Indian and Northern Affairs Affaires indiennes et du Nord

Well Name / Nom du puits: FNX et al La Biche C-30	Drilling Authority No. / Autorisation de forage n° 799
Field/Area / Gisement/Région	Date Issued / Date d'émission 5-02-75

Location / Emplacement	Unit / Unité	Section	Permit or Lease
	C	30	409-68

Latitude	60°39'14"N	Longitude	124°34'46"W
U.W.L.R. / N.R.U.E.P.	60.65389°N	124.57944	
U.W.I. No. / N.I.P. No.	300C306040124300		

File Microfilmed

Rig. Release Date / Date de transfert de la tour de forage: 24-03-76

Tour Sheets, Microfilmed

Status / Statut: D&A

Information Release Date / Date de publication autorisée des informations: 24-03-78

CHANGE OF NAME:
CHANGEMENT DE NOM:

Change of Location
Changement de emplacement

INDEX	DATE RECEIVED / RECU LE		INDEX
Application for a Drilling Authority	6-1-75		Demande d'autorisation de forage
Well Completion Data	27-10-76		Renseignements sur le forage d'un puits
Well History Report	✓		Données chronologiques sur le puits
Application to Amend a Drilling Authority	~~✓~~		Demande de modification d'une autorisation de forage
Application to Change a Well Name			Demande de changement du nom d'un puits
Application to Abandon a Well or Suspend Drilling	✓		Demande d'abandon d'un puits ou de suspension du forage
Application to Alter Condition of a Well			Demande d'autorisation de modifier l'état d'un puits
Well History Supplement			Supplément aux données chronologiques sur le puits
Well Completion Data			Renseignements sur le forage d'un puits
Work-Over Report No.			Rapport de reconditionnement n° . . . . .
Application to Commingle Production before Measurement			Demande d'autorisation de mélanger la production avant jaugeage
Data for Back Pressure Test on Natural Gas Wells			Données de calcul de la capacité de production d'un puits de gaz naturel — Méthode graphique n° 7
Data for Back Pressure Test on Natural Gas Walls			Données de calcul de la capacité de production d'un puits de gaz naturel — Méthode de Vitter
M.P.R. — Oil — Calculations			Calcul du T.M.P. (Taux maximal de production) de pétrole
New Oil Well Report			Rapport sur un nouveau puits de pétrole
New Gas Well Report			Rapport sur un nouveau puits de gaz naturel
Well Inspection Report			Rapport d'inspection de l'emplacement d'un puits
Rig Inspection Report			Rapport d'inspection d'une tour de forage
Battery Inspection Report			Rapport d'inspection d'une batterie de puits
Equipment Report			Rapport d'inspection des compteurs
Well Card	✓		Fiche de puits
New Service Well Report			Rapport sur un nouveau puits de service
Strat Service Logs			Rapport mensuel des injections d'eau
Logs — Large scale	✓		Diagrammes: Grande échelle
Logs — Small scale			Diagrammes: Petite échelle

IAND 52-90 (6-72)

DATE RECEIVED
REÇU LE

LOGS: DIAGRAMMES

NAME Nom	Type	Run No. N° du sondage	Interval Intervalle

ANALYSES:

Sample Échantillon	Lab. No. Lab. n°	Formation	Interval Intervalle

A.O.F. Potential Débit maximal absolu d'un puits	Formation	Interval Intervalle	MC.F/D. M.P.C./jour	Test Date Date du test

DRILL STEM TESTS: – ESSAIS AUX TIGES

No. N°	Formation	Interval Intervalle

Drilling Authority No. 799

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

Application for a Drilling Authority

CONSERVATION ENGINEER JAN 6 19/5 YELLOWKNIFE, N.W.T.

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 FNX et al La Biche C-30

Location: Unit C Section 30 Grid 60 - 40 - 124 - 30
Latitude 60° 39' 14" N Longitude 124° 34' 46" W
Unique Well Identifier 300C306040124300
Universal Well Location Reference Lat. 60.65389° - Long. 124.57944°

Elevation: Ground 4174 K.B. 4188 feet above sea-level.
Well is expected to produce from Middle Devonian Carbonate formation at a depth of about 5500 feet. Expected total final depth 7188
Area assigned to well
(for District Conservation Engineer's use only)

Permit No. Lease No. 409-68 Acreage 11,775
Permittee, licensee, or lessee Ran Canadian Petroleum Limited, Can. Cities Service; Kerr-McGee
Exploratory Licence No. 2036
Surface owned by Crown or 2130 2158
(If alienated submit name and address of owner and occupant.)

Petroleum and natural gas rights owned by Her Majesty the Queen in rights of Canada
We propose to use the following strings of casing, either cementing or landing them as indicated below:–

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1. 13-3/8"	54.4 & 72.0	K-55-N80	New	700	638
2. 9-5/8"	43.5/47.0	S94-N80	New	5000	182
3. 7"	26.0	N80	New	7188	380
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment
Gas in Middle Devonian Carbonate controlled by mud system and Double Gate Preventer and Hydril

Well will be drilled with Rotary Rig No. 2 by Brinkerhoff Drilling Canada Limited
(Drilling Contractor or company)

Responsible agent of applicant:–
At well C.C. Daly Contractor's Business Licence No. 1.0721
Address 470 Three Calgary Place At registered office W. G. Roddie
It is understood that if changes become necessary, notice of the change of plan will be submitted. Address 1205/505 - 6th St. S.W., Calgary
Dated at Calgary this 30th day of December 1974.
Signed by W. G. Roddie Company Fort Norman Explorations, Inc.
Title Vice-President Operator's Licence No. 2501

(For Oil and Mineral Division use only)

APPROVED

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

PLEASE SEE CONDITIONS OF APPROVAL SHOWN ON THE ATTACHED SHEET.
WELL CLASSIFICATION: DEVELOPMENT WELL

Dated. February 5 19 75

District Conservation Engineer

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

IAND 52-90-1 (8-71)

Voir au verso

FEB 10 1975

N° de l'autorisation de forage. . . . . .

CANADA

MINISTÈRE DES AFFAIRES INDIENNES ET DU NORD CANADIEN

DIVISION DU PÉTROLE ET DES MINÉRAUX

Demande d'autorisation de forage

Avant de commencer les travaux, soumettre (en triple exemplaire) et faire approuver le présent avis (indiquant l'intention d'entreprendre des travaux de forage) et, au besoin, un plan d'arpentage reconnu par l'arpenteur général, montrant l'aire de sondage ou l'emplacement du puits.

Conformément au «Règlement sur les terres pétrolifères et gazifères du Canada», nous demandons l'autorisation d'effectuer des travaux de forage.

Nom et n° du puits . . . . . .

Emplacement: Unité . . . . . Section . . . . . Étendue quadrillée . . . . .
Latitude . . . . . Longitude . . . . .
Code d'ordinateur . . . . .
Références universelles d'emplacement du puits. . . . . .

Élévation: du sol . . . . . du carré d'entraînement . . . . . pieds au-dessus du niveau de la mer
Production prévue quand les tiges atteindront la formation . . . . . à une profondeur approximative de
. . . . . pieds. Profondeur totale prévue. . . . . .
Superficie assignée au puits . . . . . (à l'usage de l'ingénieur en conservation du district)

. . . . . .
N° de permis . . . . . N° de concession . . . . . Superficie . . . . . .
Détenteur de permis ou de licence, ou concessionnaire . . . . . .
N° de permis de prospection . . . . . .
Terres appartenant à la Couronne ou à . . . . . (Dans le cas de terres aliénées, donner le nom et l'adresse du propriétaire et de l'occupant)
Détenteur(s) des droits pétroliers et gaziers . . . . . .
Nous prévoyons utiliser les colonnes de tubage suivantes et de les cimenter ou de les sceller, tel qu'il est indiqué ci-dessous: –

Diamètre extérieur (en pouces) de tubages	Poids (liv./pi.)	Qualité	Tubages neufs ou usagés	Profondeur estimative	Sacs de ciment
1.					
2.					
3.					
4.					
5.					

Nappes d'eau, de gaz et de pétrole prévues et genre de matériel anti-éruption. . . . . .
. . . . . .
. . . . . .
. . . . . .
Le puits sera foré à l'aide de la tour rotary n°. . . . . par . . . . . (Entrepreneur ou société de forage)

. . . . . .
Agent responsable pour le requérant: – N° de permis de l'entrepreneur . . . . . .
Sur le chantier . . . . . Au siège . . . . . .
Adresse . . . . . Adresse . . . . . .
Il est entendu que, dans le cas de modifications indispensables, un avis sera soumis.
Datée – . . . . . le . . . . . 19. . . . .
Signé par . . . . . Société. . . . . .
Titre . . . . . N° de licence de sondage de l'exécutant . . . . . .

(À l'usage de la Division du pétrole et des minéraux)

APPROBATION

Demande étudiée et approuvée sous réserve des conditions suivantes:

. . . . . .
. . . . . .
. . . . . .
Date . . . . . 19. . . . . .

CONDITIONS OF APPROVAL TO BE ATTACHED TO AND MADE A PART OF DRILLING AUTHORITY NO. 799

FOR FNX et al La Biche C-30 APPROVED 5 February 1975

CONDITIONS OF APPROVAL:

1. Copies of this Drilling Authority and Amendments to a 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 shall submit to this office, on Monday of each week, the latest reports received on the progress of the well.

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

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

5. Approval must be obtained from the District Oil and Gas Conservation Engineer to run any casing or liners not approved on the drilling authority.

6. All shows of oil and/or gas, and water flows, or any unusual events shall be reported to the District Oil and Gas Conservation Engineer immediately.

7. Should a fatal accident occur, the District Oil and Gas Conservation Engineer shall be notified immediately and the scene of the accident shall be left intact, unless safety considerations dictate otherwise, pending investigation by official authorities.

   If the requirement to leave the scene of the accident intact interferes, in the opinion of the Operator, with the safe and efficient operation of the drilling rig, drilling operations shall be suspended after ensuring the safety of the well in the suspended state and permission to resume drilling must be obtained from the District Oil and Gas Conservation Engineer.

8. Two field print copies of all well logs and three copies of the core and fluid analyses must be forwarded to the District Oil and Gas Conservation Engineer as soon as they are available.

9. Formation tops (samples or logs) of the section penetrated each week are to be reported with the weekly drilling reports.

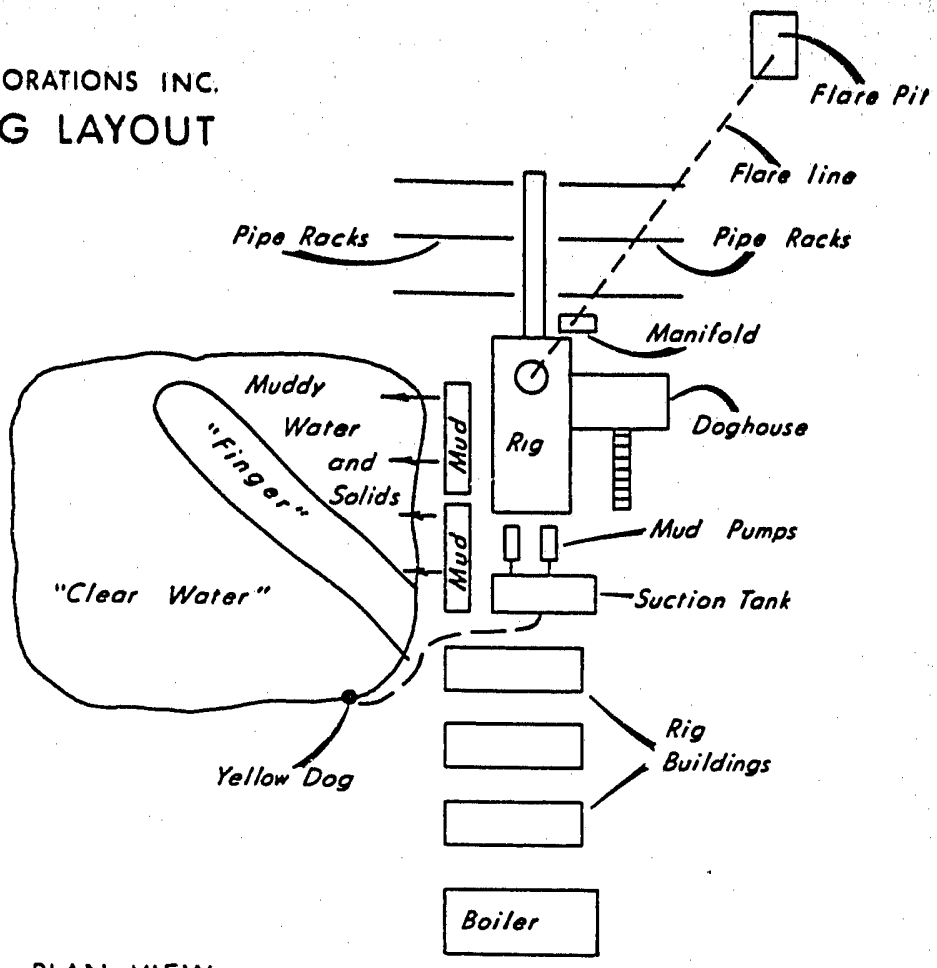
10. The District Oil and Gas Conservation Engineer must be notified at least 24 hours before spudding the well.

11. Permission to drill beyond the approved final total depth MUST be obtained from the District Oil and Gas Conservation Engineer.

J. J. Kirk
District Oil and Gas Conservation Engineer
District 1 - NWT

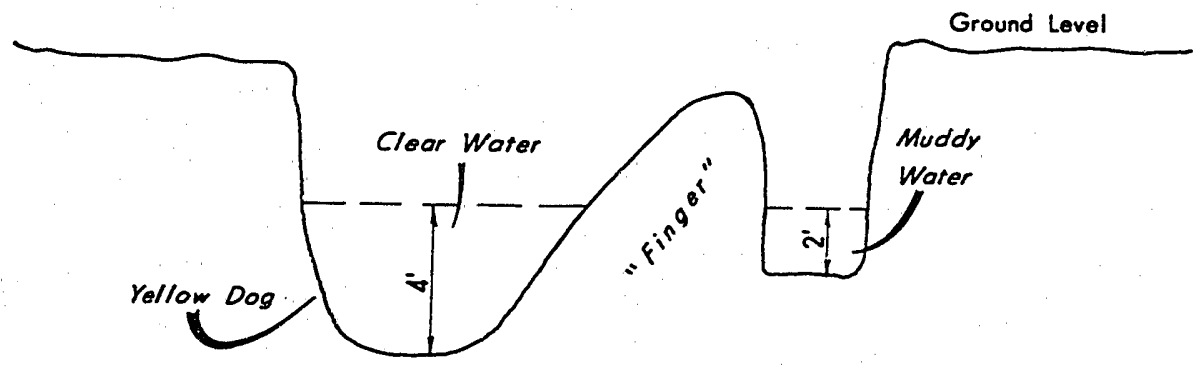
FORT NORMAN EXPLORATIONS INC.

STANDARD RIG LAYOUT

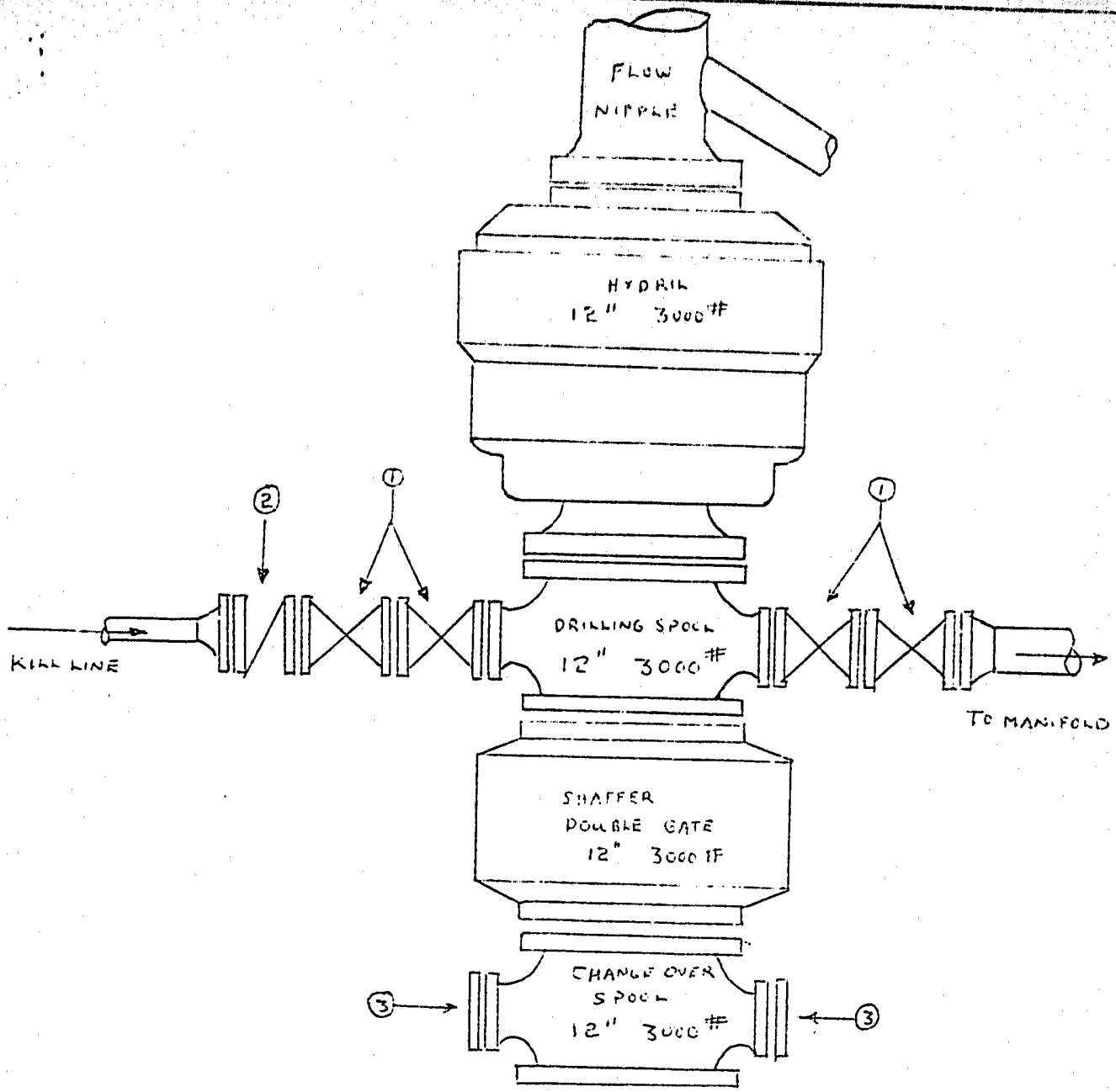


Note : Camp area is not shown.

PLAN VIEW



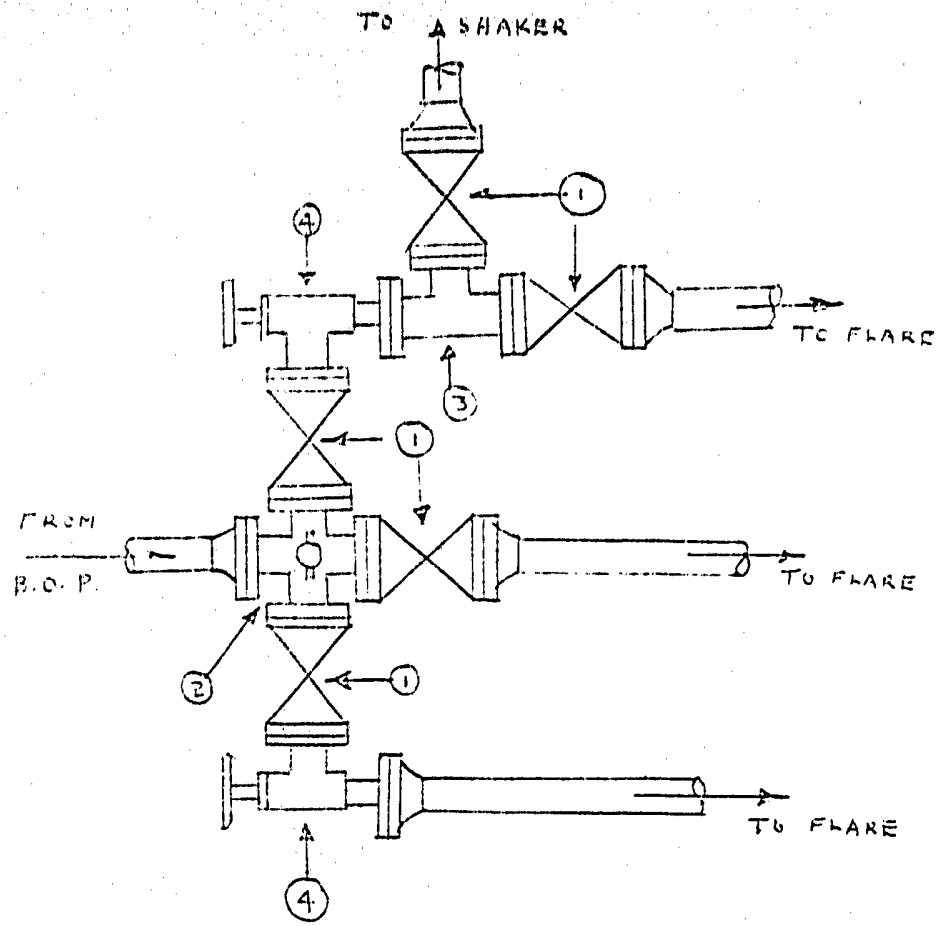
SIDE ELEVATION OF SUMP



1. 3" - 3000 PSI GATE VALVE
2. 3" - 3000 P.S.I. CHECK VALVE
3. 3" - 3000 PSI BLIND FLANGE
4. NOTE - 2 - 3" - 3000 PSI. GATE VALVES ON DOUBLE GATE B.O.P. FLANGED OUTLET.
5. NOTE - CHANGE OVER SPOOL USED IF REQUIRED.

BRINKERHOFF RIG 2

B.O.P. STACK



1. 2" - 3,000 P.S.I. GATE VALVE
2. 2" - 3,000 P.S.I CROSS WITH GAUGE
3. 2" - 3,000 P.S.I TEE
4. ADJUSTABLE CHOKE
5. NOTE - 4½" DRILL PIPE TO FLARE.

BRINKERHOFF RIG 2
MANIFOLD

GEOLOGICAL PROGNOSIS

Fort Norman et al La Biche C-30

NTS 95-C

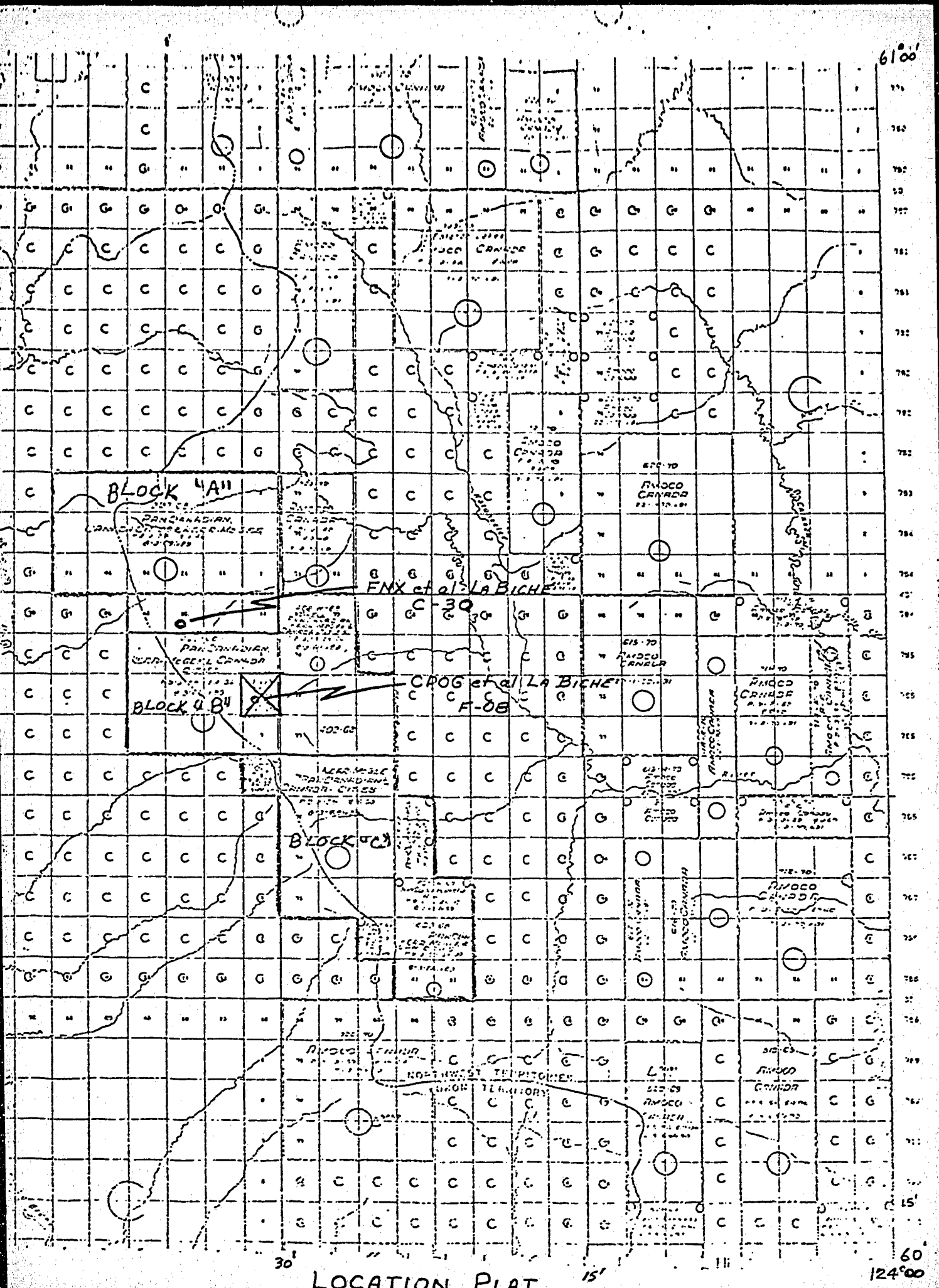
Location: 60° 39' 18" North Latitude
124° 34' 46" West Longitude

Area: La Biche, Northwest Territories

Target: Middle Devonian Carbonate (Landry Equivalent)

Elevations: Ground: 4174' (Estimated) K.B.: 4188' (Estimated)

Formation	Subsea	Depth	Interval
Mississippian - Upper Devonian			
Besa River	Surface	0	2047
Banff	+2141	2047	1930
Exshaw	+ 211	3977	190
Ft. Simpson	+ 21	4167	757
Canol	- 736	4924	
Middle Devonian			
Otter Park	- 796	4984	60
Hare Indian	- 845	5033	49
Nahanni	-1032	5220	187
Headless	-1262	5450	230
Landry	-1350	5538	88
Manetoe	-1623	5811	273
Arnica	-1756	5944	133
			1244
Total Depth	-3000	7188	



LOCATION PLAT

BLOWOUT PREVENTION	BOP's will be tested daily, and results recorded on the Daily Drilling Report. Crews will be drilled in emergency procedures at regular intervals.
REGULATIONS	All Regulations will be adhered to strictly. NO SMOKING signs will be prominently displayed. Signs marked DANGER - POISON GAS will be posted at well access points.
INVOICES	All Invoices are to be submitted in duplicate, clearly showing items related to this project. FORT NORMAN EXPLORATIONS assumes no liability for unsigned Work Tickets or Delivery Slips pertaining to any work performance on this well.
DAILY REPORTS	Summary of activity during the preceeding 24 hours to 8 a.m. will be transmitted per the sample Report following, initially to C. C. DALY & ASSOCIATES LTD., in Calgary.
PROCEDURES	Any deviation from procedures outlined herein must be cleared immediately with Calgary.
WELLSITE SUPERVISION	ENGINEER will be in overall charge of Operations, both Support and at Wellsite. In this capacity his judgement and decision will be co-ordinated with Management in Calgary, to whom he is directly responsible. To this extent, he will direct all Rig and Field Operations. GEOLOGIST will be in charge of Camp supervision and administration thereof, aircraft support in addition to regular duties.
MUD PROGRAM	A water-base system will be used throughout, flexible for maintaining good hole conditions and optimum penetration. For the control of Hydrogen Sulfide (H_2S) gas that might be encountered, the OILWEEK article of October 11, 1973, offers remedial measures. With the presence of any H_2S, corrosion inhibitor will be used for protection of the drill string.
GENERAL	On Foothills wells, increased costs are prevalent because of the desireability of drilling straight hole in country that is faulted severely, and where the mobility of dipping beds adds to such existing hazards as lost circulations, sloughing shales and

Continued....

CANADA

Drilling Authority No. 799

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 FNX et al La Biche C-30

Location: Unit C Section 30 Grid 60-40 - 124-30

Latitude 60° 39' 14" N Longitude 124° 34' 46" W

From Established Reference Marker N6,725,087.77 meters E413,627.36 meters

Universal Well Location Reference Lat. 60.65389° Long. 124.57944°

Permit No. Lease No. 409-68

FORT NORMAN EXPLORATIONS, INC.
(Permittee, Licencee, Lessee)

Date of commencement of proposed program May 6, 1975

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at

Gas at

Water at

Total Depth 6223 Date of last operations May 7, 1975

Present condition of well Set Halliburton SV (Sliding Valve) Retainer or bridge plug at 4979.1' at 9:00 a.m., May 6, 1975

CASING RECORD

	Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1.	13-3/8"	54.4/72.0		700'	725 sax Oilwell + 2% $CaCl_2$	
2.	9-5/8"	43.5/47.0		5005'	182 sax Oilwell + 2% Gel + .30% HR-4 (Retarder)	
3.						
4.						
5.						

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks

The following logs have been run Continuous Dipmeter, Borehole Compensated Sonic, Dual Induction - Laterlog

Other operations proposed To be completed after freeze-up 1975

Operations to be carried out by FORT NORMAN EXPLORATIONS Contractor Licence No. 1-0721

Address 1205, 505 - 6 St. S.W., Calgary Address 220 Bentall Bldg., Calgary,

Responsible Agent in field C. C. Daly and Associates

Dated at Calgary this 30th Day of May 19 75

Signed by W. C. Riddle Company FORT NORMAN EXPLORATIONS, LTD.

Title President Operator's Exploratory Licence No. 2501

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Confirm verbal approval to suspend drilling, given by G.E. Blue, on May 6, 1975

Dated June 12, 1975

District Conservation Engineer

IAND 52-90-5 (7-71)

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

Voir au verso

CANADA

N° de l'autorisation de forage .....

MINISTÈRE DES AFFAIRES INDIENNES ET DU NORD CANADIEN

DIVISION DU PÉTROLE ET DES MINÉRAUX

Demande d'abandon d'un puits ou de suspension du forage

Conformément au «Règlement sur les terres pétrolifères et gazifères du Canada», nous demandons l'autorisation d'abandonner le puits ci-après ou de suspendre les travaux de forage

Nom et n° du puits .....

Emplacement: Unité ..... Section ..... Étendue quadrillée .....

Latitude ..... Longitude .....

Code d'ordinateur .....

Références universelles d'emplacement du puits .....

N° de permis ..... N° de concession .....

(Détenteur de permis ou de licence, ou concessionnaire)

Date du début d'exécution du programme projeté .....

PÉTROLE, GAZ ET EAU
(Profondeur)

Pétrole à .....

Gaz à .....

Eau à .....

Profondeur globale ..... Date des derniers travaux .....

État actuel du puits .....

.....

.....

.....

TUBAGE

Diamètre extérieur (en pouces)	Poids	Longueur	Fixation à	Sacs de ciment et d'additifs	Longueur récupérée
1.					
2.					
3.					
4.					
5.					

PROGRAMME D'ABANDON PROJETÉ

Bouchon		Formation géologique	Nombre de sacs de ciment	Remarques
N°	Profondeur			

Les diagrammes suivants ont été tracés: .....

Autres travaux projetés .....

.....

Les travaux seront exécutés par ..... N° de permis de l'entrepreneur .....

Adresse ..... Adresse .....

Agent extérieur responsable .....

Fait à ..... le ..... 19 .....

Signé par ..... Société .....

Titre ..... N° de licence de sondage de l'exécutant .....

Nota: Aviser le bureau de l'ingénieur en conservation du district avant de commencer les travaux

(À l'usage de la Division du pétrole et des minéraux)

APPROBATION

Demande étudiée et programme approuvé, sous réserve des conditions suivantes:

.....

.....

.....

.....

Date ..... , 19 .....

Ingénieur en conservation du district

Présenter les formules en triple exemplaire à l'ingénieur en conservation du district ministère des Affaires indiennes et du Nord canadien.

IAND 52-90-5 (7-71)

See Reverse

File No. .....
Drilling Authority No. 399

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Alter Condition of a Well

Notice of Intention to Resume Operations to ~~[illegible]~~
~~Deepen, Recomplete or Reopen~~ a Suspended Well
(Strike out words that are not applicable.)

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

Type of operation ... exploratory wells
Name and number of well FMX et al La Biche C-30
Location: Unit ... C ... Section 30 ... Grid 60-40 - 124-30
Latitude 60° 39' 14"N ... Longitude 124° 34'46" W
Unique Well Identifier ... 300C306040124300
Universal Well Location Reference ... Lat. 60.65389° Long. 124.57944°
Permit No. 409-68 ... Lease No. 409-68
Permittee, Licensee, Lessee ... FORT NORMAN EXPLORATIONS INC.

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at .....
Gas at .....
Water at .....
Total depth ... 6223 ... Date of last operation May 7, 1975
Present condition of well Set Halliburton SV (sliding Valve) Retainer or bridge plug at 4979.1' at 9:00 a.m., May 6, 1975

CASING RECORD

Casing Size O.D. (Inches)	Weight	Amount	Set at—	Sacks of Cement and Additives	Amount Pulled
1. 13-3/8"	54.4/72.0		700'	725 sax Oilwell + 2%	$CaCl_2$
2. 9-5/8"	43.5/47.0		5005'	182 sax Oilwell + 2% Gel + .30% HR-4 (Retarder)	
3.					
4.	-				
5.					
6.					

OPERATION PROPOSED
(If more space is required, attach additional sheet)

Program of operations – (Plugs, perforations, rework, etc.)
Deepen well to contract depth, 7,200' or less

Operations to be carried out by Fort Norman Explorations ... Contractor's Business Licence No. 1-0721
Address #1205, 505 - 6 St. S.W., CALGARY, Alberta
Responsible agent in field L. L. Tedrick ... Address 1520 - 110 Ave. S.W., Calgary
Dated at Calgary, this 2nd day of March 19 76
Signed by W. J. Roddie ... Company FORT NORMAN EXPLORATIONS INC.
Title President ... Operator's Exploratory Licence No. 2400

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

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

This application has been examined and program of operations approved, subject to the following conditions:

All conditions attached to the original approved Drilling Authority shall continue to apply.

Dated 8 Mar, 19 76

Oil Conservation Engineer

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

IAND 57-22-66 (9-69)

CANADA

Drilling Authority No. 799

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 FNX et al La Biche C-30

Location: Unit C Section 30 Grid 60-40 - 124-30

Latitude 60° 39' 14"N Longitude 124° 34' 46"W

From Established Reference Marker N6,725,087.77 meters E413,627.36 meters

Universal Well Location Reference Lat. 60.65389° Long. 124.57944°

Permit No. Lease No. 409-68

FORT NORMAN EXPLORATIONS INC.
(Permittee, Licencee, Lessee)

Date of commencement of proposed program

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at

Gas at

Water at

Total Depth 7200' Date of last operations March 28, 1976

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.	13-3/8"	54.4/72.0		700'	725 sax Oilwell + 2% $CaCl_2$	
2.	9-5/8"	43.5/47.0		5005'	182 sax Oilwell + 2% Gel + .30% HR-4 (Retarder)	
3.						
4.						
5.						

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	7200-6845 ✓	cmt'd O.K.	100 sxs	Plug down @ 4:00 p.m. Mar 28 ✓
2	5050-4815 ✓	with	100 sxs	Plug down @ 6:00 p.m. Mar 28 Felt after 8 hours @ 4815' ✓
		Cut off casing 3' below surface, dropped 5 sack plug and welded on steel plate with 6' x 2" riser bearing well name and location plague.		
		Rig Released March 28, 1976 at 10:00 p.m.		

The following logs have been run Dual Induction Laterolog, Borehole Compensated Sonic, Continuous Dipmeter

Other operations proposed

Operations to be carried out by FORT NORMAN EXPLORATIONS Contractor Licence No. 1-0721

Address #1205, 505 - 6 St. S.W., CALGARY Address 220 Bentall Building, CALGARY, Alta

Responsible Agent in field R. L. Tedrick Petroleums Ltd.

Dated at Calgary, this 5th Day of April 19 76

Signed by W. G. Roddie Company FORT NORMAN EXPLORATIONS INC.

Title Operator's Exploratory Licence No. 2400

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Dated April 26, 19 76 Bruce Berry
District Conservation Engineer

IAND 52-90-5 (7-71)

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

Voir au verso

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

OIL & MINERAL DIVISION
DIVISION DU PÉTROLE ET DES MINÉRAUX

WELL COMPLETION DATA
RENSEIGNEMENTS SUR LES FORAGES

Drilling Authority No. 799
N° de l'autorisation de forage

Date Issued
Date de délivrance

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

Well Name & No. – Nom et n° du puits	Permit No. – N° de permis	Lease No. – N° de concession
FNX et al La Biche C-30		409-68

(Permittee, License, Lessee) – (Détenteur de permis ou de licence, du concessionnaire)	Exploratory Licence No. – N° de licence de sondage
Fort Norman Explorations Inc.	2400
(Operator) – (Exécutant)	Exploratory Licence No. – N° de licence de sondage
Fort Norman Explorations Inc.	

LOCATION – EMPLACEMENT

Unit – Unité	Section	Grid – Étendue quadrillée	Latitude	Longitude
C	30	60-40 124-30	60° 39' 14"N	124° 34' 46"W

Unique Well Identifier – Code d'ordinateur	Universal Well Location Reference – Références universelles d'emplacement du puits
300C306040124300	Lat. 60.65389° Long. 124.57944°

	Date	Depth – Profondeur
Spudded – Début des travaux	Mar. 1/75	
Suspended – Suspension des travaux	May 6/75	6223
Resumed Operations – Reprise des travaux	Feb. 20/76	
Finished Drilling – Forage terminé	Mar. 27/76	7200
Deepened – Approfondissement		
Complete (Gas/Oil) – Achèvement (Gaz/Pétrole)		
Abandoned – Abandon	Mar. 29/76	7200
Rig Released – Fin des travaux	Mar. 29/76	7200 @08:00 A.M.

Pool(s) – Gisement(s)

Interval(s) Open to Production – Intervalle(s) de production

Elevation: Gr. – Altitude du sol 4153' K.B. – du carré d'entraînement 4170'

Rig No. – N° de la tour de forage 2

Drilling Contractor – Entrepreneur en forage Challenger

Contractor's Business Licence No. – N° du permis de l'entrepreneur 1 0721

CASING 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.	13-3/8"		54.4/72.0		700'	725 sax Oilwell + 2% $CaCl_2$
2.						
3	9-5/8"		43.5/47.0		5005'	182 sax Oilwell + 2% G + .30% HR-4 (Retard
4.						
5.						
6.						

Geological Tops – Sommet des formations	Elevation – Profondeur: Depths – Sous le niveau du sol	Sub-Sea – Sous le niveau de la mer
Flett	845	+3325
Shunda	2116	+2054
	Fault	2770?
Banff	3625	+ 545
	Fault	5725?
Devonian	5920	-1750
Canol	6685	-2515

Core Record – Carottes

From – de	To – à	Rec. – Récupérées	From – de	To – à	Rec. – Récup.

Log Record – Diagrammes

Run – Série	Type of Log – Genre de diagramme	From – De	To – À
1	Continuous Dipmeter	4954'	697'
1	Borehole Compensated Sonic	4952'	697'
1	Dual Induction – Laterolog	4950'	697'
2	Continuous Dipmeter	7188'	5002'
2	Borehole Compensated Sonic	7188'	5002'
2	Dual Induction-Laterolog	7183'	5002'

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

Date	From – de	To – à	Remarks – Remarques
Mar 28	7200	6845	Ran 100 sxs of normal construction cement plus 0.3% HR-4. Plug down @ 4:00 p.m.
" 28/76	5050	4815	Plug No. 2. Ran 100 sxs of normal construction cement. Plug down @ 6 p.m. Felt plug after 8 hrs @ 4815'

Cut off casing 3' below surface, dropped 6 sack plug & welded on steel plate with 6' x 2" riser bearing well name and location plaque.

PERFORATING RECORD (Bullet, Jet) / PERFORATION (à balles, à jet)

Date	From – de	To – à	Remarks – Remarques
NIL			

SERVICING RECORD (Acidizing, Fracing, etc.) / ENTRETIEN (acidification, fracturation, etc.)

Date	From – de	To – à	Remarks – Remarques
NIL			

DRILL STEM TESTS – ESSAIS AUX TIGES

No. – N°	Date	Formation	From – de	To – à	V.O. Mins. Vanne ouverte (minutes)	I.S.I. Mins. Première obturation (minutes)	F.S.I. Mins. Obturation définitive (minutes)	I.S.I.B.H.P. Pression de fond à la 1re obturation	F.S.I.B.H.P. Pression de fond à l'obturation définitive	I.F.B.H.P. Pression de fond au jaillissement	F.F.B.H.P. Pression de fond à l'écoulement définitif	L.H.P. Pression hydrostatique de début	F.H.P. Pression hydrostatique définitif	Remarks – Remarques
NO TESTS RUN														

ANALYSIS – ANALYSE

Lab. No. N° de laboratoire	Sample Echantillon	From – de	To – à	Source	Remarks – Remarques
NIL					

PRESENT STATUS OF WELL / ETAT ACTUEL DU PUITS

Oil Pétrole ..... (Interval/Intervalle)

Gas Gaz ..... (Interval/Intervalle)

Dry and abandoned
Sec .....

Susp. Travaux sus. .....

Company Société FORT NORMAN EXPLORATIONS INC.

Signed by Signé par W. G. Roelofs

Title Titre President

Date May 12, 1976

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

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

Well History Report

on

FNX et al La Biche C-30

Phase II

GRID AREA: 60° 39' 14.576" N. Lat.
124° 34' 47.442" W. Long.

NORTHWEST TERRITORIES

Dated: April 5, 1976

W. G. Roddie, President
Fort Norman Explorations Inc.

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SUMMARY OF WELL DATA

SUMMARY OF WELL DATA - PHASE II

a)	Well Name	- FNX et al La Biche C-30
b)	Lessee	- PanCanadian Petroleums Limited, Kerr-McGee Corporation and Canada-Cities Service Ltd.
c)	Operator	- Fort Norman Explorations Inc. 1205, 505 - Sixth Street S.W. CALGARY, Alberta T2P 1X5
d)	Location	- C-30 Grid. 60-40 124-30 NTS 95-C
e)	Co-ordinates	- Lat. 60° 39' 14.576" Long. 124° 34' 47.442"
f)	Lease No.	- 409-68
g)	Contractor	- Challenger Drilling Rig No. 2
h)	Drilling Authority	- 799
i)	Elevations	- Ground 4153' K.B. 4170'
j)	Re-entry	- February 27, 1976
k)	Total Depth	- 7200'
l)	Rig Released	- March 29, 1976 8:00 a.m.
m)	Status	- Dry and Abandoned

GEOLOGICAL SUMMARY

FNX ET AL LA BICHE C-30

6223-6270 Shale, medium gray, blocky with Shale, medium gray-brown, slightly calcareous with trace of white calcite, rhombs, pyrite fragments and disseminated pyrite. At 6250' pyrite increases to 5 per cent with rare Shale, black, micaceous, blocky.

6270-6310 Shale, dark gray, calcareous with common calcite vein filling and with Shale, black, micaceous, up to 5 per cent disseminated pyrite.

6310-6340 Siltstone, medium gray, argillaceous, quartzose with Quartzite, medium gray, trace pyrite and with rare Limestone, light to medium gray, microcrystalline, argillaceous, dense. At 6320' with rare Chert, black and common Shale, black, fissile, trace to 5 per cent disseminated pyrite.

6340-6370 Shale, dark gray, silty, abundant disseminated pyrite, with rare Shale, black, blocky and rare Siltstone, medium gray, siliceous, trace of Dolomite, medium gray, microcrystalline, dense and rare Chert, black, massive.

6370-6440 Shale, medium gray, micaceous, slightly calcareous with common Limestone, medium gray, very fine crystalline, argillaceous, dense. At 6380' common Siltstone, medium gray, siliceous with rare pockets of quartz crystals, pyritic and with rare Chert, black, massive.

6440-6450 Shale, black, slightly calcareous, rare pyrite with rare Siltstone, light gray, argillaceous, quartzose.

6450-6510 Shale, black, blocky, pyritic with rare Limestone, light gray, microcrystalline, very argillaceous, dense. At 6470' with common pyrite fragments.

6510-6520 Sample [illegible]

6520-6550 Shale, black, blocky, pyritic as above with Shale, black micaceous with [illegible]s than 5 per cent Chert, black, massive.

6550-6600 Shale, black, massive, pyritic with Shale, medium gray, very slightly calcareous with rare Siltstone, light gray, quartzose. At 6580' with common Chert, black, massive.

6600-6640 Shale, black, as above with Shale, medium gray as above and with rare Siltstone, as above.

6640-6650 Sample Missing

6650-6690 Shale, black as above with Shale, medium gray, micaceous, very slightly calcareous. At 6670' with rare Limestone, medium gray, microcrystalline, very argillaceous. At 6680' with abundant disseminated pyrite and rare calcite rhombs.

6690-6720 Shale, black, blocky, 5 to 10 per cent disseminated pyrite, with rare Shale, medium gray, micaceous, very slightly calcareous with rare Shale, black, cut by abundant calcite veins giving a brecciated appearance. Common pyrite fragments and rare Chert, black, massive.

6720-6790 Shale, black, blocky, micaceous, trace of pyrite with rare Siltstone, light gray, quartzose, dolomitic. At 6740' rare slickenside, rare Chert, black, massive with common pyrite fragments.

6790-6850 Shale, black, silty, very slightly calcareous, abundant disseminated pyrite and pyrite fragments and with rare Chert, black, massive, and rare slickenside. At 6800' chert content increases to 10 per cent. At 6820' 5 to 10 per cent white calcite vein filling.

6850-6930 Shale, black, micaceous, "splintery" with common Shale, dark gray-brown, slightly calcareous, micaceous. Up to 5 per cent disseminated pyrite. At 6860' with a trace of Chert, black, massive. At 6890' with a trace of pyrite fragments. At 6910' Shale, as above but with common slickensides and calcite filled fractures.

6930-6990 Shale, dark gray, micaceous, blockywith Siltstone, light gray, very slightly calcareous, quartzose with a trace of disseminated pyrite. At 6950' with rare Chert, black, massive. At 6970' the Siltstone, grades to a Sandstone, very fine grained, silty, quartzose.

6990-7100 Shale, black, micaceous with less than 5 per cent disseminated pyrite with Shale, dark gray, micaceous. At 7030' rare Chert, black, massive with scattered calcite fracture and/or vein filling.

7100-7120 Shale, black, calcareous with common Limestone, medium gray, microcrystalline, very argillaceous with 5 to 10 per cent white calcareous mottling. Common calcite vein and fracture fill.

7120-7200 Shale, black, micaceous "sharp" pyritic in part with common calcite vein and fracture fill. At 7130' with rare Limestone, medium gray as above.

FINAL TOTAL DEPTH 7200'

ENGINEERING SUMMARY

ENGINEERING SUMMARY

Completion of Suspended Operations from May 1975.

Derrick raised at 10:00 a.m February 20, 1976.
Bit through table at 6:30 p.m. February 23, 1976.
Drilled out plug at 4:00 p.m. February 25, 1976.

(a) Drillstem Tests

No tests run

(b) Bit Record

Bit No.	Size	Make	Type	Depth Out	Feet	Hours	Accum. Hours
21R	8½	Reed	S31G				
23	8½	Reed	S31G				
24	8½	Reed	S31G				
25	8½	Reed	S31G				
26	8½	Reed	S31G	6343	120	24-3/4	860-3/4
27	8½	Reed	FP62J	6515	172	39-1/4	900
27R	8½	Reed	FP62J	7000	595	77-3/4	977-3/4
28	8½	Reed	FP62J	7200	200	37-1/4	1015

(c) Mud Record

Totals given are for mud used from spud date to total depth.

Gel	-	259,800 lbs.
DV-68	-	325.5 gals.
Caustic	-	6750 lbs.
CMC	-	2100 lbs.
Bicarb	-	300 lbs.

(d) Deviation Record

Depth	Degrees
5290	7-1/8
6235	5
6397	9
6429	9
6455	7
6486	8-3/4
6522	9
6547	8-1/2
6610	8-1/2
6671	8-1/2
6739	8-1/8
6796	8
6892	8-1/4
6951	8-1/2
6982	8-1/4
7091	8-1/8
7154	8

(e) Abandonment Plugs

Plug No. 1 7200-6845

Ran 100 sacks of normal construction cement plus 0.3% HR-4. Plug down at 4:00 p.m. March 28, 1976.

Plug No. 2 5050-4815

Ran 100 sacks of normal construction cement. Plug down at 6:00 p.m. March 28, 1976. Felt plug after 8 hours at 4815'.

Cut off casing 3' below surface, dropped 6 sack plug and welded on steel plate with 6' x 2" riser bearing well name and location plaque.

(f) Rig Released

March 29, 1976 at 8:00 a.m.

L O G S

LOGS

Run No. 2 Schlumberger of Canada March 26, 1976

Dual Induction Laterolog	2" scale	7183-5002
	5" scale	7183-5002
Borehole Compensated Sonic with Gamma Ray & Caliper	2" scale	7188-5002
	5" scale	7188-5002
Continuous Dipmeter Log	5"	7188-5002

Well History Report

on

FNX et al La Biche C-30

GRID AREA: 60° 39' 14.576" N. Lat.
124° 34' 47.442" W. Long.

NORTHWEST TERRITORIES

Dated: June 6, 1975

W. G. Roddie, President
Fort Norman Explorations, Inc.

OIL & GAS OPERATIONS UNIT
Oil and Mineral Division
SEP 30 1975
OTTAWA, CANADA
Dept. of Indian Affairs & Northern Development

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C. C. Daly & Associates Ltd.

470 Three Calgary Place
355 - 4th Avenue S.W.
CALGARY, Alberta
T2P 0J1

May 8, 1975

Fort Norman Explorations, Inc.
1205, 505 - 6th Street S.W.
CALGARY, Alberta
T2P 1X5

Dear Sirs:

FNX et al La Biche C-30 NTS 95-C
Northwest Territories

Enclosed herewith please find a summary of the pertinent engineering and geological details for the subject well.

This project was spudded at 11:00 p.m. on Saturday, March 1, 1975, by Challenger Drilling #2 and drilled to 6,223 feet, when operations were suspended due to inclement weather factors, mechanical considerations and prohibitive costs due to total reliance upon air-support. Rig was released from drilling operations at 8:00 a.m. May 7, 1975, on the 66th day from spud-in. Permission for temporarily suspending the well was received verbally from the Government through Mr. George Blue at 2:15 p.m. on May 6, 1975.

The project was initiated by Mr. W. G. Roddie, the President of Fort Norman Explorations, Inc.

Overall operations were under the direction of C. C. Daly & Associates Ltd.

Cont...

Wellsite supervision was provided by A. B. Roberts of Roberts Engineering Ltd. (Engineering); R. L. Tedrick and G. Williamson (Geological); J. L. Thompson (Drilling and Construction Foreman). Toolpush was M. Parasiuk of Challenger.

Operations will be resumed at the earliest opportunity in late 1975 under the direction of Mr. W. G. Roddie, with due notice to all participants. A sliding-valve Halliburton retainer was set inside the 9-5/8" Intermediate Casing at 3,979.1' and can be drilled out with conventional 8-1/2" Rock Bits when desired.

Yours very truly,

C. C. DALY & ASSOCIATES LTD.

C. C. Daly

SUMMARY OF WELL DATA

Summary of Well Data

a)	Well Name	- FNX et al La Biche C-30
b)	Lessee	- PanCanadian Petroleums Limited, Kerr-McGee Corporation and Canada-Cities Service Ltd.
c)	Operator	- Fort Norman Explorations, Inc. 1205, 505 - 6 St. S.W. CALGARY, Alberta T2P 1X5
d)	Location	- C-30 Grid. 60-40 124-30 NTS 94-C
e)	Co-ordinates	- Lat. 60° 39' 14.576" Long. 124° 34' 47.442"
f)	Lease No.	- 409-68
g)	Contractor	- Brinkerhoff Drilling Canada Limited Rig #2
h)	Drilling Authority	- 799
i)	Elevations	- Ground 4153' K.B. 4170'
j)	Spudded	- March 1, 1975 11:00 p.m.
k)	Drilling Suspended	- May 6, 1975
l)	Total Depth	- 6223'
m)	Status	- Temporarily suspended
n)	Rig Released	- May 7, 1975 8:00 a.m.
o)	Hole Size	- 0' - 701' @ 17½" 701' - 5005' @ 12¼ 5005' - 6223' @ 8½"
p)	Casing	- Surface - 700' (K.B.) of 13-3/8" Intermediate - 5005' (K.B.) of 9-5/8"

GEOLOGICAL SUMMARY

FNX ET AL LA BICHE C-30

700 - 760 Shale, black, micaceous, splintery, trace of pyrite. At 740' with rare Shale, dark gray, micaceous, fissile.

760 - 830 Shale, medium to dark gray, micaceous, slightly silty, fissile. At 780' with rare pyrite and rare calcite material - fracture infill. At 820' trace of Coal.

830 - 960 Shale, dark gray, micaceous, pyritic with rare calcareous fracture fill. At 840' with rare Siltstone, dark brown, pyritic, argillaceous and with common Shale, medium gray, non-calcareous, "metallic lustre", blocky.

960 - 1030 Shale, medium gray as above with Shale, black, "platey". At 980' trace of sphalerite. At 1000' common calcite fragments.

1030 - 1080 Shale, dark gray, slightly micaceous, "platey", rare calcite as vein fill or fracture fill and with Shale, medium gray, "metallic lustre", pyritic.

1080 - 1130 Shale, as above with rare Siltstone, dark gray, argillaceous, micaceous. At 1100' common pyrite, rare sphalerite and rare calcareous fracture infill.

1130 - 1490 Shale, medium gray, "metallic lustre" with Shale, black, fissile. At 1200' trace of dolomite rhombs. At 1240' - 1280' up to 15% silt content in all shales with 5-10% pyrite.

1490 - 1520 Shale, black, micaceous, silty, blocky with common pyrite.

1520 - 1630 Shale, medium gray, slightly micaceous, rare slickensides with minor Shale, black as above and with common pyrite.

1630 - 1650 Shale, dark gray to black, slightly dolomitic, silty with abundant nodules of pyrite.

1650 - 1710 Shale, medium to dark gray, trace of carbonaceous material, abundant mica, rare pyrite.

1710 - 1740 Shale, medium gray, "metallic lustre", trace of pyrite nodules with Shale, dark gray to black, micaceous, fissile, abundant pyrite nodules and with rare Siltstone, dark gray-brown, argillaceous, micaceous.

1740 - 1760 Shale, dark gray-brown, slightly dolomitic with Sandstone, light gray, very fine grained, rounded, spherical, fair to good porosity plugged with pyrobitumen, no live stain.

1760 - 1840 Shale, dark gray, slightly micaceous, with Siltstone, dark gray-brown, argillaceous, pyritic and with Sandstone, medium gray, very fine grained, subrounded, subangular, argillaceous, siliceous, tight, no stain.

1840 - 2000 Shale, light gray, soft, bentonitic, pyritic with Shale, black, blocky, common slickenside material.

2000 - 2030 Shale, dark gray, micaceous, silty, slightly dolomitic with rare Siltstone, dark gray-brown, argillaceous, pyritic.

2030 - 2090 Sandstone, medium gray, very fine grained, subrounded, subspherical, trace of dolomite cement, vitreous, tight, no stain with Siltstone, as above and with common pyrite.

At 2040' sandstone grades down to arenaceous siltstone. At 2060' with Shale, dark gray, micaceous, pyritic.

2090 - 2130 Sandstone, light to medium gray, very fine grained, subangular, subspherical, slightly dolomitic, siliceous, argillaceous, tight, no stain with Shale, medium gray, slightly micaceous.

2130 - 2230 Shale, medium gray, slightly micaceous, fissile and with Shale, black, pyritic, blocky with rare dolomite fracture fill. At 2220' rare Chert, dark brown, conchoidal fracture.

2230 - 2270 Siltstone, dark gray-brown, argillaceous, micaceous, very slightly dolomitic with Shale, as above.

2270 - 2310 Shale, dark gray to black, micaceous with Sandstone, medium gray, very fine grained, argillaceous, tight, no stain.

2310 - 2340 Shale, medium gray, micaceous, fissile with Siltstone, medium gray-brown, argillaceous, micaceous, pyritic.

2340 - 2400 Shale, medium gray, micaceous, fissile and Shale, dark gray to black, micaceous, blocky. At 2370' shale grades to slightly silty with rare Chert, dark brown.

2400 - 2430 Siltstone, dark gray-brown, argillaceous, very micaceous with rare Sandstone, medium gray, very fine grained, subangular, spherical, argillaceous, tight, no stain.

2430 - 2440 Shale, light gray, slightly micaceous.

2440 - 2490 Shale, dark gray, slightly micaceous, with Shale, dark brown, massive.

2490 - 2510 Shale, dark gray, micaceous with rare Sandstone, medium gray-brown, very fine grained, subrounded, subspherical, quartzitic with vitreous lustre, tight, no stain.

2510 - 2550 Shale, dark gray, micaceous with Shale, medium gray, micaceous, slightly silty with rare Chert, dark brown.

2550 - 2590 Sandstone, light brown, very fine grained, rounded, spherical, fair intergranular porosity partially plugged with pyro-bitumen with rare interbeds of Sandstone, medium gray-brown, very fine grained, quartzitic, abundant secondary silica, no porosity, no stain. At 2560' with common fragments of white, amorphous material (possible fault zone deposits), non-calcareous, slightly dolomitic.

2590 - 2650 Shale, medium gray, "metallic lustre", with Shale, dark gray, slightly micaceous, blocky. At 2600' with rare Chert, dark brown. At 2620' with rare Siltstone, dark gray-brown, argillaceous with common pyrite.

2650 - 2660 Siltstone, dark brown, argillaceous, siliceous with Shale, as above and with common pyrite.

2660 - 2690 Sandstone, light brown, very fine grained, rounded, spherical, quartzitic, tight, no stain with rare Sandstone, gray-brown, very fine grained, subrounded, spherical, 5-10% silica, quartzose, tight, no stain with Shale, black, slightly micaceous, pyritic. At 2680' rare slickenside material.

2690 - 2860 Shale, medium gray, "metallic lustre" with Shale, black, pyritic as above. At 2710' with rare Shale, dark brown, fissile, pyritic. At 2770' with rare Chert, dark brown. At 2830' with rare white dolomite and quartz fragments and fracture fill which become 5-10% of sample at 2840'.

2860 - 2990 Shale, light gray, micaceous with Shale, black, pyritic, with common Chert, dark brown and rare Dolomite, dark brown, fine crystalline, dense - appears to be vein or fracture fill. At 2910' with rare white quartz fragments.

2990 - 3050 Shale, black, fissile, pyritic with Sandstone, medium gray, very fine grained, subrounded, spherical, vitreous appearance, quartzose, tight, no stain.

3050 - 3110 Shale, light to medium gray, micaceous with rare Shale, dark gray, fissile, pyritic.

3110 - 3180 Shale, light gray, pyritic with Siltstone, dark brown, argillaceous, siliceous, very slightly dolomitic.

3180 - 3320 Shale, black, fissile, pyritic, with Shale, medium gray, with rare Siltstone, as above. At 3220' with rare sphalerite.

3320 - 3500 Shale, light gray, micaceous, with Shale, medium gray, pyritic with Dolomite, light gray-brown, very fine grained, siliceous, argillaceous, dense. At 3390' with rare Chert, dark brown.

3500 - 3550 Dolomite, dark brown, very fine crystalline, argillaceous, dense, no stain with rare Dolomite, light gray, micro to very fine crystalline, dense, no stain with scattered disseminated pyrite and rare interbeds or stringers of Shale, black, fissile.

3550 - 3670 Siltstone, dark brown, argillaceous, dolomitic, pyritic, with rare Dolomite, light gray, micro to very fine crystalline, argillaceous, dense, pyritic in part.

3670 - 3710 Dolomite, dark brown, very fine crystalline, slightly argillaceous, dense, with Siltstone, dark brown, dolomitic, argillaceous with rare Shale, dark gray, slightly micaceous.

3710 - 3730 Shale, dark gray, dolomitic with less than 5% rare Limestone, light gray mottled with dark gray, microcrystalline matrix, up to 10% crinoid ossicles.

3730 - 3830 Dolomite, dark brown, microcrystalline, argillaceous, dense, no stain with varying content of calcareous material and with Shale as above. At 3790' with Dolomite, medium to dark brown, microcrystalline, dense, no stain, slightly calcareous.

3830 - 3840 Shale, dark gray, micaceous with Siltstone, dark brown, dolomitic with rare Dolomite, medium to dark brown, microcrystalline, dense, no stain.

3840 - 3870 Shale, medium gray, micaceous, with Dolomite, light to medium gray, microcrystalline, dense, pyritic, with 5-10% free dolomite rhombs, calcite fragments, and quartz fragments.

3870 - 4110 Shale, dark gray to black, pyritic, blocky with Shale, light gray, micaceous with rare Dolomite, as above. At 3910' rare fragments of Chert, dark brown. At 3960' with rare beds of Dolomite, light gray, microcrystalline, calcareous, earthy in part, dense, no stain.

4110 - 4140 Shale, dark gray to black, pyritic, blocky with Shale, light gray, micaceous in part with rare Dolomite, medium gray, microcrystalline, dense with rare calcite rhombs and rare quartz fragments. At 4130' with Dolomite, medium gray, very fine crystalline, argillaceous, dense.

4140 - 4190 Shale, black, pyritic, dolomitic with rare Dolomite, medium gray, microcrystalline, argillaceous, pyritic. At 4180' trace of anhydrite stringers.

4190 - 4230 Shale, dark gray to black, pyritic, silty to arenaceous in part. At 4210' pyritized crinoid stem.

4230 - 4330 Shale, dark gray with rare dolomite mottling, pyritic in part, trace of Siltstone, medium gray, arenaceous grading to Sandstone, gray, very fine grained, dolomitic. At 4250' trace of calcite crystals. At 4300' trace of anhydrite interbeds.

4330 - 4360 Shale, as above with Siltstone, dark gray, very argillaceous, pyritic.

4360 - 4390 Shale, dark gray, silty in part, pyritic, trace of calcite veins. At 4380' shale becomes carbonaceous.

4390 - 4450 Shale, dark gray to black, pyritic, silty, trace of calcite and silica veining.

4450 - 4540 Shale, as above with Sandstone, dark gray, very fine grained, siliceous, very slightly calcareous. At 4510' with white dolomite rhombs.

4540 - 4590 Shale, as above with Dolomite, medium gray, very fine crystalline, siliceous fragments. At 4580' with white calcite and siliceous fragments.

4590 - 4680 Shale, dark gray to black with Sandstone, light gray, argillaceous, very siliceous. At 4610' with rare Dolomite, gray-brown, microcrystalline, argillaceous.

4680 - 4990 Shale, dark gray to black with abundant calcite and dolomite rhombs with siliceous fragments. At 4710' with rare Quartzite, gray, pyritic. At 4830' trace of Chert, black with rare Limestone, gray-brown, very fine crystalline, argillaceous, dolomitic. At 4880' trace of Sandstone, gray, very fine grained, argillaceous, pyritic.

4990 - 5060 Shale, dark gray, pyritic with abundant Chert, white to light gray, common free pyrite.

5060 - 5080 Shale, dark gray, silty in part, blocky with trace of Sandstone, light gray-brown, fine grained, argillaceous, siliceous.

5080 - 5100 Shale, as above with trace of Siltstone, gray, argillaceous with trace of white calcite and siliceous fragments.

5100 - 5170 Shale, light to medium gray, micaceous, dolomitic with Dolomite, medium gray, microcrystalline, dense with rare disseminated pyrite.

5170 - 5200 Shale, dark gray to black, fissile, rare disseminated pyrite, common slickensides.

5200 - 5240 Shale, medium gray, micaceous in part, very dolomitic grading in part to Dolomite, medium gray, microcrystalline, very argillaceous, dense with rare calcite rhombs.

5240 - 5260 Shale, medium gray as above with Dolomite, as above and with rare Siltstone, medium gray, argillaceous, totally silicified with rare silica fragments and euhedral quartz crystals. At 5250' Siltstone, appears as a quartzite and is much more common.

5260 - 5270 Shale, light to medium gray, very micaceous, dolomitic with rare Siltstone, medium gray, argillaceous, very micaceous with rare Dolomite, light to medium gray, microcrystalline, calcareous, dense.

5270 - 5300 Shale, dark gray, fissile with common Dolomite, dark brown, microcrystalline, dense with rare Dolomite, light to medium gray, microcrystalline, dense, earthy in part with rare "Quartzite", medium gray, very fine grained, tight with rare dolomite rhombs and quartz fragments.

5300 - 5400 Shale, dark gray to black, "waxy" appearance in part with rare Dolomite, dark brown as above and Dolomite, light to medium gray, as above, slightly silty in part.

5400 - 5440 Shale, medium gray, slightly dolomitic, silty in part with Dolomite, medium gray, microcrystalline, dense and with rare clear quartz fragments and rare white dolomite fracture fill.

5440 - 5490 Shale, dark gray to black, fissile, silty in part with Shale, medium gray as above and with rare Chert, red brown. At 5450' with rare Dolomite, medium gray, microcrystalline,

dense. At 5460' with rare pyrite.

5490 - 5550 Shale, black, blocky, pyritic, common calcite veins, with rare Dolomite, dark gray, microcrystalline, silty in part, calcareous with common calcite, dolomite and quartz fragments. At 5430' with rare Dolomite, light gray, microcrystalline, earthy, dense. Less than 5% disseminated pyrite throughout.

5550 - 5610 Shale, medium to dark gray, fissile, slightly dolomitic, rare disseminated pyrite, rare Chert, white with less than 5% free dolomite and quartz fragments. At 5600' with rare Dolomite, medium gray, microcrystalline, argillaceous, dense.

5610 - 5620 Shale, black, massive, slightly micaceous, very slightly dolomitic.

5620 - 5630 Shale, medium gray, fissile, dolomitic, pyritic with less than 5% free pyrite and white dolomite fragments.

5630 - 5650 Shale, dark gray, micaceous, blocky, very slightly dolomitic.

5650 - 5740 Shale, black, blocky, slightly dolomitic, with rare Sandstone, light gray, very fine grained, totally silicified with rare calcite rhombs. At 5660' with common pyrite. At 5700' with rare quartz fragments.

5740 - 5770 Shale, medium gray, micaceous, pyritic in part. At 5760' up to 5% free and disseminated pyrite.

5770 - 5840 Shale, as above with Shale, medium brown, blocky, slightly dolomitic, rare pyrite. At 5780' with rare Dolomite, medium gray, microcrystalline, dense. At 5810' with rare silica veins and fragments. At 5820' with 5-10% disseminated pyrite.

5840 - 5870 Shale, light to medium gray, micaceous, slightly pyritic with Shale, medium brown, blocky.

5870 - 5890 Shale, as above with Limestone, medium gray, microcrystalline, argillaceous, dense with rare white calcite infilling.

5890 - 5910 Shale, dark gray, dolomitic, slightly pyritic with Limestone, light gray, microcrystalline, argillaceous, dense with Shale, light gray, pyritic, calcareous and dolomitic with Marl, light gray, dolomitic, pyritic, soft.

5910 - 6010 Shale, dark gray, dolomitic, micaceous, blocky, brittle, with Shale, light gray, calcareous with rare Dolomite, medium gray, calcareous, microcrystalline, dense and with rare Dolomite, dark brown, micro to very fine crystalline, dense, common fractures lined with calcite.

6010 - 6030 Shale, dark gray-brown, dolomitic, pyritic with Shale, medium gray, dolomitic, micaceous, with common Limestone, dark gray, microcrystalline, argillaceous, dense and with rare Chert, light gray, leached appearance.

6030 - 6170 Shale, dark gray, fissile, slightly dolomitic, pyritic with rare Shale, medium gray, dolomitic, pyritic, micaceous with rare Limestone, dark gray, microcrystalline, dense with rare calcite rhombs. At 6060' with rare Sandstone, light gray, very fine grained, quartzose, tight. At 6080'

rare calcite filled fractures.

6170 - 6223 Shale, medium gray, dolomitic, blocky, pyritic in part with Limestone, medium gray, microcrystalline, argillaceous, dolomitic. At 6210' with rare Limestone, medium gray, very fine crystalline, argillaceous with less than 5% secondary and/or recrystallized calcite crystals.

ENGINEERING SUMMARY

PROGRESS REPORT

on the

DRILLING OPERATIONS

of the

FNX ET AL LA BICHE C-30 NTS 95-C WELL

located in

GRID AREA: 60° 39' 14.576" N. Lat.
124° 34' 47.442" W. Long.

NORTHWEST TERRITORIES

Dated: May 12, 1975

ROBERTS ENGINEERING LTD.

FNX ET AL LA BICHE C-30 NTS 95-C

PERTINENT WELL INFORMATION

WELL NAME:	FNX et al La Biche C-30 NTS 95-C
GRID AREA:	60° 39' 14.576" N. Lat & 124° 34' 47.442" Long.
ELEVATIONS:	Ground Elevation: 4153' (Surveyed) Kelly Bushing Elevation: 4170.3'
CONTRACTOR:	Challenger Drilling Ltd. (Formerly Brinkerhoff Drilling) Rig #2.
SPUD DATE:	March 1, 1975 -- 11:00 pm.
SURFACE HOLE:	0' - 700'KB 12¼" reamed to 17½" Hole
INTERMEDIATE HOLE:	700' - 5005'KB 12¼" Hole
MAIN HOLE:	5005' - 6223'KB 8½" Hole
SURFACE CASING:	19 Jts (702.94') 13 3/8" New 48 & 54 lbs/ft Rge 2 & 3 J-55 8rd ST&C casing landed at 700'KB. Cemented with 725 sacks neat Oilwell cement plus 2% $CaCl_2$ Plug Down: 8:15 am March 9, 1975.
INTERMEDIATE CASING:	142 Jts (5012.98') 9 5/8" Mann 43.5 & 47 lbs/ft New S00 95 & N80 Rge 2 & 3 8rd ST&C casing landed at 5005'KB. Cemented with 182 sacks Oilwell cement plus 2% Gel and 0.3% HR-4. Plug Down: 7:40 pm April 14, 1975.
LOGGING:	Schlumberger logs from 4956' to 697'KB: Dual Induction Laterolog and Survey Integrated Gamma Ray Sonic Caliper High Resolution Dipmeter.
BRIDGE PLUG:	4979'KB -- Halliburton 9 5/8" EZ-Drill cast iron plug.
RIG RELEASE:	May 7, 1975 -- 8:00 am. Well suspended with derrick down.

ROBERTS ENGINEERING LTD.

FNX ET AL LA BICHE C-30 NTS 95-C

DAILY PROGRESS REPORT

February 17 - 19, 1975:

Moved camp to drilling location.

February 20 - 24, 1975:

Moved drilling rig from Pointed Mountain to Pan Canadian Location (F-08).

February 25 - 28, 1975:

Moved drilling rig from Pan Canadian F-08 location to Fort Norman Exploration C-30 location.

March 1, 1975: INTERVAL: 0' - 50'KB FOOTAGE: 50'

12:00 am - 11:00 pm: Finished rigging up Brinkerhoff Drilling Company Ltd. Rig #2.
Mixed mud to 48 secs/qt. viscosity in preparation to spud in well.

11:00 pm - 12:00 pm: SPUDDED IN: 11:00 pm March 1, 1975.
Ground Elevation: 4153' (Surveyed)
Kelly Bushing Elevation: 4170.3'
Drilled 12¼" hole to 50'KB
Mud: Wt.: 8.7 ppg; Viscosity: 48 secs/qt.
Mud Additives: 4300 lbs Gel
Bit #1A: 12¼" Reed S13G 50' 1 Hour 160 RPM

March 2, 1975: INTERVAL: 50' - 350'KB FOOTAGE: 300'

12:00 am - 12:00 pm: Drilled 12¼" surface hole to 350'KB. Reduced weight on bit from 10,000 lbs to 2,000 lbs in order to correct increasing hole deviation. Encountered a thin gravel bed at approximately 200'KB.
Surveys: 74'- 1/8°; 102'- 1/4°; 130'- 1/4°; 159'- 1/8°; 188'- 1/4°; 217'- 1¼°; 245'- 1°; 276'- 7/8°; 305'- 1 3/8°; 334'- 1 1/8°
Mud: Wt.: 9.3 ppg; Visc.: 47 sec/qt.
Mud Additives: 1000 lbs Gel
Bit #1A: 12¼" Reed S13G 350' 20 3/4 Hrs 160 RPM

March 3, 1975: INTERVAL: 350' - 490'KB FOOTAGE: 140'

12:00 am - 1:45 am: Drilled 12¼" hole to 358'KB.

1:45 am - 3:45 am: Repair to mud pump.

FNX ET AL LA BICHE C-30 NTS 95-C

DAILY PROGRESS REPORT

March 3, 1975 -- Cont.

3:45 am - 6:45 pm: Drilled 12¼" hole to 464'KB.

6:45 pm - 7:45 pm: Round tripped for new 12¼" bit.

7:45 pm - 12:00 pm: Drilled 12¼" surface hole to 490'KB.
Surveys: 361'- 1 5/8°; 389'- 1 3/4°; 417'- 1 3/4°;
446'- 1 3/4°; 476'- 1 3/4°
Mud: Wt.: 9.6 ppg; Visc.: 43 sec/qt.
Mud Additives: Nil.
Bit #1A: 12¼" Reed S13G 464' 36 Hrs 180 RPM T2-G2-In
Bit #2A: 12¼" Reed S21G 26' 3 Hrs 180 RPM

March 4, 1975: INTERVAL: 490' - 640'KB FOOTAGE: 150'

12:00 am - 12:00 pm: Drilled 12¼" hole to 640'KB.
Surveys: 506'- 1 3/4°; 537'- 1 3/4°; 569'- 1 3/4°;
599'- 7/8°; 631'- 1 1/8°
Mud: Wt.: 9.8 ppg; Visc.: 45 secs/qt.
Mud Additives: 1500 lbs Gel
Bit #2A: 12¼" Reed S21G 176' 24 3/4 Hrs 180 RPM

March 5, 1975: INTERVAL: 640' - 700' KB FOOTAGE: 60' (12¼")
0' - 210' KB 210' (17½")

12:00 am - 9:00 am: Drilled 12¼" hole to 700'KB.

9:00 am - 10:15 am: Pulled and measured out of hole. (Correction: 2.11').

10:15 am - 11:00 am: Picked up and ran 17½" Reed 3 point reamer.

11:00 am - 12:00 pm: Reamed 12¼" pilot surface hole to 17½" from 0' to 210'KB.
Surveys: 662'- 1 1/4°; 694'- 3/4°
Mud: Wt.: 9.5 ppg; Visc.: 47 secs/qt.
Mud Additives: 1800 lbs Gel
Bit #2A: 12¼" Reed S21G 236' 33 Hrs 180 RPM T2-B2-In
Bit #1B: 17½" Reed Reamer 210' 12 Hrs 63 RPM

March 6, 1975: INTERVAL: 210' - 445'KB FOOTAGE: 235' (17½")

12:00 am - 12:00 pm: Reamed 12¼" pilot hole to 17½" surface hole from 210' to 445'KB.
Mud: Wt.: 9.6 ppg; Visc.: 41 secs/qt.
Mud Additives: 1000 lbs Gel
Bit #1B: 17½" Reed Reamer 445' 35¼ Hrs. 75 RPM

FNX ET AL LA BICHE C-30 NTS 95-C

DAILY PROGRESS REPORT

March 7, 1975: INTERVAL: 445' - 640'KB FOOTAGE: 195' (17½")

12:00 am - 2:00 am: Reamed 12¼" pilot hole to 17½" surface hole from 445' to 455'KB.

2:00 am - 3:30 am: Round tripped for new 3 point reamer.

3:30 am - 12:00 pm: Reamed 12¼" pilot hole to 17½" surface hole from 455' to 640'KB.

Mud: Wt.: 9.8 ppg; Visc.: 46 secs/qt.
Bit #1B: 17½" Reed Reamer 455' 37 Hrs. 64 RPM T3-B2-In
Bit #2B: 17½" Reed Reamer 185' 20 Hrs. 75 RPM

March 8, 1975: INTERVAL: 640' - 700'KB FOOTAGE: 60' (17½")

12:00 am - 10:30 am: Reamed 12¼" pilot hole to 17½" surface hole from 640' to 690'KB.

10:30 am - 11:30 am: Dummy tripped reamer to surface and measured out of hole. (Board: 699.80'; SLM: 699.50'; Correction: 0.30')

11:30 am - 1:00 pm: Picked up new Reed 3 point reamer and ran in hole.

1:00 pm - 4:00 pm: Reamed 12¼" pilot hole to 17½" surface hole from 690' to 700'KB.

4:00 pm - 6:30 pm: Circulated hole 3/4 hour for casing. Ran a survey on bottom and pulled out of hole for casing.

6:30 pm - 8:30 pm: Rigged up to run casing.

8:30 pm - 12:00 pm: Ran 13 3/8" surface casing.

Survey: 700'- 3/4°
Mud: Wt.: 9.9 ppg; Visc.: 45 secs/qt.
Bit #2B: 17½" Reed Reamer 235' 30 Hrs 64 RPM T3-B6-In
Bit #3B: 17½" Reed Reamer 10' 2½ Hrs 63 Rpm T2-B2-In

March 9, 1975: INTERVAL: 700' - 700'KB FOOTAGE: 0'

12:00 am - 2:30 am: Ran 19 jts (702.94') 13 3/8" New 54 & 48 lbs/ft Rge 2 J-55 8rd ST&C casing and landed at 700'KB.

2:30 am - 5:45 am: Circulated casing and rigged up Halliburton.

5:45 am - 8:15 am: Halliburton cemented casing with 725 sacks neat Oilwell cement plus 2% $CaCl_2$.
Plug Down: 8:15 am with 150 psig. Recovered 20 bbls cement returns. Pressure tested casing to 500 psig for 3 mins. - Test OK. Float collar held.

8:15 am - 12:00 pm: Waited on cement.

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DAILY PROGRESS REPORT

March 10, 1975: INTERVAL: 700' - 700'KB FOOTAGE: 0'

12:00 am - 8:00 am: Waited on cement and nippled up.

8:00 am - 12:00 pm: Installed B.O.P.'s and manifold. Installed mud desilter and spotted degasser.

March 11, 1975: INTERVAL: 700' - 764'KB FOOTAGE: 64'

12:00 am - 2:30 am: Ran lines to Degasser. Pressure tested blind rams to 1000 psi for 30 mins - Test OK.

2:30 am - 4:30 am: Ran in with bit #2A on drill collars and tagged cement top at 655'KB.

4:30 am - 5:30 am: Pressure tested pipe rams to 1000 psig for 30 mins - Test OK. Pressure tested Hydril to 1000 psig for 30 mins. - Test OK.

5:30 am - 6:00 am: Pressure tested kelly cock and motor shut-offs - OK.

6:00 am - 7:30 am: Drilled out float collar, cement and guide shoe. Drilled 12¼" hole to 701'KB.

7:30 am - 8:00 am: Pressure tested formation and cement to 250 psig - OK.

8:00 am - 12:00 pm: Drilled 12¼" hole to 764'KB.
Surveys: 728'- 1/2°; 759'- 1/2°
Mud: Wt.: 8.6 ppg; Visc.: 36 secs/qt.
Mud Add.: 4800 lbs Gel; 500 lbs Sodium Carbonate; 100 lbs Caustic; 4.5 gals DV68
Bit #2A: 12¼" Reed S21G-RR 64' 14 Hrs 64 RPM

March 12, 1975: INTERVAL: 764' - 822'KB FOOTAGE: 58'

12:00 am - 11:30 am: Drilled 12¼" hole to 790'KB.

11:30 am - 1:45 pm: Round tripped for new 12¼" bit.

1:45 pm - 12:00 pm: Drilled 12¼" hole to 822'KB.
Survey: 790'- 3/4°
Mud; Wt.: 8.7 ppg; Visc.: 36 sec/qt; W.L.: 14; pH: 9.5; F.C.: 2/32"
Mud Add.: 2000 lbs Gel; 2 gals DV68
Bit #2A: 12¼" Reed S21G-RR 353' 57 3/4 Hrs 75 RPM T4-B4-In
Bit #1: 12¼" Reed S21G 32' 10 Hrs 75 RPM Wt. 4000 lbs

FNK ET AL LA BICHE C-30 NTS 95-C

DAILY PROGRESS REPORT

March 13, 1975 — INTERVAL: 822' - 955'KB — FOOTAGE: 133'

12:00 am - 4:30 am: Pulled out of hole for new 12¼" bit.
Picked up 1 - 7 3/4" collar and 3 - 9" collars.
Ran in hole with the following drill string:
12¼" bit; 3 - 9" drill collars; 1 - 3 point reamer;
1 - 7 3/4" drill collar; 14 - 6½" drill collars followed by 4½" drill pipe.

4:30 am - 12:00 pm: Drilled 12¼" hole to 955'KB.
Surveys: 822'- 7/8°; 832'- 7/8°; 895'- 1°; 927'- 1°
Mud: Wt.: 8.7 ppg; Visc: 36 sec/qt; WL: 14.2 cc; pH: 9.5
F.C.: 2/32"
Mud Add.: 1000 lbs Gel; 50 lbs Caustic; 1 gal DV68
Bit #1: 12¼" Reed S21G 165' 27¼ Hrs 75 RPM Wt: 10M lbs

March 14, 1975: — INTERVAL: 955' - 1270'KB — FOOTAGE: 315'

12:00 am - 2:30 am: Drilled 12¼" hole to 960'KB.

2:30 am - 7:30 am: Round tripped for new 12¼" bit. Measured out of hole (Board: 990.14'; SLM: 991.50'; Correction: 1.36')

7:30 am - 11:00 am: Drilled 12¼" hole to 1106'KB.

11:00 am - 11:45 am: One jet in bit plugged. Worked pipe but unable to clear jet.

11:45 am - 12:30 pm: Drilled 12¼" hole to 1116'KB. Hole tight due to low annular velocity due to plugged jet.

12:30 pm - 1:00 pm: Circulated shale from hole.

1:00 pm - 5:00 pm: Round tripped plugged bit. Slipped drilling line.

5:00 pm - 12:00 pm: Drilled 12¼" hole to 1270'KB.
Surveys: 958'- 1 1/4°; 1021'- 7/8°; 1053'- 1°; 1084'- 1°; 1116'- 1°; 1178'- 1°; 1208'- 1°; 1240'- 1 1/4°; 1270'- 1°
Mud: Wt.: 8.9 ppg; Visc: 38 sec/qt; W.L.: 13 cc; pH: 9.0; F.C.: 2/32"
Mud Add.: 1000 lbs Gel; 50 lbs Caustic; 1 gal DV68
Bit #1: 12¼" Reed S21G 170' 29 Hrs 75 RPM Wt.: 10M lbs
Bit #2: 12¼" Reed Y31G 310' 10½ Hrs 80 RPM Wt: 25M lbs

March 15, 1975 — INTERVAL: 1270' - 1612'KB — FOOTAGE: 342'

12:00 am - 9:15 am: Drilled 12¼" hole to 1428'KB.

9:15 am - 10:00 am: Ran survey and circulated hole for one half hour.

10:00 am - 3:30 pm: Round tripped for new 12¼" bit. Installed 9" shock sub 30' above bit (String reamer located 90' above bit).

DAILY PROGRESS REPORT

March 15, 1975 -- Cont.

3:30 pm - 12:00 pm: Drilled 12¼" hole to 1612'KB.

Surveys: 1303'- 1 3/4°; 1334'- 1 3/4°; 1366'- 1 1/2°; 1397'- 1 1/2°; 1428'- 1 1/4°; 1467'- 1 1/2°; 1527'- M.R.; 1559'- 3°; 1590'- 2 1/2°

Mud: Wt.: 9.2 ppg; Visc: 40 sec/qt; W.L.: 13 cc; pH: 9.0 F.C.: 2/32"

Mud Add.: 1200 lbs Gel; 100 lbs Caustic; 1 gal DV68

Bit #2: 12¼" Reed Y31G 468' 17½ Hrs 80 RPM Wt: 23M lbs

Bit #3: 12¼" Sec M44L 184' 7¼ Hrs 75 RPM Wt: 23M lbs

March 16, 1975: INTERVAL: 1612' - 1835'KB FOOTAGE: 223'

12:00 am - 12:00 pm: Drilled 12¼" hole to 1835'KB.

Surveys: 1622'- 3°; 1653'- 3°; 1685'- 2 7/8°; 1716'- 3 1/8°; 1747'- 3 1/8°; 1779'- 3 1/8°; 1810'- 3 3/4°

Mud: Wt.: 9.2 ppg; Visc: 36 sec/qt; W.L.: 14 cc; pH: 9.0 F.C.: 2/32"

Mud Add.: 5000 lbs Gel; 250 lbs Caustic; 5 gals DV68

Bit #3: 12¼" Sec M44L 407' 28 Hrs 90 Rpm Wt: 15 M Lbs

March 17, 1975: INTERVAL: 1835' - 1992'KB FOOTAGE: 157'

12:00 am - 11:15 am: Drilled 12¼" hole to 1904'KB.

11:15 am - 12:15 pm: Circulated up heavy shales from bottom.

12:15 pm - 4:30 pm: Round tripped for new 12¼" bit.

4:30 pm - 5:30 pm: Cleaned out 70' fill from bottom and ran survey.

5:30 pm - 12:00 pm: Drilled 12¼" hole to 1992'KB.

Surveys: 1841'- 3 3/4°; 1873'- 3 3/4°; 1904'- 4 1/4°; 1936'- 4°; 1967'- 3 3/4°

Mud: Wt.: 9.2 ppg; Visc: 37 sec/qt; W.L.: 12 cc; pH: 9.5 F.C.: 2/32"

Mud Add: 2000 lbs Gel; 150 lbs Caustic; 2 gals DV68

Bit #3: 12¼" Sec M44L 476' 37¼ Hrs 100 RPM 12M lbs

Bit #4: 12¼" Reed Y31G 88' 6 Hrs 120 RPM 12-15M lbs

March 18, 1975: INTERVAL: 1992' - 2157'KB FOOTAGE: 165'

12:00 am - 12:00 pm: Drilled 12¼" hole to 2157'KB. Heavy shales.

Surveys: 1998'- 4°; 2029'- 3 1/2°; 2059'- 3 1/2°; 2091'- 4°; 2122'- 3 3/4°; 2153'- 3 3/4°

DAILY PROGRESS REPORT

March 18, 1975 -- Cont.

Mud: Wt.: 9.3 ppg; Visc: 50 sec/qt; W.L.: 9.6 cc; pH: 9.0
F.C.: 2/32"
Mud Add.: 5600 lbs Gel; 200 lbs Caustic; 5 gals DV68;
100 lbs CMC
Bit #4: 12¼" Reed Y31G 253' 26½ Hrs 120 RPM Wt.: 12-15M lbs

March 19, 1975: INTERVAL: 2157' - 2304'KB FOOTAGE: 147'

12:00 am - 12:00 pm: Drilled 12¼" hole to 2304'KB.
Surveys: 2184'- 4 1/8°; 2215'- 3 1/8°; 2247'- 4 1/4°;
2278'- 4 1/2°
Mud: Wt.: 9.2 ppg; Visc: 45 sec/qt; W.L.: 9.7 cc; pH: 9.0
F.C.: 2/32"
Mud Add.: 6300 lbs Gel; 150 lbs Caustic; 6 gals DV68;
100 lbs CMC
Bit #4: 12¼" Reed Y31G 400' 48¼ Hrs 120 RPM Wt.: 15M lbs

March 20, 1975: INTERVAL: 2304' - 2430'KB FOOTAGE: 126'

12:00 am - 12:30 pm: Drilled 12¼" hole to 2374'KB.

12:30 pm - 1:00 pm: Circulated and conditioned hole.

1:00 pm - 4:45 pm: Round tripped for new 12¼" bit.

4:45 pm - 5:00 pm: Cleaned out 20' fill from bottom.

5:00 pm - 12:00 pm: Drilled 12¼" hole to 2430'KB.
Surveys: 2310'- 4 1/2°; 2341'- 4 1/8°; 2373'- 4 3/4°;
2404'- 4 1/2°
Mud: Wt.: 9.2 ppg; Visc: 45 sec/qt; W.L.: 9.8 cc; pH: 9.0
F.C.: 2/32"
Mud Add.: 3800 lbs Gel; 150 lbs Caustic; 3.5 gals DV68
Bit #4: 12¼" Reed Y31G 470' 59¼ Hrs 120 RPM Wt. 15M lbs
Bit #5: 12¼" Reed Y31G 56' 6½ Hrs 120 RPM Wt. 17M lbs

March 21, 1975: INTERVAL: 2430' - 2604'KB FOOTAGE: 174'

12:00 am - 12:00 pm: Drilled 12¼" hole to 2604'KB.
Surveys: 2436'- 4 1/8°; 2467'- 4°; 2497'- 3 3/4°;
2530'- 3 1/2°; 2561'- 4 1/8°; 2592'- 3 3/4°
Mud: Wt.: 9.2 ppg; Visc: 40 sec/qt; W.L.: 9.4 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 5900 lbs Gel; 150 Lbs Caustic; 6 gals DV68;
100 lbs CMC
Bit #5: 12¼" Reed Y31G 230' 27¼ Hrs 120 RPM Wt.: 16M lbs

FNX ET AL LA BICHE C-30 NTS 95-C

DAILY PROGRESS REPORT

March 22, 1975: INTERVAL: 2604' - 2750'KB FOOTAGE: 146'

12:00 am - 12:00 pm: Drilled 12¼" hole to 2750'KB.
Surveys: 2623'- 3 1/2°; 2655'- 4°; 2686'- 3 7/8°; 2718'- 5°; 2748'- 5°
Mud: Wt.: 9.2 ppg; Visc: 42 sec/qt; W.L.: 9.6 cc; pH 9.0 F.C.: 2/32"
Mud Add.: 3400 lbs Gel; 200 lbs Caustic; 3 gals DV68; 50 lbs CMC
Bit #5: 12¼" Reed Y31G 376' 49 Hrs 120 RPM 12M lbs

March 23, 1975: INTERVAL: 2750' - 2809'KB FOOTAGE: 59'

12:00 am - 12:30 pm: Drilled 12¼" hole to 2804'KB.

12:30 pm - 1:00 pm: Circulated hole clean for tripping.

1:00 pm - 8:00 pm: Round tripped for new 12¼" bit. Installed Johnson 6½" jars on top of 5th drill collar and moved 3 point string reamer to top of 2nd drill collar.

8:00 pm - 10:15 pm: Worked and cleaned tight spot at 2710'KB.

10:15 pm - 12:00 pm: Drilled 12¼" hole to 2809'KB.
Surveys: 2779'- 4 1/2°; 2809'- 4 3/4°
Mud: Wt.: 9.3 ppg; Visc: 50 sec/qt; W.L.: 8.0 cc pH 9.0 F.C.: 2/32"
Mud Add.: 2500 lbs Gel; 50 lbs Caustic; 4 gals DV68
Bit #5: 12¼" Reed Y31G 430' 60 3/4 Hrs 120 RPM Wt. 12M
Bit #6: 12¼" Sec. M44N 5' 1¼ Hrs 80 RPM 10M lbs

March 24, 1975: INTERVAL: 2809' - 2950'KB FOOTAGE: 141'

12:00 am - 12:00 pm: Drilled 12¼" hole to 2950'KB.
Surveys: 2841'- 4 3/4°; 2872'- 4 1/4°; 2902'- 4 1/2°; 2935'- 3 7/8°
Mud: Wt.: 9.4 ppg; Visc: 51 sec/qt; W.L.: 8.2 cc; pH 9.0 F.C.: 2/32"
Mud Add.: 5800 lbs Gel; 200 lbs Caustic; 6 gals DV68; 100 lbs CMC
Bit #6: 12¼" Sec M44N 146' 21¼ Hrs 120 RPM Wt. 13M lbs

March 25, 1975: INTERVAL: 2950' - 3092'KB FOOTAGE: 142'

12:00 am - 8:15 am: Drilled 12¼" hole to 2995'KB.

8:15 am - 12:45 pm: Circulated hole for one half hour. Round tripped for new 12¼" bit. Cleaned out 25' fill from bottom.

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DAILY PROGRESS REPORT

March 25, 1975 -- Cont.

12:45 pm - 12:00 pm: Drilled 12¼" hole to 3092'KB.
Surveys: 2966'- 3°; 3028'- 2 1/2°; 3060'- 2 3/4°; 3091'- 2 1/4°
Mud: Wt.: 9.2 ppg; Visc: 60 sec/qt; W.L.: 8.6 cc; pH 9.5 F.C.: 2/32"
Mud Add.: 5600 lbs Gel; 100 lbs Caustic; 6 gals DV68
Bit #6: 12¼" Sec M44N 191' 28 3/4 Hrs 100 RPM Wt. 16M lbs
Bit #7: 12¼" Hughes XDV 97' 9½ Hrs 80 RPM wt. 18M lbs

March 26, 1975: INTERVAL: 3092' - 3271'KB FOOTAGE: 179'

12:00 am - 12:00 pm: Drilled 12¼" hole to 3271'KB.
Surveys: 3123'- 1 3/4°; 3150'- 1 1/2°; 3184'- 1 7/8°; 3217'- 1°; 3248'- Misrun
Mud: Wt.: 9.2 ppg; Visc: 60 sec/qt; W.L.: 8.4 cc; pH: 9.5 F.C.: 2/32"
Mud Add.: 2000 lbs Gel; 100 lbs Caustic; 2 gals DV68
Bit #7: 12¼" Hughes XDV 271' 30¼ Hrs 80 RPM Wt. 18M lbs

March 27, 1975: INTERVAL: 3271' - 3430'KB FOOTAGE: 159'

12:00 am - 1:45 am: Drilled 12¼" hole to 3284'KB.

1:45 am - 6:30 am: Round tripped for new 12¼" bit. Cleaned 50' loose fill.

6:30 am - 12:00 pm: Drilled 12¼" hole to 3430'KB.
Surveys: 3280'- 1 1/4°; 3310'- 1°; 3342'- 1 1/2°; 3402'- 2 1/8°
Mud: Wt.: 9.3 ppg; Visc: 50 sec/qt; W.L.: 8.4 cc; pH 9.5 F.C.: 2/32"
Mud Add.: 5500 lbs Gel; 100 lbs Caustic; 6 gals DV68; 50 lbs CMC
Bit #7: 12¼" Hughes XDV 289' 31 3/4 Hrs 80 RPM 22M lbs
Bit #8: 12¼" Hughes XDV 146' 15 3/4 Hrs 80 RPM 25M lbs

March 28, 1975: INTERVAL: 3430' - 3546'KB FOOTAGE: 116'

12:00 am - 2:30 pm: Drilled 12¼" hole to 3528'KB.

2:30 pm - 9:00 pm: Round tripped for new 12¼" bit. Cleaned out 10' fill.

9:00 pm - 12:00 pm: Drilled 12¼" hole to 3546'KB.
Surveys: 3432'- 2 1/8°; 3497'- 2 1/8°
Mud: Wt.: 9.3 ppg; Visc: 53 sec/qt; W.L.: 8.6 cc; pH 9.5
Mud Add.: 3500 lbs Gel; 150 lbs Caustic; 4 gals DV68; 100 lbs CMC

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DAILY PROGRESS REPORT

March 28, 1975 -- Cont.

Bit #8: 12¼" Hughes XDV 244' 28 3/4 Hrs 80 RPM Wt. 20M lbs
Bit #9: 12¼" Reed S21G 18' 3 Hrs 80 RPM Wt. 20M lbs

March 29, 1975: INTERVAL: 3546' - 3706'KB FOOTAGE: 160'

12:00 am - 12:00 pm: Drilled 12¼" hole to 3706'KB.
Surveys: 3562'- 2 1/4°; 3623'- 3°; 3654'- 2°; 3686'- 3 1/2°
Mud: Wt.: 9.3 ppg; Visc: 48 sec/qt; W.L.: 7.2 cc; pH 9.5 F.C.: 2/32"
Mud Add.: 3600 lbs Gel; 200 lbs Caustic; 4 gals DV68; 100 lbs CMC
Bit #9: 12¼" Reed S21G 178' 24½ Hrs 70 RPM Wt. 30M lbs

March 30, 1975: INTERVAL: 3706' - 3780'KB FOOTAGE: 74'

12:00 am - 4:15 am: Drilled 12¼" hole to 3725'KB.

4:15 am - 11:00 am: Round tripped for new 12¼" bit.

11:00 am - 1:45 pm: Reamed and cleaned tight hole from 3615' to 3725'KB.

1:45 pm - 12:00 pm: Drilled 12¼" hole to 3780'KB.
Surveys: 3717'- 3°; 3748'- 3°; 3780'- 3°
Mud: Wt.: 9.2 ppg; Visc: 48 sec/qt; W.L.: 8.6 cc; pH 9.5 F.C.: 2/32"
Mud Add.: 2600 lbs Gel; 200 lbs Caustic; 3 gals DV68
Bit #9: 12¼" Reed S21G 193' 28 Hrs 80 RPM Wt. 26M lbs
Bit #10: 12¼" Hughes X44 55' 9¼ Hrs 56 RPM Wt. 25M lbs

March 31, 1975: INTERVAL: 3780' - 3958'KB FOOTAGE: 178'

12:00 am - 12:00 pm: Drilled 12¼" hole to 3958'KB.
Surveys: 3810'- 3°; 3843'- 2 1/2°; 3905'- 3°
Mud: Wt.: 9.2 ppg; Visc: 48 sec/qt; W.L.: 7.8 cc; pH 9.5 F.C.: 2/32"
Mud Add.: 5000 lbs Gel; 150 lbs Caustic; 5 gals DV68; 150 lbs CMC
Bit #10: 12¼" Hughes X44 233' 31 Hrs 60 RPM Wt.: 30M lbs

April 1, 1975: INTERVAL: 3958' - 4099'KB FOOTAGE: 141'

12:00 am - 12:00 pm: Drilled 12¼" hole to 4099'KB.

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DAILY PROGRESS REPORT

April 1, 1975 -- Cont.

Surveys: 3966'- 3 1/4°; 3996'- 2 1/2°; 4029'- 3 1/4°;
4060'- 3 1/2°; 4092'- 2 7/8°
Mud: Wt.: 9.2 ppg; Visc: 49 sec/qt; W.L.: 8.8 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 3600 lbs Gel; 150 lbs Caustic; 4 gals DV68
Bit #10: 12¼" Hughes X44 374' 51 3/4 Hrs 60 RPM Wt 25M lbs

April 2, 1975: INTERVAL: 4099' - 4248'KB FOOTAGE: 149'

12:00 am - 12:00 pm: Drilled 12¼" hole to 4248'KB.
Surveys: 4122'- 3 1/4°; 4154'- 3 3/4°; 4184'- 4°;
4216'- 4 1/8°; 4248'- 4 1/8°
Mud: Wt.: 9.2 ppg; Visc: 49 sec/qt; W.L.: 8.4 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 4000 lbs Gel; 100 lbs Caustic; 4 gals DV68;
100 lbs CMC
Bit #10: 12¼" Hughes X44 523' 72½ Hrs 60 RPM Wt. 21M lbs

April 3, 1975: INTERVAL: 4248' - 4388'KB FOOTAGE: 140'

12:00 am - 12:00 pm: Drilled 12¼" hole to 4388'KB.
Surveys: 4275'- 4 1/2°; 4311'- 4 1/4°; 4342'- 4°;
4374'- 4°
Mud: Wt.: 9.3 ppg; Visc: 49 sec/qt; W.L.: 7.4 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 3600 lbs Gel; 100 lbs Caustic; 3 gals DV68;
50 lbs CMC
Bit #10: 12¼" Hughes X44 663' 93 3/4 Hrs 60 RPM Wt 21M lbs

April 4, 1975: INTERVAL: 4388' - 4512'KB FOOTAGE: 124'

12:00 am - 10:00 pm: Drilled 12¼" hole to 4512'KB.

