M1-43

Drilling Authority No. 482

Date Issued 18 December 1970

WELL NAME Candex et al Dahadinni M-43

FIELD ..... Area: .....

LOCATION: Unit M Section 43 Grid 64-00-124-30

Latitude 63-52-59.3 Longitude 124-39-15.7

U.W.L.R. 63.88314 --- 124.65436

U.W.I. 300M436400124300

Rig Release Date: .....

Status .....

Information Release Date ...

CHANGE OF NAME:

DATE RECEIVED	INDEX
18-12-70	Application for a Drilling Authority. *
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
18-1-71	Application to Abandon a Well ~~or Suspend Drilling~~
	Application to Alter Condition of a Well.
	Well History Supplement.
	Well Completion Data.
	Work-over Report No. .....
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells – Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells – Vitter's Method.
	M.P.R. – Oil – Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale ..... Small scale .....

IAND 52-90 (3-69)

CANADA

File No.
Drilling Authority No. 482

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well ~~or Suspend Drilling~~

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for approval to abandon, to suspend drilling:—

Name and number of well: Candex et al Dahadinni M-43

Location: Unit M Section 43 Grid 64°00' - 124°30'

Latitude 63°52'59.3" Longitude 124°39'15.7"

From Established Reference Marker

Universal Well Location Reference Lat. 63.88314°N Long. 124.65436°W

Permit No. 3251 Lease No.

Shell Canada Ltd. and Shell Explorer Ltd.
(Permittee, Licensee, Lessee)

Date of commencement of proposed program: January 13, 1971

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at: Nil

Gas at: Nil

Water at: Nil

Total Depth: 402' Date of last operations: Fishing at 402' Jan. 12th

Present condition of well: Drill string parted 65' from surface. Fish consists of 2 - 10' x 6" drill collars and 327' x 45" drill pipe. Fish fell over to one side of hole and unable to retrieve with fishing tools.

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 20' of conductor made from fuel bbls.					
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	45' to surface	Glacial Drift	120	

The following logs have been run: Nil

Other operations proposed: Partially fill hole and cavern with debris and run cement plug to surface.

Operations to be carried out by: Heath & Sherwood Contractor Licence No. 761

Address: Kirkland Lake, Ontario Address

Responsible Agent in field: Blain, Binnie & Associates

Dated at Calgary, this 13th Day of January 19 71

Signed by [signature] Company Candex Development Limited

Title: Engineer Operator's Exploratory Licence No. 1791

Note:—The Oil Conservation Engineer's office must be notified before work is commenced.

(For OIL AND MINERAL DIVISION use only)

APPROVAL

This application has been examined and proposed programme approved, subject to the following conditions:

Confirming oral approval given by Mr. B.H.J. Thom on the 13th January 1971.

Dated 13th January, 19 71

[signature]
Oil Conservation Engineer

IAND 5200 (5) 12-69)

Forms to be submitted in triplicate to Oil Conservation Engineer, Department of Indian Affairs and Northern Development, Calgary, Alberta.

Drilling Authority No. 482

Project No.

File No.

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application for a Drilling Authority

This notice of intention to begin drilling operations, in triplicate, and where required a plan of survey approved by the Surveyor General showing the target area or the site of the well must be submitted and approved before commencing operations.

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for approval to drill:—

Name and number of well CANDEX ET AL DAHADINNI M-43

Location: Unit M Section 43 Grid 64° 00' - 124° 30'

Latitude 63° 52' 59.3" Longitude 124° 39' 15.7"

Unique Well Identifier

Universal Well Location Reference Lat. 63.88314° N., Long. 124.65436° W.

Elevation: Ground 813' K.B. (Est.) 821' feet above sea-level.

Well is expected to produce from Devonian Carbonates formation at a depth of about 7,000 feet. Expected total final depth 12,000'

Area assigned to well

(for Oil Conservation Engineer's use only)

Permit No. 3251 Lease No. Acreage 28,166

Permittee, licensee, or lessee Shell Canada Ltd. ~~Shell Explorer Ltd.~~

Exploratory Licence No. 108 and 116

Surface owned by ~~Crown~~ or

(If alienated submit name and address of owner and occupant.)

Petroleum and natural-gas rights owned by CROWN

We propose to use the following strings of casing, either cementing or landing them as indicated below:—

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1. 7"	17#	H-40	New	390	100
2. 5"	11.5#	J-55	New	3,900	400
3. 4"	9.5#	N-80	New	12,000	100
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment Devonian, Silurian and Ordovician Carbonates, Cambrian Sands to be controlled by BOP's, adequate drilling fluids and good engineering practice.

Well will be drilled with Rotary Rig No. 11 by Heath Sherwood Drilling (Western) Ltd.
(Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Business Licence No. 761

At well Blain, Binnie & Associates At registered office W.D. Cunningham

Address 631 - 7th Avenue S.W. Address 500 Crown Trust Building, Calgary.

It is understood that if changes become necessary, notice of the change of plan will be submitted.

Dated at Calgary, this 16 day of December 1970

Signed by W.D. Cunningham Company Candex Development Limited

Title Engineer Operator's Licence No. 1791

(For Oil and Mineral Division use only)

APPROVED

This application has been examined and approved subject to the following conditions:

1. Copies of [illegible] mineralogy logs shall be submitted to the Drilling [illegible] in both [illegible] and the [illegible] format for [illegible] [illegible] reports

2. [illegible]

Dated 14th December 19 70

Oil Conservation Engineer

Forms to be submitted to Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.

IAND 52-98-1 (3-69)

received by radio on the progress of the well.

3. During well drilling and testing operations, every effort shall be made to ensure that drilling fluids, chemicals and wastes shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.

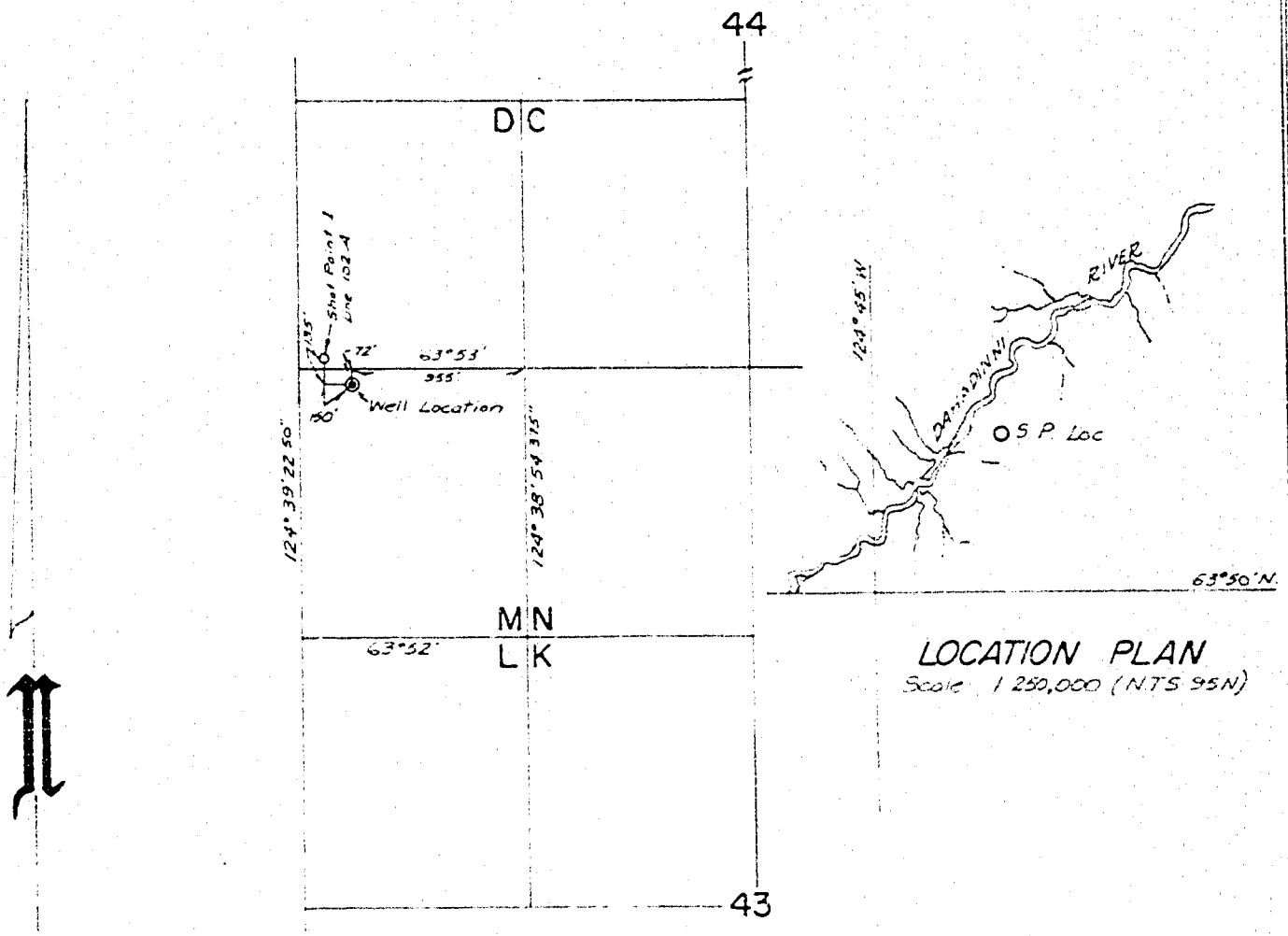
4. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.

B.H.J. Thorn, Oil Conservation Engineer

M43 64° 00', 124° 30'

Latitude 63°52'59.3" Longitude 124°39'15.7"

Northwest Territories



LOCATION PLAN
Scale 1 250,000 (NTS 95N)

DETAIL
Scale 1000 ft to 1in

	Latitude	Longitude
O.S.P. - Line 102 A	63°53'00"	124°39'19"
Well Location	63°52'59.3"	124°39'15.7"

I certify that this plan is correct to the best of my knowledge and was completed on the 16th day of December A.D. 1970

D. R. Sandison
Alberta Land Surveyor

Witness

NOTE
1. Well is 72' South, 955' West of NE Cor of Unit M
2. Information derived from Shell Seismic Survey
3. Well is 135' South, 80' East of O.S.P. - Line 102A

ELEVATION 83 Ground at O.S.P. - Line 102A

CANDEX DEVELOPMENT LTD.

E. D. Symington

K. D. Adams

Prepared by
MIDWEST SURVEYS CO. LTD.

C·651·70

CANDEX DEVELOPMENT LIMITED

DRILLING PROGRAM

Well: Candex et al Dahadinni M-43

Location: Lat. 63° 52' 59.3" Long. 124° 39' 15.7"

Contractor: Heath & Sherwood Drilling (Western) Ltd. Rig #11

Elevations: Ground: 813 ft. Estimated K.B.: 822 ft.

Drilling Licence: To be issued.

Program: Drilling to Cambrian Clastics or to 12,000 ft. Log and test as per Calgary Geological Dept.'s instructions.

Hole Size:
8-3/4" Surface Conductor to 390+ ft.
6-1/4" Surface to 3900 ft. or 50 ft. into Hume Formation.
4-1/4" to T.D. (If intermediate string is run the hole size will be reduced to 3-1/4")

Casing:

Conductor:
7" x 17# H-40 ERW to 390+ ft. Centralizers over shoe joint and on casing collar between joints 3 and 4. Guide shoe plus insert with threadlok or welding on 1st collar. Cement with 115 cu. ft. of lo-temp cement plus 2% $CaCl_2$.

Surface:
5" x 11.5# J-55 ST&C to 3900 ft. Centralizers over shoe joint and on collars 3 and 5. Guide shoe plus insert with threadlok or welding over shoe joint. Cement to surface with 425 cu. ft. oilwell plus 2% $CaCl_2$.

Production or Intermediate:
4" x N-80, FJ-40
Cementing details and final program to be issued from the Calgary office. Completion details to be determined after production casing is run. If hole is reduced a 3" Hydril or equivalent will be run.

Drilling Program:

1. Drill 8-3/4" conventional hole to 390+ ft. Maximum deviation 1° taken at 100 ft. intervals.
2. Run 7" conductor as per above. Set Series 1500 x 7" casing bowl at ground level.
3. W.O.C. for 18 hrs., slack off, head up.
4. Test blank rams to 1000 psi. Run in drill pipe and bit. Test BOP's to 1000 psi. Record on Tour Sheets. BOP's to be tested at beginning of each tour. After 24 hours W.O.C., drill out and drill 6-1/4" hole.

. . . . . /2

Drilling Program:

5. Drill 6-1/4" hole to 3900 ft. or 50 ft. into Hume Formation. Run 5" casing as above. W.O.C. 24 hours and drill out. Core 4-1/4" hole to T.D.

Mud Program:

Conductor Hole: Water Gel
Surface to 3900 ft.: Invermul
3900 ft. to Cambrian: Polymers
Cambrian to T.D.: Invermul

Invermul conversion is to drill any shales and/or salt. If after 8500 ft. a lithology change is indicated by penetration rate, the core is to be pulled immediately. The mud is to be changed as soon as shales are indicated in the core.

Coring:

From the base of 5" casing to T.D. Cores to be boxed and properly labelled under Geologist's supervision.

Testing:

The Bear Rock Formation is to be tested on penetration. Porous Carbonate porosity and all hydrocarbon shows as per Geologist's and Calgary Office's instructions. Three formation fluid samples (top of column, middle and immediately above tool) to be caught on each test. Gas recovery to be sampled in bomb for analysis.

Logging:

Schlumberger. (6 field and 9 final prints)
3900 ft. to Conductor shoe:

1. Dual Induction Laterolog - Log - Lin
   a) 2" per 100' scale
      T.D. to surface - Linear scale
   b) 5" per 100' scale
      T.D. to surface Logarithmic scale

2. Intergrated Borehole Compensated Sonic with Gamma Ray Caliper.
   2" per 100'
   5" per 100'

3. Formation Density Log
   2" per 100'
   5" per 100'

T.D. to 3900 ft.

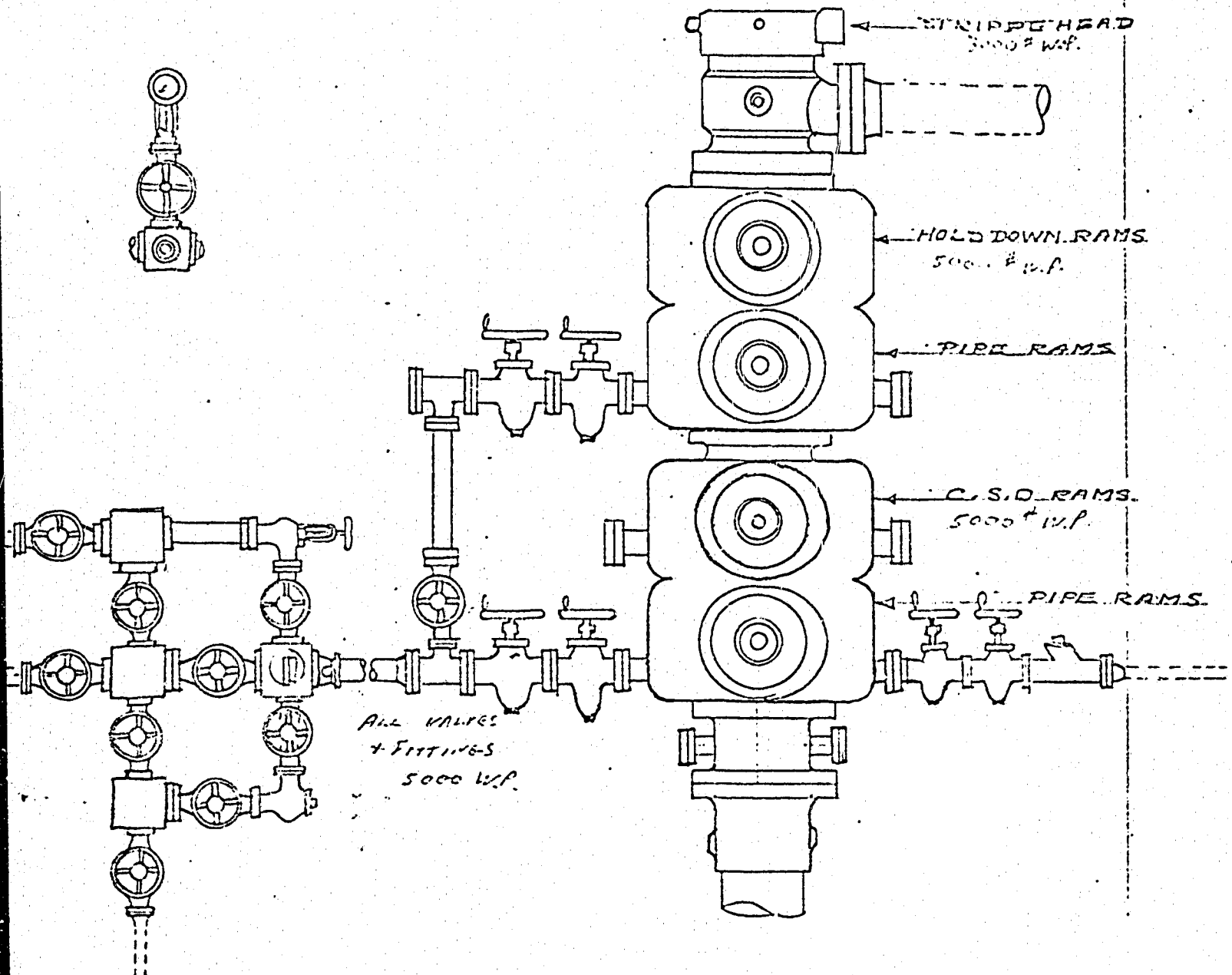
Induction E	-	2" per 100' scale
Sonic Caliper	-	2" per 100' scale
Gamma Ray-Neutron	-	2" per 100' scale

Detail on logs as per Geologist's instructions.

Deviation Surveys:

After Conductor hole a minimum of 500 ft. not to exceed 5^{o} without Calgary Office consultation.

. . . . . /3



TITLE FOUR RAM HOOK UP W/STRIPPER PLATE & 2" CHOKE MANIFOLD.	USED ON CORE RIGS

MATERIAL	HEAT TREATMENT	DRAWN	DATE	CK'D	APP.
5000# W.P.		AS	Dec 13-70		
UNLESS OTHERWISE SPECIFIED SURFACE FINISH 125 RMS. TOLERANCES FRACTIONS ± 1/64" DECIMALS ± .005" ANGLES ± 1/2°		SUPERSEDES		SCALE	DES.

SHAFFER WESTERN HEMISPHERE CANADIAN DIVISION EDMONTON, ALBERTA	DWG. SIZE	NUMBER	LATEST REV.

M-43-A

Drilling Authority No. 487

Date Issued 18 January 1971

WELL NAME Candex et al Dahadinni M-43-A

FIELD ..... Area: .....

LOCATION: Unit M Section 43 Grid 64-00-124-30

Latitude 63-52-59.3 Longitude 124-39-15.1

U.W.L.R. 63.88314 ---- 124.65420

U.W.I. 302M136400124300

Rig Release Date: 04-09-71

Status D+A

Information Release Date 04-09-73

CHANGE OF NAME:

DATE RECEIVED	INDEX
18-1-71	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
25-8-71	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
	Well History Supplement.
	Well Completion Data.
	Work-over Report No. .....
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells – Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells – Vitter's Method.
	M.P.R. – Oil – Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale..... Small scale.....

DEPARTMENT OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT
MINISTÈRE DES AFFAIRES INDIENNES ET DU NORD CANADIEN

OIL & MINERAL DIVISION
DIVISION DU PÉTROLE ET DES MINÉRAUX

WELL COMPLETION DATA
RENSEIGNEMENTS SUR LES FORAGES

Drilling Authority No.
N° de l'autorisation de forage

Date Issued
Date de délivrance

To be submitted in duplicate within thirty days after the completion, rework, abandonment, recompletion or suspension of every well.
À présenter en double dans les trente jours suivant l'achèvement, le remaniement, l'abandon et le reconditionnement de chaque puits, ou après suspension.

Well Name & No — *Nom et n° du puits*	Permit No. — *N° de permis*	Lease No. — *N° de concession*
Candex et al Dahadinni M-43A	3251	

(Permittee, License, Lessee) — *(Détenteur de permis ou de licence, du concessionnaire)*	Exploratory Licence No. — *N° de licence de sondage*
Shell Canada Ltd. & Shell Explorer Ltd.	
(Operator) — *(Exécutant)* Candex Development Limited	Exploratory Licence No. — *N° de licence de sondage* 1791

LOCATION — *EMPLACEMENT*

Unit — *Unité*	Section	Grid — *Étendue quadrillée*	Latitude	Longitude
M	43	64°00' 124°30'	63°52'59.3"	124°39'15.1"

Unique Well Identifier — *Code d'ordinateur*: 300M436400124300

Universal Well Location Reference — *Références universelles d'emplacement du puits*:

	Date	Depth — *Profondeur*
Spudded — *Début des travaux*	Feb.2/71	
Suspended — *Suspension des travaux*		
Resumed Operations — *Reprise des travaux*		
Finished Drilling — *Forage terminé*		
Deepened — *Approfondissement*		
Complete (Gas/Oil) — *Achèvement (Gaz/Pétrole)*		
Abandoned — *Abandon*	Aug.25/71	10,272
Rig Released — *Fin des travaux*	Sept. 4/71	10,272

Pool(s) — *Gisement(s)*:

Interval(s) Open to Production — *Intervalle(s) de production*:

Elevation: Gr. — *Altitude du sol*: 813 K.B. — *du carré d'entraînement*: 822

Rig No. — *N° de la tour de forage*: 11 Drilling Contractor — *Entrepreneur en forage*: Heath & Sherwood

Contractor's Business Licence No. — *N° du permis de l'entrepreneur*:

CASING RECORD — *TUBAGE*

	Casing Size (Inches) — *Diamètre (en pouces)*	Grade — *Qualité*	Weight — *Poids*	Amount — *Longeur*	Set at — *Fixation à*	Sacks of Cement and Additives — *Sacs de ciment et d'additifs*
1.	5"		13#	3704	3700	260 + 4% gel
2.	7"		20#	412	402	261 + 2% $CaCl_2$
3.	9 5/8"		32#	98	95.8	59 sax Permafrost cement
4.						
5.						
6.						

Geological Tops — *Sommet des formations*	Elevation — *Profondeur* Depths — *Sous le niveau du sol*	Sub-Sea — *Sous le niveau de la mer*
Canol	2712	(-1890)
Hare Indian	3072	(-2250)
Hume	3546	(-2724)
Headless	4070	(-3248)
Landry (?)	4273	(-3451)
Bear Rock	4990	(-4168)
T.D.	10272	

Core Record — *Carottes*

From — *de*	To — *à*	Rec. — *Récupérées*	From — *de*	To — *à*	Rec. — *Récup.*
3708' to	10272				
Continuous coring					

Log Record — *Diagrammes*

Run — *Série*	Type of Log — *Genre de diagramme*	From — *De*	To — *À*
1	Borehole Compensated Sonic	400	3701
2	" " "	3710	10275
1	Dual Induction Laterolog	400	3698
1	Induction Electrical	3708	10024
1	Gamma Ray-Neutron	3707	10024
1	Caliper	3705	10275
1	Formation Density	400	3702

CEMENTING RECORD (Plug, Squeeze, etc.) CIMENTATION (Bouchon, sous pression, etc.)				PERFORATING RECORD (Bullet, Jet) PERFORATION (à balles, à jet)				SERVICING RECORD (Acidizing, Fracing, etc.) ENTRETIEN (acidification, fracturation, etc.)			
Date	From – de	To – à	Remarks – Remarques	Date	From – de	To – à	Remarks – Remarques	Date	From – de	To – à	Remarks – Remarques
Plug #1 - Aug.24/71	9266	T.D.	Cement w/100 sax + 400 # CFR2. P.D. 3:40 a.m. Tagged at 2:00 p.m.								
Plug #2 - Aug. 25/71	3645	3760	16 sax Oilwell cement P.D. 12:45 p.m. Tagged at 3620 @ 9:30 p.m.								
Displaced hole to inhibited water 3620 - 540 Diesel from 540 to surface.											

DRILL STEM TESTS – *ESSAIS AUX TIGES*

No. – N°	Date	Formation	From – de	To – à	V.O. Mins. Vanne ouverte (minutes)	I.S.I. Mins. Première obturation (minutes)	F.S.I. Mins. Obturation définitive (minutes)	I.S.I.B.H.P. Pression de fond à la 1re obturation	F.S.I.B.H.P. Pression de fond à l'obturation définitive	I.F.B.H.P. Pression de fond au jaillissement	F.F.B.H.P. Pression de fond à l'écoulement définitif	I.H.P. Pression hydrostatique de début	F.H.P. Pression hydrostatique définitif	Remarks – Remarques
1	Feb.26/71	Imperial	1112	1222	5-45	30	60	378	374	372	358	429	388	Rec. 600' drilling mud. 30' water
2	Aug.9/71	Bear Rock	9736	10013	5-15	60	30	-	-	-	-	4152	4135	Rec. 1920' drilling mud Misrun
3	Aug.14/71	" "	9731	10013	5-60	60	120	4136	4125	3765	4125	4070	4104	Rec. 2000' drilling mud, 1870' muddy water, 5,000' salt water

ANALYSIS – *ANALYSE*

Lab. No. N° de laboratoire	Sample Echantillon	From – de	To – à	Source	Remarks – Remarques
933-1115	Mud Filtrate	9736	10013	D.S.T. #2	Rmf=0.75 @ 72°F. Cloride = 3330 mg/l
"	8870' Liquid	9731	10013	D.S.T. #3	R_w= 0.10 @ 73°F Specific gravity= 1.0542 @ 60°F pH - 7.3 H_2S - nil Total solids - calculated 77,075 mg/l

PRESENT STATUS OF WELL
ETAT ACTUEL DU PUITS

Oil Pétrole		(Interval/Intervalle)
Gas Gaz		(Interval/Intervalle)
Dry Sec	XXXX	
Susp. Travaux sus.		

Company Société: Candex Development Limited

Signed by Signé par: E.L. Lundberg

Title Titre: Geologist

Date: October 20, 1971

Forms to be prepared in duplicate and forwarded to the District Conservation Engineer.

Présentez les formules remplies à l'ingénieur en conservation du district.

CANADA

Drilling Authority No. 487

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well or Suspend Drilling

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for approval to abandon, to suspend drilling:—

Name and number of well: Candex et al Dahadinni M-43A

Location: Unit M Section 43 Grid 64°00' - 124°30'

Latitude 63°52'59.3" Longitude 124°39'15.1"

From Established Reference Marker:

Universal Well Location Reference:

Permit No. 3251 Lease No.:

Shell Canada Ltd. & Shell Explorer Ltd.
(Permittee, Licencee, Lessee)

Date of commencement of proposed program: August 23, 1971

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at: Nil

Gas at: Nil

Water at: 9742'

Total Depth: 10,272' Date of last operations: August 22, 1971

Present condition of well: Open hole from 3703' to 10,272', filled with drilling fluid.

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 9-5/8"	32#	98	95.8	59 sax Permafrost cement	Nil
2. 7"	20#	412	402	261 sax + 2% $CaCl_2$	Nil
3. 5"	13#	3704	3700	360 sax + 4% Gel	Nil
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	10,272 - 9,257'	Bear Rock	100	Placed in 2 stages. Felt after 8 hrs.
2	3,760 - 3,645'	Hume and over Int. casing	12	Feel after 8 hrs.
3	Weld on cap, 3" riser and 3" API valve for	Temperature Survey		

The following logs have been run: IES, GRN, Sonic-Caliper

Other operations proposed: 5" casing will be displaced to inhibited water to 500' and diesel from 500' to surface for temperature observation well.

Operations to be carried out by: Heath & Sherwood Drilling Contractor Licence No. 761

Address: 804 London House, Calgary, Alberta Address

Responsible Agent in field: Blain, Binnie & Associates, 631 - 7th Avenue S.W., Calgary, Alta.

Dated at Calgary, this 23rd Day of August 1971

Signed by [signature] Company: Candex Development Limited

Title: Engineer Operator's Exploratory Licence No. 1791

Note:—The District Conservation Engineer's office must be notified before work is commenced.

(For OIL AND MINERAL DIVISION use only)

APPROVAL

This application has been examined and proposed programme approved, subject to the following conditions:

Dated August 25, 1971 [signature] District Conservation Engineer

Forms to be submitted in triplicate to District Conservation Engineer, Department of Indian Affairs and Northern Development.

IAND 52-90-5 (7-71)

Voir au verso

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT File No. .....

OIL AND MINERAL DIVISION

RIG INSPECTION REPORT

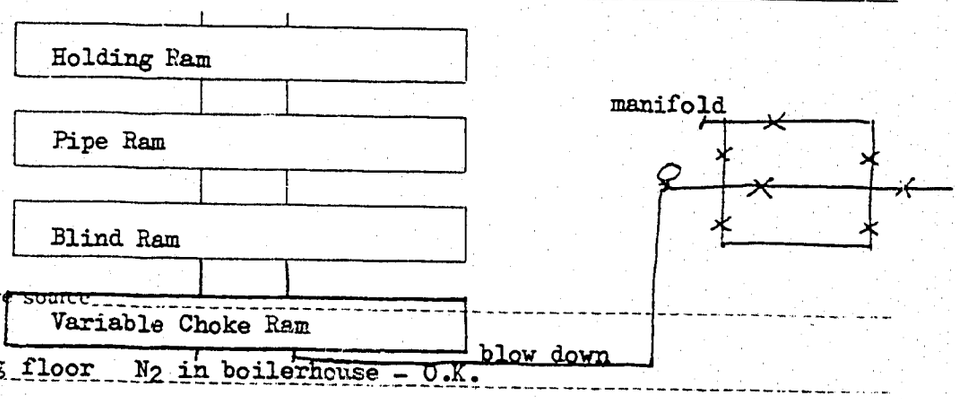
TO BE COMPLETED AS REQUIRED

A. Contractor Heath & Sherwood Drilling Ltd. Rig 11-11 Toolpusher Cliff Hokanson

Well Name Candex et al Dahadinni M-43A Date and Time of Inspection May 19/71 - 10:30 a.m.

Operation in Progress Drilling Depth 5370' Projected Total Depth 12,000'

B. Blowout Prevention Equipment



Description and Location of pressure source

Location of BOP controls On rig floor N2 in boilerhouse - O.K.

What kind of test was witnessed? Mechanical X Pressure ____ Describe test O.K.

Satisfactory	Unsatisfactory		
C. X		1. Is drilling authority posted?	Drilling Authority
X		2. Was drilling authority issued before well spudded?	
X		3. Does BOP equipment appear to be properly connected?	BLOWOUT PREVENTION EQUIPMENT
X		4. Are BOPs tested daily?	
X		5. Was equipment adequately pressure tested before drilling out casing shoe?	
X		6. Did it appear all of crew knew how to operate equipment	
X		7. Is wellhead adequately heated for winter operation?	
X		8. Are bleed-off lines tied down?	
X		9. Are distance requirements for following equipment satisfactory? (a) Boiler (150')	FIRE HAZARDS
X		(b) Open flame or electrical element heaters (75')	
X		(c) Flare pit to wellhead (150')	
X		(d) Oil or rubbish 75')	
X		10. Are smoking regulation being observed?	
X		11. Are tour reports satisfactory?	TOUR REPORTS
X		12. Have required number of deviation surveys been run?	MISCELLANEOUS
X		13. Are there any apparent hazardous conditions on the rig?	
X		14. Does equipment conform to special H_2S area requirements?	
X		15. Is well properly located with respect to buildings, roads, etc.?	

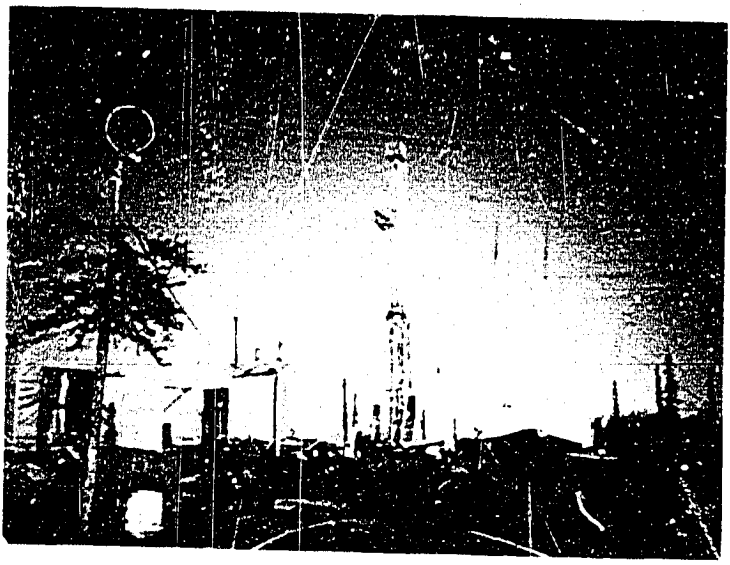
D. Remarks and Recommendations

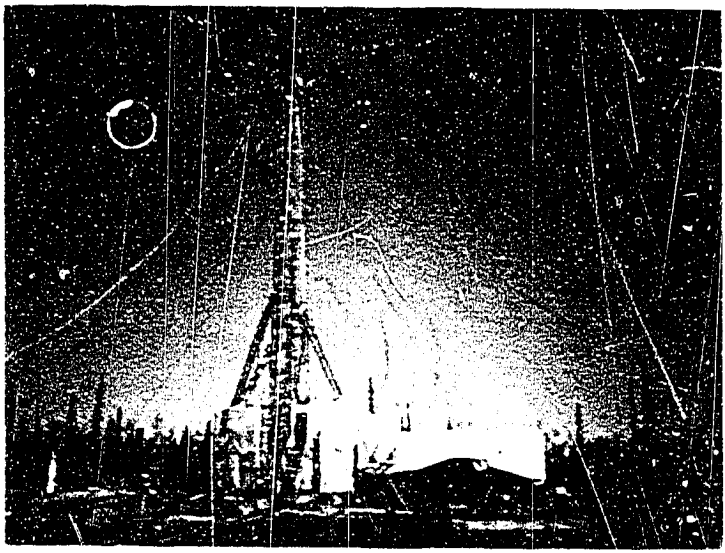
Item No.	(Any action required of Calgary Office must be listed here.)
1.	Surface casing at 3700' - 5" casing.
2.	Conductor pipe at 402'.
3.	Automatic shut-downs on 2 of 5 motors inoperative.
4.	Light over mud tank not vapor proof.
5.	General Clean-up of lease necessary.
	Instructed toolpush to rectify above faults.

Field Office Calgary Division Representative M. D. Thomas
G. E. Blue

Original to Oil Conservation Engineer Dept of IA & NP Calgary.
First copy to Field Office or Inspecting Engineer.

IAND 5000 15-68 6M





Drilling Authority No. 487

Project No.

File No.

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

INDIAN AFFAIRS & NORTHERN DEVELOPMENT OIL & MINERAL DIVISION
JAN 15 1971
CALGARY 21, ALBERTA
OIL CONSERVATION ENGINEER
Northwest Territories & Yukon Territory

Application for a Drilling Authority

This notice of intention to begin drilling operations, in triplicate, and where required a plan of survey approved by the Surveyor General showing the target area or the site of the well must be submitted and approved before commencing operations.

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for approval to drill:—

Name and number of well: **Candex et al Dahadinni M-43A**

Location: Unit **M** Section **43** Grid **64°00' - 124°30'**

Latitude **63°52'59.3"** Longitude **124°39'15.1"**

Unique Well Identifier **302M436400124300**

Universal Well Location Reference **Lat. 63.88314° N., Long. 124.65420° W.**

Elevation: Ground **813'** K.B. **(Est) 821'** feet above sea-level.

Well is expected to produce from **Devonian Carbonates** formation at a depth of about **7,000** feet. Expected total final depth **12,000 ft.**

Area assigned to well

(for Oil Conservation Engineer's use only)

Permit No. **3251** Lease No. Acreage **28,166**

Permittee, licensee, or lessee **Shell Canada Ltd. and Shell Explorer Ltd.**

Exploratory Licence No. **108 and 116**

Surface owned by Crown or

(If alienated submit name and address of owner and occupant.)

Petroleum and natural-gas rights owned by **CROWN**

We propose to use the following strings of casing, either cementing or landing them as indicated below:—

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1. 9-5/8"	32	H-40	New	90'	75
2. 7"	17	H-40	New	390'	100
3. 5"	11.5	J-55	New	3900'	400
4. 4"	9.5	N-80	New	12000'	100
5.					

Expected water, gas, and oil horizons and type of control equipment **Devonian, Silurian and Ordovician Carbonates, Cambrian Sands to be controlled by BOP's, adequate drilling fluids and good engineering practice.**

Well will be drilled with Rotary Rig No. **11** by **Heath Sherwood Drilling (Western) Ltd.**

(Drilling Contractor or company)

Kirkland Lake, Ontario

Responsible agent of applicant:— Contractor's business Licence No. **761**

At well **Blain, Binnie & Associates,** At registered office **W.D. Cunningham**

Address **631 - 7th Avenue S.W.,** Address **500 Crown Trust Building, Calgary**

It is understood that if changes become necessary, notice of the change of plan will be submitted.

Dated at **Calgary**, this **15th** day of **January** 19 **71**

Signed by [signature] Company **Candex Development Limited**

Title **Engineer** Operator's Licence No. **1791**

(For Oil and Mineral Division use only)

APPROVED

This application has been examined and approved subject to the following conditions:—

1. Copies of this Drilling Authority shall be exhibited at the Drilling Rig in both the Doghouse and the Drilling Foreman's office between spud and rig release dates.
2. The Company will submit to this office, on Tuesday of each week, the lastest reports

Dated **18th January** 19 **71** Please see over page

Oil Conservation Engineer

Forms to be submitted to Oil Conservation Engineer, Department of Indian Affairs and Northern Development, Calgary, Alberta.

IAND 52-90-1 (3-69)

received by radio on the progress of the well.

3. During well drilling and testing operations, every effort shall be made to ensure that drilling fluids, chemicals and wastes shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.

4. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.

B.H.J. Thoms, Oil Conservation Engineer

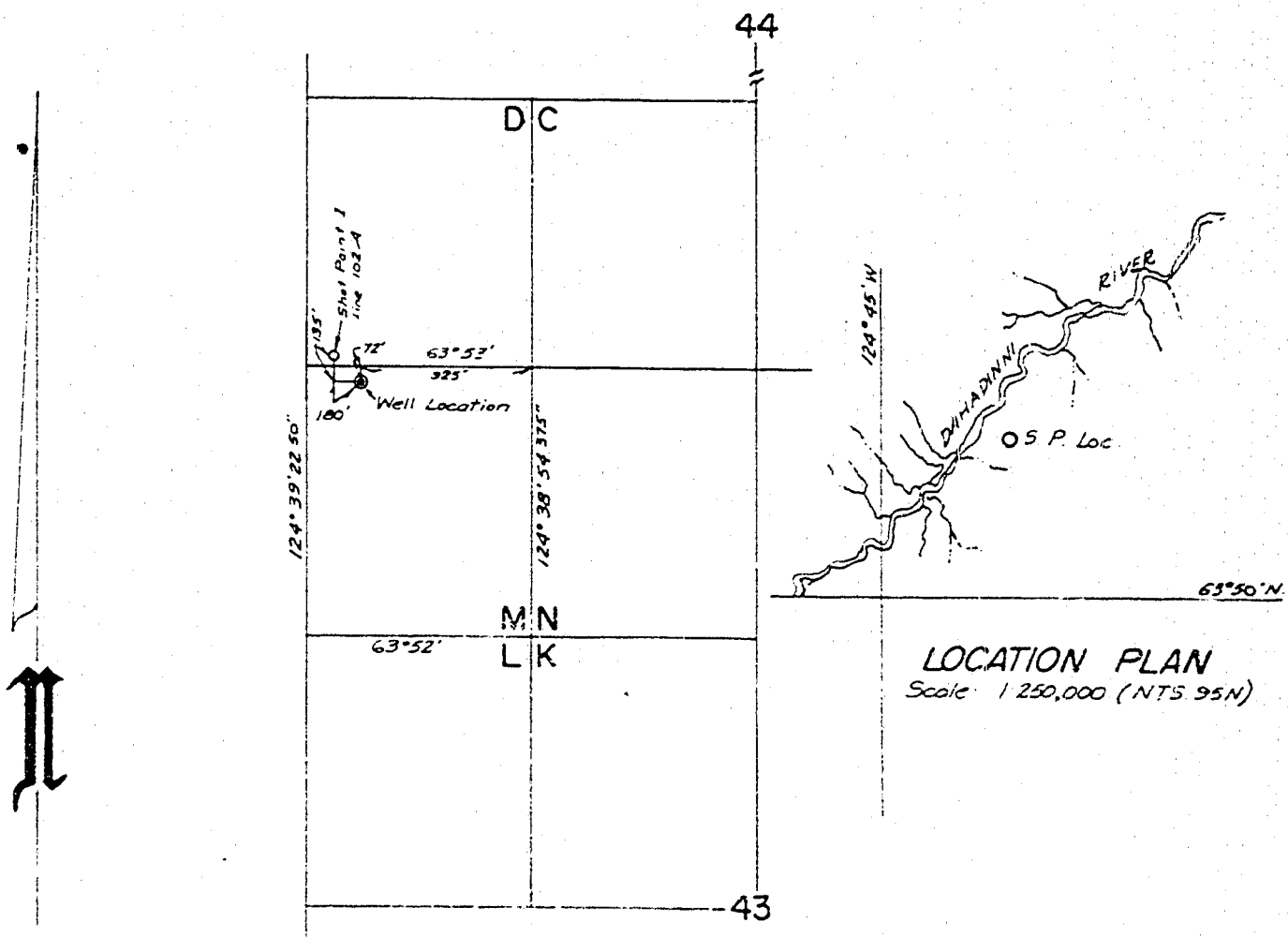
Revised: Jan. 15th 1971

CANDEX ET AL DAHADINNI M43A

M43A 64° 00', 124° 30'

Latitude 63°52'59.3" Longitude 124°39'15.1"

Northwest Territories



LOCATION PLAN
Scale 1 250,000 (NTS 95N)

DETAIL
Scale 1000 ft to 1 in.

	Latitude	Longitude
S.P. - Line 102A	63°53'00.4"	124°39'19.1"
Well Location	63°52'59.3"	124°39'15.1"

I certify that this plan is correct to the best of my knowledge and was completed on the 16th day of December A.D. 1970.

O.R. Gardiner
Alberta Land Surveyor

A.L. Lyons
Witness

NOTE
1 Well is 72' South, 325' West } of NE Cor of Unit M
2 Information derived from Shell Seismic Survey
3 Well is 135' South, 180' East } of S.P.1 - Line 102A

ELEVATION 813 Ground at S.P.1 Line 102A

CANDEX DEVELOPMENT LTD.

W. Bloomington

K.D. Lannis

Prepared by
MIDWEST SURVEYS CO. LTD.

C·651·70

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
REGIONAL DIRECTOR
NOV 22 1971
YELLOWKNIFE, N.W.T.
NORTHERN ECONOMIC DEVELOPMENT BRANCH

OIL & GAS OPERATIONS UNIT
Oil and Mineral Division
JUN 9 1972
OTTAWA, CANADA
Dept. of Indian Affairs & Northern Development

CANDEX ET AL DAHADINNI

M-43A

DRILLING HISTORY

OIL & GAS OPERATIONS UNIT
Oil and Mineral Division
JUN 9 1972
OTTAWA, CANADA
Dept. of Indian Affairs & Northern Development

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INTRODUCTION

The Wildcat Cambrian test Candex et al Dahadinni M-43A located some 120 miles south of Norman Wells and 175 miles north of Ft. Simpson was to be drilled to a proposed depth of 12 000'. It was, for geological and mechanical reasons, abandoned at a shallower depth of 10 272'.

To drill the well a slim hole diamond drill rig owned by Heath & Sherwood of Kirkland Lake, Ontario was selected by the Operator. The contract was of the footage incentive type with the Contractor to act as Operator and Expeditor for the well. Blain, Binnie and Associates Engineering Ltd. provided assistance in designing the BOP assembly to conform to normal oilfield drilling practice in wells of this depth. In addition they supplied on-site drilling engineers to observe and report on well progress, as well as insure that normal safety practices were adhered to, as it applied to lost circulation and blow-out prevention. In this latter respect the engineers were not always successful, as the design of the sub-structure on this rig made it impossible to install, test and operate BOPs in a normal fashion.

A program was developed by the Operator and Contractor which it was believed would successfully complete the well. It was planned to drill an 8-3/4" hole with tri-cone rock bits and set 7" surface pipe at 350'. A 6-1/4" hole was to be drilled to 3 900'$\pm$ and a 5" intermediate string set. Continuous diamond coring procedures were to be employed from intermediate casing to total depth.

SURFACE HOLE

Problems developed shortly after spudding when a large washout occurred in the Permafrost zone. The cement around the conductor barrels washed out and crews were unable to recover a fish lost in the hole after a twist-off at T.D. of 402'.

The rig was skidded 30' east and the well re-spudded. Thirty-three days were lost to this operation, 14 days to drilling and fishing on the first hole and 19 days to moving and rigging for the second hole.

Tight hole conditions caused difficulty in running the 7" surface pipe at 402'. Larger volume mud pumps than were available, would be required to adequately clean an 8-3/4" hole such as this.

Cementing of the 7" surface pipe was attempted using contractor's rig pumps and mud mixing equipment. This proved to be at best a make-shift method as insufficient pump and mixing capacity was available. In addition, the rig pumps became clogged with cement resulting in 2 days lost time clearing pumps, manifolds and tanks. The rig does not have a water or air supply system.

INTERMEDIATE HOLE

Drilling of the 6-1/4" intermediate hole was accomplished in 48 days for the 3 298', or 68.7' per day average. Rig repair time in the first 3 703' of hole amounted to 8.27 days or 12% of the time over the hole. Fishing jobs consumed 4.94 days or 7.16% of the time.

Deviation became severe at a very shallow depth (728' - 4°), and was a constant problem throughout the drilling of the well. Drilling weights and rotary RPMs had to be curtailed. Partial but steady lost circulation persisted through the interval from 1 500' to 2 700'. The situation then reversed itself and a daily increase in mud volume continued to 3 700' (intermediate casing depth). It was considered possible that this increase in mud volume, coupled with an increase in the water phase of the mud system was not all from formation, but from water condensation in the mud system, caused by steam hoses being used in the tanks to keep the mud system thawed out.

During this interval of drilling, the Federal Conservation Board Officer required that a number of improvements and alterations be made to the rig to conform more closely to standard oilfield practices before he would allow drilling to proceed. Most of these alterations were completed during a fishing operation at 1 600' and drilling proceeded more or less steadily to intermediate casing point.

Inverted oil emulsion mud was used throughout this section of the hole to protect water sensitive shales from heaving. The oil emulsion mud was effective in minimizing sloughing, but the surface facilities could not cope with the storage and mixing requirements. More than two days (2.57) or 3.58% of the elapsed time was lost because the crews were not able to mix and drill at the same time. A large volume of mud was wasted because the low pump horsepower would not allow

adequate mixing of the emulsifier through the jets. Frequent surface losses through mud system leakage caused delays and added considerably to mud costs for this section of the hole.

Five inch casing was set and cemented at 3 700'. Trouble was experienced with the Halliburton pump truck while displacing cement, rig pumps had insufficient horsepower to take over, as a result the plug was found 70' high on drill out.

DIAMOND CORE SECTION

The 4-1/2" main hole was drilled using a continuous coring method, utilizing a 20' wireline retrievable inner barrel. A total of 128 days were required to core drill the 6 569' from the intermediate casing to total depth of 10 272'. Average progress was 51.3' per day.

Core tube failures resulted in considerable lost time in the interval from 4 100' to 4 500'. It appeared that the causes of these failures were harmonic vibrations in the rod string. Changing the RPMs to non-critical harmonic levels effected some improvement. Half length, or ten foot inner barrels, were run for a time which also reduced the frequency of failures. Although the frequency of core barrel failures were reduced, drill rod failures and twist-offs continued. In an attempt to correct the problem, vertical, solid blade stabilizers, fabricated at Barber Machine in Edmonton, were installed. At one time, as many as 18 stabilizers were run in the hole at 60 and 120' intervals. This of course had the effect of increasing the torque to undesirable levels. Later several failures occurred in the stabilizers themselves. Subsequently most were layed down. In as much as the failures occurred at the same relative position in the string regardless of hole depth it still appeared that harmonic vibration induced at the surface by critical RPMs was a major contributor to the trouble. No stabilization was available at the floor to dampen the effect induced by the hydraulic swivel.

The viscosity of the mud system was increased from(38 - 39)seconds to(50 - 60)seconds at approximately 5 700', and appeared to have an immediate dampening effect on the vibrations in the drill rods. From this point on there were few drill rod failures. Difficulties were experienced in maintaining these higher viscosities but they were overcome through the addition of Kelzan X-C Polymer to the mud system.

DEVIATION

The hole angle remained fairly steady from 3 700' to 4 300', then began to build quite rapidly to a maximum of 27-1/2° at 7 767'. Reduced coring weights and rotary RPMs were used, in addition to stabilizers, in an attempt to keep hole deviation from increasing too rapidly. A 15 foot spiral drill collar, especially designed for this type of drill string, and installed directly above the core barrel was run in the hole at 7 767'. From this depth on the deviation stabilized, and below 8 200' began to return to vertical at a fairly rapid rate so that by 9 900' it had returned to 10-1/2°.

CONCLUSION

It is believed that, while slim hole drilling may have some merit as an exploration tool for carefully selected shallow hole projects, it has not yet been proven in North America to be economically successful on any sustained basis. Hole conditions remained very stable for a small hole with close tolerances, as evidenced by the fact that many times tools were stopped on bottom with neither rotation nor circulation and could still be moved freely on demand.

An Operator must weigh the value of geological information recovered against the additional costs incurred by employing the continuous coring technique. Core recovery time, handling coring equipment and fishing for inside core tube consumed 25.5 days or 18.76% of the rig time below the intermediate casing point. Total waiting on tools, orders, equipment and services consumed 7.61 days or 3.71% of the total time.

The major deficiencies in this operation were:

1. Insufficient motor horsepower and pump capacity. Lack of motor compounds and simple large diameter pipe manifolding. The mud tankage system was inadequate in size and offered no flexibility in emergency situations.

2. Lack of oilfield experience on the part of any of the crew or foremen. (Crews were untrained in rudimentary safety standards and could not recognize safety hazards.)

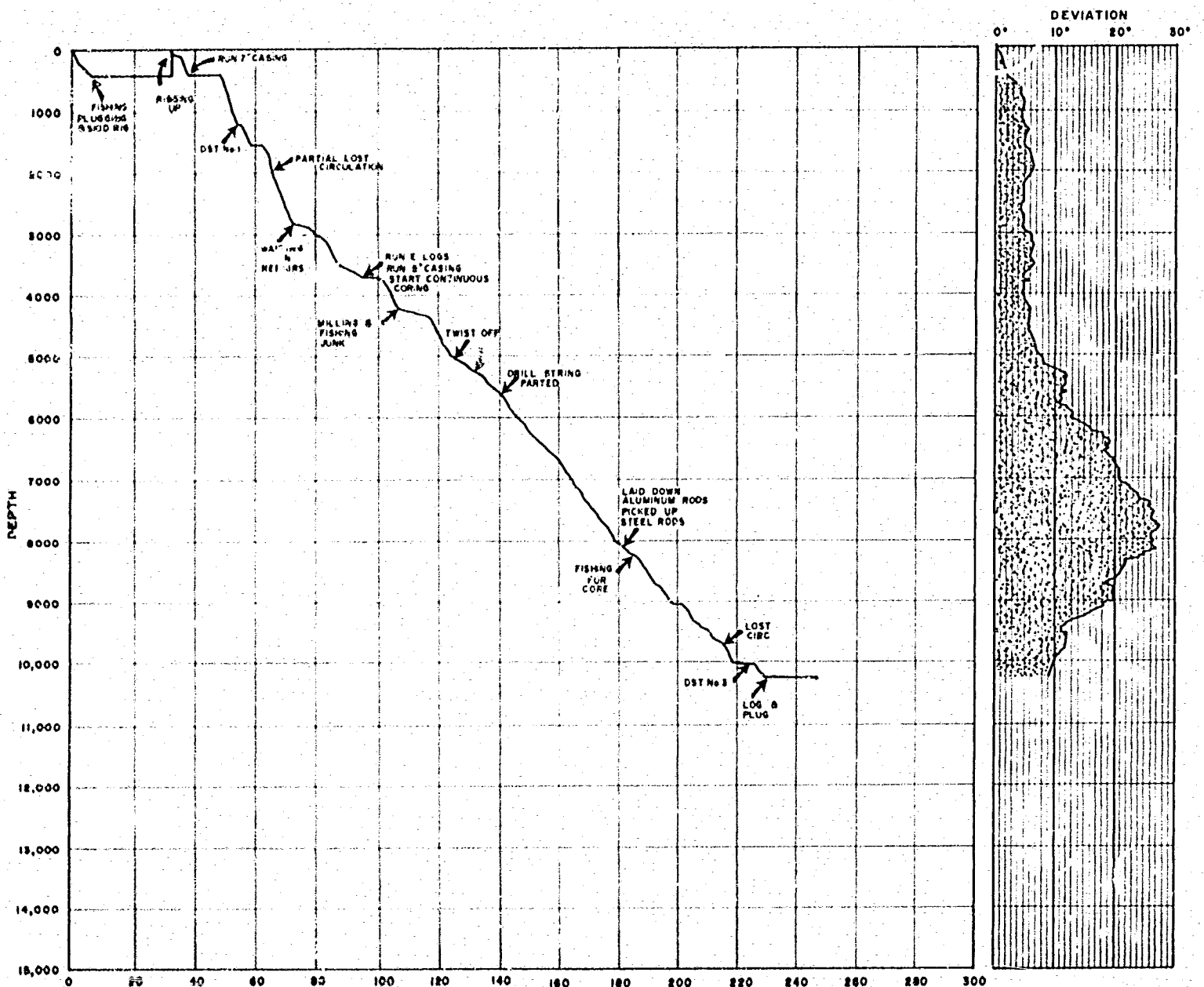
3. Rig design did not conform to safety regulations as set out by the Federal Government for oilfield drilling operations.

4. Improperly designed substructure, which was unable to accept high pressure BOPs and controls.

5. Hydraulic drilling system inadequate at depths below 7 000'. It has been demonstrated by others using hydraulic drilling techniques that under continuous heavy use hydraulic equipment must be designed to 2-1/2 times maximum working pressure.

6. Long and tortuous communication and supply lines.

DRILLING RECORD
CANDEX ET AL DAHADINNI
M-43A



CANDEX ET AL DAHADINNI M-43A

Time Distribution

Operation	Phase I		Phase II		Total Well	
	Days	% Time	Days	% Time	Days	% Total Time
Drilling (rotating)	26.21	37.85	50.55	37.13	76.76	37.44
Recover Core (Incl. servicing barrel & fishing inside drill rods)	-	-	25.50	18.73	25.50	12.44
Tripping (for bits)	7.76	11.21	13.07	9.60	20.83	10.16
Rig Repair (Incl. W.O. spare parts)	8.27	11.94	12.04	8.84	20.31	9.91
Fishing (Incl. W.O. fishing tools & trips)	4.94	7.13	5.97	4.38	10.91	5.32
Deviation Surveys	1.40	2.02	6.21	4.56	7.60	3.71
Run Casing (Incl. cmtg. & I.O.C.)	7.26	10.48	-	-	7.26	3.54
Log & DST (Incl. W.O. tools & service men)	1.01	1.46	6.17	4.53	6.78	3.31
Condition Hole	.95	1.37	5.57	4.09	6.52	3.18
Install, Test & Remove BOPs	4.06	5.88	1.01	.74	5.07	2.47
Abandon	-	-	3.56	2.61	3.56	1.74
W.O. Tools (Misc.)	1.56	2.25	1.71	1.26	3.27	1.60
Service Rig & BOP	1.14	1.65	2.01	1.48	3.15	1.54
Misc. (Handling tools, BOP drill, transport fuel, inspect pipe)	2.05	2.96	.74	.54	2.79	1.36
Mix Mud	2.47	3.57	-	-	2.47	1.20
W.O.O.	.15	.22	2.03	1.49	2.18	1.06
Slip, Cut Drill Line	.02	.03	.02	.01	.04	.02
TOTAL	69.00	100.00	136.00	100.00	205.00	100.00

Note: Phase I - All operations from day 4 at 140' through cementing of intermediate casing at 3 700' and drill out.

Phase II - All operations commencing with 1st diamond core run through abandonment.

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. - CALGARY

DRILLING HISTORY

Candex et al Dahadinni M-43A

DATE	DEPTH 8:00 AM	HOURS DRILLED	MUD				SURVEYS		REMARKS
			WT	VISC	W.L.	pH	DEPTH	DEV.	
Jan 1/71	0	-	-	-	-	-	-	-	
Jan 2/71	119	5	10.4	45	-	-	100	Misrun	
Jan 3/71	276	16½	11.5	55	-	-	228	1°	
Jan 4/71	286	17	11.3	55	-	-			Pulled bit #1
Jan 5/71	342	7¼	11.2	67	-	-	294	1°	
Jan 6/71	370	14¼	11.4	75	-	-			
Jan 7/71	402	20-3/4	11.4	50					Pipe failure
Jan 8/71	402	0							Fishing
Jan 9/71	402	0							Fishing
Jan 10/71	402	0							Fishing
Jan 11/71	402	0							Fishing
Jan 12/71	402	0							Fishing
Jan 13/71	402	0							Prepare to abdn.
Jan 14/71		0							Skid rig
Jan 15/71		0							30' east
Jan 16/71		0							
Jan 17/71		0							
Jan 18/71		0							
Jan 19/71		0							
Jan 20/71		0							Blasting for new
Jan 21/71		0							location
Jan 22/71		0							
Jan 23/71		0							
Jan 24/71		0							
Jan 25/71		0							Rigging up
Jan 26/71		0							Rigging up
Jan 27/71		0							Rigging up
Jan 28/71		0							Rigging up
Jan 29/71		0							Rigging up
Jan 30/71		0							Rigging up
Jan 31/71		0							Rigging up

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. - CALGARY

DRILLING HISTORY

Candex et al Dahadinni M-43A

DATE	DEPTH 8:00 AM	FEET/ HOURS	INVERMUL MUD FILT. YIELD WT	VISC	OIL FILT.	YIELD	SURVEYS DEPTH	DEV.	REMARKS
Feb 1/71									Rig up
Feb 2/71									
Feb 3/71	72	72/6							Spud 10:30 a.m.
									Feb. 2/71
Feb 4/71	100	28/2							
Feb 5/71	100								c 9-5/8" @ 95'
Feb 6/71	140	40/4	9.7	55					
Feb 7/71	327	187/15	10.7	100					Top sand shale @ 312
Feb 8/71	405	78/19	10.2	57					
Feb 9/71	405	0/0	11.0	90					
Feb 10/71	405		13.0	90					Attempt run 7"
Feb 11/71	405		13.0	90					Tight below 270'
Feb 12/71	405		11.4	65					
Feb 13/71	405								
Feb 14/71	405								c 7" @ 402
Feb 15/71	405								Clean cement from pumps
Feb 16/71	405								Cement outside 9-5/8"
Feb 17/71	405								Repair & rig up
Feb 18/71	405								Repair & w/o BOP
Feb 19/71	405								R.U. & mix mud
Feb 20/71	405								Test BOP
Feb 21/71	552	147/8	7.4	34	3.0	2	474	1-3/4	Replace pump
Feb 22/71	728	176/13	7.5	35	3.5	3	670	4	Reduce drlg. wt.
							700	3-7/8	
Feb 23/71	870	142/16	7.5	36	3.3	2	800	4	small lost circ.
Feb 24/71	1 008	138/20	7.6	34	3.2	2	900	4-1/2	
Feb 25/71	1 137	129/16	7.6	36	3.8	2	1 000	4	
Feb 26/71	1 222	83/6	7.7	34	3.6	3	1 100	4	Circ. to DST
Feb 27/71	1 222	0/0	7.6	36	3.4	2	1 222	5/ 4-1/2	DST #1
Feb 28/71	1 388	166/14	7.6	39	3.7	3	1 300	5-1/8	Trip with plugged bit

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. · CALGARY

DRILLING HISTORY

Candex et al Dahadinni M-43A

DATE	DEPTH 8:00 AM	FEET/ HOURS	INVERMUL MUD FILT. YIELD				SURVEYS		REMARKS
			WT	VISC			DEPTH	DEV.	
Mar 1/71	1 440	72/8	7.7	40	3.4	2	1 400	4-3/4	Trip w/plugged bit
Mar 2/71	1 589	149/	7.6	40	3.4	2	1 500	4-1/2	dropped drill string
Mar 3/71	1 589	0/0							in hole - fishing
Mar 4/71	1 589		8.0	38		2			left 2 cones in hole
Mar 5/71	1 589		8.0	38	3.6	2			Fish & repair
Mar 6/71	1 589		8.0	38					rig - re Cons.
Mar 7/71	1 676	87/	7.8	38	2.2	3	1 600	4-1/2	Board orders
Mar 8/71	1 796	120/	7.9	38	2.0	5	1 700	5-1/2	partial lost circ.
Mar 9/71	2 009	213/	8.6	40	3.6	4	1 920	6	partial lost circ.
Mar 10/71	2 101	9_/15	8.2	36	3.2	3	2 060	5	partial lost circ.
Mar 11/71	2 298	197/21	8.1	36	4.4	1	2 200	4-1/4	partial lost circ.
Mar 12/71	2 399	101/17	8.2	38	8.6	1	2 300	4-1/8	partial lost circ.
Mar 13/71	2 508	109/14	8.1	36	10.0	3	2 400	4-1/2	partial lost circ.
Mar 14/71	2 666	158/22					2 600	4	dumped tanks
Mar 15/71	2 774	108/18	8.7	40	4.4	4	2 700	4	
Mar 16/71	2 803	29/10	8.7	40	4.4	4			Repair swivel heater
									on BOPs
Mar 17/71	2 857	54/21	8.8	41			2 800	4-1/2	Install rotary w/o
									repairs
Mar 18/71	2 857	0/0							w/o repairs
Mar 19/71	2 857								w/o repairs
Mar 20/71	2 857		8.8	58	2.2	9			Repair rig
Mar 21/71	2 883	26/15	8.4	55	4.8	8			
Mar 22/71	2 930	47/15	8.5	60	2.2	8	2 900	4	
Mar 23/71	2 995	65/22	8.5	50	3.0	3	2960	4-3/4	making mud
Mar 24/71	3 033	38/22	8.5	60	water %		3 000	5-1/4	volume fm. form.
Mar 25/71	3 037	4/8	9.5	93	increasing				
Mar 26	3 075	38/14	9.6	60			3 050	6	
Mar 27/71	3 085	10/3	9.6	63					tubescope drill rods
Mar 28/71	3 122	37/5	9.6	56	3.0	9	3 100	5-7/8	Mud tank leak
Mar 29/71	3 293	171/18	9.6	58	2.1	9	3 200	6	
Mar 30/71	3 354	61/7	9.7	60	2.2	11	3 300	5-3/4	Chge. worm drg. line
Mar 31/71	3 475	121/17	9.8	54	2.7	12	3 400	5-1/8	

E-5

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. - CALGARY

DRILLING HISTORY

Candex et al Dahadinni M-43A

DATE	DEPTH 8:00 AM	FEET/ HOURS	INVERMUL MUD FILT. YIELD WT	VISC			SURVEYS DEPTH	DEV.	REMARKS
Apr 1/71	3 522	47/14	9.6	52	3.2	10	3 500	6-1/4	
Apr 2/71	3 556	34/14	9.6	53	3.8	12			Attempt button bit
Apr 3/71	3 568	12/9	9.7	50	3.8	12	3 550	6	Run dia bit hole
									too tight
Apr 4/71	3 579	11/8	9.4	45	3.6	13			
Apr 5/71	3 600	21/12	9.3	44	4.1	10			
Apr 6/71	3 629	29/15	9.3	43	3.6	9	3 600	5-3/4	
Apr 7/71	36/6	17/13	9.5	47	4.8	9	3 630	5	
Apr 8/71	3 678	32/22	9.4	45	4.4	9			
Apr 9/71	3 706	28/20	9.3	44	4.8	9	3 706	4-1/2	
Apr 10/71	3 703	Depth correction							Run E. logs
Apr 11/71	3 703								Running casing
Apr 12/71	3 703								c 5" casing @ 3 700'
Apr 13/71	3 703								Rig up BOPs
Apr 14/71	3 703				Press. test BOPs				Drill out cmt.
		START CONTINUOUS CORING							
		4-1/4" hole see next page.							

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BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. - CALGARY

Candex et al Dahadinni
M-43A (D.L. Tufts)

DRILLING HISTORY

Coring Started @ 3708' KB

DATE 1971	DEPTH 8:00 AM	FEET/ HOURS	DRLG. Wt/M	DRLG. RPM	SURVEYS DEPTH	SURVEYS DEV.	REMARKS
April 15	3743	35/4	5000				Coring with water
April 16	3786	43/5	3-4	225/250	3759	5-3/4	base mud
April 17	3883	97/13	~~2500~~ 3000	250	3799	4½	
April 18	3966	93/11	2500	250/300	~~3850~~ 3950	~~4-3/4~~ 4½	
April 19	4100	134/15	3000	300	4000	4-1/8	
April 20	4178	73/11	~~2500~~ 3000	250/150	~~4050~~ 4100	~~4-3/4~~ 4-3/4	Core tube broken
April 21	4206	33/5	2500	130	4150	5-1/8	High rotary torque
April 22	4245	39/7	1500	100	4200	5½	Core tube broke
April 23	4275	30/6	1500	100			several times
April 24	4278	3/3	1500	100			run 10' tube in
April 25	4280	5/2	1500	100			place of 20'.
April 26	4291	11/2	1500	100			Milling & fishing junk
April 27	4310	19/7	1500	120	4258	6	
April 28	4317	7/2	1500	100/150			Drill string parted
April 29	4343	26/9	1500	100	4300	5½	Ran 2 stabilizers
April 30	4416	73/17	2000	110/200	4366	5½	
May 1	4456	40/7	2000	200	4425	5½	
May 2	4515	59/12	3500	200			8 stabilizers
May 3	4615	100/16	3000	150	4500	5½	
May 4	4680	65/11	3000	150	~~4650~~ 4600	~~5½~~ 5½	
May 5	4803	123/18	3000	150			
May 6	4889	86/14	2000	150	4750	6	Twist-off
May 7	4952	63/19	2000	150			
May 8	5015	63/15	1800	150	4950	6-3/4	
May 9	5042	27/9	1800	150	5000	7	Twist-off
May 10	5063	21/4	1800	150			Twist-off
May 11	5063	-					Fishing
May 12	5104	41/9	1800	130	5050	7-3/4	
May 13	5178	74/16	1500	130	5100	7-3/4	
May 14	5205	27/4	1500	130	5150	8	
May 15	5252	47/9	~~1200~~ 1500	~~130~~ 150	5200	9-3/4	Using 10 stabilizers
May 16	5279	27/5	1200	150	5250	10-3/4	Twist-off
May 17	5299	20/5	~~1000~~ 1200	130			Twist-off
May 18	5347	48/13	1500	140	5297 5343	11½ 12	
May 19	5370	23/16	1500	140	5370	11¼	Wait on orders

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. - CALGARY

Candex et al Dahadinni
M-43-A
1971

DRILLING HISTORY

D. L. Tufts

DATE	DEPTH 8:00 AM	FEET/ HOURS	Drilling				SURVEYS		REMARKS
			WT	RPM	W.L.	pH	DEPTH	DEV.	
May 20	5394	24/7	1500	140			5376	11½	
							5390	11½	Fractures in cores
May 21	5446	53/12	1500	140					(jamming) lost circ.
May 22	5465	19/5	1500	140			5404	11-3/4	@ 5 450'
							5425	11½	
May 23	5517	52/13	1500	140					
May 24	5582	65/14	2000	140			5523	10-3/4	Drill string parted
							5555	10½	
May 25	5591	9/3	2000	140					
May 26	5637	46/10	2000	200			5599	12 (?)	
			2500				5600	10½	
May 27	5721	84/11	2500	200			5650	11	
May 28	5807	86/15	2500	200			5706	11	
							5765	10	
May 29	5858	51/11	2000	200			5827	12	Varying bit wt. in
			2500	240			5835	12	attempt to keep hole
May 30	5957	99/15	2000	200+					straight
May 31	5985	28/15	2000	200+			5950	13	
June 1	6071	86/18	1500	200+			6018	12½	
June 2	6103	32/9	1500	200			6070	13½	Core barrel jamming
June 3	6157	54/17	1200	200+			6090	14	
			1500						
June 4	6234	77/16	1200	200+			6135	15	
			1500				6170	15½	
June 5	6294	60/18	1000	200			6215	16	
June 6	6318	24/6	1200	230			6235	17	Repair hydraulics
							6278	18	
June 7	6393	75/13	1000	230			6310	18	
							6355	18½	
June 8	6413	20/5	1000	240			6391	19	
June 9	6467	54/14	1000	240			6418	19	
							6460	18	
June 10	6504	37/13	1000	240			6500	19	
June 11	6556	52/12	1200	240			6550	18	
			1500						

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BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. - CALGARY

Candex et al Dahadinni
M-43A
1971

DRILLING HISTORY

D. L. Tufts

DATE	DEPTH 8:00 AM	FEET/ HOURS	Drilling				SURVEYS		REMARKS
			WT	RPM	PUMP	pH	DEPTH	DEV.	
June 12	6576	20/3	1000	240				Run	Eastman Dir. Survey
June 13	6633	57/10	1500	240			6609	19	
June 14	6674	41/7	1000	230			6665	20	
June 15	6728	54/10	1000	230			6728	20	Repair Wt. Ind.
			1500						
June 16	6807	79/9	1000	220			6728	20	
			1500				6794	19½	
June 17	6916	106/12	1500	220			6860	20½	
							6925	20½	
June 18	6996	80/9	1500	220			6980	20½	
June 19	7101	105/14	1500	200			7040	20½	Pull wireline apart
June 20	7143	42/8	1500	210			7122	22½	using blocks
June 21	7244	101/17	1000	200			7180	22¼	
			1500						
June 22	7337	93/16	1000	200			7265	23½	Drlg. rate incr. @
			1500						7 300'
June 23	7387	50/11	1250	200+			7340	24	
							7380	25½	
June 24	7439	52/14	1000	200+	425				
			1250						
June 25	7490	51/15	1250	200+	425		7438	26	
							7471	25-1/2	
June 26	7559	69/18	1000	200	425		7518	26	Reduce wt. on bit
June 27	7633	74/15	1000	220	425		7555	26-1/2	
							7598	26-1/2	
June 28	7699	66/16	1000	220	425		7639	26	3992'/75 days =
									55'/day
June 29	7763	64/17	1000	220	425		7671	26	
							7731	27	
June 30	7789	26/7	1000	240	450		7767	27-1/2	
July 1	7873	84/16	1000	220	450		7805	27	
			1200				7836	26-1/2	
July 2	7961	88/16	1500	230	400		7886	26	
					- 15 -				

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. - CALGARY

Candex et al Dahadinni
M-43A
1971

DRILLING HISTORY

D. L. Tufts

DATE	DEPTH 8:00 AM.	FEET/ HOURS	Drilling WT	RPM	PUMP	pH	SURVEYS DEPTH	DEV.	REMARKS
July 3	8021	60/11	1500	180	400		7938	26	
							7979	26	
							8018	26-1/2	
July 4	8021	0/0							Power swivel broke
									down
July 5	8081	60/11	1500	240	375		8049	26	
July 6	8121	40/7	1500	200	375		8091	26	Laid down 80 Alum.
									rods, picked up 80
									steel rods
July 7	8208	87/15	1500	200	425		8190	27	Misruns @ 8150,8170
			1200						
July 8	8275	67/13	1500	210	400		8230	24-1/2	
							8243	25	
July 9	8275	0/0							Fishing for core
									barrel
July 10	8290	15/3	1500	210	475				Core jamming, vert.
					550				frac.
July 11	8368	78/14	2000	200	500		8293	24	Min. jamming, 45°
							8325	24	bedding
July 12	8449	81/15	2000	210	450		8385	21-1/2	
							8397	22	
							8440	21-1/2	
July 13	8529	80/14	2000	200	450		8480	21-3/4	Badly broken 8522-27
July 14	8579	50/8	2000	210	450		8545	21	
July 15	8662	83/16	2000	210	425		8608	20-1/2	
July 16	8724	62/15	2000	190	425		8668	20	Vibration in hole
				200					Short runs, slow
									penetration
July 17	8762	38/10	2000	190	425		8733	18	As above
			3000	200					
July 18	8787	25/5	2000	200	450		8780	20	Bent core barrel
									possibly accounts for
									18° @ 8733
					- 16 -				

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BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. - CALGARY

DRILLING HISTORY

Candex et al Dahadinni
M-43A
1971

DATE	DEPTH 8:00 AM	FEET/ HOURS	Drilling WT	RPM	PUMP	pH	SURVEYS DEPTH	DEV.	REMARKS
July 19	8865	78/14	2000	200	450		8798	20	
				230			8843	19-1/2	
July 20	8952	87/15	2000	200	450		8903	20	Instrument shot twice
				230	500		8943	19-1/2	
July 21	9041	89/14	2000	230	450		9001	20	Instrument shot twice
July 22	9061	20/4	2000	175	475		9060	18	Engine failure-no
				200					repairs
July 23	9061	0/0							W.O. Repairs
July 24	9097	26/7	2000	200	450				Repaired GMs
July 25	9179	82/15	2000	200	500		9105	18	
							9165	17	
July 26	9267	88/14	2000	200	500		9237	15-1/2	
July 27	9339	72/11	2000	200	450		9297	15	Repair hydraulic
									motors
									104 core days - 5631'
									56'/day average
July 28	9371	32/6	2000	200+	450		9361	12-1/2	Trip for new bit
July 29	9414	43/6	2500	200+	450				Power swivel failed
July 30	9497	83/12	2500	200+	450		9476	11	Totco survey trouble
July 31	9497	0/0							GM engine blew
Aug 1	9505	8/2	2000	150/200	400				Wait on replacement
									Installed new motor
Aug 2	9572	67/11	2000	120	375		9505	11	Wireline unit trouble
							9566	12	
Aug 3	9662	90/13	2000	200	375				Wireline unit trouble
Aug 4	9652						9650	12	Shut down to install
									new 4 cyl. GM engines
Aug 5	9692	30/5	2000	200	375				Install. of engines
									complete
Aug 6	9742	50/5	2000	200	375				Installed new drill
									line
							SEVERE LOST CIRCULATION @ 9742'.		
Aug 7	9775	33/4	2000	150/200	250		Still	losing	up to 20BPH
Aug 8	9905	130/14	2000	200	250/325		9800	11-1/2	Fluid losses continued
					- 17 -				all day @ 2-20BPH

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD.-CALGARY

DRILLING HISTORY

Candex et al Dahadinni M-43A

DATE	DEPTH 8:00 AM	FEET/ HOURS	DRILLING				SURVEYS		REMARKS
			WT	RPM	PUMP	pH	DEPTH	DEV.	
Aug 9	10013	108/11	2000	200	350		9900	10-1/2	Fluid losses under
									control
Aug 10	10013	0/0	Conducting DST #2 - Int.				9732 -	10013.	
Aug 11	10013								Lost boiler room by
									fire
Aug 12	10013								Standby
Aug 13	10013								Standby
Aug 14	10013								Logging
Aug 15	10013								DST #3 9731-10013
Aug 16	10013								Lost circ.
Aug 17	10076	63/6	2000	200	360				
Aug 18	10212	136/13	2000	170	360		10117	9-1/2	
Aug 19	10239	27/3	2000	180	450				
Aug 20	10272	49/3	180	350					T.D.
Aug 21	10272	0/0							Logging
Aug 22	10272								Logging
Aug 23	10272								Tear out rig
Aug 24	10272								Dispose excess fluids
Aug 25	9256								plugging
Aug 26	3620								plugging
Aug 27	3620								Rig down
Aug 28	3620								Circ. corrosion
Aug 29	3620								ihibitor
Aug 30									
Aug 31									
Sept 1	3620								Tear out rig
Sept 2	3620								& fly equipment &
Sept 3	3620								men to MacKenzie
Sept 4	3620								River
				Weld on plate and swedge.					
				P & A					

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. · CALGARY

BIT RECORD

WELL Candex et al Dahadinni LOCATION M-43A CONTRACTOR H & S RIG No. 11-11 FIELD W/C

No.	SIZE	MAKE	TYPE	JET SIZE	DEPTH OUT	FEET	HRS	ACCUM. HOURS	DULL COND. T	B	G	WT. ON BIT	RPM.	PUMP PRESS.	No 1 SPM LINER	No 2 SPM LINER	DATE
1A	12¼	Reed	YS4TG	Out	100	100	7-3/4	7-3/4	1	1	I	4	60	50	100 3½x6½	500 2½x3	3/2/71
1B	8-3/4	Reed	YT1A	Reg.	206	106	8		2	2	I	6	60	50	100 3½x6½	500 2½x3	
2B	8-3/4	Reed	YS1	Reg.	405	199	25	33	6	3	I	12	75	100	100 3½x6½	500 2½x3	
1C	6¼	Reed	YM	Reg.	682	177	15½	15½	4	4	I	10	75-100	75	100 3½x6½		21/2
2C	6¼	Reed	YM	Reg.	772	90	6-3/4	22¼	3	2	I	6	150	75	100 3½x6½		22/2
3C	6¼	Reed	YM	Reg.	888	116	18¼	40½	7	5	I	6	150-200	75	100 3½x6½		23/2
4C	6¼	Reed	YM	Reg.	1048	160	22¼	66-3/4	7	8	I	6-9	150+	75	GPM	Ann.Vel.	24/2
5C	6¼	Reed	YS1	Reg.	1220	172	15	81-3/4	2	6	I	6-11	140	75/100	100	120	26/2
6C	6¼	Reed	YS1	Reg.	1388	166	13-3/4	95½	2	3	I	-	120	70/80	-	100	1/3
7C	6¼	Reed	YS1	Reg.	1589	201	21-3/4	117¼				6	120	85	85	100	2/3
8C	6¼	Reed	YS1	Reg.	On part of Drill String that was dropped - lost all cones												
9C	6¼	Reed	YS1	Reg.	1796	207	18¼	135½	2	6	I	4/5	120	95	95	88	8/3
10C	6¼	Reed	YT1A	Reg.	2060	264	24½	160	2	6	I	3	120	85	95	88	10/3
11C	6¼	Reed	YT1	Reg.	2348	232	24-3/4	184-3/4	2	6	I	3½	120	85	95	88	12/3
12C	6¼	Reed	YS1	Reg.	2484	139	22¼	207	2	6	I	3½	120	90	95	88	13/3
13C	6¼	Reed	YT1A	Reg.	2672	188	25¼	232¼	2	6	I	3½	120	90	95	88	15/3
14C	6¼	Reed	YS1	Reg.	2800	128	24	256¼	3	6	I	4	120	90	95	88	16/3
15C	6¼	Reed	YT1A	Reg.	2857	57	21-3/4	278	8	8	I	3¼/4	120	140	118	108	20/3
16C	6¼	Reed	YT1A	Reg.	2885	28	17-3/4	295-3/4	6	8	I	4/8	120	150	95	88	22/3
17C	6¼	Sec.	S88	16-3	3037	152	64	395-3/4	1	8	I	7	150	250	118	108	24/3
18C	6¼	Sec.	M4N	7-7-9	3085	38	13	372-3/4	2	7	I	3/5	150	550	118	108	27/3
19C	6¼	Sec.	S3	7-7-9	3293	208	23	395-3/4	2	7	I	3/4	150	550	118	108	29/3
20C	6¼	HW	OSC1G	8-8-8	3475	182	23½	419¼	2	7	I	4	125	600	118	108	31/3
21C	6¼	HW	OSC1G	8-8-8	3522	47	14	433¼	2	7	I	4/5	125	500	118	108	1/4
22C	6¼	HW	OWV	8-8-8	3556	34	14	447¼	2	7	I	5	125+	400	118	108	2/4
23C	6¼	SEC	S88	7-9-9	3568	12	8-3/4	456¼	1	1	I	8	60	600	118	108	3/4
24C	6-7/32	Chris-tian	Dia-mond	7-9-9	Could not get to bottom.												4/4
25C	6¼	HW	OWV	8-8-8	3579	11	7-3/4	464	2	4	I	8	100	375	118	108	4/4
26C	6¼	Reed	YT1A	Reg.	3605	26	16¼	480¼	2	6	I	4-5	125	130	118	108	4/6
27C	6¼	HW	OSC3	8-8-8	3646	37	22½	502-3/4	2	6	I	6-9	60-90	300	118	108	4/7
23C	RR	SEC	S88	7-9-9	3665	60	41½	543¼	1	7	0-1/8	7	60	375/600	118	108	4/8

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. · CALGARY

BIT RECORD

WELL Dahadinni LOCATION M-43 CONTRACTOR H & S RIG No. 11-1 FIELD Wildcat N.W.T.

Diamond Coring Started at 3708' KB

No. ◇	SIZE	MAKE	Ser.#	Series	DEPTH OUT	FEET	HRS Rotating	ACCUM. HOURS			Ft./Hr.	WT. ON BIT	RPM	PUMP PRESS	No 1 SPM	No 1 LINER	No 2 SPM	No 2 LINER	DATE
1D	4-1/4	HSI	266		3762	54	6	6			9.0	4000	225	250					
2D	4-1/4	HSI	267		3826	64	7-3/4	13-3/4			8.2	3000	300	300					
3D	4-1/4	HSI	254		3966	140	19	32-3/4			7.4	2500	300	250					
4D	4-1/4	HSI	247		4173	207	26	58-3/4			8.0	2500/ 3000	300	225/ 250					
2D(RR)	4-1/4	HSI	267		4207	34	5-1/4	64			6.5	2500	150	175/ 200					
5D	4-1/4	HSI	265		4273	66	12-1/2	76-1/2			5.3	1500	100	200					
Mill	4-1/4				4274	1	7												
1D(RR)	4-1/4	HSI	266		4278	4	1-1/4	77-3/4			3.3	2000/ 3000	100	250					
Mill	4-1/4				4279	1	2-1/4												
6D	4-1/4	HSI	249		4282	3	3-1/4	81				3000	100	200					
7D	4-1/4	HSI	243		4680	399	81-3/4	162-3/4			9.8	1500	100-120	125/ 225					
8D	4-1/4	HSI	295		4889	209	32	194-3/4			6.6	2000	150	175					
9D	4-1/4	HSI	293		5062	173	39-3/4	234-1/2			4.3	1500/ 1800	150	175					
10D	4-1/4	HSI	294		5192	130	29	263-1/2			4.5	1500	130	175					
11D	4-1/4	HSI	296		5376	184	42-3/4	306-1/4			4.3	1500	130	175					
12D	4-1/4	HSI	244		5582	206	47-3/4	354			4.3	1500	140	150					
13D	4-1/4	HSI	272		5637	55	12	366			4.6	2000/ 2250	150/ 200	250/ 400					
14D	4-1/4	HSI	252		5847	210	34	400			6.2	2500	200+	400/ 450					
15D	4-1/4	HSI	263		6095	248	46-1/4	466-1/4			5.4	1500	200+	430					
16D	4-1/4	HSI	243		6296	201	52	498-1/4			3.9	1000/ 1500	230	430					
17D	4-1/4	HSI	271	S-10	6405	109	21-3/4	510			5.0	1000	240	425					
18D	4-1/4	HSI	270	S-10	6504	99	28	538			3.5	1000	240	425					
19D	4-1/4	HSI	297	S-10	6728	224	40-1/2	578-1/2			5.5	1000/ 1500	230	375					

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. - CALGARY

BIT RECORD

WELL Dahadinni LOCATION M-43A CONTRACTOR H & S RIG No 11-11 FIELD Wildcat N.W.T.

Diamond Coring Started at 3708' KB

No. ◇	SIZE	MAKE	Ser.#	Series	DEPTH OUT	FEET	HRS	ACCUM. HOURS			Ft./Hr.	WT. ON BIT	RPM	PUMP PRESS	No 1 SPM LINER	No 2 SPM LINER	DATE
20D	4-1/4	HSI	298	S-20	7128	400	48	626-1/2			8.4	1500	210	375			
21D	4-1/4	HSI	256	S-25	7387	259	50-1/4	676-3/4			5.1	1000/ 1000	200+	425			
22D	4-1/4	HSI	299	S-10	7767	380	96	772-3/4			4.0	1000	220	425			
23D	4-1/4	HSI	300	S-10	8021	254	47-3/4	820-1/2			5.3	1000/ 150	230/ 180	400			
24D	4-1/4	HSI	248	S-25	8081	60	10-1/2	831			5.7	1500	220/ 240	375			
25D	4-1/4	HSI	301	S-10	8275	194	34	865			5.7	1500	200/ 210	375/ 425			
26D	4-1/4	HSI	251	S-25	8529	254	45-1/2	910-1/2			5.6	1500/ 2000	200/ 210	450/ 500			
27D	4-1/4	HSI	245	S-25	8762	233	48-1/2	959			4.8	2000/ 3000	190/ 210	425			
28D	4-1/4	HSI	302	S-10	9351	589	99	1058			6.0	2000	190/ 210	425/ 500			
29D	4-1/4	HSI	287	S-25	9497	146	20-3/4	1078-3/4				2500	200+	400/ 450			
30D	4-1/4	HSI	288	S-25	9662	165	25-1/4	1104				2500	200+	375/ 400			
31D	4-1/4	HSI	239	S-25	10013	351	39	1143				1000/ 2000	150/ 200	50/ 350	Lost circulation		
32D	4-1/4	HSI	273	S-25	10223	210	20	1163				2000	170	350			
33D	4-1/4	HSI	275	S-25	10272	49	5	1168				2000	180	350			

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BIT RECORD

Candex et al Dahadinni #1 Hole
WELL _____ LOCATION M-43A CONTRACTOR H&S RIG No. 11 FIELD NWT

No.	SIZE	MAKE	TYPE	JET SIZE	DEPTH OUT	FEET	HRS	ACCUM. HOURS	DULL COND T	DULL COND B	DULL COND G	WT. ON BIT	RPM	PUMP PRESS	No 1 SPM	No 1 LINER	No 2 SPM	No 2 LINER	DATE
1	8-3/4	Reed	YS1	Reg.	286	286	17		4	1	IN	10,000	75	50	100	3½	100	3½	1/3
2	8-3/4	Reed	YS1G	Reg.		-16	20-3/4			Bit on fish in hole									1/6

BLAIN, BINNIE & ASSOCIATES
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CASING SUMMARY

WELL Candex et al Dahadinni LOCATION M-43A DATE Feb. 13/71

~~SURFACE INTERMEDIATE~~ SIZE Conductor 7" KB ±822 KB to CF 9.00'

NO JOINTS	DESCRIPTION	MEASURED LENGTH	KB DEPTH
			401.65
	HALCO Guide Shoe	1.00	400.65
1	7", 20#/ft. K-S, 8rd, RII	32.29	368.36
	HALCO Baffle Insert	-0-	368.36
11	7", 20#/ft, K-S, 8rd, RII	357.96	10.40
1	Landing Jt. as above	10.74	+ 0.34

TOTAL STRING	401.99
KB TO CASING TOP	0.34
LANDED DEPTH KB	401.65
TD DRILLER	405
TD CASING	405
MAKE UP	

CENTRALIZERS None

SCRATCHERS None

WELD/THREAD LOCK (NO. JOINTS) Weld shoe and first collar. Bakerlock 2nd and 3rd collars

CEMENTING CO. N.A.

VOLUME & ADDITIVES 145 sax Oilwell +

CALCULATED DISPLACEMENT 16 Bbl. MEASURED DISPLACEMENT 16 Bbl.

TOP PLUG HALCO BOTTOM PLUG None OTHER N.A.

CIRC. TIME BEFORE CEMENT Long BBLS. WASH 8 (Water)

START MIX 10:00 a.m. FIN. MIX 11:00 a.m. START DISPLACEMENT 11:10 a.m.

PLUG DOWN 12:00 Noon MAX. MIX PRESS. N.R. MAX. DISP. PRESS. 180 psi

REMARKS Good mud returns around 9-5/8" conductor. None between 7" and 9-5/8"
See reverse for additional cementing details. Slurry wt. + 15.3 ppg at 85°F.

- 23 ENGINEER D. H. Bickell

BLAIN, BINNIE & ASSOCIATES
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RECEMENTING 9-5/8" THRU 2" PIPE

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
	Conductor 7" February 13, 1971
	KB ±822 CASING SUMMARY (con't.)
	KB to CF 9.00'
	Established circulation between 7" and 9-5/8 returning behind 9-5/8".
	Mixed 90 sacks Normal + 2% $CaCl_2$ to obtain 15.4 ppg., 90°F slurry.
	Put 8 bbl. water ahead. Pump slurry away at 11:30 p.m. Good mud
	returns - no cement returns.
	Mix additional 55 sacks Normal and Oilwell + 2% $CaCl_2$. Start to
	pump slurry (15.6 ppg. at 62°F) 12:30 a.m. February 14, 1971. Pumps
	cemented off after 2 bbl. slurry away. No cement returns.
	Cement 2' below cellar between 7" and 9-5/8". Tag cement ±20' down
	outside of 9-5/8". Mix and displace 26 sacks of Oilwell cement
	+ 2% $CaCl_2$ at 110°F and 15.3 ppg. No cement returns. Mix and pump
	additional 11 sacks of Oilwell and Permafrost + 1% $CaCl_2$ as above.
	Cement at surface 10:00 p.m. February 15, 1971.

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CASING SUMMARY

WELL Candex et al Dahadinni LOCATION M-43A DATE April 10/71

SURF/INT/~~PROD/LINER~~ SIZE 5" KB 822' KB to CF 9'

NO JOINTS	DESCRIPTION	MEASURED LENGTH	KB DEPTH
	Halliburton Guide Shoe	0.82	3699.70
1	5", 13.0#, K-S, 8rd casing	15.81	3698.88
	Halliburton Insert	-	3683.07
178	5", 13.0E, K-S, 8rd casing	3688.42	+ 5.35

TOTAL STRING	3705.05
KB TO CASING TOP	5.35
LANDED DEPTH KB	3699.70
TD DRILLER	3703
TD CASING	3702
MAKE UP	

CENTRALIZERS None

SCRATCHERS None

WELD/THREAD LOCK (NO. JOINTS) Weld shoe + mill side of 3 collars
Threadlock insert

CEMENTING CO. HALCO

VOLUME & ADDITIVES 320 sacks + 400# Prehydrated Gel + 140# CFR-2 + 40 Neat

CALCULATED DISPLACEMENT 72 MEASURED DISPLACEMENT 72.0

TOP PLUG HALCO BOTTOM PLUG None OTHER

CIRC. TIME BEFORE CEMENT 2 Hours BBLS. WASH 5 Diesel + 10 Wtr.

START MIX 10:35 a.m. FIN. MIX 11:15 a.m. START DISPLACEMENT 11:17

PLUG DOWN 12:40 p.m. MAX. MIX PRESS. MAX. DISP. PRESS. 2400

REMARKS 20% excess over Sonic Caliper - hole slightly oval according to Density Log Caliper. HALCO broke down after 52 bbl. away (750 psi). Rig to use mud pumps then back to HALCO. No returns after this point. Calculated cement top ±500' KB.

- 25 ENGINEER D. H. Bickell

BLAIN, BINNIE & ASSOCIATES
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DRILL STEM TEST REPORT

D.S.T. No. 1

DATE

INTERVAL 1112' - 1222' ZONE 1

MUD WEIGHT 7.9 VISCOSITY 38 HOLE SIZE 6-1/4

TYPE OF TEST Bottom hole PACKER SIZE

JARS Bowen TYPE Hydraulic

AUXILIARY EQUIPMENT Safety Joint TYPE

PACKER SET AT 1112' WT SET ON PACKER

CHOKE SIZE S-3/4 BH 1/2 IN. FLUID CUSHION N/A

CALCULATED H.P. 452 psi CALCULATED CUSHION HYD. PRESS.

TIME STARTED IN HOLE AM,PM TIME ON BOTTOM 11:25 ~~AM~~,PM.

PREFLOW 5 MINUTES

INITIAL SHUT-IN 30 MINUTES

VALVE OPEN 45 MINUTES

FINAL SHUT-IN 60 MINUTES

RESET AFTER MINUTES

BLOW:

GAB decreasing and dying in 35 min. of second flow.

RECOVERY:

600' drilling mud 4-1/2" drill pipe

30' water

PRESSURES:

IHP	432 psi	FHP	381 psi
IFP	364	FFP	357
ISIP	372	FSIP	350

REMARKS:

Chloride content 340 ppm

NOTE SAMPLES FORWARDED FOR ANALYSIS:

N/A

SAMPLES FORWARDED TO:

 ENGINEER: D. H. Bickell

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD.-CALGARY

DRILL STEM TEST REPORT

D.S.T. No. 2 (Misrun)

DATE Aug. 10, 1971

INTERVAL 9 736' - 10 013' ZONE

MUD WEIGHT 8.8 VISCOSITY 46 HOLE SIZE 4¼

TYPE OF TEST Bottom Hole PACKER SIZE Single - 3½"

JARS Bowen TYPE Hydraulic

AUXILIARY EQUIPMENT P.O. Sub ~~TYPE~~ Safety Joint

PACKER SET AT 9 736 WT SET ON PACKER 30M

CHOKE SIZE 0.44 IN. FLUID CUSHION None

CALCULATED H.P. 4576 CALCULATED CUSHION HYD. PRESS.

TIME STARTED IN HOLE 9:00 ~~AM~~,PM Aug.11/71 TIME ON BOTTOM 6:15 AM,~~PM~~ Aug. 10/71

PREFLOW 5 MINUTES

INITIAL SHUT-IN 60 MINUTES

VALVE OPEN 15 MINUTES

FINAL SHUT-IN 30 MINUTES

RESET AFTER MINUTES

BLOW: Preflow - No air blow.

Initial flow - No air blow. Mud was dropping in the annulus. Drill Pipe was washed out and partially lost circulation.

RECOVERY: Mud in pipe flowed out of pipe through washout at 1 920' above tool.

PRESSURES:			
	IHP	4 147	@ 9 720
	IFP	4 079	
	FFP	4 079	
	ICIP	4 079	
	FCIP	4 079	
	FHP	4 134	

REMARKS:

Annulus level dropped as tool set on bottom. Lost est. 100 bbl. fluid. Packer hung upon way in hole. Pick up wt. indicated tool opened at this point. Pit level after test indicated approximately 30 bbl. lost to formation

NOTE SAMPLES FORWARDED FOR ANALYSIS:

SAMPLES FORWARDED TO:

To Candex by Lorne J. Kasmar

ENGINEER: D. L. Tufts

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. - CALGARY

DRILL STEM TEST REPORT

D.S.T. No. 3

DATE Aug. 15, 1971

INTERVAL 9 731' - 10 013' ZONE

MUD WEIGHT 8.7 VISCOSITY 46 HOLE SIZE 4½

TYPE OF TEST Bottom hole PACKER SIZE Single 3½

JARS Bowen TYPE Hydraulic

AUXILIARY EQUIPMENT P.O. Sub ~~TYPE~~ Safety Joint

PACKER SET AT 9 731 WT SET ON PACKER 10 M

CHOKE SIZE 0.44 IN. FLUID CUSHION NIL

CALCULATED H.P. 4 394 CALCULATED CUSHION HYD. PRESS.

TIME STARTED IN HOLE 9:00 ~~AM~~, PM TIME ON BOTTOM 4:00 ~~PM~~ PM. Aug. 15/71

PREFLOW 5 Aug 14/71 MINUTES

INITIAL SHUT-IN 60 MINUTES

VALVE OPEN 60 MINUTES

FINAL SHUT-IN 120 MINUTES

RESET AFTER MINUTES

BLOW: Preflow - Fair air blow.

Flow - Good decreasing at end of test.

RECOVERY: 2 000' Drl. mud

1 870' Muddy salt water

5 000' Salt water (wt. 8.8#) 38 000 ppm

PRESSURES @ 9 715

IHP	4 085
IFP	3 872
FFP	4 065
ISIP	4 092
FSIP	4 098
FHP	4 106

REMARKS:

Lost approximately 5 bbl. mud in annulus during test.

NOTE SAMPLES FORWARDED FOR ANALYSIS:

SAMPLES FORWARDED TO:

To Candex by Lorne J. Kasmar

ENGINEER: L. J. Kasmar

BLAIN, BINNIE & ASSOCIATES
ENGINEERING LTD. - CALGARY

PLUG BACK & ABANDONMENT REPORT

(First Attempt)

WELL Candex et al Dahadinni LOCATION M-43A

KB ELEV. _____

F.T.D. 402

FLUID IN HOLE 60 vis mud

PLUG BACK STRING _____

SERVICE COMPANY Contractor H & S

CONS. BD. OFFICER _____

HOLE SIZE	8-3/4		
DEPTH	402		

CASING IN HOLE	SIZE	SET AT	TOP OF CEMENT
SURF. CSG	20" Conductor		S
PROD. STR			

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG. #5
DATE	Jan. 13, 1971				
INTERVAL TOP	Surface				
INTERVAL BOTTOM	45'				
FELT PLUG DEPTH	Surface				
FORMATION NAME	Shale				
FORMATION DEPTH					
CALI. HOLE SIZE (AVG.)	30"				
TYPE OF CEMENT	Portland				
NO. OF SACKS	121				
ADDITIVES	Spruce logs				
BBLS. OF WATER AHEAD					
DISPLACEMENT BBLS. WATER					
DISPLACEMENT BBLS MUD					
SLURRY WEIGHT	14#				
MIXING TIMES START					
MIXING TIMES FINISH					
DISPLACING TIMES START					
DISPLACING TIMES FINISH					
FELT PLUG TIME	24 hours after rigging down to move rig.				

SURFACE CASING CUT 3' FT BELOW GRD. SURFACE PLUG 7 SACKS

PLATE WELDED Cemented over barrels used as conductor pipe.

CASING SALVAGE: SHOT OFF AT _____ FT. BELOW GRD.

NO. JOINTS RECOVERED _____

REMARKS: Hole was bailed dry to 45'±, logs and dry cement put in first 2' of hole. Logs one foot to two feet long used to fill hole to 3' below surface along with 121 Sk. Portland cement at average 14# slurry.

ENGINEER E. R. Larsen

BLAIN, BINNIE & ASSOCIATES
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PLUG BACK & ABANDONMENT REPORT

WELL Candex et al Dahadinni LOCATION M -43A

KB ELEV. 822'

F.T.D. 10 273'

FLUID IN HOLE Mud

PLUG BACK STRING 3-1/2" drill rods

SERVICE COMPANY H & S

CONS. BD. OFFICER

HOLE SIZE	8-3/4	6-1/4	4-1/4
DEPTH	405	3 703	10 272

CASING IN HOLE	SIZE	SET AT	TOP OF CEMENT
SURF. CSG	7"	405	-
Int. STR	5"	3 702	±500'

		PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5
DATE		Aug. 24/71	Aug. 26/71			
INTERVAL	TOP	9 256	3 645			
	BOTTOM	10 272	3 760			
FELT PLUG DEPTH		9 660	3 620			
FORMATION	NAME		Btm. 5" casing			
	DEPTH		@ 3 702'			
CALI. HOLE SIZE (AVG.)						
TYPE OF CEMENT		Oilwell	Oilwell			
NO. OF SACKS		100 sax	16 sax			
ADDITIVES		400# CFR-2				
BBLS. OF WATER AHEAD						
DISPLACEMENT	BBLS. WATER	55	22			
	BBLS MUD					
SLURRY WEIGHT		15.4	15.2			
MIXING TIMES	START	2:41 a.m.	11:52 a.m.			
	FINISH	3:05 a.m.	12:20 p.m.			
DISPLACING TIMES	START	3:05 a.m.	12:20 p.m.			
	FINISH	3:18	12:45 p.m.			
FELT PLUG TIME		Aug. 25	9:30 p. m.			

SURFACE CASING CUT _____ FT BELOW GRD. SURFACE PLUG _____ SACKS

PLATE WELDED Welded plate on 7" x 5" annulus and installed 5" x 3-1/2" swedge on 5" casing

CASING SALVAGE: SHOT OFF AT _____ FT. BELOW GRD.

NO. JOINTS RECOVERED _____

REMARKS: _____

ENGINEER L. Kasmar

BLAIN, BINNIE & ASSOCIATES
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TALLY SHEET

PAGE 1 OF 1

WELL Candex et al Dahadinni LOCATION M-43A

SIZE 7" WT. 20 GRADE K COUPLING S THRD 8rd

JOINTS ON LOCATION 15 DATE Feb. 9/71

JOINT	LENGTH	JOINT	LENGTH	JOINT	LENGTH	JOINT	LENGTH	JOINT	LENGTH
1	32 29	1		1		1		1	
2	32 89	2		2		2		2	
3	32 84	3	Out	3		3		3	
4	32 68	4		4		4		4	
5	32 64	5		5		5		5	
6	32 22	6		6		6		6	
7	32 89	7		7		7		7	
8	32 76	8		8		8		8	
9	32 57	9		9		9		9	
0	32 42	0		0		0		0	
A	326 20	C		E		G		I	
1	32 83	1		1		1		1	
2	32 97	2		2		2		2	
3	31 09	3		3		3		3	
4	10 74	4	LDG. JT.	4		4		4	
5	10 49	5	Out	5		5		5	
6		6		6		6		6	
7		7		7		7		7	
8		8		8		8		8	
9		9		9		9		9	
0		0		0		0		0	
B	118 12	D		F		H		J	

		SUB TOTAL
A	326 20	
B	118 12	444 32
C		
D		
E		
F		
G		
H		
I		
J		
TOTAL	444 32	

	JOINTS	LENGTH
PAGE TOTAL	15	444.32
BROUGHT FORWARD		
GRAND TOTAL	15	444.32

REMARKS: Joints #3 and #15 left out
Joint #3 used for rat hole
Joint #14 landing joint

- 31 - ENGINEER D. H. Bickell

E-15

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TALLY SHEET

PAGE 3 OF 3

WELL Candex et al Dahadinni LOCATION M-43A

SIZE 5" WT. 13.0 GRADE K COUPLING S THRD 8rd

JOINTS ON LOCATION 187 DATE April 1, 1971

JOINT	LENGTH		JOINT	LENGTH		JOINT	LENGTH		JOINT	LENGTH		JOINT	LENGTH	
1	34	05	1	20	49	1	19	59	1	18	67	1		
2	33	36	2	21	01	2	18	77	2	20	27	2		
3	32	83	3	19	50	3	20	83	3	19	45	3		
4	31	99	4	19	25	4	18	33	4	20	56	4		
5	32	33	5	20	13	5	17	80	5	20	38	5		
6	31	92	6	20	75	6	19	24	6	20	31	6		
7	32	82	7	19	97	7	19	53	7	19	84	7		
8	32	04	8	20	16	8	20	34	8	20	50	8		
9	31	91	9	20	17	9	19	50	9	19	41	9		
0	28	97	0	20	10	0	21	00	0	19	84	0		
A	322	22	C	201	53	E	194	93	G	199	23	I		
1	31	12	1	20	61	1	20	09	1	20	70	1		
2	31	38	2	20	17	2	20	27	2	20	11	2		
3	30	59	3	20	50	3	20	81	3	19	30	3		
4	31	97	4	20	73	4	18	90	4			4		
5	29	29	5	19	59	5	15	91	5			5		
6	30	39	6	19	91	6	19	66	6			6		
7	18	46	7	19	43	7	20	46	7			7		
8	20	58	8	20	03	8	18	86	8			8		
9	19	96	9	20	16	9	19	43	9			9		
0	19	27	0	19	46	0	20	02	0			0		
B	263	01	D	200	59	F	194	41	H	60	11	J		

			SUB TOTAL	
A	322	22		
B	263	01		
C	201	53		
D	200	59		
E	194	93		
F	194	41		
G	199	23		
H	60	11		
I				
J				
TOTAL	1636	03		

	JOINTS	LENGTH
PAGE TOTAL	109	2163.21
BROUGHT FORWARD	73	1636.03
GRAND TOTAL	182	3799.24

REMARKS: Bottom Row

Other jts. on location: 2 in Bailer

#16 = LDG. Jt. 2 in Pick Up Ramp

#1,4,10 out 1 damaged

Run in order (Additional jt. used in flowline)

ENGINEER D. H. Bickell

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TALLY SHEET

PAGE 2 OF 3

WELL Candex et al Dahadinni LOCATION M-43A

SIZE 5" WT. 13.0 GRADE K COUPLING S THRD 8rd

JOINTS ON LOCATION 187 DATE April 1/71

JOINT	LENGTH		JOINT	LENGTH		JOINT	LENGTH		JOINT	LENGTH		JOINT	LENGTH	
1	21	45	1	18	50	1	19	92	1	20	36	1		
2	21	33	2	16	66	2	18	41	2			2		
3	18	69	3	18	87	3	19	21	3			3		
4	19	80	4	19	46	4	20	11	4			4		
5	19	40	5	19	59	5	20	72	5			5		
6	18	50	6	20	92	6	20	22	6			6		
7	17	14	7	20	13	7	18	41	7			7		
8	20	03	8	20	74	8	18	80	8			8		
9	19	82	9	19	39	9	19	48	9			9		
0	20	65	0	19	65	0	19	93	0			0		
A	196	81	C	193	91	E	195	21	G	20	36	I		
1	19	41	1	18	33	1	18	96	1			1		
2	20	58	2	19	06	2	20	78	2			2		
3	20	04	3	19	31	3	20	80	3			3		
4	20	78	4	20	76	4	20	83	4			4		
5	20	52	5	19	92	5	19	40	5			5		
6	18	45	6	18	50	6	19	93	6			6		
7	18	86	7	18	84	7	20	25	7			7		
8	21	74	8	19	96	8	20	46	8			8		
9	20	98	9	18	99	9	20	83	9			9		
0	18	67	0	17	21	0	20	17	0			0		
B	200	03	D	190	88	F	202	41	H			J		

			SUB TOTAL	
A	196	81		
B	200	03		
C	193	91		
D	190	88		
E	195	21		
F	202	41		
G	20	36		
H				
I				
J				
TOTAL	1199	61		

	JOINTS	LENGTH
PAGE TOTAL	61	1199.61
BROUGHT FORWARD	48	963.60
GRAND TOTAL	109	2163.21

REMARKS: Row 2 - Middle Row

Run in order

ENGINEER D. H. Bickell

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TALLY SHEET

PAGE 1 OF 3

WELL Candex et al Dahadinni LOCATION M-43A

SIZE 5" WT. 13.0 GRADE K COUPLING S THRD 8rd

JOINTS ON LOCATION 187 DATE April 1, 1971

JOINT	LENGTH		JOINT	LENGTH		JOINT	LENGTH		JOINT	LENGTH		JOINT	LENGTH	
1	15	81	1	* 20	61	1	* 19	53	1			1		
2	34	48	2	* 19	49	2	* 20	51	2			2		
3	19	90	3	* 19	59	3	* 19	46	3			3		
4	20	39	4	* 19	10	4	* 19	48	4			4		
5	20	35	5	* 19	03	5	* 19	86	5			5		
6	19	38	6	* 19	69	6	* 20	63	6			6		
7	20	66	7	* 20	26	7	* 20	49	7			7		
8	19	11	8	* 17	25	8	* 19	61	8			8		
9	20	34	9	* 18	32	9			9			9		
0	20	35	0	* 18	85	0			0			0		
A	210	77	C	192	19	E	159	57	G			I		
1	18	68	1	* 18	70	1			1			1		
2	20	83	2	* 16	11	2			2			2		
3	19	53	3	* 19	76	3			3			3		
4	19	63	4	* 18	86	4			4			4		
5	18	58	5	* 20	42	5			5			5		
6	19	04	6	* 19	23	6			6			6		
7	20	46	7	* 18	87	7			7			7		
8	19	34	8	* 21	23	8			8			8		
9	18	71	9	* 19	61	9			9			9		
0	20	97	0	* 18	42	0			0			0		
B	195	77	D	191	21	F			H			J		

			SUB TOTAL	
A	210	77		
B	195	77		
C	192	19		
D	191	21		
E	159	57		
F				
G				
H				
I				
J				
TOTAL	949	51	+ 14.09'	

	JOINTS	LENGTH
PAGE TOTAL	48	963.60
BROUGHT FORWARD		
GRAND TOTAL		

REMARKS: Top Row.

* Add (0.542' x 26 jts.) for collars = 14.09'

Shoe = 0.82'

Run in order.

