

Drilling Authority No. 594
Date Issued 25-04-72

WELL NAME Ganderz - Amoco Shell Little Bear 1-70

FIELD

LOCATION: Unit I

Area:

Section 70

Grid 64-40-125-45

Latitude 64-39-44.27

Longitude 125-46-35.09

U.W.L.R. 64.66230 -- 125.91308

U.W.I. 3001706440125450

Rig Release Date 15-05-72

Status D + A

Information Release Date 15-05-74

CHANGE OF NAME:

DATE RECEIVED	INDEX
05-04-72	<i>RK</i> Application for a Drilling Authority.
22-11-72	<i>RK</i> Well Completion Data.
22-11-72	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
13-09-72	<i>EX</i> Application to Abandon a Well ~~on 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.
9-05-72	<i>RK</i> 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.....

DATE RECEIVED

LOGS:

Name	Run No.	Type	Interval
DIL	/		
BHC-5	/		
SNP	/		
FDC	/		

ANALYSES:

Sample	Lab. No.	Formation	Interval
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A.O.F. Potential	Formation	Interval	MC.F.D.	Test Date
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DRILL STEM TESTS:

No.	Formation	Interval
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REVISED WELL COMPLETION DATA RENSEIGNEMENTS SUR LES FORAGES

DEPARTMENT OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT
MINISTÈRE DES AFFAIRES INDÉENNES ET DU NORD CANADIEN
INDIAN MINERAL DIVISION
DIVISION DU PÉTROLE ET DES MINÉRAUX

Drilling Authority No. 594
N° de l'autorisation de forage
Date Issued: April 25/72
Date de délivrance

To be filled 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, la réparation, l'abandon et la recomplétion de chaque puits, au stade approprié.

Well Name & No. / Nom et n° du puits: **Candex-Amoco-Shell Little Bear I-70**
 Well Owner / Propriétaire: **Shell Canada Limited & Shell Explorer**
 Well Operator / Exploitant: **Candex Development Limited**
 Permit No. / N° de permis: **3413**
 Exploratory Licence No. / N° de licence de sondage: **144 & 1462**
 Licence No. / N° de licence de sondage: **1967**

LOCATION / IMPLACEMENT
 Well Section / Section du puits: **70**
 Grid - Elevation quadrille: **64-40 - 125-45**
 Latitude: **64°39'44.27"**
 Longitude: **125°56'35.09"**
 Unique Well Identifier - Code d'identification: **3001706440125450**
 Universal Well Location Reference - Référence universelle d'emplacement du puits: **Lat. N 64° 66230° Long. 125.94308°W**

Spud / Début des travaux	Date	Depth / Profondeur	Notes
Spud / Début des travaux	April 25/72		
Suspended / Suspension des travaux			
Resumed Operations / Reprise des travaux			
Finished Drilling / Forage terminé	May 10/72	7021' Log.	
Completed / Approbation / Achèvement (Gas/Oil) / Achèvement (Gaz/Pétrole)		7020' Dr.	
Abandoned / Abandon			
Well Reopened / Fin des travaux	May 15/72		

Interval Open to Production / Intervalle de production: _____
 Elevation Cr. / Altitude du sol: **1352'**
 Elevation Cr. / Altitude du sol: **1365.6'**
 Rig No. / N° de la tour de forage: **19**
 Drilling Contractor / Entreprise de forage: **Thomson**
 Contractor's Business Licence No. / N° de permis de l'entrepreneur: **0995**

Casing Size (Inches) / Diamètre (en pouces)	Grade / Qualité	Weight / Poids	Amount / Longueur	Set at / Fixation à	Sacks of Cement and Ad. / Sacs de ciment et d'ad.
1. 9 5/8"	H-40	32.3#	21 jts.	755' K.B.	450 + 2 5/8" CaCl2
2.					
3.					
4.					
5.					
6.					

CASING RECORD - TUBAGE

Geological Tops / Sommet des formations	Elevation - Profondeur		Core Record - Carottes				
	Depth / Sous le niveau du sol	Sub-sea / Sous le niveau de la mer	From - de	To - à	Rec. / Révisé	From - de	To - à
Little Bear	2732	-1416					
Slater River	4425	-3059					
Sans Sault	5310	-3944					
Imperial	5886	-4520					
Jungle Ridge Lentic	6348	-4982					
Canyon Creek "	6975	-5609					

NO CORES CUT

Log Record - Diagrammes			
Run / Série	Type of Log / Genre de diagramme	From - De	To - À
1	Dual Induction Laterolog	754	7015
	"	754	7015
1	Borehole Compensated Sonic	50	7019
	"	50	7019
1	Sidewall Neutron Porosity	754	7020
1	Formation Density	754	7020



ALLIANCE FOR CHILDREN

PERFORMING RECORD (Bulet. 2011)
PERFORMANCE INFORMATION (Bulet. 2011)

CEMENTING RECORD (Plug, Squeeze, etc.)
CIMENTATION (Gouache, sous pression, etc.)

[illegible]

surface 5 sx cement plug, weld on plate and sign.
surface DRILL STEM TESTS - ESSAIS AUX TIGES

sign.
DRILL STEM TESTS - ESSAIS AUX TIGES

[illegible]

ANALYSIS - ANALYSE

Lab. No. No de laboratorin	Sample Echantillon	From - de	To - à	Source	Remarks - Remarques
					Oil Pétrole
					Water-Intervaller
					Gas Gaz
					Water-Intervaller
					DGA
					Sec
					Sand Sable
					Fine-grained sand

N/A

**PRESENT STATUS OF WELL
ETAT ACTUEL DU PUITS**

Oil Peanut	Water-soluble
205	Water-soluble
207	
208	Oil
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Company Cancer Development Limited

44-38861-5

Geologist

June 13, 1972

For more to be used in the year 1901 and 1902

THE UNIVERSITY OF CHICAGO

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 la réachèvement de chaque puits, ou après suspension.

Well Name & No. / Nom et n° du puits Candex-Amoco-Shell Little Bear I-70	Permit No. / N° de permis 3413
(Permitter, Licensee, Lessee) / (Titulaire de permis ou de licence, du concessionnaire) Shell Canada Limited & Shell Explorer	Exploratory License No. / N° de licence de sondage 1967
(Operator) / (Exploitant) Candex Development Limited	

LOCATION / IMPLACEMENT	
Unit - Unité I	Section 70
Grid - Étendue quadrillée 64°40'N, 125°45'W	Latitude 64°39' 44.27"
Longitude 125°56'35.00"	
Unique Well Identifier - Code d'ordinateur 3001706440125450	
Universal Well Location Reference - Référence universelle d'emplacement du puits Lat. N 64°.66230° Long. 125.94308°W	

Date	Depth / Profondeur	Notes
Spudded / Début des travaux April 25/72		
Suspended / Suspension des travaux		Interval: Open to Production / Intervalle(s) de production
Resumed Operations / Reprise des travaux		
Finished Drilling / Forage terminé		
Deepened / Approfondissement		
Complete (Gas/Oil) / Achèvement (Gaz/Pétrole)		Elevation Gr. / Altitude du sol 1352' / 1365.6'
Abandoned / Abandon		Rig No. / N° de la tour de forage 19
Rig Released / Fin des travaux May 15/72		Drilling Contractor / Entrepreneur en forage Thomson
		Contractor's Business License No. / N° du permis de l'entrepreneur 0995

CASINO RECORD - TUBAGE

Casing Size (Inches) / Diamètre (en pouces)	Grade / Qualité	Weight / Poids	Amount / Longueur	Set at / Fixation à	Sacks of Cement and Additives / Sacs de ciment et d'additifs
1. 9 5/8"	H-40	32.3#	21 jts.	755' K.B.	450 + 2% CaCl2
2.					
3.					
4.					
5.					
6.					

Geological Tops / Sommet des formations	Elevation / Profondeur / Orths / Sous le niveau du sol	Sub-Sea / Sous le niveau de la mer	Core Record - Corollies
Little Bear	2782	-1416	
Slater River	4425	-3059	
Sans Sault	5310	-3944	
Imperial	5886	-4520	
Jungle Ridge Lenti	6348	-4982	
Canyon Creek "	6975	-5609	

NO CORES CUT

Run / Série	Type of Log / Genre de diagramme	From - De	To - À
2"	Dual Induction Laterolog	754	7015
5"	"	754	7015
2"	Borehole Compensated Sonic	50	7019
5"	"	50	7019
5"	Sidewall Neutron Porosity	754	7020
5"	Formation Density	754	7020





File No.
Drilling Authority No. 594

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 Amoco Shell Little Bear I-70
Location: Unit I Section 70 Grid 64-40 — 125-45
Latitude 64°39'44.27" Longitude 125°56'35.09"
From Established Reference Marker —
Universal Well Location Reference Lat. N. 64.66230° Long. 125.94308
Permit No. 3413 Lease No. —

Shell Canada Ltd. & Shell Explorer Ltd.
(Permitter, Licensee, Lessee)

Date of commencement of proposed program April 25, 1972

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at —
Gas at —
Water at —
Total Depth 7020' (Driller) Date of last operations May 15, 1972
Present condition of well Dry and Abandoned

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At —	Sacks of Cement and Additives	Amount Pulled
1. 9 5/8"	32.3#	21 jts.	755 K.B.	450 sax + 2.5% CaCl ₂	?
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
1	7020-6920	Imperial (Canyon Ck. Lentil)	75	—
2	5850-5700	Imperial - Sans Sault	100	+ 3% CaCl ₂
3	4400 - 4250	Little Bear	100	+ 3% CaCl ₂
4	800 - 700	Tertiary	75	+ 3% CaCl ₂

The following logs have been run DILL, BHCS, SNP, FD
Other operations proposed —

Operations to be carried out by Thomson Drilling Ltd. Contractor Licence No. 0995
Address 980, Three Calgary Place Address #500, 407 - 8th Ave. S.W., Calg.
Responsible Agent in field Blain, Binnie & Associates
Dated at Calgary this 5th Day of September 19 72
Signed by *[Signature]* Company Candex Development Limited
Title Geologist Operator's Exploratory Licence No. 1967

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

(For OIL AND MINERAL DIVISION use only)

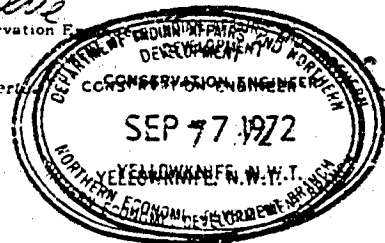
APPROVAL

This application has been examined and proposed programme approved, subject to the following conditions:
Confirming oral approval given by Mr. G.E. Blue on 13th May 1972.
This approval included that Plugs Nos. 2, 3 and 4 were to be felt for and that a 5-sack surface plug was to be run and a plate welded on the top with a 4-foot riser with name plate.

Dated 13th September 19 72

LAND 52-90 (5) (2-69)

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





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-AMOCO-SHELL LITTLE BEAR I-70
Location: Unit I Section 70 Grid 64° 40' N, 125° 45'
Latitude 64° 39' 44.27" Longitude 125° 56' 35.00"
Unique Well Identifier 300I706440125450
Universal Well Location Reference Lat. N 64.66230° Long. W 125.94308°
Elevation: Ground 1352' K.B. 1353' (Est.) feet above sea-level.
Well is expected to produce from Cretaceous formation at a depth
of about 6,000 feet. Expected total final depth 7,000'
Area assigned to well Wildcat

(for Oil Conservation Engineer's use only)

Permit No. 3413 Lease No. Acreage 55,000
Permittee, licensee, or lessee Shell Canada Limited and Shell Explorer Ltd.
Exploratory Licence No. 144 and 1462
Surface owned by Crown or CROWN
Petroleum and natural-gas rights owned by CROWN
(If alienated submit name and address of owner and occupant.)

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	Each of Cement
1. 13-3/8"	48.0	H-40	New	40	120
2. 9-5/8"	32.3	H-40	New	800	450
3. 7"	23# & 26#	J-55	New	7,000	To be approved before running.
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment Cretaceous sands to be controlled by BOP's, adequate drilling fluids and good engineering practice.

Well will be drilled with Rotary Rig No. 19 by Thomson Drilling Ltd.
(Drilling Contractor or company)

Responsible agent of applicant:-

At well Blain, Binnie & Associates
Address 631 - 7th Avenue S.W.,

Contractor's Business Licence No. 0995

At registered office

J.R. Knight

Address #500, 407 - 8th Avenue S.W., Calgary.

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

Dated at Calgary

this 30th day of March 1972

Signed by

J.R. Knight

Company Candex Development Limited

Title

Engineer

Operator's Licence No. 1967

(For Oil and Mineral Division use only)

APPROVED

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

Please see attached sheet for conditions.

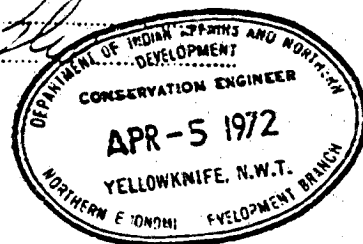
Dated

April 25 1972

Oil Conservation Engineer

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

LAND 12-00-1 (1-5-72)



CONDITIONS OF APPROVAL FOR DRILLING AUTHORITY NO. 594
FOR Candex Amoco Shell Little Bear I-70

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, a Progress Report on the well. The Oil Conservation Engineer may request more frequent reports.
3. All waste materials shall be disposed of in a manner that will prevent pollution to adjacent areas.
4. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.
5. Any additional strings of casing must be approved by the District Conservation Engineer prior to running.
6. All shows (small or large) of oil and gas are to be reported immediately.
7. When a fatal accident occurs the District Conservation Engineer is to be notified immediately. Permission to proceed with drilling operation must be granted by the District Conservation Engineer after a fatality.

G.E. BLUE,
District Conservation Engineer.
P.O. Box 1500,
Yellowknife, N.W.T.

Bus. Phone: 873-4421
Res. Phone: 873-3028

Candex Development Limited

500 CROWN TRUST BUILDING
407 8TH AVENUE S.W.
CALGARY 2, ALBERTA

March 30, 1972

Department of Indian Affairs and Northern Development
Box 1500,
Yellowknife, N.W.T.

Attention: Mr. G. Blue

Dear Sir:

Re: Candex-Amoco-Shell Little Bear I-70
lat. 64° 39' 44.27"
Long. 125° 56' 35.09"

Attached please find the following for the licencing of the captioned well:

1. ^{Two} Three copies of Application for Drilling Authority
2. / Two copies of topographic map outlining location
3. / Two copies of Survey Plan duly certified
4. / Two copies of drawings of 'Blowout preventer and Blowdown Manifold'
5. / Letter of Appointment from Shell Canada Limited appointing Candex Development Limited as Operator of Permit Number 3413
6. / Two copies of Geological and Engineering Prognosis (Drilling Program)



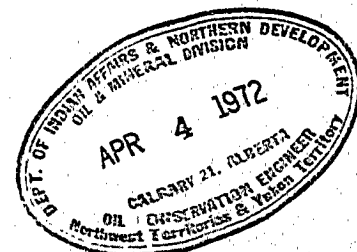
Yours very truly,

CANDEX DEVELOPMENT LIMITED

J.R. Knight
J.R. Knight

cc: Department of Indian Affairs & Northern Development
112 - 11th Avenue S.E.,
Calgary, Alberta

Attention: District Conservation Engineer



DRILLING AUTHORITY No. 594
WELL BULLETIN
OIL AND MINERAL DIVISION
DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

Date: April 25, 1972.

DATE DRILLING AUTHORITY ISSUED: April 25, 1972.

PERMIT NO.: 3413

COMPANY: Candex Development Limited

WELL NAME: CANDEX AMOCO SHELL LITTLE BEAR I-70

LOCATION: 64°39'44.27" N. 125°56'35.09" W.

CO-ORDINATES: Unit: I Section: 70 Grid: 64°40'N 125°45'W

UNIVERSAL WELL LOCATION REFERENCE: Lat. N 64.66230° Long. W 125.94308°

UNIQUE WELL IDENTIFIER: 300I706440125450

FIELD: Wildcat

GROUND ELEVATION: 1352'

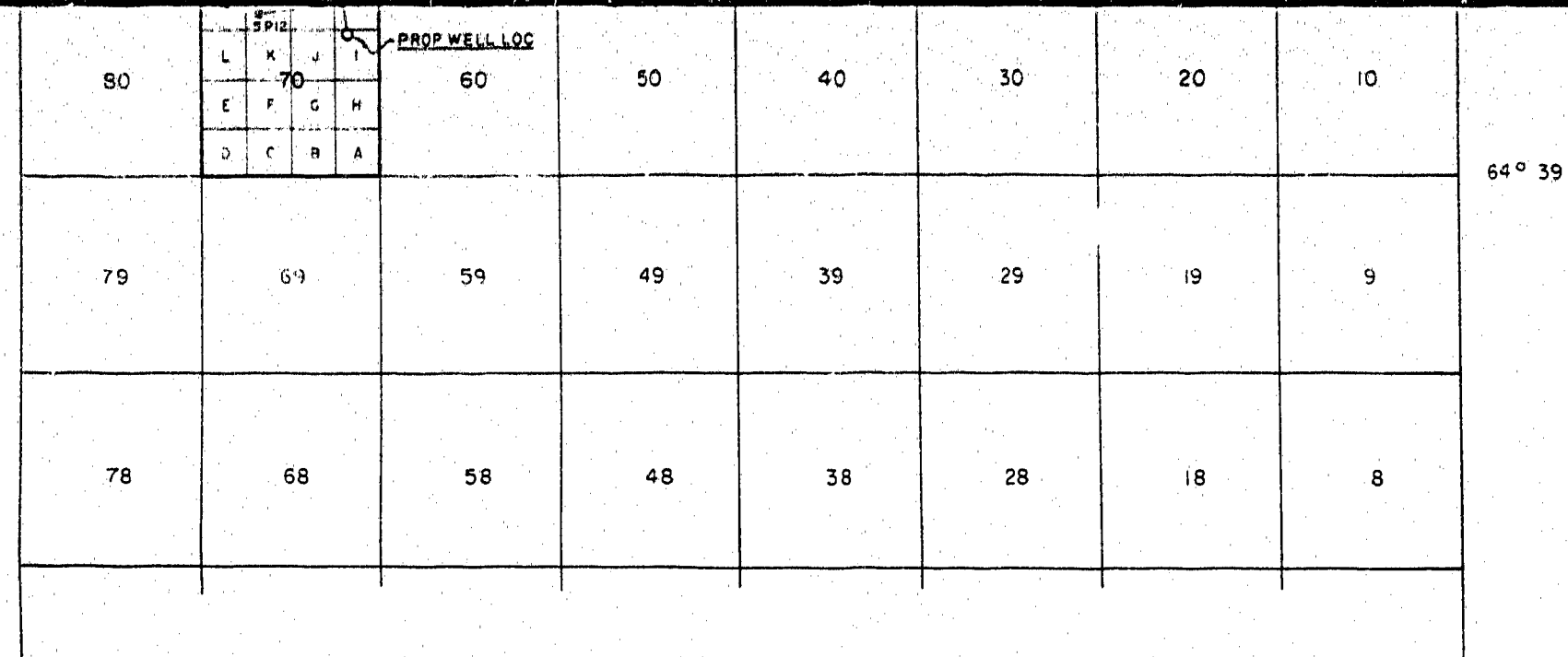
PROJECTED DEPTH: 7000'

CONTRACTOR: Thomson Drilling Canada Ltd. Rig No. 19

MAIL TO:

Oil & Gas Journal
Petroleum Information Exchange
Oilweek
Daily Oil Bulletin
Well Information Services
Northwestern District Oil Scouts
G.B. Armstrong
M.D. Thomas
A.J. McCaskill
Alan Judge


C.E. BLUE,
District Conservation Engineer,
Department of Indian Affairs and
Northern Development,
Oil and Mineral Division,
P.O. Box 1500,
YELLOWKNIFE, N.W.T.

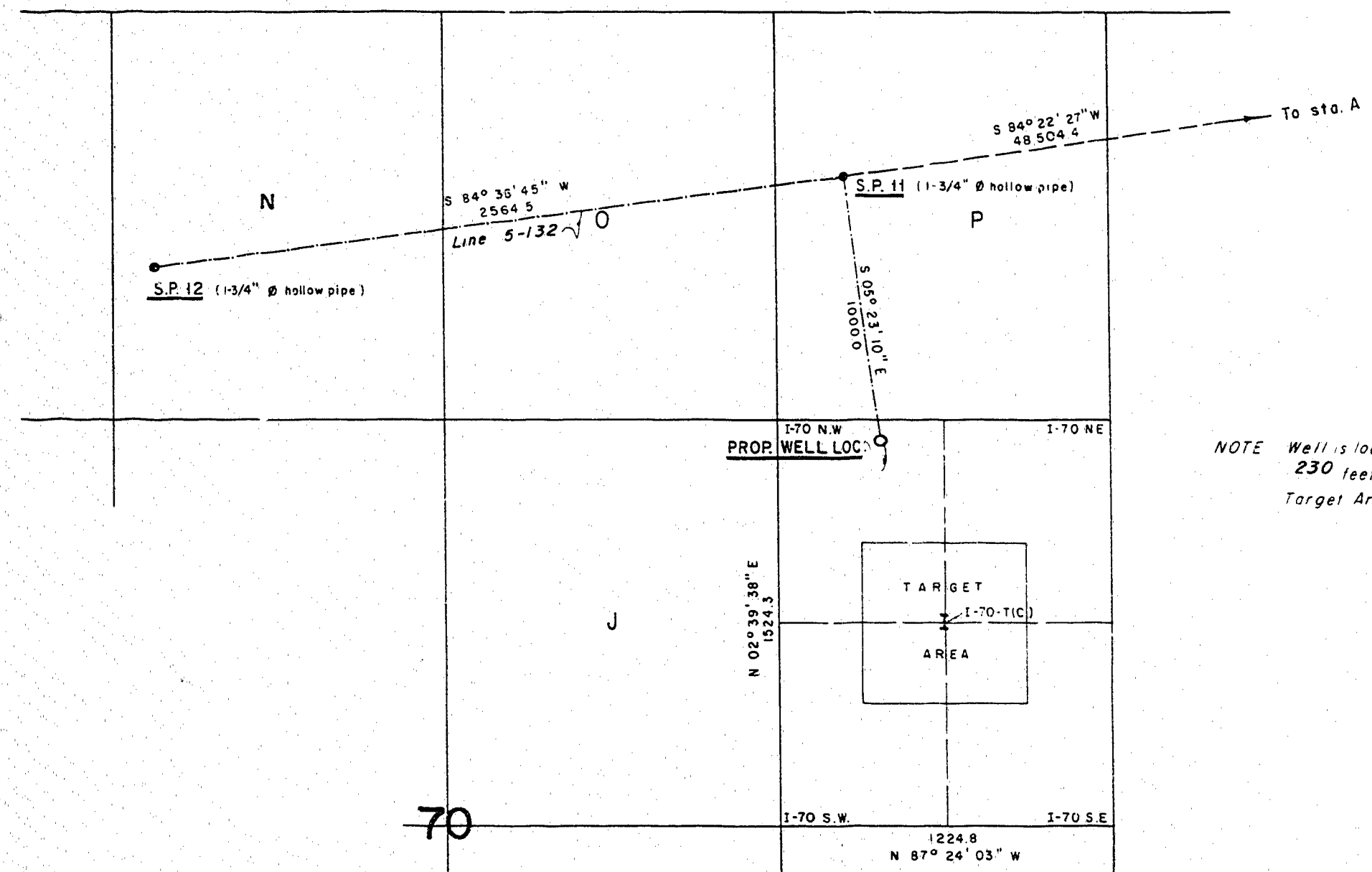


Grid Area: 64°40'N, 125°45'W
SCALE 1" = 1 mile

Sta. KAY
(Fd. cairn)

Kay	540 553 7	-408 620 0
A	549 191 0	-412 920 3
SP 11	544 435 3	-461 197 3
SP 12	544 194 5	-463 50 8
WELL LOC 1-70	543 440	-461 103
UNIT 1, SEC 70		
NE Cor	543 487 74	-460 225 51
NW Cor	543 543 27	-461 448 88
SE Cor	541 365 08	-460 296 09
SW Cor	542 020 62	-461 519 64
Centre	542 754 18	-460 872 53

- NOTE
1. Traverse is based on co-ordinates available from Geodetic Survey of Canada records for Sta. Bear and Kay. These values may have errors of several hundred feet.
 2. Bearings are referred to Central Meridian 123° W. Long. and are derived from the bearing of Sta. Bear to Sta. Kay.
 3. Distances are in feet, reduced to Sea Level.
 4. Scale factor used to compute T.P.C.S. = 1.000129



NOTE Well is located 686 feet North and 230 feet West of centre of I-70 Target Area

DETAIL
SCALE 1" = 500'

CANDEX DEVELOPMENT LIMITED PLAN

SHOWING SHOT POINT and Prop. WELL LOCATION
UNIT I., SECTION 70, GRID AREA 64°40'N, 125°45'W.
WELL LOCATION AT 64°39'44.27" N. Lat., & 125°56'35.09" W. Long.
FORT NORMAN AREA
NORTHWEST TERRITORIES

Scale: As shown

Certified correct, March 13th, 1972.

R. Bishop, P. Eng. A.C.S.

SIGNATURES FOR
CANDEX DEVELOPMENT LIMITED

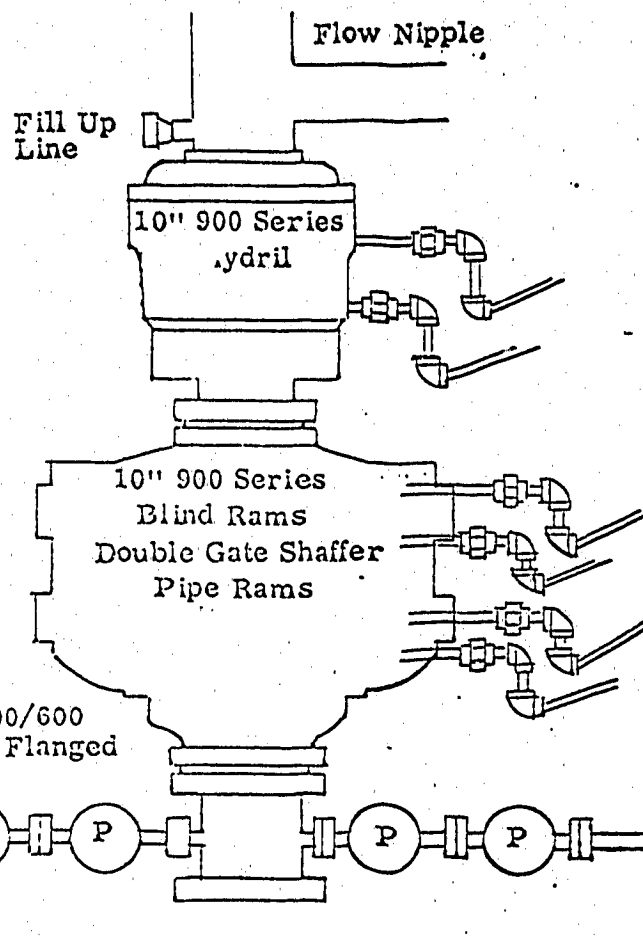
J. R. Knight, P. Eng.
G. Armstrong



CANADIAN ENGINEERING SURVEYS Co. LTD.
EDMONTON ALBERTA

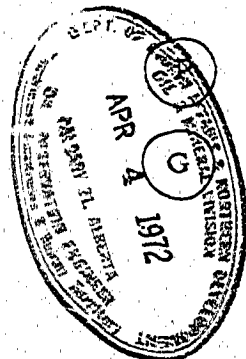
JOB No. C-6811
DATE March 13th, 1972
DRWG No. 6811-M-1

Blowout Preventer Stack



Halliburton Low Torque
Plug Valves. 2" 900 Series.

WKM 2" 900 Series Flanged
Gate Valves.