10:00 pm - 12:00 pm: Circulated one half hour and began to measure out of the hole.
Surveys: 4405'- 4°; 4440'- 3 1/2°; 4468'- 4°;
4499'- 4 1/2°
Mud: Wt.: 9.2 ppg; Visc: 50 sec/qt; W.L.: 8.6 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 5600 lbs Gel; 150 lbs Caustic; 5 gals DV68;
100 lbs CMC
Bit #10: 12¼" Hughes X44 787' 113 Hrs 60 RPM Wt 19M lbs

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DAILY PROGRESS REPORT

April 5, 1975: INTERVAL: 4512' - 4514'KB FOOTAGE: 2'

12:00 am - 3:00 am: Measured out of tight hole for new bit. Slipped 33' line. (Board: 4531' SLM: 4529' Correction: 2')

3:00 am - 11:30 pm: Ran in with new 12¼" bit. Cleaned out a 60' bridge at 3070'KB and cleaned out solid fill from 4198' to 4512'KB.

11:30 pm - 12:00 pm: Drilled 12¼" hole to 4514'KB.
Mud: Wt.: 9.3 ppg; Visc: 60 sec/qt; W.L.: 7.9 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 8100 lbs Gel; 150 lbs Caustic; 8 gals DV68; 50 lbs CMC
Bit #11: 12¼" Hughes JD-7 2' ½ Hr 120 RPM Wt. 16M lbs

April 6, 1975: INTERVAL: 4514' - 4611'KB FOOTAGE: 97'

12:00 am - 12:00 pm: Drilled 12¼" hole to 4611'KB.
Surveys: 4531'- 4°; 4561'- 4 1/8°; 4595'- 3 1/2°
Mud: Wt.: 9.3 ppg; Visc: 80 sec/qt; W.L.: 7.0 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 3700 lbs Gel; 100 lbs Caustic; 3 gals DV68; 50 lbs CMC
Bit #11: 12¼" Hughes JD-7 99' 21 Hrs 120 RPM Wt. 30M lbs

April 7, 1975: INTERVAL: 4611' - 4643'KB FOOTAGE: 32'

12:00 am - 6:30 am: Drilled 12¼" hole to 4623'KB.

6:30 am - 8:30 am: Conditioned hole and dropped survey.

8:30 am - 2:30 pm: Pulled out of hole for new 12¼" bit. Hole tight from 3217' to 4623'KB. Changes rollers in 3 point reamer.

2:30 pm - 4:45 pm: Ran in with new 12¼" bit and hit fill at 4530'KB.

4:45 pm - 8:15 pm: Drilled and cleaned out fill to bottom.

8:15 pm - 12:00 pm: Drilled 12¼" hole to 4643'KB.
Survey: 4611'- 3 1/2°
Mud: Wt.: 9.3 ppg; Visc: 61 sec/qt; W.L.: 7.9 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 1800 Gel; 100 lbs Caustic; 2 gals DV68; 50 lbs CMC
Bit #11: 12¼" Hughes JD-7 111' 27¼ Hrs 100 RPM Wt. 33M
Bit #12: 12¼" Reed S62J 20' 3 3/4 Hrs 66 RPM Wt 20M lbs

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DAILY PROGRESS REPORT

April 8, 1975: INTERVAL: 4643' - 4793'KB FOOTAGE: 150'

12:00 am - 12:00 pm: Drilled 12¼" hole to 4793'KB.
Surveys: 4655'- 3 1/2°; 4687'- 4 1/8°; 4717'- 4 1/8°; 4750'- 4 7/8°; 4780'- 4 1/2°
Mud: Wt.: 9.3 ppg; Visc: 57 sec/qt; W.L.: 7.4 cc; pH 9.5 F.C.: 2/32"
Mud Add.: 5700 lbs Gel; 150 lbs Caustic; 5 gals DV68
Bit #12: 12¼" Reed S62J 170' 24 Hrs 76 RPM Wt. 24M lbs

April 9, 1975: INTERVAL: 4793' - 4889'KB FOOTAGE: 96'

12:00 am - 4:30 pm: Drilled 12¼" hole to 4889'KB.

4:30 pm - 5:45 pm: Circulated hole and dropped survey.

5:45 pm - 10:30 pm: Measured out for new bit and laid down 3 point reamer. (Board: 4904.51' SLM: 4904.37' Corr.: 0.14')

10:30 pm - 12:00 pm: Cleaned out 64' fill from 4825' to 4889'KB.
Surveys: 4812'- 4 1/2°; 4842'- 5 1/4°; 4874'- 5 3/8°
Mud: Wt.: 9.3 ppg; Visc: 60 sec/qt; W.L.: 7.6 cc; pH 9.5 F.C.: 2/32"
Mud Add.: 2500 lbs Gel; 100 lbs Caustic; 2 gals DV68; 50 lbs CMC
Bit #12: 12¼" Reed S62J 266' 38 Hrs 80 RPM Wt 22M lbs
Bit #13: 12¼" Hughes JD-7

April 10, 1975: INTERVAL: 4889' - 4971'KB FOOTAGE: 82'

12:00 am - 1:30 am: Drilled 12¼" hole to 4896'KB.

1:30 am - 4:15 am: Ran survey and worked tight shale. Cleaned out hole.

4:15 am - 12:00 pm: Drilled 12¼" hole to 4971'KB.
Surveys: 4896'- 5°; 4926'- 5°; 4958'- 4 1/2°
Mud: Wt.: 9.3 ppg; Visc: 60 sec/qt; W.L.: 7.7 cc; pH: 9.5 F.C.: 2/32"
Mud Add.: 3900 lbs Gel; 150 lbs Caustic; 3 gals DV68; 200 lbs CMC
Bit #13: 12¼" Hughes JD-7 82' 19 Hrs 90 RPM Wt 13M lbs

April 11, 1975: INTERVAL: 4971' - 5005'KB FOOTAGE: 34'

12:00 am - 9:00 am: Drilled 12¼" hole to 5005'KB.

9:00 am - 10:30 am: Circulated and conditioned hole.

DAILY PROGRESS REPORT

April 11, 1975 -- Cont.

10:30 am - 12:15 pm: Dummy tripped 20 stands.

12:15 pm - 1:00 pm: Cleaned out 50' fill from bottom.

1:00 pm - 3:15 pm: Circulated hole and dropped survey.

3:15 pm - 9:00 pm: Measured out of hole and increased bit jet size from 16/32" to 18/32" and ran back in to loose fill at 4960'KB. (Board: 5019.82' SLM: 5019.70' Corr.: 0.12')

9:00 pm - 10:00 pm: Cleaned out 45' of loose fill.

10:00 pm - 12:00 pm: Circulated and conditioned hole.
Surveys: 4988'- 4 1/2°; 5005'- 4 1/4°
Mud: Wt.: 9.3 ppg; Visc: 100 sec/qt; W.L.: 6.2 cc; pH 9.0
F.C.: 2/32"
Mud Add.: 4100 lbs Gel; 2 gals DV68; 50 lbs CMC
Bit #13: 12¼" Hughes JD-7 116' 26 3/4 Hrs 90 RPM Wt 15M

April 12, 1975: INTERVAL: 5005' - 5005'KB FOOTAGE: 0'

12:00 am - 5:15 am: Dummy tripped 46 stands to base of surface casing at 700'KB.

5:15 am - 8:00 am: Drilled and cleaned out fill from 4958' to 5005'KB.

8:00 am - 10:30 am: Circulated hole clean.

10:30 am - 1:30 pm: Tripped out of hole to log.

1:30 pm - 10:45 pm: Schlumberger ran the following logs from 4956' to 697'KB:
Dual Induction Laterolog and Survey
Integrated Gamma Ray Sonic Caliper
High Resolution Dipmeter

10:45 pm - 12:00 pm: Laid down 9" shock sub and ran in hole with bit #13.
Mud: Wt.: 9.3 ppg; Visc: 80 sec/qt; W.L.: 6.8 cc; pH 9.0
F.C.: 2/32"
Mud Add.: 50 lbs Caustic

April 13, 1975: INTERVAL: 5005' - 5005'KB FOOTAGE: 0'

12:00 am - 4:45 am: Finished running in hole with bit #13. Cleaned out 20' of loose fill from 4985' to 5005'KB.

4:45 am - 8:30 am: Circulated and conditioned hole.

DAILY PROGRESS REPORT

April 13, 1975 -- Cont.

8:30 am - 11:30 am:	Dummy tripped 45 stands.
11:30 am - 12:00 pm:	Cleaned out 30' loose fill.
12:00 pm - 3:00 pm:	Circulated and conditioned hole.
3:00 pm - 6:30 pm:	Pulled out of hole for casing.
6:30 pm - 7:45 pm:	Laid down 3 - 9" drill collars, 1 - 7 3/4" collar and subs.
7:45 pm - 9:00 pm:	Rigged up to run 9 5/8" intermediate casing.
9:00 pm - 12:00 pm:	Began running 9 5/8" casing. HOWCO Guide Shoe on bottom and HOWCO Float Collar on top of shoe joint. Centralizers located on top of joints 1, 2, 3, 4, 5, 10 & 30. Bottom three joints Threadlocked together. Mud: Wt.: 9.3 ppg; Visc: 84 sec/qt; W.L.: 7.6 cc; pH 9.0 F.C.: 2/32" Mud Add.: 1500 lbs Gel; 50 lbs Caustic; 2 gals DV68

April 14, 1975: INTERVAL: 5005' - 5005'KB FOOTAGE: 0'

12:00 am - 2:30 pm:	Ran 142 jts (5012.98') 9 5/8" Mann 47 & 43.5 lbs/ft New S00 95 & N80 Rge 2 & 3 8rd ST&C casing and landed at 5005'KB.
2:30 pm - 4:15 pm:	Circulated casing down from 4970' to 5005'KB through bridges and loose fill.
4:15 pm - 6:30 pm:	Circulated casing and rigged up HOWCO for cementing.
6:30 pm - 7:40 pm:	Cemented casing with 182 sacks Oilwell cement plus 2% Gel and 0.3% HR-4. Plug Down at 7:40 pm with 1000 psig. Pressure tested casing to 1000 psig for 3 minutes - OK. Bled off casing and float held.
7:40 pm - 12:00 pm:	Waited on cement. Raised B.O.P.'s and installed OCT 9 5/8" slip and seal assembly. Landed casing in 45,000 lbs tension. Installed bit guide & wear bushing on top of 9 5/8" casing cut-off.

April 15, 1975: INTERVAL: 5005' - 5029'KB FOOTAGE: 24'

12:00 am - 4:00 pm:	W.O.C. Ran in with 3 - 6½" drill collars with 8½" bit.

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DAILY PROGRESS REPORT

April 15, 1975 -- Cont.

4:00 pm - 4:30 pm: Pressure tested 9 5/8" casing and B.O.P.'s to 1000 psig for 30 mins - Test OK.

4:30 pm - 9:00 pm: Ran in with new 8½" bit and tagged cement top at 4970'KB. Drilled out float collar, cement and guide shoe.

9:00 pm - 12:00 pm: Drilled 8½" hole to 5029'KB.
Survey: 5029'- 4°
Mud: Wt.: 8.4 ppg; Visc: 28 sec/qt.
Mud Add.: 12,000 lbs Gel; 100 lbs Caustic; 50 lbs CMC; 300 lbs Sodium Bicarbonate
Bit #14: 8½" Reed S31G 24' 2½ Hrs 52 RPM Wt. 18M lbs

April 16, 1975: INTERVAL: 5029' - 5148'KB FOOTAGE: 119'

12:00 am - 1:15 pm: Drilled 8½" hole to 5107'KB.

1:15 pm - 3:00 pm: Pulled and racked 4½" drill pipe.

3:00 pm - 4:45 pm: Inspected all drill collars with scope - OK.

4:45 pm - 7:15 pm: Ran in hole with new 8½" bit.

7:15 pm - 12:00 pm: Drilled 8½" hole to 5148'KB.
Surveys: 5060'- 3 7/8°; 5092'- 3 7/8°; 5122'- 4°
Mud: Wt.: 8.6 ppg; Visc: 38 sec/qt; W.L.: 9.4 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 10,300 lbs Gel; 10 gals DV68; 250 lbs CMC
Bit #14: 8½" Reed S31G 102' 14½ Hrs 76 Rpm Wt. 16M lbs
Bit #15: 8½" Reed S31G 41' 4½ Hrs 76 RPM Wt. 16M lbs

April 17, 1975: INTERVAL: 5148' - 5255'KB FOOTAGE: 107'

12:00 am - 5:15 pm: Drilled 8½" hole to 5249'KB.

5:15 pm - 10:00 pm: Conditioned hole ¼ hour and round tripped for new bit.

10:00 pm - 12:00 pm: Drilled 8½" hole to 5255'KB.
Surveys: 5154'- 4°; 5184'- 3 1/2°; 5221'- 3 5/8°; 5249'- 3 7/8°
Mud: Wt.: 8.6 ppg; Visc: 45 sec/qt; W.L.: 8.2 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 5400 lbs Gel; 6 gals DV68; 50 lbs CMC
Bit #15: 8½" Reed S31G 142' 19½ Hrs 72 RPM Wt 17M lbs
Bit #16: 8½" Reed FP63 6' 2 Hrs 60 RPM wt 22M lbs

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DAILY PROGRESS REPORT

April 18, 1975: INTERVAL: 5255' - 5305'KB FOOTAGE: 50'

12:00 am - 1:30 pm: Drilled 8½" hole to 5305'KB.

1:30 pm - 1:45 pm: Leak developed in main shaft of kelly swivel allowing drilling mud to enter swivel oil case.
Pulled bit up into 9 5/8" intermediate casing.

1:45 pm - 12:00 pm: Broke down swivel. Waited on replacement swivel to be flown in from Fort Saint John, B.C.

Survey: 5283'- 4 5/8°
Mud: Wt.: 8.8 ppg; Visc: 47 sec/qt; W.L.: 8.6 cc; pH 10.0
F.C.: 2/32"
Mud Add.: 2300 lbs Gel; 2.5 gals DV68
Bit #16: 8½" Reed FP63 56' 14½ Hrs 70 RPM Wt. 15-36M lbs

April 19, 1975: INTERVAL: 5305' - 5325'KB FOOTAGE: 20'

12:00 am - 4:15 pm: Flew in replacement swivel from Fort Saint John, B.C. and replaced broken swivel.

4:15 pm - 4:30 pm: Ran bit to bottom and cleaned out 10' of fill.

4:30 pm - 6:45 pm: Drilled 8½" hole to 5312'KB.

6:45 pm - 7:45 pm: Worked bit through tight hole at 5295'KB. Unable to run survey due to tight connection.

7:45 pm - 12:00 pm: Drilled 8½" hole to 5325'KB.

Mud: Wt.: 8.8 ppg; Visc: 45 sec/qt; W.L.: 9.0 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 2000 lbs Gel; 2 gals DV68; 100 lbs CMC
Bit #16: 8½" Reed FP63 76' 21 Hrs 70 RPM Wt. 30M lbs

April 20, 1975: INTERVAL: 5325' - 5376'KB FOOTAGE: 51'

12:00 am - 12:00 pm: Drilled 8½" hole to 5376'KB.

Surveys: 5344'- 5 5/8°; 5376'- 6 1/2°
Mud: Wt.: 8.8 ppg; Visc: 75 sec/qt; W.L.: 8.2 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 2000 lbs Gel; 3 gals DV68
Bit #16: 8½" Reed FP63 127' 38½ Hrs 72 RPM Wt. 15-32M

April 21, 1975: INTERVAL: 5376' - 5425'KB FOOTAGE: 49'

12:00 am - 12:00 pm: Drilled 8½" hole to 5425'KB.

Survey: 5407'- 6 5/8°

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DAILY PROGRESS REPORT

April 21, 1975 -- Cont.

Mud: Wt.: 8.8 ppg; Visc: 75 sec/qt; W.L.: 8.6 cc; pH 9.5
F.C.: 2/32"
Mud Add.: Nil
Bit #16: 8½" Reed FP63 74' 60½ Hrs 70 RPM Wt.: 30M lbs

April 22, 1975: INTERVAL: 5425' - 5452'KB FOOTAGE: 27'

12:00 am - 3:00 pm: Drilled 8½" hole to 5448'KB.

3:00 pm - 5:30 pm: Dummy tripped 6 stands and circulated out 15' fill.

5:30 pm - 10:30 pm: Round tripped for new 8½" bit.

10:30 pm - 11:30 pm: Circulated out 20' fill.

11:30 pm - 12:00 pm: Drilled 8½" hole to 5452'KB.
Survey: 5438'- 7°
Mud: Wt.: 8.9 ppg; Visc: 70 sec/qt; W.L.: 8.7 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 2500 lbs Gel; 100 lbs Caustic; 3 gals DV68
Bit #16: 8½" Reed fp63 199' 74¼ Hrs 70 RPM Wt. 32M lbs
Bit #17: 8½" Reed S21G 4' ½ Hr 70 RPM Wt. 15M lbs

April 23, 1975: INTERVAL: 5452' - 5584'KB FOOTAGE: 132'

12:00 am - 12:00 pm: Drilled 8½" hole to 5584'KB.
Surveys: 5477'- M.R.; 5508'- 6 3/4°; 5570'- 6 1/2°
Mud: Wt.: 8.9 ppg; Visc: 65 sec/qt; W.L.: 7.8 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 1500 lbs Gel; 50 lbs Caustic; 2 gals DV68;
100 lbs CMC
Bit #17: 8½" Reed S21G 136' 20 3/4 Hrs 120 RPM Wt 14M

April 24, 1975: INTERVAL: 5584'- 5696'KB FOOTAGE: 112'

12:00 am - 12:00 pm: Drilled 8½" hole to 5696'KB.
Survey: 5632'- 6 1/8°
Mud: Wt.: 9.1 ppg; Visc: 70 sec/qt; W.L.: 8.2 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 2800 lbs Gel; 100 lbs Caustic; 2 gals DV68
Bit #17: 8½" Reed S21G 248' 42 3/4 Hrs 120 RPM Wt 20M

FNX ET AL LA BICHE C-30 NTS 95-C

DAILY PROGRESS REPORT

April 25, 1975: INTERVAL: 5696' - 5696'KB FOOTAGE: 0'

12:00 am - 2:30 am: Worked bit through tight spot from 5406' to 5316'KB - caving shales.

2:30 am - 5:00 am: Pulled out of hole.

5:00 am - 5:30 am: Picked up 8¼" 3 point reamer and new 8½" bit. Located reamer 60' above bit with shock sub 30' above bit and jars located 300' above bit.

5:30 am - 6:15 am: Slipped and cut 100' drilling line.

6:15 am - 7:45 am: Ran in hole and hit bridge at 5346'KB.

7:45 am - 9:30 am: Cleaned out bridge and caving shales.

9:30 am - 12:30 pm: Bit plugged - unable to clear jets.

12:30 pm - 6:00 pm: Pulled wet string from hole and unplugged bit.

6:00 pm - 7:30 pm: Ran in hole and hit bridge at 5468'KB.

7:30 pm - 12:00 pm: Cleaned out bridge and fill to 5601'KB.

Survey: 5696'- 6°
Mud: Wt.: 9.2 ppg; Visc: 71 sec/qt; W.L.: 8.4 cc; pH 9.5
F.C.: 2/32"
Mud Add.: Nil
Bit #17: 8½" Reed S21G 248' 42 3/4 Hrs 120 RPM Wt 25M lbs
Bit #18: 8½" Reed S21G

April 26, 1975: INTERVAL: 5696' - 5794'KB FOOTAGE: 98'

12:00 am - 2:00 am: Cleaned out 95' soft fill to 5696'KB.

2:00 am - 12:00 pm: Drilled 8½" hole to 5794'KB.

Survey: 5764'- 6 1/8°
Mud: Wt.: 9.4 ppg; Visc: 73 sec/qt; W.L.: 6.6 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 1000 lbs Gel; 50 lbs Caustic; 1 gal DV68
Bit 318: 8½" Reed S21G 98' 20 Hrs 90 RPM Wt 30M lbs

April 27, 1975: INTERVAL: 5794' - 5848'KB FOOTAGE: 54'

12:00 am - 4:30 am: Drilled 8½" hole to 5803'KB.

4:30 am - 5:30 am: Conditioned hole to pull pipe.

5:30 am - 1:30 pm: Round tripped for new 8½" bit.

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DAILY PROGRESS REPORT

April 27, 1975 -- Cont.

1:30 pm - 2:30 pm: Reamed out 20' fill to 5803'KB.

2:30 pm - 12:00 pm: Drilled 8½" hole to 5848'KB.
Surveys: 5794'- 6 1/2°; 5825'- 6 3/4°
Mud: Wt.: 9.5 ppg; Visc; 83 sec/qt; W.L.: 8.8 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 800 lbs Gel; 50 lbs Caustic; 1 gal DV68
Bit #18: 8½" Reed S21G 207' 23¼ Hrs 90 RPM Wt. 30M lbs
Bit #19: 8½" Reed S31G 45' 8¼ Hrs 90 RPM Wt. 30M lbs

April 28, 1975: INTERVAL: 5848' - 5924'KB FOOTAGE: 76'

12:00 am - 2:30 pm: Drilled 8½" hole to 5924'KB.

2:30 pm - 4:00 pm: Circulated samplé for Geologist.

4:00 pm - 8:30 pm: Dropped survey. Pulled out of hole. Drill string pulled tight at 5696'KB. Removed 3 point string reamer from drill string located 60' above bit.

8:30 pm - 11:15 pm: Ran in hole and hit bridge at 5664'KB.

11:15 pm - 12:00 pm: Drilled and reamed bridge to 5696'KB.
Surveys: 5888'- 7 1/8°; 5918'- 8 1/2°; 5920'- 8 1/2°
Mud: Wt.; 9.4 ppg; Visc: 65 sec/qt; W.L.: 7.2 cc; pH 8.5
F.C.: 2/32"
Mud Add.: 2000 lbs Gel; 100 lbs Caustic; 2 gals DV68
Bit #19: 8½" Reed S31G 119' 19 3/4 Hrs 90 RPM Wt 30M lbs
Bit #15R: 8½" Reed S31G

April 29, 1975: INTERVAL: 5924' - 5958'KB FOOTAGE: 34'

12:00 am - 2:00 am: Cleaned 228' loose fill to 5924'KB.

2:00 am - 9:00 pm: Drilled 8½" hole to 5958'KB. High RPM & low weight on bit.

9:00 pm - 10:00 pm: Noted leak in bottom of kelly and checked same.

10:00 pm - 12:00 pm: Dropped survey and began tripping for new bit.
Waited on repairs to kelly.
Mud: Wt.: 9.4 ppg; Visc: 60 sec/qt; W.L.: 8.2 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 3400 lbs Gel; 100 lbs Caustic; 4 gals DV68
Bit #15R: 8½" Reed S31G 34' 18½ Hrs 120 RPM Wt: 14M lbs

FNX ET AL LA BICHE C-30 NTS 95-C

DAILY PROGRESS REPORT

April 30, 1975: INTERVAL: 5958' - 5986'KB FOOTAGE: 28'

12:00 am - 4:00 am: Finished round tripping for new bit. Landed bit at 4980'KB in intermediate casing.

4:00 am - 8:00 am: Waited on welder for kelly repair.

8:00 am - 12:15 pm: Welder repaired horizontal crack just below hexoganal of kelly. Crack covered half of circumference.

12:15 pm - 5:00 pm: Finished running in and cleaned 390' fill to bottom.

5:00 pm - 12:00 pm: Drilled 8½" hole to 5986'KB.
Survey: 5958'- 8 1/4°
Mud: Wt.: 9.4 ppg; Visc: 72 sec/qt; W.L.: 8.2 cc; pH 9.5
F.C.: 2/32"
Mud Add.; 1000 lbs Gel; 1 gal DV68
Bit #15R: 8½" Reed S31G 34' 18½ Hrs 120 RPM Wt 14M lbs
Bit #20: 8½" Reed S31G 28' 7 Hrs 120 RPM Wt. 14M lbs

May 1, 1975: INTERVAL: 5986' - 6038'KB FOOTAGE: 52'

12:00 am - 12:00 pm: Drilled 8½" hole to 6038'KB.
Survey: 6007'- 8°
Mud: Wt.: 9.4 ppg; Visc: 67 sec/qt; W.L.: 8.0 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 1000 lbs Gel; 100 lbs Caustic; 1 gal DV68
Bit #20: 8½" Reed S31G 80' 29 Hrs 120 RPM Wt. 14M lbs

May 2, 1975: INTERVAL: 6038' - 6090'KB FOOTAGE: 52'

12:00 am - 9:00 am: Conditioned hole half hour for tripping. Dropped survey and round tripped for new 8½" bit. Pulled tight on bottom 660'. Cleaned out 40' fill with new bit.

9:00 am - 12:00 pm: Drilled 8½" hole to 6090'KB.
Surveys: 6038'- 7 7/8°; 6070'- 7°
Mud: Wt.: 9.3 ppg; Visc: 73 sec/qt; W.L.: 7.1 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 1000 lbs Gel; 50 lbs Caustic; 1 gal DV68
Bit #21: 8½" Reed S31G 52' 14 Hrs 125 RPM Wt. 17M lbs

May 3, 1975: INTERVAL: 6090' - 6133'KB FOOTAGE: 40'

12:00 am - 1:00 pm: Drilled 8½" hole to 6133'KB.

DAILY PROGRESS REPORT

May 3, 1975 -- Cont.

1:00 pm - 2:00 pm: Circulated hole and dropped survey.

2:00 pm - 6:45 pm: Pulled out of hole for new bit. Tight hole at 5664'KB due to hole caving.

6:45 pm - 7:45 pm: Slipped and cut 280' drilling line.

7:45 pm - 12:00 pm: Ran in with new bit and cleaned out fill from 5960' to 6133'KB.

Survey: 6101'- 6 1/2°
Mud: Wt.: 9.4 ppg; Visc: 73 sec/qt; W.L.: 7.2 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 1500 lbs Gel; 1 gal DV68
Bit #21: 8½" Reed S31G 95' 25½ Hrs 120 RPM Wt 18M lbs
Bit #22: 8½" Reed S31G

May 4, 1975: INTERVAL: 6133' - 6223'KB FOOTAGE: 90'

12:00 am - 12:30 am: Cleaned out hole to 6133'KB.

12:30 am - 8:15 pm: Drilled 8½" hole to 6223'KB.

8:15 pm - 11:00 pm: Noted pump pressure drop from 1100 psig to 600 psig when picking up bit for a connection and then a pump pressure increase to 1100 psig when bit was lowered to bottom of hole. Pulled out of hole.

11:00 pm - 12:00 pm: Recovered top half of 6½" shock sub. Fish remaining in hole consisted of an 8½" bit, 1 - 6½" drill collar and the bottom end of the 6½" shock sub with 4½" splined mandrel sticking up.
Made up overshot with 5" slip-type grapple.

Survey: 6193'- 4 1/2°
Mud: Wt.: 9.5 ppg; Visc: 68 sec/qt; W.L.: 7.4 cc; pH 9.5
F.C.: 2/32"
Mud Add.: 800 lbs Gel; 50 lbs Caustic; 400 lbs Soda Ash;
1 gal DV68
Bit #22: 8½" Reed S31G 90' 18½ Hrs 110 RPM Wt. 28M lbs

May 5, 1975: TOTAL DEPTH: 6223'KB

12:00 am - 1:00 am: Finished making up 5" overshot.

1:00 am - 8:00 am: Ran in hole with overshot and cleaned out 80' fill to top of fish.

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DAILY PROGRESS REPORT

May 5, 1975 -- Cont.

8:00 am - 8:30 am:	Circulated and set overshot down on fish.
8:30 am - 12:00 pm:	Chain tonged out of hole and recovered overshot without fish. Large chunk of Pyrite wedged into overshot which prevented the overshot from latching onto fish.
12:00 pm - 5:30 pm:	Raised B.O.P.'s and reset wear bushing onto 9 5/8" casing. Nippled up B.O.P.'s.
5:30 pm - 9:30 pm:	Ran in with 8½" bit. Cleaned out 20' loose fill to top of fish.
9:30 pm - 11:15 pm:	Circulated on top of fish and cleaned out shale cavings.
11:15 pm - 12:00 pm:	Began to pull out of hole.
	Mud: Wt.: 9.4 ppg; Visc: 70 sec/qt; W.L.: 8.2 cc; pH 9.5 F.C.: 2/32"

May 6, 1975: TOTAL DEPTH: 6223'KB

12:00 am - 2:45 am:	Finished pulling bit out of hole.
2:45 am - 7:15 am:	Made up Bear Oil Tool overshot. Ran in hole and cleaned out 80' loose fill to top of fish.
7:15 am - 8:00 am:	Worked over fish and pulled fish loose - tight. Pumped out two singles.
8:00 am - 1:00 pm:	Pulled out of hole and recovered fish. Laid down and transferred Bear fishing tools to helicopter.
1:00 pm - 4:15 pm:	Slipped 38' drilling line. Cleaned and drained desilter. Checked blind rams.
4:15 pm - 9:00 pm:	Picked up and ran Halliburton 9 5/8" EZ-Drill bridge plug into casing. Set bridge plug at 4979'KB.
9:00 pm - 12:00 pm:	Started out of hole and laid down drill pipe.

May 7, 1975: TOTAL DEPTH: 6223'KB

12:00 am - 5:30 am:	Finished laying down drill pipe and drill collars.
5:30 am - 8:00 am:	Cleaned out mud tanks. RIG RELEASED: 8:00 am

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FNX ET AL LA BICHE C-30 NTS 95-C

SURFACE CASING TALLY REPORT

SIZE: 13 3/8" WEIGHT: 48 & 54 lbs/ft. GRADE: J-55 RANGE: 2 THREADS: 8rd ST&C

CONDITION: Unused but weathered I.D.: 12.715" & 12.615" DATE: March 8, 1975

REMARKS: Howco Guide Shoe on bottom & Howco Float Collar on top of shoe joint. Howco latch-on centralizers located on joints 1, 2, 3, 5, 8 & at shoe. Howco Threadlock used to weld bottom 3 joints.

Jt. No.	Length	Jt. No.	Length
1	35.92	11	38.27
2	37.88	12	37.75
3	40.65	13	35.32
4	40.83	14	37.57
5	40.97	15	32.56
6	41.48	16	30.64
7	35.65	17	33.60
8	35.31	18	31.51
9	40.32	19	32.56
10	40.64	20	33.15
	389.65		342.93

Total Casing On Location	20 jts	732.58'
Casing Left Out Of Hole	1 jt	33.15'
Guide Shoe & Float Collar		3.51'
Total Casing String	19 jts	702.94'
K.B. To Top Of Casing		2.94'
Casing Landed At		700.00'KB

DRILLING MUD USED TO DATE

Surface Hole: 12½" & 17½" (0' - 700'KB): 9,600 lbs Gel

Intermediate Hole: 12¼" (700' - 5005'KB); 123,500 lbs Gel; 4,150 lbs Caustic; 1,300 lbs CMC; 120 gallons DV68 and 500 lbs Bicarbonate

Main Hole: 8½" (5005' - 6223'KB): 53,300 lbs Gel; 550 lbs CMC; 900 lbs Caustic; 43.5 gals DV68; 300 lbs Bicarbonate; 400 lbs Soda Ash

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FNX ET AL LA BICHE C-30 NTS 95-C

INTERMEDIATE CASING TALLY REPORT

SIZE: 9 5/8" MAKE: Mann WEIGHT: 43.5 & 47 lbs/ft. GRADE: SOO 95 & N-80
RANGE: 2 & 3 THREADS: 8rd ST&C CONDITION: New Csg. MINIMUM I.D.: 8.681"
REMARKS: Howco Guide Shoe on bottom & Howco Float Collar on top of shoe joint.
Howco Centralizers located on joints 1, 2, 3, 5, 10 and 20.
Howco Threadlock used to weld bottom two joints.
Joints 116 to 139 were 43.5 lbs/ft and balance were 47 lbs/ft.

Jt. No.	Length	Jt. No.	Length	Jt. No.	Length	Jt. No.	Length	Jt. No.	Length	
1	25.80	11	40.47	21	39.55	31	34.16	41	38.04	
2	38.02	12	31.49	22	33.69	32	25.87	42	29.60	
3	38.03	13	30.19	23	26.21	33	37.82	43	41.37	
4	40.76	14	33.44	24	33.37	34	39.25	44	35.32	
5	39.86	15	31.13	25	41.86	35	24.96	45	41.53	
6	38.10	16	42.21	26	29.96	36	38.62	46	35.72	
7	30.76	17	36.27	27	33.29	37	32.00	47	41.41	
8	33.13	18	32.56	28	35.55	38	41.24	48	31.69	
9	29.86	19	33.02	29	36.00	39	37.93	49	40.75	
10	30.08	20	32.06	30	40.00	40	31.71	50	32.05	
	344.40		342.84		349.48		343.56		367.48	
51	28.81	61	37.71	71	40.88	81	31.05	91	27.79	
52	31.45	62	33.50	72	41.47	82	39.33	92	29.66	
53	27.43	63	32.31	73	41.86	83	38.96	93	38.74	
54	34.97	64	33.45	74	40.02	84	35.71	94	32.82	
55	26.91	65	30.71	75	40.83	85	40.72	95	29.81	
56	40.93	66	26.91	76	40.19	86	30.70	96	37.19	
57	41.08	67	42.88	77	31.55	87	31.09	97	29.40	
58	39.59	68	37.50	78	32.91	88	40.57	98	33.55	
59	42.04	69	40.29	79	27.46	89	40.03	99	30.14	
60	30.47	70	39.97	80	44.58	90	39.80	100	33.10	
	343.68		355.23		381.75		367.96		322.20	
101	33.07	111	33.56	121	41.16	131	37.19	141	35.40	
102	25.15	112	30.78	122	38.65	132	37.26	142	30.57	
103	31.24	113	28.96	123	38.98	133	39.10	143	31.60	*
104	29.42	114	30.01	124	27.05	134	39.64	144	41.71	*
105	24.98	115	40.44	125	40.04	135	37.08			
106	35.87	116	42.38	126	36.99	136	38.21			
107	41.59	117	40.56	127	37.09	137	41.55			
108	26.30	118	34.05	128	39.42	138	41.38			
109	30.65	119	38.44	129	36.71	139	38.46			
110	33.22	120	37.95	130	37.81	140	31.69			
	311.49		357.13		373.90		381.56		139.28	

Total Casing On Lease	144 jts	5081.94 ft.
Casing Left Out Of Hole	2 jts	73.31 ft.
Guide Shoe & Float Collar		4.35 ft.
Total Casing String	142 jts	5012.98 ft.

* Jts Left Out

ROBERTS ENGINEERING LTD.

FNX ET AL LA BICHE C-30 NTS 95-C

DRILLING BIT REPORT

BIT NO.	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS	ACCUM. HOURS	R.P.M.	WT. ON BIT	T-B-G	PUMP PRESS	D.C.'s	DATE OUT
1A	12¼	Reed	S13G	464	464	36	36	180	2,000	[illegible] 2 I	1100	16	3/4
2A	12¼	Reed	S21C	700	236	33	69	180	2,000	2 2 I	1000	16	3/6
1B	17½	Reed	Rmr.	455	455	37	106	75	2 [illegible],000	2 2 I	550	16	3/7
2B	17½	Reed	Rmr.	690	235	30	136	64	[illegible],000	3 5 I	550	16	3/9
3B	17½	Reed	Rmr.	700	10	2.5	138.5	63	4-6,000	2 2 I	550	16	3/9
2A-R	12¼	Reed	S21G	790	90	24.75	24.75	75	2-6,000	4 4 I	300	18	3/13
1	12¼	Reed	S21G	960	170	29	53.75	75	6,000	[illegible] I	[illegible]00	18	3/14
2	12¼	Reed	Y31G	1428	468	17.50	71.25	80	18,000	[illegible] I	1100	18	3/16
3	12¼	Sec	M44L	1904	476	37.25	108.50	100	15,000	5 2 0	1050	18	3/18
4	12¼	Reed	Y31G	2374	470	59.50	168	120	17,000	6 5 I	1100	18	3/21
5	12¼	Reed	Y31G	2804	430	60.75	228.75	120	16,000	6 5 I	1100	18	3/24
6	12¼	Sec	M44N	2995	191	28.75	257.50	120	14,000	7 3 I	1100	18	3/26
7	12¼	H.W.	XDV	3284	289	31.75	289.25	80	16,000	4 2 I	1100	18	3/27
8	12¼	H.W.	XDV	3528	244	28.75	318	80	22,000	3 2 I	1100	18	3/29
9	12¼	Reed	S21G	3725	197	28	346	80	27,000	5 2 I	1100	18	3/30
10	12¼	H.W.	X-44	4512	787	113	459	60	20,000	3 2 I	1100	18	4/5
11	12¼	H.W.	JD-7	4623	111	27.25	486.25	100	30,000	8 5 I	1100	18	4/8
12	12¼	Reed	S-62	4889	266	38	524.25	80	25,000	1 1 I	1100	18	4/10
13	12¼	H.W.	JD-7	5005	116	26.75	551	100	15,000	4 3 I	1100	18	4/12
14	8½	Reed	S31G	5107	102	14.25	14.25	52	15,000	3 1 I	700	17	4/17
15	8½	Reed	S31G	5249	142	19.50	33.75	72	17,000	3 1 I	750	17	4/18
16	8½	Reed	FP63	5448	199	74.25	108	70	30,000	1 1 0	800	17	4/22
17	8½	Reed	S21G	5696	248	42.75	150.75	120	16,000	6 2 I	900	17	4/24
18	8½	Reed	S21G	5803	207	23.25	174	90	30,000	8 8 0	1075	17	4/27
19	8½	Reed	S31G	5924	119	19.75	193.75	90	24,000	5 3 I	1050	17	4/29
15-R	8½	Reed	S31G	5958	34	18.50	212.25	120	14,000	5 2 I	1050	17	4/30
20	8½	Reed	S31G	6038	80	29	241.25	120	14,000	5 6 I	1050	17	5/2
21	8½	Reed	S31G	6133	95	25.50	266.75	125	18,000	4 1 I	1100	17	5/3
22	8½	Reed	S31G	6223	90	18.50	285.25	110	28,000	3 1 I	1100	17	5/5

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FNX ET AL LA BICHE C-30 NTS 95-C

DEVIATION SURVEYS

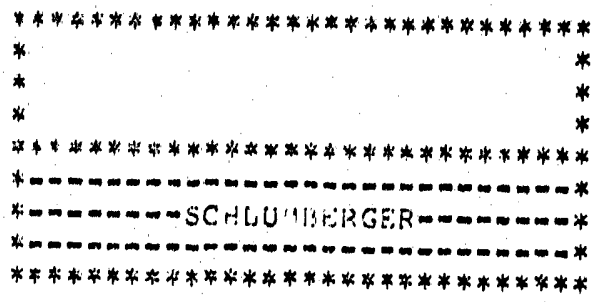
74'- 1/8°
102'- 1/4°
130'- 1/4°
159'- 1/8°
188'- 1/4°
217'- 1 1/4°
245'- 1°
276'- 7/8°
305'- 1 3/8°
334'- 1 1/8°
361'- 1 5/8°
389'- 1 3/4°
417'- 1 3/4°
446'- 1 3/4°
476'- 1 3/4°
506'- 1 3/4°
537'- 1 3/4°
569'- 1 3/4°
599'- 7/8°
631'- 1 1/8°
662'- 1 1/4°
694'- 3/4°
700'- 3/4°
728'- 1/2°
759'- 1/2°
790'- 3/4°
822'- 7/8°
832'- 7/8°
895'- 1°
927'- 1°
958'- 1 1/4°
1021'- 7/8°
1053'- 1°
1084'- 1°
1116'- 1°
1178'- 1°
1208'- 1°
1240'- 1 1/4°
1270'- 1°
1303'- 1 3/4°
1334'- 1 3/4°
1366'- 1 1/2°
1397'- 1 1/2°
1428'- 1 1/4°
1467'- 1 1/2°
1527'- M.R.
1559'- 3°
1590'- 2 1/2°
1622'- 3°
1653'- 3°
1685'- 2 7/8°
1716'- 3 1/8°
1747'- 3 1/8°
1779'- 3 1/8°
1810'- 3 3/4°
1841'- 3 3/4°
1873'- 3 3/4°
1904'- 4 1/4°
1936'- 4°
1967'- 3 3/4°
1998'- 4°
2029'- 3 1/2°
2059'- 3 1/2°
2091'- 4°
2122'- 3 1/4°
2153'- 3 3/4°
2184'- 4 1/8°
2215'- 3 7/8°
2247'- 4 1/4°
2278'- 4 1/2°
2310'- 4 1/2°
2341'- 4 1/8°
2373'- 4 3/4°
2404'- 4 1/2°
2436'- 4 1/8°
2467'- 4°
2497'- 3 3/4°
2530'- 3 1/2°
2561'- 4 1/8°
2592'- 3 3/4°
2623'- 3 1/2°
2655'- 4°
2686'- 3 1/8°
2718'- 5°
2748'- 5°
2779'- 4 1/2°
2809'- 4 3/4°
2841'- 4 3/4°
2872'- 4 1/4°
2902'- 4 1/2°
2935'- 3 7/8°
2966'- 3°
3028'- 2 1/2°
3060'- 2 3/4°
3091'- 2 1/4°
3123'- 1 3/4°
3150'- 1 1/2°
3184'- 1 7/8°
3217'- 1°
3248'- M.R.
3280'- 1 1/4°
3310'- 1°
3402'- 2 1/8°
3432'- 2 1/8°
3497'- 2 1/8°
3562'- 2 1/4°
3623'- 3°
3686'- 3 1/2°
3717'- 3°
3748'- 3°
3810'- 3°
3843'- 2 1/2°
3905'- 3°
3966'- 3 1/4°
3996'- 2 1/2°
4029'- 3 1/4°
4060'- 3 1/2°
4092'- 2 7/8°
4122'- 3 1/8°
4184'- 4°
4216'- 4 1/8°
4248'- 4 1/8°
4275'- 4 1/2°
4311'- 4 1/4°
4342'- 4°
4374'- 4°
4405'- 4°
4437'- 3 1/2°
4440'- 3 1/2°
4468'- 4°
4499'- 4 1/2°
4531'- 4°
4561'- 4 1/8°
4595'- 3 1/2°
4611'- 3 1/2°
4655'- 3 1/2°
4687'- 4 1/8°
4717'- 4 1/8°
4750'- 4 7/8°
4780'- 4 1/2°
4812'- 4 1/2°
4842'- 5 1/4°
4874'- 5 3/8°
4896'- 5°
4926'- 5°
4958'- 4 1/2°
4988'- 4 1/2°
5005'- 4 1/4°
5029'- 4°
5060'- 3 7/8°
5092'- 3 7/8°
5122'- 4°
5154'- 4°
5184'- 3 1/2°
5221'- 3 5/8°
5249'- 3 7/8°
5283'- 4 5/8°
5344'- 5 5/8°
5376'- 6 1/2°
5407'- 6 5/8°
5438'- 7°
5477'- M.R.
5508'- 6 3/4°
5570'- 6 1/2°
5632'- 6 1/8°
5696'- 6°
5764'- 6 1/8°
5794'- 6 1/2°
5825'- 6 3/4°
5888'- 7 1/8°
5918'- 8 1/2°
5920'- 8 1/2°
5958'- 8 1/4°
6007'- 8°
6038'- 7 7/8°
6070'- 7°
6101'- 6 1/2°
6133'- 6°
6193'- 4 1/2°

ROBERTS ENGINEERING LTD.

LOGS

Logs

Run No. 1 Schlumberger of Canada	April 13, 1975	
Continuous Dipmeter	5" scale	4954' - 697'
Borehole Compensated Sonic Log	2" scale	4952' - 697'
	5" scale	4952' - 697'
Dual Induction - Laterlog	2" scale	4950' - 697'
	5" scale	4950' - 697'



DIPMETER CLUSTER CALCULATION LISTING

FORT NORMAN EXP INC

FNX ET AL BICHE C-30 NTS 95-C

WILDCAT

60N 124W, NWT

RUN NO. TWO JOB NO. 410

CORRELATION LENGTH	4 FT.
STEP LENGTH	1 FT.
SEARCH ANGLE	45 DEG. X1

5-APR-76

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5024.0	21.9	39	4.8	226	13.3	17.2	1
5025.0	16.1	19	4.9	226	13.2	17.0	1
5027.0	15.9	327	4.9	226	13.2	16.7	1
5028.0	8.6	316	5.0	226	13.3	16.6	1
5029.0	8.1	321	5.1	226	13.4	16.5	2
5031.0	40.2	70	5.1	226	13.4	16.6	1
5032.0	39.6	71	5.1	227	13.6	16.5	2
5034.0	41.2	70	5.0	226	13.6	16.3	2
5037.0	47.6	223	4.9	225	13.5	15.7	1
5038.0	6.7	288	4.9	224	13.5	15.5	1
5039.0	45.5	221	4.9	224	13.7	15.4	1
5040.0	11.7	329	5.0	224	13.9	15.2	1
5041.0	39.3	65	5.0	225	14.1	15.1	1
5043.0	41.1	69	5.0	227	14.1	15.0	1
5044.0	26.4	65	5.0	228	14.1	14.9	1
5046.0	22.3	56	4.9	228	13.8	14.8	1
5047.0	12.5	173	5.0	229	13.7	14.8	1
5048.0	21.4	54	5.1	231	13.3	14.7	1
5049.0	24.6	56	5.1	230	13.1	14.9	2
5052.0	28.2	43	5.0	228	13.5	15.8	1
5053.0	23.7	44	5.0	229	13.8	16.1	1
5064.0	51.1	66	5.1	240	15.5	17.6	1
5065.0	48.3	71	5.1	238	15.8	17.9	1
5066.0	49.1	77	5.1	237	16.5	18.0	1
5069.0	47.3	78	5.2	236	18.0	17.9	2
5125.0	17.5	94	5.1	249	17.9	14.1	1
5126.0	16.5	79	5.1	248	17.7	14.1	2
5128.0	24.6	81	5.2	248	17.4	14.4	1
5129.0	20.7	97	5.1	247	17.5	14.7	1
5131.0	16.1	67	5.1	245	17.8	15.5	1
5132.0	21.7	80	5.1	245	18.0	15.6	1
5133.0	11.3	89	5.1	246	18.0	15.9	1
5151.0	30.9	88	5.1	250	18.0	13.5	1
5152.0	30.2	88	5.1	250	18.0	13.1	2
5164.0	4.8	170	4.9	247	18.0	14.8	1
5165.0	4.7	179	4.9	247	18.0	14.9	2
5168.0	4.2	145	5.0	247	18.0	15.3	1
5178.0	34.4	193	4.9	252	18.0	13.3	1
5180.0	34.7	191	4.9	252	18.0	14.1	1
5188.0	20.2	33	5.0	260	15.8	13.1	2
5190.0	19.4	31	4.9	258	16.5	14.1	2
5192.0	25.8	62	4.9	256	17.5	15.1	1
5193.0	21.9	54	4.9	257	17.1	15.4	1
5194.0	28.2	321	4.9	256	16.2	15.6	1
5196.0	29.6	313	5.0	256	14.2	14.7	1

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5198.0	24.5	311	5.1	254	13.6	13.1	1
5201.0	19.7	311	5.0	253	13.4	13.5	1
5202.0	17.9	321	5.0	258	12.2	11.9	2
5205.0	22.0	21	5.1	262	12.6	9.5	1
5207.0	18.8	32	5.0	252	16.1	12.9	1
5215.0	15.7	284	4.7	255	16.2	15.1	2
5217.0	22.3	34	4.6	251	17.7	16.5	1
5227.0	68.5	79	4.3	261	16.6	14.0	1
5237.0	50.1	51	4.5	254	13.4	13.4	1
5238.0	41.8	52	4.5	253	14.5	13.8	1
5240.0	48.0	43	4.4	254	14.9	13.1	2
5246.0	30.9	56	4.5	255	13.0	11.3	1
5247.0	29.5	57	4.5	257	13.2	11.1	2
5255.0	45.1	64	4.4	252	13.1	13.6	2
5257.0	36.6	65	4.4	252	12.6	13.5	1
5263.0	18.9	46	4.5	251	13.6	12.2	1
5265.0	56.0	264	4.7	250	14.4	11.2	1
5267.0	47.4	268	4.8	248	12.5	9.3	1
5268.0	49.6	265	4.8	247	11.6	8.4	1
5274.0	65.9	142	4.8	248	12.5	11.0	1
5275.0	62.9	144	4.8	251	13.1	12.6	1
5279.0	29.5	76	4.7	249	17.7	16.7	2
5282.0	62.6	145	4.8	244	16.5	17.1	1
5294.0	39.0	48	5.3	231	14.2	11.9	2
5307.0	8.2	76	5.6	226	11.8	10.2	1
5308.0	15.6	303	5.5	224	12.1	10.3	1
5368.0	54.6	198	7.5	219	17.1	17.1	1
5369.0	29.2	126	7.5	221	17.3	17.4	1
5370.0	30.5	132	7.4	221	17.5	17.7	1
5371.0	49.6	183	7.3	222	17.7	17.9	1
5456.0	52.7	188	7.1	222	17.3	17.8	2
5532.0	33.2	60	8.2	226	17.6	18.0	2
5534.0	21.5	59	8.2	226	17.5	18.0	4
5536.0	20.9	63	8.3	227	17.5	18.0	4
5538.0	16.1	73	8.3	228	17.4	18.0	3
5539.0	15.5	65	8.4	227	17.2	18.0	4
5541.0	12.5	76	8.3	224	17.0	18.0	3
5544.0	13.4	27	8.3	220	17.3	15.8	1
5545.0	11.7	52	8.3	222	17.2	13.9	1
5546.0	10.8	52	8.3	225	17.0	11.0	2
5552.0	39.8	-140	8.1	226	17.4	17.4	2
5554.0	10.4	74	8.1	227	17.5	17.9	2
5556.0	10.4	86	7.9	226	17.8	17.4	2
5558.0	15.4	84	7.9	227	17.4	16.9	1
5559.0	15.5	40	7.9	228	16.6	16.0	1

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =1
5560.0	27.7	125	7.9	229	15.8	14.5	1
5561.0	17.0	45	7.9	229	15.3	12.9	1
5562.0	17.3	80	7.9	228	15.0	12.0	1
5564.0	19.0	83	7.9	227	15.0	12.4	3
5566.0	14.6	64	7.9	225	15.1	12.1	3
5567.0	17.4	80	7.8	225	14.9	12.0	4
5569.0	15.5	78	7.7	225	14.8	12.6	4
5573.0	16.9	86	7.6	227	14.4	12.6	3
5574.0	46.7	75	7.6	227	14.1	12.5	2
5576.0	47.1	74	7.6	226	14.2	12.7	2
5578.0	16.0	84	7.6	227	14.4	12.8	4
5580.0	16.4	88	7.5	227	14.4	12.9	4
5582.0	16.9	83	7.5	227	14.5	12.9	4
5584.0	16.3	84	7.6	225	14.5	12.9	4
5587.0	16.6	86	7.6	228	14.4	13.0	4
5589.0	16.5	85	7.6	227	14.5	13.0	4
5591.0	14.5	79	7.6	226	14.7	12.9	2
5593.0	31.2	360	7.5	226	14.7	13.0	1
5594.0	14.9	342	7.5	227	14.7	13.0	1
5595.0	15.8	74	7.6	227	14.7	13.0	4
5597.0	15.4	78	7.6	227	14.6	12.7	4
5599.0	14.7	95	7.6	227	14.4	12.4	4
5601.0	14.3	100	7.5	228	14.1	12.4	4
5603.0	6.1	97	7.5	226	14.0	12.5	1
5604.0	7.6	136	7.5	228	14.0	12.5	1
5605.0	38.9	144	7.5	228	14.1	12.7	4
5607.0	41.4	145	7.4	230	13.9	12.6	4
5609.0	16.4	68	7.4	229	13.8	12.7	1
5610.0	11.5	68	7.4	227	13.5	12.7	2
5612.0	11.5	68	7.4	227	12.6	12.7	2
5614.0	33.7	144	7.5	226	12.3	12.6	3
5615.0	37.2	147	7.5	228	12.5	12.7	3
5616.0	35.1	144	7.4	229	12.9	12.9	4
5618.0	33.6	148	7.5	228	12.9	13.2	4
5621.0	38.0	272	7.5	226	12.6	13.6	1
5622.0	19.3	52	7.5	226	12.9	13.8	3
5623.0	23.5	68	7.4	225	13.6	14.1	4
5625.0	18.6	74	7.4	226	14.1	14.5	4
5627.0	17.3	71	7.5	227	14.1	15.1	4
5629.0	29.0	170	7.5	228	14.6	15.4	1
5630.0	18.3	63	7.5	229	14.9	15.3	3
5631.0	29.8	164	7.5	231	15.1	15.3	1
5632.0	21.9	87	7.5	231	14.9	15.2	3
5633.0	20.5	85	7.5	233	14.5	15.0	4
5637.0	13.9	95	7.4	233	15.0	15.5	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5639.0	13.8	94	7.4	231	14.9	15.6	4
5641.0	15.3	79	7.5	231	14.7	15.5	3
5646.0	20.9	94	7.7	232	15.5	14.3	1
5648.0	22.4	92	7.7	236	16.7	14.7	1
5649.0	12.6	94	7.8	237	17.0	14.4	4
5651.0	12.6	95	7.9	236	15.6	13.8	4
5653.0	11.7	102	7.8	236	13.9	13.4	4
5658.0	16.7	82	7.9	240	10.6	11.0	3
5659.0	19.1	89	7.9	241	10.3	10.4	4
5661.0	20.5	78	7.9	238	9.8	9.7	4
5663.0	22.1	74	7.9	234	9.5	9.8	4
5665.0	27.8	70	7.8	232	9.3	10.1	3
5666.0	25.8	81	7.7	238	9.4	10.0	4
5668.0	19.8	76	7.6	244	9.7	9.8	4
5670.0	24.5	80	7.6	244	9.6	9.4	3
5671.0	19.1	73	7.6	243	9.3	9.1	4
5673.0	18.9	71	7.5	242	9.0	8.8	4
5675.0	18.5	72	7.5	236	9.0	8.9	4
5677.0	18.3	68	7.4	232	9.0	8.9	4
5679.0	18.0	66	7.2	231	9.0	8.9	4
5681.0	19.2	76	7.0	233	9.0	9.0	4
5683.0	19.0	67	6.9	229	9.1	9.3	4
5685.0	18.3	70	6.9	230	9.5	9.5	4
5687.0	17.9	73	6.9	235	10.0	9.3	4
5689.0	18.8	66	6.9	231	9.7	9.0	4
5691.0	19.7	56	6.9	226	9.1	8.9	4
5693.0	19.5	48	6.9	220	8.9	8.9	4
5695.0	19.0	40	6.8	216	8.8	8.9	4
5697.0	19.0	36	6.9	218	8.9	8.8	4
5699.0	20.1	47	6.9	222	8.9	8.7	3
5700.0	19.6	52	7.0	228	9.0	8.6	4
5702.0	19.9	54	7.1	235	9.0	8.7	4
5704.0	20.7	54	7.1	238	9.0	8.7	4
5706.0	20.8	53	7.2	240	9.0	8.8	4
5708.0	22.6	54	7.2	242	9.1	8.9	2
5710.0	0.3	70	7.1	245	9.2	8.7	4
5712.0	1.2	94	7.0	243	9.3	8.6	4
5714.0	5.2	270	7.0	242	9.4	8.6	1
5715.0	5.5	247	7.0	242	9.8	8.6	2
5716.0	15.4	165	6.9	243	10.3	8.7	1
5719.0	15.1	155	6.9	243	10.5	8.9	2
5721.0	12.5	116	6.9	242	11.7	9.6	2
5723.0	11.6	130	6.8	243	13.8	11.0	2
5727.0	22.3	127	6.7	249	14.3	15.1	1
5728.0	8.1	128	6.8	248	14.6	15.9	1

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5729.0	12.0	109	6.8	245	14.6	16.1	1
5731.0	41.9	47	6.9	241	14.8	13.3	4
5733.0	43.1	44	6.9	245	15.8	13.6	4
5743.0	46.0	47	7.5	248	15.1	9.7	1
5744.0	45.2	52	7.5	248	13.8	9.4	2
5746.0	49.2	54	7.5	248	12.6	9.0	2
5748.0	43.6	52	7.6	246	12.6	8.9	1
5752.0	71.4	46	7.5	247	13.3	9.0	2
5754.0	65.7	55	7.6	254	13.3	9.0	1
5755.0	47.1	44	7.6	252	13.4	9.4	4
5757.0	47.8	47	7.6	248	13.4	10.1	4
5759.0	53.7	51	7.5	247	13.0	10.2	3
5761.0	51.0	221	7.4	247	12.8	9.4	1
5762.0	50.2	216	7.4	246	13.2	9.1	1
5763.0	55.4	218	7.4	246	13.5	9.0	1
5769.0	50.2	45	7.5	242	13.1	10.0	1
5770.0	53.2	38	7.5	241	13.7	9.6	1
5771.0	49.7	33	7.5	244	14.2	9.6	1
5774.0	62.1	44	7.5	249	14.9	9.3	1
5775.0	43.8	53	7.5	248	14.5	9.0	1
5779.0	46.1	59	7.6	249	13.9	9.1	4
5781.0	46.6	61	7.6	248	13.4	9.4	4
5788.0	46.1	60	7.6	250	14.4	11.0	1
5789.0	47.0	61	7.6	252	14.7	11.1	2
5797.0	41.9	60	7.7	248	15.4	9.4	3
5798.0	40.6	58	7.7	249	14.5	9.3	4
5800.0	34.1	52	7.7	248	14.2	9.2	3
5801.0	34.6	50	7.7	246	14.5	9.1	4
5803.0	39.7	46	7.7	244	14.7	9.2	3
5804.0	56.8	38	7.7	244	14.9	9.3	1
5810.0	43.4	53	7.7	243	12.5	10.6	3
5811.0	40.3	51	7.7	242	12.4	9.9	4
5813.0	40.0	51	7.7	245	12.7	9.5	4
5815.0	41.4	44	7.6	245	13.0	9.5	3
5817.0	43.0	51	7.6	245	13.5	9.6	3
5818.0	43.6	54	7.5	246	13.3	9.3	4
5820.0	47.7	48	7.5	245	11.9	8.9	4
5822.0	47.1	50	7.5	248	10.5	9.8	4
5824.0	42.8	42	7.5	247	10.8	10.9	4
5826.0	40.6	37	7.5	243	12.0	11.5	4
5828.0	52.8	47	7.5	241	12.0	11.9	3
5829.0	58.6	32	7.5	243	11.1	11.9	1
5830.0	51.3	35	7.5	242	10.2	11.9	3
5831.0	52.1	50	7.5	244	9.2	11.3	3
5832.0	48.0	50	7.5	246	9.0	11.0	3

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5833.0	39.7	56	7.5	245	9.0	10.6	3
5834.0	38.6	49	7.6	241	9.0	10.1	4
5836.0	37.1	40	7.6	239	9.4	10.0	3
5837.0	43.2	52	7.6	240	10.3	10.4	4
5839.0	48.4	49	7.5	241	10.5	10.9	4
5842.0	51.0	58	7.6	243	9.6	10.7	2
5844.0	46.6	57	7.7	242	9.7	10.7	3
5845.0	45.7	53	7.7	243	10.1	11.1	4
5847.0	43.8	52	7.7	240	10.1	11.6	4
5849.0	46.9	52	7.8	242	9.5	11.5	4
5851.0	46.7	59	7.9	243	9.1	11.3	4
5853.0	49.3	61	7.9	241	8.8	10.8	3
5854.0	51.1	65	7.9	241	8.7	10.5	3
5855.0	52.0	65	7.9	241	8.8	10.7	4
5857.0	46.1	55	8.0	240	8.8	11.0	3
5858.0	41.6	51	8.1	242	8.9	11.0	3
5859.0	39.0	47	8.2	243	8.9	10.9	4
5861.0	36.2	46	8.3	243	8.9	10.6	4
5863.0	35.0	44	8.3	243	8.8	10.3	4
5865.0	33.9	41	8.3	246	8.8	9.9	4
5867.0	34.0	43	8.3	243	8.8	9.3	4
5869.0	37.5	45	8.4	246	8.9	9.2	4
5871.0	40.2	51	8.5	252	8.9	9.8	4
5873.0	40.4	53	8.5	253	9.1	10.3	4
5875.0	40.4	51	8.5	249	9.1	10.4	4
5877.0	41.5	52	8.6	251	8.9	10.4	4
5879.0	41.1	54	8.7	252	9.0	10.4	4
5881.0	49.5	53	8.8	251	9.1	10.4	4
5883.0	48.0	52	8.9	252	9.2	10.5	4
5885.0	40.8	55	9.0	253	9.4	10.7	3
5886.0	42.7	61	9.1	252	9.6	10.8	3
5887.0	42.5	59	9.1	250	10.0	11.0	4
5889.0	41.1	53	9.2	247	10.2	11.5	4
5891.0	40.6	51	9.2	245	9.7	11.9	4
5893.0	38.7	49	9.1	245	9.3	12.1	4
5895.0	42.2	47	9.1	247	9.1	13.0	4
5901.0	51.3	49	9.3	250	10.2	13.3	1
5902.0	54.3	49	9.3	250	10.3	13.3	2
5904.0	50.6	47	9.3	248	10.2	13.1	1
5905.0	36.4	61	9.3	250	10.0	13.2	1
5906.0	40.2	39	9.3	253	9.8	12.7	4
5908.0	41.8	48	9.4	253	10.0	12.0	4
5910.0	40.9	45	9.3	249	10.0	12.3	4
5912.0	37.4	49	9.3	249	10.2	12.7	1
5913.0	43.4	46	9.2	253	10.8	12.8	2

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5915.0	47.4	47	9.3	254	10.8	12.1	2
5917.0	46.2	60	9.3	252	10.1	11.0	4
5919.0	48.3	53	9.3	252	10.1	11.0	4
5926.0	39.2	47	9.3	252	11.5	13.1	1
5927.0	56.0	81	9.2	253	11.1	13.4	2
5929.0	63.4	59	9.2	252	10.8	13.5	2
5931.0	50.8	47	9.1	255	11.2	13.5	1
5933.0	31.8	74	9.1	261	11.3	12.6	1
5934.0	31.9	76	9.2	261	11.7	11.9	2
5936.0	39.5	50	9.2	259	11.9	11.7	3
5937.0	43.9	54	9.2	259	12.0	11.9	3
5938.0	46.2	47	9.2	259	12.0	12.2	3
5940.0	46.6	54	9.2	257	12.8	12.6	3
5941.0	42.1	54	9.1	254	13.6	13.0	4
5943.0	46.2	55	9.1	253	13.1	13.2	3
5944.0	45.5	62	9.1	257	12.5	13.2	3
5945.0	41.5	62	9.1	259	12.0	13.3	3
5946.0	53.0	70	9.1	262	11.4	13.4	1
5947.0	48.9	80	9.1	262	11.1	13.4	1
5954.0	48.8	70	9.1	258	12.1	12.7	2
5956.0	46.3	66	9.0	261	11.1	12.5	2
5958.0	40.6	71	9.0	264	9.9	12.4	1
5959.0	45.5	65	9.0	265	9.9	13.0	2
5962.0	49.5	61	9.0	266	10.4	12.7	1
5963.0	25.5	50	9.0	266	10.4	12.2	1
5964.0	26.3	49	9.0	264	10.3	11.8	2
5976.0	42.1	54	8.7	259	10.3	11.8	3
5977.0	42.1	52	8.7	258	10.7	11.7	4
5979.0	42.4	46	8.6	257	10.6	12.0	4
5981.0	44.7	51	8.6	255	10.3	12.4	2
5983.0	48.7	49	8.6	255	10.1	12.2	2
5988.0	43.7	53	8.7	259	10.6	11.8	1
5991.0	37.7	57	8.5	263	10.0	11.6	4
5993.0	38.0	63	8.5	267	9.8	11.5	3
5994.0	37.6	69	8.6	269	9.8	11.1	4
5997.0	68.1	91	8.6	267	10.3	10.9	1
6000.0	34.5	53	8.5	270	10.8	10.6	3
6001.0	44.0	52	8.6	272	10.4	10.2	3
6002.0	40.6	57	8.6	273	11.2	11.5	4
6004.0	32.0	66	8.6	272	13.9	13.9	3
6005.0	45.3	35	8.5	271	15.9	15.6	3
6007.0	53.9	56	8.4	269	17.3	15.5	3
6008.0	45.6	57	8.3	267	16.6	14.8	4
6020.0	35.2	53	7.9	266	12.0	15.1	3
6021.0	37.1	56	8.0	266	10.9	14.2	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
6023.0	37.1	58	8.0	266	10.3	13.0	4
6025.0	38.9	53	8.1	265	10.2	11.7	2
6028.0	41.8	43	8.2	265	10.9	10.9	2
6031.0	39.6	53	8.2	266	11.4	11.6	1
6032.0	35.4	51	8.2	266	11.3	12.0	1
6033.0	42.1	48	8.2	265	10.8	11.6	2
6041.0	37.9	55	8.0	274	15.9	15.8	1
6053.0	49.4	47	7.7	271	17.0	17.8	4
6055.0	49.8	53	7.6	271	16.8	18.0	3
6057.0	47.6	49	7.7	272	17.0	18.0	3
6058.0	38.9	45	7.7	272	17.0	18.0	3
6061.0	56.3	37	7.7	273	17.1	17.8	3
6063.0	27.0	34	7.7	273	17.2	17.3	1
6066.0	47.7	96	7.8	272	16.9	17.7	1
6067.0	43.5	32	7.9	272	16.7	18.0	1
6068.0	38.2	33	7.9	274	16.6	18.0	1
6069.0	30.9	306	7.9	273	16.5	18.0	1
6071.0	51.7	102	8.0	271	16.4	18.0	2
6073.0	42.5	63	8.0	270	16.7	17.9	3
6074.0	38.3	61	8.0	272	16.8	17.8	3
6075.0	41.3	65	8.1	273	17.1	17.7	4
6077.0	47.2	56	8.1	270	17.0	17.5	1
6080.0	51.8	61	8.1	269	17.1	17.0	1
6081.0	41.0	61	8.0	270	17.1	17.1	1
6083.0	40.4	5	7.9	271	17.2	17.3	1
6084.0	52.3	62	7.8	268	17.4	17.7	1
6088.0	37.3	186	7.8	258	17.6	18.0	1
6091.0	45.4	192	7.9	264	16.2	18.0	1
6093.0	44.0	200	7.9	268	16.4	18.0	1
6094.0	33.3	187	8.0	266	16.5	18.0	1
6096.0	40.0	193	8.0	260	15.8	17.5	1
6097.0	35.9	69	8.1	258	14.7	16.9	1
6098.0	7.4	86	8.1	258	13.4	15.5	2
6100.0	7.9	91	8.1	258	13.9	15.9	2
6106.0	47.9	158	8.1	261	15.6	18.0	1
6117.0	43.5	48	7.5	259	15.7	15.9	3
6118.0	46.9	46	7.5	259	15.3	16.4	4
6120.0	42.2	48	7.5	258	15.0	16.6	3
6131.0	51.9	28	7.1	257	13.1	14.8	1
6132.0	44.3	35	7.1	257	13.1	15.2	1
6134.0	48.2	39	7.2	255	14.6	16.0	1
6135.0	45.6	35	7.2	255	15.6	16.0	2
6139.0	41.3	56	6.8	260	16.0	17.5	1
6151.0	29.2	35	6.8	257	13.6	17.0	2
6153.0	45.2	44	6.7	259	14.1	17.2	1

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
6154.0	31.1	47	6.7	260	15.4	17.8	1
6155.0	33.7	37	6.7	261	15.6	18.0	1
6156.0	25.0	44	6.6	260	15.5	18.0	1
6157.0	27.9	42	6.6	258	15.3	17.5	2
6161.0	34.7	53	6.6	259	14.7	15.8	3
6167.0	49.1	61	6.3	271	18.0	16.3	3
6168.0	44.5	56	6.2	271	18.0	16.4	3
6169.0	44.5	55	6.2	271	18.0	16.4	4
6180.0	41.2	30	6.0	276	18.0	16.3	1
6184.0	29.5	281	5.9	277	17.9	14.6	2
6191.0	39.9	55	6.1	280	15.3	13.0	1
6192.0	39.2	47	6.1	278	14.4	11.9	2
6194.0	55.6	63	6.1	278	14.7	12.4	1
6200.0	36.0	59	6.0	279	16.3	10.7	1
6201.0	46.8	56	6.0	283	16.1	10.5	4
6203.0	47.9	59	5.9	287	15.5	10.0	4
6205.0	42.7	58	5.9	286	15.7	9.6	4
6207.0	43.7	58	5.9	284	14.7	9.7	4
6209.0	47.0	61	5.9	281	13.9	9.7	3
6210.0	35.0	36	5.8	280	12.9	9.6	1
6211.0	9.8	86	5.8	284	11.8	9.2	1
6212.0	9.6	85	5.7	289	10.6	8.9	2
6219.0	35.8	45	5.8	287	10.2	8.4	2
6221.0	41.4	53	5.8	288	10.2	8.5	4
6223.0	38.6	59	5.7	291	10.3	8.5	4
6225.0	40.3	56	5.8	289	10.0	8.5	4
6227.0	40.4	58	5.9	287	9.4	8.4	4
6229.0	36.9	52	5.8	281	9.2	8.5	4
6231.0	43.2	56	5.8	273	9.2	8.6	1
6232.0	43.2	50	5.9	269	9.4	8.7	2
6234.0	37.9	43	5.9	267	9.3	8.8	1
6235.0	37.5	37	5.8	269	9.1	8.8	4
6237.0	33.5	42	5.9	271	8.9	8.9	4
6239.0	33.5	39	5.9	272	8.9	9.1	4
6241.0	34.4	37	6.0	270	8.9	9.5	4
6243.0	38.2	42	6.1	267	8.9	9.7	3
6244.0	37.9	37	6.1	270	8.8	9.6	4
6246.0	37.0	46	6.1	275	8.8	9.3	3
6247.0	37.5	60	6.2	277	8.8	9.0	3
6248.0	39.4	53	6.2	279	8.9	8.8	4
6250.0	39.5	62	6.4	282	9.0	8.7	4
6252.0	34.4	57	6.5	285	9.2	8.6	4
6254.0	33.3	58	6.7	282	9.4	8.6	4
6256.0	36.5	51	6.7	276	9.4	8.6	3
6257.0	38.3	48	6.8	274	9.1	8.6	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
6259.0	36.3	56	6.8	272	8.9	8.7	4
6261.0	36.0	49	6.9	268	8.8	8.6	3
6262.0	36.9	42	6.9	264	8.9	8.6	4
6264.0	34.0	48	7.0	264	9.2	8.6	4
6266.0	34.7	47	7.0	267	9.5	9.1	4
6269.0	32.4	62	6.9	267	9.1	9.1	4
6271.0	31.4	56	6.9	266	8.9	8.8	4
6273.0	32.9	48	6.9	265	8.7	9.2	3
6274.0	24.8	48	6.9	265	8.7	9.7	3
6277.0	35.8	67	6.9	262	8.7	9.5	1
6278.0	31.0	64	6.9	263	8.8	9.0	3
6279.0	33.7	55	7.0	261	8.8	8.9	3
6280.0	33.3	49	7.1	256	8.9	8.8	4
6284.0	33.6	49	7.2	244	8.9	8.9	3
6285.0	32.2	42	7.2	243	8.9	8.8	3
6286.0	31.9	34	7.3	241	9.0	8.8	3
6287.0	32.6	30	7.4	243	9.1	8.7	4
6289.0	35.8	33	7.5	243	9.1	8.8	3
6290.0	36.3	34	7.5	243	9.0	9.2	4
6292.0	34.7	35	7.5	244	9.0	9.4	4
6294.0	34.2	44	7.6	252	8.9	9.4	3
6295.0	34.3	54	7.6	256	8.9	9.5	3
6296.0	36.4	59	7.6	259	8.8	9.5	4
6298.0	35.5	60	7.7	260	8.8	9.1	4
6300.0	34.9	49	7.8	260	8.7	8.8	4
6302.0	35.3	58	7.9	260	8.9	8.8	4
6304.0	35.1	59	8.2	261	9.0	8.7	4
6306.0	34.0	59	8.3	260	8.9	8.6	4
6308.0	34.7	54	8.4	259	8.8	8.5	4
6310.0	32.4	63	8.5	260	8.9	8.5	3
6311.0	32.5	60	8.7	261	8.8	8.6	4
6313.0	32.3	58	8.9	257	8.7	8.6	4
6315.0	32.3	53	9.1	251	8.8	8.6	4
6317.0	32.4	60	9.2	250	9.1	8.6	4
6319.0	32.4	58	9.3	253	9.2	8.7	4
6321.0	29.8	56	9.3	253	9.1	8.6	4
6323.0	27.5	56	9.3	257	9.0	8.7	4
6325.0	27.2	67	9.3	258	8.8	8.8	4
6327.0	27.2	59	9.3	251	8.8	8.8	4
6329.0	27.2	50	9.3	246	8.8	8.7	3
6330.0	26.6	36	9.3	241	9.0	8.7	4
6334.0	26.1	42	9.6	233	9.1	8.7	4
6336.0	25.9	36	9.6	237	9.0	8.6	4
6338.0	26.8	47	9.6	246	8.9	8.7	4
6340.0	24.6	59	9.6	253	8.9	8.7	3

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
6341.0	23.7	61	9.6	254	8.9	9.0	4
6343.0	23.8	64	9.8	257	9.0	9.1	4
6345.0	23.9	63	9.9	259	8.9	8.9	4
6347.0	21.3	69	9.8	259	8.7	8.7	4
6349.0	21.3	67	9.9	260	8.8	8.8	4
6351.0	20.8	68	9.9	260	8.9	8.8	4
6353.0	20.3	66	9.9	259	8.9	8.8	4
6355.0	19.6	62	9.9	258	9.3	8.8	4
6357.0	20.9	67	9.9	258	9.6	8.7	4
6359.0	19.0	69	9.9	259	9.6	8.6	4
6361.0	18.6	68	9.9	259	9.1	8.6	4
6363.0	19.7	65	9.9	257	9.3	8.6	4
6365.0	19.4	62	9.8	257	9.2	8.6	4
6367.0	17.6	58	9.9	252	9.0	8.6	4
6369.0	17.5	61	9.9	247	8.9	8.8	4
6371.0	16.8	59	9.9	249	8.8	9.4	4
6373.0	17.5	62	9.9	251	8.8	10.0	4
6375.0	18.3	68	9.9	252	8.8	10.0	4
6377.0	17.4	64	10.0	250	8.7	9.9	4
6379.0	17.7	63	9.9	250	8.7	9.9	4
6381.0	17.3	70	9.9	252	8.7	9.4	4
6383.0	17.4	68	9.8	254	8.8	8.8	4
6385.0	18.1	66	9.9	253	8.9	8.6	4
6387.0	18.3	61	9.8	250	9.2	8.6	4
6389.0	17.7	61	9.7	249	10.0	8.6	2
6391.0	16.4	73	9.8	254	10.6	8.5	4
6393.0	16.6	76	9.9	254	10.5	8.5	4
6395.0	32.7	223	10.0	252	10.2	8.4	1
6396.0	31.2	78	9.9	250	10.0	8.3	1
6397.0	19.0	290	9.9	251	9.8	8.2	1
6398.0	22.6	56	10.0	252	9.6	8.1	1
6399.0	19.6	67	10.0	253	9.5	8.6	2
6401.0	18.8	67	9.9	249	9.5	9.1	4
6403.0	18.1	58	9.9	245	10.0	9.1	4
6405.0	17.8	56	9.9	244	10.9	9.2	4
6407.0	17.2	73	9.9	248	10.9	9.0	4
6409.0	17.5	76	9.9	250	10.7	8.6	4
6411.0	19.1	61	9.9	251	10.9	8.4	4
6413.0	17.3	67	9.9	251	10.9	8.4	4
6415.0	17.7	70	9.8	252	10.5	8.5	4
6418.0	17.3	66	9.9	250	10.1	8.5	3
6419.0	16.7	67	9.9	250	10.0	8.6	4
6421.0	16.8	67	9.9	250	9.6	8.7	4
6423.0	17.3	67	9.9	251	9.5	8.6	4
6425.0	17.4	70	9.9	253	9.7	8.3	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
6427.0	18.4	70	10.0	258	9.9	8.6	4
6429.0	18.0	81	10.0	261	10.0	8.6	4
6431.0	17.9	81	9.9	260	9.9	8.5	4
6433.0	17.3	73	9.9	257	9.8	8.4	4
6435.0	17.0	73	9.7	256	9.7	8.3	4
6437.0	17.7	69	9.7	253	9.5	8.3	4
6439.0	17.2	63	9.7	250	9.3	8.4	4
6441.0	17.5	58	9.7	248	9.5	8.5	4
6443.0	17.2	60	9.7	249	9.5	8.5	4
6445.0	17.0	63	9.7	249	9.5	8.4	4
6447.0	16.6	56	9.7	243	9.7	8.3	4
6449.0	17.1	48	9.7	236	9.5	8.4	4
6451.0	18.7	35	9.8	230	9.0	8.5	4
6453.0	15.0	49	9.8	234	8.7	8.7	3
6454.0	16.7	55	9.8	242	8.6	8.7	4
6456.0	17.4	58	9.8	247	8.5	8.8	4
6458.0	17.7	60	9.8	245	8.6	9.0	4
6460.0	15.9	55	9.8	240	8.6	9.0	4
6462.0	15.4	55	9.8	239	8.6	9.2	4
6465.0	17.9	58	9.7	237	8.7	9.4	2
6467.0	16.3	43	9.8	237	8.8	9.3	2
6469.0	17.2	61	9.8	243	8.9	9.1	2
6471.0	17.2	68	9.8	251	8.9	8.9	2
6473.0	17.1	63	9.9	255	9.0	8.7	4
6475.0	15.5	66	9.9	256	8.9	8.7	4
6477.0	14.9	69	9.8	257	8.9	8.7	4
6479.0	15.6	66	9.8	257	9.0	8.8	4
6482.0	5.5	309	9.7	258	8.9	8.7	2
6484.0	4.9	278	9.7	258	8.9	8.7	2
6486.0	15.3	71	9.7	255	8.9	8.8	4
6488.0	13.7	68	9.6	255	8.7	8.8	4
6490.0	16.3	69	9.7	252	8.7	8.7	4
6492.0	15.0	65	9.7	249	8.6	8.7	4
6494.0	15.2	65	9.7	250	8.6	8.9	4
6496.0	14.8	64	9.6	248	8.7	9.1	4
6498.0	13.6	59	9.5	248	8.6	9.2	4
6500.0	12.1	57	9.5	249	8.6	9.2	4
6502.0	13.3	68	9.5	250	8.7	9.1	4
6504.0	13.4	68	9.6	250	8.7	9.1	4
6507.0	13.4	71	9.5	249	8.7	8.8	3
6508.0	13.3	70	9.5	248	8.8	8.8	4
6510.0	13.4	70	9.5	247	8.8	8.9	4
6512.0	12.6	69	9.4	249	8.7	9.1	2
6514.0	14.3	59	9.3	251	8.8	9.1	4
6516.0	14.5	61	9.3	250	8.9	9.2	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
6518.0	14.0	51	9.3	249	8.8	9.4	4
6520.0	20.9	46	9.3	249	8.8	9.6	3
6523.0	14.2	84	9.3	252	9.0	9.7	3
6524.0	15.0	66	9.3	250	9.0	9.9	4
6526.0	14.9	62	9.3	247	8.9	10.1	4
6528.0	14.2	66	9.3	250	8.8	10.1	4
6530.0	14.7	72	9.3	252	8.8	9.6	4
6532.0	15.1	67	9.3	252	8.8	9.3	4
6534.0	12.9	54	9.3	251	8.9	9.2	1
6535.0	11.4	92	9.3	250	8.8	9.4	1
6536.0	61.8	38	9.3	248	8.8	9.7	1
6537.0	15.3	77	9.3	249	8.8	9.8	1
6538.0	17.8	51	9.3	248	8.8	9.9	1
6539.0	14.4	66	9.3	250	8.8	9.7	4
6541.0	15.2	67	9.3	250	8.9	9.4	4
6543.0	14.9	67	9.3	251	8.9	9.3	4
6545.0	14.5	67	9.3	250	9.0	9.2	4
6547.0	10.2	70	9.3	251	9.0	9.2	3
6548.0	13.3	54	9.3	251	9.0	9.3	3
6549.0	13.4	62	9.3	251	9.1	9.3	4
6551.0	13.8	70	9.3	250	9.1	9.3	4
6553.0	13.5	76	9.3	250	9.0	9.4	4
6555.0	11.9	53	9.3	252	8.9	9.3	4
6557.0	14.0	73	9.3	252	8.8	9.1	3
6558.0	17.5	55	9.3	252	8.8	9.0	3
6559.0	16.7	65	9.3	251	8.8	9.1	4
6561.0	16.6	71	9.3	250	8.8	9.1	4
6563.0	15.2	71	9.3	250	8.8	9.2	4
6565.0	16.8	71	9.3	251	9.0	9.1	4
6567.0	18.8	55	9.2	251	9.0	9.0	3
6568.0	16.3	68	9.3	248	9.1	9.0	4
6570.0	13.9	67	9.3	247	9.0	8.9	4
6572.0	14.0	68	9.3	247	9.1	9.1	4
6576.0	12.1	72	9.3	249	9.1	9.2	4
6578.0	12.9	70	9.3	251	8.8	8.9	4
6580.0	12.6	63	9.3	245	8.7	8.8	4
6582.0	13.0	50	9.3	232	8.7	8.8	4
6584.0	15.4	29	9.3	225	8.7	8.7	4
6588.0	11.1	16	9.3	230	9.1	8.8	3
6589.0	13.7	58	9.3	235	9.1	8.7	4
6591.0	15.2	51	9.3	243	8.8	8.5	3
6596.0	18.0	130	9.3	255	8.7	9.0	2
6598.0	15.2	78	9.4	253	8.7	9.0	2
6600.0	16.1	97	9.4	252	8.6	8.9	1
6601.0	14.6	69	9.4	252	8.6	8.8	1

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BESI =4
6602.0	11.7	69	9.4	252	8.6	8.8	2
6604.0	33.2	64	9.4	253	8.7	8.6	4
6606.0	32.3	61	9.3	254	8.8	8.6	4
6608.0	14.8	70	9.3	255	8.8	8.5	3
6609.0	14.6	70	9.3	255	8.8	8.6	4
6611.0	15.4	71	9.3	254	8.9	8.6	4
6613.0	14.7	67	9.3	248	8.9	8.6	4
6615.0	15.9	56	9.2	242	8.8	8.6	4
6617.0	15.3	69	9.2	243	8.8	8.5	4
6619.0	15.4	70	9.2	248	8.8	8.6	4
6621.0	13.6	71	9.1	250	8.7	8.6	4
6623.0	10.9	71	9.1	249	8.7	8.7	4
6625.0	9.5	60	9.1	245	8.7	8.6	4
6627.0	13.7	51	9.1	237	8.8	8.6	4
6629.0	12.4	56	9.1	232	8.8	8.6	4
6631.0	13.1	49	9.1	230	8.7	8.5	4
6633.0	13.3	47	9.1	230	8.7	8.5	4
6635.0	13.4	52	9.1	230	8.8	8.9	4
6637.0	13.1	52	9.1	231	8.7	9.1	4
6639.0	13.7	50	9.1	231	8.8	9.0	4
6641.0	14.7	50	9.1	233	9.0	9.1	4
6643.0	14.0	60	9.1	237	9.0	9.5	4
6645.0	14.1	61	9.1	239	8.8	9.4	4
6647.0	13.7	63	9.2	242	8.7	9.1	4
6649.0	13.9	67	9.1	246	8.8	9.1	4
6651.0	15.0	69	9.2	247	8.8	9.3	4
6653.0	15.0	67	9.2	245	8.7	9.6	4
6655.0	13.4	61	9.2	240	8.8	9.6	4
6657.0	15.8	62	9.2	238	8.8	9.1	4
6659.0	13.0	62	9.2	242	8.8	9.1	4
6661.0	10.9	62	9.1	243	8.9	9.4	4
6663.0	10.6	63	9.1	244	8.8	9.7	4
6667.0	14.6	68	9.1	245	8.6	9.3	3
6668.0	13.9	65	9.1	242	8.6	9.4	4
6670.0	13.5	63	9.1	242	8.5	9.6	4
6672.0	14.0	60	9.2	242	8.5	9.7	4
6674.0	13.9	62	9.2	242	8.6	9.6	4
6676.0	12.8	66	9.2	243	8.6	9.5	4
6678.0	13.1	66	9.2	243	8.6	9.5	4
6680.0	14.5	68	9.2	241	8.7	9.5	4
6682.0	15.4	69	9.2	242	8.7	9.6	4
6684.0	14.7	69	9.3	246	8.9	9.6	4
6686.0	13.1	68	9.3	243	8.9	9.7	4
6688.0	12.5	64	9.3	241	8.9	9.5	4
6690.0	12.5	63	9.3	242	8.8	9.2	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
6692.0	12.6	64	9.3	245	8.7	8.8	4
6694.0	12.1	63	9.2	247	8.5	8.5	4
6696.0	10.2	69	9.2	251	8.6	8.5	4
6698.0	10.6	71	9.2	252	8.5	8.5	4
6700.0	12.6	71	9.3	251	8.5	8.6	4
6702.0	15.0	70	9.3	250	8.6	8.7	4
6704.0	15.1	68	9.2	250	8.6	8.6	4
6706.0	14.5	74	9.2	249	8.7	8.5	4
6708.0	14.5	68	9.1	245	8.8	8.4	4
6710.0	13.6	66	9.1	241	8.8	8.5	4
6712.0	13.6	69	9.1	244	8.8	8.9	4
6714.0	14.1	70	9.1	248	8.7	9.0	4
6716.0	14.9	70	9.1	248	8.7	9.1	4
6718.0	15.3	73	9.1	248	8.7	9.0	4
6720.0	14.6	60	9.0	242	8.7	8.7	4
6722.0	13.4	52	9.0	234	8.7	8.7	4
6724.0	20.9	50	9.1	228	8.7	8.5	4
6727.0	14.1	157	9.2	224	8.7	8.5	1
6728.0	16.8	135	9.2	225	8.7	8.5	1
6729.0	14.2	57	9.1	228	8.7	8.5	3
6730.0	15.7	55	9.1	235	8.7	8.6	4
6732.0	14.6	71	9.1	246	8.7	8.6	4
6734.0	14.4	73	9.1	252	8.7	8.6	4
6736.0	13.7	72	9.2	252	8.7	8.6	4
6738.0	13.9	71	9.2	251	8.7	8.5	4
6740.0	14.5	70	9.1	249	8.7	8.6	4
6742.0	14.4	67	9.2	248	8.6	8.6	4
6744.0	14.3	64	9.2	246	8.6	8.7	4
6746.0	14.8	68	9.1	246	8.7	8.6	4
6748.0	14.5	65	9.1	246	8.7	8.6	4
6750.0	14.5	63	9.1	246	8.6	8.6	4
6752.0	14.8	64	9.1	243	8.6	8.5	4
6754.0	14.4	67	9.1	241	8.6	8.5	4
6756.0	14.7	73	9.0	243	8.7	8.5	4
6758.0	14.8	70	9.0	248	8.7	8.5	4
6760.0	13.3	61	9.0	248	8.7	8.5	4
6762.0	13.1	47	8.9	241	8.7	8.5	4
6764.0	13.3	47	8.9	232	8.8	8.5	4
6766.0	12.1	46	8.9	226	8.8	8.4	4
6768.0	11.6	57	8.9	226	8.7	8.4	4
6770.0	10.2	66	9.0	234	8.6	8.5	4
6772.0	9.9	73	9.1	246	8.7	8.5	4
6774.0	11.7	71	9.1	250	8.7	8.4	4
6776.0	13.1	68	8.9	252	8.7	8.4	4
6778.0	13.5	64	8.8	252	8.7	8.5	4
			8.8	250	8.7	8.5	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
6780.0	13.2	61	8.8	250	8.7	8.5	4
6782.0	13.1	59	8.8	249	8.6	8.5	4
6784.0	12.8	59	8.8	247	8.7	8.6	4
6786.0	12.3	58	8.8	247	8.7	8.6	4
6788.0	14.6	57	8.8	247	8.7	8.6	4
6790.0	14.7	55	8.8	244	8.7	8.5	4
6792.0	15.4	64	8.8	241	8.6	8.5	4
6794.0	15.8	65	8.8	239	8.6	8.5	4
6796.0	15.4	67	8.8	243	8.7	8.5	4
6798.0	17.2	71	8.8	248	8.7	8.5	4
6800.0	14.6	70	8.8	246	8.7	8.5	4
6802.0	13.3	63	8.8	239	8.7	8.5	4
6804.0	13.0	57	8.8	232	8.7	8.5	4
6806.0	13.0	53	8.8	230	8.7	8.5	4
6808.0	13.0	52	8.8	230	8.6	8.5	4
6810.0	12.8	57	8.8	234	8.6	8.6	4
6812.0	13.0	62	8.8	242	8.7	8.6	4
6814.0	13.6	71	8.8	248	8.7	8.6	4
6816.0	14.3	74	8.9	252	8.7	8.5	4
6818.0	14.6	75	9.0	255	8.7	8.5	4
6820.0	14.5	72	9.0	254	8.8	8.5	4
6822.0	14.7	68	9.0	251	8.8	8.5	4
6824.0	14.8	65	9.0	249	8.7	8.4	4
6826.0	15.8	61	9.1	248	8.7	8.5	4
6828.0	16.1	59	9.1	246	8.7	8.5	4
6830.0	15.1	58	9.0	242	8.6	8.5	4
6832.0	15.5	57	9.1	237	8.6	8.5	4
6834.0	15.2	56	9.1	238	8.7	8.5	4
6836.0	14.2	66	9.0	245	8.6	8.5	4
6838.0	13.6	70	8.9	247	8.7	8.4	4
6840.0	12.4	67	8.9	242	8.6	8.4	4
6842.0	11.7	61	8.9	235	8.6	8.4	4
6844.0	11.4	57	8.9	231	8.7	8.5	4
6846.0	11.4	60	9.0	231	8.7	8.5	4
6848.0	12.1	63	9.0	236	8.6	8.6	4
6850.0	12.1	69	8.9	246	8.6	8.6	4
6852.0	10.7	78	8.9	252	8.7	8.5	4
6854.0	11.4	78	9.0	254	8.7	8.5	4
6856.0	12.3	71	9.0	251	8.7	8.5	4
6858.0	12.5	68	9.0	250	8.8	8.5	4
6860.0	13.0	66	9.0	249	8.9	8.4	4
6862.0	13.0	69	9.0	249	8.9	8.5	4
6864.0	13.1	68	8.8	246	8.8	8.5	4
6866.0	13.0	64	8.8	242	8.7	8.5	4
6868.0	13.2	63	8.7	243	8.7	8.6	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
6870.0	12.9	72	8.8	246	8.6	8.5	4
6872.0	13.3	70	8.8	245	8.6	8.4	4
6874.0	13.5	56	8.7	237	8.7	8.4	4
6876.0	12.8	49	8.8	230	8.8	8.4	4
6878.0	13.2	49	8.8	231	8.7	8.5	4
6880.0	13.1	52	8.8	237	8.6	8.6	4
6882.0	13.0	61	8.9	244	8.6	8.5	4
6884.0	13.8	69	9.0	252	8.7	8.5	4
6886.0	14.2	75	9.1	255	8.8	8.4	4
6888.0	13.7	73	9.1	255	8.7	8.4	4
6890.0	14.0	65	9.1	252	8.7	8.4	4
6892.0	14.3	67	9.1	250	8.8	8.4	4
6894.0	13.5	70	9.1	248	8.8	8.4	4
6896.0	13.7	63	9.1	243	8.7	8.4	4
6898.0	13.6	59	9.1	241	8.7	8.5	4
6900.0	12.9	70	9.0	244	8.7	8.5	4
6902.0	12.9	72	9.0	248	8.6	8.5	4
6904.0	14.0	78	9.0	252	8.6	8.5	4
6906.0	14.1	73	8.9	248	8.6	8.4	4
6908.0	14.7	63	8.9	241	8.5	8.4	4
6910.0	13.2	58	9.0	237	8.6	8.5	4
6912.0	13.0	57	9.1	235	8.6	8.6	4
6914.0	13.7	45	9.1	226	8.6	8.6	4
6916.0	14.3	57	9.1	236	8.5	8.6	4
6918.0	12.9	75	9.0	253	8.5	8.7	4
6920.0	12.6	74	9.1	254	8.5	8.7	4
6922.0	12.6	75	9.1	255	8.6	8.5	4
6924.0	12.4	72	9.2	255	8.6	8.4	4
6926.0	11.6	69	9.1	255	8.8	8.4	4
6928.0	11.5	66	9.0	255	8.9	8.4	4
6930.0	12.7	79	9.0	258	8.9	8.4	4
6932.0	13.9	85	9.1	259	8.9	8.5	4
6935.0	10.9	65	9.1	255	8.9	8.4	3
6936.0	11.3	74	9.2	255	8.8	8.3	4
6938.0	12.8	73	9.2	255	8.7	8.4	4
6940.0	13.4	73	9.1	255	8.8	8.4	4
6942.0	13.1	73	9.1	257	9.1	8.4	4
6944.0	12.5	72	9.2	254	9.4	8.4	4
6946.0	12.6	71	9.2	253	9.2	8.4	4
6948.0	13.0	74	9.2	255	9.1	8.4	4
6950.0	12.3	77	9.2	255	9.1	8.4	4
6952.0	11.3	76	9.2	257	9.0	8.4	4
6954.0	10.6	75	9.2	257	8.8	8.5	4
6956.0	10.4	75	9.1	257	9.0	8.5	4
6958.0	9.4	72	9.1	255	9.1	8.5	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
6960.0	9.2	66	9.0	250	8.6	8.4	4
6962.0	8.9	66	9.0	250	8.4	8.3	4
6964.0	9.5	68	9.1	249	8.6	8.3	4
6966.0	9.8	67	9.0	249	8.6	8.4	4
6968.0	9.8	67	9.1	251	8.7	8.5	4
6970.0	8.6	72	9.0	253	8.7	8.4	4
6972.0	9.1	75	8.9	255	8.7	8.4	4
6974.0	9.9	62	8.8	252	8.7	8.5	4
6976.0	9.1	57	8.8	245	8.7	8.5	4
6978.0	9.5	56	8.9	240	8.6	8.5	4
6980.0	9.9	52	8.9	236	8.5	8.5	4
6982.0	10.0	57	9.0	234	8.6	8.5	4
6984.0	11.0	54	9.1	237	8.6	8.6	4
6986.0	11.5	59	9.2	246	8.6	8.7	4
6988.0	11.8	64	9.2	255	8.6	8.7	4
6990.0	12.3	65	9.1	255	8.6	8.7	4
6992.0	12.5	62	9.1	255	8.6	8.5	4
6994.0	11.8	62	9.2	257	8.7	8.4	4
6996.0	11.2	61	9.1	255	8.7	8.5	4
6998.0	10.7	59	9.1	255	8.7	8.5	4
7000.0	10.0	56	9.1	254	8.7	8.5	4
7002.0	9.4	51	9.1	254	8.7	8.5	4
7004.0	10.8	65	9.1	253	8.7	8.5	4
7006.0	13.3	87	9.0	250	8.7	8.5	3
7007.0	14.0	79	9.0	249	8.7	8.6	4
7009.0	14.4	77	9.0	253	8.7	8.6	4
7011.0	14.2	72	8.9	255	8.7	8.7	4
7013.0	12.7	68	8.8	250	8.7	8.7	4
7015.0	11.2	65	8.8	242	8.6	8.5	4
7017.0	11.7	63	8.9	237	8.5	8.5	4
7019.0	16.3	53	9.0	237	8.5	8.5	1
7020.0	27.9	35	9.0	237	8.6	8.5	1
7021.0	14.2	100	8.9	237	8.7	8.5	1
7022.0	7.8	113	8.9	240	8.7	8.5	2
7024.0	6.9	88	8.9	246	8.6	8.5	1
7025.0	5.4	102	8.8	251	8.7	8.5	2
7027.0	12.1	86	8.8	256	8.7	8.7	2
7029.0	15.6	68	8.8	260	8.7	8.5	1
7030.0	11.8	107	8.9	261	8.7	8.5	2
7032.0	12.9	98	9.1	258	8.7	8.5	2
7034.0	12.2	71	9.1	254	8.6	8.5	3
7035.0	12.1	66	9.1	252	8.5	8.5	4
7037.0	17.4	53	9.1	252	8.4	8.5	3
7038.0	17.6	68	9.1	254	8.4	8.5	4
7040.0	14.3	68	9.1	255	8.5	8.5	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX DEST =4
7042.0	12.9	65	9.1	251	8.6	8.5	4
7044.0	11.6	65	9.1	248	8.6	8.5	4
7046.0	11.4	64	9.0	250	8.7	8.5	4
7048.0	8.6	70	9.0	254	8.7	8.5	4
7050.0	7.3	88	8.9	259	8.8	8.4	4
7052.0	10.1	77	8.8	257	8.8	8.3	3
7053.0	9.2	71	8.7	251	8.8	8.4	4
7055.0	8.4	64	8.8	243	8.7	8.5	4
7057.0	9.3	67	8.8	240	8.7	8.5	4
7059.0	10.0	64	8.8	239	8.7	8.5	4
7061.0	12.2	61	8.9	243	8.6	8.6	4
7063.0	5.0	91	8.9	250	8.6	8.5	4
7065.0	6.9	122	8.9	256	8.6	8.4	4
7067.0	13.0	78	8.9	258	8.6	8.4	4
7069.0	13.0	74	8.9	260	8.6	8.4	4
7071.0	12.9	73	8.9	261	8.7	8.5	4
7073.0	12.7	73	9.0	260	8.8	8.5	4
7075.0	12.6	67	8.9	257	8.8	8.6	4
7077.0	12.1	67	8.8	256	8.6	8.6	4
7079.0	12.1	66	8.8	254	8.6	8.6	4
7081.0	11.7	61	8.8	249	8.7	8.6	4
7083.0	12.5	56	8.7	250	8.7	8.6	4
7085.0	11.9	53	8.7	255	8.8	8.4	4
7087.0	23.2	67	8.7	259	8.8	8.3	4
7089.0	25.3	56	8.7	260	8.8	8.4	4
7091.0	28.3	45	8.6	257	8.8	8.5	3
7092.0	22.6	67	8.7	252	8.8	8.5	4
7094.0	26.4	50	8.7	243	8.8	8.6	4
7096.0	22.7	42	8.7	238	8.7	8.6	3
7102.0	50.9	149	8.6	242	8.4	8.5	1
7106.0	28.7	32	8.7	254	8.5	8.4	3
7108.0	25.4	24	8.6	259	8.5	8.6	4
7110.0	20.7	47	8.6	261	8.6	8.5	3
7111.0	21.2	46	8.6	261	8.7	8.4	4
7113.0	24.7	63	8.6	260	8.7	8.4	3
7114.0	24.2	58	8.7	260	8.7	8.4	4
7116.0	20.4	53	8.7	260	8.8	8.4	4
7118.0	25.6	57	8.6	257	8.6	8.5	1
7119.0	22.3	51	8.5	256	8.6	8.5	1
7120.0	13.4	41	8.5	257	8.7	8.5	4
7122.0	11.6	32	8.5	256	8.7	8.5	4
7124.0	12.3	49	8.4	250	8.6	8.6	4
7126.0	15.7	35	8.4	248	8.6	8.6	3
7127.0	11.1	56	8.4	250	8.7	8.7	4
7129.0	10.3	58	8.3	254	8.7	8.6	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
7131.0	9.9	57	8.3	258	8.8	8.5	4
7133.0	9.5	65	8.2	259	8.8	8.4	4
7135.0	9.1	57	8.0	251	8.8	8.4	4
7137.0	7.0	51	8.1	242	8.7	8.5	4
7140.0	28.0	22	8.1	236	8.6	8.6	1
7141.0	24.7	13	8.1	238	8.6	8.6	1
7142.0	25.1	29	8.2	243	8.7	8.6	2
7145.0	19.4	38	8.2	255	8.7	8.5	1
7146.0	11.8	52	8.2	258	8.8	8.5	2
7148.0	12.2	59	8.2	259	8.8	8.5	4
7150.0	13.2	53	8.2	258	8.8	8.5	4
7152.0	13.7	24	8.1	256	8.8	8.6	3
7153.0	7.0	50	8.0	255	8.8	8.6	3
7154.0	5.2	95	8.1	254	8.8	8.6	3
7155.0	5.3	63	8.1	255	8.8	8.6	4
7157.0	5.8	53	7.9	253	8.7	8.6	4
7159.0	6.1	57	7.9	250	8.6	8.6	4
7161.0	6.0	61	7.8	251	8.7	8.5	4
7163.0	6.7	64	7.8	255	8.7	8.4	4
7165.0	4.4	62	7.7	259	8.7	8.2	2
7167.0	2.5	123	7.7	260	8.7	8.1	2
7169.0	6.7	74	7.7	260	8.7	8.3	2
7171.0	2.6	152	7.7	263	8.7	8.4	4
7173.0	3.6	122	7.8	264	8.7	8.5	4
7175.0	4.8	86	7.8	261	8.8	8.5	4
7177.0	4.6	75	7.7	253	8.7	8.6	4
7179.0	3.8	68	7.6	245	8.5	8.6	4
7181.0	3.2	84	7.4	245	8.4	8.6	4
7183.0	3.2	105	6.8	243	8.6	8.6	4
7185.0	2.0	74	5.9	243	8.6	8.6	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
6965.0	9.9	69	9.1	251	8.7	8.5	4
6967.0	9.3	70	9.1	253	8.7	8.5	4
6969.0	9.2	80	9.0	255	8.7	8.4	4
6971.0	10.3	70	9.0	255	8.7	8.5	4
6973.0	10.2	53	9.1	249	8.7	8.5	4
6975.0	9.8	55	9.1	243	8.7	8.5	4
6977.0	10.0	56	9.1	238	8.6	8.4	4
6979.0	10.0	51	9.1	233	8.5	8.5	4
6981.0	10.2	56	9.1	239	8.6	8.6	4
6983.0	11.6	63	9.2	248	8.6	8.7	4
6985.0	11.8	63	9.2	252	8.6	8.8	4
6987.0	12.4	63	9.2	252	8.7	8.8	4
6989.0	11.9	61	9.1	253	8.7	8.6	4
6991.0	11.8	65	9.1	256	8.8	8.4	4
6993.0	11.4	63	9.1	257	8.9	8.5	4
6995.0	10.8	60	9.1	255	8.8	8.5	4
6997.0	10.4	58	9.1	255	8.8	8.5	4
6999.0	10.0	57	9.1	255	8.6	8.5	4
7001.0	11.8	45	9.2	249	8.7	8.6	4
7003.0	11.8	79	9.1	247	8.7	8.6	4
7005.0	14.2	86	9.1	254	8.6	8.5	4
7007.0	14.9	82	9.0	258	8.7	8.6	4
7009.0	14.8	73	9.0	256	8.7	8.6	4
7011.0	13.7	69	9.0	248	8.7	8.5	4
7013.0	11.1	66	9.1	240	8.6	8.5	4
7015.0	12.1	58	9.1	236	8.5	8.5	4
7017.0	16.6	50	9.1	234	8.5	8.6	1
7018.0	19.6	40	9.0	233	8.6	8.6	1
7019.0	16.5	63	9.0	233	8.6	8.6	1
7020.0	6.5	109	9.0	236	8.7	8.6	1
7021.0	9.2	122	9.0	242	8.7	8.6	2
7023.0	5.2	88	9.0	249	8.6	8.5	1
7025.0	21.0	64	9.0	254	8.7	8.5	1
7026.0	11.7	86	9.0	255	8.7	8.5	1
7027.0	16.5	72	9.1	254	8.8	8.5	2
7029.0	13.9	97	9.1	255	8.7	8.5	1
7030.0	13.2	88	9.1	255	8.7	8.5	2
7032.0	12.8	92	9.1	256	8.6	8.5	4
7034.0	15.8	84	9.1	256	8.5	8.5	3
7035.0	9.1	82	9.1	257	8.4	8.5	3
7036.0	25.5	69	9.1	258	8.5	8.5	3
7037.0	17.1	69	9.1	258	8.6	8.6	3
7038.0	14.2	71	9.1	257	8.7	8.6	4
7040.0	12.8	72	9.1	254	8.6	8.5	4
7042.0	11.3	74	9.0	255	8.6	8.5	4