- 34 - ENGINEER D. H. Bickell

E-15

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER E. R. Larsen

DATE	WORK DESCRIPTION
Jan. 1/71	Mixing mud and rigging up to drill. Spudded in well 8-3/8" surface hole 9:45 p.m. Jan. 1/71. Drilling and pick up two 6" O.D. drill collars. Service rig.
Jan. 2/71	Drill and pick up 4-1/2" drill pipe. Ran Totco at 100', misrun. Ran Totco at 125', 1/2°. Drilling, mix mud, circulating and conditioning hole. Service rig.
Jan. 3/71	Drilling ahead 2 Totco misruns. Totco at 228 - 1°. Circulate hole, mix mud. Pump repairs, foreign matters getting to pumps. Rig service. Trip with bit #1 (drill).
Jan. 4/71	Run in hole with bit #2, bridge at 60'. Ream to 286'. Drilling, swivel repairs. Mix mud, work on pumps, Totco at 294 - 1°. Drilling, rig service.
Jan. 5/71	Drilling, clean pumps, drill head repairs. Mix mud. Rig service.
Jan. 6/71	Down time on shaker, pumps, rig and mud tanks. Drilling. Twisted off 4-1/2" pipe at 65' (pipe failure). Standby.
Jan. 7/71	Ran in hole to 90' with 3" spear Fish top at 65'. Unable to engage fish. Ran in with 6-1/8" O.D. overshot to 90', unable to engage fish at 65'±. Mix mud, clean out cellar to recement conductor pipe, cement around conductor barrels failed when jagged end of fish cut cement and barrels, mud going under rig matting. Wait on fishing tools. Clean up and repairs to rig and equipment.
Jan. 8/71	Wait for tools, mix mud, clean up, rig repairs. Make up and run 8-1/8 O.D. overshot to 90', unable to engage fish going past fish top at 65'.
Jan. 9/71	Ran in with 8-1/8 O.D. overshot and wall hook unable to engage fish from 65' to 116'.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER E. R. Larsen

DATE	WORK DESCRIPTION
Jan. 9/71	Continued .....
	Conductor pipe failed: Mix mud, and recement conductor pipe. Wait on
	cement. Ran in with fishing tool, break circulation, conductor pipe
	failed (again). Set in water pumps to transfer mud from cellar to tanks.
Jan. 10/71	Circulating and fishing, kelly hose burst, repair same, lost mud, water
	pumps not working. Clean out cellar, pulled out fishing tools. Try
	to seal conductor pipe with AM.9 chemical (twice), fishing with 8-1/8
	O.D. overshot, knuckle joint and wall hook.
Jan. 11/71	Fishing, check setting on knuckle joint and wall hook. Repair con-
	ductor pipe fishing, unable to repair conductor pipe fishing "DRY".
Jan. 12/71	Fishing with 8-1/8 O.D. overshot, knuckle joint and wall hook unable
	to engage fish 65' to 122' pulled out, rigged up 5" bailer and bailed
	hole to 15' below surface hole. Washed out to 36"+, layed down fishing
	tools, orders to abandon hole, 4:30 p.m. Jan. 12/71.
	Wait on abandonment program.
Jan. 13/71	Bailed hole to 45' "dry" cemented with 121 sax cement and 1 ft. and
	2 ft. logs to surface. Completed cementing 3:30 p.m. Rigging down
	to move. Clean mud tanks.
Jan. 14/71	Rigging down to skid rig 30' "EAST". List of tools lost in hole,
	listed on Daily Drilling Log.
Jan. 15/71	Rig down lower mast, remove pump engines, tanks and manifolds.
	Steaming for new matting under rig.
Jan. 16/71	Rig down to skid rig. Continue rigging down. Lay down mast and tear
	out pumps and pump motors. Doubled up on "daylights" and left 1 man
	to tend boilers and thaw ground and mattings.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Jan. 17/71	Rig down to skid rig.
-48°	Rig down drawworks, hoist, drilling head, motors, etc. Level ground
Icing	for new location. Unload supplier from Hercules aircraft in Norman Wells.
Jan. 18/71	Rig down to skid rig.
-51°	Level for matting. Unbolt sub base from matting. Loaded aircraft
Icing	in Norman Wells - icing conditions - aircraft turned back.
Jan. 19/71	Blasting for new location.
	Blast frozen ground for new location. Using small charges to avoid
	shattering ground. Aircraft arrived.
Jan. 20/71	Blasting for new location.
	Blast and excavate frozen ground for new location and run off ditch
	for cellar.
Jan. 21/71	Laying matting at new location.
	Move matting and remove 8" x 8" timbers from old location.
Jan. 22/71	Lay timbers for new location.
	Lay and level timbers for new location.
Jan. 23/71	Lay floor for new location.
	Level matting and lay floor for pump and motor room.
	NOTE: Only a limited quantity of sawdust and no polyethelyne was
	[illegible]. Insulation below the matting is therefore of questionable
	[illegible]eness. This could result in instability of the rig after
	[illegible] (This information is hearsay). D. H. Bickell
Jan. 24/71	[illegible] new location.
	Lay floor in pump house and sub base. Place pumps and motors.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Jan. 25/71	Rigging up.
	Pull derrick into place. Place GM motors. Start putting up frame for motor room shelter.
Jan. 26/71	Rigging up.
	Raise derrick and erect prefabs. Place mud tanks and fit piping.
Jan. 27/71	Rigging up.
	Erect prefabs. Rig steam and electric lines.
Jan. 28/71	Rigging up.
	Rig up heaters and hang derrick lights. Line up mud tanks.
Jan. 29/71	Rigging up.
	Bolt mud tanks together. Place guard rails around crown. Rig pump manifolds.
Jan. 30/71	Rigging up.
	Mix 40 sax cement for cellar. Rig up desilter, geolograph, gas detector stand.
Jan. 31/71	Rigging up.
	Finish rigging up geolograph. Rig upsafety clamp for power swivel.
Feb.1/71	Rigging up.
	Hang power tongs. Mix mud and repair leaks in mud tanks and line.
Feb. 2/71	Prepare to spud.
	Mix mud and work on shale shaker.
Feb. 3/71	Drilled 72' in 5-3/4 hrs. Depth 72'
	Spud new hole at 10:30 a.m. Feb. 2/71. W.O. trucks from Norman Wells.
	Drilled ahead. Conductor barrel washed out. Regrout conductor with

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Feb. 3/71	Continued .....
	300 lb. AM9 + 10 sax permafrost cement. Picked up additional 6" D.C.s
	and drilled ahead. Repair shale shaker. Connections very slow with
	large drill collars.
Feb. 4/71	Drilled 28' in 2 hrs. Depth 100'
-43°	Drilled to 100'. Circulate and condition hole while picking up shoe
	joint and installing baffle for plug. Baffle consisted of hardwood
	cross.
	Remove sub beams to pass 9-5/8" conductor. Run 3 joints 9-5/8" to 95'.
	Mix 59 sax permafrost cement. Pump down cemnt. Install homemade
	cementing plug. Displace plug. Good returns.
	NOTE: Cementing water apparently not heated - slurry was approximately
	32°F.
Feb. 5/71	W.O.C. Depth 100'
-40°F	Clean cement out of mud tanks.
	Dump mud tanks while W.O.C.
Feb. 6/71	Drilled 40' in 4 hrs. Depth 140'
-30°F	Mixed mud. No double box sub from 6" D.C.s to 8-3/4" bit. W.O. word
D. H. Bickell	from Norman Wells if bit sub left there in error. Not located. Lay
arrived on	down 6" D.C.s and pick up additional 5" D.C.s.
location	Found top of plug at 90'. Drilled out plug and had little resistance
3:15 p.m.	to 100' (T.D.). Could not detect any cement contamination (pH = 7.0
Feb. 5/71.	and uniform) - suspect cement may have been over displaced.
	Cement in annulus fill to ± 6' below G.L. Added cement from outside
	prior to drilling out.
	Initial circulation was returned between 9-5/8" after several minutes.
	9-5/8" appears firm but safety lines have been attached to holes cut
	in top collar.
	Drilled to 140' with bit #1R - 8-3/4" YT1A-Reg. Drilling rate in clay
	should be higher unless bit balling or clay frozen. Suspect there is

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Feb. 6/71	Continued .....
	some permafrost as initial returns were very cold.
	Instructions given to keep Zeogel-salt mud system as cold as possible
	to prevent sloughing.
	Survey at 100' - 1/2°.
Feb. 7/71	Depth 327' Drilled 187' in 74-3/4 hrs.
-10°F	Drilled to 195'. Drilled on boulder - install drilling head, pushed
Light Snow	through boulder and drilled ahead to 206'. Received bit sub for 6" D.C.s
	P.O.H. Lay down 3 rods and pick up sub + 3-10" X 6" D.C.s. R.I.H. with
	new bit #2B - 8-3/4" YT14-Reg. Bit #1B drilled 106' in 11 hrs.
	T2-B3-I appeared to be balling. Changed bit in hope that #2B will go to
	±400'. Crew and rig set up very slow with tricone drilling equipment.
	Clay to 312' - sand-shale from 312'.
	Weight on bit 8 - 9m, RPM 60.
	Mud Weight 10.0, Viscosity 100 sec., ph 7.0.
Feb. 8/71	Condition hole to run 7" casing. Depth 405'
-10°F	Inspect 9-5/8" conductor. Pipe fill several inches to length of
Clear	retaining lines. Some mud returns behind 9-5/8".
	Drill to 405' - Penetration 4-6'/hr. in hard sand-shale series.
	Circulate and condition hole. Made dummy trip to casing shoe - several
	tight spots.
	Circulate and condition hole.
	Weight on bit 10m, RPM 75.
	Mud Weight 10.0+, Viscosity 57 sec.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Feb. 9/71	Depth 405' Working casing in tight hole.
-20°F (±)	Continue circulating and conditioning hole. Deviation survey at 400'
	is 1°. Trip out. Hole tight, lay down singles to ream and clean to
	bottom. Nothing coming out on the shaker as hole is enlarged and
	pumps inadequate. Trip out. Lay down 6" D.C.'s and subs. Rig up
	and run in with 7" casing. Circulate and work tight hole at 280' -
	appears to be boulders.
	Mud Weight 11.0, Viscosity 90 sec.
	Bit #2B, 8-3/4" YS1-R made 199' in 25 hours.
	Bit Weight 12m, RPM 75. T6-B3-I.
Feb. 10/71	Depth 405' Working casing in bridged hole.
-20°F (±)	Continue to work casing. Would not go. Trip out with casing - wet.
	Trip in with 5" D.C.'s and rods. Break circulation and clean bridges
	below 270'. Mix and circulate 30 bbls. pill of +200 sec. viscosity
	mud. Took less than 30 bbls to fill pipe and hole but may be chanelling.
	Trip out with rods and run in with casing to ±270' - casing would not
	go.
	Water Well Attempt:
	Western Geophysical Party 85 agreed to attempt the drilling of a water
	source well on the wellsite. Spudded 4-3/4" hole using air at 10:00 pm.
	0' - 25' Frozen grey organics with ice lenses.
	25' - 35' Increased clay content - minor ice.
	35' - 70' Scattered gravel and ice boulders in clay.
	Indications of spotty permafrost.
	70' - 170' Predominantly clay with trace of water from minor gravels.
	170' - 180' Sand, fine, dry. Lost partial air returns. Hole tight.
	Pull out - very tight - abandon attempt at 3:00 a.m.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Feb. 11/71	Depth 405' Cleaning hole to rerun casing
-15° (±)	Continue to work casing in tight hole. Unable to circulate casing
	past bridges. Trip out with casing and run 8-3/4" bit #1B-RR to
	clean out. Ream bridges and circulate mud while adding salt and
	barites to increase mud weight. Repair pumps.
	Insignificant amount of fill coming over shakers.
	Mud Weight 13.0, Viscosity 90 sec.
Feb. 12/71	Depth 405' Washing casing in
Clear	Continue working drill string while repairing mud pumps. Hole not
-25°F (±)	cleaning. Pull out. Hole tight at 310' and 180'. Ran casing to 180'.
	Could not go by bridge. Rig cross-overs from 7" to power swivel.
	Circulate, rotate and work casing to 330'. Hole unloading some fill.
	GM motor went down during moderately severe load while working casing.
	Repair same.
	Two floormen got tangled up in kelly hose and lines and jammed between
	48" pipe wrench and rotating head when driller kicked power swivel in while crew
	making up rods. Floormen very durable - driller terminated.
	Mud Weight 12.0, Viscosity 75 sec.
	Mud appears to be diluting from thawing permafrost.
Feb. 13/71	Depth 405' Mix cement for 7" casing.
	Work casing to bottom using power swivel. Loosen 7" collar for casing
	bowl. Hang and lash down casing 3' off bottom. Circulate casing
	while cleaning mud tanks and repairing pumps. Heat cementing water
	after wrong valve opened returning mud to mixing tank.
Feb. 14/71	Depth 405' Cleaning cemented up pumps
-20°F (±)	Rig to mix and displace cement. Mix 145 sacks Oilwell and add 2%
	$CaCl_2$. Pump motors working very hard to mix one full tank of slurry.
	Pump 8 bbl. warm water ahead, 15.3+ ppg slurry at 85°F, 16 bbl. water
	behind plug. No cement returns to surface.
	Plug bumped to 500 psi - O.K. - at 12:00 noon 13/2/71.

CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Feb. 14/71	Continued .....
	Weld plate to close 7" - 9-5/8" annulus. Installed nipple on 9-5/8"
	and established circulation - no cement returns. Repair pumps, heat
	water and rig lines to cement down annulus and to surface outside of
	9-5/8" casing. Mix 90 sacks normal cement and add 2% $CaCl_2$. Slurry
	weight 15.4+ at 90°F. Pump 8 bbl. water flush, pump slurry. Again
	good mud returns but no cement to surface.
	Add more water to mixing tank - heat with all available steam lines.
	Mix 55 sacks normal and Oilwell cement + 2% $CaCl_2$. Pump 15.6 ppg slurry
	at 62°F. Pumps packed up with cement chips and undissolved $CaCl_2$ after
	2 bbl. No water supply to clean pumps - no cement returns. Bail
	slurry out of mixing tank and tear down pumps, and mud manifolding.
	NOTE: Crews working very hard but lack of equipment and experience
	for oilfield operations. Toolpush and crew have never seen
	rotary drilling rig.
	Cut off 9-5/8" casing in cellar.
Feb. 15/71	Depth 405' Cleaning cement from pump equip.
Hazy	Feel cement 2" below cellar floor in 7" - 9-5/8" annulus - O.K.
-20° (±)	Spent whole day cleaning cement from pump manifold and pumps and
	cleaning out mud tanks.
Feb. 16/71	Depth 405' Nipple up
Hazy	Tag cement 20' below cellar floor with 2" pipe. Mix 26 sacks of Oil-
-15° (±)	well cement + 2% $CaCl_2$ to 15.3 ppg at 110°F in barrels and pumped
	down beside 9-5/8" casing. No cement returns. Bail mud and water
	from cellar. Feel top of cement 5' below cellar. Mix 5 sacks perma-
	frost + 6 sacks Oilwell cement + 1% $CaCl_2$ to 15.3 ppg at 110°F and pump
	down outside of 9-5/8". Cement to surface.
	NOTE: Returns are coming up ±6' from the borehole under the sub base.
	Lay down drilling head in order to drill rathole - drop same on
	steam line box after clearing prefabs - minor damages. Steam
	out mud tanks, clean shaker, drill rathole and haul material to

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Feb. 16/71	mix Invermul.
Continued	NOTE: Salt water from sump seeping through lower side of pit onto seismic line. This sump will not contain th Invermul effectively.
Feb. 17/71	Depth 405' W.O. Wellhead spool for BOP's.
Clear	Repair shale shaker and finish cleaning mud tanks. Repair mud
±0°F	hopper and fill mud tanks with diesel for invert mud. Cut out roof over rig floor in order to get power swivel into rat hole so driller can see monkey board. Screw on casing bowl and pick up and service BOP's. Add more diesel and attempt to mix mud while repairing pumps. Instruct Tool Push on importance of hopper jet size. Conclude that BOP hookup is unacceptable without spacer spool as cellar too deep and small to install BOP wheels and flare and kill lines. Order spacer spool. Mix mud while W.O. spool.
Feb. 18/71	Depth 405' Repair mud lines.
Clear	Attempt to mix mud - Invermul not dissolving Lost approximately
±0°F	20 bbls. Repair leaks in mud tanks - numerous flange bolts missing and several leaking welds. Received spool. Install BOP's while attempting to mix mud. Repair additional leaks in mud tanks. Repair desilter and rig kill lines. Fabricate hydraulics lines for BOP's and attempt to locate leaks in accumulator lines while attempting to mix mud. Repair mud lines.
Feb. 19/71	Nipple up BOP's and attempt to gun Invermul up. Lost additional
Clear	5 bbl. diesel from tank leak - transfer mud and repair leak in
±0°F	patch weld. Add more diesel. Mix additional 20 sax cement and displace to 9' below cellar floor - obtained good cement returns. Modify BOP hookup in order to have kill and flare lines below lower rams - modify cellar framing to get valving in. Add diesel and mix mud.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Feb. 20/71	Depth 405' Prep. to drill cement.
	Nipple up BOP's while mixing mud. Repair additional leak in
	mud tanks. Rig hydraulic BOP lines and work on accumulator
	lines. Change one damaged blind ram. Rig to pressure test
	BOP's. Pressure blind rams and look for leaks. Repair leaks
	in accumulator lines and replace leaky valve on mud manifold.
	Pressure test blind rams to 1250 psi for 30 minutes. Okay.
	Trip in with 6¼" bit #1C - YM-Reg., 16 - 4-3/4" DC's and 4½"
	drill rod. Tag cement top at 359'. Put 3 bbl. diesel ahead
	and displace hole to Invermul mud. Pressure up on 3½" rams -
	drill string hydraulicing. Repair pump gasket, replace bent
	drill rod causing leak, and rig hold down to prevent hydraulicing.
	Test 4½" rams, kelly, cock and choke manifold to 1250 psig for
	15 minutes - okay. Test 3½" rams to 1200 psig - okay. Lay down
	3½" rod and pickup additional 4½" rod to drill out.
Feb. 21/71	Depth 552' Drilled 147' in 6½ hours.
Clear	Drilled plug and insert - drilled 32' cement and shoe at 402'
±0°F	KB. Drill 6¼" hole. Weight indicator not working properly,
	no fluid on hand. Repair flowline and modify flow "T". Install
	quad. pump. Drill 6¼" hole. Repair leak in stand pipe. Drill
	6¼" hole. Survey at 474' - 1-3/4°.
	Mud wt. 7.5, viscosity 35, PV 6, YP 2, Gels 0/0 - Fluid loss
	3.2 cc = Oil. Emulsion 80% oil.
Feb. 22/71	Depth 728' Drilled 176' in 13 hours.
	Work on desilter pump. Drill 6¼" hole. Reduce bit weight
	because of hole deviation. Trip for new bit due to slow pene-
	tration. Bit #1C - 6¼" YM-Reg. Made 281' in 15½ hours.
	T4 - B4 - I. Bit wt. 6-12m, RPM 75-100+. Ran in with bit #2C
	6¼" YM-Reg. Drill ahead. Noted partial lost circulation at
	± 700'. Probably occurred earlier. Mixed lost circ. material
	and regained full returns - drilled ahead.

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Feb. 22/71	Repair wireline and power swivel. Mix mud - slow seepage
	loss to hole.
	Mud wt. 7.6, viscosity 34, PV 6, YP 2, Gels 0/0, Oil Loss
	3.4 cc. Oil Content 80%
	Surveys @: 600' - 3-3/4°
	670' - 4°
	700' - 3-7/8°
Feb. 23/71	Depth 870' Drilled 142' in 16½ hours.
Clear	Mixed lost circulation material. Drilled ahead. Sucked one
+ 5° (±)	tank dry and plugged bit with undissolved Invermul and cuttings.
	Trip for plugged drill string. Replace bit. Bit #2C - 6½"
	YM Reg. Made 90' in 6-3/4 hours. T3 - B2-I. Bit wt. 6m. RPM 100-
	150+.
	Note: Overtime to pump out plastic - lined sump was caused
	by plugged shaker screen due to tank foul up and trip
	with wet string. Drilled ahead with bit #3C - 6½" YM
	Reg.
	Mud wt. 7.6, viscosity 35, PV 6, YP 2, Gels 0/0, Oil Loss 3.4
	cc. Oil content 80%.
Feb. 24/71	Depth 1 008' Drilled 138' in
Cloudy	Drilling ahead. Repair draworks feedoff. Drill to 888', losing
- 10°F (±)	mud - mix lost circulation material. Trip for bit due to slow
	progress. Bit #3C - 6½" YM-Reg. Made 116' in 18½ hours. Bit
	weight 6-10M (Daylight driller unable to see weight indicator
	and, therefore, hold bit weight at 6M as directed - requested
	replacement.) RPM 150+ Bit balling. Ran in
	with bit #4C - 6½" YM-Reg. Drilled ahead.
	Mud wt. 7.6, viscosity 36 sec., PV 6, YP 0, Gels 0/0, Oil Loss
	3.4 cc, Oil Content 80%. Survey @ 900', 4½°.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Feb. 25/71	Depth 1 137' Drilled 129' in 16½ hours.
Overcast	Drilled to 1 048' with bit #4C - 6¼" YM-Reg. Bit wt. 6m
-20°F (±)	125 ±. Drilled 160' in 22¼ hours.
	Ran in with bit #5C - 6¼" 451-Reg. Drilled to 1 137', cir-
	culated sample.
	Mud wt. 7.8, viscosity 37 sec., PV 6, YP 0, Gels 0/0, Oil Loss
	3.2 cc, Oil Content 80%.
Feb. 26/71	Depth 1 220 ' W.O. Tester.
Clear	Drilling with bit #5C - 6¼" YS1-Reg. Pressure up kelly hose,
- 25°F (±)	plugged bit from not circulating before connection. Kelly hose
	ruptured at 2000 psi. Repair same. Drill ahead to 1 220'.
	Clean and repair rig, survey and mix mud while waiting on
	tester. Attempt strap out during dummy trip - strap unaccept-
	able. Break down formation during trip - Contractor disregarded orders and
	kept fill-up line on continuously - pumped away most of mud.
Feb. 27/71	Depth 1 222' D.S.T. #1
Clear -25°F	Clean up and repair rig, mix mud and install testing line while
(±)	W.O. tester. Strap out - correct depth +2'. Pick up test tools
	and perform DST #1. Test mechanically successful. POH and lay
	down tools. Trip in with bit #6C.
Feb. 28/71	Depth 1 388' Drilled 166' in 13-3/4 hours.
Clear	Finish trip in with bit #6C - 6¼" YS1-Reg. Mix lost circulation
-20°F (±)	material and mud. Drill ahead. Repair weight indicator. With
	correct quantity of fluid in the lines, reads ½ of actual weight.
	Calculated string wt. 30m. Daylight driller cannot control bit
	weight - has poor eyesight and is hard of hearing. Broke wire-
	line while attempting to survey - repair same. Mix additional
	lost circulation material. Bypass shale shaker in an attempt
	to keep lost circulation material in mud system. Plugged bit
	due to failure to follow orders to circulate before connections.

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell/L. J. Kasmar

DATE	WORK DESCRIPTION
Feb. 28/71	Start trip out.
continued	Mud wt. 7.7, viscosity 34 sec., PV 6, YP 0, Gels 0/0, Oil Loss
	3.6 cc, Oil content 80%, Survey at 1 300' - 5-1/8°
Mar. 1/71	Depth 1 440' Drilled 52' in 7½ hours.
Clear -25°	Trip out with plugged bit #6C - 6½", YS1-R. Drilled 166' in
(±)	13-3/4 hours. Bit wt. 6-11m, RPM + 120 T-2/B-3/I. Dump
	desilter and shaker tanks - insufficient mud to drill ahead.
	Trip in with bit #7C - 6½" YS1-Reg. (Cut-out) - Could not main-
	tain suction due to additional mud loss from trip made
	because of plugged bit. Repair pump manifold. Attempt to by-
	pass several tanks in order to circulate lost circulation
	material without it settling - insufficient desilter capacity
	to keep up with mud pumps. Mix mud very slowly. Drill ahead
	while mixing mud and adding lost circulation material. Add
	Geltone and additional water to increase viscosity.
	Mud wt. 7.8, viscosity 42, PV 8, YP 2, Gels 0/0, Oil Loss 2.9 cc,
	Oil Content 75%. Survey at 1 400' - 4-3/4°
March 2/71	Depth 1 589' Drilled 149' in 16 hours.
Overcast	Drill ahead with no mud loss. Lost partial returns at 1 556'.
-30°F	Mix L.C.M. Drill ahead to 1 589'. Trip for bit. Bit #7C -
(±)	6½" YS1 Rec. (cut out) Made 201' in 21-3/4 hours. T3 - B4-I.
	Bit wt. 6000 , RPM 120. Trip in with bit #8C-6½" YS1 Reg. Slip
	out of gear, drop string in hole. Rig to fish.
Mar 3/71	Depth 1 589' Fishing - no progress.
	Repair elevators and spider damaged when fish dropped. RIH
	Open ended to fish with pin end. Screw into fish. Pick up 1000#
	wt. POH. Recover 60' of 4½" drill pipe - pin end broken off
	this section of fish. Make up and run in hole 3" Bowen internal
	spear grapple. Work into fish. Did not engage. POH and run
	in with 3½" internal grapple. RIH. Work into fish. POH with

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
Mar 3/71	remainder of fish string.
continued	
Mar. 4/71	Depth 1 589' Fishing - no progress.
	G.E. Blue, Federal Conservation Board Officer inspected drill
	site and presented recommendations for repair and alterations
	that would be required before drilling ahead. Recover fish except
	for two bit cones. Make up and run in with 6" junk mill and
	basket. Hook up swivel and rotate 120' off bottom while mixing
	and conditioning mud. Mud required thawing out as the steam
	had been turned off from the heater coils at an unknown time
	and by an unidentified agent. Crew also working on repairs
	recommended by Conservation Board.
Mar. 5/71	Depth 1 589' Fishing - no progress.
	Mix and condition mud. Work junk mill over iron. Run junk mill
	1½' into bottom. POH did not recover core or iron. RIH with
	3" magnet. Circ. work magnet. POH. No recovery. Mix mud and
	repair rig to Conservation Board requirements.
	Mud wt. 8.0, viscosity 38, F.L. 3.6, Gels 1/1, Solids 3%, PV 9,
	YP 2, Oil/Water 76/24.
Mar. 6/71	Depth 1 589' Fishing - no progress.
	Mix mud while waiting on larger diameter magnet and mill. Re-
	pair rig to Conservation Board requirements. RIH with 5-3/4" magnet.
	Circ. and fish. POH. Recovered 1 cone and 26 bearings. RIH
	with mill shoe guide on 5-3/4" magnet. Circ. and run magnet.
	POH and recover third cone and remainder of bearings.
	Mud wt. 8.0, viscosity 38.
Mar. 7/71	Depth 1 676' Drilling 87' - 6½"
	Make remainder of repair and alteration to rig according to the
	Conservation Board's recommendation. Work consisted of:

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
Mar. 7/71	1. Hand rails installed at
continued	a. Steps to mud tank.
	b. Steps from engine floor to rig floor.
	2. Covered working area above mud pits with grating.
	3. a. Heater installed below floor adjacent to BOP's.
	b. Gauge on blowdown manifold changed to 0-300 psi
	scale. Blowdown manifold closed in and heated with
	a steam rad.
	Blowdown line extended to 151 feet from center of
	well.
	4. All work areas cleaned up.
	5. BOP drill conducted with crew.
	6. Driller provided with door and stair to outside from his
	work position, formerly he had no exit to his work area.
	7. The rig will be provided sometime in the future with a
	conventional dog house.
	8. Boiler safety valves vented to outside of shack.
	9. First aid kit installed in floor area.
	Attempt was made to contact B. Thoms of the Department of Indian
	Affairs and Northern Development for approval to drill ahead and
	as contact could not be established it was decided to drill ahead.
	Drill. Repair wireline hoist cable. Survey. Drill.
	Surveys: 4½° @1600 ft.
	Mud:
	Wt. 7.8, Vis. 38, F.L. (HT/HP) 2.2 cc, Gels 1/1, Solids 2%,
	PV 9, YP 3, % Oil 76
Mar. 8/71	Depth 1 796' 120' - 6½"
	Drilling and surveying. Intermittent slow loss of circulation.
	Adding LCM - Fine Micatex and Walnut at suction.
	Surveys: 4½° @ 1600' 5½° @ 1760'
	5½° @ 1700' 5-3/4° @ 1780'
	5-3/4° @ 1740

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
Mar 8/71	Mud:
Continued	Wt. 7.9, Vis. 38, F.L. (HT/HP) 2, Gels 2/2, Solids 2%, PV 10,
	YP 5, % Oil 77
	Contact B. Thoms and receive approval to drill ahead.
Mar. 9/71	Depth 2 009' Drilled 213' - 6¼"
	Circ. Rig repair. Drill. Circ. and survey. Drill. Circ. and
	survey. Drill. BOP drill. Drill and surveying.
	Surveys: 5-3/4° @ 1820
	5-3/4° @ 1870
	6° @ 1920
	5-3/4° @ 1970
	Mud:
	Wt. 8.6, Vis. 40, F.L. (HT/HP) 3.6, Gels 1/3, % Solids 4, PV 10,
	YP 4, % Oil 74
	Slight loss circulation. 24 hour loss - 15 Bbl. to formation.
	Adding lost circ. material.
Mar. 10/71	Depth 2 101' Drilled 92' - 6¼"
	Drill, Circ. and surveying. Rig up stabbing valve. POH with
	bit No. 10C, 6¼" Reed YT1A-R.264' in 24½ hours. T2-B6-GI.
	RIH with bit No. 11C, 6¼" Reed YT1A-R. Water courses cut out.
	Rig repair - work on power tongs. Drill.
	Surveys: 5½° @ 2020'
	5° @ 2060'
	Mud:
	Wt. 8.2, Vis. 36, F.L. (HT/HP) 3.2, Gels 1/2, % Solids 4, PV 7,
	YP 3, % Oil 77
	Mud loss 30 Bbl./24 Hrs. Est. 10-15 Bbl. to formation remainder
	to surf leaks.
Mar. 11/71	Depth 2 298' Drill 197' - 6¼"
	Drill and Surveying.

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
Mar. 11/71	Surveys: 4½° @ 2100'
continued	4° @ 2150'
	4° @ 2200'
	Mud:
	Wt. 8.1, Vis. 36, F.L. (HT/HP) 4.4, Gels 1/2, PV 9, YP 1
	Very minor mud loss to lost circulation.
Mar. 12/71	Depth 2 399' Drilled 101' - 6½"
	Drill and survey. POH with Bit No. 11C - 6½" Reed YT1A-R.
	232' in 24-3/4 Hrs. T2 B6 GI. RIH with Bit No. 12C, 6½"
	Reed YS1-R. Water courses cut out. Drill.
	Surveys: 4-1/8° @ 2300'
	Mud: 8.2
	Wt. 8.2, Vis. 38, F.L. (HT/HP) 8.6, Gels 1/3, % Solids 7,
	PV 10, YP 1, % Oil 74
	Lost approximately 15 Bbl. mud.
Mar. 13/71	Depth 2 508' Drilled 109' - 6½"
	Drill and surveying. POH with Bit No. 12C, 6½" Reed YS1-R,
	139' in 22½ Hrs. T2 B6 GI . RIH with Bit No. 13C, 6½" Reed
	YT1-R. Water courses cut out. Rig repair. Work on power tongs.
	Drill.
	Surveys: 4½° @ 2400'
	Mud:
	Wt. 8.1, Vis. 36, F.L. (HT/HP) 10/4, Gels 2/4, PV 11, YP 3,
	% Oil 72, mud patchy, very minor, lost circulation.
Mar. 14/71	Depth 2 666' Drilled 158' - 6½"
	Drill and survey. Dump desilter and shaker tanks.
	Surveys: 4° @ 2 500'
	4° @ 2 600'
	Mud:
	Wt. 8.6, Vis. 37

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
Mar. 15/71	Depth 2 774' Drilled 108' - 6¼"
	Drill. POH with Bit No. 13C, 6¼" Reed YT1A (cut out) 188' in
	25½ hours. T2 B6 GI. Check BOP's. RIH with Bit No. 14C,
	6¼" Reed YS1 (cut out). Drill and survey. Increase mud volume
	3-4 Bbl.
	Surveys: 4° @ 2700'
	Mud:
	Wt. 8.7, Vis. 40, F.L. (HT/HP) 4.4, Gels 2/2, % solids 6, PV 11,
	YP 4, % Oil 74.
Mar. 16/71	Depth 2 803' Drilled 29' - 6¼"
	Drill. Power swivel seized. POH. Change out power swivel to
	rotary head. Bit No. 14C, 6¼" Reed YS1 128' in 24 hours.
	T3 B6 GI. RIH with Bit No. 15C, 6¼" Reed YT1A (cut out). Drill.
	Making slight mud volume.
	Mud:
	Wt. 8.7, Vis. 40, F.L. (HT/HP) 4.4, Gels 2/2, % Solids 6, PV 15,
	YP 4, % Oil 69.
	Apparently water percentage in mud increasing.
Mar. 17/71	Depth 2 857' Drilled 54' - 6¼"
	Drill and survey. Bearing in transmission on hoist badly worn.
	Not safe to trip. Circulate and rotate while waiting on re-
	pairs. Also U/S Oilwell pump transmission needs repair.
	Surveys: 4½° @ 2800'
	Mud: Wt. 8.8, Vis. 41
Mar. 18/71	Depth 2 857' Drilled 0'
	Rotate and circulate on bottom while waiting on transmission
	repairs and power swivel and Dodge coupling for Oilwell pump.
	Haul mud onto mud dock. Clean up rig. Service threads on 5"
	casing.
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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
Mar. 19/71	Depth 2 857' Drilled 0'
	Wait on repairs. Receive transmission and power swivel from
	Kirkland Lake via Yellownife. Install transmission. Re-
	move rotary head and install power swivel. Part for pump did
	not arrive. Hydraulic pump on hoist not operating. Repair.
Mar. 20/71	Depth 2 857' Drilled 0'
	Work on hydraulic motor on drawworks. POH with Bit No. 15C,
	6½" Reed YT1A. 57' in 21-3/4 hrs. T8 B8 GI. Repair GM prime
	mover. RIH with Bit No. 16C, 6½" Reed YT1A (cut out). Mud
	volume increasing for several days to this point. Make 5" in
	tanks during repair period (20 Bbl.). Water percent increased
	from 18% to 44%. Water from steam system or formation?
	Mud: Wt. 8.8, Vis. 58, F.L. (HT/HP) 2.2-TRH_2O, Gels 3/4, % Solids
	5, PV 27, YP 9, % Oil 51.
Mar. 21/71	Depth 2 883' Drilled 26' - 6½"
	Circulate to Btm. No fill. Drill. Mix diesel and emulsifiers
	into mud to reduce percentage water (44%). Water from unknown
	source. One pump U/S. Can't drill and mix mud. Suspect water
	flow from fractured shale zone up the hole. Drill and survey.
	Dump desilter tank.
	NOTE: Long tooth bit not cutting well, even by varying weight, RPM, GPM.
	carbonaceous limy shale.
	Surveys: 4° @ 2860'
	Mud: Wt. 8.4, Vis. 55, F.L. (HT/HP) 4.8-0.5% H_2O, Gels 2/2
	% Solids 5, PV 27, YP 8, % Oil 52.
Mar. 22/71	Depth 2 930' Drilled 47' - 6½"
	Drill. Circulate. POH. Check BOP's. Bit No. 16C, 6½" Reed
	YT1A. Drill 28' in 17-3/4 hours. T6 B8 GI. RIH with Bit No.
	17C, 6½" Security S88 (3-16). Slip and cut line. Drill.
	Survey. Making slight volume in mud tanks. Loss of 3/4" in

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
Mar. 22/71	late p.m. Take off desilter to add solids to raise weight.
continued	Surveys: 4° @ 2900'
	Mud: Wt. 8.5, Vis. 60, F.L. (HT/HP) 2.2, Gels 2/2 % Solids 5,
	PV 32, YP 8, % Oil 57.
Mar. 23/71	Depth 2 995' Drilled 65' - 6¼"
	Drill and survey. Transfer 38 drums - 44% water/51% diesel
	out of mud system. On March 20 transfer 20 drums of same
	out of mud system.
	Surveys: 4-3/4° @ 2960'
	Mud: Wt. 8.5, Vis. 50, Gels 1/2, % Solids 4, PV 21, YP 3,
	% Oil 55%.
Mar. 24/71	Depth 3 033' Drilled 38' - 6¼"
	Drill and survey. Starting to make volume into mud tanks.
	Surveys: 5½° @ 3000'
	Mud: 8.5, Vis. 60, % Solids 5, % Oil 38
Mar. 25/71	Depth 3 037' Drilled 4' - 6¼"
	Drill. Very Slow. Bit cones locked? Making mud volume.
	Percent water increased to 58%. Add Baryte and mix mud while
	drilling. Mud Wt. to 9.5. Volume stable. POH with Bit No. 17C
	6¼" Security S88 (3-16) 152' in 64 Hrs. (T1 B8 GI). Check hole
	on way out for mud loss or gain. Pump 60 drums (77 Bbl.) out
	of surface system. Mix new mud and circulate into surface system.
Mar. 26/71	Depth 3 075' Drilled 38' - 6¼"
	Mix mud. Add Wt. material to 9.3#/gal. RIH with Bit No. 18C,
	6¼" Security M4NJ (7,7,9). Repair power swivel. Break circu-
	lation one half way in. Circulate 50' to Btm. Drill and survey.
	Surveys: 6° @ 3050'
	Mud: Wt. 9.3, Vis. 60, F.L. (HT/HP) % Solids 6, %Oil 50.

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Mar. 27/71	Depth 3 085' Drilled 10' in 3½ hours.
Clear	Drilled to 3 058' - POH laying down to Tuboscope. Found one
-30°F	bad 3½" drill rod. Changed power tongs. Picking up drill
	string. Bit #18C - 6¼" M4N w/ 7-7-9. Drilled 38' in 13 hrs.
	Bit Wt. 3500, RPM 150. T2-B7-I.
	Mud Wt. 9.6 (added wt. material) Vis. 63 sec.
Mar. 28/71	Depth 3 122' Drilled 37' in 4-3/4 hours.
	Finished picking up 3½" drill rod. Lost 4 hours + 50 Bbl. mud
	from leak in mud tank. Unable to pick up mud because:
	1. Mud freezing due to high concentration of formation water.
	2. Sump #1 full as transfer pump was +2 months late in arriving.
	Mud in sumps partially frozen and cannot be salvaged.
	Mixed mud. Worked on plugged pump suctions. Washed and reamed
	to bottom - hole a little tight but little fill. Drilled ahead
	with Bit #19C - 6¼" S3 w/ 7-7-9.
	Survey @ 3100' - 5-7/8°.
	Mud wt. 9.6, Vis. 56 sec. 6% solids - liquid phase = 60% oil.
	OBSERVATION:
	Since I departed on March 3, 1971, most of the improvements
	demanded by the Board have been attempted. There appears to
	be no real interest in conducting an efficient operation if
	it involves the hiring of extra hands or the expenditure of
	Heath & Sherwood capital. I do not expect any change - at
	least improvement - in efficiency.
Mar. 29/71	Depth 3 293' Drilled 171' in 18½ hours.
	Deviation surveys and connections very slow. Drilled to 3 293'
	w/Bit #19C - 6¼" S3 w/ 7-7-9. Drilled 208' in 23 hours. WOB=
	3-4m RPM = ± 150.
	Surveys @ 3150' - 6°
	3200' - 6° 3250' - 6¼°

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Mar. 29/71	Mud wt. 9.6, Vis. 58 sec., PV 23, YP 9, Gels 2/4, Solids 7%,
continued	Oil in liquid phase = 61%.
Mar. 30/71	Depth 3 354' Drilled 61' in 6-3/4 hours.
	Trip out for new bit. Bit #19C - 6½" S3 W/ 7-7-9. Out at 3 293'.
	Drilled 208' in 23 hours. T2-B7-I. Changed worn and kinked
	drilling line. Hole flowed slightly during trip. Trip in with
	Bit #20C - 6½" OSC1G w/3-8's. Drill ahead with no significant
	mud loss or gain.
	Survey at 3 300' - 5-3/4°.
	Mud wt. 9.7, Vis. 60 sec., Oil % = 60%, PV 25, YP 11, Oil Loss
	2.2 ml.
Mar. 31/71	Depth 3 475' Drilled 121' in 16-3/4 hours.
	Drilling ahead with Bit #20C. Lots of rig repairs. Very slow on
	connections and surveys. Circulate and start out of hole.
	Surveys at 3 365' - 5-7/8°
	3 400' - 5-7/8°
	3 450' - 6°
	Mud wt. 9.8, Vis. 54, Gels 4/6, Solids 9%, F.L. 2.7 ml. P.V. 23,
	YP 12, Oil - 63%.
Apr. 1/71	Depth 3 522' Drilled 47' in 14 hours.
	Finished trip out with Bit #20C - 6½" OSC1G w/3-8's. Drilled
	182' in 23½ hours.
	Bit wt. 4m, RPM 125+, T2-B7-I. Repair leaks in mud manifold.
	Trip in with Bit #21C - 6½" OSC1G w/3-8's. Drilled ahead very
	slowly.
	Survey at 3 500' - 6½°
	Mud wt. 9.6, Vis. 52, F.L. 3.2 ml., Oil 66%.
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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Apr. 2/71	Depth 3 556' Drilled 34' in 14 hours.
	Drilled to 3 522' with Bit #21C - 6¼" OSC1G w/3-8's. Bit wt.
	4-5m, RPM 125+, Made 47' in 14 hours, T2-B7-I. Trip out.
	Repaired hydraulics system in an attempt to obtain reasonable
	drawworks horsepower. Run in with Bit #22C - 6¼" OWV w/3-8's.
	Drilled 34' in 14 hours - slow drilling rate unexplained unless
	threshold drilling weight is too high for available or advisable
	weight.
	Mud wt. 9.7, Vis. 53 sec., F.L. 3.8 ml., Gels 3/5, Solids 8%,
	PV 20, YP 12, Oil in liquid 62%.
Apr. 3/71	Depth 3 568' Drilled 12' in 8-3/4 hours.
	Survey, mix mud pill, and prepare to trip. Trip out with #22C,
	T2-B7-I. Pick up Bit #23C - 6¼" S88 w/ 7-9-9. Pick up Drilco
	rubber sleeve non-rotating stabilizer.
	Drill with 8m on bit and 60 RPM. Formation apparently too soft
	or'waxy'. POH with button bit (T1-B1-I). Pick up Christiansen
	Diamond bit and diamond reamer. Trip in.
	Survey at 3 550' - 6°.
	Mud wt. 9.7, Vis. 50 sec., F.L. 38 ml., Gels 3/5, Solids 9%, PV 20,
	YP 12, Oil 64%.
April 4/71	Depth 3 579' Drilled 11' in 7-3/4 hours.
	Trip in slowly with diamond assembly. Ran through tight spot
	at 2 834' - 4' free travel - reamed down 6' - still tight.
	Reamed up 4' and came free. Concluded risk too high due to
	crews inexperience and tight hole, pulled diamond assembly.
	Picked up rock bit - Drilco stabilizer still in string. Ran
	Bit #25C - 6¼" ODV w/3-8's. Bit torquing after 7-3/4 hours. POH.
	Mud wt. 914, Vis. 45, F.L. 3.6 ml., Gels 3/5, Solids 8%, PV 22,
	YP 13, Oil in liquid phaze 65%.
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ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Apr. 5/71	Depth 3 600' Drilled 21' in 11½ hours.
	Finished trip out with Bit #25C - 6¼" ODV w/3-8's. Drilled
	11' in 7-3/4 hours. T2-B4-I. Bit wt. 8m, RPM 100+.
	Pushed rubber stabilizer down the hole with the bit. Made up
	spear teeth on 3½" rod - ran in but unable to recover rubber.
	Lay down stabilizer for this bit run.Change bits and RIH. Did
	not feel rubber. Repair shaker and hydraulics - something wrong
	with hydraulics system but no one knows what. Recovered 43 bbl.
	good mud from lower sump. Drilled ahead very slowly with Bit #
	26C. Mud wt. 9.3, Vis. 44 sec., Gels 3/6, Solids 9%, F.L. 4.1 ml.,
	PV 18, YP 10, Oil in liquid phase 74%.
Apr. 6/71	Depth 3 629' Drilled 29' in 14½ hours.
L/Snow -5°F	Drilled to 3 605' with Bit #26C - 6¼" YT1A Reg. Made 26' in
	16¼ hours. Bit wt. 4-5m, RPM 125-130. T2-B6-I.
	Survey, pump pill and trip out for bit change. Ran bit #27C - 6¼"
	OSC3 w/3-8's.
	Mud wt. 9.3, Vis. 43, Oil loss 3.6 ml., Gels 3/5, Solids 10%,
	PV 16, YP 9, Oil in liquid phase 68%.
	Survey at 3 600' - 5-3/4°
Apr. 7/71	Depth 3 646' Drilled 17' in 12-3/4 hours.
Blizzard	Drilled to 3 646' with Bit #27C - 6¼" OSC3 w/3'8's
-5°F	Drilled 37' in 22½ hours. Bit wt. 6-9m, PPM 60-90. T2-B6-I.
	Trip in with rerun Bit #23C - 6¼" S88. Mud wt. 9.5, Vis.47 sec.,
	F.L. 4.8 ml., Gels 2/5, Solids 10%, PV 17, YP 9, Oil in liquid
	phase 71%.
	Survey at 3 635' - 5°.
Apr. 8/71	Depth 3 678' Drilled 32' in 22 hours.
Overcast	Finish trip in with Bit #23C - 6¼" S88 rerun. Lengthy discussion
	regarding operational problems with H & S's Dave Lapinskie.
	Survey at 3 655' - 5°.

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell

DATE	WORK DESCRIPTION
Apr. 8/71	Mud wt. 9.4, Vis. 45 sec., F.L. 4.4 ml., Gels 3/5, Solids 10%,
continued	PV 19, YP 9, Oil in liquid phase 71%.
Apr. 9/71	Depth 3 706' Drilled 28' in 19½ hours.
Snow -15°F	Drilled to casing point of 3 706'. Made dummy trip.
	Problems with mud solids caused by gunning tanks.
	Surveys at 3 680' - 3 706' - 4½°.
	Mud wt. 9.3, Vis. 44 sec., F.L. 4.8 ml., Gels 3/5, Solids 14%,
	PV 20, YP 10, Oil in liquid phase 72%.
Apr. 10/71	Depth 3 703' Laying down drill collars.
L/Snow	Finished dummy trip. Circulated and W.O. Schlumberger. Mix pill
-10°F	and trip out. W/Bit #23C - 6½" S88 rerun. Made 60' in 41½ hours.
	Bit wt. 7m, PPM 60+, T1-B7-0 1/8". Strap out - correct - 3'.
	Rig up Schlumberger - Ran Dual Induction S-GR Cal, Density -
	Schlumberger TD 3 702'. Rig down Schlumberger and trip in with
	drill collars + 4½" drill rod. Lay down 4½" drill rod to run
	casing.
	Mud wt. 9.3, Vis. 43, F.L. 3.8 ml., Gels 3/5, Solids 9%, PV 15,
	YP 8, Oil in liquid phase 75%.
Apr. 11/71	Depth 3 703' Rig to cement.
Clear, -10°	Finished laying down 4½" rod and drill collars. Change one set
F	of rams to 5". Rig up and run 179 jts. 5", 13# K-S, 8rd casing
	with HALCO guide shoe and baffel insert. Flow T assembly too
	small to pass casing slips, rig out floor beams and remove flow
	T. Circulate casing at 3 700' and prepare to cement.
	Mud wt. 9.3, Vis. 43 sec.
Apr. 12/71	Depth 3 703' N.U. BOP's
Clear,	Haul cement and water, mix gel and CFR-2 in mix water.
-10°F	Pump 5 bbl. diesel + 10 bbl. water. Mix and pump 320 sax
	Oilwell cement + 4% (equivalent) gel + 0.5% CFR-2 to 14.0 ppg

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. H. Bickell/D. L. Tufts

DATE	WORK DESCRIPTION
April 12/71	followed by 40 sax Oilwell neat @15.0 ppg. Release plug and
continued	displace with water. Halliburton unit stopped after 52 bbl.
	of displacement. Rig up to displace with rig pump. Insufficient
	horsepower and inadequate motor mounts. Start HALCO unit.
	Pressure to 1700 psi. Formation taking slurry. Finish pumping
	plug at 2400 psi. Bump to 2750 psi - held okay. Rig down HALCO
	and set casing slips. Clean rig and mud tanks - barrel Invermul
	mud. Nipple down 3000# BOP's and rig up 5000# stack.
April 13/71	Depth 3 703'
Clear +30	Set Series 1500 (5000#) BOP stack and started nippling up. Could
	not set in place as assembled due to lack of space in substructure.
	Had to take off wing valves and turn them over so they could be
	operated. Choke manifold connections would not fit and manifold
	has to be moved. BOP hydraulic lines all had to be refitted with
	H.P. pipe to fit new stack. Had to cut away part of the kelly
	rat hole sleeve to allow passage of the check valve in the kill
	line. The substructure is not adequate size for so much equipment.
	BOP's sufficiently rigged to start pressure testing at 8:00 a.m.
	Shipped Schlumberger, Halliburton and Christensen equipment via
	Tower Trucking p.m. April 12, 1971.
April 14/71	Depth
	Pressure tested blind rams to 3000 spig for 10 mins. Held okay.
	Unable to test at higher pressure with rig equipment (safely).
	Removed pop valves and installed bull plugs to get pressure to
	3000 psi. Pump manifold and valves leaked badly. Spent most of
	morning repairing leaks. Ran a stand of pipe in the hole and
	started testing the pipe rams. The top pipe rams and hold down
	tested to 3000 psig for 10 minutes. Okay. It was found that the
	BOP stack had been shipped with the wrong size 2½" pipe rams in the
	bottom Schaefer. We could not test this section of the stack as
	there were no spare rams on the location. A set had to be ordered

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
Apr. 14/71	out of Edmonton. Completed rigging up flow-tee, flow line,
continued	Floor beams and plates. Hauled salt, water and chemicals and
	mixed polymer mud system. Limited to mixing 30 bbls. at a time
	due to equipment size. Mixing pump broke down and had to be
	repaired. Took 8½ hours to mix 220 bbl. system. Moved the
	choke manifold and tied it into the BOP stack. Ran in the hole
	with a tooth bit to drill out. Tagged top of cement at 3 612'
	KB, plug at 3 616'. Plug 70' high. The drill out was delayed
	due to time required to rig up BOP equipment and install splash
	pan in rig floor.
	Mud properties: Wt. 9.0#, Vis. 40
	Equipment out of order for taking water loss. Mild weather
	resulting in bad lease condition. Require both tractors to haul
	water up the hill from the river. Have one water storage bladder
	filled. Balance of tractor time spent hauling salt and cleaning
	up junk around the rig.
April 15/71	Cored 35' in 4½ hours. Depth 3 743'
+50	Drilled cement and plugs. Drilled out to shoe. Attempted to
Clear/Mild	pressure test casing again. Pressured to 3000 psig. Bled off
	slowly due to several leaks in pump manifold again. While testing
	leaks in system crew left bleed off line open and pumped 50+ bbls.
	of mud out onto ground. Lost total of 80+ bbls. due to careless-
	ness and leaks during daylight shift. Drilled 3 ft. of new hole.
	pulled out to pick up core barrel. Ran in with new Diamond Bit
	#1D (4S1-266). Reamed cement and new hole to 3 708'. Started
	coring.
	Mud wt. 9.0, WL 4.0, PH 11, % Oil 2.0, Vis. 40, PV 11, YP 4,
	Cake 1/32
	Drilling wt. 5000#, Pump Pressure 250 - 300 psi.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
April 16/71	Depth 3 786' Cored 43'
+ 40°	Coring satisfactory at 4-5 minutes/ft. Experiencing trouble
Clear/Mild	running and retrieving inner barrel due to rubber in hole and on
	top of barrel. Rubber is apparently from the cementing plug which
	was drilled earlier. Pieces of rubber have somehow got into the
	circulating system. Made two complete round trips with the drill
	string to retrieve the core barrel. Also shut down and replaced
	the pipe rams in the lower Schaefer BOP. Spread insulation under
	substructure. Both tractors working to haul water to fill the
	storage bladders.
	Mud wt. 9.0, Gels 1, PV 15, pH 10.5, Cake 1/32, Vis. 42, Solids 2%,
	YP 10, Oil 2%, Cl 63 000, Ca_{++} 200.
	Deviation survey at 3 759 - 5-3/4°.
April 17/71	Depth 3 883' Cored 97'
Clear	Coring consistantly at 4-6 minutes/ft. Still having occassional
+20	problems caused by fragments of rubber. Wire line broke while
Windy	retrieving core #7. Had to trip drill rods to retrieve the core
	barrel. Repaired overshot and wire line. Ran back in the hole
	with Diamond Bit #3D. Cut core #8, 9, 10 and 11.
	Mud properties holding satisfactorily.
	Mud wt. 9.1, WL 3.5, pH 10, Vis. 40, PV 14, YP 7
	Drilling wt. 3000, RPM's 250
	Deviation: 3800 - 4½°
	3850 - 4-3/4°
April 18/71	Depth 3 966' Cored 93'
+ 30°	Cut cores 12-15 inclusive. Penetration rate dropped off to 10-12
Clear/Mild	min./ft. Probably due to higher mud wt. and viscosity plus re-
	duction in wt. on bit in an effort to control deviation. Crew
	pulled bit to check diamonds. The bit was in excellent condition.
	Put on new bit Diamond 4D-HNO HSI 247. Started back in hole.
	Core handling and recover as well as round trips are taking much

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
April 18/71	longer than predicted. This is an area that needs a lot of im-
continued	provement. Drilling wt. 2500, RPM 250-300.
	Mud wt. 9.1, WL 4, PV 11, FC 1/32, Oil 2%, Vis. 43, pH 8.5,
	YP 8, Solids 2½%.
	The desilter is not knocking the solids as efficiently as it
	should. Mud weight is staying high in spite of the fact the
	desilter is running 24 hours per day and a stream of water is
	running in the mud tanks.
April 19/71	Depth 4 100' Cored 134'
+ 40°	Coring operations routine. Core cutting times are considered
Clear/Mild	good for the formation being cut and the weight being carried.
	Core retrieval times are too high resulting in reduced footage
	for the day. Drilling wt. 3000#, RPM 300
	Mud wt. 9.0 , WL ±4.0, PV 9, pH 8.0, Vis. 40, FC 1/32, YP 4
	Adding small stream of water to help control weight and viscosity.
	Penetration rate fairly consistant at 5-7 min./ft.
	Deviation: 3900' - 5-1/8°, 3950' - 4½°, 4000' - 4½°
	The dikes around the mud sump have started to leak. Several inches
	of sump fluids leaked out under the dike into the muskeg and snow
	below the sump. Cats pushed fresh clay into the dike edges and
	stopped the flow at least temporarily. These fluids will no doubt
	find their way into the creek bed which leads to the Dahadinni.
	There is so much snow and ice in and under the dikes it is going
	to be difficult to control this situation.
	Water storage bladders 75% filled. Started preparing logs for
	copter pad.
April 20/71	Depth 4 173' Cored 73'
Clear/Mild	Coring rate varied from 5-10 minutes/ft. Continued to run with
Low 10°	reduced weight on bit to help control deviation. Experienced
High 45°	high torque conditions the last 50'. Reduced RPM's for safety.

CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
April 20/71	Added Cutwell and Mica-fine to help reduce torque. Well flowed
continued -	slightly on connections and while retrieving core. No evidence
	of gas cutting and no measurable increases in mud tank volumes.
	Core tube broke in half while retrieving core #26. Had to trip
	drill string to retrieve the core. Ran back in the hole with
	new bit # Diamond 5D. Drilling wt. 2500 - 3000#, RPM's 150-250.
	Mud wt. 9.1, WL 5.0, PV 8, pH 8.5, Solids 2%, Vis. 40, FC 1/32,
	YP 2, Oil 0%.
	Installed Flow Sensor in mud flow line.
April 21/71	Depth 4 206' Cored 33'
Low 20°	After tripping in with the new bit Diamond 5D - Cored 2'. Pres-
High 50°	sured up. Tried to retrieve the core tube. It was broken off
Clear/Windy	again. Round tripped the drill string to retrieve the tube and
	service the barrel. Ran back to bottom and started coring again.
	Cored 2'. Pump pressured up. Tried to retrieve tube. Overshot
	broke. Had to trip drill string again to pick up the core tube
	and repair the overshot. Ran back in the hole, cleaned to bottom
	and cored (#27) 18'. Retrieved the core and ran in with tube.
	Trouble breaking circulation. Pulled tube, checked and ran back
	in. Cored 14' (#28). Tried to retrieve. Tube broke in half
	again. Had to trip pipe again to retrieve the core. No apparent
	reason for tubes breaking. Drilling wt. 2500#, RPM's 150-250.
	Considerable hole torque being experienced. No notable drag on
	trips in and out.
April 22/71	Depth 4 245' Cored 39'
Low 10°	Had to make two more round trips to retrieve broken core tubes.
High 45°	The tubes are breaking at the mid jt., apparently on the way
Clear/Windy	in the hole or after coring has commenced. When they break
	they drop into the bit and shut off circulation. They are
	breaking at the threads. H & S were called at Kirkland Lake for
	advice. Their conclusion was the the breaks are caused by vibration.

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
April 22/71	They suggested reducing weight on bit, RPM's and pump pressure.
continued -	They are shipping up rod grease to help reduce torque. In the
	meantime coring is being carried out using single 10' tubes.
	Cut cores #30, 31 and 32 with no problems. Penetration rate
	down due to low wt. and RPM's. Hole deviation would seem to
	be the most obvious problem affecting the rod torque and break-
	ing tubes. Drilling wt. 1500#, RPM's 100, Pump Pressure 200.
	Mud wt. 9.0, WL 6.5, pH 8.5, PV 7, Vis. 37, FC 1/32, Solids 2%,
	YP 1, Oil 2%.
April 23/71	Depth @ 275' Cored 30'
Low 20°	Cut cores #33, 34, and 35. Started cutting core #36. Had cir-
High 55°	culating problems. Pulled tube and checked. Ran back in.
Clear/Mild	Could not get to bottom. Pulled drill string to check tubes.
	Core barrel had broken off and stayed on bottom. The break was
	at the center stabilizer approximately 10' from bottom. Ran in
	with spear and fished the core barrel. Pulled out of hole. Ran
	in with mill to break up junk left in hole.
	Drilling wt. 1500#, RPM's 100, Pump Pressure 150-175.
	Mud wt. 9.1, Vis. 37-40, WL 6.5, pH 9.0
	Sent both tractors to the McKenzie River with a load of drill
	collars. Rocked collars on hill above river. River clean up
	cannot be completed as the bulk of the junk is frozen into the
	ice and will have to wait for more thawing before it can be
	moved. Dahadinni River started flowing during the day. Water
	3 ft. deep on top of the ice at the crossing. Unsafe for taking
	tractors across. Will have to postpone hauling the balance of
	the collars and BOP's to the McKenzie landing.
April 24/71	Depth @ 278' Cored 3'
Low 20°	Ran to bottom with tapered mill. Milled on junk for 4 hours.
High 50-55°	Reamed bottom 30' of hole. Pulled out and ran in with core
	barrel and reran bit to try to pick up milled junk in core tube.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
April 24/71	Cut 3' of core and bit started taking too much weight to cut.
continued -	Pulled out. Bit was fairly well scrubbed from drilling junk.
	Ran back in with another rerun bit. Rotated for one hour and
	made no progress. Pulled out. Bit badly damaged from junk in
	the hole. Rigged up to run in with a tapered mill again to
	work on junk.
	Mud wt. 9.1, pH 8.5, PV 7, FC 2/32, Solids 2%, Vis. 37, WL 5.5,
	YP 1, Oil 2%.
	NOTE: Started hauling (80-87) chopper fuel from Norman Wells.
	Three Otter flights today. This air strip is now
	clear of snow and very muddy but still okay for single
	Otters. McKenzie landing strip at mouth of Dahadinni
	no longer usable.
April 25/71	Depth 4 280'
	Finished running in with tapered mill. Milled on junk for
Low 25°	2½ hours. Pulled out of the hole and picked up the core barrel
High 55°	and a diamond bit and ran back in to cut core and try again to
Clear/Mild	get junk into tube on top of core. Reverse circulated while
	working down to bottom. Cut 3' of core in 95 minutes. Pulled
	inner tube and checked. Recovered 3' in tube. Cut 3' of core in
	95 minutes. Pulled out of hole to check core bit. Still
	evidence of junk in the hole. Rigged up and ran in with Bowen
	Magnet with Texas tooth skirt on bottom. Mixed 5 Bbl. high-
	viscosity pill (140) and circulated one full circulation around,
	while working magnet. Started out of the hole.
	NOTE: This rig is poorly equipped with subs for fishing work.
	Mud wt. 9.1, pH 8.0, Vis. 37
	Flew in 5 Otter flights with Helicopter fuel. The air strip
	at this location is very muddy but still usable. No snow cover.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
April 25/71	Just mud and water.
continued -	
April 26/71	Depth 4 291' Cored 11'
Low 25°	Pulled out of the hole with the magnet. Recovered most of
High 60°	bearings and races that were lost. Rigged up a core barrel and
	new bit #7D and ran in hole to start coring. Strapped in. Tally
	checked okay. Greased the drill rods again on the trips in. Draw-
	works came unbolted from sub. Shut down for repairs. Cut 9' of
	core. Shut down 6 hours to string new wireline on retrieving
	drum. With a proper set up this should be a 30 minute job. Re-
	covered core #39. Had trouble getting core tube down hole again.
	Cut one foot of core and string started taking wt. Core barrel
	broke off again. Pulled out of hole. Core barrel had broken
	off at centre stabilizer. Rigged spear and started in hole to
	fish for core barrel.
April 27/71	Depth 4 310' Cored 19'
Low 20°	Ran in the hole with a spear and latched into the core barrel.
High 40°	Circulated fish and took Totco Survey. Pulled out with fish.
	Rigged up a new 20' core barrel and bit #7D. Ran back in the
Heavy Rain	hole to cut core #41. Cored at an average of 20 min/ft. Wire-
and snow	line retrieving unit broke down. Had to trip the drill string
	to retrieve the core. Checked every connection on the bottom
	500' of the drill string for metal failures on the way out of
	the hole. The inner core tube was broken in half again.
	Drilling wt. 1500#, RPM's 120, Pump 125 psi
	Mud wt. 9.0, WL 4.0, PV 9, FC 2/32, Oil 3%, Vis. 38, pH 8.5,
	YP 2, Solids 3%.
	No aircraft in today due to bad weather. Air strip very muddy
	and soft.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts/ L. J. Kasmar

DATE	WORK DESCRIPTION
April 28/71	Depth 4 317' Cored 7'
	Completed tripping out, checking tool jts. on the way out.
Low 10°	Waited on string stabilizers to be flown in (7 hours). Install
High 30°	stabilizers at 159' and 279'. Ran in the hole and cut Core #42
Overcast/	(7'). Retrieved the core and tried to run back in with core
Snow	tube. Found rod string had parted. Tripped out. Picked up
	spear and ran in to fish core barrel. Latched on to fish and
	pulled out of the hole.
	Drilling wt. 1500#, RPM's 100-150, Pump 125 psi
	Mud wt. 9.0, WL 4, pH 8, PV 11, YP 3, Vis. 40, FC 1/32, Solids 2%,
	Oil 4%
April 29/71	Depth 4 243' Cored 26'
Low 10°	Changed the position of the stabilizers and ran back in the hole.
High 35°	Cut core #43 (6'). Retrieved the core after jamming the barrel.
Overcast	Ran tube in and cut core #44 (13'). Shut rig down and repaired
Snow/Rain	hydraulic equipment on Wireline unit. Pulled core out. Ran
	tube back in the hole and cut cores #45 and 46. Coring at re-
	port time. Stabilization appears to have reduced vibration as
	coring is proceeding routinely. Coring time ranges from 12-20
	minutes per foot.
	Drilling wt. 1500#, RPM's 120, Torque 1500
	Mud wt. 9.0, WL 3.4, pH 8.0, PV 8, YP 4, Vis. 40, FC 1/32,
	Solids 2%, Oil 4%
April 30/71	Depth 4 416' Cored 73'
	Cut and retrieve core #45 (6'), #46 (20'), #47 (3'), #48 (8'),
	#49 (17'). Survey at 4 366'. Cont. cut and retrieve core #50
	(7'), #51 (4'), #52 (12')
	Drilling wt. 2000#, RPM 110/200
	Mud wt. 9.0, Vis. 36, Survey 5½° at 4 366'
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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
May 1/71	Depth 4 456' Cored 40'
	Cut and retrieve core #53 (15'), #54 (4'), #55 (20'). Survey
	at 4 425'. Unable to pick up inner tube. POH. Core bbl.
	broken off at adaptor CPL. RIH with spear. POH and recover
	fish.
	Drilling wt. 2000#, RPM 200
	Mud wt. 9.1, Vis. 39, Survey 5½° at 4 425'.
May 2/71	Depth 4 515' Cored 59'
	Repair core bbl. RIH installing vertical rib stabilizers at
	39, 100, 162, 223.5, 285, 406.5, 528, 649 (Total - 8) off Btm.
	Cut core #57 (19'). Pull core tube. Broken at top of main
	tube. Fatigue break. Fish out tube with spear on Wireline.
	Repair tube, cut and retrieve core #53 (3'), #59 (5'), #60 (19'),
	#61 (14').
	Drilling wt. 3500#, RPM 200
	Mud wt. 9.0, WL 3.6 , pH 75, PV 10, YP 8, Vis. 40
May 3/71	Depth 4 615' Cored 100'
	Cut and retrieved core #62, (20'), #63 (20'), #64 (20'), #65
30/60°	(20') and #66 (21'). Broke and fouled Wireline while retrieving
Clear	core #66. Cut out 4000'. Survey at 4500'.
	Drilling wt. 3500#, RPM 200
	Mud wt. 9.0, WL 4.4, pH 8, PV 10, YP 5, Vis. 40, Gels 1/1
	Survey 5½° at 4500'.
May 4/71	Depth 4 680' Cored 65'
30°	Cut and retrieve core #68 (20') and #69 (20'). Core from 4 675
Snow (6")	to 4 678'. Lost from inner bbl. and milled up. Cut and recover
	core #70 (2'). Attempt to run inner bbl. Would not seat.
	Survey. POH. Chk. inner and outer core bbl. Chg. bits. Bit
	#7D, 4¾, 25 Series out at 4680.399' in 81-3/4 hours. RIH with
	Bit #8D.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
May 4/71	Drilling wt. 3000#, RPM 150
continued -	Mud wt. 9.1, Vis. 40, Survey 5½° at 4 650', 5½° at 4 600'
May 5/71	Depth 4 803' Cored 123'
Slight O/C	Cut and retrieve core #71 (20'), #72 (20'), #73 (17'), #74 (20'),
35°	#75 (20'), #76 (20'). Repaired main hydraulic hose.
	Drilling wt. 3000#, RPM 150
	Mud wt. 9.2, WL 2.4, PV 10, YP 2, Vis. 40, Gels 1/1, % Oil 4,
	% Solids 6
May 6/71	Depth 4 889' Cored 86'
	Cut and retrieve core #77 (20'), #78 (20'), #79 (20'), #80 (20'),
Clear	#81 (11'). Survey at 4 750 and 4 850'. Twist off rods at
45°	3 818' while starting to cut core #82. Break at the base of
	pin. ROH and RIH with Bowen spear.
	Drilling wt. 2000#, RPM 150
	Mud wt. 9.1, Vis. 39, Survey 6° at 4 750', 6° at 4 850'
May 7/71	Depth 4 952' Cored 63'
	RIH with spear and pick up fish. POH, found two breaks (lay out
	4 rods). Lay out 5 stabilizers with fatigue cracks. RIH with
	new bit. Bit pulled. Bit No. 8D, 4¾", Series 25, out at 4 889'.
	209' in 32 hours. Cut and retrieve core #82 (20'), #83 (20'),
	#84 (7'). Now cutting core #85.
	Drilling wt. 2000#, RPM 150
	Mud wt. 9.2, WL 4 8, PV 6, YP 3, Vis. 40, Gels 0/0, % Oil 4,
	% Solids 5
May 8/71	Depth 5 015' Cored 63'
O/C	Cut and retrieved core #85 (20'), #86 (20'), #87 (20'), #88 (13'),
	and #89 (6'). While cutting core #89 rods broke at 4 168'. Pin
	break as before. POH. Survey at 4 950'. Reduced bit weight
	because of deviation.

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
May 8/71	Drilling wt. 1800#, RPM 150
	Mud wt. 9.2, Vis. 40, Survey 6-3/4° at 4 950'
May 9/71	Depth 5 042' Cored 27'
Clear	RIH with Bowen spear. Pick up fish. POH. Remove 5 - 3½"
40°	steel rods. Broken at the pin. Three at 4 168' and 2 at 4 785' (midpoints
	Check core bbl. RIH. Cut and retrieve core #90 (19'), #91 (2'),
	and #92 (7'). Repair pump. Survey at 5 000'.
	Drilling wt. 1800#, RPM 150
	Mud wt. 9.1, Vis. 39, Survey 7° at 5 000'
May 10/71	Depth 5 063' Cored 21'
	Cut and retrieve core #93 (17'), #94 (2'). Twist off in steel
	rods. POH. RIH with spear. Pick up fish and POH. Trouble
	with motors. Water in fuel. Pick out 4 damaged rods. Check
	core bbl. RIH with new bit. Bit 9D out at 5 062'. 173' in
	39-3/4 hours. Start cut core #95. Rods broke at 4 482'. Add
	Micatex to mud to increase lubricity.
	Drilling wt. 1800#, RPM 150
	Mud wt. 9.0, Vis. 40
May 11/71	Depth 5 063' Cored Cored 0'
Clear	Attempt to recover inner bbl. Retriever would not pass 400'
45°	from btm. Trouble with water in fuel. Change fuel oil and
	motor oil filters. POH. RIH with spear. Top of fish at 4 757'.
	Pick up fish. POH. Steam cleaned and check pins on 3½" steel
	pipe. Did not detect any failures. Lay out all steel pipe but
	1 200' on top. No fish. Pick up all pipe and trip in with spear.
May 12/71	Depth 5 104' Cored 41'
Clear	Pick up all pipe and RIH. Pick up fish. Lay out fish/steel
50°	rods. RIH with bit and pick up all pipe. Cut core #96 (19').
	Run in to retrieve inner bbl. Could not latch. Reverse circ.

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar/D.E. Sartan

DATE	WORK DESCRIPTION
May 12/71	to clear top of inner bbl. Retrieve inner bbl. Survey at
continued -	5 050'. Cut and retrieve core #97 (1') and #98 (20').
	Drilling wt. 1800#, RPM 130, Torque 2000 psi
	Mud wt. 9.1, WL 5.6, PV 6, YP 2, Vis. 38, Gels 0/0, % Oil 3,
	% Solids 3, Survey 7-3/4°at 5 050'.
May 13/71	Depth 5 178' Cored 74'
Clear	Retrieved core #99 (20'). Cored and retrieved core #100 (20'),
50°	#101 (14'), #102 (1'), #103 (5'), #104 (13'), #105 (7'). Coring
	#106.
	Drilling wt. 1500#, RPM 130, Pump Press. 175
	Mud wt. 9.1, Vis. 38, Deviation Survey 7-3/4 at 5 100'
May 14/71	Depth 5 205' Cored 27'
	Cored and retrieved core #106 (4'). Survey at 5 150'. Cored
Clear	and retrieved core #107 (2'). Weight indicator not functioning
60°	properly. Repaired load cell. Cored #108 (20'). Attempted to
	retrieve core 3 times, but inner tube would not latch. POH,
	checked core barrel and changed bits, RIH with bit #11D and
	started coring #109.
	Drilling wt. 1500#, RPM 130, Pump Press 175
	Mud wt. 9.0, Vis. 37, Deviation Survey 8° + at 5 150'
May 15/71	Depth 5 252' Cored 47'
	Cored and retrieved core #109 (6'), #110 (4'), #111 (5'), #112
Overcast	(6') and #113 (10'). Deviation survey at 5 200'. Cored and
35°/55°	retrieved #114 (10'). POH to add and respace centralizers.
	RIH with ten (10) centralizers spaced as follows: Two (2) 24'
	above core barrel, three (3) at 60' intervals, three (3) at
	120' intervals, one (1) at 180' interval and one (1) at 240'
	interval.
	Drilling wt. 1500#, RPM 130, Pump Press. 175
	Mud wt. 9.0, Vis. 37, Deviation survey 9-3/4° at 5 200'

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. E. Sartan

DATE	WORK DESCRIPTION
May 16/71	Depth 5 279' Cored 27'
	Cored and retrieved #115 (20'). Deviation survey at 5 250'.
Cloudy	Cored #116 (7') and twisted off at the pin of an aluminum
38°/56°	joint. RIH with wrong grappel on spear, failed to fish and
	POH. RIH and recovered fish at 3 882' and POH. RIH to add
	and respace centralizers.
	Drilling wt. 1200#, RPM 150, Pump Press. 150
	Mud wt. 9.1 ,W.L. 2.1, PV 8, pH 9, % Oil 2.5, Vis. 35, Gels 0/0
	YP 2, FC 1/32, % Solids 4
	Deviation survey 10-3/4° at 5 250'.
May 17/71	Depth 5 2 99' Cored 20'
	RIH with 19 centralizers spaced as follows: One (1) 12' above
	core barrel, one (1) at a 12' interval, one (1) at a 48' inter-
	val, eleven (11) at 120' intervals and five (5) at 60' intervals.
Rainy	Cored #117 (2') and twisted off from the pin of an aluminum
38°/52°	joint at 3 746'. POH. RIH with spear fished and retrieved core.
	RIH with 6 stabilizers spaced as follows: One (1) 12' above
	core barrel, one (1) at a 24' interval and four (4) at 60' in-
	tervals. Cored and retrieved #118 (15'). Started to core #119.
	Drilling wt. 1000/1500#, RPM 130/140, Pump Press. 125/150
	Mud wt. 9.1, WL 3.3, PV 6, pH 7, % Oil 0, Vis. 35, Gels 0/1,
	YP 1, FC 1/64, % Solids 3, ppm Cl, 42M, ppm Cr 500
May 18/71	Depth 5 347' Cored 48'
	Cored and retrieved #119 (11') and #120 (20'). Deviation sur-
Clear	vey at 5 297'. Cored and retrieved #121 (4'), #122 (8') and
40°/68°	#123 (4'). Deviation survey at 5 343'. Started coring #124.
	Drilling wt. 1500#, RPM 140, Pump Press. 100/120
	Mud wt. 9.2, W.L. 28, PV 12, pH 8, % Oil 2, Vis. 40, Gels 0/1
	YP 6, FC 1/32, % Solids 3, ppm Cl 38M, ppm Cr 1400
	Deviation surveys 11½° at 5 297' and 12° at 5 343'

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. E. Sartan/D.L. Tufts

DATE	WORK DESCRIPTION
May 19/71	Depth 5 370' Cored 23'
	Cored and retrieved #124 (20'), #125 (3') and #126 (4'). Failed
	to pull inner core barrel, had to POH. Checked BOP and had a
Clear	BOP safety drill. RIH, circulated and conditioned mud. Devia-
40°/70°	tion survey at 5 370' and stood by for instructions.
	Drilling wt. 1500#, RPM 140, Pump Press. 125
	Mud wt. 9.1, WL 2.6, PV 9, pH 9, % Oil 1, Vis. 37, Gels 0/1,
	YP 2, FC 1/32, % Solids 2, ppm Cl 30M, ppm Cr 1800.
	Deviation survey 11½° at 5 370'.
May 20/71	Depth 5 394' Cored 24'
	Cored and retrieved #127 (3') and #128 (3'). Failed to set
	inner core barrel. POH and changed diamond bits. RIH with
Clear	bit #12D. Deviation survey at 5 376'. Cored and retrieved
40°/75°	#129 (14') and #130 (3'). Deviation survey at 5 390'.
	Drilling wt. 1500#, RPM 140, Pump Press 150
	Mud wt. 9.1, WL 2, PV 12, pH 9, % Oil 2, Vis. 37, Gels 0/1,
	YP 6, FC 2/32, % Solids 2, ppm Cl 34M, ppm Cr 2000.
	Deviation surveys 11½° at 5 376', 11½° at 5 390'.
May 21/71	Depth 5 446' Cored 52'
	Cut cores #131,132,133. Cored @ average of 12 mins./ft.
40°/75°	Unable to cut full barrel due to fracturing resulting in
Clear	jammed core tube. Cut full 20' on core #134. Drilling in
	anhydrite. No jamming problems. Cut cores #135 - 138.
	Fractures resulted in short recoveries on these cores.
	Coring Wt. 1500#, RPM's 140, Mud wt. 9.0, Vis. 36-40.
May 22/71	Depth 5 465' Cored 19'
	Cored to 5 450'. Still coring @ 10-15 min. per ft. Lost
Cloudy	circulation. Lost approximately 40 bbls. of mud before
40°/70°	losses were noted by crew on shift and reported. Mixed mud
	to build volume. Mixed pill of lost circulation material.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
May 22/71	(Fine/coarse walnut hulls and Fine/coarse Mica-Tex). Regained
continued	circulation and prepared to start coring. Worked on lost cir-
	culation for 5 hours. Experienced pump problems. Worked on
	pumps, circulated and cleaned to bottom for 2½ hours. Started
	coring again at 10-15 mins. per ft. Cored to 5 465'. Could
	not retrieve core. Had to trip out to pick up core. Started
	checking hole drift with wireline orienting instrument.
	Deviation @5 465' - 10°, Drilling wt. 1500#, RPM's 200
	Mud wt. 9.0, WL 2.0, PV 12, Oil 2%, pH 9.0, Vis. 37, FC 2/32,
	YP 4, Solids 4%.
May 23/71	Depth 5 517' Cored 52'
	Made 3 runs with a drift indicating instrument. Instrument
40°/65°	quite working on the 4th run.
Light rain.	Data: Depth Deviation Drift Direction
	5 465' 10° N 47° W
	5 294' 9° N 21° E
	5 124' 9° S 62° W
	Ran back in the hole with bit #12D. Still unable to cut 20'
	core due to jamming caused by fractures: - Cored into anhydrite
	and hard lime (core #147) cut full 20' core. Coring @ 12-15
	min. /ft. At report time #148 had cut 14'. Some light H_2S
	odor in newly broken core. No deflections in gas detector
	and no evidence of gas cutting in the mud. Some slight mud
	losses to the formation. Controlled again with Mica/Tex (fine).
	Drilling wt. 1500#, RPM 140, Pump 175 psi
	Mud wt. 9.0, WL 1.5, PV 10, Oil 3%, pH 9.0, Vis. 37, FC 2/32,
	YP 3, Solids 2%
May 24/71	Depth 5 582' Cored 65'
	Deviation stabilized @10½° range. Added 500# to bit wt. Dis-
	continued adding deisel fuel to the mud system. H & S plan to
	mix quick-trol with Kut-well. Coring time ranged from 10-15

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
May 24/71	mins/ft. Speeded up slightly with added string weight.
continued	Drilling in anhydrite with bands of highly fractured lime-
	stone - Drill string broke at 4 155'. Appeared to be clean
40-65°	fatigue break. Did not twist off. String torque was low
Rain	(1700) at time of break.
	Drilling wt. 2000, RPM's 140, Pump 260
	Mud wt. 9.0, WL 2, PV 8, pH 9.0, Oil 1%, Vis. 37, F.C. 2/32,
	YP 2, Solids 2%
May 25/71	Depth 5 591' Cored 9'
	Ran in the hole with a spear to retrieve broken drill string.
35-45°	Unable to latch into fish. Pulled out and picked up bent
Rain	single and ran back in with the spear. Latched into the fish
	and pulled out of the hole. Laid down broken and bent rods.
	Changed the position of the stabilizers and left only 3 in
	the string. Position of stabilizers 12 - 24 and 36 ft. above
	the top of the core barrel.
	Drilling wt. 2000#, RPM's 140, Pump 210 psi
	Mud wt. 8.9, pH 7.5, PV 11, WL 4.0, Solids 4.0%, Vis. 39,
	FC 1/32, YP 3, Oil 1.0%
May 26/71	Depth 5 637' Cored 46'
	Still experiencing trouble with core jamming in tube and
35-55°	barrel, resulting in short core recoveries. Increased RPM's
Light Rain	from 140-200(+). Increased weight on bit to 2500#. The
	penetration rate improved slightly to 7-10 mins/ft. Mixed
	Quicktrol and Impermex to raise the viscosity. Core jammed
	in outer barrel. Could not pick up with tube. Tripping
	at report time to recover core.
	Drilling wt. 2500#, RPM's 200-220
	Mud wt. 8.9, WL 2, PV 27, pH 8.5, Solids 4%, Vis. 70-75,
	FC 1/32, YP 22, Oil 2%

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
May 27/71	Depth 5 721' Cored 84'
35-65°	Increased viscosity appears to have improved drilling charac-
Clear	teristics. Vibrations have been dampened considerably allow-
	ing use of higher RPM's and more weight on the bit. Penetra-
	tion rate has increased to 5-7 min/ft.
	Drilling wt. 2500#, RPM's 200(+)
	Mud wt. 9.0, WL 0.5, PV 23, Oil 2%, pH 9.0, Vis. 65, FC 1/32,
	YP 9, Solids 5%
May 28/71	Depth 5 807' Cored 86'
	Coring progressing more satisfactorily. Penetration rate
45-75°	fairly consistant at 5-10 mins/ft. Experiencing considerable
Clear/Mild	blocking through highly fractured rubble zones. Some diffi-
	culty is being had in maintaining viscosities above 50 in
	the drilling fluid. There is no evidence of water intrusion
	and no chemicals are being added which would "cut" the mud.
	Baroid have been asked to look into the problem and suggest
	a remedy. The mud sump is full to capacity and as there is
	no place to dispose of excess it is planned to start recycl-
	ing the sump into the mud system. The sump has settled and
	the top 2' is essentially water, and should pose no problems
	as to compatibility with the system.
	Drilling wt. 2500#, RPM's 200 (+), Pump Press. 410#
	Rotary torque 1700
	Mud wt. 9.0, pH 7.5, Solids 6%, pV 27, Vis. 65, Oil 2%, YP 15
	Note: The charter standby helicopter is now on location.
	Flew core and two passengers to the airstrip on the McKenzie
	River. H & S have a labor crew at the McKenzie strip cleaning
	up barrels and junk left there last winter during move-in
	operations.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
May 29/71	Depth 5 858' Cored 51'
45-75°	Coring rate stabilized at ± 10 min/ft. Formation is pre-
Clear	dominantly anhydrite. The mud viscosity continues to break
	back during circulation. Can not maintain viscosity above
	50 secs. without adding large amounts of Quick-Trol. Mud
	stock getting low. No evidence of system volume increases.
	Checked all additives. No apparent reason for viscosity
	changes. Deviation increased from 10° to 12° between 5 765'
	to 5 827'. Tripped bit #14D and ran back in with new bit
	#15D. (50 series) Lowered RPM's and weight on bit to try
	to control deviations again.
	Drilling wt. 2000#, RPM's, 200 (+), Pump 450-275
	Mud wt. 9.0, PV 22, Oil % 4, pH 8.0, Vis. 48, YP 6, Solids % 5
	Unable to measure WL and FC due to broken filter press equip.
May 30/71	Depth 5 957' Cored 99'
	Coring rate improved slightly to 5-10 mins./ft. Formation
45-70°	badly fractured resulting in short core runs. Core recoveries
Cloudy	essentially rubble. Formation bedding angle has increased
	again to near vertical. Deviation survey at 5 887' was 12°.
	Having difficulty obtaining reliable Totco deviation records.
	Drilling mud properties stabilized somewhat with vis. holding
	in the 45 sec. range. Some indication that too much caustic
	is being added causing viscosity to drop.
	Drilling wt. 2000#, RPM's 200(+), Pump Press. 350
	Mud wt. 9.0, pH 8.0, Solids 5%, PV 15, Vis. 43, Oil 5%,
	YP 2
May 31/71	Depth 5 985' Cored 28'
	Coring at 9-12 min/ft. Lost short broken core in outer core
	barrel. Had to trip drill string to retrieve the core. Con-
	ducted drift survey while pipe was out of the hole. Results -

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION			
May 31/71	Depth	Deviation	Instrument Reading	Corrected Position
continued -	5 970'	12°	187°	S 30° E
	5 800'	10°	18°	N 19° W
	5 630'	10°	28°	N 9° W
	5 460'	12°	342°	N 55° W
	Ran back in the hole with Bit #15D to core. Drilling with			
	lower weight to try to control deviation.			
	Drilling wt. 2000#, RPM's 200(+), Pump 325 psi			
	Mud wt. 9.1, WL 3.0, PV 18, Oil 3%, Vis. 43, FC 1/32 Soft			
	YP 6, Solids 3%			
	Cores badly broken up. Formation fractured and bedding			
	planes dip up to 70°.			
June 1/71	Depth 6 071' Cored 87'			
	With reduced weight on bit to try to control deviation, the			
50-75°	penetration dropped to 12-15 mins/ft. The formation is pre-			
	dominantly anhydrite again. Baroid mud engineer started			
	plot tests on mud system to determine cause of viscosity			
	drop off. Deviation survey at 6 018' was 12½°. Totco			
	not recording properly. Try leaving instrument on bottom			
	longer.			
	Mud wt. 9.0, PV 21, Oil 3%, FC 1/32 soft, Vis. 49, YP 9,			
	Solids 3%, pH 8.0			
	Drilling wt. 1500#, RPM's 200(±), Pump 340 psi			
June 2/71	Depth 6 103' Cored 32'			
	Coring at 12-15 min./ft. Rate very low due to the reduced			
50-80°	drilling weight. The deviation continues to increase in			
Clear	spite of reduced rates and weights. Bit #15D was tripped			
	and a new bit run in to try to help control the drift. Rig			
	had trouble with hydraulic lines resulting in down time.			
	The formation being drilled is still highly fractured result-			
	ing in broken up cores which cause jamming in the barrel.			

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
June 2/71	More H_2S odor in broken cores but there has been no evidence
continued -	of gas on the Baroid gas detector or entrained in the drill-
	ing fluid.
	Drilling wt. 1500#, RPM's 200, Pump 380 psi
	Mud wt. 9.1, WL 4.0, PV 18, pH 8.0, Oil 3%, Vis. 52, FC 1/32,
	YP 6, Solids 3%.
June 3/71	Depth 6 157' Cored 54'
50-75°	Coring progress still very slow due to the low bit weight
	being carried. Hole deviation still increasing. Last survey
	at 6 135' = 15°. Coring at 15-25 min/ft. Maintaining vis-
	cosity in the 50 sec. range to help control vibration problem
	in rods. It has been ascertained that Quick-Trol is shear
	degradeable and will not hold viscosities in the higher ranges
	at the RPM rates being carried. Ordered XC Polymer for ship-
	ment from Edmonton. System will be changed to Polymer as soon
	as possible. Use of this polymer will not require the dumping
	of the present system.
	Drilling wt. 12-1500#, RPM's 200, Pump 370-400 psi. Mud wt. 9.1,
	Vis. 51
June 4/71	Depth 6 234' Cored 77'
	Deviation still increasing. Reached the limit of the 16°
45-65°	clock. A higher limit Totco has been ordered but has not yet
overcast	arrived. Increased pump pressure and throughput for better
	bottom cleaning. Penetration rate increased from 20-30 min./ft
	to 7-10 min/ft with no increase in Bit weight or RPM's. The
	hole continues to drift in spite of reduced bit weights. A
	shipment of KELZAN AL Polymer arrived via air freight. This
	system will be used to maintain higher viscosities starting
	immediately.
	Drilling wt. 12-1500#, RPM's 200, Pump 400 psi.
	Mud wt. 9.1, Oil 2%, PV 14, pH 7.0, Vis. 51, Solids 6%, YP 12

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts/L. J. Kasmar

DATE	WORK DESCRIPTION
June 5/71	Depth 6 294' Cored 60'
	Continued to vary drilling parameters in an effort to achieve
45-60°	conditions which would reduce or minimize hole drift. Hole
overcast	angle has increased to 18°. (approximately 1°/day this week).
	Started using Totco 24° clock today. Reduced weight on bit
	to 1000# which seems to be as low as it can go and maintain
	any effective penetration. Increased RPM's from 200 to 230
	and pump pressure to 450.
	Started mixing Kelzan Al Polymer in place of Quick-Trol to
	try to maintain viscosity in higher ranges (48-55).
	Drilling wt. 1000#, RPM's 200-230, Pump. 430-450
	Mud wt. 9.1, PV 27, Oil 2%, pH 8.0, Vis. 49-52, YP 11, Solids 6%,
	FC 1/32, WL 2.0
June 6/71	Depth 6 318' Cored 24'
	Inner core barrel jammed with blocked core. Tripped drill
40-65°	string to recover core. Changed bits. Ran in with new 10
Clear	series bit #17D. Shut down for rig repairs (hydraulic hoses)
Light winds	for approximately 7 hours. Formation very highly fractured
	resulting in short core recoveries again. Drilling weight
	being held low at 1000-1200#, RPM's 230, Pump press. 430 psi.
	Deviation at 6 310' was 18°
	Mud wt. 9.2, WL 2, PV 21, pH 9.0, Oil 5% ,Vis. 51, FC 1/32,
	YP 16, Solids 8%
June 7/71	Depth 6 393' Cored 75'
	Cored at 7-10 mins/ft. Penetration rate improved in spite of
50-65°	low drilling weights. Formation mostly soft (sucrosic) anhy-
Clear	drite. Formation bedding angle very high (70°) again. De-
	viation increased to 18½° at 6 355'. Lost core #205 from
	inner barrel. Tripped to retrieve core. No core in barrel.
	Ran back in to ream core (17'). Drilling wt. 1000-1200#,
	RPM's 230, Pump 430 psi.

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. KASMAR

DATE	WORK DESCRIPTION
June 7/71	Mud wt. 9.1, pH 8.5, PV 22, Oil 5%, Vis. 50, YP 14, Solids 8%
continued	
June 8/71	Depth 6 413' Cored 20'
	Attempt to run over core. Made four wireline trips to re-
Clear	cover core. Survey at 6391-19°. Circ. inner bbl. to bottom
	seat. Requires approximately 1/2 hour at this depth. Drill
	to 6 405' and recover core. Pent. 5/6 ft/hr. Core not in
	tube. Trip to recover core in outer bbl. Bit No. 17D, 4½ -
	10 series, drilled 109' in 21-3/4 hours. Change bits. RIH
	with bit No. 18D - 4½, 10 series. Circ. to bottom. Require
	1/2 hour. Drill.
	Drilling wt. 1000#, RPM 240, Torque 1800 psi, Mud wt. 9.2,
	Vis. 54.
June 9/71	Depth 6 467' Cored 54'
	Drill to 6 425' and recover core. Survey at 6 418' - 17°.
	Cont. core and recover cores. Inner bbl. hanging up on trip
	in and requires to be chased with wireline. Survey at 6 460'
	18°. GM Prime Movers having invector trouble. 1½ hour in
	repair. Coring 3/5' Hr.
	Drilling wt. 1000, RPM 240, Torque 1800 (psi)
	Mud wt. 9.2, Vis. 52
June 10/71	Depth 6 504' Cored 37'
	Drilled to 6 484' and recover core. Drop inner bbl. Not
60°	seated. Retrieve bbl. with wireline and drop alternate bbl.
Light	Drill. Survey at 6 500' - 19°. POH to change bits. Piece
showers	of metal on bottom had fouled bit. Metal, apparently from
	dog collar, dropped previously and hung up somewhere. Re-
	cover metal piece with core in core tube. Bit No. 18D, 4½,
	10 series, 99' in 28 hours. RIH with bit No.19D, 4½, 10
	series. Circ. to bottom.

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
June 10/71	Drill wt. 1000 #, RPM 240, Torque 1700 (psi)
continued	Mud wt. 9.2, WL 1.6, Gels 3/4, PV 20, YP 20, Vis. 50, pH 9
	Solids 8%, Oil 4%
June 11/71	Depth 6 556' Cored 52'
Overcast	Drill to 6 515' and recover core. Chase inner bbl. to bottom.
Rain last	Pull and reseat. Cont. core. Survey at 6 550' - 18°. Lost
24 hours	2-3/4 hours working on injectors on GM and cleaning out valves
	in pump. Core 3/4' per hour. Drill wt. 12/1500#, RPM 240,
	Torque 1800 psi
	Mud wt. 9.3, WL 2.2, Gels 2/4, PV 18, YP 20, Vis. 56, pH 9,
	Solids 11%, Oil 3%
June 12/71	Depth 6 576' Cored 20'
Overcast	Pump valves fouled. Drill to 6 576' and recover core. POH.
	Eastman ran directional survey-surface to TD. Magnetic
	survey instrument on drill rods from casing shoe to TD and
	Gyro instrument on Wireline from surface to casing shoe.
	Checks with Totco readings and indicates a constant direction
	of deviation to the N.E.
June 13/71	Depth 6 633' Cored 57'
	Pick up core bbl. with bit No. 19D. Repairs to injectors
	and replacement of hose on power swivel required 3-3/4 hours.
	Drill and recover cores. Survey at 6 609' - 19°. Pent. rate
	5/7' per hour.
	Drill wt. 1500#, RPM 240, Torque 1800 psi.
	Mud wt. 9.3, WL 2.8, Gels 2/4, PV 18, YP 20, Vis. 55, pH 9,
	Solids 9%, Oil 2%, FC 1/32, Chromates 700

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
June 14/71	Depth 6 674' Cored 41'
	Drill to 6 646' and recover cores. Pent. rate increased to
60°	10 ft/hr. with no weight increase on Martin Decker Weight
Clear	Indicator. Note weight increase on geolograph. Suspect
	Martin Decker not working properly. Circ. inner bbl. to
	btm. and drill to 6 650'. Repair to weight indicator, re-
	move and replace diaphram in load cell (2½ hr), drill to
	6 664' and recover core. Clean out pump valves. Drop Totco
	in inner bbl. for survey. Adaptor on inner bbl. came out on
	Wireline and left remainder in hole. POH and retrieve inner
	bbl. RIH. Drill to 6 674' and recover core. Drill wt.
	1000#, RPM 230, Torque (psi) 1800
	Mud wt. 9.2, Vis. 55, Survey 20° at 6 665'
June 15/71	Depth 6 728' Cored 54'
	Drill to 6 677'. Repair wt. indicator. Pump up with hydraulic
	fluid. Replace main winch hydraulic motor (2 hrs). Drill to
	6 728. Run in for core with Wireline. Back off in overshot
	assembly. POH. Recover overshot, inner bbl. Check BOP and
	change bits. Bit No. 19D, 4½" S-10. 224' in 40½ hours.
	RIH with Bit No. 20D, 4½ S-10. Change solenoid on hydraulic
	pump (1 hr). Drill wt. 1000/1500#, RPM 230, Torque (psi) 1800
	Mud wt. 9.2, WL 2.4, Gels 1/2, % Solids 7, PV 27, Vis. 47,
	YP 12, pH 8, % Oil 3, Chromates 900 ppm
June 16/71	Depth 6 807' Cored 79'
	Repair hydraulic and work on injector in GM while RIH. (Repair
	time 5½ hours) Survey at 6 728'. Drop inner bbl. and circ.
	to btm. Drill and recover core to 6 804'. Survey at 6 794'.
	Drill wt. 1000/1500#, RPM 220, Torque (psi) 1800
	Mud wt. 9.2, WL 2.4, Gels 2/2, % Solids 7, Vis 48, PV 15, YP 15,
	pH 9, % Oil 3, Chromates 1200 ppm
	Survey: 20° at 6 728', 19½° at 6 794'

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
June 17/71	Depth 6 916' Cored 106'
	Drill and recover core to 6 869'. Survey at 6 860'. Drill
65°	and recover core to 6 916'. Electrical repair (5¼ hrs.)
Clear	Pent. rate 9 ft/hr. Drill wt. 1500#, RPM 220, Torque (psi) 1800
	Mud wt. 9.2, Vis. 48, Survey: 20½° at 6 860'
June 18/71	Depth 6 996' Cored 80'
	Drill to 6 929' and recover core. Drop Totco in inner bbl.
	for survey. Inner bbl. stuck. Work Wireline mechanical jars.
	Clamp Wireline to blocks. Pull Wireline apart at surface.
	Pull full with Wireline winch and 14,000# on blocks. Pull up
	4 stands and retrieve Wireline. Inner Bbl. free. Pull out
	Wireline. Drill while respool winch with 15 000' of Wireline.
	Found spring in latching assembly broken. Probably jammed
	and came free after jar caused by line parting. Continued
	drilling and recover core. Survey at 6 980'.
	Drill wt. 1500#, RPM 220, Torque (psi) 1800
	Mud wt. 9.3, WL 2.4, Gels 1/2, % Solids 6, Vis. 49, PV 14,
	YP 15, pH 8, % Oil 5, Survey: 20½° at 6 925', 20½° at 6 980'
June 19/71	Depth 7 101' Cored 105'
	Drill and recover core. Repair Wireline hydraulic pump.
	(1½ hrs). Survey at 7 040'. Pent. rate 6-8 ft/hr.
	Drill wt. 1500#, RPM 200, Torque (psi) 1900
	Mud wt. 9.3, Vis. 49, Survey: 20½° at 7 040'
June 20/71	Depth 7 143' Cored 42'
	Drill to 7 108' and recover core. Foul Wireline in top sheave
70°	while recovering core. Lay out 5 000'. Drill and recover core.
Showers	Survey at 7 122'. POH with dull bit. Bit No. 20D, 4½ S-10.
	401' in 48 hours. Pick up new core barrel assembly. RIH with
	Bit No. 21D, 4¾ S-25. Check power swivel drill. Repair in-
	jectors on GMC. (Water in fuel fouling injectors)

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar/ D. L. Tufts

DATE	WORK DESCRIPTION
June 20/71	Drill wt. 1500#, RPM 200, Torque (psi) 1900
continued -	Mud wt. 9.3, WL 3.8, Gels 1/2, % Solids 8, Vis. 50, PV 14,
	YP 14, pH 8.5, % Oil 4, Chromates 1000 ppm.
	Survey: 22½° at 7 122'
June 21/71	Depth 7 244' Cored 101 ft.
	Cored to 7 244' with no problems at a rate varying between
70°	7-12 mins/ft. Surveyed at 7 180'. Deviation 22½°. Reduced
Overcast	drilling weight to 1000.RPM's 200, Pump 450 psi
	Mud wt. 9.4, pH 8.5, Vis. 50
June 22/71	Depth 7 337' Cored 93'
	Coring fairly evenly. Formation highly fractured. Some good
75°	to fair fracture porosity at 7 290'. Approximately 10' of
Clear	faster drilling 4-7 mins. per ft. Mud weight still ranging
	too high (9.4). Started mixing new system using fresh water
	instead of sump water to help cut solids. Clean out desilter
	and shaker tanks. Drilling wt. 1000-1500#, RPM's 200 +,
	Pump 450 psi. Deviation 23½° at 7 265'.
	Mud wt. 9.3, FC 1/32, PV 14, Oil 3%, Chromates 1600 ppm
	Vis. 51, pH 8.5, YP 14, Solids 7%
June 23/71	Depth 7 387' Cored 50'
	Deviation increasing again. Reduced weight to help control
80° Clear	drift. Increased RPM's and pump rate. Surveys: 7 340' - 24°,
	7 380' - 25½°. Received 90° Totco instrument today. Completed
	dumping and rebuilding mud system.
	Mud wt. 9.2, pH 8.0, PV 13, FC 1/32, Oil 4%, Vis. 50, WL 3.0,
	YP 12, Solids 4%
	Drilling wt. 1000-1250#, RPM's 200-225, Pump 425
	Fuel supply estimated at less than 5 weeks.
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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
June 24/71	Depth 7 439' Cored 52'
	Finished tripping bit #21D. Ran back in the hole with bit
Overcast	#22D - 10 series. Carried 1000-1250# on bit. Rotated @200+
Rain	RPM's. Varied pump pressure from 425-450 psi. Drilling
+50°	mostly anhydrite. Bedding 0-30° off vertical plane of the
	core. Kelzan stock depleted. Switching back to Quick-Trol
	for viscosity control.
	Mud wt. 9.1, Gels 8/12, PV 12, Oil 4%, FC 1/32, Vis. 50, pH 8.0
	YP 13, Solids 4%
June 25/71	Depth 7 490' Cored 51'
	Penetration dropped to 15-25 mins/ft primarily due to low
Overcast	drilling weight. Bedding near vertical. Still drilling in an-
+65°	hydrite. Deviation has stabilized somewhat with lower weight.
	Surveys: 7 438' - 26°, 7 471' - 25½°. Shut down to repair
	swivel packing again.
	Mud weight 9.1, pH 8.0, FC 2/32, PV 15, Oil 4%, Vis. 50,
	WL 4.0, YP 21, Solids 6%
June 26/71	Depth 7 559' Cored 69'
	Lithology unchanged. Bedding still near vertical. Deviation
+65°	holding @26° at 7 518'. Experiencing considerable trouble
Overcast	with Quintuplex pumps. Down 3/4 hour for pump repairs.
	Solids building up again. This desilter is not adequate for
	this type of drilling.
	Mud wt. 9.3, PV 19, Solids 7%, pH 9.0, Vis. 54, YP 27, Oil 3%
	WL 4.0
June 27/71	Depth 7 633' Cored 74'
	Drilling more dolomite. Penetration rate improved slightly.
60°	Formation bedding flattened to approximately 45°. Deviation
Partly	holding in the 26° range. Lost approximately 30(+) bbls. of
cloudy.	mud at 7 575'. The loss was noted while pulling a core.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
June 27/71	Not certain that the loss was into the formation. No further
continued	losses since that point. Considerable problem being experienced
	with pumps. No spare engines, or spare parts. Materials ordered
	but have not arrived. The entire system of pumps and manifolds
	needs to be shut down and overhauled or replaced. This equip-
	ment is not reliable enough to handle emergencies or high de-
	mands.
	Drilling wt. 1000#, RPM's 220, Pump 450 psi
	Mud wt. 9.3, WL 3.4, PV 16, pH 9.0, Solids 7%, Vis. 50,
	Vis. 50, FC 1/32, YP 19, Oil 4%
June 28/71	Depth 7 699' Cored 66'
	Deviation still holding in 26° range. Lithology unchanged.
50°	Anhydrite and dolomite. No further fluid losses. Maintaining
Cloudy	viscosity in 47-49 sec. range using QuickTrol. Desilter still
Windy	not handling solids adequately. New drill collar has not yet
	arrived from Edmonton.
	Drilling wt. 1000# , RPM's 225, Pump 425 psi
	Mud wt. 9.3, W.L. PV 18, pH 9.0, Solids 7%, Vis. 49, FC 1/32,
	YP 16, Oil 2%
	Started hauling steel drill pipe from river with chopper.
June 29/71	Depth 7 763' Cored 64'
	Drilling rate decreasing slightly. Drilling predominantly
+50°	anhydrite. Deviation out to 27° at 7 731'. Running short on
Overcast	some mud stocks. Ordered new supplies shipped in. Ran out of,
Rain	Causic, Bichromate, Kelzan and preservative. Presently trying
	to maintain viscosity with QuickTrol. Will not hold viscosity
	over 47.
	Drilling wt. 1000#, RPM's 200, Pump Press. 425 psi
	Mud wt. 9.3, WL 3.0, PV 17, pH 9.0, Solids 7%, Vis. 49, FC 1/32,
	YP 16, Oil 3%.
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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
June 30/71	Depth 7 789' Cored 26'
	Tripped out with bit #22D. Serviced core bbl. Changed oil
+50°	in rig engines and pump engines. Picked up new 4" OD spiral
Overcast	drill collar. Placed in string above core bbl. Tool sequence -
Rain	bit, core bbl., spiral D.C. HNQ rod, stabilizer, balance of
	drill string. The stabilizer is 62' off bottom. No trouble
	experienced running in the hole with the D.C. Bit #23D is 10-
	series.
	Drilling wt. 1000#, RPM's 240, Pump Press 450 psi
	Mud wt. 9.3, pH 9.0, FC 1/32, Vis. 48, WL 3.2
July 1/71	Depth 7 873' Cored 84'
	Started increasing drilling weight slightly to establish the
+55°	effect of the drill collar and stabilizer. Deviation stabilized
Overcast	noteably over last 80'. Penetration varying between 7 and 20
Showers	mins/ft. Deviation @ 7 805' - 27°, @ 7 836' - 26½°
	Drilling wt. 1000 - 1250#, RPM's 220-240, Pump Press. 450 psi
	Mud wt. 9.3, PV 16, pH 9.0, FC 1/32, Solids 6%, Vis. 47,
	YP 10, WL 4.0, Oil 4%
	Completed hauling 1000' of 3½" HNQ rods from the McKenzie River
	to this location. Still short approximately 3000' of drill rod
	to be able to drill to 12 000'. Diesel fuel, chopper fuel, new
	diesel engines and additional mud supplies confirmed to arrive
	at Dahadinni River by N.T. barge on July 6.
July 2/71	Depth 7 961' Cored 88'
	Drilling rate stabilized at 10-12 mins/ft. Deviation holding
+55°	in 26° range. Increased drilling weight to 1500#, RPM's 230,
Overcast	Pump Press. 400 psi.
	Mud wt. 9.3, WL 3.8, pH 9.0, Vis. 47, FC 1/32
	Mud properties holding satisfactorily.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER R. L. Hansen

DATE	WORK DESCRIPTION
July 3/71	Depth 8 021' Cored 60'
	Drilling rate fairly stable at 12 min/ft. Deviation increase
+60°F	of 1/2° from 7 979' to 8 018' (to 26½°). Held drilling weight
Clear	at 1500 psi, decreased RPM to 180 due to increasing torque
	with occasional chatter. Pump pressure 400 psi. Power swivel
	broke down 4:00 a.m. July 3. Worked on swivel. Started out
	of hole to change bits while waiting on replacement swivel.
	Mud wt. 9.2, WL 3.4, pH 9.0, Vis. 47, F.C. 1/32
July 4/71	Depth 8 021' No Progress
	Finished tripping for bit (cleaned settling tank while out of
+55°F	hole). Circulated, waiting on swivel. Began installing re-
Overcast	placement swivel. Ran desilter while circulating - mud in good
	condition.
	Mud wt. 9.2, WL 2.6, pH 8.5, Vis. 47, Gels 2/4, PV 10, YP 17,
	Solids 7%, Oil 3%, FC 1/32, Chromate 900 ppm, CL^- 13 000, Ca^{++} 800
	Note: (1) 2 men built wharf at Cloverleaf Lake for off-loading
	float aircraft.
	(2) 3 men travelled to H.S. rig #9 to pick up replacement
	swivel. Men and swivel back on location 7:45 a.m.
July 5/71	Depth 8 081' Cored 60'
	Finished installing replacement swivel. Cored ahead to 8 081'.
+55°F	Found latch case pin broken when attempting to retrieve inner
Overcast	tube and core from 8 081'. Began tripping tods to recover core.
	Deviation 26°. Drilling rate varying 12-8 min/ft. (last 20 ft.
	avg. 8 min/ft). Drilling wt. 1500, RPM 240, Pump Press. 375
	Mud properties holding satisfactorily.
	Mud wt. 9.2, WL 2.9, pH 9.0, Visc. 49

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER R. L. Hansen

DATE	WORK DESCRIPTION
July 6/71	Depth @ 121' Cored 40'
	Finished tripping out. Recovered core. Laid down 80 aluminum
+55°F	rods and picked up 80 steel rods. Cored ahead at approximately
Clear	11 min/ft. Drilling wt. 15-0, RPM 200, Pump Press. 375
	Deviation holding at 26°F. Mud properties holding satisfactorily.
	Wt. 9.2, WL 2.1, pH 8.5, Vis. 47, Gels 2/4, PV 11, YP 28
	Solids 6%, Oil 4%, FC 1/32, Chromate 900 ppm, CL^- 12 000 ppm
	Ca^{++} 1200 ppm
	Rods in hole: 180 steel, 495 aluminum
	Barge arrived at river strip and off-loaded following
	200 drums diesel, 30 drums Av. gas, 10 drums Kutwell
	40 sx Sodium Bichromate, 6 sx caustic, 20 sx Kelzan Al
	7 sx Preservative, Misc. small supplies.
	Lease helicopter transferred mud to location.
July 7/71	Depth @ 208' Cored 87'
	Cored ahead at 8-13 min/ft. (Stringered Dolomite and Anhydrite).
+60°F	Weight 1500, RPM 200
Clear	Surveys @ 8 150' and 8 170' misruns. Deviation increased to
	27°- at 8 190'. Decreased drilling weight to 1200#.
	Mud properties satisfactory.
	Wt. 9.2, WL 2.5, pH 8.5, Vis. 47, Gels. 3/5, PV 10, YP 32,
	Solids 7, Oil 5, FC 1/32 Chromate 800, CL^- 13 000, Ca^{++} 200?
July 8/71	Depth @ 275' Cored 67'
	Cored ahead at 8-16 min/ft. Wt. 1500, RPM 210, PP 425-400
+54°F	Surveys 8 230 - 24½, 8243 - 25. Increased wt. to 1500
Overcast	Were attempting to latch onto core tube at 8:00 a.m. Will
	probably have to trip rods. Went through blow-out procedures
	with all crews. Mud properties holding satisfactorily.
	Wt. 9.2+, Vis. 48, pH 9
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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER R. L. Hansen

DATE	WORK DESCRIPTION
July 9/71	Depth 8 275' No Progress.
	Were unable to latch core tube with Wireline overshot. Hoisted
+60°F	drilling string. Found that pin of second stabilizer above
Clear	core barrel had broken, leaving in hole, from bottom:
	Bit, core barrel, receiver sub and stabilizer sub. Waited
	on orders. Ran in with open-end rod string to just over fish.
	Circulated over fish. Mud properties satisfactory.
	Wt. 9.3, WL 3.3, pH 8.5, Vis. 47, Gels 3/6, PV 9, YP 29,
	Solids 6, Oil 4, FC 1/32, Chromate 700, CL^- 12 500, Ca^{++} 80 ?
July 10/71	Depth 8 290' Cored 15'
	Circulated and rotated into fish. Circulated through fish.
+50°F	Pulled up, broke off core. Set back on bottom. Ran in with
Clear	Wireline overshot inside rods. Latched core tube and recovered
	core. Hoisted drilling string. Recovered core barrel. (Pin
	of open-end drill rods had wedged into broken pin in top of
	core barrel stabilizer - found core barrel undamaged). Ran in
	with new bit and cored ahead. Made 3 foot and 6 foot run -
	core jamming due to vertical fractures. Some scattered porosity.
	Mud properties satisfactory.
	Wt. 9.3, WL 3.1, pH 8.5, Vis. 52, Gels 5/11, PV 10, YP 34,
	Solids 6, Oil 5, FC 1/32, Chromate 500, CL^- 12 000, Ca^{++} 60?
	Note: Stopped drilling 5:00 a.m. July 8/71.
	Started drilling 1:30 a.m. July 10/71.
	Total time lost 44½ hours (includes recovering core
	8255-75 and bit trip).
July 11/71	Depth 8368' Cored 78'
	Cored ahead at 10-13 min/ft. Changed weight on bit to 2000
	after survey at 8 293' (RPM 200, PP 500).
	Surveys 8 293 - 24°, 8 325 - 24°.
	Formation back to dense Anhydrite/Dolomite (bedding planes in core

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER R. L. Hansen

DATE	WORK DESCRIPTION
July 11/71	± 45°). Generally coring 20 ft/run. Mud properties holding
continued	satisfactorily - possibly losing some 10 Bbl/Day.
	Wt. 9.2, WL 3.6, pH 9.0, Vis. 48, Gels 4/6, PV 8, YP 29
	Solids 7, Oil 3, FC 1/32, Chromate 600, CL^- 10 000, Ca^{++} 60?
	Note: Hardness readings since July 7 in serious doubt. Have
	ordered new test solutions.
July 12/71	Depth 8 449' Cored 81'
	Cored ahead at 10-12 min/ft. Deviation took 2½° drop at
	8 385', then stabilized. (Wt. 2000, RPM 210, PP 450)
+45°F	Surveys: 8 385 - 21½° (Top stabilizer on tube spun off)
Overcast	8 397 - 22° 8 440 - 21½°
	Formation basically unchanged last 24 hours (alternating Dol/Anhy)
	Mud properties holding satisfactorily - hole still weeping
	slightly.
	Wt. 9.2, WL 3.4, pH 9.0, Vis. 46, Gels 3/7, PV 8, YP 30, Solids 5,
	Oil 4, FC 1/32, Chromate 500, CL^- 10 000?, Ca^{++} 80?
July 13/71	Depth 8 579' Cored 50'
	Cored ahead at 10-13 min/ft. to 8 522' recovering full 20' runs.
	Cored to 8 527' - core jammed. Recovered core, cored to 8 529' -
	core jammed. No core in inner barrel for interval 8 527'-8 529'.
+45°F	Began hoisting rods - assume jammed core in outer barrel.
Overcast	Formation basically unchanged last 24 hours but interval 8 522'-27
Intermittant	prdominantly Dolomite + badly broken.
Rain	Deviation stabilized (8 480 - 21-3/4°).
	Drilling Properties: Wt. on bit 2000, RPM 200, PP 450, Torque 2200-2300
	Mud Properties holding satisfactorily but formation weeping.
	No mud dumped during last 7 days.
	Mud: Wt. 9.3, W.L. 3.8, pH 8.5, Visc. 45, Gels 3/5, PV 7, YP 25,
	Solids 5, Oil 4, F.C. 1/32, Chromate 600, CL^- 9000, Ca^{++} 60?.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER R. L. Hansen

DATE	WORK DESCRIPTION
July 14/71	Depth 8 579' Cored 50'
	Finished trip out. Recovered 3 inches core jammed in barrel.
	Installed reaming stabilizer midway in core barrel. Ran in
+50°F	with new bit. Cored ahead at 8-12 min/ft. Wt. on bit 2000, RPM 210,
Overcast	PP 450, Torque 2300.
Intermittant	Formation: Unbroken Dolomite/Anhydrite w/trace porosity.
Rain	Deviation dropping slightly (8 545 - 21°).
	Mud Properties holding satisfactorily - hole still weeping at approx.
	10-15 bbl/day.
	Mud Wt. 9.2+, W.L. 4.4, pH 9.0, Visc. 44, Gels 3/6, PV 7, YP 25,
	Solids 6, Oil 3, F.C. 1/32, Chromate 700, Cl^- 9000, Ca^{++} 60?
July 15/71	Depth 8 662' Cored 83'
	Cored ahead at 10-13 min/ft. Wt. on bit 2000, RPM 210, PP 425,
	Torque 2300.
+50°F	Formation unbroken Dolomite/Anhydrite. No porosity. Apparent
Raining	dip changed from 45° to 5° below interval 8 559'- 8 579'.
	Deviation dropping slightly (8 608'-20-1/2°).
	Mud Properties holding satisfactorily.
	Mud Wt. 9.2, W.L. 4.8, pH 9.0, Visc. 47, Gels 4/9, PV 7, YP 31,
	Solids 6, Oil 3 F.C. 1/32, Chromate 500, Cl^- 8500, Ca^{++} 60?, Pf 0.
July 16/71	Depth 8 724' Cored 62'
	Cored ahead at 11-20 min/ft. Wt. on bit 2000, RPM 190/200, PP 425,
	Torque 2300. Vibration in hole - core "rippled" badly on surface.
	Short runs (6) and slow penetration.
	Formation 70/30 Anhydrite/Dolomite with apparent dip of 5°. Massive -
+45°F	only occasionally broken.
Raining	Deviation dropping slightly (8 668' - 20°).
	Raised viscosity to dampen vibration - weight climbing. Still losing
	15 bbl/day.
	Mud Wt. 9.3, W.L. 4.3, pH 9.5, Visc. 50, Gels 5/9, PV 8, YP 34,
	Solids 6-1/2, Oil 3-1/2, F.C. 1/32, Chromate 400, Cl^- 8500, Ca^{++} 60?, Pf 0.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER R. L. Hansen

DATE	WORK DESCRIPTION
July 17/71	Depth 8 762' Cored 38'
	Cored ahead at 10-20 min/ft. Wt. on bit 2000-3000, RPM 200, PP 425,
	Torque 2300. Vibration at bit - core "rippled" badly. Short runs
	(6) and slow penetration. Core not "feeding" properly. Began
	hoisting.
	Formation Anhydrite/Dolomite with apparent dip 5°. Occasionally
	badly broken in Dolomite phase.
	Deviation dropped abruptly by 2° in 65' (8 733' - 18°).
+50°F	Mud Properties holding satisfactorily.
Clear &	Mud Wt. 9.3+, W.L. 4.3, pH 9.0, Visc. 47, Gels 3/6, PV 6, YP 25,
Calm	Solids 6, Oil 5, F.C. 1/32, Chromate 900, Cl^- 7500, Ca^{++} 70?, Pf 0.
July 18/71	Depth 8 787' Cored 25'
	Finished hoisting. Examined core barrel and bit. Found core barrel
	badly bent, bit flat on face. Installed new core barrel. Ran in
+50°F	hole, had trouble starting core - cored 20'. Made two very short runs
Clear &	(8" + 4"). Found bent inner barrel. Changed inner barrel, cored
Calm	ahead (penetration rate 10-13 min/ft.). Wt. on bit 2000, RPM 200,
	PP 450, Torque 2300.
	Formation 60/40 Anhydrite/Dolomite with apparent dip 5°. Occasionally
	badly broken in Dolomite phase.
	Deviation increased abruptly by 2° in 47' (8 780' - 20°). Survey
	at 8 733' possibly in error due to bent core barrel.
	Mud Properties holding satisfactorily.
	Mud Wt. 9.2+, W.L. 4.2, pH 8.5, Visc. 55, Gels 6/8, PV 8, YP 37,
	Solids 6-1/2, Oil 4-1/2, F.C. 1/32, Chromate 700, Cl^- 7500, Ca^{++} 60?,
	Pf 0.
July 19/71	Depth 8 865' Cored 78'
	Cored ahead at 9-12 min/ft. coring 20' runs.
	Formation 50/50 Anhydrite Dolomite with Tr. shale. Apparent dip 5°.
+52°F	Drilling Properties: Wt. on bit 2000, RPM 200/230, PP 450, Torque 2300
Overcast	Deviation holding: 9 798' - 20°, 8 843' - 19-1/2°.