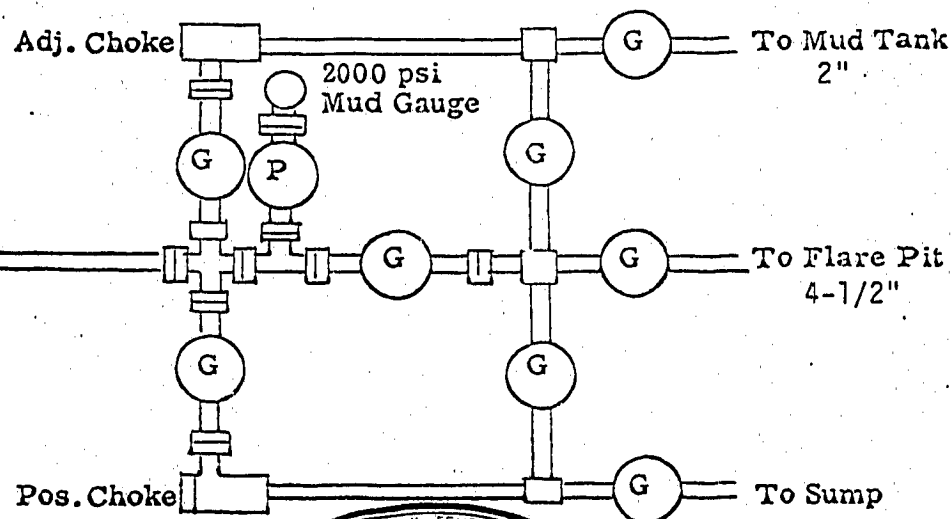


THOMSON DRILLING CANADA LTD.

RIG #19 BLOWOUT PREVENTION EQUIPMENT

Equipped with 80 gallon Koomey
accumulator and two nitrogen
bottles. Baker hand pump 75 feet
from rig.

Blowout Preventer Manifold



CANDEX DEVELOPMENT LIMITED
DRILLING PROGRAM

WELL: Candex-Amoco-Shell Little Bear I-70

LOCATION: Lat. 64° 39' 44.27"
Long. 125° 56' 35.09"

CONTRACTOR: Thomson Drilling Ltd. Rig #19

ELEVATION: Ground: 1352' K.B. 1363' (est.)

DRILLING LICENCE: To be issued.

PROGRAM: Drill to the Devonian Imperial Formation or to
±7,000' K.B. Log and test as per Calgary
Geological Department's instructions.

HOLE SIZE: 18" surface conductor to approximately 45' K.B.
12-1/4" surface to approximately 800' K.B.
8-3/4" to T.D. (If intermediate string is run
the hole size will be reduced to 6-1/8").

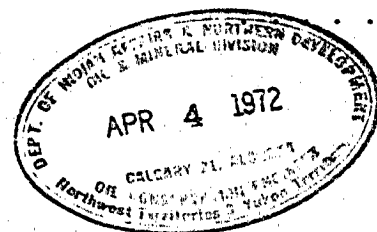
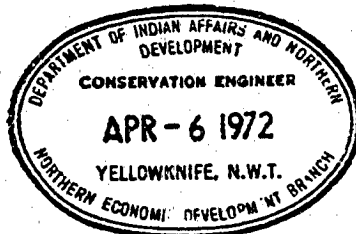
CASING: Conductor - 13-3/8", 8rd. 48#, J-55, ST&C (insulated)
cemented with 120 sax perma-frost cement
by displacement. W.O.C. 16 hrs. while
continuing rig up.

Surface - 9-5/8", 8rd, 32.3#, H-40, ST&C, Rge. 2
casing to approximately 800' K.B. Cement
to surface with 450 sax Oilwell + 2% CaCl₂
(720#). Centralizers on shoe joint and
collars number 3, 4 and 5.

Production
or
Intermediate 7", 8rd, 23 & 25#. J-55, ST&C, Rge. 2 casing.
Cement as required re Calgary office. (See
casing design attached).

DRILLING PROGRAM:

1. Drill 12-1/4" conventional hole to approximately 800' K.B.
Maximum deviation 1-1/2°. Surveys per Section 16.
2. Run 9-5/8" surface casing as above. Set 10" series 900 casing bowl at
ground level. Spot weld guide shoe, float and collars (top & bottom on
first two joints) with low hydrogen rod after propane pre-heating. Set
casing, just touching bottom.



3. W.O.C. for 16 hrs. with casing centered, cut off and head up.
4. Test blank rams and bleed off manifold to 1500 psi. Run in drill pipe and bit. Test hydril and pipe rams in turn to 1500 psi. Record on Tour Sheets. BOP's to be tested at beginning of each tour and before each trip. After 24 hrs. WOC, drill out with 8-3/4" bit using minimum wt./RPM until collars buried. If cement not hard, stop 20 ft. from shoe and delay drillout.
5. Drill 8-3/4" hole to approximately 7,000' K.B. A casing or plugging program will follow as required.
6. If hole conditions dictate, run 7" intermediate string and continue to FTD with 6-1/8" bit. Detailed program to be furnished if necessary.
7. At depths specified by wellsite geologist, hole will be conditioned (by means of prehydrated gel if necessary) for DST's or coring up hole.
8. At T.D. logs will be run as follows: (12 copies each of field & final prints)
SNP - GR, FD, DILL Surface casing to T.D. (2" and 5")

(Run BHCS-GR in place of SNP-GR & FD only if hole is badly washed out)

If intermediate casing is run the program at that point will possibly be altered.
9. Estimated formation tops are: K.B. 1363' Est.

Upper Cretaceous 2900' (-1537)
Lower Cretaceous 5800' (-4437)
Imperial 6900' (-5537)
T.D. 7000' (-5637)
10. Samples will be taken as follows:

One bag every 10 ft. Take one each for Amoco and Shell and save remainder of bag for Government.
11. Coring and testing at the discretion of the wellsite geologist.

BLOWOUT PREVENTERS: Install and equip as per diagram to conform to Candex Development Limit 11's requirements. Blow-out Preventer Equipment and Hook Up. Heating equipment to be installed and in continuous operation during freezing weather, sufficient to prevent any icing on the B.O.P.'s and allied lines. Blow-out preventers are to be kept in operating condition at all times.

- FLARE LINE: A flare line is to be installed using drill pipe. All connections from either wellhead or rig floor are to be of extra heavy seamless type.
- FLAME ARRESTERS: Each drilling engine exhaust is to be equipped with water connections as flame arresters.
- DRILL PIPE PLUGS: Drill pipe plugs must be used while pulling drill stem tests.
- GAS MASKS: Respiratory protection must be available and used if any dangerous concentrations of any poisonous gases are encountered while pulling D.S.T.'s.
- DEVIATION SURVEYS: Deviation surveys are to be taken and recorded on surface hole at 30', 60', 90', 120'. Thereafter every 90' to 800'. Maximum $3/4^\circ$ to 200'; Maximum $1-1/2^\circ$ to 800'.

Below surface hole to T.D., deviation readings are to be taken at 300' intervals (not to exceed 300' between surveys). Deviations from below surface casing to T.D. are not to exceed 3 degrees from the vertical to 2,000 feet, not exceed 8 degrees to 4,000 feet, not to exceed 12 degrees to F.T.D. All surveys are to be entered in the Tour Book.
- DRILL PIPE MEASUREMENTS: Drill pipe measurements are to be correct at all times. The pipe is to be remeasured at least every second bit change, and also before any drill stem tests, coring, running casing and logging.
- DRILL PIPE AND DRILL COLLAR MAINTENANCE: Depth of the hole and possible hole problems will require the utmost care in the inspection of all tubular goods. To this end the Contractor is to have Drill Collars and any questionable drill pipe inspected for wear and fatigue at regular intervals. Drill collars must be inspected before drilling beyond 7,000 ft. contract depth.
- DRILLING TIME RECORDER: To be installed in continuous operation.
- TOUR REPORTS: The Contractor of the well is to file with the Department of Indian Affairs and Northern Development, Yellowknife Office, as per drilling licence, 'Daily Tour Reports' for each week every Thursday. All tour reports must be filled in completely with all details of casing, depths, cementing, logging, perforations, noting - footages, amounts and intervals. Data which is not readily available to the Driller should be procured from the respective service company representative, or Candex Supervisor. This is a requirement and must be met.

ADDRESSES:

Department of Indian Affairs & Northern Development

Yellowknife: Box 1500

Engineer: George Blue
Phone: 873-4421

Calgary: 112 - 11th Avenue S.E.

Phone: 264-0201

Candex Development Limited

500 Crown Trust Building,

407 - 8th Avenue S.W.,

Calgary 2, Alberta

Phone: 263-3710

Engineer - Rick Knight

Phone: 244-5688 (home)

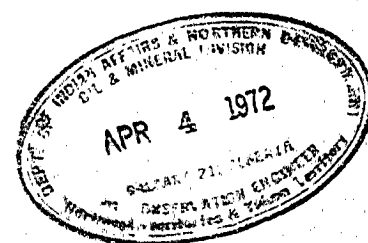
Geologist - Eric Gronberg

Phone: 271-5792 (home)

#

MATERIALS ON LEASE

550 sacks	Hydrogel
230 sacks	Zeogel
300 sacks	KCl (Potassium Chloride)
40 sacks	Sta Flow
60 sacks	Caustic Soda
11 drums	" "
107 sacks	Soda Ash
1 sack	Aluminum Stearate (50#)
4 cans	No Stik (15 gal.)
30 cans	H. M. E.
200 sacks	Super Lube Flow
1700 sacks	Sawdust
2 cases	MF-1 (50/2# sacks)
650 sacks	Baritex
20 sacks	Calcium Chloride
3 sacks	Quicktrol
76-40# sacks (53 medium - 23 fine)	Kwik Seal
59-40# sacks	Fibertex
95-50# sacks	Micatex Coarse
54-40# sacks (31 coarse, 15 medium, 8 fine)	Walnut Mixed



SUGGESTED MUD PROGRAM

Candex Amoco Shell Little Bear I-70

Surface Hole 0 - 800' ±

We suggest that surface hole be drilled with a prepared Gel Slurry, flocculated with small additions of Lime or Caustic Soda. In the event of lost circulation in the surface hole, it is suggested that Sawdust be added to a prepared Gel Slurry. No unusual surface hole problems are expected in this area, although some gravel stringers may be encountered.

800' ± to 5000'

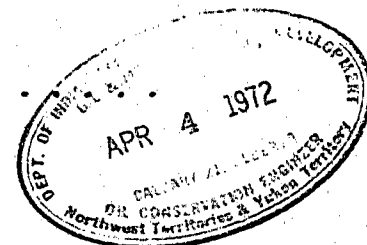
Drill out under surface casing shoe with water by-passing all heavy cement cut returns to the sump. The remainder of the cement contamination will not be treated out as it will aid in the flocculations of drilled solids. MF-1 will be used as a flocculant and will be added to the system in relation to the footage drilled. KCl (Potassium Chloride) will be added to the system at the rate of 5#/bbl. (8000 ppm./Chlorides) to inhibit the sand and shales drilled in this section of the hole. The sump should be circulated while drilling this section of the hole, to allow maximum flocculation.

From past experience in the area, the shale sections in this area can be extremely troublesome if disturbed. To avoid this problem, it is suggested that at 3000' a shale stabilization program be implemented. In this program, MF-1 will continue to be added to control solids. 5#/bbl. of KCl will be maintained in the system for shale inhibition. Super Lube Flow (99% pure Gilsonite) will be added to the system at a rate of 1#/ for every foot of new hole drilled. Super Lube Flow will be added to the system to close off hair line fractures which allow fluid to deteriorate the shale sections of the hole.

5000' to Total Depth

At approximately 5000' the MF-1 treatments will be stopped. KCl and Super Lube Flow additions will continue as before. A concentration of 2#/bbl. of Super Visbestos and 2#/bbl. bentonite will be maintained in the system to ensure hole cleaning without sacrificing penetration.

cont'd .



Suggested Mud Properties

Viscosity	-	28 - 36 sec/qt.
Weight	-	8.4 - 9.0 ppb.
Waterloss	-	High spirt loss, low total loss.
pH	-	8.5 - 9.0
Pv	-	3 to 4
YP	-	3 to 4 Ratio 1:1
Solids	-	1 to 2%

The most important properties of this fluid is waterloss and shale control. The two materials (Super Lube Flow and Sta Flow) complement each other for shale and waterloss control. The Super Lube Flow will seal the micro-fractures to prevent loss of fluid in the fractures and the Sta Flow reacts with the shale which prevents further hydration. The Super Lube Flow may also be compacted in the in situ filter cake formed by the Sta Flow and strengthen it. H.M.E. energizer will be used to water wet the Gilsonite at the concentration of 1/10 to 2/10 #/bbl.

If higher viscosity or gel strengths are required, the bentonite Super Visbestos additions will be increased at a 50:50 ratio to ensure proper hole cleaning. Increased additions of Sta Flow (3/4 - 1 #/bbl.) can be used to reduce waterloss to 10 - 12 cc's if required. A waterloss of 20 - 30 cc's with this fluid gives excellent formation protection.

As salts are being used, a corrosive environment can exist. To control this problem, Caustic will be used to raise the pH to 9.5, and this will be held throughout the duration of the hole.

A viscosity of 40 to 45 sec/qt. should be sufficient for evaluation of this hole.

A special note should be made that when volume is required for this system, sump water should be used to take advantage of the KCl used on top hole.

cont'd

SERVICE AND SUPPLY

Pat Beauchamp will handle field engineering for this hole. Pat has been associated with the drilling fluids industry for 8 years, and is well versed in drilling fluid technology as well as modern day drilling techniques.

Pat's back-up engineer will be Neville Toole. Neville has in excess of 13 years drilling fluid experience in the Canadian Oil Industry.

Engineering Service Phone 265-7595 (Calgary)

Mobile number and additional phone numbers will be listed at the rig.

We would like to take this opportunity to thank you for considering us on your drilling fluid requirements. If any further information is required, it would be our pleasure to supply same.

Yours very truly,

WESTERN MUD SERVICES LTD.

M. J. Jones
Vice President, Operations

MJJ/sw

CASING DESIGN APPROVAL

Client: Candex-Shell-Amoco Little Bear I-70 Submitted by J.R. Knight, P. Eng. (Alta.) Date March 2, 1972

Location 64° 39' 37" N & 125° 56' 50" W Company Candex Development Limited

Nominal Size of Casing: 7" o.d. Mud Weight 9.625 lbs/gallon Mud pressure gradient (M.P.G.) 0.50 psi/ft.

CASING DESIGN SUBMITTED

SECTION NO.	DEPTH INTERVAL	lbs/ft.	Grade	Collar Type	Length	Length x lbs/ft.	Cumulative lbs. (a)
1	7,000 - 5,000	26#	J	LT&C	2,000	52,000	52,000
2	5,000 - surface	23#	J	ST&C	5,000	115,000	167,000
3	At surface	26#	J	LT&C	1 jt.		
4							
5							
6							

CASING DESIGN CALCULATIONS

Section No.	COLLAPSE			TENSION		BURST	
	Consider the lowest point in each section. Minimum Safety Factor - 1.125*	Consider the highest point in each section. Minimum Safety Factor - 1.60	Consider the weakest section only. Minimum Safety Factor - 1.00	Min. parting load above P.1-004 to 1-101 (a)	Safety Factor a ÷ d	Min. Internal Formation Press. yield. if known, or P.1-003 - 1-009 T.D. x 0.5 ft. f ÷ g (r)	Safety Factor
	(b) 10-031 - (b) 10-012	(c)	(d)				
1	4060	3500	1.160	52,000	high		
2	3290	2500	1.210	167,000	1.80	4360	3500
3							1.24
4							
5							
6							

NOTE: Page numbers refer to the Spang Engineering Data Book.

Calculated safety factors should not be less than the minimum safety factors noted above.

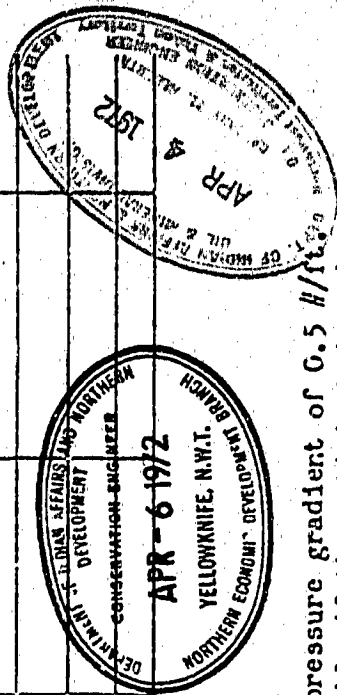
Cement fill up required: _____ feet above the top of the _____ formation.

Cement calculations based on (indicate which):

- (1) Caliper log calculations plus 20% excess.
- (2) Board required excess.

* A Spang Design which assumes a pressure gradient of 0.5 #/ft.². A minimum S.F. of 1.0 is acceptable if the anticipated maximum mud pressure gradient when running casing is used in the calculation, provided that this is not less than 0.5 #/ft.². S.F. must never be less than 1.0.

Casing design approved by _____



DRILLING AUTHORITY No. 594
WELL BULLETIN - - CANADA LANDS
OIL AND MINERAL DIVISION

DATE: April 10, 1972.

Date Drilling Authority Issued: April 10, 1972.

Permit No.: 3413

Company: Candex Development Limited

Well Name: CANDEX AMOCO SHELL LITTLE BEAR I-70

Location: 64° 39' 44.27" N. 125° 56' 35.09" W.

Co-ordinates: Unit: I Section: 70 Grid: 64°40' N 125°45' W

Universal Well Location Reference: Lat. N 64.66230° Long. W 125.94308°

Unique Well Identifier: 300I706440125450

Field: Wildcat

Ground Elevation: 1352'

Projected Depth: 7,000'

Contractor: Thomson Drilling Canada Ltd. Rig No. 19

MAIL TO:

Oil & Gas Journal
Petroleum Information Exchange
Oilweek
Daily Oil Bulletin
Well Information Services
Northwestern District Oil Scouts
~~XXXXXXXXXXXX~~
G. B. Armstrong
M. Thomas
D. Bohun

G.E. Blue
G.E. Blue,
Oil Conservation Engineer,
Department of Indian Affairs and
Northern Development,
Oil and Mineral Division,
P.O. Box 1500,
YELLOWKNIFE, N.W.T.

Drilling Authority No.
Nº de l'autorisation de forage
Date issued
Date de délivrance

✓ 52-20-2 (7-71)

TIFCO EXPLORATION LTD.

SUITE 1411-EXECUTIVE PLACE
727 8th AVENUE S.W.,
CALGARY 1, ALBERTA

313. 253-2514

H. B. TIFFIN
Consultant Geologist
RES. 289-1284

WELL REPORT

CANDEX AMOCO SHELL LITTLE BEAR I-70

64° 39' N, 125° 56' W.

Norman Wells, N.W.T.

May 15, 1972

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SECTION I - SUMMARY OF WELL DATA

- (a) Candex Amoco Shell Lit^{tle} Bear I-70
- (b) Shell Canada Limited and Shell Explorer Ltd.
- (c) Candex Development Limited
500 Crown Trust Building
407-8th Avenue S.W.
Calgary 2, Alberta
- (d) Unit: 1 Section: 70 Grid 64-40 - 125-45
Latitude: 64° 39' 44.27", Longitude: 125° 56' 35.09"
Unique Well Identifier: 300I706440125450
Universal Well Location Ref: Lat. N 64.66230°, Long. 125.94308°
- (e) 686' N. & 230' W. Centre I-70-N Target Area.
- (f) Permit No. 3413
- (g) Thomson Drilling Rig 19, T 32.
- (h) Drilling Authority No. 594 issued April 25, 1972
- (i) Wildcat
- (j) Elevation: Ground 1352', K.B. 1365.6'
- (k) Spudded: 7:45 p.m. April 25, 1972
- (l) Completed Drilling: May 10, 1972
- (m) Total Depth: 7020' (driller) 7021' (logger)
- (n) Well Status: Dry & Abandoned
- (o) Rig Released: Midnight - May 15, 1972
- (p) Hole Sizes: Surface - 755' 12 1/4"
755 - 7020' 8 3/4"
- (q) Casing: Ran 21 jts. 9 5/8" 32.3# H-40 ST & C Casing.
Landed @ 755' K.B. with 450 sack cement + 2.5% CaCl₂
Plug down 6:15 p.m. April 27, 1972

SECTION II - GEOLOGICAL SUMMARY

CANDEX AMOCO SHELL LITTLE BEAR I-70

(a) Formation Tops:

<u>Formation:</u>	<u>Sample</u>	<u>E-Log</u>	<u>Datum</u>
Tertiary	Surface	Surface	+ 1366
Cretaceous			
Little Bear	2740	2782	- 1416
Slater River	4440	4425	- 3059
Sans Sault	5180	5310	- 3944
Upper Devonian			
Imperial	5890	5886	- 4520
Jungle Ridge Lentil	6345	6348	- 4982
Canyon Creek Lentil	6960	6975	- 5609
Total Depth: Driller		7020	- 5654
Schlumberger		7021	- 5655

- (b) Cored Intervals: No cores were cut.
- (c) Core Descriptions: No cores were cut
- (d) Sample Descriptions: cont'd.

0 - 60	Missing
60 - 90	<u>Shale</u> - medium grey and brownish grey, soft, bentonitic micromicaceous shale, scattered carbonaceous flecks and minor amounts silty interbeds.
90 - 100	Missing
100 - 430	<u>Shale</u> - shale as above.
430 - 760	Missing
760 - 1000	<u>Shale</u> - medium - dark grey, soft, bentonitic, micromicaceous shale, scattered traces carbonaceous flecks and silty interbeds, minor amounts ironstone nodules.
1000 - 1180	<u>Shale</u> - medium - dark grey and brownish grey, soft, bentonitic, micromicaceous shale, in part silty, scattered carbonaceous flecks.
1180 - 1320	<u>Shale</u> - shale as above, scattered traces pyrite and black chert pebbles.
1320 - 1410	<u>Shale</u> - medium to dark grey, soft, bentonitic, micaceous shale, moderate amounts silty interbeds. Scattered trace black chert pebbles.
1410 - 1560	<u>Shale</u> - shale as above, trace pyrite and trace black chert pebbles.
1560 - 1800	<u>Shale</u> - medium grey, soft, bentonitic, micaceous shale, in part silty, rare black chert pebbles and pyrite.
1800 - 1920	<u>Shale</u> - shale as above, (KCl added to mud - looks like chert in red shale matrix).
1920 - 1980	<u>Shale</u> - medium to dark grey shale as above.
1980 - 2130	<u>Shale</u> - shale as above becoming light brownish grey and highly silty (very little sample being recovered)
2130 - 2160	<u>Shale</u> - light to medium brownish grey, bentonitic, soft, highly silty and sandy shale.
2160 - 2300	<u>Shale</u> - shale as above becoming highly silty.
2300 - 2380	<u>Shale</u> - medium to dark grey, bentonitic, micaceous shale; in part silty, minor slightly calcareous sandy interbeds, trace fine disseminated pyrite, scattered trace pale grey micaceous bentonite.

- 2380 - 2430 Shale and Sandstone - shale as above, minor amounts pale grey, very fine to fine grained, angular, medium sorted, slightly kaolinitic and calcareous, salt and pepper sandstone, in part slightly siliceous, trace pyrite.
- 2430 - 2480 Shale - dark brownish grey, soft, bentonitic, micaceous shale, in part silty, in part black and carbonaceous, scattered trace white - pale grey bentonite.
- 2480 - 2520 Shale and Coal - shale as above, minor amounts coal.
- 2520 - 2740 Shale - medium grey, soft, bentonitic, micaceous shale, in part silty; trace black chert pebbles and pyrite. Scattered trace white to pale grey bentonite.
- LITTLE BEAR 2782' (-1416')
- 2740 - 2820 Shale and Sandstone - shale as above, minor amounts pale grey, very fine grained, subangular, medium sorted, argillaceous, kaolinitic, salt and pepper sandstone, in part carbonaceous, scattered trace pale grey bentonite.
- 2820 - 2840 Siltstone - pale grey, argillaceous, kaolinitic, siltstone, in part salt and pepper.
- 2840 - 2880 Siltstone, Shale and Sandstone - siltstone as above, moderate amounts medium grey, bentonitic, micaceous shale, in part silty and sideritic, minor amounts pale grey, very fine grained, quartzose, sub-angular, well sorted, friable, slightly argillaceous and kaolinitic sandstone, trace dead brown oil stain, no visible porosity.
- 2880 - 2890 Sandstone and Siltstone - sandstone as above becoming salt and pepper, moderate amounts siltstone as above.
- 2890 - 2920 Siltstone - pale brownish grey, argillaceous - shaley, in part salt and pepper siltstone, in part carbonaceous.
- 2920 - 2940 Siltstone, Shale and Coal - siltstone as above, moderate amounts dark grey, sub-fissile, micaceous shale, minor amounts coal.
- 2940 - 2960 Shale - shale as above and light brownish grey, highly silty shale.
- 2960 - 2990 Shale and Siltstone - shale as above, in part carbonaceous and light brownish grey, argillaceous - shaley siltstone, in part sideritic.

- 2990 - 3010 Shale, Siltstone and Sandstone - shale and siltstone as above, trace pale grey, very fine grained, slightly argillaceous, subangular, medium sorted, salt and pepper sandstone, with poor to fair porosity, no shows.
- 3010 - 3050 Shale and Siltstone - medium to dark grey, sub-fissile, micaceous shale, in part silty and carbonaceous, moderate amounts light brownish grey, argillaceous - shaley siltstone.
- 3050 - 3060 Shale, Siltstone and Coal - shale and siltstone as above, moderate amounts coal.
- 3060 - 3080 Shale and Coal - shale as above, silty and sideritic, moderate amounts coal.
- 3080 - 3120 Shale and Siltstone - medium to dark grey, sub-fissile, micaceous shale, in part silty and carbonaceous, minor amounts pale grey, argillaceous to shaley siltstone.
- 3120 - 3150 Shale and Coal - shale as above, minor amounts coal.
- 3150 - 3220 Shale, Coal and Mudstone - shale and coal as above, moderate amounts dirty white, micaceous, silty mudstone.
- 3220 - 3250 Shale - dark grey, micaceous, slightly silty shale, in part pyritic.
- 3250 - 3260 Shale - shale as above, in part sideritic.
- 3260 - 3270 Shale - shale as above, in part medium grey, silty and glauconitic.
- 3270 - 3290 Shale and Sandstone - shale as above, minor amounts light grey, fine to medium grained, argillaceous, kaolinitic, angular, poorly sorted sandstone, in part glauconitic.
- 3290 - 3310 Sandstone - light grey and brown, very fine grained, medium to highly argillaceous, salt and pepper sandstone.
- 3310 - 3330 Sandstone, Shale and Chert - sandstone as above, moderate amounts dark grey, sub-fissile, micaceous shale, traces black chert fragments.
- 3330 - 3350 Sandstone - brown and pale grey, fine grained, sub-angular, medium sorted salt and pepper sandstone, in part sideritic & argillaceous, in part friable, no visible stain or fluorescence, poor to fair porosity, trace chert pebbles.

- 3350 - 3360 Sandstone - sandstone as above becoming light grey and fine to medium grained, fair porosity, no shows.
- 3360 - 3370 Sandstone - sandstone as above becoming light grey and brown, very fine grained, sideritic, argillaceous and tight.
- 3370 - 3390 Shale - medium to dark grey, fissile, micaceous, shale.
- 3390 - 3420 Shale - shale as above with few light grey silty interbeds.
- 3420 - 3430 Shale - dark grey, fissile, micaceous shale with scattered coal and carbonaceous veining.
- 3430 - 3490 Shale - shale as above in part medium grey and silty.
- 3490 - 3580 Shale - medium grey, micaceous, sub-fissile, silty shale, few highly silty interbeds, trace pyrite and coal.
- 3580 - 3610 Sandstone - pale grey, fine to medium grained, argillaceous, kaolinitic, sub-angular, medium sorted, carbonaceous, salt and pepper sandstone.
- 3610 - 3630 Sandstone and Shale - sandstone as above becoming very fine to fine grained, moderate amounts medium to dark grey, micaceous shale, in part silty.
- 3630 - 3780 Shale - shale as above, few silty interbeds, trace coal and pyrite.
- 3780 - 3810 Shale - medium grey, micaceous, silty shale, few highly silty interbeds, scattered trace pale greenish grey bentonite.
- 3810 - 3820 Shale, Coal and Bentonite - medium to dark grey, fissile, micaceous shale; moderate amounts coal, minor amounts pale greenish grey bentonite.
- 3820 - 3860 Shale and Bentonite - dark grey, sub-fissile, micaceous, carbonaceous shale with thin sandy and silty interbeds. Minor amounts pale greenish grey carbonaceous, silty bentonite.
- 3860 - 3910 Shale - shale as above (KCl and mica added to mud - hole taking fluid).
- 3910 - 3920 Sample Missing.
- 3920 - 3930 Siltstone and Shale - light brownish grey, shaley siltstone and medium grey, highly silty shale.