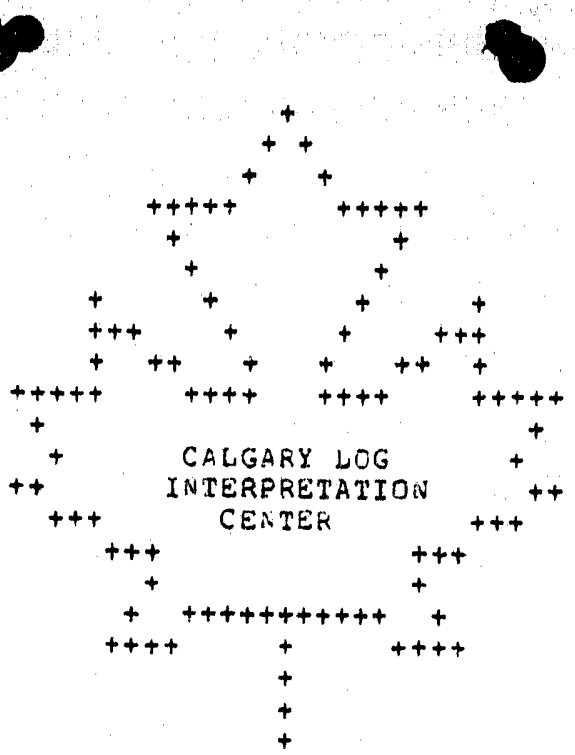
DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
7044.0	11.5	75	9.0	258	8.7	8.5	4
7046.0	8.8	79	9.0	259	8.7	8.5	4
7048.0	7.1	96	8.9	253	8.7	8.4	4
7050.0	10.6	69	8.8	249	8.7	8.4	3
7051.0	10.1	66	8.8	245	8.7	8.4	4
7053.0	9.0	63	8.8	241	8.7	8.5	4
7055.0	9.1	62	8.8	237	8.6	8.5	4
7057.0	9.8	63	8.8	239	8.7	8.5	4
7059.0	12.0	60	8.8	243	8.6	8.6	4
7061.0	4.3	87	8.8	250	8.6	8.5	4
7063.0	6.2	129	8.8	255	8.6	8.4	4
7065.0	11.4	78	8.8	257	8.6	8.5	4
7067.0	12.6	71	8.8	259	8.6	8.5	4
7069.0	12.7	66	8.9	259	8.7	8.5	4
7071.0	12.9	71	9.0	259	8.8	8.5	4
7073.0	12.8	69	9.0	258	8.8	8.6	4
7075.0	12.3	67	8.9	256	8.7	8.6	4
7077.0	12.0	67	8.9	258	8.6	8.7	4
7079.0	12.4	74	8.8	262	8.7	8.7	4
7081.0	12.6	70	8.8	260	8.7	8.6	4
7083.0	14.9	58	8.8	254	8.6	8.5	4
7085.0	26.1	57	8.7	251	8.7	8.5	4
7087.0	25.5	48	8.7	252	8.7	8.6	4
7089.0	30.7	50	8.7	254	8.7	8.6	3
7090.0	27.4	68	8.7	255	8.8	8.6	4
7092.0	29.8	81	8.7	258	8.8	8.6	4
7094.0	30.0	75	8.6	258	8.7	8.6	4
7097.0	49.6	227	8.5	255	8.7	8.6	1
7098.0	52.5	220	8.5	253	8.7	8.4	1
7101.0	41.0	237	8.4	244	8.6	8.3	1
7102.0	42.1	92	8.4	241	8.5	8.3	1
7103.0	32.4	37	8.4	239	8.4	8.4	1
7104.0	32.4	29	8.5	238	8.5	8.5	1
7105.0	36.6	22	8.5	237	8.5	8.5	1
7108.0	23.4	28	8.6	238	8.5	8.6	4
7110.0	21.8	26	8.5	243	8.6	8.7	4
7112.0	19.7	35	8.5	250	8.6	8.6	4
7114.0	14.3	44	8.5	253	8.6	8.6	3
7115.0	18.4	51	8.5	255	8.6	8.6	3
7116.0	23.2	58	8.6	256	8.6	8.6	3
7117.0	27.0	54	8.5	258	8.7	8.6	4
7119.0	13.7	41	8.5	258	8.7	8.5	4
7121.0	11.5	34	8.5	257	8.7	8.5	4
7123.0	11.2	49	8.5	258	8.7	8.5	4
7125.0	11.2	63	8.4	258	8.7	8.6	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
7127.0	10.5	62	8.3	259	8.7	8.6	4
7129.0	10.5	59	8.3	258	8.6	8.6	4
7131.0	9.7	54	8.3	254	8.4	8.6	4
7133.0	9.6	60	8.3	252	8.3	8.6	4
7135.0	9.1	63	8.2	254	8.4	8.5	4
7137.0	10.9	87	10.4	265	9.2	9.2	3
7138.0	11.1	86	10.2	266	9.3	9.1	4
7140.0	25.0	60	10.1	266	9.3	9.1	3
7141.0	24.7	50	8.1	258	8.7	8.5	4
7143.0	30.7	59	8.1	259	8.7	8.5	3
7144.0	19.3	50	8.1	261	8.8	8.5	3
7145.0	11.5	60	8.1	261	8.8	8.5	3
7146.0	11.3	57	8.0	261	8.8	8.4	4
7148.0	11.1	53	7.9	256	8.8	8.4	4
7151.0	7.7	22	7.8	247	8.8	8.5	3
7152.0	5.8	22	7.8	242	8.7	8.5	4
7154.0	3.5	54	7.8	236	8.6	8.6	4
7156.0	2.7	42	7.9	237	8.7	8.7	4
7158.0	6.6	45	7.9	244	8.7	8.7	4
7160.0	6.0	59	7.9	250	8.7	8.6	4
7162.0	5.9	61	7.8	254	8.7	8.6	4
7164.0	3.1	92	7.8	257	8.6	8.5	4
7166.0	4.1	155	7.9	259	8.7	8.4	4
7166.0	2.2	93	7.8	258	8.7	8.4	3
7169.0	3.7	117	7.9	258	8.8	8.2	4
7171.0	5.2	105	7.9	258	8.8	8.1	4
7173.0	5.4	97	7.9	257	8.7	8.4	4
7175.0	5.7	92	7.9	258	8.7	8.5	4
7177.0	6.3	99	7.8	261	8.7	8.6	4
7179.0	5.9	84	7.7	259	8.4	8.6	2

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5566.0	14.9	84	7.8	230	15.2	12.6	2
5568.0	19.0	86	7.8	229	15.1	12.3	4
5570.0	18.7	78	7.7	227	14.9	13.0	4
5574.0	65.6	29	7.6	229	14.6	12.9	4
5576.0	52.2	73	7.6	228	14.4	12.7	1
5577.0	49.3	73	7.6	229	14.5	12.9	2
5579.0	54.1	72	7.5	229	14.6	12.9	1
5580.0	22.9	95	7.4	230	14.7	13.1	4
5582.0	22.4	91	7.5	229	14.7	13.2	4
5584.0	17.5	80	7.5	228	14.7	13.2	3
5585.0	16.4	79	7.5	229	14.8	13.2	4
5587.0	14.1	66	7.5	230	14.6	13.2	3
5588.0	15.8	83	7.5	231	14.5	13.3	3
5589.0	16.2	83	7.6	230	14.6	13.2	4
5591.0	16.0	83	7.6	230	14.9	13.1	4
5593.0	11.6	79	7.5	231	14.9	13.2	4
5596.0	13.9	74	7.6	230	14.9	13.4	4
5598.0	16.5	79	7.6	230	14.8	13.1	4
5600.0	15.6	94	7.6	230	14.5	12.7	4
5602.0	16.5	94	7.5	230	14.3	12.5	4
5604.0	16.9	75	7.5	229	14.1	12.7	2
5606.0	44.7	144	7.5	230	14.1	12.9	2
5608.0	46.3	147	7.5	232	14.0	12.8	2
5611.0	12.7	37	7.5	232	13.8	12.8	1
5612.0	10.5	61	7.5	231	13.5	12.8	1
5613.0	11.3	46	7.4	231	12.9	12.8	2
5615.0	13.2	77	7.3	231	12.3	12.7	1
5616.0	15.2	92	7.3	233	12.6	12.9	4
5618.0	15.2	89	7.4	233	13.1	13.1	4
5620.0	18.8	69	7.4	233	12.9	13.3	1
5621.0	25.4	272	7.4	229	12.6	13.4	1
5622.0	26.7	277	7.4	225	12.9	13.6	2
5624.0	31.9	280	7.5	221	13.6	13.8	1
5625.0	22.9	69	7.5	222	14.0	13.9	1
5626.0	18.2	71	7.5	223	14.4	14.3	3
5627.0	18.0	70	7.5	228	14.6	14.9	4
5629.0	18.4	72	7.6	234	14.9	15.5	4
5631.0	20.3	71	7.6	237	15.2	15.6	2
5633.0	20.5	82	7.6	236	15.4	14.9	4
5635.0	20.5	86	7.5	235	15.4	14.4	4
5637.0	14.3	97	7.5	232	15.3	14.5	3
5638.0	13.2	97	7.5	231	15.3	14.8	4
5640.0	13.3	95	7.5	231	15.2	14.8	4
5644.0	13.5	97	7.6	234	15.3	14.4	3
5645.0	14.6	92	7.6	235	15.8	14.4	4

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5647.0	15.7	81	7.6	234	16.5	14.7	4
5649.0	14.3	93	7.6	235	17.2	15.0	3
5650.0	13.3	91	7.7	237	17.3	14.5	4
5652.0	13.2	89	7.8	237	15.8	13.9	4
5654.0	13.0	97	7.7	234	14.1	13.4	4
5656.0	13.1	78	7.7	228	12.6	12.1	4
5658.0	21.4	70	7.8	225	11.3	11.3	3
5659.0	21.2	72	7.8	225	10.6	11.1	4
5661.0	20.3	59	7.8	225	10.1	10.4	4
5663.0	22.0	62	7.7	224	9.8	9.7	4
5665.0	20.7	44	7.7	227	9.7	9.7	3
5666.0	25.4	76	7.7	229	9.6	9.7	3
5667.0	24.1	73	7.7	235	9.5	9.9	4
5669.0	26.6	78	7.7	239	9.6	9.9	3
5670.0	22.0	77	7.6	242	9.6	9.6	4
5672.0	20.1	73	7.6	242	9.1	9.2	4
5674.0	19.5	70	7.6	242	8.9	8.9	4
5676.0	18.3	73	7.5	242	9.1	8.9	4
5678.0	18.6	71	7.4	242	9.1	8.9	4
5680.0	19.2	72	7.4	242	9.1	8.9	4
5682.0	20.3	73	7.3	243	9.2	9.1	4
5684.0	19.8	73	7.2	241	9.2	9.3	4
5686.0	18.9	73	7.2	243	9.5	9.5	4
5688.0	18.6	80	7.2	248	9.9	9.4	4
5690.0	19.1	70	7.2	246	9.7	9.1	3
5691.0	19.8	65	7.2	243	9.3	8.9	4
5693.0	20.0	64	7.1	242	9.2	8.7	4
5696.0	19.0	63	7.1	243	9.0	8.7	3
5697.0	19.1	67	7.2	241	9.0	8.8	4
5699.0	20.7	59	7.2	238	8.9	8.9	3
5700.0	20.6	64	7.1	238	8.8	8.9	4
5702.0	20.0	59	7.0	239	8.8	8.9	4
5704.0	20.4	58	7.1	241	8.9	8.8	4
5706.0	20.8	57	7.1	240	9.0	8.8	4
5708.0	21.2	56	7.0	234	9.1	8.8	2
5710.0	12.7	56	6.9	233	9.1	8.9	1
5711.0	2.0	34	6.9	237	8.9	9.1	4
5713.0	1.0	34	6.9	238	8.7	9.2	4
5715.0	7.9	277	6.9	235	8.8	9.2	1
5716.0	8.1	258	6.9	233	8.9	9.6	2
5720.0	13.3	153	6.8	235	9.2	10.3	1
5722.0	10.8	88	6.8	237	9.8	11.3	2
5724.0	13.9	119	6.8	241	10.7	13.2	1
5725.0	16.7	155	6.8	242	12.1	14.1	2
5729.0	27.7	216	6.8	238	15.4	15.2	1

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5730.0	26.8	209	6.9	235	15.2	15.0	2
5732.0	20.9	44	7.0	232	14.1	14.9	1
5733.0	20.6	41	6.9	233	14.1	15.4	2
5739.0	52.7	31	7.1	238	14.9	16.7	1
5744.0	51.3	41	7.5	236	9.8	14.7	1
5745.0	39.1	49	7.6	237	9.5	13.9	4
5747.0	39.5	49	7.6	237	9.2	13.3	4
5749.0	23.7	47	7.6	237	9.1	13.4	1
5750.0	20.5	45	7.5	236	9.1	13.6	2
5756.0	61.8	32	7.6	240	9.3	13.1	1
5757.0	56.4	36	7.6	239	9.8	13.2	1
5758.0	56.0	40	7.6	237	10.3	13.3	2
5766.0	47.6	44	7.5	235	9.3	13.4	1
5769.0	50.5	46	7.5	232	10.3	12.7	1
5770.0	48.2	33	7.5	231	10.3	12.9	1
5771.0	51.6	31	7.5	232	9.9	13.6	2
5773.0	54.7	23	7.5	236	9.6	14.3	1
5780.0	43.1	55	7.6	240	9.3	13.7	4
5782.0	44.5	59	7.6	240	9.5	13.1	4
5784.0	45.3	45	7.6	241	9.7	12.6	1
5785.0	41.8	50	7.7	240	9.9	12.3	1
5786.0	50.2	43	7.7	239	10.0	12.4	1
5787.0	41.1	47	7.7	241	10.3	13.0	1
5788.0	35.7	49	7.8	241	11.1	13.9	2
5791.0	12.7	4	7.8	240	11.5	14.5	1
5792.0	13.2	3	7.8	239	11.2	14.4	2
5794.0	17.2	12	7.8	237	10.8	14.8	1
5799.0	60.8	347	7.8	235	9.4	14.6	1
5800.0	37.2	45	7.8	234	9.4	13.9	2
5802.0	35.5	41	7.8	233	9.4	14.1	2
5804.0	32.3	36	7.7	233	9.4	14.4	1
5805.0	51.0	283	7.7	232	9.6	14.6	1
5806.0	44.4	43	7.7	232	10.2	14.5	3
5807.0	41.2	41	7.8	233	11.6	13.9	4
5809.0	39.9	42	7.8	238	12.0	13.2	3



T A B U L A R L I S T I N G O F S A R A B A N D D A T A

SHELL CANADA LIMITED

SHELL NIGLINTGAK B-19

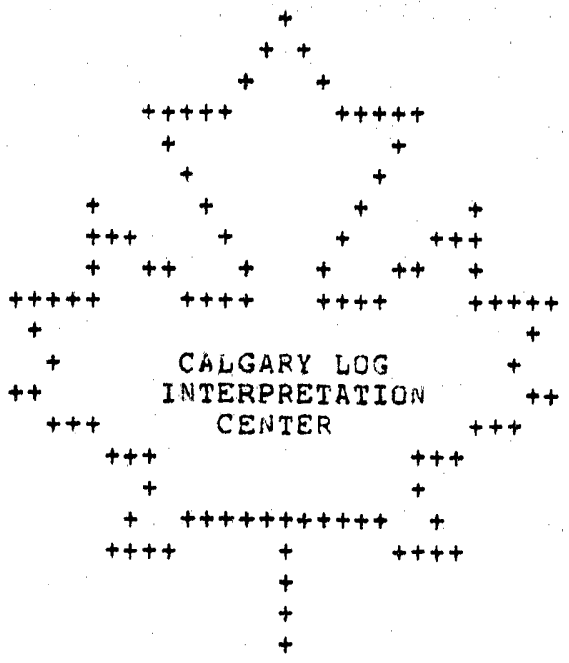
WILDCAT

NORTHWEST TERRITORIES

CANADA

JOB C-50520

Schlumberger



TABULAR LISTING OF SARABAND DATA

SHELL CANADA LIMITED

SHELL NIGLINTGAK B-19

WILDCAT

NORTHWEST TERRITORIES

CANADA

JOB C-50520

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LS	LD	LN	LXO	LSN	LILM	LILD	LSP	LGR	LCAL
15	14	11	67	70	71	66	0	19	18

SP BASE LINE SHIFT

NONE

CWSP ARRAY	999.	0.	0.	0.	0.	0.	0.	0.
RW ARRAY	0.450	0.500	0.000	0.000	0.000	0.000	0.000	0.000
AT DEPTH	9590.	8400.	0.	0.	0.	0.	0.	0.
AT TEMP	0.	0.	0.	0.	0.	0.	0.	0.
TOP DEPTH	8400.	0.	0.	0.	0.	0.	0.	0.

ROG ARRAY	2.65	2.65	0.00	0.00	0.00	0.00	0.00	0.00
DTMA ARRAY	55.5	55.5	0.0	0.0	0.0	0.0	0.0	0.0
ZSNMA ARRAY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOP DEPTH	8400.	0.	0.	0.	0.	0.	0.	0.

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ISS =	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	0	0	1	1	0	1	1	0	2	1	0	0	0	0	0	0	1	0	0	0	0

INPUT PARAMETERS FROM 6300. TO 6000.

WMUD	XLIT	BITSZ	BHT	BHTDEP	SUFT	RMF	RMFT	ROMFS	PHIMFS	DASIL
9.8	0.50	8.75	152.	9596.	30.	0.18	135.	1.013	0.990	0.600

SPCK	DSPCK	RODC	DELRGM	STAPT	STOPLG	ZSPNL	BGN	ZSPDL	REC	RESM	CSS
0.	0.	2.84	0.20	9590.	6000.	0.000	1.00	0.000	10.20	69.06	0.2

WHY	PHILEV	BR	SLIM	AK	PK	SK	STOPIN	PHIMAX	PHINCL	PHIDCL
.200	0.000	.10	0.30	62500.	6.0	2.0	0.	0.180	0.360	0.020

PHINSO	RTPM	PUN	DAX	DALIM	DAGA	DASH	DTSD	DTSH	CP	PSSH
0.180	464.	.018	81.	55.	31.	101.	150.	150.	1.00	.300

EDIAM	PNLIM	PDLIM	RLIM	GRLIM	VARMC	CONST	ROP	VARLIM	CSF
0.00	0.33	0.34	12.0	145.0	0.07	0.333	0.70	0.20	0.50

RESISTIVITY STATISTICS OVER ENTIRE INTERVAL

GAMMA - RAY STATISTICS OVER ENTIRE INTERVAL

SONIC STATISTICS OVER ENTIRE INTERVAL

ANALYSIS BY QUASI MODEL
PERMEABILITY BY TIMUR EQUATION
SONIC COEFF. FROM STATISTICS
WASAMP ROUTINE USED

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6059.0	0.1	9.3	100		40	107.02	5.43
6060.0	0.1	9.4	100		39	106.93	5.43
6061.0	0.1	9.5	100		34	106.84	5.43
6062.0	0.1	9.3	100		41	106.74	5.43
6063.0	0.1	8.6	100		43	106.65	5.43
6064.0	0.0	7.2	100		47	106.56	5.43
6065.0	0.1	8.9	100		44	106.48	5.43
6066.0	0.1	9.0	100		46	106.39	5.43
6072.0	0.0	6.3	100		50	105.98	5.43
6073.0	0.0	7.3	100		48	105.92	5.43
6074.0	0.1	8.5	100		45	105.84	5.43
6075.0	0.0	8.3	100		49	105.75	5.43
6078.0	0.0	6.6	100		49	105.55	5.43
6079.0	0.0	7.6	100		47	105.48	5.43
6080.0	0.1	9.2	100		44	105.41	5.43
6081.0	0.1	8.8	100		45	105.31	5.43
6082.0	0.2	10.1	100		46	105.22	5.43
6083.0	0.0	7.9	100		49	105.13	5.43
6084.0	0.0	7.5	100		49	105.05	5.43
6085.0	0.1	8.7	100		47	104.98	5.43
6086.0	0.2	9.8	100		37	104.88	5.43
6087.0	0.2	10.4	100		41	104.78	5.43
6088.0	0.2	9.9	100		37	104.68	5.43
6089.0	0.2	9.3	100		29	104.58	5.43
6090.0	0.1	9.4	100		39	104.48	5.43
6091.0	0.2	1	100		34	104.39	5.43
6092.0	0.2	10.2	100		36	104.29	5.43
6093.0	0.1	.0	100		44	104.19	5.43
6094.0	0.1	9.6	100		36	104.10	5.43
6095.0	0.1	9.6	100		31	104.00	5.43
6096.0	0.1	9.7	100		33	103.91	5.43
6097.0	0.2	10.0	100		41	103.81	5.43
6098.0	0.1	9.1	100		33	103.71	5.43
6099.0	0.1	9.4	100		50	103.62	5.43
6100.0	0.1	9.1	100		33	103.52	5.43
6101.0	0.1	9.1	100		36	103.43	5.43
6102.0	0.5	11.5	100		29	103.34	5.43
6103.0	2	13.9	70		39	103.21	5.43
6125.0	0.2	10.3	100		29	102.93	5.35
6126.0	0.4	11.3	100		24	102.82	5.35
6127.0	0.4	11.2	100		23	102.71	5.35
6128.0	0.3	10.9	100		23	102.60	5.35
6129.0	0.4	11.0	100		23	102.49	5.35
6130.0	0.2	10.4	100		26	102.38	5.35

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6131.0	0.2	9.8	100		27	102.28	5.35
6132.0	0.2	10.1	100		27	102.18	5.35
6133.0	0.4	11.3	100		26	102.08	5.35
6134.0	0.8	12.2	100		24	101.96	5.35
6135.0	0.8	12.1	100		23	101.84	5.35
6136.0	0.6	11.6	100		25	101.72	5.35
6137.0	0.3	10.7	100		27	101.60	5.35
6138.0	0.1	9.7	100		30	101.50	5.35
6139.0	0.5	11.7	100		29	101.40	5.35
6140.0	1	13.2	100		28	101.28	5.35
6141.0	0.3	11.0	100		31	101.15	5.35
6142.0	0.3	10.5	100		31	101.04	5.35
6143.0	0.2	10.3	100		32	100.94	5.35
6144.0	0.2	9.8	100		32	100.83	5.35
6145.0	0.2	10.1	100		31	100.74	5.35
6146.0	0.3	10.7	100		29	100.63	5.35
6147.0	0.1	9.5	100		35	100.53	5.35
6148.0	0.1	9.5	100		35	100.44	5.35
6149.0	0.1	9.5	100		33	100.34	5.35
6150.0	0.3	10.9	100		26	100.24	5.35
6151.0	0.2	10.4	100		27	100.14	5.35
6152.0	0.2	10.4	100		28	100.03	5.35
6153.0	0.2	10.4	100		28	99.93	5.35
6154.0	0.2	10.1	100		29	99.82	5.35
6155.0	0.1	9.5	100		32	99.72	5.35
6156.0	0.2	9.9	100		29	99.63	5.35
6157.0	0.2	10.2	100		28	99.53	5.35
6158.0	0.4	11.0	100		29	99.43	5.35
6159.0	0.1	9.6	100		31	99.32	5.35
6160.0	0.1	8.5	100		24	99.22	5.35
6161.0	0.1	8.7	100		23	99.14	5.35
6162.0	0.7	12.0	100		25	99.04	5.35
6163.0	4	15.5	100		25	98.91	5.35
6164.0	2	13.9	100		25	98.76	5.35
6165.0	0.6	11.7	100		29	98.62	5.35
6166.0	0.3	10.6	100		31	98.51	5.35
6167.0	0.3	10.9	100		30	98.40	5.35
6168.0	0.3	10.8	100		29	98.30	5.35
6169.0	0.3	10.5	100		28	98.19	5.35
6170.0	0.5	11.6	100		25	98.08	5.35
6171.0	0.2	10.5	95		38	97.97	5.35
6174.0	0.1	8.5	100		43	97.78	5.35
6175.0	0.1	9.8	100		33	97.69	5.35
6176.0	0.3	10.6	100		33	97.59	5.35
6177.0	0.3	10.8	100		33	97.48	5.35
6178.0	0.6	11.7	100		29	97.37	5.35
6179.0	0.2	10.4	100		30	97.26	5.35

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6180.0	0.1	9.6	100		33	97.16	5.35
6181.0	0.1	9.4	100		33	97.06	5.35
6182.0	0.1	9.4	100		33	96.97	5.35
6183.0	0.2	10.0	100		32	96.87	5.35
6184.0	0.2	10.2	100		30	96.77	5.35
6185.0	0.3	10.8	100		24	96.67	5.35
6186.0	0.2	10.2	100		21	96.56	5.35
6187.0	0.1	9.2	100		14	96.46	5.35
6188.0	2	13.3	100		13	96.36	5.35
6189.0	7	16.3	100		13	96.22	5.35
6190.0	10	17.1	100		11	96.05	5.35
6191.0	6	16.1	100		14	95.88	5.35
6192.0	5	15.4	100		14	95.72	5.35
6193.0	5	15.5	100		16	95.57	5.35
6194.0	3	14.5	100		22	95.42	5.35
6195.0	1	13.3	100		26	95.27	5.35
6196.0	0.3	10.6	100		41	95.14	5.35
6199.0	0.3	11.1	100		39	94.90	5.35
6211.0	0.6	11.9	100		32	94.71	5.35
6212.0	0.3	10.5	100		26	94.59	5.35
6213.0	0.2	10.4	100		25	94.49	5.35
6214.0	0.1	9.5	100		35	94.39	5.35
6215.0	0.1	9.8	100		37	94.29	5.35
6216.0	0.1	9.7	100		31	94.19	5.35
6217.0	0.1	9.8	100		33	94.10	5.35
6218.0	0.2	10.0	100		36	94.00	5.35
6219.0	0.1	9.1	100		42	93.90	5.35
6220.0	0.1	9.0	100		41	93.81	5.35
6221.0	0.1	8.9	100		42	93.72	5.35
6222.0	0.0	8.2	100		43	93.63	5.35
6223.0	0.0	7.7	100		43	93.55	5.35
6224.0	0.0	5.7	100		50	93.48	5.35
6226.0	0.1	9.2	100		49	93.35	5.35
6227.0	0.1	9.3	100		37	93.26	5.35
6228.0	0.1	9.3	100		45	93.16	5.35
6229.0	0.1	8.9	100		47	93.07	5.35
6230.0	0.1	9.5	100		44	92.98	5.35
6231.0	0.1	8.5	100		46	92.88	5.35
6235.0	0.1	9.1	100		45	92.66	5.35
6236.0	0.1	9.1	100		47	92.57	5.35
6239.0	0.0	7.3	100		49	92.32	5.35
6240.0	0.1	9.7	100		39	92.24	5.35
6241.0	0.2	9.9	100		31	92.14	5.35

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6242.0	0.1	9.7	100		34	92.04	5.35
6243.0	0.1	9.7	100		35	91.94	5.35
6244.0	0.0	6.1	100		47	91.86	5.35
6247.0	0.1	8.9	100		46	91.66	5.35
6248.0	0.0	7.0	100		49	91.57	5.35
6297.0	0.0	5.8	100		38	91.31	5.35

Schlumberger

ISS - 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
0 0 1 1 0 1 1 0 2 1 0 0 0 0 0 0 1 0 0 0 0

INPUT PARAMETERS FROM 6540. TO 6300.

WMUD	XLIT	BITSZ	BHT	BHTDEP	SUFT	RMF	RMFT	ROMFS	PHIMFS	DASIL
9.8	0.50	8.75	152.	9596.	30.	0.18	135.	1.013	0.990	0.600

SPCK	DSPCK	RODC	DELRGM	START	STOPLG	ZSPNL	BGN	ZSPDL	REC	RESH	CSS
0.	0.	2.84	0.20	9590.	6000.	0.000	1.00	0.000	10.20	69.06	0.2

WHY	PHILEV	BR SLIM	AK	PK	SK	STOPIN	PHIMAX	PHINCL	PHIDCL
.200	0.000	.10 0.30	62500.	6.0	2.0	6300.	0.180	0.360	0.020

PHINSO	RTPM	PUN	DAX	DALIM	DACA	DASH	DTSD	DTSH	CP	PSSH
0.180	464.	.018	81.	55.	31.	101.	150.	150.	1.00	.300

EDIAM	PNLIM	PDLIM	RLIM	GRLIM	VARMC	CONST	ROP	VARLIM	CSF
0.00	1.00	1.00	1000.0	1000.0	0.07	0.333	0.70	0.20	0.50

RESISTIVITY STATISTICS OVER ENTIRE INTERVAL

GAMMA - RAY STATISTICS OVER ENTIRE INTERVAL

SONIC STATISTICS OVER ENTIRE INTERVAL

ANALYSIS BY QUASI MODEL
PERMEABILITY BY TIMUR EQUATION
SONIC COEFF. FROM STATISTICS
WASAMP ROUTINE USED

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6334.0	0.0	6.2	100		47	91.24	5.35
6335.0	0.0	6.0	100		48	91.18	5.35
6368.0	0.0	7.2	100		35	91.04	5.35
6369.0	0.0	5.2	100		40	90.97	5.35

Schlumberger

ISS -	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	0	0	1	1	0	1	1	0	2	1	0	0	0	0	0	0	1	0	0	0	0

INPUT PARAMETERS FROM 8400. TO 6540.

WMUD	XLIT	BITSZ	BHT	BHTDEP	SUFT	RMF	RMFT	ROMFS	PHIMFS	DASIL
9.8	0.50	8.75	152.	9596.	30.	0.18	135.	1.013	0.990	0.600

SPCK	DSPCK	RODC	DELRGM	START	STOPLG	ZSPNL	BGN	ZSPDL	REC	RESH	CSS
0.	0.	2.84	0.20	9590.	6000.	0.000	1.00	0.000	10.20	20.00	0.2

WHY	PHILEV	BR	SLIM	AK	PK	SK	STOPIN	PHIMAX	PHINCL	PHIDCL
.200	0.000	.10	0.30	62500.	6.0	2.0	6540.	0.180	0.360	0.020

PHINSO	RTPM	PUN	DAX	DALIM	DAGA	DASH	DTSD	DTSH	CP	PSSH
0.180	464.	.018	81.	55.	31.	101.	150.	150.	1.00	.300

EDIAM	PNLIM	PDLIM	RLIM	GRLIM	VARMC	CONST	ROP	VARLIM	CSF
0.00	0.40	0.40	2.5	105.0	0.07	0.333	0.70	0.20	0.50

RESISTIVITY STATISTICS OVER ENTIRE INTERVAL

GAMMA - RAY STATISTICS OVER ENTIRE INTERVAL

SONIC STATISTICS OVER ENTIRE INTERVAL

ANALYSIS BY QUASI MODEL
PERMEABILITY BY TIMUR EQUATION
SONIC COEFF. FROM STATISTICS
WASAMP ROUTINE USED

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6586.0	0.2	10.3	92		41	89.84	5.34
6587.0	0.2	10.4	100		26	89.73	5.34
6588.0	0.3	10.7	100		23	89.63	5.34
6589.0	0.2	10.4	100		35	89.52	5.34
6590.0	0.1	9.0	100		44	89.42	5.34
6591.0	0.1	8.9	100		48	89.33	5.34
6596.0	0.0	7.0	100		47	89.01	5.34
6600.0	0.1	9.7	88		44	88.86	5.33
6601.0	0.2	9.9	99		41	88.76	5.32
6602.0	0.2	10.3	100		36	88.66	5.32
6603.0	0.2	10.1	100		37	88.56	5.32
6604.0	0.0	7.0	100		43	88.46	5.32
6678.0	300	14.5	7		50	88.23	5.24
6694.0	100	19.6	22		43	88.03	5.07
6695.0	0.1	9.4	100		38	87.88	4.99
6696.0	0.1	9.7	100		40	87.79	4.99
6697.0	0.1	9.5	100		34	87.69	4.99
6698.0	0.2	10.4	100		32	87.60	4.99
6699.0	0.5	11.5	100		26	87.49	4.99
6700.0	0.2	10.3	100		30	87.37	4.99
6701.0	0.2	10.3	100		31	87.27	4.99
6702.0	0.3	10.7	100		29	87.17	4.99
6703.0	0.2	10.1	100		28	87.06	4.99
6704.0	0.2	9.7	100		30	86.96	4.99
6705.0	0.2	10.0	97		40	86.87	4.99
6706.0	0.0	8.2	100		44	86.77	4.99
6754.0	0.0	8.3	100		48	86.42	4.99
6755.0	0.2	9.8	100		34	86.33	4.99
6756.0	0.2	10.0	100		30	86.24	4.99
6757.0	0.2	9.9	100		31	86.14	4.99
6758.0	0.3	10.5	100		33	86.04	4.99
6759.0	0.1	9.3	100		46	85.94	4.99
6760.0	0.1	8.8	100		41	85.85	4.99
6761.0	0.1	9.7	100		33	85.76	4.99
6762.0	0.1	9.4	100		37	85.66	4.99
6763.0	0.1	9.5	100		41	85.57	4.99
6764.0	0.1	9.6	100		31	85.47	4.99
6765.0	0.2	9.8	100		28	85.37	4.99
6766.0	0.1	9.7	100		35	85.27	4.99
6767.0	0.0	7.8	100		37	85.18	4.99
6768.0	0.0	7.2	100		46	85.10	4.99
6769.0	0.1	9.0	100		39	85.03	4.99
6770.0	0.3	10.6	100		30	84.93	4.99

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DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6771.0	0.1	9.5	100		31	84.83	4.99
6772.0	0.1	9.5	100		42	84.73	4.99
6773.0	0.2	9.8	100		33	84.63	4.99
6774.0	0.4	11.3	100		28	84.53	4.99
6775.0	0.4	11.1	100		31	84.41	4.99
6776.0	0.1	9.7	100		35	84.31	4.99
6777.0	0.1	9.6	100		37	84.21	4.99
6778.0	0.2	9.9	100		31	84.11	4.99
6779.0	0.3	10.6	100		29	84.02	4.99
6780.0	0.2	10.3	100		31	83.91	4.99
6781.0	0.2	10.2	100		33	83.81	4.99
6782.0	0.1	9.7	100		33	83.71	4.99
6783.0	0.0	7.6	100		48	83.61	4.99
6784.0	0.1	9.1	100		45	83.53	4.99
6785.0	0.1	9.1	100		42	83.44	4.99
6786.0	0.1	8.9	100		43	83.35	4.99
6797.0	0.1	9.5	100		41	82.61	4.99
6798.0	0.1	9.6	100		37	82.52	4.99
6799.0	0.1	9.5	100		44	82.42	4.99
6800.0	0.1	9.5	100		48	82.32	4.99
6801.0	0.1	8.6	100		47	82.23	4.99
6802.0	0.1	8.6	100		45	82.15	4.99
6803.0	0.0	7.3	100		48	82.07	4.99
6804.0	0.1	8.7	100		43	81.99	4.99
6805.0	0.1	9.1	100		40	81.90	4.99
6806.0	0.0	7.7	100		43	81.82	4.99
6807.0	0.0	5.7	100		47	81.74	4.99
6840.0	0.0	6.7	100		47	80.96	4.99
6841.0	0.1	8.8	100		43	80.89	4.99
6843.0	0.1	8.5	100		42	80.72	4.99
6844.0	0.7	11.8	100		19	80.62	4.99
6845.0	0.9	12.3	100		17	80.50	4.99
6846.0	0.9	12.2	100		18	80.38	4.99
6847.0	0.6	11.6	100		21	80.26	4.99
6848.0	0.4	10.9	100		20	80.14	4.99
6849.0	0.3	10.8	100		19	80.04	4.99
6850.0	0.6	11.7	100		20	79.93	4.99
6851.0	0.6	11.6	100		22	79.81	4.99
6852.0	0.3	10.8	100		29	79.69	4.99
6853.0	0.3	10.6	100		33	79.59	4.99
6854.0	0.1	9.0	100		39	79.48	4.99
6855.0	0.1	8.5	100		39	79.40	4.99
6856.0	0.2	9.9	100		35	79.31	4.99
6857.0	0.2	10.1	100		36	79.21	4.99
6858.0	0.2	10.1	99		37	79.11	4.99

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DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6859.0	0.1	9.6	95		39	79.01	4.99
6860.0	0.0	8.4	100		43	78.91	4.98
6861.0	0.1	9.0	87		43	78.83	4.98
6862.0	0.1	9.0	100		41	78.74	4.97
6863.0	0.1	9.4	100		39	78.65	4.97
6864.0	0.3	10.7	100		34	78.55	4.97
6865.0	0.1	9.6	100		38	78.45	4.97
6866.0	0.1	9.5	100		39	78.35	4.97
6867.0	0.2	9.8	100		31	78.26	4.97
6868.0	0.1	9.6	100		30	78.16	4.97
6869.0	10	16.3	54		43	78.05	4.97
6909.0	0.1	9.2	100		16	77.78	4.86
6910.0	0.0	5.5	76		13	77.70	4.86
6911.0	0.0	5.3	100		26	77.64	4.86
6913.0	0.0	8.3	98		48	77.55	4.86
6914.0	0.1	9.6	100		34	77.46	4.86
6915.0	0.2	9.8	100		33	77.37	4.86
6916.0	0.0	6.8	97		48	77.27	4.85
6941.0	0.0	8.2	100		43	77.06	4.85
6942.0	0.2	10.1	100		23	76.98	4.85
6943.0	0.4	10.9	100		19	76.87	4.85
6944.0	0.5	11.4	100		20	76.76	4.85
6945.0	0.3	10.7	100		24	76.65	4.85
6946.0	0.5	11.4	100		20	76.54	4.85
6947.0	0.9	12.3	100		14	76.42	4.85
6948.0	1	12.9	100		11	76.30	4.85
6949.0	1	12.7	100		13	76.17	4.85
6950.0	0.7	11.8	100		14	76.04	4.85
6951.0	0.4	10.9	100		10	75.93	4.85
6952.0	1	12.5	100		8	75.81	4.85
6953.0	1	12.6	100		9	75.69	4.85
6954.0	1	12.5	100		10	75.56	4.85
6955.0	0.8	12.0	100		13	75.44	4.85
6956.0	0.8	12.0	100		13	75.32	4.85
6957.0	1	12.4	100		13	75.20	4.85
6958.0	0.5	11.3	100		14	75.08	4.85
6959.0	0.3	10.8	100		19	74.96	4.85
6960.0	0.1	8.5	100		25	74.86	4.85
6963.0	0.1	9.3	100		36	74.65	4.85
6964.0	0.4	11.2	100		24	74.55	4.85
6965.0	0.9	12.3	100		16	74.43	4.85
6966.0	2	13.7	100		12	74.31	4.85
6967.0	3	14.6	100		13	74.17	4.85
6968.0	3	14.1	100		15	74.02	4.85

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DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6969.0	1	12.9	100		13	73.88	4.85
6970.0	0.8	12.0	100		11	73.76	4.85
6971.0	0.9	12.2	100		11	73.64	4.85
6972.0	1	12.5	100		13	73.51	4.85
6973.0	0.9	12.3	100		15	73.39	4.85
6974.0	0.4	11.1	100		21	73.27	4.85
6975.0	0.3	10.8	100		23	73.16	4.85
6976.0	0.2	9.9	100		30	73.06	4.85
6977.0	0.3	10.9	100		28	72.96	4.85
6978.0	0.2	10.4	100		35	72.85	4.85
6979.0	0.1	9.3	100		38	72.75	4.85
6980.0	0.1	9.4	100		40	72.65	4.85
6981.0	0.0	8.3	100		39	72.56	4.85
6982.0	0.1	9.4	100		27	72.48	4.85
6983.0	0.3	10.5	100		30	72.38	4.85
6984.0	0.3	10.5	100		27	72.27	4.85
6985.0	0.3	10.9	100		28	72.17	4.85
6986.0	0.3	10.7	100		27	72.06	4.85
6987.0	0.2	10.4	100		25	71.95	4.85
6988.0	0.1	9.7	100		27	71.85	4.85
6989.0	0.2	10.1	100		33	71.75	4.85
6990.0	0.2	10.3	100		36	71.65	4.85
6991.0	0.1	9.5	100		38	71.55	4.85
6992.0	0.3	10.5	100		27	71.45	4.85
6993.0	0.2	10.4	100		29	71.35	4.85
6994.0	0.1	9.3	100		29	71.25	4.85
6995.0	0.0	7.7	100		34	71.16	4.85
6996.0	0.0	8.0	100		34	71.08	4.85
6997.0	0.1	9.3	100		25	71.00	4.85
6998.0	0.1	9.7	100		30	70.90	4.85
6999.0	0.3	10.6	100		33	70.80	4.85
7000.0	0.3	10.9	100		32	70.69	4.85
7001.0	0.2	10.2	100		33	70.59	4.85
7002.0	0.1	8.4	100		42	70.49	4.85
7004.0	0.0	7.2	100		48	70.36	4.85
7005.0	0.1	9.4	100		39	70.28	4.85
7006.0	0.1	9.6	100		36	70.18	4.85
7007.0	0.2	10.1	100		33	70.08	4.85
7008.0	0.2	10.0	100		32	69.98	4.85
7009.0	0.1	9.7	100		34	69.88	4.85
7010.0	0.2	10.1	100		35	69.78	4.85
7011.0	0.2	10.2	100		35	69.68	4.85
7012.0	0.1	9.3	100		38	69.58	4.85
7013.0	0.1	9.6	100		38	69.49	4.85
7014.0	0.1	9.5	100		37	69.40	4.85
7015.0	0.1	9.4	100		37	69.30	4.85
7016.0	0.1	9.5	100		37	69.21	4.85

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DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7017.0	0.2	9.9	100		32	69.11	4.85
7018.0	0.3	10.5	100		33	69.01	4.85
7019.0	0.2	10.3	100		33	68.91	4.85
7020.0	0.2	10.1	100		36	68.80	4.85
7021.0	0.1	9.0	100		40	68.71	4.85
7022.0	0.2	10.0	100		37	68.62	4.85
7023.0	0.3	10.7	100		33	68.51	4.85
7024.0	0.4	10.9	100		26	68.41	4.85
7025.0	0.2	10.0	100		34	68.30	4.85
7026.0	0.0	7.4	100		41	68.20	4.85
7027.0	0.0	6.6	100		44	68.13	4.85
7028.0	0.0	7.8	100		40	68.06	4.85
7029.0	0.0	7.5	100		39	67.98	4.85
7030.0	0.0	7.3	100		37	67.91	4.85
7031.0	0.0	6.7	100		37	67.83	4.85
7105.0	0.0	6.6	100		43	67.75	4.85
7106.0	0.0	4.4	100		47	67.69	4.85
7107.0	0.0	8.1	100		32	67.64	4.85
7108.0	0.0	6.8	100		40	67.56	4.85
7109.0	0.0	6.7	100		47	67.49	4.85
7110.0	0.0	7.5	100		43	67.42	4.85
7111.0	0.1	8.8	100		40	67.34	4.85
7112.0	0.2	9.8	100		35	67.25	4.85
7113.0	0.3	10.6	100		30	67.15	4.85
7114.0	0.2	10.2	100		37	67.04	4.85
7115.0	0.1	8.9	100		40	66.95	4.85
7116.0	0.1	9.2	100		40	66.86	4.85
7117.0	0.1	9.2	100		41	66.76	4.85
7118.0	0.1	8.8	100		43	66.67	4.85
7119.0	0.0	6.4	100		46	66.59	4.85
7120.0	0.0	5.8	100		48	66.53	4.85
7121.0	0.0	7.2	100		49	66.47	4.85
7122.0	0.0	7.2	[illegible]		48	66.40	4.85
7123.0	0.0	5.8	[illegible]		46	66.33	4.85
7124.0	0.0	6.[illegible]	[illegible]		46	66.27	4.85
7125.0	0.0	[illegible]	[illegible]		45	66.21	4.85
7126.0	0.0	[illegible].7	[illegible]		44	66.15	4.85
7127.0	0.0	[illegible].1	[illegible]		48	66.11	4.85
7130.0	0.0	4.[illegible]	[illegible]		45	66.09	4.85
7131.0	0.0	4.6	[illegible]		46	66.04	4.85
7132.0	0.0	3.6	100		50	66.00	4.85
7219.0	0.0	6.1	100		49	65.77	4.85
7220.0	0.0	6.6	100		44	65.70	4.85
7221.0	0.0	5.6	100		45	65.64	4.85
7222.0	0.0	7.6	100		40	65.58	4.85

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DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7223.0	0.0	7.3	100		41	65.50	4.85
7224.0	0.0	5.3	100		46	65.44	4.85
7393.0	0.0	6.3	100		48	65.20	4.85
7400.0	0.3	11.0	100		44	64.90	4.85
7401.0	3	14.1	100		13	64.78	4.85
7402.0	2	13.5	100		9	64.64	4.85
7403.0	1	12.8	100		12	64.51	4.85
7404.0	0.8	12.0	100		10	64.38	4.85
7405.0	0.3	10.2	100		7	64.26	4.85
7406.0	0.4	9.5	100		2	64.17	4.85
7407.0	0.5	11.1	100		10	64.07	4.85
7408.0	0.4	11.1	100		14	63.95	4.85
7409.0	0.5	11.2	100		12	63.84	4.85
7410.0	1	12.2	100		7	63.72	4.85
7411.0	1	12.9	100		7	63.60	4.85
7412.0	0.9	12.1	100		9	63.47	4.85
7413.0	0.4	10.9	100		18	63.35	4.85
7414.0	0.2	10.3	100		26	63.25	4.85
7415.0	0.1	9.3	100		32	63.14	4.85
7416.0	0.3	10.4	100		14	63.05	4.85
7417.0	1	12.5	100		15	62.94	4.85
7418.0	2	14.0	100		16	62.81	4.85
7419.0	3	14.0	100		8	62.67	4.85
7420.0	2	13.5	100		10	62.53	4.85
7421.0	2	13.3	100		24	62.39	4.85
7422.0	0.5	11.5	100		24	62.27	4.85
7423.0	7	15.9	100		10	62.15	4.85
7424.0	20	18.4	100		8	61.98	4.85
7425.0	20	18.2	100		9	61.79	4.85
7426.0	10	17.1	100		10	61.61	4.85
7427.0	9	16.7	100		11	61.44	4.85
7428.0	5	15.3	100		12	61.28	4.85
7429.0	2	13.2	100		15	61.13	4.85
7430.0	1	12.5	100		17	61.00	4.85
7431.0	1	13.0	100		18	60.88	4.85
7432.0	1	13.0	100		14	60.75	4.85
7433.0	0.4	11.2	100		20	60.62	4.85
7434.0	0.4	11.1	100		32	60.51	4.85
7435.0	0.1	9.5	100		29	60.41	4.85
7436.0	0.1	9.8	100		34	60.31	4.85
7437.0	0.7	11.8	100		19	60.21	4.85
7438.0	0.8	12.1	100		17	60.08	4.85
7439.0	0.9	12.4	100		18	59.96	4.85
7440.0	0.7	12.0	100		19	59.84	4.85
7441.0	0.6	11.8	100		21	59.72	4.85
7442.0	0.1	8.7	100		35	59.61	4.85

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DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7443.0	0.0	7.5	100		38	59.53	4.85
7444.0	0.0	7.1	100		37	59.46	4.85
7445.0	0.0	6.1	100		37	59.39	4.85
7446.0	0.0	4.1	100		34	59.33	4.85
7447.0	0.0	0.4	100		47	59.29	4.85
7448.0	0.0	4.0	100		46	59.28	4.85
7449.0	0.0	8.2	100		32	59.24	4.85
7450.0	0.3	10.6	100		20	59.14	4.85
7451.0	0.1	9.3	100		35	59.05	4.85
7452.0	0.1	9.4	100		35	58.95	4.85
7453.0	0.1	8.6	100		28	58.86	4.85
7454.0	0.1	8.7	100		21	58.77	4.85
7455.0	0.1	8.8	100		19	58.69	4.85
7456.0	0.0	7.7	100		24	58.60	4.85
7457.0	0.0	8.2	100		37	58.53	4.85
7458.0	0.9	12.4	100		25	58.43	4.85
7459.0	0.9	12.3	100		21	58.31	4.85
7460.0	0.3	10.5	100		29	58.19	4.85
7461.0	0.1	8.8	100		39	58.09	4.85
7462.0	0.1	9.8	100		44	57.99	4.85
7489.0	0.0	5.7	100		48	57.47	4.85
7512.0	0.4	11.0	100		27	57.23	4.85
7513.0	0.0	6.4	100		45	57.13	4.85
7515.0	0.1	9.0	100		45	56.99	4.84
7516.0	0.1	8.9	100		40	56.90	4.84
7517.0	0.1	8.4	100		39	56.81	4.84
7518.0	0.1	9.0	100		35	56.72	4.84
7519.0	0.1	9.2	100		33	56.63	4.84
7520.0	0.2	10.3	100		25	56.54	4.84
7521.0	0.5	11.4	100		22	56.43	4.84
7522.0	0.6	11.7	100		22	56.32	4.84
7523.0	0.3	10.5	100		29	56.20	4.84
7524.0	0.2	10.3	100		35	56.10	4.84
7525.0	0.1	9.5	100		39	56.00	4.84
7526.0	0.0	8.3	100		42	55.90	4.84
7527.0	0.1	9.7	100		34	55.82	4.84
7528.0	0.5	11.4	100		24	55.72	4.84
7529.0	0.8	12.1	100		24	55.60	4.84
7530.0	0.2	10.5	100		36	55.48	4.84
7531.0	0.1	9.6	100		42	55.38	4.84
7532.0	0.4	11.2	100		26	55.28	4.84
7533.0	0.8	12.2	100		19	55.17	4.84
7534.0	1	12.4	100		16	55.05	4.84
7535.0	0.7	12.0	100		22	54.92	4.84
7536.0	0.1	9.5	100		40	54.81	4.84

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7542.0	0.0	5.0	100		47	54.49	4.84
7548.0	0.0	8.0	100		42	54.29	4.84
7549.0	0.3	10.6	100		28	54.20	4.84
7550.0	0.2	10.4	100		25	54.09	4.84
7551.0	0.3	10.7	100		23	53.99	4.84
7552.0	0.3	10.6	100		29	53.88	4.84
7553.0	0.0	7.9	100		36	53.78	4.84
7554.0	0.2	9.8	100		31	53.70	4.84
7555.0	0.0	7.5	100		36	53.61	4.84
7556.0	0.0	7.6	100		35	53.54	4.84
7557.0	0.0	6.8	100		37	53.46	4.84
7558.0	0.0	4.0	100		46	53.40	4.84
7561.0	0.0	4.7	100		40	53.31	4.84
7597.0	0.0	7.1	100		46	53.23	4.84
7598.0	0.0	6.7	100		41	53.16	4.84
7599.0	0.0	6.6	100		41	53.09	4.84
7600.0	0.0	6.3	100		41	53.03	4.84
7601.0	0.0	5.5	100		47	52.97	4.84
7608.0	0.0	6.0	100		50	52.72	4.83
7609.0	0.1	9.4	75		49	52.65	4.83
7610.0	0.3	10.6	94		39	52.55	4.80
7611.0	0.4	11.1	100		13	52.44	4.80
7612.0	0.6	11.5	100		8	52.33	4.80
7613.0	0.4	11.0	100		10	52.22	4.80
7614.0	1	12.4	100		13	52.10	4.80
7615.0	1	12.9	100		11	51.98	4.80
7616.0	1	13.0	100		12	51.85	4.80
7617.0	2	13.3	100		10	51.72	4.80
7618.0	2	13.1	100		11	51.59	4.80
7619.0	2	13.8	100		12	51.45	4.80
7620.0	1	13.0	100		9	51.31	4.80
7621.0	0.4	10.9	100		10	51.19	4.80
7622.0	3	14.6	100		10	51.07	4.80
7623.0	10	17.5	83		9	50.91	4.79
7624.0	0.5	11.5	100		17	50.75	4.77
7625.0	0.4	11.3	100		27	50.63	4.77
7626.0	0.2	9.9	100		31	50.52	4.77
7627.0	0.1	9.6	100		32	50.42	4.77
7628.0	0.1	9.7	100		35	50.32	4.77
7629.0	0.1	9.6	100		38	50.23	4.77
7630.0	0.1	9.4	100		38	50.13	4.77
7631.0	0.2	9.9	100		41	50.03	4.77
7632.0	0.1	8.9	100		41	49.94	4.77

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DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7633.0	0.0	8.3	100		40	49.85	4.77
7634.0	0.0	7.2	100		42	49.77	4.77
7635.0	0.0	7.1	100		42	49.70	4.77
7636.0	0.1	8.5	100		38	49.62	4.77
7637.0	0.1	8.9	100		36	49.54	4.77
7638.0	0.0	8.3	100		38	49.45	4.77
7639.0	0.0	7.7	100		41	49.37	4.77
7640.0	0.0	7.5	100		45	49.30	4.77
7641.0	0.0	7.0	100		48	49.22	4.77
7642.0	0.0	7.3	100		45	49.15	4.77
7643.0	0.0	8.1	100		42	49.08	4.77
7644.0	0.1	8.7	100		40	49.00	4.77
7645.0	0.0	7.4	100		45	48.91	4.77
7646.0	0.1	8.6	100		43	48.83	4.77
7647.0	0.1	8.6	100		42	48.75	4.77
7648.0	0.0	8.0	100		43	48.66	4.77
7649.0	0.0	6.8	100		47	48.59	4.77
7650.0	0.0	5.4	100		49	48.52	4.77
7668.0	0.0	6.5	100		46	47.95	4.77
7669.0	0.0	7.5	100		48	47.88	4.77
7676.0	0.0	5.8	100		[illegible]	47.41	4.77
7677.0	0.0	6.0	100		48	47.35	4.77
7687.0	0.1	9.3	100		43	46.83	4.77
7730.0	0.0	5.8	100		49	46.38	4.77
7731.0	0.0	7.1	100		36	46.33	4.77
7732.0	0.0	4.5	100		43	46.25	4.77
7737.0	0.1	8.7	100		49	45.95	4.77
7738.0	0.1	9.2	100		46	45.87	4.77
7739.0	0.0	8.1	100		46	45.78	4.77
7740.0	0.0	6.6	100		45	45.70	4.77
7741.0	0.0	7.5	100		42	45.63	4.77
7742.0	0.0	7.7	100		46	45.55	4.77
7953.0	0.0	7.7	73		38	44.26	4.76
7954.0	0.0	8.2	84		31	44.18	4.74
7957.0	0.0	5.2	100		50	44.06	4.73
7959.0	0.0	4.3	100		50	43.98	4.73
7961.0	0.0	3.2	100		48	43.93	4.73
7977.0	0.0	3.3	100		49	43.81	4.73

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7978.0	0.0	5.5	100		48	43.77	4.73
8001.0	0.0	3.8	100		50	43.38	4.73
8009.0	0.0	4.3	100		49	43.35	4.73
8010.0	0.0	4.0	100		48	43.30	4.73
8011.0	0.0	3.8	100		49	43.26	4.73
8012.0	0.0	3.5	100		49	43.23	4.73
8014.0	0.0	3.4	100		47	43.17	4.73
8015.0	0.0	5.2	100		41	43.13	4.73
8016.0	0.0	0.2	100		47	43.09	4.73
8017.0	0.0	0.8	100		49	43.09	4.73
8018.0	0.0	3.7	100		48	43.06	4.73
8107.0	0.0	5.1	100		49	42.86	4.73
8109.0	0.0	6.9	100		44	42.75	4.73
8110.0	0.0	6.6	100		41	42.68	4.73
8111.0	0.0	5.2	100		45	42.61	4.73
8118.0	0.0	6.2	100		50	42.42	4.73
8119.0	0.0	6.1	100		45	42.36	4.73
8120.0	0.0	6.9	100		41	42.30	4.73
8121.0	0.0	7.1	100		40	42.23	4.73
8122.0	0.0	5.7	100		45	42.16	4.73
8125.0	0.0	7.8	100		46	41.97	4.73
8126.0	0.0	7.6	100		41	41.90	4.73
8127.0	0.0	5.7	100		41	41.82	4.73
8128.0	0.0	6.2	100		40	41.76	4.73
8129.0	0.0	6.3	100		41	41.70	4.73
8132.0	0.0	5.3	100		44	41.63	4.73
8133.0	0.0	6.1	100		48	41.57	4.73
8138.0	0.0	6.8	100		42	41.30	4.73
8139.0	0.0	7.9	100		38	41.22	4.73
8140.0	0.0	7.7	100		39	41.14	4.73
8141.0	0.0	6.8	100		40	41.07	4.73
8142.0	0.0	5.2	100		41	41.00	4.73
8149.0	0.0	8.1	100		49	40.89	4.73
8150.0	0.0	6.5	100		40	40.81	4.73
8151.0	0.0	4.2	100		45	40.75	4.73
8152.0	0.0	4.5	100		44	40.71	4.73
8153.0	0.0	5.9	100		41	40.66	4.73
8154.0	0.0	4.8	100		47	40.61	4.73

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DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8155.0	0.0	5.4	100		49	40.56	4.73
8158.0	0.0	4.3	100		48	40.45	4.73
8159.0	0.0	5.3	100		43	40.41	4.73
8160.0	0.0	4.3	100		45	40.36	4.73
8341.0	0.0	4.8	100		43	40.11	4.73
8342.0	0.0	7.1	100		39	40.05	4.73
8343.0	0.0	6.4	100		42	39.98	4.73
8347.0	0.0	5.4	100		48	39.78	4.73
8352.0	0.0	4.3	100		47	39.68	4.73
8353.0	0.0	2.9	100		50	39.64	4.73
8356.0	0.0	4.1	100		45	39.58	4.73
8357.0	0.0	3.5	100		47	39.54	4.73
8360.0	0.0	1.3	100		49	39.50	4.73
8361.0	0.0	3.9	100		44	39.48	4.73
8362.0	0.0	4.5	100		45	39.44	4.73
8363.0	0.0	4.2	100		48	39.39	4.73
8364.0	0.0	4.0	100		49	39.35	4.73
8365.0	0.0	3.8	100		49	39.31	4.73
8367.0	0.0	4.5	100		49	39.25	4.73
8368.0	0.0	5.2	100		50	39.20	4.73
8369.0	0.0	5.1	100		49	39.15	4.73
8370.0	0.0	4.9	100		47	39.10	4.73
8371.0	0.0	4.2	100		48	39.05	4.73
8372.0	0.0	5.5	100		45	39.01	4.73
8373.0	0.0	3.8	100		47	38.96	4.73
8374.0	0.0	3.4	100		47	38.92	4.73
8375.0	0.0	3.0	100		49	38.89	4.73
8376.0	0.0	3.4	100		48	38.86	4.73
8377.0	0.0	4.0	100		46	38.82	4.73
8378.0	0.0	3.5	100		47	38.78	4.73
8379.0	0.0	3.7	100		44	38.75	4.73
8380.0	0.0	2.6	100		50	38.71	4.73
8387.0	0.0	3.5	100		45	38.66	4.73
8388.0	0.0	2.6	100		48	38.63	4.73
8392.0	0.0	3.1	100		50	38.60	4.73
8393.0	0.0	0.8	100		49	38.58	4.73
8394.0	0.0	2.0	100		45	38.57	4.73
8395.0	0.0	4.0	100		46	38.54	4.73
8396.0	0.0	4.5	100		44	38.50	4.73

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DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8397.0	0.0	6.0	100		38	38.45	4.73

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ISS -	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	0	0	1	1	0	1	1	0	2	1	0	0	0	0	0	0	1	0	0	0	0

INPUT PARAMETERS FROM 9590. TO 8400.

WMUD	XLIT	BITSZ	BHT	BHTDEP	SUFT	RMF	RMFT	ROMFS	PHIMFS	DASIL
9.8	0.50	8.75	152.	9596.	30.	0.16	152.	1.013	0.990	0.600

SPCK	DSPCK	RODC	DELRGM	START	STOPLG	ZSPNL	BGN	ZSPDL	REC	RESH	CSS
0.	0.	2.84	0.20	9590.	6000.	0.000	1.00	0.000	13.80	20.00	0.2

WHY	PHILEV	BR	SLIM	AK	PK	SK	STOPIN	PHIMAX	PHINCL	PHIDCL
.200	0.000	.10	0.30	62500.	6.0	2.0	8400.	0.200	0.320	0.010

PHINSO	RTPM	PUN	DAX	DALIM	DAGA	DASH	DTSD	DTSH	CP	PSSH
0.180	464.	.018	85.	54.	40.	109.	150.	150.	1.00	.300

EDIAM	PNLIM	PDLIM	RLIM	GRLIM	VARMC	CONST	ROP	VARLIM	CSF
0.00	1.00	1.00	1000.0	1000.0	0.07	0.333	0.70	0.20	0.50

RESISTIVITY STATISTICS OVER ENTIRE INTERVAL

GAMMA - RAY STATISTICS OVER ENTIRE INTERVAL

SONIC STATISTICS OVER ENTIRE INTERVAL

ANALYSIS BY QUASI MODEL
PERMEABILITY BY TIMUR EQUATION
SONIC COEFF. FROM STATISTICS
WASAMP ROUTINE USED

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DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8402.0	0.0	6.6	100		46	38.32	4.73
8403.0	0.0	7.7	95		40	38.25	4.73
8404.0	0.0	6.8	100		46	38.17	4.73
8405.0	0.0	7.2	99		49	38.11	4.73
8406.0	0.0	6.2	100		49	38.04	4.73
8407.0	0.0	7.9	100		42	37.98	4.73
8408.0	0.0	7.3	100		46	37.90	4.73
8417.0	0.0	7.4	98		43	37.66	4.73
8418.0	0.0	5.7	100		45	37.59	4.72
8493.0	400	30.8	35		32	35.63	4.65
8494.0	2	13.4	89		19	35.38	4.51
8495.0	0.0	8.1	100		10	35.28	4.50
8496.0	0.3	10.7	100		7	35.18	4.50
8497.0	0.3	10.7	100		9	35.08	4.50
8498.0	0.4	11.2	100		11	34.97	4.50
8499.0	0.5	11.4	99		15	34.85	4.50
8500.0	0.3	10.6	100		9	34.74	4.50
8501.0	0.3	10.6	96		15	34.64	4.50
8502.0	0.4	11.1	92		17	34.53	4.50
8503.0	0.5	11.3	98		11	34.42	4.49
8504.0	0.4	10.9	100		8	34.31	4.49
8505.0	0.6	11.8	99		10	34.20	4.49
8506.0	0.9	12.2	98		8	34.08	4.49
8507.0	0.7	11.9	92		13	33.96	4.48
8508.0	0.7	11.9	96		9	33.84	4.47
8509.0	0.7	11.8	84		9	33.72	4.47
8510.0	0.2	10.0	70		12	33.60	4.45
8511.0	0.7	9.9	65		11	33.50	4.42
8512.0	0.4	10.8	69		8	33.40	4.38
8513.0	0.3	10.6	70		13	33.30	4.35
8514.0	0.4	11.1	69		12	33.19	4.32
8515.0	0.8	12.0	71		9	33.08	4.28
8516.0	0.8	12.0	76		8	32.96	4.25
8517.0	0.6	11.6	79		13	32.83	4.22
8518.0	0.7	11.9	85		11	32.72	4.20
8519.0	0.9	12.2	91		9	32.60	4.18
8520.0	1	12.4	96		9	32.48	4.17
8521.0	0.9	12.4	95		11	32.35	4.17
8522.0	0.7	12.0	98		12	32.23	4.16
8523.0	1	12.6	98		8	32.11	4.16
8524.0	0.8	12.2	96		11	31.98	4.16
8525.0	0.7	12.0	86		10	31.86	4.15
8526.0	0.4	10.9	69		12	31.74	4.13
8527.0	0.7	9.4	60		22	31.64	4.09
8528.0	0.0	5.3	100		46	31.55	4.06
8532.0	0.0	5.8	100		47	31.49	4.06

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8533.0	0.0	6.3	100		45	31.43	4.06
8534.0	0.0	7.7	100		32	31.37	4.06
8535.0	0.2	9.7	96		18	31.28	4.06
8536.0	0.2	9.7	72		18	31.18	4.05
8537.0	0.0	7.1	69		29	31.09	4.02
8538.0	0.0	6.5	98		32	31.03	4.01
8539.0	0.1	9.4	79		24	30.95	4.00
8540.0	0.5	11.3	97		9	30.86	3.99
8541.0	0.5	11.3	100		0	30.75	3.98
8542.0	0.3	10.8	96		3	30.63	3.98
8543.0	0.5	11.3	100		5	30.52	3.98
8544.0	0.2	10.1	86		2	30.42	3.98
8545.0	0.1	9.0	76		23	30.32	3.96
8546.0	0.0	8.2	100		20	30.23	3.95
8547.0	0.1	9.2	100		1	30.15	3.95
8548.0	0.5	11.3	100		4	30.05	3.95
8549.0	1	12.6	98		4	29.93	3.95
8550.0	0.1	9.6	74		13	29.82	3.94
8551.0	0.0	5.6	99		40	29.73	3.91
8554.0	0.0	4.5	100		34	29.65	3.91
8555.0	0.1	8.7	100		5	29.60	3.91
8556.0	1	12.4	78		5	29.50	3.91
8557.0	0.9	12.2	92		5	29.37	3.88
8558.0	0.8	12.1	99		3	29.25	3.87
8559.0	0.8	12.1	99		5	29.12	3.87
8560.0	0.8	12.2	99		5	29.00	3.87
8561.0	0.7	11.9	91		8	28.88	3.87
8562.0	0.4	11.2	72		13	28.77	3.85
8563.0	1	11.3	65		9	28.65	3.82
8564.0	0.9	9.0	47		13	28.55	3.77
8565.0	0.9	10.1	59		13	28.46	3.73
8566.0	0.8	12.2	87		11	28.35	3.69
8567.0	1	12.6	100		8	28.23	3.68
8568.0	5	15.5	91		7	28.09	3.68
8569.0	3	14.3	85		8	27.94	3.66
8570.0	3	14.1	96		10	27.79	3.65
8571.0	1	13.1	98		11	27.66	3.64
8572.0	1	12.6	100		12	27.53	3.64
8573.0	1	12.4	98		12	27.40	3.64
8574.0	0.8	12.1	95		13	27.28	3.64
8575.0	0.7	11.9	95		14	27.15	3.63
8576.0	0.7	11.9	93		11	27.03	3.62
8577.0	0.4	11.0	92		12	26.92	3.61
8578.0	0.1	9.2	87		13	26.81	3.60
8579.0	0.1	6.4	56		18	26.73	3.58
8580.0	0.1	5.3	52		25	26.67	3.56
8581.0	0.0	6.0	75		26	26.61	3.53

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8582.0	0.0	5.4	100		36	26.55	3.52
8583.0	0.0	5.8	100		49	26.51	3.52
8589.0	0.2	10.3	100		19	26.30	3.52
8590.0	0.1	9.6	99		17	26.19	3.52
8591.0	0.0	7.3	100		34	26.10	3.52
8592.0	0.2	10.3	98		21	26.02	3.52
8593.0	0.4	11.1	98		20	25.92	3.52
8594.0	.2	9.9	99		23	25.81	3.51
8595.0	0.2	10.3	99		17	25.71	3.51
8596.0	0.3	10.9	99		17	25.61	3.51
8597.0	0.2	10.1	98		26	25.50	3.51
8598.0	0.1	8.5	100		33	25.40	3.51
8599.0	0.3	10.4	100		20	25.31	3.51
8600.0	0.2	10.0	100		32	25.21	3.51
8624.0	0.0	7.8	100		33	24.44	3.51
8625.0	0.8	12.2	76		15	24.36	3.50
8626.0	0.4	11.0	82		18	24.24	3.47
8627.0	0.2	9.9	76		21	24.13	3.46
8628.0	0.1	9.4	69		33	24.03	3.43
8629.0	0.7	9.9	66		41	23.94	3.40
8634.0	0.0	7.2	100		46	23.55	3.33
8641.0	0.0	8.3	86		19	23.24	3.33
8642.0	0.1	9.1	80		17	23.15	3.32
8643.0	0.1	8.7	78		23	23.06	3.30
8644.0	0.0	6.2	100		43	22.98	3.29
8654.0	0.0	5.4	100		47	22.83	3.29
8655.0	0.0	6.8	100		46	22.77	3.29
8656.0	0.0	6.2	100		48	22.70	3.29
8673.0	0.0	5.1	100		42	22.36	3.29
8674.0	0.0	6.3	99		42	22.31	3.29
8675.0	0.3	8.4	66		41	22.24	3.28
8684.0	0.0	5.3	100		49	22.03	3.26
8691.0	0.0	5.9	100		50	21.79	3.26
8692.0	0.0	7.5	100		47	21.72	3.26
8704.0	0.0	0.0	100		41	21.55	3.26
8705.0	0.0	5.7	100		34	21.53	3.26
8706.0	0.0	4.6	100		34	21.47	3.26
8768.0	0.0	5.9	100		41	20.87	3.26

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8769.0	0.0	6.7	100		42	20.80	3.26
8770.0	0.1	8.6	72		38	20.73	3.25
8771.0	0.2	10.5	71		30	20.64	3.23
8772.0	0.5	11.4	71		24	20.53	3.20
8773.0	0.1	9.4	72		29	20.42	3.16
8774.0	0.1	8.6	71		36	20.33	3.14
8775.0	0.0	6.8	97		44	20.25	3.12
8776.0	0.0	4.6	100		50	20.19	3.11
8778.0	0.0	5.8	100		41	20.12	3.11
8779.0	0.0	7.7	100		37	20.05	3.11
8780.0	0.0	7.4	90		36	19.97	3.10
8781.0	0.0	3.5	100		42	19.91	3.10
8782.0	0.0	1.1	100		49	19.87	3.10
8784.0	0.0	6.9	100		45	19.83	3.10
8785.0	0.0	6.6	100		49	19.75	3.10
8787.0	0.0	6.3	100		45	19.65	3.10
8788.0	0.0	5.6	100		47	19.58	3.10
8792.0	0.0	5.3	100		44	19.47	3.10
8793.0	0.0	4.6	100		43	19.41	3.10
8794.0	0.0	0.4	100		50	19.38	3.10
8800.0	0.0	4.9	100		46	19.33	3.10
8801.0	0.0	5.0	100		47	19.28	3.10
8802.0	0.0	5.0	100		47	19.23	3.10
8803.0	0.0	4.7	100		49	19.18	3.10
8807.0	0.0	6.6	100		50	19.07	3.10
8986.0	0.2	10.4	72		15	16.92	3.09
8987.0	1	11.3	63		12	16.82	3.06
8988.0	0.5	9.0	62		23	16.71	3.02
8989.0	0.0	4.6	100		39	16.63	2.99
8997.0	0.0	6.4	95		40	16.52	2.99
8998.0	0.0	6.1	96		40	16.45	2.99
8999.0	0.0	6.0	85		43	16.39	2.98
9000.0	0.1	6.3	65		42	16.33	2.97
9001.0	0.1	6.6	61		40	16.27	2.95
9002.0	0.2	6.8	56		38	16.20	2.92
9003.0	0.3	7.6	53		34	16.13	2.89
9004.0	0.3	7.6	53		34	16.06	2.85
9005.0	0.3	7.5	53		36	15.98	2.82
9006.0	0.3	7.3	48		38	15.91	2.78
9007.0	0.1	6.4	63		41	15.83	2.75

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
9008.0	0.0	5.9	86		42	15.77	2.73
9033.0	0.0	5.8	85		41	15.41	2.71
9034.0	0.0	6.5	87		46	15.34	2.69
9037.0	0.0	4.5	100		49	15.23	2.69
9046.0	0.0	0.0	100		46	15.18	2.69
9047.0	0.0	0.1	100		34	15.18	2.69
9076.0	3	13.0	61		40	15.03	2.69
9077.0	2000	31.4	18		42	14.86	2.59
9078.0	400	22.9	19		50	14.52	2.31
9079.0	5	13.9	55		20	14.32	2.17
9080.0	0.5	11.2	67		12	14.19	2.11
9081.0	0.2	10.0	70		9	14.06	2.08
9082.0	0.1	9.5	69		8	13.98	2.05
9083.0	0.2	9.9	67		6	13.89	2.02
9084.0	0.6	9.3	63		9	13.79	1.99
9085.0	0.6	9.1	60		13	13.70	1.95
9086.0	0.6	8.9	57		16	13.61	1.91
9087.0	0.8	9.4	56		12	13.52	1.88
9088.0	0.9	9.8	56		9	13.42	1.83
9089.0	0.6	8.5	52		16	13.32	1.79
9090.0	0.2	6.9	53		26	13.24	1.75
9091.0	0.3	7.6	54		21	13.18	1.72
9092.0	0.4	8.0	56		18	13.10	1.69
9093.0	0.5	8.5	56		14	13.02	1.65
9094.0	0.4	8.1	53		18	12.93	1.61
9095.0	0.4	7.9	52		20	12.85	1.58
9096.0	0.5	8.6	55		13	12.77	1.54
9097.0	0.4	8.1	57		16	12.69	1.50
9098.0	0.6	9.1	61		12	12.60	1.46
9099.0	0.5	9.3	65		12	12.51	1.43
9100.0	0.3	8.1	62		16	12.42	1.40
9101.0	0.3	7.7	55		21	12.34	1.36
9102.0	0.2	6.8	49		27	12.27	1.33
9103.0	0.0	5.0	88		34	12.20	1.30
9106.0	1	9.7	50		20	12.11	1.28
9107.0	1	10.2	59		7	12.01	1.23
9108.0	0.1	9.6	73		7	11.91	1.20
9109.0	0.2	10.1	71		7	11.81	1.17
9110.0	0.1	9.6	67		13	11.71	1.14
9111.0	0.4	8.3	57		23	11.62	1.11
9112.0	0.4	7.9	53		26	11.54	1.07
9113.0	0.2	7.0	54		27	11.46	1.03
9114.0	0.1	6.6	64		23	11.39	1.01

Schlumberger

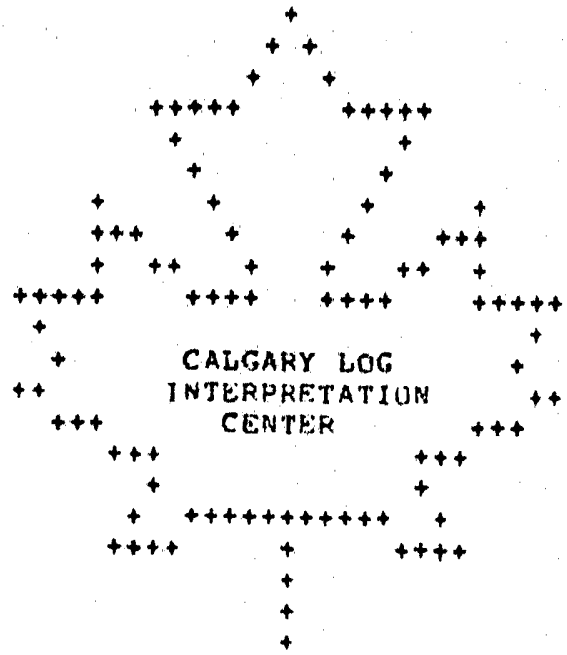
DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
9115.0	0.0	7.1	67		21	11.33	0.99
9116.0	0.1	8.6	67		20	11.25	0.96
9117.0	0.3	8.3	67		22	11.17	0.94
9118.0	0.2	7.1	66		27	11.09	0.91
9119.0	0.0	5.7	92		39	11.02	0.88
9120.0	0.0	5.6	89		42	10.96	0.88
9121.0	0.0	5.3	97		47	10.91	0.87
9125.0	0.0	4.3	100		46	10.79	0.87
9143.0	0.0	3.5	100		50	10.65	0.87
9150.0	0.0	5.1	100		46	10.53	0.87
9151.0	0.0	5.1	100		49	10.48	0.87
9152.0	0.0	5.8	100		46	10.42	0.87
9153.0	0.0	5.7	100		44	10.36	0.87
9154.0	0.0	5.6	100		34	10.31	0.87
9155.0	0.0	5.9	100		26	10.25	.87
9156.0	0.0	3.2	100		47	10.20	.87
9160.0	0.0	3.5	100		46	10.06	0.87
9161.0	0.0	7.8	83		24	10.01	0.87
9162.0	0.0	7.1	72		23	9.93	0.85
9163.0	0.0	3.9	100		30	9.87	0.84
9170.0	0.0	6.3	100		30	9.76	0.84
9171.0	0.0	6.2	100		32	9.69	0.84
9172.0	0.1	8.6	88		27	9.62	0.84
9173.0	0.0	8.2	97		22	9.54	0.83
9174.0	0.0	5.9	100		30	9.46	0.83
9176.0	0.0	6.2	100		33	9.38	0.83
9177.0	0.0	6.8	100		31	9.31	0.83
9184.0	0.0	6.0	100		32	9.24	0.83
9185.0	0.0	7.8	80		6	9.17	0.83
9186.0	0.0	4.4	100		17	9.09	0.80
9187.0	0.0	2.0	100		28	9.07	0.80
9188.0	0.1	9.0	100		0	9.02	0.80
9189.0	0.0	7.1	75		2	8.93	0.80
9190.0	0.0	6.9	100		0	8.86	0.78
9191.0	0.0	6.2	69		3	8.80	0.78
9192.0	0.1	6.2	50		4	8.74	0.76
9193.0	0.1	5.9	50		17	8.68	0.73
9194.0	0.0	5.3	100		39	8.62	0.71
9195.0	0.0	7.0	100		41	8.56	0.71
9196.0	0.0	6.9	100		44	8.49	0.71
9197.0	0.0	7.0	100		45	8.42	0.71

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
9198.0	0.0	7.2	100		44	8.35	0.71
9199.0	0.0	7.1	100		44	8.28	0.71
9200.0	0.0	7.1	100		44	8.21	0.71
9201.0	0.0	6.4	100		42	8.14	0.71
9202.0	0.0	4.8	100		47	8.08	0.71
9203.0	0.0	5.3	100		50	8.03	0.71
9204.0	0.0	5.9	100		46	7.98	0.71
9205.0	0.0	5.5	100		48	7.92	0.71
9413.0	0.0	4.6	100		45	3.68	0.71
9433.0	0.0	5.6	95		36	3.41	0.71
9434.0	0.1	6.5	58		27	3.35	0.69
9435.0	0.3	7.5	52		18	3.28	0.66
9436.0	0.3	7.4	55		14	3.20	0.63
9437.0	0.2	6.9	54		15	3.13	0.59
9438.0	0.2	6.6	50		15	3.06	0.56
9439.0	0.2	6.5	47		19	3.00	0.53
9440.0	0.3	7.2	50		22	2.93	0.49
9441.0	0.2	7.0	54		27	2.86	0.46
9442.0	0.2	6.7	56		30	2.79	0.42
9443.0	0.1	6.5	57		32	2.72	0.40
9444.0	0.2	6.9	53		28	2.65	0.37
9445.0	0.1	6.3	54		24	2.59	0.34
9446.0	0.1	6.0	54		20	2.53	0.31
9447.0	0.1	6.2	55		19	2.47	0.28
9448.0	0.1	6.3	56		14	2.40	0.25
9449.0	0.2	7.5	60		8	2.33	0.22
9450.0	0.2	6.9	58		10	2.26	0.19
9451.0	0.2	6.7	59		12	2.19	0.16
9452.0	0.2	7.5	63		14	2.12	0.13
9453.0	0.1	6.6	61		19	2.05	0.11
9454.0	0.0	4.4	98		24	1.99	0.08
9455.0	0.0	3.9	100		25	1.94	0.08
9456.0	0.0	2.4	100		40	1.91	0.08
9457.0	0.0	2.9	100		47	1.88	0.08
9458.0	0.0	5.0	99		42	1.85	0.08
9459.0	0.1	6.9	63		29	1.79	0.07
9460.0	0.0	5.2	100		38	1.73	0.06
9461.0	0.0	5.0	100		38	1.67	0.05
9462.0	0.0	3.4	100		44	1.63	0.05
9463.0	0.0	3.9	100		38	1.59	0.05
9464.0	0.0	2.5	100		50	1.56	0.05
9467.0	0.0	5.6	73		31	1.50	0.05
9468.0	0.1	5.6	67		31	1.44	0.03
9471.0	0.0	5.5	95		25	1.38	0.02

Schlumberger

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
9472.0	0.0	5.7	95		23	1.33	0.02
9473.0	0.0	5.4	98		26	1.27	0.02
9476.0	0.0	3.2	100		45	1.20	0.02
9477.0	0.0	2.8	100		46	1.16	0.02
9478.0	0.0	1.9	100		50	1.14	0.02
9488.0	0.0	4.8	100		45	1.04	0.02
9489.0	0.0	5.3	100		44	0.99	0.02
9490.0	0.0	5.0	99		43	0.94	0.02
9491.0	0.0	3.7	100		49	0.90	0.02
9496.0	0.0	3.6	100		39	0.85	0.02
9497.0	0.1	6.8	65		30	0.81	0.02
9498.0	0.0	6.5	92		33	0.75	0.00
9499.0	0.0	4.3	100		43	0.69	0.00
9504.0	0.0	4.0	100		49	0.53	0.00
9505.0	0.0	3.8	100		48	0.49	0.00
9526.0	0.0	3.5	100		44	0.07	0.00
9527.0	0.0	3.6	100		43	0.04	0.00



TABULAR LISTING OF MPL INTERPRETATION

SHELL CANADA LTD.

SHELL NIGLINTGAK H-19

WILDCAT

N.W.T.

CANADA

JOB C-50520

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
6058.0	4.00	1.34	0.33	0.297	0.305	0.201	1.00	1.00	0.00	0.141	0.83
6059.0	4.08	1.34	0.33	0.324	0.309	0.199	1.00	1.00	0.00	0.134	0.84
6060.0	4.16	1.33	0.32	0.373	0.315	0.197	1.00	1.00	0.00	0.123	0.86
6061.0	4.41	1.39	0.32	0.320	0.308	0.188	1.00	1.00	0.00	0.128	0.84
6062.0	4.45	1.41	0.32	0.292	0.305	0.187	1.00	1.00	0.00	0.132	0.83
6063.0	4.15	1.36	0.33	0.307	0.307	0.196	1.00	1.00	0.00	0.136	0.84
6064.0	4.02	1.32	0.33	0.344	0.311	0.201	1.00	1.00	0.00	0.132	0.85
6065.0	3.99	1.30	0.32	0.380	0.316	0.202	1.00	1.00	0.00	0.125	0.86
6066.0	4.42	1.35	0.31	0.406	0.319	0.189	1.00	1.00	0.00	0.112	0.87
6069.0	4.10	1.30	0.32	0.400	0.318	0.199	1.00	1.00	0.00	0.119	0.87
6070.0	3.94	1.29	0.33	0.382	0.316	0.204	1.00	1.00	0.00	0.126	0.86
6071.0	4.01	1.28	0.32	0.414	0.320	0.202	1.00	1.00	0.00	0.118	0.88
6072.0	3.97	1.28	0.32	0.408	0.319	0.203	1.00	1.00	0.00	0.120	0.87
6073.0	3.97	1.31	0.33	0.346	0.311	0.203	1.00	1.00	0.00	0.133	0.85
6074.0	3.78	1.30	0.34	0.303	0.306	0.209	1.00	1.00	0.00	0.146	0.84
6075.0	4.04	1.32	0.33	0.342	0.311	0.200	1.00	1.00	0.00	0.132	0.85
6076.0	4.24	1.36	0.32	0.331	0.310	0.194	1.00	1.00	0.00	0.129	0.85
6077.0	4.13	1.37	0.33	0.273	0.302	0.197	1.00	1.00	0.00	0.143	0.83
6078.0	4.45	1.44	0.32	0.248	0.299	0.187	1.00	1.00	0.00	0.140	0.82
6079.0	4.70	1.47	0.31	0.257	0.300	0.179	1.00	1.00	0.00	0.133	0.82
6080.0	4.49	1.43	0.32	0.264	0.301	0.185	1.00	1.00	0.00	0.136	0.82
6081.0	4.18	1.37	0.33	0.287	0.304	0.195	1.00	1.00	0.00	0.139	0.83
6082.0	6.03	1.68	0.28	0.231	0.297	0.148	1.00	1.00	0.00	0.114	0.81
6083.0	6.55	1.72	0.26	0.281	0.303	0.138	1.00	1.00	0.00	0.099	0.82
6084.0	4.23	1.33	0.32	0.379	0.315	0.194	1.00	0.92	0.00	0.121	0.86
6085.0	4.30	1.40	0.33	0.274	0.303	0.191	1.00	1.00	0.00	0.139	0.83
6086.0	4.67	1.48	0.32	0.237	0.298	0.180	1.00	1.00	0.00	0.137	0.81
6087.0	4.88	1.48	0.30	0.291	0.305	0.175	1.00	1.00	0.00	0.124	0.83
6088.0	4.52	1.40	0.31	0.335	0.310	0.185	1.00	1.00	0.00	0.123	0.85
6089.0	4.40	1.41	0.32	0.292	0.305	0.188	1.00	1.00	0.00	0.133	0.83
6090.0	4.38	1.40	0.32	0.289	0.304	0.189	1.00	1.00	0.00	0.135	0.83
6091.0	4.28	1.38	0.32	0.308	0.307	0.192	1.00	1.00	0.00	0.133	0.84
6092.0	4.38	1.35	0.31	0.393	0.317	0.190	1.00	1.00	0.00	0.115	0.87
6093.0	4.54	1.34	0.30	0.453	0.325	0.185	1.00	1.00	0.00	0.101	0.89
6094.0	4.43	1.38	0.31	0.345	0.311	0.188	1.00	1.00	0.00	0.123	0.85
6095.0	4.24	1.40	0.33	0.254	0.300	0.193	1.00	0.98	0.00	0.144	0.82
6096.0	4.38	1.44	0.33	0.222	0.296	0.188	1.00	1.00	0.00	0.147	0.81
6097.0	4.59	1.46	0.32	0.247	0.299	0.182	1.00	1.00	0.00	0.137	0.82
6098.0	4.53	1.43	0.32	0.279	0.303	0.185	1.00	1.00	0.00	0.133	0.83
6099.0	4.68	1.47	0.31	0.254	0.300	0.180	1.00	1.00	0.00	0.134	0.82
6100.0	4.13	1.36	0.33	0.298	0.305	0.197	1.00	1.00	0.00	0.138	0.83
6101.0	3.90	1.35	0.35	0.228	0.297	0.204	1.00	1.00	0.00	0.157	0.81
6102.0	3.39	1.29	0.38	0.166	0.289	0.221	1.00	0.95	0.00	0.184	0.80
6125.0	3.86	1.32	0.34	0.279	0.303	0.206	1.00	1.00	0.00	0.148	0.83
6126.0	4.03	1.36	0.34	0.260	0.301	0.200	1.00	1.00	0.00	0.148	0.82

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DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
6127.0	4.12	1.39	0.34	0.230	0.297	0.196	1.00	1.00	0.00	0.151	0.81
6128.0	4.38	1.43	0.33	0.240	0.298	0.188	1.00	1.00	0.00	0.143	0.81
6129.0	4.37	1.40	0.32	0.302	0.306	0.190	1.00	1.00	0.00	0.132	0.84
6130.0	4.29	1.39	0.32	0.292	0.305	0.192	1.00	1.00	0.00	0.136	0.83
6131.0	4.43	1.44	0.33	0.226	0.297	0.187	1.00	0.95	0.00	0.145	0.81
6132.0	4.18	1.40	0.33	0.231	0.297	0.194	1.00	0.89	0.00	0.149	0.81
6133.0	3.81	1.35	0.35	0.212	0.295	0.206	1.00	0.91	0.00	0.163	0.81
6134.0	3.72	1.34	0.36	0.200	0.293	0.209	1.00	0.96	0.00	0.167	0.80
6135.0	3.82	1.35	0.35	0.201	0.294	0.206	1.00	0.95	0.00	0.165	0.80
6136.0	3.86	1.35	0.35	0.213	0.295	0.205	1.00	1.00	0.00	0.161	0.81
6137.0	3.92	1.34	0.34	0.257	0.300	0.203	1.00	1.00	0.00	0.151	0.82
6138.0	4.03	1.35	0.34	0.271	0.302	0.200	1.00	0.99	0.00	0.146	0.83
6139.0	3.42	1.26	0.37	0.238	0.298	0.221	1.00	0.86	0.00	0.169	0.82
6140.0	3.14	1.22	0.39	0.204	0.294	0.233	1.00	0.76	0.00	0.185	0.81
6141.0	3.41	1.24	0.36	0.289	0.304	0.223	1.00	0.85	0.00	0.158	0.83
6142.0	3.62	1.27	0.35	0.308	0.307	0.215	1.00	0.90	0.00	0.149	0.84
6143.0	3.66	1.27	0.35	0.318	0.308	0.213	1.00	0.90	0.00	0.146	0.84
6144.0	3.83	1.33	0.35	0.255	0.300	0.206	1.00	0.88	0.00	0.154	0.82
6145.0	3.74	1.32	0.35	0.229	0.297	0.209	1.00	0.86	0.00	0.161	0.81
6146.0	3.74	1.32	0.35	0.231	0.297	0.209	1.00	0.90	0.00	0.161	0.81
6147.0	3.67	1.30	0.35	0.254	0.300	0.212	1.00	0.83	0.00	0.158	0.82
6148.0	3.59	1.26	0.35	0.309	0.307	0.216	1.00	0.79	0.00	0.149	0.84
6149.0	3.75	1.31	0.35	0.258	0.301	0.209	1.00	0.87	0.00	0.155	0.82
6150.0	3.94	1.37	0.35	0.207	0.294	0.202	1.00	0.96	0.00	0.160	0.81
6151.0	4.12	1.38	0.34	0.242	0.299	0.197	1.00	1.00	0.00	0.149	0.82
6152.0	4.05	1.35	0.33	0.279	0.303	0.199	1.00	0.99	0.00	0.144	0.83
6153.0	4.04	1.36	0.34	0.270	0.302	0.200	1.00	0.94	0.00	0.146	0.83
6154.0	4.06	1.36	0.33	0.280	0.303	0.199	1.00	0.96	0.00	0.143	0.83
6155.0	4.02	1.32	0.33	0.344	0.311	0.201	1.00	1.00	0.00	0.132	0.85
6156.0	4.02	1.32	0.33	0.336	0.310	0.201	1.00	1.00	0.00	0.134	0.85
6157.0	4.05	1.37	0.34	0.254	0.300	0.199	1.00	0.98	0.00	0.148	0.82
6158.0	3.64	1.28	0.35	0.289	0.304	0.214	1.00	0.95	0.00	0.152	0.83
6159.0	4.29	1.38	0.32	0.314	0.307	0.192	1.00	1.00	0.00	0.132	0.84
6160.0	7.49	1.86	0.25	0.255	0.300	0.122	1.00	1.00	0.00	0.091	0.81
6161.0	6.73	1.70	0.25	0.349	0.312	0.134	1.00	1.00	0.00	0.087	0.85
6162.0	2.87	1.07	0.37	0.454	0.325	0.250	1.00	1.00	0.00	0.137	0.89
6163.0	2.78	1.14	0.41	0.228	0.297	0.250	1.00	0.81	0.00	0.193	0.82
6164.0	3.11	1.23	0.40	0.179	0.291	0.233	1.00	0.85	0.00	0.191	0.80
6165.0	3.44	1.25	0.36	0.278	0.303	0.221	1.00	0.95	0.00	0.160	0.83
6166.0	3.58	1.25	0.35	0.326	0.309	0.217	1.00	0.95	0.00	0.146	0.85
6167.0	3.57	1.25	0.35	0.320	0.308	0.217	1.00	0.96	0.00	0.147	0.84
6168.0	3.76	1.31	0.35	0.275	0.303	0.209	1.00	0.90	0.00	0.152	0.83
6169.0	3.93	1.33	0.34	0.280	0.303	0.203	1.00	0.89	0.00	0.146	0.83
6170.0	3.79	1.33	0.35	0.232	0.297	0.207	1.00	0.90	0.00	0.159	0.81
6171.0	5.48	1.58	0.29	0.265	0.301	0.160	1.00	1.00	0.00	0.118	0.82
6175.0	3.67	1.29	0.35	0.277	0.303	0.213	1.00	0.83	0.00	0.154	0.83
6176.0	3.37	1.24	0.37	0.259	0.301	0.224	1.00	0.82	0.00	0.166	0.83

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
6177.0	3.35	1.27	0.38	0.202	0.294	0.224	1.00	0.84	0.00	0.178	0.81
6178.0	3.44	1.25	0.36	0.274	0.303	0.221	1.00	0.88	0.00	0.161	0.83
6179.0	3.75	1.30	0.35	0.277	0.303	0.210	1.00	0.88	0.00	0.152	0.83
6180.0	3.79	1.28	0.34	0.336	0.310	0.209	1.00	0.87	0.00	0.139	0.85
6181.0	3.86	1.29	0.33	0.341	0.311	0.206	1.00	0.92	0.00	0.136	0.85
6182.0	3.92	1.30	0.33	0.346	0.311	0.204	1.00	0.92	0.00	0.134	0.85
6183.0	3.75	1.27	0.34	0.341	0.311	0.210	1.00	0.91	0.00	0.139	0.85
6184.0	3.79	1.27	0.34	0.355	0.313	0.209	1.00	0.99	0.00	0.135	0.86
6185.0	4.37	1.39	0.32	0.316	0.308	0.190	1.00	1.00	0.00	0.130	0.84
6186.0	4.84	1.43	0.30	0.372	0.315	0.176	1.00	1.00	0.00	0.111	0.86
6187.0	3.19	1.08	0.34	0.562	0.338	0.235	1.00	1.00	0.00	0.103	0.92
6188.0	2.97	1.13	0.38	0.339	0.311	0.243	1.00	0.88	0.00	0.161	0.85
6189.0	2.92	1.18	0.40	0.205	0.294	0.242	1.00	0.82	0.00	0.193	0.81
6190.0	2.81	1.16	0.41	0.193	0.293	0.248	1.00	0.81	0.00	0.200	0.81
6191.0	2.90	1.17	0.40	0.224	0.296	0.244	1.00	0.86	0.00	0.189	0.82
6192.0	3.05	1.20	0.39	0.232	0.297	0.237	1.00	0.91	0.00	0.182	0.82
6193.0	2.95	1.16	0.39	0.258	0.301	0.242	1.00	0.89	0.00	0.180	0.83
6194.0	3.19	1.23	0.38	0.224	0.296	0.231	1.00	0.97	0.00	0.179	0.82
6195.0	3.25	1.23	0.38	0.248	0.299	0.228	1.00	0.97	0.00	0.172	0.82
6196.0	2.85	1.09	0.38	0.395	0.317	0.250	1.00	0.89	0.00	0.151	0.87
6199.0	2.81	1.12	0.40	0.291	0.305	0.250	1.00	0.93	0.00	0.177	0.84
6200.0	2.81	1.12	0.40	0.294	0.305	0.250	1.00	0.90	0.00	0.177	0.84
6211.0	2.97	1.24	0.42	0.077	0.278	0.236	1.00	0.74	0.00	0.218	0.77
6212.0	4.22	1.42	0.34	0.206	0.294	0.193	1.00	1.00	0.00	0.153	0.80
6213.0	4.23	1.41	0.33	0.237	0.298	0.193	1.00	1.00	0.00	0.147	0.81
6214.0	4.05	1.36	0.33	0.275	0.303	0.199	1.00	1.00	0.00	0.144	0.83
6215.0	4.13	1.40	0.34	0.220	0.296	0.196	1.00	1.00	0.00	0.153	0.81
6216.0	4.43	1.44	0.33	0.227	0.297	0.187	1.00	1.00	0.00	0.144	0.81
6217.0	4.49	1.44	0.32	0.241	0.299	0.185	1.00	1.00	0.00	0.141	0.82
6218.0	4.45	1.42	0.32	0.270	0.302	0.187	1.00	1.00	0.00	0.136	0.83
6219.0	4.36	1.41	0.32	0.274	0.303	0.190	1.00	1.00	0.00	0.138	0.83
6220.0	4.50	1.43	0.32	0.269	0.302	0.185	1.00	1.00	0.00	0.136	0.82
6221.0	4.41	1.41	0.32	0.288	0.304	0.188	1.00	1.00	0.00	0.134	0.83
6222.0	4.26	1.40	0.33	0.266	0.302	0.193	1.00	1.00	0.00	0.141	0.82
6223.0	4.12	1.35	0.33	0.312	0.307	0.197	1.00	1.00	0.00	0.136	0.84
6224.0	4.37	1.37	0.31	0.346	0.311	0.190	1.00	1.00	0.00	0.124	0.85
6225.0	4.75	1.41	0.30	0.376	0.315	0.179	1.00	1.00	0.00	0.112	0.86
6226.0	4.62	1.37	0.30	0.417	0.320	0.183	1.00	1.00	0.00	0.106	0.88
6227.0	4.34	1.37	0.31	0.350	0.312	0.191	1.00	1.00	0.00	0.124	0.85
6228.0	4.21	1.37	0.32	0.311	0.307	0.194	1.00	1.00	0.00	0.134	0.84
6229.0	4.29	1.34	0.31	0.380	0.316	0.193	1.00	1.00	0.00	0.119	0.86
6230.0	4.39	1.34	0.30	0.420	0.321	0.190	1.00	1.00	0.00	0.110	0.88
6231.0	4.45	1.36	0.31	0.385	0.316	0.188	1.00	1.00	0.00	0.115	0.87
6232.0	4.54	1.38	0.30	0.390	0.317	0.185	1.00	1.00	0.00	0.113	0.87
6233.0	4.55	1.38	0.30	0.380	0.316	0.185	1.00	1.00	0.00	0.115	0.86
6235.0	4.16	1.28	0.31	0.471	0.327	0.197	1.00	1.00	0.00	0.104	0.90