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WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER R. L. Hansen

DATE	WORK DESCRIPTION
July 19/71	Mud Properties holding satisfactorily.
Continued	Mud Wt. 9.3, W.L. 5.2, pH 9.0, Visc. 46, Gels 3/7, PV 7, YP 28.
July 20/71	Depth 8 952' Cored 87'
	Cored ahead at 13-3 min/ft. (20' runs). Wt. on bit 2000, RPM 200/230,
	PP 450-500, Torque 2400.
	Formation 55/45 Anhydrite/Arg. Dolomite with Tr.shale. Apparent
	dip 5°.
	Deviation holding: 8 903' - 20°, 8 943 - 19-1/2°.
+56°F	Mud Properties holding satisfactorily.
Overcast	Mud Wt. 9.3, W.L. 5.1, pH 9.0, Visc. 46, Gels 3/7, PV 6, YP 32,
	Solids 6, Oil 4, F.C. 1/32, Chromate 700, Cl^- 6500, Ca^{++} 60?, Pf 0.
	Still losing 10-15 bbl/day.
July 21/71	Depth 9 041' Cored 89'
	Cored ahead at 15-7 min/ft. Made two short runs (core jamming),
	remainder 20' runs. Wt. on bit 2000, RPM 230, PP 450, Torque 2400-2500
	Formation 70/30 Dolomite/Anhydrite. Dolomite Breccia Zone 9 019'-9 027
+50°F	Dip uncertain.
Cloudy	Deviation holding: 9 001' - 20° (punched twice @ 20° + 22°).
	Mud properties holding satisfactorily.
	Mud Wt. 9.4, W.L. 5.8, pH 8.5, Visc. 48, Gels 5/6, PV 7, YP 33,
	Solids 8 Oil 4, F.C. 1/32, Chromate 800, Cl^- 6500, Ca^{++} 60, Pf 0.
	NOTE: Checked Ca^{++} with new reagents - still 60 ppm.
July 22/71	Depth 9 061' Cored 20'
	Cored to 9 061' (20') @ 10-12 min/ft. Retrieved the core and ran
	in w/Totco. Deviation 18° @ 9 060 (dropped 2° in 60'). Circulated
+65°F	off bottom while shut down for rig modifications. Completed
Overcast	installation of new monkey board and rod rack. (Repair time 7-1/2 hrs.
Showers	Returned to bottom and started to rotate. The blower on the main
	rig power source (GM-engine) broke down. As no spare parts are
	available the rig was shut down waiting on repairs to be shipped

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. Tufts

DATE	WORK DESCRIPTION
July 22/71	from Calgary. Shut down time today, 10 hrs.
Continued	The 20' core was cut with 2000# on the bit @ 175-200 RPMs. Pump
	press. 475#.
	Mud Wt. 9.4, Visc. 45.
July 23/71	Depth 9 061' Cored 0'
50°	Circulated off bottom waiting on parts for GM engines. Unable to get
Overcast	spare parts into Norman Wells due to rain and fog.
Rain	Cleaned mud tanks, serviced desilter.
	Mud Wt. 9.3, Visc. +3.
July 24/71	Depth 9 097' Cored 36'
	Received repairs for GM's. Completed repairs and started drilling
+65°	again @ 5a.m. July 23. Core badly fractured resulting in blocking and
Clear/Mild	short recoveries. Solids and mud weight continuing to increase.
	Will have to dump tanks to control. Drilling Wt. 2000, RPM's 200.
	Mud Wt. 9.5, W.L. 6.8, PV 12, pH 9.0, Visc. 47, F.C. 1/32, YP 8.
July 25/71	Depth 9 179' Cored 82'
	Coring continued routinely with rates varying between 8 and 15 mins/ft.
	Formation has changed back to Dolomite and Anhydrite with less
+75°	blocking and fracturing resulting in longer core runs. The deviation
Clear/Mild	is still coming back slowly. 9 105' - 18°, 9 165' - 17°. Mud
	viscosity is holding better with the pH @ 9.0.
	Drilling Wt 2000#, RPM's 200, PP 500 psi.
	Mud Wt. 9.4, PV 11, W.L. 6.5, F.C. 1/32, Solids 9%, Visc. 47, YP 18,
	pH 9.0, Oil 4%.
July 26/71	Depth 9 267' Cored 88'
	Coring at satisfactory rate. Cannot increase drilling wt. due to
	high torque 2 400 - 2 600#. Deviation correcting rather rapidly.
+70°	Last survey @ 9 237' - 15-1/2°. Mixed 30 bbls. of new mud and added
Clear	to system. Dilution had no appreciable effect on solids count.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. Tufts

DATE	WORK DESCRIPTION
July 26/71	Mud wt. still too high. Drilling wt. 2000#, RPM's 200, PP 450.
Continued	Mud Wt. 9.5, W.L. 8.0, PV 11 Oil 3%, pH 8.0, Visc. 47, F.C. 1/32,
	YP 17, Solids 9%, Chromates 1000 ppm, Cl 7000 ppm.
July 27/71	Depth 9 339' Cored 72'
+85°	Coring @ 8 - 12 mins/ft. Formation predominantly anhydrite. Blew
Clear	two hydraulic motors. Shut down for repairs. The present GMs are
	having trouble handling the drilling load at this depth.
	Drilling Wt. 2000+, RPMs 200+, PP 450.
	Mud Wt. 9.5, W.L. 7.8, PV 12, pH 9.0, Solids 10%, Visc. 47, F.C. 1/32,
	YP 14, Oil 3%, Cl 8000 ppm, Chromates 900 ppm.
July 28/71	Depth 9 371' Cored 32'
	Torque started to build up (2700+). Lithology unchanged, drilling
	predominantly anhydrite some dolomite. Pulled bit #28. Serviced
+85°	core bbl. and ran in hole w/new bit #29D, Series 25. No series 10
Clear	bits on location. Round trip took 13 hrs. Blew out hydraulic hose.
	Shut down for repairs to hose and wireline unit which had tangled
	cable. Lost 15-20 bbls of mud while tripping. Unable to establish
	where fluids are being taken in formation.
	Drilling Wt. 2000#, RPMs 200+, PP 450.
	Mud Wt. 9.4, W.L. 8.4, PV 12, pH 8.5, Solids 10%, Visc 50,
	F.C. 1/32, YP 17, Oil 3%, Chromates 600 ppm.
	Deviation @ 9 361' - 12-1/2°. Correcting too fast.
July 29/71	Depth 9 414' Cored 43'
	Rig shut down several times during the day for repairs. Main
	hydraulic line ruptured requiring replacement. Then the control
+85° Clear	in the hydraulic control panel broke. The main drive chain on
Late p.m.	the wireline retrieving unit broke and had to be repaired. Then
Thunder	the power swivel quite working. A new swivel had to be brought
storms	up from the McKenzie River by Helicopter and installed. A few
	minutes later the hydraulic motor which powers the swivel quite again,

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ENGINEERING LTD. - CALGARY

CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. Tufts

DATE	WORK DESCRIPTION
July 29/71	requiring repair. Coring resumed @ 5-8 mins/ft. in anhydrite. Torque
Continued	very high @ 2700 - 3000. Drilling Wt. 2500#, PP 400.
	Mud Wt. 9.5, PV 10, W.L. 9.2, Oil 3%, pH 9, Visc. 47, YP 9,
	F.C. 1/32, Solids 8%.
July 30/71	Depth 9 497' Cored 83'
	Coring satisfactorily @ 7-10 mins/ft. when on bottom. Drilling
	in anhydrite for the most part. Experiencing troubles with the
	power swivel again. Shut down for repairs to the wireline unit
+75°	again. Deviation surveys very erratic. Obtained widly divergent
Clear	readings using 3 different Totco clocks.
Late p.m.	eg: 9 361' - 12-1/2° w/90° clock
Thunder	9 417' - 18° w/16° clock
storms	9 430' - 17° w/24° clock
Heavy rain	9 476' - 11° w/24° clock
	The 17° and 18° readings are considered questionable. Confirming
	readings will be taken at these depths after the next trip. Will
	continue to use the 90° clock if the 24° clock does not check out.
	Heavy rains overnight alleviated water shortage somewhat.
	Due to apparent carelessness the lifter case was not properly
	tightened on the core tube resulting in it dropping off when core
	was being retrieved. The drill string has to be round tripped
	to retrieve the core. Will lose approx. 14 hrs. due to this problem.
	Drilling Wt. 2500#, RPMs 200+, PP 450.
	Mud Wt. 9.5, W.L. 5.5, PV 11, pH 9.0, Cl 8000 ppm, Visc. 47,
	F.C. 1/32, YP 13, Chromates 800 ppm, Oil 3%, Solids 9%.
July 31/71	Depth 9 497'
	Tripped out to retrieve core from outer bbl. Inner tube had 4'
	of core (cut 11'). Replaced bit and started back in hole with
+70°	rods. Drifted rods on way in hole to assure that no core was hung
Clear	up in upsets. Knocked out additional 5' of core on way in.

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ENGINEERING LTD. · CALGARY

CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. Tufts

DATE	WORK DESCRIPTION
July 31/71	Main GM power source blew the fan through the radiator with rods
Continued	approx. 3/4 of the way in the hole. Engine cannot be repaired.
	No replacement engines on location. Shut down to wait on new
	or replacement engines.
	Considering mechanical problems experienced over the past two
	weeks this rig appears to have reached the limit of its capacity
	with its present equipment. Installed new spool of wireline on
	the retrieving unit.
	Heavy rains overnight again helped solve water shortage problem
	temporarily.
	New GM engines and shipment of aluminum rods required to finish this
	hole have not arrived and whereabouts not certain (long overdue).
Aug 1/71	Depth 9 505' Cored 8 ft.
	While waiting on replacement GM engine the mud tanks were dumped
	and cleaned to reduce solids and help control mud weight. The
	engine was flown in from H & S Little Dal location by Assoc. 204 Helicopter.
	Installed by 1:00 a.m. July 31, 1971. Finished tripping in the
	hole. Circulated on bottom to clean up the hole. Gas cutting
	detected on Baroid gas detector; producing higher background
	readings than normal. There was no cutting evidenced in the mud
	in the tanks nor was there any volume change or kicking. Started
	coring again at 6:30 a.m.
	Drilg. Wt. 2000, RPM's 110-150, Pump 375-400, Mud wt. 9.0,
	W.L. 10.5, PV 6, Oil 3%, Chromates 700 ppm, Vis. 44, pH 9.0,
	YP 8, Solids 6%.
	Retained 204 Helicopter to bring fuel to the location from the
	river landing.
Aug 2/71	Depth 9 572' Cored 67 ft.
85°+	Coring satisfactorily when on bottom. Shut down several times
Clear	to work on wire line unit. Had some pump problems and leaking
	hydraulic hoses. Wire line problems were main reason for low

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ENGINEERING LTD. - CALGARY

CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
Aug 2/71	footage today. Still recording gas intrusion on gas detector.
continued	Some very minor gas cutting in the mud. No kicking or flow on
	connections.
	Drlg. Wt. 2000, RPM's 120, Pump Press. 375, Torque 2900,
	Mud wt. 9.1, WL 8.4, PV 6, Oil 4%, pH 8.5, Vis. 44, FC 1/32,
	YP 9, Solids 6%, Chromates 800.
	Finished moving all fuel up from the McKenzie with Assoc. 204
	Helicopter.
Aug 3/71	Depth 9 662' Cored 90 ft.
	Penetration rate improved slightly. Still drilling mostly an-
+75°	hydrite with dirty dolomite. Short section (3') of vuggy poro-
Clear	sity 9 574-77. Mud still slightly gas cut. No kicks or signi-
	ficant volume changes. Core retrieving operations slow due to
	constant troubles with wire line unit. Shut down for 2 hours
	again to work on power swivel.
	Drlg. Wt. 2000, RPM's 200, Pump Press. 375, Mud wt. 9.1, WL 7.0,
	PV 7, Oil 4%, pH 8.5, Vis. 44, FC 1/32, YP 9, Solids 6%
August 4/71	Depth 9 662'
	Unable to get inner barrel to seat. Had to trip drill string to
+45°	retrieve core jammed in outer bbl. Received word that new engines
Heavy Rain	were due in Norman Wells today. Stayed on bank with pipe in order
	to make repairs to the rig. Replaced drilling line and put new
	spool of cable on wireline unit. (Second one this week). Repaired
	brakes on drawworks. Removed old GMs to prepare for new engines.
	Hauled new 4 Cyl. GM engines from Norman Wells via Klondike 204
	Helicopter (2 trips). Installing GMs at report time. Water
	supply situation improved due to heavy rains. Lease conditions very
	bad. Ice under derrick foundations still solid. No indications to
	date of rig settling.

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ENGINEERING LTD. · CALGARY

CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
Aug. 5/71	Depth 9 692' Cored 30 ft.
	Completed the installation of the new GM engines. Ran back in
+60° Clear	the hole with new bit #31D. Circulated to condition hole and started
with rain	drilling @1:15 a.m. Aug. 5. Experienced pump troubles for approxi-
overnight	mately one hour. Blew out a hydraulic hose. Coring in anhydrite
	at 7-10/mins. per ft. Gas detector reading lower @ 10-15 units.
	Mud only slightly gas cut. Evidence of minor fluid losses
	approximately 5 bbls.
	Drilling wt. 2000#, RPM's ± 200, Pump 375 psi
	Mud wt. 9.1, WL 5.5, PV 8, Oil 3%, pH 8.5, Vis. 45, FC 1/32,
	YP 9, Solids 8%.
	Lease conditions bad due to heavy rains.
Aug 6/71	Depth 9 742' Cored 50 ft.
	Cored from 9 692 - 9 741' at 5-7 mins/ft. in anhydrite and
+65°	dolomite. Shut down for 3½ hours to repair the power swivel
Cloudy	again. Started coring and made one when circulation was lost.
Rain	All hole fluid was lost and the well went on vacuum. The flow
Showers	sensor did not function and gave no warning. Mixed 5 sax of
	Mica Tex fine and pumped away with an additional 80 bbls. of mud.
	Total fluid lost to this point estimate at 240 bbls. Pulled core
	tube and started pumping lost circulation material. Pumped 10
	bbl. pills of Kwik seal followed by 30 bbls. of Quick Trol with
	Mica Tex. Used mud sump for make up water. Plugged off drill
	string with lost circulation material and had to fill annulus to
	reserve circulate out. Took approximately 270-290 bbls. of mud
	and lost circulation material to plug formation and fill the
	annulus. At report time a batch of mud was being mixed to try
	to reverse circulate the plug out of the drill string. The
	entire operation of controlling this lost circulation was severely
	hampered by the size and type of equipment available for handling
	mud and water. It would have been extremely difficult if not
	impossible to adequately and safely control this well if there had

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
Aug. 6/71	been a gas flow of any size following the lost circulation. A
continued	total estimated at 750 bbls. of mud has been pumped into the
	formation.
Aug 7/71	Depth 9 775' Cored 33'
	Mixed mud and pressured up annulus. Required 300 psi to break
+65°	circulation. Established reverse circulation down annulus.
Clear	Pumped several bbls. of lost circulation material out of the
	drill pipe. Picked up the Kelly and started circulating back
	down the drill pipe. Ran rods back in the hole which had been
	pulled while trying to break circulation (12 stands). Blew
	lost circulation material plug out of each rode on way in.
	Rigged to circulate and screen out lost circ. material. Cir-
	culated L.C. material with pressures varying from 0-300 psi.
	Losing fluid continuously in varying amounts up to 20 bbls./hr.
	Circulated from 11:00 a.m. to 9:00 p.m. to clear system of coarse
	L.C. material which would block core tube. Ran tube and started
	coring. Gas detector indicated minor background readings up to
	25 units. Coring rate fairly even and pump pressure varies from
	50-250 psi. Formation highly fractured and rubbly resulting in
	blocked tube and short runs. Formation continued to take mud
	at rates up to 20 BPH all night. Cannot use coarse L.C. materials
	while coring. Continued to add Mica-Tex (fine) and walnut hulls
	(fine) while coring. It is difficult (and expensive) to try to
	maintain any kind of mud properties while mixing continuously to
	keep up with fluid loss to the formation.
	Drlg. wt. 2000, RPM's 150-200, Pump 50-300 psi
	Mud wt. 8.5-8.8, WL 5.0, Oil % 0, PV 10, pH 11.0, Vis. 44-48,
	FC 1/32, Solids 2%, YP 5.
	If fluid losses continue at the present magnitude we will be
	faced with a serious water shortage.
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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts

DATE	WORK DESCRIPTION
Aug. 8/71	Depth 9 905' Cored 130'
	Formation continued to take fluid all day in amounts varying from
+75°	2-20 BPH. Discontinued use of mud additives until fluid losses
Clear	are under control. Maintaining enough viscosity to carry lost circ.
Rain	material. Ran out of Mica Tex fine. Started using walnut fine.
Overnight	Penetration rate increased significantly due in part to reduced
	mud weight and viscosity. Core retrieval time is also reduced
	as the tube drops faster in the lighter mud. Deviation at
	9 900' was 10½°. Approximately 50' of vuggy porosity was drilled
	before breaking back into dense dolomite. Fluid losses had dropped to
	2 BPH at report time.
	Drlg. wt. 1500-2000, RPM's 200, Pump Press. 250-325 psi.
	Mud wt. 8.6, WL 5.6, pH 8.5, PV 9, Solids 3%, Vis. 46, FC 1/32,
	YP 4, Oil 1%
Aug 9/71	Depth 10 013' Cored 108'
	Cored and pulled core No's. 420-426. Average penetration rate
	was 9.8'/hr. Cored evenly with low torque. Fluid losses to the
	formation gradually dropped off to a negligible point by report
	time. Mud properties although difficult to control have been
	satisfactory. The weight and viscosity have been ideal for cor-
	ing but the gel structure is poor. Left core in outer barrel
	when retrieving core #426. Started tripping rods to clear the
	outer barrel. Received word from Calgary to run a DST over the
	porous interval where circulation was lost. Tester being flown
	in. Continued to pull out of hole at report time. Prepare for
	DST.
	Drlg. wt. 2000, RPM's ± 200, Pump Press. 350, Torque 2600
	Mud wt. 8.6, WL 5.8, pH 8.5, PV 9, Oil 2%, Vis. 44-47, FC 1/32 S
	YP 1, Solids 0
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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER D. L. Tufts/L. J. Kasmar

DATE	WORK DESCRIPTION
Aug 10/71	Depth 10 013'
	Pulled out of hole and stood back coring assembly and D.C.
+55°	Picked up HOWCO DST assembly and ran back in the hole to con-
Overcast	duct DST #2. The tool hung up at 8 880' setting the packer
with rain	and opening the tool. The tool was pulled up and worked free.
	The string took on weight indicating the possibility that mud
	had entered the pipe while the tool was open. Finished tripping
	to the bottom. Lost circulation (approximately 100 bbls. of
	fluid were lost to the formation). Set the packer and continued
	the test anyway. There was no air blow on the 5 minute preflow.
	I.S.I. 60 mins. The valve was opened for 15 mins. with no air
	blow. Mud dropped in annulus. Shut in for 30 minutes and
	started out of the hole. Note D.S.T. report.
	Depth 10 013'
Aug 11/71	POH with DST No. 2. Welder started fire while welding in boiler
	room. Complete loss - Boiler, Light Plant, BOP Accumulator and
Rain	remote controls. Use welder plant and Schlumberger Onan for
O/C	Power Supply. POH. Found drill pipe washout at 1920' above
50°	tool. DST charts indicate that pipe was full of mud during
	test indicating a misrun. On standby waiting on fire damage
	repair.
Aug 12/71	Depth 10 013'
	Standby. Waiting on light plant and accumulator. Mix mud and
	rig inventory.
Aug 13/71	Depth 10 013'
Clear 55°	Standby. Run conditioning trip for Wireline logging.
Aug 14/71	Depth 100
	POH. Wait on Schlumberger. Schlumberger ran IES - TD to cas-
Clear 55°	ing shoe. CRN - TD to casing shoe. Sonic failed. Approximately
	1 000' on bottm run of questionable value. No charge.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
Aug 15/71	Depth 10 013'
	Wait on caliper tool. Found out PWA did not carry out of Edmonton.
	Set up and check accumulator and controls. RIH with DST. Rig up head, etc. Wait on first light. DST No. 3.
Aug.16/71	Depth 10 013'
	DST No. 3. Routine. Note DST Report. Lay down test tools.
O/C 55°	Pick up core Bbl. RIH with Bit No. 32D 4¼" Diamond S-25. Losing mud. Mix mud and lost circulating material to seal hole. Lost Circ. zone opened up during flow from DST. Charts from DST showed hydrostatic approx. equal TD C.I.P.
Aug 17/71	Depth 10 076' Cored 63'
	Continued mixing lost circ. material and circ. Cut and recover core. Drl. wt. 2000#, PPm 200, Pump 350 PSI, Torque 2600
	Mud: Wt. 8.6, Vis. 45
Aug 18/71	Depth 10 212' Cored 136'
	Core and recover core. Drl. wt. 2000#, RPM 170, Pump 350 psi
	Torque 2800. Mud: wt. 818, WL 7.6, Gels 0/0, % Solids 2
	Vis. 45, PV 6, YP 4, pH 9.0, % Oil 2
Aug 19/71	Depth 10 239' Cored 27'
	Cut and recover core. Broke jar on overshot while pulling inner
	bbl. POH Bit No. 32D. 210' in 20 Hrs. Repair GM. RIH with
	Bit No. 33D 4¼" Diamond S-25. Clean out core dropped on btm.
	Pull inner bbl. Cut and recover core. Lost 2" in mud tank
	while tripping (8 bbl./5 hrs.) Drilling some fracture porosity
	at 10'/hr. Drl. wt. 2000#, RPM 180, Pump 450 psi, Torque 2600.
	Mud: wt. 8.6, Vis. 46.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
Aug 20/71	Depth 10 272' Cored 49'
	Cut and recover core. Receive word of possible abandonment at
Clear 60°	2:00 p.m. Standby and circ. hole. Start to take fluid. Add
	lost circ. material and add makeup vol. from sump. POH to log.
	Drlg. wt. 2000#, RPM 180, Pump 350 psi, Torque 2800
	Mud wt. 8.6, Vis. 44
Aug. 21/61	Depth 10 272'
	POH. Bit No. -3D 4¾" Diamond S-25 , 49' in 5 hrs. W.O. Schlum-
	berger. Rig up loggers. Run sonic (integrated) TD to casing
	shoe. Run caliper - TD to casing shoe.
Aug 22/71	Depth 10 272'
	Finish Schlumberger logging. W.O.O. Start to tear out rig -
	steam lines, prefabs, etc.
Aug 23/71	Depth 10 272'
	WOO. Tearing down rig and crating. Helicopter flying 2-3/4"
	rods to river. Receive orders to abandon. Drill pipe hung at
	TD. Close pipe rams with rig pump. Pump sump fluid and invert mud
	(out of storage) down hole. 450 psi surface pressure (200 SPM).
	Having trouble moving invert to sunction tank because of viscosity
	of mud. Hook 2-2" pumps in series.
Aug 24/71	ETD 9 256'
	Pump away invert mud into formation. Rig to run abandonment
	plug No. 1; 9 256' - TD. With rig equipment mix 100 sax Oilwell
	cement, 400# CFR-Z at 15.4#/gal. Start mix 2:41 a.m. Start
	Disp. cement 3:05 a.m. Start Disp. mud (water) 55 bbl. 3:18 a.m.
	CIP 3:40 a.m. Pull out 1 500'. Circ. Lay down rods. Circ.
	Clean up.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
Aug 25/71	ETD 9 260'
	WOC. Tearing out. Tag top of plug No. 1 at 9 260'. POH.
	Laying down rig to set plug No. 2.
Aug 26/71	ETD 3 620'
	Ran abandonment plug No. 2, 3 645 - 3 760'.With rig equip.
	mix 16 sax Oilwell cement at 15.2#/gal. Start mix 11:52 A.M.
	Start Disp. cement 12:20 p.m. with mud (water) 22 bbl. CIP
	12:45 p.m. Pull 4 stds. (240 ft.) Tear out. Ran in and tagged
	top of plug No. 2 at 3 620'. 9:30 p.m. Lay down 1 500' of rods
	and wait on corrosion inhibitor.
Aug 27/71	ETD 3 620'
	Circ. while tearing out and crating. Inventory mud stock and
	weatherproof cover. Move one hut to river. Men working day-
	lights.
Aug 28/71	ETD 3 620'
	Tear out. Receive corrosion inhibitor. Mix 30 gal. of corrosion
	inhibitor with water and pump into surface casing. Lay down
	rods to 540'. Disp. casing with 10 drums diesel (450 Imp. gal.).
	Hole was not filled as rods were layed down. Diesel might be
	further down hole than 540'. Tear out BOP's.
Aug 29/71	ETD 3 620'
	Tear out BOP's. Weld on casing nipple to 5" casing stub. Ap-
	proximately 5' long - 3-4' above Ground Level. Pick up 5"
	casing with elevators. Move casing approximately 8" with
	100 000# pull to unseat and remove slips. Slips - non latching type
	cut off with torch. Slack off, tear out rig.

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CHRONOLOGICAL HISTORY

WELL Candex et al Dahadinni LOCATION M-43A

ENGINEER L. J. Kasmar

DATE	WORK DESCRIPTION
	ACTUAL DATE - WORKING DAYLIGHTS ONLY
Aug 29/71	Tear out rig. Lay down Derrick crate equipment. G47 Helicopter flying equipment to river. One man at river.
Aug. 30/71	Tear out rig. Move 2 sleeping huts to river. G47 Helicopter working.
Aug. 31/71	As above.
Sept. 1/71	As above. Bell 205 Helicopter arrived at lease at 7:30 p.m.
Sept. 2/71	Tear out and crate. Bell 205 made 32 trip to river with equipment. G47 inoperative with carburator trouble most of day.
Sept. 3/71	Tear out. Cut off casing bowl and weld on PL over 7"/5" annulus. Install 5" 8rd x 3-1/2" NTP swage. Valve did not arrive. G47 working. Bell 205 made trip.
Sept. 4/71	Move out. Engineer left location at 12:30 p.m. on way out of job. P & A.

FLUID ANALYSES

FOR

CANDEX DEVELOPMENT LIMITED

CANDEX ET AL DAHADINNI M-43A
DAHADINNI RIVER AREA
N. W. T.

CORE LABORATORIES - CANADA LTD.
Petroleum Reservoir Engineering
CALGARY - EDMONTON - REGINA

CORE LABORATORIES - CANADA, LTD.

Company	CANDEX DEVELOPMENT LIMITED	Formation		Page	1 of 4
Well	CANDEX ET AL DAHADINNI M-43A	Drilling Fluid	WATER BASE MUD	File	913-1214
Field	WILDCAT, NORTHWEST TERRITORIES	Elevation		Date Report	AUG. 24/71
Location	63° 52' 59.03" N	Analysis	FULL DIAMETER	Analysts	RM MH DS
	124° 39' 15.07" W	Remarks			

| | | | | |

Company CANDEX DEVELOPMENT LIMITED
Well CANDEX ET AL DAHADINNI M-43A
Formation
Drilling Fluid WATER BASE MUD
Page 2 of 4
File 913-1214

Sample Number	Interval Represented, Feet		Permeability to Air, Millidarcys			Permeability Feet	Porosity, Per Cent	Porosity Feet	Density, gm./cc.		Residual Saturations, Per Cent Pore Space		Visual Examination
	Depth	Thick	K Max	K90°	KV				Bulk	Grain	Oil	Total Water	
	CORE # 413 (Cont'd)												
9	9763.2-64.6	1.4	*	-0.01	*	-	3.6	5.04	2.74	2.84			PPV F
10	9764.6-66.4	1.8	*	-0.01	*	-	7.2	12.96	2.67	2.88			I PPV AF
11	9766.4-67.3	0.9	0.75	0.27	3.23	0.68	5.4	4.86	2.71	2.87			PPV A VF
12	9767.3-68.4	1.1	-0.01	-0.01	-0.01	-	2.0	2.20	2.77	2.83			FEW PPV
-	9768.4-72.0	3.6	-	-	-	-	-	-	-	-			DENSE & RUBBLE
	CORE # 414 9772' - 9790' (REC. 18') (3 BOXES)												
-	9772.0-81.2	9.2	-	-	-	-	-	-	-	-			DENSE
13	9781.2-82.5	1.3	251.00	2.44	0.40	326.30	2.7	3.51	2.85	2.92			DENSE AF
14	9782.5-83.4	0.9	514.00	2.49	0.40	462.60	3.6	3.24	2.82	2.93			FEW SV AF
15	9783.4-84.5	1.1	18.90	14.20	2.11	20.79	1.9	2.09	2.85	2.90			FEW PPV AF
-	9784.5-90.0	5.5	-	-	-	-	-	-	-	-			DENSE
	CORE # 415 9790' - 9811' (REC. 21') (3 BOXES)												
-	9790.0-01.3	11.3	-	-	-	-	-	-	-	-			DENSE
16	9801.3-01.9	0.6	*	-0.01	*	-	2.1	1.26	2.79	2.85			I PPV F
17	9801.9-02.7	0.8	73.50	0.10	-0.01	58.80	5.5	4.40	2.71	2.86			I PPV F
18	9802.7-03.6	0.9	9.52	0.05	1.03	8.57	1.2	1.08	2.82	2.85			PPV F
19	9803.6-04.2	0.6	0.32	0.16	-0.01	0.19	4.7	2.82	2.72	2.85			SV
20	9804.2-05.0	0.8	0.70	0.17	-0.01	0.56	3.0	2.40	2.77	2.85			PPV
21	9805.0-06.0	1.0	301.00	5.08	1.52	301.00	2.9	2.90	2.80	2.88			PPV A VF
-	9806.0-11.0	5.0	-	-	-	-	-	-	-	-			DENSE
	CORE # 416 9811' - 9831' (REC. 20') (3 BOXES)												
-	9811.0-31.0	20.0	-	-	-	-	-	-	-	-			DENSE & RUBBLE

Company CANDEX DEVELOPMENT LIMITED Formation Page 3 of 4
Well CANDEX ET AL DAHADINNI M-43A Drilling Fluid WATER BASE MUD File 913-1214

Sample Number	Interval Represented, Feet		Permeability to Air, Millidarcys			Permeability Feet	Porosity, Per Cent	Porosity Feet	Density, gm./cc.		Residual Saturations, Per Cent Pore Space		Visual Examination
	Depth	Thick	K Max	K90°	KV				Bulk	Grain	Oil	Total Water	
	CORE # 417 9831' - 9851' (REC. 20') (3 BOXES)												
-	9831.0-47.3	16.3	-	-	-	-	-	-	-	-			DENSE
22	9847.3-48.2	0.9	*	0.15	*	0.14	2.4	2.16	2.77	2.84			PPV VF
23	9848.2-49.3	1.1	0.44	0.18	-0.01	0.48	4.8	5.28	2.71	2.85			PPV F
-	9849.3-51.0	1.7	-	-	-	-	-	-	-	-			DENSE
	CORE # 418 9851' - 9871' (REC. 20') (3 BOXES)												
24	9851.0-52.2	1.2	0.04	0.02	-0.01	0.05	1.6	1.92	2.78	2.82			PPV
-	9852.2-71.0	18.8	-	-	-	-	-	-	-	-			DENSE
	CORE # 419 9871' - 9890' (REC. 19') (3 BOXES)												
-	9871.0-75.4	4.4	-	-	-	-	-	-	-	-			DENSE
25	9875.4-76.7	1.3	0.02	-0.01	-0.01	0.03	3.2	4.16	2.77	2.86			PPV
26	9876.7-77.9	1.2	0.10	-0.01	-0.01	0.12	3.4	4.08	2.75	2.85			PPV
27	9877.9-78.9	1.0	-0.01	-0.01	-0.01	-	3.9	3.90	2.72	2.83			PPV
-	9878.9-85.8	6.9	-	-	-	-	-	-	-	-			DENSE
28	9885.8-86.8	1.0	-0.01	-0.01	-0.01	-	1.2	1.20	2.80	2.83			PPV
29	9886.8-87.7	0.9	-0.01	-0.01	-0.01	-	1.0	0.90	2.81	2.84			DENSE
30	9887.7-88.6	0.9	*	-0.01	*	-	6.3	5.67	2.68	2.86			I PPV
SS31	9888.6-89.5	0.9	-0.01	-	-	-	2.8	2.52	-	-			PPV RUBBLE
SS32	9889.5-90.0	0.5	-0.01	-	-	-	6.5	3.25	-	-			I PPV RUBBLE
	CORE # 420 9890' - 9910' (REC. 20') (3 BOXES)												
33	9890.0-91.2	1.2	0.03	-0.01	-0.01	0.04	4.2	5.04	2.72	2.84			I PPV
34	9891.2-93.5	2.3	-0.01	-0.01	-0.01	-	6.8	15.64	2.66	2.85			I PPV
35	9893.5-95.9	2.4	*	-0.01	*	-	6.1	14.64	2.67	2.85			I PPV
-	9895.9-08.7	12.8	-	-	-	-	-	-	-	-			DENSE
36	9908.7-10.0	1.3	1.05	0.58	-0.01	1.37	1.9	2.47	2.81	2.86			PPV AF

CORE LABORATORIES - CANADA, LTD.

Company CANDEX DEVELOPMENT LIMITED Formation
Well CANDEX ET AL DAHADINNI M-43A Drilling Fluid WATER BASE MUD

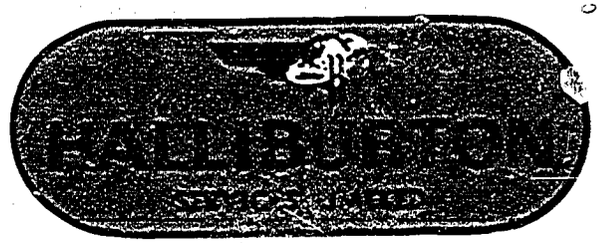
File 913-1214

Sample Number	Interval Represented, Feet		Permeability to Air, Millidarcys			Permeability Feet	Porosity, Per Cent	Porosity Feet	Density, gm/cc		Residual Saturations, Per Cent Pore Space		Visual Examination
	Depth	Thick	K Max	K90°	KV				Bulk	Grain	Oil	Total Water	
	CORE # 421 9910' - 9930' (REC. 20') (3 BOXES)												
37	9910.0-11.2	1.2	144.00	89.30	8.78	172.80	5.4	6.48	2.73	2.89			SV AF
38	9911.2-12.5	1.3	1.17	0.13	-0.01	1.52	1.5	1.95	2.82	2.89			PPV F
-	9912.5-14.2	1.7	-	-	-	-	-	-	-	-			DENSE
39	9914.2-14.9	0.7	0.08	0.05	-0.01	0.06	0.8	0.56	2.82	2.85			SCATTERED PPV
40	9914.9-15.8	0.9	0.86	0.34	-0.01	0.77	1.5	1.35	2.83	2.88			FEW SV AF
41	9915.8-16.9	1.1	3.13	2.61	-0.01	3.44	1.0	1.10	2.83	2.86			FEW PPV AF
-	9916.9-18.4	1.5	-	-	-	-	-	-	-	-			DENSE
42	9918.4-19.3	0.9	26.90	19.90	-0.01	24.21	3.8	3.42	2.74	2.85			PPV F
43	9919.3-20.5	1.2	0.33	0.09	-0.01	0.40	1.8	2.16	2.82	2.87			PPV F
44	9920.5-21.8	1.3	*	-0.01	*	-	1.2	1.56	2.83	2.87			PPV AF
45	9921.8-23.0	1.2	1.43	0.41	-0.01	1.72	1.5	1.80	2.82	2.87			PPV AF
46	9923.0-24.0	1.0	0.16	0.08	-0.01	0.16	2.5	2.50	2.79	2.86			PPV A
-	9924.0-25.2	1.2	-	-	-	-	-	-	-	-			DENSE
47	9925.2-25.7	0.5	0.10	0.05	-0.01	0.05	1.9	0.95	2.82	2.87			PPV A
48	9925.7-26.7	1.0	0.17	0.10	-0.01	0.17	0.9	0.90	2.82	2.85			SCATTERED PPV AF
49	9926.7-27.9	1.2	-0.01	-0.01	-0.01	-	1.9	2.28	2.81	2.86			PPV
50	9927.9-29.0	1.1	-0.01	-0.01	-0.01	-	1.8	1.98	2.82	2.87			PPV A
-	9929.0-30.0	1.0	-	-	-	-	-	-	-	-			DENSE
	CORE # 422 9930' - 9949' (REC. 19') (3 BOXES)												
-	9930.0-49.0	19.0	-	-	-	-	-	-	-	-			DENSE

FORMATION TESTING

Technical Report

COMPANY	CANDEX DEVELOPMENT
LEGAL LOCATION	LAT. 63° 52' 59.3" LONG 124° 39.7"
PROVINCE OR	N.W.T.
FIELD OR AREA	DAHADINNI RIVER
TEST	2
WELL NAME AND NUMBER	CANDEX ET AL DAHADINNI M-43A
TESTED	[illegible]



CALGARY, ALBERTA

A Halliburton Company

EQUIPMENT DATA

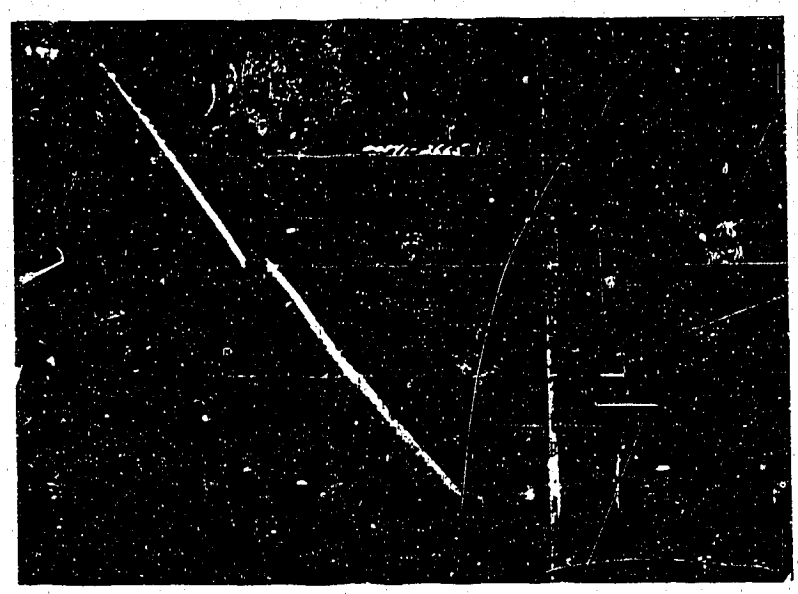
	OD	LENGTH
Reversing Sub	3.50	.80
Water Cushion Valve		
DEPTH		
Drill Pipe & Adapters		
Drill Collars & Adapters		
Handling Sub & Choke		
Dual CIP Valve	3.00	66.05
Dual CIP Sampler		
Hydrospring Tester	3.00	52.39
DEPTH		9711
Multiple CIP Sampler		
Extension Joint		
BT Running Case	3.00	56.59
DEPTH		9716
BT Recorder	3.00	56.59
		9720
Hydraulic Jar	3.00	72.00
VR Safety Joint	3.00	31.88
Equalizing Crossover		
Packer Assembly	3.50	32.69
DEPTH		9731
Distributor		
Packer Assembly		
DEPTH		
Flush Joint Anchor &	3"	40'
Crossover Adapter		
Blanked-Off BT Case		
DEPTH		
HT-500 Temp. Recorder		
Drill Collars & Adapters		
Flush Joint Anchor & Equalizing Tube		
Packer Assembly		
DEPTH		
Distributor		
Packer Assembly		
DEPTH		
Equalizing Seal		
Anchor Pipe Safety Joint		
Side Wall Anchor		
DEPTH		
Drill Collars & Adapters	3 1/2	242.00'
Flush Joint Anchor		
Blanked-Off BT Case		
DEPTH		10013

FORM 3444

PRESSURE

TIME

Each horizontal line equal to 1000 psi



EQUIPMENT DATA

	OD	LENGTH
Reversing Sub	3.50	.80
Water Cushion Valve		
DEPTH		
Drill Pipe & Adapters		
Drill Collars & Adapters		
Handling Sub & Choke		
Dual CIP Valve	3.00	66.05
Dual CIP Sampler		
Hydrospring Tester	3.00	52.39
DEPTH		9711
Multiple CIP Sampler		
Extension Joint		
HT Running Case	3.00	50.59
HT		9716
XXXXXXXX	3.00	50.59
Recorder		9720
Hydraulic Jar	3.00	72.00
VR Safety Joint	3.00	31.55
Equalizing Crossover		
Packer Assembly	5.50	32.69
DEPTH		9731
Distributor		
Packer Assembly		
DEPTH		
Accessories	3"	40'

Halliburton SERVICES LIMITED

FORMATION TESTING
DATA SHEET

REFER TO INVOICE NO. 00841

HALLIBURTON DISTRICT: High Level

JOB DATE: August 14, 1971

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA:

PRESSURE DATA

		TOP	CENTRE	BOTTOM
GAUGE NUMBER		2665		755
GAUGE DEPTH		9711		9715
BLANKED OFF		YES/NO	YES/NO	YES/NO
HOUR CLOCK TRAVEL		12 hr.		24 hr.
INITIAL HYDROSTATIC		4075		4070
FIRST FLOW	INITIAL	*		
	FINAL	*		
FIRST CLOSED IN		4140		4136
SECOND FLOW	INITIAL	3764		3765
	FINAL	4110		4105
SECOND CLOSED IN		4128		4125
THIRD FLOW	INITIAL			
	FINAL			
THIRD CLOSED IN				
FINAL HYDROSTATIC		*		4104

FLUID SAMPLER DATA

SAMPLER PRESSURE AT SURFACE _____ PSIG

RECOVERY: C.C. OIL _____ CU.FT. GAS _____

C.C. WATER _____

C.C. MUD _____

TOTAL LIQUID C.C. _____

SAMPLE SHIPPED TO LABORATORY: YES ☐ NO ☐

OIL GRAVITY _____ API @ _____ °F

GAS/OIL RATIO _____ CU.FT./BBL.

REFRACTOMETER

CHLORIDE CONTENT

RECOVERY WATER _____ @ _____ °F 38,000 PPM

RECOVERY MUD FILTRATE _____ @ _____ °F _____ PPM

MUD PIT SAMPLE FILTRATE _____ @ _____ °F _____ PPM

LIQUID RECOVERY DATA

MEASURED FROM TESTER VALVE: FEET	DESCRIPTION OF LIQUID
2000	Drilling Mud
1870	Muddy Water
5000	Salt Water
8870	TOTAL LIQUID RECOVERY

REMARKS Tool open with weak air blow.

Tool open for second flow with good blow dying to weak at end of test. Lost approx. 5 bbls. mud in annulus.

* Not readable

TYPE OF TEST	TESTER	EMPL. NO.
Bottom Hole	W. Wolodko	163
WITNESS	**DRILLING CONTRACTOR**	
L. Kasmar	Heath & Sherwood	

EQUIPMENT AND WELL DATA

FORMATION TESTED	GAUGE DEPTH ____ °F MEAS. TEMPERATURE 150 °F EST.
NET PRODUCTIVE THICKNESS ____ FT.	MUD TYPE Gel
K B ELEVATION	MUD WEIGHT ____ MUD VISC. ____
ALL DEPTHS MEASURED FROM ☑ KB ☐ GROUND	CASING OR HOLE SIZE 4 1/4"
PACKER DEPTHS TOP ____ BOTTOM 9731	RATHOLE SIZE N/A
DEPTH OF TESTER VALVE 9711	DRILL PIPE OD 3 1/2" WEIGHT ____
CASING PERFORATED INTERVAL N/A	DRILL COLLARS ABOVE TESTER ID ____ LENGTH ____
TOTAL DEPTH 10013	SURFACE CHOKE 1"
AMOUNT AND TYPE CUSHION Nil	BOTTOM CHOKE .44"

TIME PERIODS

	FIRST	SECOND	THIRD		AM	PM
FLOW	5	60		TESTER OPENED	4:45	
CLOSED IN	60	120		PACKER UNSEATED	8:50	

GAS FLOW RATE DATA

TYPE OF INSTRUMENT: ☐ CRITICAL FLOW PROVER ☐ PITOT TUBE ☐ ORIFICE WELL TESTER ☐ SIDE STATIC

FLOW TIME	INSTRUMENT PRESSURE "WATER	"MERC.	PSI	ORIFICE SIZE	GAS TEMP	GAS RATE MCFD @ 60°F

DESCRIPTION LAT. 60° 52' 59.3" LONG 124° 39.7' TERRITORY N.W.T. NUMBER 3 INTERVAL 9731 - 10013

NOMENCLATURE

AOF = absolute open flow potential, MCFD

AOF_t = theoretical absolute open flow potential if damage were removed, MCFD

B = formation volume factor, res bbl/ST bbl

c = compressibility, psi^{-1}

D = gauge depth from KB, ft

DR = damage ratio, dimensionless

E = KB elevation, ft

F = drill pipe capacity, bbl/ft

G = hydrostatic gradient of recovery fluid, psi/ft

h = net productive thickness of formation, ft

h^1 = thickness of test interval, ft

k = average effective permeability, md

k^1 = estimated average effective permeability, md

m = slope of final CIP buildup plot, psig/cycle ($psig^2$/cycle for gas)

M = slope of flow plot, min^{-1}

P_D = average pressure drop across damaged zone during flow, psig

P_f = reservoir pressure, psig

P_s = wellbore flow pressure, psig

$\bar{P}$ = weighted average wellbore flow pressure, psig

PI = productivity index, bbl/day-psi

PI_t = theoretical productivity index if damage were removed, bbl/day-psi

PS = potentiometric surface, fresh water corrected to 100°F, ft

Q = average liquid production rate during test, bbl/day

Q_g = measured gas production rate, MCFD at 60° F, 14.4 psig, sp. gr. 0.60

Q_m = maximum production rate, U.S. gal/min

Q_{mt} = maximum theoretical production rate if damage were removed, U.S. gal/min

q = flow rate calculated from hydrostatic of recovery, psi/x min

r_i = radius of investigation, ft

r_w = wellbore or shaft radius, ft

R_s = solution gas-oil ratio, MCFD ST bbl

s = fluid saturation, fraction

t = effective flow time, min

t_t = time interval from start of continuous production to some future point of interest, min

T = reservoir temperature, °R

μ = viscosity, cp

x = time increment during which q values are calculated, min

Z = compressibility factor, dimensionless

ϕ = porosity, fraction

θ = time point during the closed-in period, minutes

Subscripts

g = gas

o = oil

w = water

t = total

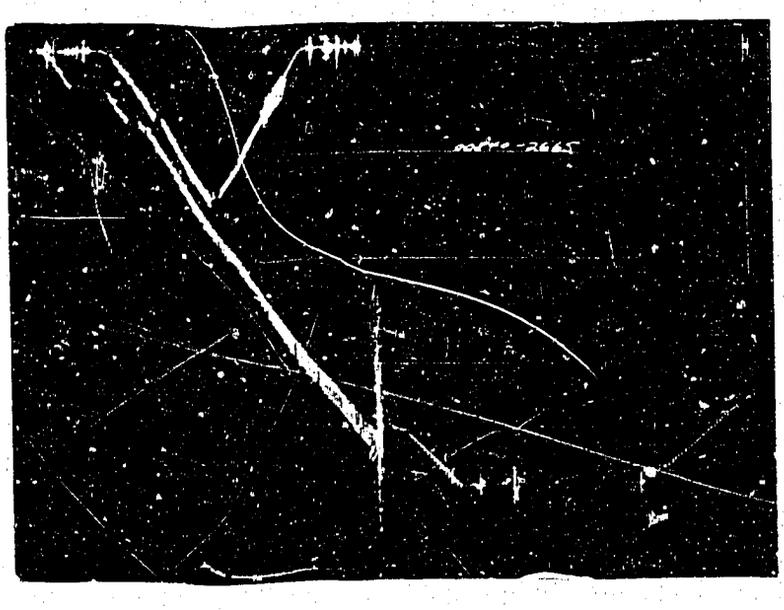
EQUIPMENT DATA

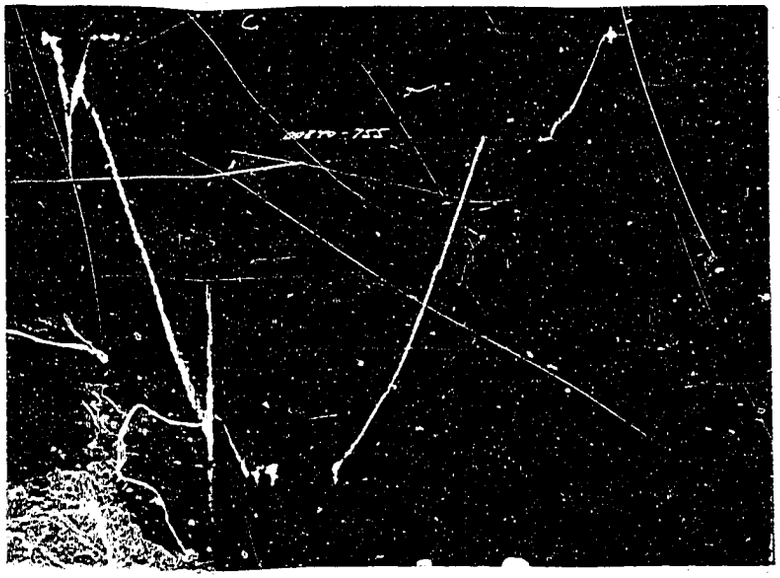
	OD	LENGTH
Reversing Sub	3.50"	.80"
Water Cushion Valve		
DEPTH		
Drill Pipe & Adapters		
Drill Collars & Adapters		
Handling Sub & Choke		
Dual CIP Valve	3.00"	66.05"
Dual CIP Sampler		
Hydrospring Tester	3.00"	52.31"
DEPTH		
Multiple CIP Sampler		
Extension Joint		
BT Running Case (2)	3.00"	56.59
DEPTH		
HT-500 Temp. Recorder		
Hydraulic Jar	3.00"	72.00"
VR Safety Joint	3.00"	31.88"
Equalizing Crossover		
Packer Assembly	3.50"	32.69"
DEPTH		9736
Distributor		
Packer Assembly		
DEPTH		
Flush Joint Anchor		35'
Crossover Adapter		
Blanked-Off BT Case		
DEPTH		
HT-500 Temp. Recorder		
Drill Collars & Adapters		
Flush Joint Anchor & Equalizing Tube		
Packer Assembly		
DEPTH		
Distributor		
Packer Assembly		
DEPTH		
Equalizing Seal		
Anchor Pipe Safety Joint		
Side Wall Anchor		
DEPTH		
Drill Collars & Adapters	3 1/2"	242.00'
Flush Joint Anchor		
Blanked-Off BT Case		
DEPTH		10013

PRESSURE

TIME

Each horizontal line equal to 1000 psi





HALLIBURTON

OWNER, OP

FORM 344A

EQUIPMENT DATA

	O.D.	LENGTH
	3.50"	.=0"
	3.00"	60.05"
	3.00"	52.31"
	3.00"	50.5"
	3.00"	72.00"
	3.00"	31.=="
	3.50"	32.69"
		9736
		35'

Halliburton SERVICES LIMITED

FORMATION TESTING
DATA SHEET

REFER TO INVOICE NO. 00840

HALLIBURTON DISTRICT: High Level

JOB DATE: August 9, 1971

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA:

PRESSURE DATA

	TOP	CENTRE	BOTTOM
GAUGE NUMBER	2665		755
GAUGE DEPTH	9716		9720
BLANKED OFF	~~YES~~/NO	YES/NO	~~YES~~/NO
HOUR CLOCK TRAVEL	12 hr.		24 hr.
INITIAL HYDROSTATIC	4153		4152
FIRST FLOW INITIAL			
FIRST FLOW FINAL			
FIRST CLOSED IN			
SECOND FLOW INITIAL			
SECOND FLOW FINAL			
SECOND CLOSED IN			
THIRD FLOW INITIAL			
THIRD FLOW FINAL			
THIRD CLOSED IN			
FINAL HYDROSTATIC	4134		4135

TYPE OF TEST: Bottom Hole	TESTER: W. Wolodko — EMPL. NO.: 163
WITNESS: D. Tufts	DRILLING CONTRACTOR: Heath & Sherwood

EQUIPMENT AND WELL DATA

FORMATION TESTED	GAUGE DEPTH ____ OF MEAS. / TEMPERATURE ____ OF EST.
NET PRODUCTIVE THICKNESS ____ FT.	MUD TYPE: Gel
K B ELEVATION	MUD WEIGHT: 8.8 MUD VISC.: 47
ALL DEPTHS MEASURED FROM: ☑ KB ☐ GROUND	CASING OR HOLE SIZE: 4 1/4"
PACKER DEPTHS (TOP / BOTTOM): 9736	RATHOLE SIZE: N/A
DEPTH OF TESTER VALVE: 9716	DRILL PIPE (OD / WEIGHT): 3 1/2"
CASING PERFORATED INTERVAL: N/A	DRILL COLLARS ABOVE TESTER (ID / LENGTH)
TOTAL DEPTH: 10013	SURFACE CHOKE: 1"
AMOUNT AND TYPE CUSHION: Nil	BOTTOM CHOKE: .44"

FLUID SAMPLER DATA

SAMPLER PRESSURE AT SURFACE ____ PSIG

RECOVERY: C.C. OIL ____ CU.FT. GAS ____

C.C. WATER ____

C.C. MUD ____

TOTAL LIQUID C.C. ____

SAMPLE SHIPPED TO LABORATORY: YES ☐ NO ☐

OIL GRAVITY ____ API @ ____ °F

GAS/OIL RATIO ____ CU.FT./BBL.

	RESISTIVITY/REFRACTOMETER/SP. GR. READING		CHLORIDE CONTENT
RECOVERY WATER	@ °F		PPM
RECOVERY MUD FILTRATE	@ °F		PPM
MUD PIT SAMPLE FILTRATE	@ °F		PPM

TIME PERIODS

	FIRST	SECOND	THIRD		AM	PM
FLOW	5	15		TESTER OPENED	6.45	
CLOSED IN	60	30		PACKER UNSEATED	8:45	

LIQUID RECOVERY DATA

FEET MEASURED FROM TESTER VALVE	DESCRIPTION OF LIQUID
1920	Drilling Mud
1920	TOTAL LIQUID RECOVERY

GAS FLOW RATE DATA

TYPE OF INSTRUMENT: ☐ CRITICAL FLOW PROVER ☐ PITOT TUBE ☐ ORIFICE WELL TESTER ☐ SIDE STATIC

FLOW TIME	INSTRUMENT PRESSURE "WATER	"MERC.	PSI	ORIFICE SIZE	GAS TEMP.	GAS RATE MCF/D @ 60°F

REMARKS: Misrun. Washed out pipe

COMPANY: CANDEX DEVELOPMENT

LEGAL DESCRIPTION: 63 52159.03 124 39115.07

PROVINCE OR TERRITORY: N.W.T.

FIELD OR AREA: DAHADINNI RIVER

TEST NUMBER: 2

WELL NAME AND NUMBER: CANDEX ET AL 43A

TESTED INTERVAL: 9736 - 10013

NOMENCLATURE

AOF = absolute open flow potential, MCFD

AOF_t = theoretical absolute open flow potential if damage were removed, MCFD

B = formation volume factor, res bbl/ST bbl

c = compressibility, psi^{-1}

D = gauge depth from KB, ft

DR = damage ratio, dimensionless

E = KB elevation, ft

F = drill pipe capacity, bbl/ft

G = hydrostatic gradient of recovery fluid, psi/ft

h = net productive thickness of formation, ft

h^1 = thickness of test interval, ft

k = average effective permeability, md

k^1 = estimated average effective permeability, md

m = slope of final CIP buildup plot, psig/cycle ($psig^2$/cycle for gas)

M = slope of flow plot, min^{-1}

P_D = average pressure drop across damaged zone during flow, psig

P_f = reservoir pressure, psig

P_s = wellbore flow pressure, psig

$\bar{P}$ = weighted average wellbore flow pressure, psig

PI = productivity index, bbl/day-psi

PI_t = theoretical productivity index if damage were removed, bbl/day-psi

PS = potentiometric surface, fresh water corrected to 100°F, ft

Q = average liquid production rate during test, bbl/day

Q_g = measured gas production rate, MCFD at 60°F, 14.4 psig, sp. gr. 0.60

Q_m = maximum production rate, U.S. gal/min

Q_{mt} = maximum theoretical production rate if damage were removed, U.S. gal/min

q = flow rate calculated from hydrostatic of recovery, psi/x min

r_i = radius of investigation, ft

r_w = wellbore or shaft radius, ft

R_s = solution gas-oil ratio, MCFD ST bbl

s = fluid saturation, fraction

t = effective flow time, min

t_f = time interval from start of continuous production to some future point of interest, min

T = reservoir temperature, °R

μ = viscosity, cp

x = time increment during which q values are calculated, min

Z = compressibility factor, dimensionless

ϕ = porosity, fraction

θ = time point during the closed-in period, minutes

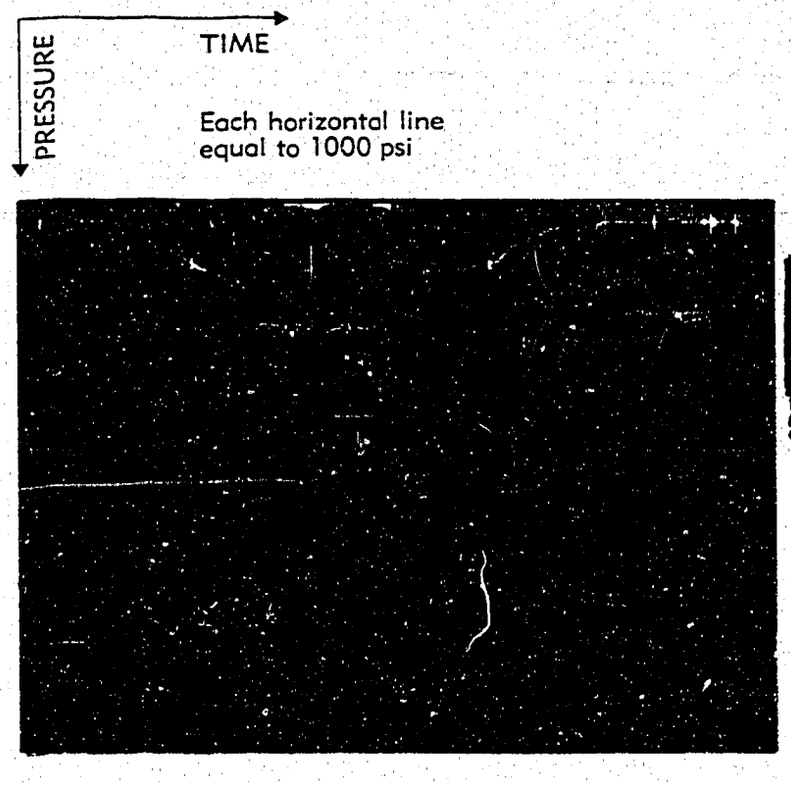
Subscripts

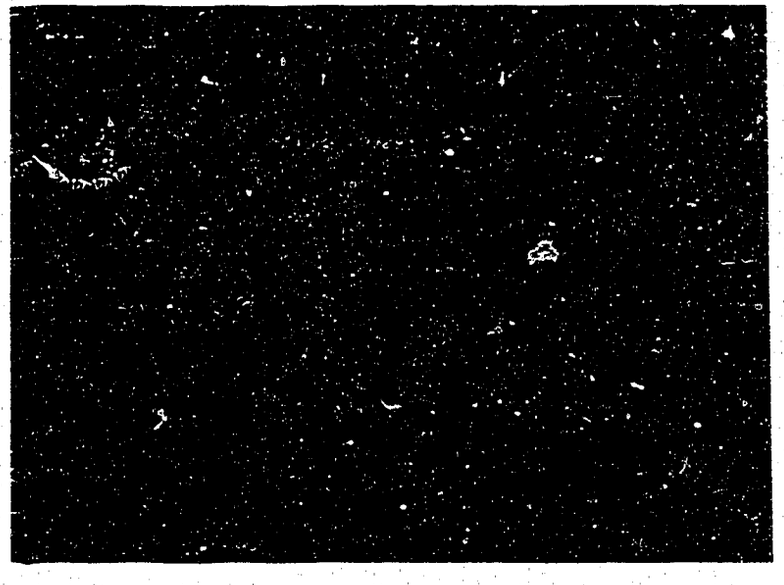
g = gas

o = oil

w = water

t = total

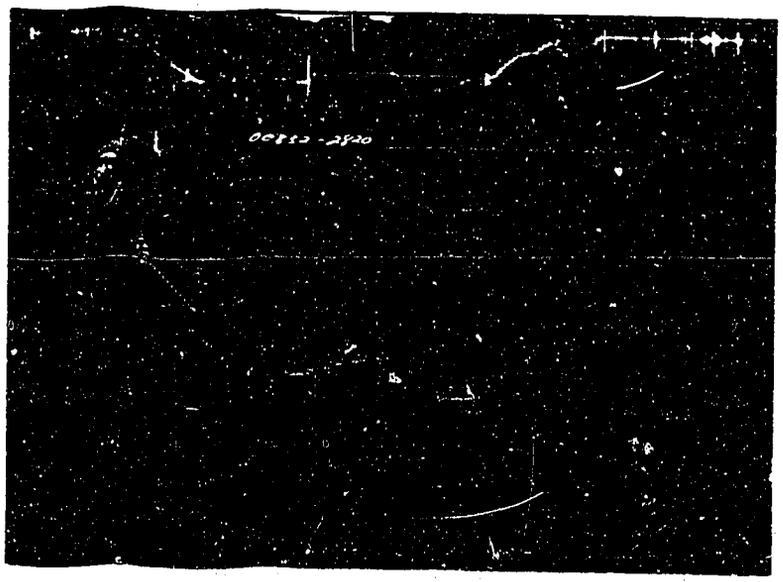

TIME
PRESSURE
Each horizontal line
equal to 1000 psi

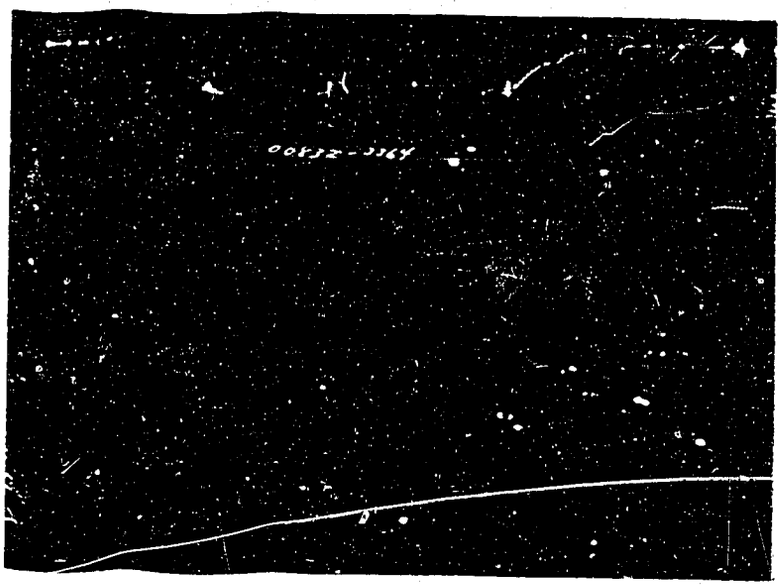


PRESSURE

TIME

Each horizontal line
equal to 1000 psi





Halliburton Services Limited

FORMATION TESTING
DATA SHEET

REFER TO INVOICE NO. 00832

HALLIBURTON DISTRICT: High Level

JOB DATE: February 26, 1971

OWNER, OPERATOR OR HIS AGENT STATES THE WELL IS IN CONDITION FOR THE SERVICE JOB TO BE PERFORMED AND SUBMITS THE FOLLOWING DATA:

PRESSURE DATA

	TOP	CENTRE	BOTTOM
GAUGE NUMBER	2820		3364
GAUGE DEPTH	1096		1102
PLUGGED OFF	YES/NO	YES/NO	YES/NO
HOUR CLOCK TRAVEL	12 hr.		12 hr.
INITIAL HYDROSTATIC	432		429
FIRST FLOW — INITIAL	364		368
FIRST FLOW — FINAL	357		364
FIRST CLOSED IN	372		378
SECOND FLOW — INITIAL	361		372
SECOND FLOW — FINAL	350		358
SECOND CLOSED IN	366		374
THIRD FLOW — INITIAL			
THIRD FLOW — FINAL			
THIRD CLOSED IN			
FINAL HYDROSTATIC	381		388

TYPE OF TEST	TESTER	EMPL. NO.
Bottom Hole	W. Wolodko	165
WITNESS: H. Bickell	DRILLING CONTRACTOR: Heath & Sherwood	

EQUIPMENT AND WELL DATA

FORMATION TESTED: –	GAUGE DEPTH: ____ OF MEAS. / TEMPERATURE: ____ OF EST.
NET PRODUCTIVE THICKNESS: ____ FT.	MUD TYPE: Invermul
K B ELEVATION: 813	MUD WEIGHT: 7.9 MUD VISC.: 38
ALL DEPTHS MEASURED FROM: ☑ KB ☐ GROUND	CASING OR HOLE SIZE: 6 1/4
PACKER DEPTHS (TOP / BOTTOM): 1112	RATHOLE SIZE: N/A
DEPTH OF TESTER VALVE: 1072	DRILL PIPE (OD / WEIGHT): 4 1/2 / 9.5
CASING PERFORATED INTERVAL: N/A	DRILL COLLARS ABOVE TESTER (ID / LENGTH): 2" / 160
TOTAL DEPTH: 1222	SURFACE CHOKE: 3/4
AMOUNT AND TYPE CUSHION: Nil	BOTTOM CHOKE: 1/2

FLUID SAMPLER DATA

SAMPLER PRESSURE AT SURFACE ____ PSIG

RECOVERY: C.C. OIL ____ CU.FT. GAS ____

C.C. WATER ____

C.C. MUD ____

TOTAL LIQUID C.C. ____

SAMPLE SHIPPED TO LABORATORY: YES ☐ NO ☐

OIL GRAVITY ____ API @ ____ °F

GAS/OIL RATIO ____ CU.FT./BBL.

	RESISTIVITY/REFRACTOMETER/SP. GR. READING	@	°F	CHLORIDE CONTENT
RECOVERY WATER				340 PPM
RECOVERY MUD FILTRATE				PPM
MUD PIT SAMPLE FILTRATE				PPM

TIME PERIODS

	FIRST	SECOND	THIRD		AM	PM
FLOW	5	45		TESTER OPENED		11:25
CLOSED IN	30	60		PACKER UNSEATED	1:45	

LIQUID RECOVERY DATA

MEASURED FROM TESTER VALVE — FEET	DESCRIPTION OF LIQUID
600	Drilling Mud
30	Water
630	TOTAL LIQUID RECOVERY

GAS FLOW RATE DATA

TYPE OF INSTRUMENT: ☐ CRITICAL FLOW PROVER ☐ PITOT TUBE ☐ ORIFICE WELL TESTER ☐ SIDE STATIC

FLOW TIME	INSTRUMENT PRESSURE "WATER	"MERC.	PSI	ORIFICE SIZE	GAS TEMP.	GAS RATE MCF/D @ 60°F

REMARKS: Tool open with good air blow.

Good air blow decreasing and dying in 35 min. of second flow.

LEGAL DESCRIPTION: 63 52' 59.03 / 124 39' 15.07

COMPANY: CANDEX DEVELOPMENT

PROVINCE OR TERRITORY: N.W.T.

FIELD OR AREA: BAHADINNI RIVER

TEST NUMBER: 1

WELL NAME AND NUMBER: CANDEX et al BAHADINNI M-43-A

TESTED INTERVAL: 1112-1222

FORM 3448 5C

NOMENCLATURE

AOF = absolute open flow potential, MCFD

AOF_t = theoretical absolute open flow potential if damage were removed, MCFD

B = formation volume factor, res bbl/ST bbl

c = compressibility, psi^{-1}

D = gauge depth from KB, ft

DR = damage ratio, dimensionless

E = KB elevation, ft

F = drill pipe capacity, bbl/ft

G = hydrostatic gradient of recovery fluid, psi/ft

h = net productive thickness of formation, ft

h^1 = thickness of test interval, ft

k = average effective permeability, md

k^1 = estimated average effective permeability, md

m = slope of final CIP buildup plot, psig/cycle ($psig^2$/cycle for gas)

M = slope of flow plot, min^{-1}

P_D = average pressure drop across damaged zone during flow, psig

P_f = reservoir pressure, psig

P_s = wellbore flow pressure, psig

$\bar{P}$ = weighted average wellbore flow pressure, psig

PI = productivity index, bbl/day-psi

PI_t = theoretical productivity index if damage were removed, bbl/day-psi

PS = potentiometric surface, fresh water corrected to 100° F, ft

Q = average liquid production rate during test, bbl/day

Q_g = measured gas production rate, MCFD at 60° F, 14.4 psig, sp. gr. 0.60

Q_m = maximum production rate, U.S. gal/min

Q_{mt} = maximum theoretical production rate if damage were removed, U.S. gal/min

q = flow rate calculated from hydrostatic of recovery, psi/x min

r_i = radius of investigation, ft

r_w = wellbore or shaft radius, ft

R_s = solution gas-oil ratio, MCFD ST bbl

s = fluid saturation, fraction

t = effective flow time, min

t_f = time interval from start of continuous production to some future point of interest, min

T = reservoir temperature, ° R

μ = viscosity, cp

x = time increment during which q values are calculated, min

Z = compressibility factor, dimensionless

ϕ = porosity, fraction

θ = time point during the closed-in period, minutes

Subscripts

g = gas

o = oil

w = water

t = total

GANDEX ET AL DAHADINNI M-43

26-1-71 Hole was plugged on the 14th January 1971

Rig was never released

From Mrs. Smith, LI&E, 26-1-71 VAH

CORE LABORATORIES – CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

Company: Candex Development Limited — Page: 1 of 2

Well: Candex et al Dahadinni M-43A — File: 933-11115

Field: Dahadinni River Area, N.W.T. — Analyst: LK

Location: 63 52' 59.03 N.L. 124 39' 15.07 W.L. — Elevation: K.B. ____ Grd. 813'

Formation ____ Depth ____

Sampled from: DST #2 (Misrun) by ____

Sampling pressure ____ psig Sampling temp. ____ °F Ambient temp. ____ °F

Date sampled ____ Date received: Sept. 15/71 Date analysed: Sept. 20/71

Container pressure ____ Mud ____ Water cushion ____

Recovery or flowrate: ____

MUD FILTRATE ANALYSIS

Resistivity	0.75	Ohm-meters @ 72°F
Chloride	2220	mg/liter

CORE LABORATORIES – CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

WATER ANALYSIS

File 933-11115 2 of 2

Company Candex Development Limited

Well Candex et al Dahadinni M-43A K.B. ____ Grd. 813'

Location 63 52' 59.03 N.L. 124 39' 15.07 W.L. Field Dahadinni River Area Province N.W.T.

Formation ____ Interval 9731' - 10,013'

Sampled from DST #3 (Top of Tool) by ____

Date sampled ____ Date analysed Sept. 20/71 Analyst LK

Recovery 8870' Liquid

____ Mud type ____ Water cushion ____

Resistivity 0.10 Ohm-meters @ 73 °F

Specific gravity 1.0542 @ 60°F

pH 7.3 H_2S Absent

Refractive Index 1.3462 @ 71°F

Total Solids:

Calculated 77,075 mg/liter

By evaporation @ 110°C – mg/liter

By evaporation @ 180°C – mg/liter

At ignition – mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO_3	SO_4	CO_3	OH
27991	1818	141	Pres.	Abs.	–	–	46011	322	792	Nil	Nil

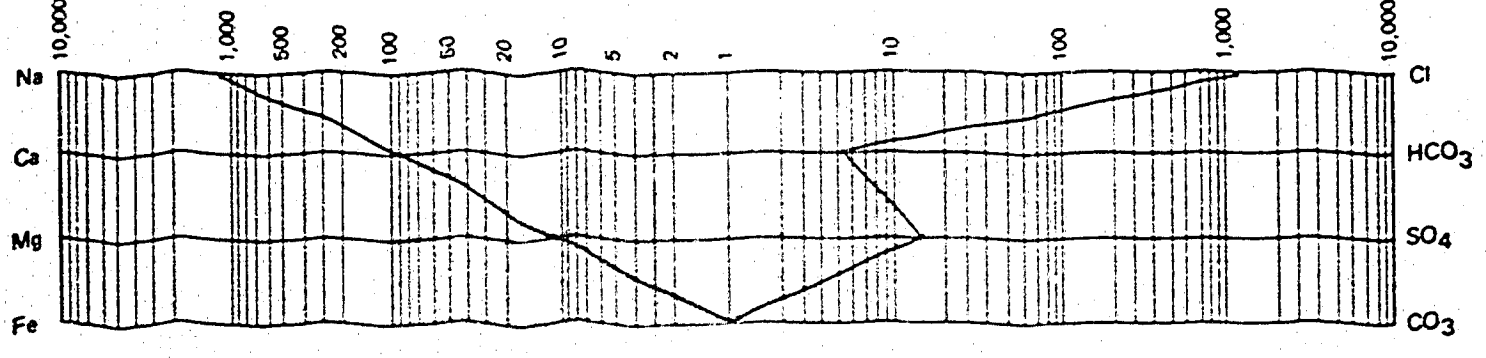
PER CENT CALCULATED SOLIDS

36.3	2.4	.2	Pres.	Abs.	–	–	59.7	.4	1.0	.0	.0

MEQ PER LITER

1217.0	90.7	11.6	Pres.	Abs.	–	–	1297.5	5.3	16.5	.0	.0

LOGARITHMIC PATTERN MEQ PER LITER



76494. 27991.0

Candea et al Dahadinni M-43

N-7940-1-482

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO 11-11 — LOCATION DAHALINN RIVER NWT LSD ___ SEC ___ TWP ___ RGE ___ W ___ — DATE JAN 15 1971

DIRECTIONS TO WELL: CANHEX M43. — MAILING POINT ___ — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR 8 A.M. TO 4 P.M. — TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL H.P.					MODEL H.P.					2	
GEL					R.P.M. LINER SIZE					R.P.M. LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL H.P.					MODEL H.P.					2	
GEL					R.P.M. LINER SIZE					R.P.M. LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL H.P.					MODEL H.P.					2	
GEL					R.P.M. LINER SIZE					R.P.M. LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

JETCO RING ON BIT # 2 — Boiler Operated 24 hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES / NO)

GENERAL: —

DAYS FROM SPUD:

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative E.R. Hansen

Approved by Toolpusher C. Johnson

HSW DDL-1

HEAD OFFICE PAYROLL COPY

№ 1335 HSW

REMARKS	TIME START	TIME STOP	TIME INTVL
TAIR Down	12.00	8.00	
Removed mud tanks pumps mud manifold ect.			
			8
FIRES ___ DRILLER'S SIGNATURE ___			
Rigging down to skid	5.00	4.00	
			8
FIRES ___ DRILLER'S SIGNATURE ___			
Rig down to skid rig 4.00 13.00			
& Tower trash.			
Move out pumps and engines			
			8
FIRES ___ DRILLER'S SIGNATURE ___			

EQUIPMENT CHANGES — TRANSFER #

DATE JAN 15 RIG # 11-11

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME I RECEIVED NO INJURY!

EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT. IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.	Hrs
Driller G. STRINGER	3
Derrick [illegible]	3
Motor R. Bacon	3
Floor Duane Garbin	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs
Driller G. STRINGER	11
Derrick Claude Gelinas	3/4
Motor Rhodes Arnaze	14
Floor R. Bacon	14
Floor Danny Dolan	14
Floor Marlon Bentorpia	15
Other Paul Lebel	15

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller	
Derrick [illegible]	12
Motor Jason Harkie	4
Floor J. Peckard	11
Floor R. Bacon	11
Floor	

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART 1)

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By: ___

Subject: ___

№ 1335 HSW

PAYROLL

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION DAHADINNI RIVER NWT — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE JAN 14 — 1971

DIRECTIONS TO WELL: CANDEX M-43 — MAILING POINT: ___ — SHIPPING POINT: ___ — MILES MOVED: ___ — ROAD CONDITIONS: ___

DATE JAN 14 71 RIG # 11-11

TOUR MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
															4	
															5	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS: At Feet / Degrees

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

START TO TAKE DOWN SET UP - (MOVING)

Rigging down to Skid rig to the East 30' feet.

GHL

FIRES ___ DRILLER'S SIGNATURE ___

Rig Down

Tools cemented in hole.

1-6"x10' Bottom Drill Collar 4½ reg box x 4½ H90 box

1-6"x10' Drill Collar 4½" H90 Pin x 4½" H90 Box.

1-6"OD x over Sub 4½" H90 Pin x 4½" 1080 Box.

1-6"OD x over Sub 4½" 1080 Pin x 4½" SWH Box.

27 joints 4½" x 12' Sheffer drill pipe

2 internal upset to 4¼"OD

Rod handled to 5"OD GR Larsen

FIRES ___ DRILLER'S SIGNATURE ___

Tear Down Rig.

FIRES ___ DRILLER'S SIGNATURE ___

TIME

	START	STOP	INTVL
START TO TAKE DOWN SET UP - (MOVING)	1200	800	8
Rig Down	800	400	
Tear Down Rig.	400	1200	8

I ACKNOWLEDGE HAVING WORKED THESE HOURS, DURING THIS TIME I RECEIVED NO INJURY!

EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT! IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. — Hrs.

Driller	G. STINGER	8
Derrick	C. Carron	8
Motor	R. Baum	17
Floor	Ivan Yankie	8
Floor		
Floor		

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. — Hrs.

Driller	Rheal St Amant	12
Derrick	Claude Gélinas	12
Motor	R. Lantz	12
Floor		
Floor	Gilbert Lebel	12
Floor	Dann Nielsen	12
Other	Mario Lautrasse	12

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT — Hrs.

Driller	G. Stinger	9
Derrick	C. Carron	9
Motor		
Floor	Ivan Yankie	9
Floor		
Floor		

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW, DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART 1).

Position	Tour	Signature	Hrs.

TOUR 4 P.M. TO MIDNIGHT

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
															4	
															5	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS: At Feet / Degrees

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12:01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11:59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING REPORT: RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative: G R Lupke

Approved by Toolpusher: G R Larsen

Toolpushers Approval

- SAFETY TALKS -

Given By: ___

Subject: ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HOTCO RING ON BIT # 2 — Boiler Operated: 24 Hrs.

HSW DDL-1

HEAD OFFICE PAYROLL COPY

Nº 1334 HSW

Nº 1334 HSW

PAYROLL

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION DAHADINNI RIVER N.W.T. — LSD. — SEC. — TWP. — RGE. — W. — DATE JAN 13 - ~~1971~~ 71

DIRECTIONS TO WELL: CANDEX M13 — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

DATE JAN 13 - 71 RIG # 11-11

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME I RECEIVED NO INJURY!

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EAC SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. — Hrs.

Driller	G. STINGER	8
Derrick		8
Motor	Rejean Bajon	8
Floor	Ivan Yorki	8
Floor		
Floor		

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. — Hrs.

Driller	Paul St Arnaud	12
Derrick	Claude Delino	12
Mot.	R. Franz	12
Floo	L. Nelson	12
Floo	Martin Yaritoojja	11
Floor	L. Packard	10
Other	Gino Gabel	11

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT — Hrs.

Driller	G STINGER	4
Derrick		4
Motor	L. Packard	12
Floor	Ivan Yorki	4
Floor		
Floor		

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART 1)

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

No. 1333 HSW

PAYROLL

TOUR: MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: — GENERAL: — Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: — GENERAL: 12¼ 121 SACK OIL WELL CEMENT 5 SACK CALCIUM CHLORIDE 1 SACK QUICK SET — Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: — GENERAL: — Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. — gals. — Fuel Rec'd Today (add) — gals. — TOTAL — gals. — Fuel on Hand 11.59 p.m. (deduct) — gals. — FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUG DOWN — A.M. P.M. — PLUS — % — CEMENT RETURNS - (YES/NO)

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative — Approved by Toolpusher

GENERAL:

TCO RING ON BIT # 2 — Boiler Operated: 24 Hrs.

CLASSIFICATION: 2 3 4

DRILL PIPE	Size	Joint	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	START	STOP	INTVL.
PREPARE TO CEMENT PACK UP FISHING TOOL PACKING UP TACK BOX IN STORAGE ROOM + MOVE OUT TO PREPARE TO MOVE	12.00	8.00	8
FIRES — DRILLER'S SIGNATURE			
PREPARE TO CEMENT HOOKING CEMENT TO DRILL CEMENT OFF HOLE 121 SACK CEMENT (OVERTIME ON MOVE)	8.00	4.00	8
FIRES — DRILLER'S SIGNATURE			
CLEAN UP AFTER CEMENTING JOB START TO TAKE DOWN SET UP CLEANING MUD TANK PUMP 30 BARREL MUD INTO DESILTER TANK FOR STORAGE	4.00	12.00	8
FIRES — DRILLER'S SIGNATURE			

HSW-DDL-1 HEAD OFFICE PAYROLL COPY

No. 1333 HSW

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION DAHADINNI RIVER N.W.T. — LSD. — SEC. — TWP. — RGE. — W. — DATE JAN 12 — 1971

DIRECTIONS TO WELL: CANDEX M.43 — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR 1 MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
402															

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	2	8 3/4	Y51		580764		75	116	~~116~~ 369									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees: 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 2 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees: 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 3 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees: 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. / Rig Savers Chk'd. / Kelly Cock Chk'd. / Fire Equip. Chk'd.

TCO RING ON BIT # 2 — Boiler Operated: 24 Hrs.

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG. — TO ____ KB. USED ____ SAX ____ CEM — PLUS ____ % — PLUG DOWN ____ A.M. P.M. — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW-DDL-1

HEAD OFFICE PAYROLL COPY

REMARKS

Fishing for 4½ Rods
Rig Sec

FIRES ____ DRILLER'S SIGNATURE G. Stenger

Fishing Broke off Rods
Bailing mud out off Hole
~~Clean up Fishing Tools~~
Rig Sec
Hole abandoned at 4:30
~~pr~~

FIRES ____ DRILLER'S SIGNATURE Fred St Amant

Bailing out Mud from Hole
Cleaning up Fishing Tools
Rig Sec
Waiting abandonment Programme

FIRES ____ DRILLER'S SIGNATURE G. Stenger

TIME

START	STOP	INTVL.
12 00	~~7 45~~ 8 00	~~7 3/4~~ 8
7 45	8 00	1/4
		8
8 00	12 00	4
12 00	4 00	4
4 30	7 45	3 1/4
7 45	8 00	1/4
		8
8 00	4 30	1/2
4 30	7 45	3 1/4
7 45	8 00	1/4
8 00	12 00	4
		8

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative: C.B. Lapp

Approved by Toolpusher: C. Williamson

GENERAL:

№ 1332 HSW

DATE ____ RIG # ____

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME I RECEIVED NO INJURY!

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.	Hrs.
Driller G. STANGER	8
Derrick Gus Pickering	8
Motor Perron	8
Floor Ivan Yashin	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs.
Driller Fred St Amant	12
Derrick Claude Delino	12
Motor R. Franz	12
Floor Larry Nielsen	9
Floor Martin Tautuaja	10
Floor	
Other Pierre Lebel	10

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller G. STANGER	4
Derrick Kilean Bacon	12
Motor	
Floor Ivan Yashin	4
Floor James Evans	4
Floor	

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART 1).

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

№ 1332 HSW

PAYROLL

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN) RIG NO. 11-11 LOCATION DAHADINNI RIVER N.W.T. LSD. SEC. TWP. RGE. W. DATE JAN 11 19 71

DAILY DRILLING LOG
DIRECTIONS TO WELL: CANDEX M43 MAILING POINT: SHIPPING POINT: MILES MOVED: ROAD CONDITIONS:

DATE JAN 11 RIG 11-11

I ACKNOWLEDGE HAVING WORKED THOSE HOURS DURING THIS TIME I RECEIVED NO INJURY.

EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. | Hrs.

		Hrs.
Driller	G. STANGIER	8
Derrick	[illegible]	8
Motor	Ken Lebsack	8
Floor	Ivan Yaskie	8
Floor		
Floor		

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. | Hrs.

		Hrs.
Driller	Phil Le Grand	12
Derrick	Claude Delorme	12
Motor	R. Fantz	12
Floor	Tony Miller	11
Floor	Martin Pantoja	12
Floor		
Other	Pierre Lebel	12

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT | Hrs.

		Hrs.
Driller	G. STANGIER	4
Derrick	Sylvain Baron	12
Motor	C. Pierre	4
Floor	Ken Lebsack	4
Floor	L. Pechon	12
Floor	Ivan Yaskie	4

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART II)

Position	Tour	Signature	Hrs.

Toolpushers Approval

SAFETY TALKS

Given By:

Subject:

Nº 1331 HSW

PAYROLL

TOUR MIDNIGHT TO 8 A.M. TOUR

From: 402 | Footage | To | Hrs. on Bottom | Wt. Drill Pipe (1000 lbs.) | Stands | Singles | DRILL COLLARS: No. | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. | Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	4¾	J51	R	590769			116	20¼									

MUD | 12 mn. | 2 a.m. | 4 a.m. | 6 a.m. | PUMP | 12 mn. | 2 a.m. | 4 a.m. | 6 a.m. | PUMP | 12 mn. | 2 a.m. | 4 a.m. | 6 a.m. | MOTOR HOURS | Next Oil Change

WEIGHT			8.7#		No. 1 PRESSURE					No. 2 PRESSURE					1		
VISCOSITY			41		MODEL					MODEL					2		
GEL					S.P.M.					S.P.M.					3		
					LINER SIZE					LINER SIZE							

W.L. | F.C. | pH. | DESILTER: Hours Op: 6 | U. Flow: | O. Flow: | SURVEYS: At Feet | Degrees | 4 | 5 | Weather | Temp. | Water | Bbls.

ADDITIVES: | GENERAL: 6 SACKS SALT 35 SACKS Zeogel 1 KELLY HOSE 2½"

Drilling Line Record: Size | Make | Serial No. | No. Lines | Trips | Ton Miles | Total Miles | Slip Feet or Cut | At Miles | Date Slip or Cut | Next Slip | Ft. Left on Spool

From: 402 | Footage | To | Hrs. on Bottom | Wt. Drill Pipe (1000 lbs.) | Stands | Singles | DRILL COLLARS: No. | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. | Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
				590768		75	116	20¼									

MUD | 8 a.m. | 10 a.m. | 12 noon | 2 p.m. | PUMP | 8 a.m. | 10 a.m. | 12 noon | 2 p.m. | PUMP | 8 a.m. | 10 a.m. | 12 noon | 2 p.m. | MOTOR HOURS | Next Oil Change

WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1		
VISCOSITY					MODEL					MODEL					2		
GEL					S.P.M.					S.P.M.					3		
					LINER SIZE					LINER SIZE							

W.L. | F.C. | pH. | DESILTER: Hours Op: | U. Flow: | O. Flow: | SURVEYS: At Feet | Degrees | 4 | 5 | Weather | Temp. | Water | Bbls.

ADDITIVES: | GENERAL: 2 DISILTER CONE LINERS 35 SACKS AMG

Drilling Line Record: Size | Make | Serial No. | No. Lines | Trips | Ton Miles | Total Miles | Slip Feet or Cut | At Miles | Date Slip or Cut | Next Slip | Ft. Left on Spool

From: 402 | Footage | To | Hrs. on Bottom | Wt. Drill Pipe (1000 lbs.) | Stands | Singles | DRILL COLLARS: No. | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. | Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD | 4 p.m. | 6 p.m. | 8 p.m. | 10 p.m. | PUMP | 4 p.m. | 6 p.m. | 8 p.m. | 10 p.m. | PUMP | 4 p.m. | 6 p.m. | 8 p.m. | 10 p.m. | MOTOR HOURS | Next Oil Change

WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1		
VISCOSITY					MODEL					MODEL					2		
GEL					S.P.M.					S.P.M.					3		
					LINER SIZE					LINER SIZE							

W.L. | F.C. | pH. | DESILTER: Hours Op: | U. Flow: | O. Flow: | SURVEYS: At Feet | Degrees | 4 | 5 | Weather | Temp. | Water | Bbls.

ADDITIVES: | GENERAL:

Drilling Line Record: Size | Make | Serial No. | No. Lines | Trips | Ton Miles | Total Miles | Slip Feet or Cut | At Miles | Date Slip or Cut | Next Slip | Ft. Left on Spool

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REMARKS

	START	STOP	INTVL.
FISHING FOR 4½ OD pipe	12.00	12.30	½
MIXING MUD	12.30	1.30	1
FISHING	1.30	4.00	2½
TESTING + REPAIR FISHING TOOLS	4.00	6.00	2
BAILING OUT HOLE AMG	6.00	7.45	1¾
GET PLUG WASHED OUT.			
RIG SER.	7.45	4.00	7½
			8
FIRES	DRILLER'S SIGNATURE L. St		
BAIL OUT HOLE + MIX AMG	7.00	12.00	4½
WAIT ON AMG PLUG TO SET.	12.00	1.00	1
DRILL AMG Nogard RUN IN 1 MORE AMG PLUG DID NOT HOLD	1.00	3.00	2
FISHING	3.00	4.00	1
(CREW ON 12 HRS SHIFT WELL FISHING) (MIXING MUD WHILE FISHING)			
			8
FIRES	DRILLER'S SIGNATURE Blitt		
FISHING	4.00	7.45	3¾
RIG S.E.R.	7.45	8.00	¼
FISHING	8.00	12.00	4
			8
FIRES	DRILLER'S SIGNATURE L. St		

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

OTCO RING ON BIT # 2 | Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals. | Fuel Rec'd Today (add) gals. | TOTAL gals. | Fuel on Hand 11.59 p.m. (deduct) gals. | FUEL USED gals.

CASING REPORT: RAN JTS CSG | TO KB. USED SAX CEM | PLUG DOWN A.M. P.M. | PLUS % | CEMENT RETURNS - (YES/NO)

GENERAL:

EQUIPMENT CHANGES | TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. | TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative: L. K. Lange

Approved by Toolpusher: [signature]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW-DDL-1 HEAD OFFICE PAYROLL COPY

Nº 1331 HSW

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO 11-11 LOCATION DEADDOINNI, K.V.E.R. NWT LAND SEC TWP RGE W DATE Jan 10 — 71

DIRECTIONS TO WELL — ENOFA M43 — HAULING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

DATE Jan 10-71 RIG # 11-H

TOUR 1 — MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
402															

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD — PUMP — PUMP — MOTOR HOURS — Next Oil Change

WEIGHT / VISCOSITY / GEL / W.L. / F.C. / pH

PUMP No. 1: Make / Model / Liner Size / Rod Size / Stroke

PUMP No. 2: Make / Model / Liner Size / Rod Size / Stroke

DESILTER Hours Op. 7 U. Flow O. Flow

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5

Weather / Temp. / Water Bbls.

ADDITIVES: GENERAL: 1 KELLY HOSE 54FT

12 SACK SALT

2 SACK ZEOGEL

Drilling Line Record: Size / Date Slip or Cut / At Miles / Next Slip / Ft. Left on Spool

TOUR 2 — 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
402															

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD — 8 a.m. — 10 a.m. — 12 noon — 2 p.m. — PUMP — 8 a.m. — 10 a.m. — 12 noon — 2 p.m. — PUMP — 4 a.m. — 10 a.m. — 12 noon — 2 p.m. — MOTOR HOURS — Next Oil Change

WEIGHT 11.9+ 11.9 11.9

VISCOSITY 60 55

GEL

PUMP No. 1: Make / Model / Liner Size / Rod Size / Stroke

PUMP No. 2: Make / Model / Liner Size / Rod Size / Stroke

W.L. / F.C. / pH

DESILTER: Hours Op. 4 U. Flow O. Flow

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5

Weather / Temp. / Water Bbls.

ADDITIVES: AMG SALES — 12 SACKS SALT — 12 SACKS SALT — 5 SACKS ZEOGEL — 5 SACKS ZEOGEL — 1 SACK BORE TEX — 1 SACK CHEK LOSS

GENERAL:

Drilling Line Record: Size / Make / Serial No. / No. Lines / Trips / Ton Miles / Total Miles / Slip or Cut / At Miles / Date Slip or Cut / Next Slip / Ft. Left on Spool

TOUR 3 — 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
402															

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
				580765			1 1/4	20									

MUD — 4 p.m. — 6 p.m. — 8 p.m. — 10 p.m. — PUMP — 4 p.m. — 6 p.m. — 8 p.m. — 10 p.m. — PUMP — 4 a.m. — 6 p.m. — 8 p.m. — 10 p.m. — MOTOR HOURS — Next Oil Change

WEIGHT

VISCOSITY

GEL

PUMP No. 1: Make / Model / Liner Size / Rod Size / Stroke

PUMP No. 2: Make / Model / Liner Size / Rod Size / Stroke

W.L. / F.C. / pH

DESILTER: Hours Op. 8 U. Flow O. Flow

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5

Weather / Temp. / Water Bbls.

ADDITIVES: AMG MARKET ON TOUR 2. (ABOVE)

GENERAL:

Drilling Line Record: Size / Make / Serial No. / No. Lines / Trips / Ton Miles / Total Miles / Slip or Cut / At Miles / Date Slip or Cut / Next Slip / Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. / Rig Savers Chk'd. / Kelly Cock Chk'd. / Fire Equip. Chk'd.

NOTCO RING ON BIT # 2 — Boiler Operated 24 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drill'd since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

FUEL REPORT		
Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN — JTS — CSG — TO — KB USED — SAX — CEM — PLUS — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL —

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD —

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative E K Lapp

Approved by Toolpusher C Stevenson

REMARKS	TIME START	TIME STOP	HRS.
Service rig + test Kelly hose (Test from pump) Rig idle	12:00	1:30	1½
Fishing tool in hole off rods	1:30	2:00	½
Mixing mud, (Mud kept from pump) Work over pump, Circ. Hole - Mix soap	2:00	4:00	2
Rig Grease	4:00	7:45	3¾
	7:45	8:00	¼
FIRES — DRILLER'S SIGNATURE			8
Bail Mud out of hole to run AMG Gel Plug	8:00	10:00	2
Mix Mud	10:00	11:00	1
Mix AMG + Put Down Hole	11:00	11:45	¾
Rig Grease	11:45	12:00	¼
Put all Crew on 12 hrs			
Female Arman Crew - Ext. Crew with AMG To Seal Connection,			
FIRES — DRILLER'S SIGNATURE			8
Waiting on AMG	4:00	4:30	½
Ballout AMG, No good	4:30	5:00	½
Bail out Hole	5:00	6:00	1
Put AMG Down Hole	6:00	7:00	1
Drill out AMG Gel plug	7:00	9:00	1
Prepare to run overshot -	9:00	9:00	1
- Fishing Tool	9:00	12:00	3
Fishing for Mg Rods	9:00	12:00	3
FIRES — DRILLER'S SIGNATURE			8

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME I RECEIVED NO INJURY!

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY

TOUR (1) MIDNIGHT R.A.M.

		Hrs.
Driller	G. Stevenson	8
Derrick		8
Motor	Mac Pickering	8
Floor	Leon Yaskie	8
Floor		
Floor		

INJURIES COMPLETE BELOW

TOUR (2) R.A.M. 4 P.M.

		Hrs.
Driller	Dave Gerrard	12
Derrick	Bernie Gebauer	12
Motor	R. Franz	12
Floor	Wayne Bacon	12
Floor	Larry Dicken	14
Floor	Martin Tantaroja	16
Other	Gerry Lebel	16

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT

		Hrs.
Driller	G. Stevenson	4
Derrick	A. Dorey	4
Motor	Mac Pickering	4
Floor	Leon Yaskie	8
Floor	J. Pellam	10
Floor		

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME & RECEIVED INJURIES AS REPORTED ON COMPANY ACCIDENT REPORT (PART I)

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

HSW - DDL-1 HEAD OFFICE PAYROLL COPY

№ 1329 HSW

№ 1329 HSW

PAYROLL

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO 11-11 — LOCATION DAMADINN RIVER N.W.T. — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DA: Jan 9 — 1971

DIRECTIONS TO WELL: CANDIX M43 — MAILING POINT: ___ — SHIPPING POINT: ___ — MILES MOVED: ___ — ROAD CONDITIONS: ___

DATE ___ RIG # ___

I ACKNOWLEDGE HAVING WORKED THESE HOURS. DURING THIS TIME I RECEIVED NO INJURY!

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
402															

Bits	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 8 U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 / 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
402															

Bits	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 4 U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 / 5

ADDITIVES: 12 SALT GEL, 5 FEOCR (5 KG), 1 SACK CAUSTIC SODA — GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bits	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			10.3		No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			56		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 4 U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 / 5

ADDITIVES: ___ GENERAL: CEMENT - 10 SACKS, 1 SACK CAUSTIC SODA — Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

OTCO RING ON BIT # 2 — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Flie Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING-REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW-DDL-1 — HEAD OFFICE PAYROLL COPY

REMARKS

	TIME START	TIME STOP	INTVL
RUN IN OPEN SHOT FISHING TOOL + WALL HOOK	12 00		
7 HRS FISHING		7 45	7 3/4
RIG SER.	7 45	8 00	1/4
C PERSON 4 HRS (TOUR 2)			
BREAK OUT CEMENT HEAD			
A. SLOT — DRILLER'S SIGNATURE			8
FIGHTING WITH WASHOUT	8 00	10 00	2
TRYING TO STOP WASHOUT FROM RETURN SPACE + MIX MUD	10 00		
RIG SER	3 45	4 00	1/4
TRACTORS HAULING WATER 4 HRS.			
OUT TIME WORKING ON + CEMENTING OUES FLOW PUMPS			
FIRES — DRILLER'S SIGNATURE			5
MIX + POUR CEMENT	4 00	5 00	1
WAITING ON CEMENT	5 00		
FIX SHALE SHAKER NEW SCREEN			
SET UP GAS DETECTOR		8 00	3
GETTING FISHING TOOLS RIG	8 00	10 00	2
TO GO DOWN HOLE.			
OUES FLOW BROKE LOOSE	10 00		
ONCE MORE, SETTING UP			
PUMPS TO TRY + PUMP BACK TO TANKS		12 00	2
FIRES — DRILLER'S SIGNATURE			5

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___ TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

GENERAL: ___

Approved by Operator's Representative: ___

Approved by Toolpusher: ___

Nº 1328 HSW

TOUR (1) MIDNIGHT - 8 A.M.

		Hrs.
Driller	G. STINGELL	8
Derrick	C. PERSON	13
Motor		
Floor	Ivan Gashie	8
Floor		
Floor		

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.

		Hrs.
Driller	Floyd Arnaut	8
Derrick	Claude Pelkie	8
Motor	R. Francis	8
Floor	Larry Nielsen	11
Floor		
Floor	Gypsy Lebel	11
Other	Mac Pelkie	4

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT

		Hrs.
Driller	Geo Pelkie	8
Derrick	Lloyd Baron	16
Motor	Martin Tautoja	11
Floor	L Packard	8
Floor		
Floor		

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART 1)

Position	TOUR	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By: ___

Subject: ___

Nº 1328 HSW

PAYROLL

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION DAHADINNI RIVER — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE JAN 9 — 1971

DIRECTIONS TO WELL CANDEX M F3 — MAILING POINT ___ — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

DATE JAN 8 — RIG # 11-11

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME I RECEIVED NO INJURY!

EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT! IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR 3 — MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1402															

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:								SURVEYS At Feet	Degrees
ADDITIVES:			GENERAL:												4	
															5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 — 8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1402															

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:								SURVEYS At Feet	Degrees
ADDITIVES:			GENERAL:	2 SET PUMP VALVES 1 SET OF LINERS & VALVE SPRINGS											4	
2½ SALT GEL FRAC 7609ft															5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 1 — 4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:								SURVEYS At Feet	Degrees
ADDITIVES:			GENERAL:	CEMENT 4 SACKS											4	
															5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

HOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M.

CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW-DDL-1

HEAD OFFICE PAYROLL COPY

REMARKS	START	STOP	INTVL
STAND BY WAIT FOR FISHING TOOLS	12.00	8.00	
BAILING OUT BASEMENT			
REPAIRING WHEATLY PUMP			
FIRES ___ DRILLER'S SIGNATURE A. Stevens			
CLEANING OUT BASEMENT SUMP	8.00	9.00	1
MIXING MUD -	9.00	1.00	4
BREAKING UP CEMENT	1.00	3.45	2¾
RIG SER.	3.45	4.00	¼
~~OOPS TOOL REPAIR MAN~~			
REPAIR PUMPS			
FIRES Reed & Cement DRILLER'S SIGNATURE			
BREAKING UP CEMENT IN BASEMENT. TO CUTOFF LOSS OFF MUD	4.00	6.00	2
CEMENTING IN BARRELS IN BASEMENT.	6.00	8.00	2
PREPARING TO RUN FISH + FISHING FOR BROKE OFF TOOL JOINTS.	8.00	12.00	4
FIRES Lee Pickering DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. | TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative E R Larsh

Approved by Toolpusher C Patterson

GENERAL:

INJURIES - COMPLETE BELOW

TOUR 2 — P.M. - 4 P.M.	Hrs.
Driller Reed & Cement	8
Derrick Glenda Gilmore	8
Motor R. Fagg	8
Floor Larry Nielsen	11
Floor	
Floor Martin Santacruz	9
Other Gisele Lebel	10

INJURIES - COMPLETE BELOW

TOUR 3 — 4 P.M. - MIDNIGHT	Hrs.
Driller Lee Pickering	8
Derrick Ryan Barron	8
Motor L. Birkhead	8
Floor	
Floor	
Floor	

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT. (PART 1)

Position	Tour #	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

Nº. 1327 HSW

PAYROLL

Nº 1327 HSW

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION DAHADINNI RIVER — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE JAN 7 — 1971

DIRECTIONS TO WELL: CANDEX M43 — MAILING POINT ___ — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

DATE JAN 7-71 RIG # 11-11

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME I RECEIVED NO INJURY!

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR 4 — MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
402															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	9¾	J.C.		580766	11-50	75'	119	203									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				11.4	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				50	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 4 U. Flow: ___ O. Flow: ___ SURVEYS: At Feet / Degrees: 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 1 — 8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
402															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS: At Feet / Degrees: 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 2 — 4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			10.4	10.4	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			55	53	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS: At Feet / Degrees: 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: 36 SACKS MUD GEL 1 SACK QUICK TROL 15 SACKS ~~MUD GEL~~ GEL GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ___ Ria Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11.59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING-REPORT: RAN ___ JTS ___ CSG TO ___ KB. USED ___ SAX ___ CEM PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO) ___

JOTCO RING ON BIT # 2 — Boiler Operated: 24 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL: ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

REMARKS

REMARKS	START	STOP	INTVL.
STAND BY	12.00	7.45	7¾
CLEAN UP & STACK TOOL BOX IN SUPPLY ROOM CLEAN SAND OUT OFF TANK & BELOW SHALE SHAKER)	7.45	8.00	¼
FIRES ___ DRILLER'S SIGNATURE ___			8
STAND BY WAITING ON FISHING TOOLS & FISHING MAN	8.00	9.30	1½
TRIP IN TO FEEL FOR FISH WITH SPEAR TAPE. NO FISH.	9.30	11.00	2½
REPAIR POWER TONG CLEAN UP PUMPS			
FIRES ___ DRILLER'S SIGNATURE ___			8
TRIP IN WITH OVER SHOT TO FEET FOR FISH WENT BY WAITING FOR TOOL & MAN MIXING MUD HAULING OUT BASEMENT	4.00	3.00	1
	5.00	12.00	7
Conductor pipe Cement Failed, when pulling jaged end of parted pipe from hole Pipe cut Conductor & Pipe.			
FIRES ___ DRILLER'S SIGNATURE ___			8

INJURIES - COMPLETE BELOW

TOUR (1) MIDNIGHT - 8 A.M.	Hrs.
Driller G. STANGER	8
Derrick Claude Pelmas	8
Motor	
Floor Dwan Yanchis	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs.
Driller Asst Lt Comeau	8
Derrick Claude Pelmas	8
Motor R. Lanz	8
Floor Larry Nielsen	12
Floor Martin Santaoja	16
Floor	
Other Pierre Lebel	16

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller Geoff Gibaing	8
Derrick Kieran Barron	8
Motor Ted Pickard	8
Floor	
Floor	
Floor	

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME. I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART 1).