- 3930 - 3970 Samples Missing - losing fluid at approximately 30 barrels per hour - running short of water - added lost circulation material - stuck in hole.
- 3970 - 3980 Siltstone and Shale - brownish grey, shaley siltstone, in part carbonaceous with moderate amounts medium grey, highly silty shale.
- 3980 - 4050 Shale and Siltstone - shale as above, minor amounts siltstone as above.
- 4050 - 4060 Shale and Siltstone - shale as above, minor amounts light grey, slightly calcareous, kaolinitic, argillaceous, salt and pepper siltstone.
- 4060 - 4080 Siltstone - light - medium grey, argillaceous - shaley, kaolinitic, slightly calcareous, salt and pepper siltstone.
- 4080 - 4100 Siltstone and Shale - light grey and brownish grey, argillaceous, kaolinitic, slightly calcareous, salt and pepper siltstone, moderate amounts medium brownish grey, silty shale.
- 4100 - 4140 Siltstone and Shale - siltstone as above, with minor to moderate amounts shale as above. Rare inoceramus fragments, scattered ironstone fragments.
- 4140 - 4250 Siltstone and Shale - siltstone as above becoming very slightly calcareous, minor to moderate amounts shale as above.
- 4250 - 4260 Shale - medium brownish grey, micaceous, somewhat blocky, moderately-highly silty shale.
- 4260 - 4290 Shale and Sandstone - shale as above with minor amounts light brownish grey, fine grained, argillaceous, kaolinitic, very slightly calcareous, sub-angular, medium sorted sandstone.
- 4290 - 4300 Shale - medium grey, highly silty and sandy shale.
- 4300 - 4360 Sandstone - light grey, very fine grained, argillaceous, kaolinitic, subrounded, well sorted, salt and pepper sandstone.
- 4360 - 4390 Siltstone - sandstone as above grading to siltstone.
- 4390 - 4420 Siltstone and Shale - siltstone as above with moderate amounts medium to dark grey, sub-fissile, micaceous, silty shale.

SLATER RIVER 4425' (-3059')

- 4420 - 4440 Shale and Siltstone - shale as above, moderate amounts
siltstone as above.
- 4440 - 4470 Shale - shale as above, few scattered interbeds
siltstone as above.
- 4470 - 4480 Shale and Siltstone - shale as above, minor amounts
light grey, argillaceous, kaolinitic, salt
and pepper siltstone.
- 4480 - 4520 Shale and Siltstone - medium to dark grey, micro-
micaceous, silty shale, in part carbonaceous.
Trace thin interbeds siltstone as above.
- 4520 - 4540 Shale and Sandstone - shale as above with interbeds
light grey, very fine grained, argillaceous,
kaolinitic, salt and pepper sandstone.
- 4540 - 4600 Shale and Siltstone - shale as above with sandstone
interbeds grading to siltstone, in part
sideritic.
- 4600 - 4710 Shale - medium to dark grey, micaceous, somewhat
blocky, silty shale.
- 4710 - 4790 Shale and Siltstone - shale as above with minor
amounts light to medium grey, argillaceous,
salt and pepper siltstone, in part slightly
carbonaceous. Trace ironstone fragments
and pyrite.
- 4790 - 4930 Shale - shale as above, in part carbonaceous.
- 4930 - 4950 Shale and Siltstone - shale as above, minor amounts
light grey, argillaceous, carbonaceous,
salt and pepper siltstone.
- 4950 - 4960 Shale - shale as above.
- 4960 - 5100 Shale and Siltstone - shale as above with trace -
minor amounts light brownish grey, argillaceous,
salt and pepper siltstone, in part carbonaceous.
- 5100 - 5180 Shale and Siltstone - shale as above with moderate
to minor amounts siltstone as above.
- 5180 - 5250 Shale - dark grey, sub-fissile, micaceous, slightly
silty shale, in part carbonaceous.
- 5250 - 5310 Shale and Siltstone - dark grey, fissile, micromicaceous,
carbonaceous shale, trace thin interbeds
light grey, argillaceous, calcareous siltstone.

SANS SAULT 5310' (-3944')

- 5310 - 5550 Shale - dark grey and in part dark brownish grey, fissile, carbonaceous shale, trace thin calcareous interbeds with white limy specks, scattered traces inoceramus fragments.
- 5550 - 5680 Shale - dark grey, fissile, soft, carbonaceous shale, in part dark brownish grey and slightly calcareous, scattered rare inoceramus fragments.
- 5680 - 5710 Shale and Siltstone - dark grey, fissile, soft, carbonaceous shale, in part dark brownish grey and slightly calcareous, trace scattered inoceramus fragments, bare trace calcareous, glauconitic siltstone stringers.
- 5710 - 5720 Shale - shale as above, in part blocky and carbonaceous, scattered inoceramus fragments.
- 5720 - 5760 Shale and Siltstone - dark grey, sub-fissile, micaceous, very slightly calcareous shale, trace light grey, argillaceous, micaceous siltstone stringers.
- 5760 - 5790 Shale and Siltstone - shale as above with moderate amounts pale greenish grey, argillaceous, micaceous, slightly glauconitic and kaolinitic siltstone.
- 5790 - 5820 Shale and Siltstone - shale as above, minor amounts siltstone as above.
- 5820 - 5840 Shale and Siltstone - dark grey to black, sub-fissile, micromicaceous, carbonaceous shale, in part very slightly calcareous, moderate amounts light greenish grey, argillaceous, calcareous siltstone, with trace glauconite. Rare inoceramus fragments.
- 5840 - 5890 Shale and Siltstone - medium to dark grey in part brownish grey shale as above; minor to moderate amounts pale greenish grey, soft, micaceous, argillaceous siltstone with trace glauconite.

IMPERIAL 5886' (-4520')

- 5890 - 6030 Shale - medium to greenish grey, sub-fissile, soft micaceous, bentonitic shale, in part silty.
- 6030 - 6040 Shale - shale as above with moderate amounts dark grey, fissile, micaceous shale, in part carbonaceous.

- 6040 - 6060 Shale - medium greenish grey shale as above, trace silty and limy thin interbeds.
- 6060 - 6160 Shale and Siltstone - shale as above, trace to minor amounts buff and light greenish grey, calcareous, argillaceous siltstone, in part carbonaceous, scattered ironstone fragments.
- 6160 - 6180 Shale - medium to greenish grey, in part brownish grey, micaceous, slightly silty, shale, in part slightly calcareous; brown silty ironstone fragments.
- 6180 - 6200 Shale - medium to greenish grey, micaceous, somewhat splintery, slightly silty shale, in part slightly calcareous
- 6200 - 6210 Sample missing.
- 6210 - 6240 Shale - medium greenish grey, micaceous, somewhat splintery, slightly silty shale, in part very slightly calcareous.
- 6240 - 6270 Shale - shale as above, in part pyritic, rare phosphate pellets, trace light grey slightly calcareous, slightly glauconitic, salt and pepper siltstone stringers.
- 6270 - 6340 Shale - shale as above, scattered ironstone fragments.
JUNGLE RIDGE 6348 (-4982)
- 6340 - 6350 Shale and Limestone - shale as above, minor amounts buff and brown crypto-crystalline, argillaceous to shaley, dense limestone.
- 6350 - 6360 Limestone - pale grey and buff, cryptocrystalline, slightly argillaceous, sub-chalky limestone.
- 6360 - 6380 Limestone - limestone as above, in part dark brownish grey, dense, hard and more argillaceous.
- 6380 - 6430 Limestone - pale buff, medium greenish and brownish grey, cryptocrystalline, argillaceous, dense limestone.
- 6430 - 6460 Limestone - grey buff, cryptocrystalline, argillaceous, slightly silty, dense limestone with darker shaley interbeds.
- 6460 - 6490 Limestone and Shale - limestone as above, moderate amounts medium to brownish grey, blocky, limey and calcareous shale.

- 6490 - 6510 Shale and Limestone - medium brownish and greenish grey, blocky, calcareous shale, minor amounts limestone as above.
- 6510 - 6560 Shale - medium to dark greenish grey, micaceous, sub-fissile, shale, in part slightly calcareous and in part silty.
- 6560 - 6570 Shale and Siltstone - shale as above, moderate amounts medium grey and brown, micaceous, shaley, calcareous siltstone.
- 6570 - 6630 Shale and Siltstone - medium to dark greenish grey, micaceous, slightly splintery shale, minor amounts siltstone as above.
- 6630 - 6660 Shale - medium greenish grey shale as above, in part silty.
- 6660 - 6720 Shale - shale as above becoming more silty and slightly calcareous.
- 6720 - 6920 Shale - medium to dark greenish grey, micaceous, slightly splintery shale, in part silty and slightly calcareous.
- 6920 - 6960 Shale - shale as above becoming more silty and calcareous.
- CANYON CREEK 6975' (-5609)
- 6960 - 6990 Shale and Siltstone - shale as above, minor amounts medium brownish grey, argillaceous - shaley, calcareous, micaceous siltstone, carbonaceous remains in bedding planes.
- 6990 - 7000 Shale and Siltstone - shale as above, moderate amounts siltstone as above.
- 7000 - 7020 Siltstone and Shale - medium grey brown, very slightly calcareous siltstone as above, moderate amounts shale as above, trace ironstone fragments.

Total Depth:	Driller	7020'	(-5654)
	Schlumberger	7021'	(-5655)

SECTION IV - LOGSCANDEX AMOCO SHELL LITTLE BEAR I-70

	<u>Interval</u>	<u>Scale</u>
Dual Induction Laterolog	754 - 7015	2"
	754 - 7015	5"
BHC Sonic - Gamma Ray	50 - 7019	2"
	50 - 7019	5"
Sidewall Neutron Porosity	754 - 7020	5"
Formation Density	754 - 7020	5"

DAILY PROGRESS REPORTSCANDEX AMOCO SHELL LITTLE BEAR I-70

<u>April 26/72</u>	Depth 8:00 a.m.: 222 Progress: 222 Mud Wt.: 8.8 Vis.: 34	Operation: Drilling Hrs. on Bottom: 11 Additives: 40 sax Gel 15 sax Sawdust 100# Caustic
<u>April 27/72</u>	Depth 8:00 a.m.: 755 Progress: 533 Mud Wt.: 8.9 Vis.: 45	Operation: Circ. casing Hrs. on bottom: 12 1/4 Additives: nil
<u>April 28/72</u>	Depth 8:00 a.m.: 755 Progress: nil	Operation: W.O.C. Hrs. on Bottom: nil
<u>April 29/72</u>	Depth 8:00 a.m.: 755 Progress: nil	Operation: Pressure Up Hrs. on bottom: nil
<u>April 30/72</u>	Depth 8:00 a.m.: 2046 Progress: 1291 Mud Wt.: 8.4 Vis.: 28	Operation: Drilling Hrs. on Bottom: 17 3/4 Additives: 4100# KCl 26# MF-1
<u>May 1/72</u>	Depth 8:00 a.m.: 3233 Progress: 1187 Mud Wt.: 8.4 Vis.: 28	Operation: Drilling Hrs. on Bottom: 17 3/4 Additives: 1300# KCl 22# MF-1
<u>May 2/72</u>	Depth 8:00 a.m.: 3845 Progress: 612 Mud Wt.: 8.3 Vis. 28	Operation: Drilling Hrs. on Bottom: 16 Additives: 1200# KCl 14# MF-1 800# Super Lube 17 gals HME
<u>May 3/72</u>	Depth 8:00 a.m.: 4134 Progress: 289 Mud Wt.: 8.7 Vis. 30 W.L.: 12.8 F.C.: 1/32 Gels: 0/0 pH: 10	Operation: Drilling Hrs. on Bottom: 12 1/2 Additives: 700# Super Visbestos 350# Sta Flow 200# Caustic 1000# Super Lube 15 gals. HME 2500# Gel 100# Soda Ash 20 Sax Sawdust 850# Micatex 250# Walnut Hulls 25# Stearite

May 4/72 Depth 8:00 a.m.: 4505
 Progress: 371
 Mud Wt.: 8.8
 Vis.: 33
 W.L.: 12.4
 F.C.: 1/32
 p.H.: 9.8

Operation: Drilling
 Hrs. on Bottom: 22 1/4
 Additives: 750# Super Lube
 17 1/2 gals. HME
 500# Gel
 100# Sta Flow
 250# Super Visbestos

May 5/72 Depth 8:00 a.m.: 4711
 Progress: 206
 Mud Wt.: 8.6
 Vis.: 35
 W.L.: 10.8
 F.C.: 2/32
 p.H.: 10.0

Operation: Tripping
 Hrs. on Bottom: 12 3/4
 Additives: 1100# Gel
 150# Sta Flow
 400# Super Visbestos
 150# Caustic

May 6/72 Depth 8:00 a.m.: 5126
 Progress: 415
 Mud Wt.: 8.8
 Vis.: 50
 W.L.: 13.4
 F.C.: 2/32
 p.H.: 9.6

Operation: Tripping
 Hrs. on Bottom: 17 1/2
 Additives: 550# Super Lube
 1600# KCl
 150# Sta Flow
 500# Gel
 250# Super Visbestos
 3 gals. HME

May 7/72 Depth 8:00 a.m.: 5720
 Progress: 594
 Mud Wt.: 9.2
 Vis.: 105
 W.L.: 15.6
 F.C.: 2/32
 p.H.: 10

Operation: Drilling
 Hrs. on Bottom: 20
 Additives: 400# Super Visbestos
 400# Super Lube
 150# Sta Flow
 100# Caustic
 1300# KCl

May 8/72 Depth 8:00 a.m.: 6190
 Progress: 470
 Mud Wt.: 9.1
 Vis.: 41
 W.L.: 23
 F.C.: 2/32
 p.H.: 10

Operation: Drilling
 Hrs. on Bottom: 18
 Additives: 150# Caustic
 3 gals. HME
 300# Super Lube
 600# Gel
 150# Super Visbestos

May 9/72 Depth 8:00 a.m.: 6438
 Progress: 248
 Mud Wt.: 8.9
 Vis.: 52
 W.L.: 18
 F.C.: 2/32
 p.H.: 10.0

Operation: Drilling
 Hrs. on Bottom: 14 1/2
 Additives: 1600# KCl
 400# Soda Ash
 600# Super Lube
 3 gals. HME
 250# Super Visbestos
 100# Sta Flow
 100# Caustic

May 10/72 Depth 8:00 a.m.: 6710
 Progress: 272
 Mud Wt.: 8.7
 Vis.: 47
 W.L.: 27
 F.C.: 2/32
 p.H.: 10

Operation: Drilling
 Hrs. on Bottom: 14 3/4
 Additives: 800# KCl
 150# Caustic
 600# Super Lube
 3 gals. HME
 100# Sta Flow

May 11/72 Depth 8:00 a.m.: 7020
 Progress: 310
 Mud Wt.: 9.0
 Vis.: 62
 W.L.: 20
 F.C.: 4/32
 p.H.: 10.5

Operation: Waiting on Schlumberger
 Hrs. on Bottom: 12 3/4
 Additives: 800# KCl
 300# Super Lube
 200# Sta Flow
 550# Super Visbestos
 150# Caustic

May 12/72 Depth 8:00 a.m. 7020
 Progress: nil

Operation: Logging
 Hrs. on Bottom: nil

May 13/72 Depth 8:00 a.m. 7020
 Progress: nil

Operation: Logging
 Hrs. on Bottom: nil

BIT RECORDCANDEX AMOCO SHELL LITTLE BEAR I-70

<u>No.</u>	<u>Size</u>	<u>Type</u>	<u>Jets</u>	<u>From</u>	<u>To</u>	<u>Ftge.</u>	<u>Hrs.</u>	<u>Cond.</u>
1A	12 1/4	OSC3	1/18 2/2	0	755	755	23	44I
1	8 3/4	X3A	3/11	755	2325	1570	32-1/4	81I
2R	8 3/4	X3A	2/11 1/10	2325	3573	1248	20-1/2	81I
3	8 3/4	J33	2/11 1/10	3573	4711	862	57-1/4	12T
4	8 3/4	X18	2/9 1/10	4711	5126	415	17-1/2	48I
5	8 3/4	XIG	2/9 1/10	5126	6221	1095	39-3/4	64I
6	8 3/4	S44	2/10 1/9	6221	6641	420	24	68I
7	8 3/4	S44	2/10 1/9	6641	7020	379	16-1/4	34I

DEVIATION SURVEYSCANDEX AMOCO SHELL LITTLE BEAR I-70

<u>Depth</u>	<u>Degrees</u>
65	1 1/4
90	1 1/4
120	1 1/4
210	1
300	1/2
410	1/4
507	1/4
603	1/4
666	1/4
975	1/4
1256	1/4
1535	3/4
1845	1/2
2150	3/4
2325	1/2
2628	1/2
2815	1/4
3125	1
3415	1 1/2
3533	1 1/4
3790	1 1/2
4070	1 1/2
4350	1 3/4
4666	1 3/4
4710	2
5000	2
5120	1 1/4
5410	1 3/4
5818	3
5923	3
6120	2 3/4
6193	3
6509	2 7/8
6640	2 3/4
6990	1 7/8

SECTION III

(a) Report of Drill Stem Tests:

There were no drill stem tests run on Candex Amoco Shell Little Bear I-70

(b) Casing Record:

Ran 21 jts. 9 5/8", 32.3#, H-40 ST&C Casing. Landed at 755' K.B. with 450 sax cement + 2.5% CaCl_2 . Plug down 6:15 p.m. April 27, 1972

(d) Mud Report:

Mud Inventory attached

(f) Abandonment Plugs:

Plug #1: 7020 - 6900 Cement with 75 sacks. No feel
Plug #2: 5850 - 5700 Cement with 100 sacks + 3% CaCl_2 . Felt after 8 hrs.
@ 5690'
Plug #3: 4400 - 4250 Cement with 100 sax + 3% CaCl_2 . Felt after 8 hrs.
@ 4230'
Plug #4: 800 - 700 Cement with 75 sacks + 3% CaCl_2 . Felt @ 710' after
8 hrs.

(g) Lost Circulation Zones:

No lost circulation zones

(h) Report of Blowouts:

There were no blowouts on the Candex Amoco Shell Little Bear I-70

SECTION V

Analyses - There were no analyses taken on the Candex Amoco Shell Little Bear I-70 well.

CANDEX-AMOCO-SHELL LITTLE BEAR I-70MUD INVENTORYDescriptionUsed

Barite	-
Gel	85 sax
Caustic	21 sax
KCL	135 sax
MF-1	34 sax
HME	60 gal
Super Lube Flow	106 sax
Soda Ash	6 sax
Super Visbestos	45 sax
Sta-flow	18 sax
Sawdust	1000 sax
Micatex (Coarse)	17 sax
Walnut Hulls	5 sax
Kwik-Seal	-
Fibertex	-
Calcium Chloride	17 sax
Cement (Oilwell)	1080 sax

WELL HISTORY LOG

Well Name: Candex Amoco Shell Little Bear

I-70

Location: 64° 39' N, 125° 56' W

Operator: Candex Development Limited

Elevation: Ground: 1352 KB. 1365.6

Spud Date: 7:45 PM April 25/72

Finished Drilling: May 10, 1972

Status: Dry & Abandoned

Total Depth: 7020 (Driller)

Bottom Formation: Upper Devonian - Imperial

Geologist: H. B. Tiffin

Surface Casing: Ran 21 jts. 9 5/8" H40 ST&B csg. Landed @ 755 KB with 450 sac cement + 2.5% calcium chloride. Plug down 6:15 PM April 27/72.

Logs: Dual Ind. Lat. Log
BHC Sonic-Gamma
Sidewall Neutron-Gamma
Formation Density

Cores: None

DST's: None

—LEGEND—

	Breccia		Dolomite, streak
	Conglomerate		Sandy
	Granite Wash		Silty
	Sandstone		Calcareous
	Siltstone		Dolomitic
	Shale, light color		Anhydritic
	Shale, med color		Gypsiferous
	Shale, dark color		Chert, light & dark
	Shale, black		Argillaceous
	Marlstone		Glaucous
	Limestone		Salt Cast
	Dolomite		Nodules
	Anhydrite		Bioclastic or Frag.
	Gypsum		Oolites
	Salt		Pellets
	Coal		Pyrite
	Glacial Till		Fossils
	Igneous		Carbonaceous
	Volcanic		Earthy
	Metamorphic		Chalky
	Marl, limy		Lithographic
	Marl, dolomitic		Cryptocrystalline
	Limestone, streak		No Samples

	POR	GOOD	>20%
	POR	FAIR	12-20%
	POR	POOR	6-12%
	POR	TRACE	<6%

	GRAIN SIZE	VERY FINE
	GRAIN SIZE	FINE
	GRAIN SIZE	MEDIUM
	GRAIN SIZE	COARSE
	GRAIN SIZE	VERY COARSE

- Oil, heavy stain
- Oil, med, poor or spotty stain
- Oil, light, questionable stain
- D Oil, dead or asphaltic
- † Gas, (positive test)
- W Water, (positive test)

WELL HISTORY LOG

WELL NAME: Candex Amoco Shell Little Bear I-70

DATE: April 25/72

INTERVAL SHOWN: Surface - 400

PAGE NO. _____

[illegible]

WELL HISTORY LOG

WELL NAME: Candex Amoco Shell Little Bear I-70

DATE: April 26/72

INTERVAL SHOWN: 400 - 800

PAGE NO. 2

CORES & TESTS	POR.	LITHOLOGY	GRAIN SIZE	DEPTH	MIN./FT.	DESCRIPTION & REMARKS
				0	5 10 15 20 25	
		— c		400		sh aa
		— "		480		
		— c				Samples missing
				500		
				580		
				600		
				700		
				800		

9 5/8" casing shoe

WELL HISTORY LOG

WELL NAME: Candex Amoco Shell Little Bear I-70

DATE: April 29/72

INTERVAL SHOWN: 800 - 1200

PAGE NO. 3

CORES & TESTS	POR.	LITHOLOGY	GRAIN SIZE	DEPTH	MIN. / FT.					DESCRIPTION & REMARKS
					5	10	15	20	25	
			c	800						
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			c							
			"							
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WELL HISTORY LOG

WELL NAME: Candax Amoco Shell Little Bear I-70

DATE: April 29/72

INTERVAL SHOWN: 1200 - 1600

PAGE NO. 4

CORES & TESTS	POR.	LITHOLOGY	GRAIN SIZE	DEPTH	MIN./FT.					DESCRIPTION & REMARKS
					0	5	10	15	20 25	
		"P		1200						
		"C								
		"								
		"C								
		"P								
		"C								
		"								
		"C								
		"P								
		"C								
		"		1300						
		"C								
		"								sh aa, scat tr pyr & blk
		"								chert pebs
		"								
		"								
		"								
		"								
		"								
		"P		1400						
		"								
		"P								med-dk gy soft bent'c mica
		"								sh, mod amts silty intbds.
		"P								tr pyr & tr blk chert pebs
		"								
		"P								
		"								
		"P								
		"								
		"P		1500						
		"								
		"P								
		"								
		"P								
		"								
		"P								
		"								
		"								med gy soft bent'c mica sh,
		"								in pt silty, rare blk chert
		"P								pebs & pyr
		"		1600						

WELL HISTORY LOG

WELL NAME: Candor Amoco Shell Little Bear I-70

DATE: April 29/72

INTERVAL SHOWN: 1600 - 2000

PAGE NO. 5

[illegible]

WELL HISTORY LOG

WELL NAME: Candex Amoco Shell Little Bear I-70

DATE: April 30/72

INTERVAL SHOWN: 2000 - 2400

PAGE NO. 6

[illegible]

WELL HISTORY LOG

WELL NAME: Candex Amoco Shell Little Bear I-20

DATE: April 30/72

INTERVAL SHOWN: 2400 - 2800

PAGE NO. 2

[illegible]

H.B. TIFFIN, P.Geol., CALGARY, ALBERTA

Telephone: Bus. 263-2514 Res. 289-1284

WELL HISTORY LOG

WELL NAME: Candex Amoco Shell Little Bear I-70

DATE: May 1/72

INTERVAL SHOWN: 2800 - 3200

PAGE NO. 8

[illegible]

WELL HISTORY LOG

WELL NAME: Candex Amoco Shell Little Bear I-70

DATE: May 1/72

INTERVAL SHOWN: 3200 - 3600

PAGE NO. 9

CORES & TESTS	POR.	LITHOLOGY	GRAIN SIZE	DEPTH	MIN./FT. 5 10 15 20 25	DESCRIPTION & REMARKS
				3200		dk gy mica sl silty sh, in pt pyr'c
		"P"				sh aa, in pt sid'c
		"P"				sh aa, in pt med gy silty & glauc'c
		"P"				sh aa, lt gy arg kaol'c A P ss, in pt glauc'c
				3300		lt gy & brn med-h arg salt & pp ss
						ss aa; dk gy sub-fiss mica sh, tr blk chert frags
						brn & pale gy a M salt & pp ss, sid'c & fri, p-fr por
						lt gy ss aa, f por
						lt gy & brn sid'c arg ss med-dk gy fiss mica sh
						sh aa w few lt gy silty intbds
				3400 $1\frac{1}{2}^{\circ}$		dk gy fiss mica sh w scat coal & carb yng
		c				sh aa, in pt med gy & silty
		c				
		c				
		c				
		c				
		c				
		c				
		p		3500		med gy mica sub-fiss silty sh, few h silty intbds, tr pyr & coal
		c				
		p				
		c		$1\frac{1}{4}^{\circ}$		
		p				
		c				
		p				
		c				
		k.c				pale gy arg kaol'c carb a M salt & pp ss
		k.c		3600		

WELL HISTORY LOG

WELL NAME: Cander Amoco Shell Little Bear I-70

DATE: May 1/72

INTERVAL SHOWN: 3600 - 4000

PAGE NO. 10

[illegible]

WELL HISTORY LOG

WELL NAME: Candex Amoco Shell Little Bear I-70

DATE: May 3/72

INTERVAL SHOWN: 4000 - 4400

PAGE NO. 11

CORES & TESTS	POR.	LITHOLOGY	GRAIN SIZE	DEPTH	MIN./FT.	DESCRIPTION & REMARKS
				4000	0 5 10 15 20 25	
						sltst
						sh aa, mnrlt gy salt & pp
				1 1/2°		lt-med gy arg-shaley kaol'c
						sl calc salt & pp sltst
						lt gy & brnsh gy sltst aa,
				4100		mod brnsh gy silty sh
						sltst aa, mnrl-mod amts sh aa,
						rare inoc frags, tr first
						sltst aa becoming v sl calc,
						mnrl-mod amts sh aa
				4200		
						med brnsh gy mica blkgy sh
						sh aa, mnrlt brnsh gy arg
						kaol'c v sl calc a M ss
				4300		
						med gy h silty & sandy sh
						lt gy arg kaol'c r W salt &
						pp ss
				1 1/2°		
						ss aa grading to sltst
				4400		
						sltst aa, mod med-dk gy sh

WELL HISTORY LOG

WELL NAME: Candex Amoco Shell Little Bear I-70

DATE: May 4/72

INTERVAL SHOWN: 4400 - 4300

PAGE NO. 12

[illegible]

WELL HISTORY LOG

WELL NAME: Cander Amoco Shell Little Bear I-70

DATE: May 5/72

INTERVAL SHOWN: 4800 - 5200

PAGE NO. 13

[illegible]

WELL HISTORY LOG

WELL NAME: Cander Amoco Shell Little Bear I-70

DATE: May 6/72

INTERVAL SHOWN: 5200 - 5600

PAGE NO. 14

[illegible]

WELL HISTORY LOG

WELL NAME: Cander Amoco Shell Little Bear I-20

DATE: May 7/72

INTERVAL SHOWN: 5600 - 6000

PAGE NO. 15

CORES & TESTS	POR.	LITHOLOGY	GRAIN SIZE	DEPTH	MIN. / FT.					DESCRIPTION & REMARKS
					0	5	10	15	20	
		C		5600						
		C								
		FC								
		C								
		C								
		C								
		FC								
		C								
		FC								
		C		5700						dk gy soft fiss carb sh, in
		FC								pt dk brnsh gy & sl calc, tr
		C								inoc, tr sltst strgs
		FC								sh aa, in pt blk & carb
		C								dk gy sub-fiss mica v sl
		C								calc sh; tr lt gy arg mica
		FC								sltst strgs
		C								
		C								sh aa, mod ants pale cnsh gy
		C								arg mica sl glauc'e &
		C								kaol'e sltst
		C		5800						sh aa, mnr ants sltst aa
		C								
		FC		3°						dk gy-blk carb sh, in pt v
		C								sl calc, lt cnsh gy sltst
		C								med-dk gy, in pt brnsh gy
		C								sh aa; mnr-mod pale cnsh gy
		C								soft mica arg sltst, tr glauc
		C								
IMPERIAL		C								
5886 (-4520)		C								
		8		5900						med cnsh gy sub-fiss soft
		8								bent'e sh, in pt silty
		8								
		8		3°						
		8								
		8								
		8								
		8								
		8								
		8		6000						

WELL HISTORY LOG

WELL NAME: Candor Amoco Shell Little Bear I-70

DATE: May 7/72

INTERVAL SHOWN: 6000 - 6400

PAGE NO. 16

[illegible]

WELL HISTORY LOG

WELL NAME: Candox Amoco Shell Little Bear I-70

DATE: May 3/72

INTERVAL SHOWN: 6400 - 6800

PAGE NO. 17

[illegible]

WELL HISTORY LOG

WELL NAME: Candex Amoco Shell Little Bear I-70

DATE: May 10/72

INTERVAL SHOWN: 6800 - 7020

PAGE NO. 18

[illegible]

Total Gas		—	T	—
Methane	C ₁	—	1	—
Ethane	C ₂	—	2	—
Propane	C ₃	—	3	—
Iso-Butane & Normal Butane	C ₄	—	4	—
Oil Indicator	$\frac{C_3+C_4}{C_1}$	—	0	—

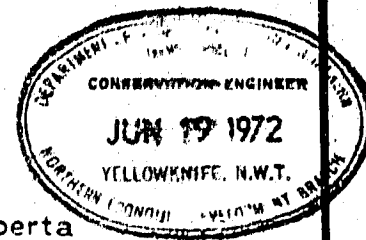
POROSITY

TRACE _____
POOR _____
FAIR _____
GOOD _____
EXCELLENT _____

TELEPHONE
262 2001
A.C. 403

Geological Wellsite Services

1639-17A Street S.E., Calgary 22, Alberta



Operator CANDEX DEVELOPMENT LIMITED Elevation KB 1365.6' GL 1352.0'

CANDEX AMOCO SHELL

Well LITTLE BEAR I-70

64° 39' 44.27" N.