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DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
6236.0	4.53	1.35	0.30	0.439	0.323	0.185	1.00	1.00	0.00	0.104	0.88
6237.0	4.54	1.36	0.30	0.427	0.321	0.185	1.00	1.00	0.00	0.106	0.88
6238.0	4.49	1.35	0.30	0.416	0.320	0.187	1.00	1.00	0.00	0.109	0.88
6239.0	4.58	1.38	0.30	0.384	0.316	0.184	1.00	1.00	0.00	0.113	0.86
6240.0	4.53	1.41	0.31	0.328	0.309	0.185	1.00	1.00	0.00	0.124	0.85
6241.0	4.18	1.37	0.33	0.284	0.304	0.195	1.00	1.00	0.00	0.140	0.83
6242.0	3.85	1.31	0.34	0.305	0.306	0.206	1.00	1.00	0.00	0.143	0.84
6243.0	3.75	1.25	0.33	0.389	0.317	0.211	1.00	1.00	0.00	0.129	0.87
6244.0	3.97	1.26	0.32	0.436	0.323	0.203	1.00	1.00	0.00	0.115	0.88
6245.0	4.41	1.34	0.30	0.427	0.322	0.189	1.00	1.00	0.00	0.108	0.88
6246.0	4.27	1.27	0.30	0.518	0.333	0.193	1.00	1.00	0.00	0.093	0.92
6247.0	3.89	1.22	0.31	0.503	0.331	0.206	1.00	1.00	0.00	0.103	0.91
6248.0	4.02	1.27	0.32	0.441	0.323	0.202	1.00	1.00	0.00	0.113	0.89
6249.0	4.02	1.32	0.33	0.340	0.311	0.201	1.00	1.00	0.00	0.133	0.85
6252.0	3.90	1.30	0.33	0.333	0.310	0.205	1.00	1.00	0.00	0.137	0.85
6253.0	3.68	1.22	0.33	0.429	0.322	0.214	1.00	1.00	0.00	0.122	0.88
6582.0	5.49	1.48	0.27	0.442	0.323	0.160	1.00	1.00	0.00	0.089	0.89
6586.0	4.97	1.48	0.30	0.313	0.307	0.173	1.00	1.00	0.00	0.119	0.84
6587.0	4.48	1.42	0.32	0.289	0.304	0.186	1.00	1.00	0.00	0.132	0.83
6588.0	4.39	1.42	0.32	0.250	0.300	0.188	1.00	1.00	0.00	0.141	0.82
6589.0	4.75	1.44	0.30	0.329	0.309	0.179	1.00	1.00	0.00	0.120	0.85
6590.0	4.82	1.40	0.29	0.425	0.321	0.177	1.00	1.00	0.00	0.102	0.88
6591.0	5.08	1.45	0.29	0.402	0.318	0.170	1.00	1.00	0.00	0.102	0.87
6596.0	7.82	1.85	0.24	0.318	0.308	0.116	1.00	1.00	0.00	0.079	0.84
6600.0	5.02	1.47	0.29	0.355	0.313	0.172	1.00	1.00	0.00	0.111	0.86
6601.0	4.79	1.44	0.30	0.340	0.311	0.178	1.00	1.00	0.00	0.117	0.85
6602.0	4.70	1.43	0.30	0.333	0.310	0.180	1.00	1.00	0.00	0.120	0.85
6603.0	4.69	1.41	0.30	0.374	0.315	0.181	1.00	1.00	0.00	0.113	0.86
6604.0	5.40	1.48	0.27	0.424	0.321	0.162	1.00	1.00	0.00	0.093	0.88
6605.0	5.91	1.47	0.25	0.550	0.337	0.149	1.00	1.00	0.00	0.067	0.92
6695.0	4.36	1.37	0.31	0.356	0.313	0.190	1.00	1.00	0.00	0.123	0.86
6696.0	4.23	1.32	0.31	0.413	0.320	0.195	1.00	1.00	0.00	0.114	0.88
6697.0	3.82	1.26	0.33	0.393	0.317	0.209	1.00	1.00	0.00	0.127	0.87
6698.0	3.58	1.22	0.34	0.393	0.317	0.218	1.00	1.00	0.00	0.132	0.87
6699.0	3.48	1.21	0.35	0.369	0.314	0.221	1.00	1.00	0.00	0.140	0.87
6700.0	3.77	1.27	0.34	0.362	0.313	0.210	1.00	1.00	0.00	0.134	0.86
6701.0	3.76	1.27	0.34	0.352	0.312	0.210	1.00	1.00	0.00	0.136	0.86
6702.0	3.83	1.30	0.34	0.320	0.308	0.207	1.00	1.00	0.00	0.141	0.85
6703.0	4.19	1.36	0.33	0.309	0.307	0.195	1.00	1.00	0.00	0.135	0.84
6704.0	4.40	1.40	0.32	0.299	0.306	0.188	1.00	1.00	0.00	0.132	0.84
6705.0	4.68	1.41	0.30	0.365	0.314	0.181	1.00	1.00	0.00	0.115	0.86
6706.0	4.95	1.44	0.29	0.380	0.316	0.173	1.00	1.00	0.00	0.107	0.87

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
6707.0	5.43	1.50	0.28	0.393	0.317	0.161	1.00	1.00	0.00	0.098	0.87
6708.0	5.58	1.48	0.27	0.462	0.326	0.158	1.00	1.00	0.00	0.085	0.90
6709.0	4.86	1.35	0.28	0.516	0.332	0.176	1.00	1.00	0.00	0.085	0.92
6750.0	3.78	1.23	0.3[illegible]	0.446	0.324	0.210	1.00	1.00	0.00	0.117	0.89
6753.0	4.52	1.40	0.31	0.342	0.311	0.185	1.00	1.00	0.00	0.122	0.85
6754.0	3.71	1.25	0.34	0.380	0.316	0.212	1.00	1.00	0.00	0.132	0.87
6755.0	3.60	1.22	0.34	0.410	0.319	0.217	1.00	1.00	0.00	0.128	0.88
6756.0	3.85	1.26	0.33	0.402	0.318	0.207	1.00	1.00	0.00	0.124	0.88
6757.0	3.76	1.24	0.33	0.421	0.321	0.211	1.00	1.00	0.00	0.122	0.88
6758.0	3.45	1.19	0.35	0.409	0.319	0.223	1.00	1.00	0.00	0.132	0.88
6759.0	4.10	1.28	0.31	0.441	0.323	0.199	1.00	1.00	0.00	0.111	0.89
6760.0	3.85	1.24	0.32	0.435	0.322	0.208	1.00	1.00	0.00	0.117	0.89
6761.0	3.83	1.28	0.33	0.365	0.314	0.208	1.00	1.00	0.00	0.132	0.86
6762.0	4.19	1.32	0.32	0.389	0.317	0.196	1.00	1.00	0.00	0.120	0.87
6763.0	4.10	1.29	0.31	0.429	0.322	0.199	1.00	1.00	0.00	0.114	0.89
6764.0	4.26	1.37	0.32	0.313	0.307	0.193	1.00	1.00	0.00	0.133	0.84
6765.0	4.59	1.46	0.32	0.240	0.298	0.182	1.00	1.00	0.00	0.139	0.82
6766.0	6.14	1.68	0.27	0.265	0.302	0.146	1.00	1.00	0.00	0.107	0.82
6767.0	7.07	1.76	0.25	0.329	0.309	0.128	1.00	1.00	0.00	0.086	0.84
6768.0	4.78	1.33	0.28	0.537	0.335	0.178	1.00	1.00	0.00	0.082	0.92
6769.0	3.54	1.16	0.33	0.501	0.331	0.220	1.00	1.00	0.00	0.110	0.91
6770.0	3.78	1.29	0.34	0.324	0.309	0.209	1.00	1.00	0.00	0.142	0.85
6771.0	4.30	1.38	0.32	0.314	0.308	0.192	1.00	1.00	0.00	0.132	0.84
6772.0	4.22	1.30	0.31	0.433	0.322	0.195	1.00	1.00	0.00	0.111	0.89
6773.0	3.81	1.25	0.33	0.403	0.318	0.209	1.00	1.00	0.00	0.125	0.88
6774.0	3.59	1.24	0.35	0.353	0.312	0.216	1.00	1.00	0.00	0.140	0.86
6775.0	3.41	1.19	0.35	0.400	0.318	0.224	1.00	1.00	0.00	0.135	0.88
6776.0	3.61	1.20	0.33	0.442	0.323	0.217	1.00	0.97	0.00	0.121	0.89
6777.0	4.06	1.28	0.32	0.427	0.322	0.200	1.00	1.00	0.00	0.115	0.89
6778.0	4.02	1.32	0.33	0.347	0.312	0.201	1.00	1.00	0.00	0.131	0.86
6779.0	3.88	1.33	0.34	0.274	0.303	0.205	1.00	0.99	0.00	0.149	0.83
6780.0	3.69	1.33	0.36	0.193	0.293	0.210	1.00	0.93	0.00	0.170	0.81
6781.0	3.53	1.28	0.36	0.253	0.300	0.218	1.00	0.94	0.00	0.162	0.83
6782.0	3.99	1.28	0.32	0.409	0.319	0.203	1.00	1.00	0.00	0.120	0.88
6783.0	5.09	1.40	0.28	0.488	0.329	0.170	1.00	1.00	0.00	0.087	0.91
6784.0	4.47	1.34	0.30	0.446	0.324	0.187	1.00	1.00	0.00	0.104	0.89
6785.0	3.59	1.19	0.33	0.464	0.326	0.218	1.00	1.00	0.00	0.117	0.90
6786.0	4.00	1.28	0.32	0.414	0.320	0.202	1.00	1.00	0.00	0.119	0.88
6787.0	4.23	1.35	0.32	0.355	0.313	0.194	1.00	1.00	0.00	0.125	0.86
6788.0	3.63	1.24	0.34	0.361	0.313	0.215	1.00	1.00	0.00	0.138	0.86
6789.0	3.50	1.19	0.34	0.438	0.323	0.221	1.00	1.00	0.00	0.124	0.89
6790.0	3.39	1.13	0.33	0.520	0.333	0.226	1.00	1.00	0.00	0.108	0.92
6791.0	3.43	1.13	0.33	0.524	0.333	0.224	1.00	1.00	0.00	0.107	0.92
6792.0	3.77	1.23	0.33	0.439	0.323	0.210	1.00	1.00	0.00	0.118	0.89
6793.0	4.00	1.24	0.31	0.483	0.328	0.203	1.00	1.00	0.00	0.105	0.91
6797.0	4.10	1.28	0.31	0.436	0.323	0.199	1.00	1.00	0.00	0.112	0.89

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
6798.0	4.10	1.29	0.32	0.416	0.320	0.199	1.00	1.00	0.00	0.116	0.88
6799.0	4.62	1.38	0.30	0.404	0.319	0.183	1.00	1.00	0.00	0.109	0.88
6800.0	5.30	1.51	0.29	0.341	0.311	0.164	1.00	1.00	0.00	0.108	0.85
6801.0	5.27	1.47	0.28	0.413	0.320	0.165	1.00	1.00	0.00	0.097	0.88
6802.0	4.98	1.42	0.29	0.423	0.321	0.173	1.00	1.00	0.00	0.100	0.88
6803.0	4.68	1.39	0.30	0.401	0.318	0.181	1.00	1.00	0.00	0.108	0.87
6804.0	4.38	1.34	0.31	0.406	0.319	0.190	1.00	1.00	0.00	0.113	0.88
6805.0	4.53	1.36	0.30	0.414	0.320	0.185	1.00	1.00	0.00	0.109	0.88
6806.0	4.53	1.36	0.30	0.425	0.321	0.185	1.00	1.00	0.00	0.107	0.88
6807.0	4.53	1.32	0.29	0.494	0.330	0.185	1.00	1.00	0.00	0.094	0.91
6808.0	4.92	1.32	0.27	0.593	0.342	0.173	1.00	1.00	0.00	0.071	0.92
6809.0	4.43	1.32	0.30	0.461	0.326	0.188	1.00	1.00	0.00	0.102	0.90
6810.0	4.15	1.30	0.31	0.416	0.320	0.197	1.00	1.00	0.00	0.115	0.88
6811.0	3.73	1.25	0.33	0.394	0.317	0.212	1.00	1.00	0.00	0.128	0.87
6812.0	3.47	1.18	0.34	0.433	0.322	0.222	1.00	1.00	0.00	0.126	0.89
6830.0	3.85	1.23	0.32	0.459	0.325	0.208	1.00	1.00	0.00	0.113	0.90
6831.0	4.48	1.31	0.29	0.489	0.329	0.187	1.00	1.00	0.00	0.096	0.91
6832.0	4.13	1.29	0.31	0.438	0.323	0.198	1.00	1.00	0.00	0.111	0.89
6833.0	3.94	1.25	0.32	0.448	0.324	0.204	1.00	1.00	0.00	0.113	0.89
6834.0	4.03	1.22	0.30	0.539	0.335	0.201	1.00	1.00	0.00	0.093	0.92
6835.0	4.10	1.23	0.30	0.538	0.335	0.199	1.00	1.00	0.00	0.092	0.92
6836.0	3.98	1.22	0.31	0.524	0.333	0.203	1.00	1.00	0.00	0.097	0.92
6837.0	4.06	1.22	0.30	0.545	0.336	0.200	1.00	1.00	0.00	0.091	0.92
6839.0	4.00	1.21	0.30	0.546	0.336	0.203	1.00	1.00	0.00	0.092	0.92
6840.0	3.88	1.22	0.31	0.497	0.330	0.207	1.00	1.00	0.00	0.104	0.91
6841.0	4.30	1.32	0.31	0.434	0.322	0.193	1.00	1.00	0.00	0.109	0.89
6844.0	3.90	1.29	0.33	0.355	0.313	0.205	1.00	1.00	0.00	0.132	0.86
6845.0	4.35	1.39	0.32	0.299	0.306	0.190	1.00	1.00	0.00	0.133	0.84
6846.0	4.19	1.36	0.32	0.314	0.307	0.195	1.00	1.00	0.00	0.134	0.85
6847.0	4.10	1.31	0.32	0.387	0.317	0.199	1.00	1.00	0.00	0.122	0.87
6848.0	4.44	1.35	0.30	0.419	0.320	0.188	1.00	1.00	0.00	0.109	0.88
6849.0	4.58	1.37	0.30	0.403	0.319	0.184	1.00	1.00	0.00	0.110	0.88
6850.0	4.41	1.40	0.32	0.315	0.308	0.188	1.00	1.00	0.00	0.129	0.84
6851.0	4.56	1.42	0.31	0.319	0.308	0.184	1.00	1.00	0.00	0.125	0.85
6852.0	4.68	1.41	0.30	0.359	0.313	0.181	1.00	1.00	0.00	0.116	0.86
6853.0	4.89	1.47	0.30	0.317	0.308	0.175	1.00	1.00	0.00	0.119	0.84
6854.0	4.80	1.39	0.29	0.434	0.322	0.178	1.00	1.00	0.00	0.100	0.89
6855.0	4.60	1.33	0.29	0.485	0.329	0.183	1.00	1.00	0.00	0.094	0.91
6856.0	4.43	1.34	0.30	0.422	0.321	0.188	1.00	1.00	0.00	0.109	0.88
6857.0	4.58	1.38	0.30	0.389	0.317	0.184	1.00	1.00	0.00	0.112	0.87
6858.0	4.82	1.44	0.30	0.359	0.313	0.177	1.00	1.00	0.00	0.113	0.86
6859.0	5.01	1.45	0.29	0.377	0.315	0.172	1.00	1.00	0.00	0.107	0.87
6860.0	5.43	1.49	0.27	0.421	0.321	0.161	1.00	1.00	0.00	0.094	0.88
6861.0	5.38	1.50	0.28	0.382	0.316	0.163	1.00	1.00	0.00	0.100	0.87
6862.0	5.31	1.49	0.28	0.389	0.317	0.164	1.00	1.00	0.00	0.100	0.87

Schlumberger

DEPTH	RATIO G/CB	SHEAR MOD.	BULK COMP	SHALE FACTOR	POIS RATIO	TOT POR	CP	WATER SATURATION	GAS	EFF POR	FRAC GRAD
FEET	10-12	10-6	10+6	Q	PR	P-Z		SW		P-E	FPG
6863.0	5.20	1.48	0.28	0.380	0.316	0.167	1.00	1.00	0.00	0.104	0.87
6864.0	5.08	1.51	0.30	0.296	0.305	0.170	1.00	1.00	0.00	0.119	0.84
6865.0	4.76	1.40	0.29	0.403	0.318	0.179	1.00	1.00	0.00	0.107	0.88
6866.0	4.24	1.30	0.31	0.447	0.324	0.194	1.00	1.00	0.00	0.107	0.89
6867.0	4.30	1.39	0.32	0.291	0.305	0.191	1.00	1.00	0.00	0.136	0.84
6868.0	4.18	1.43	0.34	0.164	0.289	0.194	1.00	1.00	0.00	0.162	0.80
6869.0	2.98	1.28	0.43	0.000	0.269	0.250	0.92	0.66	0.00	0.250	0.75
6908.0	4.71	1.45	0.31	0.291	0.305	0.179	1.00	0.93	0.00	0.127	0.84
6909.0	10.09	2.11	0.21	0.316	0.308	0.087	1.00	1.00	0.00	0.059	0.83
6914.0	3.85	1.26	0.33	0.409	0.319	0.207	1.00	1.00	0.00	0.123	0.88
6915.0	4.32	1.35	0.31	0.367	0.314	0.191	1.00	0.99	0.00	0.121	0.86
6916.0	4.73	1.31	0.28	0.564	0.338	0.179	1.00	1.00	0.00	0.078	0.92
6941.0	4.16	1.25	0.30	0.530	0.334	0.197	1.00	1.00	0.00	0.093	0.92
6942.0	4.06	1.27	0.31	0.457	0.325	0.200	1.00	1.00	0.00	0.109	0.90
6943.0	4.16	1.31	0.31	0.412	0.320	0.197	1.00	1.00	0.00	0.116	0.88
6944.0	4.29	1.34	0.31	0.380	0.316	0.193	1.00	1.00	0.00	0.119	0.87
6945.0	4.45	1.42	0.32	0.285	0.304	0.187	1.00	1.00	0.00	0.134	0.84
6946.0	4.51	1.44	0.32	0.263	0.301	0.185	1.00	1.00	0.00	0.136	0.83
6947.0	4.45	1.41	0.32	0.290	0.305	0.187	1.00	1.00	0.00	0.133	0.84
6948.0	4.43	1.44	0.32	0.241	0.299	0.187	1.00	1.00	0.00	0.142	0.82
6949.0	4.53	1.46	0.32	0.221	0.296	0.184	1.00	1.00	0.00	0.143	0.81
6950.0	4.64	1.44	0.31	0.303	0.306	0.182	1.00	1.00	0.00	0.127	0.84
6951.0	4.77	1.46	0.31	0.296	0.305	0.178	1.00	1.00	0.00	0.125	0.84
6952.0	4.84	1.50	0.31	0.237	0.298	0.176	1.00	1.00	0.00	0.134	0.82
6953.0	4.81	1.50	0.31	0.233	0.297	0.176	1.00	1.00	0.00	0.135	0.82
6954.0	4.92	1.52	0.31	0.237	0.298	0.173	1.00	1.00	0.00	0.132	0.82
6955.0	5.16	1.55	0.30	0.245	0.299	0.167	1.00	1.00	0.00	0.126	0.82
6956.0	5.10	1.54	0.30	0.243	0.299	0.169	1.00	1.00	0.00	0.128	0.82
6957.0	4.88	1.50	0.31	0.248	0.299	0.175	1.00	1.00	0.00	0.131	0.82
6958.0	5.28	1.57	0.30	0.238	0.298	0.164	1.00	1.00	0.00	0.125	0.82
6959.0	5.37	1.56	0.29	0.278	0.303	0.163	1.00	1.00	0.00	0.117	0.83
6960.0	5.01	1.40	0.28	0.465	0.326	0.172	1.00	1.00	0.00	0.092	0.90
6963.0	3.68	1.23	0.33	0.410	0.319	0.214	1.00	1.00	0.00	0.126	0.88
6964.0	3.39	1.18	0.35	0.403	0.319	0.225	1.00	1.00	0.00	0.134	0.88
6965.0	3.62	1.25	0.35	0.346	0.311	0.215	1.00	1.00	0.00	0.141	0.86
6966.0	3.52	1.26	0.36	0.283	0.304	0.218	1.00	1.00	0.00	0.157	0.84
6967.0	3.31	1.22	0.37	0.281	0.303	0.227	1.00	0.99	0.00	0.163	0.84
6968.0	3.35	1.23	0.37	0.290	0.305	0.225	1.00	1.00	0.00	0.160	0.84
6969.0	3.45	1.21	0.35	0.365	0.314	0.222	1.00	1.00	0.00	0.141	0.87
6970.0	3.56	1.22	0.34	0.390	0.317	0.218	1.00	1.00	0.00	0.133	0.87
6971.0	3.63	1.24	0.34	0.367	0.314	0.215	1.00	1.00	0.00	0.136	0.87
6972.0	3.70	1.26	0.34	0.348	0.312	0.212	1.00	1.00	0.00	0.138	0.86
6973.0	3.95	1.31	0.33	0.326	0.309	0.203	1.00	1.00	0.00	0.137	0.85
6974.0	4.38	1.38	0.32	0.333	0.310	0.190	1.00	1.00	0.00	0.126	0.85

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 1046	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
6975.0	4.29	1.37	0.32	0.330	0.310	0.192	1.00	1.00	0.00	0.129	0.85
6976.0	4.22	1.35	0.32	0.340	0.311	0.194	1.00	1.00	0.00	0.128	0.85
6977.0	4.66	1.43	0.31	0.327	0.309	0.181	1.00	1.00	0.00	0.122	0.85
6978.0	5.16	1.52	0.29	0.300	0.306	0.168	1.00	1.00	0.00	0.117	0.84
6979.0	5.69	1.57	0.28	0.336	0.310	0.155	1.00	1.00	0.00	0.103	0.85
6980.0	5.59	1.56	0.28	0.339	0.311	0.158	1.00	1.00	0.00	0.104	0.85
6981.0	5.33	1.47	0.27	0.433	0.322	0.164	1.00	1.00	0.00	0.093	0.89
6982.0	5.56	1.54	0.28	0.364	0.314	0.158	1.00	1.00	0.00	0.101	0.86
6983.0	5.30	1.53	0.29	0.321	0.308	0.164	1.00	1.00	0.00	0.112	0.85
6984.0	5.36	1.54	0.29	0.321	0.308	0.163	1.00	1.00	0.00	0.111	0.85
6985.0	5.58	1.60	0.29	0.259	0.301	0.158	1.00	1.00	0.00	0.117	0.82
6986.0	5.70	1.62	0.28	0.263	0.301	0.155	1.00	1.00	0.00	0.114	0.82
6987.0	5.82	1.62	0.28	0.278	0.303	0.152	1.00	1.00	0.00	0.110	0.83
6988.0	6.26	1.69	0.27	0.275	0.303	0.143	1.00	1.00	0.00	0.104	0.83
6989.0	5.85	1.63	0.28	0.270	0.302	0.152	1.00	1.00	0.00	0.111	0.83
6990.0	5.36	1.55	0.29	0.302	0.306	0.163	1.00	1.00	0.00	0.114	0.84
6991.0	5.37	1.52	0.28	0.355	0.313	0.163	1.00	1.00	0.00	0.105	0.86
6992.0	5.43	1.54	0.28	0.327	0.309	0.161	1.00	1.00	0.00	0.109	0.85
6993.0	5.47	1.55	0.28	0.323	0.309	0.160	1.00	1.00	0.00	0.108	0.85
6994.0	5.71	1.55	0.27	0.382	0.316	0.155	1.00	1.00	0.00	0.096	0.87
6995.0	5.69	1.50	0.26	0.463	0.326	0.155	1.00	1.00	0.00	0.083	0.90
6996.0	5.39	1.45	0.27	0.471	0.327	0.162	1.00	1.00	0.00	0.086	0.90
6997.0	5.08	1.43	0.28	0.436	0.323	0.170	1.00	1.00	0.00	0.096	0.89
6998.0	5.13	1.46	0.28	0.394	0.317	0.169	1.00	1.00	0.00	0.102	0.87
6999.0	5.55	1.59	0.29	0.270	0.302	0.158	1.00	1.00	0.00	0.116	0.83
7000.0	5.04	1.50	0.30	0.291	0.305	0.171	1.00	1.00	0.00	0.121	0.84
7001.0	5.06	1.48	0.29	0.349	0.312	0.170	1.00	1.00	0.00	0.111	0.86
7002.0	5.43	1.49	0.27	0.416	0.320	0.161	1.00	1.00	0.00	0.094	0.88
7004.0	4.83	1.34	0.28	0.534	0.335	0.176	1.00	1.00	0.00	0.082	0.92
7005.0	4.31	1.31	0.30	0.454	0.325	0.192	1.00	1.00	0.00	0.105	0.90
7006.0	4.33	1.32	0.30	0.445	0.324	0.191	1.00	1.00	0.00	0.106	0.89
7007.0	4.16	1.30	0.31	0.428	0.322	0.197	1.00	1.00	0.00	0.113	0.89
7008.0	3.80	1.24	0.33	0.424	0.321	0.209	1.00	1.00	0.00	0.121	0.89
7009.0	3.85	1.24	0.32	0.449	0.324	0.208	1.00	1.00	0.00	0.115	0.90
7010.0	4.37	1.34	0.31	0.406	0.319	0.190	1.00	1.00	0.00	0.113	0.88
7011.0	4.47	1.37	0.31	0.385	0.316	0.187	1.00	1.00	0.00	0.115	0.87
7012.0	4.58	1.36	0.30	0.438	0.323	0.184	1.00	1.00	0.00	0.103	0.89
7013.0	4.67	1.39	0.30	0.395	0.317	0.181	1.00	1.00	0.00	0.110	0.87
7014.0	4.30	1.31	0.30	0.449	0.324	0.193	1.00	1.00	0.00	0.106	0.89
7015.0	3.87	1.24	0.32	0.450	0.324	0.207	1.00	1.00	0.00	0.114	0.90
7016.0	4.03	1.28	0.32	0.424	0.321	0.201	1.00	1.00	0.00	0.116	0.89
7017.0	4.26	1.34	0.32	0.371	0.315	0.193	1.00	1.00	0.00	0.122	0.87
7018.0	4.74	1.43	0.30	0.336	0.310	0.179	1.00	1.00	0.00	0.119	0.85
7019.0	5.00	1.48	0.29	0.335	0.310	0.172	1.00	1.00	0.00	0.114	0.85
7020.0	4.81	1.43	0.30	0.363	0.314	0.177	1.00	1.00	0.00	0.113	0.86
7021.0	4.74	1.38	0.29	0.441	0.323	0.179	1.00	1.00	0.00	0.100	0.89
7022.0	4.98	1.46	0.29	0.356	0.313	0.173	1.00	1.00	0.00	0.111	0.86

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DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
7023.0	4.94	1.48	0.30	0.300	0.306	0.173	1.00	1.00	0.00	0.121	0.84
7024.0	4.48	1.39	0.31	0.346	0.311	0.187	1.00	1.00	0.00	0.122	0.86
7025.0	4.73	1.40	0.30	0.394	0.317	0.179	1.00	1.00	0.00	0.109	0.87
7026.0	5.54	1.47	0.26	0.484	0.328	0.158	1.00	1.00	0.00	0.082	0.91
7027.0	6.28	1.57	0.25	0.472	0.327	0.142	1.00	1.00	0.00	0.075	0.90
7028.0	6.15	1.63	0.27	0.342	0.311	0.146	1.00	1.00	0.00	0.096	0.85
7029.0	6.18	1.68	0.27	0.269	0.302	0.145	1.00	1.00	0.00	0.106	0.82
7030.0	5.45	1.59	0.29	0.253	0.300	0.161	1.00	1.00	0.00	0.120	0.82
7031.0	4.86	1.51	0.31	0.240	0.298	0.175	1.00	1.00	0.00	0.133	0.82
7105.0	7.98	1.95	0.24	0.215	0.295	0.114	1.00	1.00	0.00	0.090	0.80
7106.0	9.36	1.93	0.21	0.450	0.324	0.094	1.00	1.00	0.00	0.052	0.89
7107.0	7.37	1.76	0.24	0.378	0.315	0.123	1.00	1.00	0.00	0.077	0.86
7108.0	5.79	1.47	0.25	0.523	0.333	0.152	1.00	1.00	0.00	0.073	0.92
7109.0	5.47	1.43	0.26	0.520	0.333	0.160	1.00	1.00	0.00	0.077	0.92
7110.0	5.20	1.41	0.27	0.493	0.330	0.167	1.00	1.00	0.00	0.084	0.91
7111.0	4.58	1.34	0.29	0.472	0.327	0.184	1.00	1.00	0.00	0.097	0.90
7112.0	4.06	1.27	0.31	0.449	0.324	0.200	1.00	1.00	0.00	0.111	0.90
7113.0	4.69	1.44	0.31	0.311	0.307	0.180	1.00	1.00	0.00	0.124	0.84
7114.0	5.35	1.54	0.29	0.304	0.306	0.163	1.00	1.00	0.00	0.114	0.84
7115.0	5.43	1.51	0.28	0.389	0.317	0.161	1.00	1.00	0.00	0.099	0.87
7116.0	5.26	1.49	0.28	0.381	0.316	0.166	1.00	1.00	0.00	0.102	0.87
7117.0	4.68	1.38	0.29	0.429	0.322	0.181	1.00	1.00	0.00	0.103	0.89
7118.0	5.38	1.51	0.28	0.365	0.314	0.163	1.00	1.00	0.00	0.103	0.86
7119.0	6.11	1.65	0.27	0.296	0.305	0.146	1.00	1.00	0.00	0.103	0.84
7120.0	6.49	1.69	0.26	0.313	0.307	0.139	1.00	1.00	0.00	0.096	0.84
7121.0	5.81	1.52	0.26	0.455	0.325	0.152	1.00	1.00	0.00	0.083	0.90
7122.0	4.91	1.35	0.28	0.529	0.334	0.174	1.00	1.00	0.00	0.082	0.92
7123.0	5.44	1.48	0.27	0.441	0.323	0.161	1.00	1.00	0.00	0.090	0.89
7124.0	5.54	1.47	0.26	0.480	0.328	0.158	1.00	1.00	0.00	0.082	0.91
7125.0	5.20	1.38	0.27	0.553	0.337	0.166	1.00	1.00	0.00	0.074	0.92
7126.0	5.08	1.34	0.26	0.591	0.342	0.169	1.00	1.00	0.00	0.069	0.92
7130.0	5.22	1.37	0.26	0.568	0.339	0.166	1.00	1.00	0.00	0.072	0.92
7131.0	4.26	1.27	0.30	0.513	0.332	0.194	1.00	1.00	0.00	0.094	0.92
7132.0	4.41	1.30	0.30	0.488	0.329	0.189	1.00	1.00	0.00	0.097	0.91
7133.0	4.30	1.27	0.29	0.527	0.334	0.193	1.00	1.00	0.00	0.091	0.92
7198.0	5.55	1.49	0.27	0.447	0.324	0.158	1.00	1.00	0.00	0.088	0.89
7218.0	6.79	1.65	0.24	0.433	0.322	0.133	1.00	1.00	0.00	0.075	0.89
7219.0	5.36	1.47	0.27	0.441	0.323	0.163	1.00	1.00	0.00	0.091	0.89
7220.0	5.45	1.52	0.28	0.364	0.314	0.161	1.00	1.00	0.00	0.102	0.86
7221.0	5.89	1.58	0.27	0.371	0.315	0.151	1.00	1.00	0.00	0.095	0.86
7222.0	5.90	1.59	0.27	0.362	0.313	0.151	1.00	1.00	0.00	0.096	0.86
7223.0	5.86	1.60	0.27	0.329	0.309	0.152	1.00	1.00	0.00	0.102	0.85
7224.0	5.80	1.54	0.27	0.413	0.320	0.153	1.00	1.00	0.00	0.090	0.88
7393.0	6.18	1.54	0.25	0.496	0.330	0.144	1.00	1.00	0.00	0.073	0.91

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DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
7394.0	5.26	1.38	0.26	0.572	0.339	0.164	1.00	1.00	0.00	0.070	0.93
7401.0	3.44	1.28	0.37	0.210	0.295	0.220	1.00	0.95	0.00	0.174	0.82
7402.0	4.31	1.43	0.33	0.210	0.295	0.190	1.00	1.00	0.00	0.150	0.81
7403.0	4.63	1.47	0.32	0.229	0.297	0.181	1.00	1.00	0.00	0.140	0.82
7404.0	5.09	1.53	0.30	0.263	0.301	0.169	1.00	1.00	0.00	0.125	0.83
7405.0	6.82	1.76	0.26	0.276	0.303	0.133	1.00	1.00	0.00	0.096	0.83
7406.0	6.57	1.72	0.26	0.295	0.305	0.137	1.00	1.00	0.00	0.097	0.84
7407.0	5.29	1.55	0.29	0.275	0.303	0.164	1.00	1.00	0.00	0.119	0.83
7408.0	4.93	1.50	0.31	0.261	0.301	0.173	1.00	1.00	0.00	0.128	0.83
7409.0	4.97	1.53	0.31	0.222	0.296	0.172	1.00	1.00	0.00	0.134	0.81
7410.0	3.91	1.35	0.34	0.242	0.299	0.203	1.00	1.00	0.00	0.154	0.83
7411.0	3.39	1.22	0.36	0.328	0.309	0.224	1.00	1.00	0.00	0.151	0.86
7412.0	3.84	1.25	0.32	0.431	0.322	0.208	1.00	1.00	0.00	0.118	0.89
7413.0	6.34	1.68	0.27	0.303	0.306	0.142	1.00	1.00	0.00	0.099	0.84
7414.0	5.26	1.49	0.28	0.372	0.315	0.166	1.00	1.00	0.00	0.104	0.87
7415.0	5.02	1.44	0.29	0.402	0.318	0.172	1.00	1.00	0.00	0.103	0.88
7416.0	4.12	1.27	0.31	0.472	0.327	0.199	1.00	1.00	0.00	0.105	0.91
7417.0	3.45	1.17	0.34	0.453	0.325	0.223	1.00	1.00	0.00	0.122	0.90
7418.0	2.87	1.08	0.38	0.433	0.322	0.250	1.00	1.00	0.00	0.142	0.89
7419.0	2.87	1.07	0.37	0.456	0.325	0.250	1.00	1.00	0.00	0.136	0.90
7420.0	2.87	1.06	0.37	0.466	0.326	0.250	1.00	1.00	0.00	0.134	0.91
7421.0	2.87	1.07	0.37	0.451	0.324	0.250	1.00	1.00	0.00	0.137	0.90
7422.0	3.08	1.12	0.36	0.433	0.322	0.239	1.00	1.00	0.00	0.136	0.89
7423.0	2.83	1.11	0.39	0.324	0.309	0.250	1.00	0.91	0.00	0.169	0.86
7424.0	2.80	1.13	0.40	0.262	0.301	0.250	1.00	0.95	0.00	0.184	0.84
7425.0	2.80	1.13	0.40	0.270	0.302	0.250	1.00	1.00	0.00	0.182	0.84
7426.0	2.82	1.12	0.40	0.312	0.307	0.250	1.00	1.00	0.00	0.172	0.85
7427.0	2.83	1.11	0.39	0.328	0.309	0.250	1.00	1.00	0.00	0.168	0.86
7428.0	2.85	1.09	0.38	0.382	0.316	0.250	1.00	1.00	0.00	0.155	0.88
7429.0	2.87	1.07	0.37	0.455	0.325	0.250	1.00	1.00	0.00	0.136	0.90
7430.0	3.35	1.18	0.35	0.388	0.317	0.227	1.00	1.00	0.00	0.139	0.88
7431.0	3.84	1.33	0.35	0.265	0.301	0.206	1.00	1.00	0.00	0.152	0.83
7432.0	4.26	1.42	0.33	0.217	0.296	0.192	1.00	1.00	0.00	0.150	0.82
7433.0	4.72	1.49	0.31	0.233	0.297	0.179	1.00	1.00	0.00	0.137	0.82
7434.0	5.25	1.59	0.30	0.203	0.294	0.165	1.00	1.00	0.00	0.131	0.81
7435.0	4.18	1.40	0.34	0.228	0.297	0.194	1.00	1.00	0.00	0.150	0.82
7436.0	3.44	1.21	0.35	0.374	0.315	0.223	1.00	1.00	0.00	0.139	0.87
7437.0	3.82	1.26	0.33	0.398	0.318	0.209	1.00	1.00	0.00	0.126	0.88
7438.0	4.54	1.46	0.32	0.237	0.298	0.184	1.00	1.00	0.00	0.140	0.82
7439.0	4.87	1.49	0.31	0.266	0.302	0.175	1.00	1.00	0.00	0.128	0.83
7440.0	4.42	1.37	0.31	0.373	0.315	0.188	1.00	1.00	0.00	0.118	0.87
7441.0	4.39	1.35	0.31	0.393	0.317	0.190	1.00	1.00	0.00	0.115	0.88
7442.0	4.33	1.28	0.30	0.514	0.332	0.191	1.00	1.00	0.00	0.093	0.92
7443.0	5.17	1.40	0.27	0.511	0.332	0.167	1.00	1.00	0.00	0.082	0.92
7444.0	6.07	1.52	0.25	0.499	0.330	0.146	1.00	1.00	0.00	0.073	0.92
7445.0	6.51	1.56	0.24	0.531	0.334	0.137	1.00	1.00	0.00	0.064	0.93
7446.0	11.14	1.99	0.18	0.584	0.341	0.071	1.00	1.00	0.00	0.030	0.93

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DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
7450.0	4.48	1.30	0.29	0.512	0.332	0.187	1.00	1.00	0.00	0.091	0.92
7451.0	3.47	1.12	0.32	0.560	0.338	0.223	1.00	1.00	0.00	0.098	0.93
7458.0	2.89	1.04	0.36	0.520	0.333	0.250	1.00	1.00	0.00	0.120	0.93
7459.0	3.62	1.21	0.33	0.423	0.321	0.216	1.00	1.00	0.00	0.125	0.89
7460.0	4.68	1.40	0.30	0.385	0.316	0.181	1.00	1.00	0.00	0.111	0.87
7461.0	6.51	1.70	0.26	0.304	0.306	0.139	1.00	1.00	0.00	0.096	0.84
7470.0	2.95	1.15	0.39	0.283	0.304	0.243	1.00	1.00	0.00	0.174	0.84
7471.0	6.97	1.77	0.25	0.290	0.304	0.130	1.00	1.00	0.00	0.093	0.83
7481.0	3.58	1.17	0.33	0.509	0.332	0.218	1.00	1.00	0.00	0.107	0.92
7483.0	4.22	1.30	0.31	0.439	0.323	0.195	1.00	1.00	0.00	0.109	0.89
7487.0	5.05	1.39	0.28	0.493	0.330	0.171	1.00	1.00	0.00	0.087	0.91
7488.0	5.07	1.42	0.28	0.456	0.325	0.170	1.00	1.00	0.00	0.093	0.90
7489.0	4.39	1.30	0.30	0.494	0.330	0.190	1.00	1.00	0.00	0.096	0.92
7490.0	4.23	1.24	0.29	0.569	0.339	0.194	1.00	1.00	0.00	0.084	0.93
7491.0	4.67	1.32	0.28	0.538	0.335	0.181	1.00	1.00	0.00	0.084	0.93
7507.0	3.96	1.23	0.31	0.496	0.330	0.204	1.00	1.00	0.00	0.103	0.92
7512.0	3.93	1.34	0.34	0.266	0.302	0.203	1.00	1.00	0.00	0.149	0.83
7513.0	5.45	1.58	0.29	0.268	0.302	0.161	1.00	1.00	0.00	0.118	0.83
7515.0	6.07	1.64	0.27	0.313	0.307	0.147	1.00	1.00	0.00	0.101	0.84
7516.0	6.26	1.67	0.27	0.308	0.307	0.143	1.00	1.00	0.00	0.099	0.84
7517.0	5.12	1.43	0.28	0.452	0.325	0.169	1.00	1.00	0.00	0.093	0.90
7518.0	5.18	1.45	0.28	0.433	0.322	0.167	1.00	1.00	0.00	0.095	0.89
7519.0	5.10	1.43	0.28	0.432	0.322	0.170	1.00	1.00	0.00	0.096	0.89
7520.0	4.66	1.38	0.30	0.418	0.320	0.182	1.00	1.00	0.00	0.106	0.89
7521.0	4.33	1.37	0.32	0.339	0.311	0.191	1.00	1.00	0.00	0.126	0.86
7522.0	4.52	1.39	0.31	0.348	0.312	0.185	1.00	1.00	0.00	0.121	0.86
7523.0	4.26	1.32	0.31	0.422	0.321	0.194	1.00	1.00	0.00	0.112	0.89
7524.0	4.74	1.43	0.30	0.347	0.312	0.179	1.00	1.00	0.00	0.117	0.86
7525.0	4.54	1.36	0.30	0.429	0.322	0.185	1.00	1.00	0.00	0.106	0.89
7526.0	4.79	1.42	0.30	0.383	0.316	0.178	1.00	1.00	0.00	0.110	0.87
7527.0	3.85	1.25	0.32	0.427	0.321	0.207	1.00	1.00	0.00	0.119	0.89
7528.0	3.76	1.26	0.33	0.381	0.316	0.210	1.00	1.00	0.00	0.130	0.87
7529.0	3.44	1.20	0.35	0.380	0.316	0.223	1.00	1.00	0.00	0.138	0.87
7530.0	3.16	1.11	0.35	0.478	0.328	0.236	1.00	1.00	0.00	0.123	0.91
7531.0	2.94	1.04	0.35	0.546	0.336	0.248	1.00	1.00	0.00	0.112	0.93
7532.0	3.42	1.17	0.34	0.437	0.323	0.224	1.00	1.00	0.00	0.126	0.90
7533.0	3.97	1.33	0.34	0.297	0.305	0.202	1.00	1.00	0.00	0.142	0.84
7534.0	4.30	1.39	0.32	0.288	0.304	0.191	1.00	1.00	0.00	0.136	0.84
7535.0	5.30	1.57	0.30	0.242	0.299	0.164	1.00	1.00	0.00	0.124	0.82

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
7536.0	6.02	1.64	0.27	0.291	0.305	0.148	1.00	1.00	0.00	0.105	0.84
7537.0	6.07	1.65	0.27	0.295	0.305	0.147	1.00	1.00	0.00	0.104	0.84
7538.0	5.48	1.58	0.29	0.272	0.302	0.160	1.00	1.00	0.00	0.116	0.83
7539.0	5.17	1.53	0.30	0.281	0.303	0.167	1.00	1.00	0.00	0.120	0.84
7541.0	9.21	1.99	0.22	0.346	0.312	0.097	1.00	1.00	0.00	0.063	0.85
7542.0	5.95	1.61	0.27	0.337	0.310	0.150	1.00	1.00	0.00	0.099	0.85
7543.0	4.82	1.48	0.31	0.266	0.302	0.176	1.00	1.00	0.00	0.129	0.83
7544.0	4.64	1.46	0.31	0.263	0.301	0.181	1.00	1.00	0.00	0.134	0.83
7545.0	5.01	1.43	0.29	0.421	0.321	0.172	1.00	1.00	0.00	0.100	0.89
7548.0	7.32	1.82	0.25	0.282	0.304	0.124	1.00	1.00	0.00	0.089	0.83
7549.0	5.56	1.56	0.28	0.325	0.309	0.158	1.00	1.00	0.00	0.107	0.85
7550.0	4.38	1.31	0.30	0.476	0.327	0.190	1.00	1.00	0.00	0.100	0.91
7551.0	4.61	1.36	0.30	0.430	0.322	0.183	1.00	1.00	0.00	0.104	0.89
7552.0	4.42	1.38	0.31	0.345	0.311	0.188	1.00	1.00	0.00	0.123	0.86
7553.0	4.27	1.36	0.32	0.351	0.312	0.193	1.00	1.00	0.00	0.125	0.86
7554.0	4.66	1.44	0.31	0.299	0.306	0.181	1.00	1.00	0.00	0.127	0.84
7555.0	5.06	1.52	0.30	0.260	0.301	0.170	1.00	1.00	0.00	0.126	0.83
7556.0	5.22	1.52	0.29	0.309	0.307	0.166	1.00	1.00	0.00	0.115	0.85
7557.0	6.18	1.64	0.26	0.341	0.311	0.145	1.00	1.00	0.00	0.096	0.85
7558.0	6.01	1.53	0.25	0.477	0.328	0.148	1.00	1.00	0.00	0.077	0.91
7559.0	5.99	1.52	0.25	0.495	0.330	0.148	1.00	1.00	0.00	0.075	0.92
7560.0	6.55	1.63	0.25	0.420	0.321	0.137	1.00	1.00	0.00	0.080	0.88
7597.0	7.62	1.83	0.24	0.321	0.308	0.119	1.00	1.00	0.00	0.081	0.84
7598.0	7.60	1.79	0.24	0.371	0.315	0.119	1.00	1.00	0.00	0.075	0.86
7599.0	7.65	1.79	0.23	0.378	0.315	0.119	1.00	1.00	0.00	0.074	0.87
7600.0	7.61	1.77	0.23	0.405	0.319	0.119	1.00	1.00	0.00	0.071	0.88
7601.0	7.39	1.72	0.23	0.436	0.323	0.122	1.00	1.00	0.00	0.069	0.89
7608.0	9.57	2.10	0.22	0.252	0.300	0.093	1.00	1.00	0.00	0.070	0.81
7609.0	6.33	1.71	0.27	0.250	0.300	0.142	1.00	1.00	0.00	0.107	0.82
7610.0	5.24	1.55	0.30	0.260	0.301	0.166	1.00	1.00	0.00	0.122	0.83
7611.0	5.38	1.57	0.29	0.263	0.301	0.162	1.00	1.00	0.00	0.120	0.83
7612.0	5.18	1.54	0.30	0.271	0.302	0.167	1.00	1.00	0.00	0.122	0.83
7613.0	5.61	1.60	0.29	0.261	0.301	0.157	1.00	1.00	0.00	0.116	0.83
7614.0	5.35	1.57	0.29	0.261	0.301	0.163	1.00	1.00	0.00	0.120	0.83
7615.0	5.10	1.54	0.30	0.249	0.299	0.169	1.00	1.00	0.00	0.127	0.82
7616.0	4.86	1.51	0.31	0.232	0.297	0.175	1.00	1.00	0.00	0.134	0.82
7617.0	4.64	1.48	0.32	0.224	0.296	0.181	1.00	1.00	0.00	0.140	0.82
7618.0	4.66	1.52	0.33	0.160	0.288	0.179	1.00	1.00	0.00	0.151	0.80
7619.0	3.98	1.38	0.35	0.200	0.294	0.200	1.00	1.00	0.00	0.160	0.81
7620.0	4.22	1.41	0.33	0.234	0.298	0.193	1.00	1.00	0.00	0.148	0.82
7621.0	5.10	1.56	0.31	0.204	0.294	0.169	1.00	1.00	0.00	0.134	0.81
7624.0	4.37	1.47	0.34	0.153	0.288	0.188	1.00	1.00	0.00	0.159	0.80
7625.0	5.07	1.53	0.30	0.253	0.300	0.170	1.00	1.00	0.00	0.127	0.83

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
7626.0	3.92	1.27	0.32	0.411	0.320	0.205	1.00	1.00	0.00	0.121	0.89
7627.0	4.16	1.34	0.32	0.341	0.311	0.196	1.00	1.00	0.00	0.129	0.86
7628.0	5.58	1.60	0.29	0.261	0.301	0.158	1.00	1.00	0.00	0.117	0.83
7629.0	6.18	1.69	0.27	0.255	0.300	0.145	1.00	1.00	0.00	0.108	0.82
7630.0	3.54	1.17	0.33	0.488	0.329	0.220	1.00	1.00	0.00	0.113	0.91
7631.0	2.92	1.03	0.35	0.557	0.338	0.248	1.00	1.00	0.00	0.110	0.93
7632.0	4.56	1.39	0.30	0.370	0.314	0.184	1.00	1.00	0.00	0.116	0.87
7633.0	4.98	1.44	0.29	0.392	0.317	0.173	1.00	1.00	0.00	0.105	0.88
7634.0	5.12	1.41	0.28	0.476	0.328	0.169	1.00	1.00	0.00	0.088	0.91
7635.0	5.54	1.46	0.26	0.499	0.330	0.158	1.00	1.00	0.00	0.079	0.92
7636.0	6.15	1.62	0.26	0.361	0.313	0.146	1.00	1.00	0.00	0.093	0.86
7637.0	5.71	1.56	0.27	0.360	0.313	0.155	1.00	1.00	0.00	0.099	0.86
7638.0	5.82	1.55	0.27	0.398	0.318	0.152	1.00	1.00	0.00	0.092	0.88
7639.0	5.89	1.54	0.26	0.432	0.322	0.151	1.00	1.00	0.00	0.086	0.89
7640.0	5.88	1.54	0.26	0.437	0.323	0.151	1.00	1.00	0.00	0.085	0.89
7641.0	5.88	1.52	0.26	0.469	0.327	0.151	1.00	1.00	0.00	0.080	0.91
7642.0	6.02	1.55	0.26	0.440	0.323	0.148	1.00	1.00	0.00	0.083	0.89
7643.0	5.80	1.54	0.27	0.409	0.319	0.153	1.00	1.00	0.00	0.090	0.88
7644.0	6.11	1.64	0.27	0.321	0.308	0.146	1.00	1.00	0.00	0.099	0.85
7645.0	5.76	1.60	0.28	0.308	0.307	0.154	1.00	1.00	0.00	0.106	0.84
7646.0	5.49	1.57	0.29	0.289	0.304	0.160	1.00	1.00	0.00	0.114	0.84
7647.0	5.45	1.57	0.29	0.278	0.303	0.161	1.00	1.00	0.00	0.116	0.83
7648.0	6.18	1.65	0.27	0.314	0.308	0.145	1.00	1.00	0.00	0.099	0.85
7649.0	5.11	1.43	0.28	0.451	0.324	0.169	1.00	1.00	0.00	0.093	0.90
7650.0	4.68	1.38	0.29	0.428	0.322	0.181	1.00	1.00	0.00	0.103	0.89
7651.0	4.39	1.35	0.31	0.388	0.317	0.190	1.00	1.00	0.00	0.116	0.88
7652.0	3.91	1.27	0.32	0.403	0.318	0.205	1.00	1.00	0.00	0.123	0.88
7653.0	4.37	1.37	0.31	0.349	0.312	0.190	1.00	1.00	0.00	0.124	0.86
7654.0	4.75	1.51	0.32	0.203	0.294	0.178	1.00	1.00	0.00	0.141	0.81
7655.0	3.65	1.32	0.36	0.210	0.295	0.212	1.00	0.90	0.00	0.167	0.82
7656.0	3.05	1.21	0.40	0.204	0.294	0.236	1.00	0.81	0.00	0.188	0.82
7657.0	3.40	1.28	0.38	0.198	0.293	0.221	1.00	0.95	0.00	0.178	0.82
7658.0	3.60	1.30	0.36	0.225	0.297	0.214	1.00	1.00	0.00	0.166	0.82
7660.0	5.11	1.54	0.30	0.243	0.299	0.169	1.00	1.00	0.00	0.128	0.82
7661.0	5.43	1.58	0.29	0.265	0.301	0.161	1.00	1.00	0.00	0.118	0.83
7664.0	4.70	1.48	0.31	0.242	0.299	0.179	1.00	1.00	0.00	0.136	0.82
7665.0	5.48	1.58	0.29	0.273	0.302	0.160	1.00	1.00	0.00	0.116	0.83
7666.0	7.63	1.85	0.24	0.291	0.305	0.119	1.00	1.00	0.00	0.085	0.83
7668.0	7.11	1.74	0.25	0.356	0.313	0.128	1.00	1.00	0.00	0.082	0.86
7669.0	5.30	1.47	0.28	0.421	0.321	0.164	1.00	1.00	0.00	0.095	0.89
7674.0	4.87	1.44	0.30	0.356	0.313	0.176	1.00	1.00	0.00	0.113	0.86
7676.0	9.06	2.00	0.22	0.312	0.307	0.099	1.00	1.00	0.00	0.068	0.84
7677.0	5.58	1.43	0.26	0.552	0.337	0.157	1.00	1.00	0.00	0.070	0.93

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
7704.0	6.22	1.68	0.27	0.279	0.303	0.144	1.00	1.00	0.00	0.104	0.83
7717.0	5.46	1.55	0.28	0.315	0.308	0.161	1.00	1.00	0.00	0.110	0.85
7722.0	4.21	1.40	0.33	0.243	0.299	0.194	1.00	1.00	0.00	0.147	0.83
7723.0	4.74	1.48	0.31	0.242	0.299	0.178	1.00	1.00	0.00	0.135	0.82
7724.0	6.41	1.69	0.26	0.305	0.306	0.140	1.00	1.00	0.00	0.098	0.84
7725.0	6.90	1.77	0.26	0.277	0.303	0.131	1.00	1.00	0.00	0.095	0.83
7726.0	5.66	1.62	0.29	0.245	0.299	0.156	1.00	1.00	0.00	0.118	0.82
7727.0	4.86	1.51	0.31	0.239	0.298	0.175	1.00	1.00	0.00	0.133	0.82
7728.0	4.32	1.42	0.33	0.241	0.299	0.190	1.00	1.00	0.00	0.144	0.83
7729.0	4.54	1.47	0.32	0.217	0.296	0.184	1.00	1.00	0.00	0.144	0.82
7730.0	4.88	1.49	0.31	0.272	0.302	0.175	1.00	1.00	0.00	0.127	0.83
7731.0	6.15	1.66	0.27	0.293	0.305	0.146	1.00	1.00	0.00	0.103	0.84
7732.0	5.89	1.51	0.26	0.479	0.328	0.151	1.00	1.00	0.00	0.078	0.91
7737.0	5.61	1.54	0.27	0.369	0.314	0.157	1.00	1.00	0.00	0.099	0.87
7738.0	5.62	1.56	0.28	0.341	0.311	0.157	1.00	1.00	0.00	0.103	0.86
7739.0	6.59	1.70	0.26	0.329	0.309	0.137	1.00	1.00	0.00	0.092	0.85
7740.0	6.70	1.64	0.24	0.441	0.323	0.134	1.00	1.00	0.00	0.075	0.89
7741.0	5.81	1.52	0.26	0.447	0.324	0.152	1.00	1.00	0.00	0.084	0.90
7742.0	5.89	1.55	0.26	0.423	0.321	0.151	1.00	1.00	0.00	0.087	0.89
7745.0	4.72	1.44	0.30	0.329	0.309	0.179	1.00	1.00	0.00	0.120	0.85
7746.0	7.16	1.79	0.25	0.292	0.305	0.127	1.00	1.00	0.00	0.090	0.84
7748.0	7.48	1.83	0.24	0.299	0.306	0.122	1.00	1.00	0.00	0.085	0.84
7749.0	6.32	1.69	0.27	0.274	0.303	0.142	1.00	1.00	0.00	0.103	0.83
7750.0	5.89	1.63	0.28	0.288	0.304	0.151	1.00	1.00	0.00	0.108	0.84
7751.0	6.82	1.75	0.26	0.287	0.304	0.133	1.00	1.00	0.00	0.095	0.83
7752.0	6.82	1.72	0.25	0.330	0.309	0.133	1.00	1.00	0.00	0.089	0.85
7753.0	6.90	1.75	0.25	0.304	0.306	0.131	1.00	1.00	0.00	0.091	0.84
7754.0	7.11	1.76	0.25	0.334	0.310	0.128	1.00	1.00	0.00	0.085	0.85
7757.0	6.61	1.72	0.26	0.295	0.305	0.137	1.00	1.00	0.00	0.096	0.84
7758.0	7.35	1.83	0.25	0.266	0.302	0.124	1.00	1.00	0.00	0.091	0.82
7759.0	5.78	1.65	0.29	0.229	0.297	0.153	1.00	1.00	0.00	0.118	0.82
7760.0	4.19	1.40	0.33	0.237	0.298	0.194	1.00	1.00	0.00	0.148	0.83
7761.0	4.11	1.36	0.33	0.281	0.304	0.197	1.00	1.00	0.00	0.142	0.84
7762.0	3.89	1.32	0.34	0.297	0.305	0.205	1.00	1.00	0.00	0.144	0.85
7763.0	4.73	1.48	0.31	0.258	0.301	0.179	1.00	1.00	0.00	0.133	0.83
7766.0	5.74	1.65	0.29	0.222	0.296	0.154	1.00	1.00	0.00	0.120	0.81
7767.0	5.16	1.55	0.30	0.250	0.300	0.167	1.00	1.00	0.00	0.126	0.83
7772.0	5.76	1.55	0.27	0.392	0.317	0.154	1.00	1.00	0.00	0.094	0.88
7773.0	5.37	1.51	0.28	0.374	0.315	0.163	1.00	1.00	0.00	0.102	0.87

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
7774.0	5.98	1.63	0.27	0.300	0.306	0.149	1.00	1.00	0.00	0.104	0.84
7778.0	5.70	1.60	0.28	0.292	0.305	0.155	1.00	1.00	0.00	0.110	0.84
7779.0	5.02	1.48	0.29	0.337	0.310	0.172	1.00	1.00	0.00	0.114	0.86
7780.0	5.42	1.57	0.29	0.282	0.304	0.161	1.00	1.00	0.00	0.116	0.84
7781.0	7.14	1.80	0.25	0.280	0.303	0.127	1.00	1.00	0.00	0.092	0.83
7782.0	6.73	1.73	0.26	0.308	0.307	0.134	1.00	1.00	0.00	0.093	0.84
7788.0	5.23	1.54	0.29	0.278	0.303	0.166	1.00	1.00	0.00	0.120	0.84
7789.0	6.86	1.76	0.26	0.288	0.304	0.132	1.00	1.00	0.00	0.094	0.83
7790.0	7.61	1.81	0.24	0.352	0.312	0.119	1.00	1.00	0.00	0.077	0.86
7791.0	6.69	1.72	0.26	0.320	0.308	0.135	1.00	1.00	0.00	0.092	0.85
7792.0	5.48	1.59	0.29	0.253	0.300	0.160	1.00	1.00	0.00	0.119	0.83
7793.0	4.41	1.43	0.32	0.246	0.299	0.188	1.00	1.00	0.00	0.142	0.83
7794.0	4.81	1.51	0.31	0.211	0.295	0.176	1.00	1.00	0.00	0.139	0.81
7795.0	4.69	1.49	0.32	0.221	0.296	0.179	1.00	1.00	0.00	0.140	0.82
7796.0	5.02	1.52	0.30	0.259	0.301	0.171	1.00	1.00	0.00	0.127	0.83
7797.0	6.45	1.71	0.26	0.280	0.303	0.140	1.00	1.00	0.00	0.101	0.83
7798.0	6.22	1.66	0.27	0.318	0.308	0.144	1.00	1.00	0.00	0.098	0.85
7800.0	5.71	1.57	0.27	0.351	0.312	0.155	1.00	1.00	0.00	0.101	0.86
7801.0	5.19	1.52	0.29	0.303	0.306	0.167	1.00	1.00	0.00	0.116	0.84
7802.0	4.83	1.51	0.31	0.223	0.296	0.176	1.00	1.00	0.00	0.137	0.82
7803.0	5.16	1.55	0.30	0.235	0.298	0.167	1.00	1.00	0.00	0.128	0.82
7804.0	5.12	1.53	0.30	0.260	0.301	0.169	1.00	1.00	0.00	0.125	0.83
7819.0	6.26	1.63	0.26	0.365	0.314	0.143	1.00	1.00	0.00	0.091	0.87
7820.0	5.60	1.59	0.28	0.284	0.304	0.157	1.00	1.00	0.00	0.113	0.84
7821.0	5.68	1.62	0.29	0.254	0.300	0.155	1.00	1.00	0.00	0.116	0.83
7822.0	5.62	1.58	0.28	0.300	0.306	0.157	1.00	1.00	0.00	0.110	0.84
7824.0	7.05	1.78	0.25	0.284	0.304	0.129	1.00	1.00	0.00	0.092	0.83
7825.0	5.69	1.59	0.28	0.313	0.307	0.155	1.00	1.00	0.00	0.107	0.85
7826.0	5.75	1.61	0.28	0.281	0.303	0.154	1.00	1.00	0.00	0.111	0.84
7953.0	5.99	1.57	0.26	0.413	0.320	0.149	1.00	1.00	0.00	0.087	0.89
7954.0	7.19	1.80	0.25	0.291	0.305	0.127	1.00	1.00	0.00	0.090	0.84
7955.0	5.63	1.61	0.29	0.265	0.301	0.157	1.00	0.95	0.00	0.115	0.83
7956.0	6.31	1.71	0.27	0.240	0.298	0.142	1.00	1.00	0.00	0.108	0.82
7957.0	6.07	1.67	0.28	0.257	0.300	0.147	1.00	1.00	0.00	0.109	0.83
7958.0	5.68	1.62	0.29	0.253	0.300	0.155	1.00	0.95	0.00	0.116	0.83
7959.0	5.70	1.62	0.28	0.260	0.301	0.155	1.00	0.92	0.00	0.115	0.83
7960.0	5.35	1.56	0.29	0.271	0.302	0.163	1.00	0.86	0.00	0.119	0.83
7961.0	5.96	1.66	0.28	0.256	0.300	0.149	1.00	1.00	0.00	0.111	0.83
7962.0	5.41	1.56	0.29	0.297	0.305	0.162	1.00	1.00	0.00	0.114	0.84
7963.0	4.64	1.44	0.31	0.304	0.306	0.182	1.00	0.94	0.00	0.126	0.85
7967.0	4.12	1.36	0.33	0.298	0.306	0.197	1.00	0.81	0.00	0.139	0.85

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
7972.0	5.79	1.61	0.28	0.301	0.306	0.153	1.00	1.00	0.00	0.107	0.84
7973.0	5.16	1.47	0.29	0.381	0.316	0.168	1.00	1.00	0.00	0.104	0.87
7976.0	4.60	1.44	0.31	0.279	0.303	0.182	1.00	0.80	0.00	0.132	0.84
7977.0	5.73	1.63	0.29	0.240	0.298	0.154	1.00	0.89	0.00	0.117	0.82
7978.0	4.94	1.48	0.30	0.299	0.306	0.173	1.00	0.91	0.00	0.122	0.85
7982.0	6.01	1.67	0.28	0.242	0.299	0.148	1.00	0.89	0.00	0.112	0.82
7983.0	4.98	1.50	0.30	0.287	0.304	0.172	1.00	0.75	0.00	0.123	0.84
7984.0	6.15	1.64	0.27	0.323	0.309	0.146	1.00	0.90	0.00	0.099	0.85
7985.0	8.96	1.98	0.22	0.323	0.309	0.100	1.00	1.00	0.00	0.068	0.84
7986.0	7.32	1.75	0.24	0.385	0.316	0.124	1.00	1.00	0.00	0.076	0.87
7987.0	8.25	1.90	0.23	0.324	0.309	0.110	1.00	1.00	0.00	0.074	0.85
7988.0	7.14	1.79	0.25	0.293	0.305	0.127	1.00	1.00	0.00	0.090	0.84
7993.0	5.38	1.58	0.29	0.244	0.299	0.162	1.00	1.00	0.00	0.123	0.82
8000.0	5.73	1.61	0.28	0.274	0.303	0.154	1.00	1.00	0.00	0.112	0.83
8001.0	5.68	1.62	0.28	0.257	0.300	0.155	1.00	1.00	0.00	0.115	0.83
8009.0	6.57	1.72	0.26	0.287	0.304	0.137	1.00	1.00	0.00	0.098	0.84
8010.0	6.73	1.74	0.26	0.296	0.305	0.134	1.00	1.00	0.00	0.095	0.84
8011.0	6.73	1.73	0.26	0.309	0.307	0.134	1.00	1.00	0.00	0.093	0.84
8012.0	7.53	1.83	0.24	0.309	0.307	0.121	1.00	1.00	0.00	0.084	0.84
8013.0	7.50	1.82	0.24	0.316	0.308	0.121	1.00	1.00	0.00	0.083	0.85
8014.0	6.97	1.75	0.25	0.313	0.307	0.130	1.00	1.00	0.00	0.089	0.85
8015.0	8.38	1.86	0.22	0.410	0.319	0.107	1.00	1.00	0.00	0.063	0.88
8017.0	11.87	2.08	0.18	0.553	0.337	0.065	1.00	1.00	0.00	0.029	0.93
8080.0	5.59	1.50	0.27	0.430	0.322	0.158	1.00	1.00	0.00	0.090	0.89
8107.0	7.89	1.82	0.23	0.380	0.316	0.115	1.00	1.00	0.00	0.071	0.87
8108.0	8.14	1.85	0.23	0.375	0.315	0.111	1.00	1.00	0.00	0.069	0.87
8109.0	7.64	1.81	0.24	0.349	0.312	0.119	1.00	1.00	0.00	0.078	0.86
8110.0	7.85	1.83	0.23	0.363	0.314	0.116	1.00	1.00	0.00	0.074	0.86
8111.0	7.69	1.82	0.24	0.340	0.311	0.118	1.00	1.00	0.00	0.078	0.86
8112.0	5.69	1.59	0.28	0.299	0.306	0.155	1.00	1.00	0.00	0.109	0.84
8118.0	8.54	1.94	0.23	0.317	0.308	0.106	1.00	1.00	0.00	0.072	0.84
8119.0	8.53	1.92	0.23	0.338	0.310	0.106	1.00	1.00	0.00	0.070	0.85
8120.0	7.80	1.83	0.23	0.352	0.312	0.116	1.00	1.00	0.00	0.076	0.86
8121.0	7.61	1.82	0.24	0.341	0.311	0.119	1.00	1.00	0.00	0.079	0.86
8122.0	7.10	1.72	0.24	0.385	0.316	0.128	1.00	1.00	0.00	0.079	0.87
8125.0	6.57	1.70	0.26	0.318	0.308	0.137	1.00	1.00	0.00	0.094	0.85
8126.0	6.41	1.68	0.26	0.323	0.309	0.140	1.00	1.00	0.00	0.095	0.85

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
8127.0	6.41	1.68	0.26	0.312	0.307	0.140	1.00	1.00	0.00	0.097	0.85
8128.0	6.63	1.70	0.26	0.338	0.311	0.136	1.00	1.00	0.00	0.090	0.86
8129.0	7.89	1.82	0.23	0.385	0.316	0.115	1.00	1.00	0.00	0.071	0.87
8130.0	12.02	2.07	0.17	0.586	0.341	0.063	1.00	1.00	0.00	0.026	0.93
8132.0	8.71	1.90	0.22	0.402	0.318	0.103	1.00	1.00	0.00	0.062	0.88
8133.0	5.82	1.53	0.26	0.437	0.323	0.152	1.00	1.00	0.00	0.086	0.90
8138.0	7.05	1.71	0.24	0.401	0.318	0.128	1.00	1.00	0.00	0.077	0.88
8139.0	6.98	1.75	0.25	0.331	0.310	0.130	1.00	1.00	0.00	0.087	0.85
8140.0	7.41	1.81	0.24	0.306	0.307	0.123	1.00	1.00	0.00	0.085	0.84
8141.0	7.11	1.72	0.24	0.401	0.318	0.127	1.00	1.00	0.00	0.076	0.88
8142.0	7.28	1.65	0.23	0.520	0.333	0.123	1.00	1.00	0.00	0.059	0.93
8149.0	6.78	1.73	0.26	0.312	0.307	0.134	1.00	1.00	0.00	0.092	0.85
8150.0	7.99	1.84	0.23	0.373	0.315	0.113	1.00	1.00	0.00	0.071	0.87
8151.0	8.13	1.72	0.21	0.561	0.338	0.109	1.00	1.00	0.00	0.048	0.93
8152.0	7.56	1.66	0.22	0.556	0.337	0.118	1.00	1.00	0.00	0.052	0.93
8153.0	7.26	1.71	0.24	0.428	0.322	0.125	1.00	1.00	0.00	0.071	0.89
8154.0	7.76	1.83	0.24	0.343	0.311	0.117	1.00	1.00	0.00	0.077	0.86
8155.0	7.98	1.82	0.23	0.390	0.317	0.113	1.00	1.00	0.00	0.069	0.87
8158.0	7.74	1.69	0.22	0.541	0.336	0.115	1.00	1.00	0.00	0.053	0.93
8159.0	7.63	1.72	0.23	0.478	0.328	0.118	1.00	1.00	0.00	0.062	0.91
8160.0	5.69	1.47	0.26	0.515	0.332	0.155	1.00	1.00	0.00	0.075	0.93
8161.0	4.92	1.39	0.28	0.471	0.327	0.174	1.00	1.00	0.00	0.092	0.91
8162.0	5.62	1.58	0.28	0.304	0.306	0.157	1.00	1.00	0.00	0.109	0.85
8340.0	9.58	1.96	0.20	0.439	0.323	0.091	1.00	1.00	0.00	0.051	0.90
8341.0	9.12	1.93	0.21	0.420	0.321	0.097	1.00	1.00	0.00	0.056	0.89
8342.0	7.86	1.86	0.24	0.320	0.308	0.116	1.00	1.00	0.00	0.079	0.85
8343.0	6.63	1.70	0.26	0.337	0.310	0.136	1.00	1.00	0.00	0.090	0.86
8344.0	6.15	1.54	0.25	0.490	0.329	0.145	1.00	1.00	0.00	0.074	0.92
8347.0	7.15	1.66	0.23	0.490	0.329	0.126	1.00	1.00	0.00	0.064	0.92
8352.0	8.98	1.87	0.21	0.473	0.327	0.099	1.00	1.00	0.00	0.052	0.91
8353.0	8.61	1.75	0.20	0.582	0.341	0.101	1.00	1.00	0.00	0.042	0.93
8356.0	9.32	1.90	0.20	0.480	0.328	0.094	1.00	1.00	0.00	0.049	0.91
8357.0	10.01	1.98	0.20	0.474	0.327	0.086	1.00	1.00	0.00	0.045	0.91
8358.0	11.08	2.00	0.18	0.563	0.338	0.072	1.00	1.00	0.00	0.032	0.93
8360.0	10.88	1.99	0.18	0.559	0.338	0.075	1.00	1.00	0.00	0.033	0.93
8361.0	9.67	1.95	0.20	0.469	0.327	0.090	1.00	1.00	0.00	0.048	0.91
8362.0	9.17	1.95	0.21	0.401	0.318	0.097	1.00	1.00	0.00	0.058	0.88
8363.0	8.26	1.89	0.23	0.347	0.312	0.110	1.00	1.00	0.00	0.072	0.86
8364.0	7.16	1.76	0.25	0.335	0.310	0.127	1.00	1.00	0.00	0.084	0.86

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
8365.0	7.57	1.82	0.24	0.331	0.310	0.120	1.00	1.00	0.00	0.080	0.85
8366.0	8.55	1.91	0.22	0.358	0.313	0.106	1.00	1.00	0.00	0.068	0.86
8367.0	8.50	1.88	0.22	0.388	0.317	0.106	1.00	1.00	0.00	0.065	0.87
8368.0	8.31	1.88	0.23	0.358	0.313	0.109	1.00	1.00	0.00	0.070	0.86
8369.0	7.61	1.81	0.24	0.345	0.311	0.119	1.00	1.00	0.00	0.078	0.86
8370.0	7.43	1.81	0.24	0.320	0.308	0.122	1.00	1.00	0.00	0.083	0.85
8371.0	7.16	1.76	0.25	0.340	0.311	0.127	1.00	1.00	0.00	0.084	0.86
8372.0	8.05	1.85	0.23	0.366	0.314	0.113	1.00	1.00	0.00	0.071	0.87
8373.0	8.80	1.91	0.22	0.401	0.318	0.102	1.00	1.00	0.00	0.061	0.88
8374.0	9.14	1.93	0.21	0.427	0.321	0.097	1.00	1.00	0.00	0.056	0.89
8375.0	9.82	1.98	0.20	0.449	0.324	0.088	1.00	1.00	0.00	0.049	0.90
8376.0	9.50	1.94	0.20	0.460	0.326	0.092	1.00	1.00	0.00	0.050	0.90
8377.0	9.60	1.95	0.20	0.452	0.325	0.091	1.00	1.00	0.00	0.050	0.90
8378.0	10.09	1.99	0.20	0.465	0.326	0.085	1.00	1.00	0.00	0.046	0.91
8379.0	10.20	2.01	0.20	0.457	0.325	0.084	1.00	1.00	0.00	0.046	0.90
8380.0	9.92	1.97	0.20	0.470	0.327	0.087	1.00	1.00	0.00	0.046	0.91
8382.0	9.70	1.95	0.20	0.465	0.326	0.090	1.00	1.00	0.00	0.048	0.91
8385.0	8.56	1.89	0.22	0.389	0.317	0.105	1.00	1.00	0.00	0.064	0.88
8386.0	7.70	1.82	0.24	0.356	0.313	0.118	1.00	1.00	0.00	0.076	0.86
8388.0	8.20	1.87	0.23	0.364	0.314	0.110	1.00	1.00	0.00	0.070	0.87
8393.0	11.57	2.05	0.18	0.561	0.338	0.067	1.00	1.00	0.00	0.030	0.93
8394.0	10.27	1.94	0.19	0.552	0.337	0.081	1.00	1.00	0.00	0.036	0.93
8396.0	7.77	1.81	0.23	0.372	0.315	0.117	1.00	1.00	0.00	0.073	0.87
8496.0	8.20	1.87	0.23	0.364	0.314	0.110	1.00	1.00	0.00	0.070	0.87
8497.0	7.90	1.84	0.23	0.359	0.313	0.115	1.00	1.00	0.00	0.074	0.86
8498.0	7.61	1.81	0.24	0.346	0.311	0.119	1.00	1.00	0.00	0.078	0.86
8499.0	7.68	1.82	0.24	0.347	0.312	0.118	1.00	1.00	0.00	0.077	0.86
8500.0	7.88	1.84	0.23	0.351	0.312	0.115	1.00	1.00	0.00	0.075	0.86
8501.0	7.91	1.85	0.23	0.343	0.311	0.115	1.00	1.00	0.00	0.076	0.86
8502.0	7.61	1.81	0.24	0.346	0.311	0.119	1.00	1.00	0.00	0.078	0.86
8503.0	7.81	1.84	0.24	0.345	0.311	0.116	1.00	1.00	0.00	0.076	0.86
8504.0	7.81	1.83	0.24	0.346	0.311	0.116	1.00	1.00	0.00	0.076	0.86
8505.0	7.81	1.84	0.24	0.338	0.311	0.116	1.00	1.00	0.00	0.077	0.86
8506.0	7.81	1.84	0.24	0.343	0.311	0.116	1.00	1.00	0.00	0.077	0.86
8507.0	7.88	1.85	0.23	0.339	0.311	0.115	1.00	1.00	0.00	0.076	0.86
8508.0	7.68	1.82	0.24	0.351	0.312	0.118	1.00	1.00	0.00	0.077	0.86
8509.0	8.62	1.90	0.22	0.380	0.316	0.104	1.00	1.00	0.00	0.065	0.87
8510.0	9.84	1.99	0.20	0.436	0.323	0.088	1.00	1.00	0.00	0.050	0.89
8511.0	9.72	1.96	0.20	0.455	0.325	0.090	1.00	1.00	0.00	0.049	0.90
8512.0	9.02	1.91	0.21	0.434	0.322	0.099	1.00	1.00	0.00	0.056	0.89
8513.0	8.91	1.92	0.22	0.404	0.319	0.100	1.00	1.00	0.00	0.060	0.88
8514.0	8.75	1.91	0.22	0.391	0.317	0.103	1.00	1.00	0.00	0.063	0.88

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
8515.0	8.03	1.83	0.23	0.387	0.317	0.113	1.00	1.00	0.00	0.069	0.88
8516.0	7.90	1.84	0.23	0.361	0.313	0.115	1.00	1.00	0.00	0.073	0.87
8517.0	8.00	1.85	0.23	0.357	0.313	0.113	1.00	1.00	0.00	0.073	0.86
8518.0	8.00	1.85	0.23	0.362	0.313	0.113	1.00	1.00	0.00	0.072	0.87
8519.0	8.00	1.85	0.23	0.350	0.312	0.113	1.00	1.00	0.00	0.074	0.86
8520.0	7.57	1.81	0.24	0.343	0.311	0.120	1.00	1.00	0.00	0.079	0.86
8521.0	7.50	1.81	0.24	0.333	0.310	0.121	1.00	1.00	0.00	0.081	0.86
8522.0	7.34	1.79	0.24	0.336	0.310	0.124	1.00	1.00	0.00	0.082	0.86
8523.0	7.52	1.81	0.24	0.329	0.309	0.121	1.00	1.00	0.00	0.081	0.85
8524.0	7.31	1.78	0.24	0.344	0.311	0.124	1.00	1.00	0.00	0.082	0.86
8525.0	7.50	1.77	0.24	0.383	0.316	0.121	1.00	1.00	0.00	0.075	0.88
8526.0	8.61	1.90	0.22	0.385	0.316	0.104	1.00	1.00	0.00	0.064	0.87
8527.0	8.40	1.87	0.22	0.386	0.316	0.107	1.00	1.00	0.00	0.066	0.88
8536.0	9.10	1.86	0.20	0.513	0.332	0.096	1.00	1.00	0.00	0.047	0.93
8540.0	8.56	1.84	0.22	0.451	0.324	0.104	1.00	1.00	0.00	0.057	0.90
8541.0	9.75	1.99	0.20	0.425	0.321	0.090	1.00	1.00	0.00	0.051	0.89
8542.0	10.23	2.01	0.20	0.457	0.325	0.084	1.00	1.00	0.00	0.045	0.90
8543.0	9.06	1.90	0.21	0.451	0.324	0.098	1.00	1.00	0.00	0.054	0.90
8544.0	9.09	1.92	0.21	0.420	0.321	0.098	1.00	1.00	0.00	0.057	0.89
8547.0	7.92	1.80	0.23	0.416	0.320	0.114	1.00	1.00	0.00	0.067	0.89
8548.0	7.88	1.84	0.23	0.354	0.312	0.115	1.00	1.00	0.00	0.075	0.86
8549.0	7.65	1.79	0.23	0.378	0.315	0.119	1.00	1.00	0.00	0.074	0.87
8550.0	9.14	1.94	0.21	0.405	0.319	0.097	1.00	1.00	0.00	0.058	0.88
8551.0	9.81	1.95	0.20	0.478	0.328	0.088	1.00	1.00	0.00	0.046	0.91
8557.0	5.06	1.49	0.29	0.326	0.309	0.170	1.00	0.95	0.00	0.115	0.86
8558.0	8.21	1.88	0.23	0.342	0.311	0.110	1.00	1.00	0.00	0.073	0.86
8559.0	8.20	1.87	0.23	0.364	0.314	0.110	1.00	1.00	0.00	0.070	0.87
8560.0	8.26	1.89	0.23	0.349	0.312	0.110	1.00	1.00	0.00	0.071	0.86
8561.0	8.00	1.85	0.23	0.362	0.313	0.113	1.00	1.00	0.00	0.072	0.87
8562.0	8.07	1.85	0.23	0.365	0.314	0.112	1.00	1.00	0.00	0.071	0.87
8563.0	8.07	1.81	0.22	0.418	0.320	0.112	1.00	1.00	0.00	0.065	0.89
8566.0	4.79	1.34	0.28	0.527	0.334	0.178	1.00	1.00	0.00	0.084	0.94
8567.0	2.89	1.03	0.36	0.537	0.335	0.250	1.00	0.79	0.11	0.116	0.94
8568.0	2.85	1.09	0.38	0.379	0.316	0.250	1.00	0.63	0.00	0.155	0.88
8569.0	2.94	1.13	0.39	0.329	0.309	0.245	1.00	0.58	0.00	0.164	0.87
8570.0	5.38	1.55	0.29	0.305	0.306	0.163	1.00	1.00	0.00	0.113	0.85
8571.0	6.26	1.67	0.27	0.301	0.306	0.143	1.00	1.00	0.00	0.100	0.85
8572.0	6.33	1.66	0.26	0.342	0.311	0.142	1.00	1.00	0.00	0.093	0.86
8573.0	6.57	1.69	0.26	0.334	0.310	0.137	1.00	1.00	0.00	0.092	0.86
8574.0	7.07	1.76	0.25	0.320	0.308	0.128	1.00	1.00	0.00	0.087	0.85
8575.0	7.16	1.77	0.25	0.328	0.309	0.127	1.00	1.00	0.00	0.085	0.85
8576.0	7.60	1.83	0.24	0.318	0.308	0.120	1.00	1.00	0.00	0.082	0.85
8577.0	7.80	1.83	0.23	0.353	0.312	0.116	1.00	1.00	0.00	0.075	0.86

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
8578.0	9.09	1.91	0.21	0.447	0.324	0.097	1.00	1.00	0.00	0.054	0.90
8583.0	7.16	1.64	0.23	0.514	0.332	0.125	1.00	1.00	0.00	0.061	0.93
8590.0	7.50	1.68	0.22	0.523	0.333	0.119	1.00	1.00	0.00	0.057	0.94
8592.0	7.37	1.71	0.23	0.461	0.326	0.122	1.00	1.00	0.00	0.066	0.91
8593.0	7.16	1.78	0.25	0.319	0.308	0.127	1.00	1.00	0.00	0.086	0.85
8594.0	5.90	1.46	0.25	0.569	0.339	0.149	1.00	1.00	0.00	0.064	0.94
8596.0	6.78	1.62	0.24	0.480	0.328	0.133	1.00	1.00	0.00	0.069	0.92
8597.0	5.60	1.46	0.26	0.503	0.331	0.157	1.00	1.00	0.00	0.078	0.93
8599.0	5.66	1.50	0.26	0.452	0.325	0.156	1.00	1.00	0.00	0.085	0.91
8600.0	5.86	1.58	0.27	0.357	0.313	0.152	1.00	1.00	0.00	0.098	0.87
8625.0	7.42	1.83	0.25	0.287	0.304	0.123	1.00	1.00	0.00	0.088	0.84
8626.0	5.37	1.50	0.28	0.381	0.316	0.163	1.00	1.00	0.00	0.101	0.88
8627.0	6.14	1.59	0.26	0.411	0.319	0.146	1.00	1.00	0.00	0.086	0.89
8628.0	6.86	1.76	0.26	0.286	0.304	0.132	1.00	1.00	0.00	0.094	0.84
8629.0	5.53	1.62	0.29	0.216	0.295	0.158	1.00	0.89	0.00	0.124	0.82
8634.0	7.32	1.83	0.25	0.272	0.302	0.124	1.00	1.00	0.00	0.090	0.83
8635.0	4.26	1.28	0.30	0.487	0.329	0.194	1.00	0.97	0.00	0.099	0.92
8642.0	10.25	1.99	0.19	0.492	0.330	0.083	1.00	1.00	0.00	0.042	0.92
8643.0	6.80	1.57	0.23	0.568	0.339	0.131	1.00	1.00	0.00	0.057	0.94
8644.0	5.76	1.44	0.25	0.577	0.340	0.152	1.00	1.00	0.00	0.064	0.94
8655.0	5.31	1.38	0.26	0.576	0.340	0.163	1.00	1.00	0.00	0.069	0.94
8673.0	9.34	1.92	0.21	0.462	0.326	0.094	1.00	1.00	0.00	0.051	0.91
8674.0	9.34	2.01	0.22	0.338	0.310	0.096	1.00	1.00	0.00	0.063	0.85
8675.0	6.98	1.75	0.25	0.330	0.309	0.130	1.00	1.00	0.00	0.087	0.86
8676.0	8.55	1.94	0.23	0.312	0.307	0.106	1.00	1.00	0.00	0.073	0.85
8691.0	7.35	1.69	0.23	0.484	0.328	0.122	1.00	1.00	0.00	0.063	0.92
8692.0	6.83	1.71	0.25	0.360	0.313	0.133	1.00	1.00	0.00	0.085	0.87
8707.0	10.31	1.93	0.19	0.564	0.338	0.081	1.00	1.00	0.00	0.035	0.94
8769.0	5.87	1.46	0.25	0.563	0.338	0.150	1.00	1.00	0.00	0.066	0.94
8770.0	5.85	1.54	0.26	0.429	0.322	0.152	1.00	1.00	0.00	0.087	0.90
8771.0	5.44	1.54	0.28	0.336	0.310	0.161	1.00	0.98	0.00	0.107	0.86
8772.0	5.47	1.58	0.29	0.275	0.303	0.160	1.00	0.92	0.00	0.116	0.84
8773.0	5.69	1.55	0.27	0.372	0.315	0.155	1.00	1.00	0.00	0.098	0.88
8774.0	6.79	1.72	0.25	0.336	0.310	0.133	1.00	1.00	0.00	0.089	0.86
8775.0	7.63	1.77	0.23	0.405	0.319	0.119	1.00	1.00	0.00	0.071	0.89

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DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR 0	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
8779.0	4.99	1.36	0.27	0.539	0.335	0.172	1.00	1.00	0.00	0.079	0.94
8780.0	6.23	1.56	0.25	0.472	0.327	0.143	1.00	1.00	0.00	0.076	0.92
8781.0	11.22	2.04	0.18	0.532	0.334	0.072	1.00	1.00	0.00	0.033	0.94
8784.0	6.00	1.51	0.25	0.504	0.331	0.148	1.00	1.00	0.00	0.073	0.93
8785.0	6.40	1.57	0.24	0.498	0.330	0.140	1.00	1.00	0.00	0.070	0.93
8787.0	7.11	1.66	0.23	0.483	0.328	0.127	1.00	1.00	0.00	0.065	0.92
8788.0	8.28	1.80	0.22	0.468	0.327	0.108	1.00	1.00	0.00	0.058	0.91
8793.0	9.50	1.92	0.20	0.479	0.328	0.092	1.00	1.00	0.00	0.048	0.92
8800.0	9.49	1.96	0.21	0.435	0.323	0.093	1.00	1.00	0.00	0.052	0.90
8801.0	9.37	1.94	0.21	0.439	0.323	0.094	1.00	1.00	0.00	0.053	0.90
8802.0	9.37	1.94	0.21	0.434	0.322	0.094	1.00	1.00	0.00	0.053	0.90
8803.0	9.74	1.98	0.20	0.437	0.323	0.090	1.00	1.00	0.00	0.050	0.90
8807.0	8.04	1.84	0.23	0.375	0.315	0.113	1.00	1.00	0.00	0.070	0.87
8921.0	10.72	2.00	0.19	0.530	0.334	0.077	1.00	1.00	0.00	0.036	0.94
8922.0	10.21	1.99	0.20	0.476	0.328	0.084	1.00	1.00	0.00	0.044	0.92
8986.0	6.77	1.59	0.23	0.526	0.334	0.132	1.00	1.00	0.00	0.063	0.94
8987.0	6.90	1.69	0.24	0.405	0.319	0.131	1.00	1.00	0.00	0.078	0.89
8988.0	6.81	1.56	0.23	0.573	0.340	0.131	1.00	1.00	0.00	0.056	0.94
9080.0	8.75	1.95	0.22	0.340	0.311	0.103	1.00	1.00	0.00	0.068	0.86
9081.0	9.97	1.99	0.20	0.455	0.325	0.087	1.00	1.00	0.00	0.047	0.91
9082.0	10.35	2.02	0.19	0.468	0.327	0.082	1.00	1.00	0.00	0.044	0.91
9083.0	9.94	1.97	0.20	0.478	0.328	0.087	1.00	1.00	0.00	0.045	0.92
9084.0	10.21	2.00	0.20	0.471	0.327	0.084	1.00	1.00	0.00	0.044	0.91
9085.0	9.95	1.97	0.20	0.472	0.327	0.087	1.00	1.00	0.00	0.046	0.92
9086.0	9.94	1.97	0.20	0.475	0.327	0.087	1.00	1.00	0.00	0.045	0.92
9087.0	10.10	1.98	0.20	0.483	0.328	0.085	1.00	1.00	0.00	0.044	0.92
9088.0	10.43	1.99	0.19	0.504	0.331	0.081	1.00	1.00	0.00	0.040	0.93
9089.0	10.68	2.00	0.19	0.519	0.333	0.078	1.00	1.00	0.00	0.037	0.94
9090.0	10.37	1.99	0.19	0.498	0.330	0.081	1.00	1.00	0.00	0.041	0.93
9091.0	9.75	1.95	0.20	0.477	0.328	0.089	1.00	1.00	0.00	0.046	0.92
9092.0	9.87	1.98	0.20	0.458	0.325	0.088	1.00	1.00	0.00	0.048	0.91
9093.0	9.87	1.98	0.20	0.457	0.325	0.088	1.00	1.00	0.00	0.048	0.91
9094.0	9.63	1.94	0.20	0.474	0.327	0.090	1.00	1.00	0.00	0.047	0.92
9095.0	10.06	1.98	0.20	0.482	0.328	0.085	1.00	1.00	0.00	0.044	0.92
9096.0	10.45	2.01	0.19	0.492	0.329	0.081	1.00	1.00	0.00	0.041	0.92
9097.0	10.11	1.97	0.19	0.495	0.330	0.084	1.00	1.00	0.00	0.043	0.93
9098.0	10.34	2.01	0.19	0.474	0.327	0.082	1.00	1.00	0.00	0.043	0.92
9099.0	9.91	1.95	0.20	0.497	0.330	0.087	1.00	1.00	0.00	0.043	0.93
9100.0	9.31	1.86	0.20	0.532	0.334	0.093	1.00	1.00	0.00	0.044	0.94

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
9101.0	9.52	1.90	0.20	0.507	0.331	0.091	1.00	1.00	0.00	0.045	0.93
9107.0	10.31	1.99	0.19	0.495	0.330	0.082	1.00	1.00	0.00	0.041	0.93
9108.0	10.21	2.00	0.20	0.471	0.327	0.084	1.00	1.00	0.00	0.044	0.91
9109.0	9.61	1.96	0.20	0.441	0.323	0.091	1.00	1.00	0.00	0.051	0.90
9110.0	9.51	1.97	0.21	0.423	0.321	0.093	1.00	1.00	0.00	0.053	0.89
9111.0	8.86	1.85	0.21	0.482	0.328	0.100	1.00	1.00	0.00	0.052	0.92
9112.0	9.28	1.89	0.20	0.486	0.329	0.094	1.00	1.00	0.00	0.049	0.92
9113.0	11.02	2.03	0.18	0.524	0.333	0.074	1.00	1.00	0.00	0.035	0.94
9116.0	9.39	1.96	0.21	0.419	0.320	0.094	1.00	1.00	0.00	0.055	0.89
9117.0	8.77	1.86	0.21	0.457	0.325	0.101	1.00	1.00	0.00	0.055	0.91
9118.0	8.43	1.82	0.22	0.472	0.327	0.106	1.00	1.00	0.00	0.056	0.92
9119.0	8.80	1.89	0.21	0.428	0.322	0.101	1.00	1.00	0.00	0.058	0.90
9120.0	8.93	1.92	0.21	0.407	0.319	0.100	1.00	1.00	0.00	0.059	0.89
9121.0	9.03	1.91	0.21	0.427	0.321	0.099	1.00	1.00	0.00	0.056	0.90
9125.0	9.09	1.80	0.20	0.580	0.340	0.095	1.00	1.00	0.00	0.040	0.94
9142.0	9.51	1.89	0.20	0.517	0.333	0.091	1.00	1.00	0.00	0.044	0.94
9143.0	9.58	1.88	0.20	0.548	0.336	0.090	1.00	1.00	0.00	0.040	0.94
9146.0	10.26	1.96	0.19	0.521	0.333	0.082	1.00	1.00	0.00	0.039	0.94
9151.0	9.56	1.97	0.21	0.430	0.322	0.092	1.00	1.00	0.00	0.052	0.90
9152.0	8.79	1.90	0.22	0.404	0.319	0.102	1.00	1.00	0.00	0.061	0.89
9153.0	8.90	1.89	0.21	0.442	0.323	0.100	1.00	1.00	0.00	0.056	0.90
9154.0	10.53	2.00	0.19	0.505	0.331	0.079	1.00	1.00	0.00	0.039	0.93
9155.0	11.40	2.04	0.18	0.553	0.337	0.069	1.00	1.00	0.00	0.031	0.94
9161.0	9.17	1.85	0.20	0.528	0.334	0.095	1.00	1.00	0.00	0.045	0.94
9162.0	10.06	1.94	0.19	0.526	0.334	0.084	1.00	1.00	0.00	0.040	0.94
9173.0	9.97	1.99	0.20	0.455	0.325	0.087	1.00	1.00	0.00	0.047	0.91
9174.0	10.65	1.99	0.19	0.533	0.335	0.078	1.00	1.00	0.00	0.036	0.94
9193.0	11.10	1.97	0.18	0.600	0.343	0.071	1.00	1.00	0.00	0.028	0.94
9194.0	9.27	1.94	0.21	0.421	0.321	0.096	1.00	1.00	0.00	0.055	0.89
9413.0	9.54	1.93	0.20	0.471	0.327	0.091	1.00	1.00	0.00	0.048	0.92
9414.0	9.96	1.98	0.20	0.465	0.326	0.087	1.00	1.00	0.00	0.046	0.91
9418.0	10.57	1.98	0.19	0.536	0.335	0.078	1.00	1.00	0.00	0.036	0.94
9419.0	11.75	2.06	0.18	0.569	0.339	0.066	1.00	1.00	0.00	0.028	0.94
9434.0	11.15	2.02	0.18	0.550	0.337	0.072	1.00	1.00	0.00	0.032	0.94
9435.0	11.53	2.02	0.18	0.592	0.342	0.067	1.00	1.00	0.00	0.027	0.94
9436.0	11.18	2.01	0.18	0.568	0.339	0.071	1.00	1.00	0.00	0.031	0.94

Schlumberger

DEPTH FEET	RATIO G/CB 10-12	SHEAR MOD. 10-6	BULK COMP 10+6	SHALE FACTOR Q	POIS RATIO PR	TOT POR P-Z	CP	WATER SATURATION SW	GAS	EFF POR P-E	FRAC GRAD FPG
9437.0	11.00	1.98	0.18	0.582	0.341	0.073	1.00	1.00	0.00	0.030	0.94
9440.0	10.46	1.95	0.19	0.559	0.338	0.079	1.00	1.00	0.00	0.035	0.94
9441.0	10.21	1.98	0.19	0.496	0.330	0.083	1.00	1.00	0.00	0.042	0.93
9442.0	10.37	1.99	0.19	0.497	0.330	0.081	1.00	1.00	0.00	0.041	0.93
9443.0	10.15	1.98	0.19	0.492	0.329	0.084	1.00	1.00	0.00	0.043	0.93
9444.0	9.76	1.86	0.19	0.584	0.341	0.087	1.00	1.00	0.00	0.036	0.94
9451.0	11.90	2.06	0.17	0.586	0.341	0.064	1.00	1.00	0.00	0.026	0.94
9452.0	9.90	1.92	0.19	0.526	0.334	0.086	1.00	1.00	0.00	0.041	0.94
9453.0	10.03	1.92	0.19	0.542	0.336	0.084	1.00	1.00	0.00	0.039	0.94
9457.0	10.59	1.98	0.19	0.543	0.336	0.078	1.00	1.00	0.00	0.036	0.94
9458.0	9.98	1.96	0.20	0.492	0.330	0.086	1.00	1.00	0.00	0.044	0.93
9459.0	10.22	1.99	0.19	0.485	0.329	0.083	1.00	1.00	0.00	0.043	0.92
9460.0	10.35	2.00	0.19	0.490	0.329	0.082	1.00	1.00	0.00	0.042	0.93
9461.0	9.67	1.92	0.20	0.509	0.332	0.089	1.00	1.00	0.00	0.044	0.94
9462.0	10.89	2.02	0.19	0.519	0.333	0.075	1.00	1.00	0.00	0.036	0.94
9468.0	11.86	2.07	0.17	0.572	0.339	0.064	1.00	1.00	0.00	0.028	0.94
9472.0	11.15	1.99	0.18	0.582	0.341	0.071	1.00	1.00	0.00	0.030	0.94
9473.0	11.15	2.01	0.18	0.567	0.339	0.072	1.00	1.00	0.00	0.031	0.94
9474.0	11.49	2.05	0.18	0.548	0.336	0.069	1.00	1.00	0.00	0.031	0.94
9483.0	11.19	2.03	0.18	0.548	0.336	0.072	1.00	1.00	0.00	0.032	0.94
9484.0	10.43	1.96	0.19	0.542	0.336	0.080	1.00	1.00	0.00	0.037	0.94
9488.0	10.18	2.01	0.20	0.448	0.324	0.084	1.00	1.00	0.00	0.047	0.91
9489.0	9.61	1.97	0.20	0.437	0.323	0.091	1.00	1.00	0.00	0.051	0.90
9490.0	9.51	1.93	0.20	0.470	0.327	0.092	1.00	1.00	0.00	0.049	0.92
9491.0	10.34	2.01	0.19	0.474	0.327	0.082	1.00	1.00	0.00	0.043	0.92
9497.0	9.44	1.91	0.20	0.480	0.328	0.093	1.00	1.00	0.00	0.048	0.92
9498.0	9.01	1.90	0.21	0.445	0.324	0.099	1.00	1.00	0.00	0.055	0.91
9499.0	9.10	1.83	0.20	0.552	0.337	0.096	1.00	1.00	0.00	0.043	0.94
9500.0	22.83	3.51	0.15	0.024	0.272	0.035	0.05	1.00	0.00	0.034	0.70

Schlumberger

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
et al La Rich		C-30 NWT 9:C	Jan 8/75
OPERATOR		CONTRACTOR	RIG NO.
H Norman Eyr		Challenger Drilling Ltd	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
		C Tarasuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD			
BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1 32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI	/		

MUD RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR–EL–P COM–D–C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Tear out camp
				Load grid in place

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD			
BIT NO.			
SIZE			
MFG.			
TYPE			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI	/		

MUD RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC. °C			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SCL–S PAR–EL–P COM–D–C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		
	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD			
BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI	/		

MUD RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PAR–EL–P COM–D–C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ted La Rich		C-30 NWT 95-C	1/Jan 8/75
OPERATOR		CONTRACTOR	RIG NO.
H Norman Exp		Challenger Drilling Ltd	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
		C Parsons	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
COMPLETION B. TBG TRIPS			
COMPLETION C. TREATING			
COMPLETION D. SWABBING			
COMPLETION E. TESTING			
COMPLETION F. ADDIT'N'L			
COMPLETION G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO ..P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JETS 1 32"		PV/YP	/	/
	D.C. ID OD	FT.	SER. NO.		GELS	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
	STANDS DP	FT.	COND. 1/8"s T/B/ GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	FT.					
	TOTAL	FT.					
	WT. OF STRING	LBS.					

FOOTAGE FROM	TO	DR.,D RM.-R CORE.,C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARFL-P COM-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Tear out Clamps
				Load grab in place

Driller Gary Larson

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JET 1/32"		PV/YP	/	/
	D.C. ID OD	FT.	SER. NO.		GELS	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
	STANDS DP	FT.	COND. 1/8"s T/B/ GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	FT.					
	TOTAL	FT.					
	WT. OF STRING	LBS.					

FOOTAGE FROM	TO	DR.,D RM.-R CORE.,C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARFL-P COM-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/	/
	D.C. ID OD	FT.	SER. NO.		GELS	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
	STANDS DP	FT.	COND. 1/8"s T/B/ GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	FT.					
	TOTAL	FT.					
	WT. OF STRING	LBS.					