Position	Tour #	Signature	Hrs.

Toolpushers Approval ___

- SAFETY TALKS -

Given By: ___

Subject: ___

Nº 1326 HSW

PAYROLL

HSW-DDL-1

HEAD OFFICE PAYROLL COPY

Nº 1326 HSW

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION DAHADINNI RIVER N.W.T. LSD. SEC. TWP. RGE. W. DATE JAN 6 1971

DIRECTIONS TO WELL CANDEX M43 — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

DATE RIG #

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME I RECEIVED NO INJURY

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR 4 — MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
361	9	370	3		5	3		2	6		10	900			24

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	9 7/8	TC		540748	11-20	75	86	14½									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY		11.4			MODEL S.P.M.					MODEL S.P.M.					2	
GEL		75			LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: 8 U. Flow: O. Flow: SURVEYS (At Feet / Degrees) 4 5

ADDITIVES: GENERAL: 1 SHALE SHAKER SCREEN Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 1 — 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
370	22	392	4 3/4		4	3		2	6		10	900			2

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	9 7/8	TC		540748	18-20	75	106	19									

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	11.4	11.1	11.2		No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	75	84	63		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: 8 U. Flow: O. Flow: SURVEYS (At Feet / Degrees) 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 2 — 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
392	10	402	1¾		6	0		2	6		10	800			16

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	9 7/8	TC		540748	11-20	75	11½	20¾									

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		11.9			No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY		50			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: 8 U. Flow: O. Flow: SURVEYS (At Feet / Degrees) 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. / Rig Savers Chk'd. / Kelly Cock Chk'd. / Fire Equip. Chk'd.

TOOLRING ON BIT # 2 Bottom Operated: Hrs. 9¼

Fuel on Hand 12.01 a.m. gals. / Fuel Rec'd Today (add) gals. / TOTAL gals. / Fuel on Hand 11.59 p.m. (deduct) gals. / FUEL USED gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M. — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

RSW 1001

HEAD OFFICE PAYROLL COPY

REMARKS	TIME START	TIME STOP	TIME INTVL.
CHANGE SCREEN SHALE SHAKER DESILTER	12	1	1
CLEAN SAND OUT OFF WELL HYS	1.00	3.15	2¼
DRILLING	3.15	4.45	1½
Add Rods.	4.45	5.30	¾
DRILLING	5.30	6.00	½
REPAIR HYDRAULIC HOSE ON PANEL	6.00	6.45	¾
DRILLING	6.45	7.45	1
R.G SER.	7.45	8.00	¼
FIRES — DRILLER'S SIGNATURE			
CLEAN PUMP (SAND)	8.00	9.00	1
DRILLING	9.00	16.15	7¼
CLEAN PUMP, MAKE SCREENS FOR GATES IN MUD TANK	16.15	12.15	2
DRILLING	12.15	3.45	3½
R.G SER	3.45	4.00	¼
FIRES — DRILLER'S SIGNATURE			
CLEAN OUT BOTH PUMPS	4.00	5.00	1
Add RODS	5.00	6.15	1¼
DRILLING	6.15	8.00	1¾
BIT TO GO TROUBLE IN HOLE.	8.00	8.30	½
TRIP OUT. ROD BROKE OFF AT 15FT	8.30	9.00	½
CLEAN UP BROKEN ROD, R.G SER.	9.00	12.00	3
DRILL SHELTER (STAND BY)			
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. / TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative E R Lussey

Approved by Toolpusher C Hopman

GENERAL

№ 1300 HSW

INJURIES - COMPLETE BELOW

TOUR (1) MIDNIGHT - 8 A.M. — Hrs.

Driller G. STANGER 8
Derrick C. FRANCOIS 11
Motor
Floor Ivan Yarkie 8
Floor
Floor

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. — Hrs.

Driller Floyd 1st Assist 8
Derrick Claude Gélinas 8
Motor R. Franz 8
Floor Leroy Nelson 13
Floor
Floor Martin Dantagnie 14
Other Lucie Lebel 14

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT — Hrs.

Driller Ted Pickering 8
Derrick Ryan Boden 14
Motor Ted Pickering 8
Floor
Floor
Floor

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES, AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART 1)

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

№ 1300 HSW

PAYROLL

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO 11-11 — LOCATION DAHADINNI RIVER N.W.T — LSD. — SEC. — TWP. — RGE. — W. — DATE JAN 5 — 1971

DIRECTIONS TO WELL: CANDEX N 43 — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

DATE JAN 5 71 RIG # 11-11

TOUR 1 MIDNIGHT TO 8 AM TOUR 2 8 AM TO 4 PM TOUR 3 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
300	42	342	4 3/4												

BITS No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	9 7/8	T.C		580765			46 / 56	4 5/8 / 1 1/4									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	112	113		11.2	MODEL S.P.M.	75				MODEL S.P.M.	75				2	
GEL	70	67		67	LINER SIZE	7 1/2				LINER SIZE	7 1/2				3	
W.L.	F.C.	pH.	DESILTER: Hours Op: 3		U. Flow:		O. Flow: 1/2								SURVEYS At Feet / Degrees	
ADDITIVES:			GENERAL:												4	
															5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
342	14	356	9 1/4	60	5	1									14

BITS No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	9 7/8	T.C		580768	45 00	75	4 4 / 7 2	1 1/2									

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	11.2	11.4			MODEL S.P.M.					MODEL S.P.M.					2	
GEL	64	64			LINER SIZE					LINER SIZE					3	
W.L.		pH.	DESILTER: Hours Op: 8		U. Flow:		O. Flow:								SURVEYS At Feet / Degrees	
ADDITIVES: 12 Zec 064			GENERAL:												4	
															5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
	2	35 T	F M D					(8 Slips)					

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
356	5	361	1 3/4	60	5	1									

BITS No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	8 3/4 TC	8 3/4		580685	45 000		69 / 77	11 1/2									

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	11.4	11.4			MODEL S.P.M.					MODEL S.P.M.					2	
GEL	72	64			LINER SIZE					LINER SIZE					3	
W.L.		F.C.	pH.		DESILTER: Hours Op: 8		U. Flow:		O. Flow:						SURVEYS At Feet / Degrees	
ADDITIVES: 12 Zec 064					GENERAL: 2 DESILTER CONE LINERS										4	
															5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
	36	2 T C											

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. — Ria Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

TCO RING ON BIT # 2 — Boiler Operated: 24 Hrs.

Fuel on Hand 12.01 a.m. — gals.
Fuel Rec'd Today (add) — gals.
TOTAL — gals.
Fuel on Hand 11.59 p.m. (deduct) — gals.
FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	STOP	INTVL.
DRILLING	12.00	12.30	1/2
ADD RODS	12.30	1.00	1
DRILLING	1.30	1.45	1/4
CHANGE SAND OUT OF WHEATLY PUMP	1.45	9.15	1/2
DRILLING	7.15	5.45	3 1/2
ADD RODS	5.45	6.15	1/2
DRILLING	6.15	7.45	1 1/2
RIG SER.	7.45	8.00	1/4
DRILLING	8.00	10 15	2 1/4
REPAIR DRILL HEAD	10 15	11.30	1 1/4
REPAIR PUMP, MIX MUD	11.30	4.00	4 1/2
PUMP FULL OF SAND.			
(30 STANDS MUD MIXED)			
FIRES — DRILLER'S SIGNATURE			
MIXING MUD (60 BARRELS)	4.00	8.00	4
DRILLING	8.00	9.00	1
MIXING MUD + CLEANING PUMP	9.00	11.00	2
TROUBLE WITH SAND			
DRILLING	11.00	11.45	3/4
RIG SER.	11.45	12.00	1/4
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

GENERAL

I ACKNOWLEDGE HAVING WORKED THESE HOURS. DURING THIS TIME I RECEIVED NO INJURY!

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.	Hrs.
Driller G. STANGER	5
Derrick C. Fewer	8
Motor	
Floor Ivan Yabie	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs.
Driller Blind Jr Umsat	8
Derrick Claude Gelina	8
Motor P. Franz	10
Floor Larry Nielsen	13
Floor Marston Anytuaqa	14
Other Pierre Labelle	14

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller Ken Pickering	8
Derrick Kieran Bacon	8
Motor W. Pickard	8
Floor	
Floor Ivan Yabie	5
Floor G. STANGER	5

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART 1)

Position	Tour	Signature	Hrs.

Toolpushers Approval

SAFETY TALKS

Given By:

Subject:

HSW DDL-1 HEAD OFFICE PAYROLL COPY

№ 1299 HSW

№ 1299 HSW

PAYROLL

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

DIRECTIONS TO WELL: CANDEX NH3

RIG NO. 11-11 LOCATION: DAHADINNI RIVER NWT LSD. SEC. TWP. RGE. W. DATE: JAN 4 19 91

MAILING POINT: SHIPPING POINT: MILES MOVED: ROAD CONDITIONS:

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
246	~~8~~	~~254~~													

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T.	2	8¾	F.C.		580768		60	~~8~~										
S.																		

MUD	12 mn.	2 a.m	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	11.3		11.3		No. 1 PRES. SURE					No. 2 PRES. SURF					1	
VISCOSITY	55		55		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
246	8	294	1												

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T.	2	8¾	TC		580768			246	1									
S.																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURF					1	
VISCOSITY		11.1	11.1		MODEL S.P.M.					MODEL S.P.M.					2	
GEL		57	57		LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL: 1 GRAY SWIVEL WASH PIPE 1-SET PACKING (GRAY SWIVEL)										5	
															Weather	Water
															Temp.	Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
294	6	300	½												

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T.	2	8¾	TC		580768		60	14	1½									
S.				7x10														

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	11.5		11.3	11.3	No. 1 PRES. SURE					No. 2 PRES. SURF					1	
VISCOSITY	60		58	56	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op: 9		U. Flow:		O. Flow:						4	
ADDITIVES: 34 SACKS SALT 185 SACKS - 2 GEL					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

SURVEYS: At Feet 294 / Degrees 1

Drilling Line Record	Size ½	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. / Rig Savers Chk'd. / Kelly Cock Chk'd. / Fire Equip. Chk'd.

CO RING ON BIT # 2 — Boiler Operated: 24 Hrs.

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT: RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M.

CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL:

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative: E.K. Lyon

Approved by Toolpusher: C. Hollanson

HSW-DDL-1

HEAD OFFICE PAYROLL COPY

№ 1298 HSW

REMARKS

REMARKS	START	STOP	INTVL
TRIPPING IN. 66'	12.00	12.45	¾
WASHING HOLE CLEANING (No 90)	12.45	1.15	½
WASHING, REAMING DOWN TO 220	1.15	4.00	6¾

FIRES — DRILLER'S SIGNATURE: E. Sloan

~~Add~~ Add Rods, REAMING	8.00	8.15	¼
REAMING IN.	8.15	9.00	¾
Add Rods	9.00	9.15	¼
REAMING IN	9.15	12.15	3
Adding Rods	12.15	12.45	½
REAMING	12.45	2.30	1¾
Adding Rods	1.30	1.45	¼
REAMING	1.45	2.30	¾
DRILLING 246-294	2.30	3.30	1
REPAIR WATER SWIVEL PU	3.30	4.00	½

FIRES — DRILLER'S SIGNATURE: Geo Pickering

MIXING MUD (USE WATER SWIVEL)	4.00	6.00	2
FIXING CABLE ON WIRELINE	6.00	7.00	1
PICK UP + ADD RODS	7.00	8.00	1
WIRELINE CABLE OFF SHEVE	8.00	9.15	1¼
TOTCO TEST 294 —	9.15	9.45	½
JUNCK IN JUMPS CLEANING	9.45	11.45	2
DRILLING.	11.15	11.45	½
RIG SER.	11.45	12.00	¼

RIGHT SIDE

DATE ____ RIG # ____

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME I RECEIVED NO INJURY!

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.	Hrs.
Driller E. Sloan	8
Derrick C. Fenton	8
Motor	
Floor Ivan Ajarkin Tom Louis	16
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs.
Driller Blind Dog Cayuot	8
Derrick Claude Gelinas	10
Motor R. Fayz	10
Floor Larry Nitsa	9
Floor Martin Tailfeathers	12
Floor	
Other Pierre Lebel	11

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller Geo Pickering	8
Derrick Kieran Boland	8
Motor Jo Aikens	8
Floor	
Floor	
Floor	

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART I)

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

№ 1298 HSW

PAYROLL

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO 11-11 — LOCATION DAHADINNE RIVER N.W.T — LSD. — SEC. — TWP. — RGE. — W. — DATE JAN 3 — 1991

DIRECTIONS TO WELL: CANDEX N H3 — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

DATE — RIG #

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME I RECEIVED NO INJURY!

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR 3 — MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
225	46	276	2½		4	3

DRILL COLLARS: No. — O.D. — I.D. — Length — Air Wt. — Sub. Wt. — C.B. Ft. — Ft. up on Kelly

BITS:

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	8¾	TC		153809		60	276	16½									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY	113		115	
GEL	53		55	

PUMP: No. 1 / No. 2 — Pressure — Model — S.P.M. — Liner Size

PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 Pressure				
No. 1 S.P.M.	60			
No. 1 Liner Size	3½			
No. 2 Pressure				
No. 2 S.P.M.				
No. 2 Liner Size				

MOTOR HOURS: 1 — 2 — 3 — Next Oil Change

W.L. — F.C. — pH. — DESILTER: Hours Op: 8 — U. Flow: — O. Flow:

SURVEYS: At Feet / Degrees: 228 / 1 — 4 — 5

ADDITIVES: — GENERAL: — Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

REMARKS	START	STOP	INTVL.
PICKUP + ADD RODS	12.00	1.00	1
STRAIGHTEN WIRELINE CABLE	1.00	2.00	1
TOTCO TEST (TWO MISSES)	2.00	3.00	1
DRILLING	3.00	4.00	1
WASH + CLEAN HOLE	4.00	4.30	30
PICKUP + ADD RODS	4.30	5.30	1
DRILLING	5.30	7.00	1½
WASH + CLEAN HOLE	7.00	7.30	30
PACKING ON PUMP NOT FINISHED	7.30	7.45	15
FIRES — L. GLASER — DRILLER'S SIGNATURE	7.45	8.00	15

TOUR 1 — 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
276	10	286	½			

DRILL COLLARS: No. — O.D. — I.D. — Length — Air Wt. — Sub. Wt. — C.B. Ft. — Ft. up on Kelly

BITS:

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	8¾	TC		153809		60		16½									

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

PUMP: No. 1 / No. 2 — Pressure — Model — S.P.M. — Liner Size

PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 Pressure				
No. 1 S.P.M.				
No. 1 Liner Size				
No. 2 Pressure				
No. 2 S.P.M.				
No. 2 Liner Size				

MOTOR HOURS: 1 — 2 — 3 — Next Oil Change

W.L. — F.C. — pH. — DESILTER: Hours Op: 4 — U. Flow: — O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: 12 SACK SALT, 15 SACK ZEO 6EL — GENERAL: 1 STRAIGHT SHAKER SCREEN, 1 SET 7034 WATER FLOWER RUBBER — Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
		1 SACK	IMPERMAX										

REMARKS

REMARKS	START	STOP	INTVL.
ADD RODS	7.00	8.45	1¾
DRILLING	8.45	9.15	½
REPAIR PUMP - CLEAN HEAD	9.15	10.00	¾
CIRCULATE HOLE MIXING MUD	10.00		
		4.00	6
2 - TRACTORS HAULING WATER SALT + MUD 8 HRS (OVER TIME MIXING MUD)			
FIRES — BLAIR LEMIEUX — DRILLER'S SIGNATURE			

TOUR 2 — 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
286					4	1

DRILL COLLARS: No. — O.D. — I.D. — Length — Air Wt. — Sub. Wt. — C.B. Ft. — Ft. up on Kelly: 24

BITS:

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	8¾	TC		580718			286										

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				

PUMP: No. 1 / No. 2 — Pressure — Model — S.P.M. — Liner Size

PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 Pressure				
No. 1 S.P.M.				
No. 1 Liner Size				
No. 2 Pressure				
No. 2 S.P.M.				
No. 2 Liner Size				

MOTOR HOURS: 1 — 2 — 3 — Next Oil Change

W.L. — F.C. — pH. — DESILTER: Hours Op: 8 — U. Flow: — O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: 24 SACKS SALT, 14 SACKS ZEOGEL — GENERAL: — Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
		1 SACK	IMPERMAX										

REMARKS

REMARKS	START	STOP	INTVL.
REAMING BACK OUT OFF HOLE - MIXING MUD	11.00	8.00	4
TRIP OUT (WITH MUD MIX)	8.00		
CHANGE BIT - HOLE SECURING RIG SER.		11.45	3¾
	11.45	12.00	¼
2 TRACTORS HAULING WATER + MUD 6 HRS. (OVERTIME MIXING MUD)			
6 - STRINGERS	4 HRS.		
FIRES — DRILLER'S SIGNATURE			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydrit				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. — Rin Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

FCO RING ON BIT # 2 — Boiler Operated: 24 Hrs.

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING REPORT: RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL: —

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 3

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative: L.K. Lagge

Approved by Toolpusher: C. Hudema

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDC-1 — HEAD OFFICE PAYROLL COPY

No. 1297 HSW

TOUR 1 — MIDNIGHT - 8 A.M.

		Hrs.
Driller	L. Slemmon	8
Derrick	C. Purdon	8
Motor		
Floor	Ivan Ajarkie	8
Floor	Ken Lebrun (Tour 3)	13

INJURIES - COMPLETE BELOW

TOUR 2 — 8 A.M. - 4 P.M.

		Hrs.
Driller	Blair Lemieux	8
Derrick	Claude Lebrun	10
Motor	R. Franz	8
Floor	Larry Wilson	8
Floor	Martin Jourtewpie	9
Floor	Larry Richard	8
Other	Curtis Lobel	8

INJURIES - COMPLETE BELOW

TOUR 3 — 4 P.M. - MIDNIGHT

		Hrs.
Driller	Curtis Lobel	6
Derrick	Lebrun Boys	14
Motor	Martin Jourtewpie	6
Floor	Larry Wilson	4
Floor	R. Franz	4
Floor	Blair Lemieux	46

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART 1).

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

No. 1297 HSW

PAYROLL

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 111 — LOCATION DAHADINNE RIVER AREA — LSD. — SEC. — TWP. — RGE. — W. — DATE JAN 2 — 1971

DIRECTIONS TO WELL: CANDEX N43 — HAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

DATE — RIG #

"I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME I RECEIVED NO INJURY!"

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR 4 — MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
31	88	119	4½												

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	1	9¾	FC		153804		60	88	5									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	163		104		MODEL S.P.M.	60				MODEL S.P.M.	60				2	
GEL	54		45		LINER SIZE	7½				LINER SIZE	7½				3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 1 — 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
119	73	192	4 15		2	2		2							12

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	1	8¾	TC		153807		60	192	9½									

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY		11.4		11.3	MODEL S.P.M.					MODEL S.P.M.					2	
GEL		42		42	LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — C. Flow: — SURVEYS: At Feet / Degrees: 100 / ¼; 135 / ½ — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 2 — 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
192	36	228	11-30		3	3		2							12

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	1	8¾	TC		153807		60	228	11									

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY		12	11.9	12	MODEL S.P.M.	60				MODEL S.P.M.	60				2	
GEL		57	56	52	LINER SIZE	3½				LINER SIZE	3½				3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 8 — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: SOLTEX 20 GEL 1 SACK IMPERMIX — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. — gals. — Fuel Rec'd Today (add) — gals. — TOTAL — gals. — Fuel on Hand 11.59 p.m. (deduct) — gals. — FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

TCO RING ON BIT # 2 — Boiler Operated: 24 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW 001-5

HEAD OFFICE PAYROLL COPY

REMARKS	START	STOP	INTVL.
DRILLING-	12.00	1.00	1
PICK UP + ADD 4½" COLLARS	1.00	2.15	1¼
DRILLING	2.15	3.30	1¼
PICK UP ADD COLLARS	3.30	4.30	1
DRILLING	4.30	5.30	1
PICK UP COLLARS	5.30	6.15	¾
DRILLING	6.15	7.15	1
PICK UP-COLLARS	7.15	7.45	½
RIG SER.	7.45	8.00	¼
FIRES — DRILLER'S SIGNATURE			
ADD 2 RODS	8.00	8.30	30
TOTCO TEST AT 100 FT.	8.30	8.55	25
DRILLING	8.55	10.15	1.20
ADD 3 RODS	10.15	11.05	50
DRILLING	11.05	11.30	25
CLEANING	11.30	13.00	30
DRILLING	13.00	18.10	11 a
ADD 2 RODS	1.10	2.00	50
TOTCO TEST AT 186 FT.	2.00	2.35	35
DRILLING — RIG SER.	2.35	3.45	1.10
FIRES — DRILLER'S SIGNATURE	3.45	4.00	15
DRILLING	4.00	5.00	1.00
ADD RODS	5.00	5.45	45
REAMING TO BOTTOM	5.45	6.00	15
MIX MUD	6.00	6.30	30
DRILLING	6.30	8.00	1.30
MIX MUD — ADD RODS	8.00	8.20	20
DRILLING — DRILLING	8.20	9.15	1.05
CHECK HOLE FOR CAVE	9.25	10.05	30
2 HRS. MAKING OIL	10.05	11.00	55
RACKS 1 HRS. MESSURING PIPE	11.00	11.45	45
FIRES — DRILLER'S SIGNATURE	11.45	12.00	15

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 2

TOTAL COMPANY TIME — HRS. — TOTAL CONTRACTORS TIME — HRS.

GENERAL: —

Approved by Operator's Representative: E.R. Lapage

Approved by Toolpusher: C. Johnson

№ 1296 HSW

INJURIES - COMPLETE BELOW

TOUR (1) MIDNIGHT - 8 A.M.	Hrs.
Driller G. Stevens	8
Derrick Ivan Yarbis	8
Motor	
Floor Claude Fenton	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs.
Driller Reid D'Amour	8
Derrick Claude Gelinas	8
Motor P. Franz	8
Floor Martin Lautenzio	8
Floor Ivan Yarbis	8
Floor	
Other Pierre Lebel	8

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller Hap Pechenuk	11
Derrick Allison Baum	11
Motor L.A. PICKARD	11
Floor Martin Lautenzio	5
Floor Pierre Lebel	5
Floor Ivan Yarbis	5

INJURIES - COMPLETE BELOW

"I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT PART I."

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

№ 1296 HSW

PAYROLL

POOR COPY

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

DIRECTIONS TO WELL: CANDEX N43

RIG NO. H LOCATION PADDI-LAKE LSD. SEC. TWP. RGE. W. DATE JAN-1 1967

MAILING POINT SHIPPING POINT MILES MOVED ROAD CONDITIONS

DATE RIG #

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	97	10.4	10.4		No. 1 PRES. SURE					No. 2 PRES. SURF					1	
VISCOSITY	50	52	60		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L.: F.C.: pH: DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees: 4 5

ADDITIVES: 2 HI-SPERSE 7 TEOGEL 95 LIME 1 HI-PERMAX GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1	8¾	MTC	15 15 PEN	163809													

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	10.4				No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	60				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH: DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees: 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
40	31	71	3¼												

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1	8¾	FC		163809		60	31	3¼									

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		10		10.3	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY		33		57	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH: DESILTER: Hours Op: 3 U. Flow: O. Flow: SURVEYS At Feet / Degrees: 4 5

ADDITIVES: GENERAL: SALT 30 BAGS 25 - HI PERMAX TEOGEL 8 BAGS

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. / Rig Savers Chk'd. / Kelly Cock Chk'd. / Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals. / Fuel Rec'd Today (add) gals. / TOTAL gals. / Fuel on Hand 11.59 p.m. (deduct) gals. / FUEL USED gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO)

GENERAL: DAY 1

EQUIPMENT CHANGES: #2 PLUNGER ROD FOR 7024 WEATCO. NO CHANGE-OUT WORK PARTS MOVED HAVE BEEN CHANGED AT SHOP

TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative: E.R. Kasper

Approved by Toolpusher: C. Hohaneck

CO RING ON BIT # 2 Boilers Operated: 24 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.
~~24 START~~			
~~9 - TEOGEL~~			
~~1½~~			
MIX MUD	12	3	3
RIG U.P TO DRILL	3	8	5
(5 SACK IMPER MAX USE DEC 31 - 1970)			
(Mech) Called out to start boilers			
Call out To Repair Generator			
FIRES DRILLER'S SIGNATURE			
WORK ON FLOW LINE			
HOLD BACK CABLES ON POWER TONGS, PUT UP KELLY HOSE MAKE UP KELLY Rod PUT UP TOTCO CABLE	8		
CHANGE CHUCK JAWS	4	8	
(Mech) Repair Steam Rel Change 2 PUMP Rods			
Replace Hyd Hose ON WIRE LINE			
FIRES Rlesh'd DRILLER'S SIGNATURE			
(Mech) Change O Rings IN PANEL Make PIN FOR Dog Collar. Weld sub for Survey barrel			
SALT 30 BAGS	14.00	9.45	5¾
TEOGEL 8 BAGS			
25 LBS			
DRILLING	9.45	10.30	¾
Picking up + add 6" Drill Collars	10.30	11.45	1¼
Rig SER.	11.45	12.00	¼
FIRES DRILLER'S SIGNATURE			

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME I RECEIVED NO INJURY!

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.	Hrs.
Driller L. Stenger	8
Derrick C. Bonin	
Motor 1 R. Mann	8
Floor Swan Ajarbis	8
Floor	
Floor Jerry Nielsen	8
INJURIES - COMPLETE BELOW	

TOUR (2) 8 A.M. - 4 P.M.	Hrs.
Driller Rlesh'd Hansen	8
Derrick Claude Mullins	8
Motor R. Fanz	8
Floor	
Floor Jerry Nielsen	8
Floor	
Other Curtis Isbell	12
INJURIES - COMPLETE BELOW	

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller Ron Fiebelkorn	8
Derrick R. Bacon	8
Motor L.A. DICKARD	8
Floor Larry Nielsen	5
Floor Martin Santana Jr.	8
Floor	
INJURIES - COMPLETE BELOW	

I ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TIME I RECEIVED INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT (PART I)

Position	Tour	Signature	Hrs.

Toolpushers Approval

SAFETY TALKS

Given By:

Subject:

HSW. DDL-1 HEAD OFFICE PAYROLL COPY

№ 1295 HSW

№ 1295 HSW

PAYROLL

[redacted]

Canden et al Dorhadinni M-43 A

N-7940-1-487

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION _____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE 5th Feb 19 11

DIRECTIONS TO WELL _____ MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				
W.L.	F.C.		pH.	

PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 2 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

MOTOR HOURS	Next Oil Change
1	
2	
3	
4	
5	

SURVEYS

At Feet	Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				
W.L.	F.C.		pH.	

PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 2 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

MOTOR HOURS	Next Oil Change
1	
2	
3	
4	
5	

SURVEYS

At Feet	Degrees

Weather: Temp: Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				
W.L.	F.C.		pH.	

PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 2 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

MOTOR HOURS	Next Oil Change
1	
2	
3	
4	
5	

SURVEYS

At Feet	Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL: —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

DSW DDL-1 CONSERVATION BOARD COPY

REMARKS	TIME START	TIME STOP	TIME INTVL.

FIRES _____ DRILLER'S SIGNATURE _____

Point Tool Co
Prop Ass Limited
Tool

FIRES _____ DRILLER'S SIGNATURE _____

FIRES _____ DRILLER'S SIGNATURE _____

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

No. 2189 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION CANDEX-FH3-A LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE Sept 5 196 71

DIRECTIONS TO WELL At 62 1/2 M. 7th Lane 12 1/2 mi. 15 M. MAILING POINT NORMAN WELLS SHIPPING POINT Hwy MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

B. I. T. S.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:								4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

B. I. T. S.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:								4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

B. I. T. S.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:								4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS	At Feet	Degrees

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date	Crown-o-matic Chk'd.	Rig Savers Chk'd.	Kelly Cock Chk'd.	Fire Equip. Chk'd.
Hydril								
Pipe Rams.								
Blind Rams.								

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING REPORT RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES? NO)

GENERATOR

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	STOP	INTVL.

FIRES ___ DRILLER'S SIGNATURE

Maurice D. McManus
Fire Guard P.O. Box 205 Hay River

FIRES ___ DRILLER'S SIGNATURE

EQUIPMENT CHANGES ___ TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

Driller / Derrick / Moto / Floor / Floor / Floor

Driller / Derrick / Motor / Floor / Floor / Floor / Other

Driller / Derrick / Motor / Floor / Floor / Floor

Toolpusher Approval

Given By: ___

Subject: ___

DSW DDL-1 CONSERVATION BOARD COPY

No 2188 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CALDER 11-13-A — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE SEPT 11 — 1971

DIRECTIONS TO WELL RT 63°32'57.3"Long/124°31'15.1" — MAILING POINT NORMANWELLS — SHIPPING POINT NWT — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				

PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRES-SURE				
MODEL S.P.M.				
LINER SIZE				

PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 2 PRES-SURE				
MODEL S.P.M.				
LINER SIZE				

MOTOR HOURS — Next Oil Change

1 ___ 2 ___ 3 ___ 4 ___ 5 ___

W.L. ___ F.C. ___ pH. ___

DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRES-SURE				
MODEL S.P.M.				
LINER SIZE				

PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 2 PRES-SURE				
MODEL S.P.M.				
LINER SIZE				

MOTOR HOURS — Next Oil Change

1 ___ 2 ___ 3 ___ 4 ___ 5 ___

W.L. ___ F.C. ___ pH. ___

DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				

PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRES-SURE				
MODEL S.P.M.				
LINER SIZE				

PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 2 PRES-SURE				
MODEL S.P.M.				
LINER SIZE				

MOTOR HOURS — Next Oil Change

1 ___ 2 ___ 3 ___ 4 ___ 5 ___

W.L. ___ F.C. ___ pH. ___

DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ Boiler Operated ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL: —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL.

FIRES ___ DRILLER'S SIGNATURE Wayne Lee Thomas Jr.

FIRES ___ DRILLER'S SIGNATURE Wayne Lee Thomas Jr.

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher C. Hebert

DSW DDL-1 CONSERVATION BOARD COPY

No. 2187 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-C — LOCATION CANLEX #443-A — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE SEPT 4 1967

DIRECTIONS TO WELL LAT 63°32'57.3" Long 124°29'15.1" — MAILING POINT NORMAN WELLS — SHIPPING POINT N.W.T. — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

Bits	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
I																		
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bits	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
I																		
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bits	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
I																		
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ Boiler. Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG — TO ___ KB. USED ___ SAX ___ CEM — PLUS ___ % ___ PLUG DOWN ___ A.M. P.M.

CEMENT RETURNS - (YES / NO) ___ GENERAL: —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.

FIRES ___ DRILLER'S SIGNATURE

Moved in & began To Nu W.O.P.

FIRES ___ DRILLER'S SIGNATURE

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher C. Thomson

DSW DDL-1 CONSERVATION BOARD COPY

No. 2187 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

DIRECTIONS TO WELL: 63°32'S, Long 124°37' to 74 — RIG NO. 11 — LOCATION Conoco 11H3-A — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE Sept 3 — 1971

MAILING POINT Norman Wells — SHIPPING POINT Fort — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TO 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT ≙ — Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL: ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

Waiting for Well Clean Out

TIME	START	STOP	INTVL.
	1200	700	2

FIRES ___ DRILLER'S SIGNATURE ___

Waiting for Well Clean Out

TIME	START	STOP	INTVL.
	400	900	5

FIRES ___ DRILLER'S SIGNATURE ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

DSW DDL-1 CONSERVATION BOARD COPY

№ 2186 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

DIRECTIONS TO WELL 29 to 63 to 64 to 43 to Loop 124° 31' W. 7" — RIG NO. 12-A — LOCATION CANDEX Mod-A — LSD ____ SEC. ____ TWP. ____ RGE. ____ W. ____ — DATE Feb 2 196 74

MAILING POINT NORMAN WELLS — SHIPPING POINT NWT — MILES MOVED ____ — ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TO 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT: RAN ____ " CSG TO ____ KB. USED ____ SAX ____ CEM PLUS ____ % PLUG DOWN ____ A.M. P.M.

CEMENT RETURNS - (YES/NO) ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE PACK

REMARKS

TIME	START	STOP	INTVL.

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

EQUIPMENT CHANGES ____ DRILLER #

DAYS FROM SPUD: ____

GENERAL: ____

TOTAL COMPANY TIME ____ HRS.

TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DSW DDL-1 CONSERVATION BOARD COPY

№ 2185 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. H-11 LOCATION CANDEX MH3-A LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE SEPT 1 19 71

DIRECTIONS TO WELL TRT 65° 32 51.5' Long 124° 34' 19.1" MAILING POINT NORMAN WELLS SHIPPING POINT N.W.T. MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR — 8 AM TO 4 PM TOUR — 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather: ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: ___ GENERAL: 2 Tractor Miles to Lobtes (for Hoop Exp. 204 (Hoopin) ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11.59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO) ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL: ___

DAYS FROM SPUD: ___

EQUIPMENT CHANGES ___ TRANSFER # ___

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___ Approved by Toolpusher ___

REMARKS	TIME START	TIME STOP	TIME INTVL.
FIRES ___ DRILLER'S SIGNATURE ___			
Move up Set	7.00	4.00	9
Rig up			
Spud			
FIRES ___ DRILLER'S SIGNATURE ___			
Rig up + Circulate	4.00	9.00	5
MAKE TRIP FOR 20"			
205 Hole Fill Hole			
7.30 P.M.			

DSW DDL-1 CONSERVATION BOARD COPY

No. 2184 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANOE RMH 3-A — LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ — DATE August 31 — 1971

DIRECTIONS TO WELL Lat 65° 52' 51" Long 124° 39' 15" — DRILLING POINT Norman Wells — SHIPPING POINT ____ — MILES MOVED ____ — ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. ____ F.C. ____ pH. ____

ADDITIVES: ____ GENERAL: ____

PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRESSURE				
MODEL S.P.M.				
LINER SIZE				
No. 2 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

MOTOR HOURS: 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ — Next Oil Change ____

Weather ____ Temp. ____ — Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TOUR 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. ____ F.C. ____ pH. ____

ADDITIVES: ____ GENERAL: ____

PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRESSURE				
MODEL S.P.M.				
LINER SIZE				
No. 2 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

MOTOR HOURS: 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ — Next Oil Change ____

Weather ____ Temp. ____ — Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. ____ F.C. ____ pH. ____

ADDITIVES: ____ GENERAL: ____

PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRESSURE				
MODEL S.P.M.				
LINER SIZE				
No. 2 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

MOTOR HOURS: 1 ____ 2 ____ 3 ____ 4 ____ 5 ____ — Next Oil Change ____

Weather ____ Temp. ____ — Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT: RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL: ____

DSW DDL-1 CONSERVATION BOARD COPY

REMARKS	TIME START	TIME STOP	TIME INTVL.

FIRES ____ DRILLER'S SIGNATURE ____

REMARKS	TIME START	TIME STOP	TIME INTVL.
Tour Tie-up	8 AM	4.00	8
2 Xmas trees			
Wind			
Tours to Canfield etc.			

FIRES ____ DRILLER'S SIGNATURE ____

REMARKS	TIME START	TIME STOP	TIME INTVL.
Clean up Loc.	4.00	9.00	4

EQUIPMENT CHANGES ____ DRILLER'S SIGNATURE ____ TRANSFER # ____

DAYS FROM SPUD: ____

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

No. 2183 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

DIRECTIONS TO WELL: LAT 68° 32' 27" LONG 124° 29' 16" | RIG NO. 71-4 | LOCATION: CANOE M-43-A | LSD. | SEC. | TWP. | RGE. | W. | DATE August 30 — 1971

MAILING POINT: Norman Wells | SHIPPING POINT | MILES MOVED | ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M. TOUR 8 A.M. TO 4 P.M. TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # | Boiler Operated: Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT: RAN JTS CSG | TO KB. USED SAX CEM | PLUS % PLUG DOWN A.M. P.M. | CEMENT RETURNS - (YES/NO)

GENERAL:

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL.

FIRES — DRILLER'S SIGNATURE

Rig Down
Packing Tools
Move 2 Miles
To Well Head

FIRES — DRILLER'S SIGNATURE

Packing Tools

EQUIPMENT CHANGES — DRILLER'S SIGNATURE — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. | TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DSW DDL-1 CONSERVATION BOARD COPY

No. 2182 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-4 LOCATION CANOE M44 3-2 LSD. SEC. TWP. RGE. W. DATE August 20 — 1971

DIRECTIONS TO WELL LAT 68°54'47" LONG 134°39'16" 1 — MAILING POINT NORMAN WELLS — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TO 4 PM TO MIDNIGHT

From | Footage | To | Hrs. on Bottom | Wt. Drill Pipe (1000 lbs.) | Stands | Singles | DRILL COLLARS | No. | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft | Ft. up on Kelly

BITS: No. | Size | Type | Jets/W.C. | Serial No. | Wgt. | R.P.M. | Drilled or Cored | Hrs. | Reamed | Hrs. | Pump No. | Pump Pressure | S.P.M. | Table Torque | T. | B. | G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet | Degrees — 4 — 5

Weather Temp. Water Bbls.

Drilling Line Record: Size | Make | Serial No. | No. Lines | Trips | Ton Miles | Total Miles | Slip or Cut Feet | At Miles | Date Slip or Cut | Next Slip | Ft. Left on Spool

From | Footage | To | Hrs. on Bottom | Wt. Drill Pipe (1000 lbs.) | Stands | Singles | DRILL COLLARS | No. | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. | Ft. up on Kelly

BITS: No. | Size | Type | Jets/W.C. | Serial No. | Wgt. | R.P.M. | Drilled or Cored | Hrs. | Reamed | Hrs. | Pump No. | Pump Pressure | S.P.M. | Table Torque | T. | B. | G.

M.U.D.	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet | Degrees — 4 — 5

Weather Temp. Water Bbls.

Drilling Line Record: Size | Make | Serial No. | No. Lines | Trips | Ton Miles | Total Miles | Slip or Cut Feet | At Miles | Date Slip or Cut | Next Slip | Ft. Left on Spool

From | Footage | To | Hrs. on Bottom | Wt. Drill Pipe (1000 lbs.) | Stands | Singles | DRILL COLLARS | No. | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. | Ft. up on Kelly

BITS: No. | Size | Type | Jets/W.C. | Serial No. | Wgt. | R.P.M. | Drilled or Cored | Hrs. | Reamed | Hrs. | Pump No. | Pump Pressure | S.P.M. | Table Torque | T. | B. | G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1.	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet | Degrees — 4 — 5

Weather Temp. Water Bbls.

Drilling Line Record: Size | Make | Serial No. | No. Lines | Trips | Ton Miles | Total Miles | Slip or Cut Feet | At Miles | Date Slip or Cut | Next Slip | Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # — Boiler Operated: Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUG DOWN A.M. P.M. — PLUS % — CEMENT RETURNS - (YES/NO)

GENERAL:

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME: START | STOP | INTVL.

FIRES

DRILLER'S SIGNATURE

Pre Spud
Picking + Loading
Move In + Rig up
Re Spud + Drill

FIRES

DRILLER'S SIGNATURE

Loading Tools

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. | TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DSW DDL-1 CONSERVATION BOARD COPY

No. 2182 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION GANDER M43-A LSD. SEC. TWP. RGE. W. DATE August 29-71 196 74

DIRECTIONS TO WELL Lat 61°23'49"3/4 Long 124°34'15.1" MAILING POINT NORMAN WELLS SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees — 4 — 5

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees — 4 — 5

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees — 4 — 5

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M. — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL:

REMARKS	TIME START	STOP	INTVL.
Rig'd Down			
Lay Down Derrick			
Continue			
Load Casing Scrapers			
Chopper & Tk Crane Work			
Frames To River & Load			
At River			

FIRES — DRILLER'S SIGNATURE

FIRES — DRILLER'S SIGNATURE

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. | TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DSW DDL-1 CONSERVATION BOARD COPY

No. 2181 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 171 — LOCATION CANDEX MH3-A — LSD. — SEC. — TWP. — RGE. — W. — DATE August 29 — 1967

DIRECTIONS TO WELL LAT 54°43'43" on 124°37' 15" — MAILING POINT Normandville — SHIPPING POINT Nnt — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M. TOUR 8 A.M. TO 4 P.M. TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # — Boiler Operated: Hrs.

Crown-a-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals.

Fuel Rec'd Today (add) gals.

TOTAL gals.

Fuel on Hand 11.59 p.m. (deduct) gals.

FUEL USED gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.
Rigged Swivel + Flange X.	9:00	4:00	9
Effecting			
Welded 5" Riser on			
Sinil Casing			
Rigging down -			
FIRES DRILLER'S SIGNATURE			
Rigging Down	4:00	8:00	4
FIRES DRILLER'S SIGNATURE			

GENERAL — EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DSW DDL-1 CONSERVATION BOARD COPY

No. 2180 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANOE MAU-A — L.SD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE August 27 — 1967

DIRECTIONS TO WELL: Lat 63°52'59" Long 124°39'14.1" — MAILING POINT ___ — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M. TOUR 8 A.M. TO 4 P.M. TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees — 4 — 5

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees — 4 — 5

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees — 4 — 5

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12:01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG — TO ___ KB. USED ___ SAX ___ CEM — PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES / NO) — GENERAL: ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME START	TIME STOP	INTVL	REMARKS
12:00	7:00	7	Stand by waiting for Contractor to move Rig #2
			FIRES ___ DRILLER'S SIGNATURE ___
8:00	7:00	1	To [illegible]
7:00	11:00	2	[illegible] Tire
11:00	3:00	4	[illegible] Drive Fuel
3:00	4:00	1	To [illegible]
			Canoe Engineering
			To Camp
			FIRES ___ DRILLER'S SIGNATURE ___
			To [illegible]
4:00	9	5	[illegible]
			[illegible]
			FIRES ___ DRILLER'S SIGNATURE ___

EQUIPMENT CHANGES — TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative: [signature]

Approved by Toolpusher: [signature]

DSW DDL-1 CONSERVATION BOARD COPY

No. 2179 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 4-11 — LOCATION CANDEX Mesa — L.SD. — SEC. — TWP. — RGE. — W. — DATE August 21 — 196 71

DIRECTIONS TO WELL #A-62 "Go 3 blocks East on 12th 3/4 to T" — MAILING POINT Norman Wells — SHIPPING POINT Mint — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lb	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees — 4 — 5

Weather / Temp. / Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees — 4 — 5

Weather / Temp. / Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees — 4 — 5

Weather / Temp. / Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # — Boiler Operated: Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M.

CEMENT RETURNS - (YES/NO)

GENERAL:

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.
Tripping in hole	12:00	8:00	8
Tak[illegible]			
FIRES — DRILLER'S SIGNATURE			
Stand by waiting for Schlister	8:00	4:00	8
To[illegible]			
Equipment			
[illegible]			
[illegible]			
FIRES — DRILLER'S SIGNATURE			
[illegible]			
[illegible]			
To[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS: 5 — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DSW DDL-1 CONSERVATION BOARD COPY

No 2178 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION CANDEX MH3-A LSD. SEC. TWP. RGE. W. DATE August 25 1967

DIRECTIONS TO WELL 2.1 T 62° 52' 57" Long 124° 39' 15.7" MAILING POINT NORMAN WELLS SHIPPING POINT

MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

IOTCO RING ON BIT # Boiler Operated:-- Hrs.

Crown-o-matic Chk'd.		Fuel on Hand 12.01 a.m.	gals.
Rig Savers Chk'd.		Fuel Rec'd Today (add)	gals.
Kelly Cock Chk'd.		TOTAL	gals.
Fire Equip. Chk'd.		Fuel on Hand 11.59 p.m. (deduct)	gals.
		FUEL USED	gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.
Rig Down & Lay Down 12" Rod	12 00	6 00	6
To ~~Stop~~ To Set	6	7 00	1
Plug #2 3120			
Log. Circ. & Trip Equip	7 00	10 00	
Moving Tank & Equip.			
FIRES DRILLER'S SIGNATURE			
WRONG COUNT ON Rods	7 00		
From Engineer Pick up off			
Rods + Run in Hole To 3744		11 00	3
Cement Plug #1 3744 - 3120	11 00	1 00	2
Trip out	1 00	2 00	1
	2 00	4 00	2
Cont. Pull out of Hole.			
Lay down 4" D.P.			
FIRES Gas Pickup DRILLER'S SIGNATURE			
Take out + Packing.	4 00	9 30	5
Trip in	9 00	10 00	1
Tag Plug	4 00	4 30	2
Abandonment Plug No 2 - 3745 - 3760			
w/ Dic Equip Mix 16 Sx oil well cmt			
at 15.2 #/gal Displ. Mix No 2			
Displ. at 12-20 PM w/ 40 bbl mud			
22 BBL @ 12 45 PM			
FIRES 2 7/8 OD Plug at 3620 4 30 PM DRILLER'S SIGNATURE			

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

GENERAL:

DSW DDL-1 CONSERVATION BOARD COPY

No. 2177 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION CANUTE-MH3-A LSD. SEC. TWP. RGE. W. DATE August 24 1971

DIRECTIONS TO WELL LRT 63°52'49.8", 109°24°37'15.7"

MAILING POINT NORMAN WELLS SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M. TOUR 8 A.M. TO 4 P.M. TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees: 4, 5

ADDITIVES: 100 SKS GEL WELL CEMENT GENERAL: HOOLIE CER 2

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump Nr.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees: 4, 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees: 4, 5

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. Rig Savers Chk'd. Kelly Cock Chk'd. Fire Equip. Chk'd.

TOTCO RING ON BIT # Boiler Operated: Hrs.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M.

CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

DSW DDL-1 CONSERVATION BOARD COPY

REMARKS	TIME START	TIME STOP	INTVL.
Unable to Circulate in Top of Hole	12.00	12.30	½
Rig Up (Circulate Hole)	12.30	1.00	½
Mix Cement	1.00	1.30	½
Pump Cement	1.30	3.00	1½
Trip out Drill Pipe	3.00	4.00	1
Circulate	4.00	5.00	1
Lay Down 120 Ft Hole	6.00	7.00	2
Circulate, Pump Pills	7.00	8.00	1
Clean Pits & Tanks.			
FIRES			
DRILLER'S SIGNATURE			
Tour Maintenance	8.00	4.00	
Trip in Hole, Lost Returns		2.00	6
Tools			
Try Cement Through Drill Pipe	2.00	4.00	
Laying Down 120 Singles			
Attempt to Pump Plug #1 - Lost Circ. - TD			
Mix 250 Sks Class "G" Neat Cement + 4% CC-2 at 15.4 #/Gal. Slurry			
2nd Plug Start Displacement 5.5 BBLS Fresh Water			
Displaced Settling Mud with 24 BBLS Oil + 24 BBLS Water			
FIRES: Plug #1 at 4260 7:00 PM.			
DRILLER'S SIGNATURE			
Trip out 42 Stands	4.00	12.00	8
Lay Down 3½ D.P.			
120 Singles			
42 Stands in Derrick			
FIRES			
DRILLER'S SIGNATURE			

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

GENERAL:

Approved by Operator's Representative

Approved by Toolpusher

Nº 2176 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION CANDEX MH3-A LSD. SEC. TWP. RGE. W. DATE August 3 19 71

DIRECTIONS TO WELL 2876 93 41 Long 129 47 15.7" MAILING POINT Wainwright SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

TOTCO RING ON BIT # Boiler Operated: Hrs.

Fuel on Hand 12.01 a.m. gals. | Fuel Rec'd Today (add) gals. | TOTAL gals. | Fuel on Hand 11.59 p.m. (deduct) gals. | FUEL USED gals.

CASING REPORT: RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M.

CEMENT RETURNS - (YES/NO) GENERAL:

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	STOP	INTVL.
Pump Down Time	12 00	8 00	8
FIRES DRILLER'S SIGNATURE			
Pump Down Time	8 00	4 00	4
FIRES DRILLER'S SIGNATURE			
Pump Down Time	4 00	10 00	6
FIRES DRILLER'S SIGNATURE			

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DSW DDL-1 CONSERVATION BOARD COPY

№ 2175 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 141 LOCATION CANDEX 14-24 LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE August 22 19 74

DIRECTIONS TO WELL 23 to 62-55 5th Lodge 3/4 W. N. MAILING POINT Medicine Hat SHIPPING POINT N.W.T. MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M. TOUR 8 A.M. TO 4 P.M. TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4

ADDITIVES: GENERAL: 5

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4

ADDITIVES: GENERAL: 5

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4

ADDITIVES: GENERAL: 5

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd.		Fuel on Hand 12.01 a.m.	gals.
Rig Savers Chk'd.		Fuel Rec'd Today (add)	gals.
Kelly Cock Chk'd.		TOTAL	gals.
Fire Equip. Chk'd.		Fuel on Hand 11.59 p.m. (deduct)	gals.
		FUEL USED	gals.

CASING REPORT RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO) ___

GENERAL:

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.
Stand by	12 00	7 00	7
Tour Change Mud Pumps			
Rig Up			

FIRES ___ DRILLER'S SIGNATURE ___

Take on Fuel	7 00	8 00	1
Start Pumps Pressure Test Lines			
Connect Cap			
Cut Drill Line 4 Turns Up Kelly Pull Test Kelly Pull Out of Rat Hole Pull Out of Hole Lay Down Tools			

FIRES ___ DRILLER'S SIGNATURE ___

Cut Drill Line Pull Out of Hole Lay Down Tools	4 00	10 00	6
Change Out Mud Pumps Trip in Hole	1 00	12 00	5 1/2

FIRES ___ DRILLER'S SIGNATURE ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative: ___

Approved by Toolpusher: ___

DSW DDL-1 CONSERVATION BOARD COPY

No. 2174 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG No. 11-H — LOCATION CANDEX M43-A — LSD. — SEC. — TWP. — RGE. — W. — DATE Aug 21 — 1971

DIRECTIONS TO WELL Lat 63°39'49.2" Long 124° 31' 15.7" — MAILING POINT NORMAN WELLS — SHIPPING POINT NWT — MILES MOVED — ROAD CONDITIONS

DATE — RIG #

KNOWLEDGE BEING WORKED FOR HOURS RECEIVED NO INJURY

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
		10272			145										

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
		10272													

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
					171	9									12"

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE 9"					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TCO RING ON BIT # — Boiler Operated: — Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. — gals.
Fuel Rec'd Today (add) — gals.
TOTAL — gals.
Fuel on Hand 11.59 p.m. (deduct) — gals.
FUEL USED — gals.

CASING RUN: RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUGS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

Stand by - Schlumberger

Take Down Steam Heater
Remove Fitting
Sch Cal Caliper - TD to Shoe
Traveling Time
Hrs Overtime 8½
Take Down & Move. Rods

FIRES — DRILLER'S SIGNATURE

~~Stand By Accumulator~~
~~Trip in Open hole.~~
~~Sch Cal Sonic - TD to Shoe~~

Operations Tool Room
Helix & wear up Stem.

Pulled stopper rod by 24"
Drill pipe

FIRES — DRILLER'S SIGNATURE

Trip in & Complete
Stand By Rotary Obstruction
repair
Trip in to stopper & stopper
Hanging Pull & Clean

FIRES — DRILLER'S SIGNATURE

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

TIME	START	STOP	INTVL
	12:00	8:00	8
	8:00	2:00	6
	2:00	4:00	2
	4:00	9:30	5½
	9:30	12:00	2½

TOUR (1) MIDNIGHT - 8 A.M.

	Hrs.
Driller D. Heath	12
Derrick Ron Folz	8
Motor L. Blanchard	8
Floor Abe Zoe	12
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.

	Hrs.
Driller	8
Derrick Glenn Heard	8
Motor	8
Floor	8
Floor R. Bowden	5
Floor	8
Other Geo Pickering	8

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT

	Hrs.
Driller	8
Derrick Geo Pickering	12
Motor B Bowden	8
Floor Ron Folz	3½
Floor D. Heath	9
Floor Abe Zoe	7

INJURIES - COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

№ 2173 HSW

PAYROLL

DSW DDL-1 HEAD OFFICE PAYROLL COPY

№ 2173 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANDEX A43-A — LSD. — SEC. — TWP. — RGE. — W. — DATE Aug 21 — 1971

DIRECTIONS TO WELL Lat 63°39'54.3" Long 124° 31' 15.7" — MAILING POINT NORMAN WELL — SHIPPING POINT N.W.T. — MILES MOVED — ROAD CONDITIONS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
		10772			645										

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD

	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. F.C. pH.

ADDITIVES:

PUMPS

	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRES. SURE				
MODEL S.P.M.				
LINER SIZE				

No. 2 — MODEL — PRES. SURE — S.P.M. — LINER SIZE

DESILTER: Hours Op: U. Flow: O. Flow:

GENERAL:

MOTOR HOURS: 1 2 3

SURVEYS: At Feet / Degrees: 4 5

Weather Temp. Water Bbls.

Next Oil Change

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
		10772													

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD

	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. F.C. pH.

ADDITIVES:

PUMPS

	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRES. SURE				
MODEL S.P.M.				
LINER SIZE				

No. 2 — MODEL — PRES. SURE — S.P.M. — LINER SIZE

DESILTER: Hours Op: U. Flow: O. Flow:

GENERAL:

MOTOR HOURS: 1 2 3

SURVEYS: At Feet / Degrees: 4 5

Weather Temp. Water Bbls.

Next Oil Change

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
					171	9									12"

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. F.C. pH.

ADDITIVES:

PUMPS

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRES. SURE	Compl't.			
MODEL S.P.M.	Lok			
LINER SIZE	7"			

No. 2 — MODEL — PRES. SURE — S.P.M. — LINER SIZE

DESILTER: Hours Op: U. Flow: O. Flow:

GENERAL:

MOTOR HOURS: 1 2 3

SURVEYS: At Feet / Degrees: 4 5

Weather Temp. Water Bbls.

Next Oil Change

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

ICO RING ON BIT # — Boiler Operated: Hrs.

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING TALLY: RAN JTS CSG — TO KB. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc.	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

DSW DDL-1 HEAD OFFICE PAYROLL COPY

REMARKS

Stand By - Schlumberger

~~Tarp Down Steam Heater~~
~~Remove Fittings~~
~~Sch Can Caliper - TD to Shoe~~
~~Travelling Time~~
~~4 Hrs Overtime 8:12~~
~~Tarp Down & Move Rods~~

FIRES — DRILLER'S SIGNATURE

~~Stand By Schlumberger~~
~~Trip in - Open hole.~~
~~Sch Can Sonic - TD to Shoe~~

Operations Tool Down
Held d mod up stem.

Kelly Stopped moving 94"
Drill pipe

FIRES — DRILLER'S SIGNATURE

Trip in & Circ &
Stand By Schlumberger
Trip out
Log Run #1 Caliper
Rig up & Log

FIRES — DRILLER'S SIGNATURE

TIME	START	STOP	INTVL
	12:00	6:00	
	8:00	2:00	6
	2:00	4:00	
	4:00	~~4:00~~	
	~~4:00~~	9:30	5½
	9:30	12:00	2½

DATE — RIG #

KNOWLEDGE GAINED FROM ACCIDENTS RECEIVED NO INJURY

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.

		Hrs.
Driller	D. [illegible]	12
Derrick	Ron Folz	8
Motor	B B Caulk	8
Floor	Abe Fox	12
Floor		
Floor		

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.

		Hrs.
Driller	[illegible]	2
Derrick	Glenn Hoffman	8
Motor	[illegible]	6
Floor	[illegible]	5
Floor	R Bourne	5
Floor	Geo Pickering	8
Other	[illegible]	15

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT

		Hrs.
Driller	Geo Pickering	8
Derrick	[illegible]	12
Motor	B Caulk	8
Floor	Ron Folz	3
Floor	[illegible]	9
Floor	Abe Fox	7

INJURIES - COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approval

SAFETY TALKS

Given By:

Subject:

No. 2173 HSW

PAYROLL

No. 2173 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION CANDEX W43-A LSD. SEC. TWP. RGE. W. DATE August 20 1971

DIRECTIONS TO WELL Lat 53°52'59.3" Long 124°31'15.7" MAILING POINT NORMANVILLE SHIPPING POINT RUT MILES MOVED ROAD CONDITIONS

DATE August 7 RIG # 11-11

Day Tour

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10772															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
					-													

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				
W.L.	F.C.		pH.	

PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRES. SURE				
MODEL S.P.M.	Circulate Mud Tanks			
LINER SIZE	7"			

PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 2 PRES. SURE				
MODEL S.P.M.	Circulate Mud Tanks			
LINER SIZE	7"			

DESILTER: Hours Op: U. Flow: O. Flow: 2

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5

Weather Temp. Water Bbls.

Next Oil Change

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

Night Tour

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				
W.L.	F.C.		pH.	

PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRES. SURE				
MODEL S.P.M.	Circulate Mud Tank			
LINER SIZE	7"			

PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 2 PRES. SURE				
MODEL S.P.M.	Circulate Mud			
LINER SIZE	7"			

DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5

Weather Temp. Water Bbls.

Next Oil Change

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

Evening Tour

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				
W.L.	F.C.		pH.	

PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRES. SURE				
MODEL S.P.M.				
LINER SIZE				

PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 2 PRES. SURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5

Weather Temp. Water Bbls.

Next Oil Change

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

CO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING HOURS: RAN JTS CSG TO KB. USED SAX. CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETU (YES/NC)

GENERAL:

DAYS FROM SPUD:

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	START	STOP	INTVL.
CIRCULATE LOSS CIRCULATING ATTEMPT	12 00	2 00	2
TRIP OUT	2 00	4 30	2 1/2
REPAIR GAS MOTOR	4 30	6 15	1 3/4
TRIP OUT. 2 Jts.	6 15	7 00	1 3/4
FIRES 1 DRILLER'S SIGNATURE A. Atkinson			
TRIP OUT	8 00	10 00	2
STAND BY.	10 00	4 00	6
START - REMOVE STORE ROOM PACK TOOLS CLEAN SHELTERS			
~~OUT~~ OVERTIME TIME DOWN FLY IN SATURDAY GEAR TOOL + FLYING OUT 2 3/4" Rods To RIVER			
FIRES 2 DRILLER'S SIGNATURE			
STAND BY FOR STAMBERGER WORKING CLEAN UP TAKE OUT STEAM LINES	4 00	1200	8
OVERTIME. STANDING 2 3/4 Rods = MOBILE TO RIVER TAKE DOWN STEAM LINES + SHELTERS CLEANING UP TOOLS			
FIRES DRILLER'S SIGNATURE			

EQUIPMENT CHANGES

TRANSFER #

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

No. 2172 HSW

DSW DDL-1 HEAD OFFICE PAYROLL COPY

ACKNOWLEDGEMENT OF WORK PERFORMED AND HOURS RECEIVED NOTICE OF INJURY

EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT. IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.	Hrs
Driller Dwight Gibson	8
Derrick Ron Folz	8
Motor	
Floor Abe Kaz	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs
Driller	7
Derrick	7
Motor	10
Floor	
Floor	
Floor	
Other Conrad Charron	1

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs
Driller	9
Derrick	
Motor R. Bayliss	10
Floor	4
Floor	
Floor	

INJURIES - COMPLETE BELOW

ACKNOWLEDGEMENT OF WORK PERFORMED AND HOURS RECEIVED NOTICE OF INJURY

Position	Tour #	Signature	Hrs.

Toolpushers Approval

SAFETY TALKS

Given By

Subject:

No. 2172 HSW

PAYROLL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

DIRECTIONS TO WELL: LAT 63°52'55.2" LONG 124°24'44.1" | RIG NO. 11-H | LOCATION: CANDEX #143-A | L.S.D. | SEC. | TWP. | RGE. | W. | DATE: August 19 1971

MAILING POINT: NORMAN WELLS | SHIPPING POINT: N.W.T. | MILES MOVED | ROAD CONDITIONS

DATE: Aug 19-71 | RIG #: 11-H

TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
10223	16	10239	13½		170	1

DRILL COLLARS: No. | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. | Ft. up on Kelly: 16' Cat A-2 | 27 | 16'

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	33-B	11½	HWG	2-5-5	H15275	2000	180	16	13¾			1	1450	220	2600			

MUD: WEIGHT / VISCOSITY / GEL / W.L. / F.C. / pH

	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT			9.1	9.6
VISCOSITY	79		67	56
GEL			6/14	

PUMPS: No. 1 / No. 2 — PRESSURE / MODEL / S.P.M. / LINER SIZE

	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 S.P.M.				138
No. 2 S.P.M.				220
No. 2 LINER SIZE				9"

DRILLWELL: CIRCULATE TANKS

MOTOR HOURS: 1 / 2 / 3 / 4 / 5 — Next Oil Change

DESILTER: Hours Op: 8 | U. Flow: 900 | O. Flow: 900

SURVEYS: At Feet / Degrees

ADDITIVES: 15 gal Hydrocide Oil, 2 Bags Kut Well, 4 lbs Caustic Soda

GENERAL: Leach Stand By

Weather | Temp. | Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
10239	33	10272	3½		171	—

DRILL COLLARS: No. | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. | Ft. up on Kelly: 16' Cat A-2 | 27 | 21'

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	33-D	11½	HWG	2-5-5	H15275	2000	180	11	5			2	1450	221	2860			

MUD: WEIGHT / VISCOSITY / GEL / W.L. / F.C. / pH

	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				9.6
VISCOSITY				44
GEL				

PUMPS: No. 1 / No. 2 — PRESSURE / MODEL / S.P.M. / LINER SIZE

	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 S.P.M.				
No. 2 S.P.M.				225
No. 2 LINER SIZE				9"

MOTOR HOURS: 1 / 2 / 3 / 4 / 5 — Next Oil Change

DESILTER: Hours Op: 8 | U. Flow: 900 | O. Flow: 900

SURVEYS: At Feet / Degrees

ADDITIVES: Foam Spring

GENERAL:

Weather | Temp. | Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles

DRILL COLLARS: No. | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. | Ft. up on Kelly

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD: WEIGHT / VISCOSITY / GEL / W.L. / F.C. / pH

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				

PUMPS: No. 1 / No. 2 — PRESSURE / MODEL / S.P.M. / LINER SIZE

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 S.P.M.				
No. 2 S.P.M.				
No. 2 LINER SIZE				

MOTOR HOURS: 1 / 2 / 3 / 4 / 5 — Next Oil Change

DESILTER: Hours Op: — | U. Flow: | O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather | Temp. | Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

'O' RING ON BIT #

Boiler Operated: Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT: RAN | JTS | CSG | TO | KB. USED | SAX | CEM | PLUS | % | PLUG DOWN | A.M. P.M.

CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

DSW DDL-1 HEAD OFFICE PAYROLL COPY

REMARKS

TIME START	TIME STOP	INTVL
12:00	2:30	2½
2:30	3:00	½
3:00	3:30	½
3:30	5:00	1½
5:00	5:15	¼
5:15	6:30	1¼
6:30	8:00	1½

Trip in
Circulate trip tank T.D.
Core to Hole Clean out Circulate
Hole tight? Ream with some tits
Drilling - 10226
Rec Core Circulate T.D.
Drilling - 10239

FIRES — DRILLER'S SIGNATURE: Douglas Gibson

TIME START	TIME STOP	INTVL
8:00	9:15	1¼
9:15	10:30	1¼
10:30	12:00	1½
12:00	2:00	2
2:00	3:00	1
3:00	4:00	1

Rec Core
Drilling - 10252
Rec Core
Drilling - 10272
Rec Core
Stand By - Circulate

FIRES — DRILLER'S SIGNATURE

TIME START	TIME STOP	INTVL
4:00		

Stand By - Circulate
Hole Shot Down at 10272
Wait on Schlumberger
Backing Tools

FIRES — DRILLER'S SIGNATURE

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. | TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpushers

Nº 2171 HSW

ACKNOWLEDGE HAVING WORKED HOURS DURING THE TIME RECORDED. NO INJURIES

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. | Hrs.

Driller: Douglas Gibson | 8
Derrick: Ron Folz | 8
Motor:
Floor: Abe Koe | 8
Floor:

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. | Hrs.

Driller: [illegible] | 8
Derrick: [illegible] | 8
Motor: [illegible] | 8
Floor: [illegible] | 8
Floor: [illegible] | 8
Floor: [illegible] | 8
Other: [illegible] | 8

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT | Hrs.

Driller: [illegible] | 8
Derrick: [illegible] | 8
Motor:
Floor: R Boulanger | 8
Floor: Ron Folz | 4
Floor:

INJURIES - COMPLETE BELOW

ACKNOWLEDGE HAVING WORKED HOURS DURING THE TIME RECORDED. NO INJURIES / ACCIDENTS REPORTED

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

Nº 2171 HSW

PAYROLL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11 LOCATION CINDER HILL A LSD. SEC. TWP. RGE. W. DATE August 18 19 71

DIRECTIONS TO WELL LAT 63°52'34.5" LONG 121°34'18.7" MAILING POINT NORMAN WELL SHIPPING POINT NWT MILES MOVED ROAD CONDITIONS

DATE Aug 19 71 RIG # 11

Bits

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
10159	53	10212	5		170	
10212	11	10223	1		170	
10223		10223			170	

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
22	11	HHA	2-5	HS1275	2000	170	199	19			1	~~320~~ 350	320	2400			
22	11	HHA	2-5	HS1275	2000	170	210	20			1	350	320	2400			
22	11	HHA	2-5	HS1275													

DRILL COLLARS: No. 16' | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. 27' | Ft. up on Kelly 31'

Mud

	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT	9.5			9.6
VISCOSITY	45			44
GEL				9"

W.L. 7.6 F.C. pH. 9

ADDITIVES: 30 lbs Quik Flo
5 lbs Caustic Soda
3 lbs

DESILTER: Hours Op: 4 U. Flow: 4.8 O. Flow: 8.2

GENERAL: 3 sgls Kut wtr.
1 Bowl Nut Fine

	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT	9.6			
VISCOSITY	44			
GEL				

W.L. F.C. pH.

ADDITIVES: 30 lbs KFLO
10 lbs Caustic Soda
15 lbs Prestarch

DESILTER: Hours Op: 4 U. Flow: 4.7 O. Flow: 4.6

GENERAL: 3 sgls Kut wtr
15 lbs walnut fine
3 - 12 ft AL Rods 3½"

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. F.C. pH.

ADDITIVES: 30 lbs KFLO
10 lbs Caustic Soda
15 lbs Prestarch

DESILTER: Hours Op: 4 U. Flow: 5.7 O. Flow: 8.6

GENERAL: 3 sgls Kut wtr
15 lbs walnut fine
3 - 12 ft AL Rods 3½"

Pump

	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRESSURE	350			350
No. 1 MODEL				
No. 1 S.P.M.	320			320
No. 1 LINER SIZE	7"			9"
No. 2 PRESSURE				
No. 2 MODEL	Circulating Tanks			
No. 2 S.P.M.				
No. 2 LINER SIZE	9"			

	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRESSURE	350			
No. 1 MODEL				
No. 1 S.P.M.	320			
No. 1 LINER SIZE	9"			
No. 2 PRESSURE				
No. 2 MODEL	Circulating Tanks			
No. 2 S.P.M.				
No. 2 LINER SIZE	7"			

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRESSURE				
No. 1 MODEL				
No. 1 S.P.M.				
No. 1 LINER SIZE				
No. 2 PRESSURE				
No. 2 MODEL				
No. 2 S.P.M.				
No. 2 LINER SIZE				

Motor Hours

	Next Oil Change
1	
2	
3	
4	
5	

Weather / Temp. / Water Bbls.

SURVEYS — At Feet / Degrees

Drilling Line Record

Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
3/4											

B.O.P.

	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

CO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

Casing Report

RAN JTS CSG TO KB. USED SAX CEM PLUG DOWN A.M. P.M. PLUS % CEMENT RETURNS - (YES/NO)

Drill Pipe

Size	Joint	Classification 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

Remarks

	Start	Stop	Intvl.
Drilling - 10170	12 00	1 00	1
Rec core bbl - inner barrel to bottom	1 00	2 15	1¼
Drilling - 10211	2 15	4 15	2
Rec core bbl - inner barrel T.D.	4 15	5 45	1½
Drilling - 10212	5 45	7 45	2
Rec - core - Rig Ser.	7 45	8 00	¼
FIRES Driller's Signature			
Rec core bbl - inner barrel T.D.	8 00	9 00	1
Drilling - 10223	9 00	10 00	1
Broke star on quick shot	10 00	10 30	½
Trip out for quick shot	10 30	12 00	1½
Pump stop start up.	12 00	12 15	¼
Trip out	12 15	3 30	3¼
Repair G.M. Diesel - Hydrastatic Head	13 70	4 00	½
FIRES Driller's Signature			
Trip out	4 00	7 00	3
Change bit - take out core. Check core barrel	7 00	8 00	1
Tripping in	8 00	12 00	4
3 Inner Tube Stabilizers FIRES Driller's Signature			

EQUIPMENT CHANGES

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

GENERAL

TRANSFER #

No. 2170 HSW

DSW DDL-1 HEAD OFFICE PAYROLL COPY

ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THE RECEIVED NO INJURY

EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT. IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. Hrs

Driller Dwight Gibson 8
Derrick Ron Folz 8
Motor
Floor Abe Koe 8
Floor
Floor

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. Hrs

Driller
Derrick
Motor
Floor
Floor
Floor
Other

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT Hrs.

Driller Geo Pickering 9
Derrick 4
Motor
Floor BB Wilson 8
Floor Ron Folz 7
Floor

INJURIES - COMPLETE BELOW

ACKNOWLEDGE HAVING WORKED THESE HOURS AS SHOWN BELOW DURING THE PERIOD COVERED ON THIS SHEET. ACCIDENTS REPORTED ON THIS SHEET ONLY.

Position	Tour	Signature	Hrs.

Toolpushers Approval

SAFETY TALKS

Given By:

Subject:

No. 2170 HSW

D

PAYROLL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

DIRECTIONS TO WELL: LET

RIG NO. 11 LOCATION CANDEX AWS-A LSD.. SEC.. TWP.. RGE.. W.. DATE August 17 1967

MAILING POINT Norman Wells SHIPPING POINT Norman MILES MOVED ROAD CONDITIONS

DATE Aug 17-71 RIG # 11

Run 1

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
10036	40	10076	3¾	67	167	2

DRILL COLLARS: No. 16' Collars; O.D.; I.D.; Length; Air Wt.; Sub. Wt.; C.B. Ft. 27; Ft. up on Kelly 9

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	22-D	11¼	HWG	265	HSI 273	2000	200	63	5 3/4			2	350	220	2600			

MUD: 12 mn. | 2 a.m. | 4 a.m. | 6 a.m.
WEIGHT: 9.2 | 9.6
VISCOSITY: 44 | 44
GEL: | 4/7
W.L. F.C. pH.

PUMPS: 12 mn. | 2 a.m. | 4 a.m. | 6 a.m.
No. 1 MODEL Circulate Tank; PRESSURE; S.P.M.; LINER SIZE 9"
No. 2 MODEL; PRESSURE 350; S.P.M. 220; LINER SIZE 9"

TEMPERATURE: 12 mn. | 2 a.m. | 4 a.m. | 6 a.m.
No. 2 MODEL; PRESSURE 350; S.P.M. 220; LINER SIZE 9"

MOTOR HOURS: 1 2 3 4 5

Next Oil Change

ADDITIVES: 60 lbs Quikfoam; 30 lbs Resinex Native; GENERAL: Hotwork 6 guys; 2 days without fuel

DESILTER: Hours Op: 8¾ U. Flow: 9 O. Flow: 4.7

SURVEYS: At Feet | Degrees

Weather; Temp.; Water; Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
	1¼	Macwhyte	Carbon Core	8								

Run 2

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
10076	47	10123	6¾	69	168	2

DRILL COLLARS: No. 16' Collars; O.D.; I.D.; Length; Air Wt.; Sub. Wt.; C.B. Ft. 27; Ft. up on Kelly 24

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	22-D	11¼	HT HWG	265	HSI 273-U	2000	200	110	10½			1	325	224 2700				

MUD: 8 a.m. | 10 a.m. | 12 noon | 2 p.m.
WEIGHT: 9.6
VISCOSITY: 45
GEL:
W.L. F.C. pH.

PUMPS: 8 a.m. | 10 a.m. | 12 noon | 2 p.m.
No. 1 MODEL; PRESSURE; S.P.M. 225; LINER SIZE 9"
No. 2 MODEL; PRESSURE; S.P.M. 225 225; LINER SIZE 9" 9"

TEMPERATURE: 8 a.m. | 10 a.m. | 12 noon | 2 p.m.
No. 2 MODEL Circulate Tank; PRESSURE; S.P.M.; LINER SIZE 9"

MOTOR HOURS: 1 2 3 4 5

Next Oil Change

ADDITIVES: GENERAL:

DESILTER: Hours Op: 2 U. Flow: O. Flow:

SURVEYS: At Feet | Degrees

Weather; Temp.; Water; Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
	1¼	Macwhyte	Carbon Core	8								

Run 3

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
10123	36	10159	3½	68	119	

DRILL COLLARS: No. 16' Collars; O.D.; I.D.; Length; Air Wt.; Sub. Wt.; C.B. Ft. 27; Ft. up on Kelly 24

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	22-D	11¼	HWG	265	HSI 273	2000	200	146	14			1	325	224 2600				

MUD: 4 p.m. | 6 p.m. | 8 p.m. | 10 p.m.
WEIGHT
VISCOSITY: 44
GEL: WT
W.L. F.C. pH.

PUMPS: 4 p.m. | 6 p.m. | 8 p.m. | 10 p.m.
No. 1 MODEL; PRESSURE 375; S.P.M. 225; LINER SIZE 9"
No. 2 MODEL; PRESSURE; S.P.M. 224; LINER SIZE 9"

TEMPERATURE: 4 p.m. | 6 p.m. | 8 p.m. | 10 p.m.
No. 2 MODEL; PRESSURE; S.P.M.; LINER SIZE

MOTOR HOURS: 1 2 3 4 5

Next Oil Change

ADDITIVES: 30 lbs Quikfoam; 30 lbs Resinex; GENERAL: 35 lbs Walk Not Frac; 10 lbs Caustic Soda

DESILTER: Hours Op: 8 U. Flow: 9¼ O. Flow:

SURVEYS: At Feet: 10117 | Degrees: 9½

Weather; Temp.; Water; Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
	1¼	Macwhyte	Carbon Core	8								

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

O RING ON BIT #; Boiler Operated: Hrs.

Crown-o-matic Chk'd.; Rig Savers Chk'd.; Kelly Cock Chk'd.; Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals.; Fuel Rec'd Today (add) gals.; TOTAL gals.; Fuel on Hand 11.59 p.m. (deduct) gals.; FUEL USED gals.

CASING REPORT: RAN JTS CSG; TO KB. USED SAX CEM; PLUS % PLUG DOWN A.M. P.M.; CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc.	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	START	STOP	INTVL.
~~Circulate Inner Barrel T.B. R.S.~~	12.00	12.30	½
Drilling 10051	12.30	2.00	1½
~~Rec Core - Circulate Inner Barrel T.B~~	2.00	3.15	1¼
Drilling 10056	3.15	3.45	½
~~Rec Core - Circulate Inner Barrel T.B~~	3.45	5.30	1¾
Drilling - 10076	5.30	7.15	1¾
~~Rec Core - R.S.~~	7.15	8.00	¾

FIRES: DRILLER'S SIGNATURE

~~Circulate, Inner Barrel T.B~~	8.00	8.45	¾
Drilling - 10096	8.45	11.00	2¼
~~Rec Core - Circulate Inner Barrel~~	11.00	12.15	1¼
Drilling - 10116	12.15	2.00	1¾
~~Rec Core - Circulate Inner Barrel T.B~~	2.00	3.15	1¼
Drilling - 10123	3.15	4.00	¾

FIRES: DRILLER'S SIGNATURE

Drilling - 10136	4.00	5.00	1
~~Rec Core~~	5.00	6.00	1
~~Totco Survey 10117~~	6.00	7.15	1¼
~~Circulate Inner Barrel T.B~~	7.15	8.00	¾
Drilling - 10156	8.00	10.15	2¼
~~Rec Core - Circulate Inner Barrel T.B~~ R.S.	10.15	11.45	1½
	11.45	12.00	¼

FIRES: DRILLER'S SIGNATURE

EQUIPMENT CHANGES: TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.; TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative:

Approved by Toolpusher:

GENERAL

I ACKNOWLEDGE HAVING WORKED THE HOURS DURING THE TIME REQUIRED NO INJURIES

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.	Hrs
Driller	8
Derrick Rene Folz	8
Motor	
Floor Abe Kot	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs
Driller	
Derrick	8
Motor	
Floor	8
Floor	
Floor	
Other	

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller	8
Derrick	5
Motor	
Floor RC Cauline	8
Floor	
Floor	4

INJURIES - COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

DSW DDL-1 HEAD OFFICE PAYROLL COPY

No. 2169 HSW

No. F 2169 HSW

D

PAYROLL

KEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-H — LOCATION CANDEX ETAL MM3-A — LSD. — SEC. — TWP. — RGE. — W. — DATE August 16 — 1971

DIRECTIONS TO WELL Lat 63°52'59.3" Long 124°34'13.7" — MAILING POINT NORMAN WELLS — SHIPPING POINT 1 — MILES MOVED — ROAD CONDITIONS

DATE Aug 16 71 — RIG # 11-H

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
10013				67.5											

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	32-D	4¼	HWO	25-5	HSi273H													

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				8.7	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				45	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH. 9.1	DESILTER: Hours Op: 8	U. Flow:	O. Flow:										4	
ADDITIVES: 60 Lbs KELZAN			GENERAL: 2 BAGS WALNUT FINE												5	
30 Lbs PRESERVATIVE			30 Lbs BAGS NUTSHELL												Weather	Water
30 Lbs CAUSTIC SODA			80 Lbs FIBRAFLEX												Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

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From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013				67.5	166	3		16	6¼	2¼	126			27	26

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	29-D	4¼	HWO	25-5	HSi273H													

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.	CIRCULATE				MODEL S.P.M.	CIRCULATE				2	
GEL					LINER SIZE	LOSS CIR				LINER SIZE	TANKS				3	
W.L.	F.C.	pH.	DESILTER: Hours Op:	U. Flow:	O. Flow:	911									4	
ADDITIVES: 60 Lbs QUIKTHIK			GENERAL: LIQUAL NUTSHELL												5	
10 Lbs CAUSTIC SODA			40 Lbs QUIKSEAL												Weather	Water
30 Lbs PRESERVATIVE			2 WALNUT FINE												Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

---

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
10013	23	10036	2	67.5	167			16	6¼	2¼	Tobin Collar			27	27

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	32-D	4¼	HWO	25-5	HSi273	2000	100	23	2			1	1400	230	2600			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.6		9.6	9.7	No. 1 PRESSURE				1400	No. 2 PRESSURE					1	
VISCOSITY	44		44	45	MODEL S.P.M.				230	MODEL S.P.M.	CIRCULATE				2	
GEL					LINER SIZE	911			2"	LINER SIZE	TANKS				3	
W.L.	F.C.	pH. 9.1	DESILTER: Hours Op: 8	U. Flow:	O. Flow: 7										4	
ADDITIVES: KOL-SEAL HI-GEL			GENERAL: 2 SKS WALNUT FINE												5	
PRESERVATIVE 30 LBS			10 LBS CAUSTIC												Weather	Water
QUIKTHIK 60 LBS															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

---

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd.		Fuel on Hand 12.01 a.m.	gals.
Rig Savers Chk'd.		Fuel Rec'd Today (add)	gals.
Kelly Cock Chk'd.		TOTAL	gals.
Fire Equip. Chk'd.		Fuel on Hand 11:59 p.m. (deduct)	gals.
		FUEL USED	gals.

CASING EFFORT: RAN — JTS — CSG — TO — KB. USED — SAW — CEM — PLUG DOWN — A.M. P.M. — PLUS — %

CEMENT RETURNS - (YES/NO)

CO RING ON BIT # — Boiler Operated: — Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL

EQUIPMENT CHANGES — TRANSFER #:

DAYS FROM SPUD: 196

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILLER'S SIGNATURE

REMARKS

	START	STOP	INTVL
TRIP IN	12.00	2.00	2
PUTTING LIGHTS ON DERRICK	2.00	2.30	½
TRIP IN	2.30	6.00	3½
REPAIR HYDRAULIC FITTING ON POWER SWIVEL & MIXING MUD.	6.00	7.00	1
MIXING LOSS CIRCULATION MATERIAL	7.00	8.00	1
PUMPS PLUGGED LOSS MIXING LOSS CIRCULATION MATERIAL	8.00	10.00	2
WORKING ON LOSS CIRC	10.00	4.00	6
UNSTUCK PUMPING DOWN DRLG & CIRCULATE			
CIRCULATE, LOSS, CIR. MATERIAL	4.00	7.30	3½
DRILLING - 10016	7.30	7.45	¼
REC CORE - CIRCULATE INNER BARREL T.D	7.45	9.30	1¾
DRILLING 10036	9.30	11.15	1¾
REC CORE - CIRCULATE INNER BARREL T.D	11.15	12.00	¾

FIRES — DRILLER'S SIGNATURE

FIRES — DRILLER'S SIGNATURE

ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THE TIME RECEIVED NO. MPR

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT. IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.	Hrs.
Driller	8
Derrick	8
Motor	
Floor	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs.
Driller	
Derrick	
Motor	
Floor	8
Floor	
Floor	
Other	8

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller	8
Derrick	4
Motor	
Floor R. Burbank	8
Floor	8
Floor	4

INJURIES - COMPLETE BELOW

ACCIDENTS OR INJURIES REPORTED TO THIS TOUR

Position	Tour #	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

No. 2168 HSW

PAYROLL

CSW-DDL-1 HEAD OFFICE PAYROLL COPY

No. 2168 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANOE M43A — LSD. — SEC. — TWP. — RGE. — W. — DATE August 15 — 1977

DIRECTIONS TO WELL Lat 63°52'39.31 Long 124°37'15.7 — MAILING POINT NORMAN WELLS — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

DATE — RIG #

ACKNOWLEDGE HAVING WORKED THREE HOURS DURING THIS REPORTING PERIOD

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

BOTTOM HOLE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013					166	3									

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

M-U-D	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: — GENERAL: — Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

2ND BOTTOM HOLE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013															

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

M-U-D	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: — GENERAL: — Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

3RD BOTTOM HOLE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013				67320	166	3		14	Colair					27	26'

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	32	8½	HWC	15-15-15	HS1273													

M-U-D	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: 60 Lbs Quik Trol, 30 Lbs Preservative, 10 Lbs Caustic Soda — GENERAL: 2 Walnut Plug, 300 gal Fuel Oil — Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	3 SEC			
Blind Rams.	3 SEC			

CO RING ON BIT # — Boiler Operated: — Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	INTVL.
TRIP IN	12.00	3.00	3
FIX RISER PIPE & FLARE LINE	3.00	3.30	½
HOOK UP TEST HEADER	3.30	4.00	½
TAKING DRILL STEM TEST.	4.00	8.00	4
FIRES — DRILLER'S SIGNATURE			
DRILL STEM TEST NO3	8.00	8.45	¾
TRIP OUT STRING WET	8.45	10.15	1½
HANG MUD CAN	10.15	11.15	1
TRIP OUT	11.15	3.45	4½
RIG SER	3.45	4.00	¼
LOSSING MUD			
FIRES — DRILLER'S SIGNATURE			
TRIP OUT LAY DOWN TEST TOOLS (LOSING MUD)	4.00	7.00	3
PICK UP CORE BARRELS	7.00	8.00	1
CHECK OUT CORE BARRELS	8.00	10.30	2½
CHECK BOTTOM BARRELS			
TRIP IN OPEN CORE BARREL (STILL LOSSING CIRCULATION)	10.30	12.00	1½
3 11¼" STABILIZER FOR BARREL MUD TENDS TO LOSS.			
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 145

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

TOUR (1) MIDNIGHT - 8 A.M.

	Hrs.
Driller Dwight Hulsey	12
Derrick Ron Folz	8
Motor	
Floor Abe Rod	12
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.

	Hrs.
Driller	8
Derrick	4
Motor	8
Floor	8
Floor	8
Floor	8
Other	8

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT

	Hrs.
Driller	11
Derrick	7
Motor	
Floor RB Barlow	8
Floor	
Floor	3

INJURIES - COMPLETE BELOW

ACKNOWLEDGE HAVING WORKED THREE HOURS DURING THIS REPORTING PERIOD. IF INJURIES, SIGN ON ACCIDENT REPORT FORM.

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

No. 2167 HSW

DSW. DDL-1 HEAD OFFICE PAYROLL COPY

No. 2167 HSW

PAYROLL D

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION CANTEX-MU37 LSD. SEC. TWP. RGE. W. DATE August 14 19 71

DIRECTIONS TO WELL Lat 63°12'49.3" Long 124° 35' 41" MAILING POINT HIGH HAWK, Alta. SHIPPING POINT Norman Wells MILES MOVED ROAD CONDITIONS

DATE August 14 RIG # 11

ACKNOWLEDGE PAYING TWO HRS. FOR HOURS DURING THIS TOUR RECEIVED NO INJURIES

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

DRILLING

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
10013															

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
I	37-8																	
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013															

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
I																		
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
I																		
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	✓	3540	1500	
Blind Rams.	✓	3540	1500	

CO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd. Rig Savers Chk'd. ✓ Kelly Cock Chk'd. ✓ Fire Equip. Chk'd. ✓

Fuel on Hand 12.01 a.m. gals. Fuel Rec'd Today (add) gals. TOTAL gals. Fuel on Hand 11.59 p.m. (deduct) gals. FUEL USED gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUG DOWN A.M. P.M. PLUS % CEMENT RETURNS - (YES/NO)

GENERAL

DAYS FROM SPUD: 194

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Drlg Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	START	STOP	INTVL
Schlumberger Testing Tests	12.00	8.00	8
Stand By wait on tools for Schlumberger	8.00	4.00	8
Over Time Bottoms Rotten Room Set up Deco + Bop Accumulator control			
Stand By Set up Accumulator for Tops	4.00	8.00	4
Check out			
Start Tripping for Drillstem	8.00		
Test Pickup Drillstem Tools		9.30	1½
Tripping In	9.30	11.45	2¼
Rig Ser.	11.45	12.00	¼

FIRES DRILLER'S SIGNATURE

FIRES DRILLER'S SIGNATURE

EQUIPMENT CHANGES DRILLER'S SIGNATURE TRANSFER #

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

TOUR (1) MIDNIGHT - 8 A.M. — Hrs.

Driller Dwight Yelton 12
Derrick Ron Folz 12
Motor
Floor Abe Kot 12
Floor
Floor

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. — Hrs.

Driller L. Lanagan 8
Derrick Leo Champagne 8
Motor James Gotchie 12
Floor Jean Guy Roy 8
Floor
Floor Gerard Gleason 8
Other 9

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT — Hrs.

Driller Ted Pelton 11
Derrick L. Langan 8
Motor Ron Baulne 11
Floor L. Lanagan 4
Floor Jean Guy Roy 4
Floor

INJURIES - COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

DSW DDL-1 HEAD OFFICE PAYROLL COPY

№ 2166 HSW

№ 2166 HSW

PAYROLL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION CANDET M43-A LSD. SEC. TWP. RGE. W. DATE Aug 13 196 74

DIRECTIONS TO WELL LAT 63°52'51.3" LONG 124°36'15.1" MAILING POINT SHIPPING POINT MILES MOVED ROAD CONDITIONS

DATE Aug 6/74 RIG # 11-11

BOTTOM HOLE ASSEMBLY

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013															

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD

	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. F.C. pH.

ADDITIVES: 2 Bags Walnut Fine

PUMPS

	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRESSURE				
No. 1 MODEL S.P.M.				
No. 1 LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

GENERAL:

JUMPS

	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 2 PRESSURE				
No. 2 MODEL S.P.M.				
No. 2 LINER SIZE				

SURVEYS: At Feet / Degrees

Weather Temp. Water Bbls.

MOTOR HOURS

	Next Oil Change
1	
2	
3	
4	
5	

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

BOTTOM HOLE ASSEMBLY

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD

	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. F.C. pH.

ADDITIVES:

PUMPS

	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRESSURE				
No. 1 MODEL S.P.M.				
No. 1 LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

GENERAL

JUMPS

	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 2 PRESSURE				
No. 2 MODEL S.P.M.				
No. 2 LINER SIZE				

SURVEYS: At Feet / Degrees

Weather Temp. Water Bbls.

MOTOR HOURS

	Next Oil Change
1	
2	
3	
4	
5	

Drilling Line Record	Size	Make	Serial No	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

BOTTOM HOLE ASSEMBLY

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lb.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013															

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. F.C. pH.

ADDITIVES: 20 Lbs Gel Flake 30 gal Diesel Fuel 15 Lbs Desco

PUMPS

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRESSURE				
No. 1 MODEL S.P.M.				
No. 1 LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

GENERAL: 1 Lb Caustic Soda

JUMPS

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 2 PRESSURE				
No. 2 MODEL S.P.M.				
No. 2 LINER SIZE				

SURVEYS: At Feet / Degrees

Weather Temp. Water Bbls.

MOTOR HOURS

	Next Oil Change
1	
2	
3	
4	
5	

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TCO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT

RAN JTS CSG

TO KB. USED SAX CEM

PLUS % PLUG DOWN A.M. P.M.

CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL.
Trip in to circulate T.D.	12 00	2 00	2
circulate Hole	2 00	6 00	4
Tripping out	6 00	8 00	2

FIRES D. Wright DRILLER'S SIGNATURE

TIME	START	STOP	INTVL.
Trip out (Slowly)	8 00	1 30	5½
Wait on Stromberger	1 30	4 00	2½

Bottom Bottle Room.

Overtime Loading & Unloading Chopper Thanks Attrill Bottom Bottle Room.

FIRES L Langan DRILLER'S SIGNATURE

TIME	START	STOP	INTVL.
Mix Tarkoff Mud	4 00	6 00	2
Stromberger Test Tray Hole	6 00	12 00	6

Test No 1

Yes - TD to Csg Shoe

Gin - TD to Csg Shoe

Attempt Run Sonic - Tool Failure

Overtime on Bottle Room & Chopper.

FIRES D. Wright DRILLER'S SIGNATURE

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 193

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative L Langan

Approved by Toolpusher

No 2165 HSW

DSW DDL-1 HEAD OFFICE PAYROLL COPY

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME AND RECEIVED NO INJURY

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. Hrs.

Driller Dwight Wilson 8

Derrick Ron Folz 8

Motor

Floor Abe Ted 8

Floor Gene Stevens 16

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. Hrs.

Driller L. Langan 8

Derrick Lee Chamberlain 8

Motor

Floor Jean Guy Roy 8

Floor [illegible] 8

Floor [illegible] 16

Other [illegible] 16

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT Hrs.

Driller L. Langan 4

Derrick Lee Chamberlain 4

Motor R. Bourque 16

Floor Jean Guy Roy 4

Floor Joe Pilon 4

Floor [illegible] 4

INJURIES - COMPLETE BELOW

I ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TIME AND RECEIVED NO INJURY EXCEPT AS REPORTED ON ACCIDENT REPORT FORM

Position	Tour #	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

No 2165 HSW

PAYROLL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 1-44 LOCATION CANDOX A43-I LSD. SEC. TWP. RGE. W. DATE Aug 12 19 71

DIRECTIONS TO WELL LA 12 1/2 24 1/2 1/2 Long 0 31 44 1

MAILING POINT NORMAN WELLS SHIPPING POINT

MILES MOVED ROAD CONDITIONS

DATE Aug 12 RIG # 1

Report 1

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
10013					166	3

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
						27	26

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD

	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. F.C. pH.

ADDITIVES: GENERAL:

PUMPS

	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRES-SURE				
MODEL S.P.M.				
LINER SIZE				

No. 2 MODEL

DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5

Next Oil Change

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

Report 2

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
10013					166	3

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
						27	26

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12 1/4	HWA	3-5	149-377													

MUD

	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. F.C. pH.

ADDITIVES: GENERAL:

PUMPS

	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRES-SURE	CIRCULATE TANK			
MODEL S.P.M.				
LINER SIZE	7"			

No. 2 MODEL: CIRCULATE

DESILTER: Hours Op: 8 U. Flow: 9.2 O. Flow: 9.4

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5

Next Oil Change

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

Report 3

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
10013					166	3

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
						27	26

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12 A			149-277													

MUD

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				9.5
VISCOSITY				53
GEL				

W.L. F.C. pH.

ADDITIVES: GENERAL:

PUMPS

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRES-SURE	CIRCULATE TANKS			
MODEL S.P.M.				
LINER SIZE	7"			

No. 2 MODEL: CIRCULATE

DESILTER: Hours Op: 8 U. Flow: 9.2 O. Flow: 9.4

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5

Next Oil Change

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

TCO RING ON BIT # Boiler Operated: Hrs.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT: RAN JTS CSG TO KB. USED SAX CEM PLUG DOWN A.M. P.M. PLUS % CEMENT RETURNS: (YES/NO)

DRILL PIPE | Size | Joint | CLASSIFICATION 2 3 4 | TOTAL | Date Sonosc | Ft. Drilled since Sonosc | Total Ft. Drilled | CALIPER DATE | RESULTS | FROM PIPE RACK

GENERAL:

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 122

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

REMARKS

	TIME START	TIME STOP	INTV.
Stand By			
Taking Inventory Stock	12.00	8.00	8
FIRES 1 - DRILLER'S SIGNATURE			
Stand By - Clean Store Room	8.00	1.00	5
Tripping in Condition Hole For Tests	1.00	4.00	3
Requested To Run In Hole By Mr. King Man Rep. Of Ian Binnie & Associates Engineering Ltd.			
FIRES R. Lee DRILLER'S SIGNATURE			
Tripping in + Circulating	4.00	6.00	2
Change Power Tongs	6.00	6.30	1/2
Trip in + Circulate Condition Hole + Run Drill Stem Test @ 4600 Wash Down	6.30	12.00	5 1/2
FIRES DRILLER'S SIGNATURE			

ACKNOWLEDGE HAVING WORKED THESE HOURS DURING THIS TOUR. RECEIVED NO INJURY.

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT. IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. | Hrs.

Driller L. Lafferty
Derrick Ron Folz
Motor
Floor Abe Fox
Floor
Floor

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. | Hrs.

Driller V. Tomyn
Derrick Joe Stenbraten
Motor
Floor Jimmy Young
Floor
Floor C. Conrad Charron
Other

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT | Hrs.

Driller Geo Pedersen
Derrick
Motor
Floor A. Boulet
Floor
Floor

INJURIES - COMPLETE BELOW

ACKNOWLEDGE HAVING WORKED THE HOURS SHOWN BELOW DURING THIS TOUR. INJURIES AS REPORTED ON THE COMPANY ACCIDENT REPORT, PART 2.

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

Nº 2164 HSW

PAYROLL

DSW DDL-1 HEAD OFFICE PAYROLL COPY

Nº 2164 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-H LOCATION CANDEY NW3-A LSD. SEC. TWP. RGE. W. DATE August 11 19 71

DIRECTIONS TO WELL Lat 40°57'52" Long 124°34'16.7" MAILING POINT Normandy Wells SHIPPING POINT MILES MOVED ROAD CONDITIONS

DATE Aug-11-71 R/G # 11

TOUR 1

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013															

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD: 12 mn. | 2 a.m. | 4 a.m. | 6 a.m.
WEIGHT | VISCOSITY | GEL | W.L. | F.C. | pH.
ADDITIVES:

PUMP: 12 mn. | 2 a.m. | 4 a.m. | 6 a.m.
No. 1 PRES. SURE | MODEL | S.P.M. | LINER SIZE 9"
No. 2 PRES. SURE | MODEL | S.P.M. | LINER SIZE
DESILTER: Hours Op: 8 U. Flow: 9.44 O. Flow: 8.47
GENERAL: CARGO TANK

MOTOR HOURS | Next Oil Change
1 | 2 | 3 | 4 | 5

SURVEYS: At Feet | Degrees
Weather | Temp. | Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

Stand By No Power
(Taking Inventory)
(Fire Burning Waste)

FIRES

DRILLER'S SIGNATURE

Stand By Wait for Diesel Plant (That Burnt)

Mix Mud 60 Barrels

Taking Inventory Stock

FIRES

DRILLER'S SIGNATURE

Stand By
Taking Inventory

FIRES

DRILLER'S SIGNATURE

TIME

	START	STOP	HRS.
	12^00	8:00	8
	8:00	16:00	8
	16:00	24:00	8

TOUR 2

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013			16^00		166	3								37	35'

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD: 8 a.m. | 10 a.m. | 12 noon | 2 p.m.
WEIGHT | VISCOSITY | GEL | W.L. | F.C. | pH.
ADDITIVES: 60 ~~lbs~~ Barrels 30 gal Foam Oil 2 Sacks Mud Left from Job

PUMP: 8 a.m. | 10 a.m. | 12 noon | 2 p.m.
No. 1 PRES. SURE | MODEL | S.P.M. | LINER SIZE 9"
No. 2 PRES. SURE | MODEL | S.P.M. | LINER SIZE
DESILTER: Hours Op: 8 U. Flow: O. Flow:
GENERAL: Quik Trol 10 gal Cut with 30 Bbls Preservative Caustic Soda

MOTOR HOURS | Next Oil Change
1 | 2 | 3 | 4 | 5

SURVEYS: At Feet | Degrees
Weather | Temp. | Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 3

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013															

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD: 4 p.m. | 6 p.m. | 8 p.m.
WEIGHT | VISCOSITY | GEL | W.L. | F.C. | pH.
ADDITIVES:

PUMP: 4 p.m. | 6 p.m. | 8 p.m. | 10 p.m.
No. 1 PRES. SURE | MODEL | S.P.M. | LINER SIZE
No. 2 PRES. SURE | MODEL | S.P.M. | LINER SIZE
DESILTER: Hours Op: 4 U. Flow: O. Flow:
GENERAL:

MOTOR HOURS | Next Oil Change
1 | 2 | 3 | 4 | 5

SURVEYS: At Feet | Degrees
Weather | Temp. | Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Serial No.	Size	Rating	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

CO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT: RAN JTS CSG | TO KB. USED SAX CEM | PLUS % PLUG DOWN A.M. P.M. | CEMENT RETURNS - (YES/NO)

GENERAL:

EQUIPMENT CHANGES

TRANSFER #

DAYS FROM SPUD: 141

TOTAL COMPANY TIME HRS. | TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

DSW DDL-1 HEAD OFFICE PAYROLL COPY

No. 2163 HSW

ACKNOWLEDGE RECEIPT OF THIS FORM AND RETURN TO DRILLER

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. Hrs.

Driller Hank Gibson 8
Derrick Rob Folz 8
Motor
Floor Abe Fox 8
Floor
Floor

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. Hrs.

Driller [illegible] 8
Derrick Leo Granberg 8
Motor
Floor [illegible] 8
Floor
Floor
Other [illegible] 8

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT Hrs.

Driller Leo Granberg 8
Derrick Mike Campbell 8
Motor
Floor B Bowlds 8
Floor
Floor

INJURIES - COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

No. 2163 HSW

PAYROLL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG No. 11 LOCATION CANOSX 0443-A LSD. SEC. TWP. RGE. W. DATE August 10th 1971

DIRECTIONS TO WELL Lat 63° 29' 54.3" Long 124° 37' 15.7" MAILING POINT Norman Wells SHIPPING POINT MILES MOVED ROAD CONDITIONS

DATE August 7th RIG # 11

ACKNOWLEDGE HAVING WORKED THESE HOURS DURING WHICH I RECEIVED NO INJURY

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

Bit Record

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013														

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	8	4H					351	39									

Mud Record

	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. F.C. pH.

ADDITIVES: GENERAL:

Pump Record

	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 2 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

Motor Hours

	Next Oil Change
1	
2	
3	
4	
5	

SURVEYS: At Feet / Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

Bit Record

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013														

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	4						351	39									

Mud Record

	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

W.L. F.C. pH.

ADDITIVES: 3265 Quikfos GENERAL: 5 bags Cinosite

17 bags Prosenrad

1 Drum Invert

Pump Record

	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRESSURE				
MODEL S.P.M.		Circulating		
LINER SIZE	9"			

	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 2 PRESSURE				
MODEL S.P.M.		Circulating		
LINER SIZE	9"			

DESILTER: Hours Op: 4 U. Flow: O. Flow:

Motor Hours

	Next Oil Change
1	
2	
3	
4	
5	

SURVEYS: At Feet / Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

Bit Record

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013					116	7								

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	4					351	39										

Mud Record

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				9.1
VISCOSITY				41
GEL				

W.L. F.C. pH.

ADDITIVES: GENERAL:

Pump Record

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRESSURE				
MODEL S.P.M.	Emsco			
LINER SIZE				

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 2 PRESSURE				
MODEL S.P.M.	Emsco			
LINER SIZE				

DESILTER: Hours Op: 8 U. Flow: 9.6 O. Flow: 8.1

Motor Hours

	Next Oil Change
1	
2	
3	
4	
5	

SURVEYS: At Feet / Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

TCO RING ON BIT # Boiler Operated: Hrs.

Fuel on Hand 12.01 a.m. gals. | Fuel Rec'd Today (add) gals. | TOTAL gals. | Fuel on Hand 11.59 p.m. (deduct) gals. | FUEL USED gals.

Casing Report

RAN JTS CSG TO KB. USED SAW CEM PLUG DOWN A.M. P.M. PLUS % CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL.
TRIP IN	12 00	4 45	4 3/4
PACKER HUNG OFF 5 FT ABOVE WHALE OPEN AND DRILL STRING FILLED WITH MUD	4 45	5 15	1/2
TRIP TO BOTTOM	5 15	6 15	1
STRADDLE PACKER — HOLE LOOSING FLUID MUD TALKS DROPPED 11"	6 15	7 15	1
PRE FLOW — NO BLOW (LOSING MUD)			
START SHUT IN PERIOD	7 15	9 00	3/4

FIRES DRILLER'S SIGNATURE

DST — SHUT IN PERIOD	8 00	9 15	1 1/4
TRIP OUT	9 15	9 15	1/4
TRY PUT OUT FIRE BOILER HOUSE	9 15	4 00	3 3/4

FIRES DRILLER'S SIGNATURE

TRIP OUT (POSIT. WELDING)	4 00	6 30	2 1/2
STAND BY (FIRE — NO POWER)	6 30	12	5 1/2
MIX MUD LOSSING CIR.			

FIRES DRILLER'S SIGNATURE

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 14

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

GENERAL

TOUR (1) MIDNIGHT - 8 A.M.

	Hrs.
Driller Lloyd A. Nelson	8
Derrick Bob Folz	8
Motor	
Floor Abe Kool	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.

	Hrs.
Driller	
Derrick THAMBI-KRAIN Lee	8
Motor Conrad Thomson	8
Floor Jean Guy Roy	8
Floor Willie Clot	1
Floor Ron Pickering	4
Other Ernie Kuptana	8

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT

	Hrs.
Driller Joe Pudlowski	8
Derrick Fred Jones	8
Motor Bruce Cutler	8
Floor TP Bandak	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

ACCIDENTS, INJURIES OR DAMAGE TO EQUIPMENT OR PROPERTY SHOULD BE REPORTED IMMEDIATELY TO YOUR SUPERVISOR

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

DSW DDL-1 HEAD OFFICE PAYROLL COPY

No. 2162 HSW

No. 2162 HSW

PAYROLL D

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANLEY AMH's-A — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE August 1971

DIRECTIONS TO WELL Lat 67°39'34" Long 126°37'15.1" — MAILING POINT NORMAN WELLS — SHIPPING POINT Norman Wells — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9798	25	10013	24		16	3		16' Collars	9"	2 1/2"				27	29

B/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	21-2	6 1/4	HWS	25	H-1239	2000	200	32	39			2	2500	238				
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.7	9.7		9.6	No. 1 PRES-SURE	Circ.				No. 2 PRES-SURE					1	
VISCOSITY	47	47		47	MODEL S.P.M.	Tanks				MODEL S.P.M.					2	
GEL					LINER SIZE 9"					LINER SIZE 9"					3	
W.L.	F.C.		pH. 9.5		DESILTER: Hours Op: 9	U. Flow: 7.1		O. Flow: 9.7							4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013		10013			16	3		16' Collars	9"	2 1/2"				27	29

B/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	21-2	6 1/4	HWS	25	H-1239													
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.7				No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY	47				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op: 9	U. Flow: 7.1		O. Flow: 7.7							4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10013					16	3		16' Collars	9"	2 1/2"	STANDS			27	29

B/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	21-2																	
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.4				No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY	47				MODEL S.P.M.		Circ.	Tanks		MODEL S.P.M.					2	
GEL					LINER SIZE 9"					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op: 9	U. Flow: 7.1		O. Flow: 9.1							4	
ADDITIVES: 30 Lbs Gyp Trol GENERAL: 2 Loads Cement Sack															5	
15 Gal Soltex Well															Weather	Water
35 Gal Fuel Diesel															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___ TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

REMARKS	TIME START	TIME STOP	TIME INTVL.
REC Cuttings - Circulate Pump	1:00	1:30	1/2
Drilling -	1:30	1:45	1/4
Rec Cuttings - Circulate Pump	1:45	3:15	1 1/2
Drilling -	3:15	4:30	2 1/4
Rec Cuttings - Circulate Pump	5:30	6:45	1 1/4
Drilling - (Clean Mud)	6:45	7:00	1/4
Rec Cuttings -	7:00	8:00	1
FIRES ___ DRILLER'S SIGNATURE ___			
Rec Cuttings - Pump	8:00	9:15	1 1/4
Drilling -	9:15	9:30	1/4
Circulate - Pump Trouble	9:30	9:45	1/4
N.T.			
Trip out 1 Stand - Pump Trouble	9:45	9:45	1/2
Rec Cuttings - Pump	9:45	10:30	3/4
Trip out to Change Bit	10:30	3:45	5 1/4
Change Bit	3:45	4:00	1/4
FIRES ___ DRILLER'S SIGNATURE ___			
Trip out of Hole	4:00	8:00	1
Make up Directional Tools	8:00	7:00	2
Trip in w/ 61.20' Drill Pipe	7:00	9:00	2
Trip out to change Drill Pipe	9:00	10:30	1 1/2
Trip in (Change to Test)	10:30	11:00	1/2
Test	11:00	11:45	3/4
Trip in	11:45	12:00	1/4
FIRES ___ DRILLER'S SIGNATURE ___			

DSW DDL-1 CONSERVATION BOARD COPY

No. 2161 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. H-11 LOCATION CANDEX NW-A LSD ___ SEC ___ TWP ___ RGE ___ W ___ DATE August 9 1971

DIRECTIONS TO WELL LSD 2 5-51-3" LONG 124° 39 7" — MAILING POINT NORMAN WELLS — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
9855	30	9906	5¼	~~Heat~~	16	3

DRILL COLLARS: No. ___ O.D. ___ I.D. ___ Length ___ Air Wt. ___ Sub. Wt. ___ C.B. Ft. 27 — Ft. up on Kelly 21

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T	21-0	12¼	HWO	20-5	H5 23971	2000	100	243	28½			2	325	230	3500			
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT	9.7			9.7
VISCOSITY	46			46
GEL				
W.L.	F.C.	pH.		

PUMP — 12 mn. / 2 a.m. / 4 a.m. / 6 a.m.
No. 1 PRES. SURE: C[illegible] — MODEL: T[illegible] — S.P.M. — LINER SIZE
No. 2 PRES. SURE: 325 — MODEL: [illegible] — S.P.M. 230 — LINER SIZE 6

MOTOR HOURS — Next Oil Change
1 ___ 2 ___ 3 ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

DESILTER: Hours Op: 9 U. Flow: 9 O. Flow: 97

SURVEYS: At Feet / Degrees

ADDITIVES: Bar-Tol 20 lbs GENERAL: WASHOUT FINE LEAK. BUT WELL IN GOOD DIRECTION - 16 lbs 1 CONE LOST & LOOSE LOWER CASE

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
9905	36	9941	5½	17	16½	1

DRILL COLLARS: No. [illegible] O.D. [illegible] I.D. [illegible] Length [illegible] Air Wt. ___ Sub. Wt. ___ C.B. Ft. 27 — Ft. up on Kelly ___

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T	21-0	12¼	HWO	20-5	H5 23974	2000	100	279	21½			2	275	230	3600			
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT	9.7		9.4	
VISCOSITY	47		47	
GEL				
W.L.	F.C.	pH.		

PUMP — 8 a.m. / 10 a.m. / 12 noon / 2 p.m.
No. 1 PRES. SURE: C[illegible] — MODEL: [illegible] — S.P.M. — LINER SIZE
No. 2 PRES. SURE: 275 — MODEL: [illegible] — S.P.M. 230 — LINER SIZE 6

MOTOR HOURS — Next Oil Change
1 ___ 2 ___ 3 ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

DESILTER: Hours Op: 9 U. Flow: 3[illegible] O. Flow: 57

SURVEYS: At Feet 9900 / Degrees 1½

ADDITIVES: 30 lbs Quik-Gel GENERAL: Slight Circ.
15 Gal Nutrol
4 lbs Miscellaneous

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
9941	47	9988	4¾	69300	16½	4

DRILL COLLARS: No. 16 Collar Stabilizer O.D. ___ I.D. ___ Length ___ Air Wt. ___ Sub. Wt. ___ C.B. Ft. 27 — Ft. up on Kelly 5

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T	21-0	12¼	HWO	20-5	H5 23974	2000	100	226	26½			2	350	230	3600			
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT		9.[illegible]		
VISCOSITY		44		
GEL				
W.L.	F.C.	pH.		