Location 125° 56' 35.09" W.

Field WILDCAT, NORMAN WELLS AREA

Province N.W.T.

Technicians JOHN SCHAFFER, GERALD STEWART

Instrumentation HW #12, HFC#7 TWO MAN SERVICE

① Elevation KB 1365.6' GL 1352.0'

Depth Logged 755' KB To 2020'

Date Logged 4-27-1972 To 5-11-72

Remarks: TOTAL GAS IS MEASURED IN UNITS OF GAS, MULTIPLY SCALE BY 1000.

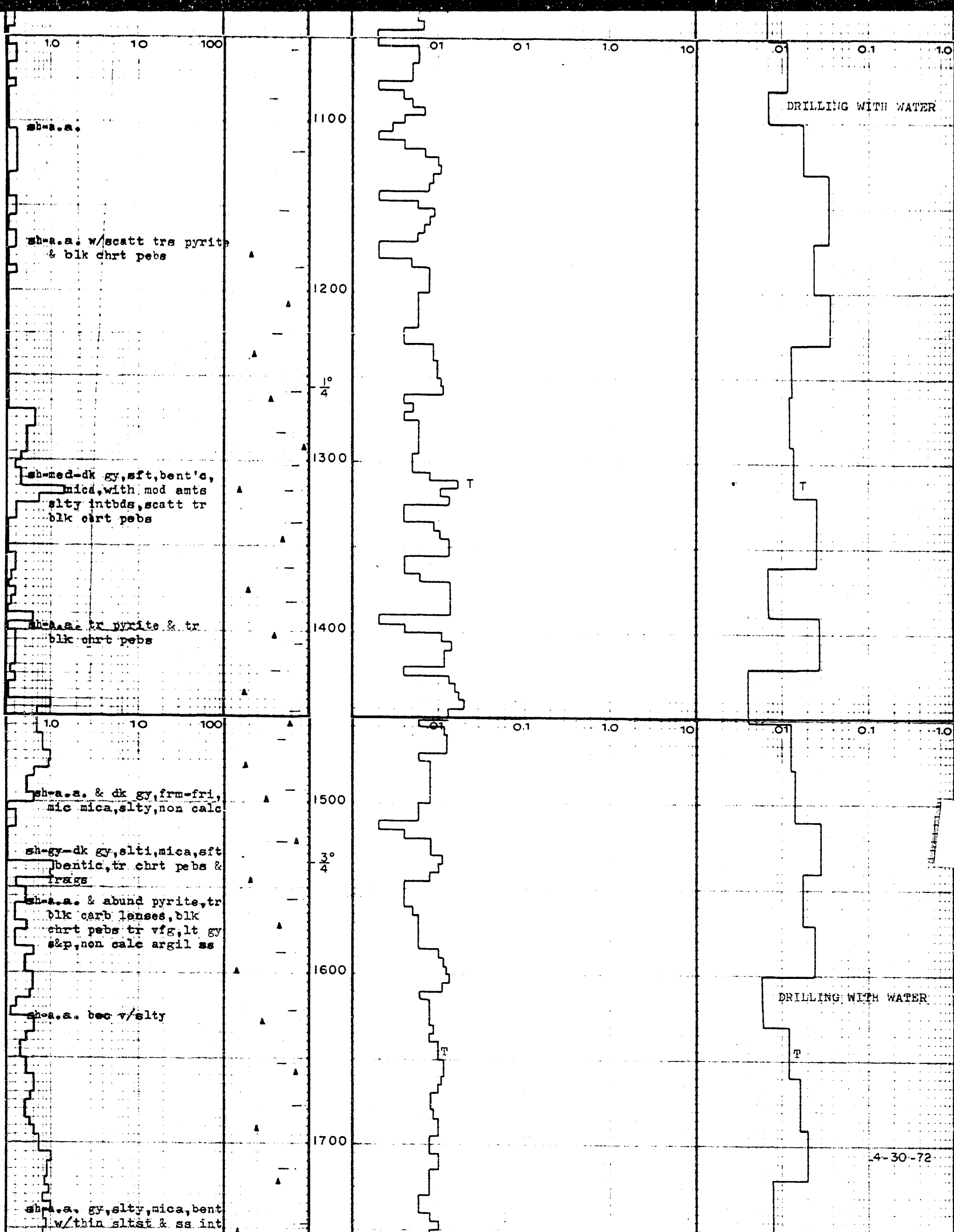
TOTAL
SHOW
EVALUATOR

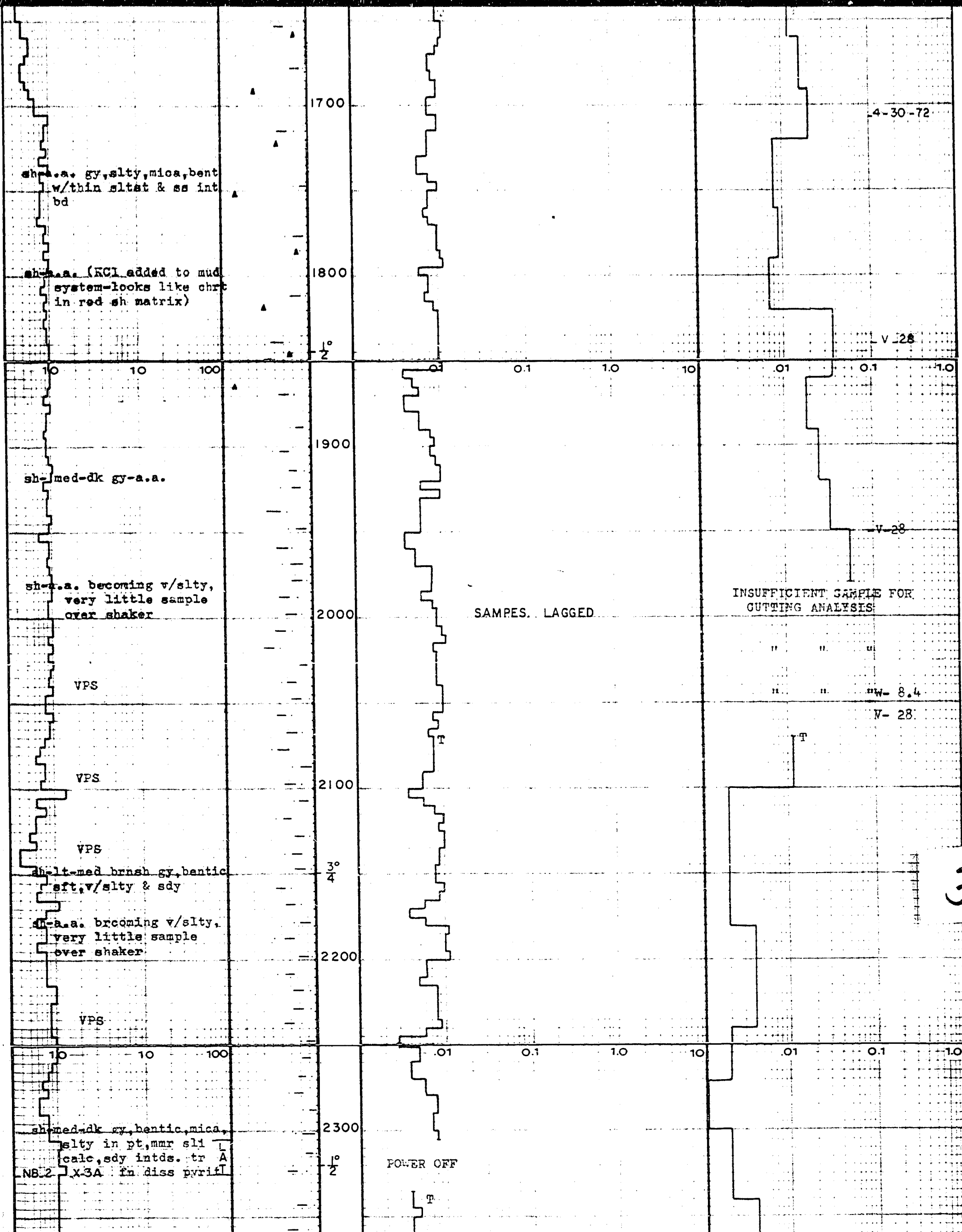
VISUAL
SHOW
INDICATOR

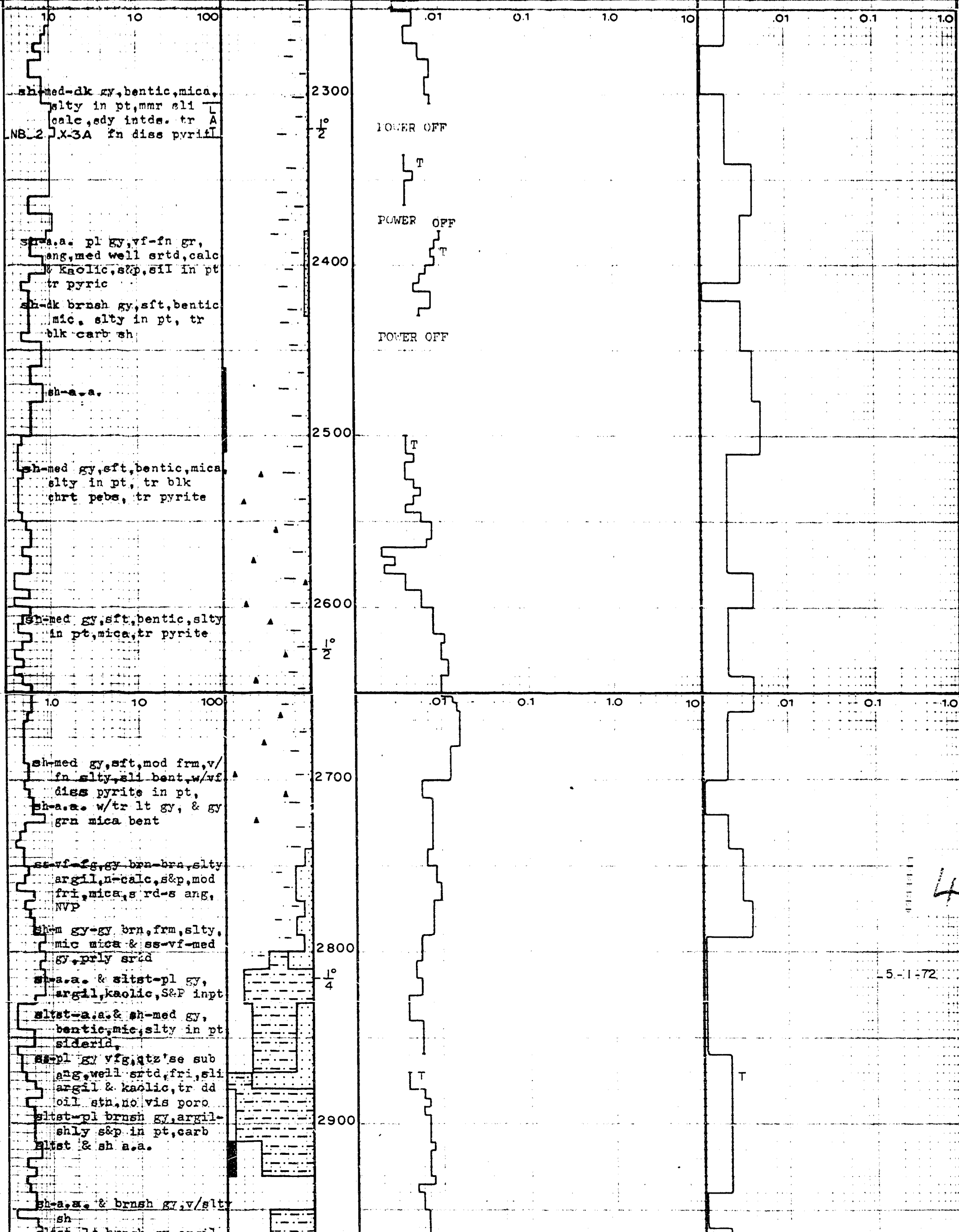
TRACE _____
POOR _____
FAIR _____
GOOD _____
EXCELLENT _____

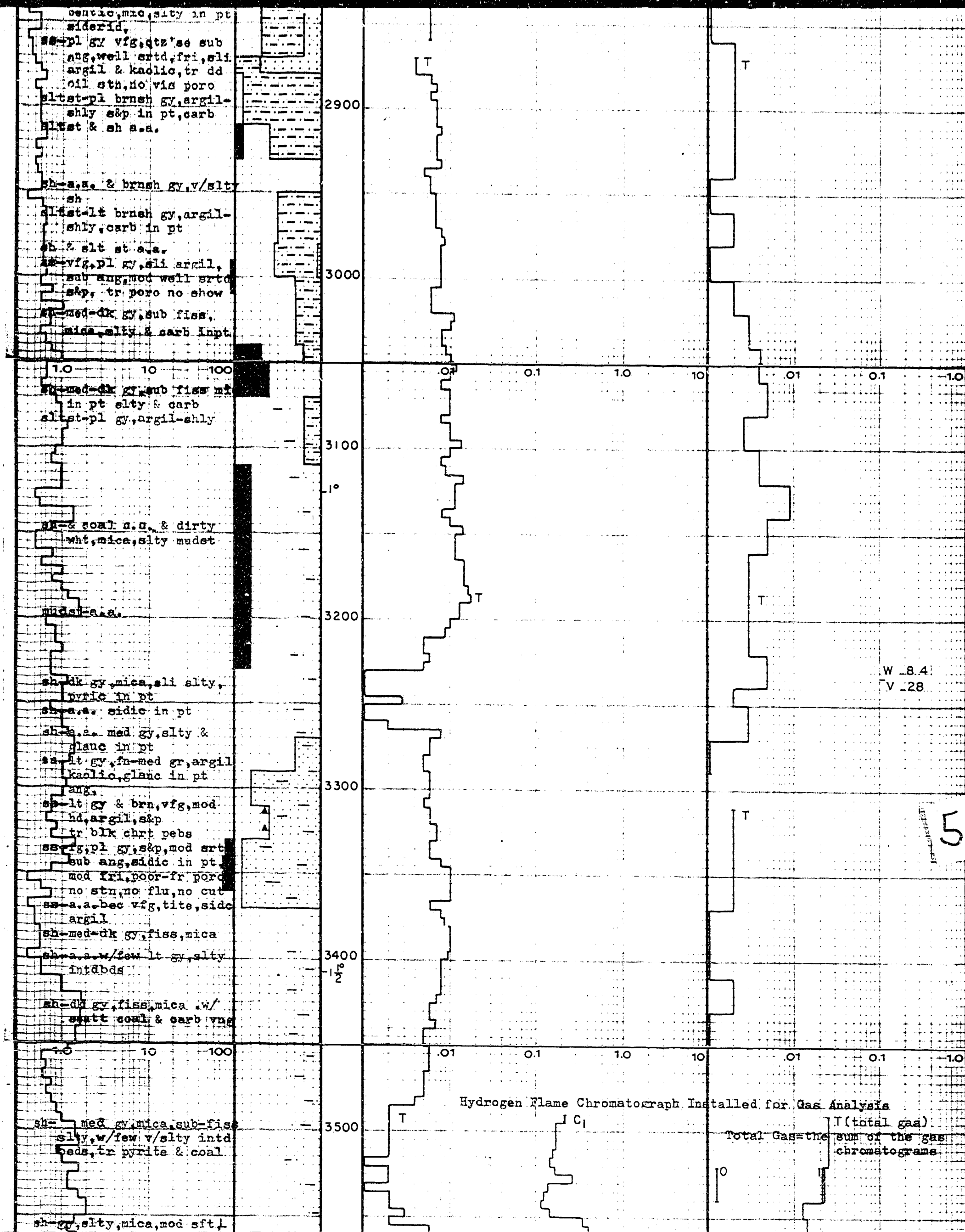
PENETRATION RATE min./ft.		porosity	LITHOLOGY IN PERCENT	DEPTH CORE DS DST	HYDROCARBON DETECTION AND ANALYSIS Reported in Percent by Volume - for ppm. multiply by 10,000										VISUAL SHOW INDICATOR
					DRILLING FLUID				CUTTINGS						
					.01 .1 1.0 10				.01 .1 1.0						
9 7/8" SURFACE CSG LANDED AT 755' DRILLING WITH 8 3/4" BIT					SAMPLES NOT LAGGED										
NB L X 3A					T (total gas)										DRILLING WITH WATER 4-29-72
sh-red-dk gy, sft, bentic, mic mica, w/tr carb incls, tr slty intdbd t. mar first nodes			800												T (total gas)
sh-gy, sft, bentid, gummy, mic mica, v/in slt intd beds			900												
sh-dk gy & brnsh gy, bentic, sft, mic mica, slty in pt, with scatt carb flecks			1000												
			1100												
sh-a.a.					DRILLING WITH WATER										

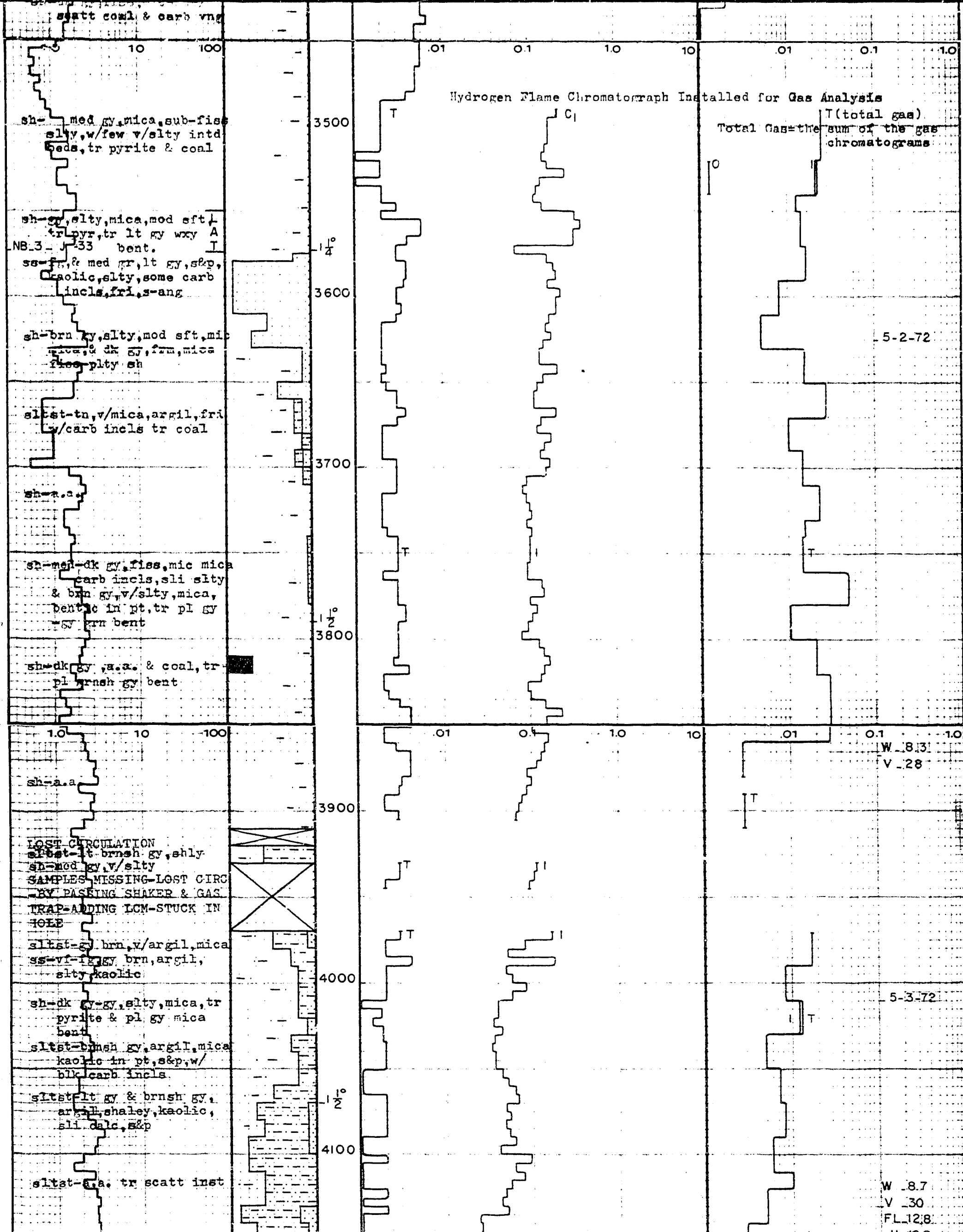
107











scatt coal & carb vng

10 100

.01 0.1 1.0 10 .01 0.1 1.0

Hydrogen Flame Chromatograph Installed for Gas Analysis

T (total gas)
Total Gas = the sum of the gas chromatograms

sh-med gy, mica, sub-fiss
silty, w/few v/silty intd
beds, tr pyrite & coal

3500

sh-gy, silty, mica, mod sft
tr pyr, tr lt gy wxy A
NB.3 - J-33 bent.

3600

sh-brn gy, silty, mod sft, mic
mica, & dk gy, fm, mica
fines, plty sh

siltst-tn, v/mica, argil, fri
gy/carb incls tr coal

3700

sh-a.a.

sh-med-dk gy, fiss, mic mica
carb incls, sli silty
& brn gy, v/silty, mica,
bentic in pt, tr pl gy
-gy brn bent

3800

sh-dk gy, a.a. & coal, tr
pl brnsh gy bent

1.0 10 100

.01 0.1 1.0 10 .01 0.1 1.0

sh-a.a.

3900

LOST CIRCULATION
sh-dk gy, v/silty
SAMPLES MISSING - LOST CIRC
-GY PASSING SHAKER & GAS
TRAP-ADDING LCM-STUCK IN
HOLE

siltst-gy brn, v/argil, mica
ss-vf-ig gy brn, argil,
silty kaolic

4000

sh-dk gy-gy, silty, mica, tr
pyrite & pl gy mica
bent

siltst-brnsh gy, argil, mica
kaolic in pt, s&p, w/
blk carb incls

4100

siltst-lt gy & brnsh gy,
argil, shaley, kaolic,
sli calc, s&p

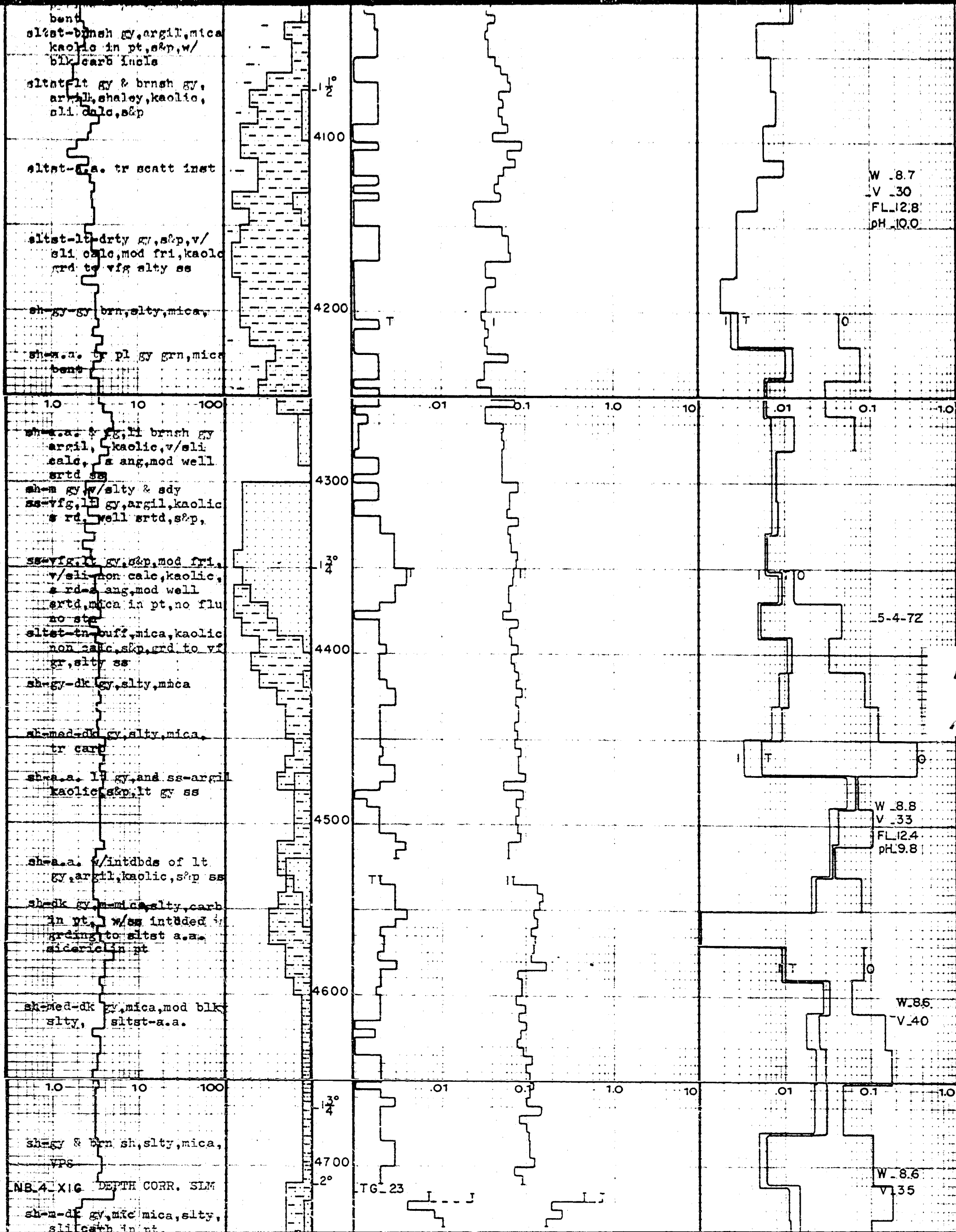
siltst-a.a. tr scatt inst

5-2-72

W 8.3
V 28

5-3-72

W 8.7
V 30
FL 12.8



sh-gy & brn sh, slty, mica,
VPS

NB.4.XIG DEPTH CORR. SIM

sh-m-dk gy, mic mica, slty,
slt carb in pt,
sltst-lt gy, s&p, kaolic,

sltst-lt-med gy, argill, s&p,
slt carb in pt, tr frst
frags & pyrite

sh-dk gy, mod frm, mic mica
mod blk, slty

sh-a.a. w/mmtr ants lt gy
s&p, sltst

sltst-lt gy-tnsh gy, s&p,
argill in pt, mica

sltst-a.a. grd to vfg
slty ss

sh-med-dk gy, mica, mod
blk, slty & lt gy,
argill, carb, s&p, sltst

sh-gy, sft, bent, gummy, slty
in pt, mica, carb incls,
tr lt gy, carb sltst

sh-gy, sft, bent, slty
tr carb incls

sh-gy, frm, mic mica, slty,
tr pyrite

sltst-lt gy-gy, s&p, L
kaolic, slt calc, fri A
NB.5.XIG T

sh-a.a. w/ tr carb incls

sh-lt gy-gy, frm, fiss, mic
mica,
CO. drilg break

sh-a.a. & mod gy, mic mica
w/sltst intbd, fiss,
bent, sft-mod frm

sh-dk gy, fiss, carb, tr
thin calc intbds, w/wht
lmw spks

12°
4700
2°

TG-23

carbide bag check

4800

4900

5000
2°

5100

12°

TG-56

5200

5300

W. 8.6
V. 35

5-6-72

W. 8.8
V. 57
FL. 13.2
pH. 9.6

807

sh-a.s. & med gy, mic mica
w/sltst intbd, fiss,
bent, sft-mod frm

sh-dk gy, fiss, carb, tr
thin calc intbds, w/wht
lmy spks

sh-red gy-gy brn & dk gy
mic mica, carb, fiss, &
tr drty gy, sli calc
sli pyric sltst

sh-a.s.