FOOTAGE FROM	TO	DR.,D RM.-R CORE.,C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARFL-P COM-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Alaska Lubiche	C-30	C-30 - N.W.T. - 95-C	May 8/72
OPERATOR		CONTRACTOR	RIG NO.
Ft Norman Exp		Ed Kemper Drilling Ltd	2.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
		M Lacasse	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JETS 1 32"		PV/YP	/	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN		MUD & CHEMICALS ADDED		
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		TYPE	AMT.	TYPE AMT.
	SINGLES DP	FT.	GPM/ PD-PSI	/			
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR FL-P COMP C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1900				WASH TRUCK MIXING, LOGS, PUMP HOUSES, CLEAN UP LEASE
	800			

DRILLER Tom Lacasse

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JET 1/32"		PV/YP	/	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN		MUD & CHEMICALS ADDED		
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		TYPE	AMT.	TYPE AMT.
	SINGLES DP	FT.	GPM/ PD-PSI	/			
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR FL-P COMP C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800				Clean up location Wash + paint
			#1	Pump House + mud tanks
				drain boiler - flush boiler - Check
	400			anti freeze in all motors

DRILLER Ray Lacasse

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN		MUD & CHEMICALS ADDED		
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		TYPE	AMT.	TYPE AMT.
	SINGLES DP	FT.	GPM/ PD-PSI	/			
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR FL-P COMP C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 3

27133
36904
229

LEASE	WELL NO.	API WELL NUMBER	DATE
et al La Biche		C-30 NWT 95 C	7 May 75

OPERATOR	CONTRACTOR	RIG NO.
Ft Norman Exp	Challenger Drilling Ltd	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
Robert Sadrick	B Parasiuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.	Clean Mud Tanks	8		
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1 32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARA-P COMP-C
	6223											

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	1/4		Rig Service
1215	530	5 1/4		Lay down pipe & DC's
530	800	2 1/2		Cleaning tanks - Clean up floors
				Rig Released 2:00 A.M. May 7, 1975
				Robert Sadrick
				DRILLER Murray Larson

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SCHL-S PARA-P COMP-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	1/4		Rig Service
415	800	3 3/4		Lay down Drill Pipe & DC's
	400			Clean up Mud Tanks & Clean up Floors
				DRILLER Kenneth Lafond

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARA-P COMP-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400				Lay down Kelly
				Lay down Derrick
	1200			Drain & flush pumps
				DRILLER Murray Larson

DAILY DRILLING REPORT REPORT NO.

Fuel @ 0700
26904 tank 4 3½"
26632
272 gals

LEASE	WELL NO.	API WELL NUMBER	DATE
Ft Al. Co Buche	C-30	C-30 - NWT 9S-C.	5/6/75
OPERATOR		CONTRACTOR	RIG NO.
Ft Norman Exp.		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
K. Cedrick		M. Parasiuk	

DRL. PIPE SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	"	"	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9-5/8	MANN	47 36	142	5012		5005

SIZE 1/2 NO. LINES 8 FT. SLIPPED 33'
FT. CUT OFF PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	6	3¼	3¼
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF SLIPPED DRILLING LINE		1½	
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. LAY DN PIPE			3
21. MAINTENANCE TOOLS		1½	
22. CLEAN + DRAIN MUD TANKS		2½	
23. Pick up + Set Hower Bdg		1½	
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		
16	D.C. ID 6½ OD	4903.2	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	90.2	FT.
	STB RMR OD		FT.
1	6½ Jars	20.10	
60	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD: BIT NO., SIZE, MFG., TYPE, JETS 1/32", SER. NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, COND. 1/8's T/B/ GAGE, GPM/ PD–PSI

MUD RECORD: TIME, WEIGHT, PRESSURE GRADIENT, VISC.–SEC., PV/YP, GELS., WL –CC'S., pH, SOLIDS %

MUD & CHEMICALS ADDED: TYPE, AMT., TYPE, AMT.

FOOTAGE FROM	FOOTAGE TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH–S PARKER–P COMPCO
	6223											

DEVIATION RECORD: DEPTH, DEV., DIRECTION, DEPTH, DEV., DIRECTION, DEPTH, DEV., DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼		Rig Serv BOPS.
12 15	2 45	2½		Hoist To Run. O Shot. Blind Rams OK.
2 45	2 45	1		Pick. up 4 pt Make up C Shot Run. in. Runner
2 45	6 15	3½		Clean To Bottom 20'
6 15	7 15	1		Work over fish – Hoist fish free tight
7 15	7 30	¼		pump out 62 singles – Hoist.
7 30	8 00	½		

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		
16	D.C. ID 6½ OD	490	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD		FT.
	STB RMR OD		FT.
1	6½ Jars		
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD: BIT NO., SIZE, MFG., TYPE, JET 1/32", SER. NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, COND. 1/8's T/B/ GAGE, GPM/ PD–PSI

MUD RECORD: TIME, WEIGHT, PRESSURE GRADIENT, VISC.–SEC., PV/YP, GELS., WL –CC'S., pH, SOLIDS %

MUD & CHEMICALS ADDED: TYPE, AMT., TYPE, AMT.

FOOTAGE FROM	FOOTAGE TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SCH–S PARKER–P COMPCO

DEVIATION RECORD: DEPTH, DEV., DIRECTION, DEPTH, DEV., DIRECTION, DEPTH, DEV., DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		Rig Lower B.O.P.S.
8 15	11 30	3¼		Haist Lisbe
11 30	12 00	1½		Lay Down Bean tools & Clean up
				Bean tools Transport to Helicapture
1 00	1 30	½		Slipped 33' Drill Line
1 30	4 00	2½		Clean & Dresser Strainer

DRILLER Pierre Laforce

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD: BIT NO., SIZE, MFG., TYPE, JETS 1/32", SER. NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, COND. 1/8's T/B/ GAGE, GPM/ PD–PSI

MUD RECORD: TIME, WEIGHT, PRESSURE GRADIENT, VISC.–SEC., PV/YP, GELS., WL –CC'S., pH, SOLIDS %

MUD & CHEMICALS ADDED: TYPE, AMT., TYPE, AMT.

FOOTAGE FROM	FOOTAGE TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH–S PARKER–P COMPCO

DEVIATION RECORD: DEPTH, DEV., DIRECTION, DEPTH, DEV., DIRECTION, DEPTH, DEV., DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	¼		Rig Service & Blind Rams
4 15	4 45	½		Pick up Howco Bridge plug
4 45	8 00	3¼		Run in to 4969' SLM
8 00	9 00	1		Work pipe Set plug
9 00	12 00	3		Rig to & lay down pipe
				Set 9 5/8" EZ-Drill Halliburton Bridge Plug
				Plug set @ 9:00 P.M. May 6, 1975 @ 4979.50

DRILLER Jimmy Jason

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

Fuel in Tank 4 ft.
26632
26280
352 gals

LEASE	WELL NO.	API WELL NUMBER	DATE
EL Ol LaBarge	C30	C-30 NWT 95C	5/5/75
OPERATOR		**CONTRACTOR**	**RIG NO.**
First Norman Explor.		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
		Tom Parsons	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4 1/2	16.6	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14"
2	"	"	14"

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9 5/8	MAAH	47/55	142	5012		5005

SIZE 1/4 — NO. LINES 8 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND ~~TEAR DOWN~~ SHOT	3/4	1/4	
2	DRILL ACTUAL			
3	REAMING	1 3/4		
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	5 1/4	3 1/2	
7	LUBRICATE RIG	1/4	1/4	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.		4	
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIP			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
16	D.C. ID 6 1/2 OD	449.32 FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JETS 1 32"		PV/YP	/	/
1	D.C. ID 6 1/2 OD	9.02 FT.	SER. NO.		GELS.	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.		
1	6 1/2 Jars	20.10	DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
60	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	41 FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLS PARKER-P COMPLC
6223												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	1/4		Rig Serv. ✓ BOP's (Fish with spline)
1215	100	3/4		Make up O Shot. – 5 Drags (– 4 1/8" fish
100	615	5 1/4		Run in Tool JTs banging up on bit Guide – Derrick Clearing.
615	800	1 3/4		Clean to Top of fish 20'±

DRILLER: L. Blevins

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
16	D.C. ID 6 1/2 OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JET 1/32"		PV/YP	/	/
1	D.C. ID 6 1/2 OD	FT.	SER. NO.		GELS.	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.		
1	6 1/2 Jars		DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
60	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED		
1	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLS PARKER-P COMPLC
6223	—											

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	1/4		Work O Shot over fish STD
815	830	1/4		Circ – Lg Sand
830	1200	3 1/2		Hoist – Chain out – No Fish Large piece of Shale stuck in O Shot
1200	400	4		Pick up B.O.P.'s & Install Ware Ringgon Csg Hd & Nipple up SAME

DRILLER: Remi Lafarge

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.	RR #21	TIME	11:00	
1	BS 6 1/2	2.14	SIZE	8 1/2	WEIGHT	8.4	
	STB RMR OD	FT.	MFG.	Reed	PRESSURE GRADIENT		
16	D.C. ID 6 1/2 OD	449.32 FT.	TYPE	S31G	VISC.-SEC.	70	
	STB RMR OD	FT.	JETS 1/32"	13 13 0	PV/YP	/	/
1	D.C. ID 6 1/2 OD	9.02 FT.	SER. NO.		GELS.	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.	8.2	
1	Jars	20.10	DEPTH IN		pH	9.5	
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
60	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED		
2	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	11.00 FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLS PARKER-P COMPLC
							800	5 1/2				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	~~500~~ 800	1 1/2		Nipple up BOPs
~~500~~ 800	830	3		Run in w/ bit
830	930	1		Clean 20' to top of fish Loose fill
930	1115	1 3/4		Tag fish – Circ above fish
1115	1200	3/4		Hoist

DRILLER: Burney Lisons

EVENING TOUR

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Cl. Ice Kuche.	C-30	C-30 NWT 95C	5/4/75

OPERATOR: Ex Norman, Ex P.

CONTRACTOR: Challenger Drilling — RIG NO. 2.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M. Parasiuk.

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D300	14
2	"	"	14

Fuel @ 7:00 AM 4'7" Jan 26280 2563 444 GALS

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE 1/8 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
9⅝	Nat.	47/53.5	142	5012.1520		5005

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7½	7	4
3	REAMING	¼		
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			2¾
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		3/4	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Pick up DS			1
22				
23				
	A. PERF'R'T'N			
	B. TBG TRIPS			
COMPLETION	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR OD		
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		
1	6½ Jars	20.10	
1	6½ SS	9.38	
66	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	17	FT.
	TOTAL	6169	FT.
WT. OF STRING		118000	LBS.

BIT RECORD

BIT NO.	22
SIZE	8¾
MFG.	Reed
TYPE	S31G
JETS 1/32"	3-13
SER. NO.	200968
DEPTH OUT	
DEPTH IN	6133.
TOTAL FTG.	36
TOTAL HRS. RUN	7½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	2:00	4:00	6:00
WEIGHT	9.5	9.5+	
PRESSURE GRADIENT			
VISC.-SEC.	83	90	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.2	7.4	
pH	9.0	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50		
Sudh HSH	400		

MORNING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
6133.	6169	36			125	18/20	1100	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		Clean to Btm
12:15	12:30	¼		Rig SERV & BOPs.
12:30	8:00	7½		DRLG. DS

DRILLER: L.A. Brennan

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR OD		
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		
1	6½ Jars	20.10	
1	6½ SS	9.38	
60	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	17.50	FT.
	TOTAL	6201.	FT.
WT. OF STRING		118.	LBS.

BIT RECORD

BIT NO.	22
SIZE	8½
MFG.	Reed
TYPE	S31G
JET 1/32"	13 13 13
SER. NO.	200968
DEPTH OUT	
DEPTH IN	6133
TOTAL FTG.	68
TOTAL HRS. RUN	14½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	8:00	11:30	3:30
WEIGHT	9.5	9.5	10.5
PRESSURE GRADIENT			
VISC.-SEC.	108	55	68
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.4	7.4	7.4
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
SUMP WATER		VIS	29
GEL	800		
DYBS	1 GAL		
WATER			
FLOW	12-1		

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR OD		
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		
1	Jars	20.10	
1	SS	9.38	
60	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	39.50	FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	22
SIZE	8½
MFG.	Reed
TYPE	S31G
JETS 1/32"	13 13 13
SER. NO.	200968
DEPTH OUT	
DEPTH IN	6133
TOTAL FTG.	90
TOTAL HRS. RUN	18½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	4:15		
WEIGHT	9.4		
PRESSURE GRADIENT			
VISC.-SEC.	74		
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.2		
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
6169	6201	32		P.S.I. AT C400 32 S.P.M.	120	18/20	1100	5½	60			
					110	28	"	"	"			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6193.	4½°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Serv & B.O.P.S
8:15	1:45	5 1/2		Drilling 8½ Hole
1:45	2:30	¾		Pumped Down Surveys.
2:30	4:00	1½		Drilling
				Held Blow out Drill
				Tryon air Pack

DRILLER: Rumi Laforce

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
6201	6223				110	28	1100	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		Rig Service + B.O.P.S
4:15	8:15	4		Drilling
8:15	11:00	2¾		Hoist 6 stands of pipe out to Csg (Hole F)
11:00	12:00	1		Twist off @ shock sub — pick up Overshot

DRILLER: Murray Lorenz

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

Fuel 5½" 8 17 — mtr 35836 / 35533 — 504 Gals.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ethel Lee		C-30 NWT 95C	5/13/75
OPERATOR		CONTRACTOR	RIG NO.
J-T Newman		Challenger Drlg.	2.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
Paddock		Ed Tavarish	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	300	14"
2	"	"	"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	Mann	36#	142	5012	1520	5005

WIRE LINE RECORD — REEL NO.
SIZE 1⅛ — NO. LINES 9 — FT. SLIPPED 73 — FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT 4½ TRIPS
CUMULATIVE TON MI. OR TRIPS ½ TRIP SLIP 23

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	6¾	4¾	
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE		¼	
6	TRIPS		2	4¾
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			1
10	DEVIATION SURVEY	1	¼	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Cleanout Trip			2
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
17	D.C. ID 6½	OD	490.32 FT.
	STB RMR	OD	FT.
1	D.C. ID 6½	OD	9.02 FT.
	STB RMR	OD	FT.
1	6½ Sorig		20.10
1	6½ SS		9.38
59	STANDS OP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		22. FT.
	TOTAL		6114 FT.
WT. OF STRING	115		LBS.

BIT RECORD

BIT NO.	21
SIZE	8½
MFG.	Reed
TYPE	S31G
JETS 1 32"	13 13 13
SER. NO.	200963
DEPTH OUT	
DEPTH IN	6038
TOTAL FTG.	76
TOTAL HRS. RUN	20¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	2:00	4:00	6:00
WEIGHT	9.4+	9.5	
PRESSURE GRADIENT			
VISC.-SEC.	75	75	
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	7.2	7.2	
pH	9.5	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.,D RM.-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000.	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6090	6114	24			120	17	1100	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6101	6½							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		R.g Serv. & B.O.P.'s
12:15	2:00	2¾		Drlg. 8½.
2:00	2:30	½		Survey
3:45	8:00	4¼		Drill 8½

DRILLER R.P. Brown

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
17	D.C. ID 6½	OD	490.32 FT.
	STB RMR	OD	FT.
1	D.C. ID 6½	OD	9.02 FT.
	STB RMR	OD	FT.
1	6½ Jarco		20.10
1	6½ SS		9.38
59	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		41.00 FT.
	TOTAL		6163 FT.
WT. OF STRING	116000		LBS.

BIT RECORD

BIT NO.	21
SIZE	8½
MFG.	Reed
TYPE	S31G
JET 1/32"	13 13 13
SER. NO.	200963
DEPTH OUT	6133
DEPTH IN	6038
TOTAL FTG.	95
TOTAL HRS. RUN	25½
COND. 1/8's T/B/ GAGE	4 1 1
GPM/ PD-PSI	

MUD RECORD

TIME		1100	
WEIGHT		9.4	
PRESSURE GRADIENT			
VISC.-SEC.		73	
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH		9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1500		
DN68	1 GAL		

FOOTAGE

FROM	TO	DR.,D RM.-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000.	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE
6114	6163	19			120	18	1100	5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Serv – B.O.P.'s
8:15	1:00	4¾		Drilling 8½ Hole
1:00	2:00	1		CHC ½° Drop Survey
2:00	4:00	2		Hoist for Bit 22. Light at 5664.

DRILLER Sam Jaramillo

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
17	D.C. ID 6½	OD	490.32 FT.
	STB RMR	OD	FT.
1	D.C. ID 6½	OD	9.02 FT.
	STB RMR	OD	FT.
1	Jarco		20.10
1	SS		9.38
59	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		41.50
	TOTAL		6133 FT.
WT. OF STRING	118000		LBS.

BIT RECORD

BIT NO.	22
SIZE	8½
MFG.	Reed
TYPE	S31G
JETS 1/32"	13 13 13
SER. NO.	200968
DEPTH OUT	
DEPTH IN	6133
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	1115		
WEIGHT	9.4		
PRESSURE GRADIENT			
VISC.-SEC.	105		
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.,D RM.-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000.	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6133												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		Rig Service & BOPs
4:15	6:45	2½		Trip +1 Std
6:45	7:45	1		Slip & Cut 280' drilling line
7:45	9:45	2		Run in.
9:45	10:45	1		Break circ Clean to btm from 5960-6010
10:45	10:00	¼		Run in to 6100
10:00	12:00	1¾		Clean fill 6100 – btm

DRILLER Murray Larsons

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ely al. La Buche		C-30 NWT. 9S-C	5/2/75

OPERATOR	CONTRACTOR	RIG NO.
J. T. Norman.	Challenger Drilling	2.

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[signature]	Marion Fraserick

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6.	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	300	14
2			

Mud 25 332 and 6 PT
6.2 6 gallons

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKD. TO CSG. HD.	SET AT
	9⅝	MANN	47/36	142.	5012	15.70	5005

WIRE LINE RECORD — REEL NO.
SIZE 1/4 — NO. LINE 8 — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT 4⅓ TRIPS
CUMULATIVE TON MI. OR TRIPS ⅓ TRIP & SLIP

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL		7	
3	REAMING	½		
4	CORING			
5	CONDITION MUD & CIRCULATE	¼	¾	
6	TRIPS	6¾		
7	LUBRICATE RIG	¼	¼	½
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	¼		
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO./D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		FT.
1	6½ Jars	20.10	
1	6½ SS	9.38	
	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	41.50	FT.
	TOTAL	6038	FT.
	WT. OF STRING	121.000	LBS.

BIT RECORD

BIT NO.	2
SIZE	8¾
MFG.	Reed
TYPE	S31G
JETS 1/32"	3-13
SER. NO.	200963
DEPTH OUT	
DEPTH IN	6038
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	2:00	4:00	6:00
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP			
GELS.			
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARKER'D COMPLC
6038												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6038	7¾							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12¹⁵	¼		RIG SERV ✓ BOPS.
12¹⁵	12³⁰	¼		CIRC - DROP SURVEY TIGHT HOLE FIRST
12³⁰	4⁴⁵	4		TRIP FOR BIT # 2. (6660' FT of BTM.)
4⁴⁵	7³⁰	2¾		RUN 10 DC. (SLIP 33' LINE ¼) BLIND RAMS OK.
7³⁰	8⁰⁰	½		Clean to bottom 40'

INJURY To Murray Bunker's Right hand. Tear Thumb off. when standing back Kelly.

DRILLER J. T. Norman

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		FT.
1	6½ Jars	20.10	
1	6½ SS	9.38	
58	STANDS DP		FT.
2.	SINGLES DP		FT.
	KELLY DOWN	31.00	FT.
	TOTAL	6060.	FT.
	WT. OF STRING	120.	LBS.

BIT RECORD

BIT NO.	21
SIZE	8½
MFG.	Reed
TYPE	S31G
JET 1/32"	13 13 13
SER. NO.	200963
DEPTH OUT	
DEPTH IN	6038
TOTAL FTG.	22.
TOTAL HRS. RUN	7
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

DESILTER

MUD RECORD

TIME	8:00	11:00	3:00
WEIGHT	9.4	9.2	9.3
PRESSURE GRADIENT			
VISC.-SEC.	90	68	65
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.0	7.0	7.2
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
DV68	1 GAL		
UNDERFLOW	12.0		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SCHL'S PARKER'D COMPLC
6038	6060	22		Between Formation at head of Rope	125	18	1075	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2⁰⁰	8¹⁵	¼		Rig Serv ✓ B.O.P.'S
8¹⁵	9⁰⁰	¾		Work pipe & core carving
9⁰⁰	4⁰⁰	7		Drilling 7⅞ Hole

DRILLER Jerri Lafrance

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		FT.
1	Jars	20.10	
1	SS	9.38	
59	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	30.50	FT.
	TOTAL	6090	FT.
	WT. OF STRING	115.000	LBS.

BIT RECORD

BIT NO.	21
SIZE	8½
MFG.	Reed
TYPE	S31G
JETS 1/32"	13 13 13
SER. NO.	200963
DEPTH OUT	
DEPTH IN	6038
TOTAL FTG.	52
TOTAL HRS. RUN	14
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	4¹⁵	8⁰⁰	11¹⁵
WEIGHT	9.4	9.3+	9.4
PRESSURE GRADIENT			
VISC.-SEC.	71	73	73
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.1	7.2	7.2
pH	9.0	9.5	9.5
SOLIDS %			
UNDERFLOW	11.9		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	50#		

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO.	METHOD RUN SCHL'S PARKER'D COMPLC
6060	6090	30			125	17	1100	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6070	7							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	4¹⁵	¼		Rig Service & BOP
4¹⁵	6¹⁵	2		Drilling
6¹⁵	7⁰⁰	¾		Survey
7⁰⁰	12⁰⁰	5		Drilling

DRILLER Murray Farmer

DAILY DRILLING REPORT — REPORT NO.

LEASE: Etal La Luke — WELL NO.
API WELL NUMBER: 6-30-N.W.T.-95C — DATE: 5/1/75
OPERATOR: H Norman
CONTRACTOR: Callegan Drilling — RIG NO. 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE: Robert H
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: S. Kirchuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6"	E.H	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	"	"	"

LEGAL LAND DESCRIPTION: Motor - 24706

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	Mannes	47 S-5	142	5012	15.20	5005

WIRE LINE RECORD — REEL NO.
SIZE 11/8 — NO. LINES 8 — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT: 4 trips
CUMULATIVE TON MI. OR TRIPS: 504

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¼	7¾	7
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			¾
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	½		
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	7	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO. D.P.
HRS. STANDBY
Braden 8 8 8
TOTAL DAY WORK
NO. OF DAYS FROM SPUD: 60
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
17	D.C. ID 6½	OD	490.32
	STB RMR	OD	FT.
1	D.C. ID 6½	OD	9.02
	STB RMR	OD	FT.
1	6½ Jars		20.10
1	6½ SS		9.38
58	STANDS DP		FT.
1	SINGLES DP		31.41
	KELLY DOWN		12.00 FT.
	TOTAL		6008 FT.
WT. OF STRING			121,000 LBS.

BIT RECORD

BIT NO.	20
SIZE	8½
MFG.	Reed
TYPE	S316
JETS 1/32"	12 13 13
SER. NO.	202509
DEPTH OUT	
DEPTH IN	5958
TOTAL FTG.	50
TOTAL HRS. RUN	14¼
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/ /

MUD RECORD

TIME	2	4	6
WEIGHT	9.1	9.1	9.3
PRESSURE GRADIENT			
VISC.–SEC.	39	66	73
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	8.6	8.6	8.6
pH	9.5	7.5	7.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Mud	1 sack		
Dia Seal	1 sack		
Visc	12 lb		

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
17	D.C. ID 6½	OD	490.32
	STB RMR	OD	FT.
1	D.C. ID 6½	OD	9.02
	STB RMR	OD	FT.
1	6½ Jars		20.10
1	6½ SS		9.38
58	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		27. FT.
	TOTAL		6024 FT.
WT. OF STRING			121 000 LBS.

BIT RECORD

BIT NO.	20
SIZE	8½
MFG.	Reed
TYPE	S316
JET 1/32"	12 13 13
SER. NO.	202509
DEPTH OUT	
DEPTH IN	5958
TOTAL FTG.	
TOTAL HRS. RUN	22
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/ /

MUD RECORD

TIME	10:00	12:00	2 00
WEIGHT	9.4	9.4+	
PRESSURE GRADIENT			
VISC.–SEC.	70	65	
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	8.6	8.6	
pH	9 5	9.0-	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	100 #		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
17	D.C. ID 6½	OD	490.32
	STB RMR	OD	FT.
1	D.C. ID 6½	OD	9.02
	STB RMR	OD	FT.
1	6½ Jars		20.10
1	6½ SS		9.38
58	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		41.00 FT.
	TOTAL		6038. FT.
WT. OF STRING			121 LBS.

BIT RECORD

BIT NO.	20
SIZE	8½
MFG.	Reed
TYPE	S316
JETS 1/32"	12 13 13
SER. NO.	202509
DEPTH OUT	6038
DEPTH IN	5958
TOTAL FTG.	80
TOTAL HRS. RUN	29
COND. 1/8's T/B/ GAGE	5 6 1
GPM/ PD–PSI	/ /

MUD RECORD

TIME	430	730	1130
WEIGHT	9.4	9.1	9.2
PRESSURE GRADIENT			
VISC.–SEC.	75	65	67
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	7.0	7.0	7.0
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLS PARTED COMP'D
5986	6008	22		120	14	1050	5½	55			

DEVIATION RECORD: DEPTH 6007 — DEV. 2° — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼		Rig Serv & Bops
1215	700	6¾		Drilling
700	730	½		Survey
730	800	½		Drill
		8		

DRILLER: L Bolin

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLS PARTED COMP'D
6008	6024	16		120	14	1050	5½	55			

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		Rig Serv ✓ BOPs.
815	400	7¾		DRLG. 8½

DRILLER: P N Norman

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLS PARTED COMP'D
6024	6038	14		120	14	1050	5½	55			

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼		Rig Serv ✓ B.O.P.S
415	939	5¼		Drilling 8½ Hole
939	1015	¾		Repair Rotary Chain Drive
1015	1200	1¾		Drilling

DRILLER: Leroi Laborde

EVENING TOUR

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Leal-Le Duke		C-30-N.W.T.-95C	4/30/75

OPERATOR	CONTRACTOR	RIG NO.
H. Norman Exp	Challenger Drilling	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. Kirshk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.6	E	6"	F.H	1	1	Emsco	D-300	14
							"	"	"

LEGAL LAND DESCRIPTION: Fuel Meter - 24071

WIRE LINE RECORD — REEL NO. — SIZE 11/16 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT: 4 Trips

CUMULATIVE TON MI. OR TRIPS: 504

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
9⅝	Mann	36 J55	142	5012	15.20	5005

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			7
3	REAMING TO CASING		3¼	¾
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	3¾	¼	
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG	¼		
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
Kelly	8	8	8
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD: 59

CUMULATIVE ROTATING HRS.: 1048

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		FT.
17	D.C. ID 6½ OD		490.32
	STB RMR OD		FT.
1	D.C. ID 6½ OD		9.02
	STB RMR OD		FT.
1	6½ JARS		20.10
1	6½ SS		9.38
57	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		24.50 FT.
	TOTAL		5958 FT.
WT. OF STRING		120,000	LBS.

BIT RECORD			
BIT NO.	4	JDRR15	21
SIZE		8½	8½
MFG.		Reed	Reed
TYPE		S31G	S31G
JETS 1/32"		12 13 13	12 13 13
SER. NO.		512205	202509
DEPTH OUT		5958	
DEPTH IN		5924	5958
TOTAL FTG.		176	—
TOTAL HRS. RUN		38	—
COND. 1/8's T/B/ GAGE		5 L 1	
GPM/ PD-PSI		/	/

MUD RECORD			
TIME	7:00	4:00	
WEIGHT	9.4	9.4	
PRESSURE GRADIENT			
VISC.-SEC.	71	78	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.4	8.4	
pH	9.5	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR'L-P COM'D-C
5958	—											

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5958	8¼							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼		Rig Service Boops
1215	400	3¾		Hoist & Trip in to Top of Shoe
400	800	4		WAIT ON WELDER
		8		

DRILLER: L Bolin

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		FT.
17	D.C. ID 6½ OD		490.32 FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD		9.02 FT.
	STB RMR OD		FT.
1	6½ JARS		20.16
1	6½ SS		9.38
57	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING		120,000	LBS.

BIT RECORD			
BIT NO.	21		
SIZE	8½		
MFG.	REED		
TYPE	S31G		
JET 1/32"	12 13 13		
SER. NO.	202509		
DEPTH OUT			
DEPTH IN	5958		
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD			
TIME	10.00	12.00	7:00
WEIGHT	9.1	9.4	9.4
PRESSURE GRADIENT			
VISC.-SEC.	72	72	72
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.4	8.4	8.4
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR'L-P COM'D-C
5958												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		R.C SERV — 130 JTS
815	1215	¼		HELP WELDER. WORK ON KELLY.
1215	1230	¼		RUN IN.
1230	400	3½		CLEAN 350' to BOTTOM.

DRILLER: R.J Brewer

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		FT.
17	D.C. ID 6½ OD		490.32 FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD		9.02 FT.
	STB RMR OD		FT.
1	6½ JARS		20.10
1	6½ SS		9.38
58	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		20.19 FT.
	TOTAL		59.86 FT.
WT. OF STRING		120	LBS.

BIT RECORD			
BIT NO.	21		
SIZE	8½		
MFG.	Reed		
TYPE	S31G		
JETS 1/32"	12 13 13		
SER. NO.	202509		
DEPTH OUT			
DEPTH IN	5958		
TOTAL FTG.	28		
TOTAL HRS. RUN	7		
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

DESILTER

MUD RECORD			
TIME	4:00	6:00	10:00
WEIGHT	9.4	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	72	65	68
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.2	8.2	8.2
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000		
DV64	16GAL		
OVER	9.3		
UNDER	12.8		

FOOTAGE FROM	FOOTAGE TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR'L-P COM'D-C
5958	5986	28			120	10/14	1050	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼		Rig Serv — R.O. BOPS.
415	500	¾		Clean Foam 5946 to Bottom
500	1200	7		Drilling 6¼ Hole

DRILLER: Jim Jones

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
et al La Loche		C-30-N.W.T.-95C	4/27/75
OPERATOR		**CONTRACTOR**	**RIG NO.**
J. Norman Exp		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
		D. Frisk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6"	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	"	"	"

LEGAL LAND DESCRIPTION: Fuel 23719

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	Honn	36 K55	142	5012	15.20	5005

WIRE LINE RECORD — REEL NO. 9
SIZE 1/8 — NO. LINES 8 — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT: 3 trips
CUMULATIVE TON MI. OR TRIPS: 375

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	6	4¾	4¾
3	REAMING	1¾		
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			1¾
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG			1
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			¼
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
Daily	8	8	8
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD: 58
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
17	D.C. ID 6½	OD	490.32 FT.
	STB RMR	OD	
1	D.C. ID 6½	OD	9.02 FT.
	STB RMR	OD	
1	6½ Jars		20.10
1	6½ SS		9.38
57	STANDS DP		FT.
1	SINGLES DP		31.60 FT.
	KELLY DOWN		34.00 FT.
	TOTAL		5937 FT.
	WT. OF STRING		121,000 LBS.

BIT RECORD

BIT NO.	#20 RR15
SIZE	8½
MFG.	Reed
TYPE	5316
JETS 1.32"	12 13 13
SER. NO.	512205
DEPTH OUT	
DEPTH IN	5924
TOTAL FT.	13
TOTAL HRS. RUN	6
COND. 1/8's T/B/ GAGE	155 25½
GPM/ PD-PSI	

MUD RECORD

TIME	10:00	6:00	6:00
WEIGHT	9.3	#93	9.3
PRESSURE GRADIENT			
VISC.-SEC.	54	55	57
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.4	8.4	8.4
pH	9.0	9.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]	Wood	
Duo Gel	1 gal		
[illegible]			

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
17	D.C. ID 6½	OD	490.32 FT.
	STB RMR	OD	
1	D.C. ID 6½	OD	9.02 FT.
	STB RMR	OD	
1	6½ Jars		20.10
1	6½ SS		9.38
57	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	15	FT.
	TOTAL	594.9	FT.
	WT. OF STRING	121,000	LBS.

BIT RECORD

BIT NO.	#20 RR15
SIZE	8½
MFG.	Reed
TYPE	5316
JETS 1/32"	12 13 13
SER. NO.	512205
DEPTH OUT	
DEPTH IN	5924
TOTAL FT.	12 167
TOTAL HRS. RUN	13¾ 3¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10:00	12:00	2:00
WEIGHT	9.3+	9.4+	9.5
PRESSURE GRADIENT			
VISC.-SEC.	60	75	80
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.2	8.2	8.2
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Cel	1000#		
DV-68	1 gal		

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
17	D.C. ID 6½	OD	490.32 FT.
	STB RMR	OD	
1	D.C. ID 6½	OD	9.02 FT.
	STB RMR	OD	
1	6½ JARS		20.10
1	6½ SS		9.38
57	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	24.50	FT.
	TOTAL	5958.	FT.
	WT. OF STRING	121	LBS.

BIT RECORD

BIT NO.	#20 RR15
SIZE	8½
MFG.	Reed
TYPE	5316
JETS 1/32"	12 13 13
SER. NO.	512205
DEPTH OUT	5958.
DEPTH IN	5924
TOTAL FT.	9 176
TOTAL HRS. RUN	38
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	4:00	7:00	
WEIGHT	9.5	9.4	
PRESSURE GRADIENT			
VISC.-SEC.	55	72	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.2	8.2	
pH	9.5	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
DV68	1 gal		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMP-C
5696	5924	228		Clean to bottom	70	10	1050	5½	55			
5924	5937	13			120	10/14	1050	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		Rig Serv + B.O.P.s
12:15	2:00	1¾		Cleaning to bottom - 228' of loose fill
2:00	8:00	6		Drilling

DRILLER: L. Bolin

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMP-C
5937	5949	12			120	14	1050	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		RIG SERV ✓ BOPs.
8:15	4:00	7¾		DRILL 8½

DRILLER: R. Bonneau

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMP-C
5949	5958	9			120	13/15	1050	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		Rig Serv ✓ B.O.P.S
4:15	9:00	4¾		Drilling
9:00	10:00	1		WORK ON Kelly
10:00	10:15	¼		DROP SURVEY
10:15		1¾		TRIP FOR Bit

DRILLER: Denis Pierce

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Et al La Roche		C-30-N.W.T.-95-C	4/18/75

OPERATOR	CONTRACTOR	RIG NO.
Lt Numan Exp	Challenger Drilling	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	D. Kriehl

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4 1/2	16.6	E	6"	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	"	"	"

LEGAL LAND DESCRIPTION: Fuel Motor - 23344

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9 5/8	Mannes	36	142	5012	15.20	5005

WIRE LINE RECORD — REEL NO. 9

SIZE 1 1/4 | NO. LINES 8 | FT. SLIPPED 33'

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT: 3 trips

CUMULATIVE TON MI. OR TRIPS: 247

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7	4½	
3. REAMING			¼
4. CORING			
5. CONDITION MUD & CIRCULATE		1½	
6. TRIPS			6¼
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE		1½	1½
10. DEVIATION SURVEY	¾	[illegible]	¼
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD: 5
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD		490.32 FT.
1	STB RMR 6½ OD		5.43 FT.
1	D.C. ID 6½ OD		9.02 FT.
	STB RMR OD		FT.
1	6½ Jars		20.10
1	6½ SS		9.38
57	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		14.00 FT.
	TOTAL		5891 FT.
WT. OF STRING	122,000 LBS.		

BIT RECORD	
BIT NO.	19
SIZE	8½
MFG.	Reed
TYPE	S31G
JETS 1. 32"	12 13 13
SER. NO.	512118
DEPTH OUT	
DEPTH IN	5803
TOTAL FTG.	88
TOTAL HRS. RUN	15 ½
COND. 1/8's T.B./ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	2:00 PM	4:00	
WEIGHT	9.5+	9.[illegible]	9.4
PRESSURE GRADIENT			
VISC.-SEC.	75	71	65
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	74	73	72
pH	9.5	9.[illegible]	9.[illegible]
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	800#		
DVL68	1 gal		

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD		490.32 FT.
1	STB RMR 6½ OD		5.32 FT.
1	D.C. ID 6½ OD		9.02 FT.
	STB RMR OD		FT.
1	6½ Jars	20.10	
1	6½ SS	9.38	
57	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	16	FT.
	TOTAL	5924	FT.
WT. OF STRING	122,000	LBS.	

BIT RECORD	
BIT NO.	19
SIZE	8½
MFG.	Reed
TYPE	S31G
JET 1/32"	12 13 13
SER. NO.	512118
DEPTH OUT	5924
DEPTH IN	5803
TOTAL FTG.	119
TOTAL HRS. RUN	19 3/4
COND. 1/8's T/B/ GAGE	5 3 1
GPM/ PD-PSI	

MUD RECORD			
TIME	10:00	12:00	2:00
WEIGHT	9.4		
PRESSURE GRADIENT			
VISC.-SEC.	65		
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.2		
pH	8.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1200#		
DVL68	1 gal		
Caustic	100#		

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
1	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		FT.
1	6½ Jars	20.10	
1	6½ SS	9.38	
57	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	21.12	FT.
	TOTAL	5924.	FT.
WT. OF STRING	129	LBS.	

BIT RECORD	
BIT NO.	R.R. 15-R.
SIZE	8 1/2.
MFG.	Reed
TYPE	S31G
JETS 1/32"	12 13 13
SER. NO.	511205
DEPTH OUT	
DEPTH IN	5924.
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD	
TIME	
WEIGHT	A
PRESSURE GRADIENT	
VISC.-SEC.	R
PV/YP	/ / /
GELS.	1 / / /
WL -CC'S.	P
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLS PARTEL-P COMP.-C
5848	5891	43			90	7½/30	1050	5½	55			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5880	7¼							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼		Rig Service & Boops
12 15	6 45	6½		Drilling
6 45	7:30	¾		Survey
7 30	8 00	1½		Drilling
		8		

DRILLER: J. Bolin

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLS PARTEL-P COMP.-C
5891	5927.	3B			90/80	30	1050	5½	55			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5918	8½	5918	8½					

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		RIG SERV'L BOPS
8 15	12 00	3¾		DRLG. 8½
12 00	1 45	1¾		SURVEY
1 45	2 30	¾		DRLG 8½
2 30	4 00	1½		CIRC SAMPLE.

DRILLER: J. Brannon

FOOTAGE FROM	FOOTAGE TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLS PARTEL-P COMP.-C
5924.	—				90	10	1050	5½	55			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5920	8½°							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	¼		Rig Serv'l B.O.P.S
4 15	4 30	¼		Dropped Survey Pump down Survey.
4 30	8 00	3½		Pooh Bit 19 Tight at 5696.
8 00	8 30	½		Lay down Reamer Changed Bit
8 30	9 15	¾		Run in D.C
9 15	9 45	½		Slipped 33' Drill line
9 45	11 15	1½		Run in Bridge at 5664. ~~5696~~
11 15	12 00	¾		Break Circ & Ream to 5696.

DRILLER: Jamie Tyler

DAILY DRILLING REPORT REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
T.L. Norman Exp		C-30-NW.T.-95-C	4/27/15
OPERATOR		CONTRACTOR	RIG NO.
et al La Luche		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
A Luche Jr		D. Krisnic	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6"	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14"
2	"	"	"

LEGAL LAND DESCRIPTION: Meter 22887

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	Mann	47 J55	142	5012	15	5005

WIRE LINE RECORD REEL NO. 9

SIZE 1 1/8 | NO. LINES 8 | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT: 122

CUMULATIVE TON MI. OR TRIPS: 122

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	3¼	1¾	6¾
3	REAMING		¾	
4	CORING			
5	CONDITION MUD & CIRCULATE	1	¼	
6	TRIPS	2½	5¼	
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1		1
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		9		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO. | DRILLING ASSEMBLY (At end of tour) | FT.

- BIT — FT.
- STB RMR OD — FT.
- 17 D.C. ID 6½ OD — 490.32 FT.
- 1 STB RMR 6½ OD — 5.43 FT.
- 1 D.C. ID 6½ OD — 9.02 FT.
- STB RMR OD — FT.
- 1 6½ JARS — 20.10
- 1 6½ SS — 9.38
- 56 STANDS DP — FT.
- SINGLES DP — FT.
- KELLY DOWN — 19.00 FT.
- TOTAL — 5803 FT.
- WT. OF STRING 122,000 LBS.

BIT RECORD

BIT NO.	18
SIZE	8½
MFG.	Reed
TYPE	S216
JETS 1 32"	12 13 13
SER. NO.	220019
DEPTH OUT	5803
DEPTH IN	5696
TOTAL FTG.	107
TOTAL HRS. RUN	23¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	1000	400	
WEIGHT	9.4	9.5	
PRESSURE GRADIENT			
VISC.-SEC.	100	90	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	26	8.8	
pH	9	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO: | DRILLING ASSEMBLY (At end of tour) | FT.

- BIT — FT.
- STB RMR OD — FT.
- 17 D.C. ID 6½ OD — 490.32 FT.
- 1 STB RMR 6½ OD — 5.43 FT.
- 1 D.C. ID 6½ OD — 9.02 FT.
- STB RMR OD — FT.
- 1 6½ JARS — 20.10
- 1 6½ SS — 9.38
- 56 STANDS DP — FT.
- SINGLES DP — FT.
- KELLY DOWN — 25 FT.
- TOTAL — 5809 FT.
- WT. OF STRING 122,000 LBS.

BIT RECORD

BIT NO.	19
SIZE	8½
MFG.	REED
TYPE	S316
JET 1/32"	12 13 13
SER. NO.	512118
DEPTH OUT	
DEPTH IN	5803
TOTAL FTG.	6
TOTAL HRS. RUN	1½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10:00	12:00	2:00
WEIGHT			9.5
PRESSURE GRADIENT			
VISC.-SEC.			100
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	11		8.8
pH			9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO. | DRILLING ASSEMBLY (At end of tour) | FT.

- BIT — FT.
- STB RMR OD — FT.
- 17 D.C. ID 6½ OD — 490.32 FT.
- 1 STB RMR 6½ OD — 5.43 FT.
- 1 D.C. ID 6½ OD — 9.02 FT.
- STB RMR OD — FT.
- 1 6½ JARS — 20.10
- 1 6½ SS — 9.38
- 56 STANDS DP — FT.
- 1 SINGLES DP — FT.
- KELLY DOWN — 32.50 FT.
- TOTAL — 5848. FT.
- WT. OF STRING 122 LBS.

BIT RECORD

BIT NO.	19
SIZE	8½
MFG.	Reed
TYPE	S316
JETS 1/32"	12 13 13
SER. NO.	512118
DEPTH OUT	
DEPTH IN	5803
TOTAL FTG.	45
TOTAL HRS. RUN	8¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	4:30	6:30	11:30
WEIGHT	9.3	9.5	9.5
PRESSURE GRADIENT			
VISC.-SEC.	100	43	72
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	9.8	9.2	7.2
pH	9.3	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSIC	20		
GEL	800		
LIQUID			

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
5794	5803	9			90	28/40	1075	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.
5794	6½						

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼		Rig Serv & u Bops
1215	1230	¼		DRILL
1230	130	1		Survey
130	430	3		DRILL - ¼ hr u Bit trouble bit in hole
430	530	1		Circulate & Condition hole
530	8	2½		Hoist & Pump 1st 5 stds out - tight to 40 Klbs off bottom
		6		

DRILLER: H Bolin

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
5803	5809	6			90	14/16	1025	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		RIG SERV u BOPS.
815	130	5¼		TRIP FOR BIT #19. BLIND RAMS. OK.
130	145	¼		BREAK. CIRC
145	230	¾		CREAN + REAMING TO BTM.
230	400	1½		DRLG 8½

DRILLER: R A Brennan

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
5809	5848	39			90	30	1050	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5825	6¼							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼		Rig Serv u B.O.P.S
415	639	2¼		Drilling 8½ Hole
639	739	1		Survey.
739	1200	4½		Drilling

DRILLER: Tom Spence

DAILY DRILLING REPORT — REPORT NO.

LEASE: Atal San Lucie — WELL NO.:
API WELL NUMBER: 6-30 NWT 95-C — DATE: 4/26/75
OPERATOR: H Herman Exp. — CONTRACTOR: Challenger Drilling — RIG NO.: 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: L. Knoll

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6"	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-300	14
2	"	"	"

LEGAL LAND DESCRIPTION: Fuel - 22217 - 5:4" fuel

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	DEPT	RKB. TO CSG. HD.	SET AT
9⅝	CMMN	47 #S-5	142	5012	1520	5005

WIRE LINE RECORD — REEL NO. 9
SIZE 1 1/8 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT: 122 ton miles
CUMULATIVE TON MI. OR TRIPS: 172

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	6	7 3/4	6 1/4
3. REAMING	1/2		
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	1/4	1/4	1/4
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			1 1/2
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD: 55
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
	STB RMR OD	FT.
17	D.C. ID 6½ OD	490.32 FT.
1	STB RMR 6½ OD	5.43 FT.
1	D.C. ID 6½ OD	9.02 FT.
	STB RMR OD	FT.
1	6½ JARS	20.10
1	6½ SS	9.38
55	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	29.00 FT.
	TOTAL	5720 FT.
	WT. OF STRING	120,000 LBS.

BIT RECORD

BIT NO.	18
SIZE	8½
MFG.	Reed
TYPE	S216
JETS 1 32"	12 13 13
SER. NO.	220019
DEPTH OUT	
DEPTH IN	5696
TOTAL FTG.	24
TOTAL HRS. RUN	6
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	2:00	3:00	6:00
WEIGHT	9.3+	9.3	9.4+
PRESSURE GRADIENT			
VISC.-SEC.	100	95	75
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	6.3	6.4	6.6
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
½" Stream water			

FOOTAGE

FROM	TO	DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHLUM PARFL-P COMP.D.C.
5696	5696	95		Clean to Bottom	70	6	1000	5½	54			
5696	5720	24			84/60	14/20	950	5½	50			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	1/4		Rig Serv & w Bops
12:15	2:00	1 3/4		Clean 95' Soft fill to Bottom
2:00	8:00	6		Drilling 8½" hole
		8		

DRILLER: G Bolin

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
	STB RMR OD	FT.
17	D.C. ID 6½ OD	490.32 FT.
1	STB RMR 6½ OD	5.43 FT.
1	D.C. ID 6½ OD	9.02 FT.
	STB RMR OD	FT.
1	6½ JARS	20.10
1	6½ SS	9.38
55	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	39 FT.
	TOTAL	5762 FT.
	WT. OF STRING	120 LBS.

BIT RECORD

BIT NO.	18
SIZE	8½
MFG.	REED
TYPE	S216
JET 1/32"	12 13 13
SER. NO.	220019
DEPTH OUT	
DEPTH IN	5696
TOTAL FTG.	66
TOTAL HRS. RUN	13 3/4
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10:00	12:00	2:00
WEIGHT	9.5	9.4+	9.5
PRESSURE GRADIENT			
VISC.-SEC.	73	70	68
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	6.6	6.8	
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
5720	5762	42			120	14/35	1025	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	1/4		RIG SERV - BOPS
8:15	4:00	7 3/4		DRLG. 8½

DRILLER: P O Bommer

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
	STB RMR OD	FT.
17	D.C. ID 6½ OD	490.32 FT.
1	STB RMR 6½ OD	5.43 FT.
1	D.C. ID 6½ OD	9.02 FT.
	STB RMR OD	FT.
1	6½ JARS	20.10
1	6½ SS	9.38
55	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	41.00 FT.
	TOTAL	5794 FT.
	WT. OF STRING	120 LBS.

BIT RECORD

BIT NO.	18
SIZE	8½
MFG.	Reed
TYPE	S216
JETS 1/32"	12 13 13
SER. NO.	220019
DEPTH OUT	
DEPTH IN	5696
TOTAL FTG.	98
TOTAL HRS. RUN	20
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	7:00		11:00
WEIGHT	9.4		9.4+
PRESSURE GRADIENT			
VISC.-SEC.	72		90
PV/YP	/		/
GELS.	/		/
WL -CC'S.	6.8		6.8
pH	9.5		9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000		
DVGS	1 GAL		
CAUSTIC	50		

FOOTAGE

FROM	TO	DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5762	5794	32		Fire WELL Kick Conteol PSI 1550 at 30 S.P.M	90	3/35	1015	5½	55	5½	55	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5764	6 7/8°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	1/4		Rig Serv & B.O.P.S.
4:15	5:00	3/4		Survey Mins Run
5:00	5:45	3/4		Drilling 8½ Hole
5:45	6:30	3/4		Survey
6:30	12:00	5 1/2		Drilling

DRILLER: Rene Falcon

DAILY DRILLING REPORT REPORT NO.

LEASE: Fuel La Ducle WELL NO.

API WELL NUMBER: C-30 - N.W.T. 95-C DATE: 4/25/75

OPERATOR: H Norman Exp CONTRACTOR: Challenger Drilling RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: L. Kriedrick

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6"	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	"	"	"

LEGAL LAND DESCRIPTION: Fuel Meter — 21831

WIRE LINE RECORD REEL NO. SIZE 1⅛ NO. LINES 8 FT. SLIPPED 66' FT. CUT OFF 180 PRESENT LENGTH

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
9⅝	Mann	47 #3.5	142	5012	15.20	5005

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING		1¼	4¼
4. CORING			
5. CONDITION MUD & CIRCULATE	¼		¼
6. TRIPS	4½	3½	3¼
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE	¾		
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. W/ Pipe	½		
22. UNPLUGGING BIT		3.	
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	9	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO./D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR OD		
17	D.C. ID 6½ OD	490.32	FT.
1	STB RMR 6½ OD	5.43	FT.
1	D.C. ID 6½ OD	90.2	FT.
	STB RMR OD		
1	6½ Jars	20.10	
1	SS 6½	9.38	
54	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	35.00	FT.
	TOTAL	5696	FT.

WT. OF STRING 111 M LBS.

BIT RECORD

BIT NO.	17	18
SIZE	8½	8½
MFG.	Reed	Reed
TYPE	S216	S216
JETS 1/32"	12 13 13	12 13 13
SER. NO.	220263	220019
DEPTH OUT	5696	
DEPTH IN	5448	5696
TOTAL FTG.	248	
TOTAL HRS. RUN	42 ¾	
COND. 1/8's T/B/ GAGE	6 1 1	
GPM/ PD-PSI	/	/

MUD RECORD

TIME	2000	
WEIGHT	9.2+	
PRESSURE GRADIENT		
VISC.-SEC.	71	
PV/YP	/	/
GELS	/	/
WL -CC'S	5.4	
pH	9.5	
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C
5696	—						900	5½				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5696	6°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼		Rig Serv & Bops
1215	1730	2¼		WORK Pipe thru tight Spot @ 5406'-5316' with Kelly
1730	500	7½		Hoist
500	530	½		Pickup Reamer & Run Collars in
530	615	¾		Cut 100' & Slip 66' fast DRILL LINE
615	745	1½		Run in - Hit bridge @ 5346
745	800	¼		Break Circ

DRILLER E. Bolton

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR OD		
17	D.C. ID 6½ OD	490.32	FT.
1	STB RMR 6½ OD	5.43	FT.
1	D.C. ID 6½ OD		FT.
	STB RMR OD		FT.
1	6½ Jars	20.10	
1	SS 6½	9.38	
54	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	35.00	FT.
	TOTAL	5696	FT.

WT. OF STRING LBS.

BIT RECORD

BIT NO.	18
SIZE	8½
MFG.	REED
TYPE	S216
JET 1/32"	12 13 13
SER. NO.	220019
DEPTH OUT	
DEPTH IN	5696
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME		
WEIGHT		
PRESSURE GRADIENT		
VISC.-SEC.		
PV/YP	/	/
GELS	/	/
WL -CC'S		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C
5696	—											

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		Rig SERV & B.O.P.S.
815	930	1¼		Clean BRIDGE.
920	1230	3		TRY TO UN PLUG BIT.
1230	400	3½		TRIPPING WET STRING ALL THE WAY

DRILLER R. H. Brennan

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR OD		
17	D.C. ID 6½ OD	490.32	FT.
1	STB RMR 6½ OD	5.43	FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD	20.10	FT.
1	6½ JAR	9.38	
1	SS 6½		
54	STANDS DP		FT.
2.	SINGLES DP		FT.
	KELLY DOWN	35.00	FT.
	TOTAL	5696	FT.

WT. OF STRING LBS.

BIT RECORD

BIT NO.	18
SIZE	8½
MFG.	Reed
TYPE	S216
JETS 1/32"	12 13 13
SER. NO.	220019
DEPTH OUT	
DEPTH IN	5696
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME		1100
WEIGHT		9.3
PRESSURE GRADIENT		
VISC.-SEC.		90
PV/YP	/	/
GELS	/	/
WL -CC'S		6.2
pH		9.5
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMPL-C
5696	—				90/120	5/10	1000	5½	5⅞	5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼		Rig Serv & B.O.P.S.
415	539	1 ¼		Finish Tripping out of Hole unplug Bit
539	600	½		Run in Hit bridge at 5468
600	730	1½		Break circ
730	745	¼		Clean To Bottom from 5468 to 5601 soft fill
745	1200	4¼		

DRILLER Leroi Labrie

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT REPORT NO. 53

Fuel @ 7 AM 4'8"
2136.2
209.10
422

LEASE	WELL NO.	API WELL NUMBER	DATE
Stark La Biche		C-30 NWT 95-C	April 3/82
OPERATOR		CONTRACTOR	RIG NO.
Ft Norman Gas		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
A Roberts		M. Parasiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	"	"	"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	MANS	47 J55	142	5012	15.23	5005

WIRE LINE RECORD REEL NO.
SIZE | NO. LINES | FT. SLIPPED
FT. CUT OFF | PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL		7	7½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG		¼	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		¾	¼
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS			8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
Rotor	8	8	8
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		
17	D.C. ID 6½ OD	490.32	
	STB RMR OD		
1	D.C. ID 6½ OD	9.02	
	STB RMR OD		
1	6½ Jars	20.10	
1	SS 6½	9.38	
54	STANDS DP	3151	
1	SINGLES DP		
	KELLY DOWN		
	TOTAL	5448	
WT. OF STRING	114,000 LBS.		

BIT RECORD

BIT NO.	17
SIZE	8½
MFG.	Reed
TYPE	S21G
JETS 1 32"	12 13 13
SER. NO.	220263
DEPTH OUT	
DEPTH IN	5448
TOTAL FTG.	212
TOTAL HRS. RUN	35½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	12:15	3:50	6:30
WEIGHT	9.0	9.0	9.0
PRESSURE GRADIENT			
VISC.-SEC.	56	76	70
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.		7.5	7.2
pH	9.5	9.5	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	13 Sx		
DV 68	1 GAL		

MORNING TOUR

FOOTAGE

FROM	TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARFL-P COMP-C
5584	5626	42			120	16	900	5½	50			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼		Rig Service & B.O.P.
1215	800	7¾		Drilling
				S. Krupka arrived @ Lease @ 6.30 PM

DRILLER Percy Larson

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		
17	D.C. ID 6½ OD	490.32	
	STB RMR OD		
1	D.C. ID 6½ OD	9.02	
	STB RMR OD		
1	6½ Jars	20.10	
1	SS 6½	9.38	
54	STANDS DP	3151	
1	SINGLES DP		
	KELLY DOWN		
	TOTAL	5448	
WT. OF STRING	114,000 LBS.		

BIT RECORD

BIT NO.	17
SIZE	8½
MFG.	Reed
TYPE	S21G
JET 1/32"	12 13 13
SER. NO.	220263
DEPTH OUT	
DEPTH IN	5448
TOTAL FTG.	212
TOTAL HRS. RUN	35½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	7:30	12 m	7:00
WEIGHT	9.1	9.1+	9.1
PRESSURE GRADIENT			
VISC.-SEC	66	69	72
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	82	82	82
pH	8.0	9.5	10
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	100#		
SAPP	500#		
DV 68	—		

FOOTAGE

FROM	TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARFL-P COMP-C
5626	5660	34			120	16/20	900	5½				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5632	6/8							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		Rig Serv & ✓ Bops
815	900	¾		Drill
900	945	¾		Survey
945	400	6¼		Drill

DRILLER A Roberts

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		
17	D.C. ID 6½ OD	490.32	
	STB RMR OD		
1	D.C. ID 6½ OD	902.	
	STB RMR OD		
1	6½ JARS	20.10	
1	SS 6½	9.38	
54	STANDS DP	54	
2	SINGLES DP		
1	KELLY DOWN		
	TOTAL	5696	
WT. OF STRING	114 LBS.		

BIT RECORD

BIT NO.	17
SIZE	8½
MFG.	Reed
TYPE	S21G.
JETS 1/32"	12 B 13
SER. NO.	220263
DEPTH OUT	5696
DEPTH IN	5448
TOTAL FTG.	248
TOTAL HRS. RUN	42¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	6:00	8:00	10:00
WEIGHT	9.1+	9.2	9.2+
PRESSURE GRADIENT			
VISC.-SEC	65	70	75
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.2		8.2
pH	10.0	10.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000#		
DV-68	1 gal.		

EVENING TOUR

FOOTAGE

FROM	TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARFL-P COMP-C
5660	5696	36			120	14/20	900	5½	50			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼		RIG SERV ✓ BOPs
415	1145	7½		DRLG. 8½
1145	1200	¼		SURVEY DROPPED

DRILLER R Robertson

DAILY DRILLING REPORT — REPORT NO. 52

Back @ 7:00 20940 − 20541 = 399 — 5½"

LEASE	WELL NO.	API WELL NUMBER	DATE
Fed La Cinta		C-30 NWT 95-C	April 27 '76
OPERATOR		CONTRACTOR	RIG NO.
Ft Worth Exp Ltd		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
[illegible]		M Pasasiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	"	"	"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	Mans	32 H-40	142	5012	13.20	5005

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL		6¼	6¾
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG		¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY		1	1
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
17	STB RMR 6½ OD		490.32 FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD		9.02 FT.
	STB RMR OD		FT.
1	Jars		20.10
1	D.C.		9.38
52	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		27.50 FT.
	TOTAL		5495 FT.

WT. OF STRING 114000# LBS.

BIT RECORD

BIT NO.	17
SIZE	8¾
MFG.	Reed
TYPE	S216
JETS 1 32"	12 13 13
SER. NO.	220263
DEPTH OUT	
DEPTH IN	5448
TOTAL FTG.	47
TOTAL HRS. RUN	7¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	12¹⁵	5³⁰	6⁵⁰
WEIGHT	8.9	8.9	8.9
PRESSURE GRADIENT			
VISC.-SEC.	68	76	74
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.6		7.9
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500	Gp.	
DV-62	2	Gal.	
CMC	100	Lbs.	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR OD		FT.
17	D.C. ID 6½ OD		490.32 FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD		9.02 FT.
1	6½ Jars		20.10
1	5 D.C.'s 6½		9.38
53	STANDS DP		FT.
1	SINGLES DP		30.26 FT.
	KELLY DOWN		13.04 FT.
	TOTAL		5542 FT.

WT. OF STRING 114,000 LBS.

BIT RECORD

BIT NO.	17
SIZE	8½
MFG.	Reed
TYPE	S216
JET 1/32"	12 13 13
SER. NO.	220263
DEPTH OUT	
DEPTH IN	5448
TOTAL FTG.	94
TOTAL HRS. RUN	9¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME			
WEIGHT	8.9	8.9	8.9
PRESSURE GRADIENT			
VISC.-SEC.	93	92	90
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.8	7.8	7.4
pH	10	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR OD		FT.
17	D.C. ID 6½ OD		490.32 FT.
1	D.C. ID 6½ OD		9.02 FT.
1	6½ JARS AB		20.10
1	5 D.C.'s 6½		9.38
53	STANDS DP		FT.
2	SINGLES DP		24 FT.
	KELLY DOWN		FT.
	TOTAL		5584 FT.

WT. OF STRING 114 LBS.

BIT RECORD

BIT NO.	17
SIZE	8½
MFG.	REED
TYPE	S 3G
JETS 1/32"	12 13 13
SER. NO.	220263
DEPTH OUT	
DEPTH IN	5448
TOTAL FTG.	136
TOTAL HRS. RUN	20¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	6:00	8.00	10.00
WEIGHT	9.0	9.0	8.9
PRESSURE GRADIENT			
VISC.-SEC.	65	62	58
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.4	7.4	7.6
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-P FL-P COM-DC
5452	5495	43			120	14	900	5½	50			

DEVIATION RECORD: DEPTH 5497 — DEV. MISS RUN — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12¹⁵	¼		Rig Service & BOP
12¹⁵	3³⁰	3¼		Drilling
3³⁰	4³⁰	1		Survey (2 degrees)
4³⁰	8⁰⁰	3½		Drilling

DRILLER Jay Larson

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-P FL-P COM-DC
5495	5542	47			120	14	900	5½	50			

DEVIATION RECORD: DEPTH 5504 — DEV. 6¾ — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8¹⁵	¼		Rig Serv & Bops
8¹⁵	10⁰⁰	1¾		Drilling
10⁰⁰	11⁰⁰	1		Survey
11⁰⁰	4⁰⁰	5		Drilling
		⅛		

Board → Cons. Eng [illegible]

DRILLER C Bolin

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-P FL-P COM-DC
5542	5584	42			120	14	900	5½	50			

DEVIATION RECORD: DEPTH 5570 — DEV. 6½ — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	4¹⁵	¼		Rig Serv & Bops
4¹⁵	8⁴⁵	4½		Drlg 8½
8⁴⁵	9⁴⁵	1		Survey
9⁴⁵	12⁰⁰	2¼		Drlg 8½

DRILLER C Bowman

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 51

20041 / 20055 (491) 6'

LEASE	WELL NO.	API WELL NUMBER	DATE
et al La Bute		C-30 NWT 95-C	April 29/82
OPERATOR		**CONTRACTOR**	**RIG NO.**
J.H. Neumann Exp		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S POOL PUSHER**	
Carroll Fox		M Tomasiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	"	"	"

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	MANS	47 43.5	142	5012	15.20	5005

WIRE LINE RECORD: SIZE | NO. LINES | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. TRIP UP AND LAY DOWN			
2. DRILL ACTUAL		6	½
3. REAMING (CLEAN TO BTM)			1
4. CORING			
5. CONDITION MUD & CIRCULATE			¾
6. TRIPS		½	½
7. LUBRICATE RIG		¼	¼
8. REPAIR RIG		½	
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY		¾	
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6¼ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6¼ OD	9.02	FT.
	STB RMR OD		FT.
1	Jars	30.10	FT.
52	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	41.50	FT.
	TOTAL	5438	FT.
WT. OF STRING	114000		LBS.

BIT RECORD

BIT NO.	16
SIZE	8½
MFG.	Reed
TYPE	FP63
JETS 1. 32"	13 13 13
SER. NO.	513801
DEPTH OUT	
DEPTH IN	5249
TOTAL FTG.	189
TOTAL HRS. RUN	68½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	12¹⁵	4⁰⁰	6⁴⁵
WEIGHT	8.8	9.4+	9.8+
PRESSURE GRADIENT			
VISC.-SEC.	68	67	73
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.9	8.3	
pH	9.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1500	Mix.	
CAUSTIC	50	Mix.	
DV-66	2	Gals	

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.
5425	5438	13	2 Rec.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARFL-P COMP-C
70	30/35	800	5½	50			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12¹⁵	¼		Rig Service + B.P.
12¹⁵	8⁰⁰	7¾		Drilling

DRILLER Murray Larson

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		FT.
1	6½ Jars		FT.
52	STANDS DP		FT.
1	SINGLES DP	29.71	FT.
	KELLY DOWN	21.00	FT.
	TOTAL	5448	FT.
WT. OF STRING	114,000		LBS.

BIT RECORD

BIT NO.	16
SIZE	8½
MFG.	Reed
TYPE	FP63
JET 1/32"	13 13 13
SER. NO.	513801
DEPTH OUT	5448
DEPTH IN	5249
TOTAL FTG.	199
TOTAL HRS. RUN	74¼
COND. 1/8' T/B' GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10	12	2
WEIGHT	8.7	8.9	8.9
PRESSURE GRADIENT			
VISC.-SEC.	63	75	70
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	4.9	4.7	4.7
pH	9.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Mil	100		
Drill Caustic	6		

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.
5438	5448	10	

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARFL-P COMP-C
70	32	800	5½	50			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5438	7°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		Rig Service + Baps
815	900	¾		Survey
900	200	6		Drill 8½" hole
200	230	½		Pull 1 std slimmy trip
230	400	½		Break Down old Swivel + change To Robert one.
		8		

DRILLER J Bol

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
1	STB RMR 55 OD	9.38	FT.
1	D.C. ID 6½ OD	9.02	FT.
1	STB RMR 55 OD	4	FT.
52	STANDS DP	24.71	FT.
1	SINGLES DP	29.71	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING	114		LBS.

BIT RECORD

BIT NO.	17
SIZE	8½
MFG.	REED
TYPE	S21G
JETS 1/32"	12 13 13
SER. NO.	230263
DEPTH OUT	
DEPTH IN	5448
TOTAL FTG.	4
TOTAL HRS. RUN	½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	6:00		10:00
WEIGHT	8.9		8.9
PRESSURE GRADIENT			
VISC.-SEC.	70		70
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.7		8.7
pH	9.5		9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.
5448	5452	4	

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARFL-P COMP-C
70	15	800	5½	50			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	4¹⁵	¼		RIG SERV
4¹⁵	4⁴⁵	½		DUMMY TRIP - 15' FILL
4⁴⁵	5³⁰	¾		CIRC. BLIND RAMS. OK.
5³⁰	10³⁰	5		TRIP FOR BIT #17 PKR UP SHOCK SUB
10³⁰	11³⁰	1		CLEAN TO BOTTOM. 20' FILL
11³⁰	12⁰⁰	½		DRLG.

DRILLER Rob Newman

DAILY DRILLING REPORT — REPORT NO. 50

Spud @ 7:00 AM 8-17-75 (8'7")
3002.0
195.75
472.

LEASE	WELL NO.	API WELL NUMBER	DATE
Etal La Bihe		C-30 NWT 95-C	Aug 21/75
OPERATOR		CONTRACTOR	RIG NO.
H Norman Eaves		Chalbergers Drilling	1
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
Cecil Roberts		M. Parasiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	11
2	"	"	"

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9⅝	MANS	47 #3.5	142	5012	15.20	5005

WIRE LINE RECORD — REEL NO.
SIZE | NO. LINES | WT. SLIPPED
FT. CUT OFF | PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¾	7¼	6½
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			1/4
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. W/O D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		
17	D.C. ID OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID OD	9.02	FT.
	STB RMR OD		FT.
1	Jars	20.10	
51	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	22.50	FT.
	TOTAL	5388	FT.
WT. OF STRING	114000		LBS.

BIT RECORD			
BIT NO.	16		
SIZE	8½		
MFG.	Reed		
TYPE	FP63		
JETS 1 32"	13 13 13		
SER. NO.	513801		
DEPTH OUT			
DEPTH IN	5249		
TOTAL FTG.	139		
TOTAL HRS. RUN	46¼		
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI			

MUD RECORD			
TIME	12¼	4:30	7¼
WEIGHT	8.7	8.8	8.8
PRESSURE GRADIENT			
VISC.-SEC.	84	79	72
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	6.1		7.0
pH	9.5	9.5	9.5
SOLIDS %			
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.

FOOTAGE FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM PARFL-P COM D-C
5376	5388	12			70/76	17/20	800	5½	50			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼		Rig Service & Bolt
1215	800	7¾		Drilling

DRILLER Harvey Larson

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID OD	9.02	FT.
	STB RMR OD		FT.
1	6½ Jars	20.10	
51	STANDS DP		FT.
2	SINGLES DP	155	FT.
	KELLY DOWN	38	FT.
	TOTAL	5405	FT.
WT. OF STRING	114,000		LBS.

BIT RECORD			
BIT NO.	16		
SIZE	8½		
MFG.	Reed		
TYPE	FP63		
JET 1/32"	13 13 13		
SER. NO.	513801		
DEPTH OUT			
DEPTH IN	5249		
TOTAL FTG.	156		
TOTAL HRS. RUN	54		
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI			

MUD RECORD			
TIME	1200	12.0	700
WEIGHT	88	88	88
PRESSURE GRADIENT			
VISC.-SEC	75	78	71
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	6.0	8.8	8.7
pH	9.5	9.5	9.5
SOLIDS %			
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.

FOOTAGE FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM PARFL-P COM D-C
5388	5405	19		✓ Fire Extinguishers	75	30	800	5½	50			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		Rig Serv & ✓ Bops
815	400	7¾		Drill

DRILLER G Rolin

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
	STB RMR OD		
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		FT.
1	6½ Jars	20.10	
52	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	28	FT.
	TOTAL	5425	FT.
WT. OF STRING	114		LBS.

BIT RECORD			
BIT NO.	16		
SIZE	8½		
MFG.	REED		
TYPE	FP63		
JETS 1/32"	3-13		
SER. NO.	513801		
DEPTH OUT			
DEPTH IN	5249		
TOTAL FTG.	74		
TOTAL HRS. RUN	60½		
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI			

MUD RECORD			
TIME	6:00	8:00	10:00
WEIGHT	8.9	8.9	8.9
PRESSURE GRADIENT			
VISC.-SEC	78	76	75
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	8.8	8.6	8.6
pH	9.5	9.5	9.0
SOLIDS %	Desilter 9.2		
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE AMT.

FOOTAGE FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM PARFL-P COM D-C
5405	5425	20			70	23/30	800	5½	50			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5407	6¾							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼		RIG SERV ✓ BOPs
415	545	1½		DRLG 8½
545	700	1¼		SURVEY
700	1200	5		DRLG 8½

DRILLER R O Bronner

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

Fuel @ 700 AM 3'5"
19-5-18
18-9-18
1660

LEASE	WELL NO.	API WELL NUMBER	DATE
Sal La Bike		C-30 NWT 95-C	April 30/75
OPERATOR		CONTRACTOR	RIG NO.
H. Norman Exp		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
Bill Lovell		J.M. Farasin	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	"	"	"

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	MHNS	47 #325	14	562	15'20	500'

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¾	5½	5
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¾	2¼	2¾
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		FT.
1	Jars	20.10	
57	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	41.50	FT.
	TOTAL	5346	FT.
WT. OF STRING	112 000		LBS.

BIT RECORD		
BIT NO.	16	
SIZE	8½	
MFG.	Reed	
TYPE	FP63	
JETS 1/32"	13 13 13	
SER. NO.	513801	
DEPTH OUT		
DEPTH IN	5249	
TOTAL FTG.	97	
TOTAL HRS. RUN	28¾	
COND. 1/8"s T/B/ GAGE		
GPM/ PD-PSI	/	/

MUD RECORD			
TIME	1:30	4:45	6:45
WEIGHT	8.8	8.8	8.8
PRESSURE GRADIENT			
VISC.-SEC.	70	56	70
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.6		8.0
pH	9.5	9.5	9.5
SOLIDS %			
UNDER FLOW 90 GPM 3½ G.P.M.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000	Lig.	
DU 68	3	Gals.	

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		FT.
1	6½ Jars	20.10	
51	STANDS DP		FT.
1	SINGLES DP	29.98	FT.
	KELLY DOWN	39.00	FT.
	TOTAL	5364	FT.
WT. OF STRING	113,000		LBS.

BIT RECORD		
BIT NO.	16	
SIZE	8½	
MFG.	Reed	
TYPE	FP63	
JET 1/32"	13 13 13	
SER. NO.	513801	
DEPTH OUT		
DEPTH IN	5249	
TOTAL FTG.	115	
TOTAL HRS. RUN	33½	
COND. 1/8"s T/B/ GAGE		
GPM/ PD-PSI	/	/

MUD RECORD			
TIME	1600	1200	200
WEIGHT	8.8	8.8	8.8
PRESSURE GRADIENT			
VISC.-SEC.	73	75	78
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.0	8.2	8.4
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		FT.
1	6½ Jars	20.10	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD		
BIT NO.	16	
SIZE	8½	
MFG.	REED	
TYPE	FP63	
JETS 1/32"	3-13.	
SER. NO.	513801	
DEPTH OUT		
DEPTH IN	5249	
TOTAL FTG.	127	
TOTAL HRS. RUN	38½	
COND. 1/8"s T/B/ GAGE		
GPM/ PD-PSI	/	/

MUD RECORD			
TIME	430	630	
WEIGHT	88	88	
PRESSURE GRADIENT			
VISC.-SEC.	83	84	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.		8.4	
pH	9.5	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARTEE P COMPLEC
5325	5346	21			72	15/32	1000	5½	60			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5346								

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼		Rig Servic + Bole
1215	700	6¾		Drilling
700	745	¾		Circ + Survey (Misc Runs)
745	800	¼		Drilling (Circ.)

DRILLER Leroy Sarras

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 4 LINER SIZE	PUMP NO. 4 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARTEE P COMPLEC
5346	5364	12			72	25/32	775	5½	50			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5346	—		5353	5½				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		Rig Serv + Rep.
815	900	¾		Finish Running Survey - Misc Run # 2
900	1115	2¼		Drilling 8½" hole
1115	1245	1½		Survey (Hi-Vis)
1245	400	3¼		Drilling
		8		

DRILLER R Bolin

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARTEE P COMPLEC
5364	5376	12			72	25/30	775	5½	50			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5376	6½							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼		RIG SERV. + BOYS
415	915	5		DRLG 8½ HOLE
915	1200	2¾		SURVEY - Circ.

DRILLER R Bowman

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT REPORT NO. 48

LEASE	WELL NO.	API WELL NUMBER	DATE
Atl La Pick		C-30 NWT 95-C	April 72
OPERATOR		CONTRACTOR	RIG NO.
H Hamilton Co		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
[illegible]		M Paranick	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6	F.H	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	"	"	"

Fuel @ 7am 1841B 11 1127 (341) 11'

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	Mans	47	114	5012	15.20	5005

SIZE | NO. LINES | FT. TRIPPED
FT. CUT OFF | PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			6½
3. REAMING & CLEAN			1/4
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	11	1/4	
7. LUBRICATE RIG		1/2	¼
8. REPAIR RIG		7½	
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. Wait on Parts			1
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		7½	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
17	D.C. ID 6½	OD 490.32	FT.
	STB RMR	OD	FT.
1	D.C. ID 6½	OD 9.02	FT.
	STB RMR	OD	FT.
1	Jars	20.10	
53	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	31.00	FT.
	TOTAL	5305	FT.
WT. OF STRING	114,000		LBS.

BIT RECORD

BIT NO.	16
SIZE	8½
MFG.	Reed
TYPE	FP63
JETS 1 32"	13 13 13
SER. NO.	513801
DEPTH OUT	
DEPTH IN	5249
TOTAL FTG.	56
TOTAL HRS. RUN	14½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PARTEL-P COMB-C
5305												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200				Wait on Swivel
				Unable to fly swivel in Weather conditions Snow
	8 00			

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
17	D.C. ID 6½	OD 490.32	FT.
	STB RMR	OD	FT.
1	D.C. ID 6½	OD 9.02	FT.
	STB RMR	OD	FT.
1	6½ Jars	20.10	
50	STANDS DP		FT.
2	SINGLES DP	67.19	FT.
	KELLY DOWN	31.00	FT.
	TOTAL	5205	FT.
WT. OF STRING	114,000		LBS.

BIT RECORD

BIT NO.	16
SIZE	8½
MFG.	Reed
TYPE	FP63
JET 1/32"	13 13 13
SER. NO.	513801
DEPTH OUT	
DEPTH IN	5249
TOTAL FTG.	56
TOTAL HRS. RUN	14½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10 AM	11 00	2 00
WEIGHT	8.8	8.8	8.8
PRESSURE GRADIENT			
VISC.-SEC.	41	42	40
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.	9.0	9.0	9.0
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SGL-S PARTEL-P COMB-C
5305				Changed oil & filters in No 1 - Rig - light plant.								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		R.G. Serv
815	230	6¾		WAIT ON SWIVEL PARTS & MAKE
230	345	1¼		UP NEW SWIVEL & BREAK CIRC - to tank
345	400	¼		Clean in.
		8		

DRILLER [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
17	D.C. ID 6½	OD 490.32	FT.
	STB RMR	OD	FT.
1	D.C. ID 6½	OD 9.02	FT.
	STB RMR	OD	FT.
1	6½ Jars	20.10	
51	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	21	FT.
	TOTAL	5325	FT.
WT. OF STRING	114		LBS.

BIT RECORD

BIT NO.	16
SIZE	8½
MFG.	REED
TYPE	FP63
JETS 1/32"	3-13
SER. NO.	513801
DEPTH OUT	
DEPTH IN	5249
TOTAL FTG.	76
TOTAL HRS. RUN	21
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	6:00	9:00	10:00
WEIGHT	8.8+	8.8	8.7+
PRESSURE GRADIENT			
VISC.-SEC.	45	48	55
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.	9.0		9.2
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000#		
PU-68	2 Sack		
CMC	100#		

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PARTEL-P COMB-C
5305	5325	20			70	30	900	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼		RIG SERV & BOPS
415	430	¼		CLEAN 10' TO BOTTOM.
430	645	2¼		DRLG. 8½ HOLE.
645	745	1		WORK TIGHT HOLE CONN @ 5295
745	1200	4¼		DRLG. 8½ HOLE.

DRILLER [illegible]

Form 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

Drld @ 700 18607
1800 ft 527 4'11"

LEASE	WELL NO.	API WELL NUMBER	DATE
Etal La Rue		C-30 NWT 95-C	April 12
OPERATOR		CONTRACTOR	RIG NO.
H Warren Exp		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
Owner		T M Parasiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	11
2	"	-	"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	MANS	47 43⅝	112	5012	15.20	5005

WIRE LINE RECORD — REEL NO.
SIZE | NO. LINES | FT. SLIPPED
FT. CUT OFF | PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¼	5¼	
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		¼	
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG		2¼	7¼
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¼		
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		FT.
1	Jars	20.10	
50	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	10.50	FT.
	TOTAL	5283	FT.
WT. OF STRING	114200		LBS.

BIT RECORD

BIT NO.	16
SIZE	8½
MFG.	Reed
TYPE	FP63
JETS 1/32"	12 12 12
SER. NO.	513801
DEPTH OUT	
DEPTH IN	5249
TOTAL FTG.	34
TOTAL HRS. RUN	9¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	12:15	4:30	6:15
WEIGHT	8.7	8.7+	8.7+
PRESSURE GRADIENT			
VISC.-SEC.	44	52	48
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	78	8.6	
pH	10.0	10.0	10.0
SOLIDS %			
UNDER FLUX	-9.1 wt.		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	175x		
DV 68	26a		

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
	STB RMR OD		FT.
1	6½ Jars	20.10	
50	STANDS DP		FT.
2	SINGLES DP	62.49	FT.
	KELLY DOWN	31	FT.
	TOTAL	5305	FT.
WT. OF STRING	114,000		LBS.

BIT RECORD

BIT NO.	16
SIZE	8½
MFG.	Reed
TYPE	FP63
JETS 1/32"	13 13 13
SER. NO.	513801
DEPTH OUT	
DEPTH IN	5249
TOTAL FTG.	56
TOTAL HRS. RUN	14¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	1:00	12:00	Run
WEIGHT	8.8	8.8	8.8
PRESSURE GRADIENT			
VISC.-SEC.	47	45	45
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.7	8.7	10
pH	10	10	10
SOLIDS %	4 wt	9	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
H2O	6 bbl		
DV 68	½ gal		

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
17	D.C. ID 6½ OD	490.32	FT.
	STB RMR OD		FT.
1	D.C. ID 6½ OD	9.02	FT.
1	STB RMR 6½ OD	20.10	FT.
50	STANDS DP		FT.
1	SINGLES DP	62.49	FT.
	KELLY DOWN	31	FT.
	TOTAL	5305	FT.
WT. OF STRING	114		LBS.

BIT RECORD

BIT NO.	16
SIZE	8½
MFG.	Reed
TYPE	FP63
JETS 1/32"	3-13
SER. NO.	513801
DEPTH OUT	
DEPTH IN	5249
TOTAL FTG.	56
TOTAL HRS. RUN	14½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/
GELS.	/
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM PARFLEX P COMPLEC
5255	5283	28			66	15/36	900	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5283	4 5/8							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼		Rig Service & R&R
1215	645	6½		Drilling
645	715	½		Survey
715	800	¾		Drilling

DRILLER

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM PARFLEX P COMPLEC
5283	5305	22			70	30/	900	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		Rig Service & Oops
815	130	5¼		Drilling 8½ hole
130	145	1¼		Pull 4 stds for Kin Circ Sub in Casing
145	400	2¼		Pull Spool unit - Leaving mud in csg + check trip

DRILLER T Bolin

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM PARFLEX P COMPLEC
5305												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼		Rig SERVICE BOPS.
415	1200	7¾		W.O.D. - mixed pasta.

DRILLER RBBrannon

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fnx Ind Ludwick	C-30	C-30-IV-W-T-95-C	April 17th 95

OPERATOR	CONTRACTOR	RIG NO.
H Nuevo Corp	Challenger Drilling	2.

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
C Roberts	M Vasquez

O.D. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½ IF H	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2.	Emsco	D-300	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE 1/4 — NO. LINES 8 — PT. SLIPPED — PT. CUT OFF — PRESENT LENGTH

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9 5/8	Mavs	47 43.5	14 2	5012	15.20	5005

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	6 3/4	7 1/4	3 1/4
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			1/4
6. TRIPS			3 3/4
7. LUBRICATE RIG	1/4	1/4	1/4
8. REPAIR RIG			
9. CUT-OFF DRILLING LINE			1/4
10. DEVIATION SURVEY	1	1/2	1/4
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
17	D.C. ID 6½	OD 490.32	FT.
	STB RMR	OD	FT.
1	D.C. ID 6½	OD 9.02	FT.
	STB RMR	OD	FT.
1	6½ Jars	20.10	
49	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	37.99	FT.
	TOTAL	52.12.	FT.
WT. OF STRING	124.000	LBS.	

BIT RECORD

BIT NO.	15	
SIZE	8 1/2	
MFG.	Reed	
TYPE	S31G	
JETS 1 32"	13 13 13	
SER. NO.	S12205	
DEPTH OUT		
DEPTH IN	5107	
TOTAL FTG.	105	
TOTAL HRS. RUN	11	
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI	/	/

MUD RECORD

TIME	12 00	3 00	6 30
WEIGHT	8.6	8.6	8.6
PRESSURE GRADIENT	450	450	
VISC.-SEC.	40	45	40
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.	8.5	7.4	7.4
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000		
XT			
DV68	2GAL		
DESILTER UNDERFLO 10-2			

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
17	D.C. ID 6¼	OD 490.32	FT.
	STB RMR	OD	FT.
1	D.C. ID 6¼	OD 9.02	FT.
	STB RMR	OD	FT.
1	Jars	20.10	
50	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	33.50	FT.
	TOTAL	5244	FT.
WT. OF STRING	124 000	LBS.	

BIT RECORD

BIT NO.	15	
SIZE	8½	
MFG.	Reed	
TYPE	S31G	
JET 1/32"	13 13 13	
SER. NO.	S12205	
DEPTH OUT		
DEPTH IN	5107	
TOTAL FTG.	137	
TOTAL HRS. RUN	18¼	
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI	/	/

MUD RECORD

TIME	8 15	11 15	3 00
WEIGHT	9.6	8.6	8.6+
PRESSURE GRADIENT			
VISC.-SEC.	39	44	48
PV/YP		/	/
GELS	/	/	/
WL -CC'S.	10	8.2	8.1
pH	9.5+	9.5+	9.5+
SOLIDS %			
	Under flow 39 wt.		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel			
DV-L			
CMC			

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
17	D.C. ID 6½	OD 490.32	FT.
	STB RMR	OD	FT.
1	D.C. ID 6½	OD 9.02	FT.
	STB RMR	OD	FT.
1	6½ Jars	20.10	
50	STANDS DP		FT.
1	SINGLES DP	21.19	FT.
	KELLY DOWN	35	FT.
	TOTAL	5255	FT.
WT. OF STRING	114,000	LBS.	

BIT RECORD

BIT NO.	15	16
SIZE	8½	8½
MFG.	Reed	Reed
TYPE	S31G	FP63
JETS 1/32"	13 13 13	13 13 13
SER. NO.	S12205	S13801
DEPTH OUT	5249	
DEPTH IN	5107	5249
TOTAL FTG.	142	6
TOTAL HRS. RUN	19½	2
COND. 1/8's T/B/ GAGE	3 1 1	
GPM/ PD-PSI	/	/

MUD RECORD

TIME	5 30		
WEIGHT	9.6		9.6
PRESSURE GRADIENT			
VISC.-SEC.	49		45
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.	8.8		4.2
pH	9.5		9.5
SOLIDS %	4.5 F	9.1	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR-P COM-C
5148	5212	64		Sand 5'6"	72	15/17	750	5½	60	5½		
				Mud 18080								
				Fuel 469								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5154.	4°		5184.	3½.				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	1/4		Rig Service & B.O.P.S
12 15	12 45	1/2		Survey
12 45	4 45	4		Drilling 8½ Hole
4 45	5 15	1/2		Circulate
5 15	8 00	2 3/4		Drilling

DRILLER Ramiro Zapata

FOOTAGE FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-P COM-C
5212	5244	32			75	17	900	5½	60			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5221	3 5/8							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	1/4		Rig Service & B.O.P.
8 15	10 30	2 1/4		Drilling
10 30	11 00	1/2		Survey
11 00	4 00	5		Drilling

DRILLER Wesley Larson

EVENING TOUR

FOOTAGE FROM	TO	DR.D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-P COM-C
5244	5249	11			60	17/16	900	5½	66			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5249	3 7/8							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	5 15	1 1/4		Drill
5 15	5 30	1/4		Circ
5 30	5 45	1/4		Rig Serv & w Boys
5 45	6 00	1/4		Drop Survey
6 00	8 15	2 1/4		Hoist for Bit + Run Collars in
8 15	8 30	1/4		Slip 33' drilling line
8 30	10 00	1 1/2		Run in & Break Circ
10 00	12 00	2		Drilling

DRILLER A Bolton

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fixed Lobsicle	C-30	C-30 IV N.W.T. — 95'-C	April 16 -

OPERATOR	CONTRACTOR	RIG NO.
Ft Norman Exp	Challenger Drilling	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	W Parasiuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½ FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9 5/8	Mans	47 43.5	142	5012	15.20	5005

WIRE LINE RECORD — REEL NO.
SIZE 1 1/8 — NO. LINES 8 — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¼	11½	4¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		1¾	2½
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	1¼	½	1½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADD'T'N'L			
G. DC's	1	3¼	
TOTAL	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR	OD	FT.
17	D.C. ID 6½	OD 490.32	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	6½ D.C	9.02	
1	JARS	20.10	
48	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	26.30	FT.
	TOTAL	5077	FT.
WT. OF STRING	122		LBS.

BIT RECORD

BIT NO.	14
SIZE	8½
MFG.	Reed
TYPE	S31G
JETS 1/32"	13 13 13
SER. NO.	751436
DEPTH OUT	
DEPTH IN	5005'
TOTAL FTG.	72.
TOTAL HRS. RUN	9¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	400
WEIGHT	8.4
PRESSURE GRADIENT	
VISC.-SEC.	42
PV/YP	/
GELS.	/
WL.-CC'S.	9.4
pH	9.5+
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
~~CMC~~			
GEL	6500		
DVG8	6 gal		
CMC	50		

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR	OD	FT.
17	D.C. ID 6½	OD 490.32	FT.
	STB RMR	OD	FT.
1	D.C. ID 6½	OD 9.02	FT.
1	STB RMR JAR	OD 20.10	FT.
18	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	25.30	FT.
	TOTAL	5107	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	14
SIZE	8½
MFG.	Reed
TYPE	S31G
JET 1/32"	13 13 13
SER. NO.	751436
DEPTH OUT	5107
DEPTH IN	5005
TOTAL FTG.	102
TOTAL HRS. RUN	14¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	900
WEIGHT	9.5
PRESSURE GRADIENT	
VISC.-SEC	35
PV/YP	/
GELS.	/
WL.-CC'S.	11
pH	7.5
SOLIDS %	underflow 10.2

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2400	lbs	
DV-12	3	Gals	
CMC	100	lbs	

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR	OD	FT.
17	D.C. ID 6½	OD 490.32	FT.
1	D.C. ID 6½	OD 9.02	FT.
1	6½ JARS	20.10	
49	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	35.00	FT.
	TOTAL	5147	FT.
WT. OF STRING	122,000		LBS.

BIT RECORD

BIT NO.	14	15
SIZE	8½	8½
MFG.	Reed	Reed
TYPE	S31G	S31G
JETS 1/32"	13 13 13	15 13 13
SER. NO.	751436	512205
DEPTH OUT	5107	
DEPTH IN	5005	5107
TOTAL FTG.	102	41
TOTAL HRS. RUN	14¼	4¼
COND. 1/8's T/B/ GAGE	3 1 1	
GPM/ PD-PSI		

MUD RECORD

TIME	600	800	100
WEIGHT	8.6	8.6	8.6
PRESSURE GRADIENT			
VISC.-SEC.	35	34	44
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.	12	10	8.5
pH	9.5	9.5	9.5
SOLIDS %	underflow		
		10.5	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	~~bags~~	Gel	1200
DVG8	6 gal		
CMC	100		

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.FL.-P COM.D.C.
5029	5077	~~48~~		Fred 6'6"	52	1.5	700	5½	60	~~5½~~	~~60~~	
				Mctn 17611								
				Shed 439								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5060	3¾							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼		Rig Serv. & B.O.P.'s
12 15	5 30	5 ¼		Drilling 8½ Hole
5 30	6 00	½		survey.
6 00	8 00	2		Drilling

DRILLER Dennis Lefave

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.FL.-P COM.D.C.
5077	5107	30			76	16	750	5½	60			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5092	3⅞							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		Rig Service & B.O.P.s
815	1 15	5		Drilling — ½ hr. Survey
1 15	3 00	1¾		Hoist
3 00	4 00	1		Check drill collars

DRILLER Murray Larson

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.FL.-P COM.D.C.
5107	5148	41			76	16	750	5½	60			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	5122	4°							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	445	¾		Check drill Collars
445	500	¼		Rig Service & B.O.P.s
500	715	2¼		Ream in & Break Circ
715	830	1¼		drill 8½" hole
830	900	½		survey @ 5122
900	1200	3		drill 8½" hole
		8		

DRILLER G Bolin

Form 3T5 — APPROVED — APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FNX Val Laberdie	C-30	C-30-IV W.T. - 95-C	April 15/7
OPERATOR		**CONTRACTOR**	**RIG NO.**
FT Norman Exp		Challenger Drilling	2.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
Robert Ey		M Parasiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½ FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO. — SIZE 1 1/4 — NO. LINES 4 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8	Nom	54.5 J55	19	703		700
9 5/8	MANS	47 N80	142	5012	15.20	5005

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			7½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			½
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT	8		3½
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Reaming up			½
22	DRILL OUT			1½
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P. | HRS. W/OPR. D.P. | HRS. WO/D.P. | HRS. STANDBY | TOTAL DAY WORK | NO. OF DAYS FROM SPUD | CUMULATIVE ROTATING HRS. | TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED — TYPE / AMT. / TYPE / AMT.

FOOTAGE FROM — TO | DR..D RM..R CORE..C | CORE NO. | **FORMATION (SHOW CORE RECOVERY)** | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | S.P.M. | PUMP NO. LINER SIZE | S.P.M. | METHOD RUN SGL. DBL. PART'L P COMPL.

Fuel 3' 8"
Water @ 71%
Used 236 gal

DEVIATION RECORD — DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM — TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
12 24	8 24			W.O.C. & cut casing & install wear Bushing Nipple up B.O.P.S & Clean Mud Tanks

DRILLER Remi Labrie

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR	OD	FT.
17	D.C. ID 6½	OD 490.32	FT.
	STB RMR	OD	FT.
1	D.C. ID	OD 9.02	FT.
1	STB RMR JARS	OD 20.13	FT.
8			
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD

BIT NO.	1A
SIZE	8½
MFG.	Reed
TYPE	S31G
JET 1/32"	13 13 13
SER. NO.	751436
DEPTH OUT	
DEPTH IN	5005
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED — TYPE / AMT. / TYPE / AMT.

FOOTAGE FROM — TO | DR..D RM..R CORE..C | CORE NO. | **FORMATION (SHOW CORE RECOVERY)** | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | S.P.M. | PUMP NO. LINER SIZE | S.P.M. | METHOD RUN SGL. DBL. PART'L P COMPL.

DEVIATION RECORD — DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM — TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
8 00	9 30	6½		W. O.C.
9 30	4 00	1½		Run in DC. Pick up 3 DC.

DRILLER Harvey Larson

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR	OD	FT.
17	D.C. ID 6½	OD 490.32	FT.
	STB RMR	OD	FT.
1	D.C. ID	OD 902	FT.
1	STB RMR Third	OD 20.10	FT.
48	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	40.00	FT.
	TOTAL	5029	FT.
	WT. OF STRING	122M	LBS.

BIT RECORD

BIT NO.	1A
SIZE	8½
MFG.	Reed
TYPE	S31G
JETS 1/32"	13 13 13
SER. NO.	751436
DEPTH OUT	
DEPTH IN	5005
TOTAL FTG.	24
TOTAL HRS. RUN	3½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	9 00	10 00
WEIGHT	8.4	8.4
PRESSURE GRADIENT		
VISC.-SEC.	25	26
PV/YP		
GELS.		
WL -CC'S.		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED — TYPE / AMT. / TYPE / AMT.
Gel Poz
Carbon Bicarb 300
Soda Ash (10)
PMC 40

FOOTAGE FROM — TO | DR..D RM..R CORE..C | CORE NO. | **FORMATION (SHOW CORE RECOVERY)** | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. 1 LINER SIZE | S.P.M. | PUMP NO. 2 LINER SIZE | S.P.M. | METHOD RUN SGL. DBL. PART'L P COMPL.

FROM	TO				ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. 2 LINER SIZE	S.P.M.	METHOD RUN
5005	5029	24			52	1¼	775	5½		5½	60	5

DEVIATION RECORD — DEPTH 5029 | DEV. 4° | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM — TO | ELAPSED TIME | CODE NO. | DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
400	430	½		Press test Casing & BOPs 1000 PSI 30min OK.
430	600	1½		Run in
600	730	1½		W O C Tagged at 4970
730	900	1½		Drill Out Cement. Float & Shoe.
900	1130	2½		Drilling 8½" Hole
1130	1200	½		Survey
		8		

DRILLER L Kolia

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Exxelal Lubicon	C-30	C-30 - N.W.T. - 95-C	Apr 14/78

OPERATOR	CONTRACTOR	RIG NO.
Ft Norman Exp	Challenger Drilling	2.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½ FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8	Mann	54.5 J55	19	703		700

WIRE LINE RECORD — REEL NO.
SIZE 1 1/8 — NO. LINES 8 — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. ~~CONDITION MUD~~ & CIRCULATE			2½
6. TRIPS			
7. LUBRICATE RIG	1/4		
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT	7¾		1
13. WAIT ON CEMENT			4½
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD: BIT NO. | SIZE | MFG. | TYPE | JETS 1 32" | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1/8's T.B/ GAGE | GPM/ PD-PSI

MUD RECORD: TIME | WEIGHT | PRESSURE GRADIENT | VISC.-SEC. | PV/YP | GELS. | WL -CC'S | pH | SOLIDS %

MUD & CHEMICALS ADDED: TYPE | AMT. | TYPE | AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD: BIT NO. | SIZE | MFG. | TYPE | JET 1/32" | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1/8's T.B/ GAGE | GPM/ PD-PSI

MUD RECORD: TIME | WEIGHT | PRESSURE GRADIENT | VISC.-SEC. | PV/YP | GELS. | WL -CC'S. | pH | SOLIDS %

MUD & CHEMICALS ADDED: TYPE | AMT. | TYPE | AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD NIL	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD: BIT NO. | SIZE | MFG. | TYPE | JETS 1/32" | SER. NO. NIL | DEPTH OUT NIL | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1/8's T.B/ GAGE | GPM/ PD-PSI

MUD RECORD: TIME 6 00 | WEIGHT 93 | PRESSURE GRADIENT | VISC.-SEC. 81 | PV/YP - | GELS. - | WL -CC'S. 8.4 | pH 9.0 | SOLIDS %

MUD & CHEMICALS ADDED: TYPE | AMT. | TYPE | AMT.

MORNING TOUR

FOOTAGE FROM 5006' TO — | DR..D RM-R CORE..C | CORE NO. | FORMATION (SHOW CORE RECOVERY): Fuel 41.3" / Meter 16936 / used 341 | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE 5½ S.P.M. | PUMP NO. LINER SIZE 5½ S.P.M. | METHOD RUN SGL-S PART-P COM'D-C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	1/4		Rig Serv'd B.O.P.S
12 15	8 00	7¾		Running Casing Eight Protectors 1 JT type Stuck Rabbit.

Darrell Fay injured Knee by Casing Drift No LOST TIME

DRILLER Remi Laforce

DAY TOUR

FOOTAGE FROM — TO — | DR..D RM-R CORE..C | CORE NO. | FORMATION (SHOW CORE RECOVERY): Ran 142 jts (5012.98') 9⅝" Mann 47# & 43.5# New S00 95 & N80 type csg & landed at 5005' KB. Cemented w/182 sacks Oilwell cement plus 2% Gc + 0.3% HR4 Plug Down at 7:40 pm Apr. 14 w/1600#. Float held. | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE 6½ S.P.M. 80 | PUMP NO. LINER SIZE 5½ S.P.M. 57 | METHOD RUN SGL-S PART-P COM'D-C 1

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	1/4		Rig Service & BOPs
8 15	2 30	6¼		Run Csg
2 30	3 00	½		Rig to circ Csg
3 00	4 00	1		Break Circ Clean fill on bottom Bridge at 4970'

DRILLER D Murray Larson

EVENING TOUR

FOOTAGE FROM — TO — | DR..D RM-R CORE..C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE S.P.M. | PUMP NO. LINER SIZE S.P.M. | METHOD RUN SGL-S PART-P COM'D-C

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	1/4		Circ to Bottom 10' loose fill
415	630	2¼		Circ Casing for Cementing.
630	730	1		Cementing Land & displace plug
730		4½		W.O.C & Tear out BOPs & Set slips
	1200			
		8		

DRILLER G Bolin

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
ENX et al Lakeside	C-30	C-30 - N.W.I - 95 - C	Apr 13/7

OPERATOR: Ft Norman Exp
CONTRACTOR: Challenger Drilling — RIG NO. 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE:
SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½ I.F.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	13⅜	Man	52 J55	19	703		700

WIRE LINE RECORD — REEL NO.
SIZE 1⅛ — NO. LINES 8 — FT. SLIPPED 35'
FT. CUT OFF 95' — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING	1¼		
4	CORING			
5	CONDITION MUD & CIRCULATE	3¼		
6	TRIPS	2¼		2¼
7	LUBRICATE R'G	¼		1¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE	1		
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			3
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Lay down			1¼
22	Rig up Casing			1¼
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	B.S	9.00
	STB RMR OD	FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR 7 3/4 OD	28.72 FT.
1	D.C. JARS ID OD	20.10 FT.
	STB RMR OD	FT.
14	6½ D.C	403.94
1	6½ D.C	9.02
2	X O	5.00
47	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	36.66 FT.
	TOTAL	5005 FT.
	WT. OF STRING	132,000 LBS.

BIT RECORD

BIT NO.	RR13
SIZE	12¼
MFG.	HW
TYPE	JD7
JETS 1 32"	18 18 —
SER. NO.	70910
DEPTH OUT	
DEPTH IN	5005'
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B' GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	300	500	
WEIGHT	9.2+	9.3	
PRESSURE GRADIENT	.96		
VISC.-SEC.	50	70	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.		7.5	
pH	9.0	9.0	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500#		
Caustic	50#		
DV 68	2 gal.		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI. S PAINTER P COMPLC
5005'	—			Fuel tank 4' 8"	50	4/5	1150	5½	52	5½	52	
				Motor 16395'								
				used 489 ret								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
12 00	12 15	¼		Rig Serv ✓ B.O.P.S
12 15	1 00	¾		Dress bit D.C.
1 00	2 00	1		Slipped & cut line
2 00	3 30	1½		Run in hole
3 30	4 45	¼		Break circ & clean to Bottom Bridge at 4978. Run in to (4985') 20' bott fill Batt
4 45	8 00	3¼		Circ ✓

DRILLER: Rami Laberge

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	FT.
	TOTAL	FT.
	WT. OF STRING	LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B' GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI. S PAINTER P COMPLC

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
8 00	8 15	¼		Rig Service & BoP
8 15	8 30	¼		Circ — Condition mud & hole f/ Csg.
8 30	11 30	3		Dummy trip 45 stds - chain out
11 30	12 00	½		Break circ Clean 30' loose fill
12 00	3 00	3		Circ Cond hole f/ Csg
3 00	4 00	1		Hoist f/ Csg

DRILLER: Ronny Larsen

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	STB RMR Jet PD	20.10 FT.
14	D.C. ID 6½ OD	403.94 FT.
	STB RMR OD	FT.
	Halton Bank	
47	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	36.66 FT.
	TOTAL	5005 FT.
	WT. OF STRING	76,000 LBS.