PUMP — 4 p.m. / 6 p.m. / 8 p.m. / 10 p.m.
No. 1 PRES. SURE: — MODEL: — S.P.M. — LINER SIZE 6½
No. 2 PRES. SURE: — MODEL: — S.P.M. [illegible] — LINER SIZE 5½

MOTOR HOURS — Next Oil Change
1 ___ 2 ___ 3 ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

DESILTER: Hours Op: 7 U. Flow: 7.2 O. Flow: 57

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOCO RING ON BIT ___ — Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL: ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL.
Drilling	12:00	1:45	1¾
Rec-Circ-Short-Circ out [illegible] T.	1:45	2:15	1½
Drilling	2:15	5:15	3
Rec Circ - Circ at [illegible] T.	5:15	6:30	1¼
Drilling	6:30	8:00	1½

FIRES ___ DRILLER'S SIGNATURE ___

Drilling	8:00	8:30	½
Rec Circ - Circ Sample	8:30	10:00	1½
Tr. Sur. + Circ [illegible] T.	10:00	11:30	1½
Drilling	11:30	1:15	1¾
Rec Circ Circ at [illegible] T.	1:15	2:45	1½
Drilling	2:45	4:00	1¼

FIRES ___ DRILLER'S SIGNATURE ___

Drilling	4:00	4:45	¾
Rec Circ Sample	4:45	6:15	1¼
Drilling	6:15	8:30	2
Rec Circ - Circulate [illegible] T.	8:30	10:00	1½
Drilling	10:00	12:00	2

FIRES ___ DRILLER'S SIGNATURE ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

DSW DDL-1 CONSERVATION BOARD COPY

No. 2160 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANOE AMOCO A — LSD. — SEC. — TWP. — RGE. — W. — DATE August 7 — 1971

DIRECTIONS TO WELL — MAILING POINT NORMAN WELLS — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
9751	24	9775	3½	[illegible]	162	2		6¼"			52			27	27

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2-0	12¼	HWO	9-5	HC 234-H	2000	200	113	14½			2	250	295	9-20			

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				71	No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY				44	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	7				LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: 12 bags Gyp-Seal — GENERAL: 4-NADA CUTWELL

20 bbls Caustic — 2 Sacks - MICATEX FINE

6 bbls Desco-Thin

Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9775	36	9811	4		162	1		16"						27	26

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2-0	12¼	HWO	9-5	HC 234-H	2000	200	149	18¼			2	250					
						+												
						500												

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.7	9.7		9.7	No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY	42	42		42	MODEL S.P.M.					MODEL S.P.M.	230			230	2	
GEL					LINER SIZE	7"				LINER SIZE	9"			9	3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 9 — U. Flow: 9 — O. Flow: 9.7

SURVEYS: At Feet: 9775 / Degrees: 11½

ADDITIVES: 30 bbls Gyp-Seal — GENERAL: 1-LATCH SURVEY

4 bbls CAUSTIC — 2 bbls DIESEL

1 Sk WALNUT FINE — 2-7 PACKER RUBBERS

Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9811	44	9855	4¼	140	163	4		16"		2"	5 TAPER			27	20'

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2-0	12¼	HWO	9-5	HC 234-H	2000	200	193	23			2	345	320	350			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.7				No. 1 PRES-SURE					No. 2 PRES-SURE	325			325	1	
VISCOSITY	42				MODEL S.P.M.					MODEL S.P.M.	220			220	2	
GEL					LINER SIZE	7"				LINER SIZE	2"			2	3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 8 — U. Flow: 9.1 — O. Flow: 9.7

SURVEYS: At Feet / Degrees

ADDITIVES: 120 lbs - Quik-Trol — GENERAL: 45 Lbs DRISPAC ULTRA

16 gal KUTWELL — 2 LATCH SURVEYS — 1 LIFE CAST

4 Sks WALNUT FINE — 1 CORE BARREL

Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

TOTCO RING ON BIT # — Boiler Operated: — Hrs.

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M.

CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL:

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved Toolpusher

DRILLER'S SIGNATURE

REMARKS

	TIME START	TIME STOP	INTVL.
[illegible]	12:00	[illegible]	¼
[illegible]	12:15	1	¾
[illegible]	1	[illegible]	1½
[illegible]	[illegible]	[illegible]	½
[illegible]	[illegible]	[illegible]	1½
[illegible]	[illegible]	6	1¼
[illegible]	6	7	1
[illegible]	7	7:00	½
[illegible]			
FIRES — DRILLER'S SIGNATURE			
Drilling —	8:00	10:00	2
Rig [illegible]	10:00	11:45	1¾
Servicing	11:45	1:45	2
Rig [illegible]	1:45	2:45	1
Totco Survey @ 9900	2:45	4:00	1¼
[illegible]			
Servicing [illegible]			
FIRES — DRILLER'S SIGNATURE			
[illegible]	4:00	4:45	¾
Servicing	4:45	6:45	2
Rig [illegible]	6:45	8:15	1½
Drilling —	8:15	10:00	1¾
Rec. Circulate	10:00	11:30	1½
Drilling —	11:30	12:00	½
FIRES — DRILLER'S SIGNATURE			

DSW DDL-1 CONSERVATION BOARD COPY

No 2159 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION Sec. 5 Mile A — LSD — SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE August 1971

DIRECTIONS TO WELL Lake Christina 37 mi. — MAILING POINT Norman Wells — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR: MIDNIGHT TO 4 AM | 4 AM TO 8 AM | 8 AM TO 4 PM | 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
9713					162	

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	4		25-5	HS 231			21	10½		70½							
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn	2 a.m	4 a.m	6 a.m.	PUMP	12 mn	2 a.m	4 a.m	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 Pots Swbs					No. 2 Pots Swbs					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					Liners Size	6				Liners Size					3	
W.L.	F.C.		pH.		DESILTER: Hours Op.		U. Flow		O. Flow		SURVEYS At Feet	Degrees			4	
ADDITIVES:	14 sks Bicarb & Chromate				GENERAL:										5	
25# Fresh Gel & Caustic															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
9743					162	

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼							21	10½					142				
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 Pots Swbs					No. 2 Pots Swbs					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					Liners Size	7				Liners Size	7½				3	
W.L.	F.C.		pH.		DESILTER: Hours Op.		U. Flow		O. Flow		SURVEYS At Feet	Degrees			4	
ADDITIVES:	Salt & Bicarb				GENERAL:										5	
Soda Caustic															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
9743	8	9751	1		162	

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6 Monel						27	

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	Security		15-5	HS 231	1000	200	29	11½			2	250	220	22 30			
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 Pots Swbs					No. 2 Pots Swbs					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					Liners Size					Liners Size					3	
W.L.	F.C.		pH. 9		DESILTER: Hours Op. 9		U. Flow		O. Flow		SURVEYS At Feet	Degrees			4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL
	12 00	7 00	7

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION CANDEX MED. LSD SEC. TWP. RGE. W. DATE Aug 5 1971

DIRECTIONS TO WELL LAT Lease Sinclair MAILING POINT Medicine Hat SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
9612	30	9642	4½	46.40	161	1		1	Cav	11"	1570	5		27	11

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
7	7 7/8	HWT	32-5	W 234	2000	142	30	2			3	750	200	3200			

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				10+	No. 1 PRESS. SURE	Cir	Cir	Cir		No. 2 PRESS. SURE	Cir	Cir			1	
VISCOSITY				45	MODEL S.P.M. LINER SIZE	Pump				MODEL S.P.M. LINER SIZE	225				2	
GEL															3	
W.L.	F.C.	pH. 9	DESILTER: Hours Op: 5		U. Flow: 11	O. Flow: 11	SURVEYS At Feet	Degrees							4	
ADDITIVES: 3 Drums Bar			GENERAL: 12 Sks Caustic		15 Lbs										5	
1 Can Lignite			25 Lbs Fibremix												Weather	Water
1 Can Caustic			30 Gal Kerosene												Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
9642	98	9740	5		11									27	21

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
7	7 7/8	HWT	32-5	JS1339	2000	200	98	10									
							79										

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.1	9.2	9.1	No. 1 PRESS. SURE					No. 2 PRESS. SURE	A.M.				1	
VISCOSITY	47	47	47	47	MODEL S.P.M. LINER SIZE					MODEL S.P.M. LINER SIZE	220				2	
GEL															3	
W.L.	F.C.	pH. 9	DESILTER: Hours Op: 9		U. Flow: 9.1	O. Flow: 9.4	SURVEYS At Feet	Degrees							4	
ADDITIVES: (Thru-D)			GENERAL: 5 Sks Micatex Coarse												5	
5 Sks Micafax Fine			12 Lbs Bicarb												Weather	Water
5 Sks Kwikseal Coarse			10 Lbs Caustic Soda												Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
9740	3	9743	½		162									17	23

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
7	7 7/8	HWT	32-5	JS1339	2000	200	81										

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 a.m.	6 a.m.	8 a.m.	10 a.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.1	9.1	9.1	No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY					MODEL S.P.M. LINER SIZE					MODEL S.P.M. LINER SIZE					2	
GEL															3	
W.L.	F.C.	pH. 9	DESILTER: Hours Op: 7		U. Flow: 9.1	O. Flow: 9	SURVEYS At Feet	Degrees							4	
ADDITIVES: 25 Lbs Fibrex			GENERAL: 15 Lbs Fibremix												5	
10 Lbs Lignite			75 Gal Kerosene Fuel												Weather	Water
5 Lbs Caustic Soda															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO)

GENERAL

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosr	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Service	12 00	12 15	¼
Circ & Cond	12 15	1 15	1
Trip	1 15	2 00	¾
Wash & Ream 7'	2 00	2 30	1½
Drilling	2 30	4 00	1½
Old Kb Was Twenty Two August 2nd 71			

HEATH & SHERWOOD DRILLING (WESTERN) RIG NO. 11-E LOCATION CANDEX MW2-A LND. SEC. TWP. RGE. W. DATE August - 1971

DAILY DRILLING LOG
DIRECTIONS TO WELL Lat- 63°32'54.5" Long 124" 31'15.7" MAILING POINT NORMAN WELLS SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub Wt.	C.B. Ft	Ft. up on Kelly
		9662			160	4									31

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]	[illegible]	[illegible]	22's	234-CH													
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. GUAGE	CIRC MUD TANKS				No. 2 PRESS. GUAGE	CIRC MUD TANKS				1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	3"				LINER SIZE	2"				3	
															4	
															5	

W.L. F.C. pH. DESILTER: Hours Op: 9 U. Flow: O. Flow: SURVEYS At Feet Degrees

ADDITIVES: GENERAL:

1 - MAINLINE CABLE 1" X 6.0 FT

Weather Temp. Water bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub Wt.	C.B. Ft	Ft. up on Kelly
9662															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]													
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. GUAGE	OIL CIRC TANK				No. 2 PRESS. GUAGE	CIRCULATE TANKS				1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	3"				LINER SIZE	2"				3	
															4	
															5	

W.L. F.C. pH. DESILTER: Hours Op: 4 U. Flow: O. Flow: SURVEYS At Feet Degrees

ADDITIVES: GENERAL:

4 - 5000 FT MAINLINE CABLE
2 - 499 GM MOTORS

Weather Temp. Water bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub Wt.	C.B. Ft	Ft. up on Kelly
9662															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]													
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.2	No. 1 PRESS. GUAGE					No. 2 PRESS. GUAGE					1	
VISCOSITY				45	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
															4	
															5	

W.L. F.C pH. 9 DESILTER: Hours Op: 8 U. Flow: 97 O. Flow: 91 SURVEYS At Feet Degrees

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

CHANGING 1 - 10 MOTORS

RIG - NIPPLE UP BOP'S

TIME	START	STOP	INTVL
	12:00	5:00	8

FIRES DRILLER'S SIGNATURE

INSTALL 4½ G.A. MOTORS

TIME	START	STOP	INTVL
	4:00	4:00	8

TAKE OFF WIRELINE CABLE

STAT WORKING ON NEW WIRELINE CABLE

~~CHG TOP DRIVE MOTOR~~

FIRES DRILLER'S SIGNATURE

COMPLETE INSTALLING 4 MS

TIME	START	STOP	INTVL
	4:00	6:00	2

TRIPPING IN

TIME	START	STOP	INTVL
	6:00	8:00	2

TRIPPING IN

TIME	START	STOP	INTVL
	8:00	12:00	4

START TO RIG UP NEW CABLE SPOOLING.

ONE TURN RUNNING ON WIRELINE

FIRES DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. Rig Savers Chk'd. Kelly Cock Chk'd. Fire Equip. Chk'd.

TOTCO PING ON BIT = ° Boiler Operated: Hrs.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUG DOWN A.M. P.M. PLUS % CEMENT RETURNS - (YES/NO)

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 194

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

Approved by Operator's Representative

Approved by Toolpusher

DSW DDL-1 CONSERVATION BOARD COPY

No. 2156 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION CAMBRIA Mesa Drilling LSD. SEC. TWP. RGE. W. DATE August 7 19 71

DIRECTIONS TO WELL La Veta 62 mi. Long 24 39.15 MAILING POINT SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
9644	4'	9648	3	60 60 60 60	160	4		6	8	2	30'			27	31

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T	2nd	4½	HH11	3-3-3	WS-3844	30 M	70	165'	25½			2	775	92	740			
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				91	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				44	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. 7 F.C. 4/32 pH. 9.5 DESILTER: Hours Op: 9 U. Flow: 9.7 O. Flow: 9.1

ADDITIVES: GENERAL:

SURVEYS: At Feet 9640 Degrees ½

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
9662					160	4									31

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T																		
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				91	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				44	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 9 DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

1 CORE L. HEA CASE

1 CORE L. FISH — 1 CORE RETRVG SUB. NG

SURVEYS: At Feet 9650 Degrees 17°

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
		9662			160	4									31

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T	Reed			3-3-3														
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				91	No. 1 PRESSURE	CIRCULATE				No. 2 PRESSURE	CIRCULATE				1	
VISCOSITY				44	MODEL S.P.M.					MODEL S.P.M.	TANK				2	
GEL					LINER SIZE	2				LINER SIZE	2				3	

W.L. F.C pH. 9 DESILTER: Hours Op: 9 U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet Degrees

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd. Rig Savers Chk'd. Kelly Cock Chk'd. Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals.

Fuel Rec'd Today (add) gals.

TOTAL gals.

Fuel on Hand 11.59 p.m. (deduct) gals.

FUEL USED gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Serv	12:00	1:00	1
Totco Survey No. 1	1:00	1:30	½
Circulate	1:30	2:30	1
Trip out	2:30	3:00	½
Rec Core #1	5:45	7:15	1½
Trip in	7:15	7:30	¼
Ream Core	7:30	8:00	½
R Daniel Hop and 1 (KH)			
FIRES T & T DRILLER'S SIGNATURE			
Rig Serv	9:00	9:15	¼
Totco Survey	9:15	9:30	¼
Circulate prep to Trip	9:30	10:00	½
Trip out Pull Wear Bushing	10:00	10:45	¾
Out Tool	10:45	11:00	¼
Trip Out	11:00	4:00	5
FIRES DRILLER'S SIGNATURE			
Trip out	4:00	6:30	2½
Prep. to change GM Motor	6:30	12:00	5½
Reduce main line			
FIRES DRILLER'S SIGNATURE			

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 197

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DSW DDL-1 CONSERVATION BOARD COPY

No. 2155 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION Canada Mud — LSD. — SEC. — TWP. — RGE. — W. — DATE Aug 13 — 1971

DIRECTIONS TO WELL Lat 63-32-57 Lon 124-29 1.1 — MAILING POINT Norman Wells — SHIPPING POINT Mud — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
9457	15'	9572	3		157	1	16						27	27

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
3	7 7/8	HWA	32-5	HS 2986	20M	120	75	12½			2	750	195	2700			

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESSURE	C.C.				No. 2 PRESSURE					1	
VISCOSITY				42	MODEL S.P.M.			Failure		MODEL S.P.M.				120	2	
GEL					LINER SIZE	7"				LINER SIZE				7"	3	

W.L. 9.1 F.C. — pH. 7 — DESILTER: Hours Op: 8 — U. Flow: 4.1 — O. Flow: 6.2 — SURVEYS: At Feet 9456 — Degrees 12

ADDITIVES: 30 Lbs Caustic — GENERAL: 10 lbs KELZAN — 10 Lbs KELZAN

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9572	42	9614	5½		160		11	Collars		2'			27	27

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
3RR	7 7/8	HWA	32-5	HS 2984	20M	100	117	18			2	750	195	2700			

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	11		11	No. 1 PRESSURE	C.C.				No. 2 PRESSURE					1	
VISCOSITY	42	44		41	MODEL S.P.M.			Failure		MODEL S.P.M.					2	
GEL					LINER SIZE	7"				LINER SIZE					3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet — Degrees

ADDITIVES: — GENERAL:

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
9614	30	9644	4½		160	2	Collars	6¼"	3"	30'	12"	20	27	

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
3RR	7 7/8	HWA	32-5	HS 2984	20M	100	147	22½			2	375	220	2400			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 a.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	5 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.1		9.1	No. 1 PRESSURE	C.C.				No. 2 PRESSURE	775			775	1	
VISCOSITY	44	42		47	MODEL S.P.M.			Failure		MODEL S.P.M.	240			225	2	
GEL					LINER SIZE	7"				LINER SIZE	7"			7"	3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 9 — U. Flow: 9.7 — O. Flow: 9.1 — SURVEYS: At Feet 9460 — Degrees 0

ADDITIVES: 5 Lbs KELZAN — GENERAL: — 20 Lbs Caustic Soda

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # — Boiler Operated — Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. — gals.
Fuel Rec'd Today (add) — gals.
TOTAL — gals.
Fuel on Hand 11.59 p.m. (deduct) — gals.
FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 14

GENERAL —

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative — Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	TIME START	TIME STOP	INTVL
[illegible]	12[illegible]	12[illegible]	½
Rig [illegible]	12[illegible]	12[illegible]	½
Drilling	12[illegible]	2[illegible]	2½
Rig Service	2[illegible]	4[illegible]	1
[illegible]	4[illegible]	4[illegible]	½
Circulate	4[illegible]	6[illegible]	1½
[illegible]	6[illegible]	7[illegible]	1½
[illegible]	7[illegible]	7[illegible]	½
[illegible]	7[illegible]	[illegible]	½
FIRES		DRILLER'S SIGNATURE	
Drilling	8[illegible]	10[illegible]	2
Rig Service - Circulate	10[illegible]	11[illegible]	1½
Washing	11[illegible]	2[illegible]	2½
Circulate - Trip	2[illegible]	[illegible]	1½
Drilling	2[illegible]	4[illegible]	½
FIRES		DRILLER'S SIGNATURE	
Drilling	4[illegible]	6[illegible]	1½
Rig Service - Circulate	6[illegible]	7[illegible]	1½
Wash - Circulate	7[illegible]	9[illegible]	2½
Drilling	9[illegible]	11[illegible]	2½
Rig Service - Circulate	11[illegible]	12[illegible]	1½
Trip - Circulate	12[illegible]	2[illegible]	1½
Circulate	2[illegible]	3[illegible]	½
	3[illegible]	6[illegible]	

DSW DDL-1 CONSERVATION BOARD COPY

No. 2154 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION Cana Mesa LSD SEC. TWP. RGE. W. DATE August 1-71 1971

DIRECTIONS TO WELL Lot-Loop 12E 24 1 1/2 E — MAILING POINT Normandville — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
9407	5	9405	1½		158										22

	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	10-0	4½	HWC	3-5	[illegible]	2000	110	8	1½			2	975					
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				72	No. 1 PRES. SURF					No. 2 PRES. SURF					1	
VISCOSITY				42	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 7 — DESILTER: Hours Op: 9 U. Flow: 10/ O. Flow: 9 — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: Soda Ash GENERAL: Gel - Caustic Soda

72 gal Cutback — Soda Ash

10 lbs Defoamer

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9505	13	9514	2½		17	1									

	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	10-0	4½	HWC	3-5	[illegible]	3000	150	9	4			2	725	175	2760			
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	72			70	No. 1 PRES. SURF					No. 2 PRES. SURF					1	
VISCOSITY	44			42	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 7 — DESILTER: Hours Op: 9 U. Flow: 6/ O. Flow: — SURVEYS: At Feet 96 / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: 1 Can Lo-Co-7 GENERAL:

Caus — Lo-Co-7 Cellulose

10 lbs Defoamer — 30 Gal Cutback

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
9514	37	9551	5½												

	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	10-0	4½	HWC	3-5	[illegible]	3000	160	60	9½			2	375	175	2900			
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	94	9		7	No. 1 PRES. SURF					No. 2 PRES. SURF					1	
VISCOSITY	42			41	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE 2					LINER SIZE					3	

W.L. F.C. pH. 9 — DESILTER: Hours Op: 9 U. Flow: O. Flow: — SURVEYS: At Feet 4[illegible] / Degrees 1° — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: 45 Gal Cutback GENERAL: Soda Ash — Caustic

50 lbs Emulsifier

10 lbs Defoamer

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT ⇄ — Boiler Operated: Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals. — Fuel Rec'd Today (add) gals. — TOTAL gals. — Fuel on Hand 11.59 p.m. (deduct) gals. — FUEL USED gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUG DOWN A.M. P.M. — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Install Mud Line	12 00	1 00	1
Trip out	1 00	2 00	2
Lay Down Bit	2 00	2 45	¾
Condition Mud	2 45	6 15	3½
Trip in	6 15	7 00	¾
FIRES — DRILLER'S SIGNATURE			
Survey	7 00	7 15	¼
Trip out	7 15	7 30	¼
Rig Service - Trip in	7 30	10 45	3¼
Ream Tight Hole	10 45	11	¼
Trip out	11	11 45	¾
Change Bits	11 45	1	1¼
Trip in	1	1 45	¾
Drilling	1 45	2 45	1
Rig Service	2 45	4 00	1¼
FIRES — DRILLER'S SIGNATURE			
Drilling	4 00	6 00	2
Rig Service	6 00	8 00	1½
Survey	8 00	11 00	3
Trip out	11	12	1
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

GENERAL —

Approved by Operator's Representative

Approved by Toolpusher

DSW DDL-1 CONSERVATION BOARD COPY

No. 2153 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION CANADA MESA — LSD. — SEC. — TWP. — RGE. — W. — DATE Sept 21 — 1971

DIRECTIONS TO WELL [illegible] — MAILING POINT Nor[illegible] — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
		7497			157	4									16

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	20-0	4½	HNR	15-5	451299	—	—											
I																		
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				41	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 9 — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water Temp. — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
		7497													

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T	300	4½	HNR	15-5	451299													
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				41	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	2				LINER SIZE					3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water Temp. — Bbls.

ADDITIVES: KELZAN-20 lbs — GENERAL: RICHFIELD - 15 LBS
Mil-Gel-9 sks
Caustic Soda-15-LBS — Bicarbonate - 15-LBS

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
		7497			157	4	Collars			16"				28	16

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	300	4½	HNR	15-5	451299													

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: Good — O. Flow: 9 — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water Temp. — Bbls.

ADDITIVES: KelZan 20 lbs — GENERAL: Mil-Gel-Natural - 15 LBS
Kwikseal-20 sks — Caustic Soda - 20 LBS
Bicarbonate-15 lbs

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	✓	2		
Blind Rams.	✓	2		

TOTCO RING ON BIT # — Boiler Operated: — Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES / NO)

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME — HRS.

TOTAL CONTRACTOR'S TIME — HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL
	12	12½	½
	12½	[illegible]	8

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-U — LOCATION Cato ... Mal ... — LSD. — SEC. — TWP. — RGE. — W. — DATE Feb ... 1961

DIRECTIONS TO WELL ... — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9473	24	9497	4		157	4									16

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	7[illegible]-D	4[illegible]	[illegible]	7-7	997[illegible]	4500	120	146	9	[illegible]		P						

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS SURF					No. 2 PRESS SURF					1	
VISCOSITY			57		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — °C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS At Feet / Degrees: 7436 / 11° — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL: Fuel

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9497					157	4									16

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	7[illegible]-D	4[illegible]	[illegible]	7[illegible]	[illegible]-[illegible]-4													

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS SURF					No. 2 PRESS SURF					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 2 — U. Flow: — O. Flow: — SURVEYS At Feet / Degrees — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL: Fuel

Locking C[illegible] ... Lock [illegible] case

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
		9497			157	4									16

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]-[illegible]-4													

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS SURF					No. 2 PRESS SURF					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 9 — U. Flow: — O. Flow: — SURVEYS At Feet / Degrees — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL: Fuel

[illegible] ... [illegible] ... [illegible]

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12 [illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	1
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	7 [illegible]	2
[illegible]	[illegible]	7 [illegible]	4
[illegible]	[illegible]	[illegible]	4
T[illegible]	7 [illegible]	2 [illegible]	6 2
[illegible]	2 [illegible]	3 [illegible]	1
[illegible]	[illegible]	[illegible]	4
[illegible] oil T[illegible] ... [illegible]			
[illegible] ... [illegible]			
Lost [illegible]			
Water in D.P. [illegible]			
[illegible]			
[illegible]			

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W ____ DATE ____ 19__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.O.	Serial No's	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Opr. ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet ____ Degrees ____

ADDITIVES: ____ GENERAL: ____ 4 ____ 5 ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.O.	Serial No's	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Opr. ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet ____ Degrees ____

ADDITIVES: ____ GENERAL: ____ 4 ____ 5 ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1-1-6	7	2-73													

No.	Size	Type	Jets/W.O.	Serial No's	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Opr. ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet ____ Degrees ____

ADDITIVES: ____ GENERAL: ____ 4 ____ 5 ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd	
Fire Equip. Chk'd.	

Fuel on Hand 12:01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____ GENERAL ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD. ____

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

HSW DDL-1 CONSERVATION BOARD COPY

No 2000 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W ____ DATE ____

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILER MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op. U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

8 AM TOUR 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op. U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

4 PM TOUR TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op. U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

REMARKS

TIME	START	STOP	INTVL

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT RAN ____ JTS ____ CSG TO ____ KB. USED ____ SAX ____ CEM PLUS ____ % PLUG DOWN ____ A.M. P.M. CEMENT RETURNS - (YES/NO) GENERAL

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD.

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1999 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. — LOCATION — LSD. — SEC. — TWP. — RGE. — W — DATE — 19

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours On: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water Temp. — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours On: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water Temp. — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours On: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water Temp. — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril	✓			
Pipe Rams	✓			
Blind Rams	✓			

TOTCO RING ON BIT # — Boiler Operated: — Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO) — GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	STOP	INTVL

EQUIPMENT CHANGES — TRANSFER # — DRILLER'S SIGNATURE

DAYS FROM SPUD.

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 CONSERVATION BOARD COPY

No. 1998 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. — LOCATION — LSD. — SEC. — TWP. — RGE. — W. — DATE

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1147	23	1170													

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.D.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			45		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L. 7	F.C.		pH. 8		DESILTER: Hours Opr.		U. Flow:		O. Flow:						4	
ADDITIVES					GENERAL										5	
															Weather	Water
															Temp.	Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2267	53	2320													

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.D.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	43			47	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L. 4	F.C.		pH.		DESILTER: Hours Opr.		U. Flow:		O. Flow:						4	
ADDITIVES					GENERAL										5	
															Weather	Water
															Temp.	Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2300	26	2326	5.00												

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.D.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	43			43	MODEL S.P.M.					MODEL S.P.M.	115		115		2	
GEL					LINER SIZE	3				LINER SIZE	6		6		3	
W.L. 7	F.C.		pH.		DESILTER: Hours Opr.		U. Flow:		O. Flow:						4	
ADDITIVES					GENERAL										5	
															Weather	Water
															Temp.	Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME	START	STOP	INTVL.

FIRES — DRILLER'S SIGNATURE

FIRES — DRILLER'S SIGNATURE

FIRES — DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: — Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN JTS CSG

TO KB. USED SAX CEM

PLUS % PLUG DOWN A.M. P.M.

CEMENT RETURNS - (YES/NO)

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW. DDL-1 CONSERVATION BOARD COPY

No. 1997 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W ____ DATE ____ 19__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
4177	22	4199													

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME: START / STOP / INTVL

FIRES ____ DRILLER'S SIGNATURE ____

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4177	22	4199													

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4177	22	4199													

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

GENERAL

EQUIPMENT CHANGES — TRANSFER # ____

DAYS FROM SPUD: ____

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1996 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W ____ DATE ____

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10724															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees 4

ADDITIVES: ____ GENERAL ____ 5

Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10724															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees 4

ADDITIVES: ____ GENERAL ____ 5

Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9125															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees 4

ADDITIVES: ____ GENERAL ____ 5

Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL.

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD. ____ TOTAL COMPANY TIME ____ HRS. ____ TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

HSW DDL-1 CONSERVATION BOARD COPY

No. 1995 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W ____ DATE ____

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

FOUR MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS.					No. 2 PRESS.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op.		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			4	
ADDITIVES					GENERAL										5	
													Weather		Water	
													Temp.		Bbls.	

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS.					No. 2 PRESS.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op.		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			4	
ADDITIVES					GENERAL										5	
													Weather		Water	
													Temp.		Bbls.	

Drilling Line Record	Size	Make	Serial No	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

4 P.M. TO MIDNIGHT

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS.					No. 2 PRESS.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op.		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			4	
ADDITIVES					GENERAL										5	
													Weather		Water	
													Temp.		Bbls.	

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME	START	ATOP	INTVL

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUG DOWN ____ A.M. P.M. PLUS ____ CEMENT RETURNS - (YES/NO) ____

GENERAL ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: ____

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonoc	Ft. Drilled since Sonoc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1994 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO. ... LOCATION ... LSD ... SEC. ... TWP. ... RGE. ... W ... DATE ... 19...

DAILY DRILLING LOG
DIRECTIONS TO WELL ...
MAILING POINT ...
SHIPPING POINT ...
MILES MOVED ...
ROAD CONDITIONS ...

TOUR MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Joint W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ... P.C. ... pH. ... DESILTER: Hours Op: ... U. Flow: ... O. Flow: ... SURVEYS At Feet / Degrees ... 4 ... 5 ...

ADDITIVES: ... GENERAL: ... Weather ... Water ... Temp. ... Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ... DRILLER'S SIGNATURE ...

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7041															

No.	Size	Type	Joint W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ... F.C. ... pH. ... DESILTER: Hours Op: ... U. Flow: ... O. Flow: ... SURVEYS At Feet / Degrees ... 4 ... 5 ...

ADDITIVES: ... GENERAL: ... Weather ... Water ... Temp. ... Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ... DRILLER'S SIGNATURE ...

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Joint W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 a.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ... F.C. ... pH. ... DESILTER: Hours Op: ... U. Flow: ... O. Flow: ... SURVEYS At Feet / Degrees ... 4 ... 5 ...

ADDITIVES: ... GENERAL: ... Weather ... Water ... Temp. ... Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ... DRILLER'S SIGNATURE ...

REMARKS

TIME	START	STOP	INTVL

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams				

TOTCO RING ON BIT # ... Boiler ... Operated: ... Hrs.

Crown-o-matic Chk'd.		Fuel on Hand 12.01 a.m.	gals.
Rig Savers Chk'd.		Fuel Rec'd Today (add)	gals.
Kelly Cock Chk'd.		TOTAL	gals.
Fire Equip. Chk'd.		Fuel on Hand 11.59 p.m. (deduct)	gals.
		FUEL USED	gals.

CASING REPORT: RAN ... JTS ... CSG ... TO ... KB. USED ... SAX ... CEM ... PLUS ... % ... PLUG DOWN ... A.M. P.M. ... CEMENT RETURNS - (YES/NO) ... GENERAL ...

EQUIPMENT CHANGES ... TRANSFER #

DAYS FROM SPUD.

TOTAL COMPANY TIME ... HRS. TOTAL CONTRACTOR'S TIME ... HRS.

Approved by Operator's Representative ...

Approved by Toolpusher ...

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1993 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO. LOCATION LSD SEC. TWP. RGE. W DATE

DAILY DRILLING LOG
DIRECTIONS TO WELL
MAILING POINT
SHIPPING POINT
MILES MOVED
ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR — 8 AM TO 4 PM TOUR — 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water
Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water
Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
					3										20

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water
Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

REMARKS	TIME START	TIME STOP	TIME INTVL.

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams				

TOTCO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN JTS CSG
TO KB. USED SAX CEM
PLUS % PLUG DOWN A.M. P.M.
CEMENT RETURNS - (YES/NO)
GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1992 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. ____ LOCATION ____ L.S.D. ____ SEC. ____ TWP. ____ RGE. ____ W ____ DATE ____ 19__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.C.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

ADDITIVES: ____ GENERAL: ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.C.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

ADDITIVES: ____ GENERAL: ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.C.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

ADDITIVES: ____ GENERAL: ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

REMARKS

TIME	START	STOP	INTVL.

EQUIPMENT CHANGES ____ TRANSFER # ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams				

TOTCO RING ON BIT ± ____ Boiler Operated: ____ Hrs. ____

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT: RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

GENERAL ____

DAYS FROM SPUD: ____

TOTAL COMPANY TIME ____ HRS. ____ TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1991 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG
DIRECTIONS TO WELL _____ RIG NO. _____ LOCATION _____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE _____ 19__
MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets W/C	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	T.G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: ____ GENERAL: ____

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets W/C	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	T.G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: ____ GENERAL: ____

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets W/C	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	T.G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: ____ GENERAL: ____

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT ☐ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

GENERAL: ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: ____

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

Rec Aug 9/71

HSW DDL-1 CONSERVATION BOARD COPY

No 1990 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 44 LOCATION [illegible] LSD. ___ EC ___ TWP. ___ RGE. ___ W. ___ DATE Tues 15/71 19 71

DIRECTIONS TO WELL [illegible] MAILING POINT Wildman Wells SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7902	5	7907	1.0	100	16										0'

B/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1	12 1/4	HTC	3-11	7-2-14	30	60	C	10			1	1000	45	1200			
T																		
S																		

MUD UP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1		No. 1 PRESSURE					No. 2 PRESSURE				1100	1	
VISCOSITY			45	51	MODEL					MODEL				115	2	
GEL					S.P.M.					S.P.M.					3	
					LINER SIZE					LINER SIZE					4	
W.L.	F.C.		pH. 9		DESILTER: Hours Op: 4		U. Flow: 1.6		O. Flow: 1.2		SURVEYS At Feet	Degrees			5	
ADDITIVES:					GENERAL:										Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7907	64	7971	7.5	100	16	1									4'

B/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1	12 1/4	HTC	3-11	7-2-14	30	60	53	7.5			1	1000	45	1200			
T																		
S																		

MUD UP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1			No. 1 PRESSURE					No. 2 PRESSURE			1100		1	
VISCOSITY		45			MODEL			CIRCULATING		MODEL			115		2	
GEL					S.P.M.					S.P.M.					3	
					LINER SIZE					LINER SIZE					4	
W.L.	F.C. 1/32		pH. 9		DESILTER: Hours Op: 5		U. Flow: 7.7		O. Flow: 5		SURVEYS At Feet	Degrees			5	
ADDITIVES:					GENERAL: Drilled TIGHT HOLE										Weather	Water
					CIRCULATING										Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7971	30	8001	5.15	100	16	1									2'

B/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1	12 1/4	HTC	3-11	7-2-14	30	60	53	5.15			1	1000	45	1200			
T																		
S																		

MUD UP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.3		9.3	No. 1 PRESSURE					No. 2 PRESSURE		1000		1100	1	
VISCOSITY		51		50	MODEL			CIRCULATING		MODEL		195		192	2	
GEL					S.P.M.			TANKS		S.P.M.					3	
					LINER SIZE	7"				LINER SIZE	7"				4	
W.L.	F.C. 1/32		pH. 9		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			5	
ADDITIVES:					GENERAL: 1- CEL. FUEL OIL M-22332										Weather	Water
					1- SPRING-LATCH- M-22332										Temp.	Bbls.
					1- PIN-BRAKE- M-22332											

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	✓			
Blind Rams.				

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORTS: RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO)

GENERAL

O RING ON BIT ___ Boiler Operated: ___ Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 HEAD OFFICE PAYROLL COPY

REMARKS	TIME START	TIME STOP	TIME INTVL
RE-LOGGE	2:00	3:30	1:30
TRIP PIPE TO BOTTOM - DRILL T. F. CORE	3:30	4:00	:30
RE-LOGGE	4:00	8:30	4:30
WAIT ON WIRELINE TRUCK	8:30	8:50	:20
TRIP OUT	8:50	12:30	3:40
RECOVER 8' OF CORE #1	12:30	1:00	:30
LAY DOWN CORE BARREL	1:00	1:30	:30
RIG SERVICE	1:30	1:45	:15
DRILLING	1:45	7:00	5:15
FIRES K. Finnson DRILLER'S SIGNATURE			
DRILLING	7:00	11:00	4:00
RE-LOGGE	11:00	11:30	:30
TOTCO SURVEY	11:30	1:00	1:30
CONNECTS	1:00	1:30	:30
DRILLING	1:30	1:45	:15
DRILLING	1:45	4:00	2:15
TARMAC-TOOK TIME			
FIRES R. Finnson DRILLER'S SIGNATURE			
DRILLING	4:00	5:30	1:30
RE-LOGGE	5:30	6:45	1:15
DRILLING	6:45	10:30	3:45
RE-LOGGE	10:30	11:00	:30
TOTCO SURVEY	11:00	11:15	:15
RIG SERVICE	11:15	12:00	:45
FIRES Lou Fiasti DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 10

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

№ 1989 HSW

DATE Tues 15/71 RIG #44

EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT. IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.	Hrs.
Driller T. Finnson	6
Derrick K W Wiebe	2
Motor	
Floor Burton Lachapelle	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs.
Driller L. Finnson	8
Derrick [illegible]	8
Motor [illegible]	
Floor [illegible]	
Floor	
Floor [illegible]	5
Other	

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller Lou Fiasti	8
Derrick Ron C Story	6
Motor	
Floor R. [illegible]	4
Floor Burton Lachapelle	4
Floor	

INJURIES - COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

№ 1989 HSW

PAYROLL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION ENDER-CALLING LAKE M-43 — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE 5 JULY 17 — 19 71

DIRECTIONS TO WELL: LAC LA BICHE 2 SW 1 E 1 S 1 E 1 S 1 E 1 S

SHERWOOD DRILLING (WESTERN)

DRILLING LOG

RIG NO. [illegible] LOCATION [illegible] LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE [illegible] 19[illegible]

DIRECTIONS TO [illegible] MAILING POINT [illegible] SHIPPING POINT [illegible] MILES MOVED ____ ROAD CONDITIONS ____

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
D																	
T																	
S																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow ____ O. Flow: ____ SURVEYS At Feet / Degrees: 4 ____ 5 ____

ADDITIVES: ____ GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
D																	
T																	
S																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.5			No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY		44			MODEL S.P.M.					MODEL S.P.M.		150			2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees: 4 ____ 5 ____

ADDITIVES: ____ GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
5730	6	5736	4.30	New	140	Singles									12

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
D	7										1	700	45	4200			
T																	
S																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY			52		MODEL S.P.M.					MODEL S.P.M.		50		45	2	
GEL			2		LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. 2/32 pH. 9 DESILTER: Hours Op: ____ U. Flow: 7.6 O. Flow: 7.6 SURVEYS At Feet / Degrees: 4 5733 1/4 5 ____

ADDITIVES: 20 SACKS KOLTEX GENERAL: 2 CREWS ON Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	✓			
Blind Rams.				

RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals. Fuel Rec'd Today (odd) ____ gals. TOTAL ____ gals. Fuel on Hand 11.59 p.m. (deduct) ____ gals. FUEL USED ____ gals.

CASING REPORTS: RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M. CEMENT RETURNS - (YES/NO) ____

GENERAL: ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonesc	Ft. Drilled since Sonesc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 HEAD OFFICE PAYROLL COPY

REMARKS	TIME START	TIME STOP	TIME INTV.
Drilling	12:00	2:00	2:00
Rig Repair	2:00	4:15	2:15
Drilling	4:15	7:30	3:15
Rig Repair Swivel	7:30	8:00	.30
FIRES ____ DRILLER'S SIGNATURE [signature]			
Rig Repair	8:00	10:00	2:00
Drilling	10:00	11:00	1:00
Rig Repair	11:00	11:30	.30
Drilling	11:30	12:00	.30
Rig Repair	12:00	1:00	1:00
Drilling	1:00	2:00	1:00
Rig Repair	2:00	2:30	.30
Drilling	2:30	3:00	.30
Rig Repair Swivel Packing - Blew	3:00	4:00	1:00
FIRES ____ DRILLER'S SIGNATURE [signature]			
Trip Out	4:00	4:30	.30
Circulate	4:30	5:00	.30
Drilling	5:00	6:30	1:30
Rig Repair	6:30	7:00	.30
Drilling	7:00	9:15	2:15
Rig Repair	9:15	10:30	1:15
Drilling	10:30	12:00	1:30
Service Unit Repair Travel Time 2 hrs			
FIRES ____ DRILLER'S SIGNATURE [signature]			

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 145

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

DATE [illegible] RIG #[illegible]

EMPLOYER IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT. IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.	Hrs.
Driller [illegible]	2
Derrick R. W. Britton	8
Motor	
Floor Hector Lachapelle	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs.
Driller R. J. [illegible]	8
Derrick [illegible]	
Motor	
Floor [illegible]	8
Floor	
Floor	
Other R. Charron	2

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller Ken Tryon	8
Derrick [illegible]	8
Motor	
Floor R. J. [illegible]	4
Floor Victor Lachapelle	4
Floor	

INJURIES - COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approval

SAFETY TALKS

Given By: ____

Subject: ____

№ 1987 HSW

PAYROLL

№ 1987 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION Provincial Park M-13 LSD. SEC. TWP. RGE. W. DATE. July 15 1971

DIRECTION TO WELL 1 1/2 S-W LONG 124° 37' 15" MAILING POINT NORMAN WELLS SHIPPING POINT MILES MOVED ROAD CONDITIONS

DATE July 15 1971 RIG #11

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6633	29	6662	4.30	59,000	144										39'

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
BITS	12	12¼				2000	110	29	4.30			2	1000	90				
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PLUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9		No. 1 Pres. Sure			850		No. 2 Pres. Sure			1000		1	
VISCOSITY			49		MODEL			7		MODEL			7		2	
GEL					S.P.M.			90		S.P.M.			100		3	
					LINER SIZE			6½"		LINER SIZE			6½"		4	
W.L.	F.C.		pH. 10		DESILTER: Hours Op: 5		U. Flow: 1.6		O. Flow: 7.1						5	
ADDITIVES:					GENERAL: Water, Steel, Diesel Fuel										Weather	Water
					1½ Gel, 1½ Caustic										Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6662	22	6684	4.30	59,000	144	1									1'

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
BITS	12	12¼				2000	110	22	4.30			2	1000	90				
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	PLUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		73		72	No. 1 Pres. Sure			1000		No. 2 Pres. Sure					1	
VISCOSITY		45		47	MODEL			Gardner		MODEL					2	
GEL					S.P.M.			65		S.P.M.					3	
					LINER SIZE					LINER SIZE					4	
W.L.	F.C.	2	pH. 7		DESILTER: Hours Op: 5		U. Flow: 1.7		O. Flow: 2.2		SURVEYS At Feet	Degrees			5	
ADDITIVES: Caustic, Mud Mix					GENERAL: Water, Gel, Fuel, Oil						6662	1½			Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6684	17	6701	4.15	59,000	144	3									20'

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
BITS	12	12¼				2000	110	17	2.30			2	1000	90	2000			
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PLUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		74			No. 1 Pres. Sure					No. 2 Pres. Sure					1	
VISCOSITY		46			MODEL			Gardner		MODEL			190		2	
GEL		2			S.P.M.			65		S.P.M.					3	
					LINER SIZE					LINER SIZE					4	
W.L.	5	F.C.	pH. 9		DESILTER: Hours Op: 5		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			5	
ADDITIVES: Caustic, Kwikleen					GENERAL: Water, Gel, Fuel, Oil										Weather	Water
Lignosulfonate															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams				

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals. Fuel Rec'd Today (add) ____ gals. TOTAL ____ gals. Fuel on Hand 11.59 p.m. (deduct) ____ gals. FUEL USED ____ gals.

CASING REPORT RAN ____ JTS ____ CSG TO ____ KB. USED ____ SAX ____ CEM PLUG DOWN ____ A.M. P.M. PLUS ____ % CEMENT RETURNS - (YES/NO)

GENERAL:

EQUIPMENT CHANGES

TRANSFER #

DAYS FROM SPUD: 120

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILLER'S SIGNATURE

TRIP ____ Bailer Operated: ____ Hrs.

Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonoscope	Ft. Drilled since Sonoscope	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 HEAD OFFICE PAYROLL COPY

REMARKS	TIME START	TIME STOP	TIME HRS.
DRILLING	12.00	1.45	1.45
REC. CORE	1.45	3.00	1.15
DRILLING	3.00	6.00	3.00
REC. CORE	6.00	7.00	1.00
RIG SERVICE	7.00	7.30	.30
FIRES			
DRILLER'S SIGNATURE			
CIRCULATE	7.30	8.30	1.00
DRILLING	8.30	11.30	3.00
REC. CORE	11.30	12.15	.45
TRIP OUT	12.15	1.45	1.30
CIRCULATE	1.45	2.15	.30
DRILLING	2.15	4.45	2.30
RIG SERVICE	4.45	5.00	.15
SLIP LINE UP TOOL TIME 5.00			
FIRES			
DRILLER'S SIGNATURE			
REC. CORE	5.00	6.00	1.00
DRILLING	6.00	7.15	1.15
REC. CORE	7.15	8.45	1.30
DRILLING	8.45	9.45	2.00
REC. CORE RIG SERVICE	9.45	11.00	1.15
DRILLING	11.00	12.00	1.00
FIRES			
DRILLER'S SIGNATURE			

(EMPLOYEE is REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M.	Hrs.
Driller T. Finnegan	4
Derrick R W Bartlett	4
Motor	
Floor Gaston Lachapelle	8
Floor	
Floor	

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M.	Hrs.
Driller R. Lafleur	8
Derrick Wm St Pierre	4
Motor Lorne Clifton	4
Floor R B Gardner	8
Floor	
Floor	
Other	

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT	Hrs.
Driller Hank Fayrath	
Derrick Ron Stubbs	8
Motor	
Floor R Gardner	4
Floor Gaston Lachapelle	4
Floor	

INJURIES - COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

№ 1986 HSW

PAYROLL.

№ 1986 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO. 11-11 LOCATION SANDEX DAVID INN M-42 LSD. SEC. TWP. RGE. W. DATE JULY 14 19 71

DAILY DRILLING LOG

DIRECTIONS TO WELL: INT 67° 53' 59" LONG 126° 39' 15.7" MAILING POINT NORMAN WELLS SHIPPING POINT MILES MOVED ROAD CONDITIONS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
450	29	5579	4.15	71,000	1/1	3									30

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	7D	4¼																
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					1	
VISCOSITY					No. 2 PRES. SURE					2	
GEL					MODEL S.P.M.					3	
					LINER SIZE					4	
W.L.	F.C.	pH.			DESILTER: Hours Op:		U. Flow:		O. Flow:	5	
ADDITIVES:					GENERAL:					Weather / Temp.	Water / Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5579	31	5610	5.45	71,000	1/2	4									30

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	7¾	4½																
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			11.5		No. 1 PRES. SURE					1	
VISCOSITY			45		No. 2 PRES. SURE					2	
GEL					MODEL S.P.M.					3	
					LINER SIZE					4	
W.L.	F.C. 1/32	pH. 9			DESILTER: Hours Op:		U. Flow:		O. Flow:	5	
ADDITIVES:					GENERAL: ½ BBL. FUEL OIL					Weather / Temp.	Water / Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5610	33	5643	4.30	71,000	1/2	3									28

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	7¾																	
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					1	
VISCOSITY					No. 2 PRES. SURE					2	
GEL					MODEL S.P.M.					3	
					LINER SIZE					4	
W.L. 14.5	F.C. 1/32	pH. 9			DESILTER: Hours Op:		U. Flow: 0.2		O. Flow: 7.2	5	
ADDITIVES:					GENERAL:					Weather / Temp.	Water / Bbls.

SURVEYS: At Feet 5605 / Degrees 2½

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydrit				
Pipe Rams.	✓			
Blind Rams.				

Boiler Operated: 4 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT: RAN JTS CSG TO KB. USED SAX CEM PLUG DOWN A.M. P.M. PLUS % CEMENT RETURNS - (YES/NO)

GENERAL

DAYS FROM SPUD: 163

EQUIPMENT CHANGES

TRANSFER #

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

ING ON BIT #

Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
REC. CORE	12.00	12.15	.15
TOTCO SURVEY	12.15	1.30	1.15
CIRCULATE	1.30	2.00	.30
DRILLING	2.00	5.15	3.15
REC. CORE	5.15	6.45	1.30
DRILLING	6.45	7.45	1.00
RIG SERVICE	7.45	8.00	.15
FIRES	F. Finnigan DRILLER'S SIGNATURE		
DRILLING	8.00	10.00	2.00
REC. CORE	10.00	11.30	1.30
DRILLING	11.30	3.15	3.45
REC. CORE	3.15	3.45	.30
RIG SERVICE	3.45	4.00	.15
FIRES	DRILLER'S SIGNATURE		
TOTCO SURVEY	4.00	4.30	.30
CIRCULATE	4.30	4.00	.30
DRILLING	4.00	10.00	4.00
REC. CORE & RIG SERVICE	10.00	11.30	1.30
DRILLING	11.30	12.00	.30
FIRES	Kenji Tsuneta DRILLER'S SIGNATURE		

DATE JULY 14/71 RIG 11-11

EMPLOYER IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT! IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. — Hrs.

Driller F. Finnigan 5
Derrick R W Bartlett 5
Motor
Floor
Floor
Floor

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. — Hrs.

Driller E. Guinnsse 5
Derrick M. St. Germain 5
Motor James Cattain 6
Floor R. Bartlett 8
Floor
Floor
Floor
Other Pierre Isabel 5

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT — Hrs.

Driller Kenji Tsipashi 8
Derrick Ron Jones 8
Motor
Floor R Bartlett 4
Floor Gaston Lachapelle 14
Floor

INJURIES COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

Nº 1985 HSW

PAYROLL

Nº 1985 HSW

HSW DDL-1 HEAD OFFICE PAYROLL COPY

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO. 11-11 LOCATION CANDEX MADDINGLEY M-43 LSD. SEC. TWP. RGE. W. DATE JULY 13 '71

DAILY DRILLING LOG

DIRECTIONS WELL N.W. 63 52 59" LONG. 124° 39' 15.7" MAILING POINT NORMAN WELLS SHIPPING POINT MILES MOVED ROAD CONDITIONS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
511	18	8529	3 Days 5	78.000	141	4									24

B/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1-D	7 7/8	HUGHES		451-H	2000	120	134	43.30			1	1450	195	200			
T																		
S																		

MUD DATA	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.2			No. 1 PRESSURE		450			No. 2 PRESSURE		CIRCULATE			1	
VISCOSITY		46			MODEL S.P.M.		200			MODEL S.P.M.		TANKS			2	
GEL					LINER SIZE 6"					LINER SIZE 5 1/2"					3	
W.L.	F.C.	pH. 9	DESILTER: Hours Op. 5		U. Flow 9.7		O. Flow 0								4	
ADDITIVES: SLB. KELZAN			GENERAL: 2 BBL. FUEL OIL												5	
															Weather Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8529															

B/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD DATA	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.	KEEP FILLED				MODEL S.P.M.	CIRCULATE TANKS				2	
GEL					LINER SIZE 6"					LINER SIZE 5 1/2"					3	
W.L.	F.C.	pH.	DESILTER: Hours Op.		U. Flow:		O. Flow:								4	
ADDITIVES:			GENERAL: 1/2 BBL. FUEL OIL												5	
			1-STABIL-SEN-SK6-2971												Weather Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8529	21	8550	2.45	78,000	142	1									27

B/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1-D	7 7/8	HUGHES	3-12s	451-H	2000	110	21	3.45			1	1250	200	200			
T																		
S																		

MUD DATA	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.2			No. 1 PRESSURE			425		No. 2 PRESSURE	CIRCULATE				1	
VISCOSITY		48			MODEL S.P.M.			200		MODEL S.P.M.	TANKS				2	
GEL					LINER SIZE 6"					LINER SIZE 5 1/2"					3	
W.L. 9.6/32	F.C.	pH. 9	DESILTER: Hours Op. 5		U. Flow 3.5		O. Flow 9.2								4	
ADDITIVES: SOLT. KELZAN			GENERAL: CAUS. CAUSTIC SODA												5	
KELZ. BICHROMATE			10 GAL. KUTWELL												Weather Temp.	Water Bbls.
PRESERVATIVE			1 BBL. FUEL OIL													

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams	✓			

TO RING ON BIT # Boiler Operated: 11 Hrs.

Crown-o-matic Chk'd.		Fuel on Hand 12.01 a.m.	gals.
Rig Savers Chk'd.		Fuel Rec'd Today (add)	gals.
Kelly Cock Chk'd.		TOTAL	gals.
Fire Equip. Chk'd.		Fuel on Hand 11.59 p.m. (deduct)	gals.
		FUEL USED	gals.

CASING REPORT: RAN JTS CSG; TO KB. USED SAX CEM; PLUS % PLUG DOWN A.M. P.M.; CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonesc	Ft. Drilled since Sonesc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 16

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 HEAD OFFICE PAYROLL COPY

№ 1984 HSW

REMARKS

	START	STOP	INTVL
DRILLING	12:00	2:00	2.00
REC. CORE	2:00	3:15	1.15
DRILLING	3:15	4:00	.45
REC. CORE	4:00	5:15	1.15
DRILLING	5:15	5:45	.30
TURBO CIRCULATING TRIP TUBE	5:45	6:30	.45
RIG SERVICE	6:30	6:45	.15
TRIP OUT	6:45	8:00	1.15
TRIP OUT	8:00	9:15	1.15
CHECK CORE HOUSE WITH CHECK B.O.P.	9:15	10:15	1.00
NU. RECOVERED 60' OF CORE			
DISCONTINUED DRILL	10:15	10:45	.30
CIRCULATING	10:45	11:00	.15
TRIP IN	11:00	3:00	4.00
RIG SERVICE	3:00	4:00	1.00
TRIP IN	4:00	7:00	3.00
MAKE UP KELLY	7:00	7:15	.15
CIRCULATE	7:15	7:45	.30
DRILLING	7:45	11:30	3.45
REC. CORE	11:30	11:45	.15
R.G. SERVICE	11:45	12:00	.15

FIRES DRILLER'S SIGNATURE

FIRES DRILLER'S SIGNATURE

DATE JULY 12/71 RIG 11-11

(EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT) IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. Hrs

Driller
Derrick R. W. Bottrell
Motor
Floor
Floor
Floor

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. Hrs

Driller R. Lajoie 8
Derrick D. Chipman 8
Motor James Gatinan 8
Floor
Floor Goodall 5
Floor
Other Kevin Lebel 8

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT Hrs

Driller Kevin Tippett 8
Derrick R. Lajoie 8
Motor
Floor
Floor Walter Lachapelle 8
Floor

INJURIES - COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approval

- SAFETY TALKS -

Given By:

Subject:

№ 1984 HSW

PAYROLL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1-11 — LOCATION CANOE DANA CINNI M-43 — LSD. — SEC. — TWP. — RGE. — W. — DATE JULY 12 — 1971

DIRECTIONS WELL LAT. 63°52'59" LONG. 124°39'15.7" — MAILING POINT NORMAN WELLS — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

DATE JULY 12/71 — RIG #1-11

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
22	27	8449	4.45	58,000	140	2									20

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B 6-D	7 7/8	HWO	12-12-12	251-H	2000	140	174	3.30			1	450	90	2200			
I																	
T																	
S																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.3			9.3	No. 1 PRES. SURE				450	No. 2 PRES. SURE	CIRCULATE				1	
VISCOSITY	48			47	MODEL S.P.M.				90	MODEL S.P.M.	TANKS				2	
GEL					LINER SIZE	2"				LINER SIZE	3½				3	

W.L. 3.5 F.C. 1/32 pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 9.6 — O. Flow: 9.2 — SURVEYS: At Feet 8440, Degrees 1½

ADDITIVES: — GENERAL: 1/2 BBL. FUEL OIL — Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8449	33	8482	5.30	58,000	140	4									11

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2 7/4	HWO	20-SER	251-H	2000	120	207	7.30				1	425	90	2300			
T																	
S																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.2	No. 1 PRES. SURE	450			425	No. 2 PRES. SURE	CIRCULATE				1	
VISCOSITY				46	MODEL S.P.M.	125			200	MODEL S.P.M.	TANKS				2	
GEL					LINER SIZE	2"				LINER SIZE	3½				3	

W.L. F.C. pH 9.5 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow: — SURVEYS: At Feet, Degrees

ADDITIVES: 20 GAL. MUT WELL — GENERAL: 20 LB. SODIUM BICHROMATE — Weather — Temp. — Water — Bbls.

20 LB. KELZAN — 2 BBL. FUEL OIL

20 LB. PRESERVATIVE

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8482	29	8511	5.15	58,000	141	2									19

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2 7/4	HWO	20-SER	251-H	2000	210	236	2.15				1	450	90	2200			
T																	
S																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.2			No. 1 PRES. SURE	450				No. 2 PRES. SURE	CIRCULATE				1	
VISCOSITY		45			MODEL S.P.M.	200				MODEL S.P.M.	TANKS				2	
GEL					LINER SIZE	2"				LINER SIZE	3½				3	

W.L. 4 F.C. 1/32 pH. 8.5 — DESILTER: Hours Op: 8 — U. Flow: 9.4 — O. Flow: 9.1 — SURVEYS: At Feet 8480, Degrees 1¾

ADDITIVES: 5 LB. KELZAN — GENERAL: 4 BBL. FUEL OIL — Weather — Temp. — Water — Bbls.

5 BAL KUT WELL — 1 - WL. RUBBER STRIPPER

7 LB. CAUSTIC

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

RING ON BIT # — Boiler Operated: 4 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals. — Fuel Rec'd Today (odd) gals. — TOTAL gals. — Fuel on Hand 11.59 p.m. (deduct) gals. — FUEL USED gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUG DOWN — A.M. P.M. — PLUS % — CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIP.	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 HEAD OFFICE PAYROLL COPY

REMARKS	TIME START	TIME STOP	INTVL
CIRCULATE	12.00	12.30	.30
DRILLING	12.30	4.00	3.30
REC. CORE	4.00	4.45	.45
TOTCO SURVEY	4.45	5.00	.15
CIRCULATE	5.00	5.30	.30
DRILLING	5.30	7.45	1.15
RIG SERVICE	7.45	8.00	.15
FIRES			
X Trimpop DRILLER'S SIGNATURE			
DRILLING	8.00	10.00	2.00
REC. CORE	10.00	10.45	.45
CIRCULATE	10.45	11.30	.45
DRILLING	11.30	3.00	3.30
REC. CORE	3.00	3.45	.45
RIG SERVICE	3.45	4.00	.15
FIRES 2 1 DRILLER'S SIGNATURE			
TOTCO SURVEY	4.00	5.15	1.15
CIRCULATE	5.15	5.30	.15
DRILLING	5.30	9.00	3.30
REC. CORE RIG SERVICE	9.00	10.15	1.15
DRILLING	10.15	2.00	1.45
FIRES K Tremblay DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 161

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

Nº 1983 HSW

EMPLOYEE IS REQUIRED TO SIGN PERSONALLY AT THE COMPLETION OF EACH SHIFT IF INJURY WAS RECEIVED SIGN AT BOTTOM OF SHEET ONLY.

TOUR (1) MIDNIGHT - 8 A.M. — Hrs.

Driller L. Simpson 7
Derrick R W Battley 7
Motor
Floor
Floor
Floor

INJURIES - COMPLETE BELOW

TOUR (2) 8 A.M. - 4 P.M. — Hrs.

Driller L. A. Simpson 8
Derrick R W Battley 8
Motor
Floor
Floor
Floor
Floor
Other Terry Lebel 8

INJURIES - COMPLETE BELOW

TOUR (3) 4 P.M. - MIDNIGHT — Hrs.

Driller Kenn Tremblay 8
Derrick Roy Fehr 8
Motor
Floor Ron Bourbeau 8
Floor Victor Lafayette 8
Floor

INJURIES - COMPLETE BELOW

Position	Tour	Signature	Hrs.

Toolpushers Approved

- SAFETY TALKS -

Given By:

Subject:

Nº 1983 HSW

PAYROLL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION [illegible] — LAD ___ SEC. ___ TWP ___ RGE. ___ W ___ DATE [illegible] 19[illegible]

DIRECTIONS TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9317	31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	F. Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
[illegible]																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		[illegible]			No. 1 PRES. SURE			[illegible]		No. 2 PRES. SURE			[illegible]		1	
VISCOSITY		[illegible]			MODEL S.P.M.			190		MODEL S.P.M.			[illegible]		2	
GEL					LINER SIZE			[illegible]		LINER SIZE			[illegible]		3	

W.L. ___ F.C. ___ pH. [illegible] — DESILTER: Hours Op: [illegible] — U. Flow: [illegible] — O. Flow: [illegible]

ADDITIVES: [illegible] — GENERAL: [illegible]

SURVEYS: At Feet ___ Degrees ___

4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9318	95	9306	5-00	57,000	139	2									13'

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	F. Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
[illegible]																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.3			9.3	No. 1 PRES. SURE	450			450	No. 2 PRES. SURE					1	
VISCOSITY	49			47	MODEL S.P.M.	140			140	MODEL S.P.M.	[illegible]				2	
GEL					LINER SIZE	6"			6"	LINER SIZE	[illegible]				3	

W.L. ___ F.C. ___ pH. 9 — DESILTER: Hours Op: 5 — U. Flow: [illegible] — O. Flow: [illegible]

ADDITIVES: [illegible] — GENERAL: [illegible]

SURVEYS: At Feet [illegible] Degrees [illegible]

4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9396	26	9422	4-45	59,000	140										33

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	F. Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
[illegible]																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.3			No. 1 PRES. SURE			[illegible]		No. 2 PRES. SURE			[illegible]		1	
VISCOSITY		46			MODEL S.P.M.			140		MODEL S.P.M.			[illegible]		2	
GEL					LINER SIZE			[illegible]		LINER SIZE			[illegible]		3	

W.L. [illegible] F.C. [illegible] pH. 9 — DESILTER: Hours Op: 5 — U. Flow: [illegible] — O. Flow: [illegible]

ADDITIVES: [illegible] — GENERAL: [illegible]

SURVEYS: At Feet [illegible] Degrees [illegible]

4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ — Boiler Operated: 4 Hrs.

Crown-o-matic Chk'd. ___ — Pig Savers Chk'd. ___ — Kelly Cock Chk'd. ___ — Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

[illegible]

FIRES ___ DRILLER'S SIGNATURE ___

TIME

	START	STOP	INTVL
[illegible]			

FIRES ___ DRILLER'S SIGNATURE ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher [signature]

HSW DDL-1 CONSERVATION BOARD COPY

No. 1982 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1-11 — LOCATION [illegible] — LSD. — SEC. — TWP. — RGE. — W — DATE 7 / 6 / 81

DIRECTIONS TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
[illegible]	[illegible]	7240	3.15	[illegible]	[illegible]	[illegible]

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
[illegible]							11

No.	Size	Type	Jets W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
[illegible]																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
7240	[illegible]	[illegible]	[illegible]	[illegible]	115	[illegible]

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
[illegible]							[illegible]

No.	Size	Type	Jets W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
[illegible]																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
[illegible]							24

No.	Size	Type	Jets W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
[illegible]																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME

REMARKS	START	STOP	INTVL
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP ____ RGE. ____ W ____ DATE ____ 19__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 4 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 AM TO 8 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME

	START	ATOP	INTVL
		3.00	3.00

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 44-11 LOCATION _____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE _____ 19__

DIRECTIONS TO WELL _____ MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cu	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydr.				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # _____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT RAN ____ JTS ____ CSG

TO ____ KB. USED ____ SAX ____ CEM

PLUS ____ % PLUG DOWN ____ A.M. P.M.

CEMENT RETURNS - (YES/NO) ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: _____

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative _____

Approved by Toolpusher _____

HSW DDL-1 CONSERVATION BOARD COPY

No 1979 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO 1-11 — LOCATION [illegible] — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE Dec 7 — Vol ___

DIRECTIONS TO WELL [illegible] — MAILING POINT Norman Wells — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8181	27	8208	4.45	50	136	1									7

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.F.	T.B.	T.G.
2	7 7/8	[illegible]	[illegible]	[illegible]	2200	200	1573	2.45			1	1200	55	2200			

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	12			12	No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY	50			47	MODEL S.P.M.					MODEL S.P.M.		120			2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. 7 — DESILTER: Hours Op. 5 — U. Flow 1.3 — O. Flow 1.0

SURVEYS: At Feet 1170 — Degrees 1/2

ADDITIVES: ___ GENERAL 2% Sol-Fuel Oil

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8208	27	8235	4.45	54,000	136	4									15

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.F.	T.B.	T.G.
2	7 7/8	[illegible]	[illegible]	[illegible]	2000	200	1574	2.20			1	1225	55	2200			

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	12			12	No. 1 PRESS. SURE	[illegible]			[illegible]	No. 2 PRESS. SURE					1	
VISCOSITY	45			47	MODEL S.P.M.	115			[illegible]	MODEL S.P.M.					2	
GEL					LINER SIZE	6				LINER SIZE	6½				3	

W.L. 7 — F.C. 2/32 — pH. 7 — DESILTER: Hours Op. 5 — U. Flow 1.3 — O. Flow 1.1

SURVEYS: At Feet 1210 — Degrees 1/2

ADDITIVES: 1% B-CAUSTIC SODA 1% FER-FUR-OIL — GENERAL ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8235	20	8255	3.30	56,000	137										22

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.F.	T.B.	T.G.
2	7 7/8	[illegible]	[illegible]	[illegible]	2000	200	1594	5.50			1	1225	55	2100			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		12			No. 1 PRESS. SURE					1	
VISCOSITY		48			MODEL S.P.M.					2	
GEL					LINER SIZE	6				3	

W.L. ___ F.C. ___ pH. 7 — DESILTER: Hours Op. 8

SURVEYS: At Feet 1243 — Degrees 1/2

ADDITIVES: 6% B-GEL 1% FER-FUR-OIL — GENERAL ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ — Boiler Operated ½ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN ___ JTS ___ CSG. TO ___ KB. USED ___ SAX ___ CEM. PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES / NO) ___ GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
DRILLING	[illegible]	[illegible]	[illegible]
[illegible]	2.45	5.15	2.30
DRILLING	5.15	5.30	.15
[illegible]	5.30	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

FIRES ___ Ken Sievert DRILLER'S SIGNATURE

DRILLING	5.30	6.30	1.00
[illegible]	6.30	7.00	.30
DRILLING	7.00	8.30	1.30
[illegible]	8.30	9.00	.30
[illegible]	9.00	9.30	.30
[illegible]	9.30	10.00	.30
[illegible]	10.00	10.30	.30
[illegible]	10.30	11.00	.30
[illegible]	11.00	11.45	.45
[illegible]	11.45	12.00	.15

FIRES ___ K. J DRILLER'S SIGNATURE

RIG TOTCO SURVEY	1.00	1.30	.30
[illegible]	1.30	2.00	.30
DRILLING	2.00	5.30	3.30
REC. CORE	5.30	6.00	.30
TOTCO SURVEY	6.00	6.30	.30
[illegible]	6.30	7.00	.30
[illegible]	7.00	7.30	.30
[illegible]	7.30	8.00	.30
RIG SERVICE	8.00	8.30	.30

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher [signature]

HSW DDL-1 — CONSERVATION BOARD COPY — No 1978 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 44 LOCATION [illegible] LSD. SEC. TWP. RGE. W. DATE [illegible] 19[illegible]

DIRECTIONS TO WELL [illegible] MAILING POINT Norman Wells SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2093	26	2119	4.45	55	135										24

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	
4																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.4	No. 1 PRESSURE					No. 2 PRESSURE					1.	
VISCOSITY				48	MODEL					MODEL					2.	
GEL					S.P.M.					S.P.M.					3.	
					LINER SIZE					LINER SIZE						

W.L. F.C. pH. 9 DESILTER: Hours Op: 9 U. Flow: 1.2 O. Flow: 2.1

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL: 2 Sol. Fuel Mix — 2093 1/2

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2119	26	2145	4.00	60	135	3									24

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	
4																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.4			9.4	No. 1 PRESSURE					No. 2 PRESSURE					1.	
VISCOSITY	48			47	MODEL					MODEL					2.	
GEL					S.P.M.					S.P.M.					3.	
					LINER SIZE					LINER SIZE						

W.L. F.C. pH. 9 DESILTER: Hours Op: 8 U. Flow: 1.4 O. Flow: 1.1

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL: 2 Sol. Fuel Mix — 2119 1/2

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2145	22	2167	4.00	Circ	135										24

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	
4																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.4		No. 1 PRESSURE					No. 2 PRESSURE					1.	
VISCOSITY			47		MODEL					MODEL					2.	
GEL					S.P.M.					S.P.M.					3.	
					LINER SIZE					LINER SIZE						

W.L. F.C. pH. 9 DESILTER: Hours Op: 6 U. Flow: 1.4 O. Flow: 1.3

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL: Sol. Fuel Mix

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL.
DRILLING	12:00	1:00	1.00
SERVICE	1:00	1:15	.15
TRIP	1:15	3:00	1.45
DRILLING	3:00	3:30	.15
[illegible]	3:30		
[illegible]		4:00	
SERVICE	4:00	5:00	1.0
[illegible]	5:00		

FIRES — DRILLER'S SIGNATURE

SERVICE	12:00	12:45	.45
DRILLING	12:45	1:00	.15
SERVICE	1:00	1:30	.30
DRILLING	1:30	4:00	2.30

FIRES — DRILLER'S SIGNATURE

DRILLING	4:00	4:15	.15
SERVICE	4:15	4:45	.30
TRIP SURVEY	4:45	5:00	.15
CIRCULATE	5:00	5:30	.30
DRILLING	5:30	10:15	4.45
SERVICE	10:15	10:45	.30
TRIP SURVEY	10:45	11:00	.15

FIRES — DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # Boiler Operated: 6 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT: RAN JTS CSG; TO KB. USED SAX CEM; PLUS % PLUG DOWN A.M. P.M.; CEMENT RETURNS - (YES/NO)

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. / TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1977 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 4-11 — LOCATION [illegible] — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible]

DIRECTIONS TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5061	20	5081	2-45	[illegible]	[illegible]	[illegible]									

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]																
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.2				No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	50				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. 9 — DESILTER: Hours Op. ___ U. Flow: 7-3 O. Flow: 7-3 — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: ___ GENERAL: [illegible]

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5081															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ — DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5081	12	5093	1-45	65,000	134	1									

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]										5	400	110	2100			
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.4	No. 1 PRES. SURE				400	No. 2 PRES. SURE					1	
VISCOSITY				50	MODEL S.P.M.				110	MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. 6 F.C. 12 pH. 9 — DESILTER: Hours Op: 3 U. Flow: 7.4 O. Flow: 7.4 — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: ___ GENERAL: Gas Flare 3/4"

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril	✓			
Pipe Rams	✓			
Blind Rams	✓			

TOTCO RING ON BIT # ___ Boiler Operated: 4 Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ✓

Fuel on Hand 12,01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___ GENERAL: ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
CIRCULATE	2:00	2:30	0:30
DRILLING	2:30	4	1:30
[illegible]	4:00	4:15	0:15
T. O. H. [illegible]	4:15	6:45	2:30
[illegible]	6:45	7:30	0:45
FIRES ___ DRILLER'S SIGNATURE [illegible]			
[illegible]	7:00	8:00	1:00
T.I.H.	8:00	11:00	3:00
[illegible]	11:00	11:30	0:30
T.O.H.	11:30	1:30	2:00
[illegible]	1:30	2:30	1:00
[illegible]	2:30	3:00	0:30
T.I.H.	3:00	4:00	1:00
[illegible]	4:00	4:30	0:30
[illegible]	4:30	5:00	0:30
RIG SERVICE	5:00	6:00	1:00
FIRES ___ DRILLER'S SIGNATURE [illegible]			

EQUIPMENT CHANGES — TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

HSW DDL-1 CONSERVATION BOARD COPY

№ 1976 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 19__

DAILY DRILLING LOG
DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

12 MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8221															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1																	
2																	
3																	
4																	
5																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURF.					No. 2 PRESS. SURF.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. 9 DESILTER: Hours Opr. 5 U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees 4 ____ 5 ____

ADDITIVES: ____ GENERAL: ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8221	16	8237			133										0'

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1																	
2																	
3																	
4																	
5																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.3		No. 1 PRESS. SURF.					No. 2 PRESS. SURF.					1	
VISCOSITY			40		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. 11 pH. 9 DESILTER: Hours Opr. 5 U. Flow: 4.5 O. Flow: 4.3 SURVEYS At Feet / Degrees 4 ____ 5 ____

ADDITIVES: ____ GENERAL: ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8237	26	8263			134										

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1																	
2																	
3																	
4																	
5																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9			No. 1 PRESSURE					No. 2 PRESS.					1	
VISCOSITY		51			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. 9 DESILTER: Hours Opr. ____ U. Flow: 0.4 O. Flow: 9.4 SURVEYS At Feet 8249 / Degrees 26 4 ____ 5 ____

ADDITIVES: Gel Caustic Soda GENERAL: ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

REMARKS

TIME	START	STOP	INTVL
Drilling	4:00	4:30	0.5
Service	4:30	5:15	0.75
Trip	5:15	7:45	2.5
Drilling	7:45	9:45	2.0
Service	9:45	10:30	0.75
Trip	10:30	11:45	1.25
Service	11:45	12:15	0.5

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

RING ON BIT # ____ Boiler Operated: 11 Hrs.

Crown-o-matic Chk'd. ____ Kig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equipment Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals. Fuel Rec'd Today (add) ____ gals. TOTAL ____ gals. Fuel on Hand 11.59 p.m. (deduct) ____ gals. FUEL USED ____ gals.

CASING REPORT RAN ____ JTS ____ CSG TO ____ KB. USED ____ SAX ____ CEM PLUG DOWN ____ A.M. P.M. PLUS ____ % CEMENT RETURNS - (YES/NO)

GENERAL —

EQUIPMENT CHANGES 0 TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1825 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. — LOCATION — LSD. — SEC. — TWP. — RGE. — W. — DATE — 19

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

OUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8005	6	8021													

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 8 — U. Flow: — O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: — GENERAL:

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8021															

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 4 — U. Flow: — O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: — GENERAL:

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 4 — U. Flow: — O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: — GENERAL:

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

REMARKS	TIME START	TIME STOP	TIME INTVL.
		3:30	
		20	

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

TO RING ON BIT # — Boiler Operated: Hrs.

Fuel on Hand 12.01 a.m. gals. — Fuel Rec'd Today (add) gals. — TOTAL gals. — Fuel on Hand 11.59 p.m. (deduct) gals. — FUEL USED gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M. — CEMENT RETURNS - (YES/NO) — GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 — CONSERVATION BOARD COPY

No 1824 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. — LOCATION — LSD. — SEC. — TWP. — RGE. — W. — DATE —

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

OUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
T																		
B																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M. LINER SIZE					MODEL S.P.M. LINER SIZE					2	
GEL															3	
W.L.	F.C.		pH.		DESILTER: Hours Op.		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

FIRES — DRILLER'S SIGNATURE

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
T																		
B																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M. LINER SIZE					MODEL S.P.M. LINER SIZE					2	
GEL															3	
W.L.	F.C.		pH.		DESILTER: Hours Op.		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

FIRES — DRILLER'S SIGNATURE

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
T																		
B																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M. LINER SIZE					MODEL S.P.M. LINER SIZE					2	
GEL															3	
W.L.	F.C.		pH.		DESILTER: Hours Op.		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

FIRES — DRILLER'S SIGNATURE

REMARKS	TIME START	TIME STOP	TIME INTVL.

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 19__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

OUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

ADDITIVES: ____ GENERAL: ____

Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

ADDITIVES: ____ GENERAL: ____

Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

ADDITIVES: ____ GENERAL: ____

Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME	START	STOP	INTVL

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

"O" RING ON BIT # ____ Boiler Operated ____ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12:01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____ GENERAL ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: ____

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonoscanned	Ft. Drilled since Sonoscanned	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1822 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. [illegible] LOCATION [illegible] L.D. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 19[illegible]

DIRECTIONS TO WELL [illegible] — SAILING POINT [illegible] — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

0 A.M. TO 4 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
7269	[illegible]	7359	5:30	[illegible]	129	3

DRILL COLLARS: No. ___ O.D. ___ I.D. ___ Length ___ Air Wt. ___ Sub. Wt. ___ C.B. Ft. ___ Ft. up on Kelly ___

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]																
2																	
3																	

MUD	12 mn	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. [illegible] pH. 9 — DESILTER: Hours Op. 5 — U. Flow: 4.1 — O. Flow: 1.0 — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: [illegible] — GENERAL: [illegible]

Weather ___ Temp. ___ — Water ___ Bbls

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE [illegible]

4 A.M. TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
7269	24	7518	5:15	[illegible]	120	4

DRILL COLLARS: No. ___ O.D. ___ I.D. ___ Length ___ Air Wt. ___ Sub. Wt. ___ C.B. Ft. ___ Ft. up on Kelly ___

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]																
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 a.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 a.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	[illegible]				No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	[illegible]				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. 9 — DESILTER: Hours Op. [illegible] — U. Flow: [illegible] — O. Flow: [illegible] — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: [illegible] — GENERAL: [illegible]

Weather ___ Temp. ___ — Water ___ Bbls

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE [illegible]

8 A.M. TO 12 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
7518	30	7548	5:15	[illegible]	120	1

DRILL COLLARS: No. ___ O.D. ___ I.D. ___ Length ___ Air Wt. ___ Sub. Wt. ___ C.B. Ft. ___ Ft. up on Kelly 7

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]																
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.2			No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY		46			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. [illegible] pH. 9 — DESILTER: Hours Op. 8 — U. Flow: 1.7 — O. Flow: 1.0 — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ___ — GENERAL: [illegible]

Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE [illegible]

12 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
7548	30	7578	5:15	[illegible]	120	1

DRILL COLLARS: No. ___ O.D. ___ I.D. ___ Length ___ Air Wt. ___ Sub. Wt. ___ C.B. Ft. ___ Ft. up on Kelly 7

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]																
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ — DESILTER: Hours Op. ___ — U. Flow: ___ — O. Flow: ___ — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ___ — GENERAL: ___

Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

REMARKS

TIME	START	STOP	INTVL
	[illegible]		
	1:00	2:30	5:00
	7:30	8:00	1:00

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANEY (ANADARKO) MW3 — LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ — DATE June 4 19 84

DIRECTIONS TO WELL 27, 6 3 : 52 59 Lincoln 37 1/2 7 — MAILING POINT NORCAN WELLS — SHIPPING POINT ____ — MILES MOVED ____ — ROAD CONDITIONS ____

FOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7239	24'	7263	6:30	85000	12 9	1									18

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	12¼	HTC	11-11-11	7094	7000	110	26	6:30			2	450	110	2000			
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				49	MODEL	CIRCO	KANS			MODEL					2	
GEL					H.P.					H.P.					3	
					LINER SIZE	7"				LINER SIZE						

W.L. 2-1 F.C. 1/32 pH. 9 DESILTER: Hours Op: 5 U. Flow: 9.1 O. Flow: 9.1

ADDITIVES: GENERAL: Fibrecel-150 Fibrecel-300

SURVEYS: At Feet / Degrees

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7263	—	7277	1:30	—	—	2									—

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	12¼	HTC	11-11-11	7094	7000	110	14	1:30									
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.2			No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY		49			MODEL					MODEL					2	
GEL					H.P.					H.P.					3	
					LINER SIZE					LINER SIZE						

W.L. ____ F.C. ____ pH. 9 DESILTER: Hours Op: 5 U. Flow: ____ O. Flow: ____

ADDITIVES: GENERAL: ____

SURVEYS: At Feet / Degrees

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7277															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL					MODEL					2	
GEL					H.P.					H.P.					3	
					LINER SIZE					LINER SIZE						

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: 5 U. Flow: ____ O. Flow: ____

ADDITIVES: GENERAL: Fibrecel-150 Fibrecel-300 1-Stackpipe -SKB-11994

SURVEYS: At Feet / Degrees

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals. Fuel Rec'd Today (add) ____ gals. TOTAL ____ gals. Fuel on Hand 11.59 p.m. (deduct) ____ gals. FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sanosc	Ft. Drilled since Sanosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL: ____

DAYS FROM SPUD: ____

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative: ____

Approved by Toolpusher: ____

REMARKS	TIME START	TIME STOP	TIME INTVL.
DRILLING	12:00	4 a.m.	4 hrs.
REC CORE	4 a.m.	6:00	2 hrs.
DRILLING	6:00	7 a.m.	1 hr.
TIH + SERVICE	7 a.m.	5:00	11 hrs.

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

EQUIPMENT CHANGES ____ TRANSFER # ____

HSW DDL-1 CONSERVATION BOARD COPY

No 1820 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION CANDELARIA STATE M-43 — LSD. — SEC. — TWP. — RGE. — W. — DATE JUNE 5/71 — 19 71

DIRECTIONS TO WELL S. 62°-2 59° 100 12W 1 S.T. — HAILING POINT NORMAN WELLS — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
7675	24	7699	6:30	45000	125	

DRILL COLLARS: No. — O.D. — I.D. — Length — Air Wt. — Sub. Wt. — C.B. Ft. — Ft. up on Kelly: 5

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.m.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	6-16	7994	1000	220	310	7¾			1	425	100	1900			
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	2 mn.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 Press. Susc.			425	No. 2 Press. Susc.					1	
VISCOSITY				49	Model			225	Model			TANKS		2	
GEL					S.P.M.				S.P.M.					3	
W.L. 3cm	F.C. 1/32		pH. 9		Liner Size			2"	Liner Size	1½				4	
ADDITIVES					DESILTER: Hours Op. 5			U. Flow: 9.2	O. Flow: 9.1					5	
					GENERAL									Weather	Water
														Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
7699	27	7726	6:45	45000	125	2

DRILL COLLARS: No. — O.D. — I.D. — Length — Air Wt. — Sub. Wt. — C.B. Ft. — Ft. up on Kelly:

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.m.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	6-16	7994	1000	220	329	9¾			1	425	100	1900			
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.2				No. 1 Press. Susc.	425				No. 2 Press. Susc.					1	
VISCOSITY	49				Model					Model			TANKS		2	
GEL					S.P.M.	100				S.P.M.					3	
W.L. 3cm	F.C. 1/32		pH. 9		Liner Size	2"				Liner Size	1½				4	
ADDITIVES					DESILTER: Hours Op. 5			U. Flow: 9.2	O. Flow: 9.2						5	
					GENERAL										Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
7726	13	7739	2:15	45000	125	1

DRILL COLLARS: No. — O.D. — I.D. — Length — Air Wt. — Sub. Wt. — C.B. Ft. — Ft. up on Kelly: 18'

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.m.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	6-16	7994	1000	220	338	9¾			1	425	100	1900			
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.2		No. 1 Press. Susc.					No. 2 Press. Susc.					1	
VISCOSITY			48		Model			TANKS		Model					2	
GEL					S.P.M.					S.P.M.					3	
W.L.	F.C.		pH. 9		Liner Size			2"		Liner Size	1½				4	
ADDITIVES					DESILTER: Hours Op. 8			U. Flow: 9.2	O. Flow: 9.1						5	
					GENERAL										Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet 7721 — Degrees 27

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. — gals. — Fuel Rec'd Today (add) — gals. — TOTAL — gals. — Fuel on Hand 11.59 p.m. (deduct) — gals. — FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: — TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative — Approved by Toolpusher

GENERAL —

CO RING ON BIT # — Boiler Operated: — Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE #4

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Drilling	12:30	4:30	4:00
Rec. Code	4:30	5:00	0:30
Drilling	5:00	12:30	7:30

Drilling 4 std 120' Tite
Rec. Code Tank 4 hrs.

FIRES — DRILLER'S SIGNATURE

REMARKS	TIME START	TIME STOP	TIME INTVL
Drilling	7:30	11:30	4:00
Rec. Code	11:30	12:00	0:30
Drilling	12:00	4:00	4:00

FIRES — DRILLER'S SIGNATURE

REMARKS	TIME START	TIME STOP	TIME INTVL
Drilling	4:00	5:45	1:45
Rec. Code	5:45	6:00	0:15
Total Survey	6:00	7:45	1:45
Circulate	7:45	8:15	0:30
Drilling	8:15	9:30	1:15
Rec. Code	9:30	10:00	0:30
Conditioning Mud	10:00	11:00	1:00
Automatic Tool Pulling	11:00	11:30	0:30
Rig Service	11:30	11:45	0:15
Drilling	11:45	12:00	0:15

FIRES — DRILLER'S SIGNATURE

HSW DDL-1 — CONSERVATION BOARD COPY — No. 1819 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION — LSD. — SEC. — TWP. — RGE. — W. — DATE — 19—

DIRECTIONS TO WELL — MAILING POINT Pioneer Wells — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7605	28	7633	6	45000	12	7									

Pump No.	Liner Size	Type	Jets/F.W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9	No. 1 PRESSURE				450	No. 2 PRESSURE					1	
VISCOSITY				50	MODEL				70	MODEL					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.		F.C.		pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet — Degrees

REMARKS: L. WEBSTER & RILEY TOOL PUSH

FIRES — DRILLER'S SIGNATURE

TIME: START — STOP — INTVL

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7633	18	7651	5:30	45-50	12	3									

Pump No.	Liner Size	Type	Jets/F.W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9			No. 1 PRESSURE		450			No. 2 PRESSURE					1	
VISCOSITY		46			MODEL		140			MODEL					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.		F.C. 1/32		pH. 9	DESILTER: Hours Op:	4	U. Flow:	9-9	O. Flow:	9-1					4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet 7633 — Degrees 2

FIRES — DRILLER'S SIGNATURE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7651	20	7671	:30	45-50	12	4		3	STR						29

Pump No.	Liner Size	Type	Jets/F.W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				49	MODEL					MODEL					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.		F.C.		pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet 7671 — Degrees 26

FIRES — DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydrils				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT #

Boiler Operated: 4 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12:01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO) — GENERAL

EQUIPMENT CHANGES — TRANSFER # — DRILLER'S SIGNATURE

DAYS FROM SPUD: 14½

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1818 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — NIC NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 196__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8AM TOUR 8AM TO 4PM TOUR 4PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

	No.	Size	Type	Joh/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op.		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Joh/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op.		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

	No.	Size	Type	Joh/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op.		U. Flow:		O. Flow:		SURVEY At Feet	Degrees			4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT #		Boiler Operated:	Hrs.
Crown-o-matic Chk'd.		Rig Savers Chk'd.	
Kelly Cock Chk'd.		Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

GENERAL ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 145

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

HSW DDL-1 CONSERVATION BOARD COPY

No 1817 HSW

...ITH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-A — LOCATION [illegible] — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 19__

DIRECTIONS TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
7475	15	7490	5½	140	124	2		2	6¼	2¼				27	3

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
B	12¼	J	HW4	10-10-10	151-2978	1-15	250	163	5½	—		2	475	275	15000			
1																		
2																		

M.U.D.	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9		9+	9+	No. 1 PRES. SURE					No. 2 PRES. SURE				1400	1	
VISCOSITY	46		51	50	MODEL S.P.M.					MODEL S.P.M.				125	2	
GEL					LINER SIZE	6½				LINER SIZE	7½				3	
W.L.	F.C. 1/32		pH. 9		DESILTER: Hours Op: 8		U. Flow: 0		O. Flow: 0						4	
ADDITIVES:			GENERAL:												5	
Starch 16 Drispac 25 Antisol 15gl															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

REMARKS

TIME	START	STOP	INT.
	12:00	1:00	1
	1:00	1:30	½
	1:30	2:30	1
	2:30	4:00	1½
	4:00	5:00	1

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION [illegible] — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 19__

DIRECTIONS TO WELL [illegible] — MAILING POINT Nisku Alta — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR — 8 AM TO 4 PM TOUR — 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7075	15	7090	5½	47000	124	2		2	6¼	[illegible]				27	3

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	20	161-7978	1-1750	240	103	24½	—	—	1	475	115	1500			
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9		9+	9+	No. 1 PRES. SURF.	[illegible]				No. 2 PRES. SURF.					1	
VISCOSITY	46		51	50	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	6½				LINER SIZE	6½				3	

W.L. ___ F.C. 1/32 pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 10 — O. Flow: 11

SURVEYS: At Feet 447 — Degrees 1½

ADDITIVES: [illegible] — GENERAL: 9

Lost 10 Dumped 25 — Returned 15 bbls

Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ — DRILLER'S SIGNATURE [illegible]

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7090	20	7510	6½	47000	124	2		2	6¼	[illegible]				27	7

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	20	161-7978	40-45	240	125	5½	—	—	1	475	115	1400			
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9+		9+		No. 1 PRES. SURF.	[illegible]				No. 2 PRES. SURF.					1	
VISCOSITY	52		52		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE	6½				3	

W.L. ___ F.C. 1/32 pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 9 — O. Flow: 9

SURVEYS: At Feet ___ — Degrees ___

ADDITIVES: [illegible] — GENERAL: ___

Returned 15

Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ — DRILLER'S SIGNATURE ___

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7510	21	7531	5½	47000	125	1		2	6¼	[illegible]				27	10

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	20	161-7978	40-45	240	146	29½	—	—	1	475	120	1500			
2											2	400	210	1500			
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9+		9+	No. 1 PRES. SURF.	[illegible]				No. 2 PRES. SURF.					1	
VISCOSITY		58		57	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. 1/1 pH. 9 — DESILTER: Hours Op: 7 — U. Flow: 96 — O. Flow: 9

SURVEYS: At Feet 9538 — Degrees 6

ADDITIVES: [illegible] — GENERAL: ___

Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ — DRILLER'S SIGNATURE ___

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ — Bailer Operated: ___ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN ___ JTS ___ CSG

TO ___ KB. USED ___ SAX ___ CEM

PLUS ___ % — PLUG DOWN ___ A.M. P.M.

CEMENT RETURNS - (YES/NO) ___

GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

EQUIPMENT CHANGES — TRANSFER # ___

DAYS FROM SPUD: 1414

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

REMARKS	TIME START	TIME STOP	TIME INT.
[illegible]	12[illegible]	1[illegible]	1
[illegible]	12[illegible]	1[illegible]	[illegible]
[illegible]	1[illegible]	[illegible]	1
[illegible]	[illegible]	[illegible]	1
[illegible]	4[illegible]	4[illegible]	4
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

HSW DDL-1 CONSERVATION BOARD COPY

№ 19[illegible] HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. — LOCATION — LSD. — SEC. — TWP. — RGE. — W. — DATE — 196
DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

12 MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op. U. Flow O. Flow

SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton-Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op. U. Flow O. Flow

SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton-Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op. U. Flow O. Flow

SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton-Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

REMARKS	TIME START	TIME STOP	TIME INTV

FIRES — DRILLER'S SIGNATURE

FIRES — DRILLER'S SIGNATURE

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD — TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

No. 18991 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG
DIRECTIONS TO WELL

RIG NO. LOCATION LSD. SEC. TWP. RGE. W. DATE 19

MAILING POINT SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather: Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

AM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather: Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT #

Boiler Operated: Hrs.

Crown-o-matic Chk'd.
Rig Savers Chk'd.
Kelly Cock Chk'd.
Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT RAN JTS CSG
TO KB. USED SAX CEM
PLUS % PLUG DOWN A.M. P.M.
CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTV

FIRES DRILLER'S SIGNATURE

FIRES DRILLER'S SIGNATURE

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

GENERAL

Approved by Operator's Representative

Approved by Toolpusher

Tool App

Give

Sub

RSW DDL-1 CONSERVATION BOARD COPY

No. 1898 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG
DIRECTIONS TO WELL

RIG NO. 1 LOCATION LSD. SEC. TWP. RGE. W. DATE 19

MAILING POINT SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	Bg.	O.
1																		
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES GENERAL

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	Bg.	O.
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES GENERAL

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	Bg.	O.
1																		
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES GENERAL

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd. Rig Savers Chk'd. Kelly Cock Chk'd. Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT RAN JTS CSG
TO KB. USED SAX CEM
PLUS % PLUG DOWN A.M. P.M.
CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME START	STOP	INTVL

FIRES DRILLER'S SIGNATURE

FIRES DRILLER'S SIGNATURE

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW 0001 CONSERVATION BOARD COPY

No. 1897 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. — LOCATION — LSD — SEC. — TWP. — RGE. — W. — DATE — 19

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
207	37	244	6		120	2								27	9

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
BIT																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
244	28	7272	-		121									27	15

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
BIT																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7272															

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
BIT																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. / Rig Savers Chk'd. / Kelly Cock Chk'd. / Fire Equip. Chk'd.

TOTCO RING ON BIT # — Boiler Operated: Hrs.

Fuel on Hand 12:01 a.m. gals. / Fuel Rec'd Today (add) gals. / TOTAL gals. / Fuel on Hand 11:59 p.m. (deduct) gals. / FUEL USED gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M. — CEMENT RETURNS (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonose	Ft. Drilled since Sonose	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

REMARKS

TIME	START	STOP	INTVL
	12 00	12 15	1/4
	12 15	12 45	1/2
	12 45	00	1/4
	00	1 15	1 1/4
	1 15	2 00	3/4
	2 00	2 45	3/4
	2 45	3 15	1/2
	3 15	4 00	3/4
	4 00	7 15	1 1/4
	7 15	7 45	1/2
	7 45	10 00	2 1/4
	10 00	11 00	1
	11 00	12 00	1

FIRES — DRILLER'S SIGNATURE

FIRES — DRILLER'S SIGNATURE

HSW DDL-1 CONSERVATION BOARD COPY

No. 1896 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG — LOCATION — LSD. — SEC. — TWP. — RGE. — W. — DATE — 19

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Diam.	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	F.	C.
1																		
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL

Weather: Water: Temp.: Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut: Feet	Slip or Cut: Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Diam.	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	F.	C.
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL

Weather: Water: Temp.: Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut: Feet	Slip or Cut: Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7	24	7207	5½		120		2					77	22	

	No.	Diam.	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	F.	C.
1																		
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL

Weather: Water: Temp.: Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut: Feet	Slip or Cut: Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME START	STOP.	INTVL

FIRES — DRILLER'S SIGNATURE

FIRES — DRILLER'S SIGNATURE

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 134

GENERAL

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 CONSERVATION BOARD COPY

No 1895 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

DIRECTIONS TO WELL _____ RIG NO. _____ LOCATION _____ LSD. _____ SEC. _____ TWP. _____ RGE. _____ W. _____ DATE _____ 19__

MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Use	T.	B.	Gal.
1																		
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY					MODEL S.P.M. LINER SIZE					MODEL S.P.M. LINER SIZE					2	
GEL															3	
W.L.	F.C.	pH	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE _____

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Use	T.	B.	Gal.
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY					MODEL S.P.M. LINER SIZE					MODEL S.P.M. LINER SIZE					2	
GEL															3	
W.L.	F.C.	pH 8	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE _____

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7	24	7207	5¼		120			4½						27	22

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Use	T.	B.	Gal.
1							120											
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY		9	9		MODEL S.P.M. LINER SIZE					MODEL S.P.M. LINER SIZE					2	
GEL		5	5												3	
W.L.	F.C.	pH 9	DESILTER: Hours Op: 8		U. Flow: 96		O. Flow: 44		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE _____

REMARKS

TIME

	START	STOP	INTVL

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # _____ Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. _____ Rig Savers Chk'd. _____ Kelly Cock Chk'd. _____ Fire Equip. Chk'd. _____

Fuel on Hand 12.01 a.m. _____ gals.
Fuel Rec'd Today (add') _____ gals.
TOTAL _____ gals.
Fuel on Hand 11.59 p.m. (deduct) _____ gals.
FUEL USED _____ gals.

CEMENT RETURNS - (YES/NO) _____

CASING REPORT RAN _____ JTS _____ CSG _____ TO _____ JTS. USED _____ SAX _____ CEM _____ PLUG DOWN _____ A.M. P.M.

EQUIPMENT CHANGES _____ TRANSFER # _____

DRILLER'S SIGNATURE _____

DAYS FROM SPUD: 174

TOTAL COMPANY TIME _____ HRS.

TOTAL CONTRACTOR'S TIME _____ HRS.

Approved by Operator's Representative _____

Approved by Toolpusher _____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1895 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. — LOCATION — LSD — SEC. — TWP. — RGE. — W. — DATE — 19

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	P.C.	pH			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather / Temp.	Water Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME	START	STOP.	INTVL

FIRES — DRILLER'S SIGNATURE

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather / Temp.	Water Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather / Temp.	Water Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO) — GENERAL

EQUIPMENT CHANGES — TRANSFER # — DRILLER'S SIGNATURE

TOTCO RING ON BIT # — Boiler Operated: — Hrs.

DAYS FROM SPUD: 174

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 — CONSERVATION BOARD COPY — No. 1895 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG No. ___ LOCATION ___ LND. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE June 19 ___ 1971

DIRECTIONS TO WELL ___ SAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M. TOUR 8 A.M. TO 4 P.M. TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7011	73	7101	4½	117										27	

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
3																	
4																	
5																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet ___ Degrees ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7101	22	7124	4½	118	3									27	27

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
3																	
4																	
5																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.1	9.1		No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	40	42	41		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. 9 DESILTER: Hours Op: 9 U. Flow: 9 O. Flow: 9½

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet ___ Degrees ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7124	3	7128	2	119	3									27	27

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
3																	
4																	
5																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet 7122 Degrees ½

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				
Kelly Cock				
Floor Valve				

Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

*CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M.

CEMENT RETURNS - (YES/NO)

DAYS FROM SPUD: 19

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	TIME START	TIME STOP	INTVL
	12		

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION [illegible] — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE June 11 — 1961

DIRECTIONS TO WELL [illegible] — MAILING POINT Wainwright — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR: 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6796	31	7027	5	44-50	116	1	4½"							27	24

	No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	[illegible]																	
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.2	9.2	9.2	No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY		49	47	47	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. 8 — DESILTER: Hours Op: 8 — U. Flow: 9.5 — O. Flow: 9.7

SURVEYS: At Feet 6940 — Degrees 1°

ADDITIVES: ___ GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7027	41	7068	4½	44-50	117	7	4½"							27	20

	No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	[illegible]																	
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.2	9.2	9.2	9.1	No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY	49	49	49	49	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 9 — O. Flow: 9.1

SURVEYS: At Feet ___ — Degrees ___

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7068	41	7109	4½	44-50	117	7	4½"							27	20

	No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	[illegible]																	
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.2	9.2	9.2	No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY	50	49	49	50	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. 9 — DESILTER: Hours Op: 8 — U. Flow: ___ — O. Flow: ___

SURVEYS: At Feet 7040 — Degrees 1½°

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. ___ — Rig Savers Chk'd. ___ — Kelly Cock Chk'd. ___ — Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.

Fuel Rec'd Today (add) ___ gals.

TOTAL ___ gals.

Fuel on Hand 11.59 p.m. (deduct) ___ gals.

FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ — TO ___ KB. USED ___ SAX ___ CEM ___ — PLUS ___ % ___ PLUG DOWN ___ A.M. P.M.

CEMENT RETURNS - (YES/NO) ___

GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	START	STOP	
Waiting on bits	12 00	1 00	1
Pick up bits	1 00	2 15	1¼
Repair rig	2 15	4 15	2
Pick up	4 15	5 00	¾
Running sections in hole	5 00	6 00	1
Drilling 6796	6 00	7 30	1½
Trip - 1740 ft.			
FIRES ___ DRILLER'S SIGNATURE ___			
Pick up bits	7 30	10 00	2
Pick up bits	10 00	11 00	1
Drilling - 7027	11 00	2 00	3
Pick up	2 00	2 45	¾
Wash & ream 40'	2 45	4 00	1¼
FIRES ___ DRILLER'S SIGNATURE ___			
Pick up	4 00	4 15	¼
Lay down bits	4 15	4 30	¼
Pick up bits	4 30	4 45	¼
Drilling - 7068	4 45	7 30	2¾
Pick up	7 30	8 30	1
Survey	8 30	8 50	¼
Drilling - 7109	8 50	11 45	2¾
Pick up	11 45	12 00	¼
FIRES ___ DRILLER'S SIGNATURE ___			

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 17

TOTAL COMPANY TIME ___ HRS.

TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative: [signature]

Approved by Toolpusher: [signature]

HSW DDL-1 — CONSERVATION BOARD COPY

No. 1893 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. — LOCATION — LSD — SEC. — TWP. — RGE. — W. — DATE — 19—

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub Wt.	C.B. Ft	Ft. up on Kelly
7402	14	6716	13½		115									27	16

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
7416	13	8429	12½		115									27	16

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8429	29	8458	3		115	3								27	16

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

PM TO MIDNIGHT

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

TOTCO RING ON BIT # — Boiler Operated: — Hrs.

Fuel on Hand 12.01 a.m. — gals.
Fuel Rec'd Today (add) — gals.
TOTAL — gals.
Fuel on Hand 11.59 p.m. (deduct) — gals.
FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO) — GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	IN

FIRES — DRILLER'S SIGNATURE

FIRES — DRILLER'S SIGNATURE

EQUIPMENT CHANGES — DRILLER'S SIGNATURE — TRANSFER #

DAYS FROM SPUD: 136

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 CONSERVATION BOARD COPY

No 1892 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 19__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR — 8 AM TO 4 PM TOUR — 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4902	14	6916	1 3/4		115										

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																		
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6916	12	8928	12		115										

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
8928	29	8957	3		115										

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																		
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd. ____ Kel Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12:01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — JTS ____ CSG ____ TO ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

GENERAL ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 136

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

HSW DDL-1 CONSERVATION BOARD COPY

No 1892 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 19__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
761	40	6407	11½		113	1								27	17

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	DSC	F-5	10-10-10	1HK	10M	120	7¼	9½			2	1400	277				
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.1	9.1	9.1	No. 1 PRESS. GUGE					No. 2 PRESS. GUGE					1	
VISCOSITY	44	44	44	47	MODEL S.P.M.					MODEL S.P.M.	77				2	
GEL					LINER SIZE					LINER SIZE	6				3	

W.L. ____ F.C. ____ pH. 11 DESILTER: Hours Op. 7.58 U. Flow: 1.5 O. Flow: 1.1 SURVEYS At Feet / Degrees: 6744 1¼ 4 5

ADDITIVES: GENERAL: Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4401	60	4861	5½		114	1								27	17

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HP	J-3	10-10-10	185798	30M	90	12 9	11½			2	1200	277	1600			
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1			9.1	No. 1 PRESS. GUGE	1200				No. 2 PRESS. GUGE					1	
VISCOSITY	44	47		44	MODEL S.P.M.	6	6			MODEL S.P.M.	66				2	
GEL					LINER SIZE	6				LINER SIZE	6				3	

W.L. ____ F.C. ____ pH. 9 DESILTER: Hours Op. 7 U. Flow: 7.1 O. Flow: 1.1 SURVEYS At Feet / Degrees: 4 5

ADDITIVES: 11 GENERAL: Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4861	415	5276	5		114	3								27	

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HP	J-3	10-10-10	185798	30M	90	7½	5			2	1400	277				
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.1	9.2	9.1	No. 1 PRESS. GUGE					No. 2 PRESS. GUGE					1	
VISCOSITY	47	47	44	44	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	6	21			LINER SIZE	6				3	

W.L. ____ F.C. ____ pH. 9 DESILTER: Hours Op. 7 U. Flow: 7.1 O. Flow: 1.1 SURVEYS At Feet / Degrees: 4860 3.5 4 5

ADDITIVES: GENERAL: Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

TOTCO RING ON BIT # ____ Boiler Operated? ____ Hrs. ____

Fuel on Hand 12.01 a.m. ____ gals. Fuel Rec'd Today (add) ____ gals. TOTAL ____ gals. Fuel on Hand 11.59 p.m. (deduct) ____ gals. FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB, USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M. CEMENT RETURNS - (YES/NO) ____ GENERAL ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME: START / STOP

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 13½

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

HSW DDL-1 CONSERVATION BOARD COPY

No. 1891 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. — LOCATION — LSD — SEC. — TWP. — RGE. — W. — DATE — 19__

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR-HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
728															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
728	29	757	4 1/4	112											

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME

START	STOP	INT
	30	

FIRES — DRILLER'S SIGNATURE

FIRES — DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Fuel on Hand 12.01 a.m. — gals.
Fuel Rec'd Today (add) — gals.
TOTAL — gals.
Fuel on Hand 11.59 p.m. (deduct) — gals.
FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M.

CEMENT RETURNS - (YES/NO)

DAYS FROM SPUD: 122

EQUIPMENT CHANGES — TRANSFER #

GENERAL

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative:

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 — CONSERVATION BOARD COPY

No. 1890 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 10 — LOCATION Capitan Marsh — LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE June 11 19 81

DIRECTIONS TO WELL ___ MAILING POINT Hurricane Wells — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6670	4	6674	1		111			5	57					21	18

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 9 U. Flow: 7 O. Flow: 71

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6674	15	6689	2½		111	1		2						27	15

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. 9 DESILTER: Hours Op: 8 U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6689	36	6725	6½		111	3		2						21	3

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.2	9.2	9.2	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	46	47	47	47	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. 9 DESILTER: Hours Op: 9 U. Flow: 9+ O. Flow: 9+

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: Sta-Carb GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓	4 sec		
Blind Rams	✓	3 sec		

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd.	Rig Savers Chk'd.	Kelly Cock Chk'd.	Fire Equip. Chk'd.
	✓	✓	✓

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M.

CEMENT RETURNS - (YES/NO) ___ GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME START	TIME STOP

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION CANADA MESA — LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE June 1 19 71

DIRECTIONS TO WELL 18 mi S 30° E Hwy 120 11 mi E 1 mi S — MAILING POINT Wernham Well — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
6603	30	6633	4½	110	1			5	6½	2¼				21	11

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	16-5	MK-791	1500	240	124	Surf			1	1100	120				
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	11	11	11	11	No. 1 PRES. SURF.	1100				No. 2 PRES. SURF.					1	
VISCOSITY	41	41	41	43	MODEL S.P.M.	120				MODEL S.P.M.					2	
GEL					LINER SIZE	4½				LINER SIZE					3	

W.L. ___ F.C. ___ pH. 9 — DESILTER: Hours Op. 8 — U. Flow 1.1 — O. Flow 1.1 — SURVEYS At Feet / Degrees: 6601 / 1°

ADDITIVES: ___ GENERAL: ___ — Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
6633	17	6650	3	110		2		5 STD	6½	2¼				21	15

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	16-5	MK-791	11	240	46	7¾			2	1100	120	1400			
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	11	11			No. 1 PRES. SURF.					No. 2 PRES. SURF.	1100				1	
VISCOSITY	43	43			MODEL S.P.M.		120			MODEL S.P.M.	120				2	
GEL					LINER SIZE		4½			LINER SIZE	4½				3	

W.L. ___ F.C. ___ pH. 9 — DESILTER: Hours Op. 8 — U. Flow 1.2 — O. Flow 1.1 — SURVEYS At Feet / Degrees: ___

ADDITIVES: 20 gal Conc Mud Vis GENERAL: ___ — Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
6650	20	6670	7	111				5 STD	6½	2¼				21	9

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	16-5	MK-791	11	240	20	14½			1	1100	120	1400			
2											2	1100	125				
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 a.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.1			No. 1 PRES. SURF.	1100				No. 2 PRES. SURF.					1	
VISCOSITY	44	44			MODEL S.P.M.	120				MODEL S.P.M.					2	
GEL					LINER SIZE	4½				LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ — DESILTER: Hours Op. 7 — U. Flow 1.4 — O. Flow 1.1 — SURVEYS At Feet / Degrees: ___

ADDITIVES: 1 - Conc Mud Vis GENERAL: ___ — Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. ___ — Rig Savers Chk'd. ___ — Kelly Cock Chk'd. ___ — Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES/NO) ___

GENERAL ___

DAYS FROM SPUD: 121

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig up	1:00	1:30	½
Circ & cond	1:30	3:30	2
Rec	3:30	4:30	1
Trip out f/ bit	4:30	5:30	1
Change bit & BHA	5:30	7:00	1½
Drilling 6633	7:00	9:30	2½
Drilling 6650	7:00	7:30	½
Rec	7:30	8:30	1
Drilling 6650 -	8:30	11:00	1½
Circ & cond for trip	11:00	12:30	1½
Rec	12:30	1:30	1
Trip out f/ bit	1:30	2:30	1
Drilling 6650	2:30	4:15	1¾
Rec	4:15	5:15	1
Rig repair	5:15	5:45	½
Wash 90' to btm	5:45	6:00	¼
Drilling 6650 - 6670	6:00	7:00	1
Circ & cond	7:00	8:00	1
Trip out f/ bit	8:00	9:00	1
Change bit & BHA	9:00	10:00	1
Trip in	10:00	11:00	1
Rig repair	11:00	12:00	1

Drillers ___ Derrick ___ Motor ___ Floor ___ Floor ___ Floor ___

FIRES ___ DRILLER'S SIGNATURE ___

FIRES ___ DRILLER'S SIGNATURE ___

EQUIPMENT CHANGES ___ TRANSFER # ___

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

RSW DDL-1 CONSERVATION BOARD COPY

No. 1888 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 14 — LOCATION [illegible] — LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE June 12 19 71

DIRECTIONS TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1576															

Pump No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Corrd.	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			42		MODEL S.P.M.					MODEL S.P.M.					2	
GEL			5"		LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 6 U. Flow: 42 O. Flow: 1/2

SURVEYS: At Feet / Degrees — 4: ___ 5: ___

ADDITIVES: ___ GENERAL: ___

Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

	TIME START	TIME STOP	INTVL
Rig up	12:00	1:00	1
Safety Survey	1:00	1:30	1/2

FIRES ___ DRILLER'S SIGNATURE ___

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1576	97	1673	7 1/2		10	7									

Pump No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Corrd.	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4: ___ 5: ___

ADDITIVES: ___ GENERAL: ___

Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

	TIME START	TIME STOP	INTVL
Rig service	8:00	8:30	1/2
Trip for bit	8:30	10:00	1 1/2
Circ. & cond. for logs	10:00	10:30	1/2
Logging	10:30	12:00	1 1/2
Trip out	12:00	1:00	1
Lay down DC's	1:00	2:00	1
Rig up loggers	2:00	3:00	1
Logging	3:00	7:00	4

FIRES ___ DRILLER'S SIGNATURE ___

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1576	97	1673	7 1/2		10	7									

Pump No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Corrd.	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			40	40	MODEL S.P.M.					MODEL S.P.M.					2	
GEL			5	5	LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. 9 DESILTER: Hours Op: 8 U. Flow: 9 O. Flow: 12

SURVEYS: At Feet / Degrees — 4: ___ 5: ___

ADDITIVES: ___ GENERAL: ___

Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

	TIME START	TIME STOP	INTVL
Logging	7:00	10:00	1
Trip in hole	10:00	12:00	1 1/2

FIRES ___ DRILLER'S SIGNATURE ___

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

TOTCO RING ON BIT @ ___ Boiler Operated: 4 Hrs.