sh-dk gy, ss, sft, carb in
pt dk brnsh gy, sli calc

sh-a.s.

sh-dk gy, fiss, sft, carb,
in pt dk brnsh gy, &
sli calc tr sli
calc, glauc sltst

sltst-grnsh gy, argil,
CO drig brk mica, sli
glauc

sh-dk-med gy, brnsh gy, a.s.

sltst-pl grnsh gy, sft, argil
sli glauc

sh-med-dk gy, sub fiss, sft
bentic, slty & carb in
part

5300

5400

5500

5600

5700

5800

3°

5900

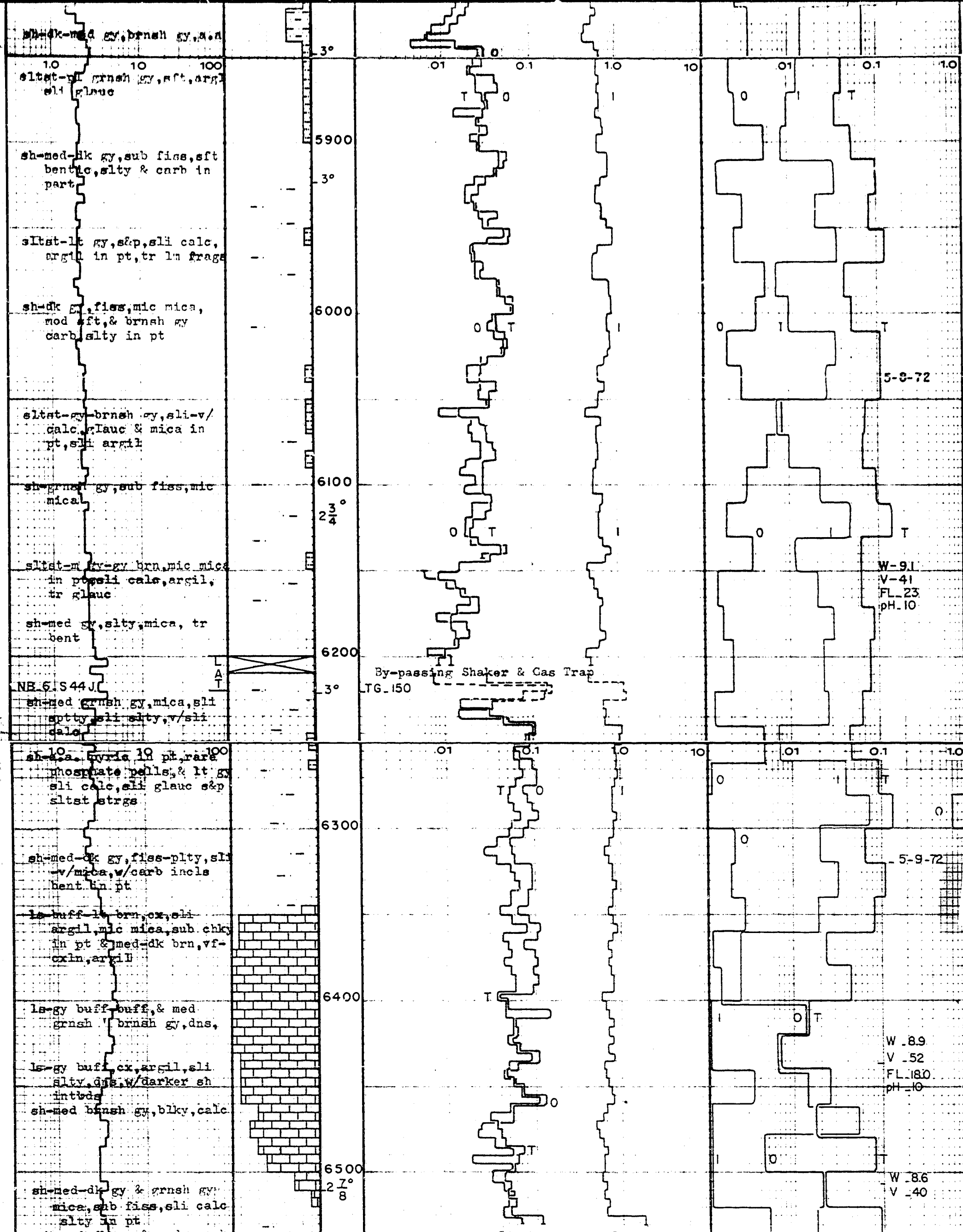
3°

5-7-72

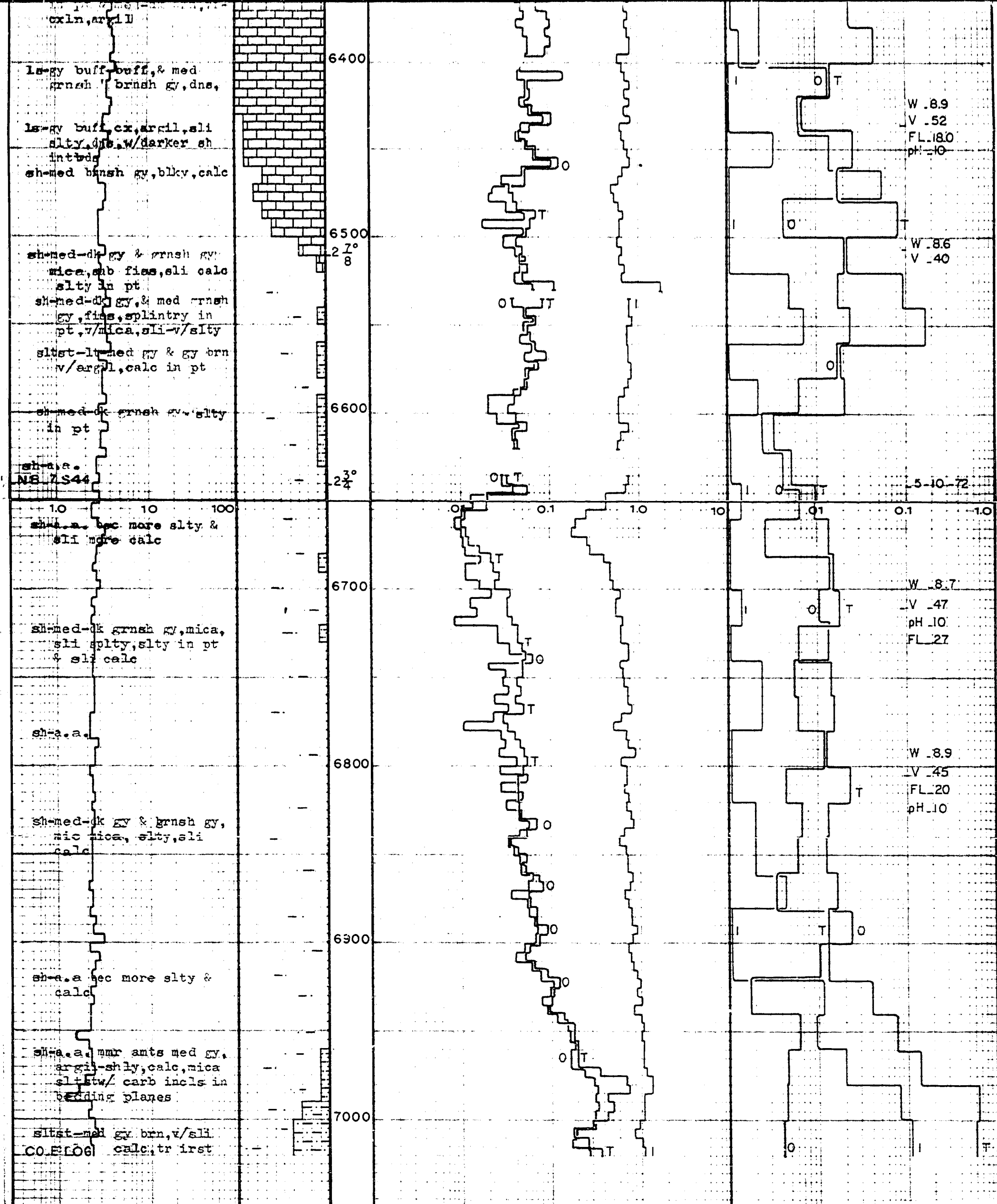
W -92
V -105

PR 10
FL 15.6

9



100





THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION Candace Amoco Steel I70 Lick bar AREA Ft. Homan DATE May 15 19 72

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS			FUEL	WATER	COAL	Stands
Specify actual hours worked						No.	O.D.	I.D.	Wgt.	Gals.	Bbls.	Tons
Driller <u>W. R. Johnson</u>	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
Derrick <u>Keith Orom</u>	B I T S											
Floor <u>Chris Rose</u>	MUD											
Floor <u>Kenny Barber</u>	WEIGHT											
Floor <u>Dale Ausmus</u>	VISCOSITY											
Motor <u>Art Mello</u>	GEL											
Mechanic	P U M P S											
Extra	W.L. F.C. pH.											
Injuries:	At Surveys Degree											
Fires:	MOTOR HOURS											
	Next Oil Change											
	Slip Feet Cut Feet Left on Spool Next Slip											
	General											

Tour - 8 a.m. to 4 p.m.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS			FUEL	WATER	COAL	Stands
Specify actual hours worked						No.	O.D.	I.D.	Wgt.	Gals.	Bbls.	Tons
Driller <u>Allen Thomas</u>	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
Derrick <u>Dan O'Connor</u>	B I T S											
Floor <u>Brian Faber</u>	MUD											
Floor <u>Bob Greenway</u>	WEIGHT											
Floor	VISCOSITY											
Motor <u>Wm. Brozny</u>	GEL											
Mechanic	P U M P S											
Extra	W.L. F.C. pH.											
Injuries:	At Surveys Degree											
Fires:	MOTOR HOURS											
	Next Oil Change											
	Slip Feet Cut Feet Left on Spool Next Slip											
	General											

Tour - 4 p.m. to Midnight	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS			FUEL	WATER	COAL	Stands
Specify actual hours worked						No.	O.D.	I.D.	Wgt.	Gals.	Bbls.	Tons
Driller <u>Robert Meyers</u>	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
Derrick <u>Brian Dunaway</u>	B I T S											
Floor <u>Dale Ausmus</u>	MUD											
Floor <u>Kerry Barber</u>	WEIGHT											
Floor	VISCOSITY											
Motor <u>Art Mello</u>	GEL											
Mechanic	P U M P S											
Extra	W.L. F.C. pH.											
Injuries:	At Surveys Degree											
Fires:	MOTOR HOURS											
	Next Oil Change											
	Slip Feet Cut Feet Left on Spool Next Slip											
	General											

W.O.C. on Plug No 3
Holt to Plug No 4
Set Plug No 4
No 4 - 800 - 700 - 8 std + 2 single.
75 sacks cement 370 Cal. Feelin 8 hrs.

Felt Plug No 3 @ 6:15 AM May 15-72
@ 4230

Company Time Cont'r Time

W.O.C. Plug No 4 800 400 8

Tear out B.O.P.'s clean mud
Tanks drain up pumps partly.

Company Time Cont'r Time

Felt Plug No 4 4:00
Lay down pipe
Lay down Kelly + Momo Hole
Dig cellar 3ft deep run sand
cement plug weld on plate & weld
name. cement mome hole &
rathole 1200

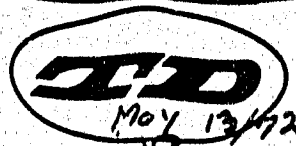
Felt Plug No 4 @ 4:00 P.M. May 15-72
Felt @ 7:10 ft

TOTAL

Company Time Cont'r Time

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
B.O.P. Test-Operated _____ Time _____ Results _____

Total Contractor Time _____ Hrs. Toolpusher _____
Total Company Time _____ Hrs. Approved by _____



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 LOCATION & Cander Amoco Well I 70 Little BREA FT NORM DATE May 13 19 72

Tour - Midnight - 8 a.m.
Specify actual hours worked Hrs.
Driller Clifford Johnson 8
Derrick Keith Orom 8
Floor Chris Rose 8
Floor Harry Burbee 8
Motor Art Mellozz 8
Mechanic
Extra
Injuries:
Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands		
No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
7020											
MUD 12 Mm. 2 a.m. 4 a.m. 6 a.m. Additives											
WEIGHT											
VISCOSITY											
GEL											
PUMP											
S											
W.L. F.C. PH.											

At Surveys Degree	MOTOR HOURS	Next Oil Change
1	86	86
2	86	86
3	38	
4	86	
5	40	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1 1/2	68	8	763	3730			7030	200

General Reple mud
checked All motor for ant-freeze
All good for -10 Boiler 2 hrs.

REMARKS
Logging. wait on tools.
RAN #3 FORMATION DENSITY
3 SIDEWALL NEUTRON POROSITY

Start	Stop	Interval
1200	800	8

Company Time Cont'r Time

Tour - 8 a.m. to 4 p.m.
Specify actual hours worked Hrs.
Driller ALLEN THOMAS 8
Derrick DAN OCONNOR 8
Floor BRIAN FABER 12
Floor BOB GREENWAY 8
Motor WM. BROZNY 12
Mechanic
Extra
Injuries:
Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands		
No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
7020 T.R.											
MUD 8 a.m. 10 a.m. 12 Noon 2 p.m. Additives											
WEIGHT											
VISCOSITY											
GEL											
PUMP											
S											
W.L. F.C. PH.											

At Surveys Degree	MOTOR HOURS	Next Oil Change
1	88	86
2	88	LR 84
3	46	
4	88	
5	88	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1 1/2	68	8	263	3730			7030	NW

General Boiler RAN 2 HRS

REMARKS
LOGGING
RAN #4 FORMATION DENSITY
TEAR OUT LOGGERS
RUN IN WITH DRILL & LAY
DOWN 10 OF SAME.
HANG BLOCKS TO SLIP & CUT LINE

Start	Stop	Interval
800	145	9 3/4
145	215	1/2
215	345	1 1/2
345	400	1/4

Company Time Cont'r Time

Tour - 4 p.m. to Midnight
Specify actual hours worked Hrs.
Driller ROBERT MEYERS 8
Derrick BRIAN DUNHAVEY 8
Floor DALE ASMUS 8
Floor HARRY BURBEE 4
Motor Art Mellozz 4
Mechanic
Extra
Injuries:
Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands		
No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
7020											
MUD 4 p.m. 6 p.m. 8 p.m. 10 p.m. Additives											
WEIGHT											
VISCOSITY											
GEL											
PUMP											
S											
W.L. F.C. PH.											

At Surveys Degree	MOTOR HOURS	Next Oil Change
1	96	94
2	96	10 82
3	64	
4	96	
5	96	

Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
1 1/2	69	8	120	3850	32	64	4000	350

General Boiler RAN 6 HRS.

REMARKS
Slip & cut Drly. line
RAN IN HOLE, BREAK CIRC. NO RLL
CIRC. W.O. orders

Start	Stop	Interval
4:00	5:00	1
5:00	8:00	3
8:00	1200	4

Company Time Cont'r Time

Totco Ring on Bit No. _____ Results _____ From Pipe Rack _____ Total Contractor Time _____ Hrs. _____
B.O.P. Test-Operated _____ Time _____ Results _____ Total Company Time _____ Hrs. _____
Toolpusher Sh. G. Gentry
Approved by [Signature]



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION Armed Shell I-70 L. 2 1/2 E Bear AREA 64° 39' 44.27" N 125° 56' 35.09" W DATE May 12 1972

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		From		Footage		To		Hrs. on Bottom		Wt. Drill String (1000lbs.)		DRILL COLLARS		FUEL		WATER		COAL		Stands																	
Specify actual hours worked		Hrs.		No.		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
8		8		7		544		7-9		913072		-		-		379		16 1/4		-		-		5-6-I		625.51		-		-		-		-		625.51	
Driller Clifford Johnson		8		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Derrick Keith Orom		8		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Floor Kerry Barber		8		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Floor Chris Rose		8		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Motor Art Mello		8		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Mechanic		8		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Extra		8		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Injuries:		8		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Fires:		8		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Tour - 8 a.m. to 4 p.m.		8		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Specify actual hours worked		8		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Driller Allen Thomas		8		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Derrick Dan O'Connor		8		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Floor Brian Facer		8		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Floor Bob Greenway		12		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Motor Wm. Brozny		12		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Mechanic		12		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Extra		12		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Injuries:		12		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Fires:		12		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Tour - 4 p.m. to Midnight		16		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Specify actual hours worked		16		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Driller Robert Meyers		16		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Derrick Brian Dunkley		16		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Floor Dale Ausmus		8		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Floor Kerry Barber		4		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Motor Art Mello		4		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Mechanic		4		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Extra		4		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Injuries:		4		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
Fires:		4		No. 1		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	
8 Hrs Travelling Time For May 11, 1972.		4		No. 2		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL	

REMARKS		Time	
		Start	Stop
Rig Service		1200	1215
C.I.C.		1215	1230
Blow Kelly & Survey		1230	1245
Strap out to Log		1245	500
Slow Hoisting due to table off center of hole			
Rig up Schlumberger Logging 500 ft			3
RAN DUAL INDUCTION LATEROLOG			
Work on Break out Cat head			
Company Time		Cont'r Time	
LOGGING @ SCHLUMBERGER		8:00	
RAN BOREHOLE COMPENSATED SONIC GAMMA RAY			
FORMATION DENSITY TOOL		4:00	
WOULDN'T WORK			
CHANGED BEARINGS IN BREAK OUT CATHEAD.			
Company Time		Cont'r Time	
Logging w/ Schlumberger & wait on tool.		4:00	12:00
TOTAL			
Company Time		Cont'r Time	

Totco Ring on Bit No.
B.O.P. Test-OperatedD.P. Caliper Date
TimeResults
Results

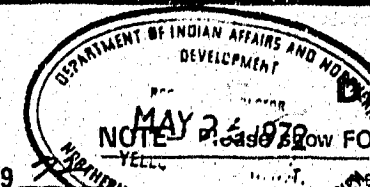
From Pipe Rack

Total Contractor Time
Total Company TimeToolpusher
Approved by



THOMSON DRILLING

DAILY DRILLING REPORT



DAY WORK RECORD

RIG No. 19 MAY 11-77 LOCATION CANEX Amoco Shell J-70 Little Bear AREA Fort Horman DATE May 11 1977

NOTE: Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS		FUEL	WATER	COAL	Stand
Specify actual hours worked							No.	I.D.	Wgt.	Gals.	Bbls.	Tons
Driller	PAUL JACOB 8	7020	T.D.			130.000	18	6	2 3/4	50		6291.94
Derrick	RICK BELAIR 8											
Floor	ALAN CURRIE 8											
Floor	DALE AUSMUS 8											
Floor												
Motor	WILBERT SIMMONS 8											
Mechanic												
Extra												
Injuries:												
Fires:												

Tour - 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS		FUEL	WATER	COAL	Stand
Specify actual hours worked							No.	I.D.	Wgt.	Gals.	Bbls.	Tons
Driller	CLIFFORD JOHNSON 8	7020	T.D.				18	6	2 1/2	50		6291.94
Derrick	KEITH OROM 8											
Floor	CHRIS ROSETH 8											
Floor	KERRY BURBEE 8											
Floor												
Motor	ART MELLOTT 8											
Mechanic												
Extra												
Injuries:												
Fires:												

Tour - 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS		FUEL	WATER	COAL	Stand
Specify actual hours worked							No.	I.D.	Wgt.	Gals.	Bbls.	Tons
Driller	ALLEN THOMAS 8	7020	T.D.				18	6	2 1/2	50		6291.94
Derrick	DAN O'CONNOR 8											
Floor	BRIAN FABER 8											
Floor	BOB GREENHAY 8											
Floor												
Motor	Wm. BROZNY 8											
Mechanic												
Extra												
Injuries:												
Fires:												

Start	Stop	Interval
12:00	12:30	1/2
12:30	1:00	1/2
1:00	1:30	3/4
1:30	2:00	1/4
2:00	2:30	1/2
2:30	3:00	1/2
3:00	3:30	1/2
3:30	4:00	1/2
4:00	4:30	1/2
4:30	5:00	1/2
5:00	5:30	1/2
5:30	6:00	1/2
6:00	6:30	1/2
6:30	7:00	1/2
7:00	7:30	1/2
7:30	8:00	1/2
8:00	8:30	1/2
8:30	9:00	1/2
9:00	9:30	1/2
9:30	10:00	1/2
10:00	10:30	1/2
10:30	11:00	1/2
11:00	11:30	1/2
11:30	12:00	1/2
12:00	12:30	1/2
12:30	1:00	1/2
1:00	1:30	1/2
1:30	2:00	1/2
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2:30	3:00	1/2
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3:30	4:00	1/2
4:00	4:30	1/2
4:30	5:00	1/2
5:00	5:30	1/2
5:30	6:00	1/2
6:00	6:30	1/2
6:30	7:00	1/2
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8:30	9:00	1/2
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9:00	9:30	1/2
9:30	10:00	1/2
10:00	10:30	1/2
10:30	11:00	1/2
11:00	11:30	1/2
11:30	12:00	1/2
12:00	12:30	1/2
12:30	1:00	1/2
1:00	1:30	1/2
1:30	2:00	1/2
2:00	2:30	1/2
2:30	3:00	1/2
3:00	3:30	1/2
3:30	4:00	1/2
4:00	4:30	1/2
4:30	5:00	1/2
5:00	5:30	1/2
5:30	6:00	1/2
6:00	6:30	1/2
6:30	7:00	1/2
7:00	7:30	1/2
7:30	8:00	1/2
8:00	8:30	1/2
8:30	9:00	1/2
9:00	9:30	1/2
9:30	10:00	1/2
10:00	10:30	1/2
10:30	11:00	1/2
11:00	11:30	1/2
11:30	12:00	1/2
12:00	12:30	1/2
12:30	1:00	1/2
1:00	1:30	1/2
1:30	2:00	1/2
2:00	2:30	1/2
2:30	3:00	1/2
3:00	3:30	1/2
3:30	4:00	1/2
4:00	4:30	1/2
4:30	5:00	1/2
5:00	5:30	1/2
5:30	6:00	1/2
6:00	6:30	1/2
6:30	7:00	1/2
7:00	7:30	1/2
7:30	8:00	1/2
8:00	8:30	1/2
8:30	9:00	1/2
9:00	9:30	1/2
9:30	10:00	1/2
10:00	10:30	1/2
10:30	11:00	1/2
11:00	11:30	1/2
11:30	12:00	1/2
12:00	12:30	1/2
12:30	1:00	1/2
1:00	1:30	1/2
1:30	2:00	1/2
2:00	2:30	1/2
2:30	3:00	1/2
3:00	3:30	1/2
3:30	4:00	1/2
4:00	4:30	1/2
4:30	5:00	1/2
5:00	5:30	1/2
5:30	6:00	1/2
6:00	6:30	1/2
6:30	7:00	1/2
7:00	7:30	1/2
7:30	8:00	1/2
8:00	8:30	1/2
8:30	9:00	1/2
9:00	9:30	1/2
9:30	10:00	1/2
10:00	10:30	1/2
10:30	11:00	1/2
11:00	11:30	1/2
11:30	12:00	1/2
12:00	12:30	1/2
12:30	1:00	1/2
1:00	1:30	1/2
1:30	2:00	1/2
2:00	2:30	1/2
2:30	3:00	1/2
3:00		

THOMPSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CANEX AMOCO SHELL 1/2-70 LITTLE BEAR AREA FORT NORMAN DATE MAY 10 19 72

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG NO.		LOCATION		CANDLER HMMCOO NEEL 8-70 LITTLE DEER AREA		FOR NORMAN		DATE		MAY 10 19 72		REMARKS		Time																			
Tour -- Midnight - 8 a.m.		Specify actual hours worked		Hrs.		From		Footage		To		Hrs. on Bottom		Wt. Drill String (1000lbs.)		DRILL COLLARS		FUEL		WATER		COAL		Stands		Start		Stop		Interval			
Driller		PAUL JACOB		8		6641		69		6710		3 1/2		12500		3 18 6 2 48				5 4 4		6 6008.22		FINISH OUT		12 30		12 30		1/2			
Derrick		RICK BELAIR		8		B		No. 5		Size 8 3/4		Type 544		Size Jets 7/16		Serial No. 913013		Weight 45		R.P.M. 76		Ft. Drilled 420		Hrs. 24		Feet Reamed		Hrs. 6-8-1		CONDITION		D. Collars	
Floor		ALAN CURRIE		12		T		No. 7		Size 8 3/4		Type 544		Size Jets 7/16		Serial No. 913012		Weight 42		R.P.M. 76		Ft. Drilled 69		Hrs. 3 1/2		Feet Reamed		Hrs.		CONDITION		Other Ft.	
Floor		DALE RUSMUS		8		S																											
Floor																																	
Motor		WILBERT SIMMS		12																													
Mechanic																																	
Extra																																	
Injuries:		SIMMS + CURRIE																															
Fires:		STAY OVER WORK ON																															
		WATER LINE																															

Totco Ring on Bit No.