BIT RECORD

BIT NO.	RR13
SIZE	12¼
MFG.	HW
TYPE	JD7
JETS 1/32"	18 18 —
SER. NO.	70910
DEPTH OUT	5005
DEPTH IN	5005
TOTAL FTG.	116
TOTAL HRS. RUN	26¾
COND. 1/8's T/B GAGE	4 1 1
GPM/ PD-PSI	

MUD RECORD

TIME	600	800	1000
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	86	4	84
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.8	7.8	8.0
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI. S PAINTER P COMPLC
5005	5005							5½		5½		5

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
400	415	¼		R.G Serv ✓ Bops
415	630	2¼		Hoist - Chain out for Casing
630	745	1¼		Lay down 7" 4" Collars & Subs
745	900	1¼		R/G to Run Casing
900	1700	3		Run Casing
		5		

DRILLER: G Bolin

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: Fnfield Labiche — WELL NO.: C-30 — API WELL NUMBER: C-30 - N.W.S.L. - 95'-C — DATE: Apr 12/7
OPERATOR: H Norman Eng — CONTRACTOR: Challenger Drilling — RIG NO.: 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½ IF H	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
1	Emsco	D-300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8	Mmm	54.5	J55	19	703	700

WIRE LINE RECORD — REEL NO. — SIZE 1 1/4 — NO. LINES [illegible] — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING	2 3/4		
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	5		3/4
7. LUBRICATE RIG	1/2		
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			6 3/4
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. Lay down			1/2
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	BS		2.00
1	STB RMR SS OD		9.16 FT.
3	D.C. ID 9" OD		93.06 FT.
1	STB RMR 7¾ OD		28.72 FT.
1	D.C. ID [illegible] OD		20.10 FT.
	STB RMR OD		
14	6½ DC		403.94
1	6½ DC		9.02
2	XO		5.00
47	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		27.50 FT.
	TOTAL		5005 FT.
WT. OF STRING	128		LBS.

BIT RECORD

BIT NO.	RR 13
SIZE	12 1/4
MFG.	HW
TYPE	J07
JETS 1 32"	18 18 18
SER. NO.	70910
DEPTH OUT	
DEPTH IN	4889
TOTAL FTG.	116
TOTAL HRS. RUN	26 3/4
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	1200	600	800
WEIGHT	9.4	9.3+	9.3
PRESSURE GRADIENT			
VISC.-SEC.	48	100	105
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.4	6.2	6.2
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
1" STREAM OF WATER.			
CAUSTIC 50#			

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	8:00		
WEIGHT	9.2		
PRESSURE GRADIENT			
VISC.-SEC.	80		
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	BS		2.00
	STB RMR OD		FT.
3	D.C. ID 9" OD		93.06 FT.
1	STB RMR 7¾ OD		28.72 FT.
1	D.C. ID JAR OD		20.10 FT.
	STB RMR OD		FT.
14	6½ DC.		403.94
1	6½ DC		9.02
2	X.H.		5.00
47	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		36.66 FT.
	TOTAL		5005 FT.
WT. OF STRING		127,000	LBS.

BIT RECORD

BIT NO.	RR13
SIZE	12¼
MFG.	HW
TYPE	JD7
JETS 1/32"	18 18 —
SER. NO.	70910
DEPTH OUT	
DEPTH IN	5005
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	600	800
WEIGHT	93	93
PRESSURE GRADIENT		
VISC.-SEC.	84	75
PV/YP	/	/
GELS.	/	/
WL -CC'S.	6.6	6.8
pH	9.0	9.0
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE FROM 5005' TO —

DR.-D RM-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SURF.-S ANN.-P COMP.-C
		Fuel tanks 5'6"	50	5/10	1150	5½	50	5½	50	
		Meter 15906								
		used 590								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	1/4		Rig Serv ✓ B.O.P.S
12 15	5 15	5		Dumsmy trip 46 stands tight at 20 stands at Bottom Posse
5 15	8 00	2 3/4		Brck circ & Clean to Bottom 90' fill from 4956.

DRILLER Remi Lafleur

DAY TOUR

FOOTAGE FROM — TO 5005

DR.-D RM-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SURF.-S ANN.-P COMP.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	1/4		Rig Service + B.O.P.
8 15	10 30	2 1/4		Tin
10 30	1 30	3		Hoist f/ logging - chain out Lay down Short Sa
1 30	4 00	2 1/2		Rig to + log

LOGS: Dual Induction Laterolog & Survey; Integrated Gamma Ray Sonic Caliper & High Resolution Dipmeter logs from 4956' to 697' KB.

DRILLER Jerry Jason

EVENING TOUR

FOOTAGE FROM 5005 TO 5005

DR.-D RM-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SURF.-S ANN.-P COMP.-C
		Change out + fuel filters in Floor Motor								
		Change out fuel filters in all pump motors								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	1			
	10 45	6 3/4		LOGGING with Schlumberger + Tear out
10 45	11 15	1/2		SAME
11 15	1200	3/4		Remove Reamer + Shock Sub from floor
				Remove one Jet + Run in

DRILLER [illegible]

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Exxon Lal Lafitte	C-30	C-30 - N.W.T - 95-C	April 11/7

OPERATOR: Exxon
SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

CONTRACTOR: Challenger Drilling — RIG NO. 2.
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4 1/2	16.6	E	6	4 1/2 FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8	Mon	54.5	19	703		700

WIRE LINE RECORD — REEL NO. — SIZE 1 1/8 — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7	3/4	
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE		3 1/4	2
6	TRIPS		2 1/2	4 3/4
7	LUBRICATE RIG	1/4	1/4	1/4
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	3/4	1/4	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Clean & Ctn	3/4	1	
22				
23				
A	PERF'R'T'N			
B	TBG TRIPS			
C	TREATING			
D	SWABBING			
E	TESTING			
F	ADDIT'N'L			
G				
	TOTALS	8	8	8

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	2.00
1	STB RMR SS OD	9.16 FT.
3	D.C. ID 9" OD	93.16 FT.
1	STB RMR 7 3/4 OD	28.72 FT.
1	D.C. ID JAR OD	20.10 FT.
14	STB RMR 6 1/2 OD	403.94 FT.
1	6 1/2 DC	9.02
2	XO	5.00
47	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	27.68 FT.
	TOTAL	5001. FT.

WT. OF STRING 125 LBS.

BIT RECORD

BIT NO.	13
SIZE	12 1/4
MFG.	HW
TYPE	J07
JETS 1/32"	16 16 16
SER. NO.	70910
DEPTH OUT	
DEPTH IN	4889.
TOTAL FTG.	112.
TOTAL HRS. RUN	26
COND. 1/8's T/B/ GAGE	/ /
GPM/ PD-PSI	

MUD RECORD

TIME	145	400	600
WEIGHT	9.3+	9.3+	9.3+
PRESSURE GRADIENT			
VISC.-SEC.	70	65	62
PV/YP	/	/	/
GELS.	/	/	/
WL -CC's.	76	76	78
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000 #		

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'D C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH-S PART'L-P COMB-C
4971	5001.	30		Fuel	90	15/17	1100	5 1/2	46	5 1/2	46	
				Fuel Tank 3'								
				Meter 15316								
				used 806								

DEVIATION RECORD: DEPTH 4988. — DEV. 4 1/2° — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	1/4		Rig Serv & B.O.P.'s
12 15	4 15	4		Drilling 12 1/4 Hole
4 15	5 00	3/4		circ & Survey
5 00	8 00	3		Drilling

DRILLER: Remi Laforce

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	2.00
1	STB RMR SS OD	9.16 FT.
3	D.C. ID 9" OD	93.06 FT.
	STB RMR OD	FT.
1	D.C. ID 7 3/4 OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6 1/2 DC	403.94
1	6 1/2 DC	9.02
2	XO	5.00
47	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	27.50 FT.
	TOTAL	5005 FT.

WT. OF STRING 128.000 LBS.

BIT RECORD

BIT NO.	13
SIZE	12 1/4
MFG.	HW
TYPE	JD7
JET 1/32"	16 16 16
SER. NO.	70910
DEPTH OUT	5005
DEPTH IN	4889
TOTAL FTG.	116
TOTAL HRS. RUN	26 3/4
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	930	1030	300
WEIGHT	9.4	9.3+	9.3+
PRESSURE GRADIENT			
VISC.-SEC.	73	69	97
PV/YP	/	/	/
GELS.	/	/	/
WL -CC's.	9.0		
pH	9.5	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Q-2	2 100	Oil	
DF-11	2	Caus	
MI-VIS GEL	50	Oil	

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'D C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH-S PART'L-P COMB-C
5001	5005				90	15	1100	5 1/2	42	5 1/2	42	

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	1/4		Rig Service + B.O.P.
8 15	9 00	3/4		Drilling
9 00	10 30	1 1/2		Circ Condition mud + hole
10 30	12 15	1 3/4		Dummy Trip - 20 stds Hit fill @ 4955
12 15	1 00	3/4	Break Circ	Clean to bottom 50'
1 00	3 00	2		Circ Cond hole + mud
3 00	3 15	1/4		Pump Survey
3 15	4 00	3/4		Hoist SLM

DRILLER: Murray Larson

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'D C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH-S PART'L-P COMB-C
5005	5005				30	5	1150	5 1/2	50	5 1/2	50	S
					Clean	Fill	to	Bottom				

DEVIATION RECORD: DEPTH 5005 — DEV. 4 1/4 — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	1/4		Rig Serv & Bops
4 15	6 45	2 1/2		Hoist
6 45	9 00	2 1/4		Change jts & run in
9 00	10 00	1		Clean 45' loose fill to bottom
10 00	12 00	2		Circulate & Condition Mud & Hole

Board 5019.82
SLM. 5019.70
.12

DRILLER: E Robin

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	2.00
1	STB RMR SS OD	9.16 FT.
3	D.C. ID 9" OD	93.06 FT.
	STB RMR OD	FT.
1	D.C. ID 7 3/4 OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6 1/2 DC	403.94
1	6 1/2 DC	9.02
2	XH	5.00
47	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	27.50 FT.
	TOTAL	5005 FT.

WT. OF STRING 128.000 LBS.

BIT RECORD

BIT NO.	RR13
SIZE	12 1/4
MFG.	HW
TYPE	TD7
JETS 1/32"	18 18 18
SER. NO.	70910
DEPTH OUT	5005
DEPTH IN	4889
TOTAL FTG.	116
TOTAL HRS. RUN	26 3/4
COND. 1/8's T/B/ GAGE	4 1 I
GPM/ PD-PSI	

MUD RECORD

TIME		1400	
WEIGHT		9.4	
PRESSURE GRADIENT			
VISC.-SEC.		135	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC's.		6.4	
pH		9.0	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FORM 3T5

APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

Poor Copy.

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FNX et al Ja. Bickle	C-30	C-30 NWT. 95-C.	Apr. 10-7

OPERATOR	CONTRACTOR	RIG NO.
Ft Norman exp.	Challenger Drilling	2.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: S. Kirchbuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	Emsco	D 300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜	MANN	52 55	19	703		700

WIRE LINE RECORD — REEL NO.

SIZE 1¼ — NO. LINES 8 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

MORNING TOUR

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	5	6¾	6¼
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE	2¼	1/2	
6	TRIPS			
7	LUBRICATE RIG	¼	¼	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	½	½	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
Eccles	4	8	8
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD	34		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	B.S.	2.00	
1	STB RMR 95 OD	9.16	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 7¾ OD	28.72	FT.
14	D.C. ID 6½ OD	403.94	FT.
1	STB RMR JARS OD	20.10	FT.
1	6½ DC	9.02	FT.
2	XO	5.00	
46	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	27	FT.
	TOTAL	4912	FT.

WT. OF STRING 125 LBS.

BIT RECORD

BIT NO.	13
SIZE	12¼
MFG.	HW
TYPE	J07
JETS 1/32"	3-16
SER. NO.	70910
DEPTH OUT	
DEPTH IN	4889
TOTAL FTG.	23
TOTAL HRS. RUN	5
COND. 1/8's T/B/ GAGE	2 2
GPM/ PD-PSI	

MUD RECORD

TIME	12:30	4:00	7:00
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	59	65	67
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.	8.6	7.2	6.8
pH	9.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500#		
Dr. Sol	10 Gal		
Caustic	100#		
C.M.C.	50#		

FOOTAGE FROM	FOOTAGE TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PART'L P COMP'D C
4889	4912	23		Fuel 0 7100 40°	60/120	17/20	1100	5½	46	5½	46	
				Mixed 14510 Lbs.								
				Fuel used 720 Gal.								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4896	5							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		RIG SERV ✓ BOPS.
12:15	1:30	1¼		DRILL. 12¼ HOLE.
1:30	4:15			SURVEY WORK PIPE HOLE TIGHT. PUMP OUT 2 SINGLES
		2¾		CIRC & CONDITION MUD & RETURN TO BOTTOM. CLEANING
4:15	8:00	3¾		DRLG 12¼ HOLE.

S Kirchbuk left at 4 P.M. 4/10/71

DRILLER R.D. Brannen.

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	B.S.	2.00	
1	STB RMR SS OD	9.16	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 7¾ OD	28.72	FT.
14	D.C. ID 6½ OD	403.94	FT.
1	STB RMR JARS OD	20.10	FT.
1	6½ DC	9.02	FT.
2	XO	5.00	
46	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	26.41	FT.
	TOTAL	4943. corr.	

WT. OF STRING 125 LBS.

BIT RECORD

BIT NO.	13
SIZE	12¼
MFG.	HW
TYPE	J07
JET 1/32"	16 16 16
SER. NO.	70910
DEPTH OUT	
DEPTH IN	4889
TOTAL FTG.	54
TOTAL HRS. RUN	12¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10:00	12:00	2:00
WEIGHT	9.3+	9.3+	9.3+
PRESSURE GRADIENT			
VISC.-SEC.	56	55	62
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.	8.4	8.6	8.6
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Hi Vis CMC - 100#			

FOOTAGE FROM	FOOTAGE TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PART'L P COMP'D C
4912.	4943	31			90/120	15/16	1100	5½	46	5½	46	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4926	5°							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Serv ✓ B.O.P.S
8:15	11:00	2 3/4		Drilling 12¼ Hole
11:00	11:30	½		circ & work Pipe tight on Conn.
11:30	12:45	1 1/4		Drilling
12:45	1:15	½		Survey.
1:15	4:00	2 3/4		Drilling

DRILLER Jeremi Laforce

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	B.S	2.00	
1	SS OD	9.16	FT.
3	D.C. ID 9" OD	93.16	FT.
	STB RMR OD		FT.
1	D.C. ID 7¾ OD	28.72	FT.
1	STB RMR JARS OD	20.10	FT.
14	6½ DC	403.94	
1	6½ DC	9.02	
2	XO	5.00	
46	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	21.50	FT.
	TOTAL	4971	FT.

WT. OF STRING 125000 LBS.

BIT RECORD

BIT NO.	13
SIZE	12¼
MFG.	HW
TYPE	J07
JETS 1/32"	16 16 16
SER. NO.	70910
DEPTH OUT	
DEPTH IN	4889
TOTAL FTG.	82
TOTAL HRS. RUN	18
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	4:15	8:00	11:00
WEIGHT	9.3+	9.3+	9.3+
PRESSURE GRADIENT			
VISC.-SEC.	56	54	63
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.	7.7	7.5	7.7
pH	9.5	9.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2400	Lbs	
DW-68	2	Gal	
HI-VIS CMC	50	Lbs	
CAUST-P	50	Lbs	

FOOTAGE FROM	FOOTAGE TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PART'L P COMP'D C
4943	4971	28			90	15	1100	5½	42	5½	42	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4958	4½							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		Rig Service + Bo Pt
4:15	7:30	3¼		Drilling
7:30	8:00	½		Survey
8:00	12:00	4		Drilling

DRILLER Jurray Larson

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FNX Del La Biche	C-30	C-30 NWT 95-C	apr. 9-7

OPERATOR	CONTRACTOR	RIG NO.
Ed Morman Exp.	Challenger Drilling	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Clint Lloyd

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: S. Kirchuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½ FH.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	Emsco	D 300	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

LAST CASING, TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜	MANN	52	19	703		700

SIZE 1½ — NO. LINES 8 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7	6¾	1¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			1
6. TRIPS			4¾
7. LUBRICATE RIG	1/4	1/4	1/4
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¾	1	1/4
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. Clean to Btm			1½
22.			
23.			

COMPLETION: A. PERF'R'T'N; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'N'L; G.

TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
Contr	8	8	
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD: 38

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	B.S	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ D.C	403.94
1	6½ D.C	9.02
2	XO	5.00
45	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	39. FT.
	TOTAL	4840 FT.
WT. OF STRING	124	LBS.

BIT RECORD

BIT NO.	12.	
SIZE	12¼	
MFG.	REED	
TYPE	S62J	
JETS 1 32"	3 – 16	
SER. NO.	215355	
DEPTH OUT		
DEPTH IN	4673.	
TOTAL FTG.	217	
TOTAL HRS. RUN	31	
COND. 1/8's T/B/ GAGE		
GPM/ PD–PSI	/	/

MUD RECORD

TIME	12:30	4:30	6:45
WEIGHT	9.3	9.3	
PRESSURE GRADIENT			
VISC.–SEC.	59	61	63
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S	8.6	7.2	6.8
pH	9.0	9.5	9.5
SOLIDS %			

DESILTER A.D.F. 9 M.L.F. 10 I @ 3 G.P.M.

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
CAUSTIC	100#		
C.M.C.	50#		
D.V. 69	1 GAL		

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	Bit sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ D.C	403.94
1	6½ D.C	9.02
2	XO	5.00
45	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	24.99 FT.
	TOTAL	4844.00 FT.
WT. OF STRING	125	LBS.

BIT RECORD

BIT NO.	12	
SIZE	12¼	
MFG.	Reed	
TYPE	S62J	
JET 1/32"	16 16 16	
SER. NO.	215355	
DEPTH OUT		
DEPTH IN	4623	
TOTAL FTG.	265	
TOTAL HRS. RUN	37¾	
COND. 1/8's T/B/ GAGE		
GPM/ PD–PSI	/	/

MUD RECORD

TIME	9:45	10:00	2:00
WEIGHT	9.3+	9.3+	9.3
PRESSURE GRADIENT			
VISC.–SEC.	61	54	55
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	7.4	7.6	7.6
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500#		
Lignite	20 GL		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	B.S	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	XO	5.00
45	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	34.50 FT.
	TOTAL	4889 FT.
WT. OF STRING	125	LBS.

BIT RECORD

BIT NO.	12	13
SIZE	12¼	12¼
MFG.	Reed	HW
TYPE	S62	J07
JETS 1/32"	16 16 16	16 16 16
SER. NO.	215355	70910
DEPTH OUT	4889	
DEPTH IN	4623	4889
TOTAL FTG.	266	
TOTAL HRS. RUN	38	
COND. 1/8's T/B/ GAGE	1 1 1	
GPM/ PD–PSI	/	/

MUD RECORD

TIME	4:15	11:15
WEIGHT	9.3	9.3
PRESSURE GRADIENT		
VISC.–SEC.	55	60
PV/YP	/	/
GELS.	/	/
WL –CC'S.		8.8
pH	9.5	9.5
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'L–P COM'D–C
4793.	4840	47		Lwst gy fossiliferous 4793 – 4796. Lwst gy 4796 – 4799 Shale wood 4799 – 4840	72	30.000	1100	5½	46	5½	46	

DEVIATION RECORD: DEPTH 4812. — DEV. 4½ — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12	12¼	¼		RIG SERV ✓ BOPS.
12¼	2 45	2½		DRLG. 12¼ HOLE.
2 45	3 30	¾		CIRC & SURVEY
3 30	8 00	4½		DRLG 12¼ HOLE.

DRILLER R.D. Brenner

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL–S PAR'L–P COM'D–C
4840	4888.	48			80	14/15	1100	5½	46	5½	46	

DEVIATION RECORD: DEPTH 4842. — DEV. 5 1/4 — DIRECTION; DEPTH 4873. — DEV. 5 7/8 — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		Rig Service ✓ B.O.P.S
8 15	8 45	½		Surveys.
8 45	1 15	4½		Drilling 12¼ Hole
1 15	1 45	½		Surveys
1 45	4 03	2¼		Drilling

DRILLER Demi Lefarce

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'L–P COM'D–C
1888	4889											

DEVIATION RECORD: DEPTH 4874 — DEV. 5 3/4 — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
11 00	4 15	¼		Rig Service & BOPs
4 15	4 30	¼		Drilling
4 30	5 30	1		Circ
5 30	5 45	¼		Drop Survey
5 45	10 00	4¾		O Trip F/ bit lay down reamer – SLM
10 00	12 00	1½		Break circ @ 4825 – Clean to Btm

SLM 4904.37
Board 4904.57
No correction made

Driller Leroy Larson

APPROVED — APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: JNX. et al la Bid | WELL NO.: C-30 | API WELL NUMBER: C-30 NWT-9S-C | DATE: Apr. 8-

OPERATOR: E. Norman, exp. | CONTRACTOR: Challenger Drilling | RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: ~~E. Norman, exp.~~ ~~Ted Sadler~~

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: S. Hrushka

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½ IH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 8"	14
2	"		

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	13⅜	Mayhew	54	J55	19	703	700

WIRE LINE RECORD — REEL NO.: SIZE 1 1/8 | NO. LINES 8 | FT. SLIPPED 3

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7¼	6½	6½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	½	¼	¼
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

MRS. W/CONTR. D.P. | MRS. W/OPR. D.P. | MRS. WO/D.P. | MRS. STANDBY | TOTAL DAY WORK | NO. OF DAYS FROM SPUD | CUMULATIVE ROTATING HRS. | TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	B.S.	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR 5⅝ OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ D.C.	403.94
1	6½ D.C.	9.02
2	X O	5.00
43	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	41.50 FT.
	TOTAL	4697 FT.
WT. OF STRING	122	LBS.

BIT RECORD

BIT NO.	12
SIZE	12¼
MFG.	REED
TYPE	S62S
JETS 1 32"	3-16
SER. NO.	215355
DEPTH OUT	
DEPTH IN	4623.
TOTAL FTG.	64
TOTAL HRS. RUN	11
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

	12:45	3:30	7:00
TIME			
WEIGHT	9.2	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	57	58	54
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.2	6.8	7.4
pH	9.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	800#		
D.V.66	1 GAL		
CAUSTIC	1.0#		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	Bit sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR 5⅝ OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ D.C.	403.94
1	6½ D.C.	9.02
2	X O	5.00
44	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	34.44 FT.
	TOTAL	4743.00 FT.
WT. OF STRING	123	LBS.

BIT RECORD

BIT NO.	12
SIZE	12¼
MFG.	Reed
TYPE	S62S
JET 1/32"	16 16 16
SER. NO.	215353
DEPTH OUT	
DEPTH IN	4623
TOTAL FTG.	120
TOTAL HRS. RUN	17½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

	9:30	12:00	2:00
TIME			
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	54	55	57
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.2	8.2	8.4
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2500#		
DV-66	2 gal		

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	B.S.	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR 5⅝ OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ D.C.	403.94
1	6½ D.C.	9.02
2	X O	5.00
44	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	22.50 FT.
	TOTAL	4793 FT.
WT. OF STRING	124000	LBS.

BIT RECORD

BIT NO.	12
SIZE	12¼
MFG.	Reed
TYPE	S62
JETS 1/32"	16 16 16
SER. NO.	215355
DEPTH OUT	
DEPTH IN	4623
TOTAL FTG.	170
TOTAL HRS. RUN	24
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

	4:30	9:00	11:30
TIME			
WEIGHT	9.3	9.3	9.2
PRESSURE GRADIENT			
VISC.-SEC.	60	~~52~~	54
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.5	8.6	
pH	9.5	9.0	9.2
SOLIDS %			
	UNDER FLOW 2½ BBLS/M WT 9.9		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2400 lbs		
DV-66	2	Gal	
CAUSTIC	50	lbs	

MORNING TOUR

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
4643	4687	44		Fmn. Cut 7.00 Hr. 5'-6"	86	20	1100	5½	46	5½	46	Comp
				Mixed 13014 Yds								
				Truck used 544 Gal								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4655	3½	K						

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
~~4643~~	2:00	~~17½~~		Rig Serv. BOPs.
12:15	2:00	1¾		DRLG 12¼ HOLE.
2:00	2:30	½		Circ & Survey
2:30	8:00	5½		DRLG 12¼ HOLE.

DRILLER R. Bateman

DAY TOUR

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
4687	4743	56			80	16/18	1100	5½	46	5½	46	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4687	4⅛		4717	4⅛				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Serv ✓ B.O.P.S
8:15	8:45	½		Survey
8:45	12:15	3½		Drilling 12¼ Hole
12:15	1:00	¾		Tight Conn [redacted]. Circ work pipe
				Survey.
1:00	4:00	3		Drilling

DRILLER Remi Lapsee

EVENING TOUR

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
4743	4793	50			72	30	1100	5½	44	5½	44	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4750	4⅞		4780	4½				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1:00	4:15	¼		Rig Service & B.O.P.
4:15	5:00	¾		Drilling
5:00	5:45	¾		Survey
5:45	9:15	3½		Drilling
9:15	9:45	½		Survey
9:45	12:00	2¼		Drilling

DRILLER Jerry Larson

FORM 3T5 — APPROVED — APPROVED — A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FN.X Elal LaBrie	C-30	C-30 N WT - 9S - C.	April 7
OPERATOR		**CONTRACTOR**	RIG NO.
Mobil Mobil Oil Corp. Exp.		Gallagher Drilling	2.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
		S. Hinkle	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.6	E	6	4½ FH	1	1	Emsco	D 300	14
						2	"	"	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13⅜	Mahn	52 J55	19	703		700

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	6¼		3¾
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE	¾		
6.	TRIPS	¾	5½	½
7.	LUBRICATE RIG	¼	¼	¼
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY		¼	
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
	Change out Rotating Head		2.	
22.				
23.	Clean to Btm			3½
	COMPLETION A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS			8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
Rig	8	8	8
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD	36		
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

NO.	BIT	FT.
1	B.S	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	XO	5.00
42	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	39 FT.
	TOTAL	4623 FT.
WT. OF STRING	120	LBS.

BIT RECORD	
BIT NO.	11
SIZE	12¼
MFG.	HW
TYPE	JD7
JETS 1 32"	3 - 14
SER. NO.	71504
DEPTH OUT	4623
DEPTH IN	4512
TOTAL FTG.	111
TOTAL HRS. RUN	27¼
COND. 1/8's T/B/ GAGE	8 4/1
GPM/ PD-PSI	

MUD RECORD			
TIME	12.30	4:30	6:30
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	63	61	65
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	5.4	8.2	7.4
pH	9.5	9.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	800		
DYES	1 GAL		
C.M.C.	50#		
CAUSTIC	50#		

MORNING TOUR

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

NO.	BIT	FT.
1	B.S	1.00
1	STB RMR 9" OD	7.57 FT.
7	D.C ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	XO	5.00
42	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	39.00 FT.
	TOTAL	4623 FT.
WT. OF STRING	120	LBS.

BIT RECORD	
BIT NO.	12
SIZE	12¼
MFG.	Reed
TYPE	S62J
JET 1/32"	16 16 16
SER. NO.	215355
DEPTH OUT	
DEPTH IN	4623
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

NO.	BIT	FT.
1	B S	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	XO	5.00
43	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	29.50 FT.
	TOTAL	4643 FT.
WT. OF STRING	120	LBS.

BIT RECORD	
BIT NO.	12
SIZE	12¼
MFG.	REED
TYPE	S62J
JETS 1/32"	16 16 16
SER. NO.	215355
DEPTH OUT	
DEPTH IN	4623
TOTAL FTG.	20
TOTAL HRS. RUN	3¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	7.30	10 AM	11.30
WEIGHT	9.3	9.2+	9.3
PRESSURE GRADIENT			
VISC.-SEC.	62	54	59
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.8	7.9	
pH	9.0	9.5	9.5
SOLIDS %			
UNDER FLOW		10.1 #/ft.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1060	lbs.	
DI-LB	1	Gal.	
CAUSTIC	50	lbs	

EVENING TOUR

FOOTAGE — FORMATION — MUD PUMPS — DEVIATION RECORD — TIME LOG

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAPER-P COMP-C
4611	4623	12		FUEL @ 7.00 3' 11"	60/120	35/40	1100/1150	5½	46	5½	46	
				AFTER. 1270 Gal.								
				USED. 967 Gal.								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	2 45	2¾		DRLG. 12¼ HOLE
2 45	3 00	¼		RIG SERV — BOPS
3 00	6 30	3½		DRLG. 12¼ HOLE.
6 30	7 00	1½		CIRC. & CONDITION HOLE
~~7~~	~~8 00~~			~~HOLE FELL IN.~~

DRILLER Bob Brewer

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAPER-P COMP-C
4623	—							5½		5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4611	3½							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		Rig Serv ✓ B.O.P.S
8 15	8 30	¼		Drop'd survey Pump's down survey.
8 30	12 30	4		Hoist for Bit Tight Hole to (3217) 15 stand's off Bottom.
12 30	2 30	2		Changed Roller's in Reamer's String
2 30	4 00	1½		Run in w/ Bit No 12.

DRILLER Remi Lefore

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAPER-P COMP-C
4623	4643	20	-		66	20	1100	5½	45	5½	45	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	¼		Rig Service & BOP
4 15	4 45	½		Run in to 45'30
4 45	8 15	3½		Circ. air - Clean to btm (15' very hard fill)
8 15	12 00	3¾		Drilling

DRILLER Jerry Larson

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 1

LEASE	WELL NO.	API WELL NUMBER	DATE
J.W. et al. La Biche	C-30	C-30 NWT-98-C.	Apr. 6

OPERATOR	CONTRACTOR	RIG NO.
Ford Norman Exp.	Challenger Drilling	2.

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	S. Kruduk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½ FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	"	"	"

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8	MANN	S2	JSS	19	703.	15.20	700

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	6½	7	7½
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE	¾		
6.	TRIPS			
7.	LUBRICATE RIG	¼	¼	¼
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY	½	¾	¾
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

Kelly 8 8 8

TOTAL DAY WORK

NO. OF DAYS FROM SPUD 35

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	B.S	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	X O	5.00
42	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	29 FT.
	TOTAL	4553 FT.
WT. OF STRING	116	LBS.

BIT RECORD

BIT NO.	11
SIZE	12¼
MFG.	HW
TYPE	JD7
JETS 1 32"	3-11
SER. NO.	71504
DEPTH OUT	
DEPTH IN	4512.
TOTAL FTG.	41
TOTAL HRS. RUN	7
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	12:30	3:30	7:00
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	92	96	107
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.8	6.8	7.2
pH	9.5	9.5	9.5
SOLIDS %			

DES/LITER @ F. 7.1 u.f. 9.8 @ 3 C.F.

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2400		
DV. 68	2 GAL.		
C.M.C.	50#		
CAUSTIC	50#		

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	Cut sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	X O	5.00
42	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	33.29 FT.
	TOTAL	4586. FT.
WT. OF STRING	118	LBS.

BIT RECORD

BIT NO.	11
SIZE	12¼
MFG.	HW
TYPE	JD7
JET 1/32"	16 16 16
SER. NO.	71504
DEPTH OUT	
DEPTH IN	4512
TOTAL FTG.	74
TOTAL HRS. RUN	14
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	9.00	12.00	2.00
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	94	67	69
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.6	7.8	8.0
pH	9.5	9.5	9.5
SOLIDS %	G/C 9.1		
	U/F 9.9		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	800 #		
1½"	Stream water		

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	B.S.	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	X O	5.00
42	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	27.50 FT.
	TOTAL	4611 FT.
WT. OF STRING	120000	LBS.

BIT RECORD

BIT NO.	11
SIZE	12¼
MFG.	HW
TYPE	JD7
JETS 1/32"	16 16 16
SER. NO.	71504
DEPTH OUT	
DEPTH IN	4512
TOTAL FTG.	99
TOTAL HRS. RUN	21
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	4.30	8.00	11.15
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	66	60	67
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.0	8.0	8.2
pH	9.5	9.0	9.2
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000	Wtr	
DI-68	1	Gal.	
CAUSTIC	50	Wtr	

DAY TOUR

FOOTAGE FROM 4514 TO 4553 | DR.-D RM.-R CORE.-C 39 | CORE NO. | FORMATION (SHOW CORE RECOVERY): Fresh at 7:00 a.m. 5' in. Motor 11:30. Fresh used x15 Jet.

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
120	12/22	1100	5½		5½	56	
			HOWCO				

DEVIATION RECORD: DEPTH 4531 | DEV. 4° | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12.00	3.00	3		DRLG 12¼ HOLE.
3.00	3.15	¼		RIG SERV & BOPS.
3.15	4.30	1¼		CIRC & WORK PIPE TIGHT. FOR. CONN. SURVEY
4.30	8.00	3½		DRLG. 12¼ HOLE.

DRILLER R.D. Brenner

FOOTAGE FROM 4553 TO 4586. 33 | DR.-D RM.-R CORE.-C | CORE NO. | FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
120	25/30	1100	5½		5½	60	
			[redacted]				
			HOWCO				

DEVIATION RECORD: DEPTH 4561 | DEV. 4¼ | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9.00	8.15	¼		[redacted] Rig Serv & B.O.P.S
8.15	10.00	1 ¾		Drilling 12¼ Hole
10.00	10.45	¾		Survey
10.45	4.00	5 ¼		Drilling
				Howco OFF line at 5PM. 11-6-75
				L.K.
				Found Joint that #19 No. on Line S.K.

DRILLER Remi Laforce

EVENING TOUR

FOOTAGE FROM 4586 TO 4611 | DR.-D RM.-R CORE.-C 25 | CORE NO. | FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
100	30/40	1100	5½	45	5½	45	

DEVIATION RECORD: DEPTH 4595 | DEV. 3½ | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4.00	4.15	¼		Rig Service & B.O.P.s
4.15	5.15	1		Drilling
5.15	6.00	¾		Circ & Survey
6.00	12.00	6		Drilling

DRILLER Jerry Larson

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 4

LEASE	WELL NO.	API WELL NUMBER	DATE
Fnx Federal Fabiche	C-30	C-30 NWT - 9S - C	Sept. 5th

OPERATOR	CONTRACTOR	RIG NO.
Fnx Int'l Inc. Ft Sumner Dist	Challenger Drilling	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[signature]	S. Krischke

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2		" "	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜	MAN W	54.5	19	703		700

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED
FT. CUT OFF		PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT		
CUMULATIVE TON MI. OR TRIPS		

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			11½
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	7¼	1	
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE	½		
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. Clean to Btm	6¾	7¼	
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	BIT sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.16 FT.
14	6½ DCs	403.94
1	6½ DCs	9.02
2	XO	5.00
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	FT.
	TOTAL	FT.
	WT. OF STRING	LBS.

BIT RECORD

BIT NO.	11
SIZE	12¼
MFG.	HW
TYPE	JD-7
JETS 1/32"	3-16
SER. NO.	71514
DEPTH OUT	
DEPTH IN	4512
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	ABD
WEIGHT	9.2
PRESSURE GRADIENT	
VISC.–SEC.	60
PV/YP	/ / /
GELS.	/ / /
WL –CC'S.	7.8
pH	9.0
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.–P COM.–C
4512				Fuel @ 7:00 am 9's" Bbls 10688 Fuel used 702 Gls				5½		5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:15	2¼		HOIST BIT #10 TIGHT HOLE 31-32 STDS. SLM.
2:15	2:30	¼		RIG SERV - BLIND RAMS. OK.
2:30	3:00	½		SLIP 33' LINE @ (3070) feet
3:00	8:00	5		RUN IN W/BIT #11. TIGHT HOLE. 15 STDS. OFF BTM. Circ + WOR. pipe lots of Shale Coming OVER Ream 2 Stds. Through Bridge @ 3070 feet

DRILLER R.D. Brennan

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	Bit sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ DC	403.94
1	6½ D.C	9.02
2	XO	5.00
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	FT.
	TOTAL	FT.
	WT. OF STRING	LBS.

BIT RECORD

BIT NO.	11
SIZE	12 1/4
MFG.	HW
TYPE	JD-7
JET 1/32"	16 16 16
SER. NO.	71504
DEPTH OUT	4512
DEPTH IN	4512
TOTAL FTG.	
TOTAL HRS. RUN	6¾ Clean To Btm
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	10:00	12:00	2:00
WEIGHT	9.2+	9.2+	9.3
PRESSURE GRADIENT			
VISC.–SEC.	55	52	54
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	8.0	8.2	9.4
pH	9.5	9.5	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	3000#		
CMC	50#		
Caustic	50#		
DV. 69	3 Gals		

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.–S PAR.–P COM.–C
4512	—				60/100	20/30	600	5½		5½	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Service + B.O.Ps
8:15	9:15	1		Trip in 11 Stds Hit Bridge
9:15				Clean Bridge 4 Stands From Bottom appx 4198
	4:00	6¾		Clean from 4198 to 4440.

DRILLER Henri Lafonce

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	B.S.	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½	403.94
1	6½	9.02
2	XO	5.00
41	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	24.50 FT.
	TOTAL	4514 FT.
	WT. OF STRING	116000 LBS.

BIT RECORD

BIT NO.	11
SIZE	12¼
MFG.	HW
TYPE	JD7
JETS 1/32"	16 16 16
SER. NO.	71504
DEPTH OUT	
DEPTH IN	4512
TOTAL FTG.	2
TOTAL HRS. RUN	½
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	4:30	8:30	11:00
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.–SEC.	65	100+	102
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	7.9	7.6	7.9
pH	9.0	9.2	9.5
SOLIDS %	UNDER FLOW 3 G.P.M. 9.6 Wt.		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	5000	lbs.	
DV-69	5	Gals	
CAUSTIC	100	lbs.	

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.–P COM.–C
4512	4514	2			120	16	1100	5½	56	(Howco)		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		Rig Service + BoPs
4:15	10:30	6¼		Cleaning from 4440 to Btm
10:30	11:30	1		Drilling

Halliburton on Line 10.30 P.m. S.K.

DRILLER Jerry Larson

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 5

LEASE	WELL NO.	API WELL NUMBER	DATE
FNX Federal Fa Bicke	C-30	C-30 NWT 95-C	Apr. 4

OPERATOR	CONTRACTOR	RIG NO.
Ted Jamison exp.	Challenger Drilling	2.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: S. Krisbok

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½ FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco 300	350	14
2	" 300	"	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜	MAN'd	54	ISS	19	703	700

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	6¾	7¼	5¼
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			½
6	TRIPS			1½
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1	½	¼
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
Baden	8 6 8
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	33
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	Bit Sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JaR OD	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	X O	5.00
46	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	1 300 FT.
	TOTAL	4440 FT.
WT. OF STRING	114	LBS.

BIT RECORD

BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JETS 1 32"	3-16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	715
TOTAL HRS. RUN	10 D½
COND. 1/8's T/B. GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	12:30	3:30	7:00
WEIGHT	9.2	9.1	9.1
PRESSURE GRADIENT			
VISC.-SEC.	46	51	51
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.6	6.6	6.4
pH	9.0	9.5	9.5
SOLIDS %			

DESILTER D.E. 8.7 L. F. 10.3 @ 3 G.P.M.

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1200#		
D.V. 68	1 GAL.		
CAUSTIC	100#		
C.M.C.	50#		

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL. PAR. S DP DC CONTR.
4388	4446	52		Trip @ 7. 5'1" meter 9985 Trip used 974 gal.	60	19/20	1100	5½	46	5½	46	

DEVIATION RECORD: DEPTH 4405 — DEV. 4° — DIRECTION — DEPTH 4440 — DEV. 3½ — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		Rig serv. & BOPs.
12:15	2:30	2¼		Drlg 12¼ hole.
2:30	3:00	½		Circ & survey
3:00	7:30	4½		Drlg.
7:30	8:00	½		Circ + survey

DRILLER: [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	Bit sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JaR OD	20.10 FT.
14	6½ D.C.	403.94
1	6½ DC	9.02
2	XO	5.00
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	25.78 FT.
	TOTAL	4484. FT.
WT. OF STRING	114	LBS.

BIT RECORD

BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JET 1/32"	16 16 16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	759
TOTAL HRS. RUN	107¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10:00	1:00	3:00
WEIGHT	9.2+	9.2	9.2+
PRESSURE GRADIENT			
VISC.-SEC.	50	49	54
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	6.8	6.4	6.6
pH	9.5	9.5	9.5
SOLIDS %	O/F 9.0		
	U/F 10.3		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2400#		
CMC.	50#		
DV.68	2 gals		

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL. PAR. S DP DC CONTR.
4440	4484	44		440	60	19/20	1100	5½	46	5½	46	

DEVIATION RECORD: DEPTH 4468. — DEV. 4° — DIRECTION — DEPTH 12 — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Serv + B.O.P.S.
8:15	12:30	4¼		Drilling 12¼ Hole
12:30	1:00	½		Surveys
1:00	4:00	3		Drilling

DRILLER: Leroy Jefferies

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	Bit Sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JaR OD	20.10 FT.
14	6½	403.94
1	6½	9.02
2	XO	5.00
41	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	22.50 FT.
	TOTAL	4512 FT.
WT. OF STRING	116,000	LBS.

BIT RECORD

BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JETS 1/32"	16 16 16
SER. NO.	HR556
DEPTH OUT	4512
DEPTH IN	3725
TOTAL FTG.	787
TOTAL HRS. RUN	113
COND. 1/8's T/B/ GAGE	3 1 I
GPM/ PD-PSI	

MUD RECORD

TIME	4:30	8:30	
WEIGHT	9.2	9.2	
PRESSURE GRADIENT			
VISC.-SEC.	48	60	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.8		
pH	9.5	9.0	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000 lbs		
DV-68	2	Gal.	
CAUSTIC	50	lbs.	

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL. PAR. S DP DC CONTR.
4484	4512	28			70	18	1100	5½	45	5½	45	P

DEVIATION RECORD: DEPTH 4499 — DEV. 4½ — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		Rig Service + B.O.P.S
4:15	6:45	2½		Drilling
6:45	7:15	½		Survey
7:15	10:00	2¾		Drilling
10:00	10:30	½		Circ.
10:30	12:00	1½		Hoist 5 std - SLM

DRILLER: Murray Larson

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fmt. Col. Lubricha	C-30	C-30 N.W.T. 95-C	Nov 3/73

OPERATOR	CONTRACTOR	RIG NO.
Ft Harrison Exp	Challenger Drilling	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: ORR

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: L. Kimball

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	4½FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜	Mon	54.5	19	703		700

WIRE LINE RECORD — REEL NO.
SIZE | NO. LINES | FT. SLIPPED
FT. CUT OFF | PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¼	13¼	7¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	½	1	¼
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
Baker	8	8	8
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD: 32
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

NO.	DRILLING ASSEMBLY	FT.
*	BIT	
1	B.S	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	X O	5.00
39	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN 33	FT.
	TOTAL 4303	FT.
WT. OF STRING 114		LBS.

BIT RECORD	
BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JETS 1/32"	16 16 16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725'
TOTAL FTG.	578
TOTAL HRS. RUN	77¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	9	1:00	6:00
WEIGHT	93+	93	93
PRESSURE GRADIENT			
VISC.-SEC.	45	49	50
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	44	44	44
pH	9.5	9.5	9.5
SOLIDS %			
	Add water & mud		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Drispac	x		
SAL	1400#		
DUG8	1 gal		

MORNING TOUR

FOOTAGE — FORMATION — RECORD

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARFL-P COMP-C
4248	4303	55		Fmt Wash = 848'								
				tank 5' 6"	60	2	1100	5½	46	5½	46	
				meter 009031	10	20						

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4275	4½							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	3 00	3H		Drilling 12¼ Hole
3 00	3 30	½		Rig Service
3 30	4 00	½		Survey
4 00	8 00	4		Drilling 12¼ Hole

DRILLER

BIT RECORD — MUD RECORD

NO.	DRILLING ASSEMBLY	FT.
	BIT	
1	B.S	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	X O	5.00
40	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN 39.50	FT.
	TOTAL 4343	FT.
WT. OF STRING 114		LBS.

BIT RECORD	
BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JET 1/32"	3-16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	618
TOTAL HRS. RUN	86½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	10:00	1:00	3:00
WEIGHT	9.3	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	44	51	56
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	9.6	6.8	7.0
pH	9.0	9.5	9.5
SOLIDS %			
DESILTER O.F. 8.9 U.F. 10.6 @ 3 G. PM			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2A00#		
D.V. 68	2 GAL		
CAUSTIC	100#		
C.M.C.	50#		

OXY TOUR

FOOTAGE — FORMATION — RECORD

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SCHL-S PARFL-P COMP-C
4303	4343	40			60	18/20	1100	5½	46	5½	46	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4311	4¼		4342	4				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	9 12	1¼		DRLG. 12¼ HOLE.
9 12	9 30	¼		RIG SERV - BOPS. MOTOR SHUT OFFS. OK.
9 30	10 00	½		CIRC & SURVEY
10 00	3 00	5		DRLG. 12¼ HOLE.
3 00	3 30	½		CIRC & SURVEY.
3 30	4 00	½		DRLG. 12¼ HOLE,

DRILLER R.D. Bimmer

EVENING TOUR

FOOTAGE — FORMATION — RECORD

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL-S PARFL-P COMP-C
4343	4388	45			60	18/20	1100	5½	46	5½	46	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4374	4°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	8 15	4¼		Drilling 12¼ Hole
8 15	8 30	¼		Rig Serv B.O.P.S
8 30	9 00	½		Survey
9 00	12 00	3		Drilling

DRILLER Ronnie Lefevre

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
EXXON FEE LI Basin	C30	C30 N.W.T. 9 S.C.	APR. 27

OPERATOR	CONTRACTOR	RIG NO.
EXXON CORP	CHALLENGER DRLG	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	Fortunino Casados

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.6	E	6	FH	1	1	EMSCO	D 300	14
						2	"	"	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	13 3/8	Mannesmann	54.5 J-55	19	703		700

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	12¼	7¼	6¾
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	1	½	8
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD 31

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	B S	2.00
1	STB RMR 9 OD	7.57 FT.
3	D.C. ID 9 OD	93.06 FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ D.C.	1103.94
1	6½ "	7.02
2	X.O.	5.00
37	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	41 FT.
	TOTAL	4154 FT.
WT. OF STRING	112M	LBS.

BIT RECORD

BIT NO.	10
SIZE	12¼
MFG.	H.W.
TYPE	X44
JETS 1 32"	16 16 16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	429
TOTAL HRS. RUN	58½
COND. 1/8's T/B/ GAGE	/ /
GPM/ PD-PSI	

MUD RECORD

TIME	2	4	6 0022
WEIGHT	9.3	9.3	9.2
PRESSURE GRADIENT			
VISC.-SEC.	45	49	47
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	96	84	84
pH	9.0	9.5	
SOLIDS %	9		
O/W	91	96	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
H.O	200 bbl		
DIESEL	2 gal		
CMC	50		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	B S	2.00
1	STB RMR 9 OD	7.57 FT.
3	D.C. ID 9 OD	93.06 FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	X O	5.00
34	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	41 FT.
	TOTAL	4204 FT.
WT. OF STRING	103M	LBS.

BIT RECORD

BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JET 1/32"	3-16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	479
TOTAL HRS. RUN	65¾
COND. 1/8's T/B/ GAGE	/ /
GPM/ PD-PSI	

MUD RECORD

TIME	8:30	11:30	2:30
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC	45	54	51
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	9.8	7.4	7.6
pH	9.0	9.5	9.5
SOLIDS %			
DESILTER O.F. 8.2 M.F. 10.0 @ 3 G.P.M.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000 #		
D.V. 63	1 GAL.		
CAUSTIC	100 #		
C.M.C.	50 #		

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	Bit sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JARS OD	20.10 FT.
14	6½ DC	403.94
1	6½ D.C.	9.02
2	X O	5.00
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	41.50 FT.
	TOTAL	4248. FT.
WT. OF STRING	114	LBS.

BIT RECORD

BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JETS 1/32"	16 16 16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725'
TOTAL FTG.	523'
TOTAL HRS. RUN	72½
COND. 1/8's T/B/ GAGE	/ /
GPM/ PD-PSI	

MUD RECORD

TIME	6:00	2:00	10:00
WEIGHT	9.2+	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	51	52	45
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.6	7.8	7.4
pH	9.5	9.5	9.5
SOLIDS O/F	9.1	9.1	
O/W	9.9	10.0	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000 #		
DIESEL	1 gal		

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARKER-P COMP. B.C
4099	4154	55			60	25	1100	5½	44	6½	44	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4122	3¼		4154	3°				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12[illegible]	12'5	¼		Rig Service
12'5	3''	2¾		Drlg 12¼ Hole
3''	3 30	½		Survey
3 30	7 30	4		Drlg 12¼ Hole
7 30	8	½		Survey

DRILLER [signature]

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARKER-P COMP. B.C
~~4099~~					60	25	1100	5½	44	5½	46	
4154	4204	50										

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4184	4°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8[illegible]	8[illegible]	¼		RIG SERV'D BOPS
8[illegible]	12[illegible]	4		DRLG. 12¼ HOLE.
12[illegible]	12[illegible]	½		CIRC + SURVEY
12[illegible]	4[illegible]	3½		DRLG 12¼ HOLE.

DRILLER R. Brannen

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL'S PARKER-P COMP. B.C
4204	4248	44			60	18/20	1100	5½	46	5½	46	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4216	4¼		4248.	4¼				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4[illegible]	6[illegible]	2		Drilling 12¼ Hole
6[illegible]	6[illegible]	¼		Rig Serv'd B.O.P.S.
6[illegible]	6[illegible]	½		Survey
6[illegible]	11[illegible]	4½		Drilling
11[illegible]	11[illegible]	½		Survey
11[illegible]	12[illegible]	¼		Drilling

DRILLER Demi Lafosca

RM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Exxon Hanna	C-31	5-31 4WS 7-9	April 1980

OPERATOR	CONTRACTOR	RIG NO.
Exxon Co. USA	Pool Kellamyer	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M. Parasuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14"
2	"	"	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜	National	54.5 J55	19	703		710

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
FT. CUT OFF		PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT		
CUMULATIVE TON MI. OR TRIPS		

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	6¾	7¼	6¾
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	½	¼	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1	¾	1
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	12¼"	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR 9" OD	9.16 FT.
1	D.C. ID 7¾" OD	28.72 FT.
1	STB RMR TARS OD	20.10 FT.
14	6½ D.C	403.94
1	6½ D.C	9.02
2	X.O.	5.00
	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	27.1 FT.
	TOTAL	4112 FT.
	WT. OF STRING	112 M LBS.

BIT RECORD

BIT NO.	10
SIZE	12¼
MFG.	H.W.
TYPE	X44
JETS 1 32"	16 16 16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	287
TOTAL HRS. RUN	37¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

	20	40	
TIME	20	40	
WEIGHT	93	93	92
PRESSURE GRADIENT			
VISC.-SEC.	49	48	55
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	76	82	84
pH	10	10	9.5
SOLIDS %	[illegible]	10.5	
	[illegible]	[illegible]	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50		
Q.B.	2 sacks		
DuCX	2 gal.		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	B.S.	2.00
1	STB RMR 9" OD	9.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR 9" OD	9.16 FT.
1	D.C. ID 7¾" OD	28.72 FT.
1	STB RMR TARS OD	20.10 FT.
14	6½ DX	403.94
1	6½ DX	9.02
2	X O	5.00
36	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	33 FT.
	TOTAL	4052 FT.
	WT. OF STRING	112 LBS.

BIT RECORD

BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JET 1/32"	3-16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	327
TOTAL HRS. RUN	45
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

	10	12:00	2:30
TIME	10	12:00	2:30
WEIGHT	95	9.1	9.1
PRESSURE GRADIENT			
VISC.-SEC.	39	41	45
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	8.8	9.2	9.4
pH	9.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	100		
DuCX	2 gal.		

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	Bit sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR SS OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR TARS OD	20.10 FT.
14	6½ D.C	403.94
1	6½ D.C	9.02
2	X O	5.00
37	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	27.27 FT.
	TOTAL	4099.00 FT.
	WT. OF STRING	112 LBS.

BIT RECORD

BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JETS 1/32"	16 16 16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	374
TOTAL HRS. RUN	51¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

	6:00	8:00	10:00
TIME	6:00	8:00	10:00
WEIGHT	9.1+	9.1+	9.2+
PRESSURE GRADIENT			
VISC.-SEC.	44	46	52
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	9.4	9.6	9.8
pH	9.5	9.5	9.5
SOLIDS %	Discharge		9.8
	Offload		9.8

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1600		
DuCX	2 gal.		

MORNING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.EL.-P COM.D.C.
3758	4012'	54			60	25	1100	5½	116	5½	116	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3966	3½		3996	2½				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12[illegible]	1[illegible]	1½		[illegible] DRLG 12¼ HOLE
1[illegible]	130	½		R.A. SERVICE
130	2[illegible]	½		SURVEY
2[illegible]	5[illegible]	2½		DRLG 12¼ HOLE
5[illegible]	6[illegible]	½		SURVEY
6[illegible]	800	2		DRLG 12¼ HOLE

DRILLER [signature]

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.EL.-P COM.D.C.
4012.	4052	40			60	25	1100	5½	46	5½	46	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4029	3¼							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8[illegible]	11[illegible]	3¼		DRLG. 12¼ HOLE
11[illegible]	11[illegible]	¼		RIG SERV & BOP's
11[illegible]	12[illegible]	½		CIRC & SURVEY
12[illegible]	4[illegible]	4		DRLG 12¼ HOLE

DRILLER R. Brannen

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR.EL.-P COM.D.C.
4052.	4099	47			60	25	1100	5½	46	5½	46	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4060	3½		4099.	2 7/8				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4[illegible]	5[illegible]	1½		Drilling
5[illegible]	5[illegible]	¼		Rig Serv & B.O.P.S
5[illegible]	6[illegible]	½		Survey
6[illegible]	10[illegible]	4¼		Drilling 12¼ Hole
10[illegible]	11[illegible]	½		Survey
11[illegible]	12[illegible]	1		Drilling

DRILLER Remi Lafarge

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
EAVES TRAL LEASE	C30	C-30 N.W.T. 9SC	March 21,75

OPERATOR	CONTRACTOR	RIG NO.
EXXON CO. U.S.A.	KIRKLAND DRLG.	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M Brannon

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	CIDECO	K-300	11"
2	"	"	14"

3½" — meter 10650 — 1614 C-ML

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜	Smith	52 J55	19	712.26	7.24	719

WIRE LINE RECORD — REEL NO.
SIZE 1⅝ — NO. LINES 8 — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¼	7½	7¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	½	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	½	½	½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	R.S.	2.00	
1	STB RMR 9" OD	7.57	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 55 OD	9.16	FT.
1	D.C. ID 7¾ OD	28.72	FT.
1	STB RMR JARS OD	20.11	FT.
14	6½ D.C.	403.94	
1	6½ D.C.	9.02	
2	X O	5.00	
34	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	36	FT.
	TOTAL	3839	FT.
WT. OF STRING	110m		LBS.

BIT RECORD	
BIT NO.	10
SIZE	12¼
MFG.	Hughes
TYPE	XH4
JETS 1 32"	16 16 16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	113
TOTAL HRS. RUN	16½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	2°	4°	6:00
WEIGHT	93	92	92
PRESSURE GRADIENT			
VISC.-SEC.	49	48	49
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.	90	84	84
pH	9.5	10	10
SOLIDS %			
ID. [illegible]	10.5	12.2	12.2

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1 sack		
DuCo	2 gal		
Caustic	1 Drum	10#	
CMC	50	12.0	

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	BIT SUB	2.00	
1	STB RMR 9" OD	7.57	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 55 OD	9.16	FT.
1	D.C. ID 7¾ OD	28.72	FT.
1	STB RMR JARS OD	20.10	FT.
14	6½ D.C.	403.94	
1	6½ D.C.	9.02	
2	X O	5.00	
35	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	34.50	FT.
	TOTAL	3896	FT.
WT. OF STRING	110		LBS.

BIT RECORD	
BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JET 1/32"	3-16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	173.
TOTAL HRS. RUN	23¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	8:30	11:30	2:30
WEIGHT	9.2	9.2	9.1
PRESSURE GRADIENT			
VISC.-SEC.	44	53	52
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.	9.4	6.8	7.2
pH	9.0	9.5	9.5
SOLIDS %			

DESILTER OF 89 GPM 113 @ 3600#

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000#		
D.V. 68	2 GAL.		
CAUSTIC	100#		
C.M.C.	50#		

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	Reed	2.00	
1	STB RMR 9" OD	7.57	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 55 OD	9.16	FT.
1	D.C. ID 7¾ OD	28.72	FT.
1	STB RMR JARS OD	20.10	FT.
14	6½ D.C.	403.94	
1	6½ D.C.	9.02	
2	X O	5.00	
35	STANDS DP	3388.00	FT.
2	SINGLES DP		FT.
	KELLY DOWN	32.85	FT.
	TOTAL	3925.00	FT.
WT. OF STRING	111		LBS.

BIT RECORD	
BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JETS 1/32"	16 16 16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	233.
TOTAL HRS. RUN	31
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	4:30	7:30	10:00
WEIGHT	9.1	9.1	9.3
PRESSURE GRADIENT			
VISC.-SEC.	54	49	50
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.	7.6	7.8	7.6
pH	9.5	9.5	9.0
SOLIDS %	Under Tank		
	13.5	10.5	13.5

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000		
Caustic	50		
DE8	1 gal		
CMC	50		

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-L-P COM-P-C
3720	3838	58			60	30	1100	5½	46	5½	46	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3840	3°							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		Rig Serv. C.O. - Function Test BOP
12:15	4:00	3¾		Drlg 12¼ Hole
4:00	4:30	½		Survey
4:30	8:00	3½		Drlg 12¼ Hole

DRILLER [signature]

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-L-P COM-P-C
3838	3898	60			60	30	1100	5½	46	5½	46	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3843	2½							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		RIG SERV. & BOPS.
8:15	8:45	½		CIRC & SURVEY
8:45	4:00	7¼		DRLG 12¼ HOLE.

DRILLER R.L. Brannon

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR-L-P COM-P-C
3898	3958	60			60	30	1100	5½	46	5½	46	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3905	3							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1		Drilling 12¼ Hole
5:00	5:15	¼		Rig Ser. / B.OPS.
5:15	5:45	½		Survey.
5:45	12:00	6¼		Drilling

DRILLER Remi Lafleur

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FAX. ET-AL LINDSEY	C 30	C 30 N.W.T. 75C	MAR 30,75

OPERATOR	CONTRACTOR	RIG NO.
FT. DOD MID-CAL	BRINKERHOFF	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M Panasiuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D 375	14
2	"	"	14

FWAL 4.5 MR. RAN 00 3489 725

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜	NATL	50	J55	19	703	700

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL		24	7
3. REAMING		1¾	
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		3¼	
7. LUBRICATE RIG		¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE SLIP.		½	
10. DEVIATION SURVEY			¾
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)	FT.
	BIT	
1	B.S	2.00
1	STB RMR 9 OD	7.57 FT.
2	D.C. ID 9 OD	93.06 FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JAR OD	20.10 FT.
14	6½ D.C.	403.94
1	6½ D.C.	9.02
2	¾ I.D.	5.00
33	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	18 FT.
	TOTAL	3725 FT.
	WT. OF STRING 105M	LBS.

BIT RECORD	
BIT NO.	9
SIZE	12¼
MFG.	REED
TYPE	S21C
JETS 1 32"	3/16
SER. NO.	120275
DEPTH OUT	3725
DEPTH IN	3528
TOTAL FTG.	195
TOTAL HRS. RUN	28
COND. 1/8's T/B/ GAGE	— /
GPM/ PD-PSI	

MUD RECORD			
TIME	300	400	530
WEIGHT	92	93	93
PRESSURE GRADIENT			
VISC.-SEC.	50	45	52
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	84		
pH	90	9.0	9.1
SOLIDS %	Discha 11		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
KV	100		
CAUS	1/2		

NO.	DRILLING ASSEMBLY (At end of tour)	FT.
	BIT	
1	B.S	2.00
1	STB RMR 9 OD	7.57 FT.
3	D.C. ID 9 OD	93 ds FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JAR OD	20.10 FT.
14	6½ DC	403.94
1	6½ DC	9.02
2	X 6	5.00
32	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	30 FT.
	TOTAL	3737 FT.
	WT. OF STRING 110	LBS.

BIT RECORD	
BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X44
JET 1/32"	3-16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	12
TOTAL HRS. RUN	2¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD			
TIME		100	2:30
WEIGHT		9.1	9.0
PRESSURE GRADIENT			
VISC.-SEC.		53	49
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.		8.6	8.4
pH		9.0	9.5
SOLIDS %			
DESILTER USE 3 GPM @			11.4

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	100#		

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)	FT.
	BIT	
1	Bit sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JAR OD	20.10 FT.
14	6½ D.C.	403.94
1	6½ D.C.	9.02
2	X O	5.00
33	STANDS DP	3201.73 FT.
2	SINGLES DP	FT.
	KELLY DOWN	41.50 FT.
	TOTAL	3780 FT.
	WT. OF STRING 160	LBS.

BIT RECORD	
BIT NO.	10
SIZE	12¼
MFG.	HW
TYPE	X 44
JETS 1/32"	16 16 16
SER. NO.	HR556
DEPTH OUT	
DEPTH IN	3725
TOTAL FTG.	55
TOTAL HRS. RUN	9¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD			
TIME	6.00	9.00	11.00
WEIGHT	9.1	9.2	9.3
PRESSURE GRADIENT			
VISC.-SEC.	40	48	45
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.0	9.5	9.5
SOLIDS %	2 Sand c/ min.		
DESILTER REJECTS 112 GS			

MUD & CHEMICALS ADDED — 1 SCK

TYPE	AMT.	TYPE	AMT.
GEL	1600		
DUO-VIS	2 gal		
CAUSTIC	100#		
WATER			

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH. PARKER COMP.
3706	3725	19			80	25/30	1100	6½	46	5½	46	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3717	3°							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2 00	300	2¢		DRLG 12¼ HOLE
300	345	3/4		CIRC SURVEY - RIG SERVICE & RAN CLOCK
345	415	1½		DRLG 12¼ HOLE
415	500	¾		CIRC TO TAKE SHOT
500	530	½		TRIP FOR BIT

DRILLER [illegible]

FOOTAGE FROM	FOOTAGE TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH. PARKER COMP.
3725	3737	12			56	25/30	1100	5½	46	5½	46	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		RIG SERVICE BOPS. BLIND RAMS OK.
8 15	10 00	2¾		HOIST BHA RUN IN BIT 10 & DC.
10 00	11 00	½		SLIP 30' LINE.
11 00	12 00	1		RUN IN TIGHT HOLE. 110' OFF BOTTOM.
12 00	1 45	1¾		REAM & CLEANING HOLE TO BOTTOM.
1 45	4 00	2¼		DRLG 12¼ HOLE.

DRILLER R.D. Bennett

FOOTAGE FROM	FOOTAGE TO	DR. RM. CORE.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCH. PARKER COMP.
3737	3780	43			50/55	30	1100	5½	46	5½	46	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3748	3°		3780					

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	7 00	3		Drilling 12¼ Hole
7 00	7 15	¼		Rig Ser / B.O.P.S
7 15	7 45	½		Survey
7 45	11 45	4		Drilling
11 45	12 00	¼		Survey

DRILLER Remi Lafore

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
E.W.X. Exploration	C	30 [illegible] T 7S C	Mar 31 '72

OPERATOR	CONTRACTOR	RIG NO.
Exxon Co. USA	[illegible]	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M. Tarasuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	11.6	E	6	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	[illegible]	[illegible]	14
2			

FINAL 4'10 0004614 [illegible]

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜	[illegible]	54.5	11	11	1	[illegible]

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7½	6¾	7¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG		¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY		1	½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	6	8	8

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	[illegible]	2.10	
1	STB RMR 9 OD	7.57	FT.
30	D.C. ID 9 OD	93.06	FT.
1	STB RMR 5.5 OD	9.11	FT.
1	D.C. ID 7¾ OD	28.72	FT.
1	STB RMR JAKS OD	20.10	FT.
14	6½ D.C.	403.94	
1	6½ D.C.	9.02	
2	X.O.	5.00	
32	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	21	FT.
	TOTAL	3603	FT.
WT. OF STRING	104		LBS.

BIT RECORD

BIT NO.	9
SIZE	12¼
MFG.	[illegible]
TYPE	S21C
JETS 1 32nds	16 16 16
SER. NO.	820275
DEPTH OUT	
DEPTH IN	3528
TOTAL FTG.	75
TOTAL HRS. RUN	11½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	[illegible]	[illegible]	6:00
WEIGHT	9.4	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	50	47	48
PV/YP	/	/	/
GELS.			
WL -CC's	9.6	8.6	8.4
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000#		
Caustic	NO		
DUG 68	1 gal		
CMC	50		

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI.-S PAPER-P COMPLC
3546	3603	57			80	25	11	5½	46	5½	46	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3562	2½							

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
12⁰⁰	2³⁰	2½		Drlg
2³⁰	3⁰⁰	½		Circ. Drlg Brk. & Surv.
3⁰⁰	8⁰⁰	5		Drlg

DRILLER [signature]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	Bit sub	2.00	
1	STB RMR 9 OD	7.57	FT.
3	D.C. ID 9 OD	93.06	FT.
1	STB RMR 5.5 OD	9.16	FT.
11	D.C. ID 7¾ OD	28.72	FT.
1	STB RMR JARS OD	20.10	FT.
14	6½ D.C.	403.94	
1	6½ B.S.	9.02	
2	X O	5.00	
32	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	6	FT.
	TOTAL	3660	FT.
WT. OF STRING	104		LBS.

BIT RECORD

BIT NO.	9
SIZE	12¼
MFG.	REED
TYPE	S21C
JET 1/32"	3-16
SER. NO.	820275
DEPTH OUT	
DEPTH IN	3528
TOTAL FTG.	132
TOTAL HRS. RUN	17¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	8:30	12:30	2:30
WEIGHT	9.2	9.2	9.3
PRESSURE GRADIENT			
VISC.-SEC.	46	51	49
PV/YP	/	/	/
GELS.	/	/	/
WL -CC's	9.4	7.2	7.6
pH	9.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
DV. 68	1 GAL.		
CAUSTIC	50#		
C.M.C.	50#		

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI.-S PAPER-P COMPLC
3603	3660	57			80	3½	11⁰⁰	5½	46	5½	46	
					70	2½	11⁰⁰					

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2623	3	[illegible]						

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
8⁰⁰	10⁰⁰	2		Drlg 12¼ Hole.
10⁰⁰	10⁴³	¾		Circ. Survey Rig Serv. & BOPs.
10⁴³	3⁰⁰	4¼		Drlg 12¼ Hole
3⁰⁰	3³⁰	½		Circ. Survey
3³⁰	4⁰⁰	½		Drlg. 12¼ Hole.

DRILLER E. Brewer

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	Bit sub	2.00	
1	STB RMR 9" OD	7.57	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR SS OD	9.16	FT.
1	D.C. ID 7¾ OD	28.72	FT.
1	STB RMR JARS OD	20.10	FT.
14	6½ D.C.	403.94	
1	6½ D.C.	9.02	
2	X O	5.00	
33	STANDS DP	3138.77	FT.
	SINGLES DP		FT.
	KELLY DOWN	30.16	FT.
	TOTAL	3706	FT.
WT. OF STRING	105		LBS.

BIT RECORD

BIT NO.	9
SIZE	12¼
MFG.	Reed
TYPE	S21C
JETS 1/32"	16 16 16
SER. NO.	820275
DEPTH OUT	
DEPTH IN	3528
TOTAL FTG.	178
TOTAL HRS. RUN	24½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	6:00	9:30	
WEIGHT	9.2	9.3	
PRESSURE GRADIENT			
VISC.-SEC.	43	56	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC's			
pH	9.0	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1600#		
DU-68	2 gal		
CAUSTIC	100		

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI.-S PAPER-P COMPLC
3660	3706	46			70	2½	11⁰⁰	5½	46	5½	46	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3686	3½							

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
4⁰⁰	8⁰⁰	4		Drilling 12¼ Hole
8⁰⁹	8¹⁵	¼		Rig Serv. & B.O.P.'s
8¹⁵	8⁴⁵	½		Survey
8⁴⁵	12⁰⁹	3¼		Drilling

DRILLER Rems Laforce

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.—A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
N.E. KET-AL LA RUCHE	C-30	C-30 NWT 95 C	MAR 28 78

OPERATOR	CONTRACTOR	RIG NO.
EL NORMAN EXP	BRINKERHOFF DRLG	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M Kanasiuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6	EH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D 300	14
2	"	"	14

LEGAL LAND DESCRIPTION: FWEL 5 [illegible] 00403 2

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜	Mann	54.5 J55	19	703	15.20	700

WIRE LINE RECORD: SIZE | NO. LINES | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7¼	5¾	3
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE		¾	
6	TRIPS		¾	4¾
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	½	½	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		1	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)	FT.
	BIT	
1	B.S.	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9 OD	93.06 FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JAR OD	20.10 FT.
14	6½ DC	403.94
1	6½ "	9.02
2	X.O.	5.00
30	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	37 FT.
	TOTAL	3149 FT.
	WT. OF STRING	101 M LBS.

BIT RECORD	
BIT NO.	8
SIZE	12¼
MFG.	H.W.
TYPE	X.O.V
JETS 1/32"	3-16
SER. NO.	71488
DEPTH OUT	
DEPTH IN	3284
TOTAL FTG.	205
TOTAL HRS. RUN	23¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	300	500	600
WEIGHT	92+	93	93
PRESSURE GRADIENT			
VISC.-SEC.	52	50	48
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	84	86	10
pH	95	95	95
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
H.V.	1500		
D.68	2gal		
CMC	50		

NO.	DRILLING ASSEMBLY (At end of tour)	FT.
	BIT	
1	BITSUB	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9 OD	93.06 FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JAR OD	20.10 FT.
14	6½ DC	403.94
1	6½ OS	9.02
2	X-O	5.00
31	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	41.50 FT.
	TOTAL	3528.97 FT.
	WT. OF STRING	104 LBS.

BIT RECORD	
BIT NO.	8
SIZE	12¼
MFG.	HW
TYPE	XDV
JET 1/32"	3-16
SER. NO.	71488
DEPTH OUT	3528
DEPTH IN	3284
TOTAL FTG.	244
TOTAL HRS. RUN	28¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	9.30	11.45	2.30
WEIGHT	9.3	9.3	9.2
PRESSURE GRADIENT			
VISC.-SEC.	47	53	54
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	10	6.8	7.2
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000		
DV. 68	2GAL		
CM-C	50		
CAUSTIC	50		

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)	FT.
	BIT reed	2.00 FT.
1		
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR JAR OD	20.10 FT.
14	6½ DC	403.94
1	6½ OS	9.02
2	X O	5.00
31	STANDS DP	2767.43 FT.
8	SINGLES DP	FT.
	KELLY DOWN	27.50 FT.
	TOTAL	3546.00 FT.
	WT. OF STRING	104 LBS.

BIT RECORD	
BIT NO.	9
SIZE	12¼
MFG.	REED
TYPE	S-21G
JETS 1/32"	3-16
SER. NO.	870715
DEPTH OUT	
DEPTH IN	3528
TOTAL FTG.	18
TOTAL HRS. RUN	3
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	930	1130	
WEIGHT	9.3	9.2	
PRESSURE GRADIENT			
VISC.-SEC.	68	58	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	8.5	9.0	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	100 LBS		
WATER			

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.,D RM.,R CORE.,C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
3430	3489	59			80	20	1100	5½	46	5½	46	

DEVIATION RECORD: DEPTH 3432 | DEV. 2½ | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼		Rig SERVICE
1215	1245	½		SURVEY
1245	800	7¼		DRLg 12¼ HOLE

DRILLER

FOOTAGE FROM	FOOTAGE TO	DR.,D RM.,R CORE.,C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
3489	3538	39			80	25/32	1100	5½	46	5½	46	

DEVIATION RECORD: DEPTH 3497 | DEV. 2½ | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		RIG SERV ✓ BOPS.
815	845	½		C.IRC & SURVEY
845	230	5¾		DRIG. 12¼
230	300	¾		CIRC.
300	400	¾		TRIP FOR BIT #9

DRILLER K. Brenner

FOOTAGE FROM	FOOTAGE TO	DR.,D RM.,R CORE.,C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
3528	3546	18			80	18/20	1100	5½	46	5½	46	

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	530	1½		Adjust for Bit
530	545	¼		Rig Ser ✓ B.O.P.S.
545	830	2¾		Trip in Bit no 9 ✓ Ream 10' to Bottom
830	900	½		Break circ & Clean to Bottom ~~10~~ 5' fill
900	1200	3		Drilling

DRILLER Tom Hynes

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: FNX ET AL LA RICHE — WELL NO.
API WELL NUMBER: C-30 NWT 95-C — DATE: Mar 27/82
OPERATOR: Ft NORMAN EXP INC
CONTRACTOR: BRINKERHOFF DRILLING LTD — RIG NO. 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE:
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Mervin Parasiuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E		FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 700	14
2	"	"	"

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	13⅜	MANS	54	19	703	15.20	700

WIRE LINE RECORD — REEL NO.
SIZE | NO. LINES | FT. SLIPPED
FT. CUT OFF | PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN		7	7¼
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG		¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY		¾	½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		7	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	Bit Sub	2.00	
1	STB RMR 9" OD	7.57	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 55 OD	9.16	FT.
1	D.C. ID 7¾ OD	28.72	FT.
1	STB RMR JAR OD	20.10	FT.
14	6½ x 4½	403.94	
1	6½ DC	9.02	
2	XO	5.00	
28	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	27.50	FT.
	TOTAL	3297	FT.

WT. OF STRING 102 000 LBS.

BIT RECORD

BIT NO.	7	8
SIZE	12¼	12¼
MFG.	HW	HW
TYPE	XDV	XDV
JETS 1/32"	15 16 16	16 16 16
SER. NO.	70900	71488
DEPTH OUT	3284	
DEPTH IN	2995	3284
TOTAL FTG.	289	13
TOTAL HRS. RUN	31¾	1½
COND. 1/8's T/B/ GAGE	4 2 1	/ /
GPM/ PD-PSI		

MUD RECORD

TIME	12:30	1:00	
WEIGHT	9.3	9.3	
PRESSURE GRADIENT			
VISC.-SEC.	45	68	/
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.7	9.0	
pH	9.0+	9.0	
SOLIDS %	11		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1500	Mag	
DV-68	1	Bal.	

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
3271	3297	26			80	22	1100	5½	46	5½	46	

DEVIATION RECORD: DEPTH 3280 — DEV. 1¾ — DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
1800	1915	1¼		Rig Service & Rod
1915	1945	½		Drilling
1945	2000	¼		Survey
2000	1445	3¼		Drilling
1445	2115	½		Circ
2115	545	3½		C Trip 5/ bit
545	630	¾		Break Circ Clean To Btm 50' loose fill
630	800	1½		Drilling

DRILLER: Murray Larson

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT	1	
1	B.T Sub	2.00	
1	STB RMR 9" OD	7.57	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 55 OD	9.16	FT.
1	D.C. ID 7¾ OD	28.72	FT.
1	STB RMR JAR OD	20.10	FT.
14	6½ DC	403.94	
1	6½ DC	9.02	
2	X.O.	5.00	
29	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	36	FT.
	TOTAL	3367	FT.

WT. OF STRING 102 M LBS.

BIT RECORD

BIT NO.	8
SIZE	12¼
MFG.	N.W.
TYPE	X.D.V.
JET 1/32"	16 16 16
SER. NO.	71488
DEPTH OUT	
DEPTH IN	3284
TOTAL FTG.	83
TOTAL HRS. RUN	8½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	1000	200	
WEIGHT	9.3+	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	44	50	53
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	20	24	7.2
pH	9.0	10	10
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
N.V.	2500		
Caus.	50		
DUO	3 gal		
CMC.	50		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
3277	3367	70			80	22	11	5½	46	5½	46	
					80	25	11					

DEVIATION RECORD: DEPTH 3310 — DEV. 1° — DIRECTION — DEPTH 3342 — DEV. 1½ — DIRECTION — DEPTH 3344 — DEV. ¼ — DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
8	930	1½		DRLG 12¼ HOLE DV T.T.
930	1000	½		Rig SERVICE - CIRC. - SURVEY
1000	1245	2¾		DRLG 12¼ HOLE
1245	145	1½		CIRC & SURVEY
145	400	2¼		DRLG 12¼ HOLE
				6¾
				¼

DRILLER

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P COM.-C
3367	3430	63			80	25	1000	5½	46	5½	46	

DEVIATION RECORD: DEPTH 3402 — DEV. 2¼ — DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
400	415	¼		RIG SERV — BOPS
415	745	3½		DRLG. 12¼
745	815	½		CIRC — SURVEY
815	1200	3¼		DRLG. 12¼

DRILLER

EVENING TOUR

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

NO.

API WELL NUMBER: C-30 NWT 95-C

DATE: MAR 26/75

OPERATOR: ENX ET AL LA RICHE

CONTRACTOR: BRINKERHOFF DRILLING LTD

RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: J. Norman Eva Dpc

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

O.D. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E		FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D300	14
2	"	"	"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13⅜	MANS	54 J55	19	703	15.20	700

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7¼	12¼	6¾
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	¼	1	1
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

MORNING TOUR

NO.	BIT	FT.
1	BIT SUB	2.00
1	STB RMR 9" OD	7.57
3	D.C. ID 9" OD	93.06
1	STB RMR 55 OD	9.16
1	D.C. ID 7¾ OD	28.72
1	STB RMR JAC'S OD	20.10
14	6¼ DC	402.94
1	6¼ DC	9.02
2	X-O	5.00
22	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	37.50 FT.
	TOTAL	3150.05 FT.
	WT. OF STRING 100,000	LBS.

BIT RECORD	
BIT NO.	7
SIZE	12¼
MFG.	HW
TYPE	XDV
JETS 1/32"	15 16 16
SER. NO.	70900 71488
DEPTH OUT	
DEPTH IN	2995'
TOTAL FTG.	155
TOTAL HRS. RUN	16¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	12¹⁵	5.00	7:00
WEIGHT	9.3	9.3	9.2
PRESSURE GRADIENT			
VISC.-SEC.	65	65	65
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S	8.6		
pH	9.0	9.5	9.5
SOLIDS %			
UNDERFLOW 36 Gal. wt. 10.3			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000	Ash	
CAUSTIC	50	lbs	
DV 68	2	Gals.	

NO.	BIT	FT.
1	BIT SUB	2.00
1	STB RMR 9" OD	7.57
3	D.C. ID 9" OD	93.06
1	STB RMR 55 OD	9.16
1	D.C. ID 7¾ OD	28.72
1	STB RMR JAC'S OD	20.10
14	6¼ DC	403.94
1	6¼ DC	9.02
2	X-O	5.00
22	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	35 FT.
	TOTAL	3211 FT.
	WT. OF STRING 100,000	LBS.

BIT RECORD	
BIT NO.	7
SIZE	12¼
MFG.	HW
TYPE	XDV
JETS 1/32"	15 16 16
SER. NO.	70900
DEPTH OUT	
DEPTH IN	2995
TOTAL FTG.	211
TOTAL HRS. RUN	23½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	10⁰⁰	12	2:00
WEIGHT	93	93	92
PRESSURE GRADIENT			
VISC.-SEC.	65	60	55
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S	86	79	8.0
pH	9.0	10	10
SOLIDS %	MUD UP		
	11.5	11.4	11.4

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CMC	50		
Caustic	50		

DAY TOUR

NO.	BIT	FT.
1	BIT SUB	2.00
1	STB RMR 9 OD	7.57
3	D.C. ID 9 OD	93.06
1	STB RMR 55 OD	9.16
1	D.C. ID 7¾ OD	28.72
1	STB RMR JAC'S OD	20.10
14	6¼ DC	403.94
1	6¼ DC	9.02
2	X-O	5.00
24	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	32 FT.
	TOTAL	3271 FT.
	WT. OF STRING 100	LBS.

BIT RECORD	
BIT NO.	7
SIZE	12¼
MFG.	H.W.
TYPE	XDV
JETS 1/32"	15 16 16
SER. NO.	70900
DEPTH OUT	
DEPTH IN	2995
TOTAL FTG.	271
TOTAL HRS. RUN	30¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD			
TIME	5:30	8:00	10:30
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	57	53	51
PV/YP	/	/	/
GELS.	/	/	/
WL-CC'S.	8.4	8.6	8.4
pH	9.5	9.5	9.5
SOLIDS %			
DESILTER WP. 36 P.M. @ 11.2			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE — FORMATION — ROTARY — PUMP

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-EL-P COM-DC
3092	3150	58			80	18	1100	5½	46	5½	46	

DEVIATION RECORD: DEPTH 3123 — DEV. 1¾ — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12¹⁵	¼		RIG SERVICE + B.P.
12¹⁵	2⁴⁵	2½		DRILLING
2⁴⁵	3¹⁵	½		SURVEY
3¹⁵	8⁰⁰	4¾		DRILLING

DRILLER

FOOTAGE — FORMATION — ROTARY — PUMP

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-EL-P COM-DC
3150	3211	61			80	18	1100	5½	46	5½	46	

DEVIATION RECORD: DEPTH 3150 — DEV. 1½ — DIRECTION — DEPTH 3180 — DEV. 1½ — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8¹⁵	¼		DRLG 12¼ HOLE
8¹⁵	8³⁰	¼		RIG SERVICE
8³⁰	9⁰⁰	½		SURVEY - CIRC
9⁰⁰	12⁰⁰	3		DRLG 12¼ HOLE
12⁰⁰	12³⁰	½		SURVEY
12³⁰	4⁸⁰	3½		DRLG 12¼ HOLE

DRILLER

FOOTAGE — FORMATION — ROTARY — PUMP

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-EL-P COM-DC
3211	3271	60			80	18	1100	5½	46	5½	46	

DEVIATION RECORD: DEPTH 3217 — DEV. 1° — DIRECTION — DEPTH 3248 — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	4¹⁵	¼		RIG SERV'D BOPS.
4¹⁵	5⁰⁰	¾		DRLG. 12¼ HOLE
5⁰⁰	5³⁰	½		CIRC + SURVEY
5³⁰	9⁰⁰	3½		DRLG 12¼ HOLE
9⁰⁰	9³⁰	½		CIRC + SURVEY
9³⁰	12⁰⁰	2½		DRLG. 12¼ HOLE

DRILLER

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

FORM 3T5 — APPROVED — APPROVED

DAILY DRILLING REPORT — REPORT NO.

Fuel @ 7:00 AM 4'10"
D1532 875

LEASE	WELL NO.	API WELL NUMBER	DATE
FNX Ft Al LA Riche		C-30 NWT 95-C	MAR 25/82
OPERATOR		**CONTRACTOR**	**RIG NO.**
H Norman Exp Inc		Brinkerhoff Drilling LTD	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
		M Parasiuk	

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	13⅜	MANC	54	55	19	703	15.20	700

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E		FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D 300	14
2	"	"	"

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7½	3¼	6¾
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		3¼	
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¼	¼	1
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO./D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT		
1	Bit Sub		2.00
1	STB RMR 9" OD		7.57
3	D.C. ID 9" OD		93.06
1	STB RMR 9" OD		9.16
1	D.C. ID 7" OD		28.72
1	STB RMR JARS OD		20.10
14	6½		403.94
1	6½		9.02
2	X O		5.00
25	STANDS DP		
1	SINGLES DP		
	KELLY DOWN		39.70
	TOTAL		2995

WT. OF STRING 98000 LBS.

BIT RECORD

BIT NO.	6
SIZE	12¼
MFG.	SEC
TYPE	M44N
JETS 1/32"	15 16 16
SER. NO.	451268
DEPTH OUT	
DEPTH IN	2804
TOTAL FTG.	191
TOTAL HRS. RUN	28¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	12:15	3:30	7:00
WEIGHT	9.1	9.1+	
PRESSURE GRADIENT			
VISC.-SEC.	45	61	65
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.3		
pH	9.0	9.5	
SOLIDS %			
DESILTER U.F. 10.5			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	3600	Mica	
DV-44	4	Cal.	
CAUSTIC	50#		

FOOTAGE / FORMATION

FROM	TO	DR.D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-L-P COM-D-C
2950	2995	15			100	18	1100	5½	46	5½	46	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2966	3°							

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
12:00	12:15	¼		Rig Service + B.O.P.
12:15	2:15	2		Drilling
2:15	2:30	¼		Survey
2:30	8:00	5½		Drilling

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT R.S.		2.00
2	X.O.		5.00
1	STB RMR 9 OD		7.57
3	D.C. ID 9 OD		93.06
1	STB RMR 9 OD		9.16
1	D.C. ID 7 OD		28.72
1	STB RMR JARS OD		20.10
1	6½		9.02
14	6½		403.94
1	[illegible]		[illegible]
25	STANDS DP		
2	SINGLES DP		
	KELLY DOWN		39.70
	TOTAL		3028

WT. OF STRING 98000 LBS.

BIT RECORD

BIT NO.	6	7
SIZE	12¼	12¼
MFG.	SEC	H.W.
TYPE	M44N	X.D.V.
JETS 1/32"	15 16 16	15 16 16
SER. NO.	451268	70900
DEPTH OUT	2795	
DEPTH IN	2804	2795
TOTAL FTG.	191	33
TOTAL HRS. RUN	28¼	3¾
COND. 1/8's T/B/ GAGE	7 3 1	1 1 4
GPM/ PD-PSI	/	/

MUD RECORD

TIME	8:30		3:30
WEIGHT	9.2		9.2
PRESSURE GRADIENT			
VISC.-SEC.	60		65
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.0		7.5
pH	9.5		9.5
SOLIDS %	W.L. FL.		9.0

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-L-P COM-D-C
2795	3028	33			90	14	1100	5½	46	5½	46	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3028	2½							

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
8:00	8:15	¼		Rig Service
8:15	8:30	¼		Survey
8:30	9:00	½		Circ
9:00	12:30	3½		Trip for B.I
12:30	12:45	¼		Break Circ Clean To Bottom 25'
12:45	3:30	2¾		Drlg 12¼ Hole
3:30	4:00	½		Survey - Circ

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT RS		2.00
2	X.O		5.00
1	STB RMR 9 OD		7.59
3	D.C. ID 9" OD		93.06
1	STB RMR SS OD		9.16
1	D.C. ID 7½ OD		28.72
1	STB RMR JARS OD		20.10
1	6½ DC		9.02
14	6½ DC		403.94
26	STANDS DP		
2	SINGLES DP		
	KELLY DOWN		41.50
	TOTAL		3092

WT. OF STRING 98 LBS.

BIT RECORD

BIT NO.	7
SIZE	12¼
MFG.	SEC HW
TYPE	XDV
JETS 1/32"	15 16 16
SER. NO.	70900
DEPTH OUT	
DEPTH IN	2995
TOTAL FTG.	97
TOTAL HRS. RUN	10 9½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	4:30	8:30	10:30
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	55	64	67
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.6	8.4	8.6
pH	9.0	9.5	9.5
SOLIDS %			
DESILTER U.F. 30 G.P.M. @ 10.8			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000#		
CAUSTIC	50#		
D.V. 68	2 GAL.		

FOOTAGE / FORMATION

FROM	TO	DR.D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-L-P COM-D-C
3028	3092	64			80	12	1100	5½	46	5½	46	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3078	2¼	30E 9W	3091	2¼				

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
4:00	4:15	¼		Rig Serv ✓ BOPS.
4:15	7:45	3½		Drlg 12¼ Hole
7:45	8:15	½		Circ & Survey
8:15	11:15	3		Drlg 12¼ Hole
11:15	11:45	½		Circ & Survey
11:45	12:00	¼		Drlg 12¼ Hole

DRILLER LD Brenner

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

Dual @ 700 AM 3-25 ~~3-26~~ 0657 839

LEASE	WELL NO.	API WELL NUMBER	DATE
ENX ETAL LARICHE		C-70 NWT 95-C	MAR 28/75
OPERATOR		**CONTRACTOR**	**RIG NO.**
Ft Norman Exp Inc		Blakeney Drilling LTD	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
Todd Barton		M Parasiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.60	E		F11	1	1	Emsco	D700	14
						2	"	"	"

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜	Jap.	54 ISS	19	703	15.20	703

WIRE LINE RECORD: SIZE | NO. LINES | FT. SLIPPED; FT. CUT OFF | PRESENT LENGTH; TON MI. OR TRIPS SINCE LAST CUT; CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7	14¼	15¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¾	1	1½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.	BIT / DRILLING ASSEMBLY	FT.
	BIT	
1	Bit Sub	2.00
1	STB RMR 9" OD	7.57 FT.
3	D.C. ID 9" OD	93.06 FT.
1	STB RMR 9" OD	9.16 FT.
1	D.C. ID 7¼ OD	28.72 FT.
	STB RMR OD	FT.
14	6½ DC	403.94
2	X O	5.00
24	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	29.50 FT.
	TOTAL	2860 FT.
WT. OF STRING	96,000	LBS.

BIT RECORD

BIT NO.	6
SIZE	12¼
MFG.	SEC
TYPE	M44N
JETS 1 32"	15 16 16
SER. NO.	451268
DEPTH OUT	
DEPTH IN	2804
TOTAL FTG.	56
TOTAL HRS. RUN	8¼
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	1230	400	700
WEIGHT	9.5	9.4	9.3+
PRESSURE GRADIENT			
VISC.–SEC.	50	45	58
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.		8.7	
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1400#		
CAUSTIC	50#		
DI 68	2 GAL		

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.–S PAR.–P COM.–C
2809	2860	51			100	12	1100	5½	48	5½	48	

DEVIATION RECORD: DEPTH 2841 DEV. 4¾ DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼		Rig Service + BOP
1215	400	3¾		Drilling
400	445	¾		Circ – Tight conn Surv 1.4
445	800	3¼		Drilling

DRILLER Jerry Larson

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.	BIT / DRILLING ASSEMBLY	FT.
	BIT	
1	BIT SUB	2.00
1	STB RMR 9 OD	7.57 FT.
3	D.C. ID 9 OD	93.06 FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.72 FT.
1	STB RMR C-STAB	20.10 FT.
14	6½	403.94
1	D.C.	9.02
24	STANDS DP	FT.
2	SINGLES DP	FT.
	KELLY DOWN	16 FT.
	TOTAL	2910 FT.
WT. OF STRING	96,000	LBS.

BIT RECORD

BIT NO.	6
SIZE	12¼
MFG.	SEC
TYPE	M44N
JET 1/32"	15 16 16
SER. NO.	451268
DEPTH OUT	
DEPTH IN	2804
TOTAL FTG.	106
TOTAL HRS. RUN	15
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	10	12	230
WEIGHT	9.4+	9.4	9.4
PRESSURE GRADIENT			
VISC.–SEC.	49	50	60
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	10.4	7	7.1
pH	9.0	10.0	10
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2400	Drill	
Caustic	50#	Underflow	
DU68	2 gal.	10.8	
CMC.	100		

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.–S PAR.–P COM.–C
2860	2910	50			120	13/14	1100	5½	48	5½	48	

DEVIATION RECORD: DEPTH 2872 DEV. 4½ DIRECTION; DEPTH 2902 DEV. 4½ DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	915	1¼		DRLg 12¼ HOLE
915	945	½		CIRC AND SURVEY
945	1000	¼		RIG SERVICE
1000	200	4		DRLg 12¼ HOLE
200	230	½		CIRC AND SURVEY
230	400	1½		DRLg 12¼ HOLE
				CHANGE OIL IN FLOOR MOTOR

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.	BIT / DRILLING ASSEMBLY	FT.
	BIT	
1	BIT SUB	2.00
1	STB RMR 9 OD	7.57 FT.
3	D.C. ID 9 OD	93.06 FT.
1	STB RMR 55 OD	9.16 FT.
1	D.C. ID 7¾ OD	28.12 FT.
1	STB RMR C-STAB	20.10 FT.
14	6½ DC	403.94
1	DC-6½	9.02
24	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	15 FT.
	TOTAL	2950 FT.
WT. OF STRING	96,000	LBS.

BIT RECORD

BIT NO.	6
SIZE	12¼
MFG.	SEC.
TYPE	M44N
JETS 1/32"	15 16 16
SER. NO.	451268
DEPTH OUT	
DEPTH IN	2804
TOTAL FTG.	146
TOTAL HRS. RUN	21¼
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	4:30	7:30	10:30
WEIGHT	9.4	9.3	9.3
PRESSURE GRADIENT			
VISC.–SEC.	51	61	61
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	6.8	1.2	1.6
pH	9.5	9.5	9.5
SOLIDS %			
DESILTER	U.F. 36 P.M. @ 12.1		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000#		
D.V. 68	2 GAL.		
Caustic	50#		

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.–S PAR.–P COM.–C
2910	2950	40			120	13/14	1100	5½	48	5½	48	

DEVIATION RECORD: DEPTH 2935 DEV. 3¾ DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	545	1¼		DRLG. 12¼ HOLE
545	600	¼		RIG SERV – BOPS & SHUT OFFS.
600	830	2½		DRLG. 12¼ HOLE
830	900	1½		CIRC + SURVEY
1000	1200	2		DRLG 12¼ HOLE

DRILLER

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

Fuel @ 700 AM
99818 4'

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FNK et al LaBiche		C-23 NWT 95-C	7 Nov 82
OPERATOR		**CONTRACTOR**	**RIG NO.**
JR Vorgelegt Exp. Inc		Cardinal Drilling Ltd	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
[illegible]		W Parasiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E		FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-700	14
2	"	"	"

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	12¾			19	702	15.20	702

SIZE | NO. LINES | FT. SLIPPED
FT. CUT OFF | PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7½	4½	1½
3. REAMING LEGS OF FLUTES			2¼
4. CORING			
5. CONDITION MUD & CIRCULATE		¼	
6. TRIPS		¼	3¾
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¼		½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	Cut Sub	2.00	
1	STB RMR 9 OD	7.57	FT.
2	D.C. ID 9" OD	93.06	FT.
1	STB RMR 5¾ OD	9.16	FT.
1	D.C. ID 7¾ OD	28.72	FT.
	STB RMR OD		FT.
14	6½ DR	403.94	
2	X.O	5.00	
33	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	17.50	FT.
	TOTAL	2785	FT.
WT. OF STRING	94,000		LBS.

BIT RECORD		
BIT NO.	5	
SIZE	12¼	
MFG.	Reed	
TYPE	Y-J1G	
JETS 1/32"	15 16 16	
SER. NO.	S19231	
DEPTH OUT		
DEPTH IN	2374	
TOTAL FTG.	411	
TOTAL HRS. RUN	56½	
COND. 1/8's T/B/ GAGE		
GPM/ PD–PSI	/	/

MUD RECORD			
TIME	12:20	5:30	7:15
WEIGHT	9.3	9.2	9.2
PRESSURE GRADIENT			
VISC.–SEC.	39	40	38
PV/YP	/	/	/
GELS.	/	/	/
WL –CC's.	8.9		
pH	9.0	9.5	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500		
DUG8	2		
Caustic	50		

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	B.S.	2.00	
1	STB RMR 9 OD	7.57	FT.
2	D.C. ID 9 OD	93.06	FT.
1	STB RMR 5¾ OD	9.16	FT.
1	D.C. ID 7¾ OD	28.72	FT.
	STB RMR OD		FT.
14	6½ DR	413.94	
2	X.O.	5.00	
28	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	36	FT.
	TOTAL	2804	FT.
WT. OF STRING	94 M		LBS.

BIT RECORD		
BIT NO.	5	6
SIZE	12¼	12¼
MFG.	Reed	SEC.
TYPE	Y-J1G	M44N
JETS 1/32"	15 16 16	15 15 16
SER. NO.	S19231	451269
DEPTH OUT	2804	
DEPTH IN	2374	
TOTAL FTG.	430	
TOTAL HRS. RUN	60¾	
COND. 1/8's T/B/ GAGE		
GPM/ PD–PSI	/	/

MUD RECORD			
TIME	10	12	2000
WEIGHT	9.2+	9.2+	9.3+
PRESSURE GRADIENT			
VISC.–SEC.	38	44	50
PV/YP	/	/	/
GELS.	/	/	/
WL –CC's.	8.7	8.7	8.7
pH	9.0	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel			
DUG8	2		

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		
1	BS	2.00	
1	STB RMR 9 OD	7.57	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 5¾ OD	9.16	FT.
1	D.C. ID 7¾ OD	28.72	FT.
14	STB RMR 6½ DR	403.94	FT.
2	X.O	5.00	
1	SDC 6¼	9.02	
1	JARS 6¼	20.10	
23	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	10	FT.
	TOTAL	2809	FT.
WT. OF STRING	96		LBS.

BIT RECORD	
BIT NO.	6
SIZE	12¼
MFG.	SEC
TYPE	M44N
JETS 1/32"	15 16 16
SER. NO.	451269
DEPTH OUT	
DEPTH IN	2804
TOTAL FTG.	5
TOTAL HRS. RUN	1¼
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD		
TIME	9:00	10:30
WEIGHT	9.3	9.3
PRESSURE GRADIENT		
VISC.–SEC.	64	53
PV/YP	/	/
GELS.	/	/
WL –CC's.		8.7
pH	9.0	9.0
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

EVENING TOUR

FOOTAGE FROM	TO	DR.D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PART–P COM–DC
2720	2785	35			120	12	1100	5½	48	5½	48	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2779	4½							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		Rig Servic. & Cut
12:15	6:15	6		Drilling
6:15	6:30	¼		Survey
6:30	8:00	1½		Drilling

DRILLER Jerry Lavoie

FOOTAGE FROM	TO	DR.D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PART–P COM–DC
2785	2804	19			120	12	1100	5½	48	5½	48	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Service & B.O.P.
8:15	12:30	4¼		Drlg 12¼ H. Le
12:30	1:00	½		Circ
1:00	4:00	3		Trip for B.T. Work Tight Hole @ 2670'
				Change Oil in No 2 Pump Motors
				Change Oil in No 1 Pump Motors

DRILLER [illegible]

FOOTAGE FROM	TO	DR.D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL–S PART–P COM–DC
2804	2809	5			80	10	1100	5½	48	5½	48	
STB	70'	1/16		Bottom								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2809	4¾							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1		Hoist for Bit #6.
5:00	5:15	¼		Rig Serv. & B.O.P.S Blind Rams.
5:15				Change Reamer. Pick up 1-6½ DC 1-6¼ Jars.
	8:00	2¾		Run in with Bit #6
8:00	10:00	2		Clean & Ream 170' to Bottom.
10:15	11:30	1¼		Drill 12¼ Hole
11:30	12:00	½		Survey

DRILLER RD Bergman

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FNX et al La Ciclo		C-30 NWT 95-C	11/Jan 22/73
OPERATOR		CONTRACTOR	RIG NO.
Ft Knox Exp Inc		Cardwell Drilling Co	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
Robert Ely		Jim Tarasiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	Varies	E		FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2			

Fuel @ 7:00 AM 98931

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜			19	703	15.20	700

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¼	7½	7¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	½	½	½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			

COMPLETION: A. PERF'R'T'N; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'N'L; G.

TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	Rit'ul	2.00	
1	STB RMR 9" OD	7.57	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 8⅝ OD	9.16	FT.
1	D.C. ID 7¼ OD	28.72	FT.
	STB RMR OD		FT.
14	6¼ DC	403.94	
2	XO	5.00	
22	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	17.50	FT.
	TOTAL	2664	FT.

WT. OF STRING 94000 LBS.

BIT RECORD

BIT NO.	5
SIZE	12¼
MFG.	Reed
TYPE	Y31G
JETS 1/32"	15/16/16
SER. NO.	819235
DEPTH OUT	
DEPTH IN	2374
TOTAL FTG.	290
TOTAL HRS. RUN	34½
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	12.30	4.00	7.00
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.–SEC.	39	49	41
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	10.0		8.7
pH	9.0	7.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1400		
CAUSTIC	100	Na	
CMC	50	Na	
DN68	1	Gal	

MORNING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
2604	2664	60			120	14	1100	5½	48	5½	48	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2623	3°		2655	4				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12¹⁵	¼		Rig Service + B.O.P
12¹⁵	2⁰⁰	1¾		Drilling
2⁰⁰	2¹⁵	¼		Survey
2¹⁵	6⁰⁰	3¾		Drilling
6⁰⁰	6¹⁵	¼		Survey
6¹⁵	7⁰⁰	1¾		Drilling

DRILLER Gary Lord

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	B.S.	2.00	
1	STB RMR 8 OD	7.57	FT.
3	D.C. ID 9 OD	93.06	FT.
1	STB RMR 8⅝ OD	9.16	FT.
1	D.C. ID 7¼ OD	28.72	FT.
	STB RMR OD		FT.
14	6½ DC	403.94	
2	X.O.	5.00	
22	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	10	FT.
	TOTAL	2717	FT.

WT. OF STRING 94000 LBS.