Fuel on Hand 12:01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT: RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 130

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher: [signature]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1887 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1511 — LOCATION [illegible] — LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE June 11 — 196[illegible]

DIRECTIONS TO WELL [illegible] — MAILING POINT Woodman Wells — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5516	12	6556	3¼	100	101		5th	[illegible]					27	16

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			[illegible]	[illegible]	No. 1 PRESSURE	[illegible]	[illegible]			No. 2 PRESSURE	[illegible]	[illegible]			1	
VISCOSITY			[illegible]	[illegible]	MODEL S.P.M.	[illegible]	[illegible]			MODEL S.P.M.					2	
GEL					LINER SIZE	[illegible]				LINER SIZE					3	

W.L. ___ F.C. ___ pH. [illegible] — DESILTER: Hours Op. [illegible] — U. Flow [illegible] — O. Flow [illegible] — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: [illegible] — GENERAL: [illegible]

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
			[illegible]									

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6556	30	6586	3¾	100	101	2	5th	[illegible]					27	16

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			[illegible]		No. 1 PRESSURE	[illegible]				No. 2 PRESSURE	[illegible]				1	
VISCOSITY			[illegible]		MODEL S.P.M.	[illegible]				MODEL S.P.M.	[illegible]				2	
GEL					LINER SIZE	[illegible]				LINER SIZE					3	

W.L. ___ F.C. ___ pH. [illegible] — DESILTER: Hours Op. [illegible] — U. Flow [illegible] — O. Flow [illegible] — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: [illegible] — GENERAL: [illegible]

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
			[illegible]									

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5516														

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ — DESILTER: Hours Op. [illegible] — U. Flow [illegible] — O. Flow [illegible] — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: [illegible] — GENERAL: [illegible]

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams.	[illegible]	[illegible]		
Blind Rams.	[illegible]	[illegible]		

TOTCO RING ON BIT # ___ — Boiler Operated [illegible] Hrs.

Crown-o-matic Chk'd. ___ — Rig Savers Chk'd. ✓ — Kelly Cock Chk'd. ✓ — Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ — TO ___ KB. USED ___ SAX ___ CEM ___ — PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES/NO) ___

GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Drilling - 6556	1200	3[illegible]	15
REC CORE	2[illegible]	2[illegible]	4
Survey at 6550	[illegible]	[illegible]	1½
[illegible]	[illegible]	[illegible]	¼
[illegible]	[illegible]	[illegible]	¼
[illegible]			
[illegible]			
[illegible]		

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANFIELD #1A — L.SD. — SEC. — TWP. — RGE. — W. — DATE June 2 — 1961

DIRECTIONS WELL EAT 6.5 MI. TO END OF 3RD P — MAILING POINT NORMAN OK — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
4504					108	1		6	5 7/8	2 1/2			27		19

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	12	HMDC	10-5	15E-391													
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.2		No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			50		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 7 — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS At Feet / Degrees: 4400 1°

ADDITIVES: — GENERAL — 4 — Weather — Water

5 — Temp. — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
4504	17	4521	3 3/4		108	2		1	STABILIZERS				27		14

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	12	HMDC	10-10-10	15E-391	6-8	100	17	3 1/4			1	125	21	500			
2				TOOH													
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1		9.1		No. 1 PRES. SURE	600				No. 2 PRES. SURE	C.C.				1	
VISCOSITY	50		50		MODEL S.P.M.	21				MODEL S.P.M.	TRIP				2	
GEL					LINER SIZE	6 1/2				LINER SIZE					3	

W.L. F.C. pH. — DESILTER: Hours Op: 5 — U. Flow: 7 1/2 — O. Flow: 9 — SURVEYS At Feet / Degrees:

ADDITIVES: 5 LBS CAUSTIC — GENERAL — 4 — Weather — Water

5 — Temp. — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
4521	23	4544	5		108			3	STABILIZERS				27		14

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	12	HMDC	10-10-10	15E-391	6-8	100	23	5 1/4			1	400	19	1100			
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1		9.0	9.1	No. 1 PRES. SURE					No. 2 PRES. SURE	C.C.				1	
VISCOSITY	51		51	51	MODEL S.P.M.	12	12			MODEL S.P.M.	TRIP				2	
GEL					LINER SIZE	6 1/2				LINER SIZE					3	

W.L. F.C. pH. 9 — DESILTER: Hours Op: 9 — U. Flow: 9 1/2 — O. Flow: 9 1/2 — SURVEYS At Feet / Degrees:

ADDITIVES: — GENERAL — 4 — Weather — Water

5 — Temp. — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCC RING ON BIT # — Boiler Operated 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO) — GENERAL

DAYS FROM SPUD: 124

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
RIG SER -	12 00	12 30	1/2
SURVEY AT 5500	12 30	1 00	1/2
TRIP OUT	1 00	4 00	3
CHANGE STABILIZERS	4 00	4 30	1/2
TRIP IN	4 30	7 00	2 1/2
CIRCULATE & COND	7 00	8 00	1
FIRES — DRILLER'S SIGNATURE			
RIG SER			1/2
TRIP IN			1
WASH & REAM			1/2
CIRCULATE		10 30	2 1/2
TRIP OUT	10 30	1 30	3
LOGGING	1 30	2 30	1
FIRES — DRILLER'S SIGNATURE			
RIG SER		00	1/2
TRIP IN	00	1 30	1 1/2
WASHING	1 30	2 00	1/2
WASH CHANGE OF TOP & BTM	2 00	2 30	1/2
LOGGING	2 30	7 30	5
RECORD - CHANGING TOOLS	7 30	10 30	3
LOGGING - LAID	10 30	12 00	1 1/2
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 — CONSERVATION BOARD COPY

No. 1885 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1 — LOCATION Cedar Mtn 3-4 — 1/8D. — SEC. — TWP. — RGE. — W. — DATE June 1 — 19 84

DIRECTIONS TO WELL — MAILING POINT Woodward — SHIPPING POINT Mart — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR — 8 AM TO 4 PM TOUR — 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
4115	12	6111	3½		107	3		5"						27	21

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				11	No. 1 PRES. SUCT.					No. 2 PRES. SUCT.					1	
VISCOSITY		51			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH. 9		DESILTER: Hours Op: 9			U. Flow: 94		O. Flow: 1					4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
4611	17	6684	7½	6-6	107	4		6"						27	17

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.2		9.2		No. 1 PRES. SUCT.					No. 2 PRES. SUCT.					1	
VISCOSITY	50		50		MODEL S.P.M.	24				MODEL S.P.M.					2	
GEL					LINER SIZE	7"				LINER SIZE	6"				3	
W.L.	F.C.		pH. 9		DESILTER: Hours Op:			U. Flow:		O. Flow:					4	
ADDITIVES:	Gel, Lost Circ.				GENERAL: Fuel, Rig Serv.										5	
	Lost Circulation														Weather	Water
	Fuel, Circulate														Temp.	Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
4794	20	6504	6¼		106	1	6 Collars							27	19

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.2	9.1	9.1		No. 1 PRES. SUCT.					No. 2 PRES. SUCT.					1	
VISCOSITY	50	51	50		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH. 9		DESILTER: Hours Op: 9			U. Flow: 94		O. Flow: 1					4	
ADDITIVES:	Gel, Lost Circ.				GENERAL: Fuel, Rig Serv.										5	
	Lost Circulation														Weather	Water
	Fuel, Circulate														Temp.	Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME: START / STOP / INTVL

FIRES — DRILLER'S SIGNATURE

9:00 — 1:00 — 4

1:30 — 5:00 — 3½

5:00 — 11:30 — 6½

11:30 — 12:00 — ½

FIRES — DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓	2		
Blind Rams	✓	2	5.56	

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. ✓ — Kelly Cock Chk'd. ✓ — Fire Equip. Chk'd.

	gals.
Fuel on Hand 12:01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11:59 p.m. (deduct)	
FUEL USED	

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 127

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 — CONSERVATION BOARD COPY

No 1884 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION [illegible] — LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE June 7 — 19[illegible]

DIRECTIONS TO WELL [illegible] — MAILING POINT Woodward — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR — 8 A.M. TO 4 P.M. TOUR — 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6105	8	6413	6½	106	3								41	17	

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.C.
A																		
B																		
C																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SUPC					No. 2 PRESS. SUPC					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH	DESILTER: Hours Op:		U. Flow		O. Flow								4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6133	20	6433	4½	101									27	16	

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.C.
A																		
B																		
C																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SUPC					No. 2 PRESS. SUPC					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH	DESILTER: Hours Op:		U. Flow		O. Flow								4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6433	22	6455	5½	101	2								27	19	

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.C.
A																		
B																		
C																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SUPC					No. 2 PRESS. SUPC					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH	DESILTER: Hours Op:		U. Flow		O. Flow								4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓		1500 psi	
Blind Rams	✓		1500 psi	

TOTCO RING ON BIT # ___ Boiler Operated ___ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	✓
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11:59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUG DOWN ___ A.M. P.M. ___ PLUS ___ % ___ CEMENT RETURNS - (YES/NO) ___

GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	1	[illegible]	[illegible]
[illegible]	[illegible]	30	[illegible]
[illegible]	[illegible]	10	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
Rigging up	[illegible]	[illegible]	2½
FIRES ___ DRILLER'S SIGNATURE ___			
Drilling 6413	7:00	11:00	2
[illegible]	11:00	11:45	¼
[illegible]	11:45	12:15	½
[illegible]	12:15	12:30	¼
[illegible]	12:30	12:45	¼
[illegible]	12:45	[illegible]	[illegible]
Drilling 6433	3:15	4:30	1¼
FIRES ___ DRILLER'S SIGNATURE ___			
Drilling 6445	11:00	1:30	2½
[illegible]	1:30	1:45	¼
Drilling 6455	7:45	10:00	2¼
[illegible]	10:00	10:30	½
[illegible]	10:30	10:45	¼
FIRES ___ DRILLER'S SIGNATURE ___			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 127

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

HSW DDL-1 — CONSERVATION BOARD COPY

No. 1883 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANWELL MESA — LSD. — SEC. — TWP. — RGE. — W. — DATE June 7 — 1971

DIRECTIONS TO WELL — MAILING POINT Nor MANWELL — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6313	10	6313	2		106	2		6	7 3/4	2 1/2				27	24

Hole	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	No. Chgs.
WEIGHT		12			No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY		50			MODEL					MODEL					2	
GEL					S.P.M.					S.P.M.					3	
					LINER SIZE					LINER SIZE						

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 7 — U. Flow: 1.3 — O. Flow: 22 — SURVEYS: At Feet / Degrees — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6313					106	2		6	7 3/4	2 1/2				27	22

Hole	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL					MODEL					2	
GEL					S.P.M.					S.P.M.					3	
					LINER SIZE					LINER SIZE						

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 1.1 — O. Flow: 1.1 — SURVEYS: At Feet / Degrees — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6393	12	6405	2 1/2												

Hole	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL					MODEL					2	
GEL					S.P.M.					S.P.M.					3	
					LINER SIZE					LINER SIZE						

W.L. — F.C. — pH. — DESILTER: Hours Op: 8 — U. Flow: 1.2 — O. Flow: 1 — SURVEYS: At Feet 6291 / Degrees 140 — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	6	3:00		
Blind Rams.	6	3:00		

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

TOTCO RING ON BIT # — Boilers Operated: 24 Hrs.

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joints	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	TIME START	TIME STOP	TIME INTVL.
Drilling - 6373	12 00	2 00	2
[illegible]	2 00	2 45	3/4
[illegible]	2 45	3 00	1/4
Tripping - Fish [illegible]	3 00	3 30	1/2
[illegible]	3 30	4 00	1/2
Tripping out	4 00	6 45	2 3/4
[illegible]	6 45	7 15	1/2
Trip in	7 15	7 30	1/4
FIRES	DRILLER'S SIGNATURE		
Rig Ser	7 30	7 45	1/4
Trip in	7 45	10 45	3
Running and [illegible]	10 45	11 00	1/4
Trip [illegible]			

K. F. Ser	4 00	4 15	1/4
Drl. [illegible]	4 15	7 30	1/4
Rig Ser	4 30	4 45	3/4
Survey at 6291	5 15	5 30	1/4
Circulate [illegible]	5 30	7 00	1/2
Drilling hard	7 00	7 30	1/2
Rig Ser - [illegible]	9 30	10 15	1/4
Tripping out	10 15	12 01	1 3/4
FIRES	DRILLER'S SIGNATURE		

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 126

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 — CONSERVATION BOARD COPY

No 1882 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1411 — LOCATION [illegible] — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE June 6 ___ 196___

DIRECTIONS TO WELL [illegible] — MAILING POINT Hermaville — SHIPPING POINT Hwy 7 — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
201	17	6218	4½		105		6						27	14

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	7⅞	HA	10-3	142711	10-12	40-50	22	6¼			9	1450	72	4 Kgm			
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9				No. 1 PRES. SURF.	1000				No. 2 PRES. SURF.					1	
VISCOSITY	47				MODEL					MODEL					2	
GEL	4/10				S.P.M. 119					S.P.M.					3	
					LINER SIZE 5½"					LINER SIZE						

W.L. ___ F.C. ___ pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 7 — O. Flow: 7

SURVEYS: At Feet 4110 — Degrees 1°

ADDITIVES: 2 sks Lime, 2 sks Caustic, 5 sks Caustic — GENERAL: ___

Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
318	28	6356	1¾		105	4	6						27	25

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	7⅞	HA	10-3	142711	10-12	40-50	60	12			9	1450	120	4 Kgm			
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1		9.2	9.2	No. 1 PRES. SURE	450			450	No. 2 PRES. SURF.					1	
VISCOSITY	47		47	48	MODEL					MODEL					2	
GEL	4/10		4/10	4/10	S.P.M.	124			124	S.P.M.					3	
					LINER SIZE	5½"			5½"	LINER SIZE	5½"					

W.L. ___ F.C. ___ pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 93 — O. Flow: 91

SURVEYS: At Feet ___ — Degrees ___

ADDITIVES: 2 sks Lime, 2 sks Caustic, 5 sks Caustic — GENERAL: ___

Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6356	27	6383	4¾		1								27	10

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	7⅞	HA	10-3	142711	10-12	40-50	27	4¾			9	1450	120	4 Kgm			
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1	9.1	No. 1 PRES. SURE	450				No. 2 PRES. SURF.					1	
VISCOSITY			47	47	MODEL					MODEL					2	
GEL			4/10	4/10	S.P.M.	120				S.P.M.					3	
					LINER SIZE	5½"				LINER SIZE	5½"					

W.L. ___ F.C. ___ pH. 9 — DESILTER: Hours Op: 8

SURVEYS: At Feet 6356 — Degrees 1¾

ADDITIVES: 2 sks Caustic — GENERAL: ___

Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. ___ — Rig Savers Chk'd. ___ — Kelly Cock Chk'd. ___ — Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ — TO ___ KB. USED ___ SAX ___ CEM ___ — PLUS ___ % — PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES/NO) ___

GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Svc	12 00	12 15	¼
Drilling - 6356	12 15	2 00	1¾
Rec core	2 00	3 15	1¼
Circ. trip out	3 15	4 45	1½
Rec core	4 45	5 00	¼
Circ. + trip in - 6 stds + 1 single	5 00	7 00	2
Circ. + cond.	7 00	7 30	½

FIRES ___ DRILLER'S SIGNATURE ___

REMARKS	TIME START	TIME STOP	TIME INTVL
Drilling - 6336	7 30	10 45	3¼
Rec core - + Rig Svc	10 45	11 00	¼
Drilling - 6356	11 00	3 00	4
Rec core	3 00	4 00	1

FIRES ___ DRILLER'S SIGNATURE ___

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Svc + core	4 00	4 15	¼
Drilling - 6356	4 15	4 30	¼
Rec core	4 30	5 00	½
Survey at 6355	5 00	5 30	½
Drill rat & mouse hole - Circ.	5 30	6 00	½
Drilling 6376	6 00	9 30	3½
Rec core - +	9 30	10 45	1¼
Drilling 6383	10 45	12 00	1¼

FIRES ___ DRILLER'S SIGNATURE ___

EQUIPMENT CHANGES — TRANSFER # ___

DAYS FROM SPUD: 125

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

HSW DDL-1 CONSERVATION BOARD COPY

No. 1881 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION CAUDER M43-4 LND SEC. TWP. RGE. W. DATE June 19 67

DIRECTIONS TO WELL 2 mi 65 42 W Long 12 S 35 1 1 — MAILING POINT NORMAN NE — SHIPPING POINT NW 1 — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
6278		6294	16		104	3		5 STA		1				27	14

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	60	4½	HRO	22	HS 243	10-12	240	190	15½			1	425	82	Chro			
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	11	11	12	12	No. 1 PRES. SURE	42			42	No. 2 PRES. SURE	CARRIAGE				1	
VISCOSITY	42	51	51	50	MODEL S.P.M.	129			124	MODEL S.P.M.	TANKS				2	
GEL					LINER SIZE				5"	LINER SIZE	1¼				3	

W.L. F.C. pH 7½ DESILTER: Hours Op: 8 U. Flow: 9 7 O. Flow: 7 SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
6294	2	6296			104	4		STA		1				27	20

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	60	4½	HRO	22	HS 243	10-12	240	190	15½			1	425	82	Chro			
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	11				No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	51				MODEL S.P.M.	127				MODEL S.P.M.					2	
GEL					LINER SIZE	5"				LINER SIZE	1¼				3	

W.L. F.C. pH 7½ DESILTER: Hours Op: 4 U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
6296	5	6301	1		104	4		5 STA		1				27	20

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	60	4½	HRO	22	HS 243	10-12	240	190	15½			1	425	82	Chro			
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		11			No. 1 PRES. SURE	42				No. 2 PRES. SURE	CARRIAGE				1	
VISCOSITY		44			MODEL S.P.M.	122				MODEL S.P.M.	TANKS				2	
GEL					LINER SIZE	5"				LINER SIZE	1¼				3	

W.L. F.C. pH 7½ DESILTER: Hours Op: 7 U. Flow: 7.4 O. Flow: 7.5 SURVEYS At Feet Degrees 4 5

ADDITIVES: 55 GENERAL: 55 HRS RIG TIME 26 RIG REPAIR 4 RIG SERVICE

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	6	2 5:00		
Blind Rams.	2	5:00		

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Fuel on Hand 12.01 a.m. gals. | Fuel Rec'd Today (add) gals. | TOTAL gals. | Fuel on Hand 11.59 p.m. (deduct) gals. | FUEL USED gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUG DOWN A.M. P.M. PLUS % CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig [illegible]	12 00	12 1	½
Pull [illegible]	12 1	12 4	½
Drilling - 6296	12 4	1 10	3½
Rig Chg	1 15	1 15	1
Drilling - 6301	1 15	1 04	2½

FIRES — DRILLER'S SIGNATURE

[illegible]	1 00	1 [illegible]	½
[illegible]	[illegible]	[illegible]	½
[illegible]	2 30	3 [illegible]	[illegible]
[illegible]	[illegible]	12 [illegible]	2½
[illegible]	[illegible]	[illegible]	1½
[illegible]	[illegible]	[illegible]	½
[illegible]	[illegible]	[illegible]	1½

FIRES — DRILLER'S SIGNATURE

[illegible]	[illegible]	[illegible]	½
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	4 00	4 30	½
[illegible]	4 30	7 00	2½
[illegible]	7 00	7 [illegible]	1
[illegible]	9 00	11 [illegible]	2
Drilling	11 [illegible]	12 [illegible]	1

EQUIPMENT CHANGES — DRILLER'S SIGNATURE — TRANSFER #

DAYS FROM SPUD: 124

TOTAL COMPANY TIME HRS. | TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 CONSERVATION BOARD COPY

No 1880 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1-11 — LOCATION [illegible] — LSD. — SEC. — TWP. — RGE. — W. — DATE [illegible] 19[illegible]

DIRECTIONS TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT [illegible] — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
212	21	6233	5½		103	3

DRILL COLLARS: [illegible]

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
[illegible]						27	15

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
[illegible]																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	72	72	72	72	No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY	41	41	50	50	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH 9½ — DESILTER: Hours Op: 9 — U. Flow 93 — U. Flow 91

SURVEYS: At Feet [illegible] — Degrees 16

ADDITIVES: 12½ Soda Ash — GENERAL:

5 sx Gel

5 sx Caustic

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
233	24	6257	6½		103	4

DRILL COLLARS: [illegible]

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
[illegible]						27	2

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
[illegible]																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	71	71		9.1	No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY	42	42		47	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 7 — U. Flow: 11 — O. Flow: 7

SURVEYS: At Feet 6234 — Degrees 1°

ADDITIVES: — GENERAL:

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
257	21	6278	5½		104	2

DRILL COLLARS: [illegible]

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
[illegible]						27	17

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
[illegible]																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1			No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY		47			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 7 — U. Flow: 11 — O. Flow: 7

SURVEYS: At Feet 6278 — Degrees 1°

ADDITIVES: — GENERAL:

40 sx Kwik Seal — 20 sx Caustic

40 sx Gel — 5 sx Caustic

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. — gals.

Fuel Rec'd Today (add) — gals.

TOTAL — gals.

Fuel on Hand 11.59 p.m. (deduct) — gals.

FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG

TO — KB. USED — SAX — CEM

PLUS — % — PLUG DOWN — A.M. P.M.

CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	TIME START	TIME STOP	TIME INTVL
[illegible]	12 00	1 00	1
[illegible]	1 00	1 30	1½
[illegible]	1 30	3 00	1½
[illegible]	3 00	4 00	1
[illegible]	4 00	5 30	1½
Rig Repair	5 30	7 00	1½
Rig Code	7 00	8 30	1½
[illegible] — 6233	8 30	10 00	1½
[illegible]	12 00	1 00	1
Rig Repair	1 00	2 00	1
[illegible]	2 00	3 15	1¼
[illegible]	3 15	4 00	¾
[illegible]	4 00	5 30	1½
Rig Code	5 30	6 30	1
[illegible]	6 30	7 45	1¼
[illegible]	7 45	8 00	¼
[illegible]	8 00	9 00	1
[illegible]	9 00	10 00	1
[illegible]	10 00	11 00	1
[illegible]	11 00	12 00	1
[illegible]	12 00	1 00	1
[illegible]	1 00	2 00	1
[illegible]	2 00	3 00	1
[illegible]	3 00	4 00	1
[illegible]	4 00	5 00	1
[illegible]	5 00	6 00	1
[illegible]	6 00	7 00	1
[illegible]	7 00	8 00	1

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1-11 — LOCATION Cowles Mobil-A — LSD. — SEC. — TWP. — RGE. — W. — DATE June — 19 74

DIRECTIONS TO WELL — MAILING POINT Moosomin — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6137	21	6158	5½		102	2		5'	5¼					27	19

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	7⅞	Mill	955	6-2427	35-40	70-80	C	6½			2	400	73	150			
2								1¼									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	72	72	71	72	No. 1 PRES. SURE	Cont				No. 2 PRES. SURE					1	
VISCOSITY	51	52	52	52	MODEL S.P.M.	Kocks				MODEL S.P.M.					2	
GEL					LINER SIZE	2				LINER SIZE					3	

W.L. — F.C. — pH. 8 — DESILTER: Hours Op: 8 — U. Flow: 43 — O. Flow: 41 — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6158	23	6181	5¾		102	4		5'						27	19

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	7⅞	Mill	955	RR247	40-45	70-80	C	4½			2	450	70	1200			
2								1¼									

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	71	71			No. 1 PRES. SURE	Cont				No. 2 PRES. SURE					1	
VISCOSITY	51	50			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	2				LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 8 — U. Flow: 9 — O. Flow: 70 — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: Zeo-Co Ultra GENERAL: Improve Mud Properties, Control Fluid Loss, Soda Ash, Caustic

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6181	31	6212	6¾		102			5'						27	11

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	7⅞	Mill	955	RR242	40-45	70-80	C	6¾			1	425	72	1700			
2								1¼									

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	72		71	72	No. 1 PRES. SURE	425	250		425	No. 2 PRES. SURE	Cont				1	
VISCOSITY	52		50	51	MODEL S.P.M.	222	222		222	MODEL S.P.M.					2	
GEL					LINER SIZE	5½			5½	LINER SIZE	14				3	

W.L. — F.C. — pH. 8 — DESILTER: Hours Op: 9 — U. Flow: 93 — O. Flow: 90 — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: Zeo-Co Ultra GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. — gals.
Fuel Rec'd Today (add) — gals.
TOTAL — gals.
Fuel on Hand 11.59 p.m. (deduct) — gals.
FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STRIP	TIME (HRS.)
Trip	1:00	1:2	½
Circ. & Cond. for Trip	1:1	1:2	1
Drilling - 6151	1:2	2:1	5
Rig Service	2:1	2:30	½
Drilling	7:30	2:00	½
FIRES — DRILLER'S SIGNATURE			
Rig Ser	7:00	7:30	½
Drilling - 6161	7:30	7:45	¼
Rig Service	7:45	8:00	¼
Trip	8:00	8:30	½
Drilling - 6171	8:30	9:00	½
FIRES — DRILLER'S SIGNATURE			
Rig Ser	9:00	9:15	¼
Drilling - 6179	9:15	12:00	2¾
Rig Service	12:00	12:00	
Drilling	12:00	12:00	
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 12

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 CONSERVATION BOARD COPY

No. 1878 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ L&D. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 19__

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6102	9	6111	5½		101	1									

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS: At Feet		Degrees			4	
ADDITIVES:				GENERAL:											5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6102	9	6111	5½		101	1									

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS: At Feet		Degrees			4	
ADDITIVES:				GENERAL:											5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6111	20	6131	5½		15										

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS: At Feet		Degrees			4	
ADDITIVES:				GENERAL:											5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

TOTCO RING ON BIT # ___ Bottom Operated ___ Hrs.

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ NO. USED ___ SAX ___ CEM ___ PLUS ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME START	TIME STOP	INTVL

FIRES ___ DRILLER'S SIGNATURE ___

GENERAL ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD ___

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

HSW DDL-1 CONSERVATION BOARD COPY

No. 1877 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION — SEC. — TWP. — RGE. — W. — DATE June 1 19 61

DIRECTIONS TO WELL — MAILING POINT Wapato Wash. — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8AM TOUR 8AM TO 4PM TOUR 4PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6041	30	6071			100	4		6						21	7

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	S.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	16-0	8½	HWDT	505	MG 263	15-20	220	8 3/4	23½			2	225	44	1750			
2									41				1600					

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	72	72	72	71	No. 1 Press.	Cmc				No. 2 Press.	22			1600	1	
VISCOSITY	44		41	42	MODEL S.P.M.					MODEL S.P.M.	7			8	2	
GEL					Liner Size	6½				Liner Size	6½			12	3	

W.L. — P.C. — pH. — DESILTER: Hours Op: 3 — U. Flow: 7 — O. Flow: 7 1 — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: 15 lbs Quick Gel — GENERAL: 1 Can Lite — 1 Sack Caustic — 1 Can Lite — 10 Lbs Soda Ash

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6071	24	6095	5½		1										

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	S.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	16-0	8½	HWDT	505	MG 263	15-20	220	8 3/4	16½			2	225	44	1750			
2																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	71	71		71	No. 1 Press.	Cmc				No. 2 Press.					1	
VISCOSITY	44	42		42	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					Liner Size	6½				Liner Size	6½				3	

W.L. — P.C. — pH. 9 — DESILTER: Hours Op: 7 — U. Flow: 7 1 — O. Flow: 7 1 — SURVEYS: At Feet 6070 / Degrees 3¼ — 4 — 5

ADDITIVES: Soda Ash 1 Sack — GENERAL: 1 Can Lite — 1 Sack Caustic

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6095					101	1		6						21	2

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	S.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	71				No. 1 Press.					No. 2 Press.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					Liner Size	6½				Liner Size	6½				3	

W.L. — P.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: Lite Gel 1 — GENERAL: Lo. — 1 Sack Caustic — Lo.

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams	✓			

TOTCO RING ON BIT = — Boiler Operated: — Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. ✓ — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12:01 a.m. — gals.
Fuel Rec'd Today (add) — gals.
TOTAL — gals.
Fuel on Hand 11:59 p.m. (deduct) — gals.
FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUG DOWN — A.M. P.M. — PLUS — CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

Down w/ Unit
K.C.C.
Unit up 6071

TIME	START	STOP	UNITS
	12 mn	2 a.m.	2
	2 a.m.	4 a.m.	1
	4 a.m.	6 a.m.	2

FIRES — DRILLER'S SIGNATURE

TIME	START	STOP	UNITS
	6 a.m.	12 noon	6
	12 noon	1 p.m.	1
	1 p.m.	2 p.m.	1
	2 p.m.	4 p.m.	2

FIRES — DRILLER'S SIGNATURE

TIME	START	STOP	UNITS
	4 p.m.	12 mn	8
	12 mn	1 a.m.	1
	1 a.m.	2 a.m.	1
	2 a.m.	4 a.m.	2
	4 a.m.	6 a.m.	2

FIRES — DRILLER'S SIGNATURE

EQUIPMENT CHANGES — "RAISED" =

DAYS FROM SPUD: 120

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 CONSERVATION BOARD COPY

No. 1876 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION Grass Creek Area — 1/4 — SEC. — TWP. — RGE. — W. — DATE June 1 — 19 61

DIRECTIONS TO WELL Lot 43 Shoshone Unit — MAILING POINT Worland Wyo. — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6011	30	6041			100	4								31	7

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
16	7/8	Hyd	505	M5363	1500	120	24	165			2	725		1700			
								41				(Hyd)					

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	72	72	72	71	No. 1 PRES. SURE	Cyc				No. 2 PRES. SURE					1	
VISCOSITY	44		54	42	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	9"				LINER SIZE	14"				3	

W.L. — F.C. — pH. — DESILTER: Hours Op. 8 — U. Flow: 72 — O. Flow: 71

SURVEYS: At Feet — Degrees

ADDITIVES: Soda Ash — GENERAL: Caustic — Lignosulfonate — Lime — Caustic

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6071	24	6075	5½		101	2								27	2

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
16	7/8	Hyd	505	M5363	15M	120	18	183			#5	700	114	1700			
								59									

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	71	71		71	No. 1 PRES. SURE	Cyc				No. 2 PRES. SURE					1	
VISCOSITY	44	42		42	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	9"				LINER SIZE	14"				3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op. 7 — U. Flow: 71 — O. Flow: 71

SURVEYS: At Feet 6070 — Degrees 1¾

ADDITIVES: Soda Ash — Caustic — Lignosulfonate — GENERAL:

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6095					101	2								27	2

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
16	7/8	Hyd	505	M5363	15M												

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	71				No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	9"				LINER SIZE	14"				3	

W.L. — F.C. — pH. — DESILTER: Hours Op. — U. Flow: — O. Flow:

SURVEYS: At Feet — Degrees

ADDITIVES: Soda Ash — Caustic — Lignosulfonate — GENERAL:

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	11	2	1500	
Blind Rams	11	2	1500	

TOTCO RING ON BIT # — Boiler Operated: — Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. — gals.

Fuel Rec'd Today (add) — gals.

TOTAL — gals.

Fuel on Hand 11.59 p.m. (deduct) — gals.

FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUG DOWN — A.M. P.M. — PLUS — %

CEMENT RETURNS - (YES/NO)

GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL
Warm up Unit	12 00	2 00	2
Rig Crew	2 00	2 30	½
Warm up 6071	4 00	5 00	1
FIRES — DRILLER'S SIGNATURE			
Drill 6071	7 00	7 30	½
	7 30	11 00	3½
Survey 6070 1¾	11 00	11 30	½
Lubricate Rig	11 30	12 00	½
Rig Crew	12 00	1 00	1
FIRES — DRILLER'S SIGNATURE			
	7 00	9 15	2¼
	9 15	10 30	1¼
	10 30	11 30	1
	11 30	12 00	½
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 120

TOTAL COMPANY TIME — HRS.

TOTAL CONTRACTOR'S TIME — HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 — CONSERVATION BOARD COPY

No. 1876 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1 — LOCATION CANEK Area — L.SD. — SEC. — TWP. — RGE. — W. — DATE MAY 61 — 1961

DIRECTIONS TO WELL 25 E 63 S - 1/2 mi E 24 S 3/4 E 1/2 S — MAILING POINT Neal New Mex — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5740	5	5745'	1 1/4		99	2	5	4 1/2	2 1/2				27	11

	No.	Size	Type	Join/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Correct	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	5	4 1/2	HO	10	K 765	2000	100-3	137	23			2	350	350	1700			
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESS. SURF.					No. 2 PRESS. SURF.					1	
VISCOSITY				43	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	6"				LINER SIZE	1 1/4				3	
W.L.	F.C.		pH.	9	DESILTER: Hours Op:	8		U. Flow:	9"	O. Flow:	70		SURVEYS At Feet	Degrees	4	
ADDITIVES:					GENERAL:										5	
1-Reclaim Shell No HSI Jet															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5745'	23	6019	5 1/4		99	1	5	4 1/2	2 1/2				27	7

	No.	Size	Type	Join/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Correct	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	5	4 1/2	HO	50-5	K 765	190	130	171	23			2	350	75%	1700			
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1		9.1	9.1	No. 1 PRESS. SURF.					No. 2 PRESS. SURF.					1	
VISCOSITY	44		43	43	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	6"				LINER SIZE	1 1/4				3	
W.L.	F.C.		pH.	9	DESILTER: Hours Op:	9		U. Flow:	9 1/2	O. Flow:	9.1		SURVEYS At Feet	Degrees	4	
ADDITIVES: 20 sx Caustic GENERAL:															5	
2 Fine Quikset															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
6019	23	6041	5 1/4		100	2	5	4 1/2	2 1/2				27	12

	No.	Size	Type	Join/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Correct	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	5	4 1/2	HO	50-5	K 765	190	90	194	23			2	350	75%	1700			
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.2		9.0	No. 1 PRESS. SURF.					No. 2 PRESS. SURF.					1	
VISCOSITY		47		46	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	9"				LINER SIZE	1 1/4				3	
W.L.	F.C.		pH.		DESILTER: Hours Op:	8		U. Flow:	9.2	O. Flow:	9.1		SURVEYS At Feet	Degrees	4	
ADDITIVES: 20 sx Quikset GENERAL: Clear Hole													6019	12 1/2	5	
4 Gel Caustic Mix															Weather / Temp.	Water / Bbls.
5 1/2 Soda Ash																

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL
Trip	12:00	12:15	1/4
Trip in - Mud-at 4600	12:15	1:30	1 1/4
Repair - Mud Motor	1:30	2:00	1/2
Trip	2:00	6:00	4
Circulate TD	6:00	6:15	1/4
Drilling - 6745'	6:15	7:00	1/2
FIRES — DRILLER'S SIGNATURE			
Drilling 6774	7:00	1:00	2
Rig Code & R. Sft	11:00	11:30	1/2
Repair Mud Motor	11:30	12:00	1/2
Drilling Ahead	12:00	4:00	4
FIRES — DRILLER'S SIGNATURE			
Rig Code	4:00	4:30	1/2
Trip out	4:30	5:30	1
Drop survey - Circulate	5:30	5:45	1/4
Drilling - 6041	5:45	10:00	4 1/4
Rig Code	10:00	11:00	1
Drilling - 6041	11:00	12:00	1
FIRES — DRILLER'S SIGNATURE			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	✓	2:00		
Blind Rams.				

TOTCO RING ON BIT = — Boiler Operated: 3 of 4 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO) — GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 119

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1875 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

RIG No. 1-11 LOCATION CANOL M-43-K LSD. SEC. TWP. RGE. W. DATE May 1971

DAILY DRILLING LOG
DIRECTIONS TO WELL: Sat-62-42 W Chevron 12 mi 37 mi 1 mi 7 MAILING POINT: NORMAN WELLS SHIPPING POINT: MILES MOVED: ROAD CONDITIONS:

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5714	38	5756	6½		94	4		5	5"	2½"				27	3

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12-0 12	HR	5-5-5	51363	2000	100	100	17½			2	750	100	1700			
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.1	9.1	9.0	No. 1 PRESS. SUPP.	C.A.T.				No. 2 PRESS. SUPP.	1200				1	
VISCOSITY	42	46	45	43	MODEL	T.M.C.				MODEL	10				2	
GEL					LINER SIZE	6"				LINER SIZE	6½				3	

W.L. F.C. pH. 8 DESILTER: Hours Op. 4 U. Flow 1.2 O. Flow 2.1 SURVEYS At Feet Degrees

ADDITIVES: GENERAL: 4 Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5756	24	5780	3½		94	2		5	5"	2½"				27	16

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12-0 12	HR	5-5-5	51363	2000	100	100	21½			2	725	100	1700			
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESS. SUPP.	600	600			No. 2 PRESS. SUPP.	1200			1250	1	
VISCOSITY				43	MODEL	T.M.C.				MODEL	10				2	
GEL					LINER SIZE	6"				LINER SIZE	6½				3	

W.L. F.C. pH. 9 DESILTER: Hours Op. 8 U. Flow 1.4 O. Flow 9.0 SURVEYS At Feet Degrees

ADDITIVES: Cap-Salt 9 GENERAL: 1645 Pac-regular 3 lbs - Caustic Tank 2 lbs - Rich-Mud 2 lbs - Pac-reg 3 lbs - Caustic Tank 2 lbs - Rich-Mud 2 lbs - Pac-reg No. 1 30 sec Cutting at Gascheck

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5780					99	2		5	5"	2½"				27	16

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12-0 12	HR	5-5-5	51363		100	124	31½									
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESS. SUPP.	C.A.T.				No. 2 PRESS. SUPP.					1	
VISCOSITY				43	MODEL	T.M.C.				MODEL					2	
GEL					LINER SIZE	6"				LINER SIZE	6½				3	

W.L. F.C. pH. 9 DESILTER: Hours Op. 8 U. Flow: O. Flow: SURVEYS At Feet Degrees

ADDITIVES: GENERAL: 4 Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

TOTCO RING ON BIT #: Boiler Operated: 24 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING REPORT: RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO)

GENERAL

REMARKS	TIME START	TIME FINISH	TIME INTVL
Rig up	1:00	1:15	¼
Drilling 5727	1:15	2:45	1½
Rig Ser	2:45	3:00	¼
Drilling 5756	3:00	6:30	3½
FIRES	DRILLER'S SIGNATURE		
Rig up	4:00	4:15	¼
Rec Core	4:15	5:00	¾
Core #1 - 5756 - 5780	5:00	6:00	1
Drilling 5778	6:00	6:30	½
Rec Core	6:30	7:30	1
Drilling 5778	7:30	8:00	½
Rec Core	8:00	9:00	1
Drilling -	9:00	9:30	½
Rec Formation Sample	9:30	10:00	½
FIRES	DRILLER'S SIGNATURE		
Rig Serv	4:00	4:15	¼
Trip out of hole	4:15	7:00	2¾
Survey	8:00		
Hole at 5770 - 1° - S 47° E			
Hole at 5780 - 1° - S 40° E			
Hole at 5803 - 1° - S 40° E Drilling - N 49° W		12:00	4
(Hole at 6460 - 12° Drilling - N 55° W) (To Core)			

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 118

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative:

Approved by Toolpusher:

HSW DDL-1 CONSERVATION BOARD COPY

No. 1874 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1-11 LOCATION CANOL M-43-A LSD. SEC. TWP. RGE. W. DATE May 20 1971

DIRECTIONS TO WELL 1st-63-52 Liard 12 1 27 1 7 — MAILING POINT NORMAN WELLS — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5718	38	5756	6½		77	4	5	3½	2¼				27	3

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	6-0	HW	5055	41263	2000	120	104	17½			2	750	76	1700			
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.1	9.1	9.0	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	42	46	45	43	MODEL	Cyclone				MODEL					2	
GEL					S.P.M.	Tank				S.P.M.					3	
					LINER SIZE	7"				LINER SIZE	7½"					

W.L. F.C. pH. 8 — DESILTER: Hours Op. 9 U. Flow 7.2 O. Flow 8.1 — SURVEYS: At Feet / Degrees

ADDITIVES: — GENERAL — Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5756	24	5780	3¾		77		5	3½	2¼				27	16

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	5-0	HW	5055	41263	2000	120	133	21¾			2	750	76	1700			
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				42	MODEL	Cyclone				MODEL					2	
GEL					S.P.M.	Tank				S.P.M.					3	
					LINER SIZE	7"				LINER SIZE	7½"					

W.L. F.C. pH. 9 — DESILTER: Hours Op. 8 U. Flow 1.4 O. Flow 9.0 — SURVEYS: At Feet 5100 / Degrees ¼°

ADDITIVES: (Flow-Gard, Gel Conc., Lime, Pac-Regular, Soda Ash, Tri-Cide, Tri-Cide-Purple, Soda Ash, Caustic Soda, Caustic) — GENERAL — Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5780					99	2	5	3½	2¼				27	16

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	5-0	HW	5055	41263	2000	120	137	24¾			2	750	76	1700			
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				44	MODEL	Cyclone				MODEL					2	
GEL					S.P.M.	Tank				S.P.M.					3	
					LINER SIZE	7"				LINER SIZE	7½"					

W.L. F.C. pH. 9 — DESILTER: Hours Op. 9 U. Flow: O. Flow: — SURVEYS: At Feet / Degrees

ADDITIVES: — GENERAL — Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals. — Fuel Rec'd Today (add) gals. — TOTAL gals. — Fuel on Hand 11.59 p.m. (deduct) gals. — FUEL USED gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M. — CEMENT RETURNS - (YES/NO) — GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Serv	1:00	1:15	¼
Drilling 5724	1:15	2:45	1½
Rig Serv	2:45	3:00	¼
Drilling - 5756	4:00	4:00	8

FIRES — DRILLER'S SIGNATURE

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Serv	12:00	1:00	¼
REC CORE	1:00	1:30	½
SURVEY - 5780 ft.	1:30	1:45	¼
Drilling 5780	1:45	12:30	4¾
REC CORE	12:30	1:30	1
Drilling 5784	1:30	2:00	½
REC CORE	2:00	3:00	1
Drilling -	3:00	3:30	½
REC CORE	3:30	4:00	½

FIRES — DRILLER'S SIGNATURE

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Serv	4:00	4:15	¼
TRIP OUT [illegible]	4:15	7:00	2¾
RIG UP SURVEY	5:00		
[illegible]			
[illegible]			
[illegible]		12:00	4
[illegible]			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 118

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 CONSERVATION BOARD COPY

No 1874 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION CANDIA AREA — LSD. — SEC. — TWP. — RGE. — W. — DATE May 21 — 1971

DIRECTIONS TO WELL: ERT-43°53'31" long 12H-7 1 T — MAILING POINT: Norman Wells — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5941	10	5951			97	1		5	7 1/4					27	6

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
C-8	12	RR6	3-3-3	42951	30-40	100	10	2 1/2			2	1350	340	1700			

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			8.6		No. 1 PRES. SURE					No. 2 PRES. SURE	475			475	1	
VISCOSITY			46		MODEL S.P.M.					MODEL S.P.M.	340			340	2	
GEL					LINER SIZE	6 1/4				LINER SIZE	6 1/4			6 1/4	3	

W.L. — F.C. — pH. 7.5 — DESILTER: Hours Op: 8 — U. Flow: 161 — O. Flow: 1.1

SURVEYS: At Feet — Degrees

ADDITIVES: Pac 10 #, Caustic 1 sk — GENERAL: Fuel 5,000 gals

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5951	30	5981	3		99			5	7 1/4					27	6

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
C-8	12	RR6	3-3-3	42951	30-40	100	10	7 1/2			2	1350	340	1700			

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	8.6		8.6	8.6	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	46		46	46	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE	1 3/4				3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow:

SURVEYS: At Feet 4477 — Degrees 12

ADDITIVES: Pac 10 #, Caustic 1 sk — GENERAL: Fuel 5,000 gals

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5981	31	6029	3 1/2		99	2		5	7 1/4					27	14

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
C-8	12	RR6	3-3-3	42951	30-40	100	71	11 1/2			2	1350	340	1700			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.0		8.8	9.0	No. 1 PRES. SURE	Circ.				No. 2 PRES. SURE	425				1	
VISCOSITY	47		48	46	MODEL S.P.M.	Pump				MODEL S.P.M.	334			278	2	
GEL					LINER SIZE	5"				LINER SIZE	1 3/4			17 1/2	3	

W.L. — F.C. — pH. 8 — DESILTER: Hours Op: 4 — U. Flow: 334 — O. Flow: 91

SURVEYS: At Feet — Degrees

ADDITIVES: — GENERAL:

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. — gals.
Fuel Rec'd Today (add) — gals.
TOTAL — gals.
Fuel on Hand 11.59 p.m. (deduct) — gals.
FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL —

DAYS FROM SPUD: 117

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Trip out	4:00	1:15	1 1/2
Change bit	1:15	1:45	1/2
Trip in	1:45	4:45	3
Wash Thru Core	4:45	5:15	1/2
Drilling	5:15	7:00	1 3/4

FIRES — DRILLER'S SIGNATURE

Drilling - 5967	7:00	9:00	2
Rec Core 5967-5981	9:00	11:15	1 1/4
Wash Dn - 5977	11:15	2:15	3
Rec Core	2:15	3:00	3/4
Survey	3:00	3:45	1/4
Circ & Trip	3:45	6:00	1 1/4

FIRES — DRILLER'S SIGNATURE

Rig Sick	4:00	4:15	1/4
Drilling - 5991	4:15	5:30	1 1/4
Rec Core	5:30	6:45	1 1/4
Drilling - 5993	6:45	7:15	1/2
Rec Core	7:15	8:30	1 1/4
Drilling - 5911	8:30	9:30	1
Rec Core	9:30	10:30	1
Drilling - 5918	10:30	11:15	3/4
Rec Core	11:15	12:00	3/4

EQUIPMENT CHANGES — TRANSFER #

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 — CONSERVATION BOARD COPY — № 1873 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO. 11-11 LOCATION Gandy 44-A LSD. SEC. TWP. RGE. W. DATE May 27 19 71

DAILY DRILLING LOG
DIRECTIONS TO WELL Lat 62°32'7 Grady 124°21'7 1.7 MAILING POINT Norman Wells SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
5777	30	5807	6		92	2		5	5 7/8	2				27	7

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	HWT	4½	HWDP	3x16	HF7252	7500	200	170	7½			2	1120	34	1700			
C														32				
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	8.9			9	No. 1 PRESS. SURE	C.C.				No. 2 PRESS. SURE	400				1	
VISCOSITY	44			47	MODEL S.P.M.	Tri				MODEL S.P.M.	34				2	
GEL					LINER SIZE	7"				LINER SIZE	7"				3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 8 U. Flow: 9 O. Flow: 74 SURVEYS At Feet / Degrees

ADDITIVES: 15 lbs Gel 10 lbs GENERAL: Flow Guard, Chrome

2 gal Conqor 101 16 lbs Lignite

1 Hydrocide 1 lbs Mineral Seal 12 lbs Lignite

4: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
5807	20	5827	4½		91			5	5 7/8	2				27	25

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	HWT	4½	HWDP	3x16	HF7252	7500	200	190	20½			2	1120	34	1700			
C																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	70	9.3	9.1	9.1	No. 1 PRESS. SURE	C.C.				No. 2 PRESS. SURE					1	
VISCOSITY	54	49	49	49	MODEL S.P.M.	Tri				MODEL S.P.M.	34				2	
GEL					LINER SIZE	7"	Mud Mud			LINER SIZE	7"				3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 4 U. Flow: 92 O. Flow: 90 SURVEYS At Feet / Degrees

ADDITIVES: 5 lbs Gel 10 lbs GENERAL: (6 Flow Guard 4) 10 lbs Lignite

2 gal Conqor 101 16 lbs Lignite 1 gal Cutwell

1 Hydrocide 1 lbs Mineral Seal 12 lbs Lignite

4: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
5827	20	5847	3½		91	1		3	5 7/8	2				27	17

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	HWT	4½	HWDP	3x16	HF7252	7500	200	210	24			2	1120	34	1700			
C																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1				No. 1 PRESS. SURE	Mud Mud				No. 2 PRESS. SURE	400				1	
VISCOSITY	44				MODEL S.P.M.	Mud				MODEL S.P.M.	34				2	
GEL					LINER SIZE	7"				LINER SIZE	7"				3	

W.L. F.C. pH. 9.5 DESILTER: Hours Op: 4 U. Flow: 92 O. Flow: 90 SURVEYS At Feet / Degrees

ADDITIVES: 10 lbs Gel 10 lbs GENERAL: 9-12 lbs Lignite

1 gal Cutwell

4: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT #: Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO)

GENERAL

DAYS FROM SPUD: 116

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	START	STOP	INTVL
Lay up 5719	12 00	2 00	3
Rig Service	2 00	2 15	1/4
Drilling - Reeves	2 15	4 15	2
Drilling 5777 -	4 15	6 15	2
Reeves	6 15	7 00	1/4
Survey 5807	7 00	7 00	1
Make up & clean Pits	7 00	7 30	1/2
Drilling	7 30	11 00	3 1/2
Rig Service	11 00	11 30	1/2
Drilling 5827	11 30	3 00	3 1/2
Rig Service & Survey	3 00	3 30	1/2
Drilling	3 30	4 00	1/2

FIRES DRILLER'S SIGNATURE

	START	STOP	INTVL
Drilling 5847	4 00	7 30	3 1/2
Rig Service & Survey	7 30	8 15	1/4
Survey 5847	8 15	9 15	1
Drilling	9 15	10 00	3/4
To Cut & Slip	10 00	11 00	1

FIRES DRILLER'S SIGNATURE

EQUIPMENT CHANGES TRANSFER #

HSW DDL-1 CONSERVATION BOARD COPY

No. 1872 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION Can Dex Pipeline — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE May 27 19 61

DIRECTIONS TO WELL Pat-43's - 5 1/2 miles 12 1/2 to L — MAILING POINT Nisku — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5685'	37'	5720	5¼		75'			4½"	6¾"					27	12

No.	Size	Type	Gals/H.P.	Serial No.	Wgt.	R.P.M.	Diam. or Cones	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.C.	T.Bal.	D.C.
1	4½"	Hughes	31	142543	30M	100	6-3	1854			2	700	76	1800			
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	7 a.m.	4 p.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	10	10	10	9.6	No. 1 PRES. SURE					No. 2 PRES. SURE	400			400	1	
VISCOSITY	50	50	50	52	MODEL S.P.M.	70	70	70	70	MODEL S.P.M.	141			141	2	
GEL					LINER SIZE	6"				LINER SIZE	1¾"				3	

W.L. 0 F.C. 1/32 pH. ___ DESILTER: Hours Op: 7 U. Flow: 9 O. Flow: 8.7

SURVEYS: At Feet 5716 Degrees 1°

ADDITIVES: 100# Bentonite, 50# Flocon, 50# Drispac, 50# Caustic, 50# Soda Ash, 50# Lignosol, 50# Caustic, 50# Soda Ash, 50# Lignosol, 50# Caustic, 50# Soda Ash, 50# Lignosol

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION Cavern No. 2 — LSD. — SEC. — TWP. — RGE. — W. — DATE May 26 — 19 61

DIRECTIONS TO WELL — MAILING POINT Norman, Okla. — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3690	16	4627	3		92	9		4½"						27	22

Pump No.	Liner Size	Stroke	Make	Serial No.	Wgt.	F.V.	Drilled or Cored	Hrs.	Recovered	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Tonnage	T.	B.	G.
4	6½	10	Oilwell	K-500		55	10				2	1000	90				

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			9		MODEL S.P.M.					MODEL S.P.M.					2	
GEL			36		LINER SIZE	6½				LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op. — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3647	43	4627	12		77	4								27	22

Pump No.	Liner Size	Stroke	Make	Serial No.	Wgt.	F.V.	Drilled or Cored	Hrs.	Recovered	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Tonnage	T.	B.	G.
4	6½	10	Oilwell	K-500		55	10				2	1000	90				

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			8.1	28	MODEL S.P.M.					MODEL S.P.M.					2	
GEL			3	11	LINER SIZE	6½				LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op. — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: — GENERAL: 8 — 8.1

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5641	39	4165	12½		74	1		7½						27	17

Pump No.	Liner Size	Stroke	Make	Serial No.	Wgt.	F.V.	Drilled or Cored	Hrs.	Recovered	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Tonnage	T.	B.	G.
4	6½	10	Oilwell	K-500		55	10				2	1000	90				

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			9	10	MODEL S.P.M.					MODEL S.P.M.					2	
GEL			36	33	LINER SIZE	6½				LINER SIZE	1⅞				3	

W.L. — F.C. — pH. — DESILTER: Hours Op. — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: — GENERAL: 8 — 7650 — 11°

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.	4	2 Hrs.		

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	✓
Kelly Cock Chk'd.	✓
Fire Equip. Chk'd.	✓

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN — JTS — CSG — TO — Kb. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO) — GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 114

TOTAL COMPANY TIME — HRS. — TOTAL CONTRACTOR'S TIME — HRS.

Approved by Operator's Representative:

Approved by Toolpusher:

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

START	STOP	INTVL.
12:00	2:15	2¼
2:15	3:30	1¼
3:30	4:00	½
4:00	5:15	1¼
5:15	5:30	¼
5:30	6:30	1
6:30	7:30	1
7:30	8:00	½
8:00	9:15	1¼
9:15	10:30	1¼
10:30	2:00	3½
2:00	2:45	¾
2:45	4:00	1¼

FIRES — DRILLER'S SIGNATURE

START	STOP	INTVL.
4:00	5:30	1½
5:30	6:15	¾
6:15	7:15	1
7:15	9:30	2¼
9:30	10:45	1¼
10:45	11:30	¾
11:30	12:00	½

FIRES — H. B. Sherwood — DRILLER'S SIGNATURE

HSW DDL-1 CONSERVATION BOARD COPY

No. 1870 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 171 LOCATION Cundiff Mill A LSD. SEC. TWP. RGE. W. DATE May 19 67

DIRECTIONS TO WELL [illegible] MAILING POINT Mackinaw SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5572	9	5581	2½		92	1		9'	6"	2¼"				27	8

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	No.
1	6	[illegible]	[illegible]	[illegible]	[illegible]	140	9	2½			2	950	125	1400			
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.4	No. 1 PRESS. SURE				1400	No. 2 PRESS. SURE					1	
VISCOSITY				37	MODEL				125	MODEL					2	
GEL				2	LINER SIZE				2½	LINER SIZE					3	

W.L. F.C. pH. 9 DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees

ADDITIVES: GENERAL: 9 1200 lbs Gel

4 Sacks Caustic

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5591	15	5606	3½		92	1		5½"	6"	2¼"	4'-6"			27	19

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	No.
1	[illegible]	[illegible]	[illegible]	[illegible]	2000	136	7½	5½			2	975	125	1700			
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.8	9.4	9.4	8.7	No. 1 PRESS. SURE	C	C	[illegible]		No. 2 PRESS. SURE	1700		1700		1	
VISCOSITY	36	37	37	38	MODEL					MODEL					2	
GEL				9½	LINER SIZE					LINER SIZE	1 3/4		1 3/4		3	

W.L. F.C. pH. 7 DESILTER: Hours Op: 8-8 U. Flow: 4-4 O. Flow: 2-2 SURVEYS At Feet / Degrees

ADDITIVES: 9 Sacks Caustic GENERAL:

2 Sacks Caustic

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5606	16	5622	3¼		93	2		5½"	6"	2¼"	4'-6"			27	14

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	No.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4 0	4			2	1700	120	1700			
2												1400					
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.6	No. 1 PRESS. SURE	C	6			No. 2 PRESS. SURE	1400				1	
VISCOSITY				55	MODEL					MODEL					2	
GEL				2"	LINER SIZE					LINER SIZE	1¾				3	

W.L. F.C. pH. DESILTER: Hours Op: 4 U. Flow: 99 O. Flow: 44 SURVEYS At Feet / Degrees: 5600 10½

ADDITIVES: GENERAL:

30 Lbs Quick Trol

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

	START	STOP	INTVL
Rig Service	12 00	12 15	¼
Drilling - 5591	12 15	5 00	4¾
Circulate & Trip	5 00	6 00	1
Drilling - 5611	6 00	8 00	2

FIRES DRILLER'S SIGNATURE

Rig Service	8 00	8 15	¼
Drilling - 5622	8 15	10 00	1¾
Rec Circ - Trip	10 00	11 30	1½
Drilling - 5641	11 30	1 00	1½
Rec Circ	1 00	2 00	1
Change Sub on Elevator		2 30	½
Circulate	2 30	3 45	1¼
Drilling - 5665	3 45	11 00	¼

FIRES DRILLER'S SIGNATURE

Rig Service	4 00	4 15	¼
Rec Circ	4 15	5 00	¾
Drilling (Pick up [illegible] ft)	5 00	5 15	¼
Work Tube	5 15	5 45	½
Survey at 5644 (Misrun)	5 45	7 00	1¼
Drilling 5622	7 00	9 45	2¾
Rec Circ	9 45	10 30	¾
Survey - 10½ - Circulate	10 30	11 45	1¼
Drilling - 5622	11 45	12 00	¼

FIRES DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

TOTCO RING ON BIT # Boiler Operated 24 Hrs.

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M.

CEMENT RETURNS - (YES/NO)

GENERAL

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 113

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1869 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION [illegible] LSD ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE [illegible] 19[illegible]

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5562	20	5582	4		92	4		8	[illegible]					27	21

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
9	11	RWD	16-16-16	163411	9000	140	206	6			1	1100	140	1200			
10																	
11																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	8.7	9		8.9	No. 1 PRESSURE	250				No. 2 PRESSURE					1	
VISCOSITY	46	39	36	34	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	6½				LINER SIZE	6½				3	

W.L. ____ F.C. ½ pH. 9 DESILTER: Hours Op: 9 U. Flow: 9 O. Flow: 9

ADDITIVES: [illegible] GENERAL: [illegible]

SURVEYS: At Feet / Degrees

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5562			0		92	4		8	[illegible]					27	21

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
10	11	RWD	23-15-15	163411			206	6			2						
11																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1	9.1	No. 1 PRESSURE	C	C	—	—	No. 2 PRESSURE	—				1	
VISCOSITY			39	35	MODEL S.P.M.	[illegible]				MODEL S.P.M.					2	
GEL					LINER SIZE	7½				LINER SIZE	6½				3	

W.L. ____ F.C. ____ pH. 9 DESILTER: Hours Op: 8 U. Flow: 9½ O. Flow: [illegible]

ADDITIVES: [illegible] GENERAL: [illegible]

SURVEYS: At Feet / Degrees

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5582					92	4		8	[illegible]					27	116

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	[illegible]				No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	[illegible]				MODEL S.P.M.					MODEL S.P.M.					2	
GEL	[illegible]				LINER SIZE	6½				LINER SIZE	6½				3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: 4 U. Flow: [illegible] O. Flow: [illegible]

ADDITIVES: [illegible] GENERAL: [illegible]

SURVEYS: At Feet / Degrees

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12 00	12 15	¼
[illegible]	12 15	1 15	1
[illegible]	1 15	1 45	½
[illegible]	1 45	4 00	2¼
[illegible]	4 00	5 00	1
[illegible]	5 00	6 45	1¾
[illegible]	6 45	9 00	2¼
FIRES ____ DRILLER'S SIGNATURE			
[illegible]	9 00	9 15	¼
[illegible]	9 15	9 30	¼
[illegible]	9 30	9 45	¼
[illegible]	9 45	12 15	2½
[illegible]	12 15	12 45	½
[illegible]	12 45	2 15	1½
[illegible]	2 15	4 00	1¾
[illegible]			
[illegible]			
FIRES ____ DRILLER'S SIGNATURE			
[illegible]	4 00	4 15	¼
[illegible]	4 15	5 45	1½
[illegible]	5 45	6 00	¼
[illegible]	6 00	7 30	1½
[illegible]	7 30		
[illegible]		11 00	1½
[illegible]	11 00	12	1
[illegible]			
[illegible]			
FIRES ____ DRILLER'S SIGNATURE			

B.C.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	✓			
Blind Rams.				

TOTCO RING ON BIT # ____ Boiler Operated: 24 Hrs.

Crown-a-matic Chk'd.	
Rig Savers Chk'd.	✓
Kelly Cock Chk'd.	✓
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

GENERAL ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 112

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK
		-										

HSW DDL-1 CONSERVATION BOARD COPY

No. 1868 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 171 — LOCATION Cousins 11-24A — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE May 22 19 71

DIRECTIONS TO WELL Glat 52° 54 Hwy 12½ 57 1.7 — MAILING POINT Nor Manvelle — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5289	28	5317	6½		71	3								27	15

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	RR	4½	HMO	9-9-9	4579-H	1500	140	5441	34			2	225	120	1700			
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9	9	9.1	No. 1 PRES. SURE	240				No. 2 PRES. SURE	C.C.				1	
VISCOSITY		36	37	37	MODEL					MODEL					2	
GEL					S.P.M.	120				S.P.M.					3	
					LINER SIZE	9½				LINER SIZE	7½					

W.L. 1 F.C. 4/32 pH. 9 DESILTER: Hours Op: 8 U. Flow: 90 O. Flow: 97

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: 10 sx Caustic GENERAL: ___

2 sx Gel 5 sx F.C.

4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5317	21	5538	4½		72	2								27	14

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	RR	4½	HMO	9-9-9	4579-H	1500	140	5441	34			2	225	120	1700			
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	8.4	8.9	9.0		No. 1 PRES. SURE		C.C.			No. 2 PRES. SURE	135				1	
VISCOSITY	26	26	25		MODEL		Triplex			MODEL					2	
GEL					S.P.M.					S.P.M.					3	
					LINER SIZE	9½				LINER SIZE	7½					

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 7 U. Flow: 90 O. Flow: 84

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: 10 sx Caustic GENERAL: 1 cask Life

4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

2 sx C-5 Chemtrol 1054 Diesel

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5538	24	5562	5½		72	2								25	17

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	RR	4½	HMO	9-9-9	4579-H	1500	140	5441	34			2	225	120	1700			
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	8.9	8.9			No. 1 PRES. SURE					No. 2 PRES. SURE	175				1	
VISCOSITY	36	36			MODEL		Triplex			MODEL					2	
GEL					S.P.M.					S.P.M.					3	
					LINER SIZE	9½				LINER SIZE	7½					

W.L. ___ F.C. ___ pH. 9 DESILTER: Hours Op: 7 U. Flow: 90 O. Flow: 78

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: ___ GENERAL: ___

4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

2 sx Caustic 1 sx Chemtrol 1 sx Lime 2 sx Gel

5 sx Flocele 2 sx Soda Ash 2 sx Quebracho

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Service	12:00	12:15	¼
Welding Kelly Bushing	12:15	12:30	¼
Drilling 5538	12:30	2:45	2¼
Rig Repair -	2:45	3:00	¼
Drilling - 5562	3:00	4:00	1
Rig Service	4:00	4:15	¼
Welding - Kelly Bushing	4:15	4:30	¼
Rig Repair -	4:30	5:30	1
Drilling 5562	5:30	6:30	1
Rig Service	6:30	7:00	½
Drilling 5562	7:00	8:00	1
Rig Service	8:00	8:15	¼
Drilling 5562	8:15	9:00	¾
Rig Service	9:00	9:15	¼
Drilling 5562	9:15	11:00	1¾
Repair Swivel Packing	11:00	11:30	½
Drilling - 5591	11:30	1:30	2
Rig Service	1:30	2:45	1¼
Drilling 5538	2:45	4:00	1¼
Drilling 5538	4:00	4:45	¾
Rig Service	4:45	5:45	1
Drilling 5562	5:45	10:30	4¾
Rig Service	10:30	11:00	½
Survey pt	11:00	12:00	1

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12:01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUG DOWN ___ A.M. P.M. ___ PLUS ___ % ___ CEMENT RETURNS - (YES/NO) ___

GENERAL —

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 11

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1867 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO 1-11 LOCATION CANDEX HM3-A LSD SEC. TWP. RGE. W. DATE MAY 22 19 71

DAILY DRILLING LOG
DIRECTIONS TO WELL Pt L 1 E Lsd 12 4 37 15 W
MAILING POINT NORMAN WELLS SHIPPING POINT
MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5465					9	4							27	12

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
T	1	12 1/4	HWT	32	HC 244			77½	22									
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			37		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 9 U. Flow: O. Flow: SURVEYS At Feet Degrees

ADDITIVES: Conc-Lig GENERAL: 4 5

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip In	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5466	2	5467	¼											

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	7.0				No. 1 PRES. SURE	240				No. 2 PRES. SURE					1	
VISCOSITY	77				MODEL S.P.M.	120				MODEL S.P.M.	240				2	
GEL					LINER SIZE	2½				LINER SIZE	1¾				3	

W.L. F.C. pH. DESILTER: Hours Op: 9 U. Flow: 4 O. Flow: 4 7 SURVEYS At Feet Degrees

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5467	22	5489	6 ¼		9 1	1							27	18

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
T	1	12 1/4	HWT	32	HC 244			77½	22			2	240		1100			
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	7.0	7.0			No. 1 PRES. SURE	240			240	No. 2 PRES. SURE					1	
VISCOSITY	77	77			MODEL S.P.M.	120			120	MODEL S.P.M.					2	
GEL					LINER SIZE	2½				LINER SIZE	1¾				3	

W.L. F.C. pH. DESILTER: Hours Op: 9 U. Flow: O. Flow: SURVEYS At Feet Degrees

ADDITIVES: GENERAL: 5465 11°

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams				

TOTCO RING ON BIT # Boiler Operated 24 Hrs.

Crown-o-matic Chk'd. Rig Savers Chk'd. ✓ Kelly Cock Chk'd. Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals. Fuel Rec'd Today (add) gals. TOTAL gals. Fuel on Hand 11.59 p.m. (deduct) gals. FUEL USED gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO)

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 110

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

GENERAL: ② Overtime dic to Rig chart

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	INTVL
Rig SER	12 00	12 15	¼
Circulate	12 15	12 30	½
Drop Nagel Survey	12 30	12 45	¼
Circulate	12 45	1 —	¼
Trip out	1 —	4 30	3½
Trans Survey - 11/4 at 5464 70°	4 30		
Direct - Nelis 170° - T			
Wait on Daylight at 5464 70°		8 00	3½
Nelis 21 pt T			
RIG SER	8 00	8 15	¼
Trouble Survey	8 15	9 00	¾
Change Kelly	9 00	9 15	¼
Trip in	9 15	11 00	1¾
Circulate Bottoms	11 00	11 30	½
Drilling 5477 Travel Time	11 30	12 00	½
Drilling 5475 -	00	5 45	1¾
RIG SER	5 45	6 15	½
Survey at 5465 Nelis	6 15	7 15	1
Drilling - 5483	7 15	9 00	1¾
REC CORE	9 00	10 15	1¼
Drilling 5499	10 15	12 00	1¾

FIRES DRILLER'S SIGNATURE

HSW DDL-1 CONSERVATION BOARD COPY

No 1866 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 17-11 — LOCATION CANDLEY AREA — LND. — SEC. — TWP. — RGE. — W. — DATE May 31 — 1971

DIRECTIONS TO WELL Rig 12 miles Long Lake N.E. — MAILING POINT Norman Wells — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5430	16	5446	4½											17	12

B/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	12	4½	HWDP	355	45244	1500	140	70½	17				1250		1200			
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1		No. 1 PRES. SURF.					No. 2 PRES. SURF.	150				1	
VISCOSITY			36		MODEL			Tank		MODEL S.P.M.	140				2	
GEL					S.P.M. LINER SIZE	2½				LINER SIZE	1¼				3	
W.L.	F.C.	pH.			DESILTER: Hours Op.	4	U. Flow		O. Flow						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet — Degrees

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5446	4	5450	1½		90	3								27	21

T	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T	12	4½	HWDP	355	45244	1500	140	71½	14½			2	150	150	1250			
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.0	9.0			No. 1 PRES. SURF.	Circ. Tk.				No. 2 PRES. SURF.	200	150			1	
VISCOSITY	35	35			MODEL	Tanks				MODEL S.P.M.	150				2	
GEL					S.P.M. LINER SIZE	2½				LINER SIZE	1¼				3	
W.L	F.C	pH.			DESILTER: Hours Op.	8	U. Flow	44	O. Flow	8.7					4	
ADDITIVES:	2 Five Way Out	GENERAL:	Fuel Mud												5	
	2 Five Way Out	1 Soda Ash	1 Caustic												Weather	Water
	2 Five Way Out	2 Caustic													Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet — Degrees

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5450		5465	3¾		90	4								27	18

T	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
T	12	4½	HWDP	355	45244	1500	140	84½	22			1	300	120	1300			
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.	900				No. 2 PRES. SURF.					1	
VISCOSITY					MODEL					MODEL S.P.M.					2	
GEL					S.P.M. LINER SIZE	120				LINER SIZE	1¾				3	
W.L	F.C.	pH. 9			DESILTER: Hours Op.		U. Flow		O. Flow						4	
ADDITIVES:	4 Mud Sweep	GENERAL:	1 Bag Phosphate												5	
	100 lbs Quik Tel		190 lbs Bicarb												Weather	Water
	2 Bags Lignosox		25 lbs Caustic Soda												Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet — Degrees

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date	Crown-o-matic Chk'd.	Rig Savers Chk'd.	Kelly Cock Chk'd.	Fire Equip. Chk'd.
Hydril								
Pipe Rams								
Blind Rams								

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUG DOWN — A.M. P.M. — PLUS — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 109

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS

Approved by Operator's Representative

Approved by Toolpusher

REMARKS

TIME START	TIME STOP	INTVL	REMARKS
12 03	12 15	¼	[illegible]
12 15	2 00	1¾	[illegible]
2 00	3 15	1¼	[illegible]
3 15	4 30	1¼	[illegible]
4 30	5 15	¾	[illegible]
5 15	5 45	½	[illegible]
5 45	7 00	1¼	[illegible]
7 00	7 30	½	[illegible]
			FIRES — DRILLER'S SIGNATURE
8 00	8 15	¼	Drilling - Sand
8 15	7 30	1¼	Rec Core - Circulate Tub. To
7 30	10 30	1	Drilling 5450
10 30	11 30	1	Rec Core - Circulate Tub. To
11 30	12 30	1	Partial Losses - [illegible]
12 30	2 45	2¼	[illegible]
2 45	4 00	¼	Trip [illegible]
			FIRES — DRILLER'S SIGNATURE
4 00	4 15	¼	Rig Service
4 15	6 15	2	Wait on Water Pump - Circulate Tank
6 15	7 30	1¼	Drilling - 5456
7 30	8 30	1	Rec Core - Circulate To
8 30	10 15	1¾	Drilling - 5465
10 15	11 15	1	Rec Core
11 15	11 30	¼	Drilling (Stuck)
11 30	12 00	½	Rec Core
			(Work Pipe - Trying to Free)
			(Unload Pipe - Trying to Free)
			FIRES — DRILLER'S SIGNATURE

HSW DDL-1 CONSERVATION BOARD COPY

No 1864 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANUCK Area — LSD — SEC. — TWP. — RGE. — W. — DATE May 4 — 1971

DIRECTIONS TO WELL [illegible] — MAILING POINT Norman Wells — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	L.B. Ft.	Ft. up on Kelly
5430	16	5446	4½											17	1'

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	12¼	4½	HWC	3-3-3	HC124H	40K	140	70½	17				1250		1200			
1																		
2																		
3																		

MUD	12 mn	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 press. sure					No. 2 press. sure	1200				1	
VISCOSITY			41		MODEL					MODEL					2	
GEL			26		liners size	2½		5½		liners size	7¼				3	
W.L.	F.C.		pH.		DESILTER: Hours Op:			U. Flow:		O. Flow:			SURVEYS At Feet	Degrees	4	
ADDITIVES:					GENERAL:								Survey 10°		5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8AM TO 4PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	L.B. Ft.	Ft. up on Kelly
5446	4	5450	1½		90	3								27	21

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	12-0	4½	HWC	3-3-3	HC124H	40K	140	70½	19½			2	1500	750	1250			
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.2			No. 1 press. sure	Circ				No. 2 press. sure	2	150			1	
VISCOSITY	35	35			MODEL			Triplex		MODEL	750				2	
GEL					liners size	2½				liners size	12				3	
W.L.	F.C.		pH.		DESILTER: Hours Op:	8		U. Flow:	9.2	O. Flow:	8.7		SURVEYS At Feet	Degrees	4	
ADDITIVES:	2 Pails Walnut				GENERAL:	Some Mud									5	
	2 Sacks Walnut					1 Drum pipe lubricant									Weather / Temp.	Water / Bbls.
	2 Pails Aluminum					2 Cans Lubetex										

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	L.B. Ft.	Ft. up on Kelly
5450		5465'	3¾		90	4								27	18

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	12¼	4½	HWC	3-3-3	HC124H	45K	140	84½	22			1	1200	120	1300			
1																		
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 press. sure	900				No. 2 press. sure					1	
VISCOSITY					MODEL					MODEL					2	
GEL					liners size	6½				liners size	6½				3	
W.L.	F.C.		pH. 9		DESILTER: Hours Op:			U. Flow:		O. Flow:			SURVEYS At Feet	Degrees	4	
ADDITIVES:	4 Pails Walnut				GENERAL:	Lots of Pressure									5	
	100 lbs Quicktrol					120 lbs Bicarbonate									Weather / Temp.	Water / Bbls.
	2 Cans Lubricant					25 lbs Caustic Soda										

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

	TIME START	TIME STOP	INTVL
[illegible]	12 00	12 15	¼
[illegible]	12 15	2 00	1¾
[illegible]	2 00	3 30	1½
[illegible]	3 30	4 30	1
[illegible]	4 30	5 00	½
[illegible]	5 00	6 00	1
[illegible]	6 00	6 30	½
[illegible]	6 30	7 00	½
FIRES		DRILLER'S SIGNATURE	
Drilling - Surv.	9 00	9 15	¼
Rig Chk + Circulate Tr.	9 15	9 30	¼
Drilling - 5450	9 30	10 30	1
Rig Chk + Circulate Tr.	10 30	11 30	1
Drilling - 5465	11 30	12 00	½
[illegible]	12 00	1 00	1
[illegible]	1 00	2 00	1
[illegible]	2 00	3 00	1
[illegible]	3 00	4 00	1
Trip [illegible]	4 00	4 30	½
[illegible]	4 30	5 00	½
[illegible]	5 00	6 00	1
[illegible]	6 00	6 30	½
[illegible]	6 30	7 00	½
[illegible]	7 00	8 00	1
[illegible]	8 00	9 00	1
[illegible]	9 00	10 00	1
[illegible]	10 00	11 00	1
[illegible]	11 00	12 00	1
FIRES		DRILLER'S SIGNATURE	
Drilling - 5450	4 00	4 15	¼
Rig Chk + Circulate Prior to Trip	4 15	6 15	2
Drilling - 5456	6 15	7 30	1¼
Rig Chk - Circulate Tr.	7 30	8 30	1
Drilling - 5465'	8 30	10 15	1¾
Rig Chk.	10 15	11 15	1
Drilling - (Ream)	11 15	11 30	¼
Rig Chk.	11 30	12 00	½
(Wiper Trip)			
Circulate & Trip (Test BOP)			
FIRES		DRILLER'S SIGNATURE	

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected By
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12,01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11,59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG

TO ____ KB. USED ____ SAX ____ CEM

PLUG DOWN ____ A.M. P.M.

CEMENT RETURNS - (YES/NO)

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 109

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sanosc	Ft. Drilled since Sanosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW 661-1 — CONSERVATION BOARD COPY

No 1864 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION CANOE MARSH LSD. SEC. TWP. RGE. W. DATE May 20 1971

DIRECTIONS TO WELL [illegible] MAILING POINT NORMAN WELLS SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5376	17½	5393½	3¼		89	3								27	17½

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	12¼	HWT	3-15	185-2W1500	40	80	17½	33¼			2	750	250	1253			
2																	
3																	
4																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.2		No. 1 PRESSURE					No. 2 PRESSURE	750			750	1	
VISCOSITY			37		MODEL S.P.M.					MODEL S.P.M.	90			90	2	
GEL					LINER SIZE	2½				LINER SIZE	1¾			1¾	3	

W.L. F.C. pH. DESILTER: Hours Op: 8 U. Flow: O. Flow:

SURVEYS: At Feet 5340 Degrees 11½ | 4 | 5 | Weather | Water

ADDITIVES: GENERAL: [illegible] Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES [illegible] DRILLER'S SIGNATURE

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5392	13½ Footage	5405	3½		89	1									16

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	12¼	HWT	3-15	185-2W1500	40	80	17½	33¼			2	750	250	1253			
2																	
3																	
4																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1	9.2		No. 1 PRESSURE					No. 2 PRESSURE	[illegible]		1500	1500	1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.	[illegible]		[illegible]	[illegible]	2	
GEL					LINER SIZE	2½				LINER SIZE	1¾			1¾	3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 8 U. Flow: 92 O. Flow: 90

SURVEYS: At Feet 5405 Degrees 11½ | 4 | 5 | Weather | Water

ADDITIVES: GENERAL: [illegible] Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
			1										

FIRES DRILLER'S SIGNATURE

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5407	23	5430	5½		90	1								27	17

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	12¼	HWT	3-15	185-2W1500	40	80	17½	33¼			2	750	250	1253			
2																	
3																	
4																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESSURE					No. 2 PRESSURE	1500				1	
VISCOSITY				36	MODEL S.P.M.					MODEL S.P.M.	240				2	
GEL					LINER SIZE	2½				LINER SIZE	1¾				3	

W.L. F.C. pH. 9 DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet 5405 Degrees 11½ | 4 | 5 | Weather — | Water

ADDITIVES: GENERAL: [illegible] Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	✓	25 min	1500	
Blind Rams.				

TOTCO RING ON BIT # Bailer Operated: 24 Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. ✓ | Kelly Cock Chk'd. | Fire Equip. Chk'd.

		gals.
Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT: CAN JTS CSG — TO KB. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M. — CEMENT RETURNS - (YES/NO) GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 108

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	INTVL.
Surv Surveys	12 00	12 15	¼
Rig Svc	12 15	12 30	¼
Wash Tube & Circ	12 30	1 15	¾
[illegible]	1 15	2 00	¾
Rig Svc	2 00	3 00	1
Drilling - 5390	3 00	5 15	2¼
Rig Svc	5 15	5 45	½
Survey 5400 Wire Line	5 45	6 45	1
Drilling - 5392	6 45	7 30	¾
Rig Svc	7 30	8 00	½
Drilling 5396	8 00	8 15	¼
Rig Svc	8 15	8 30	¼
Circ [illegible] Trip	8 30	9 30	1
Drilling 5396	9 30	11 15	1¾
Rig Svc	11 15	12 15	1
[illegible]	12 15	1 30	1¼
Rig Svc	1 30	2 00	½
Survey @ 4	2 00	9 45	¾
[illegible]	9 45	9 30	¾
Drilling 5407	9 30	4 00	½
Drilling	4 00	11 45	¾
Rig Svc	4 45	5 45	1
Drilling 5419	5 45	9 00	2¼
Circ 5430	9 00	10 00	2½
Rig Svc	10 20	11 00	½
Surv @ 5430	11 00	12 00	1
(K Lines Tangling Sur)			

FIRES DRILLER'S SIGNATURE

HSW DDL-1 CONSERVATION BOARD COPY

No 1863 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION CANON 44-3 — LSD. — SEC. — TWP. — RGE. — W. — DATE MAY 19 — 1971

DIRECTIONS TO WELL — MAILING POINT Norman Wells — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5370					84	1								27	17

No.	Size	Type	Jets/W.O.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1							179	40			2	1300	240				
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1	9.2	No. 1 PRES. SURE		Circ			No. 2 PRES. SURE		C	C		1	
VISCOSITY			37	37	MODEL S.P.M.	120	Tank			MODEL S.P.M.	240				2	
GEL					LINER SIZE	2½				LINER SIZE	1½				3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 4 — U. Flow: — O. Flow:

SURVEYS: At Feet / Degrees — 5370 / 11½

ADDITIVES: — GENERAL: Drilling Stiff Rubber Packer Element

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5370	6	5376	2¾		84	2								27	23

No.	Size	Type	Jets/W.O.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1		9.0	No. 1 PRES. SURE			150		No. 2 PRES. SURE	240	240		150	1	
VISCOSITY		37		37	MODEL S.P.M.			150		MODEL S.P.M.		240		240	2	
GEL					LINER SIZE	2½		3½		LINER SIZE	5½				3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 8 — U. Flow: 89 — O. Flow: 78

SURVEYS: At Feet / Degrees

ADDITIVES: 1 Sack Soft — GENERAL: Drilling

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5376															

No.	Size	Type	Jets/W.O.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.2				No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	37				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 96 — O. Flow: 91

SURVEYS: At Feet / Degrees — 5376 / 11½

ADDITIVES: 4 Sack Soft — GENERAL: Drilling

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

REMARKS

REMARKS	TIME START	TIME STOP	INTVL.
Rig Serv	12 00	12 15	¼
Trip in	12 15	1 15	1
Circ	1 15	1 30	¼
Trip out	1 30	2 45	1¼
Mix Circ Mat	2 45	3 00	¼
Circ	3 00	4 00	1
Survey @ 10	4 00	4 15	¼
Circ & Cond to Log	4 15	5 00	¾
Rig Serv	5 00	5 15	¼
Circ Last Full Circ	5 15	7 30	2¼
Trip out	7 30	9 00	1½
Clean out Junk Bskt	9 00	11 15	2¼
Trip in	11 15	12 00	¾
Survey			
Rig Serv	8 00	8 15	¼
Steam Leg	8 15	10 30	2¼
Drilling 5372	10 30	12 00	1½
Rec Core	12 00	1 15	1¼
Drilling 5376	1 15	2 30	1¼
Rec Core - Circulate	2 30	4 00	1½
Rig Serv	4 00	4 15	¼
Circ Last Full Circ	4 15	5 15	1
Trip out	5 15	7 30	2¼
Clean out Junk Bskt	7 30	9 00	1½
Trip in	9 00	11 15	2¼
Survey	11 15	12 00	¾

FIRES — DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO) — GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 107

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative: D. E. Sutton

Approved by Toolpusher: C. Yoshimura

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 — CONSERVATION BOARD COPY

No 1862 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION CANADA MESA A — LSD. — SEC. — TWP. — RGE. — W. — DATE May 19 — 1971

DIRECTIONS TO WELL — MAILING POINT Marshall Wells — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5370					89	1								27	17

Hole	Start	Type	Jars/WOC	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	Tons	Bits	Out

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.2	9.2	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			37	37	MODEL					MODEL					2	
GEL					S.P.M.	120				S.P.M.	240				3	
					LINER SIZE	2½				LINER SIZE	1½					

W.L. — F.C. — pH. — DESILTER: Hours Op: 4 — U. Flow: — O. Flow:

ADDITIVES: — GENERAL:

SURVEYS: At Feet 5370 — Degrees 11½

Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5370	6	5376	2¾		89	2								27	23

Hole	Start	Type	Jars/WOC	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	Tons	Bits	Out

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1		9.0	No. 1 PRESSURE	[illegible]		150		No. 2 PRESSURE	240	260		150	1	
VISCOSITY		37		37	MODEL					MODEL		240		240	2	
GEL					S.P.M.			132		S.P.M.					3	
					LINER SIZE	2½		2½		LINER SIZE	1½					

W.L. — F.C. — pH. — DESILTER: Hours Op: 8 — U. Flow: 9.4 — O. Flow: 9.0

ADDITIVES: 10 Bags Salt — GENERAL:

1 Bag Caustic

SURVEYS: At Feet — Degrees

Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5376															

Hole	Start	Type	Jars/WOC	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	Tons	Bits	Out

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.2				No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	37				MODEL					MODEL					2	
GEL					S.P.M.					S.P.M.					3	
					LINER SIZE					LINER SIZE						

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 9.6 — O. Flow: 9.1

ADDITIVES: — GENERAL:

2 Bags Caustic (Used on Trip)

SURVEYS: At Feet 5376 — Degrees 11½

Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. — gals.
Fuel Rec'd Today (add) — gals.
TOTAL — gals.
Fuel on Hand 11.59 p.m. (deduct) — gals.
FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 107

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative — Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.
Rig Service	12 00	12 15	¼
Fuel unit	12 15	1 15	1
[illegible]	1 15	1 30	¼
Trip in	1 30	2 45	1¼
Make up bit	2 45	3 00	¼
Circ.	3 00	4 15	1¼
Survey at 10	4 15	4 45	½
Trip out for bit	4 45	8 00	3¼
FIRES		DRILLER'S SIGNATURE	
Rig Service	8 00	8 15	¼
Trip in	8 15	10 30	2¼
Drilling 5372	10 30	12 00	1½
Rig Service	12 00	1 15	1¼
Drilling 5376	1 15	2 30	1¼
Rig Service - Circulate	2 30	4 00	1½
Rig Service	4 00	4 15	¼
Circulate Tune at 5372	4 15	5 15	1
Trip out	5 15	7 30	2¼
Change out Bit #3	7 30	8 00	½
Trip in	8 00	11 15	3¼
Survey	11 15	12 00	¾
FIRES		DRILLER'S SIGNATURE	

HSW DDL-1 — CONSERVATION BOARD COPY — No 1862 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION CANDEX MH-A Palmisano LSD. SEC. TWP. RGE. W. DATE May 18 19 71

DIRECTIONS TO WELL 21 Cr 52 2 mi W 1/2 N 1-0.7 — MAILING POINT NORMAN WELL — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5336	11	5347	3½		88	4								27	16

No.	Size	Type	Jets/W.C.m	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	11-32	4½	3-15	42-236	15-20	140	155	34			2	100	240	1000			
2																	
3																	
4																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.2		No. 1 PRESSURE	M x Mud				No. 2 PRESSURE	100			100	1	
VISCOSITY			40		MODEL S.P.M.					MODEL S.P.M.	240			240	2	
GEL					LINER SIZE	2½				LINER SIZE	1¾				3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 95 — O. Flow: 91

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: 10 Sx Gel, 5 Sx Lignite, 10 Sx Caustic, 5 Sx Barite, 5 Sx Lime, 5 Sx Starch — GENERAL: Drilling

Weather: Cloudy — Temp. 53 — Water: 13 Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5341	21	5368	5½		89	1								27	21

No.	Size	Type	Jets/W.C.m	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	11-32	4½	3-15	42-236	15-20	140	155	34			2	100	240	1000			
2																	
3																	
4																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1			9.1	No. 1 PRESSURE	Circ.				No. 2 PRESSURE	240	120			1	
VISCOSITY	37	39	40	39	MODEL S.P.M.	200		Hauling		MODEL S.P.M.	240				2	
GEL					LINER SIZE	2½				LINER SIZE	1¾				3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 93 — O. Flow: 91

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: — GENERAL:

Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5368	2	5370	½												

No.	Size	Type	Jets/W.C.m	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	11-32	4½	3-15	42-236	15-20	140	155	34			2	100	240	1000			
2																	
3																	
4																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	~~9.0~~	9.3		9.1	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY		42		39	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 98 — O. Flow: 93

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: 10 Sx Gel, 5 Sx Lignite, 10 Sx Caustic, 5 Sx Barite, 5 Sx Lime, 5 Sx Starch — GENERAL: Drilling

Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓	9 5	1500	
Blind Rams	✓	7 5	1500	

TOTCO RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	✓
Kelly Cock Chk'd.	✓
Fire Equip. Chk'd.	✓

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 106

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative D. V. Sutton

Approved by Toolpusher C. Hofman

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL.
Circulate & Condition Mud	12 00	2 15	2¼
Drilling - 5334	2 15	3 15	1
R.C.C.H.	3 15	4 00	¾
Drilling - 5343	4 00	5 00	1
R.C.C.H.	5 00	5 30	½
Survey at 5346 - 1°	5 30	6 45	1¼
Drilling	6 45	8 00	1¼
FIRES			

DRILLER'S SIGNATURE

R.C.S.E.R.	8 00	8 11	¼
Drilling	8 15	12 00	3¾
R.C.C.H.	12 00	1 00	1
Repair Sub	1 00	1 15	¼
Drilling 5916	1 15	2 15	1
R.C.C.H.	2 15	3 30	1¼
Drilling - 5369	3 30	4 00	½
FIRES			

DRILLER'S SIGNATURE

Drilling - 5369	4 00	4 15	¼
R.C.C.H.	4 15	5 00	¾
Drilling 5370 (No go.)	5 00	5 15	¼
Pull Pipe (Hang Cable Rods)	5 15	6 00	¾
Tripping out	6 00	7 00	1
Equipment in GM Repair	7 00	7 45	¾
Trip in	7 45	9 00	1¼
Circ. Bot. & Cond. Mud.	9 00	10 30	1½
Circ. - Cond. Mud. Mix Cement	10 30	11 00	½
Trip out	11 00	12 00	1
FIRES			

DRILLER'S SIGNATURE

HSW DDL-1 CONSERVATION BOARD COPY

No 1861 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. [illegible] LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE MAY 17 19 71

DIRECTIONS TO WELL [illegible] MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5281	18	5299	3 1/2		88								27	14

Bit No.	Size	Type	Jets 32nds	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Grade
[illegible]																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	Next Oil Change
WEIGHT			71	71	No. 1 PRESS. SURF.	[illegible]				No. 2 PRESS. SURF.	125		125		
VISCOSITY			37	35	MODEL S.P.M.	[illegible]				MODEL S.P.M.	120		120		
GEL					LINER SIZE	1 1/2				LINER SIZE	2		2		

W.L. ___ F.C. ___ pH. 9 DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet ___ Degrees ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5299	28	5327	6 1/2		88	3								29

Bit No.	Size	Type	Jets 32nds	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Grade
[illegible]																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	74				No. 1 PRESS. SURF.	125				No. 2 PRESS. SURF.	[illegible]				1	
VISCOSITY	37			37	MODEL S.P.M.	120				MODEL S.P.M.	[illegible]				2	
GEL					LINER SIZE	6 1/2				LINER SIZE	1 3/4				3	

W.L. ___ F.C. ___ pH. 9 DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: 6

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet ___ Degrees ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5327	9	5336	3 1/2		89	3							27	15

Bit No.	Size	Type	Jets 32nds	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Grade
[illegible]																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURF.					No. 2 PRESS. SURF.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

ADDITIVES: [illegible] GENERAL: [illegible]

SURVEYS: At Feet ___ Degrees ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11.59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___ GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.
[illegible]	12 00	12 15	1/4
[illegible]	12 15	12 45	1/2
[illegible]	12 45	2 15	2 1/2
[illegible]	2 15	2 45	1/2
[illegible]	2 45	6 30	3 3/4
[illegible]	6 30	7 15	3/4
Drilling	7 15	9 00	1 3/4
FIRES ___ DRILLER'S SIGNATURE [illegible]			
Rig Service	9 00	9 15	1/4
Drilling - 5307	9 15	10 30	1 1/4
R-C-Co[illegible]	10 30	11 45	1 1/4
Drilling - 5327	11 45	4 00	4 1/4
FIRES ___ DRILLER'S SIGNATURE			
Rig Service	4 00	4 15	1/4
R-C-Co[illegible]	4 15	5 30	1 1/4
R-C-Co[illegible]	5 30	6 30	1
Survey at 5297 - 1 1/2°	6 30	7 15	3/4
Drilling 5321	7 15	9 00	1 3/4
R-C-Co[illegible]	9 00	9 45	1/4
Drilling - 5336	9 45	11 15	1 1/2
Water and Fuel Line Repair	11 15	12 03	3/4
FIRES ___ DRILLER'S SIGNATURE [illegible]			

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 105

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative D. E. Foster

Approved by Toolpusher [illegible]

HSW DDL-1 CONSERVATION BOARD COPY

No. 1860 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CAUDLE-I ac NE/4 — LSD. — SEC. — TWP. — RGE. — W. — DATE MAY 16 — 19 71

DIRECTIONS TO WELL 181-63'SL 57'Elev, 12W-39'N-7 — MAILING POINT NORMAN, OKLA. — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5279					87	3								27	14

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	32	6K7781													
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5279	2	5281	1½		87	2					28			27	20

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	32	6K7781			2	1½									
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.7	No. 1 PRESSURE					No. 2 PRESSURE	1000				1	
VISCOSITY				35	MODEL S.P.M.	100				MODEL S.P.M.	120				2	
GEL					LINER SIZE	2½				LINER SIZE	2½				3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5281					87	2								27	16

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	12¼	HTC	32	6K7781			96	13½									
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

TOTCO RING ON BIT # — Sollar Operated: 24 Hrs.

Fuel on Hand 12.01 a.m. — gals. — Fuel Rec'd Today (add) — gals. — TOTAL — gals. — Fuel on Hand 11.59 p.m. (deduct) — gals. — FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL —

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 164

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative — Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	INTVL.
Rig service	12 00	12 15	¼
Trip in hole	12 15	2 15	2
Circ. & cond.	2 15	2 45	½
Trip out of hole	2 45	4 45	2
Lay down drill collars	4 45	5 00	¼
Trip in hole with bit #2	5 00	6 30	1½
Circ. & cond.	6 30	7 00	½
Trip out of hole	7 00	7 00	1
FIRES			
DRILLER'S SIGNATURE			
Circ. & cond.	7 00	7 15	¼
Trip in hole	7 15	10 45	3½
Circ. & cond.	10 45	11 30	¾
Wash & ream 7' to bottom	11 30	12 45	1¼
Drill 5279' - 5281'	12 45	1 45	1
Circ. & cond.	1 45	4 15	2½
Trip out of hole	4 15	4 45	½
Lay down drill collars	4 45	5 45	1
Run 4½" casing	5 45	7 00	1¼
Circ. & cond.	7 00	7 45	¾
Cement with 200 sx Class H 4% gel, 2% CaCl, 1/4# flocele/sx	7 45	8 00	¼
Plug down @ 8:00 p.m. 5-16-71			
3-4½" centralizers @ 5279', 5234', 5189'			
FIRES			
DRILLER'S SIGNATURE			

HSW DDL-1 — CONSERVATION BOARD COPY — No. 1859 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LOT ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 196__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
52															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gge.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours On: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: ____ GENERAL: ____

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5230	92	5322	5		91	1								27	39

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gge.
1	7 7/8	RR		5229	15/20	140	87	16				900					

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				43	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: 8 U. Flow: ____ O. Flow: ____ SURVEYS 6 at 25° — 11 — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: ____ GENERAL: Lost 60 bbls

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5279					87	3									18

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gge.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.7	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				40	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. 9 DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees — 4 — 5 — Weather — Water — Temp. — Bbls.

ADDITIVES: ____ GENERAL: Lost 120 bbls

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME: START / STOP / INTVL

- 7:00 — 7:15 — 1/4
- 7:15 — 7:45 — 1/2
- 7:45 — 12:00 — 4 1/4
- 12:45 — 1:15 — 1/2
- 1:15 — 2:00 — 3/4
- 2:00 — 2:30 — 1/2
- 2:30 — 3:30 — 1
- 3:30 — 4:00 — 1/2
- 4:00 — 4:15 — 1/4
- 4:30 — 4:45 — 1/4
- 4:45 — 5:00 — 1/4
- 5:00 — 5:15 — 1/4
- 5:15 — 5:45 — 1/2
- 5:45 — 6:00 — 1/4
- 6:00 — 7:00 — 1
- 7:00 — 11:30 — 3 1/2
- 11:30 — 12:00 — 1/2

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals. Fuel Rec'd Today (add) ____ gals. TOTAL ____ gals. Fuel on Hand 11.59 p.m. (deduct) ____ gals. FUEL USED ____ gals.

CASING REPORT: RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M. CEMENT RETURNS - (YES/NO) ____

EQUIPMENT CHANGES ____ DRILLER'S SIGNATURE ____ TRANSFER # ____

DAYS FROM SPUD: ____ TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

GENERAL ____

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1858 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 19__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
52															

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	TOTAL

MUD	12 m.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 m.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 m.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.		DESILTER: Hours On:		U. Flow:		O. Flow:							4	
ADDITIVES:				GENERAL:											5	
															Weather	Water Bbls.
															Temp.	

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5230	92	5279	5		27	3								27	28

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	TOTAL
1	7 7/8																

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				53	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.		DESILTER: Hours Op:	8	U. Flow:		O. Flow:							4	
ADDITIVES:				GENERAL:											5	
															Weather	Water Bbls.
															Temp.	

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5279					27	3									15

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	TOTAL

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				40	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	9	DESILTER: Hours Op:		U. Flow:		O. Flow:							4	
ADDITIVES:				GENERAL:											5	
															Weather	Water Bbls.
															Temp.	

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date	Crown-o-matic Chk'd.	Rig Savers Chk'd.	Kelly Cock Chk'd.	Fire Equip. Chk'd.
Hydril								
Pipe Rams								
Blind Rams								

TOTCO RING ON BIT # ____ Boiler Operated: 24 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____ GENERAL ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: ____

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

REMARKS	TIME START	TIME STOP	TIME INTVL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 19__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	F.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME: START / STOP / INTVL.

FIRES ____ DRILLER'S SIGNATURE ____

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	F.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	F.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

GENERAL ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: ____

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1857 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG RIG NO. 11 LOCATION ... LSD. ... SEC. ... TWP. ... RGE. ... W. ... DATE ... 19 71

DIRECTIONS TO WELL ... MAILING POINT ... SHIPPING POINT ... MILES MOVED ... ROAD CONDITIONS ...

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5116	15	5116	9		16	1									

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	TO.
1	12¼	F-2	3-12	214	40K	65	116	25			2	1100	55				
2																	
3																	
4																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				39	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. 6.6 F.C. pH. 8 DESILTER: Hours Op: 2 U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5116	10	5121	2½		16	2									23

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	TO.
1	12¼	F-2	3-12	214	40K	65	116	27½			2	1100	55				
2																	
3																	
4																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1		No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			39		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. 6.6 F.C. pH. 8 DESILTER: Hours Op: 2 U. Flow: O. Flow:

ADDITIVES: Lube-Trol GENERAL:

SURVEYS: At Feet 5116 / Degrees 1¼

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5121	4	5121½	1¼		16	2									13

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	TO.
1	12¼	F-2	3-12	214	40K	65	116	28¾			2	1100	55				
2																	
3																	
4																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1			No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY		39			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 2 U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME	START	STOP	INTVL.

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 19__

DIRECTIONS TO WELL: ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees ___ 4 ___ 5 ___ Weather ___ Water ___ Temp. ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees ___ 4 ___ 5 ___ Weather ___ Water ___ Temp. ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees ___ 4 ___ 5 ___ Weather ___ Water ___ Temp. ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11:59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___ GENERAL: —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___ TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

REMARKS	TIME START	TIME STOP	TIME INTVL

FIRES ___ DRILLER'S SIGNATURE ___

HSW DDL-1 CONSERVATION BOARD COPY

No. 1855 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 19___

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

TOUR 8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5042	20	5062	3½		94	3									

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.4	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				40	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. 9 DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At 5050 feet / Degrees 1¼ — 4 — 5

ADDITIVES: ___ GENERAL ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m.		gals.
Fuel rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___ GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME — START / STOP / INTVL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: ___ TOTAL COMPANY TIME ___ HRS. ___ TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

HSW DDL-1 CONSERVATION BOARD COPY

No. 1854 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 19__

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

12 PM TO MIDNIGHT

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip	Feet Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11.59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

REMARKS	TIME START	TIME STOP	TIME INTVL

HSW DDL-1 CONSERVATION BOARD COPY

No 1853 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 120 LOCATION _____ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE _____ 19__

DIRECTIONS TO WELL _____ MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	J.G.
1																		
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	5 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE _____

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	J.G.
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hour: Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE _____

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	J.G.
1																		
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE _____

REMARKS

TIME	START	STOP	INTVL.

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12:01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUG DOWN ___ PLUS ___ % CEMENT RETURNS ___

EQUIPMENT CHANGES _____ TRANSFER # _____

DAYS FROM SPUD: _____

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative _____

Approved by Toolpusher _____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	TELEMETER RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1852 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 19__

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Col.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees

Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Col.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees

Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Col.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees

Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-a-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M.

CEMENT RETURNS - (YES/NO)

GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL.

FIRES ___ DRILLER'S SIGNATURE ___

FIRES ___ DRILLER'S SIGNATURE ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

HSW DDL-1 CONSERVATION BOARD COPY

No. 1852 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 12 — LOCATION _____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE _____ 19__

DIRECTIONS TO WELL _____ MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5015	9	5015	2½												

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	9-7/8	[illegible]			15 a	1-3	121	24½			2	175	250				
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1		No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			39		MODEL / L.P.M.					MODEL / S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. 8 — DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: [illegible] GENERAL: [illegible] — Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5015															

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL / L.P.M.					MODEL / S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ — DESILTER: Hours Op: 5 U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: [illegible] GENERAL: [illegible] — Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
5015	19	[illegible]			9	2									30

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]																
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 2 PRESSURE					1	
VISCOSITY					MODEL / S.P.M.					2	
GEL					LINER SIZE					3	

W.L. ____ F.C. ____ — DESILTER: Hours Op: 2 U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: [illegible] GENERAL: 2 Cats [illegible] — Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cu	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

TOTCO RING ON 'T' # ____ Boiler Operated: 14 Hrs.

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUG DOWN ____ A.M. P.M. ____ PLUS ____ % ____ CEMENT RETURNS - (YES/NO) ____ GENERAL: —

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: ____

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher [illegible]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL
	12	1	1
	1	2	1
	2	3	1
	3	4	1
	4	5	1
	5	6	1
	6	7	1
	7	8	1
	8	9	1
	9	10	1
	10	11	1
	11	12	1
	12	1	1
	1	2	1
	2	3	1
	3	4	1
	4	5	1
	5	6	1
	6	7	1
	7	8	1
	8	9	1
	9	10	1
	10	11	1
	11	12	1
	12	1	1
	1	2	1
	2	3	1
	3	4	1
	4	5	1
	5	6	1
	6	7	1
	7	8	1
	8	9	1
	9	10	1
	10	11	1
	11	12	1
	12	1	1
	1	2	1
	2	3	1
	3	4	1
	4	5	1
	5	6	1
	6	7	1
	7	8	1

HSW DDL-1 CONSERVATION BOARD COPY

No. 1851 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION ... LSD. ... SEC ... TWP. ... RGE. ... W. ... DATE ... 19...

DIRECTIONS TO WELL ... MAILING POINT ... SHIPPING POINT ... MILES MOVED ... ROAD CONDITIONS ...

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
4111	3-	4114	6½		38	3

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
							15

B. No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gauge
1	8¾			242	4000	150	10	11½			2	175	250				
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.2		No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY			45		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ... F.C. ... pH. ... DESILTER: Hours Op: ... U. Flow: ... O. Flow: ... SURVEYS At Feet / Degrees ... 4 ... 5 ... Weather ... Temp. ... Water Bbls.

ADDITIVES: ... GENERAL: ...

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
4114	37	4151	3½		39	1

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
							11

B. No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gauge
1	8¾			242	1700	120	4	17½			2	175	250				
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.2	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				39	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ... F.C. ... pH. 9 ... DESILTER: Hours Op: 5 ... U. Flow: ... O. Flow: ... SURVEYS At Feet 4475 / Degrees 70 ... 4 ... 5 ... Weather ... Temp. ... Water Bbls.

ADDITIVES: 1 sk Lig, 1 gal F-2 ... GENERAL: 2.11

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
4428	22	4506	1½		39	1

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
							17

B. No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gauge
1	8¾			[illegible]	[illegible]	[illegible]	17	23½			2	175	250				
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.2		No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			39		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ... F.C. ... pH. 9 ... DESILTER: Hours Op: 5 ... U. Flow: ... O. Flow: ... SURVEYS At Feet / Degrees ... 4 ... 5 ... Weather ... Temp. ... Water Bbls.

ADDITIVES: ... GENERAL: ...

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ... Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. ... Rig Savers Chk'd. ... Kelly Cock Chk'd. ... Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. ... gals. ... Fuel Rec'd Today (add) ... gals. ... TOTAL ... gals. ... Fuel on Hand 11.59 p.m. (deduct) ... gals. ... FUEL USED ... gals.

CASING REPORT — RAN ... JTS ... CSG ... TO ... KB. USED ... SAX ... CEM ... PLUS ... % ... PLUG DOWN ... A.M. P.M. ... CEMENT RETURNS - (YES/NO) ... GENERAL: ...

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME START	TIME STOP	TIME INTVL

DAILY DRILLING LOG — DATE MAY 6

DIRECTIONS TO WELL 52-62-5-3 1st 12W 3rd 1/2 — RIG NO. 11 — MAILING POINT A. Wells — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
4880	9	4889	2¼		81	1

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
							22

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
9-D	7⅞	JC		HST 225	2000	150	209	22			2	175	250				

MUD

	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT			9.1	
VISCOSITY			39	
GEL				

PUMPS

	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRESSURE				
No. 1 MODEL S.P.M.				
No. 1 LINER SIZE				
No. 2 PRESSURE				
No. 2 MODEL S.P.M.				
No. 2 LINER SIZE				

MOTOR HOURS

	Next Oil Change
1	
2	
3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow:

SURVEYS

At Feet	Degrees
4850	6°

ADDITIVES: — GENERAL:

2 3# Jel 1 Sack Kol-Seal

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
4889						

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD

	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				

PUMPS

	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRESSURE				
No. 1 MODEL S.P.M.				
No. 1 LINER SIZE				
No. 2 PRESSURE				
No. 2 MODEL S.P.M.				
No. 2 LINER SIZE				

MOTOR HOURS

	Next Oil Change
1	
2	
3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow:

SURVEYS

At Feet	Degrees

ADDITIVES: 1 Cal-Mix 1 Gel GENERAL:

2 3# Jel 1 Sack Kol-Seal

2 Sacks Cal-Mix Lime 1 Lubing Compound

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
4889	30	4919	5¼		91	1

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
							14

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
9-D	7⅞	JC		HST 225	2000	150	30	5¼			2	175	250				

MUD

	4 p.m.	6 p.m.	11 p.m.	10 p.m.
WEIGHT			~~9.0~~	9.3
VISCOSITY				40
GEL				

PUMPS

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRESSURE				
No. 1 MODEL S.P.M.				
No. 1 LINER SIZE				
No. 2 PRESSURE				
No. 2 MODEL S.P.M.				
No. 2 LINER SIZE				

MOTOR HOURS

	Next Oil Change
1	
2	
3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow:

SURVEYS

At Feet	Degrees

ADDITIVES: 2 Cal-Mix Gel 1 GENERAL: 1 Sack Spring

Fiber 2 Sacks

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

O RING ON BIT # — Boiler Operated: 24 Hrs

Fuel on Hand 12.01 a.m. gals.

Fuel Rec'd Today (add) gals.

TOTAL gals.

Fuel on Hand 11.59 p.m. (deduct) gals.

FUEL USED gals.

CASING RAN JTS CSG

TO KB. USED SAX CEM

PLUS % PLUG DOWN A.M. P.M.

CEMENT PERFORATIONS (FROM/TO)

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sensac	Ft. Drilled since Sensac	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL.
Drilling	12:00	2:00	2
Rig Rep.	2:00	3:00	1
Survey at 4850	3:00	3:30	½
Circ.	3:30	4:45	1¼
Tripping Rig Repair	3:45		
7⅞ 3618 M-Rock Twist		6:00	2¼
Tripping in with Bowen	6:00		
Spear		8:00	2
3 BBL Fuel Oil			
FIRES — DRILLER'S SIGNATURE			
Rig Service	8:00	8:15	¼
Tripping Rig Rabbit Rods	8:15		
Drilling & Damaged		4:00	7¾
Fix Shakers			
400 BBL Diesel Fuel			
FIRES — DRILLER'S SIGNATURE			
Tripping	4:00	6:00	2
Drilling	6:00	9:30	3½
Rig Service	9:30	10:15	¾
Drilling	10:15	12:00	1¾
3 BBL Fuel Oil			
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

HSW DDL-1 HEAD OFFICE PAYROLL COPY

No. 1799 HSW

DAILY DRILLING LOG — RIG NO. // — LSD — DATE May 5

DIRECTIONS TO WELL 23-12-3W3 1st 12½-3-15-7 — MAILING POINT Hughes — SHIPPING POINT Hughes — MILES MOVED — ROAD CONDITIONS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
4713	40	4803	1¼		77	3

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
							12

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2-D	4½	2C		42296	2000	150	1-3	17¼			2	125	250				

MUD

	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				9.2
VISCOSITY				40
GEL				

PUMP No. 1: PRESSURE — MODEL — S.P.M. — LINER SIZE

	12 mn.	2 a.m.	4 a.m.	6 a.m.
PUMP No. 2: PRESSURE				
MODEL				
S.P.M.				
LINER SIZE				

WORKHOURS

	12 mn.	2 a.m.	4 a.m.	6 a.m.
1				
2				
3				

Next Oil Change

W.L. — F.C. — pH 9 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow:

SURVEYS: At Feet — Degrees

ADDITIVES: 200 Quik Vis — GENERAL: 2 sks Impercy

15 sks Imperial Penetrate 150 Gyro Lignosulf

10 Gal Defoam 40 Gal Diesel Oil

Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
4803	44	4847	5¾		79	3

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
							12

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2-D	4½	2C		42295	2000	150	167	23½			2	125	250				1

MUD

	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT		9.1		
VISCOSITY		37		
GEL				

PUMP No. 1: PRESSURE — MODEL — S.P.M. — LINER SIZE

	8 a.m.	10 a.m.	12 noon	2 p.m.
PUMP No. 2: PRESSURE				
MODEL				
S.P.M.				
LINER SIZE				

WORKHOURS

	8 a.m.	10 a.m.	12 noon	2 p.m.
1				
2				
3				
4				
5				

Next Oil Change

W.L. — F.C. — pH. 8 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow:

SURVEYS: At Feet 4750 — Degrees 6°

ADDITIVES: 10 Gal Defoam GENERAL:

2 sks Tannex

Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
4207	33	4880	6¼		80	3

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
							18

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2-D	4½	2C		42295	2000	150	700	93¼			2	125	250				

MUD

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT		9.1		
VISCOSITY		39		
GEL				

PUMP No. 1: PRESSURE — MODEL — S.P.M. — LINER SIZE

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
PUMP No. 2: PRESSURE				
MODEL				
S.P.M.				
LINER SIZE				

WORKHOURS

	4 p.m.	6 p.m.	8 p.m.	10 p.m.
1				
2				
3				
4				
5				

Next Oil Change

W.L. — F.C. — pH. — DESILTER: Hours Op: 2 — U. Flow: — O. Flow:

SURVEYS: At Feet — Degrees

ADDITIVES: 10 Gal Mil-Bar GENERAL: 10 Gal Defoam

Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

O RING ON BIT — Boiler Operated: 24 Hrs.