D.P. Calipered Date

Results

From Pipe Rack

Total Contractor Time _____ Hrs

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time _____ Hrs

Approved

THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 ^{May 9-72} LOCATION CADNEX Amoco Shell I-70 Little Bear AREA FORT NORMAN DATE MAY 9 19 72

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER		COAL	Stand			
Specify actual hours worked	Hrs.	6321	117	6438	7 3/4	122-000	3 18	D. 6	I.D. 2 7/8	Wgt. 44	7'	Gals.	Bbls.	Tons	65788.3			
Driller	PAUL JACOB	B	No. 6	Size B 3/4	Type S44	Size Jaws 7/16	Serial No. 913013	Weight 46-48	R.P.M. 76	Ft. Drilled 217	Hrs. 12 3/4	Feet Reamed	Hrs.	CONDITION	D. Collars 625.51			
Derrick	RICK BELAIR	B													Other Ft.			
Floor	ALAN CURRIE	B													C.B. Ft.			
Floor	DALE AUSMUS	B																
Floor			MUD				12 Mn.	2 a.m.	4 a.m.	6 a.m.	Activities	At Surveys Degree		MOTOR HOURS	Next Oil Change			
			WEIGHT				9.0	9.0	8.9	8.9	FRESH 8000			1 5	22			
			VISCOSITY				50	65	60	52				2 6	L.P.O. 214			
			GEL											3 200	2-2			
			No. 1	Pressure	1600	1600	1600	1600	1' STREAM WDF H2O						4 7			
			No. 2	Pressure	51	51	58	58							5 32			
			No. 3	Pressure	500				Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or	Cut	Feet Left on Spool	Next Slip
			No. 4	Pressure					1 1/8	65	8	358	3326				4060	350
			No. 5	Pressure					General CHANGE OIL AND OIL FILTER IN No. 1, 2, 4. SERV. AIR									
			No. 6	Pressure					CLEANERS ON ALL MOTORS									
			No. 7	Pressure					HELD SAFETY MEETING a Blowout Drill Riser - 6 ft									
			No. 8	Pressure														
			No. 9	Pressure														
			No. 10	Pressure														
			No. 11	Pressure														
			No. 12	Pressure														
			No. 13	Pressure														
			No. 14	Pressure														
			No. 15	Pressure														
			No. 16	Pressure														
			No. 17	Pressure														
			No. 18	Pressure														
			No. 19	Pressure														
			No. 20	Pressure														
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			No. 30	Pressure														
			No. 31	Pressure														
			No. 32	Pressure														
			No. 33	Pressure														
			No. 34	Pressure														
			No. 35	Pressure														
			No. 36	Pressure														
			No. 37	Pressure														
			No. 38	Pressure														
			No. 39	Pressure			</											

[illegible]

Tour	8 a.m. to 4 p.m.
Specify actual hours worked	Hrs.
Driller <u>E. P. Johnson</u>	<u>6</u>
Derrick <u>Keith Orom</u>	<u>6</u>
Floor <u>Chris Rosezth</u>	<u>6</u>
Floor <u>Kerry Burbee</u>	<u>6</u>
Floor	
Motor <u>Art Mellott</u>	
Mechanic	
Extra	
Injuries:	
Fires:	

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands
No.	Size	Type	Size Jct.	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
B I T S	<u>6</u>	<u>4 1/4</u>	<u>344</u>	<u>7/8</u>	<u>913013</u>	<u>45</u>	<u>76</u>	<u>337</u>	<u>19 1/2</u>	-	<u>D-19.</u>	<u>625.5</u>
												Other Ft.
												C.B. Ft.
												Subst.-Ft.
												Ft. Up On Kelly
												TOTAL

MUD	8 a.m.	10 a.m.	12 Noon	2 p.m.	Additives	At Surveys Degree	MOTOR HOURS	Next Oil Change
WEIGHT	<u>87</u>	<u>86</u>	<u>8.6</u>	<u>87</u>	<u>150 lbs Caustic</u>	<u>6509</u>	<u>2 1/2</u>	<u>P. 30</u>
VISCOSITY	<u>50</u>	<u>45</u>	<u>40</u>	<u>38</u>	<u>300 lbs Super Lube</u>		<u>2</u>	<u>P.R. 22</u>
GEL					<u>flow</u>		<u>3</u>	<u>208</u>
							<u>4</u>	<u>15</u>
							<u>5</u>	<u>32</u>

PUMP S.	No. 1 Pres-sure	No. 1 S.P.M.	Liner Size	No. 2 Pres-sure	No. 2 S.P.M.	Liner Size	Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or Cut	Feet Left on Spool	Next Slip
	<u>500</u>	<u>56</u>	<u>56</u>	<u>56</u>	<u>56</u>		<u>1 1/8</u>	<u>65</u>	<u>6</u>	<u>358</u>	<u>3386</u>			<u>4060</u>	<u>350</u>
							General	<u>Held</u>	<u>Safety</u>	<u>meedng</u>	<u>& Blow out oil</u>				

W.L.	F.C.	PM
<u>26.0</u>	<u>4/32</u>	<u>100</u>

[illegible]

Tour - 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER		COAL	Stands
Specify actual hours worked	Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars	
Driller ALLEN THOMAS	8	6558	83	6641	4 1/2	125m	318	6	2 1/2	50				5913.5	
Derrick DAN O'CONNOR	8													63.1	
Floor BRIAN FABER	8														
Floor BOB GREENWAY	8														
Floor															
Motor WM. BROZNY	8														
Mechanic															
Extra															
Injuries:															
Fires:															
		MUD		4 p.m.	6 p.m.	8 p.m.	10 p.m.	Adds			At Surveys Degree		MOTOR HOURS		Next Oil Change
		WEIGHT		8.8	8.7	8.8		300 lbs Super Lube flow			6641		1	22	38
		VISCOSITY		45	42	40		3 gal. HME					2	22	4P. 230
		GEL						100 lbs. Stapflow					3	216	
		PUMP		No. 1	Pres. 1550	1550	1550						4	23	
		Model		S.P.M. 56	56	56							5	40	
		Liner Size		5 1/2	X 16										
		No. 2		Pres. 1550	1550	1550									
		Model		S.P.M. 56	56	56									
		Liner Size		5 1/2	X 16										
		W.L.		23.4	F.C.	342	p.H.	108							
		General		HELD SAFETY MEETING & BLOW OUT DRILL											
		BULKER RAN 3 hrs													

DRLG.	4:00	5:00	1
RIG SET.	5:00	5:15	$\frac{1}{4}$
DRLG.	5:15	8:45	$3\frac{1}{2}$
DROP SURVEY & TRIP FOR BIT #7	8:45	12:00	$3\frac{1}{4}$
TOTAL			
Company Time	Cont'r Time		

Totco Ring on Bit No:

D.P. Calipered Date

Results

From Pipe Rack

Total Contractor Time _____ Hrs.

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time _____ Hrs.

Approved by _____



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CADWEX Amoco Swell 1-70 Little Bear Area Fort Norman DATE MAY 8 19 72

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands	
Specify actual hours worked		6040	150	6190	6 1/4	118.000	No.	I.D.	I.D.	Wgt.	Gals.	Bbls.	Tons	5539.11	
Driller	Paul Jacob	8													623.66
Derrick	Rich Belair	8													623.66
Floor	Alan Currie	8													623.66
Floor	Dale Ausmus	8													623.66
Floor															623.66
Motor	Wilbert Simms	8													623.66
Mechanic															623.66
Extra															623.66
Injuries:															623.66
Fires:															623.66

Tour - 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands	
Specify actual hours worked		6190	31	6221	1 3/4	118	No.	I.D.	I.D.	Wgt.	Gals.	Bbls.	Tons	6205.18	
Driller	Clifford Johnson	8													623.66
Derrick	Keith Orom	8													623.66
Floor	Chris Roseth	8													623.66
Floor	Kerry Burbee	8													623.66
Floor															623.66
Motor	Art Mellozz	8													623.66
Mechanic															623.66
Extra															623.66
Injuries:															623.66
Fires:															623.66

Tour - 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands	
Specify actual hours worked		6221	100	6321	5	120.000	No.	I.D.	I.D.	Wgt.	Gals.	Bbls.	Tons	5632.49	
Driller	Allen Thomas	8													623.66
Derrick	Dan O'Connor	8													623.66
Floor	Brian Jader	8													623.66
Floor	Bob Greenway	8													623.66
Floor															623.66
Motor	Wm. Brozny	8													623.66
Mechanic															623.66
Extra															623.66
Injuries:															623.66
Fires:															623.66

REMARKS		Start	Stop	Interval
Rig SERV - B.O.P.		12:00	12:15	1/4
Drilling.		12:15	1:45	1 1/4
Work on Air Line (Rodary Table)		1:45	2:00	1/4
Drilling.		2:00	4:45	2 3/4
Circ to Survey & Survey		4:45	5:45	1
Drilling.		5:45	8:00	2 1/4
Company Time				
Cont'r Time				
DRIG.		8:00	9:30	1 1/2
Rig Service, check B.O.P.		9:30	9:45	1/4
D-19.		9:45	10:00	1/4
Survey		10:00	10:15	1/4
Hoist Bit No 5 Strap out		10:15	2:15	4
Check Blind Rams change bit		2:15	2:30	1/4
Trip in w Bit No 6 Check subs		2:30	3:00	1/2
Lay down D.C.S + replace		3:00	3:30	1/2
Run in		3:30	4:00	1/2
Greased Crown + Blocks				
Checked motor shut offs				
Company Time				
Cont'r Time				
Rig SER.		4:00	4:15	1/4
RUN IN STRAPPING PIPE		4:15	5:45	1 1/2
BRK CIRC + REAM BRIDGE AT 4570		5:45		
H580 (WORK TO ANKLE JETS)			6:05	1/2
FINISH IN		6:15	6:45	1/2
BRK CIRC + CLEAN 10' FILL		6:45	7:00	1/4
DRLG.		7:00	12:00	5
TOTAL				
Company Time				
Cont'r Time				

Totco Ring on Bit No.

D.P. Calipered Date

Results

From Pipe Rack

Total Contractor Time

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time

Approved by



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 MAY 7-72 LOCATION CADWEX IMCO SHELL I-70 LITTLE BOAR AREA FORT NORMAN DATE MAY 7 19 72

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands					
Specify actual hours worked							No.	Size	Type	Size Jts	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Singles
Driller	PAUL JACOB	8	5477	243	5720	7 3/4	107.000	18	6	2 3/4	48								5070.41
Derrick	RICK DELAIR	8																	NIL
Floor	ALAN CURRIE	8																	623.66
Floor	DALE RUSMUS	8																	
Floor																			
Motor	WILBERE SIMMS	8																	
Mechanic																			
Extra																			
Injuries:																			
Fires:																			
MUD		12 Mm.	2 a.m.	4 a.m.	6 a.m.	Additives				At Surveys Degree				MOTOR HOURS		Next Oil Change			
WEIGHT		8.9	8.9	9.0	9.0	TATASH 800								1 224		272			
VISCOSITY		52	65	85	100	STAFLOW 100								2 224		276			
GEL														3 152					
No. 1		Pressure	1700	1700	1700	1700	WATER 1 1/2 STREAM								4 202				
Model		S.P.M.	58	58	58	58									5 272				
No. 2		Pressure																	
Model		S.P.M.																	
No. 3		Pressure																	
Model		S.P.M.																	
No. 4		Pressure																	
Model		S.P.M.																	
No. 5		Pressure																	
Model		S.P.M.																	
No. 6		Pressure																	
Model		S.P.M.																	
No. 7		Pressure																	
Model		S.P.M.																	
No. 8		Pressure																	
Model		S.P.M.																	
No. 9		Pressure																	
Model		S.P.M.																	
No. 10		Pressure																	
Model		S.P.M.																	
No. 11		Pressure																	
Model		S.P.M.																	
No. 12		Pressure																	
Model		S.P.M.																	
No. 13		Pressure																	
Model		S.P.M.																	
No. 14		Pressure																	
Model		S.P.M.																	
No. 15		Pressure																	
Model		S.P.M.																	
No. 16		Pressure																	
Model		S.P.M.																	
No. 17		Pressure																	
Model		S.P.M.																	
No. 18		Pressure																	
Model		S.P.M.																	
No. 19		Pressure																	
Model		S.P.M.																	
No. 20		Pressure																	
Model		S.P.M.																	
No. 21		Pressure																	
Model		S.P.M.																	
No. 22		Pressure																	
Model		S.P.M.																	
No. 23		Pressure																	
Model		S.P.M.																	
No. 24		Pressure																	
Model		S.P.M.																	
No. 25		Pressure																	
Model		S.P.M.																	
No. 26		Pressure																	
Model		S.P.M.																	
No. 27		Pressure																	
Model		S.P.M.																	
No. 28		Pressure																	
Model		S.P.M.																	
No. 29		Pressure																	
Model		S.P.M.																	
No. 30		Pressure																	
Model		S.P.M.																	
No. 31		Pressure																	
Model		S.P.M.																	
No. 32		Pressure																	
Model		S.P.M.																	
No. 33		Pressure																	
Model		S.P.M.																	
No. 34		Pressure																	
Model		S.P.M.																	
No. 35		Pressure																	
Model		S.P.M.																	
No. 36		Pressure																	
Model		S.P.M.																	
No. 37		Pressure																	
Model		S.P.M.																	
No. 38		Pressure																	
Model		S.P.M.																	
No. 39		Pressure																	
Model		S.P.M.																	
No. 40		Pressure																	
Model		S.P.M.																	
No. 41		Pressure																	
Model		S.P.M.																	
No. 42		Pressure																	
Model		S.P.M.																	
No. 43		Pressure																	
Model		S.P.M.																	
No. 44		Pressure																	
Model		S.P.M.																	
No. 45		Pressure																	
Model		S.P.M.																	
No. 46		Pressure																	
Model		S.P.M.																	
No. 47		Pressure																	
Model		S.P.M.																	
No. 48		Pressure																	
Model		S.P.M.																	
No. 49		Pressure																	
Model		S.P.M.																	
No. 50		Pressure																	
Model		S.P.M.																	
No. 51		Pressure																	
Model		S.P.M.																	
No. 52		Pressure																	
Model		S.P.M.																	
No. 53		Pressure																	
Model		S.P.M.																	
No. 54		Pressure																	
Model		S.P.M.																	
No. 55		Pressure																	
Model		S.P.M.																	
No. 56		Pressure																	
Model		S.P.M.																	
No. 57		Pressure																	
Model		S.P.M.																	
No. 58		Pressure																	
Model		S.P.M.																	
No. 59		Pressure																	
Model		S.P.M.																	
No. 60		Pressure																	
Model		S.P.M.																	
No. 61		Pressure																	
Model		S.P.M.																	
No. 62		Pressure																	
Model		S.P.M.																	
No. 63		Pressure																	
Model		S.P.M.																	
No. 64		Pressure																	
Model		S.P.M.																	
No. 65		Pressure																	
Model		S.P.M.																	
No. 66		Pressure																	
Model		S.P.M.																	
No. 67		Pressure																	
Model		S.P.M.																	
No. 68		Pressure																	
Model		S.P.M.																	
No. 69		Pressure																	
Model		S.P.M.																	
No. 70		Pressure																	
Model		S.P.M.																	
No. 71		Pressure																	
Model		S.P.M.																	
No. 72		Pressure																	
Model		S.P.M.																	
No. 73		Pressure																	
Model		S.P.M.																	
No. 74		Pressure																	
Model		S.P.M.																	
No. 75		Pressure																	
Model		S.P.M.																	
No. 76		Pressure																	
Model		S.P.M.		</															



THOMPSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION *CADNEY Amoco Shell I-70 Little Bear AREA Fort Norman* DATE *MAY 6 19 72*

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands
Specify actual hours worked						No. O.D. I.D. Wgt.	Gals. Bbls. Tons			
Driller <i>Paul Jacob</i>	5040	846	5126	3 1/2	803.00	15 6 2 3/8 48				4477.59
Derrick <i>Rick Beland</i>										
Floor <i>Allen Currie</i>										
Floor <i>DAVE HUSMAN</i>										
Floor										
Motor <i>WILBERT SIMMS</i>										
Mechanic										
Extra										
Injuries:										
Fires:										

Tour - 8 a.m. to 4 p.m.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands
Specify actual hours worked						No. O.D. I.D. Wgt.	Gals. Bbls. Tons			
Driller <i>Clifford Johnson</i>	5126	100	5226	5	104 M	18 6 2 1/2 50				4571.90
Derrick <i>Keith Orom</i>										
Floor <i>Chris Roseth</i>										
Floor <i>Kerry Burbee</i>										
Floor										
Motor <i>Art Mellott</i>										
Mechanic										
Extra										
Injuries:										
Fires:										

Tour - 4 p.m. to Midnight	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands
Specify actual hours worked						No. O.D. I.D. Wgt.	Gals. Bbls. Tons			
Driller <i>ALLEN THOMAS</i>	5226	251	5477	7 1/4	105 M	18 6 2 1/2 50				4788.63
Derrick <i>DAN OCONNOR</i>										
Floor <i>BRIAN FABER</i>										
Floor <i>BOB GREENWAY</i>										
Floor										
Motor <i>Wm. BROZNY</i>										
Mechanic										
Extra										
Injuries:										
Fires:										

REMARKS	Start	Stop	Interval
Rig SERV. ✓ B.O.P. Drilling.	12 ⁰⁰	12 ¹⁵	1/4
DROP SURVEY	12 ¹⁵	3 ⁴⁵	3 1/2
HOIST F.H.B. Slow due to table out of line w/ hole (Due boulders on conductor)	3 ⁴⁵	4 ⁰⁰	1/2
CHANGE B.T. BLIND RAMS	4 ⁰⁰	7 ⁰⁰	3
RUN IN w/ B.T. No 5	7 ⁰⁰	7 ¹⁵	1/4
	7 ¹⁵	8 ⁰⁰	3/4
Hole Tight From 4400 to 3925			
Boiler - 4 HRS			
Company Time			
Cont'r Time			
Rig SERVICE + B.O.P. <i>3 HRS</i>	8 ⁰⁰	8 ¹⁵	1/4
RUN IN (clean out BRIDGE @ 4380') NO FILL	8 ¹⁵	9 ⁴⁵	1 1/2
DRLG	9 ⁴⁵	2 ¹⁵	4 1/2
C.R.C. SAMPLE (heat orders)	2 ¹⁵		
@ 5210		3 ³⁰	1 1/4
DRLG	3 ³⁰	4 ⁰⁰	1/2
			1/2
Company Time			
Cont'r Time			
RIG SER.	4 ⁰⁰	4 ¹⁵	1/4
DRLG.	4 ¹⁵	10 ⁰⁰	5 3/4
SURVEY @ 5410	10 ⁰⁰	10 ³⁰	1/2
DRLG.	10 ³⁰	12 ⁰⁰	1 1/2
TOTAL			
Company Time			
Cont'r Time			

Totco Ring on Bit No.

D.P. Caliper Date

Results

From Pipe Rack

Total Contractor Time Hrs.

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time Hrs.

Approved by



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 MAY 5 72 LOCATION CANDEX AMOCO SHELL 1-70 LITTLE BEAR AREA FORT NORMA DATE MAY 5 1972

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS		FUEL	WATER	COAL	Stands			
Specify actual hours worked							No.	O.D.	I.D.	Wgt.					
Driller	PAUL JACOB 8	4711	0			109,000	18	6	2 1/2	50		4034.32			
Derrick	RICK BELAIR 8	B	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
Floor	ALAN CURRIE 8	I	3	8 3/4	33	7/16	40565	40	48	1158	57 1/4			Good 1-2	623.66
Floor	DALE AUSMUS 8	S	4	8 3/4	X16	7/16									Other Ft.
Floor			MUD												
Floor			WEIGHT												
Motor	WILBERT SIMMS 8		VISCOSITY												
Mechanic			GEL												
Extra			PUMP												
Injuries:			Fires:												
			W.L.												

Tour - 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS		FUEL	WATER	COAL	Stands			
Specify actual hours worked							No.	O.D.	I.D.	Wgt.					
Driller	Clifford Johnson 8	4711	168	4679	6 3/4	100	18	6 1/2	2 1/2	50		4426.25			
Derrick	Keith Orom 8	B	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
Floor	Chris Roseth 8	I	4	8 3/4	X16	7/16	40057	42	76	168	6 3/4				623.66
Floor	Kenny Burbee 8	S													Other Ft.
Floor			MUD												
Floor			WEIGHT												
Motor	Art Mellozz 9		VISCOSITY												
Mechanic			GEL												
Extra			PUMP												
Injuries:			Fires:												
			W.L.												

Tour - 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS		FUEL	WATER	COAL	Stands			
Specify actual hours worked							No.	O.D.	I.D.	Wgt.					
Driller	ALLEN THOMAS 8	4879	161	5040	7 1/4	102,000	18	6	2 1/2	50		4320.42			
Derrick	DAN OCONNOR 8	B	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
Floor	BRIAN FABER 8	I	4	8 3/4	X16	7/16	40057	42	76	329	14				623.66
Floor	BOB GREENWAY 8	S													Other Ft.
Floor			MUD												
Floor			WEIGHT												
Motor	Wm. BROZNY 8		VISCOSITY												
Mechanic			GEL												
Extra			PUMP												
Injuries:			Fires:												
			W.L.												

REMARKS		Time	
		Start	Stop
Hoist Tight Hole from 4/30 to 2650 - Blind Rams		12:00	
Slip & Cut D.L. (145 Feet)		5:00	5:00
Down w/ Bit No. 4		6:00	7:00
BREAK CIRC AND REAM		7:00	
BRIDGE @ 3650		8:00	1/2
4350			
4711			
4733.51			
4728.44			
5.06 corrected 5 ft deeper			
Ream to Bottom		8:00	9:00
DRIG.		9:00	9:00
Rig Service + BOP check		10:00	10:15
DRIG		10:15	4:00
		5:34	5:34
DRLG.		4:00	4:30
RIG SER.		4:30	4:45
DRLG.		4:45	10:15
SURVEY @ 5000		10:15	10:45
DRLG.		10:45	12:00
TOTAL			
Company Time			
Cont'r Time			

Totco Ring on Bit No. D.P. Caliper Date Results From Pipe Rack

Total Contractor Time Hrs.

Toolpusher

Total Company Time Hrs.

Approved by



DAY WORK RECORD

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

From		Footage		To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	MRS. COLLARS	FUEL	WATER		COAL	Stands	
4627 - 84		4711		4	109000	N ³ ₁₈	O ₉	I.D. ₂₂	Wgt.	Gals.	Bbls.	Tons	
												Singles	
												31.4	
BITS	No.	Size	Type	Size Jaws	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
	3	8 3/4	J-33	1 1/16	KN 565	42	48	1148	564				621.6
													Other Ft.
													C.B. Ft.
MUD		4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives	At Surveys Degree			MOTOR HOURS		Next Oil Change	Subs. Ft.
WEIGHT		86 8/6				SUPER UA BEST			4666	1 1/4			
VISCOSITY		58 33				HOO #							
GEL		605 GEL											Ft. Used On Kelly 30.0
PUMPS	No. 1	Pressure	1200 1200 1200		S-TAFLO								TOTAL 47 11
	Model:	S.P.M.	58	58	58								
	Liner Size	5 X	7 C										
	No. 2	Pressure											
S	Model:	S.P.M.			General DESILTER UNDER FLOW - gal/min. lbs./gal								
	Liner Size				OVER FLOW lbs./gal. bucket & hose								
W.L.		108		E.C.	253		P.H.	1/2					

6	TRIC SERV. + B.O.P. CHECK	800	815	1/4
5	DRILL	815	400	7 3/4

Activity	Survey Time	Survey Time	Survey Time
DRUG.	4:00	4:30	$\frac{1}{2}$
RIG SER.	4:30	4:45	$\frac{1}{4}$
DRUG.	4:45	6:30	$1\frac{3}{4}$
SURVEY	6:30	7:00	$\frac{1}{2}$
DRUG.	7:00	9:45	$1\frac{3}{4}$
Survey	9:45	10:00	$\frac{1}{4}$
Haist	10:00	10:30	$\frac{1}{2}$
Work light Role	10:30	12:00	$1\frac{1}{2}$

Tight Lab @ 4190 & 4130

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ Total Contractor Time _____ Hrs. Toolpusher Y. H. Brumby

B.O.P. Test-Operated _____ Time _____ Results _____ Total Company Time _____ Hrs. Approved by [Signature]



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CANEX AMOCO Shell Little Bear I-70 AREA FORT NORMAN DATE May 3 1972

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour — Midnight - 8 a.m.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS	FUEL	WATER	COAL	37	355.80
Specify actual hours worked	Hrs.	4009	125	4834	6	109.000	3 15 6 2 1/2 42				
Driller PAUL JACOB	8										
Derrick RICK BELAIR	8										
Floor ALLAN CURRIE	8										
Floor DAVE AUSMUS	8										
Floor											
Motor WILBERT SIMMS	8										
Mechanic											
Extra											
Injuries:											
Fires:											

Tour — 8 a.m. to 4 p.m.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS	FUEL	WATER	COAL	37	355.80
Specify actual hours worked	Hrs.	4134	112	4256	7	108	3 18 6 2 1/2 42				
Driller CLIFFORD JOHNSON	10										
Derrick KEITH DROM	10										
Floor JOHN KELLOCK	8										
Floor MURRAY DIXON	8										
Floor											
Motor ART MELLOTT	12										
Mechanic											
Extra											
Injuries:											
Fires:											

Tour — 4 p.m. to Midnight	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS	FUEL	WATER	COAL	37	355.80
Specify actual hours worked	Hrs.	4256	130	4386	7 1/4	108.000	3 18 6 2 1/2 42				
Driller ALLEN THOMAS	10										
Derrick DAN O'CONNOR	8										
Floor BRIAN FABER	10										
Floor HARRY FRASER	9										
Floor											
Motor WM. BROZNY	11										
Mechanic											
Extra											
Injuries:											
Fires:											

REMARKS	Start	Stop	Interval
Drilling	8:20	12:45	3/4
Rig SER - B.O.P.	12:45	1:00	1/4
WORK ON MAIN pump Clean scrub	1:00	1:15	1/4
Drilling.	1:15	3:15	2
WORK ON 0-500 pump Clean scrub	3:15	3:30	1/4
Drilling.	3:30	4:45	1 1/4
Cable to Survey a Survey	4:45	5:30	3/4
Drilling.	5:30	5:45	1/4
Air up mud start degasser	5:45	6:15	1/2
Drilling.	6:15	8:00	1 3/4
Screen on pump plugging off with lost air material & gravel			
Company Time			
Cont'r Time			
Rig SERVICE + B.O.P. CHECK	8:00	8:15	1/4
DRAG	8:15	3:15	7
Synchronize Motors.	3:15	3:45	1/2
DRAG	3:45	4:00	1/4
			1/4
DRAG.	4:00	4:15	1/4
RIG SER	4:15	4:30	1/4
DRAG	4:30	12:00	7 1/2
TOTAL			
Company Time			
Cont'r Time			

Totco Ring on Bit No.

D.P. Caliper Date

Results

From Pipe Rack

Total Contractor Time

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time

Approved by



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CANEX AMOCO SHELL I-90 LITTLE BUMP AREA FORT NORMAN DATE MAY 2 1972

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	34	Stands	3179.93
Specify actual hours worked		Hrs.	3625	220	3845	7 1/4	83,000	3	9	2 1/2	43					
Driller	PAUL JACOB															
Derrick	RICE BOLAIR															
Floor	ALLAN CURRIE															
Floor	DALE AUSMUS															
Floor																
Floor																
Motor	WILBERT SIMMS															
Mechanic																
Extra																
Injuries	S.S. No.															
Fires	DALE AUSMUS															
	621-941-459.															