BIT RECORD

BIT NO.	5
SIZE	12¼
MFG.	Reed
TYPE	Y31G
JET 1/32"	15/16/16
SER. NO.	819235
DEPTH OUT	
DEPTH IN	2374
TOTAL FTG.	343
TOTAL HRS. RUN	41¼
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	10	12¹⁰	2.30
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.–SEC.	43	40	41
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	8.7	8.6	8.8
pH	9.5	9.0	10
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000		
DV68	1 Gal		
100	Lbs		

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
2664	2717	52			120		1100	5½	48	5½	48	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2686	3⅞		2718	5°				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8¹⁵	¼		RIG SERVICE + BOP.
8¹⁵	11¹⁵	3		DRLG 12¾ HOLE
11¹⁵	11³⁰	¼		SURVEY
11³⁰	3³⁰	4		DRLG
3³⁰	3⁴⁵	¼		SURVEY
3⁴⁵	4⁰⁰	¼		DRLG
				CHANGE OIL NAT GAS LIGHT PLANT

DRILLER [illegible]

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	B.S.	2.00	
1	STB RMR 8 OD	7.57	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 8⅝ OD	9.16	FT.
1	D.C. ID 7¼ OD	28.72	FT.
	STB RMR OD		FT.
14	6½ DC	403.94	
2	XO	5.00	
22	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	12	FT.
	TOTAL	2750	FT.

WT. OF STRING 94000 LBS.

BIT RECORD

BIT NO.	5
SIZE	12¼
MFG.	REED
TYPE	Y31G
JETS 1/32"	15/16/16
SER. NO.	819235
DEPTH OUT	
DEPTH IN	2374
TOTAL FTG.	376
TOTAL HRS. RUN	49
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	4.30	7.30	10:00
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.–SEC.	42	40	44
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	8.5	9.4	9.4
pH	9.5	9.5	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
DV68	1GAL		

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
2717	2750	33			120	10/12	1100	5½	48	5½	48	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2748	5°							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	4¹⁵	¼		RIG Service + BOPS
4¹⁵	10⁴⁵	6½		Drilling 12¼ Hole.
10⁴⁵	11⁴⁵	1		Survey
11⁴⁵	12⁰⁰	¼		Drilling

DRILLER [illegible]

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

Fuel @ 7am Nov 2nd
4744

LEASE: FNX Hel La Biche | WELL NO.

API WELL NUMBER: C-20 NWT 97-C | DATE: 2 Nov 31

OPERATOR: FNX Mines Ltd | RIG NO.

CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E		FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-375	14"
2			"

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. | SIZE | NO. LINES | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜			19	762	15.20	762

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7¼	7½	7¼
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	½	¼	½
8	REPAIR RIG		½	
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	½	¼	½
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	[illegible]			½
22				
23				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8	8	8

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	Rot Sub	1.00
1	STB RMR 7" OD	1.27 FT.
3	D.C. ID 7" OD	93.06 FT.
1	STB RMR 7" OD	7.16 FT.
1	D.C. ID 7⅛ OD	28.72 FT.
	STB RMR OD	FT.
14	6½ DC	403.94
2	x-over	5.00
20	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	37.50 FT.
	TOTAL	2494 FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.	5
SIZE	12¼
MFG.	Reed
TYPE	X31G
JETS 1/32"	15 16 16
SER. NO.	E19235
DEPTH OUT	
DEPTH IN	2374
TOTAL FTG.	120
TOTAL HRS. RUN	13¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	12 MN	3.0	700
WEIGHT	72	9.1	9.2
PRESSURE GRADIENT			
VISC.-SEC.	/	41	40
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	10.0		8.9
pH	9.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2600		
CMC	50		
CAUSTIC	100		
DV 62	2 Gal		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P TDM-D C-C
2430	2494	64			120	18	1100	5½	41	5½	41	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2436	4¾		2457	4				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		Rig Service + B.P.
12:15	12:45	½		Drilling
12:45	1:00	¼		Survey
1:00	4:00	3		Drilling
4:00	4:15	¼		Survey
4:15	8:00	3¾		Drilling

DRILLER [illegible]

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	Rot Sub	2.01
1	STB RMR 7" OD	7.27 FT.
3	D.C. ID 7" OD	93.06 FT.
1	STB RMR 7" OD	7.16 FT.
1	D.C. ID 7⅛ OD	28.72 FT.
	STB RMR OD	FT.
14	6½ DC	403.94
2	x-over	5.01
21	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	34 FT.
	TOTAL	2556 FT.
WT. OF STRING	90,000	LBS.

BIT RECORD

BIT NO.	5
SIZE	12¼
MFG.	Reed
TYPE	X31G
JET 1/32"	15 16 16
SER. NO.	E19235
DEPTH OUT	
DEPTH IN	2374
TOTAL FTG.	182
TOTAL HRS. RUN	21
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	12 MN	12 MN	7
WEIGHT	7.2	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	40	37	45
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.4	7.5	7.6
pH	9.5	9.0	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	200		
CMC	50		
Caustic	100		
DV 62	2 Gal		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P TDM-D C-C
2494	2556	62			120	17	1100	5½	41	5½	41	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2477	3¾		2530	3¾				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	8:15	¼		DRLG
8:15	8:30	¼		Rig Service
8:30	8:45	¼		Survey
8:45	9:00	¼		Drlg.
9:00	11:30	2½		Circ. Sweep - Drlg 12¼ Hole
11:30	12:00	½		Dump Suction Tank
12:00	3:00	3		Drlg.
3:00	3:30	½		Circulate for Trip

DRILLER [illegible]

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	[illegible]	
1	STB RMR 7" OD	7.27 FT.
	D.C. ID 7" OD	28.06 FT.
1	STB RMR 7" OD	7.16 FT.
1	D.C. ID 7½ OD	28.72 FT.
	STB RMR OD	FT.
14	6½ DC	403.94
2	x-over	5.00
21	STANDS DP	FT.
1	SINGLES DP	FT.
	KELLY DOWN	29.50 FT.
	TOTAL	2504 FT.
WT. OF STRING	90,000	LBS.

BIT RECORD

BIT NO.	5
SIZE	12¼
MFG.	Reed
TYPE	X31G
JETS 1/32"	15 16 16
SER. NO.	
DEPTH OUT	
DEPTH IN	2374
TOTAL FTG.	130
TOTAL HRS. RUN	21h
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	6 PM	4:30	11:30
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	40	37	41
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.		11	
pH	9.5	9.5	9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	300		
DV-62	2	Gal	

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR.-P TDM-D C-C
2556	2604	48			120	16	1100	5½	41	5½	41	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2561	4¾		2592	3¾				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		DRLG
4:15	4:30	¼		Rig Service
4:30	4:45	¼		Survey
4:45	4:50	¼		DRL 12¼ Hole
4:50	10:00	5¼		Drilling
10:00	12:00	2		Drilling

DRILLER [illegible]

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fikkelal Lakieta	C-30	C-30-NFS-95-C	Mar 201x

OPERATOR: Ft Norman Energy Inc
CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. — RIG NO. 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE:
SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E		4½ FH	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜			19	703		700

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	6¼	3¾	6¼
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE		½	¼
6	TRIPS		3	–
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	½	½	¼
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	7	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
1	BIT sub	2.00 FT.	BIT NO.	4
			SIZE	12¼
1	STB RMR 9" OD	7.57 FT.	MFG.	Reed
3	D.C. ID 9" OD	93.06 FT.	TYPE	Y316
1	STB RMR 7¾ OD	28.72 FT.	JETS 1/32"	15 15 16
14	D.C. ID 6½ OD	403.94 FT.	SER. NO.	819237
	STB RMR OD	FT.	DEPTH OUT	1904
1	S.S.	9.16	DEPTH IN	1904
2	XO	5.00	TOTAL FTG.	446
			TOTAL HRS. RUN	55½
19	STANDS DP	1800.55 FT.	COND. 1/8's T/B/ GAGE	
	SINGLES DP	FT.	GPM/ PD-PSI	/
	KELLY DOWN	8.44 FT.		
	TOTAL	2350.00 FT.		
WT. OF STRING	90	LBS.		

MUD RECORD			
TIME	DLY	DHB	7:00
WEIGHT	9.2	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	47	48	45
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			9.2
pH	9.0	9.0	9.0
SOLIDS %			
F/T			9/32

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
EFL	1	Drill	LBS
DU-68			gals
CAUSTIC		100	LBS
WATER			

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PAR'L-P COM'D-C
2304	2350	46		Fuel	120	15	1100	5½	48	5½	48	
				Tank 3' 8"								
				Meter 97210								
				mud 10 24								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2310	4½		2341	4⅞				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:45	¾		Drilling 12¼ Hole
12:45	1:00	¼		Rig Service B.O.P.'s
1:00	1:15	¼		Survey
1:15	6:00	4¾		Drilling
6:00	6:15	¼		Survey.
6:15	8:00	1¾		Drilling

DRILLER: Jamie Hanna

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
	BIT	FT.	BIT NO.	4	5
1	B.S.	2.00	SIZE	12¼	12¼
1	STB RMR 9" OD	7.57 FT.	MFG.	Reed	Reed
3	D.C. ID 9" OD	93.06 FT.	TYPE	Y316	Y316
1	STB RMR S OD	9.16 FT.	JET 1/32"	15 15 16	15 16 16
1	D.C. ID 7 OD	30.72 FT.	SER. NO.	819327	819235
	STB RMR OD	FT.	DEPTH OUT	2374	
14	6½	403.94	DEPTH IN	1904	2374
2	XO	5.00	TOTAL FTG.	470	
			TOTAL HRS. RUN	59¼	
19	STANDS DP	FT.	COND. 1/8's T/B/ GAGE	6 5 1	
1	SINGLES DP	FT.	GPM/ PD-PSI	/	/
	KELLY DOWN	11.50 FT.			
	TOTAL	2374 FT.			
WT. OF STRING	89000	LBS.			

MUD RECORD			
TIME	8:15	12:15	
WEIGHT	9.3	9.2	
PRESSURE GRADIENT			
VISC.-SEC.	49	50	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.0	9.0	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000		
DU-68	1	gal	
CAUSTIC	50	lbs	

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR'L-P COM'D-C
2350	2374	24			120	15	1100	5½	48	5½	48	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2373	4¾							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Service + B.P.
8:15	11:30	3¼		Drilling
11:30	12:00	½		Circ - Survey
12:00	12:30	½		Drilling
12:30	1:00	½		Circ
1:00	1:00	3		O Trip for bit

DRILLER: Jamie Hanna

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	BIT	FT.	BIT NO.	5
1	RSWC	2.00	SIZE	12¼
1	STB RMR 9 OD	7.57 FT.	MFG.	REED
3	D.C. ID 9 OD	93.06 FT.	TYPE	Y31G
1	STB RMR 7¾ OD	28.72 FT.	JETS 1/32"	15 16 16
14	D.C. ID 6½ OD	403.94 FT.	SER. NO.	819235
	STB RMR 2 OD	FT.	DEPTH OUT	
1	S.S.	9.16	DEPTH IN	2374
2	X.O.	5.00	TOTAL FTG.	56
			TOTAL HRS. RUN	6¼
19	STANDS DP	FT.	COND. 1/8's T/B/ GAGE	
2	SINGLES DP	FT.	GPM/ PD-PSI	/
	KELLY DOWN	35 FT.		
	TOTAL	2430 FT.		
WT. OF STRING	89000	LBS.		

MUD RECORD			
TIME	7:00	9:00	11
WEIGHT	9.2+	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	50	45	47
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			7.6
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	500 lb		
DU-68	½ gal		

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR'L-P COM'D-C
2374	2430	56			120	15	1100	5½	48	5½	48	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2404	4½							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:45	¾		FINISH TRIPPING IN.
4:45	5:00	¼		BREAK CIRC CLEAN TO BOTTOM 20'
5:00	8:15	3¼		DRILL 12¼ HOLE
8:15	8:30	¼		R.S. SERVICE U.P.O.
8:30	8:45	¼		SURVEY
8:45	12:00	3¼		DRLG 12¼ HOLE

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Freehold Lobstick	C-30	C-30 - N.T.S - 95-C	Jan 19/75

OPERATOR: Ft Norman Exploration

CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

LEGAL LAND DESCRIPTION

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E		4½ FH	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8			19	703		700

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

MORNING TOUR

TIME DISTRIBUTION - HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¼	7½	7½
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	½	¾	¼
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK

NO. OF DAYS FROM SPUD: 17
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT Smith	2.00 FT.	
1	STB RMR 9" OD	7.57 FT.	
3	D.C. ID 9" OD	93.06 FT.	
1	STB RMR 7⅞ OD	28.72 FT.	
14	D.C. ID 6½ OD	403.94 FT.	
	STB RMR OD	FT.	
2	X O	5.00	
17	STANDS DP	1666.31 FT.	
1	SINGLES DP	FT.	
	KELLY DOWN	38.50 FT.	
	TOTAL	2212. FT.	
WT. OF STRING	86000 LBS.		

BIT RECORD

BIT NO.	4
SIZE	12¼
MFG.	Reed
TYPE	Y31G
JETS 1/32"	15 15 16
SER. NO.	219237
DEPTH OUT	
DEPTH IN	1904
TOTAL FTG.	308
TOTAL HRS. RUN	33¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	2100	0400	0700
WEIGHT	9.4	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	47	45	46
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			7.2
pH	9.0	9.0	9.5
SOLIDS %	10		4½

1 UNIT CLEAN & THIN

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL		3000	LBS
DV-68		3	GAL
CAUSTIC		50	LBS
WATER			

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	FT.	
1	Bit Sub	2.00	
1	STB RMR 9" OD	7.57 FT.	
3	D.C. ID 9" OD	93.06 FT.	
1	STB RMR 8" OD	9.16 FT.	
1	D.C. ID 7½ OD	28.72 FT.	
	STB RMR OD	FT.	
14	6½	403.94	
2	X O	5.00	
18	STANDS DP	FT.	
	SINGLES DP	FT.	
	KELLY DOWN	20.50 FT.	
	TOTAL	2257 FT.	
WT. OF STRING	84000 LBS.		

BIT RECORD

BIT NO.	4
SIZE	12¼
MFG.	Reed
TYPE	Y31G
JET 1/32"	15 15 16
SER. NO.	219237
DEPTH OUT	
DEPTH IN	1904
TOTAL FTG.	353
TOTAL HRS. RUN	40¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	1000	1000	3000
WEIGHT		9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	55	54	41
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.	8.6	10.6	10.6
pH	9.5	9.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	3300	LBS	
DV68	3	GAL	
CMC	50	LBS	
CAUSTIC	10.0	LBS	

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	FT.	
1	B.S.	2.00	
1	STB RMR 9 OD	7.57 FT.	
3	D.C. ID 9 OD	93.06 FT.	
1	STB RMR 8.5 OD	9.16 FT.	
1	D.C. ID 7½ OD	28.72 FT.	
	STB RMR OD	FT.	
14	6½ D.C.	403.94	
2	X.O.	5.00	
17	STANDS DP	FT.	
1	SINGLES DP	FT.	
	KELLY DOWN	35 FT.	
	TOTAL	2306 FT.	
WT. OF STRING	XX FT.	LBS.	

BIT RECORD

BIT NO.	4
SIZE	12¼
MFG.	Reed
TYPE	Y31G
JETS 1/32"	15 15 16
SER. NO.	219237
DEPTH OUT	
DEPTH IN	1904
TOTAL FTG.	402
TOTAL HRS. RUN	45¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	600	600	10
WEIGHT	9.2	9.1	9.1+
PRESSURE GRADIENT			
VISC.-SEC.	45	50	45
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.	6.2	6.4	7.2
pH	7.0	7.0	7.0
SOLIDS %			

DUMP TANKS

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

WATER

EVENING TOUR

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI. PARTIAL COMPL.
2157	2212	55		Fuel	120	20/25	1100	5½	48	5½	48	
				Junk 4'7"								
				Meter 96186								
				used 1084								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2184	4¼							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	2 15	2¼		Drilling 12¼ Hole
2 15	3 00	¼		Rig Svc ✓ B.O.P.'s
3 00	3 30	½		Circ & Survey
3 30	8 00	4½		Drilling

DRILLER: Remi Lafond

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI. PARTIAL COMPL.
2212	2257	45			120	12	1100	5½	48	5½	48	P

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2215	3/8		2241	4/4				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
6 00	6 15	¼		Rig Service & B.O.P.
6 15	6 30	¼		Survey
6 30	1 00	4½		Drilling
1 00	1 30	½		Circ & Survey
1 30	4 00	2½		Drilling

DRILLER: Ray Lee

FOOTAGE

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI. PARTIAL COMPL.
2257	2304	47			120		1100	5½	48	5½	48	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2294	4½							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4	6	2		Drlg 12¼ Hole
6	6 15	¼		Rig Service & Kelly Cock
6 15	6	¼		Survey
6	8	2		Drlg 12¼ Hole

DRILLER: [signature]

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fort Vermilion Esso Lease	C-30	C-30-IV-TS-75-C	Mar 18/74

OPERATOR: Esso Resources Canada Ltd.
SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. RIG NO. 2
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: L. Remage

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E		4½ IF	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8			19	703		700

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	6½	6½	7¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE	¾		
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	½	1	½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8		

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	16
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT sub	2.00	FT.
1	STB RMR 9" OD	7.57	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 9" OD / D.C. ID 7¾ OD	28.72	FT.
14	D.C. ID 6½ OD	403.94	FT.
	STB RMR OD		FT.
1	x.o	5.00	
15	STANDS DP	1510.47	FT.
2	SINGLES DP		FT.
	KELLY DOWN	48.55	FT.
	TOTAL	2047.05	FT.

WT. OF STRING 85,000 LBS.

BIT RECORD

BIT NO.	4
SIZE	12¼
MFG.	Reed
TYPE	Y316
JETS 1/32"	15 15 16
SER. NO.	819237
DEPTH OUT	
DEPTH IN	1904
TOTAL FTG.	143
TOTAL HRS. RUN	12½
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	1 00	4.00	7 30
WEIGHT	9.4	9.4+	9.4+
PRESSURE GRADIENT			
VISC.–SEC.	37	37	42
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	9.5	9.0	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL		LIGNO	LBS
DD-18			gal
CAUSTIC		SOD	LBS

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

	BIT		FT.
1	Bit Sub	2.00	
1	STB RMR 9" OD	7.57	FT.
3	D.C. ID 9" OD	93.06	FT.
1	STB RMR 9" OD	9.16	FT.
1	D.C. ID 7¾ OD	28.72	FT.
	STB RMR OD		FT.
2	x.o	5.00	
14	DC	403.94	
16	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	14.50	FT.
	TOTAL	2095	FT.

WT. OF STRING 84,000 LBS.

BIT RECORD

BIT NO.	4
SIZE	12¼
MFG.	Reed
TYPE	Y316
JET 1/32"	15 15 16
SER. NO.	819237
DEPTH OUT	
DEPTH IN	1904
TOTAL FTG.	191
TOTAL HRS. RUN	19¼
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	8:15	11 00	3.00
WEIGHT	9.4		9.4
PRESSURE GRADIENT			
VISC.–SEC.	43	54	56
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.		10.0	7.0
pH	9.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000	Lignite	
DD-18	2	Caustic	
Caustic	100	Lignite	
Lignite	100		

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

	BIT		FT.
1	Bit Sub	2.00	
1	STB RMR 9 OD	7.57	FT.
3	D.C. ID 9 OD	93.06	FT.
1	STB RMR 9 OD	9.16	FT.
1	D.C. ID 7¾ OD	28.72	FT.
	STB RMR OD		FT.
2	x.o	5.00	
14	DC	403.94	
17	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	14	FT.
	TOTAL	2157	FT.

WT. OF STRING 96,000 LBS.

BIT RECORD

BIT NO.	4
SIZE	12¼
MFG.	REED
TYPE	Y316
JETS 1/32"	15 15 16
SER. NO.	819237
DEPTH OUT	
DEPTH IN	1904
TOTAL FTG.	253
TOTAL HRS. RUN	26½
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	6 00	8 00	10 00
WEIGHT	9.3	9.3	9.3
PRESSURE GRADIENT			
VISC.–SEC.	50	49	50
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.	7.0	7.1	6.2
pH	9.6	9.0	9.5
SOLIDS %			

Mud Tanks

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000		
DD-18	2 gal		
Caustic	50		
WATER			

MORNING TOUR

FOOTAGE FROM 1992 TO 2047 — DR'D RM'R CORE'D 55' — CORE NO. — FORMATION (SHOW CORE RECOVERY): Fuel, Tank 62", Meter 95102, Mud #10

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR–D TRI–T COM–C
120	17-25	1100	5½	50	5½	50	
		1350		55		55	

DEVIATION RECORD: DEPTH 1998 DEV. 4° DIRECTION — DEPTH 2024 DEV. 5½ DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼		Drilling 12¼ hole
12 15	12 30	¼		Rig Ser. & B.O.P.'s
12 30	1 00	½		Circ & Survey
1 00	4 30	3½		Drilling
4 30	5 00	½		Circ wash'd light cor.
5 00	5 15	¼		Survey
5 15	8 00	2 3/4		Drilling

DRILLER: Remi Laforce

FOOTAGE FROM 2047 TO 2095 — DR'D RM'R CORE'D 48 — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM 120 — WT. ON BIT 1000# 17½ — PUMP PRESS 1100 — PUMP NO. LINER SIZE 5½ — PUMP NO. S.P.M. 48 — PUMP NO. LINER SIZE 5½ — PUMP NO. S.P.M. 48 — METHOD RUN

DEVIATION RECORD: DEPTH 2059 DEV. 3½ DIRECTION — DEPTH 2091 DEV. 4 DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		Rig Service & B.O.P.'s
8 15	9 15	1		Drilling
9 15	9 45	½		Circ & Survey
9 45	2 15	4½		Drilling
2 15	2 45	½		Circ & Survey
2 45	4 00	1¼		Drilling

DRILLER: Jimmy Larson

FOOTAGE FROM 2095 TO 2157 (62) — DR'D RM'R CORE'D — CORE NO. 1 — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM 120 / 120 — WT. ON BIT 15 / 20 — PUMP PRESS 1100 / 1100 — PUMP NO. LINER SIZE 5½ / 5½ — PUMP NO. S.P.M. 48 / 49 — PUMP NO. LINER SIZE 5½ / 5½ — PUMP NO. S.P.M. 48 / 48 — METHOD RUN

DEVIATION RECORD: DEPTH 2127 DEV. 3¾ DIRECTION — DEPTH 2153 DEV. 3¾ DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	8 00	4		DRLG 12¼ HOLE
8 00	8 15	¼		SURVEY
8 15	8 30	¼		RIG SERVICE
8 30	10 00	1½		DRLG 12¼ HOLE
10 00	11 15	1¼		SURVEY
11 15	12 00	¾		DRLG

DRILLER: [illegible]

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FWA et al Labiche	C-30	C-30-IV-T-S-95-C	Mar 17/78

OPERATOR: H.E. Norman Energy Inc — CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

LEGAL LAND DESCRIPTION

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E		4½ FH	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
13 3/8			19	703		700

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	6¼	3	6
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE		1	
6. TRIPS		3¾	¼
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	1½		¾
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. C. Trip Tr.			¼
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
Dr. Ins.	8 7
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	12
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD		MUD RECORD		
1	BIT Smith	2.00 FT.	BIT NO.	3	TIME	0100	0400
1	STB RMR OD	7.57 FT.	SIZE	12¼	WEIGHT	9.1	9.2
3	D.C. ID 9" OD	93.06 FT.	MFG.	SEC	PRESSURE GRADIENT		
1	STB RMR 0.6" OD	28.72 FT.	TYPE	M44L	VISC.-SEC.	46	37
14	D.C. ID 6" OD	403.94 FT.	JETS 1/32"	15 15 14	PV/YP	/	/
	STB RMR OD	FT.	SER. NO.	537810	GELS.	/	/
2	X O	5.00	DEPTH OUT		WL -CC'S.	9	9
1	SS	9.16	DEPTH IN	1428	pH	9	9
			TOTAL FTG.	455	SOLIDS %		
			TOTAL HRS. RUN	27 3¼	MUD & CHEMICALS ADDED		
			COND. 1/8's T/B/ GAGE		TYPE	AMT.	TYPE AMT.
14	STANDS DP	1355.18 FT.	GPM/ PD-PSI	/ /	GEL	100	LBS
	SINGLES DP	FT.			DU-68	1	GAL
	KELLY DOWN	18.67 FT.			CAUSTIC	50	LBS
	TOTAL	1883.00 FT.					
WT. OF STRING		82 000 LBS.					

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD			MUD RECORD		
	BIT	FT.	BIT NO.	3	4	TIME	0915	1100
1	Bit Sub	2.00	SIZE	12¼	12¼	WEIGHT	9.2	12
1	STB RMR 9" OD	7.57 FT.	MFG.	SEC	Reed	PRESSURE GRADIENT		
3	D.C. ID 9" OD	93.06 FT.	TYPE	M44L	Y31G	VISC.-SEC.	38	54
	STB RMR OD	FT.	JET 1/32"	15 15 14	15 15 16	PV/YP	/	/
1	D.C. ID 7½ OD	28.72 FT.	SER. NO.	537810	819237	GELS.	/	/
	STB RMR OD	FT.	DEPTH OUT	1904		WL -CC'S.	decr.	under 10 cc's
14	6½	403.94	DEPTH IN	1428	1904	pH	9.0	7.5
			TOTAL FTG.	476		SOLIDS %		
2	X O	5.00	TOTAL HRS. RUN	37¼		MUD & CHEMICALS ADDED		
14	STANDS DP	FT.	COND. 1/8's T/B/ GAGE	5 2 0		TYPE	AMT.	TYPE AMT.
	SINGLES DP	FT.	GPM/ PD-PSI	/ /				
	KELLY DOWN	41.50 FT.						
	TOTAL	FT.				CAUSTIC		
WT. OF STRING		LBS.						

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.	4	TIME	1100	1700
1	C.S.	2.00	SIZE	12¼	WEIGHT	9.2+	9.3
1	STB RMR 9 OD	7.57 FT.	MFG.	REED	PRESSURE GRADIENT		
3	D.C. ID 9 OD	93.06 FT.	TYPE	Y31G	VISC.-SEC.	46	42
	STB RMR OD	FT.	JETS 1/32"	15 15 16	PV/YP	/	/
1	D.C. ID 7½ OD	28.72 FT.	SER. NO.	819237	GELS.	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.		
14	6½	403.94	DEPTH IN	1904	pH	9.0	9.0
			TOTAL FTG.	88	SOLIDS %		
2	X.O	5.00	TOTAL HRS. RUN	6	MUD & CHEMICALS ADDED		
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		TYPE	AMT.	TYPE AMT.
	SINGLES DP	FT.	GPM/ PD-PSI	/ /	Gel	1000	gal
	KELLY DOWN	35 FT.			D-68	1 gal	
	TOTAL	1992 FT.			Caustic	50.	
WT. OF STRING		84 M LBS.					

EVENING TOUR

FOOTAGE — FORMATION — DEVIATION RECORD — TIME LOG

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL-S PARM-P COMP-C
1835	1883	48		Red Tank 4 Motor 94212	100	12	1050	5½	50	5½	50	

DEVIATION RECORD: DEPTH 1841 — DEV. 3¼ — DIRECTION — DEPTH 1872 — DEV. ¼ — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 30	12 30	½		Drilling 12¼ hole
12 30	12 45	¼		Rig Ser. & B.O.P. S
12 45	1 30	½		Survey Trip Run
1 30	1 45	½		Survey
1 45	5 45	4		Drilling
5 45	6 00	½		Survey
6 00	600	1 ¼		Drilling

DRILLER Emi Laforce

FOOTAGE FROM 1883 TO 1904 — DR.-D RM.-R CORE.-C — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM 100 — WT. ON BIT 1000# 12 — PUMP PRESS 1050 — PUMP NO. LINER SIZE 5½ — PUMP NO. S.P.M. 50 — PUMP NO. LINER SIZE 5½ — PUMP NO. S.P.M. 50 — METHOD RUN

DEVIATION RECORD: DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		Rig Service & B.O.P.
8 15	11 15	3		Drilling
11 15	11 45	½		Cire
11 45	12 15	½		Trip f/ bit
12 15	4 00	3¾		O Trips f/ bit

Engineering Larson

FOOTAGE FROM 1774 TO 1992 — DR.-D RM.-R CORE.-C 88 — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM 120 — WT. ON BIT 1000# 13 — PUMP PRESS 1100 — PUMP NO. LINER SIZE 5½ — PUMP NO. S.P.M. 50 — PUMP NO. LINER SIZE 5½ — PUMP NO. S.P.M. 50 — METHOD RUN

DEVIATION RECORD: DEPTH 1904 — DEV. ¾ — DIRECTION 1936 = 70 — DEPTH 1766 — DEV. ¾ — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 30	½		FINISH REAMING IN.
4 30	5 00	½		CLEAN TO BOTTOM 70' FILL
5 00	5 15	¼		SURVEY
5 15	5 30	¼		RIG SERVICE & B.O.P.'S
5 30	8 00	2½		DRLG 12¼ HOLE 10 00 - 12 00 = DRLG REG HOLE
8 00	8 15	¼		SURVEY
8 15	7 45	1½		DRLG 12¼ HOLE
7 45	10 00	4¼		SURVEY

DRILLER Emi Laforce

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

FORM 3T5 — APPROVED — APPROVED

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fenelal Lobiche	C-30	C-30 - IV-T-S - 95-C	Mar 16/78

OPERATOR: St Mariman Exp Inc

CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE:

SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E		4½ FH	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8			19	703		700

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
CUT OFF	PRESENT LENGTH	

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	6¼	7½	1¼
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	¼	¼	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1½	½	½
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	14
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	sub	2.00 FT.
1	STB RMR	OD	7.57 FT.
3	D.C. ID	9" OD	93.06 FT.
1	STB RMR	9" OD	7.57 FT.
1	D.C. ID	7" OD	28.72 FT.
14	D.C. ID	6½ OD	403.94 FT.
	STB RMR	OD	FT.
2	X O		5.00
1	S.S		9.16
	STANDS DP		1150.55 FT.
	SINGLES DP		FT.
	KELLY DOWN		25.50 FT.
	TOTAL		1700.00 FT.
WT. OF STRING		80,000	LBS.

BIT RECORD

BIT NO.	3
SIZE	12¼
MFG.	SEC
TYPE	M44L
JETS 1 32"	15 15 14
SER. NO.	537810
DEPTH OUT	
DEPTH IN	1428
TOTAL FTG.	272
TOTAL HRS. RUN	13½
COND. 1/8's T/B/ GAGE	/ /
GPM/ PD-PSI	

MUD RECORD

TIME	1[illegible]	2:30	6:30
WEIGHT	9.4	9.4	9.4
PRESSURE GRADIENT			
VISC.-SEC.	35	33	39
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.0	9.0	9.0
SOLIDS %			

DUMPING TANKS

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL		1050	LBS
DU-68		1	GAL
CAUSTIC		100	LBS

Running Water

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	Bit Sub		2.00
	STB RMR	OD	FT.
3	D.C. ID	9" OD	93.06 FT.
1	STB RMR	9" OD	7.57 FT.
1	D.C. ID	7" OD	28.72 FT.
	STB RMR	OD	FT.
1	SS		9.16
14	6½ DC		403.94
2	x O		5.00
12	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		24.50 FT.
	TOTAL		1762 FT.
WT. OF STRING		81000	LBS.

BIT RECORD

BIT NO.	3
SIZE	12¼
MFG.	SEC
TYPE	M44L
JET 1/32"	15 15 14
SER. NO.	537810
DEPTH OUT	
DEPTH IN	1428
TOTAL FTG.	334
TOTAL HRS. RUN	20¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	8:30	12:00	3:00
WEIGHT	9.4	9.2	9.2
PRESSURE GRADIENT			
VISC.-SEC.	36	37	40
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.0	9.0	9.0
SOLIDS %			

DUMPING TANKS

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000 lbs		
DU-68	2 Gal.		
CAUSTIC	50 lbs.		
RUNNING WATER			

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	Bit Sub		2.00
	STB RMR	OD	FT.
3	D.C. ID	9" OD	93.06 FT.
1	STB RMR	9" OD	7.57 FT.
1	D.C. ID	7" OD	28.72 FT.
	STB RMR	OD	FT.
1	5.5.		9.16
14	6½ DC		403.94
2	x.O.		5.00
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		35 FT.
	TOTAL		1935 FT.
WT. OF STRING		82,000	LBS.

BIT RECORD

BIT NO.	3
SIZE	12¼
MFG.	SEC
TYPE	M44L
JETS 1/32"	15 15 14
SER. NO.	537810
DEPTH OUT	
DEPTH IN	1428
TOTAL FTG.	407
TOTAL HRS. RUN	28
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	6:00	8:00	10:00
WEIGHT	9.4	9.1	9.0
PRESSURE GRADIENT			
VISC.-SEC.	35	37	36
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

DUMPING TANKS

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000 lbs		
DU-68	2 gal.		
Caustic	100 lbs.		
PAC	H-2-O		

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DRILL RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR-EL-P COM-D-C
1612	1700	88		Gravel	80	20/15	1050	5½	50	5½	50	
				Gravel 93%								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1622	3°		1653	3°		1685	2 7/8	

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼		Rig Ser. & B.O.P.S
12 15	12 45	½		Surveys
12 45	5 00	2¼		Drilling 12¼ hole
3 00	3 30	½		Surveys
3 30	6 30	3		Drilling
6 30	7 00	½		Surveys
7 00	8 00	1		Drilling

DRILLER Remi Laforce

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-EL-P COM-D-C
1700	1762	62			90	10/20	1050	5½	50	5½	50	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1716	3½		1747	3½				

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		Rig Service & B.O.P.S
8 15	9 00	¾		Drilling
9 00	9 15	¼		Survey
9 15	12 45	3½		Drilling
12 45	1 00	¼		Survey
1 00	4 00	3		Drilling

DRILLER [illegible]

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR-EL-P COM-D-C
1762	1835	73			90	20	1050	5½	50	5½	50	
					110	10	1050	5½				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1779	3¾		1810	3¾				

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	5 30	1½		[illegible]
5 30	6 00	½		Rig Service Survey
6 00	5 30	2½		[illegible]
[illegible]	8 00	½		[illegible]
8 00	12 00	3½		[illegible]

DRILLER [illegible]

Form 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FNX et al Labiche	C-30	C-30 - IV-T-S - 95-C	Nov 15/77

OPERATOR: Mr Norman Ennis Nine

CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E		4½ FH	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — WT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8			19	703		700

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	5¾		
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼		
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¼		
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION: A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.		
HRS. W/OPR. D.P.		
HRS. WO/D.P.		
HRS. STANDBY		
DRLG	8	4
TOTAL DAY WORK		
NO. OF DAYS FROM SPUD	13	
CUMULATIVE ROTATING HRS.		
TOTAL MUD COST		

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	Bit sub		2.00
	STB RMR	OD	FT.
3	D.C. ID 9"	OD	93.06 FT.
1	STB RMR Reamer	OD	7.57 FT.
1	D.C. ID 7"	OD	28.72 FT.
2	STB RMR X O	OD	5.00 FT.
14	D.C. 6½		403.94
8	STANDS DP		851.20 FT.
2	SINGLES DP		FT.
	KELLY DOWN		41.00 FT.
	TOTAL		1397.00 FT.

WT. OF STRING 84,000 LBS.

BIT RECORD

BIT NO.	2
SIZE	12¼
MFG.	Reed
TYPE	Y3165
JETS 1/32"	14 14 14
SER. NO.	218373
DEPTH OUT	
DEPTH IN	960
TOTAL FTG.	437
TOTAL HRS. RUN	16½
COND. 1/8's T/B/ GAGE	
GPM/ PD--PSI	

MUD RECORD

TIME	MOR	EVE
WEIGHT	9.0	9.3
PRESSURE GRADIENT		
VISC.-SEC.	32	38
PV/YP	/	/ /
GELS.	/	/ /
WL -CC'S.		
pH		9.0
SOLIDS %	DESILTER RESETS	
	T. 18.4 @ 36 GPM	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL		1050	LBS
DL-68		1	gal
CAUSTIC		50	LBS

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
1270	1397	127		FUEL TANK 2'6"	1700	25	1000	5½	45	5½	46	
				MUD 12 (9225 7)	90	~~25~~	1100					
						12						

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1403.	1¼	~~139~~	1334.	1¾		1366.	1½	139 1½

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 45	¾		Drilling 12¼ hole
12 45	1 00	¼		Rig Service & B.O.P.'s
1 00	1 30	½		Survey
1 30	2 45	1¼		Drilling
2 45	3 15	½		Survey 1° 6° Seimac
3 15	5 15	2		Drilling
5 15	5 45	½		Survey
5 45	7 00	1¼		Drilling

DRILLER Norm Laberge

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	Bit Sub		2.00
	STB RMR	OD	FT.
3	D.C. ID 9"	OD	93.06 FT.
1	STB RMR	OD	7.57 FT.
1	D.C. ID 7"	OD	28.72 FT.
	STB RMR	OD	FT.
9	X O		5.00
14	DC 6½		403.94
1	SS ~~9.16~~		9.16
9	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		41.50 FT.
	TOTAL		1437.25 FT.

WT. OF STRING 80,000 LBS.

BIT RECORD

BIT NO.	2	3
SIZE	12¼	12¼
MFG.	Reed	SEC
TYPE	Y3165	M44C
JET 1/32"	14 14 14	15 15 14
SER. NO.	218373	537810
DEPTH OUT	1428	
DEPTH IN	960	1428
TOTAL FTG.	468	9
TOTAL HRS. RUN	17½	½
COND. 1/8's T/B/ GAGE	3 3 1	
GPM/ PD--PSI		

MUD RECORD

TIME	8:15	3:30
WEIGHT	9.1	9.1
PRESSURE GRADIENT		
VISC.-SEC.	40	40
PV/YP	/	/ /
GELS.	/	/ /
WL -CC'S.		
pH	9.2	9.0
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
1397	1437	40			80	20	950	5½	50	5½	50	P

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1428	1¼							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
7 00	8 15	¼		Rig Service & B.O.P.
8 15	9 15	1		Drilling
9 15	9 30	¼		Survey
9 30	10 00	½		Circ
10 00				Hoist - change out mule shoe DC's Change bit
	9 30			pick up Shock Sub, ~~Reamer~~ Run in DC's
9 30	3 00			Slip 20' drilling line
3 00	3 30			Running
3 30	~~7 00~~			Drilling

DRILLER Jerry Larose

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	Bit Sub		2.00
	STB RMR	OD	FT.
3	D.C. ID 9"	OD	93.06 FT.
1	STB RMR	OD	7.57 FT.
1	D.C. ID 7"	OD	28.72 FT.
	STB RMR	OD	FT.
2	X O		5.00
14	D.C. 6½		403.94
1	SS.		9.16
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		31.50 FT.
	TOTAL		1613 FT.

WT. OF STRING 80,000 LBS.

BIT RECORD

BIT NO.	3
SIZE	12¼
MFG.	SEC
TYPE	M 44C
JETS 1/32"	15 15 14
SER. NO.	537810
DEPTH OUT	
DEPTH IN	1428
TOTAL FTG.	144
TOTAL HRS. RUN	14
COND. 1/8's T/B/ GAGE	
GPM/ PD--PSI	

MUD RECORD

TIME	6:00		11
WEIGHT	9.2	9.2	9.3
PRESSURE GRADIENT			
VISC.-SEC.	40	38	44
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.0	9.5	9.5
SOLIDS %	Desilter		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	50		
MD	400		
DL-68		1	gal

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
1437	1611	174			70	20	1100				50	
					70							

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1461	1½		1511	1¾		1516	2½	

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	5	1		DRLG 10 00 - 10 45 = ¾ - Survey
5	5 15	¼		Rig Service & Kelly Check 10 45 - 1 00 = 1¼ DRLG
5 15	5 30	¼		Survey

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fort Norman Exp Area	C-30	C-30 - N-T-S 95-C	Mar 14/75

OPERATOR: Pan American Petroleum Corp

CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E		4½ IF	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8			14	703		700

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	3¼	3	7½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE		1	
6	TRIPS	3½	2½	½
7	LUBRICATE RIG	¼	¼	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE		½	
10	DEVIATION SURVEY	1	¾	1
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P. | HRS. W/OPR. D.P. | HRS. WO/D.P. | HRS. STANDBY | [illegible]

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
1	BIT	Rock	2.00 FT.
1		Reamer	29.57
2	STB RMR X O OD		5.00 FT.
3	D.C. ID 9" OD		93.06 FT.
1	STB RMR 7¾ OD		28.72 FT.
14	D.C. ID 6½ OD		403.94 FT.
	STB RMR OD		FT.
4	STANDS DP		484.45 FT.
XX	SINGLES DP		FT.
	KELLY DOWN		14.76 FT.
	TOTAL		FT.
WT. OF STRING	70 000		LBS.

BIT RECORD		
BIT NO.	1	2
SIZE	12¼	12¼
MFG.	Reed	Reed
TYPE	S21GJ	Y31GJ
JETS 1/32"	13 13 14	
SER. NO.	717584	218373
DEPTH OUT	760	
DEPTH IN	790	960
TOTAL FTG.	170	35
TOTAL HRS. RUN	2.9	1¼
COND. 1/8's T/B/ GAGE		
GPM/ PD–PSI		

MUD RECORD			
TIME	0230	0750	
WEIGHT	8.8	8.8	
PRESSURE GRADIENT			
VISC.–SEC.	37	35	
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	9	9	
SOLIDS %			
DRILLED SOLIDS			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL–S PAR'EL–P COMP–C
955	995	40			75	10	1050	5½	45	5½	46	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	958	1¼							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	1 00	1¼		Drilling — fuel in tank 6' — full on Mud Pit
1 15	1 30	¼		Rig Service & B.O.P. S
1 30	2 00	½		Survey
2 00	2 30	½		Drilling — SLM 971.50
2 30	4 00	1½		Trip for Bit & SLM. — Board 970.14
4 00	6 00	2		Run in w/ bit no 2
6 00	7 30	1½		Drilling
7 30	8 00	½		Survey

DRILLER: Remi Laforce

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
1	Bit Sub		2.00
	STB RMR OD		FT.
3	D.C. ID 9 OD		93.06 FT.
1	STB RMR OD		7.57 FT.
1	D.C. ID 7" OD		28.72 FT.
	STB RMR OD		FT.
14	6		403.94
2	XO		5.00
5	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		41.50 FT.
	TOTAL		1116 FT.
WT. OF STRING	70000		LBS.

BIT RECORD		
BIT NO.	2	
SIZE	12¼	
MFG.	Reed	
TYPE	Y31GJ	
JET 1/32"	14 14 14	
SER. NO.	218373	
DEPTH OUT		
DEPTH IN	960	
TOTAL FTG.	156	
TOTAL HRS. RUN	4½	
COND. 1/8's T/B/ GAGE		
GPM/ PD–PSI		

MUD RECORD			
TIME	8.15	11.00	100
WEIGHT	8.9	8.8	
PRESSURE GRADIENT			
VISC.–SEC.	34	40	38
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	9.0	10.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	10 sx		
CAUSTIC	50 lbs		
DF-69	16 gal		

FOOTAGE FROM	FOOTAGE TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'EL–P COMP–C
995	1116				80	20	1050	5½	61			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1206	¾		1253	1		1074	1	

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		Rig Service & B.O.P. — 1400 – 1530 Drilling
8 15	8 45	½		Drilling — 1530 – 1700 Circ
8 45	9 00	¼		Survey — 1700 – 2330 Hoist 5 stands
9 00	10 00	1		Drilling w/ plugged jet — 2330 – 3330 Unplug jet Run
10 00	10 15	¼		Survey — 3330 – 400 Stop & cut
10 15	11 00	¾		Drilling
11 00	11 30	½		Try unplug jet - work tight hole
11 30	11 45	¼		Survey

DRILLER: [illegible]

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
1	BIT 12¼	1	FT.
1	1 [illegible]	[illegible]	
	STB RMR OD		FT.
3	D.C. ID 7 OD	1206	FT.
1	STB RMR OD	75	FT.
1	D.C. ID 8" OD	28.72	FT.
	STB RMR OD		FT.
14	6	403.94	
2	X.O.	5.00	
7	STANDS DP		FT.
3	SINGLES DP		FT.
	KELLY DOWN	41.50	FT.
	TOTAL	1210	FT.
WT. OF STRING	80 M		LBS.

BIT RECORD		
BIT NO.	2	
SIZE	12¼	
MFG.	Reed	
TYPE	Y-16-J	
JETS 1/32"	14 14 14	
SER. NO.	218373	
DEPTH OUT		
DEPTH IN	960	
TOTAL FTG.	250	
TOTAL HRS. RUN	10½	
COND. 1/8's T/B/ GAGE		
GPM/ PD–PSI		

MUD RECORD			
TIME	6	800	
WEIGHT	9.	8.9	1.0
PRESSURE GRADIENT	40	.36	37
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	10	9.5	1.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'EL–P COMP–C
1116	1270				80	25	1050	5½	61			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1116	1°		1174	1	12 1-10	1241-14	1.27½	1

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	¼		Rig Service & B.O.P.
4 15	4 [illegible]	[illegible]		[illegible]
4 30	5 00	½		Finish running in
5 00	12	6		Drilling
5		1		Survey

DRILLER: [illegible]

FORM 3T5

APPROVED — APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: Fenn Cat In Lake — WELL NO.

API WELL NUMBER: C-20-NTS-75-C — DATE: March 13-75

OPERATOR: Ft Norman Exploration

CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: C-20-NTS-75-C

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	BE		4½ FH	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	300	14
2	"		14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13⅜			19	203		700

WIRE LINE RECORD: SIZE | NO. LINES | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL		5¾	7¼
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	1¾		
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG		½	
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		½	¼
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		2.00
1	STB RMR	7" OD	9.30 FT.
3	D.C. ID	7¾ OD	78.72 FT.
1	STB RMR	OD	7.57 FT.
14	D.C. ID	6½ OD	403.94 FT.
	STB RMR	OD	FT.
2	XO		5.00
3	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		840 FT.

WT. OF STRING 69 LBS.

BIT RECORD

BIT NO.	1
SIZE	12¼
MFG.	Reed
TYPE	S21GJ
JETS 1/32"	13 13 14
SER. NO.	717984
DEPTH OUT	
DEPTH IN	790
TOTAL FTG.	50
TOTAL HRS. RUN	12¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME		5:00	7:00
WEIGHT		8.7	8.7
PRESSURE GRADIENT			
VISC.-SEC.		37	36
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH			
SOLIDS %			
DESANDER			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WATER	36 B.B.L.		

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCLMS PARFL-P COMP.D.C
822	840	50			75	7/8	700	5½	45	5½	46	

DEVIATION RECORD: DEPTH 822 — DEV. ¾ — DIRECTION — DEPTH 252 — DEV. 11/8 — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		Rig down & move to 15-75.
12:15	1:30	1¼		Survey & Hoist for Bit
1:30	4:00	2½		Pick up 2-9" DC & 1-12" DC; Lay down 4 singles
4:00	4:30	½		Run in with Bit #1 - Tank Time
4:30	6:30	2		Drilling
6:30	6:45	¼		Survey
6:45				

DRILLER: [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		2.00 FT.
1	Reamer		5.17
2	STB RMR	XO OD	5.00 FT.
3	D.C. ID	9" OD	93.06 FT.
1	STB RMR	7¾ OD	28.72 FT.
14	D.C. ID	6½ OD	403.94 FT.
	STB RMR	OD	FT.
3	STANDS DP		316.27 FT.
1	SINGLES DP		FT.
	KELLY DOWN		14.29 FT.
	TOTAL		840 LBS.

WT. OF STRING

BIT RECORD

BIT NO.	1
SIZE	12¼
MFG.	Reed
TYPE	S21GJ
JET 1/32"	13 13 14
SER. NO.	717984
DEPTH OUT	
DEPTH IN	790
TOTAL FTG.	77
TOTAL HRS. RUN	20
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

DESILTER WT. 19.8 RATE 300 GPM

MUD RECORD

TIME	12:30	8:20	
WEIGHT	8.7	8.7	
PRESSURE GRADIENT			
VISC.-SEC.	44	38	/
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9	9	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL		1000	LBS
DU-68		1	gals

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCLMS PARFL-P COMP.D.C
840	864	24			75	4/7	1050	5½	45	5½	46	
					75	7/8						

DEVIATION RECORD: DEPTH 864 — DEV. ¾ — DIRECTION — DEPTH — DEV. — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:30	10:00	1½		Drilling 12¼ hole
10:00	10:30	½		Change 2" Cameron valve on manifold
10:30	2:00	3½		Drilling
2:00	2:30	½		Rig Ser. 12 hrs.
2:30	3:00	½		Survey
3:00	4:00	1		Drilling

DRILLER: [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
3	STB RMR	7" OD	FT.
1	D.C. ID	7¾ OD	FT.
1	STB RMR	OD	FT.
14	D.C. ID	6½ OD	403.94
2	XO		5.00
4	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		38.50 FT.
	TOTAL		955 FT.

WT. OF STRING 69000 LBS.

BIT RECORD

BIT NO.	1
SIZE	12¼
MFG.	Reed
TYPE	S21GJ
JETS 1/32"	13 13 14
SER. NO.	717984
DEPTH OUT	
DEPTH IN	790
TOTAL FTG.	165
TOTAL HRS. RUN	27¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	4:30	7:00	11:30
WEIGHT	8.9	8.9	8.8
PRESSURE GRADIENT			
VISC.-SEC.	39	37	38
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9	9.5	9.5
SOLIDS %			9.8
DESILTER			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	50 lbs.		

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCLMS PARFL-P COMP.D.C
869	955				75	10	1025	5½	46	5½	45	P

DEVIATION RECORD: DEPTH 895 — DEV. 1° — DIRECTION — DEPTH 937 — DEV. 1° — DIRECTION — DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		Rig Service & BOP
4:15	5:45	1½		Drilling
5:45	6:00	¼		Survey
6:00	9:45	3¾		Drilling
9:45	10:00	¼		Survey
10:00	12:00	2		Drilling

DRILLER: [illegible]

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fox Old Ingrid		C-30.NTS-95C	June 12-75
OPERATOR		CONTRACTOR	RIG NO.
Ft Norman Exp Loc.		BRINKERHOFF DRILLING CANADA LTD.	2.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
		M Tomanek.	

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	13 3/4			19	703		700

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E		4½ FH	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	300	14
2	Emsco	300	14

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¼	5¼	
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		2	
7. LUBRICATE RIG	¼	¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY		½	
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	16	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P. — HRS. W/OPR. D.P. — HRS. WO/D.P. — HRS. STANDBY — TOTAL DAY WORK

NO. OF DAYS FROM SPUD — CUMULATIVE ROTATING HRS. — TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
1	D.C. ID 8 OD	31 48	FT.
	STB RMR OD		FT.
14	D.C. ID 6½ OD	438.84	FT.
	STB RMR OD		FT.
3	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN	30.50	FT.
	TOTAL	780	FT.
WT. OF STRING		53 00	LBS.

BIT RECORD		
BIT NO.	RR	
SIZE	12¼	
MFG.	REED	
TYPE	S21GJ	
JETS 1/32"	3-16	
SER. NO.	820272	
DEPTH OUT		
DEPTH IN	700	
TOTAL FTG.	80	
TOTAL HRS. RUN	21 5/4	
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI	/	

MUD RECORD			
TIME	12:30	4:00	7:00
WEIGHT	8.8	8.7	8.7
PRESSURE GRADIENT			
VISC.-SEC.	34	37	38
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		
WATER	2½	C.P.M.	
DVG8	1 GAL.		

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
764	780	16			75	½	900	5½	50	5½	50	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼		Rig Serv & BOPs
12 15	700	7 3/4		Drilling 12¼

DRILLER R D Brouwer

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
1	D.C. ID 8" OD	31.48	FT.
	STB RMR OD		FT.
14	D.C. ID 6½ OD	438.84	FT.
	STB RMR OD		FT.
3	STANDS DP	344.43	FT.
1	SINGLES DP		FT.
	KELLY DOWN	22.65	FT.
	TOTAL	784	FT.
WT. OF STRING		52000	LBS.

BIT RECORD		
BIT NO.	RR2A	#1
SIZE	12¼	12¼
MFG.	Reed	Reed
TYPE	S21GJ	S21GJ
JET 1/32"	16 16 16	14 14 14
SER. NO.	890272	717984
DEPTH OUT	790	
DEPTH IN	700	790
TOTAL FTG.	90	4
TOTAL HRS. RUN	24 ¼	2 ¼
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI	DESILTER DISCHARGE REJECTS 13.3 lbs @ 9 gallons/min	

MUD RECORD		
TIME	9.00	330
WEIGHT	8.8	8.9
PRESSURE GRADIENT		
VISC.-SEC.	34	38
PV/YP	/	/
GELS.	/	/
WL -CC'S.		
pH	9.5	9.5
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL		1000	LBS
DV68		1	GAL
water			

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
780	794	14			75	¼	750	5½	50	5½	50	
					75	2	1050	"	50	"	50	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
790	¾							

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	11 00	3		Drilling 12¼ Hole
10 00	11 30	½		Survey
11 30	12 15	¾		Hoist for Bit
12 15	12 30	¼		Rig Serv & B.O.P.S
12 30	1 45	1 ¼		Run in with Bit
1 45	4 00	2 ¼		Drilling

DRILLER Leroi Laforce

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR OD		FT.
1	D.C. ID 8 OD	31.48	FT.
	STB RMR OD		FT.
14	D.C. ID 6½ OD	438.84	FT.
	STB RMR OD		FT.
3	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	41.52	FT.
	TOTAL	822	FT.
WT. OF STRING		52000	LBS.

BIT RECORD	
BIT NO.	1
SIZE	12¼
MFG.	Reed
TYPE	S21GJ
JETS 1/32"	14 14 14
SER. NO.	717984
DEPTH OUT	822
DEPTH IN	790
TOTAL FTG.	32
TOTAL HRS. RUN	10
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD		
TIME	6 00	11 00
WEIGHT	8.7	8.9
PRESSURE GRADIENT		
VISC.-SEC.	37	38
PV/YP	/	/
GELS.	/	/
WL -CC'S.		
pH		9.5
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
water			

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P COMP.-C
794	822	28			75	4	1050	5½	50	5½	50	P

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	¼		Rig Servic & B.O.P.s
4 15	12 00	7¾		Drilling

DRILLER Murray Jacson

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FNX Et al La Biche		C-30-NTS-95-C	Nov 11-75

OPERATOR	CONTRACTOR	RIG NO.
Ft Norman Oil Gas Inc.	BRINKERHOFF DRILLING CANADA LTD.	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: W Pannuck

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E		4½ FH	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	200	14
2	Emsco	300	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	13 3/8			19	702		700

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	1½	6¾	7¼
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG		¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. [illegible]	2		
[illegible]	1		
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID	4" OD	31.48 FT.
	STB RMR	OD	FT.
14	D.C. ID	6¾ OD	438.84 FT.
	STB RMR	OD	FT.
2	STANDS DP		186.62 FT.
2	SINGLES DP		62.13 FT.
	KELLY DOWN		FT.
	TOTAL		10-01 FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	RR.
SIZE	12¼
MFG.	REED
TYPE	S21GJ
JETS 1/32"	16 16 16
SER. NO.	820772
DEPTH OUT	
DEPTH IN	700
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/ /

MUD RECORD

TIME	Cook		
WEIGHT		Diesel	
PRESSURE GRADIENT			Water
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID	8" OD	31.48 FT.
	STB RMR	OD	FT.
14	D.C. ID	6½ OD	438.84 FT.
	STB RMR	OD	FT.
9	STANDS DP		250.14 FT.
9	SINGLES DP		FT.
	KELLY DOWN		36.94 FT.
	TOTAL		724. FT.
WT. OF STRING			~1000 LBS.

BIT RECORD

BIT NO.	RR.
SIZE	12¼
MFG.	Reed
TYPE	S21GJ
JET 1/32"	16 16 16
SER. NO.	820772
DEPTH OUT	
DEPTH IN	700
TOTAL FTG.	24
TOTAL HRS. RUN	6¾
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/ /

MUD RECORD

TIME	2.30		
WEIGHT	8.5+		
PRESSURE GRADIENT			
VISC.–SEC.	29		
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC		100	LBS
BICARB		300	LBS
GEL		3100	LBS
DV-68		3	GALS

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID	8 OD	31.48 FT.
	STB RMR	OD	FT.
14	D.C. ID	6½ OD	438.84 FT.
	STB RMR	OD	FT.
3	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		14.50 FT.
	TOTAL		764 FT.
WT. OF STRING			53000 LBS.

BIT RECORD

BIT NO.	1
SIZE	12¼
MFG.	REED
TYPE	S21GS
JETS 1/32"	16 16 16
SER. NO.	RR #2A
DEPTH OUT	
DEPTH IN	700
TOTAL FTG.	64
TOTAL HRS. RUN	14
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/ /

MUD RECORD

TIME	4:15	8:00	11.00
WEIGHT	8.5	8.6	8.6+
PRESSURE GRADIENT			
VISC.–SEC.	31	36	35
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	17 SX		
BICARB	2 SX		
DV 68	1½ GAL		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR'L.–P COM'D.–C
700	714	14			64	4/3	300	5½	50	5½	50	
									61			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Ser. & B.O.P.S
8:15	10:30	2¼		Drilling
10:30	11:30	1		Wiper Trip to Shoe - Fill hole & Trip
11:30	4:00	4½		Drilling 12¼ hole with water.

DRILLER: Leno Lefebvre

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR'L.–P COM'D.–C
714	764	40			75	6/11	800	5½	50	5½	50	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
728	½		759	½				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		RR Screws & B.O.P.
4:15	5:30	1¼		Drilling
5:30	5:45	¼		Survey
5:45	10:00	4¼		Drilling
10:00	10:15	¼		Survey
10:15	12:00	1¾		Drilling

DRILLER: [illegible]

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

Fuel 8-12 30 6 ft. 5 in.

LEASE	WELL NO.	API WELL NUMBER	DATE
FNX Beal In Ricke		C-30-NTS-45-C	Mar. 10-75

OPERATOR	CONTRACTOR	RIG NO.
Ft Norman Oil Co Ltd.	BRINKERHOFF DRILLING CANADA LTD.	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	300	14
2	Emsco	300	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.		8	
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS			8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI. S PAPET-P COMP'G-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12				W.O.C.
	3			Nipplening up.

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JET 1/32"		PV/YP	/	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI. S PAPET-P COMP'G-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8	4			Nipplening up

DRILLER Dennis Lafore

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
	BIT	FT.	BIT NO.		TIME		
			SIZE		WEIGHT		
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT		
	D.C. ID OD	FT.	TYPE		VISC.-SEC.		
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/	/
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.		
			DEPTH IN		pH		
			TOTAL FTG.		SOLIDS %		
			TOTAL HRS. RUN				
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED		
	SINGLES DP	FT.	GPM/ PD-PSI	/	TYPE	AMT.	TYPE AMT.
	KELLY DOWN	FT.					
	TOTAL	FT.					
WT. OF STRING		LBS.					

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI. S PAPET-P COMP'G-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4				Nipple up
				Install degasser and drilled
5:30				Light Dy, Lost circ.

DRILLER Irving Larsen

FORM 375 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
F.N.X Clat In Bike		C-30 NTS-95-C	Mar. 9/75

OPERATOR	CONTRACTOR	RIG NO.
Ford Mowman Oil Co.	BRINKERHOFF DRILLING CANADA LTD.	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	300	14
2	Emsco	300	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. T.J. CSG. HD.	SET AT

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE	¼		
6. TRIPS	¼		
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT	4¾		
13. WAIT ON CEMENT		7¾	
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. Pump Down Plug	¼		
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES DP			FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES DP			FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES DP			FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.EL–P COM.D–C
Ran 19 jts (702.54) 2 7/8" N-80 EUE J-55 8rd tbg. Tagged												
Cemented csg with 425 sacks neat Oilwell cement plus 2% CaCl2												
Plug Down at 8:15 a.m. Mar. 9/75. Rig released at noon.												

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	2 30	2½		Run 13 3/8" Csg.
2 30	5 45	3¼		Rig to Circ & Cond.
				& Rig up Hallco.
5 45	8 00	2¼		Cementing

DRILLER

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.EL–P COM.D–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		Pump Down Plug
8 15	4 00	7¾		W.O.C. Clean Mud Tanks

DRILLER Louis Lafond

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.EL–P COM.D–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00				W.O.C.
		8		
	12 00			

DRILLER

Form 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fenn Conrad Imperial		C-30-NT3-45-C	March 8-74

OPERATOR	CONTRACTOR	RIG NO.
Hudson's Bay Oil & Gas Co.	BRINKERHOFF DRILLING CANADA LTD.	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
	M Tarasiuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	300	14
2	Emsco	300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING	1/4	4 1/4	
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		2 1/2	
7. LUBRICATE RIG	1/4	1/4	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. Clean pump screen		1/2	
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
1	D.C. ID 8 OD	31.48	FT.
	STB RMR OD		FT.
15	D.C. ID 6 1/2 OD	472.07	FT.
	STB RMR OD		FT.
1	X O	1.55	
1	Reamer	5.50	
2	STANDS DP	188	FT.
	SINGLES DP		FT.
	KELLY DOWN	11	FT.
	TOTAL	675	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	2B
SIZE	12 1/4
MFG.	Reed
TYPE	Reamer
JETS 1/32"	18 18 18
SER. NO.	
DEPTH OUT	
DEPTH IN	455
TOTAL FTG.	220
TOTAL HRS. RUN	4 1/4
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	12:30	3:45	7:00
WEIGHT	9.9	9.8	9.9
PRESSURE GRADIENT			
VISC.-SEC.	47	45	45
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH.-S PART'L-P COM'PLE
640	675	35			64	3/4	550	5 1/2	62	5 1/2	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 00	24		Rig Serv.
12 00	7 00	7 3/4		Reaming.

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
1	D.C. ID 8 OD	31.48	FT.
	STB RMR OD		FT.
15	D.C. ID 6 1/2 OD	432.07	FT.
	STB RMR OD		FT.
1	X-O	1.55	
1	Reamer	5.50	
2	STANDS DP	188.	FT.
	SINGLES DP		FT.
	KELLY DOWN	49.50	FT.
	TOTAL	700.	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	2B	3B
SIZE	12 1/4	12 1/4
MFG.	Reed	Reed
TYPE	Reamer	Reamer
JET 1/32"	18 18 18	16 16 16
SER. NO.	10408	10582
DEPTH OUT	690.	
DEPTH IN	455	690
TOTAL FTG.	235.	10.
TOTAL HRS. RUN	30	2 1/2
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI		

MUD RECORD

TIME	9.00	1 30
WEIGHT	9.9	9.9+
PRESSURE GRADIENT		
VISC.-SEC.	40	44
PV/YP	/	/
GELS.	/	/
WL -CC'S.		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH.-S PART'L-P COM'PLE
675	700.	25			63	7/16	700	5 1/2	61	5 1/2	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	10 15	2 1/4		Reaming
10 15	10 30	1/4		Rig Ser.
10 30	11 30	1		Reaming trips + S.L.M.
11 30	12 30	1		Pull up Reamer + Changed Reamer
12 30	1 00	1/2		Run in Reamer
1 00	1 30	1/2		Reaming
1 30	2 00	1/2		Clean Pump screen
2 00	4 00	2		Reaming

DRILLER Ronald Lefrancois

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	3B
SIZE	17 1/2
MFG.	Reed
TYPE	Reamer
JETS 1/32"	16 16 16
SER. NO.	10582
DEPTH OUT	700
DEPTH IN	690
TOTAL FTG.	10
TOTAL HRS. RUN	2 1/2
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	4 20
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	47
PV/YP	/
GELS.	/
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH.-S PART'L-P COM'PLE
	700											

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
700	3/4							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	1/4		Rig Service
4 15	5 00	3/4		Circ - Cond hole f/ Csg
5 00	5 15	1/4		Survey
5 15	6 30	1 1/4		Hoist f/ Csg
6 30	8 30	2		Rig to run Csg
8 30	12 00	3 1/2		Run 13 3/8 Csg Protectors tight - rusty

Drill Survey 1220

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Fox Fed Ft Liard		C-30 NTS 95C	MAR 7/75
OPERATOR		CONTRACTOR	RIG NO.
Ft Norman Oil Corp.		BRINKERHOFF DRILLING CANADA LTD.	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
[illegible]		Maureen Fanssiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	Emsco	D 300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.
SIZE — NO. LINES — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING	6¼	7¾	12
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS	1½		
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	4

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
Driller	8	8	8
Camp	8	8	8
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID 8	OD	31.48 FT.
	STB RMR	OD	FT.
15	D.C. ID 6½	OD	431.07 FT.
	STB RMR	OD	FT.
1	XO		1.55
1	Reamer		5.50
	STANDS DP		FT.
1	SINGLES DP		31.40 FT.
	KELLY DOWN		17.00 FT.
	TOTAL		590.45 FT.
WT. OF STRING			LBS.

BIT RECORD			
BIT NO.	1B	2B	
SIZE	17½	17½	
MFG.	Reed	Reed	
TYPE	Reamer	Reamer	
JETS 1/32"	18 18 18	18 18 18	
SER. NO.	10584	—	
DEPTH OUT	455		
DEPTH IN	0	455	
TOTAL FTG.	455	45	
TOTAL HRS. RUN	37	4½	
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	

MUD RECORD			
TIME	12:30	KND	7:00
WEIGHT	9.7	9.7	9.5
PRESSURE GRADIENT			
VISC.-SEC.	46	40	41
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID 8	OD	31.48 FT.
	STB RMR	OD	FT.
15	D.C. ID 6½	OD	432.07 FT.
	STB RMR	OD	FT.
1	XO		1.55
1	Reamer		5.50
1	STANDS DP		93.41 FT.
	SINGLES DP		FT.
	KELLY DOWN		25.99 FT.
	TOTAL		590. FT.
WT. OF STRING			52 000 LBS.

BIT RECORD			
BIT NO.	2B		
SIZE	17½		
MFG.	Reed		
TYPE	Reamer		
JET 1/32"	18 18 18		
SER. NO.			
DEPTH OUT			
DEPTH IN	455		
TOTAL FTG.	135		
TOTAL HRS. RUN	12¼		
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	

MUD RECORD			
TIME	9:00	12:00	3:30
WEIGHT	9.8	9.8	9.7
PRESSURE GRADIENT			
VISC.-SEC.	45	44	47
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

NO.	DRILLING ASSEMBLY (At end of tour)		FT.
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID 8	OD	31.48 FT.
	STB RMR	OD	FT.
15	D.C. ID 6½	OD	432.07 FT.
	STB RMR	OD	FT.
1	XO		1.55
1	Reamer		5.50
1	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN		13.50 FT.
	TOTAL		640 FT.
WT. OF STRING			55 000 LBS.

BIT RECORD			
BIT NO.	2B		
SIZE	17½		
MFG.	Reed		
TYPE	Reamer		
JETS 1/32"	18 18 18		
SER. NO.			
DEPTH OUT			
DEPTH IN	455		
TOTAL FTG.	185		
TOTAL HRS. RUN	20		
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	

MUD RECORD			
TIME	5:00	6:00	11:00
WEIGHT	9.9	10.0	9.8
PRESSURE GRADIENT			
VISC.-SEC.	48	48	46
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI. PARTIAL COM. D.C.
445	520	75			60	7/4	550	5½	54	5½	54	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼		Rig Serv.
12 15	2 00	1¾		Reaming
2 00	3 30	1½		Trip with new Reamer
3 30	7 30	4½		Reaming

DRILLER Robert Beaumont

DAY TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCI. PARTIAL COM. D.C.
520	590	70			63	2	500	5½	61	5½	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	10 15	2¼		Reaming
10 15	10 30	¼		Rig Ser
10 30	4 00	5½		Reaming

DRILLER Remi Laforce

EVENING TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI. PARTIAL COM. D.C.
590	640	50			75	2/6	550	5½	62	5½	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	¼		Rig Service
4 15	12 00	7¾		Reaming

DRILLER Murray Lawson

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FAX Ind Sa Pit L		C-30 NTS 95-C	Nov 6/75
OPERATOR		CONTRACTOR	RIG NO.
H Norman Eng Inc		BRINKERHOFF DRILLING CANADA LTD.	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
		M Panasiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	"	"	"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING	7¼	7¼	7¼
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
COMPLETION B. TBG TRIPS			
COMPLETION C. TREATING			
COMPLETION D. SWABBING			
COMPLETION E. TESTING			
COMPLETION F. ADDIT'N'L			
COMPLETION G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
	8	8	8
	8	8	8
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID 8	OD	31.41 FT.
	STB RMR	OD	FT.
7	D.C. ID 6¼	OD	202.26 FT.
	STB RMR	OD	FT.
1	x o		1.55
1	Reamer		5.30
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		34.00 FT.
	TOTAL		275' FT.
WT. OF STRING	42000		LBS.

BIT RECORD

BIT NO.	1B
SIZE	17½
MFG.	Reed
TYPE	Reamer
JETS 1/32"	18 18 18
SER. NO.	10584
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	275
TOTAL HRS. RUN	19½
COND. 1/8's T/B/ GAGE	/
GPM/ PD-PSI	

MUD RECORD

TIME	12.30	3.00	6.00
WEIGHT	9.7	9.4	9.4
PRESSURE GRADIENT			
VISC.-SEC.	47	42	40
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB-RMR	OD	FT.
1	D.C. ID 8	OD	31.48 FT.
	STB RMR	OD	FT.
9	D.C. ID 6½	OD	259.97 FT.
	STB RMR	OD	FT.
X	X O		1.55
1	Reamer		5.50
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		41.50 FT.
	TOTAL		340.00 FT.
WT. OF STRING	44		LBS.

BIT RECORD

BIT NO.	1 B
SIZE	17½
MFG.	Reed
TYPE	Reamer
JET 1/32"	14 18 18
SER. NO.	10584
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	340.
TOTAL HRS. RUN	27½
COND. 1/8's T/B/ GAGE	/
GPM/ PD-PSI	

MUD RECORD

TIME	9.00	1:00	3:00
WEIGHT	9.5	9.4	9.5
PRESSURE GRADIENT			
VISC.-SEC.	42	40	39
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID 8	OD	31.48 FT.
	STB RMR	OD	FT.
13	D.C. ID 6½	OD	371.70 FT.
	STB RMR	OD	FT.
1	X O		1.55
1	Reamer		5.30
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		34.77 FT.
	TOTAL		445.00 FT.
WT. OF STRING	52		LBS.

BIT RECORD

BIT NO.	1 B
SIZE	17½
MFG.	Reed
TYPE	Reamer
JETS 1/32"	18 18 18
SER. NO.	10584
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	445.
TOTAL HRS. RUN	35¼
COND. 1/8's T/B/ GAGE	/
GPM/ PD-PSI	

MUD RECORD

TIME	5.00	8.00	11.00
WEIGHT	9.6	9.6	9.7
PRESSURE GRADIENT			
VISC.-SEC.	40	41	43
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
HYDROGEL	100		LBS

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR.D (RE-D) CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR'L-P COM'L-C
210	275	65			75	3/6	550	5½	60	5½	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12.00	12.15	¼		Rig Service
12.15	8.00			Drilling Reaming to 11"

DRILLER Doug Larson

FOOTAGE / FORMATION

FROM	TO	DR.D (RE-D) CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR'L-P COM'L-C
275	340	65			75	3/6	550	5½	60	5½	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8.00	9.45	1¾		~~Drilling~~ Reaming
9.45	10.00	¼		Rig Serv.
10.00	4.00	6		~~Drilling~~ Reaming

DRILLER Andy Brennan

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.D (RE-D) CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR'L-P COM'L-C
340	445.	105			63	2	700	5½	62	5½	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4.00	4.15	¼		Rig Ser
4.15	12.00	7¾		Reaming

DRILLER Remi Lafond

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
ENT et al La Biche		C-30 NTS 95-C	2/Jan 5/75

OPERATOR: Ft Norman Exp Inc

CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7¼	6	
3. REAMING			7
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		10	
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	½		
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK [illegible] Reams Ream			¾
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID 8	OD 31.48	FT.
	STB RMR	OD	FT.
15	D.C. ID 6¼	OD 472.07	FT.
	STB RMR	OD	FT.
1	X O	1.50	
2	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	41.50	FT.
	TOTAL	694	FT.
WT. OF STRING	58000		LBS.

BIT RECORD

BIT NO.	2A
SIZE	12¼
MFG.	Reed
TYPE	S21GJ
JETS 1/32"	16 16 16
SER. NO.	520072
DEPTH OUT	
DEPTH IN	464
TOTAL FTG.	230
TOTAL HRS. RUN	33½
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD

TIME	12	3.00	6.30
WEIGHT		9.8	9.8
PRESSURE GRADIENT			
VISC.–SEC.	50	46	50
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	Reamer	5.50	
	STB RMR	OD	FT.
1	D.C. ID 8	OD 31.48	FT.
	STB RMR	OD	FT.
15	D.C. ID 6¼	OD 143.14	FT.
	STB RMR	OD	FT.
1	X O	1.55	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	41.50	FT.
	TOTAL	108.16	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	2A	1S
SIZE	12¼	17½
MFG.	Reed	
TYPE	S21GJ	REAMER
JET 1/32"	16 16 16	12 12 12
SER. NO.	820272	
DEPTH OUT	700	
DEPTH IN	464	0
TOTAL FTG.	236	108
TOTAL HRS. RUN	33	5
COND. 1/8's T/B/ GAGE	2 2 1	
GPM/ PD–PSI	/	/

MUD RECORD

TIME	8:30	1:00	3:00
WEIGHT	9.8	9.5	9.5
PRESSURE GRADIENT			
VISC.–SEC.	47	49	41
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	Reamer	5.50	
	STB RMR	OD	FT.
1	D.C. ID 8	OD 31.48	FT.
	STB RMR	OD	FT.
5	D.C. ID 6¼	OD 143.14	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	28.33	FT.
	TOTAL	210.00	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1B
SIZE	17½
MFG.	REED
TYPE	RHINEGEL
JETS 1/32"	18 18 18
SER. NO.	
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	102
TOTAL HRS. RUN	0
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD

TIME	6.30	9.30	11.30
WEIGHT	9.5	9.4	9.5
PRESSURE GRADIENT			
VISC.–SEC.	35	45	49
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			8.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
HYDROGEL	1800	LBS	

MORNING TOUR

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
640	694				180	2	1000	5½	56	5½	56	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
662	1¼		694	¾				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12[illegible]	12[illegible]	¼		Rig Service
12[illegible]	2[illegible]	2½		Drilling
2[illegible]	3[illegible]	½		Surveys
3[illegible]	7[illegible]	4¼		Drilling
7[illegible]	730	½		Surveys
730	800	½		Drilling

DRILLER [illegible]

EVENING TOUR

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN
694	700	6			180	2	1000	5½	56	5½	56	
0	108	108	Reamer				600	5½	62	5½	62	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2[illegible]	3[illegible]	1		Dir Work
3[illegible]	4[illegible]	¼		Rig Serv.
9[illegible]	10[illegible]	1		Hoist + Strap out.
10[illegible]	11	¼		Pick up Reamer & Kelly to Clean.
11	4	5		Reaming

DRILLER E. J. Bremner

EVENING TOUR

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
108	210.	102			63	7	550	5½	60	5½	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4[illegible]	4[illegible]	¼		Rig Serv
4[illegible]	6[illegible]	2		Reaming
6[illegible]	7[illegible]	¾		Prime No 1 & 2 Pumps & Clean Suction and Screen
7[illegible]	12[illegible]	5		Reaming

DRILLER [illegible]

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

Fuel for (1) 15'6" (84824.5)

LEASE	WELL NO.	API WELL NUMBER	DATE
GNX et al La Biche		C-30 NTS 95-C	Nov 4/75
OPERATOR		**CONTRACTOR**	**RIG NO.**
Fl Woodward's Gas Ltd.		BRINKERHOFF DRILLING CANADA LTD.	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
		Morrison Paranich	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D300	14
2	"	"	"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD REEL NO.

SIZE	NO. LINES	FT. SLIPPED
FT. CUT OFF		PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT		
CUMULATIVE TON MI. OR TRIPS		

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	7½	7¼	6¾
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	¼	½	1
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	2A
			SIZE	12¼
	STB RMR OD	FT.	MFG.	Reed
1	D.C. ID 8 OD	31.48 FT.	TYPE	S21GJ
	STB RMR OD	FT.	JETS 1. 32"	16/16/16
15	D.C. ID 6½ OD	432.07 FT.	SER. NO.	820272
	STB RMR OD	FT.	DEPTH OUT	
1	X O	1.50	DEPTH IN	464
			TOTAL FTG.	69
			TOTAL HRS. RUN	10¾
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE	
1	SINGLES DP	FT.	GPM/ PD-PSI	/
	KELLY DOWN	37.50 FT.		
	TOTAL	533 FT.		
WT. OF STRING	55 000 LBS.			

MUD RECORD				
TIME	3:00			6:30
WEIGHT	9.9			10.0
PRESSURE GRADIENT				
VISC.-SEC.	45			52
PV/YP	/	/	/	/
GELS.	/	/	/	/
WL -CC'S.				
pH				
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	2A
			SIZE	12¼
	STB RMR 8 OD		MFG.	Reed
1	D.C. ID 8 OD	31.48 FT.	TYPE	S21GJ
	STB RMR 6½ OD		JET 1/32"	3-16's
15	D.C. ID 6½ OD	432.07 FT.	SER. NO.	820272
	STB RMR OD	FT.	DEPTH OUT	Running
1	X O	1.50	DEPTH IN	464
			TOTAL FTG.	116
			TOTAL HRS. RUN	18
1	STANDS DP	104.41 FT.	COND. 1/8's T/B/ GAGE	
	SINGLES DP	FT.	GPM/ PD-PSI	/
	KELLY DOWN	10 FT.		
	TOTAL	579.46 FT.		
WT. OF STRING	55 LBS.			

MUD RECORD				
TIME	7:30	11:45		
WEIGHT	10.0	7.8		
PRESSURE GRADIENT				
VISC.-SEC.	49	50		
PV/YP	/	/	/	
GELS.	/	/	/	
WL -CC'S.				
pH				
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	2A
			SIZE	12¼
	STB RMR OD	FT.	MFG.	Reed
1	D.C. ID 8 OD	31.48 FT.	TYPE	S21GJ
	STB RMR OD	FT.	JETS 1/32"	16/16/16
15	D.C. ID 6½ OD	432.07 FT.	SER. NO.	820272
	STB RMR OD	FT.	DEPTH OUT	
1	X O	1.50	DEPTH IN	464
			TOTAL FTG.	176
			TOTAL HRS. RUN	24¾
1	STANDS DP	156.15 FT.	COND. 1/8's T/B/ GAGE	
2	SINGLES DP	FT.	GPM/ PD-PSI	/
	KELLY DOWN	18.80 FT.		
	TOTAL	640.00 FT.		
WT. OF STRING	56000 LBS.			

MUD RECORD				
TIME	6:00	9:30	11:30	
WEIGHT	9.7	9.7	9.8	
PRESSURE GRADIENT				
VISC.-SEC.	45	45	42	
PV/YP	/	/	/	
GELS.	/	/	/	
WL -CC'S.				
pH				
SOLIDS %				
MUD & CHEMICALS ADDED				
TYPE	AMT.	TYPE	AMT.	
HYDROGEL		1500	LBS.	

DAY TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
490	533	44			180	2	1100/400	5½	61	5	60	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	506	1¾							

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		Rig Service
12:15	2:30	2¼		Drilling
2:30	2:45	¼		Survey
2:45	8:00	5¼		Drilling

DRILLER Ray Lessard

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
533	580	47			190/120	2	1100	5½	61	5	60	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	537	1¾		569	1¾				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8	8	¼		Rig Service
8:15	8:30	¼		Survey
8:30	2:00	5½		Drilling
2:00	2:15	¼		Survey
2:15	4:00	1¾		Drilling

DRILLER R. Plemmons

EVENING TOUR

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
580	640	60			180	2000	1200	5½	60	5½	60	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	599	1½°		631	1½°				

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	6:30	2½		Drilling 12¼ Hole
6:30	6:45	¼		Rig Ser.
6:45	7:15	½		Survey
7:15	10:30	3¼		Drilling
10:30	11:00	½		Survey
11:00	12:00	1		Drilling

DRILLER Ronnie Lafrance

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

Jul 0 7th 4

LEASE	WELL NO.	API WELL NUMBER	DATE
JNX et al S. Pool		C-30 NTS 95-C	7 Apr 7/75
OPERATOR		CONTRACTOR	RIG NO.
Ft Norman Gas Inc.		BRINKERHOFF DRILLING CANADA LTD.	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
		Wm Parsons	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 300	14
2	"	"	"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	5½	7	6¼
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			1
7.	LUBRICATE RIG	¼	¼	¼
8.	REPAIR RIG	2		
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY	¼	¾	½
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID 8	OD	31.48 FT.
	STB RMR	OD	FT.
11	D.C. ID 6¼	OD	316.25 FT.
	STB RMR	OD	FT.
1	X0		1.50
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		41.50 FT.
	TOTAL		389 FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1A
SIZE	12¼
MFG.	Reed
TYPE	S13GJ
JETS 1/32"	16 16 16
SER. NO.	218925
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	389
TOTAL HRS. RUN	26¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	12:30	5:00
WEIGHT		9.6
PRESSURE GRADIENT		
VISC.-SEC.	41	41
PV/YP	/	/ /
GELS.	/	/ /
WL -CC'S.		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-PARTL-P COMPL-C
350	389	39			180	7/2	1100	5½	64	5	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
361	1 5/8							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12¹⁵	¼		Rig Service
12¹⁵	1⁴⁵	1½		Drilling
1⁴⁵	3⁴⁵	2		Change wash pipe + packing
3⁴⁵	4⁰⁰	¼		Survey
4⁰⁰	8⁰⁰	4		Drilling

DRILLER Jerry Larson

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID 8	OD	31.48 FT.
	STB RMR	OD	FT.
14	D.C. ID 6½	OD	476.40 FT.
	STB RMR	OD	FT.
1	X0		1.50
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		41.50 FT.
	TOTAL		446.18 FT.
WT. OF STRING	50		LBS.

BIT RECORD

BIT NO.	1A	
SIZE	12¼	
MFG.	Reed	
TYPE	3/16⁵	
JET 1/32"		
SER. NO.	218925	
DEPTH OUT	Running	
DEPTH IN	0	
TOTAL FTG.	446	
TOTAL HRS. RUN	33¼	
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI		

MUD RECORD

TIME	7:00	12:30
WEIGHT	9.6	9.6
PRESSURE GRADIENT		
VISC.-SEC.	42	40
PV/YP	/	/ /
GELS.	/	/ /
WL -CC'S.		
pH		
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.D RM.R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SGL-PARTL-P COMPL-C
389	446	57			140	7/2	1100	5½	61	5	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
389	1¼		417	1¼		446	1¼	

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	8¹⁵	¼		Rig Serv. + Kelly Cock.
8¹⁵	8³⁰	¼		Survey.
8³⁰	12⁰⁰	3½		Drilling
12⁰⁰	12¹⁵	¼		Survey
12¹⁵	3³⁰	3¼		Drilling
3³⁰	3⁴⁵	¼		SURVEY
3⁴⁵	4⁰⁰	¼		Drilling

DRILLER R. D. Stevenson

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
1	D.C. ID 8"	OD	31.48 FT.
	STB RMR	OD	FT.
15	D.C. ID 6¼	OD	432.07 FT.
	STB RMR	OD	FT.
1	X-0		1.50
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		24.95 FT.
	TOTAL		490.00 FT.
WT. OF STRING	45000		LBS.

BIT RECORD

BIT NO.	1A	2A
SIZE	12¼	12¼
MFG.	Reed	Reed
TYPE	S13GJ	S21GJ
JETS 1/32"	16 16 16	16 16 16
SER. NO.	218925	820272
DEPTH OUT	464	
DEPTH IN	0	464
TOTAL FTG.	464	26
TOTAL HRS. RUN	36	3¼
COND. 1/8's T/B/ GAGE		
GPM/ PD-PSI		

MUD RECORD

TIME			11:15
WEIGHT	9.6		9.7
PRESSURE GRADIENT			
VISC.-SEC.	47		43
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

Running casing

FOOTAGE

FROM	TO	DR.D RM.R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-PARTL-P COMPL-C
446	490	44			180	2000	1000	5½	61	5	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
476	1¾°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	6⁴⁵	2¾		DRLG
6⁴⁵	7⁴⁵	1		Hoist for bit ~~& Bha~~ & ran in
7⁴⁵	8⁰⁰	¼		Rig Ser
8⁰⁰	9³⁰	1½		Drilling
9³⁰	10⁰⁰	½		Survey
10⁰⁰	12⁰⁰	2		DRLG 12¼ hole

DRILLER Remi Laforce

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

Fwd @ 7 AM 2'2"

LEASE	WELL NO.	API WELL NUMBER	DATE
FNX et al Ft. Liard		C-30 NTS 75-C	Mar 2/75

OPERATOR: Ft Norman Exp Inc

CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Ron Panosiuk

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER					KB 1730'		

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 700	14
2	"	"	"

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	6¼	7	6½
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG	¼	¼	¼
8.	~~REPAIR RIG~~ Rig Service		¼	
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY	1½	1½	1¼
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
1	D.C. ID	8" OD	31.48 FT.
	STB RMR	OD	
5	D.C. ID	6¼" OD	142.84 FT.
	STB RMR	OD	
1	XO		1.50
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		41.10 FT.
	TOTAL		217.02 FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1A
SIZE	12¼
MFG.	Reed
TYPE	S13G
JETS 1/32"	16 16 16
SER. NO.	218925
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	217
TOTAL HRS. RUN	3¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	4:00	6:00	
WEIGHT		9.9	
PRESSURE GRADIENT			
VISC.-SEC.	41	48	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	10 sx		

FOOTAGE

FROM	TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PART'L-P COMP'L-C
50	217				90/100	10	1000	5½	65	5	60	P

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
74	⅛		102	¼	120 ¼	159 ⅛	186 ¼	217 ¼

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼		Rig Service
1215	1245	½		Drilling
1245	100	¼		Survey
100	215	1¼		Drilling
215	300	¼		Survey
300	440	1¾		Drilling
440	500	¼		Survey
500	540	¾		Drilling

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
1	D.C. ID	8" OD	31.48 FT.
	STB RMR	OD	
7	D.C. ID	6¾" OD	230.58 FT.
	STB RMR	OD	
1	XO		1.50
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		41.50 FT.
	TOTAL		276.76 FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1A
SIZE	12¼
MFG.	Reed
TYPE	S13G
JET 1/32"	16 16 16
SER. NO.	218925
DEPTH OUT	Rig Repair
DEPTH IN	0
TOTAL FTG.	276
TOTAL HRS. RUN	14¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	9:00	11:45	2145
WEIGHT	9.0	9.1	9.3
PRESSURE GRADIENT			
VISC.-SEC.	44	47	49
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PART'L-P COMP'L-C
217	276	59			74 / 160	10	1000	5½	66	5	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
245	1°		276	7/8°				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼		Rig Serv
815	1115	3		Drilling
1115	1130	¼		Survey
1130	315	3¾		Drilling
315	330	¼		Clean Pump & Clean
330	345	¼		Survey.
345	400	¼		Drilling

DRILLER Ed Hammond

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	
1	D.C. ID	8" OD	31.48 FT.
	STB RMR	OD	
10	D.C. ID	6¾" OD	267.06 FT.
	STB RMR	OD	
1	XO		1.50
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		29.60 FT.
	TOTAL		350.00 FT.
WT. OF STRING		470	LBS.

BIT RECORD

BIT NO.	1A
SIZE	12¼
MFG.	Reed
TYPE	S13G
JETS 1/32"	16 16 16
SER. NO.	218925
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	350
TOTAL HRS. RUN	20¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	530	830	1130
WEIGHT	9.5	9.6	9.1
PRESSURE GRADIENT			
VISC.-SEC.	48	47	42
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM-R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PART'L-P COMP'L-C
276	350	74			160 / 175	4/3000 3/4000	1000	5½	60	5	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
305	1 1/8°		334	1 1/8				

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	430	½		DRLG 12¼ HOLE
430	445	¼		Rig SER
445	515	½		SURVEY
515	930	4¼		DRLG
930	1015	¾		SURVEY
1015	1200	1¾		DRLG

DRILLER Pierre Lafrance

Form 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: Enx et al Lloyd — WELL NO.
API WELL NUMBER: C-30 NTS 95-C — DATE: 7 Apr 75
OPERATOR: JK Roman Exp Corp.
CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. — RIG NO. 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M Lassiuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 200	14
2	EMSCO	D 200	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.
SIZE — NO. LINES — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR-DOWN			4
2. DRILL ACTUAL			1
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			3
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	/
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.			
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR'FL-P COM'D-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1700				Rig up pumps - tanks -
	2400			

DRILLER: M Lassiuk

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	/
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR'FL-P COM'D-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
300				
	400			Rig up.

DRILLER: K D Rennard

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	1.00	FT.
1	STB RMR OD	8"	FT.
1	D.C. ID OD	8"	FT.
10	STB RMR OD	6"	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	1600	FT.
	TOTAL	50'	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1A
SIZE	12 1/4
MFG.	Reed
TYPE	513GJ
JETS 1/32"	16 16 16
SER. NO.	218925
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	50
TOTAL HRS. RUN	1
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME		11.30	
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.		38	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
HYDROGEL	1 1/2 00	LIGNOSULFONATE	1/2 S

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR'FL-P COM'D-C
0	50				70	1000	1000	5 1/2	65	5"	60	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	800	4		Rig up
800	1100	3		Mixing mud.
1100	1200	1		Drilling 12 1/4 Hole

DRILLER: Rennard

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
ENX et al Kiln		C-30 NTS 95-C	Feb 28/82
OPERATOR		**CONTRACTOR** BRINKERHOFF DRILLING CANADA LTD.	RIG NO. 2
Ft Norman Exp			
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER** M Parasiuk	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN		9	8
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS		8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1. 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	/
GELS.	/
WL –CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SURVEY PARFL-P COMPLC

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
0515	0600			Rig ups
				Work on boiler & Steam Lines

DRILLER Jerry Larose

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	/
GELS.	/
WL –CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SURVEY PARFL-P COMPLC

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Rig up Floor & Ford Eng.

DRILLER M Brennan

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.–SEC.	
PV/YP	/
GELS.	/
WL –CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SURVEY PARFL-P COMPLC

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Rig up Steam [redacted] & water Lines

DRILLER Lonnie Lafferty

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ft Norman & Pointed	K-20	K-20 NTS-95-C	Feb 27/78

OPERATOR	CONTRACTOR	RIG NO.
Ft Norman Gas Ltd	BRINKERHOFF DRILLING CANADA LTD.	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER — M Kanasuk

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES DP			FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES DP			FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
BIT			FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
D.C. ID	OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES DP			FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE: FROM / TO — DR..D RM..R CORE..C — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM — WT. ON BIT 1000# — PUMP PRESS — PUMP NO. LINER SIZE / S.P.M. — PUMP NO. LINER SIZE / S.P.M. — METHOD RUN SGL.-S PAR'L-P COM'D-C

DEVIATION RECORD: DEPTH / DEV. / DIRECTION (×3)

TIME LOG: FROM / TO — ELAPSED TIME — CODE NO. — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

FOOTAGE: FROM / TO — DR..D RM..R CORE..C — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM — WT. ON BIT 1000# — PUMP PRESS — PUMP NO. LINER SIZE / S.P.M. — PUMP NO. LINER SIZE / S.P.M. — METHOD RUN SGL.-S PAR'L-P COM'D-C

DEVIATION RECORD: DEPTH / DEV. / DIRECTION (×3)

TIME LOG: FROM / TO — ELAPSED TIME — CODE NO. — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

Move from CPOG Loc 3 miles.
Rig up. & Spud K.B.

DRILLER R Brunner

EVENING TOUR

FOOTAGE: FROM / TO — DR..D RM..R CORE..C — CORE NO. — FORMATION (SHOW CORE RECOVERY) — ROTARY RPM — WT. ON BIT 1000# — PUMP PRESS — PUMP NO. LINER SIZE / S.P.M. — PUMP NO. LINER SIZE / S.P.M. — METHOD RUN SGL.-S PAR'L-P COM'D-C

DEVIATION RECORD: DEPTH / DEV. / DIRECTION (×3)

TIME LOG: FROM / TO — ELAPSED TIME — CODE NO. — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

Rig up Prepare & erect Buildings

DRILLER Ronnie Laferte

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ft Norman Slot Pokaiche	K-20	K-20 IVTS-95-C	Feb 26/75

OPERATOR: Ft Norman Exp Ltd

CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIP'S			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.

BIT		FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
STANDS DP		FT.
SINGLES DP		FT.
KELLY DOWN		FT.
TOTAL		FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8" T/B/ GAGE			
GPM/ PD–PSI	/	/	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH–S PUMP–P CORE–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.

BIT		FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
STANDS DP		FT.
SINGLES DP		FT.
KELLY DOWN		FT.
TOTAL		FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8" T/B/ GAGE			
GPM/ PD–PSI	/	/	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH–S PUMP–P CORE–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Move Rig from C POG.
				3 Drills & Rig up.

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.

BIT		FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
STANDS DP		FT.
SINGLES DP		FT.
KELLY DOWN		FT.
TOTAL		FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8" T/B/ GAGE			
GPM/ PD–PSI	/	/	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM–R CORE–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCH–S PUMP–P CORE–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Rig up sub & Pwr Unit.
				Set up Dog House & Mud Tanks

DRILLER Tom Lafoe

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ft Norman et al Facilities	K-20	K-20 NTS-95-C	Feb 25/75

OPERATOR: Ft Norman Exp Unit

CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Maurice Lasaine

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14
2	Emsco	D-300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C.	ID OD	FT.
	STB RMR	OD	FT.
	D.C.	ID OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.FL.–P COMP.D.C.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C.	ID OD	FT.
	STB RMR	OD	FT.
	D.C.	ID OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.FL.–P COMP.D.C.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				MOVE RIG FROM C POG LOCATION
				3 Miles & Rigging up
				Matting and assemble Derrick

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C.	ID OD	FT.
	STB RMR	OD	FT.
	D.C.	ID OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.FL.–P COMP.D.C.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Rig up Derrick spot Matting

DRILLER Norm Fehrer

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER		DATE
Chevron et al Pobitt-Lo K-20	K-20	NTS -95-C	206	24/15
OPERATOR		CONTRACTOR		RIG NO.
H Norman Exp. Inc.		BRINKERHOFF DRILLING CANADA LTD.		2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		
		M Kanasuk		

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D300	14
2	Emsco	D300	14

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD				
	BIT	FT.	BIT NO.		TIME				
			SIZE		WEIGHT				
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT				
	D.C. ID OD	FT.	TYPE		VISC.–SEC.				
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/	/	/	
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/	/	
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S.				
			DEPTH IN		pH				
			TOTAL FTG.		SOLIDS %				
			TOTAL HRS. RUN						
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED				
	SINGLES DP	FT.	GPM/ PD–PSI	/	TYPE	AMT.	TYPE	AMT.	
	KELLY DOWN	FT.							
	TOTAL	FT.							
WT. OF STRING		LBS.							

FOOTAGE FROM	TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'L–P COM'D–C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD				
	BIT	FT.	BIT NO.		TIME				
			SIZE		WEIGHT				
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT				
	D.C. ID OD	FT.	TYPE		VISC.–SEC.				
	STB RMR OD	FT.	JET 1/32"		PV/YP	/	/	/	
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/	/	
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S.				
			DEPTH IN		pH				
			TOTAL FTG.		SOLIDS %				
			TOTAL HRS. RUN						
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED				
	SINGLES DP	FT.	GPM/ PD–PSI	/	TYPE	AMT.	TYPE	AMT.	
	KELLY DOWN	FT.							
	TOTAL	FT.							
WT. OF STRING		LBS.							

FOOTAGE FROM	TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'L–P COM'D–C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800				Move Rig and eqt from River at Painted Mtn. Haul to CPOG location 2 Miles from K-20
	1200			location

DRILLER

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD				
	BIT	FT.	BIT NO.		TIME				
			SIZE		WEIGHT				
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT				
	D.C. ID OD	FT.	TYPE		VISC.–SEC.				
	STB RMR OD	FT.	JETS 1/32"		PV/YP	/	/	/	
	D.C. ID OD	FT.	SER. NO.		GELS.	/	/	/	
	STB RMR OD	FT.	DEPTH OUT		WL –CC'S.				
			DEPTH IN		pH				
			TOTAL FTG.		SOLIDS %				
			TOTAL HRS. RUN						
	STANDS DP	FT.	COND. 1/8's T/B/ GAGE		MUD & CHEMICALS ADDED				
	SINGLES DP	FT.	GPM/ PD–PSI	/	TYPE	AMT.	TYPE	AMT.	
	KELLY DOWN	FT.							
	TOTAL	FT.							
WT. OF STRING		LBS.							

FOOTAGE FROM	TO	DR..D RM–R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL–S PAR'L–P COM'D–C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
H. Norman et al Tubitsko	K-20	K-20 NTS-95-C	Feb 23/75
OPERATOR		**CONTRACTOR**	**RIG NO.**
H. Norman Exp. Inc.		BRINKERHOFF DRILLING CANADA LTD.	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
		Gilbert Parasiuk	

LEGAL LAND DESCRIPTION

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1. 32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE	/		
GPM/ PD–PSI			

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.EL–P COM.D.C.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/8/ GAGE			
GPM/ PD–PSI	/		

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SGL.–S PAR.EL–P COM.D.C.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Move Rig from River at
				Pointed Mt. and haul to
				CPOG Portion 3 miles from
				K-20 location.

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/6/ GAGE			
GPM/ PD–PSI	/		

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.EL–P COM.D.C.

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: Shoreline Pilot — WELL NO.: 1-20
API WELL NUMBER: K-20 NTS-95-C — DATE: Feb 22/75
OPERATOR: H. Norman Exp Inc. — CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. — RIG NO.: 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Norm Lavasseur

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.
SIZE — NO. LINES — FT. SLIPPED
WT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	F. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1-32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV/YP	/	/	/	
GELS	/	/	/	
WL -CC'S.				
pH				
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'L.-P COM'D.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV/YP	/	/	/	
GELS	/	/	/	
WL -CC'S.				
pH				
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'L.-P COM'D.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Move Rig from isolated Loc.
				to CPOG location 3 Miles
				from K-20 location.

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME				
WEIGHT				
PRESSURE GRADIENT				
VISC.-SEC.				
PV/YP	/	/	/	
GELS	/	/	/	
WL -CC'S.				
pH				
SOLIDS %				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'L.-P COM'D.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT REPORT NO.

LEASE: Imperial Tobitchi | WELL NO.: K-20
OPERATOR: Norman Eaton Inc.
API WELL NUMBER: K-20 NTS-95-C | DATE: Feb 21/75
CONTRACTOR: BRINKERHOFF DRILLING CANADA LTD. | RIG NO.: 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Marion Fawsett

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E		4½ FH	

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D300	14
2	Emsco	D300	14

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD REEL NO.
SIZE | NO. LINES | FT. SLIPPED
FT. CUT OFF | PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.–P COM.–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Moveing Rig from Posted
				to C.P.G. location 3 miles
				from K-20 location.

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SGL.–S PAR.–P COM.–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Moveing Rig

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD–PSI			

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.–S PAR.–P COM.–C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.–A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Imperial Pubitabi	K-20	K-20 NTS-95-C F06 20/25	
OPERATOR		CONTRACTOR BRINKERHOFF DRILLING CANADA LTD.	RIG NO. 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRIL. LING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1 32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'L.-P COM'D.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Moving Rig

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SGL.-S PAR'L.-P COM'D.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Moving Rig - Work on Camp.

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES	DP	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'L.-P COM'D.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Mt. Horn Fat Lubitche	F-20	K-20 NTS-75-C	Feb 19/95

OPERATOR	CONTRACTOR	RIG NO.
Thomas Exp. Inc.	BRINKERHOFF DRILLING CANADA LTD.	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Wayne Tarasuck

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER							

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	
	STB RMR OD	FT.	JETS 1 32"		PV/YP	
	D.C. ID OD	FT.	SER. NO.		GELS.	
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8" T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI		TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
	WT. OF STRING	LBS.				

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI-S PART'L-P COM'PL-C

DEVIATION RECORD — DEPTH / DEV. / DIRECTION (×3)

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Rig up Camp

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	
	STB RMR OD	FT.	JET 1/32"		PV/YP	
	D.C. ID OD	FT.	SER. NO.		GELS.	
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8" T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI		TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
	WT. OF STRING	LBS.				

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SCI-S PART'L-P COM'PL-C

DEVIATION RECORD — DEPTH / DEV. / DIRECTION (×3)

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Trip to Rig Site
				Rig up Camp.