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	units

CEMENT PETROLEUM : TYPE/SIZE

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — TAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — DAYS FROM SPUD:

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

EQUIPMENT CHANGES — TRANSFER #

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 HEAD OFFICE PAYROLL COPY

No 1798 HSW

REMARKS	TIME START	TIME STOP	INTVL
Closing	12:00	2:45	2¾
Pre Trip Rig Service	2:45	3:45	1
Tripping	3:45	7:30	3¾
Fish Core	7:30	7:45	¼
Tripping	7:45	8:00	¼
2201 Diesel Fuel to Baker			
Tripping	8:00	9:45	1¾
Fish Core	9:45	10:45	1
Survey at 4750	10:45	11:00	¼
Tripping	11:00	1:30	2½
Fish Core	1:30	2:30	1
Tripping	2:30	4:00	1½
6321 Diesel Fuel to Mud Co.			
Tripping	4:00	5:30	1½
Fish Core	5:30	6:30	1
Tripping	6:30	10:30	4
Fish Core	10:30	11:15	¾
Tripping	11:15	12:00	¾
3 Bbl Fuel oil			

FIRES — DRILLER'S SIGNATURE

FIRES — DRILLER'S SIGNATURE

DAILY DRILLING LOG — MAY 4

DIRECTIONS TO WELL Sy Lyons 5½ Lat. 134-21-15-2 — RIG NO. 11 — MAILING POINT Hobbs — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4460					77	4									27

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	8-D	4½	2S		M5C295													

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: 5 U. Flow: O. Flow: SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: 1 sack Shell Lo GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4480	43	4723	6¼		77	4									27

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	4¾	2S		M5C995	2000	150	43	6¼			2	250	250				

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMPS	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1		No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			40		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 8 U. Flow: O. Flow: SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: 2 Cut Polywell GENERAL: 2 Cut Mud Tone Thin
10 Sack Shell Lo
2 Cut Mud Tone Thin 1 Hour 272-14
2 Sack Shell Lo 1 Hour 272

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4723	140	4763	5½		78	2									23'

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2-D	4¾	2S		M5C295	3000	150	83	11½			2	250	250				

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMPS	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1			No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY		40			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 8 U. Flow: O. Flow: SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: 2 Cut Polywell GENERAL: 2 Cut Mud Tone Thin
2 Cut Mud Tone Thin 1 Hour 272-14
2 Sack Shell Lo 1 Hour 272

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	V			
Blind Rams.	V			

'O RING ON BIT # — Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING RAN JTS CSG — TO KB. USED S.SAX CEM — PLUS % — PLUG DOWN A.M. P.M. — CEMENT RETURNS : (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonoscanned	Ft. Drilled since Sonoscanned	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Trip out	12:00	3:00	3
Pick up bit, trip in & drill cmt	2:00		
Trip out		3:30	½
Trip in	3:30	7:45	4¼
Lay down	7:45	8:00	¼
Rig Service			
TD 4723 Ran 140' Hole			
Circ Clean Ran 2 Gal Mud Tone Thin 2 Sack Shell Lo Wash 30' to Bottom			
Drill	8:00	10:45	2¾
Rig Service	10:45	11:30	¾
Drill	11:30	2:30	3
Rig Service	2:30	3:30	1
Drill	3:30	4:00	½
2 Sack Shell Lo			
2 Sack Mud Tone Thin 1 Hour 272-14			
Drill	4:00	5:30	1½
Change Out Hose	5:30	6:45	1¼
Rig Clean	6:45	7:30	¾
Drill	7:30	10:15	2¾
Rig Service	10:15	11:00	¾
Drill	11:00	12:00	1
1 Sack Shell Lo			

FIRES — DRILLER'S SIGNATURE

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 HEAD OFFICE PAYROLL COPY

No. 1797 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG
DIRECTIONS TO WELL

RIG NO. LOCATION LSD SEC. TWP. RGE. W. DATE 19
MAILING POINT SHIPPING POINT
MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS.					No. 2 PRESS.					1	
VISCOSITY					MODEL H.P.					MODEL H.P.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS.					No. 2 PRESS.					1	
VISCOSITY					MODEL H.P.					MODEL H.P.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather: Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS.					No. 2 PRESS.					1	
VISCOSITY					MODEL H.P.					MODEL H.P.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL
			1
	1	1	3
			1
FIRES DRILLER'S SIGNATURE			
FIX CONNECT ELECTRICAL WIRE	TRACTOR		
MOVING RIG WELL AND MOTOR OIL	9AM	4PM	7
HAULING WATER FILL KELLY'S UNLOAD	4PM	6PM	2
[illegible]	6AM	9AM	3
[illegible]	10AM	12PM	2
FIRES DRILLER'S SIGNATURE			
Rig up Completion unit Weld swivel and pump	9AM	9AM	1
Moving Rig well + Motor oil + tank	9AM	4PM	7
Haul Water + unload Tanks	4PM	8PM	4
FIRES DRILLER'S SIGNATURE			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT #

Crown-o-matic Chk'd.
Rig Savers Chk'd.
Kelly Cock Chk'd.
Fire Equip. Chk'd.
Boiler Operated: Hrs.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT RAN JTS CSG
TO KB. USED SAX CEM
PLUS % PLUG DOWN A.M. P.M.
CEMENT RETURNS - (YES/NO)

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD:
TOTAL COMPANY TIME HRS.
TOTAL CONTRACTOR'S TIME HRS.

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

Approved by Operator's Representative
Approved by Toolpusher

HSW DDL-1 CONSERVATION BOARD COPY

No. 1725 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION CANADA M43-A — LOD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE MARCH 3 19 71

DIRECTIONS TO WELL [illegible] — MAILING POINT NORMAN WELLS — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3302	52	3354	34½	57	56	—		11	4½	2	1				11

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Grd.
20	6¾	[illegible]	3	30595	40M	125	6.1	6½			2	600	32	1200			

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.1	9.1	9.6	No. 1 PRESS. GUGE					No. 2 PRESS. GUGE	600				1	
VISCOSITY	57	52	52	60	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE	2¼				3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 3210' / 5½ — 4 ___ — 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls. ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3354	42	3396	11½	57	56	4		17	4¼	2	10				16

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Grd.
20	6¾	[illegible]	3	[illegible]	40M	125	96	11½			2	625					
							107										

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1				No. 1 PRESS. GUGE	625				No. 2 PRESS. GUGE					1	
VISCOSITY	57				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	2¼				LINER SIZE					3	

W.L. ___ F.C ___ pH. ___ DESILTER: Hours Op: 1 U. Flow: 17 O. Flow: 1

SURVEYS: At Feet / Degrees — ___ — ¼ — 4 ___ — 5 ___

ADDITIVES: [illegible] GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls. ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3396	50	3446	6½		57	3		17	4¼	2	170				14

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Grd.
20	6¾	[illegible]	3	[illegible]	40M	125	153	16			2	600	25	1200			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESS. GUGE					No. 2 PRESS. GUGE	600				1	
VISCOSITY				60	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE	2¼				3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 3446 — 5¾ — 4 ___ — 5 ___

ADDITIVES: [illegible] GENERAL: [illegible] Weather ___ Water ___ Temp. ___ Bbls. ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: 9-24 Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.
[illegible]	1:00	1:45	1¾
ST. [illegible]	1:45	2:00	¼
[illegible]	2:00	5:00	3
SURVEY AT 3200	5:00	5:30	½
[illegible]	5:30	6:00	½
[illegible]	6:00	7:00	1
[illegible]	7:00		
FIRES ___ DRILLER'S SIGNATURE ___			
[illegible]	7:00	7:00	1
CHANGE OIL SUBS.	7:00	10:00	1
[illegible]	10:00	10:30	½
RIG SERVICE	10:30	11:00	½
DRILLING 3396	11:00	2:00	2¾
[illegible]	2:00	2:30	½
[illegible]	2:30	3:00	½
DRILLING - 3416	3:00	4:00	1
[illegible]	4:00	4:30	½
CHANGE OVER TO CLOSED SYSTEM			
FIRES ___ DRILLER'S SIGNATURE ___			
DRILLING - 3412	4:00	6:00	2
SURVEY AT 3400	6:00	6:30	½
[illegible]	6:30	7:00	½
DRILLING	7:00	10:30	3½
[illegible]	10:30	10:45	¼
DRILLING	10:45	11:45	1
RIG SERVICE	11:45	12:00	¼
CHANGE OVER TO OPEN SYSTEM			
[illegible]			
FIRES ___ DRILLER'S SIGNATURE ___			

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 57

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

HSW-DDL-1 CONSERVATION BOARD COPY

No 1737 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 21-A LOCATION CAMDEX AREA LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE MARCH 27 19 71

DIRECTIONS TO WELL 21-6 Weyburn 11 E 1/2 MAILING POINT NORMAN WELLS SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2254	39	3293	6	56	55	1		17	4½	2	10				24

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	S.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	6½	RR	9-11-11	38111	6000	120	24	23			1	550	120	1 mm			
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.7	9.6	9.6	9.7	No. 1 PRESS. SURF.	600				No. 2 PRESS. SURF.					1	
VISCOSITY	54	57	54	52	MODEL S.P.M.	120				MODEL S.P.M.					2	
GEL					LINER SIZE	3½				LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 3250 / 6-1

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut — Feet	At Miles	Slip or Cut — Date	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3293				56	54	1		17	4½	2	10				24

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	S.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURF.					No. 2 PRESS. SURF.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — ___

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut — Feet	At Miles	Slip or Cut — Date	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3213	9	3302	1	46	55	3		17	4¾	2	10				

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	S.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	6½	RR	9-11-11	38111	6000	120	9	1			1	600	120	1000			
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.5		No. 1 PRESS. SURF.	600			600	No. 2 PRESS. SURF.					1	
VISCOSITY			49		MODEL S.P.M.				120	MODEL S.P.M.					2	
GEL					LINER SIZE				3½	LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — ___

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut — Feet	At Miles	Slip or Cut — Date	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated 2-24 Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG: ___ TO ___ KB. USED ___ SAX ___ CEM: ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL: ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 56

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Y[illegible]	12.	1.	1½
Su[illegible]	2.	2.	1
D[illegible] - 3293	3.	7.	4
Tr[illegible] - C[illegible]	7.	7.	¼
Ri[illegible]	7.	9.	1½
FIRES ___ DRILLER'S SIGNATURE ___			
Tr[illegible] - C[illegible]	9.	9.	½
[illegible]	9.	2.	5½
Tr[illegible]	2.	3.	1¼
Ri[illegible]	3.	___	¼
[illegible]			
[illegible]			
FIRES ___ DRILLER'S SIGNATURE ___			
Tr[illegible]	4.	5.	1½
[illegible]	5.	6.	1
Tr[illegible]	6.	9.	3
Circulate	9.	10.	¾
D[illegible]	10.	11.	¾
[illegible]	11.	11.	½
[illegible]			
Driving.	11.	1.	1½
OUT TIME STARTING 8" CASING			
[illegible]			
FIRES ___ DRILLER'S SIGNATURE ___			

HSW DDL-1 CONSERVATION BOARD COPY

No 1736 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION CANADA MESA A Unit Lse. LSD ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE MARCH 28 – 1971

DIRECTIONS TO WELL 2 Mi S-W Blanco 134 — MAILING POINT NORMAN, OKLA. — SHIPPING POINT ____ — MILES MOVED ____ — ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3065'	35	3120	11½	55	52	2		17	4¼	2	10				16

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
RC	12¼	S3J	3-3-3	206611	40	150	35	11½			1	600	120	1000			

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			8.8	8.8	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			36	36	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L. 20	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			4	
ADDITIVES: 2.5 Soda Ash, 1 Carb					GENERAL: 60 Diesel, 4 Drums Visc. Foil						3100	3½			5	
5 Bbls Diesel Fuel															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3120	70	3191	6½	55.4	53	1		17	4¼	2	1	4-1/2			5

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
RC	12¼	S3J	3-3-3	206611	40	150	105	11									

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.2	9.2	9.1	No. 1 PRES. SURE	950			1350	No. 2 PRES. SURE					1	
VISCOSITY	37	37	40	42	MODEL S.P.M.	150			120	MODEL S.P.M.					2	
GEL					LINER SIZE	2½				LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			4	
ADDITIVES:					GENERAL:						3140	6			5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3191	63	3254	6	54.1	54	2		17	4¾	2	10				14

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
RC	12¼	S3J	3-3-3	206611	40	150	64	17			1	1350	120	1000			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.2	9.4	9.5	No. 1 PRES. SURE	950				No. 2 PRES. SURE					1	
VISCOSITY		46	36	36	MODEL S.P.M.	150				MODEL S.P.M.					2	
GEL					LINER SIZE	2½				LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			4	
ADDITIVES:					GENERAL:						3200	6			5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES — DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: 1-24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	✓
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN ____ JTS ____ CSG — TO ____ KB. USED ____ SAX ____ CEM — PLUG DOWN ____ A.M. P.M. — PLUS ____ % — CEMENT RETURNS - (YES/NO) ____ — GENERAL ____

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 5½

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative

Approved by Toolpusher C. Hutchinson

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Circulate - Wash & Ream	1.00	1.30	½
Drilling To 3065	1.30	6.00	4½
Circulate & Trip	6.00	6.30	½
Drill 3065 To 3115	6.30	8.00	1½
Circulate - Survey At 3100	8.00	9.00	1
Drill 3115 To 3120	9.00	9.30	½
Rig Up.	9.30	11.00	1½
Drilling	8.00	9.30	1½
Circulate & Survey	9.30	9.45	¼
Drilling	9.45	11.15	1½
Survey At 3150	11.15	11.30	½
Add 2 Singles	11.30	12.00	½
Drilling -	12.00	2.00	2
Add 1 Single	2.00	2.30	½
Drilling.	2.30	4.00	1½
Drilling -	4.00	4.30	½
Add 2 Singles & Kelly	4.30	4.45	¼
Drilling.	4.45	6.45	2
Circulate & Survey At 3210	6.45	7.30	¾
Add 2 Singles & Kelly	7.30	8.00	½
Drilling - 32 HH	8.00	10.45	2¾
Add 1 Single	10.45	11.00	¼
Drilling 32 HH	11.00	11.15	¼
Rig Svc.	11.45	12.00	¼

1SW DDL-1 CONSERVATION BOARD COPY

No 1735 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CAUSEWAY AREA — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE MARCH 27 — 19 72

DIRECTIONS TO WELL EAST 1½ MI. SOUTH OF WELL — MAILING POINT RIVERTON WYO. — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3085								17	4¾	2	10				

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TOUR TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3085								17	4¾	2	10				

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				40	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3085								17	4¾	2	10				

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: LOST CIRC. MAT. GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: 7-24 Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12:01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11:59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % GEL ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___ GENERAL ___

DAYS FROM SPUD: 40

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
RIG SERV. — CLEAN FLOOR	12:00	12:15	¼
PICKING UP 4½ DRILL PIPE	12:15	5:30	5¼
CHANGE POWER TONGS	5:30	7:00	1½
PICK UP 4½ DRILL PIPE	7:00	7:15	¼
RIG SERV.	7:15	7:30	¼
FIRES ___ DRILLER'S SIGNATURE			
PICK UP 3½ DRILL PIPE	7:30	11:30	3½
MUD TANK CLEANED-PICK UP 3½ DP			
MUD — LOST CIRC. MAT.	11:30	3:30	4
PICK UP 3½ DRILL PIPE — TRIP IN	3:30	3:45	¼
RIG SERV.	3:45	4:00	¼
FIRES ___ DRILLER'S SIGNATURE			
PICKED UP 3½ DP + TRIP IN	4:00	5:15	1¼
HAUL OUT 3½ DP	5:15	5:45	½
PICKED UP 3½ DP + TRIP IN	5:45	6:00	¼
CLEAN SUCTION FLOWLINE OFF PUMPS.	6:00	8:00	2
	8:00	10:00	2
MIXED MUD	10:00	11:00	1
MISC. CIRC.	11:00	12:00	1
FIRES ___ DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

HSW DDL-1 CONSERVATION BOARD COPY

No. 1734 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION CAMEX MH3-A LAD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE MARCH 26 1971

DIRECTIONS TO WELL 2 MI. E-S-E 2 MI. TO LANE, 12 MI. N 16 E — MAILING POINT NORMAN WELLS — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3060	15	3075	6¼	48.9	51	1		16	4¼	2	10				3

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	S.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1	6½	MFDP	4-32	912060	35M	150	2½	13			1	650	700	1000			
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.5	9.4	9.6	9.6	No. 1 PRESS-SURE	600				No. 2 PRESS-SURE					1	
VISCOSITY	60	60	62	62	MODEL S.P.M.	90				MODEL S.P.M.					2	
GEL					LINER SIZE	2½				LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3075	10	3085	3½	49.2	51	3		16	4¼	2	10				19.3

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	S.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1	6½	MFDP	5-32	912060	35M	150	4½	16.5			1	550	700	1000			
2							4½										
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.4	9.0	9.5	9.4	No. 1 PRESS-SURE					No. 2 PRESS-SURE					1	
VISCOSITY	62	63	64	62	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3085					51	3		16	4¼	2	10				19.3

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	S.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.4		No. 1 PRESS-SURE					No. 2 PRESS-SURE					1	
VISCOSITY			62		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ Boiler Operated: 9-24 Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___ GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	INTVL
[illegible]	12[illegible]	1[illegible]	1¾
[illegible]	1.[illegible]	6[illegible]	¼

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO. 11-11 LOCATION GANS DOME, HAWAII, ALASKA SEC. ___ TWP. ___ RGE. ___ W. ___ DATE MARCH 25 19 71

DAILY DRILLING LOG
DIRECTIONS TO WELL LAT-62° [illegible] MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

12 MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. D. P. (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3031	/	/		44	50	4		16	4¾	2	10				19

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESSURE			-		No. 2 PRESSURE					1	
VISCOSITY				35	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: BAR-MUD & MUD GENERAL: BAR-CAL-CIDE
12 LBS BARITE 34 LBS DIESEL FUEL
4 GALS EZ-MUL DRUMS

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME	START	STOP	INTVL.
MIDNIGHT MUD	12		

FIRES ___ DRILLER'S SIGNATURE ___

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3037	/	/	/	44	50	4		16	4¾	2	10				19

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
RC	12¼	M44	7-7-7	412062													

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1	9.3		9.3	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	36	35		54	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: 3 SACKS BAR-MUD GENERAL:
4½ LBS CAUSTIC SODA

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME	START	STOP	INTVL.
MIDNIGHT MUDDING MUD	8.00	10.	2
DRLG	10.00	12.00	2
REAM & HOLE OPEN [illegible]	12.00	12.30	½
TRIP FOR NEW BIT	12.30	1.30	1
CIRC	1.30	1.45	¼
TRIP IN (2 STDS)	1.45	2.00	¼
OVERTIME - MIXING MUD			
GUNNING MUD			

FIRES ___ DRILLER'S SIGNATURE ___

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3037	23	3060	5½		51	1		16	4¾	2	10				20

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
RC	12¼	M44	7-7-7	412062		150	23	5½			1	900	100				

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.3	9.4		9.7	No. 1 PRESSURE	900				No. 2 PRESSURE					1	
VISCOSITY	60	60		49	MODEL S.P.M.	100				MODEL S.P.M.					2	
GEL					LINER SIZE	2½				LINER SIZE					3	

W.L. ___ F.C. ___ pH ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet 3050 Degrees 6.5

ADDITIVES: GENERAL:
4 - 55 GAL CANS

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME	START	STOP	INTVL.
DRLG	4.00	4.15	¼
CIRCULATE TO TRIP (1 STD)	4.15	5.00	¾
DRILLING	5.00	7.15	2¼
CIRCULATE AND 2 SAMPLES	7.15	7.45	½
DRILLING -	7.45	10.00	2¼
SURVEY AT 3060	10	11.00	1
DRILLING	11.00	11.45	¾
OVER TIME PUTTING PUMP	11.45	12	¼
TO ANY DOWN TIME TO TOOLSCOPE			

FIRES ___ DRILLER'S SIGNATURE ___

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams	✓			

TOTCO RING ON BIT # ___ Boiler Operated 2-24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	✓
Kelly Cock Chk'd.	✓
Fire Equip. Chk'd.	✓

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 52

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME 11 HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

№ 1731 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION [illegible] — LSD ____ SEC. ____ TWP. ____ RGE. ____ W. ____ — DATE MARCH 24 — 196 71

DIRECTIONS TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT ____ — MILES MOVED ____ — ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub Wt.	C.B. Ft.	Ft. up on Kelly
3025	10	3033	7½	116	50	4		16	4¾	2	10				

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Carried	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
12C	6¾	S-4	3-12	[illegible]	40	150	148	6½			1	1750	90	760			

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.4	No. 1 PRESS. SURE	1600				No. 2 PRESS. SURE					1	
VISCOSITY				62	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	2½				LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours On: ____ U. Flow: ____ O. Flow: ____ SURVEYS: At Feet ____ Degrees ____ — 4 ____ — 5 ____ — Weather ____ Temp. ____ — Water ____ Bbls.

ADDITIVES: ____ GENERAL: ____

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3033	3	3036		116	50	4		16	4¾	2	10				11

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Carried	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
12C	6¾	S-4	3-12	[illegible]	40	150	161	6½			1	1750	90	760			
												1750					

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	8.1		9.-		No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY	65		70		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS: At Feet ____ Degrees ____ — 4 ____ — 5 ____ — Weather ____ Temp. ____ — Water ____ Bbls.

ADDITIVES: 9½ LBS GEL — GENERAL: ____

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3036	1	3037		116	50	4		16	4¼	2	10				18

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Carried	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
12	6¾	S-4	3-12	[illegible]	40	150	162	6½			1	1750	90	900			
												950					

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.4				No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY	73				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS: At Feet ____ Degrees ____ — 4 ____ — 5 ____ — Weather ____ Temp. ____ — Water ____ Bbls.

ADDITIVES: 9½ LBS GEL — MODEL CO 125 OIL FLAKE — 22 1½ — DIESEL FUEL — 4 BAGS E-D MUD

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ____ Boiler Operated: 9-24 Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ✓ Kelly Cock Chk'd. ✓ Fire Equip. Chk'd. ✓

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG — TO ____ KB. USED ____ SAX ____ Cu. ft. — PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. — CEMENT RETURNS - (YES/NO) ____ — GENERAL ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 51

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative [signature] — Approved by Toolpusher [signature]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	TIME START	TIME STOP	INTVL
[illegible]	12:-	4:-	4½
[illegible]	4:-	4:30	½
[illegible]	4:30	7:30	3
[illegible]	7:30	8:00	½

FIRES ____ DRILLER'S SIGNATURE [signature]

[illegible]	8:00	8:30	½
[illegible]	8:30	9:-	½

HOLE [illegible] - [illegible] Mud

CUT & TRIP - 2 HRS WELD-ING ON TOOL JOINT, MAKE CONDITION MUD

FIRES ____ DRILLER'S SIGNATURE [signature]

~~Fix~~ Drilling -	11:00	11:30	½
TRIP OUT	11:30	7:00	2½
CHECK ALL FOR MUD JAM	7:00	7:15	¼
TRIP OUT	7:15	9:00	1¾
MIXING MUD (CIRCULATE & COND 66 BBLS MUD THROUGH LINES)	7:00	12:00	3
START MIXING NEW MUD (OUT TIME)			

FIRES ____ DRILLER'S SIGNATURE ____

HSW DDL-1 CONSERVATION BOARD COPY

No 1730 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CAN[illegible] MILLS — SEC. — TWP. — RGE. — W. — DATE MARCH 23 — 19[illegible]

DIRECTIONS TO WELL [illegible] — MAILING POINT Nor Mex WELL — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2911	18	2711	7.1	46	50			16	4¾	2	10				13

No.	Size	Type	Jets/W.O.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
12	6¾	3-6	3-6	27334	4000	150	110	7½			1	1750	300				

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1	9.7	9.5	No. 1 PRES. SURE	1150				No. 2 PRES. SURE					1	
VISCOSITY		41	52	52	MODEL S.P.M.	50				MODEL S.P.M.					2	
GEL					LINER SIZE	2				LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather: Water: Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2995	12	3007	8	412	50			16	4¾	2	10				

No.	Size	Type	Jets/W.O.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
12	6¾	5-6	3-6	27334	5-7000	150	12	4½			1	1750	300	400			

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.4	9.5	9.5	9.2	No. 1 PRES. SURE	1600				No. 2 PRES. SURE					1	
VISCOSITY	41	41	41	45	MODEL S.P.M.	50				MODEL S.P.M.					2	
GEL					LINER SIZE	2				LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather: Water: Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3007	16	3023	6¾	41.2	50	2		16	4¾	2	10				

No.	Size	Type	Jets/W.O.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
12	6¾	5-6	3-6	27334	6-7000	150	23	6¾			1	1750	300	900			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.4			9.4	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	41			41	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet 3000 / Degrees ¼

ADDITIVES: GENERAL:

Weather: Water: Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: 9-24 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals. — Fuel Rec'd Today (add) gals. — TOTAL gals. — Fuel on Hand 11.59 p.m. (deduct) gals. — FUEL USED gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUG DOWN A.M. P.M. — PLUS % — CEMENT RETURNS - (YES/NO)

GENERAL —

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 50

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher C. Robinson

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Laydown.	12:00	2:30	2½
Add 2 Jts. to DP	2:30	3:00	½
Drilling	3:00	7:45	4¾
Rig Svc.	7:45	8:00	¼
K. Johnson Tool Co.			
FIRES	DRILLER'S SIGNATURE		
Drilling	8:00	4:00	8

REMARKS	TIME START	TIME STOP	TIME INTVL
Welding	4:00	4:30	½
Circulate	4:30	4:45	¼
Survey at 3000 ft. 4°	4:45	5:00	¼
Drilling	5:00	7:45	2¾
Rig Svc.	7:45	8:00	¼
Drilling	8:00	12:00	4
FIRES	DRILLER'S SIGNATURE		

HSW DDL-1 CONSERVATION BOARD COPY

No. 1729 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — Rig NO. 14 — LOCATION [illegible] — LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 19[illegible]

DIRECTIONS TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2902	27	2929	6 1/4		4	1		11	6 1/4	2					

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1	6 1/4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	[illegible]			[illegible]	No. 1 PRESS.		[illegible]			No. 2 PRESS.					1	
VISCOSITY				[illegible]	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE		1 1/2			LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:						[illegible]	[illegible]					5	
[illegible]															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TOUR 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2930	29	2957	6 1/4	47	4 1	3		11	6 1/4	2					

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				[illegible]	No. 1 PRESS.				11	No. 2 PRESS.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L. [illegible]	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:						[illegible]	7					5	
[illegible]															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TOUR TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2960	17	2977	7.15	47	49	3		11	6 1/4	2					

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1	6 1/4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			8.2	8.3	No. 1 PRESS.		17			No. 2 PRESS.					1	
VISCOSITY			40	41	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE		22			LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
[illegible]															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL.
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
R. LASSITER [illegible]			
[illegible]			
FIRES [illegible] DRILLER'S SIGNATURE [illegible]			
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]		

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 19__

DIRECTIONS-TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2074	9	2083	6 1/2	90	14	1		11	4 3/4	2	10				17

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	6	6 7/8	Rock	2	53422	7/10	60/70	D	2			1	1100	54				
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.4	No. 1 PRES. SURE				1100	No. 2 PRES. SURE					1.	
VISCOSITY				54	MODEL S.P.M.				54	MODEL S.P.M.					2	
GEL					LINER SIZE				6	LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 1 U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees — 2074 / 1

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2083	1	2084	1/2	90	14	1		11	4 3/4	2	10				17

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	6	6 7/8	Rock	2	53422	7/10	60/70	D	3			1	1100	54				
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1.	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 1 U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees — 2083 / 1

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2084	12	2096	5 1/2	90	14	1		11	4 3/4	2	10				17

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	6	6 7/8	Rock	2	53422	7/10	60/70	D	5 1/2			1	1100	54				
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees — 2096 / 1

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: 1 Hrs.

Crown-a-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.

Fuel Rec'd Today (add) ___ gals.

TOTAL ___ gals.

Fuel on Hand 11.59 p.m. (deduct) ___ gals.

FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Drilling	12	12	1/2
Circulate & Condition			1
Trip out		7 1/2	
Lay down Stabilizer			

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 196___

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Used/W.C.	Serial No.s	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS: At Feet / Degrees

ADDITIVES: ___ GENERAL: ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Used/W.C.	Serial No.s	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS: At Feet / Degrees

ADDITIVES: ___ GENERAL: ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Used/W.C.	Serial No.s	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS: At Feet / Degrees

ADDITIVES: ___ GENERAL: ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11.59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING REPORT: RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUG DOWN ___ A.M. P.M. PLUS ___ % CEMENT RETURNS - (YES/NO) ___ GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL

FIRES ___ DRILLER'S SIGNATURE ___

FIRES ___ DRILLER'S SIGNATURE ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

HSW DDL-1 CONSERVATION BOARD COPY

No. 1850 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11 LOCATION _____ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE _____ 196__

DIRECTIONS TO WELL _____ MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2017															

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	C.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather / Temp. — Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2017															

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	C.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather / Temp. — Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2017															

No.	Size	Type	Jet/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	C.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather / Temp. — Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: ____ Hrs.

Crown-o-matic Chk'd. / Rig Savers Chk'd. / Kelly Cock Chk'd. / Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT

RAN ____ JTS ____ CSG
TO ____ KB. USED ____ SAX ____ CEM
PLUS ____ % PLUG DOWN ____ A.M. P.M.
CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	STOP	INTVL.

FIRES ____ DRILLER'S SIGNATURE

FIRES ____ DRILLER'S SIGNATURE

FIRES ____ DRILLER'S SIGNATURE

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME ____ HRS.

TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 CONSERVATION BOARD COPY

No 1849 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1611 LOCATION _____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE _____ 196__

DIRECTIONS TO WELL _____ MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	
4																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1.	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2.	
GEL					LINER SIZE					LINER SIZE					3.	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4. — 5.

ADDITIVES: ____ GENERAL: ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	
4																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1.	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2.	
GEL					LINER SIZE					LINER SIZE					3.	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4. — 5.

ADDITIVES: ____ GENERAL: ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	
4																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1.	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2.	
GEL					LINER SIZE					LINER SIZE					3.	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet / Degrees — 4. — 5.

ADDITIVES: ____ GENERAL: ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

TOTCO RING ON BIT # ____ Boiler Operated: 24 Hrs.

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUG DOWN ____ A.M. P.M. ____ PLUS ____ %

CEMENT RETURNS - (YES/NO) ____

GENERAL ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL.

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 45

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by, Toolpusher ____

HSW DDL-1 CONSERVATION BOARD COPY

No 1848 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 LOCATION _____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE _____ 196__

DIRECTIONS TO WELL _____ MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																		
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																		
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ____ GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M.
CEMENT RETURNS - (YES/NO) ____
GENERAL ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL.

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 11

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative: ____

Approved by Toolpusher: ____

HSW DDL-1 CONSERVATION BOARD COPY

No. 1847 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 19___

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Correct	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

8 AM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Correct	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Correct	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL

DAYS FROM SPUD: ___

EQUIPMENT CHANGES ___ TRANSFER # ___

TOTAL COMPANY TIME ___ HRS. ___ TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1121	17	2138	7¾	415	47	3		16	4¾	2	10				26

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Correct	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.7	9.7			No. 1 PRES. SURE			1200		No. 2 PRES. SURE					1	
VISCOSITY	41	43			MODEL S.P.M.			75		MODEL S.P.M.					2	
GEL					LINER SIZE			7¾		LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: 12 U. Flow: O. Flow:

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: GENERAL:

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

REMARKS	TIME START	TIME STOP	TIME INTVL

HSW DDL-1 CONSERVATION BOARD COPY

No. 1846 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION _____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE _____ 196__

DIRECTIONS TO WELL _____ MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2110	59	2169	7½	45	46	2		16	4¾	2	15				17

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
6	7⅞	J-3	C	7822	45000	110	169	18½			1	90	56				2169

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.5		No. 1 PRES. SURE				10	No. 2 PRES. SURE					1	
VISCOSITY			40		MODEL S.P.M.				56	MODEL S.P.M.					2	
GEL					LINER SIZE				7"	LINER SIZE					3	

W.L. _____ F.C. _____ pH. _____ DESILTER: Hours Op: 2 U. Flow: _____ O. Flow: _____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: _____ GENERAL: Gel

Weather _____ Temp. _____ Water _____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2169	2	2171	1½	42	46	1		16	4¾	2	15				16

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
6	7⅞	J-3	C	7822	45000	110	171	20½			1	90	56				2340

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.6	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				47	MODEL S.P.M.				56	MODEL S.P.M.					2	
GEL					LINER SIZE				7"	LINER SIZE					3	

W.L. _____ F.C. _____ pH. _____ DESILTER: Hours Op: 6 U. Flow: _____ O. Flow: _____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: _____ GENERAL: Gel

Weather _____ Temp. _____ Water _____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2340	2	2342	1½	42	46	1		16	4¾	2	15				16

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
6	7⅞	J-3	C	7822	45000	110	173	22½			1	90	56		3	1	2513

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE			9.6		No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.			52		MODEL S.P.M.					2	
GEL					LINER SIZE			7"		LINER SIZE					3	

W.L. _____ F.C. _____ pH. _____ DESILTER: Hours Op: 2 U. Flow: _____ O. Flow: _____

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: 150# Lignox GENERAL: _____

Weather _____ Temp. _____ Water _____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG
DIRECTIONS TO WELL ____ RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 196__
MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2410	56	2466	24	295				16	4½						

No.	Size	Type	Jen./W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	6¼	[illegible]	K	[illegible]	35-0	120	19½	14¾									
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
															4	
															5	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____
SURVEYS: At Feet ____ Degrees ____
ADDITIVES: [illegible] GENERAL: [illegible]
Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME: START ____ STOP ____ INTVL. ____

FIRES ____ DRILLER'S SIGNATURE ____

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2466	11	2477	2½	31	4-2	4		16	4¼	2	4-6				14

No.	Size	Type	Jen./W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	6¼	[illegible]	[illegible]	[illegible]	[illegible]	120	19½	15½							2	1	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1	9.1	No. 1 PRES. SURE			90		No. 2 PRES. SURE					1	
VISCOSITY			40		MODEL S.P.M.			30		MODEL S.P.M.					2	
GEL					LINER SIZE			5-7		LINER SIZE					3	
															4	
															5	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____
SURVEYS: At Feet ____ Degrees ____
ADDITIVES: [illegible] GENERAL: [illegible]
Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

TOUR 8 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2492	34	2720	6¾	31	4-2	2		16	4¼	2	4-6				24

No.	Size	Type	Jen./W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	6¼	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	21									
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1		No. 1 PRES. SURE				90	No. 2 PRES. SURE					1	
VISCOSITY			40		MODEL S.P.M.				[illegible]	MODEL S.P.M.					2	
GEL					LINER SIZE				[illegible]	LINER SIZE					3	
															4	
															5	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____
SURVEYS: At Feet 2700 Degrees ¼
ADDITIVES: [illegible] GENERAL: [illegible]
Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ____ Boiler Operated ____ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT: RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M. ____
CEMENT RETURNS - (YES/NO) ____
GENERAL —

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 41
TOTAL COMPANY TIME ____ HRS.
TOTAL CONTRACTOR'S TIME ____ HRS.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

Approved by Operator's Representative [illegible]
Approved by Toolpusher [illegible]

HSW DDL-1 CONSERVATION BOARD COPY

No. 1844 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 196__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2490	4	2504	5	26			16	4¾	2	10				1

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	6	RC	6	37496	3000	120	4	5									
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESSURE			90		No. 2 PRESSURE					1	
VISCOSITY				34	MODEL S.P.M.			60		MODEL S.P.M.					2	
GEL					LINER SIZE			2¼		LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: 2 U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

ADDITIVES: ____ GENERAL: ____

4 ____ Weather ____ Water ____

5 ____ Temp. ____ Bbls. ____

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2504	4	2508	7¼	26	4½	4	16	4¾	2	10				1

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	6	RC	6	37496	3000	125	4	5									
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.6	No. 1 PRESSURE			90		No. 2 PRESSURE					1	
VISCOSITY				40	MODEL S.P.M.			60		MODEL S.P.M.					2	
GEL					LINER SIZE			2¼		LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: 2 U. Flow: ____ O. Flow: ____

SURVEYS: At Feet 2500 Degrees ¼

ADDITIVES: ____ GENERAL: ____

4 ____ Weather ____ Water ____

5 ____ Temp. ____ Bbls. ____

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2512	48	2610	7¼	27½	4½	3	16	4¾	2	10				1

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	6	RC	6	37496	3000	120	48	12½			1	900	120				
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.6		No. 1 PRESSURE			90		No. 2 PRESSURE					1	
VISCOSITY			37		MODEL S.P.M.			60		MODEL S.P.M.					2	
GEL					LINER SIZE			2½		LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: 2 U. Flow: ____ O. Flow: ____

SURVEYS: At Feet 1.6 Degrees ¼

ADDITIVES: Lig. GENERAL: Fuel 611 Fuel 931 Fuel

4 ____ Weather ____ Water ____

5 ____ Temp. ____ Bbls. ____

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

REMARKS

TIME	START	STOP	INTVL.

B.O.P.

	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M.

CEMENT RETURNS - (YES/NO) ____ GENERAL ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 26

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1843 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 19__

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2246	51	2297	7	27	2	1	16	4¾						

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9		No. 1 PRES. SURE			100		No. 2 PRES. SURE					1	
VISCOSITY			44		MODEL S.P.M.			90		MODEL S.P.M.					2	
GEL					LINER SIZE			4½		LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Opr. ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2297	12	2309	2¼	27	2	1	16	4¾						

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1																	
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE			70		No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.			90		MODEL S.P.M.					2	
GEL					LINER SIZE			4½		LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Opr. 2 U. Flow: 77 O. Flow: 7·0 SURVEYS At Feet / Degrees 2312 / 1¼

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2312	13	2325	2¼	27	2	1	16	4¾						

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1																	
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9		No. 1 PRES. SURE			90		No. 2 PRES. SURE					1	
VISCOSITY			44		MODEL S.P.M.			90		MODEL S.P.M.					2	
GEL					LINER SIZE			4½		LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Opr. ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE ___

REMARKS

TIME	START	STOP	INTVL.
		2 45	¾
			½
			¼
			¼
			¼
			½
			½
		95	½
			½
			½
			¼
			¼
			¼
			½
			½
			¼
			¼
			¼

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 1961

DIRECTIONS TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
2208	70	2278	14	26.5	39	1		15	6 3/4	2 1/2	45				2

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	11	6 1/4	STH	F	27614	3500	120	206	11			1	75	100				
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9	9+		No. 1 PRESSURE			75		No. 2 PRESSURE					1	
VISCOSITY			36		MODEL S.P.M.			90		MODEL S.P.M.					2	
GEL					LINER SIZE			6 1/2		LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op: 8		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL										5	
															Weather / Temp.	Water Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2214	16	2314	3	32.5	41	2		16	4 3/4	2	10				4

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	11	6 1/4	STH	F	27614	3500	120	222	14			1	75	100	2	1	2	
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.3			No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY		39			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL										5	
															Weather / Temp.	Water Bbls.

SURVEYS: At Feet 2314 / Degrees 4 1/2

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
2314	24	2340	5 1/4	37	41	2		16	4 3/4	2	10				4

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	11	6 1/4	STH	F	27614	3500	120	248	19			1	75	100	2	1	2	
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9	9.3	No. 1 PRESSURE			75		No. 2 PRESSURE					1	
VISCOSITY				39	MODEL S.P.M.			90		MODEL S.P.M.					2	
GEL					LINER SIZE			6 1/2		LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op: 8		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL										5	
2-3/4 Hi-Vis 1 Caus 1 Dril-Aid															Weather / Temp.	Water Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL.

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 19[illegible]

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2101	41	2101	3½	25	32			16	4¾	2	10				7

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Y.C.
1	16	6¼	F	[illegible]	51164	3000	120	71	3¾			1	75	210				
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.4		No. 1 PRESSURE		2000			No. 2 PRESSURE					1	
VISCOSITY			46		MODEL S.P.M.		210			MODEL S.P.M.					2	
GEL					LINER SIZE		6¼			LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: [illegible] U. Flow: ___ O. Flow: ___

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2101	11	2110	6	25	21	1		16	4¾	2	10				10

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Y.C.
1	16	6¼	F	[illegible]	51164	3000	120	110	10¾			1	95	210				
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.4	No. 1 PRESSURE		2000			No. 2 PRESSURE					1	
VISCOSITY				38	MODEL S.P.M.		210			MODEL S.P.M.					2	
GEL					LINER SIZE		6¼			LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: [illegible] U. Flow: ___ O. Flow: ___

SURVEYS: At Feet [illegible] Degrees [illegible]

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
2110	52	2226	6	26	31			16	4¾	2	10				6

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Y.C.
1	16	6¼	F	[illegible]	51164	3000	125	116	16¾			1	95	200				
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.4	No. 1 PRESSURE			75		No. 2 PRESSURE					1	
VISCOSITY				38	MODEL S.P.M.			210		MODEL S.P.M.					2	
GEL					LINER SIZE			2¼		LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: [illegible] U. Flow: ___ O. Flow: ___

SURVEYS: At Feet [illegible] Degrees 4¼

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: 24 Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M.
CEMENT RETURNS - (YES/NO) ___
GENERAL —

DP or DC	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL
	[illegible]	[illegible]	
	[illegible]	[illegible]	
	[illegible]	[illegible]	1½
	[illegible]	[illegible]	½
	[illegible]	[illegible]	1½
	[illegible]	[illegible]	¼
	[illegible]	[illegible]	¾
	[illegible]	[illegible]	½
	[illegible]	[illegible]	2½
	[illegible]	[illegible]	¾
	[illegible]	[illegible]	1½
	[illegible]	[illegible]	¾
	[illegible]	[illegible]	1
	[illegible]	[illegible]	½
	[illegible]	[illegible]	1
	[illegible]	[illegible]	½
	[illegible]	[illegible]	½
	[illegible]	[illegible]	½
	[illegible]	[illegible]	½
	[illegible]	[illegible]	½
	[illegible]	[illegible]	½

FIRES ___ DRILLER'S SIGNATURE ___

FIRES ___ DRILLER'S SIGNATURE ___

FIRES [illegible] DRILLER'S SIGNATURE ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 27

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

HSW DDL-1 CONSERVATION BOARD COPY

No. 1840 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 19__

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10001	53	10054	1½	22	22	2	12	6¼	2	46				2

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gal.
1	10	4 1/16	2	4115	22	120	212	11½			1	1					
2																	
3																	
4																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			7.3		No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			34		MODEL R.P.M.					MODEL R.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet 1910 — Degrees ¾ — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10001	11	10012	4½	24	24		12	6¼	2	46				7

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gal.
1	10	4 1/16	2	4115	30		6	4			1	75					
2																	
3																	
4																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			7.4		No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			34		MODEL R.P.M.					MODEL R.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet — Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10001	4	10010	½	24	24	3	12	6¼	2	46				2

No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gal.
1	10	4 1/16	2	4115	22	120	212	11½			1	85	120		3	4	F
2																	
3																	
4																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL R.P.M.					MODEL R.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet 1 — Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME START	TIME STOP	TIME INTVL

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 196__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1776	14	1790													

	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	I.C.	O.C.
1																2			
2																			
3																			

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Opr.		U. Flow:		O. Flow:								4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1790	10	1800	4												

	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	I.C.	O.C.
1																			
2																			
3																			

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Opr.		U. Flow:		O. Flow:								4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1800	10	1810	12	30	30	3		6	8	2	180				30

	No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	I.C.	O.C.
1																			
2																			
3																			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1			No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY		49			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Opr.		U. Flow:		O. Flow:								4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTV
		10	1½
		10	
		10	

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 196__

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR — 8 AM TO 4 PM TOUR — 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
11711	59	11770	7	70	27	2									

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gal.
B																		
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
11711	60	11771	6	70	29	2									

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gal.
B																		
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
17711	47	17771	5	70	29	2									

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gal.
B																		
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12:01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11:59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.

FIRES ___ DRILLER'S SIGNATURE

FIRES ___ DRILLER'S SIGNATURE

FIRES ___ DRILLER'S SIGNATURE

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 24

TOTAL COMPANY TIME HRS. ___ TOTAL CONTRACTOR'S TIME HRS. ___

GENERAL

Approved by Operator's Representative ___

Approved by Toolpusher ___

HSW DDL-1 CONSERVATION BOARD COPY

No 1837 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 1982

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M. TO 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1529															

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
12																		
11																		
10																		
9																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

FIRES ___ DRILLER'S SIGNATURE [illegible]

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1529															

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
12																		
11																		
10																		
9																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

FIRES ___ DRILLER'S SIGNATURE [illegible]

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1529	36	1565	2½		27			11	4¾	2	11'				47'

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
12																		
11																		
10																		
9																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS: At Feet / Degrees

FIRES ___ DRILLER'S SIGNATURE [illegible]

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]			
[illegible]			
[illegible]			1½
[illegible]			1½
[illegible]			½
[illegible]			½
[illegible]			½
[illegible]			2½
[illegible]			½
[illegible]			1½
[illegible]			½
[illegible]			½
[illegible]		

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 11 — LOCATION Eastern Trail Extension 1 — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE May 2 1962

DIRECTIONS TO WELL ___ — MAILING POINT ___ — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1761															

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		
4																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1729															

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		
4																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1921															

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		
4																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]			
[illegible]	1200	1200	12
[illegible]			
[illegible]	1 30	4 [illegible]	2½
[illegible]	4 [illegible]	7 [illegible]	7½
[illegible]			
[illegible]	1 [illegible]	2 [illegible]	1½
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]	2 00	4 00	7
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]	2 [illegible]	2 [illegible]	
[illegible]			
[illegible]	4 00	4 45	12½
[illegible]			
[illegible]	5 45	8 00	1¼
[illegible]			
[illegible]	8 00	8 15	¼
[illegible]	8 15	9 30	1¼
[illegible]	9 30	10 45	1¼
[illegible]	10 45	12 00	1¼
[illegible]			

FIRES ___ DRILLER'S SIGNATURE ___

FIRES ___ DRILLER'S SIGNATURE ___

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams.				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL —

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 22

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1835 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION [illegible] — LSD ___ SEC. ___ TWP. ___ RGE ___ W. ___ DATE ___ 196___

DIRECTIONS TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1679															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4

ADDITIVES: [illegible] GENERAL: ___ — 5

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TOUR 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1679															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.6				No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	7				MODEL S.P.M.					MODEL S.P.M.					2	
GEL	2/2				LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. / pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4

ADDITIVES: [illegible] GENERAL: ___ — 5

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TOUR TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4

ADDITIVES: [illegible] GENERAL: [illegible] — 5

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12	1	1
[illegible]	12	1	1
[illegible]	1	1	1
[illegible]			
[illegible]	1	5	4½
[illegible]	6:30	7:45	1¼
[illegible]	7:45	9:00	1¼
[illegible]			
[illegible]			
[illegible]			
FIRES ___ DRILLER'S SIGNATURE			
[illegible]	2	5	3
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]	1	3:45	2¾
[illegible]	3:45	4:45	1¼
[illegible]			
[illegible]			
FIRES ___ DRILLER'S SIGNATURE			
[illegible]	4:00	4:15	¼
[illegible]	4:15	6:30	2
[illegible]			
[illegible]			1
[illegible]	9:00	10:30	1½
[illegible]			
[illegible]	10:30	12:00	1½
[illegible]			
[illegible]			
FIRES ___ DRILLER'S SIGNATURE			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (odd)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG — TO ___ KB. USED ___ SAX ___ CEM — PLUS ___ % PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES/NO) ___ — GENERAL —

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 7 1

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative: [illegible]

Approved by Toolpusher: [illegible]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE TACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1834 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1 — LOCATION — LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE ___ 19__

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1559															

	No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1																		
2																		
3																		
4																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF					No. 2 PRES. SURF					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1559															

	No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1																		
2																		
3																		
4																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF					No. 2 PRES. SURF					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1559															

	No.	Size	Type	Joint/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1																		
2																		
3																		
4																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF					No. 2 PRES. SURF					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — 11.5 p.m. (deduct) ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG — TO ___ KB. USED ___ SAE ___ CEM — PLUG DOWN ___ A.M. P.M. — PLUS ___ % ___ — CEMENT RETURNS - (YES/NO) ___

TOTCO RING ON BIT # ___ Boiler Operated: ___

GENERAL: ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	Date Sonosc	Ft. Drilled since Sonosc	Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.

FIRES ___ DRILLER'S SIGNATURE

FIRES ___ DRILLER'S SIGNATURE

FIRES ___ DRILLER'S SIGNATURE

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 7 2

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

HSW DEL-1 CONSERVATION BOARD

No 1833 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION [illegible] — LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE March 2 19 61

DIRECTIONS TO WELL [illegible] — MAILING POINT Medicine Hat — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1556	33	1589	23	3	96	3		16	4½						1

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
C	11	6A	3	1[illegible]	[illegible]	120	Drilled	23								1	2
C	11	6A	3	1[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									
C	7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE	70				No. 2 PRESSURE					1	
VISCOSITY		37			MODEL S.P.M.					MODEL S.P.M.					2	
GEL		3/7			LINER SIZE	5½				LINER SIZE					3	

W.L. ___ F.C. ___ pH ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1589															

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
C																	
C																	
C																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1589															

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
C																	
C																	
C																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG — TO ___ KB. USED ___ SAX ___ CEM — PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES/NO) ___

GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 19__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Make	Type	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T	B	Gal.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				
W.L.	F.C.	pH.		

PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 2 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5 Weather Temp. Water Bbls.

Next Oil Change/

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Make	Type	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T	B	Gal.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				
W.L.	F.C.	pH.		

PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 2 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5 Weather Temp. Water Bbls.

Next Oil Change

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

NIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles

DRILL COLLARS

No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Make	Type	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T	B	Gal.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				
W.L.	F.C.	pH.		

PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 2 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

ADDITIVES: GENERAL:

SURVEYS: At Feet / Degrees

MOTOR HOURS: 1 2 3 4 5 Weather Temp. Water Bbls.

Next Oil Change

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT #: ____ Boiler Hrs. Operated: ____ Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12:01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED	gals.

CASI... TO... PLUS... CEMEN...

DRILL PIP.	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESUL...

HSW DDL-1 CONSERVATION BOARD COPY

REMARKS

TIME: START / STOP

	START	STOP
12	12	1/2
12	2	2
2	2	1/2
2	7	5
7		1/2
	3	7 1/2
		1/2
	7 30	
7	8 00	1/2
8	11 00	3
11	11 30	1/2

FIRES ____ DRILLER'S SIGNATURE ____

EQUIPMENT CHANGES ____ TRANSFER ____

...G REPORT ... RAN ... JTS ... CSG ... KB, USED ... SAX ... CEM ... PLUG DOWN ... A.M. P.M. ... T RETURNS - (YES/NO) ... GENERAL ... TS ... FROM PIPE RACK

DAYS FROM SPUD: 2 8

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____

Approved by Operator's Representative ____

Approved by Toolpusher ____

NO 1831 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION _____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE _____ 196__

DIRECTIONS TO WELL _____ MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR: MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees

ADDITIVES: ____ GENERAL: ____ 4 ____ 5 ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE _____

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees

ADDITIVES: ____ GENERAL: ____ 4 ____ 5 ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE _____

TOUR: 8 AM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees

ADDITIVES: ____ GENERAL: ____ 4 ____ 5 ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES _____ DRILLER'S SIGNATURE _____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

O RING ON B.F. # _____ Boiler Operator _____ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (aud) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT

RAN ____ JTS ____ CSG
TO ____ KB ____ USED ____ SAX ____ CEM
PLUS ____ % ____ PLUG DOWN ____ A.M. P.M.
CEMENT RETURNS - (YES / NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	STOP	INTVL.

EQUIPMENT CHANGES _____ TRANSFER #

DAYS FROM SPUD: 27

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative _____

Approved by Toolpusher _____

HSW-DDL-1 CONSERVATION BOARD COPY

No. 1830 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 1961

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
1232					20	2

DRILL COLLARS: No. 1 | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. | Ft. up on Kelly: 12

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	[illegible]	[illegible]	[illegible]	[illegible]													
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT				
VISCOSITY				
GEL				

PUMP No. 1 — PRES. SURE | MODEL | S.P.M. | LINER SIZE

PUMP No. 2	12 mn.	2 a.m.	4 a.m.	6 a.m.
PRES. SURE				
S.P.M.				
LINER SIZE				

MOTOR HOURS: 1 | 2 | 3 | 4 | 5 — Next Oil Change

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet | Degrees

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ___ DRILLER'S SIGNATURE [illegible]

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
1232	39	1271	5½	90	20	2

DRILL COLLARS: No. 1 | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. | Ft. up on Kelly: 12

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	[illegible]	[illegible]	[illegible]	[illegible]			39	5½				700-50					
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT		71		
VISCOSITY				
GEL				

PUMP No. 1 — PRES. SURE | MODEL | S.P.M. | LINER SIZE

PUMP No. 2	8 a.m.	10 a.m.	12 noon	2 p.m.
PRES. SURE				
S.P.M.				
LINER SIZE				

MOTOR HOURS: 1 | 2 | 3 | 4 | 5 — Next Oil Change

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: [illegible] U. Flow: ___ O. Flow: ___

SURVEYS: At Feet | Degrees

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES [illegible] DRILLER'S SIGNATURE

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles
1271	49	1296	7½	90	20	2

DRILL COLLARS: No. 1 | O.D. | I.D. | Length | Air Wt. | Sub. Wt. | C.B. Ft. | Ft. up on Kelly: —

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	7½				700					
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT				
VISCOSITY				
GEL				

PUMP No. 1 — PRES. SURE | MODEL | S.P.M. | LINER SIZE

PUMP No. 2	4 p.m.	6 p.m.	8 p.m.	10 p.m.
PRES. SURE				
S.P.M.				
LINER SIZE				

MOTOR HOURS: 1 | 2 | 3 | 4 | 5 — Next Oil Change

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: [illegible] U. Flow: ___ O. Flow: ___

SURVEYS: At Feet | Degrees

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES [illegible] DRILLER'S SIGNATURE

REMARKS

TIME

	START	STOP	INTVL
	[illegible]		

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE ___ 196__

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

12 MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1222					20	2		1		9					

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
B																		
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1222	55	1277	12	0	21										

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
B																		
T																		
S																		

8 AM TO 4 PM TOUR

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1277	49	1296	9½	96	3										

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
B																		
T																		
S																		

4 PM TO MIDNIGHT TOUR

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES-SURE					No. 2 PRES-SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL

FIRES ___ DRILLER'S SIGNATURE ___

FIRES ___ DRILLER'S SIGNATURE ___

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

RING ON BIT # ___ Boiler Operated: ___ Hrs.

Fuel on Hand 12:01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11:59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUG DOWN ___ A.M. P.M. ___ PLUS ___ % ___ CEMENT RETURNS - (YES/NO) ___

GENERAL —

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

№ 1829 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1-11 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE Feb 26 ___ 1971

DIRECTIONS TO WELL [illegible] MAILING POINT Norman Wells SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1220	/	/													

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Q.
1	[illegible]																
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: [illegible] GENERAL: [illegible] Weather ___ Water Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES [illegible] DRILLER'S SIGNATURE [illegible]

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1220															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Press.	S.P.M.	Table Torque	T.	B.	Q.
1	[illegible]																
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: [illegible] GENERAL: [illegible] Weather ___ Water Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES [illegible] DRILLER'S SIGNATURE [illegible]

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1220	[illegible]	1222													

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Q.
1	[illegible]																
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Water Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES [illegible] DRILLER'S SIGNATURE [illegible]

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11.59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TC ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO) ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 25

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher [illegible]

O RING ON BIT # ___ Boiler Operated 9-27 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL ___

REMARKS	TIME START	TIME ST	TIME INTVL
ST	12 mn	1 "	1 hr
[illegible]	1 "		½
T [illegible]			
SI [illegible]			
[illegible]			
[illegible]			

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. — LOCATION — LSD — SEC. — TWP. — RGE. — W. — DATE — 19

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

MIDNIGHT TO 4 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Grade

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. GUAGE					No. 2 PRESS. GUAGE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS — At Feet — Degrees

REMARKS — TIME: START / STOP / INTVL

FIRES — DRILLER'S SIGNATURE

TOUR 4 A.M. TO NOON

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Grade

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. GUAGE					No. 2 PRESS. GUAGE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS — At Feet — Degrees

REMARKS — TIME: START / STOP / INTVL

FIRES — DRILLER'S SIGNATURE

TOUR NOON TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Grade

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. GUAGE					No. 2 PRESS. GUAGE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

SURVEYS — At Feet — Degrees

REMARKS — TIME: START / STOP / INTVL

FIRES — DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG — TO ____ KB. USED ____ SAX ____ CEM — PLUS ____ % — PLUG DOWN ____ A.M. P.M.

CEMENT RETURNS - (YES/NO) — GENERAL —

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 24

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS.

O RING ON BIT # — Boiler Operated: 7 - 2 - 21 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DAYE	RESULTS	FROM PIPE RACK

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 — CONSERVATION BOARD COPY

No 1827 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG No. 11-11 — LOCATION _____ Ld _____ SEC. _____ TWP. _____ RGE. _____ W. _____ DATE _____ 19__

DIRECTIONS TO WELL _____ MAILING POINT _____ SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

T R I D N I G H T T O 8 A M T O U R

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
7:47	51	10:54	11:74	11	17			11	5						17

	No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																		
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				74	No. 1 PRESS. SUCT.					No. 2 PRESS. SUCT.					1	
VISCOSITY				25	MODEL H.P.M.					MODEL H.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. _____ F.C. _____ pH. _____ DESILTER: Hours Op: 9 U. Flow: 7 O. Flow: _____ SURVEYS At Feet / Degrees: 4, 5

ADDITIVES: _____ GENERAL _____ Weather _____ Temp. _____ Water _____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A M T O 4 P M T O U R

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
7:47															

	No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SUCT.					No. 2 PRESS. SUCT.					1	
VISCOSITY					MODEL H.P.M.					MODEL H.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. _____ F.C. _____ pH. _____ DESILTER: Hours Op: _____ U. Flow: _____ O. Flow: _____ SURVEYS At Feet / Degrees: 4, 5

ADDITIVES: _____ GENERAL _____ Weather _____ Temp. _____ Water _____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

T O U R 4 P M T O M I D N I G H T

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
10:45	20	10:79	11		19			11	5						7

	No.	Size	Type	Jets W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																		
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				76	No. 1 PRESS. SUCT.					No. 2 PRESS. SUCT.					1	
VISCOSITY					MODEL H.P.M.					MODEL H.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. _____ F.C. _____ pH. _____ DESILTER: Hours Op: 8 U. Flow: _____ O. Flow: _____ SURVEYS At Feet / Degrees: 4, 5

ADDITIVES: _____ GENERAL _____ Weather _____ Temp. _____ Water _____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME	START	STOP	INTVL
	12	7	7

FIRES _____ DRILLER'S SIGNATURE _____

FIRES _____ DRILLER'S SIGNATURE _____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. _____ Rig Savers Chk'd. _____ Kelly Cock Chk'd. _____ Fire Equip. Chk'd. _____

Fuel on Hand 12:01 a.m. _____ gals. Fuel Rec'd Today (add) _____ gals. TOTAL _____ gals. Fuel on stand 11:59 p.m. (deduct) _____ gals. FUEL USED _____ gals.

CASING REPORT — RAN _____ JTS _____ CSG _____ TO _____ KB. USED _____ SAX _____ CEM _____ PLUG DOWN _____ A.M. P.M. _____ PLUS _____ % CEMENT RETURNS - (YES/NO) _____

GENERAL —

EQUIPMENT CHANGES _____ TRANSFER # _____

DAYS FROM SPUD: 23

TOTAL COMPANY TIME _____ HRS. TOTAL CONTRACTOR'S TIME _____ HRS.

Approved by Operator's Representative _____

Approved by Toolpusher _____

RING ON BIT # _____ Boiler Operated 9.24 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1826 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 111 LOCATION Central Oklahoma 111 4½ Mi. LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE Feb 2 ___ 196 21

DIRECTIONS TO WELL Dry 66 52 66 2 mi. west 36 1/2 1 1/2 N MAILING POINT Edmond Okla. SHIPPING POINT Nowata MILES MOVED ___ ROAD CONDITIONS ___

MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9 33	1'	7 70	7½	21	14	1		11	5						

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
6	7 7/8	Rock	3-11-11	35124	6	140	98	13½									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		14	7	14	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				35	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 9 U. Flow: 7 1/ O. Flow: 7 - SURVEYS At Feet / Degrees

ADDITIVES: ___ GENERAL: ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9 70	1'	7 71	2		13	2		11							14

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
6	7 7/8	Rock	3-11-11	35124													

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			7		No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			34		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 9 U. Flow: 7 O. Flow: 7 1/ SURVEYS At Feet / Degrees

ADDITIVES: ___ GENERAL: ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
9 71	1 7	9 31	7½	21	16	1		11	5						22

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
6	7 7/8	Rock	3-11-11	35124	6	140	98	13½									

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		7	7		No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY		31			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 9 U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees

ADDITIVES: ___ GENERAL: ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

O RING ON BIT # ___ Boiler Operated: 9 - 1st Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

FIRES ___ DRILLER'S SIGNATURE ___

TIME	START	STOP	INTVL
	1200	7 4	7½
	7 4		4½

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 4 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 19[illegible]

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT [illegible] MILES MOVED ___ ROAD CONDITIONS ___

TOUR: MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.S. Ft.	Ft. up on Kelly
709	21	724	2	4	1-	1		11					1		

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Circ.	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	6	[illegible]	[illegible]	[illegible]	6	[illegible]	[illegible]	[illegible]									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL H.P.					MODEL H.P.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.S. Ft.	Ft. up on Kelly
724	41	765			12	4		11	2	2	30	41	1		

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Circ.	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	6	[illegible]	[illegible]	[illegible]	6	[illegible]	[illegible]	[illegible]							3	2	5

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL H.P.					MODEL H.P.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 7 U. Flow: 17 O. Flow: [illegible]

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR: 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.S. Ft.	Ft. up on Kelly
779	6	785	4	20	14	1		11	2	2	30	41	1		24

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Circ.	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	6	[illegible]	[illegible]	[illegible]	6	[illegible]	[illegible]	[illegible]									

MUD	4 a.m.	6 a.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL H.P.					MODEL H.P.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet 600 Degrees 4° | 5: ___

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR: P.M. TO MIDNIGHT

REMARKS	TIME START	TIME STOP	TIME (PITY)

FIRES ___ DRILLER'S SIGNATURE ___

FIRES ___ DRILLER'S SIGNATURE ___

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Mydril				
Pipe Rams.				
Blind Rams.				

O RING ON BIT # ___ Boiler Operated: 7 [illegible] Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M.

CEMENT RETURNS - (YES/NO)

EQUIPMENT CHANGES ___ TRANSFER #

DAYS FROM SPUD: [illegible]

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

№ 1399 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 111 LOCATION Coors #1 of Dakkenmi 11 4" 1+ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE Feb 21 19 71

DIRECTIONS TO WELL [illegible] MAILING POINT Norwood Well SHIPPING POINT Nucla MILES MOVED ___ ROAD CONDITIONS ___

TOUR: MIDNIGHT TO 8 A.M. | 8 A.M. TO 4 P.M. | 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.S. Ft	Ft. up on Kelly
44	78	122	2 4	16	9	2		16	5	2	162	7.5	1.3		19

No.	Bissett	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1	[illegible]	[illegible]	[illegible]	[illegible]	12	75	147	24									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 2 U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees — 121 / 1 1/4

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.S. Ft	Ft. up on Kelly
55	122	67	7 1/2	11	11	2		16	5	2	162	7.5	1		1

No.	Bissett	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	72	211	12									

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		7.5			No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY		35			MODEL S.P.M.					MODEL S.P.M.					2	
GEL		0/0			LINER SIZE					LINER SIZE					3	

W.L. 12 F.C. — pH. — DESILTER: Hours Op: 4 U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees — [illegible] / 1/4

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.S. ft	Ft. up on Kelly
67H	29	702	23 1/2	11	11			11		2	11	1	1		24

No.	Bissett	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	92	35						4	4		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		7+			No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY		3			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: 4 U. Flow: ___ O. Flow: ___

ADDITIVES: ___ GENERAL: ___

SURVEYS: At Feet / Degrees — 170 / 11

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

O RING ON BIT # ___ Boiler Operated: 9-2 ½ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT: RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS (YES/NO) ___

GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	STOP	INTVL
Trip Survey	11 30	12 00	½
Ream 1 ST & Survey	12 00	04 30	2
Drill 6¾ Hole	04 30	06 00	1½
Ream Last 90 Singles	06 00	06 30	½
Drill 6¾ Hole	06 30	07 45	1¼
Rig Service	07 45	08 00	¼

FIRES ___ DRILLER'S SIGNATURE ___

	11	11	½

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 4444 LOCATION Comanche Well Inverness 1/4 1/4 LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE 5-6-72 19

DIRECTIONS TO WELL Hwy 60 1 1/2 S 1/2 E into Inv 1/4 N 1/2 E 1/2 E 1/2 N

MAILING POINT Drumheller Alta. SHIPPING POINT Nisku MILES MOVED ____ ROAD CONDITIONS ____

TOUR: MIDNIGHT TO 8 A.M. | 8 A.M. TO 4 P.M. | 4 P.M. TO MIDNIGHT

MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
405	—				7	2		14	5"	—	160	96			7'

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1C	Co	Tri	12s	913019													

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			1-	-	No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY			-	-	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS: At Feet / Degrees

ADDITIVES: ____ GENERAL: ____ 4 ____ 5 ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
405	22	427	1		7	2		14	5	2	160	96			7'

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1C	Co	Tri	12s	913019	10	100	1	1									

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	7.1	7.1	7.1		No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY	-	34	1-		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. 10 F.C. — pH. — DESILTER: Hours Op: 4 U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees

ADDITIVES: — GENERAL: — 4 — 5 — Weather — Temp. — Water — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
427	47	474	3		9	1		16	5	2	160	96			7'

No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1C	Co	Tri	12s	913019	10	100	1	4									

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	7.1	7.1	7.1	7.1	No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY	-	-	-	-	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: 8 U. Flow: ____ O. Flow: ____ SURVEYS: At Feet / Degrees

ADDITIVES: ____ GENERAL: Changed out the four sump lines. 4 ____ 5 ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril	—			
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ✓ Fire Equip. Chk'd. ____

D RING ON BIT # ____ Boiler Operated: 2 - 2 Hrs.

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____ GENERAL —

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 17

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Tour in with 6 1/4" bit, 160' 5" DC	12:00		
Drill Cement, 4 1/2" CSD. TAG			
Cement TOP @ 359' KB		01:00	2
Put Drilling hours and Derrick			
Have to Install Hose	01:00	01:00	1
Test C/O Rams - Manifolds	01:00	01:30	1/2
Rig Has been Leaking Gear	01:30		
Grease, Repair Rig Welders St.		06:00	2 1/2
Test 4" Pipe Rams 1250 psi 5" Hydril OK	06:00	06:45	3/4
Pipes Left in Rat Hole Rig Service	06:15	06:30	1 1/4
DRILLER'S SIGNATURE			
Pipe To Drill Cement	06:30	07:30	1
Drill Plug & Insert	07:30	11:30	3 1/2
Drill Cement - Shoe @ 401	12:00	2:00	2
Drilling 6 1/4" Hole.	2:00	3:45	1 1/4
Rig Service	3:45	4:00	1/4
[illegible]			
[illegible]			
FIRES			
DRILLER'S SIGNATURE			
Drill 6 1/4 Hole	4:00	7:00	3
Work on Flowline &	7:00		
Install Quad Pump.		12:00	5
[illegible]			
[illegible]			
FIRES			
DRILLER'S SIGNATURE			

HSW DDL-1 CONSERVATION BOARD COPY

No. 1397 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 4 LOCATION _____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE 6-14 19 74

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR: MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	% Gl.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR: 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	% Gl.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR: 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	% Gl.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT: RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

GENERAL

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 10

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

CO RING ON BIT # ____ Boiler Operated: 9 - 24 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME: START / STOP / INTVL

REMARKS	START	STOP	INTVL
Nipple up BOP and test same	12:30		
Drilled 7 7/8" hole		7:45	7½
Rig Service.	7:45	8:00	¼
Change 1 drill Rotor	8:00	9:00	1
Rig to pressure test casing Lines	9:00	9:30	½
Pressure Csng Lines - Leak Free Line	9:30	10:00	½
Remove accumulator Lines	10:30	11:30	1
Remove Leaky Valve in manifold	11:30	11:30	½
Test Lines from to 1250 psi - OK	11:30	12:00	½
Test Blind rams OK to 1250 psi			

FIRES [illegible] DRILLER'S SIGNATURE [signature]

REMARKS	START	STOP	INTVL
Nipple up BOP and Lines	08:30	10:30	2
Pick up DP			
Rig Service	12:00	12:30	½
Nipple up Kelly and Test	12:30	4:00	1
[illegible]			
[illegible]			

FIRES [illegible] DRILLER'S SIGNATURE [signature]

REMARKS	START	STOP	INTVL
Wash and ream 60' to bottom	4:00	7:45	3¾
Drilled 7 7/8" hole to 8200'	7:45	8:00	¼
Rig Service	7:45	8:00	¼
Circulate & Condition Mud	8:00	9:00	1
Rig to pressure test casing Lines	9:00	9:30	½
Pressure Csng Lines - Leak Free Line	9:30	10:00	½
Remove accumulator Lines	10:30	11:30	1
Remove Leaky Valve in manifold	11:30	11:30	½
Test Lines from to 1250 psi - OK	11:30	12:00	½
Test Blind rams OK to 1250 psi			

FIRES [illegible] DRILLER'S SIGNATURE

HSW DDL-1

CONSERVATION BOARD COPY

No. 1396 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 1 LOCATION _____ LUD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE 6-11 196 71

DIRECTIONS TO WELL 6 miles East of Ozona

MAILING POINT P.O. Box 1111 SHIPPING POINT _____ MILES MOVED _____ ROAD CONDITIONS _____

TOUR: MIDNIGHT TO 4 A.M. | 4 A.M. TO 8 A.M. | 8 A.M. TO 12 NOON | 12 NOON TO 4 P.M. | 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS.					No. 2 PRESS.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:				SURVEYS At Feet	Degrees			4	
ADDITIVES:			GENERAL:												5	
													Weather		Water	
													Temp.		Bbls.	

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS.					No. 2 PRESS.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:				SURVEYS At Feet	Degrees			4	
ADDITIVES:			GENERAL:												5	
													Weather		Water	
													Temp.		Bbls.	

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS.					No. 2 PRESS.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:				SURVEYS At Feet	Degrees			4	
ADDITIVES:			GENERAL:												5	
													Weather		Water	
													Temp.		Bbls.	

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL
Mancos Rod Hook up Swivel	12:00		
Circulate Mud		7:45	7¾
Rig Service	7:45	8:00	¼
FIRES	DRILLER'S SIGNATURE		
Nipple up BOP Hook up Flowline	08:00	10:00	2
Mud			
Finish Trip in Mud Tanks	10:00	11:00	1
Nipple up Test Hose Rig Up Line Unit	11:00	4:00	1
FIRES	DRILLER'S SIGNATURE		
Nipple up BOP & Flow Nipple	4:00	7:45	3¾
Trip in Hole with Bit & Scraper to 7200			
Rig Service	7:45	8:00	¼
Circulate & Build Ring	8:00	9:00	1
Rig to Pressure Test Surface Lines	9:00	9:15	¼
Pressure Bull Line - Lock Pipe Line	9:30	10:00	½
Repair Accumulator Lines	10:00	11:00	1
Replace Lower Valve in Manifold	11:00	11:30	½
Test Blind Rams to 1250 psi - OK	11:30	12:00	½
Test Blind Rams OK to 1250 psi			
FIRES	DRILLER'S SIGNATURE		

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals. Fuel Rec'd Today (add) ____ gals. TOTAL ____ gals. Fuel on Hand 11.59 p.m. (deduct) ____ gals. FUEL USED ____ gals.

CASING REPORT RAN ____ JTS. ____ CSG TO ____ KB. USED ____ SAX ____ CEM PLUS ____ % PLUG DOWN ____ A.M. P.M. CEMENT RETURNS - (YES/NO) ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 12

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative _____

Approved by Toolpusher _____

GENERAL ____

Boiler Operated: ____ Hrs.

CO RING ON BIT # ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

№ 1396 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 1 LOCATION [illegible] LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE F ____ 196 1

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4[illegible]															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:	GENERAL:														5	
[illegible]															Weather	Water
[illegible]															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:	GENERAL:														5	
[illegible]															Weather	Water
[illegible]															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:	GENERAL: 16 Gal Asphalt Emt.														5	
	45 Gal Diesel Emt.														Weather	Water
[illegible]	[illegible]														Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig up Lines Remove Derrick	12 00		
Move		1 45	1 3/4
Finish rig up Circ Mud	1 45	6 45	5
Mud	~~6 45~~	~~7 45~~	1
Repair Mud Lines	6 45	7 45	1
Rig Service.	7 45	8 00	1/4
Nipple up BOPs & Gun	8 00	10 00	2
Mix Tools			
Load in Tools, Drill	10 00		
Circ & Repair Leak		4 00	6
Repair Mud Tank Leak	4 00	8 00	4
Add Diesel & Mix Mud	8 00	10 00	2
Mix & Cement Fox Around	10 00		
Top @ 9 5/8"		12 00	2

FIRES ____ DRILLER'S SIGNATURE ____

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

O RING ON BIT # ____ Boiler Operated: 7-24 Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT RAN ____ JTS. ____ CSG
TO ____ KB. USED ____ SAX ____ CEM
PLUS ____ % PLUG DOWN ____ A.M. P.M.
CEMENT RETURNS - (YES/NO) ____

GENERAL ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 17

TOTAL COMPANY TIME ____ HRS.

TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1

CONSERVATION BOARD COPY

№ 1395 HSW

HEATH & SHERWOOD DRILLING (WESRERN) RIG NO. 11-H LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 196___

DAILY DRILLING LOG

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR: MIDNIGHT TO 8 A.M. | 4 P.M. TO MIDNIGHT | 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
305															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Q

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Q

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Q

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

O RING ON BIT # ___ Boiler Operated: 9-9.4 Hrs.

Crown-o-matic Chk'd.		Fuel on Hand 12.01 a.m.	gals.
Rig Savers Chk'd.		Fuel Rec'd Today (add)	gals.
Kelly Cock Chk'd.		TOTAL	gals.
Fire Equip. Chk'd.		Fuel on Hand 11.59 p.m. (deduct)	gals.
		FUEL USED	gals.

CASING REPORT: RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS (YES/NO) ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 16

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	11 30		
[illegible]			
[illegible]			
[illegible]		2 00	2
[illegible]			
[illegible]			
[illegible]		

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 44 LOCATION [illegible] LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE Feb 11 19 71

DIRECTIONS TO WELL [illegible]

MAILING POINT [illegible] SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1116'														

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

ADDITIVES: [illegible] GENERAL: [illegible]

4 [illegible] 5 [illegible]

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10'	—													

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

ADDITIVES: [illegible] GENERAL: [illegible]

4 [illegible] 5 [illegible]

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TOUR TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
10'	—													

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

SURVEYS: At Feet ____ Degrees ____

ADDITIVES: [illegible] GENERAL: [illegible]

4 [illegible] 5 [illegible]

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

O RING ON BIT # ____ Bailer Operated: 1-2 Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M.

CEMENT RETURNS - (YES/NO) ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL

REMARKS

Circ and RAT Hole 2 HRS
Pump pump Pit and Displace to Surface
Circulate out cement
Hauling fuel to Wetaskiwin
Trucks unloading pump and Tank

FIRES ____ DRILLER'S SIGNATURE ____

TIME	START	STOP	INTVL
	12:00	2:00	2
	2:00		
		6:00	3
	6:00	8:00	2
	7:30		
		1:30	1
	9:00		
		10:00	1
	10:00	12:00	2
		2:00	1
		3:00	1

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 44 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 19 71

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

No.	Size	Type	Jets/W.C.S.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP		12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP		12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1	PRESSURE					No. 2	PRESSURE					1	
VISCOSITY					MODEL	S.P.M.					MODEL	S.P.M.					2	
GEL						LINER SIZE						LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4105															

No.	Size	Type	Jets/W.C.S.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP		8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP		8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1	PRESSURE					No. 2	PRESSURE					1	
VISCOSITY					MODEL	S.P.M.					MODEL	S.P.M.					2	
GEL						LINER SIZE						LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 ___ 5 ___

ADDITIVES: ___ GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.S.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP		4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP		4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1	PRESSURE					No. 2	PRESSURE					1	
VISCOSITY					MODEL	S.P.M.					MODEL	S.P.M.					2	
GEL						LINER SIZE						LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 ___ 5 ___

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

OTCO RING ON BIT # ___ Boiler Operated ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (odd) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUG DOWN ___ A.M. P.M. ___ PLUS ___ % CEMENT RETURNS - (YES/NO) ___

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL.

FIRES [illegible] DRILLER'S SIGNATURE

FIRES [illegible] DRILLER'S SIGNATURE

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: [illegible]

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

HSW DDL-1 CONSERVATION BOARD COPY

No. 1392 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 196__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR: MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	7 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:			SURVEYS At Feet	Degrees				4	
ADDITIVES:			GENERAL:												5	
18 sx Normal + 40% SA + Diacel D 1 sack CaCl															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:			SURVEYS At Feet	Degrees				4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Line	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				MODEL S.P.M.					MODEL S.P.M.					2	
GEL				LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees				4	
ADDITIVES:			GENERAL:											5	
														Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Mix Cement in Mud Tank	12:00	12:30	1/2
Start to Pump Cement - Full Pumps Packed up - Could Not Get Suction on Outlet Line	12:30	01:30	1
Take down Pumps & Circ. Out - Cut off 9 5/8" Intermediate	01:30		
Circ. Out. Clean Mud Tanks		08:00	6 1/2
Mixed 50 sxs Normal + Calwell wt. 2% CaCl			
Pumped 2 bbls of 15.6 ppg 62% Cmt			
FIRES Dobbelstein Rig DRILLER'S SIGNATURE			
~~Cleaning Cement out of pump~~	8:00		
~~Pressure Manifold~~			
~~Put 3 Join pipe down to test for~~			
~~Cement between 9 5/8" & Hole~~			
~~Take down Pumps to get out~~			
~~Cement~~		4:00	8
FIRES Dobbelstein Rig DRILLER'S SIGNATURE			
~~Cleaned out + putting together~~	4:00		
~~Suction + Pressure Manifold~~		8:00	4
~~Cleaning Cement out of Pit~~	8:00		
~~Pump~~		12:00	4
FIRES Dobbelstein Rig DRILLER'S SIGNATURE			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

TCO RING ON BIT # ____ Boiler Operated: 7 - 11 Hrs.

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. CEMENT RETURNS - (YES/NO)

GENERAL —

EQUIPMENT CHANGES — TRANSFER ##

DAYS FROM SPUD: 17

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

№ 1391 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 4 LOCATION [illegible] SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 196 4

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4405															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY		N.B.			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 a.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: 145 sax Oilwell GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.
300 # Ca Cl2

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: 90 sax Neat GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.
200 # Ca Cl2

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

CO RING ON BIT # ___ Boiler Operated: 9-2 ½ Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT RAN ___ JTS ___ CSG TO ___ KB. USED ___ SAX ___ CEM PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO) ___ GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
CIRCULATE & CONDITION CSG	12:00		
HOOK UP TO CEMENTER		05:00	5
RIG TO CEMENT 7" CSG.	08:00	11:00	2
Hold Cement	11:00	11:00	0
Pump water, slurry, & displace	11:00	12:00	1
Clean up Pumps & Lines	12:00		
Weld plate to close 7" csg.			
Handles to Recement top		4:00	4
Mix 145 sacks Oilwell + 2% CaCl2 to 15.3 ppg. 8 bbl water ahead 16 bbl displacement	Slurry 85°F		
Bump plug @ 4:54			
FIRE 500 psi @ 12:00 NOON DRILLER'S SIGNATURE			
Wash on pumps - heat water, rig lines to	4:00		
Cement 7" 9 5/8" annulus		10:00	6
Mix Cement & Ca Cl2			
Pump flush & slurry - no returns			
Mix additional Cement			
Mix 90 sax Neat + 2% CaCl2 to 15.4 ppg. 8 bbl water ahead	(Slurry 90°F)		
Good mud returns, no cement returns Dasschell P. Eng.			
FIRES DRILLER'S SIGNATURE			

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 12

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

HSW DDL-1

CONSERVATION BOARD COPY

No. 1390 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 11 LOCATION [illegible] LAD. SEC. TWP. RGE. W. DATE 5-6-72 19[illegible]

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT [illegible] MILES MOVED [illegible] ROAD CONDITIONS [illegible]

TOUR: MIDNIGHT TO 8 AM TO 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1	—														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
	—														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
405	—														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk d.

ISO RING ON BIT ☐ Boiler Operated: 9 24 Hrs.

Fuel on Hand 12.01 a.m. [illegible] gals.
Fuel Rec'd Today (add) [illegible] gals.
TOTAL [illegible] gals.
Fuel on Hand 11.59 p.m. (deduct) [illegible] gals.
FUEL USED [illegible] gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	TIME START	TIME STOP	INTVL
Add Drill Rod & Work Circ.	12:00	01:45	1¾
Pick up 3 jts. Csg & Wash to	01:45	04:15	2½
Clean & Circ Tight Spots @ 300'.	04:15	07:00	2¾
Pick up 1 jt Casing & Con.	07:00	07:45	¾
Rig Service	07:45	08:00	¼
FIRES [illegible] DRILLER'S SIGNATURE			
Run 7" Csg. Work, Rotate & Circulate Casing In.	08:00	12:45	4¾
Clean to Bottom & Pick up Landing Joint	12:45	3:00	2¼
Loosen 7" Collars for Csg. Bowl	3:00	4:00	1
Run 13 jt 7" K-S 20# Csg w/Shoe @ 402' KB Guide shoe on bottom & baffle insert on top of first joint			
FIRES Dbl Jacket Plug DRILLER'S SIGNATURE			
Circulate Csg with Rig Pump	4:00		
Working on Pumps & Cleaning Mud Tanks		12:00	8
FIRES DRILLER'S SIGNATURE			

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 11

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

HSW DDL-1 CONSERVATION BOARD COPY

№ 1389 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

RIG NO. Hoot LOCATION 6 miles ... Hwy ... M ... LSD ... SEC. ... TWP. ... RGE. ... W. ... DATE Feb 11 ... 196 71

DAILY DRILLING LOG
DIRECTIONS TO WELL ... MAILING POINT ... SHIPPING POINT ... MILES MOVED ... ROAD CONDITIONS ...

TOUR: MIDNIGHT TO 8 AM TOUR - 8 AM TO 4 PM TOUR - 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
405'	/														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn	2 a.m	4 a.m.	6 a m	MOTOR HOURS	Next Oil Change
WEIGHT			12.8	13	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			80	90	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet		Degrees		4	
ADDITIVES: 60 Cedar					GENERAL:										5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
405'	/														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		11.8	11.11		No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY		75	65		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet		Degrees		4	
ADDITIVES:					GENERAL:										5	
2-3 ... (Caustic)															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
-10-	/														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
	18	8	[illegible]															

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet		Degrees		4	
ADDITIVES:					GENERAL: Fresh water [illegible]										5	
[illegible]															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TCO RING ON BIT # ... Boiler Operated: 9 - 14 Hrs.

Crown-o-matic Chk'd. ... Rig Savers Chk'd. ... Kelly Cock Chk'd. ... Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. ... gals.
Fuel Rec'd Today (add) ... gals.
TOTAL ... gals.
Fuel on Hand 11.59 p.m. (deduct) ... gals.
FUEL USED ... gals.

CASING REPORT RAN ... JTS ... CSG
TO ... KB. USED ... SAX ... CEM
PLUS ... % ... PLUG DOWN ... A.M. P.M.
CEMENT RETURNS - (YES/NO) ...
GENERAL: —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	TIME START	TIME STOP	TIME INTVL
MIX SALT & WT MATERIAL TO 13+ ppg	12:00	4:30	4½
CIRCULATE HOLE & STRAIGHTEN KELLY FILL FROM 180'	4:30	6:00	1½
	6:00	8:00	2
FIRES ... DRILLER'S SIGNATURE			
WORKING PIPE & TRYING TO CLEAN HOLE WHILE WORKING ON PUMPS	8:00	4:00	8
FIRES ... DRILLER'S SIGNATURE			
CIRCULATE - UNABLE TO CLEAN HOLE	4:00	6:30	2½
PULL OUT WITH DRILL STRING @ 310' & 180'	6:30	9:00	2½
RUN CSG. - HUNG UP @ 180'	9:00	10:30	1½
CIRCULATE & ROTATE CSG. TO CLEAN UP HOLE	10:30	12:00	1½
FIRES ... DRILLER'S SIGNATURE			

EQUIPMENT CHANGES ... TRANSFER #

DAYS FROM SPUD: 1/2 ... TOTAL COMPANY TIME HRS. ... TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative ...

Approved by Toolpusher ...

HSW DDL-1

CONSERVATION BOARD COPY

No. 1388 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 1 Kelly LOCATION Cadillac - Lot ... Lse. REC. ... TWP. ... RGE. ... W. ... DATE Feb 2 ... 19 71

DIRECTIONS TO WELL ... MAILING POINT Plainsville, Kan. SHIPPING POINT ... MILES MOVED ... ROAD CONDITIONS ...

TOUR: MIDNIGHT TO 8 AM · 8 AM TO 4 PM · 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ... F.C. ... pH. ... DESILTER: Hours Op: 8 ... U. Flow: ... O. Flow: ... SURVEYS At Feet / Degrees ... 4 ... 5 ... Weather ... Temp. ... Water ... Bbls.

ADDITIVES: ... GENERAL: 1 Jug Hi-Vis Cmt Gel

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				11.0	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				100	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ... F.C. ... pH. ... DESILTER: Hours Op: 8 ... U. Flow: ... O. Flow: ... SURVEYS At Feet / Degrees ... 4 ... 5 ... Weather ... Temp. ... Water ... Bbls.

ADDITIVES: ... GENERAL: 8 SACKS Zeogel

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1	18 2C	TH															

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				11.4	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				90	MODEL S.P.M.					MODEL S.P.M.					2	
GEL	100				LINER SIZE					LINER SIZE					3	

W.L. ... F.C. ... pH. ... DESILTER: Hours Op: 9 ... U. Flow: ... O. Flow: ... SURVEYS At Feet / Degrees ... 4 ... 5 ... Weather ... Temp. ... Water ... Bbls.

ADDITIVES: ... GENERAL: 30 SACKS SALT

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ... Rig Savers Chk'd. ... Kelly Cock Chk'd. ... Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. ... gals.
Fuel Rec'd Today (adr.) ... gals.
TOTAL ... gals.
Fuel on Hand 11.59 p.m. (deduct) ... gals.
FUEL USED ... gals.

CASING REPORT: RAN ... JTS ... CSG; TO ... KB. USED ... SAX ... CEM; PLUS ... % ... PLUG DOWN ... A.M. P.M.; CEMENT RETURNS - (YES/NO)

GENERAL: —

TCO RING ON BIT # ... Boiler Operated: 3.34 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL.
TRIP IN WITH 7" CASING	12:00	4:00	4
ATTEMPT TO WORK CASING PAST FIRST SHOT AT 250'	4:00	8:00	4
FIRES ... DRILLER'S SIGNATURE			
WORK CASING IN TIGHT HOLE	8:00	9:00	1
PULL OUT WITH CASING - WET	9:00	1:00	4
BREAK BALLOCKED BIT	1:00	2:30	1½
TRIP IN WITH BIT TO REAM	2:30	4:00	1½
FIRES ... DRILLER'S SIGNATURE			
TRIP IN WITH BIT	4:00	5:15	1¼
CIRCULATE & REAM FILL	5:15	7:45	2½
RIG SERVICE	7:15	8:00	¼
REAM TO BOTTOM	8:00	9:00	1
LITTLE FILL ON SHOE IC			
MIX MUD & CIRCULATE.	9:00	12:00	3
FIRES ... DRILLER'S SIGNATURE			

EQUIPMENT CHANGES ... TRANSFER #

DAYS FROM SPUD: 9

TOTAL COMPANY TIME HRS. ... TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative ...

Approved by Toolpusher C. Hutchinson

No. 1387 HSW

HSW DDL-1

CONSERVATION BOARD COPY

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 11 LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 196__

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR: MIDNIGHT TO 8 AM | 8 AM TO 4 PM | 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
40'	—														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees 4 5

ADDITIVES: ____ GENERAL: 1 — 12 1/4" Hall Rock Bit (Reconditioned) Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
40'	—														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1.	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees 4 5

ADDITIVES: ____ GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
43'	—														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			10.7		No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			195		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. 7.0 DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees 4 5

ADDITIVES: 15 sacks Zeogel GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL.
Run 7" casing	12:00	03:00	3
Circ & work casing to 270'	03:00	07:45	4 3/4
Rig Service	07:45	08:00	1/4
FIRES ____ DRILLER'S SIGNATURE ____			
Circ & work casing @ 280'	05:00	10:45	2 1/4
Trip out casing - wet	10:45	2:30	4 1/4
Trip in with rods and break circulation & ream bottom 270'	2:30	4:00	1 1/2
FIRES ____ DRILLER'S SIGNATURE ____			
Clean & clean to bottom - circ.	4:00	8:30	4 1/2
Mix mud pill & circulate around rods	8:30	9:30	1
Start out with rods	9:30	10:00	1/2
Repair power swivel	10:00	10:15	1/4
Trip out with rods	10:15	12:00	1 3/4
FIRES ____ DRILLER'S SIGNATURE ____			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams:				
Blind Rams.				

CO RING ON BIT = ____ Boiler Operated: 5 7 hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M.

CEMENT RETURNS - (YES/NO) ____

GENERAL: —

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 8

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1

CONSERVATION BOARD COPY

No 1386 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. #11 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE Feb 7 19 74

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
391	14	405	4	14				3	6		90				
								16	5		160				

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2B	VSI	8¾	Rig	353967	10	75	109	2½	—	—				1000	6	3	F

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	10.2	11.0			No. 1 PRES. SURE		12.5			No. 2 PRES. SURE		12.5			1	
VISCOSITY	57	57			MODEL S.P.M.		100			MODEL S.P.M.		500			2	
GEL					LINER SIZE		3½ x 6½			LINER SIZE		2½ x 3			3	
W.L.	F.C.		pH.	7.0	DESILTER: Hours Op:	7	U. Flow:		O. Flow:						SURVEYS At Feet	Degrees	4	
ADDITIVES:					GENERAL:												5	
2 Desilter Cones															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
405	—														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				11.0	No. 1 PRES. SURE		125			No. 2 PRES. SURE		12.5			1	
VISCOSITY				90	MODEL S.P.M.		100			MODEL S.P.M.		500			2	
GEL				Fair	LINER SIZE		3½ x 6½			LINER SIZE		2½ x 3			3	
W.L.	F.C.		pH.	7.0	DESILTER: Hours Op:	5	U. Flow:		O. Flow:						SURVEYS At Feet	Degrees	4	
ADDITIVES:					GENERAL:										400	10	5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
405	—														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	11.0				No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	90				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.	7.0	DESILTER: Hours Op:	8	U. Flow:		O. Flow:						SURVEYS At Feet	Degrees	4	
ADDITIVES:					GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ___
Rig Savers Chk'd. ___
Kelly Cock Chk'd. ___
Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

TICO RING ON BIT = ___ Boiler Operated: 2-2½ Hrs.

CASING REPORT RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO) ___ GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Drill 8¾" Hole	12:00	12:15	1¼
Repair mud line	12:15	12:45	½
Drill 8¾" Hole	12:45	04:30	3¾
Circ & Condition Hole	04:30	05:15	¾
Drop Trip Pt and 3 singles	05:15	07:15	2
Circ & Condition Hole To	07:15		
Run 7" Casing		08:00	¾
FIRES DRILLER'S SIGNATURE			
Circ & Condition Hole	08:00	08:45	¾
Totco Survey	8:45	9:15	½
Trip out Hole tight	9:15	11:00	1¾
Lay down Singles to ream to bottom	11:00	11:30	½
Ream tight Hole	11:30	4:00	4½

HEATH & SHERWOOD DRILLING (WESRERN)

RIG NO. 111 LOCATION [illegible] LND. SEC. TWP. RGE. W. DATE Feb 7 19 64

DAILY DRILLING LOG
DIRECTIONS TO WELL [illegible]
MAILING POINT [illegible] SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
215	112	327	4 1/4												

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	9 7/8	SLB	—	35501	10	75	105	6 1/4			1	100	100	1000			
											2	100					

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	10	10		10	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	47	47		100	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 7 DESILTER: Hours Op: 8 U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: Pkg - 2 Salt
Pkg - 4 Zeogel

GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
327	30	357	7	13				3	6"		30	3in			
								16	5"		160	9.6m			

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2RR	8 3/4	451	Rig	35961	10	75	155	13 1/4	—					1000			

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.9	10.7	10.4	10.1	No. 1 PRES. SURE		125	—		No. 2 PRES. SURE		125			1	
VISCOSITY	51	130	160	160	MODEL S.P.M.		100	—		MODEL S.P.M.		500			2	
GEL					LINER SIZE		3 1/2 X 6 1/2			LINER SIZE		2 1/2 X 3"			3	

W.L. F.C. pH. 7.0 DESILTER: Hours Op: 8 U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TOUR 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
357	34	391	7 3/4	10				as above							

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2R	8 3/4	451	Rig	39567	10	75	185	21	—					1000			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	10.1	10.9	11.0	10.2	No. 1 PRES. SURE		125			No. 2 PRES. SURE		125			1	
VISCOSITY	100	95	165	50	MODEL S.P.M.		100			MODEL S.P.M.		500			2	
GEL					LINER SIZE		3 1/2" X 6 1/2"			LINER SIZE		2 1/2 X 3"			3	

W.L. F.C. pH. 7.0 DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

	START	STOP	INTVL
[illegible]	1	1	1
[illegible]	1	1	1
[illegible]	1	1	1

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. Hell LOCATION [illegible] LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE Feb ____ 1974

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TO MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
100	[illegible]	110	[illegible]	4	2	X-2		1	[illegible]	[illegible]	[illegible]	[illegible]	1		

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1-A	9 7/8	JTH		R2HC	5M	60	10	3½	[illegible]	1	1	[illegible]	[illegible]	0 1/2			

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	7 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.7	10	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			52	60	MODEL S.P.M.					MODEL S.P.M.					2	
GEL			2/3	4/6	7 LINER SIZE					7 1/2 LINER SIZE					3	
W.L.	F.C.		pH. 7		DESILTER: Hours Op: 9		U. Flow:		O. Flow:			SURVEYS At Feet	Degrees		4	
ADDITIVES:					GENERAL:								½		5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
140	66	206	4½	12	3	3		16	6"			60	41		

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1-2	9 7/8	JTH		R2HC	15M	60	206	9			1	40	100				
												3	50					

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	10	9.9	10	9.6	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	53	52	54	51	MODEL S.P.M.					MODEL S.P.M.					2	
GEL	3				7-34 LINER SIZE					7 LINER SIZE					3	
W.L.	F.C.		pH. 6		DESILTER: Hours Op: 9		U. Flow:		O. Flow:			SURVEYS At Feet	Degrees		4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp. 70	70 Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
206	9	215	½	12				16	6"			60			
								3	7"			90			

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1-A	9 7/8	JTH		[illegible]	10M	60	9	½			1	30	100	12-14-00			
	2-A	9 7/8	JTH		[illegible]							3						

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.6				No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	49				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					7-34 LINER SIZE					3 LINER SIZE					3	
W.L.	F.C.		pH. 7		DESILTER: Hours Op: 9		U. Flow:		O. Flow:			SURVEYS At Feet	Degrees		4	
ADDITIVES:	1 SOAP SPOT				GENERAL:										5	
	1 GEL 1 Red														Weather	Water
	1 Soda Ash														Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals. Fuel Rec'd Today (add) ____ gals. TOTAL ____ gals. Fuel on Hand 11.59 p.m. (deduct) ____ gals. FUEL USED ____ gals.

CASING REPORT RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % PLUG DOWN ____ A.M. P.M. CEMENT RETURNS - (YES/NO) ____ GENERAL: —

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 5

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

JTCO RING ON BIT # ____ Boiler Operated: 2-24 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL
	12 [illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]
	2 [illegible]	2 [illegible]	1
	[illegible]	[illegible]	[illegible]
	[illegible]	2 00	½
	2 00	[illegible]	½
	[illegible]	7 [illegible]	2½
	7 [illegible]	[illegible]	½
	7 00	7 [illegible]	½
	7 15	11 00	1¼
	11 00	11 30	½
	11 30	12 00	½
	12 00	12 15	¼
	12 15	12 30	¼
	12 30	12 45	¼
	12 45	1 15	½
	1 15	3 00	1¾
	3 00	4 00	1
	4 00	[illegible]	[illegible]
	[illegible]	11 00	7
	11 00	11 15	¼
	11 45	11 45	¼
	11 45	[illegible]	¼

FIRES ____ DRILLER'S SIGNATURE [illegible]

FIRES ____ DRILLER'S SIGNATURE [illegible]

HSW DDL-1 CONSERVATION BOARD COPY

№ 1383 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION [illegible] LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE Feb 6 19 74

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
1	53														

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: 4 U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees 4 ____

ADDITIVES: ____ GENERAL: ____ 5 ____

Weather ____ Water ____

Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
100															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	2 7/8	4	Tin		P24102													

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: [illegible] U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees 4 ____

ADDITIVES: Soda Ash - 2 GENERAL: ____ 5 ____

Visco 37 - 2 sx

Flo-Chek - 1 sx Weather ____ Water ____

Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
100															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	2 7/8	4	Tin		P24109													

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			1		No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			37		MODEL S.P.M.					MODEL S.P.M.					2	
GEL			2		LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: 4 U. Flow: ____ O. Flow: ____ SURVEYS At Feet / Degrees 4 ____

ADDITIVES: ____ GENERAL: ____ 5 ____

Weather ____ Water ____

Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ____ Boiler Operated: 7 - 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAY ____ CEM ____ PLUS ____ PLUG DOWN ____ A.M. P.M.

CEMENT RETURNS - (YES/NO) ____ GENERAL: —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	INTVL
W.O. [illegible]	[illegible]	[illegible]	4
[illegible]			
[illegible]			
[illegible]		

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO 1-24 — LOCATION [illegible] LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE Feb 4 ____ 1971

DIRECTIONS TO WELL [illegible] — MAILING POINT No Name — SHIPPING POINT ____ — MILES MOVED ____ — ROAD CONDITIONS ____

TOUR: MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
160															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet ____ Degrees ____ 4 ____ 5 ____

ADDITIVES: 5# Sack Cement — GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR: 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
160															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet ____ Degrees ____ 4 ____ 5 ____

ADDITIVES: ____ GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR: 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet ____ Degrees ____ 4 ____ 5 ____

ADDITIVES: ____ GENERAL: ____ Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12		
Mix Cmt	2	5	1½
[illegible]	5	7	2
[illegible]			
[illegible]	7		17
FIRES ____ DRILLER'S SIGNATURE ____	4		
[illegible]			
[illegible]		11	9
[illegible]			
FIRES ____ DRILLER'S SIGNATURE ____			
[illegible]	4	12	9
[illegible]			
[illegible]			
[illegible]			
FIRES ____ DRILLER'S SIGNATURE ____			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

CO RING ON BIT # ____ Boiler Operated: 2 - 24 Hrs.

Fuel on Hand 12.01 a.m.	____ gals.
Fuel Rec'd Today (add)	____ gals.
TOTAL	____ gals.
Fuel on Hand 11.59 p.m. (deduct)	____ gals.
FUEL USED	____ gals.

CASING REPORT — RAN 7 JTS 94 CSG TO 71 [illegible] KB. USED 5 SAX [illegible] CEM — PLUG DOWN ____ A.M. 7 P.M. — PLUS ____ % — CEMENT RETURNS - (YES/NO) ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 1

GENERAL: —

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____

Approved by Toolpusher C Wilson

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 — CONSERVATION BOARD COPY

No. 1381 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ___ LOCATION ___ LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE Feb. ___ 1971

DIRECTIONS TO WELL ___ MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
36	12	72	2												

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1	12¼			170769	4	60	72	2½									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	10		11		No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			40	51	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: 15 salt, 6 ze Gel — GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 A.M. TO 4 P.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
72	24	100	2												

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	1	12¼			170769	11	60	100	7½									

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		10.6	9.1		No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY		44	41		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: 2 Lbs Hi-Temp WF-2 - A No-4701-4702

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 P.M. TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
100															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet ___ Degrees ___ 4 ___ 5 ___ Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTV.
Drilling	12 01	12, 30	½
Trip in with bit	12	2, 00	2
Ream	2, 00	3, 00	1
Circ. Mud for Logs	3, 00		
Circ. Mud for Logs		7 30	4½
Logging	7 30	8, 00	½
FIRES — DRILLER'S SIGNATURE			
Drilling	8, 00	9, 15	1¼
Trip out for Logs	9, 15	11, 15	2
Logging	11, 15	12, 00	¾
Trip in with bit	12, 00	1, 30	1½
Ream	1, 30	11, 00	9½
FIRES — DRILLER'S SIGNATURE			
Trip out for Logs	11, 00	9, 00	4
Logging	9, 00	9, 30	½
Trip in with bit	9, 30	11, 00	1½
Ream	11 00	12	1
FIRES — DRILLER'S SIGNATURE			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUG DOWN ___ A.M. P.M. ___ PLUS ___ % ___ CEMENT RETURNS - (YES/NO) ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 2

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

GENERAL: —

TCO RING ON BIT # ___ Boiler Operated: 7-24 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

Approved by Operator's Representative ___

Approved by Toolpusher [signature]

HSW-DDL-1 CONSERVATION BOARD COPY

No. 1380 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-14 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE Feb 2 19 71

DIRECTIONS TO WELL [illegible] MAILING POINT Marian Hotel SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
0															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
I																		
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	10.2			10.4	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	50			47	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			4	
ADDITIVES:					GENERAL:										5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
0	25	25	3½												

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1	12¼	[illegible]		[illegible]		60	25	3½									
I																		
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			4	
ADDITIVES:					GENERAL:										5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
25	31	56	7			2									

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B	1	12¼	[illegible]		13679				3½									
I																		
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				10.4	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				44	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees			4	
ADDITIVES:	[illegible]				GENERAL:										5	
															Weather / Temp.	Water / Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

CO RING ON BIT # ___ Boiler Operated: 9-24 Hrs.

Crown-o-matic Chk'd.		Fuel on Hand 12.01 a.m.	gals.
Rig Savers Chk'd.		Fuel Rec'd Today (add)	gals.
Kelly Cock Chk'd.		TOTAL	gals.
Fire Equip. Chk'd.		Fuel on Hand 11.59 p.m. (deduct)	gals.
		FUEL USED	gals.

CASING REPORT RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME START	TIME STOP	TIME INTVL
12	7	7

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11 — LOCATION Condition Dakota Mud — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE Feb 1 — 1961

DIRECTIONS TO WELL: [illegible] — MAILING POINT Norman W-4 — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL R.P.M.					MODEL R.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather — Water Temp. — Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL R.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather — Water Temp. — Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	10				No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	40				MODEL R.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather — Water Temp. — Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Annular				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

STRING ON BIT # ___ Boiler Operated: 2-24 Hrs.

Fuel on Hand 12:01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11:59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES/NO) ___

GENERAL: —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 1 LOCATION GAUDET-TAL PARADOX, MAP B KB. SEC. TWP. RGE. W. DATE JAN 31 19 57

DIRECTIONS TO WELL LAT 38°52'54" Long 109°34'15" MAILING POINT NORMAN WELLS SHIPPING POINT MILES MOVED ROAD CONDITIONS

MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

DTCO RING ON BIT # Boiler Operated: Hrs.

Crown-o-matic Chk'd. Rig Savers Chk'd. Kelly Cock Chk'd. Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO)

GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 HEAD OFFICE PAYROLL COPY

REMARKS	TIME START	TIME STOP	TIME INTVL.
Jobs Check Work on The Day Tool Joint Wrench Waiting For Pipe With Pipe & Swivel to Drill Hole To Spud in.	12⁰⁰	8⁰⁰	8
FIRES Blind DRILLER'S SIGNATURE			
Rig up Hang Power Tongs - Prepare To Mix Mud + Mixing Mud.	8⁰⁰	4⁰⁰	8
FIRES DRILLER'S SIGNATURE			
Mixing Mud Going Desilter Mud Going Fixing Leaks in Mud Tanks Circulating	8⁰⁰	12⁰⁰	
FIRES DRILLER'S SIGNATURE			

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

Nº 1377 HSW

HEATH & SHERWOOD DRILLING (WESRERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION CANDEX-PETAL DAMAGING, M43-63 LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE JAN 30 19 71

DIRECTIONS TO WELL LAT. 62° 52' 51.5" LONG 124° 34' 15.7 MAILING POINT NOR-MAN WELLS SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME

REMARKS	START	STOP	INTVL
X C E	12 00	8 00	8
E			
Road up			
	8 00	4 00	8
1 + Fco Picker			
+ Fco Gas Detector			
	4 00	12 00	8
Rig up — Power Sivel Make Clamp For Power (Safety)			

FIRES ___ DRILLER'S SIGNATURE ___

FIRES ___ DRILLER'S SIGNATURE ___

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11.59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING REPORT PAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO) ___

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___ TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR TIME ___ HRS.

GENERAL —

TCO RING ON BIT # ___ Boiler Operated: 9-94 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

Approved by Operator's Representative ___

Approved by Toolpusher C Holmes

HSW DDL-1 HEAD OFFICE PAYROLL COPY

№ 1376 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION CANOCEX-ET-AL-DAHAHINNI M43,8 LSD. SEC. TWP. RGE. W. DATE JAN 26/ 1971

DIRECTIONS TO WELL LAT 63°52'59.3" LONG 124°37'15.7 MAILING POINT NORMAN WELL SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR: MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4

ADDITIVES: GENERAL: 5

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR: 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4

ADDITIVES: GENERAL: 5

H-O-SAKS PREMATROST CEMENT. Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR: 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURF.					No. 2 PRES. SURF.					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4

ADDITIVES: GENERAL: 5

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

TIME: START 12.00 STOP 6.00 INTVL 8

Rig up
Pump manifolds

FIRES DRILLER'S SIGNATURE

Rig up
Cement HD conductor
Nibble HO-SAKS cement

FIRES DRILLER'S SIGNATURE

Rig up
Steam pipe to mud tanks.
Hook up oil well suction
+ pressure lines to manifold

FIRES DRILLER'S SIGNATURE

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

JTCO RING ON BIT #

Boiler Operated: 9.24 Hrs.

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M.

CEMENT RETURNS - (YES / NO)

GENERAL:

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

Approved by Operator's Representative

Approved by Toolpusher C. Hollar

HSW-DDL-1 HEAD OFFICE PAYROLL COPY

No. 1350 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG

RIG NO. 11-11 LOCATION GAUDER-ET-AL DAHADINNI M-43B LSD. SEC. TWP. RGE. W. DATE JAN 28 19 71

DIRECTIONS TO WELL LAT. 63°52'54.3 LONG 124°39'16.7 MAILING POINT NORMAN WELLS SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4

ADDITIVES: GENERAL: 5

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4

ADDITIVES: GENERAL: 5

Weather: Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

M-U'D	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4

ADDITIVES: GENERAL: 5

Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

HOTCO RING ON BIT # Boiler Operated: 2.24 Hrs.

Crown-o-matic Chk'd. Rig Savers Chk'd. Kelly Cock Chk'd Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals.

Fuel Rec'd Today (add) gals.

TOTAL gals.

Fuel on Hand 11.59 p.m. (deduct) gals.

FUEL USED gals.

CASING REPORT RAN JTS CSG

TO KB. USED SAX CEM

PLUG DOWN A.M. P.M.

PLUS %

CEMENT RETURNS - (YES/NO)

GENERAL:

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME

	START	STOP	INTVL
Rig up. Lineing up Mud Tanks + Cooking Together	12.00	8.00	8
FIRES DRILLER'S SIGNATURE			
Rig up Bit Mud Tanks Together Work on Crown off Derrick (Gard Rails Platform) Steam Fitting Mud Tanks	8.00	4.00	8
FIRES DRILLER'S SIGNATURE			
Steam Fitting Mud Tanks Line up Circulating Pump	4.00	12.00	8
Rig up			
FIRES DRILLER'S SIGNATURE			

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 HEAD OFFICE PAYROLL COPY

No. 1349 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANDEX-ET-AL DAINGERFIELD M-43-B — SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE JAN 27 — 1971

DIRECTIONS WELL LAT 63° 6' 59.3" LONG 124° 39' 59.9 — MAILING POINT NORMAN WELLS — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TRIP MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lb.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather ___ Temp. ___ Water ___ Bbls.