Tour - 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	31	Stands	3312.77
Specify actual hours worked		Hrs.	3845	128	3973	5 1/2	90,000	18	6	2 1/2	50					
Driller	COFFIN JOHNSON															
Derrick	KEITH ORAM															
Floor	JOHN KELLOCK															
Floor	MURRAY DIXON															
Floor																
Motor	DALE MELLATH															
Mechanic																
Extra																
Injuries																
Fires																

Tour - 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	33	Stands	3366.75
Specify actual hours worked		Hrs.	3973	36	4009	2	90,000	18	6	2 1/2	50					
Driller	ALLEN THOMAS															
Derrick	DAN O'CONNOR															
Floor	HARRY FRASER															
Floor	BRIAN FABER															
Floor																
Motor	Wm. BROZNY															
Mechanic																
Extra																
Injuries																
Fires																

REMARKS		Start	Time	Interval
Big SERV. - B.O.P.		18 00	18 15	1/4
Drilling 8 3/4 Hole		12 15	6 45	6 1/2
Survey @ 3790		6 00	7 15	1 1/2
Drilling.		7 15	8 00	3/4
1510				
50.00				
20				
Company Time				
Cont'r Time				
Big Service + B.O.P. Check		8 00	8 15	1/4
Only losing circ		8 15	9 00	3/4 3/4
Clean suction screen remove		9 00		
wood from under valves pump				
picked up from sump.		9 30	1/2	
Only losing circ		9 30	11 30	2 2
Clean screen in section, +		11 30		
check valves.		12 00	1/3	
Only losing circ.		12 00	2 45	2 3/4 2 3/4
Pipe stuck @ 3938.		2 45		
Work stuck pipe		4 00	1 1/4	
Company Time				
Cont'r Time				
RIG SER. +		4 00	4 15	1/4
MIX NUSTICK & SPOT SAME		4 15	5 15	1
WORK STUCK PIPE.		5 15	8 15	3
PIPE FREE WORK PIPE AND		8 15		
CLEAN SUCTION ON PUMP		8 30	1/4	
MIX MUD + LOWER WATER LOSS.		8 30	9 00	1/2
ORILL		9 00	9 15	1/4
CLEAN SUCTION TANK + FLUSH SUCTION		9 15	9 30	1/4
DRILL		9 30	11 00	1 1/2
CLEAN SUCTION SCREEN		11 00	11 15	1/4
TOTAL DAILL		11 15	11 30	1/4
CLEAN SCREEN & START STAND BY PUMP		11 30	12 00	1/2
Company Time				
Cont'r Time				

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
 B.O.P. Test-Operated _____ Time _____ Results _____

Total Contractor Time _____ Hrs. Toolpusher _____
 Total Company Time _____ Hrs. Approved by _____



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CANDET AMOCO SHELL I-70 LITTLE BEAR AREA Fort Normand DATE MAY 1 19 72

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		From										To										Hrs. on Bottom										Wt. Drill String (1000lbs.)										DRILL COLLARS										FUEL										WATER										COAL										Stands										REMARKS										Time									
Specify actual hours worked		Hrs.		No.		Size		Type		Size Jets		Serial No.		Weight		R.P.M.		Ft. Drilled		Hrs.		Feet Reamed		Hrs.		CONDITION		D. Collars		Other Ft.		C.B. Ft.		Subs. Ft.		Ft. Up On Kelly		TOTAL		Start		Stop		Interval																																																																			
Driller ROBERT MEYERS		8		2800		433		3283		6 3/4		73000		15		6 1/2		2 1/2		45						2472		268917		Drill 8 3/4" Hole		12:00		12:15		1/4																																																																											
Derrick MURRAY DIXON		8		2R		8 3/4		X3A		3/4 1/10		39406		35-30		85-130		908		13 1/2						RUN		530.46		Rig SERVICE + Bops		12:15		12:30		1/4																																																																											
Floor BRIAN FABER		8																												SURVEY		12:30		12:45		1/4																																																																											
Floor																														Drill.		12:45		1:00		1/4																																																																											
Floor																														Work on Airline		1:00		1:15		1/4																																																																											
Floor																														Drill.		1:15		1:30		1/4																																																																											
Motor HARRY FRASER		8																												SURVEY		1:30		1:45		1/4																																																																											
Mechanic																														Drill.		1:45		2:00		1/4																																																																											
Extra																														Drill.		2:00		2:15		1/4																																																																											
Injuries:																																																																																																															
Fires:																																																																																																															
Tour - 8 a.m. to 4 p.m.				3233		278		3511		5 1/2		74,600		15		6		2 1/4		45								2935:81		Drilling		8:00		8:30		1/2																																																																											
Driller BOB JACOB		8		2R		8 3/4		X3A		3/4 1/10		39406		30-15		130-95		1186		19 1/2								530.46		Rig SERV - B.O.R		8:30		8:45		1/4																																																																											
Derrick RICK DELNIK		8																												WORK ON STANDBY PUMP		8:45		9:00		1/4																																																																											
Floor ALAN CURRIE		8																												AND DESILTER.																																																																																	
Floor																														Drilling.		10:00		11:00		1																																																																											
Floor																														WORK ON STANDBY PUMP.		11:00		11:30		1/2																																																																											
Motor WILBERT SIMON		8																												Drilling.		11:30		1:00		1 3/4																																																																											
Mechanic																														SURVEY		1:00		1:15		1/4																																																																											
Extra																														Drilling		1:15		1:30		1/4																																																																											
Injuries:																														WORK ON MAIN PUMP.		2:30		2:45		1/4																																																																											
Fires:																														Drilling.		2:45		3:00		1/4																																																																											
Tour - 4 p.m. to Midnight				3511		1734		3625		3 1/4		86M		18		6		1 1/2		50								2935:37		Rig SERVICE BOP ✓		4:00		4:15		1/4																																																																											
Driller CLIFFORD JOHNSON		8		2R		8 3/4		X3A		3/4 1/10		39406		30		85		1248		20 1/2								62.00		DRILL		4:15		4:45		1 1/2																																																																											
Derrick KEITH ORDM		12		3		8 3/4		X3A		3/4 1/10		KN565		20		60		52		13 1/2								62934		Survey for trip (Drop)		5:45		6:00		1/4																																																																											
Floor DAN OCONNOR		8																												Pull out Bit 2 (trip slow due		6:00																																																																															
Floor JOHN KELLOCK		8																												too pushing coming out of hole)		8:00		2																																																																													
Floor																														Check Blend rams change bit		8:30																																																																															
Motor ART MELLOTT		8																												Change air compress make up bit		8:30		1/2																																																																													
Mechanic																														Run in Pick up 3 D.C.S.		8:30		10:00		1 1/2																																																																											
Extra																														Clean 30' out to bottom		10:00		10:15		1/4																																																																											
Injuries:																														Only		10:15		12:00		1 3/4																																																																											
Fires:																																																																																																															
TOTAL																																																																																																															
Company Time																																																																																																															
Cont'r Time																																																																																																															

Totco Ring on Bit No.

D.P. Calipered Date

Results

From Pipe Rack

Total Contractor Time

Hrs.

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time

Hrs.

Approved by

THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CANDY AMOCO SHELL I-70 LITTLE BEAR AREA FORT NORMAN DATE APRIL 30 19 72

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

[illegible]

Tour - 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands
Specify actual hours worked	Hrs.	2046	2799	2325	4 1/2	65.000	3 15	0 06	1.0 2 3/8	Wgt. 42.				1749.67
Driller	8													Singles
Derrick	13													D. Collars
Floor	8													Other Ft.
Floor														C.B. Ft.
Floor														Subs. Ft.
Motor	8													Ft. Up on Kelly
Mechanic														TOTAL
Ex. Injuries:	8													2325
		MUD		8 a.m.	10 a.m.	12 Noon	2 p.m.	Additives	At Surveys Degree		MOTOR HOURS		Next Oil Change	
		WEIGHT		9.4	9.4	9.4		Potassium 300	2150 3/4		1 74		122	
		VISCOSITY		29	28	29		MF-1 4	2325 1/2		2 74		104	
		GEL								3 74				
		No. 1	Pressure	1450	1460	1450					4 166			
		No. 2	Pressure	63	63	63					5 122			
		Liner Size		5 1/2	5 1/2	5 1/2								
		No. 1	Pressure					Size 1 1/8	TRIPS 61	No. Lines 8	TON MILES 28	TOTAL MILES 2692	Slip Foot or Cut	Feet Left on Spool 4205
		No. 2	Pressure											Next Slip 350
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		Liner Size												
		No. 1	Pressure											
		No. 2	Pressure											
		L												

Tour - 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands
Specify actual hours worked	Hrs.	2325	475	2800	6 1/2	68M	3	9	10	Wgt.				2249.5
Driller	Clifford Johnson	8					75	6	2 1/2	45				Singles
Derrick	KEITH DROM	12												
Floor	JOHN KELLOCK	6												
Floor	DAN O'CONNOR	6												
Floor														
Motor	ART MELLOTT	8												
Mechanic														
Extra														
Injuries:														
Fires:														
		No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
		2R	6 3/4	X3A	1/11-1/10	39406	25-35	85-130	475	6 1/2			DRIC	530.46
														Other Ft.
														C.B. Ft.
		MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives				At Surveys Degree	MOTOR HOURS		Next Oil Change
		WEIGHT					PLASSUM 500 lbs				2628 1/2	1	82	130
		VISCOSITY					MF-1 5 SACS					2	82	112
		GEL										3	82	
												4	74	
												5	130	
		No. 1	Pressure											
		Model	S.P.M.											
		Liner Size												
		No. 2	Pressure											
		Model	S.P.M.											
		Liner Size												
		W.L.	F.C.	PH.										
		Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet on Spool	Cut	Feet Left on Spool	Next Slip			
		1 1/4	61	6	89.71	2781				4205	350			
		General												

[illegible]

Totco Ring on Bit No.

B.O.P. Test-Operated

D.P. Calipered Date

Results

Results

From Pipe Rack

Total Contractor Time _____ Hrs.

Total Company Time _____ Hrs

Toolpusher

Approved by _____



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CANOEX AMOCO SHELL I-70 LITTLE BEAR AREA FORT NORMAN DATE April 29 1972

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands					
Specify actual hours worked							No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	
Driller	ROBERT MEYERS	8	755			50.000	3	18	4	2 1/2	45								756.50
Derrick	MURRAY DITON	8	755																530.46
Floor	ALLAN KINAKIN	30																	
Floor	BRIAN FABER	8																	
Floor																			
Motor	HARRY FRASER	8																	
Mechanic																			
Extra																			
Injuries:	A. KINAKIN quit. SEND CHECK FOR H. FRASER TO ROYAL BANK, FORT SACKATCHEWAN, ALTA. AK # 6561																		
Fires:																			

Tour - 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands					
Specify actual hours worked							No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	
Driller	PAUL JACOB	8	755	353	1109	3 3/4	50.000	3	15	6	2 1/2	45							531.98
Derrick	TRICK DELAIR	8																	530.46
Floor	ALLAN CURRIE	12																	
Floor																			
Floor																			
Motor	WILBERT SIMMONS	4																	
Mechanic																			
Extra	Jim Dufarlais	11																	
Injuries:																			
Fires:																			

Tour - 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands					
Specify actual hours worked							No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	
Driller	CLIFFORD JOHNSON	11	1106	594	1702	6 1/2	55	13	6	2 1/2	45								1166
Derrick	KEITH OROM	12																	530.46
Floor	JOHN KALLOCK	8																	
Floor																			
Floor																			
Motor	ART MERLOTT	15																	
Mechanic																			
Extra																			
Injuries:																			
Fires:																			

REMARKS		Start	Time	Interval
NIPPLE up BOPs.		12:00	3:00	3
PRESSURE TEST & Tighten up BOPs.		3:00	5:00	2
Run In Hole & PRESSURE TEST.		8:00		
Pick up 3 Lcs.			8:00	3
PRESSURE TEST BLIND RAMS @ 1500 FOR 15 MINUTES ok				
PRESSURE TEST PIPE RAMS @ 1500 FOR 15 MINUTES ok				
PRESSURE TEST HYDRIL @ 1500 FOR 15 MINUTES ok.				
CHECK motor kills ok.				
Company Time				
Cont'r Time				
DIP SERV.		8:00	8:15	1/4
PRESSURE TEST Kelly cock @ 1500 PSI		8:15		
FOR 15 MIN O.K.			8:30	1/4
Drill out Cement Float +		8:30		
SHOE			11:00	2 1/2
Drilling 8 3/4" Hole		11:00	1:00	2
WORK ON NO. 2 pump FOR		1:00	1:45	3/4
Jettin out of sump				
Drilling.		1:45	2:15	1/2
SURVEY		2:15	2:45	1/2
Drilling.		2:45	4:00	1 1/4
Company Time				
Cont'r Time				
RIG SERVICE + BOP ✓		4:00	4:15	1/4
DRLC		4:15	6:00	1 3/4 1 3/4
SURVEY		6:00	6:15	1/4
DRLC		6:15	6:30	1/4 1/4
REMOVE ROCH FROM VALVE ON D500		6:30	6:45	1/4
DRLC		6:45	8:00	1 1/4 1 1/4
WORK ON D500 REMOVE		8:00		
WOOD FROM UNDER VALVE			8:30	1/2
DRLC		8:30	10:15	1 3/4 1 3/4
SURVEY		10:15	10:30	1/4
TOTAL DRLC		10:30	12:00	1 1/2 1 1/2
Company Time				
Cont'r Time				

Totco Ring on Bit No.

D.P. Calipered Date

Results

From Pipe Rack

Total Contractor Time

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time

Approved by

THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CANDER AMOCO SHELL I-70 LITTLE BEAR AREA AREA FORT NORMAN DATE APRIL 28 19 72

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.															From		Footage		To		Hrs. on Bottom		Wt. Drill String (1000lbs.)		DRILL COLLARS				FUEL		WATER		COAL		Stands		Start		Stop		Interval			
Specify actual hours worked															Hrs.		755																											
Driller ROBERT MEYERS															8																													
Derrick MURRAY DIXON															8																													
Floor ALLAN KINAKIN															8																													
Floor BRIAN FABER															8																													
Floor																																												
Motor HARRY FRASER															8																													
Mechanic																																												
Extra																																												
Injuries:																																												
Fires:																																												
Tour - 8 a.m. to 4 p.m.															From		Footage		To		Hrs. on Bottom		Wt. Drill String (1000lbs.)		DRILL COLLARS				FUEL		WATER		COAL		Stands		Company Time		Cont'r Time					
Specify actual hours worked															Hrs.		755																											
Driller PAUL JACOB															8																													
Derrick RICK DELAIR															8																													
Floor ALLAN CURRIE															8																													
Floor																																												
Floor																																												
Motor WILBERT SIMMS															8																													
Mechanic																																												
Extra Deleted Jim Desjarlais															12																													
Injuries:																																												
Fires:																																												
Tour - 4 p.m. to Midnight															From		Footage		To		Hrs. on Bottom		Wt. Drill String (1000lbs.)		DRILL COLLARS				FUEL		WATER		COAL		Stands		Company Time		Cont'r Time					
Specify actual hours worked															Hrs.																													
Driller CLIFFORD JOHNSON															8																													
Derrick KEITH DROM															13																													
Floor JOHN KELLOCK															8																													
Floor BRIAN FABER															4																													
Floor																																												
Floor																																												
Motor ART MELLOTT															8																													
Mechanic																																												
Extra																	</																											

Totco Ring on Bit No.

B.O.P. Test-Operated

D.P. Calipered Date

Time

Results

Results

From Pipe Rack

Total Contractor Time _____ Hrs.

Total Company Time _____ Hrs.

Toolpusher

Approved by _____



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CANDEX AMOCO SHELL I-70 LITTLE BEAR AREA FORT NORMAN DATE APRIL 27 19 72

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands
Specify actual hours worked	Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Singles
Driller <u>ROBERT MEYERS</u>	<u>8</u>													290.90
Derrick <u>MURRAY DIXON</u>	<u>8</u>													439.12
Floor <u>ALLAN KINAKIN</u>	<u>8</u>													
Floor <u>BRIAN FABER</u>	<u>8</u>													
Floor														
Motor <u>HARRY FRASER</u>	<u>8</u>													
Mechanic														
Extra														
Injuries:														
Fires:														
Tour — 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands
Specify actual hours worked	Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Singles
Driller <u>PAUL JACOB</u>	<u>10</u>													
Derrick <u>DICK DELARK</u>	<u>10</u>													
Floor <u>ALLAN CURRIE</u>	<u>10</u>													
Floor														
Motor <u>WILBERT SIMMS</u>	<u>10</u>													
Mechanic <u>Jim Dejarlais</u>	<u>10</u>													
Extra														
Injuries:														
Fires:														
Tour — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands
Specify actual hours worked	Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Singles
Driller <u>Cliff Johnson</u>	<u>8</u>													
Derrick <u>Keith Dixon</u>	<u>8</u>													
Floor <u>John Kellock</u>	<u>8</u>													
Floor <u>Doug Bussie</u>	<u>8</u>													
Floor														
Motor <u>Art Mellatt</u>	<u>8</u>													
Mechanic														
Extra														
Injuries:														
Fires:														

REMARKS	Time		
	Start	Stop	Interval
Rig SERVICE	12:00	12:15	1/4
Hoist to Run SURFACE CASING.	12:15	1:15	1
Rig up to Run CASING	1:15	1:45	1/2
Run CASING	1:45	6:15	4 3/4
Circ. CASING.	6:15	8:00	1 3/4
Company Time			
Cont'r Time			
Circ. CASING W.O. C.A.L.C.2. 400 400 8			
Company Time			
Cont'r Time			
H.B. TO BRAND. 1360			
Company Time			
Cont'r Time			
Circ. CASING W.O. C.A.L.C.2. 400 430 1/2			
Rig too CEMENT & CEMENT	430	6:35	1 3/4
W.O.R	6:15	12:00	5 3/4
Company Time			
Cont'r Time			
Ran 21 JTS. 95% C.S.G. 32.3 H-40 5140			
HANDLED @ 755' USED HOWE SHOES &			
INSERT FLOAT & A CEMENT.			
CEMENTED w/ 450 SAKS OILWELL CEMENT			
Plus 2.5% R.P.			
C.P. @ 6:15 PM. April 27/72			
TOTAL Approx 15-15BLs Returns			
Company Time			
Cont'r Time			

Totco Ring on Bit No.

D.P. Calipered Date

Results

From Pipe Rack

Total Contractor Time

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time

Approv

THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CANDET HINOCO SHELL F-70 LITTLE BEAR AREA FORT NORMAN DATE APRIL 26 19 72

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

[illegible]

Totco Ring on Bit No.

D.P. Calipered Date

Results

From Pipe Rack

Total Contractor Time _____ Hrs.

Tcolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time _____ Hrs

Approved-by



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CHANDLER AMOCO SHELL I-70 LITTLE BELLE AREA FORT NORMAN DATE APRIL 25 1972

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		Specify actual hours worked		Hrs.
Driller	ROBERT MEYERS	8		
Derrick	MURRAY DIXON	8		
Floor				
Floor				
Floor				
Motor				
Mechanic				
Extra				
Injuries:				
Fires:				

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	No.	O.D.	I.D.	Wgt.	FUEL	WATER	COAL	Stands
B	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
I												
T												
S												
MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.	Additives				At Surveys Degree	MOTOR HOURS	Next Oil Change	
WEIGHT												
VISCOSITY												
GEL												
P	No. 1	Pressure										
U	Model	S.P.M.										
M	Liner Size											
P	No. 2	Pressure										
S	Model	S.P.M.										
Liner Size												
W.L.	F.C.	pH.										

Tour - 8 a.m. to 4 p.m.		Specify actual hours worked		Hrs.
Driller	PAUL JACOB	8		
Derrick	PICK DELAIR	8		
Floor	ALLAN CURRIE	8		
Floor				
Floor				
Motor	WILBERT SIMMS	8		
Mechanic				
Extra	JIM WELSH	8		
Injuries:				
Fires:				

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	No.	O.D.	I.D.	Wgt.	FUEL	WATER	COAL	Stands
B	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
I												
T												
S												
MUD	8 a.m.	10 a.m.	12 Noon	2 p.m.	Additives				At Surveys Degree	MOTOR HOURS	Next Oil Change	
WEIGHT												
VISCOSITY												
GEL												
P	No. 1	Pressure										
U	Model	S.P.M.										
M	Liner Size											
P	No. 2	Pressure										
S	Model	S.P.M.										
Liner Size												
W.L.	F.C.	pH.										

Tour - 4 p.m. to Midnight		Specify actual hours worked		Hrs.
Driller	CLIFF JACOBSON	8		
Derrick	JOHN DROM	8		
Floor	JOHN KELLOCK	8		
Floor	DOUG BURKE	8		
Floor				
Motor	ART MELLATH	8		
Mechanic				
Extra				
Injuries:				
Fires:				

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	No.	O.D.	I.D.	Wgt.	FUEL	WATER	COAL	Stands
B	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION
I												
T												
S												
MUD	4 p.m.	6 p.m.	8 p.m.	12 m.	Additives				At Surveys Degree	MOTOR HOURS	Next Oil Change	
WEIGHT												
VISCOSITY												
GEL												
P	No. 1	Pressure										
U	Model	S.P.M.										
M	Liner Size											
P	No. 2	Pressure										
S	Model	S.P.M.										
Liner Size												
W.L.	F.C.	pH.										

W.O.O. Fill mud Tanks
Prime Pump

Start	Stop	Interval
12:00		
8:00		

W.O.O. CLEAN UP LEASE
START STANDBY MOTOR
PRIME PUMP WORK ON ROBERT
TABLE CLEAN REPLACE GREASE LINE
AND STRAIGHTEN TABLE TOP

Company Time	Cont'r Time
4:00	5:00 1 1/2
5:20	7:45 2 1/4
7:45	10:00 2 1/4
10:00	10:45 3/4
10:45	12:00 1 1/4

TOTAL

Company Time Cont'r Time

Total Contractor Time Hrs.

Total Company Time Hrs.

Toolpusher

Approved

Totco Ring on Bit No.

D.P. Caliper Date

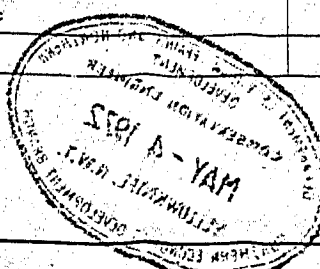
Results

From Pipe Rack

B.O.P. Test-Operated

Time

Results





THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 LOCATION CANEX AMOCO SHELL I-70 LITTLE BEAR AREA FORT NORMAN DATE April 24 1972

Tour - Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands
Specify actual hours worked	Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Singles
Driller ROBERT MEYERS	8													
Derrick MURRAY D. TOWN	8													
Floor														
Floor														
Floor														
Motor Int. Mallett	4													
Mechanic														
Extra														
Injuries:														
Fires:														
Tour - 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands
Specify actual hours worked	Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Singles
Driller Paul Jacob	8													
Derrick Rick Debris	8													
Floor														
Floor														
Floor														
Motor ALAN CURRIE	8													
Motor Walker Simms	8													
Mechanic														
Extra Welder Jim Desjarlais	9													
Injuries:														
Fires:														
Tour - 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000 lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands
Specify actual hours worked	Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Singles
Driller Clifford Johnson	8													
Derrick Keith Cron	8													
Floor Doug Burke	8													
Floor														
Floor John Mellock	6													
Motor														
Mechanic														
Extra														
Injuries:														
Fires:														

W.O.O. getting Ready to Spud 8:00 4:00 8

Company Time Cont'r Time

W.O.O. Chasen up Getting Ready to Spud.

8 HRS TRAVELLING TIME FOR AL CURRIE + D. SIMMS

Company Time Cont'r Time

W.O.O. Clean up rig 4:00 12:00 8
Getting ready to Spud.

TOTAL

Company Time Cont'r Time

Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack
B.O.P. Test-Operated Time Results

Total Contractor Time Hrs.

Total Company Time Hrs.

Toolpusher

Approved by



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 LOCATION Candace Amoro Skel I 70 Little Bear AREA St. Herman DATE April 18-19-20 19 72

Tour — Midnight - 8 a.m.		Specify actual hours worked		Hrs.
Driller	<u>ROBERT MEYERS</u>			<u>8</u>
Derrick	<u>MURRAY DIXON</u>			<u>8</u>
Floor				
Floor				
Floor				
Motor				
Mechanic	<u>JIM DESJARLAIS</u>			<u>9</u>
Extra				
Injuries:	<u>April 18-72</u> <u>Welding done building gin poles</u>			
Fires:	<u>for 06 gal. change to Candace skel</u> <u>change Dallas Court. etc</u>			

Tour — 8 a.m. to 4 p.m.		Specify actual hours worked		Hrs.
Driller	<u>ROBERT MEYERS</u>			<u>8</u>
Derrick	<u>MURRAY DIXON</u>			<u>9</u>
Floor				
Floor				
Floor				
Motor				
Mechanic	<u>JIM DESJARLAIS</u>			<u>8</u>
Extra				
Injuries:	<u>April 19-72</u> <u>Welding done building gin poles</u>			
Fires:	<u>for 06 gal. change to Candace skel</u> <u>change Dallas Court. etc</u>			

Tour — 4 p.m. to Midnight		Specify actual hours worked		Hrs.
Driller	<u>ROBERT MEYERS</u>			<u>8</u>
Derrick	<u>MURRAY DIXON</u>			<u>8</u>
Floor				
Floor				
Floor				
Motor				
Mechanic	<u>JIM DESJARLAIS</u>			<u>8</u>
Extra				
Injuries:	<u>April 20-72</u>			
Fires:				

REMARKS	Start	Stop	Interval
Pull line 0500 clean out more 800			
cement, put new inlet valve rubber on			
oil valves 0500, put new pulchation rubber			
in 0500's charge.			
Change oil in the light plant, Build gin poles			
April 18-72			
for 06 gal. Put new toilet in engine house			
Measure fuel 49 ft on line a 20 bbls ft.			
W.O.O.			400 8 hrs
Company Time			
Cont'r Time			
Haul two 1/2 loads water to 800			
water tank. Fill main fuel tank up			
Work on degasser welding brues			
on mud tank as can turn degasser			400 8
Take mud inventory oil but not sure.			
April 19-72			
W.O.O.			
Company Time			
Cont'r Time			
Finish hooking up gin poles on cat			
Take degasser off mud tank turn			
put on right.			
Pull seat 0500 clean cement out of			
rest pump.			
April 20-72			
Put shute up in engine house			
Unload gas 2 bbls, grease part of			
single roller.			
TOTAL			
W.O.O. License			
Company Time			
Cont'r Time			

Totco Ring on Bit No.

D.P. Caliper Date

Results

From Pipe Rack

Total Contractor Time

Toolpusher HR. Greenly

B.O.P. Test Operated

Time

Results

Total Company Time

Approved by



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 LOCATION CANEX AMCO SHELL I-70 LITTLE BEAR AREA FORT NORMAN DATE April 16 1972

Tour — Midnight - 8 a.m.		Specify actual hours worked		Hrs.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands	REMARKS	Start	Time Stop	Interval
					No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION					
Driller																					
Derrick																					
Floor																					
Floor																					
Floor																					
Motor																					
Mechanic																					
Extra																					
Injuries:																					
Fires:																					
Tour — 8 a.m. to 4 p.m.		Specify actual hours worked		Hrs.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands				
					No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION					
Driller	<u>ROBERT MEYERS</u>			<u>8</u>																	
Derrick	<u>MURRAY DIXON</u>			<u>8</u>																	
Floor																					
Floor																					
Floor																					
Motor																					
Mechanic	<u>WELDER JIM DESTALMAS</u>			<u>9</u>																	
Extra																					
Injuries:																					
Fires:																					
Tour — 4 p.m. to Midnight		Specify actual hours worked		Hrs.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands				
					No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION					
Driller																					
Derrick																					
Floor																					
Floor																					
Floor																					
Motor																					
Mechanic																					
Extra																					
Injuries:																					
Fires:																					
TOTAL																					

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
B.O.P. Test-Operated _____ Time _____ Results _____Total Contractor Time _____ Hrs.
Total Company Time _____ Hrs.Tcolpusher _____
Approved by _____

THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CANEX AMOCO SHELL I-70 LITTLE BEAR AREA FORT WORTH DATE April 15 1972

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour — Midnight - 8 A.M.	
Specify actual hours worked	Hrs.
Driller	
Derrick	
Floor	
Floor	
Floor	
Motor	
Mechanic	
Extra	
Injuries:	
Fires:	

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands	
					No.	O.D.	I.D.	Wgt.					
B	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
I													Other Ft.
T													C.B. Ft.
S													Subs. Ft.
MUD									At Surveys Degree		MOTOR HOURS		Next Oil Change
WEIGHT											1		
VISCOSITY											2		
GEL											3		
P U M P S	No. 1	Pressure											Ft. Up On Kelly
	Model	S.P.M.											TOTAL
	Liner Size												
	No. 2	Pressure											
	Model	S.P.M.											
	Liner Size												
W.L.									F.C.		pH.		
No. Lines TON MILES TOTAL MILES Slip Feet or Cut Feet Left on Spool Next Slip													
General													

Tour — 8 .m. to 4 p.m.	
Specify actual hours worked	Hrs.
Driller <i>ROBERT MEYERS</i>	<i>8</i>
Derrick <i>MURRAY DITON</i>	<i>8</i>
Floor	
Floor	
Floor	
Motor	
Mechanic <i>JIM DESJARLAYS</i>	<i>9</i>
Extra	
Injuries:	
Fires:	

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands	
					No.	O.D.	I.D.	Wgt.					
B	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
I													Other Ft.
T													C.B. Ft.
S													Subs. Ft.
MUD									At Surveys Degree		MOTOR HOURS		Next Oil Change
WEIGHT											1		
VISCOSITY											2		
GEL											3		
P U M P S	No. 1	Pressure											Ft. Up On Kelly
	Model	S.P.M.											TOTAL
	Liner Size												
	No. 2	Pressure											
	Model	S.P.M.											
	Liner Size												
W.L.									F.C.		pH.		
No. Lines TON MILES TOTAL MILES Slip Feet or Cut Feet Left on Spool Next Slip													
General													

Tour — 4 p.m. to Midnight	
Specify actual hours worked	Hrs.
Driller	
Derrick	
Floor	
Floor	
Floor	
Motor	
Mechanic	
Extra	
Injuries:	
Fires:	

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands	
					No.	O.D.	I.D.	Wgt.					
B	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
I													Other Ft.
T													C.B. Ft.
S													Subs. Ft.
MUD									At Surveys Degree		MOTOR HOURS		Next Oil Change
WEIGHT											1		
VISCOSITY											2		
GEL											3		
P U M P S	No. 1	Pressure											Ft. Up On Kelly
	Model	S.P.M.											TOTAL
	Liner Size												
	No. 2	Pressure											
	Model	S.P.M.											
	Liner Size												
W.L.									F.C.		pH.		
No. Lines TON MILES TOTAL MILES Slip Feet or Cut Feet Left on Spool Next Slip													
General													

Stamp: RECEIVED BY THE OFFICE OF THE SECRETARY OF THE INTERIOR DEPARTMENT OF THE UNITED STATES

Stamp: SEP 1 1971

Stamp: U.S. GEOLOGICAL SURVEY

Stamp: WASHINGTON, D.C.