ADDITIVES: ___ GENERAL: ___

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Lock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG — TO ___ KB. USED ___ SAX ___ CEM — PLUS ___ % — PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES/NO) ___

GENERAL: —

TICO RING ON BIT # ___ Boiler Operated: 224 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher C. Johnson

HSW DDL-5 HEAD OFFICE PAYROLL COPY

REMARKS	TIME START	TIME STOP	TIME INTVL
RIGGING UP WIRING LIGHT PUTTING UP RIG SHELTER	12.00	8.00	4
FIRES ___ DRILLER'S SIGNATURE ___	8.00	4.00	8
RIG UP STEAM FITTING (FOR HEATERS) REPAIR + HANG DERRICK LIGHTS + RIG LIGHTS. CROWN BLOCK UP ON DERRICK			
FIRES ___ DRILLER'S SIGNATURE ___	4.00	12.00	8
RIG UP WIRING RIG STEAM F. THAWER			
FIRES ___ DRILLER'S SIGNATURE ___			

No. 1348 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANOL-Dahadinni ETal MH3 — SEC. — TWP. — RGE. — W. — DATE JAN 26 — 1971

DIRECTIONS TO WELL: LAT 63°52 143' LONG 124°34 15'9 — MAILING POINT: NORMAN WELLS — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees — 4 — 5

ADDITIVES: GENERAL: Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees — 4 — 5

ADDITIVES: GENERAL: Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees — 4 — 5

ADDITIVES: GENERAL: Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

OTCO RING ON BIT #

Boiler Operated: 9 24 Hrs.

Fuel on Hand 12.01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11.59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT — RAN JTS CSG — TO KB. USED SAX CEM — PLUS % PLUG DOWN A.M. P.M. — CEMENT RETURNS · (YES/NO)

GENERAL: —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

REMARKS

TIME	START	STOP	INTVL
	12⁰⁰	8⁰⁰	8

Rig up - TANK + PUMP SHELTER.

FIRES — DRILLER'S SIGNATURE

TIME	START	STOP	INTVL
	8⁰⁰	4⁰⁰	8

Rigging up

PUTTING UP RIG SHELTERS STEAM LINES

FIRES — DRILLER'S SIGNATURE

TIME	START	STOP	INTVL
	4⁰⁰	12⁰⁰	4

Rigging up

Rig SHELTERS STEAM FITTING

FIRES — DRILLER'S SIGNATURE

HSW-DDL-1

HEAD OFFICE PAYROLL COPY

№ 1347 HSW

DAILY DRILLING LOG — RIG NO. 7 — DATE MAY 3

DIRECTIONS TO WELL 25-62-32E Hel. 12 mi N 1 E — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
4615	20	4615	3½	76	2										20

B/I/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
B	7-D	4½	50		243	2500	150	271	76¾			2	2250	250				
I																		
T																		
S																		

	12 mn.	2 a.m.	4 a.m.	6 a.m.	Pump No. 1	12 mn.	2 a.m.	4 a.m.	6 a.m.	Pump No. 2	12 mn.	2 a.m.	4 a.m.	6 a.m.	Motor Equip.	Next Oil Change
WEIGHT				9.5	Press. Guage					Press. Guage					1	
VISCOSITY				160	MODEL					MODEL					2	
GEL					S.P.M.					S.P.M.					3	
					Liner Size					Liner Size						

W.L. — F.C. — pH. — DESILTER: Hours Op: 8 — U. Flow: — O. Flow: — SURVEYS: At Feet — Degrees

ADDITIVES: — GENERAL: — Weather — Water — Temp. — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet of Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
4615	37	4652	6	2000	76	3									20

B/I/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
B	7-D	4½	50		243	2500	150	271	76¾			2	2250	250				
I																		
T																		
S																		

	6 a.m.	10 a.m.	12 noon	2 p.m.	Pump No. 1	6 a.m.	10 a.m.	12 noon	2 p.m.	Pump No. 2	6 a.m.	10 a.m.	12 noon	2 p.m.	Motor Equip.	Next Oil Change
WEIGHT			9.5		Press. Guage					Press. Guage					1	
VISCOSITY			39		MODEL					MODEL					2	
GEL					S.P.M.					S.P.M.					3	
					Liner Size					Liner Size						

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow: — SURVEYS: At Feet 4100 — Degrees 5¼

ADDITIVES: 1½ Gal Motorcil — GENERAL: 2 sac Salt
2 Gal Flowell 4 sac Lignosol 4 Gal Quick Gel
2 Gal Penetrol 2 sx Calcium Bichromate

Weather — Water — Temp. — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet of Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
4652	28	4680	5	3-00	77	3									20

B/I/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
B	7-D	4½	50		243	2500	150	299	99¾			2	2550	250				
I																		
T																		
S																		

	4 p.m.	6 p.m.	8 p.m.	10 p.m.	Pump No. 1	4 p.m.	6 p.m.	8 p.m.	10 p.m.	Pump No. 2	4 p.m.	6 p.m.	8 p.m.	10 p.m.	Motor Equip.	Next Oil Change
WEIGHT			9.1		Press. Guage					Press. Guage					1	
VISCOSITY			40		MODEL					MODEL					2	
GEL					S.P.M.					S.P.M.					3	
					Liner Size					Liner Size						

W.L. cc F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow: — SURVEYS: At Feet 4650 — Degrees 5¾

ADDITIVES: Gel Caustic — GENERAL: Kal Kal Diesel
Steel Flowell 2 Gal Motorcil
1 Gal Packing 1 Gal Pipe Lip Lube Compound

Weather — Water — Temp. — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet of Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

"O" RING ON BIT — Boiler Operated: 5 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Fovin. Chk'd.

Fuel on Hand 12.01 a.m. — gals.
Fuel Rec'd Today (add) — gals.
TOTAL — gals.
Fuel on Hand 11.59 p.m. (deduct) — gals.
FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — AX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS: (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonesc	Ft. Drilled since Sonesc	Total Ft. Drilled	CALIPER LOG	RESULTS	BREAK DOWN BOLT

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Repair	12.30	12.45	¼
Circ	12.45	2.00	1¼
Cutting wire line Check	2.00		
Pull 11 Std		2.30	½

FIRES — DRILLER'S SIGNATURE

Rig Repair	2.00	2.30	½
Circ	2.30	12.00	9½
Rig Repair	12.00	12.30	½
Wash over Stand	12.30	1.00	½
Survey at 4600	1.00	1.30	½
Circ	1.30	4.00	2½

738 Diesel 160 Motors

FIRES — DRILLER'S SIGNATURE

Circ	4.00	5.00	1
Rig Repair	5.00	5.30	½
Circ	5.30	8.15	2¾
Rig Repair	8.15	8.45	½
Circ	8.45	9.30	¾
Rig Repair	9.30	10.15	¾
Circ	10.15	10.45	½
Survey at 4650	10.45	11.00	¼
Tripping	11.00	11.15	¼
Rig Service	11.15	12 mn	¼

FIRES — DRILLER'S SIGNATURE

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: — TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 — HEAD OFFICE PAYROLL COPY

No. 1796 HSW

DAILY DRILLING LOG

RIG NO. 11 — DATE May 2

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
surface	23	4515	5½		75										24

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	4½	25			115203	2000	200	2214	45½			2	175	250				
3																		
5																		

	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD UP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD UP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD 24 HOURS	New Oil Change
WEIGHT				9.0	No. 1 PUMPS					No. 2 PUMPS					1	
VISCOSITY				40	MODEL					MODEL					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 8 U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4515	40	4555	5¼		76										24

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	4½	25			115243	2000	200	2254	40¼			1	200	250				
3																		
5																		

	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD UP	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD UP	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD 24 HOURS	Next Oil Change
WEIGHT			9.2		No. 1 PUMPS					No. 2 PUMPS					1	
VISCOSITY			37		MODEL					MODEL					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 8 U. Flow: O. Flow:

SURVEYS: At Feet 4556 / Degrees 5¼

ADDITIVES: Cal Mudsol GENERAL: 20 Bbl Fuel Oil

34 Lbs Bent To 20 Bbl Fuel Oil

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4555	40	4595	6¾	63/4	76										24

BIT	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	4½	25		14-243	2000	150	2314	44¾				2	250	250				
3								6834										
5																		

	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD UP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD UP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD 24 HOURS	Next Oil Change
WEIGHT			9.2		No. 1 PUMPS					No. 2 PUMPS					1	
VISCOSITY			38		MODEL					MODEL					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 8 U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: Cal Mudsol GENERAL: 20 Bbl Fuel Oil

Sawdust

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

CO RING ON BIT ☐ — Boiler Operated 24 Hrs.

Crown-o-matic Chk'd. ☐ — Rig Savers Chk'd. ☐ — Kelly Cock Chk'd. ☐ — Fire Equip. Chk'd. ☐

Fuel on Hand 12.01 a.m. gals.

Fuel Rec'd Today (add) gals.

TOTAL gals.

Fuel on Hand 11.59 p.m. (deduct) gals.

FUEL USED 626 gals.

CASING — RAN JTS CSG

TO KB. USED SAX CEM

PLUS % PLUG DOWN A.M. P.M.

CEMENT RETURNS: (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonesc	Ft. Drilled since Sonesc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL
Rig Service	12:00	12:15	¼
Rig Repair	12:15	1:00	3/4
Trucking	1:00	1:30	½
Rig Repair	1:30	2:30	1
Trucking	2:30	3:00	½
Rig Repair	3:00	4:00	1
FIRES Fuel Consumption — Driller's Signature			
Rig Repair	2:00	5:45	3¾
Trucking	5:45	11:15	5½
Rig Repair	11:15	12:00	¾
Trucking	12:45	2:30	1¾
Rig Repair	2:30	5:00	2½
Circulate & Cond	12:00	12:45	¾
FIRES Fuel Consumption — Driller's Signature			
Rig Service	4:00	4:30	½
Trucking	4:30	8:00	3½
Rig Repair	8:00	9:00	1
Rig Repair	9:00	12:00	3
Fuel Used 626 gals			
FIRES Fuel Consumption — Driller's Signature			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS.

TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 HEAD OFFICE PAYROLL COPY

No. 1795 HSW

DAILY DRILLING LOG — RIG NO. 11 — DATE MAY 1

DIRECTIONS TO WELL: 1-1-E-42-S-13 Lone 124 3rd 13-7 — MAILING POINT: At WELL — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4446					74										12'--

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
7	4 7/8	25		116293	20--		12--	4½									

	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD DATA	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD DATA	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD RECOND.	Next Oil Change
WEIGHT		9.0			No. 1 PRESS SURF					No. 2 PRESS SURF					1	
VISCOSITY		39			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DRILLTER: Hours Op: 8 — U. Flow: — O. Flow: — SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4446	10	4456	2½		74										12½

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	4 7/8	25		116293	20--	90	18½	16½			2	175	75				

	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD DATA	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD RECOND.	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD SERVICE	Next Oil Change
WEIGHT				9.0	No. 1 PRESS SURF					No. 2 PRESS SURF					1	
VISCOSITY				39	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

V.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow: — SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4446	16	4492	4		74	8									12

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
4	4 7/8	25		116293	25--	90	20¾	20¾			2	175	75				

	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD DATA	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD RECOND.	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD SERVICE	Next Oil Change
WEIGHT			9		No. 1 PRESS SURF					No. 2 PRESS SURF					1	
VISCOSITY			40		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow: — SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date	Crown-o-matic Chk'd.	Rig Savers Chk'd.	Kelly Cock Chk'd.	Fire Equip. Chk'd.
Hydril								
Pipe Rams.								
Blind Rams.								

D RING ON BIT ☐ — Boiler Operated: 24 Hrs.

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED 2681	gals.

CASING RAN: JTS CSG — TO — KB. USED — SAX CEM — PLUS % — PLUG DOWN A.M. P.M. — CEMENT RETURNS - (YES/NO)

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE BACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Trip for full	12.00	1.00	1
Wash out Kelly	1.00	2.15	1¼
Work BOP.	2.15	5.00	2¾
Trip for PC Bullet	5.00		
Pull Bit.		7.45	2¾
Rig Service	7.45	8.00	¼

FIRES — DRILLER'S SIGNATURE

Wash & ream to Bot	8.00	9.30	1½
Trip in with bit	9.30		
Circulate B		1.15	4¼
Drlg	1.15	4.00	2¾

FIRES — DRILLER'S SIGNATURE

Drlg	4.00	5.45	1¾
Trip Pipe / Use Brake	5.45		
Wash to Bot		6.15	½
Drlg	6.15	9.00	2¾
Rig Repair	9.00	10.15	1¼
Drlg	10.15	11.45	1½
Rig Repair	11.45	12.00	¼

HSW DDL-1 — HEAD OFFICE PAYROLL COPY

No. 1794 HSW

DAILY DRILLING LOG — RIG NO. — April 30

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4396	21	4416	5 3/4		73	2									7

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	136	11			2	[illegible]	[illegible]	[illegible]			

	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD UP	12 mn.	2 a.m.	4 a.m.	6 a.m.	DEVIA.	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR CREW	Next Oil Change
WEIGHT				30	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				-1	MODEL S.P.M.	0				MODEL S.P.M.					2	
GEL					LINER SIZE	2 1/2				LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: 2 — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4416	26	4442	5 1/2	[illegible]	77	3									5'

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10	1/2			2	175	[illegible]	[illegible]			

	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD UP	8 a.m.	10 a.m.	12 noon	2 p.m.	DEVIA.	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR CREW	Next Oil Change
WEIGHT				10	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				40	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	7 1/2				LINER SIZE					3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4442	14	4456	1 3/4												

B I T S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	2	11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	3/4			2	175	[illegible]	[illegible]			

	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD UP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	DEVIA.	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR CREW	Next Oil Change
WEIGHT			9.1		No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			40		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 2 — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: 4 BAG DIACEL LT — GENERAL: 2 Col. HT-E Co.

2 Hands - Driller, Pusher, Derrickman, Floorman — 4425-5½

20 Col. HT-E

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

O RING GASKET — Boiler Operated: 7-24 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING TEST — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonoscanned	Ft. Drilled since Sonoscanned	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Rec Core	12:00	12:30	½
Drilling	12:30	1:30	1
Rec Core	1:30	2:00	½
Drilling	2:00	5:45	3¾
Rec Core	5:45	6:30	¾
Drilling	6:30	7:00	½
Rig Service	7:15	7:30	¼
FIRES — DRILLER'S SIGNATURE			
Drilling	7:30	10:30	3
Rec Core	10:30	11:00	½
Reaming Core	11:00	12:00	1
Drilling	12:00	1:00	1
Rec Core	1:00	2:00	1
Drilling	2:00	4:00	2
Co Petrol Transverse Surv.			
FIRES — DRILLER'S SIGNATURE			
Drilling	4:00	5:00	1
Rec Core	5:00	5:45	¾
Survey	5:45	6:00	¼
Drilling	6:00	7:00	3/4
Rec Core - Twist Drill Test	7:00	10:00	3
Tripping	10:00	10:30	½
Change Hydraulic Pump	10:30	11:15	¾
Tripping	11:15	12:00	¾
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD:

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 HEAD OFFICE PAYROLL COPY

No. 1793 HSW

April 29

DAILY DRILLING LOG — RIG NO. 22

WELL _____ DIRECTIONS TO _____ MAILING POINT Nevada Wells SHIPPING POINT _____ MOVED _____ ROAD CONDITIONS _____

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.S. Ft.	Ft. up on Kelly
4331	7	4342			72	1									15'

B/I/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
B	7½	4¾	3	[illegible]	1151 241	15/20	120	61	20¼			2	1[illegible]	75	10[illegible]			
I																		
T																		
S																		

	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD TYPE	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD TYPE	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR FUEL	Next Oil Change
WEIGHT				9.0	No. 1			Fresh		No. 2					1	
VISCOSITY				37	MODEL					MODEL					2	
GEL															3	

W.L. F.C. pH. 7 DESILTER: Hours Op: 7 U. Flow: O. Flow: SURVEYS At Feet Degrees 4 1/2 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.S. Ft.	Ft. up on Kelly
4342	29	4371	6		72	3									11'

B/I/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
B	[illegible]	4¾	[illegible]	[illegible]	1141 242	15/20	110	90	7½			2	1[illegible]	75	10[illegible]			
I																		
T																		
S																		

	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD TYPE	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD TYPE	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR FUEL	Next Oil Change
WEIGHT				9.6	No. 1					No. 2				1[illegible]	1	
VISCOSITY				35	MODEL					MODEL				[illegible]	2	
GEL				2½										15½	3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 7 U. Flow: O. Flow: SURVEYS At Feet Degrees 4

ADDITIVES: GENERAL: 5 Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.S. Ft.	Ft. up on Kelly
4371	24	4395	5¼		73										16'

B/I/T/S	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
B	[illegible]	4¾	[illegible]	[illegible]	1141 242	[illegible]	[illegible]	114	7½			2	1[illegible]	[illegible]	1[illegible]			
I																		
T																		
S																		

	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD TYPE	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD TYPE	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR FUEL	Next Oil Change
WEIGHT		9.1			No. 1					No. 2			1[illegible]		1	
VISCOSITY		37			MODEL					MODEL			[illegible]		2	
GEL													1[illegible]		3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 9 U. Flow: O. Flow: SURVEYS At Feet Degrees 4 4371 1 3/4

ADDITIVES: [illegible] GENERAL: 5 Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams.				

Boiler Operated: 2-24 Hrs.

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock Chk'd. | Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. _____ gals.
Fuel Rec'd Today (add) _____ gals.
TOTAL _____ gals.
Fuel on Hand 11.59 p.m. (deduct) _____ gals.
FUEL USED [illegible] gals.

CASING REPORT — RAN _____ JTS _____ CSG
TO _____ KB. USED _____ AX _____ CEM
PLUS _____ % PLUG DOWN _____ A.M. P.M.
CASING DETAILS: SIZE/WT/GR

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 HEAD OFFICE PAYROLL COPY

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Service	7:00	7:30	½
Drilling	7:30	5:45	10¼
Rig Check	5:45	7:00	1¼
Drilling	7:00	7:45	¾
Rig Check & Survey	7:45	8:00	¼

FIRES _____ DRILLER'S SIGNATURE

Drilling	8:00	11:00	2¾
Rig Check	11:45	12:00	¼
Drilling	12:00	1:45	1¾
Rig Check	1:45	2:30	¾
Drilling	2:30	3:45	1¼
Rig Service	3:45	4:00	¼

6 Crews Traveling 2 hrs

FIRES _____ DRILLER'S SIGNATURE

Rig Check	4:00	4:30	½
Drilling	4:30	5:00	½
Rig Check	5:00	5:30	½
Drilling	5:30	6:45	1¼
Rig Check & Survey	6:45	8:00	1¼
Drilling	10:00	11:30	1½
Rig Check	11:30	11:45	¼
Rig Check	11:45	12:00	¼

FIRES _____ DRILLER'S SIGNATURE

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 67

TOTAL COMPANY TIME HRS. | TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

No. 1792 HSW

DIRECTION OR LOCATION: 65 52 39.3 long 124°.3% 15.T — MAILING POINT: NORMAN WELLS — SHIPPING POINT: — SEC. — TWP. — RGE. — W. — DATE: APRIL 28

MILES MOVED — ROAD CONDITIONS

WELL

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
316.0															

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	In.
1	1-13	17½	HTC	25-5	152343													
T																		
S																		

	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1		9.9		No. 1 Pres. Sure					No. 2 Pres. Sure					1	
VISCOSITY	57		57		MODEL					MODEL					2	
GEL					H.P.M. LINER SIZE	CIRCULATE TRIP				H.P.M. LINER SIZE					3	

W.L. — F.C. — pH 9 — DESILTER: Hours Op: 8 — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees

ADDITIVES: — GENERAL:

Weather — Water — Temp. — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1316	6	1322	1½		71	4									15

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	In.
1	1-2	17½	HTC	20-5	152345	15.00	110	40	14			2	1150	245	10,000 ft-lbs			
T																		
S																		

	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9		No. 1 Pres. Sure					No. 2 Pres. Sure	150				1	
VISCOSITY			40		MODEL		KINGDRILL			MODEL	1¼				2	
GEL					H.P.M. LINER SIZE	12	MUDTANK			H.P.M. LINER SIZE	11				3	

W.L. — F.C. — pH 9 — DESILTER: Hours Op: 7 — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees

ADDITIVES: — GENERAL: 1-16 FT OUTER 1502

Weather — Water — Temp. — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
1322	12	1334	3½		72										14.0

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	In.
1	1-3	17½	HTC		152345	5.00	110	5.5	17½			2	1150	245	10,000 ft-lbs			
T																		
S																		

	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1+		No. 1 Pres. Sure		CIRCULATE			No. 2 Pres. Sure	10				1	
VISCOSITY			54		MODEL		MUD TANK			MODEL	4				2	
GEL					H.P.M. LINER SIZE	12				H.P.M. LINER SIZE	7				3	

W.L. — F.C. — pH 9 — DESILTER: Hours Op: 7 — U. Flow: 2.9 — O. Flow: 4 — SURVEYS: At Feet / Degrees

ADDITIVES: — GENERAL:

Weather — Water — Temp. — Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

O RING ON BIT # — Bit Operated 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11:59 p.m. (deduct)	gals.
FUEL USED 1½ UNITS	units.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS % — PLUS DOWN — A.M. P.M. — SHOE

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sensec	Ft. Drilled since Sensec	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	START	STOP	INTVL
R.G SER	12:00	12:15	¼
TRIP OUT TO CONDITION HOLE	12:15	1:30	1¼
PICK UP STRAP TRIP IN	1:30	2:00	½
PICK UP FISH - TRIPPING OUT	2:00	3:45	1¾
REPAIR CAMERON HYDR. CONTROL	3:45	6:30	2¾
TRIPPING OUT	6:30	8:00	1½
KELLY DRAKE OFF 309 FT OFF BOTTOM.			
FIRES — DRILLER'S SIGNATURE			
TRIP OUT WITH FISH	8:00	9:30	1½
MAKE CONDITIONS RUN AT 207 — 310 FT/HR AT 4447 FT	9:30	10:00	½
TRIP IN	10:00	12:45	2¾
DRILLING	12:45	2:30	1¾
TRIP RIG CURE WINDAGE	2:30	4:00	1½
BOP			
C PERRON 4 MEN ON 4 MAN TRIPS			
FIRES — DRILLER'S SIGNATURE			
DRILL TUBE + CHECK TO			
CLEAN HIGH MUD LOSING	4:00	5:00	1
RUN TUBE DIRECTIONAL CHECK CIRCULATE	5:00	7:15	2¼
DRILLING	7:15	7:45	½
(REMOVE WIRELINE SWITCH TO HYDRIL CLOSE)	7:45	MIDN	4¼
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 26

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 HEAD OFFICE PAYROLL COPY

No. 1791 HSW

DIRECTION TO WELL — LAT 63°52'2" LONG 124°39'15" — MAILING POINT — NORMAN WELLS — SHIPPING POINT — SEC. — TWP. — RGE. — W. — DATE April 27 — MILES MOVED — ROAD CONDITIONS

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
4305'	5'	4310	23/4		71	2						20.5	1'		

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	7	12¼	HWO	255	HC12W2	15-20	120	26	17¾			2	1200	240	1200			
									10½									

	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD DATA	12 mn.	2 a.m.	4 a.m.	6 a.m.	MUD DATA	12 mn.	2 a.m.	4 a.m.	6 a.m.	STRING HOURS	Next Oil Change
WEIGHT			9.0	9.0	No. 1 PRES. SURE			Complete		No. 2 PRES. SURE	12.1				1	
VISCOSITY			36	36	MODEL S.P.M.			Fluids		MODEL S.P.M.	240				2	
GEL					LINER SIZE					LINER SIZE	1¾				3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 8 — U. Flow: 91 — O. Flow: 90 — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water Temp. — bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4310															

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD DATA	8 a.m.	10 a.m.	12 noon	2 p.m.	MUD DATA	8 a.m.	10 a.m.	12 noon	2 p.m.	STRING HOURS	Next Oil Change
WEIGHT			9		No. 1 PRES. SURE			Complete		No. 2 PRES. SURE					1	
VISCOSITY			38		MODEL S.P.M.			Fluids		MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 9 — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water Temp. — bbls.

ADDITIVES: 1-10# Cal Cl — 1-10# Tuf — 1 44 Stabilose — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4310	6 ft.	4316	9		71	3								95.5	92

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
	7	12¼	HWO	255	HC44	15-20	120	Fluids	17½			2	1500	245	1500			

	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MUD DATA	4 a.m.	6 a.m.	8 a.m.	10 a.m.	MUD DATA	4 p.m.	6 p.m.	8 p.m.	10 p.m.	STRING HOURS	Next Oil Change
WEIGHT		9			No. 1 PRES. SURE			Complete		No. 2 PRES. SURE			150		1	
VISCOSITY		37			MODEL S.P.M.			Fluids		MODEL S.P.M.			245		2	
GEL					LINER SIZE	2½		Mud		LINER SIZE			179	14	3	

W.L. — F.C. — pH. 9 — DESILTER: Hours Op: 9 — U. Flow: — O. Flow: — SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Water Temp. — bbls.

ADDITIVES: 10 Cal Cl — 6 Sks Salt — 3 lbs Caustic — GENERAL: 30 Lbs Bichromate 15 lbs Quebracho — 2 Sks Lignite & Caustic — 35 lbs Quik Thin — Drilling Well

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

O RING ON BIT # 1 — Boiler Operated: 9-24 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Flare Equip. Chk'd.

Fuel on Hand 12:01 a.m. ____ gals. — Fuel Rec'd Today (add) ____ gals. — TOTAL ____ gals. — Fuel on Hand 11:59 p.m. (deduct) ____ gals. — FUEL USED ____ units

CASING RAN: JTS ____ CSG ____ — TO ____ KB. USED ____ SAX ____ CEM ____ — PLUS ____ % ____ PLUG DOWN A.M. P.M. — CEMENT RETURNS (YES/NO) ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

	TIME START	TIME STOP	TIME INTVL
Rig Serv	12 00	12 15	¼
Drilling - 4310	12 15	2 30	2¼
Tripping Check Bottom Stab Pads	2 30	3 00	½
Test BOP Equip & Kelly			
FIRES — DRILLER'S SIGNATURE			
Rig Serv	8 00	8 15	¼
Trip out Check Bit Stab Pads	8 15	9 00	¾
Strap out & Stabilizers	9 00	3 00	6
Mix 1 - 10# Cal Cl - 3# Soda Ash			
Circ & Cond Mud for Logs	3 00	4 00	1
Run E. Trip In			
FIRES — DRILLER'S SIGNATURE			
Rig Serv	4 00	4 15	¼
Trip in Strap out Drill 4316 ft	4 15	7 15	3
Cut DF & Slip 112 - 15/16 off Drum			
Circulate & Bottom	7 15	8 00	¾
Drilling Well	8 00	10 00	2
Mix Cal Cl Barrel	10 00	11 00	1
Trip out Lay out Core	11 00	12 00	1
Barrel			
Run Tool ____ Core Barrel			
Lay down ____			
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 9½

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative: ____

Approved by Toolpusher: ____

HSW DDL-1 HEAD OFFICE PAYROLL COPY

No. 1790 NSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — NIS NO. 1141 — LOCATION Campbell #1-A — LOD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE April 26 — 1961

DIRECTIONS TO WELL Lat. 1053 E of Jct. 124 24 N/1 — MAILING POINT Wasilla — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4291	1	4292	1/4	37½	71	2								1.5	7

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
	7-D	12¼	HMK	25-5	121963	1000	100	9	4			1	325	105	1401			
						10 gms												

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.0			No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY		51			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. 7 F.C. 2 pH. 9 DESILTER: Hours Op: 4 U. Flow: 1 O. Flow: 1 SURVEYS At Feet / Degrees 4

ADDITIVES: GENERAL: 5

1 Lost Circ 1 Kwik Seal 6 Weather Water

Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4291					71										7

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE 2¾					LINER SIZE 1¾					3	

W.L. F.C. pH. DESILTER: Hours Op: 8 U. Flow: 1 O. Flow: 1 SURVEYS At Feet 4290 / Degrees 10 — 4

ADDITIVES: GENERAL: 5

25 lbs 22" 12 Mako Fuel Stop 1 Weather Water

1 pk Kwik Seal Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4291	14	4305	4	37½	71	2								2½	7

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
	7-D	12¼	HMK	25-5	121963	1000	120	23	8			2	1850	390	1600			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9	9	No. 1 PRESS. SURE		Circ			No. 2 PRESS. SURE	1850		1250	1250	1	
VISCOSITY			35	35	MODEL S.P.M.		Tanks			MODEL S.P.M.			390	390	2	
GEL					LINER SIZE 2¾					LINER SIZE 1¾			1¾	1¾	3	

W.L. F.C. pH. 9 DESILTER: Hours Op: 9 U. Flow: O. Flow: SURVEYS At Feet / Degrees 4

ADDITIVES: GENERAL: 5

5# Cedar Fiber 1 pk Quick Gel 6 Weather Water

1 pk Kwik Seal Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: 9-~~22~~ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gal.. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11:59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUG DOWN ___ A.M. P.M. PLUS ___ % CEMENT RETURNS - (YES/NO) ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig up	12 00	12 15	¼
[illegible]	12 15	1 00	1¾
Circ & Cond.		3 15	1¾
[illegible]	3 15	[illegible]	1¾
[illegible]	[illegible]	[illegible]	¾
[illegible]	4 45	5 30	¾
Trip out - Tools - [illegible]	5 00	7 00	1¾
[illegible]	7 00	8 00	1
FIRES ___ DRILLER'S SIGNATURE			
Rig up	8 00	8 15	¼
Trip up w/ Sc[illegible]	8 15	10 00	1¾
Dicker up Fish	10 00	10 15	¼
Circulate	10 15	10 30	¼
Survey at 4290	10 30	11 30	1
Trip out w/ Fish	11 30	2 30	2¾
[illegible]	2 30		
[illegible]			1
Trip [illegible]			½
[illegible]			
FIRES ___ DRILLER'S SIGNATURE			
Rig up	4 00	4 15	¼
Make up Over Shot & Tools	4 15	5 00	¾
Trip up w/ [illegible]	5 00	7 30	2½
Circulate & Trip out	7 30	8 00	½
Lay down Fish	8 00	12 00	4
FIRES ___ DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME HRS. ___ TOTAL CONTRACTOR'S TIME HRS. ___

GENERAL ___

Approved by Operator's Representative ___

Approved by Toolpusher ___

HSW DDL-1 CONSERVATION BOARD COPY

No 1789 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION Cole Field Area — SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE April 15 — 1971

DIRECTIONS TO WELL S.A. 63° 52' W. 4.4 mi. to T.L.

MAILING POINT Norman Wells — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
11282				27	71	2									18

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
T																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9	No. 1 PRESS. SURE	2			2	No. 2 PRESS. SURE					1	
VISCOSITY				41	MODEL S.P.M.	120			120	MODEL S.P.M.					2	
GEL					LINER SIZE	2½			2½	LINER SIZE	1½				3	

W.L. ___ F.C. ___ pH. 8 — DESILTER: Hours Op: 4 — U. Flow: 1.1 — O. Flow: 90 — SURVEYS: At Feet / Degrees

ADDITIVES: — GENERAL:

- 10263 Quik Trol (For more Data)

Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut: Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4282				27	71	2									18

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	7	20	32	HWG	255	HX Pin												
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ — DESILTER: Hours Op: 9 — U. Flow: 9 — O. Flow: 9 — SURVEYS: At Feet / Degrees

ADDITIVES: — GENERAL: 1 - Twin Barrel Shaker 2.5

- 6 Sks Salt - Flosperse 4.5 Sks Caustic

Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut: Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4282	8	4290	24	37											

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	7	20	32	HWG	255	42283	45K	140	8	24					180			
T																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	37		37		No. 1 PRESS. SURE	3			300	No. 2 PRESS. SURE	Cyclone				1	
VISCOSITY	39		39		MODEL S.P.M.	11			11	MODEL S.P.M.	FB 500				2	
GEL					LINER SIZE	2½			5½	LINER SIZE	5½				3	

W.L. ___ F.C. ___ pH. 9 — DESILTER: Hours Op: 9 — U. Flow: 11 — O. Flow: 11 — SURVEYS: At Feet / Degrees

ADDITIVES: — GENERAL:

- 2 Cor-Lig Caustic 1 Sx Dy

Weather ___ Temp. ___ — Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut: Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	INTVL
Rig Service	12 00	12 15	¼
Trouble out Wireline	12 15	2 00	1¾
Rig Service	2 00	2 15	¼
Make [illegible]			
Trip In	2 15	4 45	2
Mix Mud - Trip Out	11 45	3 30	¾
Drill [illegible]	5 10	7 00	X
[illegible]		7 30	2
Trip Out	7 00	9 00	1½
FIRES — DRILLER'S SIGNATURE			
[illegible]	8 00	8 15	¼
Trouble out	9 15	10 30	2¼
[illegible]	10 30	11 30	1
Trip in String [illegible]	11 30	1 15	1¾
[illegible] ON BIT	1 15	2 00	¾
Trip in String [illegible]	2 00	2 45	1¾
Circulate & Clean	2 45	3 00	¼
OVERTIME TALLY [illegible]			
Wire Line Cut [illegible]			
FIRES — DRILLER'S SIGNATURE			
Rig Service	4 00	11 15	¼
Drilling 4240	4 15	6 30	2¼
Put on New Wire Line	6 30	11 00	½
Recut Core	4 30	11 00	½
FIRES — DRILLER'S SIGNATURE			

B.O.P.	Tested	Elapsed Time	Pressure	Parking & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ — Boiler Operated: 2-24 Hrs.

Crown-o-matic Chk'd. ___ — Rig Savers Chk'd. ___ — Kelly Cock Chk'd. ___ — Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ — TO ___ KB. USED ___ SAX ___ CEM ___ — PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES/NO) ___

GENERAL —

EQUIPMENT CHANGES — TRANSFER # ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonoscope	Ft. Drilled since Sonoscope	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 — CONSERVATION BOARD COPY

No 1788 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-A — LOCATION CANADIAN, OKLA. — LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE 4 [illegible] 19[illegible]

DIRECTIONS TO WELL NE. 2 1/2 mi. on 12 - 3 1/2 E. — MAILING POINT NU MAN — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4234	/	/													

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1																	
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1			No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY		37			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: ___ GENERAL: 6 sacks Gel, 1 sack Lime, 2 sacks Starch

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4274	1	4274	3/4		71	2									42

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	4 1/2	Mod.	3-3-3		1500	90	6	2 1/2			1	200	120	1900			
2	5 7/8	Reed	3-3-3	KEJA		100											
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9		No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY			37		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. 4/4 pH. 7.4 DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: ___ GENERAL: 6 sacks Gel, 1 sack Starch, 2 sacks Lime

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4279	3	4292	3/4		71	2									42

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	4 1/2	Mod.	3-3-3	KEJA 286	15	100	4				1	200	120	1700			
2	5 7/8	Reed	3-3-3	KEJA 286	15	100	1										
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9	9		No. 1 PRES. SURE	90			200	No. 2 PRES. SURE					1	
VISCOSITY		37	37		MODEL S.P.M.	120			120	MODEL S.P.M.					2	
GEL					LINER SIZE	2 1/2			2 1/2	LINER SIZE	1 3/4				3	

W.L. 5 F.C. 4/4 pH. 7.4 DESILTER: Hours Op: 9 U. Flow: 9 O. Flow: 72 SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: ___ GENERAL: 14 sacks Gel, 1 sack Soda Ash, 1 sack Lime

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: 2 - 24 Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ — TO ___ KB. USED ___ SAX ___ CEM ___ — PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS - (YES/NO) ___

GENERAL: ___

EQUIPMENT CHANGES: ___ TRANSFER # ___

DAYS FROM SPUD: 82

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Tr[illegible]	12	1	1
T[illegible]	12	1	1
C[illegible]	1	1	1
T[illegible]	1	3	2
C[illegible]			—
[illegible]			
R[illegible]	3	4	1
[illegible]	5	7	2
C[illegible]	7	8	1
FIRES — DRILLER'S SIGNATURE			
R[illegible]	8	8	1/2
C[illegible]	8	8	1/2
T[illegible]	8	10	2
M[illegible]	10	11	1
T[illegible]	11	12	1
Pickup C[illegible]	12	1	1
T[illegible]	1	2	1
FIRES — DRILLER'S SIGNATURE			
Rig S[illegible]	4	4	1/2
T[illegible]	4	5	1
C[illegible]	5	6	1/2
T[illegible]	6	7	1/2
C[illegible]	7	7	1/2
D[illegible]	7	9	1 1/2
Drilling - picking up wt. 70M	9	11	2
R[illegible]	11		
W[illegible]	11	12	

FIRES — DRILLER'S SIGNATURE

HSW DDL-1 CONSERVATION BOARD COPY

№ 1787 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 141 — LOCATION CANDELARIA AREA — LSD ___ SEC ___ TWP ___ RGE ___ W ___ — DATE April 22 — 1961

DIRECTIONS TO WELL 2 MI. E & 3 1/2 MI. N. OF CANDELARIA — MAILING POINT NORMAN WELLS — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub Wt.	C.B. Ft.	Ft. up on Kelly
4273				77	71	1									1m

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
5-0	11"	HTC	10-5	HS 263			64	2½									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		7.9			No. 1 PRESS. SURF.					No. 2 PRESS. SURF.					1	
VISCOSITY		37			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. 4/32 pH. 7 — DESILTER: Hours Op: 2 — U. Flow: 71 — O. Flow: 1. — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: — GENERAL: Fresh H2O Gypsum 1#/B Stabilizer 2%

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4273	1	4274	7	77	71	2								1	26

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
5-0	11"	HTC															

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1		9.2	9.1	No. 1 PRESS. SURF.					No. 2 PRESS. SURF.					1	
VISCOSITY	38		38	37	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. 2/32 pH. 8 — DESILTER: Hours Op: ___ — U. Flow: ___ — O. Flow: ___ — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: 25 Quebracho — GENERAL: 4

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4214	4	4278	14	37	71	2									22

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
5-0	11"	HTC															

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.1	No. 1 PRESS. SURF.	725				No. 2 PRESS. SURF.					1	
VISCOSITY				37	MODEL S.P.M.	40				MODEL S.P.M.					2	
GEL					LINER SIZE	4½				LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ — DESILTER: Hours Op: 9 — U. Flow: 9/2 — O. Flow: 7.0 — SURVEYS: At Feet / Degrees — 4 — 5

ADDITIVES: 1 Soda Ash 2 Caustic Soda 2 Lack Tannate — GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ — Boiler Operated: 7-24 Hrs.

Crown-o-matic Chk'd. ___ — Rig Savers Chk'd. ___ — Kelly Cock Chk'd. ___ — Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. — Fuel Rec'd Today (add) ___ gals. — TOTAL ___ gals. — Fuel on Hand 11.59 p.m. (deduct) ___ gals. — FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG — TO ___ KB. USED ___ SAX ___ CEM — PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. — CEMENT RETURNS . (YES/NO) ___

GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
Rig Service	12	12½	½
Trip in	12½	1	½
Fish [illegible]	1	2	1
Fish [illegible]			
Trip out fish			
[illegible]			
[illegible]			
Trip in No. 1			
FIRES ___ DRILLER'S SIGNATURE			
Rig Service	6.45		½
Trip in [illegible]	7.15		½
Running Mud Log [illegible]	8.00		
[illegible]		1.45	5½
Trip out			
Trip out	1.15	4.00	2½
FIRES ___ DRILLER'S SIGNATURE			
Rig Serv.	4.00	4.15	¼
Trip out	4.15	4.30	¼
Change [illegible]	4.30	5.00	½
Mud Log [illegible]			
Trip in	5.00	7.30	2½
Circulate	7.30	8.00	½
[illegible]	8.00	8.30	½
[illegible]	8.30	9.30	1
[illegible]	9.	10.	½
[illegible]	10.	11.	1
FIRES ___ DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER # ___

DAYS FROM SPUD: 81

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___

Approved by Toolpusher ___

HSW DDL-1 — CONSERVATION BOARD COPY

No 1786 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1-11 — LOCATION Candex-Ft. Mac — LSD. — SEC. — TWP. — RGE. — W. — DATE Aug. 28 — 1971

DIRECTIONS TO WELL — MAILING POINT Normandville — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4221	23	4244	4½	37	70	4									20

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1	5-0	4½	HWK	10-3	455284	15-20	100	33	7			1	200	1	1700			
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			71	71	No. 1 PRES. SURE	200			200	No. 2 PRES. SURE					1	
VISCOSITY			36	36	MODEL S.P.M.	115			115	MODEL S.P.M.					2	
GEL					LINER SIZE	2½			2½	LINER SIZE					3	

W.L. 3 — F.C. 4/2 — pH. — DESILTER: Hours Op: 8 — U. Flow: 1/2 — O. Flow: 1/1

SURVEYS: At Feet 4200 — Degrees 6

ADDITIVES: — GENERAL:

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4244	27	4271	5	71	71	1								16	17

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1	5-0	4½	HWK	10-3	455284	15-20	100	62	12			1	175	120	2000			
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	71	72	71	71	No. 1 PRES. SURE	175			175	No. 2 PRES. SURE					1	
VISCOSITY	35	36	36	36	MODEL S.P.M.	120			120	MODEL S.P.M.					2	
GEL					LINER SIZE	2½			2½	LINER SIZE	1¼				3	

W.L. — F.C. ½ — pH. 7 — DESILTER: Hours Op: 4 — U. Flow: 1/2 — O. Flow: 1/1

SURVEYS: At Feet 4200 — Degrees 5¼

ADDITIVES: — GENERAL:

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4271	2	4273	½	71	71	1									19½

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1	5-0	4½	HWK	10-3	455284	15-20	100	64	12½			1	175	120	2000			
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		71			No. 1 PRES. SURE	175				No. 2 PRES. SURE					1	
VISCOSITY		35			MODEL S.P.M.	120				MODEL S.P.M.					2	
GEL					LINER SIZE	2½				LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: 4 — U. Flow: — O. Flow:

SURVEYS: At Feet — Degrees

ADDITIVES: — GENERAL:

Weather — Temp. — Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

REMARKS	TIME START	TIME STOP	INTVL
Drilling 4221	12 00	12 30	½
RIG SERVICE	12 30	1 30	1
Drilling 4237	1 30	3 30	2
TRIP	3 30	4 00	½
TEST BOPE	4 00	4 30	½
DRILLING 4243	4 45	6 45	2
RIG CORE	6 45	7 45	1
DRILLING	7 45	9 30	1½
RECOVER CORE	9 30	10 00	½
RETEST BOPE	10 00	10 30	½
Drilling - 4261	10 30	12 00	1½
RECOVER CORE - CHANGE BIT	12 00	1 00	1
Drilling 4271	1 00	3 00	2
RECOVER CORE - CHANGE BIT	3 00	4 00	1
FIRES — DRILLER'S SIGNATURE			
RECOVER CORE - CHANGE BIT	4 00	4 15	¼
DRILLING 4273 TD	4 15	6 00	1¾
RIG UP CSG CREW	6 00	6 15	¼
RUN 4273' 5½ CSG	6 15	7 15	1
RIG UP CEMENTERS	7 15	9 45	2½
CEMENT CSG	9 45	10 45	1
TEAR DOWN	10 45	12 00	1¼
FIRES — DRILLER'S SIGNATURE			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: 7-24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	✓
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	✓

Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUG DOWN — A.M. P.M. — PLUS — % — CEMENT RETURNS - (YES/NO)

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 40

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 — CONSERVATION BOARD COPY — No. 1785 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE March 21 19 71

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4144	23	4207	3½	36	69	4								21	8

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1-2-2	4½	HWP	105	142271	40M	90	69	3½			2	175	250	2400			
						120											

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				37	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. [illegible] F.C. [illegible] pH. [illegible] DESILTER: Hours Op: [illegible] U. Flow: [illegible] O. Flow: [illegible]

SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: GENERAL: [illegible]

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4207	6	4213	1½	36	70	1								27	14

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Wgt.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	12¼	HWP	10s	142264	40M	120	C	2½			2	175	250	2400			

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.2	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY				47	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: GENERAL: 1 Sack Outer Guard, 1 Sack Conwed, 10 Gal Caustic, 1½ Lb. Trifos, Kwikseal Complete

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4213	18	4231	1½	36	70	1								16	14

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Wgt.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
2	12¼	HWP	10s	142264	40M	120	14	3½	7		2	240	70	1400			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.2	No. 1 PRES. SURE	0				No. 2 PRES. SURE					1	
VISCOSITY				36	MODEL S.P.M.	110				MODEL S.P.M.	240				2	
GEL					LINER SIZE	2½				LINER SIZE	1/8				3	

W.L. 9 F.C. 4/32 pH. 9 DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___

SURVEYS: At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: GENERAL: 1 Sack Thrift, Kwikseal Complete

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams	✓			

TOTCO RING ON BIT # ___ Boiler Operated 2 - 24 Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ✓ Kelly Cock Chk'd. ✓ Fire Equip. Chk'd. ___

		gals.
Fuel on Hand 12.01 a.m.		gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO) ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RE' JLTS	FROM PIPE RACK

GENERAL

DAYS FROM SPUD: 79

EQUIPMENT CHANGES — DRILLER'S SIGNATURE — TRANSFER #

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [signature] TOUR

Approved by Toolpusher [signature]

REMARKS	TIME START	TIME STOP	INTVL.
Drilling - 4144	12:00	1½	1½
Lubricate rig - check [illegible]	1:30	2:00	½
Repair [illegible]	2:00	4:00	2
Drilling 4206	4:00	4:30	½
Rig [illegible]	4:30	7:00	2½
Drilling 4206	7:00	8:00	1
Rig [illegible]	8:00	8:30	½
TRIP OUT [illegible]	8:30	10:00	1½
FIRES ___ DRILLER'S SIGNATURE			
Rig [illegible]	10:00	10:30	½
Trip in	10:30	12:00	1½
Drilling 4213	12:00	1:00	1
Rig [illegible]	1:00	1:30	½
Trip in	1:30	2:00	½
Drilling 4221 - Circ. [illegible]	2:00	3:30	1½
Rig [illegible]	3:30	4:00	½
Pump Circulate [illegible]	4:00	5:00	1
Trip out	5:00	6:00	1
Lay down [illegible]	6:00	7:00	1
Trip in	7:00	8:00	1
Rig [illegible]	8:00	8:30	½
Drilling - 4221	8:30	12:00	3½
FIRES ___ DRILLER'S SIGNATURE			

HSW DDL-1 CONSERVATION BOARD COPY

No. 1784 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION CANUK 1 Sec. M-13-4 LND. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE APRIL 20 19 61

DIRECTIONS TO WELL A-6 [illegible] 2½ 35' 1.7 — MAILING POINT NOR MAN WELLS — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR: MIDNIGHT TO 8 A.M. TOUR — 8 A.M. TO 4 P.M. TOUR — 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (100 / lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4113					67	2								27	16

Line No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Cir.
							307	26									

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	71		71	71	No. 1 PRESS. PUMP					No. 2 PRESS. PUMP					1	
VISCOSITY	36		37	37	MODEL H.P. LINER SIZE					MODEL H.P. LINER SIZE					2	
GEL															3	

W.L. 1 P.C. 7½ pH. 9 DESILTER: Hours Op. ___ U. Flow: 4? O. Flow: 1

SURVEYS: At Feet ___ Degrees 4½

ADDITIVES: GENERAL: [illegible] Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4172	2	4175	¼	3?	67	2								27	16

Line No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Cir.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				71	No. 1 PRESS. PUMP					No. 2 PRESS. PUMP	210			245	1	
VISCOSITY				37	MODEL H.P. LINER SIZE					MODEL H.P. LINER SIZE	245			205	2	
GEL						2½					1¾			170	3	

W.L. ___ P.C. ___ pH. ___ DESILTER: Hours Op. 4 U. Flow: 4? O. Flow: 10

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: GENERAL: 10½ CUT WELL

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4175	9	4184	1½		69	4								27	

Line No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Cir.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 a.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	70	7		71	No. 1 PRESS. PUMP					No. 2 PRESS. PUMP	175				1	
VISCOSITY	37	37		36	MODEL H.P. LINER SIZE	200				MODEL H.P. LINER SIZE					2	
GEL						2½									3	

W.L. ½ P.C. ½ pH. 9 DESILTER: Hours Op: 8.7 U. Flow: 8.7 O. Flow: 1.0

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.	✓			
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: 1 — 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	✓
Kelly Cock Chk'd.	✓
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___ GENERAL —

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 14

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative ___ Approved by Toolpusher ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	INTVL.
R. -	12	12	½
[illegible]	12	1	1½
[illegible]			
[illegible]	12	1.15	1¼
T. [illegible]	1.15	2.	¾
C.4. C. [illegible]	2.	4.	2
[illegible]	4.	4	½
T. [illegible]	4.	4	½
[illegible]	4	4	½
FIRES — DRILLER'S SIGNATURE			
R. [illegible]	7.00	9.15	2¼
T. [illegible] OUTSIDE	9.15	10.45	1½
REAMED COAL OUT OF HOLE	10.45	11.30	¾
CHECK FOR BRIDGE [illegible]	11.30		
TRIP IN.	11.30	2.00	2½
ADJUST [illegible]	2.00	2.15	¼
CIRCULATE.	2.15	2.45	½
WASHING - NO GO [illegible]	2.45	3.00	¼
REC [illegible]	3.00		
[illegible]		3.00	1
FIRES — DRILLER'S SIGNATURE			
RIG SER.	3.00	4.15	1¼
TRIP OUT WASH - ONE STD.	4.15	4.30	¼
CHECK OUT CUTTERS ON CORE BIT	4.30		
TRIP [illegible]		7.45	1¼
TRIP IN.	7.45	10.00	2¼
A [illegible]	10.00	10.30	½
[illegible]	10.30	12.00	1½
FIRES — DRILLER'S SIGNATURE			

HSW DDL-1 CONSERVATION BOARD COPY

No. 1783 HSW

DRILLING CONTRACTOR _____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE Dec. 17 1971 — 1982

DIRECTIONS TO WELL LAT 69.42-58.2 comp 12w 30-15-1 — MAILING POINT NORMAN WELLS — SHIPPING POINT _____ — MILES MOVED _____ — ROAD CONDITIONS _____

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
051	48	4099	6	32.3	66	.								27	8

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored Hrs.	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
4-D	4¾	HWG	12.5	H5L247	3000	300	133	142			1	450	110	1700			

	12 mn.	2 a.m.	4 a.m.	6 a.m.		12 mn.	2 a.m.	4 a.m.	6 a.m.		12 mn.	2 a.m.	4 a.m.	6 a.m.		Next Oil Change
WEIGHT		9	9	9	No. 1 PRES. SURE	225				No. 2 PRES. SURE						
VISCOSITY		40	40	40	MODEL S.P.M.	210				MODEL S.P.M.	11	CIRCULATE				
GEL	11				LINER SIZE	7¾			17½	LINER SIZE	2½	TANK				

W.L. 11 F.C. 2/32 pH. 10 DESILTER: Hours Op: 4 U. Flow: O. Flow:

SURVEYS: At Feet 4050 Degrees ¼

ADDITIVES: GENERAL:

15 gal. Cut Well

Weather _____ Temp. _____ Water _____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4099	41	4140	5½	34	68	3								27	3

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored Hrs.	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
4-D	4¾	HWG	12.5	H5L247	3000	250	1 74	41			1+2	250	110	3000			

	8 a.m.	10 a.m.	12 noon	2 p.m.		8 a.m.	10 a.m.	12 noon	2 p.m.		8 a.m.	10 a.m.	12 noon	7 p.m.		Next Oil Change
WEIGHT		9.0	9.0	9½	No. 1 PRES. SURE	225	250			No. 2 PRES. SURE	250	250				
VISCOSITY		40	40	34	MODEL S.P.M.	210				MODEL S.P.M.						
GEL					LINER SIZE	1¾				LINER SIZE	2½					

W.L. 16 F.C. 1/32 pH. 9 DESILTER: Hours Op: 9 U. Flow: 97 O. Flow: 9.9

SURVEYS: At Feet 4100 Degrees ¼

ADDITIVES: GENERAL:

15 gal Cut-well 1 Bag Mica Fine

Weather _____ Temp. _____ Water _____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4140	33	4173	5½	35	69	2								21	18

BITS

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored Hrs.	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
4-D	4¾	HWG	25.5	H5L247	3000	150	2.07	22½			2	320	110	3000			
								26									

	4 p.m.	6 p.m.	8 p.m.	10 p.m.		4 p.m.	6 p.m.	8 p.m.	10 p.m.		4 p.m.	6 p.m.	8 p.m.	10 p.m.		Next Oil Change
WEIGHT	9½	9.1			No. 1 PRES. SURE					No. 2 PRES. SURE	250	75		380		
VISCOSITY	34	35			MODEL S.P.M.	CIRCULATE				MODEL S.P.M.	110			110		
GEL					LINER SIZE	1¾	TANK			LINER SIZE	2½			2½		

W.L. 14 F.C. 1/32 pH. 9 DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet 4100 Degrees ¼

ADDITIVES: GENERAL:

Gel-10 Cut-well 1 Mica Fine

Weather _____ Temp. _____ Water _____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓		1500	
Blind Rams.	✓		1500	

Crown-o-matic Chk'd. _____ Rig Savers Chk'd. ✓ Kelly Cock Chk'd. ✓ Fire Equip. Chk'd. ✓

Fuel on Hand 12.01 a.m. _____ gals. Fuel Rec'd Today (add) _____ gals. TOTAL _____ gals. Fuel on Hand 11.59 p.m. (deduct) _____ gals. FUEL USED _____ gals.

MUD PUMPS: RAN _____ JTS _____ CSG _____ TO _____ KB _____ USED _____ SAX _____ CEM _____ PLUG DOWN _____ A.M. P.M. _____ PLUS _____ % CEMENT RETURNS _____ BBLS/NO) CONTRACTOR

D RING ON BIT # _____ Boiler Operated: 1.2 Hrs.

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS

FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
Drilling - Hold	12.00	1.15	1¼
Rec-Core - Chase Inner Barrel To	1.15	2.15	1
Drilling - 4080	2.15	11.45	2½
Rec Core + Chase Inverbarrel To	4.45	5.45	1
Drilling - 4099	5.45	8.00	2¼
FIRES — DRILLER'S SIGNATURE			
Drilling 4100	8.00	9.15	1¼
Rec Core - Chase Inverbarrel To	9.15	9.15	1
Drilling - 4120	9.15	12.15	3
Rec Core Chase Inverbarrel To	12.15	1.30	1¼
Drilling - 4140	1.30	4.00	2½
(Torque Coming on 15 - Cut Jts + Mixing Lost Circ. Material)			
Overtime - Putting Saw Dust Lost Circ. Material)			
FIRES — DRILLER'S SIGNATURE			
Rig Service	4.00	4.15	¼
Rec Core - Ck 3 Times Trip up Jts	4.15	5.30	1¼
Drilling - 4153	5.30	7.30	2
Rec-Core	7.30	8.00	½
Survey + Circulate	8.00	8.45	¾
Drilling - 4173	8.45	11.45	3
Rec-Core	11.45	12.00	¼
FIRES — DRILLER'S SIGNATURE			

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 77

TOTAL COMPANY TIME _____ HRS. TOTAL CONTRACTOR'S TIME _____ HRS.

Approved by Operator's Representative _____ TVD: _____

Approved by Toolpusher _____

HSW DDL-1 HEAD OFFICE PAYROLL COPY

No. 1782 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1121 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE A[illegible] 18 19[illegible]

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3791	9	3764	16½	41	65	4								27	7

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMPS	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	[illegible]	[illegible]	[illegible]	[illegible]	No. 1 PRESS SURF	[illegible]	[illegible]	[illegible]	[illegible]	No. 2 PRESS SURF	[illegible]	[illegible]	[illegible]	[illegible]	1	[illegible]
VISCOSITY	[illegible]	[illegible]	[illegible]	[illegible]	MODEL S.P.M.	[illegible]	[illegible]	[illegible]	[illegible]	MODEL S.P.M.	[illegible]	[illegible]	[illegible]	[illegible]	2	[illegible]
GEL	[illegible]	[illegible]	[illegible]	[illegible]	LINER SIZE	[illegible]	[illegible]	[illegible]	[illegible]	LINER SIZE	[illegible]	[illegible]	[illegible]	[illegible]	3	[illegible]

W.L. [illegible] F.C. [illegible] pH. [illegible] DESILTER: Hours Op: [illegible] U. Flow: [illegible] O. Flow: [illegible] SURVEYS At Feet Degrees 4 [illegible] 5 [illegible]

ADDITIVES: [illegible] GENERAL: [illegible] Weather [illegible] Water [illegible] Temp. [illegible] Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3766	34	4000	3½	41	66	3								27'	27

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	180	[illegible]	12½	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5000	34	3½	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	71	71			No. 1 PRESS SURF	2[illegible]				No. 2 PRESS SURF					1	
VISCOSITY	41	43			MODEL S.P.M.	2[illegible]				MODEL S.P.M.					2	
GEL					LINER SIZE	1¾				LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: 7 U. Flow: 12 O. Flow: 5.7 SURVEYS At Feet Degrees 4 5

ADDITIVES: [illegible] GENERAL: Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4000	51	4051	5¾	72	67	1								27'	8

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Gr.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	[illegible]	[illegible]	[illegible]	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9				No. 1 PRESS SURF	92[illegible]			22[illegible]	No. 2 PRESS SURF					1	
VISCOSITY	76				MODEL S.P.M.	70[illegible]			[illegible]	MODEL S.P.M.	[illegible]				2	
GEL					LINER SIZE	18			11	LINER SIZE	12				3	

W.L. F.C. pH. 10 DESILTER: Hours Op: [illegible] U. Flow: O. Flow: SURVEYS At Feet Degrees 4 [illegible] 5 [illegible]

ADDITIVES: GENERAL: Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet	or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12[illegible]	1.[illegible]	1½
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	2.[illegible]	3[illegible]	[illegible]
[illegible]	3.[illegible]	3.[illegible]	½
[illegible]	3.[illegible]	4	1[illegible]
[illegible]	4.[illegible]	6	1[illegible]
[illegible]	6.[illegible]	6	[illegible]
[illegible]	6	6.[illegible]	1[illegible]
FIRES [illegible] DRILLER'S SIGNATURE			
[illegible]	8.[illegible]	8.[illegible]	½
[illegible]	8.[illegible]	7.[illegible]	½
[illegible]	7.[illegible]	7.[illegible]	½
[illegible]	7.[illegible]	8	1
[illegible]	8	11.[illegible]	1[illegible]
[illegible]	11.[illegible]	12.[illegible]	1
[illegible]	12.[illegible]	2.[illegible]	2
[illegible]	2.[illegible]	3.[illegible]	1½
[illegible]	[illegible]	[illegible]	[illegible]
FIRES [illegible] DRILLER'S SIGNATURE			
[illegible]	7.[illegible]	6.[illegible]	½
[illegible]	6.[illegible]	6.[illegible]	½
[illegible]	6.[illegible]	7.[illegible]	½
[illegible]	7.[illegible]	7.[illegible]	½
[illegible]	7	9.[illegible]	2½
[illegible]	9.[illegible]	10.[illegible]	1
[illegible]	10.[illegible]	12.[illegible]	1½
FIRES [illegible] DRILLER'S SIGNATURE			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: [illegible] Hrs.

Crown-o-matic Chk'd.		
Rig Savers Chk'd.	✓	
Kelly Cock Chk'd.		
Fire Equip. Chk'd.		

Fuel on Hand 12.01 a.m.	[illegible]	gals.
Fuel Rec'd Today (add)		gals.
TOTAL	[illegible]	gals.
Fuel on Hand 11.59 p.m. (deduct)	[illegible]	gals.
FUEL USED	[illegible]	gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUG DOWN ___ A.M. P.M. PLUS [illegible] % CEMENT RETURNS - (YES/NO) ___

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 76

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1781 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1 — LOCATION [illegible] — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE Apr 18 — 196 11

DIRECTIONS TO [illegible] — MAILING POINT [illegible] — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

WELL ___

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3941	25	3966	14½	[illegible]	65	1								27	4

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	C.O.
1	[illegible]																
2																	
3																	
4																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	[illegible]				No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	[illegible]				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. [illegible] F.C. [illegible] pH. [illegible] DESILTER: Hours Op: [illegible] U. Flow: [illegible] O. Flow: [illegible]

SURVEYS: At Feet [illegible] Degrees [illegible]

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3966	34	4000	3½	11	66	3								27'	25

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	C.O.
1	[illegible]																
2																	
3																	
4																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	[illegible]	[illegible]			No. 1 PRESSURE	[illegible]				No. 2 PRESSURE					1	
VISCOSITY	[illegible]	[illegible]			MODEL S.P.M.	[illegible]				MODEL S.P.M.					2	
GEL					LINER SIZE	14½				LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: [illegible] U. Flow: [illegible] O. Flow: [illegible]

SURVEYS: At Feet ___ Degrees ___

ADDITIVES: [illegible] GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
4000	51	4051	5½	22	67	1								27'	8

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	C.O.
1	[illegible]																
2																	
3																	
4																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9				No. 1 PRESSURE	325			22	No. 2 PRESSURE					1	
VISCOSITY	35				MODEL S.P.M.	90			24	MODEL S.P.M.					2	
GEL					LINER SIZE	14½			14	LINER SIZE					3	

W.L. ___ F.C. ___ pH. 10 DESILTER: Hours Op: [illegible] U. Flow: ___ O. Flow: ___

SURVEYS: At Feet 4000 Degrees [illegible]

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: 1 — 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	✓
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	[illegible]	gals.
Fuel Rec'd Today (add)		gals.
TOTAL		gals.
Fuel on Hand 11.59 p.m. (deduct)		gals.
FUEL USED		gals.

CASING REPORT: RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___ GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 16

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12:00	1:00	1
R C Co.	1:00	-	1
Fill Service Sub	2:00	3:00	1
Trip out	3:00	3:30	½
Core - Unload - Strap Core	3:30	4:30	1
Trip in	4:30	6:00	1½
Change Core Barrel	6:00	6:30	½
Trip in	6:30	7:00	½
FIRES ___ DRILLER'S SIGNATURE [illegible]			
Rig Jack	8:00	8:30	½
Trip in & Ream	8:30	9:00	½
Circulate	9:00	9:30	½
Survey	9:30	9:45	¼
Drill out Cement & Core	9:45	10:45	1
Drilling 3780	10:45	11:45	1
REC Core -	11:45	12:45	1
Drilling - 4000	12:45	2:45	2
REC Core -	2:45	4:00	1¼
One Jt Casing Stripped			
FIRES ___ DRILLER'S SIGNATURE [signature]			
Drilling 4020	4:00	6:00	2
REC Core & Drop Inner Barrel	6:00	6:45	¾
Survey at 4000	6:45	7:00	¼
Ream Single & Circulate	7:00	7:30	½
Drilling 4040	7:30	9:00	2½
REC Core - Drop Inner Barrel	9:00	10:00	1
Drilling 4051	10:00	12:00	1½
FIRES ___ DRILLER'S SIGNATURE [signature]			

HSW DDL-1 CONSERVATION BOARD COPY

No. 1781 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO. 11-A LOCATION CAMPBELL 41-A LSD. SEC. TWP. RGE. W. DATE A. 17 19 71

DAILY DRILLING LOG
DIRECTIONS TO WELL [illegible] MAILING POINT NORMAN WELLS SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3842	41	3883	5 1/2	31.6	64	2							27	8

No.	Size	Type	Jets/W.C.	Serial No.	Wear	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.C.	T.C.
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			9.1	9.1	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY			43	43	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:
ADDITIVES: GENERAL:
SURVEYS: At Feet / Degrees
Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3883	48	3931	4 1/2	31.2	65	1							27	6

No.	Size	Type	Jets/W.C.	Serial No.	Wear	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.C.	T.C.
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:
ADDITIVES: GENERAL:
SURVEYS: At Feet / Degrees
Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3931	26	3957	5 1/4		65	4							27'	17

No.	Size	Type	Jets/W.C.	Serial No.	Wear	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.C.	T.C.
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.0			9.1	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	54			51	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. 4 F.C. 1/2 pH. 12 DESILTER: Hours Op: 9 U. Flow: 72 O. Flow: 87
ADDITIVES: GENERAL:
SURVEYS: At Feet 3900 / Degrees 5 1/2
Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # Boiler Operated: 1-24 Hrs.

Crown-o-matic Chk'd.	Rig Savers Chk'd.	Kelly Cock Chk'd.	Fire Equip. Chk'd.

	gals.
Fuel on Hand 12.01 a.m.	
Fuel Rec'd Today (add)	
TOTAL	
Fuel on Hand 11.59 p.m. (deduct)	
FUEL USED	

CASING REPORT: RAN JTS CSG; TO KB. USED SAX CEM; PLUS % PLUG DOWN A.M. P.M.; CEMENT RETURNS - (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12.00	2.00	2
[illegible]	[illegible]	2.30	1/2
[illegible]	2.30	4.00	1 1/2
[illegible]	[illegible]	[illegible]	1 1/2 Dr
RIG CLEAN-UP [illegible]	6.00	6.30	1/2
DRILLING 3943	6.30	7.30	1 De
			Mi
			Flo
			Flo
			Fl
FIRES DRILLER'S SIGNATURE			
RIG SER.	7.00	8.00	1 Di
DRILLING 3941	8.00	8.30	1/2 De
RIG CLEAN + CHANGE FLT. [illegible]	8.30	9.30	1 Mi
DRILLING 3911	9.30	11.00	2 Flo
RIG CL. - 27 [illegible]	11.00	1.00	1 F
DRILLING - 3931	1.00	3.00	2
RIG SERV. - T. [illegible]	3.00	4.00	1
FIRES [illegible] DRILLER'S SIGNATURE			
SERVICE RIG	4.00	4.30	1/2
DRILLING	4.30	8.30	4
RIG CLEAN	8.30	9.30	1
INSTALL NEW KELLY + TEST	9.30	10.45	1 1/4
DRILLING	10.45	12.00	1 1/4

FIRES DRILLER'S SIGNATURE

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 75

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

HSW DDL-1 CONSERVATION BOARD COPY

No 1780 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO. 11-11 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE April 16 19 61

DAILY DRILLING LOG
DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
3766	20	3776	2.25	31	61									21	21

Pump No.	Liners	Type	Jets/W.O.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T	B	Cor.
2	4½	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	7 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9				No. 1 PRESSURE	[illegible]				No. 2 PRESSURE	[illegible]				1	
VISCOSITY	43				MODEL S.P.M.	[illegible]				MODEL S.P.M.	[illegible]				2	
GEL					LINER SIZE	4½				LINER SIZE	4½				3	
W.L.	F.C.	pH.			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather / Temp.	Water Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3766	40	3806	7½	31.2	63	2								27	5

Pump No.	Liners	Type	Jets/W.O.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T	B	Cor.
2	4½	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.2		9		No. 1 PRESSURE	[illegible]				No. 2 PRESSURE					1	
VISCOSITY	43		43		MODEL S.P.M.	[illegible]				MODEL S.P.M.					2	
GEL					LINER SIZE	4½				LINER SIZE					3	
W.L. 4	F.C. 2/32	pH. 10+			DESILTER: Hours Op:		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather / Temp.	Water Bbls.

SURVEYS: At Feet / Degrees

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3826	16	3842		31	63	4								27	13

Pump No.	Liners	Type	Jets/W.O.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T	B	Cor.
2	4½	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.			DESILTER: Hours Op:	4	U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather / Temp.	Water Bbls.

SURVEYS: At Feet 3903 / Degrees 4½

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
P. c. Rams	✓			
Blind Rams	✓			

TOTCO RING ON BIT # ___ Boiler Operated 9-24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	✓
Kelly Cock Chk'd.	✓
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT: RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUG DOWN ___ A.M. P.M. ___ PLUS ___ % ___ CEMENT RETURNS - (YES/NO) ___ GENERAL ___

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12.	12.	½
[illegible]	12.	12.	½
[illegible]	12.	2.	2
[illegible]	2.	2.	½
[illegible]	2.	3.	1½
[illegible]			
[illegible]			
[illegible]			
[illegible]			
FIRES ___ DRILLER'S SIGNATURE			
Rig [illegible]	8.00	8.	¼
Drilling - 3806	8.15	10.	1½
R.C. Cor. - Last [illegible]	10.	10.	1
Drilling - 3826	11.	1.	2
R.C. Cor. - Last [illegible]	1.	2.	1
[illegible]			
Trip for bit.	2.	4.	1½
O.K. Tom			
FIRES ___ DRILLER'S SIGNATURE			
Rig [illegible]	4.	4.	¼
Trip for bit.	4.	4.	½
Circ. for Cor.	4.		
Pull out for Cor.		5.	1
Trip in with Cor.	5.	8.	3
Drilling 3842	8.	9.	1
R.C. Cor. + Drill [illegible]	9.	10.	½
Surveys	10.	10.	½
Rig Circ. Circulate	10.	11.	½
Drilling - 3842	11.	12.	¾
FIRES ___ DRILLER'S SIGNATURE			

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 74

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

HSW DDL-1 CONSERVATION BOARD COPY

No. 1779 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO. 11-11 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 19[illegible]

DAILY DRILLING LOG
DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3706	36	3742	4½	28	62	1								27	16

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36	[illegible]				300	134	[illegible]			
2																	
3																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT			[illegible]	[illegible]	No. 1 PRESS. SURE	[illegible]				No. 2 PRESS. SURE			[illegible]	[illegible]	1	
VISCOSITY			[illegible]	[illegible]	MODEL S.P.M.	[illegible]				MODEL S.P.M.			[illegible]	[illegible]	2	
GEL					LINER SIZE	[illegible]				LINER SIZE					3	

W.L. ___ F.C. [illegible] pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees

ADDITIVES: ___ GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3742	18½	3760½	[illegible]	30	62	2								27	7

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]			
2																	
3																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE	[illegible]				No. 2 PRESS. SURE					1	
VISCOSITY					MODEL S.P.M.	[illegible]				MODEL S.P.M.					2	
GEL					LINER SIZE	[illegible]				LINER SIZE					3	

W.L. [illegible] F.C. [illegible] pH. [illegible] DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees

ADDITIVES: [illegible] GENERAL: [illegible]

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3760½	5½	3766	[illegible]	30	62	3								27	11

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]			
2																	
3																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESS. SURE	[illegible]				No. 2 PRESS. SURE	[illegible]				1	
VISCOSITY					MODEL S.P.M.	[illegible]	[illegible]			MODEL S.P.M.	[illegible]				2	
GEL					LINER SIZE	[illegible]				LINER SIZE	[illegible]				3	

W.L. [illegible] F.C. [illegible] pH. [illegible] DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees

ADDITIVES: [illegible] GENERAL: ___

Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut (Feet)	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril	[illegible]			
Pipe Rams	[illegible]			
Blind Rams	[illegible]			

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS ___ (YES/NO)

GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12		
[illegible]	1	11	1
[illegible]	1	2	2
Rig Service Connect	3	4	1
Drilling - 3742 - [illegible]	4	6	2
Rig Service - Test Pipe Rams [illegible]	6	7	1
[illegible]	7		
FIRES ___ DRILLER'S SIGNATURE [illegible]			
[illegible]	7	7	12
[illegible]	7	9	2
[illegible]	9	10	½
[illegible]	10	11	1
[illegible]			
[illegible]	11	1	1
[illegible]	1	1	½
[illegible]			1
[illegible]			1
DRESSER SUB [illegible] DRILLER'S SIGNATURE			
[illegible]			1
[illegible]			
[illegible]			½
[illegible]			½
[illegible]			½
[illegible]			½
[illegible]			½
[illegible]			1
[illegible]			1
[illegible]			1
FIRES [illegible] DRILLER'S SIGNATURE			

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 73

TOTAL COMPANY TIME ___ HRS. TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

HSW DDL-1 CONSERVATION BOARD COPY

No. 1778 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. ____ LOCATION ____ LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE ____ 1964

DIRECTIONS TO WELL ____ MAILING POINT ____ SHIPPING POINT ____ MILES MOVED ____ ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	F.	O.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet ____ Degrees ____ A ____ B ____

ADDITIVES ____ GENERAL ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3102		3102			61	4									

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	F.	O.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet ____ Degrees ____ 4 ____ 5 ____

ADDITIVES ____ GENERAL ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3709															

No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	F.	O.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS At Feet ____ Degrees ____ 4 ____ 5 ____

ADDITIVES ____ GENERAL ____ Weather ____ Water ____ Temp. ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ____ Boiler Operated: ____

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ____ Kelly Cock Chk'd. ____ Fire Equip. Chk'd. ____

Fuel on Hand 12.01 a.m. ____ gals.
Fuel Rec'd Today (add) ____ gals.
TOTAL ____ gals.
Fuel on Hand 11.59 p.m. (deduct) ____ gals.
FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____

GENERAL ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 72

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative ____ D.T.

Approved by Toolpusher ____

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	TIME INTVL
	12	12	1
	12	2	12
	2	2	
	3		
		5	3
3616			
	5	9	4
	9	12	3
	12	1	1
	1	1	
	1	1	
	1		
	1	2	
	2	1	2
	4	4	
	4	5	1
	5	6	1
	6	6	½
	6	7	1
	7	7	1
	7	9	2
	9	12	3

HSW DDL-1 CONSERVATION BOARD COPY

No 1777 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. — LOCATION — LSD. — SEC. — TWP. — RGE. — W. — DATE — 19—

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees 4 5

ADDITIVES: GENERAL: Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: — Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	✓
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m. — gals.
Fuel Rec'd Today (add) — gals.
TOTAL — gals.
Fuel on Hand 11.59 p.m. (deduct) — gals.
FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO)

GENERAL —

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 11

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative — TOP T

Approved by Toolpusher

REMARKS	TIME START	TIME STOP	TIME INTVL

FIRES — DRILLER'S SIGNATURE

REMARKS	TIME START	TIME STOP	TIME INTVL

Pressure Test Blind Rams - Top Pipe Rams Held 1000 psig

FIRES — DRILLER'S SIGNATURE

HSW DDL-1 CONSERVATION BOARD COPY

No 1776 HSW

DIRECTIONS TO WELL LOC 65° 21' S 40° 24' W 1.9 MAILING POINT NORMAN WELLS SHIPPING POINT

MILES MOVED ROAD CONDITIONS

DATE 12

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft

BITS	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Corred	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.

	12 mn.	2 a.m.	4 a.m.	6 a.m.		12 mn.	2 a.m.	4 a.m.	6 a.m.		12 mn.	2 a.m.	4 a.m.	6 a.m.	
WEIGHT					No. 1 PRES SURE					No. 2 PRES SURE					1
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2
GEL					LINER SIZE					LINER SIZE					3

SURVEYS: At Feet / Degrees

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: 4

ADDITIVES: GENERAL: 5

Weather

Temp.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Corred	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.

	8 a.m.	10 a.m.	12 noon	2 p.m.		8 a.m.	10 a.m.	12 noon	2 p.m.		8 a.m.	10 a.m.	12 noon	2 p.m.	
WEIGHT					No. 1 PRES SURE					No. 2 PRES SURE					1
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2
GEL					LINER SIZE					LINER SIZE					3

SURVEYS: At Feet / Degrees

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: 4

ADDITIVES: GENERAL: 5

Weather

Temp.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Corred	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.

	4 p.m.	6 p.m.	8 p.m.	10 p.m.		4 p.m.	6 p.m.	8 p.m.	10 p.m.		4 p.m.	6 p.m.	8 p.m.	10 p.m.	
WEIGHT					No. 1 PRES SURE					No. 2 PRES SURE					1
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2
GEL					LINER SIZE					LINER SIZE					3

SURVEYS: At Feet / Degrees

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: 4

ADDITIVES: GENERAL: 5

Weather

Temp.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

O RING ON BIT #

Boiler Operated: 1-24 Hrs.

Crown-o-matic Chk'd.	
Ria Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.	CASING TALLY RAN
Fuel Rec'd Today (add)	gals.	
TOTAL	gals.	TO KB. USED
Fuel on Hand 11.59 p.m. (deduct)	gals.	PLUS %
FUEL USED	gals.	CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonoscope	Ft. Drilled since Sonoscope	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE

HSW DDL-1 HEAD OFFICE PAYROLL COPY

REMARKS	TIME START	TIME STOP	TIME INTVL
NIPPLE UP 13 3/8" BOPS + CHOKE			
PRE TOUR -	12:00	7:00	7
FIRES DRILLER'S SIGNATURE			
RIG SER	8:00	8:15	15
WORKED BOPS.	8:15	4:00	7 3/4

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION [illegible] LSD. SEC. TWP. RGE. W. DATE [illegible] 19[illegible]

DIRECTIONS TO WELL [illegible] MAILING POINT Herman Minn. SHIPPING POINT [illegible] MILES MOVED [illegible] ROAD CONDITIONS [illegible]

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
3203															

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. P.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — bbls.

ADDITIVES: GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. P.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water — Bbls.

ADDITIVES: GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12:01 a.m. gals. — Fuel Rec'd Today (add) gals. — TOTAL gals. — Fuel on Hand 11:59 p.m. (deduct) gals. — FUEL USED gals.

CASING REPORT RAN 179 JTS 5" CSG TO 5700' KB. USED 3201.44 SAX 50 CEM PLUG DOWN [illegible] A.M./P.M. PLUS [illegible] % [illegible] CEMENT RETURNS - (YES/NO) GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL
[illegible]	1:00	12:00	11
[illegible]	12:00	1:00	1
[illegible]	1:00	2:00	1
[illegible]	2:00		
[illegible]			
[illegible]			
[illegible]		1:00	6
[illegible]			
FIRES — DRILLER'S SIGNATURE			
[illegible]	7:00	7:00	7
[illegible]	7:00	8:45	1:45
[illegible]	8:45	9:30	:45
[illegible]	9:30	10:15	1
[illegible]	10:15	12:15	2
[illegible]	12:15	1:15	1
[illegible]	1:15	4:15	3
[illegible]			
[illegible]			
FIRES Wind — DRILLER'S SIGNATURE			
[illegible]	4:30	12:00	7:30

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 67

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher C. G. Thompson

HSW 00-1 CONSERVATION BOARD COPY

No 1749 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 1 — LOCATION — LSD. — SEC. — TWP. — RGE. — W. — DATE — 19

DIRECTIONS TO WELL — MAILING POINT Norman Wells — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3701															

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
1																		
2																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 AM TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3701															

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
1																		
2																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3701															

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B																		
1																		
2																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:		SURVEYS At Feet	Degrees					4	
ADDITIVES:			GENERAL:												5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or	Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL
FIRES — DRILLER'S SIGNATURE			
FIRES — DRILLER'S SIGNATURE			
FIRES — DRILLER'S SIGNATURE			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT ## — Boiler Operated: 9 - 24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUS — % — PLUG DOWN — A.M. P.M. — CEMENT RETURNS - (YES/NO) — GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 6 7

TOTAL COMPANY TIME HRS. — TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 — CONSERVATION BOARD COPY

No. 1748 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-1 — LOCATION — LSD. — SEC. — TWP. — RGE. — W. — DATE — 19 71

DIRECTIONS TO WELL — MAILING POINT — SHIPPING POINT — MILES MOVED — ROAD CONDITIONS

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
3701	5	3706	5		1	2		11			10				

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1	3-C	6 3/4	S.T.	14-14-14	261111	10	56	5 1/2	5			2	1400	70		1	1	1/8
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9	9			No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	40				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
3706					1	2									

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TO MIDNIGHT TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
3706		5113													

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
1																		
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. — F.C. — pH. — DESILTER: Hours Op: — U. Flow: — O. Flow: — SURVEYS At Feet / Degrees — 4 — 5 — Weather — Temp. — Water Bbls.

ADDITIVES: — GENERAL:

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Installed Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # — Boiler Operated: 1 - 24 Hrs.

Crown-o-matic Chk'd. — Rig Savers Chk'd. — Kelly Cock Chk'd. — Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. — gals. — Fuel Rec'd Today (add) — TOTAL — gals. — Fuel on Hand 11.59 p.m. (deduct) — gals. — FUEL USED — gals.

CASING REPORT — RAN — JTS — CSG — TO — KB. USED — SAX — CEM — PLUG DOWN — A.M. P.M. — PLUS — % — CEMENT RETURNS - (YES/NO) — GENERAL

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonasc	Ft. Drilled since Sonasc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS

TIME	START	STOP	INTVL
	12		
	12		

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-1 LOCATION [illegible] LSD. SEC. TWP. RGE. W. DATE [illegible] 19 81

DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT [illegible] MILES MOVED [illegible] ROAD CONDITIONS [illegible]

8 AM TO 4 PM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3669	7	3676	7 1/4	51.	1	1		17	4 1/4	2	116'				3

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	EC	6 1/4	5 BL	14-14-14	306613	20	90	7 1/2	7 1/4			2	1400	60	1150			
2	RR																	
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.3	9.5	9.4	9.4	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	41	45	44	41	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	2				LINER SIZE	2				3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow: SURVEYS At Feet Degrees

ADDITIVES: GENERAL: 4

Weather Water Temp. Bbls. 5

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3676	14	3672	7	51.	61	3		17	4 1/4	2	116'				3

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	EC	6 1/4	5BL	14-14-14	306613	1000	90	5 1/2	12 1/4			2	1500	60	1150			
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.3			9.3	No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY	53			47	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	2 1/2				LINER SIZE	2				3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: 1 O. Flow: SURVEYS At Feet Degrees

ADDITIVES: GENERAL: 4

Weather Water Temp. Bbls. 5

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3672	9	3701	1 1/2	41.	61	3		17	4 1/4	2	116'				6

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	EC	6 1/4	5BL	14-14-14	306613	100	90	6 1/2	4 1/2	6			525	250	1000			
2																		
3																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				9.3	No. 1 PRES. SURE					No. 2 PRES. SURE	350			1250	1	
VISCOSITY				47	MODEL S.P.M.					MODEL S.P.M.				1 1/2	2	
GEL					LINER SIZE					LINER SIZE	2 1/2			2 1/2	3	

W.L. F.C. pH. DESILTER: Hours Op: 1/2 U. Flow: 1/2 O. Flow: SURVEYS At Feet Degrees

ADDITIVES: 5 GAL 12 GENERAL: 2 GAL 12 MUL 4

12 LBS KWIK SEAL 10 LBS GILSONITE 5

105 LBS THICK MUL 14 LBS GILSONITE

Weather Water Temp. Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut	Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

	TIME START	TIME STOP	TIME INTVL
[illegible]	6	12	6
[illegible]	12	7	19
[illegible]	7		4
FIRES	DRILLER'S SIGNATURE		
[illegible]		8	2
[illegible]	8	10	12
[illegible]	10	2	4
[illegible]		11	9
[illegible]		11	2
[illegible]	11	2	3
[illegible]	2	4	2
[illegible]			
[illegible]			
[illegible]			
[illegible]			
[illegible]			
FIRES	DRILLER'S SIGNATURE		
[illegible]	4	4	1
[illegible]	4	12	8
[illegible]	4	12	7
FIRES	DRILLER'S SIGNATURE		

4 PM TO MIDNIGHT TOUR

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # Boiler Operated 1 - 24 Hrs.

Crown-o-matic Chk'd. Rig Savers Chk'd. Kelly Cock Chk'd. Fire Equip. Chk'd.

Fuel on Hand 12.01 a.m. gals. Fuel Rec'd Today (add) gals. TOTAL gals. Fuel on Hand 11.59 p.m. (deduct) gals. FUEL USED gals.

CASING REPORT RAN JTS CSG TO KB. USED SAX CEM PLUS % PLUG DOWN A.M. P.M. CEMENT RETURNS - (YES/NO) GENERAL

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD 16

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1746 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION [illegible] — LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE [illegible] 19[illegible]

DIRECTIONS, TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M. TOUR 8 A.M. TO 4 P.M. TOUR 4 P.M. TO MIDNIGHT

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
3616					60	4		11	4 1/4	2	110				15

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B.	[illegible]	6	[illegible]	[illegible]	506114	[illegible]	[illegible]	[illegible]	[illegible]									
T.	[illegible]																	
S.																		

MUD	12 mn	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES SURE					No. 2 PRES SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:			SURVEYS At Feet	Degrees				4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
3616	14	3660	7		61			17							

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									
T.	[illegible]																	
S.																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	[illegible]			[illegible]	No. 1 PRES SURE					No. 2 PRES SURE	[illegible]				1	
VISCOSITY	[illegible]				MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:			SURVEYS At Feet	Degrees				4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
3660	1	3661	1/4		61	1		1							1

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
B.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]									
T.	[illegible]																	
S.																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		[illegible]		[illegible]	No. 1 PRES SURE					No. 2 PRES SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.	pH.	DESILTER: Hours Op:		U. Flow:		O. Flow:			SURVEYS At Feet	Degrees				4	
ADDITIVES:			GENERAL:												5	
															Weather / Temp.	Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: [illegible] Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ✓ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11:59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___ GENERAL ___

DAYS FROM SPUD: [illegible]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

REMARKS	TIME START	TIME STOP	HRS. TVL
[illegible]	12	12	1/2
[illegible]	12	3	3
[illegible]	3	4	1/2
[illegible]	4		
[illegible]	4	5	1
[illegible]	7		

FIRES ___ DRILLER'S SIGNATURE [illegible]

FIRES ___ DRILLER'S SIGNATURE [illegible]

FIRES ___ DRILLER'S SIGNATURE [illegible]

EQUIPMENT CHANGES ___ TRANSFER # ___

TOTAL COMPANY TIME ___ HRS. ___ TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

HSW DDL-1 CONSERVATION BOARD COPY

No 1745 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

RIG NO. [illegible] LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE A [illegible] 19[illegible]

DAILY DRILLING LOG
DIRECTIONS TO WELL [illegible] MAILING POINT [illegible] SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
3612	17	3621	7½	[illegible]	60	3		11	4½	2	170				18

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
B.	[illegible]	6¼	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	29	47¼			2	[illegible]	[illegible]	[illegible]			
T.																		
S.																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	[illegible]	[illegible]	[illegible]	[illegible]	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	[illegible]	[illegible]	[illegible]	[illegible]	MODEL S.P.M.		[illegible]	[illegible]	[illegible]	MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet [illegible] Degrees [illegible]

ADDITIVES: GENERAL: [illegible]

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
3621	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]				[illegible]

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
B.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]			
T.																		
S.																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	[illegible]	[illegible]		[illegible]	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	[illegible]	[illegible]			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet [illegible] Degrees [illegible]

ADDITIVES: GENERAL: [illegible]

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly
3640	6	3646	5¾	41	60	-1		7	4½	2	170				13

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
B.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
T.																		
S.																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	[illegible]		[illegible]		No. 1 PRESSURE					No. 2 PRESSURE	[illegible]				1	
VISCOSITY	[illegible]	[illegible]	[illegible]		MODEL S.P.M.	[illegible]	[illegible]	[illegible]	[illegible]	MODEL S.P.M.				[illegible]	2	
GEL					LINER SIZE	[illegible]				LINER SIZE	[illegible]			[illegible]	3	

W.L. F.C. pH. DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet Degrees

ADDITIVES: GENERAL: [illegible]

Weather Temp. Water Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Feet Slip or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

Crown-o-matic Chk'd. | Rig Savers Chk'd. | Kelly Cock

TOTCO RING ON BIT # Boiler C.

DRILL PIPE	Size	Joint	C. 2	3	4	TOTAL	Dev. Sonoscope	Drilled since Sonoscope	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT: RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M.
CEMENT RETURNS - (YES/NO)

GENERAL [illegible]

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12[illegible]	12[illegible]	[illegible]
[illegible]	12[illegible]	1[illegible]	[illegible]
[illegible]	1[illegible]	[illegible]	[illegible]
[illegible]	5[illegible]	[illegible]	[illegible]

FIRES ___ DRILLER'S SIGNATURE

[illegible]	9[illegible]	9[illegible]	[illegible]
[illegible]	[illegible]	11[illegible]	[illegible]
[illegible]	[illegible]	12[illegible]	[illegible]
[illegible]	12[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1[illegible]	[illegible]	[illegible]

FIRES ___ DRILLER'S SIGNATURE

[illegible]	4[illegible]	4[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	3[illegible]	[illegible]	[illegible]
[illegible]	2[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
Questions - short handed.			
[illegible]			

FIRES ___ DRILLER'S SIGNATURE

EQUIPMENT CHANGES ___ TRANSFER #

DAYS FROM SPUD: 6 4. TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

HSW DDL-1 CONSERVATIO

No 1744 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANUCK-TAJ MESA — LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ DATE A[illegible] 5 ____ 19[illegible]

DIRECTIONS TO WELL TAJ 63 51-5 Along 124 51 15.7 — MAILING POINT NORMAN WELLS — SHIPPING POINT ____ — MILES MOVED ____ — ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3451	13	3464	7	51	60	2		17	4¼	2	1 170				4

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	2-12	6¼	X31	=		5-7	120	21	11½			2	130	55	1800			
2																		
3																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	9.1+	11+	72	7.2	No. 1 PRESS. SUPP.					No. 2 PRESS. SUPP.	13	7.1		7+	1	
VISCOSITY	49	49	44	43	MODEL S.P.M.	120	120			MODEL S.P.M.				120	2	
GEL					LINER SIZE	7	7			LINER SIZE	2½			2½	3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

ADDITIVES: ____ GENERAL: ____

SURVEYS: At Feet ____ Degrees ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

	START	STOP	INTVL.
[illegible]	12[illegible]	4[illegible]	15
Di[illegible]	[illegible]	6:[illegible]	2½
[illegible]	[illegible]	[illegible]	2[illegible]
Ri[illegible]	7[illegible]	[illegible]	[illegible]

FIRES ____ DRILLER'S SIGNATURE ____

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3600	5	3605	4¾		57	2		17	4¼	2	1 170				5

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			2	180	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2																		
3																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		[illegible]	6.5		No. 1 PRESS. SUPP.					No. 2 PRESS. SUPP.	1[illegible]			1[illegible]	1	
VISCOSITY			[illegible]		MODEL S.P.M.		[illegible]	[illegible]		MODEL S.P.M.					2	
GEL					LINER SIZE	2½		[illegible]		LINER SIZE	[illegible]			2[illegible]	3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

ADDITIVES: 2 bags wood cut GENERAL: ____

SURVEYS: At Feet [illegible] Degrees [illegible]4 5

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

	START	STOP	INTVL.
Dr[illegible]	2.	12.45	10½
Surveys	12.4[illegible]	1.	¼
Mix [illegible]	1.	[illegible]	½
T.I. OUT	2.	2.	1½
Ri[illegible]	[illegible]	[illegible]	¼
T[illegible]	[illegible]	[illegible]	1½
C[illegible]	[illegible]	[illegible]	½
Short hands			
P.U. Travelling Washpipe			

FIRES ____ DRILLER'S SIGNATURE ____

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3605	7	3612	3½	51	60	1		17	4¼	2	1 170				11

B.	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1	[illegible]	4	[illegible]	[illegible]	[illegible]	14	90	7	2[illegible]			2	400	74	1200			
2																		
3																		

MUD	4 a.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 a.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT			7.1	7.4	No. 1 PRESS. SUPP.					No. 2 PRESS. SUPP.	400				1	
VISCOSITY			47	47	MODEL S.P.M.					MODEL S.P.M.	230				2	
GEL					LINER SIZE	2½				LINER SIZE	2½				3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____

ADDITIVES: ____ GENERAL: ____

SURVEYS: At Feet ____ Degrees ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

	START	STOP	INTVL.
Circulate [illegible]	[illegible]	[illegible]	[illegible]
Trip[illegible]	7	12	5½
Short hands			
P.U. Travelling Washpipe			

FIRES ____ DRILLER'S SIGNATURE ____

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams	✓			

TOTCO RING ON BIT # ____ Boiler Operated: 1-24 Hrs.

Crown-o-matic Chk'd. ____ Rig Savers Chk'd. ✓ Kelly Cock Chk'd. — Fire Equip. Chk'd. —

Fuel on Hand 12.01 a.m. ____ gals.

Fuel Rec'd Today (add) ____ gals.

TOTAL ____ gals.

Fuel on Hand 11.59 p.m. (deduct) ____ gals.

FUEL USED ____ gals.

CASING REPORT — RAN ____ JTS ____ CSG ____

TO ____ KB. USED ____ SAX ____ CEM ____

PLUS ____ % PLUG DOWN ____ A.M. P.M.

CEMENT RETURNS - (YES/NO) ____

GENERAL: —

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 63

TOTAL COMPANY TIME ____ HRS. TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1743 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION [illegible] LSD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE [illegible] 19 71

DIRECTIONS TO WELL [illegible] MAILING POINT ___ SHIPPING POINT ___ MILES MOVED ___ ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.R. Ft.	Ft. up on Kelly
3570	9	3579	6	51	51	3		17	4¼	2	470				1

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
22	6¾	OWC	9	27[illegible]	5[illegible]	165	11	1¾			1	5[illegible]	5[illegible]	[illegible]			

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.
WEIGHT		9.3	9.3	9.4
VISCOSITY		49	49	46
GEL				
W.L.	F.C.	pH.		

PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 1 PRESSURE				
MODEL S.P.M.	60	[illegible]	[illegible]	[illegible]
LINER SIZE	2½			

PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.
No. 2 PRESSURE	3[illegible]			
MODEL S.P.M.	[illegible]			[illegible]
LINER SIZE	2½			2½

DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: [illegible] GENERAL: [illegible]

MOTOR HOURS: 1 T. 2 3 4 5 Weather Temp. Water Bbls.

Next Oil Change

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.R. Ft.	Ft. up on Kelly
3579				51	51	3		17	4¼	2	470				

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
22	6¾	[illegible]		[illegible]													

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.
WEIGHT				
VISCOSITY				
GEL				
W.L.	F.C.	pH.		

PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 1 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.
No. 2 PRESSURE				
MODEL S.P.M.				
LINER SIZE				

DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: GENERAL:

MOTOR HOURS: 1 2 3 4 5 Weather Temp. Water Bbls.

Next Oil Change

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.R. Ft.	Ft. up on Kelly
3579	4[illegible]	3[illegible]	4½												

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	G.
22	6¾	[illegible]		[illegible]							2	1[illegible]	3[illegible]	10			

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.
WEIGHT		[illegible]	[illegible]	[illegible]
VISCOSITY		41	[illegible]	
GEL				
W.L.	F.C.	pH.		

PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 1 PRESSURE				
MODEL S.P.M.		[illegible]	[illegible]	
LINER SIZE		TAY		

PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.
No. 2 PRESSURE		[illegible]		
MODEL S.P.M.		[illegible]		
LINER SIZE		2½		

DESILTER: Hours Op: U. Flow: O. Flow:

SURVEYS: At Feet / Degrees

ADDITIVES: [illegible] GENERAL:

MOTOR HOURS: 1 2 3 4 5 Weather Temp. Water Bbls.

Next Oil Change

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12	6.	6
C[illegible]	6.	6.[illegible]	¼
TRIPPING OUT	6.[illegible]	1.[illegible]	1
RIG SER	1.[illegible]	2	¼ Dr
FIRES	DRILLER'S SIGNATURE		
TRIPPING OUT		8.[illegible]	10.[illegible]	2½
[illegible]				
[illegible]		10[illegible]	1.[illegible]	2½
CHANGE [illegible]		10 0	1.[illegible]	¼
TRIPPING [illegible]		1	3.[illegible]	2½
[illegible]		3[illegible]	[illegible]	¼
[illegible]				
[illegible]				
[illegible]				
FIRES	DRILLER'S SIGNATURE			
TRIPPING		4.[illegible]	4[illegible]	½
C[illegible]		4.[illegible]	[illegible]	½
[illegible]		[illegible]	[illegible]	½
[illegible]				
RI[illegible]		[illegible]	6.[illegible]	[illegible]
[illegible]		6.[illegible]	7[illegible]	[illegible]
[illegible]		7[illegible]	9[illegible]	1
DRILL[illegible]		9[illegible]	11.[illegible]	3½
[illegible]		11.[illegible]	12.[illegible]	¼
FIRES	DRILLER'S SIGNATURE			

B.O.P	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT #: Boiler Operated: 2-27 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	
Kelly Cock Chk'd.	
Fire Equip. Chk'd.	

Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.
FUEL USED	gals.

CASING REPORT: RAN ___ JTS ___ CSG TO ___ KB. USED ___ SAX ___ CEM PLUS ___ % PLUG DOWN ___ A.M. P.M. CEMENT RETURNS - (YES/NO)

GENERAL

EQUIPMENT CHANGES — TRANSFER #

DAYS FROM SPUD: 62

TOTAL COMPANY TIME HRS. ___ TOTAL CONTRACTOR'S TIME HRS. ___

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1742 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION CANNON #1 NW¼ 3-4 — LOD. ___ SEC. ___ TWP. ___ RGE. ___ W. ___ — DATE April 3 — 196 71

DIRECTIONS TO WELL ___ — MAILING POINT Norman, Okla. — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 A.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3566	2	3567	1½	50	5	2		11							

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.G.
B	2RC	6½	3-51	7-11	50-931	40	60	12	3¾									
T	2RC																	
S	3RC	6½	100GH		BC 3712													

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	7 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	10	10	11		No. 1 PRESS. SURE			1000		No. 2 PRESS. SURE	40				1	
VISCOSITY	41				MODEL			POWER		MODEL					2	
GEL					S.P.M.			70		S.P.M.	3				3	
					LINER SIZE	12		RAMS		LINER SIZE	6½					

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: 3 sx Caustic Wt. GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 8 A.M. TO 4 P.M.

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3569					5	2		11	4½	2	310		1		

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.G.
B	2RC	6½	3-51		BC 7326													
T																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		10	10		No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY		39	41		MODEL					MODEL					2	
GEL					S.P.M.					S.P.M.					3	
					LINER SIZE					LINER SIZE						

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: 3 sx Caustic Wt. GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3568	2	3570	1¾	50	5	3		17	11¼	2	170				16

B	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.G.
B	5RC	6½	3-51	7-11	50-931	40	60	12	3¾									
T	2RC	6½	3-51		BC 7326													
S	3RC	6½	100GH		BC 3712													

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		10			No. 1 PRESS. SURE					No. 2 PRESS. SURE					1	
VISCOSITY		41			MODEL					MODEL					2	
GEL					S.P.M.					S.P.M.					3	
					LINER SIZE					LINER SIZE						

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees: 4 ___ 5 ___

ADDITIVES: ___ GENERAL: ___ Weather ___ Temp. ___ Water ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL.
[illegible]	12:00	1:00	1
Mix [illegible]	1:00	1:30	½
[illegible]	1:30	[illegible]	[illegible]
[illegible]	[illegible]		
[illegible] -20 [illegible]	11:1		
[illegible]		1:00	1½
R/Sec.	7:00	8:00	½
FIRES ___ DRILLER'S SIGNATURE [illegible]			
[illegible]	1:00	1:30	1
[illegible]	7:00	2:00	[illegible]
Mix [illegible]	1:00	2:00	½
[illegible]	2:00	3:00	1
	3:00	4:00	½
FIRES ___ DRILLER'S SIGNATURE [illegible]			
[illegible]	4:00	5:00	1
Circ. [illegible]	5:00	6:00	1
[illegible]	6:00	7:00	½
Trip out [illegible]	7:00	7:30	2½
Circ. & Ream	9:00	10:00	½
Drilling	10:00	11:00	1
Water	11:00	12:00	½
FIRES ___ DRILLER'S SIGNATURE [illegible]			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seat Inspected Date
Hydril				
Pipe Rams				
Blind Rams				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals. Fuel Rec'd Today (add) ___ gals. TOTAL ___ gals. Fuel on Hand 11.59 p.m. (deduct) ___ gals. FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % PLUG DOWN ___ A.M. P.M. ___ CEMENT RETURNS - (YES/NO) ___

GENERAL —

EQUIPMENT CHANGES ___ TRANSFER # ___

DAYS FROM SPUD: 101 — TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [signature]

Approved by Toolpusher [signature]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1741 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 LOCATION CANNON FEDERAL M42-4 LSD. SEC. TWP. RGE. W. DATE April 2 19 71

DIRECTIONS TO WELL [illegible] MAILING POINT Woodward Wells SHIPPING POINT MILES MOVED ROAD CONDITIONS

TOUR MIDNIGHT TO 8 A.M. TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3542	14	3556	7¼	51.5	4	2		11	4¼	2	170				13

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
B	2-C	12¼	[illegible]	[illegible]	12453	35-40	125	301	14			1	375	55	[illegible]			
1																		
2																		
S																		

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.1	9.1	9.1	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY		42	44		MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE	2½				LINER SIZE	2½				3	
W.L.	F.C.		pH.		DESILTER: Hours Opr.		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3556															

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
B	3-C	12¼	STC	20-18T	[illegible]		60											
1																		
2																		
S																		

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Opr.		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

TOUR 4 P.M. TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3556	10	3566	7¾		4	2		17	4¼	2	115				7

	No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
B	3-C	12¼	STC	20-18T	[illegible]	40-50	80	10	7¾			2	600	350	100			
1																		
2																		
S																		

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT		9.6		9.6	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY		50			MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE				2½	LINER SIZE					3	
W.L.	F.C.		pH.		DESILTER: Hours Opr.		U. Flow:		O. Flow:						4	
ADDITIVES:					GENERAL:										5	
															Weather	Water
															Temp.	Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip	Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12:00	1:00	1½
[illegible]	1:00	2:00	1
[illegible]	2:00	7:00	5
[illegible]	7:00		¼
FIRES	DRILLER'S SIGNATURE		
[illegible]	7:00	8:00	1
[illegible]	8:00	9:00	1
[illegible]	9:00	10:45	1¾
[illegible]	10:45	11:45	1
[illegible]	11:45	12:00	¼
[illegible]	12:00	1:00	1
[illegible]	1:00	2:00	1
[illegible]			
[illegible]			
FIRES	DRILLER'S SIGNATURE		
[illegible]	2:00	4:00	2
[illegible]	4:00	11:30	7½
[illegible]	11:30	11:45	¼
[illegible]	11:45	12:00	¼
FIRES	DRILLER'S SIGNATURE		

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓			
Blind Rams	✓			

TOTCO RING ON BIT # Boiler Operated: 2-14 Hrs.

Crown-o-matic Chk'd. Rig Savers Chk'd. ✓ Kelly Cock Chk'd ✓ Fire Equip. Chk'd.

Fuel on Hand 12:01 a.m. gals.
Fuel Rec'd Today (add) gals.
TOTAL gals.
Fuel on Hand 11:59 p.m. (deduct) gals.
FUEL USED gals.

CASING REPORT RAN JTS CSG
TO KB. USED SAX CEM
PLUS % PLUG DOWN A.M. P.M.
CEMENT RETURNS - (YES/NO) GENERAL

EQUIPMENT CHANGES TRANSFER #

DAYS FROM SPUD: 20

TOTAL COMPANY TIME HRS. TOTAL CONTRACTOR'S TIME HRS.

Approved by Operator's Representative

Approved by Toolpusher

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No. 1740 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION Camp 8 Mdl-1 — LSD. ____ SEC. ____ TWP. ____ RGE. ____ W. ____ — DATE February 1 — 1971

DIRECTIONS TO WELL ____ — MAILING POINT Norman Wells — SHIPPING POINT ____ — MILES MOVED ____ — ROAD CONDITIONS ____

TOUR MIDNIGHT TO 8 AM TOUR

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3321	19'	3340		52.01	51			17	4	2	1710				

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1RC	6 3/4	OSC3	3	24812	40-50	125	319	114			2	600	120	1700			
2																	
3																	
4																	

MUD	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT	71	71	71	71	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY	51	51	51	51	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS: At Feet ____ Degrees ____ 4 ____ 5 ____

ADDITIVES: Pipe Lubricant ____ GENERAL: Base E-Z-Mud ____ Caustic ____ Soda Ash ____ Lost Circulation ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

8 AM TOUR TO 4 PM

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3321					51			11	4 3/4	2	710				22

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1RC	6 3/4	OSC3	3	24812	40-50	125	319	114			2	600	120	1700			
2																	
3																	
4																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT				71	No. 1 PRESSURE					No. 2 PRESSURE					1	
VISCOSITY				51	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS: At Feet ____ Degrees ____ 4 ____ 5 ____

ADDITIVES: ____ GENERAL: Base E-Z-Mud ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

4 PM TOUR TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly
3322.	20	3342	6 1/4	47.4	51	1		11	4 3/4	2	1710				3

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	O.
1RC	6 3/4	OSC3	3	24812	40-50	125	319	114			2	600	120	1700			
2																	
3																	
4																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT	71			71	No. 1 PRESSURE					No. 2 PRESSURE	71			71	1	
VISCOSITY	51			54	MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ____ F.C. ____ pH. ____ DESILTER: Hours Op: ____ U. Flow: ____ O. Flow: ____ SURVEYS: At Feet ____ Degrees ____ 4 ____ 5 ____

ADDITIVES: ____ GENERAL: ____

Weather ____ Temp. ____ Water ____ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip Feet or Cut	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]	12	6	6
[illegible]			4
[illegible]	6	7	1
[illegible]	7	1	7
[illegible]	1	2	1
FIRES ____ DRILLER'S SIGNATURE [illegible]			
[illegible]	8	10	2
Trip out	1	1.65	2 1/4
Change bit	1	1.75	3/4
Trip in	1	3	1 1/4
Ch[illegible]	3	4	1
[illegible]			
[illegible]	4	5	1
FIRES ____ DRILLER'S SIGNATURE [illegible]			
Trip out	2	4	2
Change bit	4	4	
Trip in	5	11.4	6 1/4
[illegible]	11	12	1
FIRES ____ DRILLER'S SIGNATURE [illegible]			

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams	✓		1	
Blind Rams	✓			

TOTCO RING ON BIT # ____ Bottom Operated: 2-24 Hrs.

Crown-o-matic Chk'd.	
Rig Savers Chk'd.	✓
Kelly Cock Chk'd.	✓
Fire Equip. Chk'd.	✓

FUEL USED	gals.
Fuel on Hand 12.01 a.m.	gals.
Fuel Rec'd Today (add)	gals.
TOTAL	gals.
Fuel on Hand 11.59 p.m. (deduct)	gals.

CASING REPORT — RAN ____ JTS ____ CSG ____ TO ____ KB. USED ____ SAX ____ CEM ____ PLUS ____ % ____ PLUG DOWN ____ A.M. P.M. ____ CEMENT RETURNS - (YES/NO) ____ GENERAL ____

EQUIPMENT CHANGES ____ TRANSFER # ____

DAYS FROM SPUD: 37

TOTAL COMPANY TIME ____ HRS. — TOTAL CONTRACTOR'S TIME ____ HRS.

Approved by Operator's Representative [illegible]

Approved by Toolpusher [illegible]

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

HSW DDL-1 CONSERVATION BOARD COPY

No 1739 HSW

HEATH & SHERWOOD DRILLING (WESTERN)

DAILY DRILLING LOG — RIG NO. 11-11 — LOCATION [illegible] — LSD ___ SEC. ___ TWP. ___ RGE. ___ W. ___ DATE March 1 ___ 19 71

DIRECTIONS TO WELL [illegible] — MAILING POINT [illegible] — SHIPPING POINT ___ — MILES MOVED ___ — ROAD CONDITIONS ___

TOUR MIDNIGHT TO 8 AM TOUR 8 AM TO 4 PM TOUR 4 PM TO MIDNIGHT

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	
4																	

MUD	12 mn	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	PUMP	12 mn.	2 a.m.	4 a.m.	6 a.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft.	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	
4																	

MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	PUMP	8 a.m.	10 a.m.	12 noon	2 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C. ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS	No.	O.D.	I.D.	Length	Air Wt.	Sub. Wt.	C.B. Ft	Ft. up on Kelly

Bit No.	Size	Type	Jets/W.C.	Serial No.	Wgt.	R.P.M.	Drilled or Cored	Hrs.	Reamed	Hrs.	Pump No.	Pump Pressure	S.P.M.	Table Torque	T.	B.	Out
1																	
2																	
3																	
4																	

MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	PUMP	4 p.m.	6 p.m.	8 p.m.	10 p.m.	MOTOR HOURS	Next Oil Change
WEIGHT					No. 1 PRES. SURE					No. 2 PRES. SURE					1	
VISCOSITY					MODEL S.P.M.					MODEL S.P.M.					2	
GEL					LINER SIZE					LINER SIZE					3	

W.L. ___ F.C ___ pH. ___ DESILTER: Hours Op: ___ U. Flow: ___ O. Flow: ___ SURVEYS At Feet / Degrees — 4 — 5

ADDITIVES: ___ GENERAL: ___ Weather ___ Water ___ Temp. ___ Bbls.

Drilling Line Record	Size	Make	Serial No.	No. Lines	Trips	Ton Miles	Total Miles	Slip or Cut Feet	At Miles	Date Slip or Cut	Next Slip	Ft. Left on Spool

B.O.P.	Tested	Elapsed Time	Pressure	Packing & Seal Inspected Date
Hydril				
Pipe Rams.				
Blind Rams.				

TOTCO RING ON BIT # ___ Boiler Operated: ___ Hrs.

Crown-o-matic Chk'd. ___ Rig Savers Chk'd. ___ Kelly Cock Chk'd. ___ Fire Equip. Chk'd. ___

Fuel on Hand 12.01 a.m. ___ gals.
Fuel Rec'd Today (add) ___ gals.
TOTAL ___ gals.
Fuel on Hand 11.59 p.m. (deduct) ___ gals.
FUEL USED ___ gals.

CASING REPORT — RAN ___ JTS ___ CSG ___ TO ___ KB. USED ___ SAX ___ CEM ___ PLUS ___ % ___ PLUG DOWN ___ A.M. P.M.

CEMENT RETURNS - (YES/NO)

DRILL PIPE	Size	Joint	CLASSIFICATION 2	3	4	TOTAL	Date Sonosc	Ft. Drilled since Sonosc	Total Ft. Drilled	CALIPER DATE	RESULTS	FROM PIPE RACK

GENERAL: ___

DAYS FROM SPUD: ___

TOTAL COMPANY TIME ___ HRS. — TOTAL CONTRACTOR'S TIME ___ HRS.

Approved by Operator's Representative [signature]

Approved by, Toolpusher [signature]

REMARKS	TIME START	TIME STOP	TIME INTVL
[illegible]			
[illegible]			
[illegible]			