REMARKS	Time		
	Start	Stop	Interval

Company Time	Cont'r Time				
--------------	-------------	--	--	--	--

Hard water Pump from Lake, 1000 other	8 ⁰⁰			
work on 2:50		4 ⁰⁰		

PLEASE SEND: MURRAY DIXON CHEQUE TO:

Toronto-Dominion Bank @					
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Mayerthorpe Alta.				
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[illegible]

TOTAL					
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Company Time	Cont'r Time			
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Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pine Rack _____

B.O.P. Test-Operated	Time	Results
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Total Contractor Time _____ Hrs. Toolpusher [Signature]

Total Company Time _____ Hrs. Approved by [Signature]

THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION CANDER ANCO SHELL I-70 LITTLE BEAR AREA FORT NORMAN DATE APRIL 14 19 72

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		Specify actual hours worked		Hrs.																Start		Stop		Interval		
Driller																										
Derrick																										
Floor																										
Floor																										
Floor																										
Motor																										
Mechanic																										
Extra																										
Injuries:																										
Fires:																										
Tour - 8 a.m. to 4 p.m.					Specify actual hours worked		Hrs.																Company Time		Cont'r Time	
Driller	ROBERT MEYERS	10																		HELP WELDER, Roll out + Hookup		8:00				
Derrick	MURRAY DIXON	8																		BLADDER TANK		4:00				
Floor																										
Floor																										
Floor																										
Motor																										
Mechanic	WELDER JIM DESJARLAIS	8																								
Extra																										
Injuries:	Overtime - 1000 water pump																									
Fires:	At Lake.																									
Tour - 4 p.m. to Midnight					Specify actual hours worked		Hrs.																Company Time		Cont'r Time	
Driller																										
Derrick																										
Floor																										
Floor																										
Floor																										
Motor																										
Mechanic																										
Extra																										
Injuries:																										
Fires:																										
TOTAL																							Company Time		Cont'r Time	

Totco Ring on Bit No.

D.P. Calipered Date

Results

From Pipe Rack

Total Contractor Time _____ Hrs.

Toolpusher:

B.O.P. Test-Operated

Time _____

Results

Total Company Time _____ Hrs.

Approved by _____

THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 LOCATION CANEX AMOCO SHELL I-70 LITTLE BEAR AREA FORT NORMAN DATE APRIL 13 1972

REMARKS

19 年 10 月 1 日

Tour -- Midnight - 8 a.m.

Specify actual hours worked

Hrs.	From		To		Hrs. on Rotary		Wt. Drill String (1000 lbs.)		DRILL COLLARS				FUEL		WATER		COAL		Status				
									No.	I.D.	O.D.	Wt.	Gals		Hrds		Tons		Gauges				
BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars										
													Other Ft.										
													C.B. Ft.										
													Subs. Ft.										
MUD			12 Mn.	2 a.m.	4 a.m.	6 a.m.	Additives			At Surveys Degree		MOTOR HOURS		Next Oil Change		Ft. Us On							
WEIGHT												1				Kelly							
VISCOSITY												2				TOTAL							
GEL												3											
PUMPS	No. 1 Model	Pressure												4									
		S.P.M.												5									
	No. 2 Model	Liner Size												Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or	Cut	Feet Left on Spool	Next Slip
		Pressure												General									
		S.P.M.																					
		Liner Size																					
W.L.			F.C.			pH.																	

Company Time

Cont'r Time

Tour - 8 a.m. to 4 p.m.

Specify actual hours worked

[illegible]

Company Time

Cont'r Time

Tour — 4 p.m. to Midnight

Specify actual hours worked

Hrs.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands	
							No.	O.D.	I.D.	Wgt.					
											Gals.	Bbls.	Tons	Singles	
BITS	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars		
													Other Ft.		
													C.B. Ft.		
													Subs. Ft.		
MUD		4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives	At Surveys Degree				MOTOR HOURS		Next Oil Change	Subs. Ft.	
WEIGHT											1			Subs. Ft.	
VISCOSITY											2			Ft. Up On Kelly	
GEL											3				
PUMPS	No. 1	Pressure									4			TOTAL	
	Model	S.P.M.									5				
		Liner Size				Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet	Cut	Feet Left on Spool	
	No. 2	Pressure												Next Slip	
	Model	S.P.M.				General									
		Liner Size													
W.L.		F.C.		pH.											

	TOTAL
--	-------

Company Time

Cent's Time

Totco Ring on Bit No.

D.P. Calipered Date

Results

From Pipe Race:

Total Contractor Time _____ Hrs.

Toolpusher

S.C.P. Test-Operated

Time

Results

Total Company Time _____ Hrs.

Approved by _____



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 LOCATION Candex Amoco Shell 1-90 Little Bear AREA Fort Norman DATE 4-11-1977

Tour - Midnight - 8 a.m.
Specify actual hours worked Hrs.
Driller PAUL JACOB 8
Derrick BOB DELAIR 8
Floor ANDRUS MISKOSKI 8
Floor TIM ROBERTSON 8
Motor WILBERT SIMONS 8
Mechanic
Extra
Injuries: 362 W.L.T.A.
Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands												
No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars									
MUD												At Surveys Degree	MOTOR HOURS	Next Oil Change							
WEIGHT												Cement = 13.5 #/km									
VISCOSITY												Cement = 15.4 #/km									
GEL												Tailed with 45 sacks neat cement in place @ 3:30 AM									
No. 1	Pressure											Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or	Cut	Feet Left on Spool	Next Slip
Model	S.P.M.											General									
No. 2	Pressure																				
Model	S.P.M.																				
Liner Size																					
W.L.	F.C.	pH.																			

Remarks: Cement Mix Cement in Suction Tank and Cement Conductor pipe W.O.C.

12' 0"

3' 30" 3 1/2

3' 30" 8' 00" 1 1/2

Company Time Cont'r Time

Tour - 8 a.m. to 4 p.m.
Specify actual hours worked Hrs.
Driller ALLEN THOMAS 8
Derrick KEN STEINERSON 8
Floor IRV. HOLLAND 8
Floor BRIAN FOX 8
Motor WM. BROZNY 8
Mechanic
Injuries: JIM OESTERLITS
Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands												
No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars									
MUD												At Surveys Degree	MOTOR HOURS	Next Oil Change							
WEIGHT												1									
VISCOSITY												2									
GEL												3									
No. 1	Pressure											Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or	Cut	Feet Left on Spool	Next Slip
Model	S.P.M.											General									
No. 2	Pressure																				
Model	S.P.M.																				
Liner Size																					
W.L.	F.C.	pH.																			

Remarks: W.O.C.

8' S.S. 17 1/2"

13 3/4"

48' KB

Company Time Cont'r Time

Tour - 4 p.m. to Midnight
Specify actual hours worked Hrs.
Driller ROBERT MEYERS 8
Derrick MURRAY DIXON 8
Floor BILL YUZUWARI 8
Floor MIKE PAUL 8
Motor HANK ROBERTSON 8
Mechanic
Extra
Injuries:
Fires:

From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands												
No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars									
MUD												At Surveys Degree	MOTOR HOURS	Next Oil Change							
WEIGHT												1									
VISCOSITY												2									
GEL												3									
No. 1	Pressure											Size	TRIPS	No. Lines	TON MILES	TOTAL MILES	Slip	Feet or	Cut	Feet Left on Spool	Next Slip
Model	S.P.M.											General									
No. 2	Pressure																				
Model	S.P.M.																				
Liner Size																					
W.L.	F.C.	pH.																			

Remarks: W.O.C.

4' 00" 12' 00" 8

Company Time Cont'r Time

TOTAL

Company Time Cont'r Time

Totco Ring on Bit No.

D.P. Calipered Date

Results

From Pipe Rack

Total Contractor Time Hrs.

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time Hrs.

Approved by



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 LOCATION CANEX APPROX SH-11 I-70 LITTLE ROCK AREA FORT NORMAN DATE April 10 1972

Tour — Midnight - 8 a.m.		From Footage To										Hrs. on Bottom		Wt. Drill String (1000 lbs.)		DRILL COLLARS		FUEL		WATER		COAL		Stands		
Specify actual hours worked																No. O.D. I.D. Wgt.		Gals.		Bbls.		Tons		Singles		
Hrs.																										
Driller	PAUL JACOB	8																								
Derrick	RICK DELAIR	8																								
Floor	MAURICE DISKOSKI	8																								
Floor	TIM ROBERTSON	8																								
Floor																										
Motor	WILBERT SIMMS	8																								
Mechanic																										
Extra																										
Injuries:																										
Fires:																										
Tour — 8 a.m. to 4 p.m.		From Footage To										Hrs. on Bottom		Wt. Drill String (1000 lbs.)		DRILL COLLARS		FUEL		WATER		COAL		Stands		
Specify actual hours worked																No. O.D. I.D. Wgt.		Gals.		Bbls.		Tons		Singles		
Hrs.																										
Driller	ALLEN THOMAS	8																								
Derrick	KEH STENERSAN	8																								
Floor	TRV HOLLAND	8																								
Floor	BRYAN FOX	8																								
Floor	DERYL NORMAN	8																								
Motor	WM. BROZNY	8																								
Mechanic																										
Extra	HELDER JIM DESJARLAIS	8																								
Injuries:																										
Fires:																										
Tour — 4 p.m. to Midnight		From Footage To										Hrs. on Bottom		Wt. Drill String (1000 lbs.)		DRILL COLLARS		FUEL		WATER		COAL		Stands		
Specify actual hours worked																No. O.D. I.D. Wgt.		Gals.		Bbls.		Tons		Singles		
Hrs.																										
Driller	ROBERT MEYERS	8																								
Derrick	MURRAY DIXON	8																								
Floor	BILL YUZICAPI	8																								
Floor	MIKE PARK	8																								
Floor																										
Motor	HANK ROBERTSON	8																								
Mechanic																										
Extra																										
Injuries:																										
Fires:																										

Drill Rat Hole Sand stone 12:00 5:00 5
Clean out Conductor Hole and 5:00
Bail out Sinker 8:00 3

RIG SER. 8:00 8:15 1/4
DRILL MOUSE HOLE 8:15 12:15 4
MAKE CIRC. HEAD FOR CONDUCTOR PIPE 12:15 1:15 1
WORK CONDUCTOR PIPE IN (HANGING UP ON SANDSTONE LEAGE) 4:00 2 3/8

Rig SERVICE 4:00 4:15 1/4
CIRC CONDUCTOR & WORK SAME 4:15 7:00 2 3/4
Run in w/ REAMER & PHOT. BIT, CLEAN HILL IN BOTTOM 7:00 9:00 2
Run in CONDUCTOR & CIRC. 9:00 10:00 1
Mix CEMENT IN SINKER TANK 10:00 12:00 2

TOTAL

Company Time Cont'r Time

Totco Ring on Bit No.

D.P. Calipered Date

Results

From Pipe Rack

Total Contractor Time Hrs.

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time Hrs.

Approved by



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 LOCATION CARVER AMOCO Shell 170 LITTLE BEAR AREA Fort Worth DATE April 9 1972

Tour — Midnight - 8 a.m.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands			
Specify actual hours worked	0	45	45	7	2,000	No. 1 6 1/4 3 3/4 1000							
Driller PAUL INCOB 8	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
Derrick TISS DELAIR 8	1A	8 3/4	X 3A	3-12	39496	ALL	80	45	5				11.90
Floor MAURICE MISHKES 8	1A	12 1/4	S 4T	3/8 1/8	390902	ALL	80	2	12	2			2.68
Floor JIM ROBERTSON 8													2.73
Floor	MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.	Additives	At Surveys Degree	MOTOR HOURS	Next Oil Change				
Floor	WEIGHT												
Motor WILBERT SIMMS 8	VISCOSITY												
Mechanic	GEL												
Extra	No. 1	Pres. sure	0	9.00	300								
Injuries: 360	Model	S.P.M.	500	60	40								
Fires: JIM ROBERTSON 689 761-919	Liner Size	5 X 16											
	No. 2	Pres. sure											
	Model	S.P.M.											
	Liner Size												
	W.L.	F.C.	pH.										
Tour — 8 a.m. to 4 p.m.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands			
Specify actual hours worked	45	8	53	1	2,000	No. 1 6 1/4 2 3/8 1000							
Driller ALLEN THOMAS 8	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
Derrick KEN STENERSON 8	1A	12 1/4	S 4T	3/8 1/8	390902	ALL	80	8	1	45	8 1/2		11.90
Floor IRV. HULLAND 8													2.68
Floor BRYAN FOX 8													2.73
Floor DEAN NORMAN 8													2.50
Motor WM. BROZNY 8													6.80
Mechanic													
Extra JIM DESTARLAIS 89													
Injuries:													
Fires:													

Tour — 4 p.m. to Midnight	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands			
Specify actual hours worked	53												
Driller ROBERT MEYERS 8	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
Derrick MURRAY DIXON 8	1A	12 1/4	S 4T	3/8 1/8	390902	ALL	80	(17 1/2" REAMER)	53	3			11.90
Floor BILL YUZICAPI 8													2.68
Floor MIKE PAUL 8													2.73
Floor	MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives	At Surveys Degree	MOTOR HOURS	Next Oil Change				
Floor	WEIGHT												
Motor HANK ROBERTSON 8	VISCOSITY												
Mechanic	GEL												
Extra	No. 1	Pres. sure											
Injuries:	Model	S.P.M.											
Fires:	Liner Size												
	No. 2	Pres. sure											
	Model	S.P.M.											
	Liner Size												
	W.L.	F.C.	pH.										

Tour — 8 a.m. to 4 p.m.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands			
Specify actual hours worked	45	8	53	1	2,000	No. 1 6 1/4 2 3/8 1000							
Driller ALLEN THOMAS 8	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
Derrick KEN STENERSON 8	1A	12 1/4	S 4T	3/8 1/8	390902	ALL	80	8	1	45	8 1/2		11.90
Floor IRV. HULLAND 8													2.68
Floor BRYAN FOX 8													2.73
Floor DEAN NORMAN 8													2.50
Motor WM. BROZNY 8													6.80
Mechanic													
Extra JIM DESTARLAIS 89													
Injuries:													
Fires:													

Tour — 4 p.m. to Midnight	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS	FUEL	WATER	COAL	Stands			
Specify actual hours worked	53												
Driller ROBERT MEYERS 8	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	D. Collars
Derrick MURRAY DIXON 8	1A	12 1/4	S 4T	3/8 1/8	390902	ALL	80	(17 1/2" REAMER)	53	3			11.90
Floor BILL YUZICAPI 8													2.68
Floor MIKE PAUL 8													2.73
Floor	MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives	At Surveys Degree	MOTOR HOURS	Next Oil Change				
Floor	WEIGHT												
Motor HANK ROBERTSON 8	VISCOSITY												
Mechanic	GEL												
Extra	No. 1	Pres. sure											
Injuries:	Model	S.P.M.											
Fires:	Liner Size												
	No. 2	Pres. sure											
	Model	S.P.M.											
	Liner Size												
	W.L.	F.C.	pH.										

REMARKS	Start	Stop	Interval
Rig SERV & SWIRL	12:00	12:35	1/4
INSTALL SHAKER motor	12:35	1:00	3/4
Drilling Conductor Hole	1:00		
SANDSTONE @ 10 FT.		6:00	5
PICK 12 1/4 Bit & REAM Rat Hole	6:00	8:00	2
REAMING 8 3/4 - 12 1/4 hole.	8:00	3:30	7 1/2
PULL OUT & PUT ON 17 1/2 PILOT	3:30		
REAMER.		4:00	1/2
REAM 17 1/2" Hole to 53'	4:00	7:00	3
Drill on Rat Hole	7:00	12:00	5
TOTAL			
Company Time			
Cont'r Time			

Totco Ring on Bit NO.

D.P. Calibrated Date

Results

From Pipe Rack

Total Contractor Time Hrs.

Toolpusher

B.O.P. Test-Operated

Time

Results

Total Company Time Hrs.

Approved by



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 LOCATION *Candax Amoco Shell & 70 Little Bear AREA Ft. Norman* DATE *April 8* 19 *72*

Tour - Midnight - 8 a.m.		From		Footage		To		Hrs. on Bottom		Wt. Drill String (1000lbs.)		DRILL COLLARS		FUEL		WATER		COAL		Stands					
Specify actual hours worked		Hrs.										No.		O.D.		I.D.		Wgt.		Gals.		Bbls.		Tons	
Driller <i>Paul Jacob</i>		12																							
Derrick <i>RICK BELAIR</i>		12																							
Floor <i>MAURICE MISKOSKI</i>		12																							
Floor <i>JIM ROBERTSON</i>		12																							
Motor <i>WILBERT SIMMS</i>		12																							
Mechanic																									
Extra																									
Injuries: <i>359</i>																									
Fires:																									

Tour - 8 a.m. to 4 p.m.		From		Footage		To		Hrs. on Bottom		Wt. Drill String (1000lbs.)		DRILL COLLARS		FUEL		WATER		COAL		Stands					
Specify actual hours worked		Hrs.										No.		O.D.		I.D.		Wgt.		Gals.		Bbls.		Tons	
Driller <i>ALLEN THOMAS</i>		12																							
Derrick <i>KEN STENERSON</i>		12																							
Floor <i>IRV HOLLAND</i>		12																							
Floor <i>BRYAN FOX</i>		12																							
Motor <i>WM. BROZNY</i>		12																							
Mechanic <i>DEAN NORMAN</i>		12																							
Extra <i>WELDER JIM DESJARDIS</i>		13																							
Injuries: <i>Welder 5 hrs off 400 AM building cellar jet, weld two jobs 13 3/8 together & two plates on end.</i>																									
Fires:																									

Tour - 4 p.m. to Midnight		From		Footage		To		Hrs. on Bottom		Wt. Drill String (1000lbs.)		DRILL COLLARS		FUEL		WATER		COAL		Stands					
Specify actual hours worked		Hrs.										No.		O.D.		I.D.		Wgt.		Gals.		Bbls.		Tons	
Driller <i>ROBERT MEYERS</i>		12																							
Derrick <i>MURRAY DITON</i>		12																							
Floor <i>BILL YUZICAP</i>		12																							
Floor <i>MIKE PAUL</i>		12																							
Motor <i>HANK ROBERTSON</i>		12																							
Mechanic																									
Extra																									
Injuries: <i>SEND BILL YUZICAP 8:42 AM TO - 9930 113 ST. SUITE 505 ROCHESTER HOUSE EDMONTON.</i>																									
Fires:																									

REMARKS		Start		Time Stop		Interval	
<i>Dig cellar dippers with pick give some start to cement</i>		12:00		8:00		8	
<i>Cement cellar dig ditch from rat hole to cellar from cellar to pump circle & cement</i>		8:00		4:00		8	
<i>One crew cellar ditches for 16 hrs.</i>							
<i>Used 80 bags cement</i>							
<i>20 bags permafrost cement</i>							
<i>Put up prefabs rig up mud tank prime pumps rig to speed</i>		4:00					
<i>Hook up cellar jet, rig up station</i>							
<i>W.O.C. in ditches & cellar.</i>							
<i>Build CELLAR JET & EXTEND SAME.</i>		12:00		8			
TOTAL							
Company Time		Cont'r Time					

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
B.O.P. Test-Operated _____ Time _____ Results _____Total Contractor Time _____ Hrs. Toolpusher *YK Brumby*
Total Company Time _____ Hrs. Approved by _____



THOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION Candace Ames Shell & 70 Little Bear AREA North Thompson DATE April 7 1972

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS			FUEL	WATER	COAL	Stands	Time		
Specify actual hours worked	Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Start	Stop	Interval
Driller <u>PAUL JACOB</u>	<u>8</u>															
Derrick <u>DICK DELAIR</u>	<u>16</u>															
Floor <u>MAURICE MISKOSKI</u>	<u>12</u>															
Floor <u>JIM ROBERTSON</u>	<u>16</u>															
Floor																
Motor <u>WILBERT SUMNER</u>	<u>12</u>															
Mechanic																
Extra																
Injuries: <u>Bilaine & Robertson run hole worked on water pump.</u>																
Fires:																
Tour — 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS			FUEL	WATER	COAL	Stands	Time		
Specify actual hours worked	Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Start	Stop	Interval
Driller <u>ALLEN THOMAS</u>	<u>12</u>															
Derrick <u>KEN STENERSON</u>	<u>12</u>															
Floor <u>IRV HOLLAND</u>	<u>12</u>															
Floor <u>BRYAN FOX</u>	<u>12</u>															
Floor <u>Daryl Norman</u>	<u>14</u>															
Motor <u>Wm. BROZNY</u>	<u>12</u>															
Mechanic																
Extra <u>Welder Jim Desjarlais</u>	<u>11</u>															
Injuries: <u>Norman & Brozny</u>																
Fires: <u>Norman & Brozny</u>																
Tour — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS			FUEL	WATER	COAL	Stands	Time		
Specify actual hours worked	Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Start	Stop	Interval
Driller <u>ROBERT MEYERS</u>	<u>12</u>															
Derrick <u>MURRAY DIXON</u>	<u>12</u>															
Floor <u>BILL YUZICAPI</u>	<u>12</u>															
Floor <u>MIKE PAUL</u>	<u>12</u>															
Floor																
Motor <u>HANK ROBERTSON</u>	<u>12</u>															
Mechanic																
Extra																
Injuries:																
Fires:																

Two men, water fight, sand & boiler, steam out, tanks

Started boiler 8:00 P.M.
April 6 - 72
EPC

Company Time Cont'r Time

Prepare to raise derrick 8:00
Spot mud pump & mud tank 8:00
cut in fluid, give pole D.C.s
on pipe racks. Lay water, fuel
& steam lines, rig up lights
Dig in cellarRaise derrick string light
Take off bridge slip line clean
and shaken tankSlow rigging up, two bed trucks
(Workman on line & pull down) (Slow brake down)
Company Time Cont'r TimeRigging up floor stand, pull up pipe 12:00 8:00 8
Dig cellar & build CRIB. 8:00 12:00 4

TOTAL

Company Time Cont'r Time

Totco Ring on Bit No. _____ D.P. Caliper Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

Total Contractor Time _____ Hrs.

Toolbox _____

Total Company Time _____ Hrs.

App. by _____



TOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION Candace Amoco Shell 170 Little Bear AREA 11 Norman DATE April 6 1972

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		Specify actual hours worked		Hrs.	From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands	
					No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Singles	
																	D. Collars	
																	Other Ft.	
																	C.B. Ft.	
																	Subs. Ft.	
																	Ft. Up On Kelly	
																	TOTAL	
Driller	<u>Cliffad Johns</u>			<u>5</u>														
Derrick	<u>Cliffad Campbell</u>			<u>26</u>														
Floor	<u>Art Mellett</u>			<u>9</u>														
Floor																		
Floor																		
Motor	<u>Keith Orton</u>			<u>5</u>														
Mechanic																		
Extra																		
Injuries	<u>(Milled welding)</u>																	
Fires																		
Tour - 8 a.m. to 4 p.m.					From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands	
Specify actual hours worked				Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Singles	
																	D. Collars	
																	Other Ft.	
																	C.B. Ft.	
																	Subs. Ft.	
																	Ft. Up On Kelly	
																	TOTAL	
Driller	<u>PAUL JACOB</u>			<u>12</u>														
Derrick	<u>SICK BELAIR</u>			<u>10</u>														
Floor	<u>MAURICE MISKOSKI</u>			<u>8</u>														
Floor	<u>JIM ROBERTSON</u>			<u>8</u>														
Floor																		
Motor	<u>WILBERT SIMMS</u>			<u>8</u>														
Mechanic	<u>Deryle Norman</u>			<u>16</u>														
Extra	<u>Walter Jim Wesley</u>			<u>8</u>														
Injuries	<u>BS-7</u>																	
Fires	<u>Norman took lander</u> <u>rental truck to</u> <u>Norman Wells (this) for truck</u>																	
Tour - 4 p.m. to Midnight					From	Footage	To	Hrs. on Bottom	Wt. Drill String (1000lbs.)	DRILL COLLARS				FUEL	WATER	COAL	Stands	
Specify actual hours worked				Hrs.	No.	Size	Type	Size Jets	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION	Singles	
																	D. Collars	
																	Other Ft.	
																	C.B. Ft.	
																	Subs. Ft.	
																	Ft. Up On Kelly	
																	TOTAL	
Driller	<u>ALLEN THOMAS</u>			<u>13</u>														
Derrick	<u>KEN STENERSON</u>			<u>13</u>														
Floor	<u>BRYAN FOX</u>			<u>8</u>														
Floor	<u>IRV HOLLAND</u>			<u>8</u>														
Floor																		
Motor	<u>WM. BROZNY</u>			<u>13</u>														
Mechanic																		
Extra																		
Injuries																		
Fires																		

Cut logs for Buildings
stack welder
work on water pump
in camp, spot Driller
Put Drills on sub.

Rig up
Put derrick together, put down
back in, put monkey board
Pin derrick, raise A legs. Spot
light plant, spot pump matting,
Digging on cellar
Unload all mud & cement
from Manganie River & oil bbls
Fire up boiler.

PIN TOP SECTION ON DERRICK, PIN
SAME. BRIDLE UP DERRICK +
RAISE A-LEGS.

TOTAL

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
B.O.P. Test-Operated _____ Time _____ Results _____

Total Contractor Time _____ Hrs.

Toolpusher _____

Total Company Time _____ Hrs.

Approved by _____

TOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 19 LOCATION Candax Amoco Shell #70 Little Bear AREA H. Norman DATE April 6 1972

NOTE— Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour -- Midnight - 8 a.m.															REMARKS															Start			Stop			Interval		
Specify actual hours worked																																						
Driller																																						
Derrick																																						
Floor																																						
Floor																																						
Floor																																						
Motor																																						
Mechanic																																						
Extra																																						
Injuries:																																						
Fires:																																						
Tour -- 8 a.m. to 4 p.m.																																						
Specify actual hours worked																																						
Driller																																						
Derrick																																						
Floor																																						
Floor																																						
Floor																																						
Motor																																						
Mechanic																																						
Extra																																						
Injuries:																																						
Fires:																																						
Tour -- 8 a.m. to 4 p.m.																																						
Specify actual hours worked																																						
Driller																																						
Derrick																																						
Floor																																						
Floor																																						
Floor																																						
Motor																																						
Mechanic																																						
Extra																																						
Injuries:																																						
Fires:																																						
Tour -- 4 p.m. to Midnight																																						
Specify actual hours worked																																						
Driller																																						
Derrick																																						
Floor																																						
Floor																																						
Floor																																						
Motor																																						
Mechanic																																						
Extra																																						
Injuries:																																						
Fires:																																						
TOTAL																																						
Company Time																																						
Cont'r Time																																						

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
B.O.P. Test-Operated _____ Time _____ Results _____

Total Contractor Time _____ Hrs

Toolpusher

Total Company Time _____ Hrs

Approved by _____

TOMSON DRILLING

DAILY DRILLING REPORT

DAY WORK RECORD

RIG No: 19 LOCATION Candace Amoco Shell I 70 Little Bear AREA Thomson Wells DATE April 5 19 72

NOTE-- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

[illegible]

Totco Ring on Bit No.

B.O.P. Test-Operated

D.P. Calipered Date

Time

Results

Results

From Pipe Rack

Total Contractor Time _____ Hrs.

Total Company Time _____ Hrs.

Toolpusher: GR Benson

Approved by _____



THOMSON DRILLING

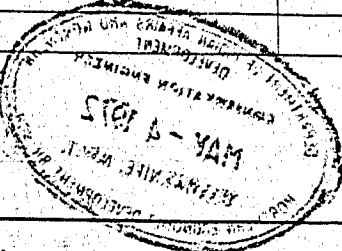
DAILY DRILLING REPORT

DAY WORK RECORD

RIG No. 79 LOCATION Candace Amoco - Shell - I 70 Little Bear AREA Norman Wells DATE April 4 1972

NOTE- Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.														REMARKS		Time				
Specify actual hours worked		Hrs.																Start Stop Interval		
Driller	Cliff Johnson	12																		
Derrick	Clint Campbell	8																		
Floor	Art Mellett	8																		
Floor																				
Floor																				
Motor	Keith Cron	16																		
Mechanic																				
Extra																				
Injuries:																				
Fires:																				
Tour - 8 a.m. to 4 p.m.														Company Time		Cont'r Time				
Specify actual hours worked		Hrs.																		
Driller	Paul Jacob	12																		
Derrick	Rick Belair	8																		
Floor																				
Floor																				
Floor																				
Motor																				
Mechanic																				
Extra	Deryle Norman	14																		
Injuries:																				
Fires:																				
Tour - 4 p.m. to Midnight														Company Time		Cont'r Time				
Specify actual hours worked		Hrs.																		
Driller	Allen Thomas	8																		
Derrick	Ken Stenerson	8																		
Floor																				
Floor																				
Floor																				
Motor	Wm. Brozny	8																		
Mechanic																				
Extra																				
Injuries:																				
Fires:																				
TOTAL																				
Company Time																				
Cont'r Time																				



Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack

B.O.P. Test-Operated Time Results

Total Contractor Time Hrs.

Total Company Time Hrs.

Toolpusher JH Brown

Approved by