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
	BIT	FT.	BIT NO.		TIME	
			SIZE		WEIGHT	
	STB RMR OD	FT.	MFG.		PRESSURE GRADIENT	
	D.C. ID OD	FT.	TYPE		VISC.-SEC.	
	STB RMR OD	FT.	JETS 1/32"		PV/YP	
	D.C. ID OD	FT.	SER. NO.		GELS.	
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S.	
			DEPTH IN		pH	
			TOTAL FTG.		SOLIDS %	
			TOTAL HRS. RUN			
	STANDS DP	FT.	COND. 1/8" T/B/ GAGE		MUD & CHEMICALS ADDED	
	SINGLES DP	FT.	GPM/ PD-PSI		TYPE / AMT. / TYPE / AMT.	
	KELLY DOWN	FT.				
	TOTAL	FT.				
	WT. OF STRING	LBS.				

FOOTAGE FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCI-S PART'L-P COM'PL-C

DEVIATION RECORD — DEPTH / DEV. / DIRECTION (×3)

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
H. Norman et al (Tabiche)	K20	K20 NTC-95-C-7	6/04/75
OPERATOR		CONTRACTOR	RIG NO.
H. Norman Exp. Inc.		BRINKERHOFF DRILLING CANADA LTD.	
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
		Marvin Paraschuk.	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE	/	/	/
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARTEL-P COMP-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Moving Camp.

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JET 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE	/	/	/
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN SCL-S PARTEL-P COMP-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
				Stay at ft. Nelson
				wait for Plane – Laundry
				at Strip at Kaps Camp.
				at Tabiche.

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SER. NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
COND. 1/8's T/B/ GAGE			
GPM/ PD-PSI	/	/	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARTEL-P COMP-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
ET AL LA BIGHE		FT. NORMAN C-30.	22/2/76
OPERATOR		**CONTRACTOR**	**RIG NO.**
FT. NORMAN C-30		CHALLENGER DRILLING.	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
Robert L. Le Blanc		W. Haugen	

DRILL PIPE SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN	8	8	8
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

NO. DRILLING ASSEMBLY (At end of tour) / BIT RECORD

BIT		FT.	BIT NO.
			SIZE
STB RMR	OD	FT.	MFG.
D.C. ID	OD	FT.	TYPE
STB RMR	OD	FT.	JETS 1/32"
D.C. ID	OD	FT.	SER. NO.
STB RMR	OD	FT.	DEPTH OUT
			DEPTH IN
			TOTAL FTG.
			TOTAL HRS. RUN
STANDS DP		FT.	COND. 1/8's T/B. GAGE
SINGLES DP		FT.	GPM/ PD-PSI
KELLY DOWN		FT.	
TOTAL		FT.	
WT. OF STRING		LBS.	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS	/ / /
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN WL-S PAR-L-P COM-P-C
				FUEL 6'								
				BAKER 12 hrs.								
				CAMP 12 hrs.								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:00			RIG UP.

DRILLER J. Senger

DAY TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S. P. M.	METHOD RUN WL-S PAR-L-P COM-P-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
6:00	6:00			RIG UP.

DRILLER P. Fike

EVENING TOUR

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN WL-S PAR-L-P COM-P-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9:00	8:00			RIG UP.

DRILLER Donald Daniels

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
ET AL LA RICHE.		FT. NORMAN C-30	2-1-2-76
OPERATOR		**CONTRACTOR**	**RIG NO.**
FT. NORMAN C-30		CHALLENGER DRILLING	2.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
Robert K. Dedrick		D. Haugen	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE		4	
6. TRIPS	8-	4	8
7. LUBRICATE RIG			
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	16 IA.	FT.
1	Sperry Sun	11.27	
	STB RMR OD		FT.
16	D.C. ID 6" OD	517.35	FT.
1	STB RMR 10 OD	1.53	FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
2.	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL	549.00	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1-32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS.	/ / /
WL -CC'S.	
pH	WATER
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
	NONE.		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARFL-P COMP-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 AM	8 PM	12.		Pick up D.C & D.P / Circulate w/ #1 Pump.
REENTAY				

DRILLER D. Haugen

DRILLING ASSEMBLY (At end of tour)

	BIT	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS.	/ / /
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARFL-P COMP-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 AM	9 AM	1		PRESSURE TEST W/ RAMS 1500 PSI 15 MIN. O.K.
9 AM	12 AM	3		RIG UP TO PICK UP DRL. - THRU TABLE.
12 AM	8 PM	8		PICK UP DRL. THRU SPACE.

DRILLER D. Haugen

DRILLING ASSEMBLY (At end of tour)

	BIT	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN -	
COND. 1-8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS.	/ / /
WL -CC'S.	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARFL-P COMP-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	4:00			Rig up Pumps & Mud Lines
4:00	11:00	3		Pick up 4" D.P.
11	12:00	1		Trip to Break Circ

DRILLER Darrell Goodson

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
ET AL "A" DIEHL		FT. NORMAN C-20	2/5/66

OPERATOR	CONTRACTOR	RIG NO.
FT. NORMAN C-20	CHALLENGER DRILLING	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: R. L. Roderick

SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4"					

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	E. M. SCO	C-300	

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE		3	8
6	TRIPS	8		
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
COMPLETION	A. PERF'R'TN			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1	Smith	11.27	FT.
	STB RMR OD		FT.
16	D.C. ID OD	513.25	FT.
1	STB RMR X.O OD	1.53	FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	STANDS DP	1[illegible] 5	FT.
2	SINGLES DP	62.5	FT.
	KELLY DOWN	40	FT.
	TOTAL	2007.47	FT.

WT. OF STRING [illegible] LBS.

BIT RECORD

BIT NO.	17
SIZE	
MFG.	
TYPE	
JETS 1 32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T. B. GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS	
ML -CC'S	WATER.
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
	NIL.		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
				Fuel 4.5 ft.				5½	115			
				Soap 10 bbl.								
				Water 10 bbl.								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	11 00	3	6	Pick up Pipe (Cr. Same Pipe Same)
11 00	12 00	1	6	Try to break Circ. (10/00)
12 00	5 00	5	6	Pull out of Hole / Too Tight Up/Circ.
5 00	6 00	1	5	Drink Circ. @ 1600 PSI / Cond. @ 600 PSI.
6 15	8 00	1¾	5	Circ / Condition Mud.

DRILLER

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
			FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING 110,000 LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	7:00
WEIGHT	9.3
PRESSURE GRADIENT	
VISC.-SEC.	38
PV/YP	/ / /
GELS	/ / /
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	3500#		
Caustic	300#		
D.V.C.P.	6 GAL.		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
	5353'						950	5½	64	5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	9 15	1¼		Pick up Bit #2 & Drill Collars. Tight Hole @ 5353
9 15	10 30	2¼		Run in 15 stds. Tight Hole @ 5353
10 30	12 30	1½		Circ Cont Fluid.
12 30	1 00	½		Run in 3 stds & Circ.
1 00	3 00	1½		Drill 1' Rat Hole.
3 00	4 00	1		Circ.

DRILLER

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1		Measure + Pick up 12 Singles.
5:00	12:00	7½		Tight Hole. Circ Cond. Mud.

DRILLER

Form 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
[illegible]		#1 NORMAN C-30	2/2/82

OPERATOR	CONTRACTOR	RIG NO.
#1 NORMAN C-30	CHALLENGER DRILLING	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
Ed K. Dedrick	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½					

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-360	
2	"	D-[illegible]00	

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	MAVERICK	WT 43.5	112	5012	520	5065

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
FT. CUT OFF	PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT		
CUMULATIVE TON MI. OR TRIPS		

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING	8		
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG			
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
COMPLETION A	PERF'R'T'N			
B	TBG TRIPS			
C	TREATING			
D	SWABBING			
E	TESTING			
F	ADDIT'N'L			
G				
	TOTALS	8		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		FT.
1	Shock Sub	11.27	
	SUB RMR OD		FT.
16	D.C. ID 6¼ OD	513.27	
1	STB RMR X.O OD	1.53	
	D.C. ID OD		FT.
	STB RMR OD		FT.
52	STANDS DP	5333	FT.
1	SINGLES DP	31.55	
	KELLY DOWN	30.05	
	TOTAL	5446	FT.
WT. OF STRING	110m	LBS.	

BIT RECORD

BIT NO.	RR #21
SIZE	8¾
MFG.	
TYPE	S1C-J
JETS 1/32"	13 13 13
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T.B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	1 00	3 00	7 30
WEIGHT	9.0	9.1	9.3
PRESSURE GRADIENT			
VISC.-SEC.	70	117	98
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	11.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	50 #		
GEL	350 #		
CMC	50 #		
DUO-VIS	4 Gal		

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING		LBS.	

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	8:30	12.00
WEIGHT	9.3	9.3
PRESSURE GRADIENT		
VISC.-SEC.	103	110
PV/YP	/	/
GELS	/	/
WL -CC'S		
pH	10.0	10.0
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	400 #		

DRILLING ASSEMBLY (At end of tour)

	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING		LBS.	

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	9 00	
WEIGHT	9.8	
PRESSURE GRADIENT		
VISC.-SEC.	205	
PV/YP	/	/
GELS	/	/
WL -CC'S		
pH	9	
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	400 #		
DUO-VIS	1 gal		

MORNING TOUR

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PARLD-P COMPLX
5380	5406			CAMP 8 Lss	40	3/5	1000	5½	60	5½	60	
				Rounds 8 Lss								
				Fuel 3.5								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	8 00	7¾	3	CIRC & CONDITION MUD (TIGHT HOLE*) WORK PIPE (HOLE SLOUGHING IN BEHIND) @ 5380

DRILLER

DAY TOUR

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PARLD-P COMPLX
						3/10	800	5½	55	5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
6 00	8 15	2¼		RIG UP WL UNITS
8 15	11 45	3¾		TAG & REAM TO BOTTOM - 5197' 5258'

DRILLER

EVENING TOUR

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL-S PARLD-P COMPLX

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	5 00	1		REAMING
5 00	5 15	¼		RIG SERV. & B.O.P.
5 15	11 45	6½		REAM
11 45	12 00	¼		HOIST. BIT RK #21

DRILLER

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FT AL 1A BLOCK	C-30	FT NORMAN C-30	26/2/74

OPERATOR: FT. NORMAN FIELD — CONTRACTOR: CHALLENGER DRILLING — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: X [illegible] — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D.J. Hannigan

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4"	16.6	E	6		

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	D-300	
2	EMSCO	D-300	

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9⅝	DIAMOND	WT 40#	147	5012		5005

WIRE LINE RECORD — REEL NO.

SIZE 1" — NO. LINES 8 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING		11	
4. CORING			
5. CONDITION MUD & CIRCULATE			7¾
6. TRIPS	7¾	2¼	
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. STUCK.		1½	
22.			
23.	6	8	8
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	55	11.27 FT.
	STB RMR OD		FT.
16	D.C. ID 6¼ OD	513.25	FT.
1	STB RMR 8 0 OD	1.53	FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
50	STANDS DP		FT.
2	SINGLES DP	5258	FT.
	KELLY DOWN	3½	FT.
	TOTAL	5258.	FT.

WT. OF STRING 110 M LBS.

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	S31G-J
JETS 1 32"	15 15 15
SER. NO.	512217
DEPTH OUT	
DEPTH IN	5258
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	55	11.27 FT.
	STB RMR OD		FT.
16	D.C. ID 6¼ OD	513.25	FT.
1	STB RMR X O OD	1.53	FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
50	STANDS DP	5197.8	FT.
1	SINGLES DP	31.54	FT.
	KELLY DOWN	41.6	FT.
	TOTAL	5229.4	FT.

WT. OF STRING 110,000 LBS.

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	S31GJ
JETS 1/32"	15 15 15
SER. NO.	512217
DEPTH OUT	
DEPTH IN	5253.
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	S.S.	POOR 11.27	
	STB RMR OD		FT.
16	D.C. ID 6¼ OD	513.25	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	10 SUB	1.53	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING LBS.

BIT RECORD

BIT NO.	33
SIZE	8½
MFG.	REED
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-P DRL-D CONV-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12¹⁵	¼		RIG SERV. & B.O.P.
12¹⁵	4⁰⁰	3¾		HOIST BIT. BR = 21
4⁰⁰	5⁰⁰	4		RUN BIT = ~~23~~ 23

Lawrence M Donaldson

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-P DRL-D CONV-C
	5229'						700	5½	64			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

DAY TOUR

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
5⁰⁰	8¹⁵	¼		Rig Serv. & B.O.P's
8¹⁵	10³⁰	2¼		Run in Break Circ. & Trip.
10³⁰	2³⁰	4		Ream. 5166' 5229'
2³⁰	4¹⁵	1¾		Stuck in Hole.
				Circ Mud & Add Diesel Fuel.

Lease

DRILLER R. [illegible]

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PAR-P DRL-D CONV-C
							800	5½	64			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

EVENING TOUR

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	4¹⁵	¼		Rig Serv. & BOPs
4¹⁵	12⁰⁰	7¾		Circ. Mud Add Diesel Fuel.

DRILLER

9T5

APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FT AL LA RICHE	C-30	FORT NORMAN C-30	FEB 26/71

OPERATOR	CONTRACTOR	RIG NO.
FT. NORMAN EXPL.	CHALLENGER DRILLING	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	D. L. Mangum

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6#	E	6		

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	C-300	15"

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — #FRL NO.

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	MAYNUS	47 J-55	142	5012	15.20	5005

SIZE 1" — NO. LINES 4 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING	7		
4	CORING			
5	CONDITION MUD & CIRCULATE		3½	5
6	TRIPS		3¼	
7	LUBRICATE RIG	¼		
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	Time to 3	3¼		
22	5 Struct.			11
23				
COMPLETION	A. PERF'R'TN	¼		
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'NL			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
1	S.S.		11.27
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD	513.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	AD		1.53
51	STANDS DP		4756.76 FT.
	SINGLES DP		FT.
	KELLY DOWN		39.00 FT.
	TOTAL		5321.81 FT.
WT. OF STRING			112,000 LBS.

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	53J6-J
JETS 1/32"	15-15-15
SER. NO.	512217
DEPTH OUT	
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	12:00	3:00	7:00
WEIGHT	9.3	9.7	9.7
PRESSURE GRADIENT			
VISC.-SEC.	175	185	200
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	900lb.		
DV.66	2 gal.		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PARL.-P CONT.-C
							500	5½	64			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼	7	RIG SERV. & B.O.P.
12:15	5:00	4¾	3	REAMING 8½" HOLE
5:00	5:45	¾		WORK STUCK PIPE.
5:45	8:00	2¼	3	REAMING 8½" HOLE.

Driller

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT SS		11.27 FT.
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD	513.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	AD		1.53
51	STANDS DP		4756.76 FT.
	SINGLES DP		FT.
	KELLY DOWN		39.00 FT.
	TOTAL		FT.
WT. OF STRING			112,000 LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10	12	2
WEIGHT	9.7	9.7	9.7
PRESSURE GRADIENT			
VISC.-SEC.	190	215	160
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	900		

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PARL.-P CONT.-C
							600	5½	64			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	12:00	4		STUCK IN 2 HOLE WORK PIPE TRY BREAK CIRC.
12:00	1:00	1		BREAK CIRC. TRY TO FREE PIPE.
1:00	2:00	1		BREAK CIRC ROTATE PIPE. CIRC.
2:00	5:15	3		TRIP 3 STDS.
5:15	4:00	1		CIRC TRY & DRILL.

Driller

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
1	SS	11.27	
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD	513.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1		1.53	
51	STANDS DP		4756.76 FT.
	SINGLES DP		FT.
	KELLY DOWN		39.00 FT.
	TOTAL		5297.96 FT.
WT. OF STRING			112 M LBS.

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	53J6J
JETS 1/32"	15-15-15
SER. NO.	5122J
DEPTH OUT	
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	6:00	7:00	11:30
WEIGHT	[illegible]	9.7	9.1
PRESSURE GRADIENT			
VISC.-SEC.	150	155	145
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9.2	9.1	9.3
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PARL.-P CONT.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	12:00	8		CIRC. CONDITION MUD WAIT ON WATER.

Driller

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
ET AL LA BICHE		FT. NORMAN EXPL. C-30	FEB. 29/82
OPERATOR		**CONTRACTOR**	**RIG NO.**
FT. NORMAN EXPL		CHALLENGER DRILLING LTD.	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
Robert Redwood		O. H. Flaugher	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6"		

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	C-300	15"
2	"	"	15"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
9⅝	Nidaros	47	142	5912		5927

WIRE LINE RECORD REEL NO.

SIZE " NO. LINES 6 FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE	7¾		
6.	TRIPS			
7.	LUBRICATE RIG	¼		
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO. D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1		55.	11.27
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD	513.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1		10	1.53
51	STANDS DP		4756.76 FT.
	SINGLES DP		FT.
	KELLY DOWN		39.00 FT.
	TOTAL		5297.96 FT.
WT. OF STRING		110 000	LBS.

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	5316-J
JETS 1/32"	15 15 15
SER. NO.	512217
DEPTH OUT	
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	1 30	4 00	7 00
WEIGHT	9.8+	9.6+	9.9
PRESSURE GRADIENT			
VISC.-SEC.	140	125	105
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SOL.-S PART.-P CORE-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	8¼	7	~~SERC~~. RIG SERV. ✓ B.O.P.
12 15	5 30	17¼	5	CIRC. COND. MUD - WAIT ON WATER.

Roderell Donaldson

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL	5297.96	FT.
WT. OF STRING		110,000	LBS.

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	5316-J
JET 1/32"	15 15 15
SER. NO.	
DEPTH OUT	
DEPTH IN	5253.
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SOL.-S PART.-P CORE-C
							900	5½	64			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	4 00			WAIT ON WATER.

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1		55.	11.27
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD	573.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1		10	1.53
51	STANDS DP		4756.76 FT.
	SINGLES DP		FT.
	KELLY DOWN		39.00 FT.
	TOTAL		5297.96 FT.
WT. OF STRING		110,000	LBS.

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	5316-J
JETS 1/32"	15 15 15
SER. NO.	512217
DEPTH OUT	
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.		64	64
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH		9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SOL.-S PART.-P CORE-C
							800	5½	64			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	12 00			WAIT ON WATER.

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FT AL LA BUCHE		C-30	MAR. 1/16
OPERATOR		CONTRACTOR	RIG NO.
FT. NORMAN EXPL.			2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
Robert R Redwine		D. A. Flanagan	

O.D. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.60	E	6"		1	1	Emsco	C-30	15"

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9⅝	MANNS	40 43.5	112	5012		5005

WIRE LINE RECORD — REEL NO.

SIZE 1" — NO. LINES 8 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DWN			
2. DRILL ACTUAL			
3. REAMING	6¾	4	7¼
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG		3¾	
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. Lost 7 Jts			
22.			

COMPLETION

A. PERF'R'T'N	
B. TBG TRIPS	
C. TREATING	
D. SWABBING	
E. TESTING	
F. ADDIT'N'L	
G.	
TOTALS	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO. D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	5 S.		11.27
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD 5	513.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	x o		1.53
51	STANDS DP		5290 FT.
	SINGLES DP		FT.
	KELLY DOWN		41.03 FT.
	TOTAL		5321.81 FT.

WT. OF STRING 112,000 LBS.

BIT RECORD

BIT NO.	23
SIZE	8¾
MFG.	REED
TYPE	S3J6-J
JETS 1/32"	15 15 15
SER. NO.	522217
DEPTH OUT	
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	12 00	4 PM	7 PM
WEIGHT	9.1	9.1	9.1
PRESSURE GRADIENT			
VISC.-SEC.	42	46	42
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR FL-P COM D-C
							1800	5½	64			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼	1	RIG SERV. & B.O.P.
12 15	1 [illegible]	1 [illegible]		WAIT ON WATER
1 35	6 00	6 25	3	REAM 8½ HOLE

DRILLER: Russell Donathan

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	5 S.		11.27
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD 5	513.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	x o		1.53
51	STANDS DP		5290 FT.
	SINGLES DP		FT.
	KELLY DOWN		41.00 FT.
	TOTAL		5321.81 FT.

WT. OF STRING 112,000 LBS.

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	S3J6-J
JETS 1/32"	15 15 15
SER. NO.	522217
DEPTH OUT	
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10	12	2
WEIGHT	9.2	9.2	9.3
PRESSURE GRADIENT			
VISC.-SEC.	90	93	95
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
[illegible]	[illegible]		

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL-S PAR FL-P COM D-C
							1200			5½	66	

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	12 00	4		WORK ON BOILER.
12 00	4 00	4		RIG REPAIR & WAIT.

DRILLER: R. Redwine

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	5-S.		11.27
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD 5	513.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	x o		1.53
51	STANDS DP		5290 FT.
	SINGLES DP		FT.
	KELLY DOWN		41.03 FT.
	TOTAL		5321.81 FT.

WT. OF STRING 117,000 LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME			8 00
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PAR FL-P COM D-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	¼	1	RIG SERV. & BOPS
4 15	12 00	7¾	3	REAMING 8½" HOLE

DRILLER:

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.—A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
FT AL LA BLOCK	C-30		MAR 2/76

OPERATOR	CONTRACTOR	RIG NO.
FT NORMAN EXPL.	CHALLENGER DRILLING	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
Robert L Sedwick	D. N. Hannan

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	"	"	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	C-300	15"

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9 5/8	MANNS	36	142	5012		5005

SIZE 1 — NO. LINES 8 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO. - OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING	7¼		
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼		
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	S.S.		11.27
	STB RMR	OD	
16	D.C. ID 6½	OD	513.25
	STB RMR	OD	
	D.C. ID	OD	
	STB RMR	OD	
1	JD		1.53
51	STANDS DP		
1	SINGLES DP		532.67
	KELLY DOWN		41.00
	TOTAL		537.67
WT. OF STRING	112M	LBS.	

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	S31G-J
JETS 1/32"	15 15 15
SER. NO.	512217
DEPTH OUT	
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	2PM	4:30	7:00
WEIGHT	9.7	9.9	9.8
PRESSURE GRADIENT			
VISC.-SEC.	82	84	76
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCR-S PUMP-P COM-SC
						10M	700	5½	64			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
5290	¾	N/E						

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
12:30	12:45	¼	7	RIG SERV. ✓ B.O.P.'s
12:45	8:00	7¾	3	REAM 8½" HOLE

DRILLER Darrell Donaldson

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT SS.		11.27
	STB RMR	OD	
16	D.C. ID 6½	OD	513.25
	STB RMR	OD	
	D.C. ID	OD	
	STB RMR	OD	
1	YO		1.53
51	STANDS DP		
1	SINGLES DP		
	KELLY DOWN		
	TOTAL		
WT. OF STRING		LBS.	

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	S31G
JET 1/32"	15 15 15
SER. NO.	512217
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCR-S PUMP-P COM-SC

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
12M	6:15	¼	7	Rig Serv. ✓ B.O.P.'s
6:15	4:00	9¾		Pull 5 stds Run water Bbl
4:00	4:00	7		

DRILLER Darrell Donaldson

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	S.S.		11.27
	STB RMR	OD	
16	D.C. ID 6½	OD	513.25
	STB RMR	OD	
	D.C. ID	OD	
	STB RMR	OD	
1	XO		1.53
51	STANDS DP		
1	SINGLES DP		532.15
	KELLY DOWN		41.00
	TOTAL		537.67
WT. OF STRING	112M	LBS.	

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	S31G-J
JETS 1/32"	15 15 15
SER. NO.	512217
DEPTH OUT	
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCR-S PUMP-P COM-SC

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
4:00	4:15	¼	7	Rig Serv. ✓ B.O.P.
4:15	12:00	7¾	21	WAIT ON BOILER
				SUSP.

DRILLER

DAILY DRILLING REPORT — REPORT NO.

LEASE: Ft de la Baca | WELL NO.: C-30 | API WELL NUMBER: C-30 | DATE:

OPERATOR: Ft. Worth Eng. | CONTRACTOR: Chancellor Drlg. | RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature] | SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. A. Hamner

LEGAL LAND DESCRIPTION:

	SIZE OR SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
	2	10.4	E			1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	C-300	15"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB TO CSG. HD.	SET AT
7"	Mohns	23	147	5913		5905

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SKIPPED
1"	6	

FT. CUT OFF: | PRESENT LENGTH:

TON MI. OR TRIPS SINCE LAST CUT:

CUMULATIVE TON MI. OR TRIPS:

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	1/4		1/4
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	WAIT ON BOILER	7	8	7 1/4
22				
	COMPLETION: A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADD'L			
	TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour) — MORNING TOUR

NO.			FT.
	BIT		
1	S.S.		11.27
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD	513.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1			1.53
51	STANDS DP		5321.57 FT.
1	SINGLES DP		33.10 FT.
	KELLY DOWN		41.00 FT.
	TOTAL		5375.87 FT.
	WT. OF STRING	112M	LBS.

BIT RECORD — MORNING TOUR

BIT NO.	23
SIZE	8½
MFG.	Reed
TYPE	S33GJ
JETS 1/32"	15 15 12
SER. NO.	512877
DEPTH OUT	
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/ /

MUD RECORD — MORNING TOUR

	12 00	4 00	7 00
TIME			
WEIGHT	9.9	9.9	10.0
PRESSURE GRADIENT			
VISC.-SEC.	64	64	60
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour) — DAY TOUR

NO.			FT.
1	BIT SS		10.27 FT.
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD	513.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1			1.53
51	STANDS DP		5321.57 FT.
	SINGLES DP		FT.
	KELLY DOWN		41.00 FT.
	TOTAL		5375.87 FT.
	WT. OF STRING	112 M	LBS.

BIT RECORD — DAY TOUR

BIT NO.	23
SIZE	8½
MFG.	Reed
TYPE	S33GJ
JET 1/32"	3/15
SER. NO.	512877
DEPTH OUT	
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/ /

MUD RECORD — DAY TOUR

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour) — EVENING TOUR

NO.			FT.
	BIT		
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD — EVENING TOUR

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	/ /

MUD RECORD — EVENING TOUR

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE FROM / TO | DR.-D RM.-R CORE.-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PART.-P COMP.-C

DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼	7	Rig Serv. & B.O.P.
12 15	2 00	7 3/4	21	Wait on Boiler - C.R.C.

DRILLER

DAY TOUR

FOOTAGE FROM / TO | DR.-D RM.-R CORE.-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PART.-P COMP.-C

DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	4 00	8		Wait on Boiler.

DRILLER

EVENING TOUR

FOOTAGE FROM / TO | DR.-D RM.-R CORE.-C | CORE NO. | FORMATION (SHOW CORE RECOVERY) | ROTARY RPM | WT. ON BIT 1000# | PUMP PRESS | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | PUMP NO. LINER SIZE | PUMP NO. S.P.M. | METHOD RUN SGL.-S PART.-P COMP.-C

DEVIATION RECORD | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	¼	7	Rig Serv.
4 15	12 00	7 3/4		Wait on Boiler

DRILLER

Form 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
ET AL U. BIGBEE	C-30	C-30	MAR. 7/76
OPERATOR		**CONTRACTOR**	**RIG NO.**
ET NORMAN DRL.		CHALLENGER DRILLING	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
Ethel K Ledbetter		W. H. Tate	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.60	E	6		1	1	EMSCO	C-300	15"

LEGAL LAND DESCRIPTION

WIRE LINE RECORD — REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9 7/8	MANNS.	40 J	1-42	5012		5005

SIZE 1" — NO. LINES 5 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN		5	6
2. DRILL ACTUAL			
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			2
7. LUBRICATE RIG	¼	½	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. WAIT ON BOILER	7½	7½	
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. NO. D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	STB RMR OD	11.27
16	D.C. ID 6¼ OD	513.25 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	V.J	1.53
51	STANDS DP	FT.
1	SINGLES DP	5321.87 FT.
	KELLY DOWN	41.00 FT.
	TOTAL	5375.21 FT.
WT. OF STRING	112 M	LBS.

BIT RECORD

BIT NO.	23
SIZE	8½
MFG.	REED
TYPE	S31GJ
JETS 1 32"	15 15 15
SER. NO.	512217
DEPTH OUT	5253
DEPTH IN	5253
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS	/ / /
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
								5½				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼	7	R.G SERV.
12:15	5:30	17¼	21	WAIT ON BOILER

DRILLER Darrell Donaldson

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
	STANDS DP	FT.
	SINGLES DP	FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS	/ / /
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
								5½		5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:30	½		RIG SERV.
8:30	11:00	2½		WAIT ON BOILER.
11:00	4:00	5		RIG UP BOILER.

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	STB RMR OD	11.27
16	D.C. ID 6¼ OD	513.25 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	V.J	1.53
51	STANDS DP	FT.
1	SINGLES DP	5321.87 FT.
	KELLY DOWN	41.00 FT.
	TOTAL	5375.21 FT.
WT. OF STRING	112 M	LBS.

BIT RECORD

BIT NO.	23
SIZE	8¼
MFG.	REED
TYPE	S31GJ
JETS 1/32"	15 15 15
SER. NO.	512217
DEPTH OUT	5375
DEPTH IN	5253
TOTAL FTG.	122
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	/ / /
GELS	/ / /
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	10:00			RIG UP BOILER. FLOW STEAM LINES
10	10:30	½		BLOW KELLY
10:30	1:00	1½		TRIP OUT. T.T. #23
				WOW.

DRILLER

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ft. Wingate Bldg.	C-30	C-30	MAR. 5/71
OPERATOR		**CONTRACTOR**	RIG NO.
Ft. Wingate Exp.		CHALLENGER DRILLING	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
Robert Leach		C.N. Jones	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6"		1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	C-300	15"

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9 5/8	MANN'S	40 #H	142	5012		5005

WIRE LINE RECORD REEL NO.

SIZE 7/8" NO. LINES 8 FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	HORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING		1 2/4 7 3/4	
4	CORING			
5	CONDITION MUD & CIRCULATE			1/4
6	TRIPS	2	2 3/4	
7	LUBRICATE RIG	1/4		1/4
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	CLEAN MUD TANKS.		3 1/4	
22				
23				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS		8	8

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO. D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	S.S.	11.27
	STB RMR OD	FT.
4	D.C. ID 6 1/4 OD	113.57 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	x o	1.53
53	STANDS DP	5078.98 FT.
	SINGLES DP	FT.
	KELLY DOWN	FT.
	TOTAL	5091.98 FT.
	WT. OF STRING	LBS.

BIT RECORD

BIT NO.	24
SIZE	8 3/4
MFG.	REED
TYPE	S316-J
JETS 1 32"	15 15 14
SER. NO.	512208
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARA-FLO COMP'D

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	1/4		RIG SERV. - B.O.P.
12 15	2 15	2		HOIST
2 15	8 00	5 3/4		CLEAN MUD TANKS
6 30	8 00	1 1/2		REAM IN BIT #24

DRILLER Darrell Dowden

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	S.S.	11.27
	STB RMR OD	FT.
4	D.C. ID 6 1/4 OD	113.57 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	x o	1.53
53	STANDS DP	5078.98 FT.
1	SINGLES DP	31.42 FT.
	KELLY DOWN	40.00 FT.
	TOTAL	5129.77 FT.
	WT. OF STRING	135 LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	1:20		
WEIGHT	9.6		
PRESSURE GRADIENT			
VISC.-SEC.	70		
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH	8-		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARA-FLO COMP'D

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CORE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	12 00	4		CLEAN MUD TANKS.
12 00	2 30	2 1/2		RUN IN 2 HLS.
2 30	4 00	1 1/2		REAM.

DRILLER E. [illegible]

DRILLING ASSEMBLY (At end of tour)

NO.		FT.
	BIT	
1	SS.	11.27
	STB RMR OD	FT.
4	D.C. ID 6 1/4 OD	113.57 FT.
	STB RMR OD	FT.
	D.C. ID OD	FT.
	STB RMR OD	FT.
1	x o	1.53
53	STANDS DP	5078.98 FT.
1	SINGLES DP	31.42 FT.
	KELLY DOWN	40.00 FT.
	TOTAL	5129.77 FT.
	WT. OF STRING	135 LBS.

BIT RECORD

BIT NO.	24
SIZE	8 3/4
MFG.	REED
TYPE	S316-J
JETS 1/32"	15 15 14
SER. NO.	512208
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	6 00	9 00	7 00
WEIGHT	9.9	9.9	9.9
PRESSURE GRADIENT			
VISC.-SEC.	35	54	48
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH	7.5	9.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	3100 lbs		
DV-60	7 gals		

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000's	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARA-FLO COMP'D
				Sandstone 10.7	60	5000	800	5½	64			
				Limestone 10.1								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 30	1/2	7	RIG SERV. - B.O.P.
4 30	12 30	7 1/2	1	REAM 8¾" HOLE

DRILLER Darrell Dowden

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
EF AL GA BICHE.	C-30	C-30	MAR 6 56

OPERATOR	CONTRACTOR	RIG NO.
EXXON PROD.	CHALLENGER. DALG.	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
Robert Sudduth	Wesley Norman

O.D. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	11.60	E.	6"		

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-500	14"
2	"	"	14"

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9⅝	Nat'l	40	142	5012		5005

WIRE LINE RECORD — REEL NO.

SIZE 1" | NO. LINES 8 | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL. ACTUAL			
3. REAMING	7¾	7¾	7¾
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	¼	¼	¼
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			

COMPLETION: A. PERF'R'T'N; B. TBG TRIPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'N'L; G.

TOTALS 8 8 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. NO. D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
1	STB RMR 55 OD	11.27	FT.
44	D.C. ID 6⅝ OD	1116.52	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	XO	1.53	
56	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	41.5	FT.
	TOTAL	5149.00	FT.

WT. OF STRING 96,000 LBS.

BIT RECORD

BIT NO.	24
SIZE	8¾
MFG.	REED
TYPE	S21C-J
JETS 1 32"	2½ 2½
SER. NO.	512209
DEPTH OUT	
DEPTH IN	5091
TOTAL FTG.	357
TOTAL HRS. RUN	16¾
COND. 1/8" T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	1:30	3:30	7:00
WEIGHT	9.7	9.6+	9.5
PRESSURE GRADIENT			
VISC.-SEC.	70	55	55
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9-	8.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	16.00		
DV-68	4		
Caustic Soda	1 bs.		
CMC.	50	"	

NO.			FT.
	BIT		FT.
1	55	11.27	
	STB RMR OD		FT.
11	D.C. ID 8" OD	1116.52	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	XO	1.53	
49	STANDS DP	5116.98	FT.
1	SINGLES DP	32.02	FT.
	KELLY DOWN		FT.
	TOTAL	5149	FT.

WT. OF STRING 96,000 LBS.

BIT RECORD

BIT NO.	24
SIZE	8¾
MFG.	Reed
TYPE	S21C-J
JETS 1/32"	15 15 15
SER. NO.	512209
DEPTH OUT	
DEPTH IN	5091
TOTAL FTG.	404
TOTAL HRS. RUN	29½
COND. 1/8" T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	9:30	12:00	4:00
WEIGHT	9.6	9.6	9.6
PRESSURE GRADIENT			
VISC.-SEC.	66	61	55
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	12 sks		
Caustic	40 lbs		
DV-44	3 gal.		
LIGNOSOL	2 sks		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING LBS.

BIT RECORD

BIT NO.	24
SIZE	8¾
MFG.	Reed
TYPE	S21C-J
JETS 1/32"	15 15 15
SER. NO.	512209
DEPTH OUT	
DEPTH IN	5091
TOTAL FTG.	404
TOTAL HRS. RUN	32¾
COND. 1/8" T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	6:00	7:00	11:30
WEIGHT	9.6	9.7	9.4
PRESSURE GRADIENT			
VISC.-SEC.	64	57	48
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	9.0	8.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DRILL RM—R CORING	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
5129	5440	319		Kelly Twist. 4'1"	50	6-7	900	5½	56	5½		
				Meter. 35.20								
				Bumper sub Twist. 8'								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 AM	12 PM	12		Rig Serv. B.O.P's
12 PM	8 AM	7¾		Reaming

DRILLER

FOOTAGE / FORMATION

FROM	TO	DRILL RM—R CORING	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
5440	5534	85			50	6-7	900	5½	56			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 AM	5 PM	9	9	Rig Serv. ✓ B.O.P.
5 PM	4 00 AM	7	3	Trip in

DRILLER

FOOTAGE / FORMATION

FROM	TO	DRILL RM—R CORING	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
5534	5534				40	6-7	600	5½	56			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 AM	7 AM	3	1	T. I. ✓ B.O.P.
7 AM	12 PM	7½	3	Trip in

WOH

DRILLER

EVENING TOUR

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.—A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
ETAL-IA-BCNG.	C-30	C-30	2-6-76

OPERATOR	CONTRACTOR	RIG NO.
ET NANNIAN ETAL.	C. HOLLINGER DRLG.	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
[illegible]	[illegible]

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	11.60	E	6"			1	EMSCO	D-300	14"
						2	"	D-300	14"

LEGAL LAND DESCRIPTION — NE

WIRE LINE RECORD REEL NO.

SIZE 1" | NO. LINES 8 | FT. SLIPPED | FT. CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
9⅝	MANNS	41 #/ft	112	5012		5005

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING	7¾	7½	3¾
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			11
7	LUBRICATE RIG	¼	½	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8	8	8

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	55	11.27	
	STB RMR OD		FT.
11	D.C. ID 6¼ OD	116.59	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	KC.	1.53	
57	STANDS DP	5480.71	FT.
1	SINGLES DP	31.70	FT.
	KELLY DOWN	41.00	FT.
	TOTAL	5534	FT.
WT. OF STRING	140M		LBS.

BIT RECORD

BIT NO.	24
SIZE	8¾
MFG.	REED
TYPE	S3K-J
JETS 1/32"	3-16 M.
SER. NO.	512208
DEPTH OUT	
DEPTH IN	5091
TOTAL FTG.	443
TOTAL HRS. RUN	38
COND. 1/8" T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	3:00	5:00
WEIGHT	9.6+	9.5+
PRESSURE GRADIENT		
VISC.-SEC.	53	65
PV/YP	/	/
GELS.	/	/
WL -CC'S.	/	/
pH	10	10
SOLIDS %		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GL	2000		
DV-81	6#		
Caustic	100		
CMC	50#		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5534	5534			FISH 3' 10"	40	4-7	800	5½	58	5½		
				METER. 36467								
				ROLLER TANK. 4' 10"								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
3:00	12:00	9		KEY SEAT.
12:00	8:00	7¾		REAM.
				UNDER FLOW .10.5 OVER FLOW

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	S.S.	11.27	
	STB RMR OD		FT.
4	D.C. ID 6½ OD	116.58	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	KO	1.53	
57	STANDS DP	5480.71	FT.
	SINGLES DP	31.70	FT.
	KELLY DOWN	41.30	FT.
	TOTAL	5534	FT.
WT. OF STRING	140M		LBS.

BIT RECORD

BIT NO.	24
SIZE	8½
MFG.	REED
TYPE	S3G-J
JET 1/32"	16-16-M
SER. NO.	512208
DEPTH OUT	
DEPTH IN	5091
TOTAL FTG.	443
TOTAL HRS. RUN	46¾
COND. 1/8" T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	8:00	12:00	4:00
WEIGHT	9.6	9.6	9.4+
PRESSURE GRADIENT			
VISC.-SEC.	59	56	67
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	9.4		
pH	10	10	10
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GL	2000 lbs		
DV-81	5 gal.		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5534	5534				60	4-7	700	5½	58			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼	7	R.S. SERV. & B.O.P.
8:15	4:30	7¾	3	REAMING & 8½ HOLE

DRILLER [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	S.S.	11.27	
	STB RMR OD		FT.
4	D.C. ID 6¼ OD	116.58	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	KO	1.53	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	24
SIZE	8½
MFG.	REED
TYPE	
JETS 1/32"	16-16-M
SER. NO.	512208
DEPTH OUT	5534
DEPTH IN	5091
TOTAL FTG.	443
TOTAL HRS. RUN	49½
COND. 1/8" T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	6:00
WEIGHT	9.4+
PRESSURE GRADIENT	
VISC.-SEC.	63
PV/YP	/
GELS.	/
WL -CC'S.	
pH	10
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
5534	5534				60	4-7	700	5½	58			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼	7	R.S. SERV. & B.O.P.
4:15	8:00	3¾	3	REAM.
8:00	12:00	4		TRIP OUT.

DRILLER [illegible]

RM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
ET-AL-LA BICHE.	C-30	C-30	MAR 8/60

OPERATOR	CONTRACTOR	RIG NO.
ET Marathon Exp.	Challenger Drlg.	2.

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
Robert Ledrick	W. H. Hodgen

O.D. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.60	E.	6"	F.H.	1	1	Emsco	D-300	14"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	Mann	H1	18.5	142.	5012	5006

WIRE LINE RECORD — REEL NO.
SIZE 1" — NO. LINES 9 — FT. SLIPPED 100'
FT. CUT OFF 100' — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING	1½	7.	7¾
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	3½		
7	LUBRICATE RIG			½
8	REPAIR RIG		¼	
9	CUT OFF DRILLING LINE	2		
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	BREAK JARS.	1		
22				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8	8	8

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.			
HRS. W/OPR. D.P.			
HRS. WO/D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1		55.	11.27
	STB RMR OD		FT.
1	D.C. ID 6¼ OD		29.15
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	20	1.53	
57	STANDS DP	5480.15	FT.
	SINGLES DP	31.60	FT.
	KELLY DOWN	1.00	FT.
	TOTAL	5512.75	FT.
WT. OF STRING	100,000		LBS.

BIT RECORD

BIT NO.	24
SIZE	6¾
MFG.	Reed
TYPE	53C-J
JETS 1/32"	20
SER. NO.	519208
DEPTH OUT	5091
DEPTH IN	5091
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	7:00		
WEIGHT			
PRESSURE GRADIENT			
VISC.–SEC.	70		
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SC.–S PART.–P COM.–C
5352	5552			FRWL 3'1"								
				MEDIUM 37041								
				RUBEN WAL. 4'6"								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1		Hoist.
1:00	2:00	1		Break set of Jars Down.
2:00	4:00	2		Slip 100' Cut 100' Line.
4:00	6:30	2½		Run in w/Bit. 80'
6:30	8:00	1½		Pick up Singles & Ream
				Measure in

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	55.	11.27	
	STB RMR OD		FT.
1	D.C. ID 6¼ OD	29.15	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	20	1.53	
57	STANDS DP	5480.15	FT.
1	SINGLES DP	31.60	FT.
	KELLY DOWN	1.00	FT.
	TOTAL	5512.75	FT.
WT. OF STRING	92,000		LBS.

BIT RECORD

BIT NO.	24
SIZE	6¾
MFG.	Reed
TYPE	53C-J
JETS 1/32"	20
SER. NO.	519208
DEPTH OUT	5091
DEPTH IN	5091
TOTAL FTG.	
TOTAL HRS. RUN	57
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	9:30	11:00	3:00
WEIGHT	9.4	9.4	9.4
PRESSURE GRADIENT			
VISC.–SEC.	49	54	52
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.	9.6		
pH	9.0	9.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	27 sx	Ash	
Caustic	100	lbs	
DX-61	7	gal	

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SC.–S PART.–P COM.–C
5352	5517				60	2	1200	5"	58	5"		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼	7	R.G. Serv. & B.O.P.
8:15	4:00	7¾	3	Ream

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	/ / /
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	65
COND. 1/8's T/B/ GAGE	
GPM/ PD–PSI	

MUD RECORD

TIME	5:00	7:45	7:00
WEIGHT	9.2	9.4	9.4
PRESSURE GRADIENT			
VISC.–SEC.	61	76	65
PV/YP	/	/	/
GELS	/	/	/
WL –CC'S.			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	10 sx	Ash	
Caustic	100	lbs	
DX-61	4	gal	

FOOTAGE

FROM	TO	DR.–D RM.–R CORE.–C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SC.–S PART.–P COM.–C
5512	5517			UNDER FLOW 10.7	60	2	1200	5"	58			
				OVER FLOW 9.4								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼	7	R.G. Serv.
4:15	12:00	7¾		Ream.

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
E-1-1-Fed.	C-20	C-30	Nov 2 '62
OPERATOR		**CONTRACTOR**	**RIG NO.**
Ft. Howard Corp.		Cleveland Drlg.	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
Robert L. Sedrick		D. D. Mayhew	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.60	E	6"	EH	1	1	Emsco	D-375	14"
						2	"	"	"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	Nat'l	40	485 JH2	5012		5205

WIRE LINE RECORD REEL NO.
SIZE 4" NO. LINES 8 FT. SLIPPED
FT. CUT OFF PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING	2½	6¼	
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		1	
7	LUBRICATE RIG	½	¼	
8	REPAIR RIG		½	
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		2½	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. W/O D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1		SS	11.27
	STB RMR	OD	FT.
1	D.C. ID	1½ OD	28.12 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1		X-O	1.53
57	STANDS DP		5421.15 FT.
1	SINGLES DP		31.18 FT.
	KELLY DOWN		FT.
	TOTAL		5483.68 FT.

WT. OF STRING 79,000 LBS.

BIT RECORD

BIT NO.	21
SIZE	6¾
MFG.	Reed
TYPE	SDHG-J
JETS 1/32"	1 1 1
SER. NO.	512208
DEPTH OUT	5542
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	9:00	11:00	6:00
WEIGHT	9.4	9.4	
PRESSURE GRADIENT			
VISC.-SEC.	64	75	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	7.3	7.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	300		
LIV-60	2 Gal.		
Caustic	1.0		

FOOTAGE

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
5542				Fox. - 4-3								
				Mtzz. - 38 (6)								
				Noyes Tank. - 4.7								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼		Rig Serv.
12 15	2 00	7¾		Ream 8½" Hole.

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1		SS	11.27
	STR RMR	OD	FT.
1	D.C. ID	6½ OD	28.12 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1		X-O	1.53
57	STANDS DP		5480.15 FT.
1	SINGLES DP		31.68 FT.
	KELLY DOWN		41.50 FT.
	TOTAL		5542.21 FT.

WT. OF STRING 92,000 LBS.

BIT RECORD

BIT NO.	24
SIZE	6¾
MFG.	Reed
TYPE	S3J-J
JET 1/32"	1 1 1
SER. NO.	512208
DEPTH OUT	5542
DEPTH IN	[illegible]
TOTAL FTG.	451
TOTAL HRS. RUN	79
COND. 1/8's T/B/ GAGE	2 1 CT PN
GPM/ PD-PSI	

MUD RECORD

TIME	9:00	12:30	
WEIGHT	9.4	9.4	
PRESSURE GRADIENT			
VISC.-SEC.	61	49	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	7.3		
pH	10.0	10.0	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000	Ke	
Diesel	3	Oil	
Circ	20	Ke	

FOOTAGE

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
5542	5547	RM			50	2	400	5½	58	5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼	7	Rig Service - B.O.P.
8 15	2 00	6¾		Ream 8½" Hole
2 30	3 30	1	6	Hoist.
3 30	4 00	½	8	Set Kelly Bushings & Repair Cathead.
4 30	8 30	3	6	Hoist.

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
1	BIT		
1		SS	11.27
	STB RMR	OD	FT.
4	D.C. ID	6½ OD	116.58 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
1	STB RMR	8 OD	1.53 FT.
56	STANDS DP		5369.25 FT.
	SINGLES DP		FT.
	KELLY DOWN		41.50 FT.
	TOTAL		4 [illegible] FT.

WT. OF STRING 78,000 LBS.

BIT RECORD

BIT NO.	25
SIZE	6¾
MFG.	Hughes
TYPE	52JGJ
JETS 1/32"	15 15 16
SER. NO.	322204
DEPTH OUT	[illegible]
DEPTH IN	5542
TOTAL FTG.	[illegible]
TOTAL HRS. RUN	[illegible]
COND. 1/8's T/B/ GAGE	[illegible]
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR'D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
5542	5550				40	3-4	1200		62	5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 30	5 00	½	8	Set Kelly Bushings & Repair Cathead.
5 00	8 00	3	6	Hoist.
8 00	10 30	2½		Trip in w/bit #25.
10 30	11 00	½		Break Circ.
11 00	12 00	1		Ream 8½ Hole.

DRILLER

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: Ed W Bell — WELL NO.: C-3-C
API WELL NUMBER: C-3-C — DATE: 11-10-61
OPERATOR: ET Wrather for Ed W Bell
CONTRACTOR: Challenger Drlg. Co. — RIG NO.: 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE: Robert Roderick
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. D. Harper

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	11.6	E	6"	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-350	14"
2	"	"	"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB TO CSG. HD.	SET AT
	9⅝	Mann	40	43	1412	5412	5005

WIRE LINE RECORD — REEL NO.
SIZE 1" — NO. LINES 7 — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING	2¾	7¼	
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG	½	¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

NO. 1 — DRILLING ASSEMBLY (At end of tour) / BIT RECORD

		FT.
BIT		
1	55	11.27
STB RMR	OD	FT.
4 D.C. ID 6¼	OD	116.58 FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
1 X C		1.53
57 STANDS DP		5460.15 FT.
1 SINGLES DP		31.60 FT.
KELLY DOWN		41.50 FT.
TOTAL		5542.60 FT.

WT. OF STRING 105,000 LBS.

BIT RECORD	
BIT NO.	25
SIZE	8¾
MFG.	Reed
TYPE	5316-J
JETS 1/32"	14-14-14
SER. NO.	320804
DEPTH OUT	
DEPTH IN	5542
TOTAL FTG.	60
TOTAL HRS. RUN	6 0
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	12	330	700
WEIGHT	9.5+	9.5	9.2
PRESSURE GRADIENT			
VISC.-SEC.	70	65	53
PV/YP	/	/	/
GELS.	Y32	/	/
WL.-CC'S.	9.4		
pH	10.	10.	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel.	12 sx		
2 gal.	D#62		

MORNING TOUR

NO. 2 — DRILLING ASSEMBLY (At end of tour) / BIT RECORD

		FT.
BIT		
1	55	11.27
STB RMR	OD	FT.
4 D.C. ID 2¼	OD	116.58 FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
1 X O		1.53
57 STANDS DP		5460.15 FT.
2 SINGLES DP		62.91 FT.
KELLY DOWN		FT.
TOTAL		5548.06 FT.

WT. OF STRING 105,000 LBS.

BIT RECORD	
BIT NO.	25
SIZE	8¾
MFG.	Reed
TYPE	5316-J
JETS 1/32"	14-14-14
SER. NO.	320804
DEPTH OUT	
DEPTH IN	5542
TOTAL FTG.	
TOTAL HRS. RUN	16½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	7:00	1:00	4:00
WEIGHT	9.5	10	9.5
PRESSURE GRADIENT			
VISC.-SEC.	68	164	123
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH	10.5	10	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2300 lbs.		
Caust	100 lbs.		
Dr Lig	6 Gal.		

DAY TOUR

NO. 3 — DRILLING ASSEMBLY (At end of tour) / BIT RECORD

		FT.
BIT		
1	55	11.27
STB RMR	OD	FT.
4 D.C. ID 2¼	OD	116.58 FT.
STB RMR	OD	FT.
D.C. ID	OD	FT.
STB RMR	OD	FT.
1 X O		1.53
57½ STANDS DP		5460.15 FT.
SINGLES DP		FT.
KELLY DOWN		41.50 FT.
TOTAL		5603 FT.

WT. OF STRING 56,000 LBS.

BIT RECORD	
BIT NO.	25
SIZE	8¾
MFG.	Reed
TYPE	5316-J
JETS 1/32"	14-14-14
SER. NO.	320801
DEPTH OUT	
DEPTH IN	5542
TOTAL FTG.	123
TOTAL HRS. RUN	24½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	5:30	7:00	9:30
WEIGHT	9.5	9.6	9.6
PRESSURE GRADIENT			
VISC.-SEC.	130	146	135
PV/YP	/	/	/
GELS.	/	/	/
WL.-CC'S.			
pH	9.5	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000		
Dr-Lig	3 gal.		

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DRILLED RM-R CORED-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM. PARFLO-P COMPLC
5480	5542			Salt - 3'9" Miss. - 36.6'9 Lower Trin. - 3'8"	60	6-7	800	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼		Rig Serv.
12 15	2 00	7¾		Ream 8¾ Hole.

DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM. PARFLO-P COMPLC
5542	5548	RM.			60	6	1000	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8	¼	7	Rig Serv.
8 15	400	7¾	3	Ream 8¾" Hole.

Clarence Smith
DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM. PARFLO-P COMPLC
5548	5603	RM.			60	6	1000	5½				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	¼	7	Rig Serv.
4 15	8 00	7¾		Ream 8¾" Hole

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.—A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ferrill-Lea-Bicknell	C-30	C-30	11-21-61

OPERATOR	CONTRACTOR	RIG NO.
El Mapco Exp.	Cheesman	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER
Richard Goodrich	

DRILL PIPE SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	11.60	E	6"	FH	1	1	Emsco	D-350	14"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	Nat'l	40 H-40	112	5012		5025

WIRE LINE RECORD — REEL NO.
SIZE 4" — NO. LINES 2 — PT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING	7½	7½	9
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG	½	½	½
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
1		55	11.27
	STB RMR	OD	FT.
4	D.C. ID 6¼	OD	116.58 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1		XO	1.53
60	STANDS DP		5620.12 FT.
	SINGLES DP		FT.
	KELLY DOWN		41.03 FT.
	TOTAL		5791.05 FT.

WT. OF STRING 102,000 LBS.

BIT RECORD

BIT NO.	25
SIZE	8¾
MFG.	Reed
TYPE	S3J-J
JETS 1 32"	15 15 14
SER. NO.	320804
DEPTH OUT	
DEPTH IN	5542
TOTAL FTG.	311
TOTAL HRS. RUN	32
COND. 1/8's T/B. GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	1200	300	
WEIGHT	9.6	9.6	
PRESSURE GRADIENT			
VISC.-SEC.	180	145	145
PV/YP	/	/	/
GELS.	7/12	7/37	/
WL -CC'S.	7.6	8.6	
pH	9.5	9.5	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE / FORMATION

FROM	TO	DR.D RM.N CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
5603	5791	R.		Fusl. 2.7"	60	6-7	1000	5½	60			
				Mats. 29.1165								
				Nodule Tour. 1.1"								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		Rig Serv.
12:15	7:00	7¾		Reaming 8½ Hole.

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
1		55.	11.27
	STB RMR	OD	FT.
4	D.C. ID 6¼	OD	116.58 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1		XO	1.53
61	STANDS DP		
2	SINGLES DP		5911
	KELLY DOWN		00
	TOTAL		5916.00 FT.

WT. OF STRING 107 M LBS.

BIT RECORD

BIT NO.	25
SIZE	8½"
MFG.	Reed
TYPE	S3J-J
JETS 1/32"	15 15 14
SER. NO.	320804
DEPTH OUT	
DEPTH IN	5542
TOTAL FTG.	374
TOTAL HRS. RUN	39 1/4
COND. 1/8's GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	8:00	12:30	3:30
WEIGHT	9.6	9.6	9.6
PRESSURE GRADIENT			
VISC.-SEC.	110	200	110
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	3 100 lbs		
Q-T	50 lbs		
DD-1	9 gal.		

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
5791	5916	RM			60	6	1000	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼	7	Rig Service ✓ B.O.P.
8:15	4:00	7¾	3	Ream 8½" Hole

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		FT.
1		55	11.27
	STB RMR	OD	FT.
41	D.C. ID 6¼	OD	116.58 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1		XO	1.53
62	STANDS DP		6908.51 FT.
	SINGLES DP		FT.
	KELLY DOWN		41.50 FT.
	TOTAL		6950.01 FT.

WT. OF STRING 107 M LBS.

BIT RECORD

BIT NO.	25
SIZE	8½
MFG.	Reed
TYPE	S3J-J
JETS 1/32"	15 15 14
SER. NO.	320804
DEPTH OUT	
DEPTH IN	5542
TOTAL FTG.	531
TOTAL HRS. RUN	47½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	6:00	7:20	9:30
WEIGHT	9.6	9.5	9.6
PRESSURE GRADIENT			
VISC.-SEC.	190	185	135
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel			
Q-T			

FOOTAGE / FORMATION

FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
5916	6078	RM			60	6-7	1000	5½	60	5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼	7	Rig Serv. ✓ B.O.P.
4:15	12:00	7¾	3	Ream 8½" Hole.

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ft. Lea-Lease	C-30	C-30	March
OPERATOR		**CONTRACTOR**	RIG NO.
Ft. Navajo Exp.		Challenger Drlg.	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
Robert A. Ledrick		L. C. Young	

DRL. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
11"	11.6	E	6¼"	FH.	1	1	Emsco	D-900	14"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
9⅝	Mann	41	133	1142	5012	5005

WIRE LINE RECORD REEL NO.

SIZE 11 | NO. LINES 9 | FT. SLIPPED | FT./CUT OFF | PRESENT LENGTH | TON MI. OR TRIPS SINCE LAST CUT | CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING			6¾
4. CORING	1¾		
5. CONDITION MUD & CIRCULATE	2	2¾	1
6. TRIPS			
7. LUBRICATE RIG	¼	¼	½
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21. STUCK.	6		
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	¾	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour) — BIT RECORD

NO.		FT.	BIT RECORD	
	BIT		BIT NO.	25
1		11.27	SIZE	8½
	STB RMR OD	FT.	MFG.	Reed
11	D.C. ID 6½ OD	116.56 FT.	TYPE	S316-J
	STB RMR OD	FT.	JETS 1/32"	15 15 14
	D.C. ID OD	FT.	SER. NO.	320604
	STB RMR OD	FT.	DEPTH OUT	
1	x0	1.53	DEPTH IN	5542
			TOTAL FTG.	594
			TOTAL HRS. RUN	54¼
60	STANDS DP	6275 FT.	COND. 1/8's T/B/ GAGE	
2	SINGLES DP	62.75 FT.	GPM/ PD-PSI	
	KELLY DOWN	41.50 FT.		
	TOTAL	6136.44 FT.		
WT. OF STRING	110,000 LBS.			

MUD RECORD

TIME	2 PM	4 PM	6 PM
WEIGHT	9.6	9.5	9.4
PRESSURE GRADIENT			
VISC.-SEC.	135	145	135
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5+	9.5+	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1600		
DV-66	4 sack		

MORNING TOUR

DRILLING ASSEMBLY (At end of tour) — BIT RECORD

NO.		FT.	BIT RECORD	
	BIT		BIT NO.	25
1		11.27	SIZE	8½
	STB RMR OD	FT.	MFG.	Reed
4	D.C. ID 6¼ OD	116.58 FT.	TYPE	S316-J
	STB RMR OD	FT.	JET 1/32"	15 15 14
	D.C. ID OD	FT.	SER. NO.	320604
	STB RMR OD	FT.	DEPTH OUT	
1	x0	1.53	DEPTH IN	5542
			TOTAL FTG.	594
			TOTAL HRS. RUN	54¼
59	STANDS DP	5902.5 FT.	COND. 1/8's T/B/ GAGE	
2	SINGLES DP	62.75 FT.	GPM/ PD-PSI	
	KELLY DOWN	41.50 FT.		
	TOTAL	6136.44 FT.		
WT. OF STRING	110 LBS.			

MUD RECORD

TIME	8 AM	1 PM	3 PM
WEIGHT	9.4	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC.	90	190	185
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	3200 #		
DV-21	8 sack		

DAY TOUR

DRILLING ASSEMBLY (At end of tour) — BIT RECORD

NO.		FT.	BIT RECORD	
	BIT		BIT NO.	25
1		11.27	SIZE	8½
	STB RMR OD	FT.	MFG.	Reed
4	D.C. ID 6¼ OD	116.58 FT.	TYPE	S316-J
	STB RMR OD	FT.	JETS 1/32"	15 15 14
	D.C. ID OD	FT.	SER. NO.	320604
	STB RMR OD	FT.	DEPTH OUT	6223
1	x0	1.53	DEPTH IN	5542
			TOTAL FTG.	681
			TOTAL HRS. RUN	61
61	STANDS DP	6058.25 FT.	COND. 1/8's T/B/ GAGE	
	SINGLES DP	FT.	GPM/ PD-PSI	
	KELLY DOWN	24.50 FT.		
	TOTAL	6223 FT.		
WT. OF STRING	110,000 LBS.			

MUD RECORD

TIME	4:00	9:00	10:00
WEIGHT	9.3+	9.4+	9.4
PRESSURE GRADIENT			
VISC.-SEC.	204	254	169
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	91		
pH	9.5+	9.5+	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL.-S PARTEL-P COMP.-C
6075	6136			Fm 5-7	60	6-7	1000	5½	60			
				Moen 40205								
				Bull Tank 6-1								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 AM	12:15	¼		Rig Serv.
12:15	2 AM	1¾		Reem 8½ Hole.
2 AM	6 AM	4		Trip. Mix Mud.
6 AM	8 AM	2		Circ. Cond. Mud.

DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL.-S PARTEL-P COMP.-C
6075	6136	RM		Undesignated Cores	60	6	800	5½	64	5½		
6136	6136			Over Flow 9.3								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼	1	Rig Serv. & B.O.P.
8:15	11:00	2¾	5	Circ. Cond. Mud.
11:00	4:00	5	3	Ream 8½" Hole

DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL.-S PARTEL-P COMP.-C
6136	6223	R.			60	6-7	1200	5½	66			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 AM	4:15	¼		Rig Serv.
4:15	11 AM	6¾		Ream 8½ Hole.
11 AM	12 PM	1		Circ. Cond. Hole to Trip.

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM with

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
E. AL LA TICHE	C-30		MAR 13/70
OPERATOR		**CONTRACTOR**	**RIG NO.**
ET Norman Lee		CHALLENGER DRILLING	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
H. C. Rudisill		V. H. Mauldin	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6"	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	C-350	14"

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9 5/8	MAYS.	41 40#	142	5012		5005

WIRE LINE RECORD REEL NO.
SIZE — NO. LINES 8 — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			
3. REAMING	4¾	6¼	
4. CORING			
5. CONDITION MUD & CIRCULATE	3	1	
6. TRIPS		1½	
7. LUBRICATE RIG	¼	¼	
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	STB RMR 5.5 OD	11.27	FT.
4	D.C. ID 6¼ OD	116.58	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X O	1.53	
61	STANDS DP	6059.37	FT.
	SINGLES DP		FT.
	KELLY DOWN	34.00	FT.
	TOTAL	6223	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	25
SIZE	8¾
MFG.	REED
TYPE	S3GJ
JETS 1/32"	15 15 11
SER. NO.	320804
DEPTH OUT	6223
DEPTH IN	5542
TOTAL FTG.	681
TOTAL HRS. RUN	6¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	12:00	4:00	7:00
WEIGHT	9.5	9.3	9.3
PRESSURE GRADIENT			
VISC.-SEC	176	105	149
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	7.5		9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	3300 lbs		
Diesel	8 gal.		

MORNING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PART'L-P COM'P.-C
	6223	RM		ELLIS (11171)	50	2M	1000	5½	64	5½		

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼	7	RIG SERV. ✓ B.O.P.S
12:15	2:00	1¾	5	CIRC.
2:00	6:45	4¾	3	WORK TIGHT HOLE STRAIGHT DUMMY TRIP, NO TIGHT SPOTS
6:45	8:00	1¼	5	CIRC. COND. MUD

DRILLER J. F. D.

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	STB RMR 5¾ OD	11.39	FT.
4	D.C. ID 6¼ OD	116.58	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X O	1.53	
61	STANDS DP	6059.37	FT.
	SINGLES DP		FT.
	KELLY DOWN	35.00	FT.
	TOTAL	6223	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	25
SIZE	8¾
MFG.	REED
TYPE	S3GJ
JET 1/32"	15 15 11
SER. NO.	320804
DEPTH OUT	6223
DEPTH IN	5542
TOTAL FTG.	681
TOTAL HRS. RUN	6¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	9:30	12	2
WEIGHT	9.4		9.4
PRESSURE GRADIENT			
VISC.-SEC	50		190
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.	10.		
pH	9.		8.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	200 lbs		

DAY TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PART'L-P COM'P.-C
	6223						1000	5½	62			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
5:00	7:30	2½		CIRC. COND. MUD
7:30	9:45	2¼	X	RIG SERV.
9:45	11:30	1¾		TRIP TO TRIM OUT. 4 STDS.
11:30	1:00	1½		CIRC. TIGHT HOLE.
1:00	4:00	3		TRIP WET FOR FISHING.

DRILLER E. V.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT 55.	11.27	FT.
	STB RMR OD		FT.
4	D.C. ID 6¼ OD	116.58	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X O	1.53	
61	STANDS DP	6059.37	FT.
	SINGLES DP		FT.
	KELLY DOWN	35.00	FT.
	TOTAL	6223	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	25
SIZE	8¾
MFG.	REED
TYPE	S3GJ
JETS 1/32"	15 15 11
SER. NO.	320804
DEPTH OUT	6223
DEPTH IN	5542
TOTAL FTG.	681
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	1:00	7:00	11:00
WEIGHT	9.4	9.4	14
PRESSURE GRADIENT			
VISC.-SEC.	95	99	185
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S.			
pH	10.	10.	10
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	6200 lbs		
Diesel	15 bbl		

EVENING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PART'L-P COM'P.-C
							1000	5½	62			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	11:15	¼	7	RIG SERV.
11:15	8:30	4¼	5	CIRC. COND. MUD & TRIP.
10:30	12:00	1½		WORK DUMMY TRIP WORK TIGHT HOLE
8:30	10:30	2		RUN A UP PIECE ON KELLY BUSHINGS.
10:30	12:00	1½		DUMMY TRIP WORK TIGHT HOLE

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM with

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ft Al La Buse	C-30	C-30	MAR 14/76
OPERATOR		**CONTRACTOR**	**RIG NO.**
Ft Worth Exp.		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
Frank Redrick		N. A. Flanagan	

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6"	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	C-350	14"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	Mark.	40 H-40	142	5012		5002

WIRE LINE RECORD — REEL NO.
SIZE — NO. LINES 8 — FT. SLIPPED
WT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL			
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	1		
7	LUBRICATE RIG	¼		
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	[illegible]			
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8		

DAY WORK TIME SUMMARY (OFFICE USE ONLY)
HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	S.S.		11.27
	STB RMR	OD	FT.
4	D.C. ID 6	OD 6¼	116.58 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	K.O		1.56
61	STANDS DP		1059.37 FT.
	SINGLES DP		FT.
	KELLY DOWN		35.00 FT.
	TOTAL		6223.71 FT.
WT. OF STRING	110M		LBS.

BIT RECORD

BIT NO.	2A
SIZE	6¾
MFG.	REED
TYPE	S33G-J
JETS 1 32"	14 14 14
SER. NO.	320801
DEPTH OUT	6223
DEPTH IN	5542
TOTAL FTG.	681
TOTAL HRS. RUN	68¾
COND. 1/8's T/B/ GAGE	3 1 / OUT.
GPM/ PD-PSI	

MUD RECORD

TIME	12.00	4.30	7
WEIGHT	9.2	9.0	9.1
PRESSURE GRADIENT			
VISC.-SEC.	185	175	175
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	10	10	10
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	100	Lime	
Lig and Caust	4		

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		.5 FT.
1	S.C.		11.27
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD	513.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	K.O		1.56
1	S.S.		5.08
1	S.S.		32.52
62	STANDS DP		5695.00 FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	2G
SIZE	6¾
MFG.	Hughes
TYPE	S91G-J
JET 1/32"	13 13 13
SER. NO.	320209
DEPTH OUT	
DEPTH IN	6223
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	9:30	11.30	
WEIGHT	9.4+	9.4+	
PRESSURE GRADIENT			
VISC.-SEC.	168	153	
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	8.4		
pH	9.5		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	900 #		
CD-49	1 gal.		

DRILLING ASSEMBLY (At end of tour)

NO.			FT.
	BIT		
1	S.S.		11.27
	STB RMR	OD	FT.
16	D.C. ID 6¼	OD	513.25 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
1	STB RMR 6	OD	5.08 FT.
1	K.O		1.56
1	TORS		30.52
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	2G
SIZE	6¾
MFG.	REED
TYPE	S33G-J
JETS 1/32"	13 13 13
SER. NO.	320809
DEPTH OUT	
DEPTH IN	6223
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	900 #		
Lig and Caust	1 gal.		

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
				Fuel 4'	60	2-7	1000	5½	60			
				Water 4227'								
				Pusher 5½'								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼	9	Rig Serv. & B.O.P.
12 15	1 30	1¼		Work Tight Hole & Stuck P.P.
1 30	2 30	1	3	Dummy Trip
2 30	8 00	5½		Work Tight Hole.

DRILLER

DAY TOUR

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		Rig Serv.
8 15	12 30	4¼		Run in.
12 30	11 00	½		Ream to Bottom.
11 00	12 30	1½		Circ. Pump Press. Hose.
12 30	11 00	3½		Trip. Lower Pumps & Bha Stuck Pipe.

DRILLER

EVENING TOUR

FOOTAGE

FROM	TO	DR..D RM..R CORE..C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6223	6223											

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼		Pick Jars & BHA SLM
415	700	2¾		Trip Board
700	700	1		Pick Jars
700	830	1½		Cut & Slip line, set up brake.
830	1200	3½		Run in W/bit MEASURE IN LAYDOWN 3 RENT SETS

DRILLER

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO. 7

LEASE: E. A. LA BICHE — WELL NO.: C-30 — API WELL NUMBER: — DATE: MAR 15/71

OPERATOR: EL Paso Nat. Gas. — CONTRACTOR: CHALLENGER — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Robert Reed — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: V. T. Haugen

LEGAL LAND DESCRIPTION:

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.6	E	6"	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	C-350	14"
2	EMSCO	C-350	14"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB TO CSG. HD.	SET AT
9 5/8	MAYNS.	40 J-55	142	5013		5026

WIRE LINE RECORD — REEL NO.

SIZE 1" — NO. LINES 5 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			1
2	DRILL ACTUAL		6	17½
3	REAMING	9¼	1¾	
4	CORING			
5	CONDITION MUD & CIRCULATE			½
6	TRIPS	½		
7	LUBRICATE RIG	¼	½	½
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			1½
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
	A. PERF'R'TN (COMPLETION)			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
1	BIT	.65 FT.	BIT NO.	26
1	S.S.	11.27	SIZE	8½
	STB RMR OD	FT.	MFG.	Reed
16	D.C. ID 6 2/4 OD	458.95 FT.	TYPE	S33G-J
	STB RMR OD	FT.	JETS 1 32"	13 13 13
	D.C. ID OD	FT.	SER. NO.	320509
1	STB RMR OD	5.08 FT.	DEPTH OUT	
1	X.O.	1.53	DEPTH IN	6223
1	JARS	30.52	TOTAL FTG.	
	STANDS DP	FT.	TOTAL HRS. RUN	7¼
	SINGLES DP	FT.	COND. 1/8" T.B. GAGE	
	KELLY DOWN	FT.	GPM/ PD-PSI	/ /
	TOTAL	FT.		

WT. OF STRING 120M LBS.

MUD RECORD			
TIME	5:30	7:-	
WEIGHT	9.3	9.3	
PRESSURE GRADIENT			
VISC.-SEC.	185	175	
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			9.4
pH	1-		9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6223		RM.		Lwr Cret 1½'	60	30/40/22	550	5½	60			
				Dakota 42976								
				Jur. 5½'								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 [illegible]	12 15	¼	7	Rig Serv. ✓ BOP.
12 15	12 45	½	6	Finish in Hole
12 45	2 00	1¼	3	Ream 160' To Bottom.

DRILLER W. D. [illegible]

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	26
1	[illegible]	11.27	SIZE	8½
	STB RMR OD	FT.	MFG.	Reed.
16	D.C. ID 6¼ OD	458.95 FT.	TYPE	S33G-J
	STB RMR OD	FT.	JET 1/32"	13 13 13
	D.C. ID OD	FT.	SER. NO.	320509
1	STB RMR OD	5.08 FT.	DEPTH OUT	
1	X.O.	1.53	DEPTH IN	6223
1	JARS	30.52	TOTAL FTG.	32
			TOTAL HRS. RUN	7¾
61	STANDS DP	5726.63 FT.	COND. 1/8" T/B' GAGE	
1	SINGLES DP	31.85 FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	30.00 FT.		
	TOTAL	6223.27 FT.		

WT. OF STRING 120M LBS.

MUD RECORD			
TIME	12:-	12:-	2:-
WEIGHT	9.11	9.11	9.5
PRESSURE GRADIENT			
VISC.-SEC.	193	220	110
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	800#		
CHROMIC	200#		
LIGNOSULFONATE	1 GAL.		

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6223	6255	DR.		32'	60	30-35/1100	550	5½	55			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8 00	8 15	¼		Rig Serv.
8 15	11 00	2¾		Ream To Bottom.
11 00	4 00	5		Drill 6¼ Hole.

DRILLER [illegible]

EVENING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
	BIT	FT.	BIT NO.	26
1	S.S.	11.27	SIZE	8½
	STB RMR OD	FT.	MFG.	REED.
16	D.C. ID 6¼ OD	458.95 FT.	TYPE	S33G-J
	STB RMR OD	FT.	JETS 1/32"	13 13 13
	D.C. ID OD	FT.	SER. NO.	320509
1	STB RMR OD	5.08 FT.	DEPTH OUT	6286
1	X.O.	1.53	DEPTH IN	6223
1	JARS	30.52	TOTAL FTG.	63
			TOTAL HRS. RUN	7¾ 13
61	STANDS DP	FT.	COND. 1/8" T.B. GAGE	
2	SINGLES DP	57[illegible] FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	30.00 FT.		
	TOTAL	6255.12 FT.		

WT. OF STRING 120M LBS.

MUD RECORD			
TIME	5:00	8:30	12:-
WEIGHT	9.6	9.5	9.5
PRESSURE GRADIENT			
VISC.-SEC.	95	75	105
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	11.5	10.5	10.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1200 lbs		
Drill 10	10 gal		

FOOTAGE FROM	FOOTAGE TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6255	6286	DR		31'	60	30-35/1100	550	5½	55			

DEVIATION RECORD — DEPTH 6255 — DEV. 0°

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 00	4 15	¼	7	Rig Serv.
4 15	6 30	2¼	2	Drill 6¼ Hole.
6 30	6 45	¼	5	Circ. Cond. Hole for Survey. DRLG
6 45	8 00	1¼	10	Survey & Cond.
8 00	12 00	4	2	DRLG 8½ Hole.

DRILLER

FORM 3T5 — APPROVED — APPROVED — A.A.O.D.C.--A.P.I.--OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ft de la Baca	C-32		May 16/76
OPERATOR		**CONTRACTOR**	RIG NO.
Ft Abraham Expl		Challenger Drilling	2
SIGNATURE OF OPERATOR'S REPRESENTATIVE		**SIGNATURE OF CONTRACTOR'S TOOL PUSHER**	
R.W. Sulcer		V.P. Hayes	

O.D. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6"	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	C-350	14"
2	Emsco	C-350	14"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	BKR. TO CSG. NO.	SET AT
	9⅝"	Mann's	43.5	142	5012		5005

WIRE LINE RECORD — REEL NO.
SIZE 1/4" — NO. LINES 8 — FT. SLIPPED
FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	7¾	5½	
3.	REAMING			3¼
4.	CORING			
5.	CONDITION MUD & CIRCULATE		¾	
6.	TRIPS		1½	4
7.	LUBRICATE RIG	¼	½	¼
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY		½	
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	6½	7½

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		65 FT.
1	S.S.B.		11.27
	STB RMR	OD	FT.
16	D.C. ID 6½	OD	478.95 FT.
1	STB RMR	OD	5.08 FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	X.O		1.53
1	JARS		30.52
62	STANDS DP		5779.81 FT.
	SINGLES DP		FT.
	KELLY DOWN		35.00 FT.
	TOTAL		6322.96 FT.
WT. OF STRING	120M		LBS.

BIT RECORD

BIT NO.	26
SIZE	8½
MFG.	Reed
TYPE	S316-T
JETS 1/32"	13 13 13
SER. NO.	3203
DEPTH OUT	
DEPTH IN	6223
TOTAL FTG.	100
TOTAL HRS. RUN	20¾
COND. T/B. GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	1P	4.00	6:30
WEIGHT	9.5	9.5	9.5
PRESSURE GRADIENT			
VISC.-SEC.	135	140	194
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	10.5	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	3000lb.		
DU-68	7 gal.		

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		65 FT.
1	S.S.B.		11.27
1	STB RMR	OD	5.06 FT.
11	D.C. ID 6½	OD	458.95 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	X.O		1.53
1	Jars		30.52
62	STANDS DP		5779.81 FT.
1	SINGLES DP		31.53 FT.
	KELLY DOWN		35.00 FT.
	TOTAL		6348.69 FT.
WT. OF STRING	129,000		LBS.

BIT RECORD

BIT NO.	26
SIZE	8½
MFG.	Reed
TYPE	S316-T
JET 1/32"	13 13 13
SER. NO.	320209
DEPTH OUT	6343
DEPTH IN	6223
TOTAL FTG.	120
TOTAL HRS. RUN	24¾
COND. T/B. GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10	12	3
WEIGHT	9.5	9.6	9.6
PRESSURE GRADIENT			
VISC.-SEC.	252	223	154
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	9.0		
pH	10	10	10.
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT		65 FT.
1	S.S.		11.27
1	STB RMR	OD	5.08 FT.
16	D.C. ID 6½	OD	458.95 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	X.O		1.53
1	JARS		30.52
62	STANDS DP		5779.81 FT.
	SINGLES DP		31.53 FT.
	KELLY DOWN		35.00 FT.
	TOTAL		6348.69 FT.
WT. OF STRING	129,000		LBS.

BIT RECORD

BIT NO.	26
SIZE	8½
MFG.	Reed
TYPE	S316-T
JETS 1/32"	13 13 13
SER. NO.	320209
DEPTH OUT	6343
DEPTH IN	6223
TOTAL FTG.	120
TOTAL HRS. RUN	24¾
COND. T/B. GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PART-P COMB-C
6256	6323	DR	37'	METER 4 1900 FUEL WATER	60	40	1100	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼	7	Rig Serv ✓ B.O.P.
1205	600	7¾		Drlg 8½ Hole

Driller W.W. Sumrall

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PART-P COMB-C
6323	6343		20'		60	35-40		5½	63			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
2 45	3 45	1		Rig Serv.
3 45	9 30	5¾		Drlg.
9 30	10 00	½		Circ Clean Hole F. Trip.
10 00	10 30	½		Survey. Mess Run.
10 30	2 00	3½		Drlg.
2 00	11 00	1½		Hoist.

Driller

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL-S PART-P COMB-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4 45	6 15	1½		Rig Serv.
11 45	8 00	3 3/4		Work Tight Hole
8 00	12 00	4		Hoist

Driller

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: E-T | WELL NO.: C-30 | API WELL NUMBER | DATE: MAR 17

OPERATOR: AL LABORATORY | CONTRACTOR: CHALLENGER DRILLING | RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Norwine Engr. / Robert L. Derrick

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. F. Hargrave

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6"	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	C-350	14"
2	EMSCO	C-350	14"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	MANNS.	43.5	142	6012		6005

WIRE LINE RECORD — REEL NO. — SIZE: 1 — NO. LINES: 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL		11½	5½
3	REAMING		3½	
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS	2½		
7	LUBRICATE RIG	¼		
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY			2
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21	[illegible] D.C.	¼		
22				
23				

COMPLETION: A. PERF'R'T'N; B. TBG THRPS; C. TREATING; D. SWABBING; E. TESTING; F. ADDIT'N'L; G.

TOTALS: 8 | 8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

NRS. W/CONTR. D.P.
NRS. W/OPR. D.P.
NRS. WO/D.P.
NRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

NO. 1 DRILLING ASSEMBLY (At end of tour) / BIT RECORD

	BIT	.65	FT.
1	SS	11.27	
	STB RMR OD		FT.
14	D.C. ID 6½ OD	401.70	FT.
1	STB RMR OD	5.08	FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X.O	1.53	
1	JARS	30.52	
63	STANDS DP	5873.95	FT.
	SINGLES DP		FT.
	KELLY DOWN	19.00	FT.
	TOTAL	6343.	FT.
WT. OF STRING	125M		LBS.

BIT RECORD: BIT NO. 27; SIZE 8¾; MFG. REED; TYPE FDG2-J; JETS 1/32" 13 13 13; SER. NO. 702783; DEPTH OUT; DEPTH IN 6343; TOTAL FTG.; TOTAL HRS. RUN; COND. 1/8's T/B/ GAGE; GPM/ PD-PSI

MUD RECORD: TIME; WEIGHT; PRESSURE GRADIENT; VISC.-SEC.; PV/YP; GELS; WL -CC'S; pH; SOLIDS %

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

MORNING TOUR

NO. 1 DRILLING ASSEMBLY (At end of tour) / BIT RECORD

1	BIT	.65	FT.
1	SS	11.27	
	STB RMR 1.5 OD	401.70	FT.
	D.C. ID OD		FT.
1	STB RMR OD	5.08	FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X.O	1.53	
1	JARS	30.52	
63	STANDS DP	5873.95	FT.
1	SINGLES DP	31.50	FT.
	KELLY DOWN	33.00	FT.
	TOTAL	6389.55	FT.
WT. OF STRING	135M		LBS.

BIT RECORD: BIT NO. 27; SIZE 8¾; MFG. REED; TYPE FDG2-J; JETS 1/32" 13 13 13; SER. NO. 702783; DEPTH OUT; DEPTH IN 6343; TOTAL FTG. 46; TOTAL HRS. RUN 4½; COND. 1/8's T/B/ GAGE; GPM/ PD-PSI

MUD RECORD

TIME	10	12	2
WEIGHT	9.5+	9.5+	9.5+
PRESSURE GRADIENT			
VISC.-SEC.	106	95	92
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	7.0	9.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	100		
GEL	600		
DU-GB	2yds.		

DAY TOUR

NO. 1 DRILLING ASSEMBLY (At end of tour) / BIT RECORD

1	BIT	.65	FT.
1	SS	11.27	
14	STB RMR OD		FT.
	D.C. ID 6½ OD	401.70	FT.
1	STB RMR OD	5.08	FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X.O	1.53	
1	JARS	30.52	
63	STANDS DP	5936.00 5942.45	FT.
23	SINGLES DP	73	FT.
	KELLY DOWN	31.00	FT.
	TOTAL	6417	FT.
WT. OF STRING	130M		LBS.

BIT RECORD: BIT NO. 27; SIZE 8¾; MFG. REED; TYPE FDG2-J; JETS 1/32" 13 13 13; SER. NO. 702783; DEPTH OUT; DEPTH IN 6343; TOTAL FTG. 74; TOTAL HRS. RUN 10¼; COND. 1/8's T/B/ GAGE; GPM/ PD-PSI 6417

MUD RECORD

TIME	6:00	8:00	12:00
WEIGHT	9.6	9.6+	9.6
PRESSURE GRADIENT			
VISC.-SEC.	95	90	105
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	11.0	10.5	10.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM. PARTEE COMBO

DEVIATION RECORD: DEPTH / DEV. / DIRECTION (×3)

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼	9	Rig Serv. & B.O.P.
12:15	12:45	½	6	Run in B.T. #27
12:45	1:00	¼	21	Lay Down 2 D.C's.
1:00	3:00	1¾	6	Run in
3:00	8:00	5	3	~~Work Tight Hole~~ K-[illegible]

DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM. PARTEE COMBO
6343	6389	46			50	30	1000	5½				

DEVIATION RECORD: DEPTH / DEV. / DIRECTION (×3)

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
7:30	8:00	½		Rig Serv.
8:00	8:30	½		Circ. & Rig 5:18 to Bottom undergauge Hole.
8:30	11:30	3		Drlg. Clean [illegible]
11:30	4	4½		Trip.

DRILLER

FOOTAGE / FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHLUM. PARTEE COMBO
6389	6417	DR		28'								

DEVIATION RECORD: DEPTH 6366 / DEV. / DIRECTION (×3)

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼	9	Rig Serv.
4:15	5:00	¾	2	Drlg.
5:00	6:00	1		Survey.
6:00	7:00	1	2	Drlg.
7:00	8:00	1		Survey.
8:00	12:00	4	2	Drlg

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.—A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: E.T. Al LeBus — WELL NO.: C-30
API WELL NUMBER — DATE: MAR 15/76
OPERATOR: E.T. Normal Exp. — CONTRACTOR: Challenger Drilling — RIG NO.: 2
SIGNATURE OF OPERATOR'S REPRESENTATIVE: R. L. Redrick — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: O. A. Haynes

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6"	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	C-350	14"
2	EMSCO	C-350	14"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9⅝	MANNS.	43.5#	142	5012		5005

WIRE LINE RECORD — REEL NO. — SIZE — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL	7	7½	8½
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG	½	½	½
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY	½		
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				½
22.				
	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	7½	16½	

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.	
HRS. W/OPR. D.P.	
HRS. WO/D.P.	
HRS. STANDBY	
TOTAL DAY WORK	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

DRILLING ASSEMBLY (At end of tour) — BIT RECORD

NO.	DRILLING ASSEMBLY		BIT RECORD	
	BIT	65 FT.	BIT NO.	27
1	D.S.	11.27	SIZE	8½
	STB RMR OD	FT.	MFG.	REED
1	D.C. ID 6" OD 6 2.00	401.70 FT.	TYPE	FA62-J
1	STB RMR OD 00	7.02 FT.	JETS 1/32"	13 13 13
	D.C. ID OD	FT.	SER. NO.	702783
	STB RMR OD	FT.	DEPTH OUT	
1	X.O.	1.53	DEPTH IN	6343
1	JARS	30.52	TOTAL FTG.	87
			TOTAL HRS. RUN	17¼
64	STANDS DP	5968.37 FT.	COND. 1/8's T/B. GAGE	
	SINGLES DP	FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	12.00 FT.		
	TOTAL	6430.37 FT.		
	WT. OF STRING	130M LBS.		

NO.	DRILLING ASSEMBLY		BIT RECORD	
	BIT	65 FT.	BIT NO.	27
1	D.S.	11.27	SIZE	8½
	STB RMR OD	FT.	MFG.	REED
1	D.C. ID 6½ OD	401.70 FT.	TYPE	FA62-J
1	STB RMR OD	7.02 FT.	JETS 1/32"	13 13 13
	D.C. ID OD	FT.	SER. NO.	702783
	STB RMR OD	FT.	DEPTH OUT	
1	X.O.	1.53	DEPTH IN	6343
1	JARS	30.52	TOTAL FTG.	87
			TOTAL HRS. RUN	17¼
64	STANDS DP	5968.37 FT.	COND. 1/8's T/B/ GAGE	
	SINGLES DP	FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	12.00 FT.		
	TOTAL	6430.37 FT.		
	WT. OF STRING	130M LBS.		

NO.	DRILLING ASSEMBLY		BIT RECORD	
	BIT	65 FT.	BIT NO.	27
		11.27	SIZE	8½
	STB RMR OD	FT.	MFG.	REED
	D.C. ID OD	401.70 FT.	TYPE	FA62-J
	STB RMR OD	FT.	JETS 1/32"	13 13 13
	D.C. ID OD	FT.	SER. NO.	702783
	STB RMR OD	FT.	DEPTH OUT	
1	X.O.	1.53	DEPTH IN	6343
1	JARS	30.52	TOTAL FTG.	87
			TOTAL HRS. RUN	17¼
64	STANDS DP	5968.37 FT.	COND. 1/8's T/B/ GAGE	
	SINGLES DP	FT.	GPM/ PD-PSI	/ /
	KELLY DOWN	12.00 FT.		
	TOTAL	6430.37 FT.		
	WT. OF STRING	130M LBS.		

MUD RECORD

TIME	7:00	1:00	7:00
WEIGHT	9.6	9.6	9.6+
PRESSURE GRADIENT			
VISC.-SEC.	110	115	112
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			9.2
pH	11.5	10.5	10.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500	Clay	
Drisp	4 gal.		

MORNING TOUR

MUD RECORD

TIME	12	12	5
WEIGHT	9.6+	9.6+	9.6+
PRESSURE GRADIENT			
VISC.-SEC.	109	90	87
PV/YP	/	/	/
GELS	12	/	/
WL -CC'S	5.2		
pH	10.	10.	10.
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	800#		
Drisp	3 gal.		

DAY TOUR

MUD RECORD

TIME	6:00	2:00	10:00
WEIGHT	9.6+	9.6+	9.6+
PRESSURE GRADIENT			
VISC.-SEC.	138	136	136
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	10.0	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE — FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6417	6430	DR		Mud - 45.3 11 Water - 6' Fuel - 41'7"	70	10M	1100	5½	60			

DEVIATION RECORD: DEPTH 6429 — DEV. 9° — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼	7	Rig Serv. ✓ B.O.P
12:15	4:30	4¼	2	DRLG 8½" Hole.
4:30	5:15	¾	10	Survey
5:15	7:00	2¾	2	Drlg 8½" Hole

DRILLER

FOOTAGE — FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6430	6452	22			70	10	1100	5½	60			

DEVIATION RECORD

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
7:00	7:15	¼		Rig Serv. - B.O.P.
7:15	11:00	3¾		Drlg.
				CHANGE OIL + FILTERS IN No. 1 + 2 LIGHT PLANTS
				NEW ROD + HEAD # 1 PUMP SIDE

DRILLER

FOOTAGE — FORMATION (SHOW CORE RECOVERY)

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6452	6472	21			60-70	5-10M	1100	5½	60			

DEVIATION RECORD: DEPTH 6435 — DEV. 1° — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
11:00	11:15	¼		Rig Serv. + B.O.P.
11:15	4:00	4¾		Drlg.
5:00	5:30	½		Survey.
5:30	6:00	½		Drlg.
				Circ.
	2:00	2		Trip.
8:00	9:00	1		Survey.
9:00	11:30	2½		Drlg. 11" 12"

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: ET-AL LAUCHE — WELL NO.: C-30 — API WELL NUMBER — DATE: MAR 11

OPERATOR: EXXON — CONTRACTOR: CHALLENGER DRLG. — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: E. Nakamura EXXON

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Robert Cedrick

LEGAL LAND DESCRIPTION

	DRL. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
	4½	16.60	E	6"	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	EMSCO	C-350	14"
2	EMSCO	C-350	14"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
9⅝	YOUNGS	#1 43.5	142	5612		5605

WIRE LINE RECORD — REEL NO.

SIZE 1 — NO. LINES 8 — FT. CLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	6¾	1¾	
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS		6	
7	LUBRICATE RIG	¼	¼	
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1		
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'RT'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
	TOTALS	7	8	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

BIT		67	FT.
	55	11.21	
STB RMR	OD		FT.
D.C.	ID OD	401.70	FT.
STB RMR	OD		FT.
D.C.	ID OD		FT.
STB RMR	OD		FT.
1	X-O	1.53	
1	JAR	30.52	
24	STANDS DP		FT.
2	SINGLES DP	62.98	FT.
	KELLY DOWN	40	FT.
	TOTAL	6209.45	FT.
WT. OF STRING		130M	LBS.

BIT RECORD

BIT NO.	27
SIZE	8¾
MFG.	REED
TYPE	FB-625
JETS 1/32"	13 13 13
SER. NO.	702783
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	166
TOTAL HRS. RUN	37½
COND. 1/8"s T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	12.00	9.00	7.00
WEIGHT	9.6	9.6	9.6
PRESSURE GRADIENT			
VISC.-SEC	175	140	90
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	10.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	10 bx		
DU-66	2 gal		
Caustic	50#		

MORNING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SWP-S PART'L-P CONT'L-C
6473	6508	35			70	10-12	1100	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6486	9¾							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		RIG SERVICE & V B.O.P.s
12:15	2:00	1¾		DRLG. 8½" HOLE
2:00	3:00	1		SURVEY @ 6486
3:00	8:00	5		DRLG.

DRILLER: Ernest Thigpen

DRILLING ASSEMBLY (At end of tour)

BIT		65	FT.
55		11.27	
STB RMR	OD		FT.
D.C.	ID 1½ OD	401.70	FT.
STB RMR	OD		FT.
D.C.	ID OD		FT.
STB RMR	OD		FT.
X-O		1.53	
JAR		30.52	
		3M	
STANDS DP			FT.
SINGLES DP			FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	27
SIZE	8½
MFG.	REED
TYPE	EBH-5
JET 1/32"	13 13 13
SER. NO.	702783
DEPTH OUT	
DEPTH IN	6348
TOTAL FTG.	171
TOTAL HRS. RUN	39¼
COND. 1/8"s T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	10	12	2
WEIGHT	9.6		
PRESSURE GRADIENT			
VISC.-SEC	175		
PV/YP	/	/	/
GEL	/	/	/
WL -CC'S	9.8		
pH			
SOLIDS %	10.		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SWP-S PART'L-P CONT'L-C
6508	6515	7'			70	10-13	1100	5½	LC			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:45	9:15	½		RIG SERVICE & V B.O.P.s
9:15	10:30	1¾		WORK PIPE
10:30	11:00	½		DRLG.

DRILLER: Ernest Thigpen

DRILLING ASSEMBLY (At end of tour)

BIT			FT.
STB RMR	OD		FT.
D.C.	ID OD		FT.
STB RMR	OD		FT.
D.C.	ID OD		FT.
STB RMR	OD		FT.
STANDS DP			FT.
SINGLES DP			FT.
KELLY DOWN			FT.
TOTAL			FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8"s T/B/ GAGE	
GPM/PD-PSI	

MUD RECORD

TIME			
WEIGHT			
PRESSURE GRADIENT			
VISC.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH			
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SWP-S PART'L-P CONT'L-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		RIG SERVICE & V B.O.P.s
4:15	6:15	2		HOIST PIPE TAG JOINTS TIGHT
6:15	9:15	3		CHECK ALL DRILL COLLARS 4 PT. MKS.
9:15	12:00	2¾		VICAK ON BOTH CATHEADS NOT WORKING

DRILLER: Ernest Thigpen

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ft. Worth Fuel	C-30	C-30	Mar 20 [illegible]

OPERATOR	CONTRACTOR	RIG NO.
Ft Worth Expl.	Challenger	2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: R. Smith Dedrick

SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.60	E	6"	EH.	1	1	Emsco	D-300	14"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9 5/8	Wamel	40 113.5	113	5012		5005

WIRE LINE RECORD — REEL NO.

SIZE	NO. LINES	FT. SLIPPED
1	8	33

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO. — OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL			16½
3. REAMING			
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS			
7. LUBRICATE RIG			½
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY			1½
11. WIRE LINE LOGS			
12. RUN CASING & CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
A. PERF'R'TN			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS			24

COMPLETION

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. W/O D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	.65	FT.
	55	11.27	
	STB RMR OD		FT.
11	D.C. ID 6¼ OD		FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	I.C.	1.13	
1	Jars.	30.52	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.

WT. OF STRING 120M LBS.

BIT RECORD

BIT NO.	27
SIZE	9 7/8
MFG.	Reed
TYPE	FDGJS
JETS 1/32"	13 15 15
SER. NO.	702795
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	171
TOTAL HRS. RUN	39½
COND. 1/8's T/B/ GAGE	IN
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS.	
WL -CC'S.	
pH	
SOLIDS %	

TRIPPING

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARA-P COMP-C
	6515			Shale - 2'-5"								
				Anhyd. - 6" 8"								
				Roller Tank - 5'-4"								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1	7	Work on Gas Hose.
1:00	3:00	2	2	Lay Down 3 Drill Collars.
3:00	5:00	2		Check Kelly & Screen Subs.
5:00	6:00	1		Slip 33' Line.
6:00	8:00	2		Rig up w/Rat.

DRILLER

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	.65	FT.
1	Stabilizer	11.27	
	STB RMR OD		FT.
11	D.C. ID 6¼ OD	355.44	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	I.C.	1.53	
1	Jars	30.52	
6	STANDS DP	1156.32	FT.
1	SINGLES DP	17.00	FT.
	KELLY DOWN		FT.
	TOTAL	6324.00	FT.

WT. OF STRING 120M LBS.

BIT RECORD

BIT NO.	27
SIZE	9 7/8
MFG.	Reed
TYPE	FDGJS
JET 1/32"	13 12 13
SER. NO.	702795
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	188
TOTAL HRS. RUN	41
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME		1:00	4:00
WEIGHT	9.6	9.6	9.6
PRESSURE GRADIENT			
VISC.-SEC.		130	105
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH		10	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARA-P COMP-C
6515	6524	9			70	15-20	700	5½	65			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6522	9°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
7:00	8:00	1H		Rig service & B.O.P.
8:00	12:00	33H		Finish Running in Hole pick up 9 Collars & Load pipe in Tank
12:00	2:00	2		Drill 9½" Hole
2:00	3:15	1¼		Survey @ 6522
3:15	4:00	¾H		Drill

DRILLER

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
1	BIT	.65	FT.
1	Stabilizer	11.27	
	STB RMR OD		FT.
11	D.C. ID 6¼ OD	355.44	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	I.C.	1.53	
1	Jars	30.52	
66	STANDS DP		FT.
1	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL	6517	FT.

WT. OF STRING 120M LBS.

BIT RECORD

BIT NO.	27
SIZE	9 7/8
MFG.	Reed
TYPE	FDGJS
JETS 1/32"	13 13 13
SER. NO.	702795
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	284
TOTAL HRS. RUN	46½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	6:00	7:00	10:30
WEIGHT	9.6	9.6	9.6
PRESSURE GRADIENT			
VISC.-SEC.	95	124	94
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.		9.0	
pH	9.5	10	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL-S PARA-P COMP-C
6524	6547	23			70	15-20	700	5½	65			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6547	2°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:30	½		Rig service & B.O.P.
4:30	10:30	6H		Drill
10:30	12:00	1½		Survey

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.-A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE — WELL NO. C-50

API WELL NUMBER — DATE

OPERATOR

CONTRACTOR **CHALLENGER DRILLING** — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER W. D. Hansen

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1			
2			

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT

WIRE LINE RECORD — REEL NO.

SIZE — NO. LINES — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7½	6½	6½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	½	½	½
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		½	½
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		.65 FT.
		55	11.27 FT.
	STB RMR	OD	FT.
11	D.C. ID 6¼	OD 355.44	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	KC	1.55	
1	Jar.	30.52	
64	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN	22.04	FT.
	TOTAL	6591	FT.
WT. OF STRING	120,000		LBS.

BIT RECORD

BIT NO.	27
SIZE	7⅞
MFG.	Reed
TYPE	FP-64J
JETS 1/32"	13 13 13
SER. NO.	702785
DEPTH OUT	
DEPTH IN	6243
TOTAL FTG.	246
TOTAL HRS. RUN	43¾
COND. 1/8's T/D. GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	2:00	6:00	1:00
WEIGHT	91	96	91
PRESSURE GRADIENT			
VISC.-SEC.	78	96	101
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH	10.0	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	200 lbs.		
Dvds	2 Gal.		

MORNING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6247	6591	44		Red. 3'11'	70	12-18	1400	5½	60			
				Wasatch 6,345.								
				7" Wasatch liner point.								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	12:00	4		Rig Service & C.O.P.
12:00	2:00	2		Drlg.
				Tallied in 7" liner. Changed 15 jts in STB Cut.

DRILLER

NO. DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		.65 FT.
1		11.27	
	STB RMR	OD	FT.
11	D.C. ID 6¼	OD 355.44	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	KC	1.55	
1	Jar	30.52	
	STANDS DP		FT.
1	SINGLES DP	64.79	FT.
	KELLY DOWN	22.04	FT.
	TOTAL	6615	FT.
WT. OF STRING	140,000		LBS.

BIT RECORD

BIT NO.	27
SIZE	7⅞
MFG.	Reed
TYPE	FP-64J
JETS 1/32"	13 13 13
SER. NO.	702785
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	292
TOTAL HRS. RUN	56¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME			4:00
WEIGHT			9.6
PRESSURE GRADIENT			
VISC.-SEC.			150
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S			
pH			9.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6591	6635	44			90	12-18	1400	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6600	9½							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼		Rig Service & C.O.P.
8:15	12:00	3¾		Drlg. T.O.H.
12:00	1:15	1¼		Wire line survey @ 6600
1:15	4:00	2¾		Tallied.

DRILLER

NO. DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		.65 FT.
1		11.27	
	STB RMR	OD	FT.
11	D.C. ID 6¼	OD 355.44	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	KC	1.55	
1	Jar	30.52	
64	STANDS DP		FT.
2	SINGLES DP		FT.
	KELLY DOWN	41.20	FT.
	TOTAL	6670.3	FT.
WT. OF STRING	120,000		LBS.

BIT RECORD

BIT NO.	27
SIZE	7⅞
MFG.	Reed
TYPE	FP-64J
JETS 1/32"	13 13 13
SER. NO.	M21183
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	326
TOTAL HRS. RUN	62¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	7:00	12:30	12:00
WEIGHT	9.6	9.6	9.6
PRESSURE GRADIENT			
VISC.-SEC.	110	86	79
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	10.6		
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6635	6679	36			70	20	1400	5½	60			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6671	8½							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		Rig service & C.O.P.
4:15	10:45	6½		Drlg.
10:45	11:00	¼		Survey.

DRILLER

Form 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO. 5

LEASE: [illegible] WELL NO. C-30

API WELL NUMBER: [illegible] C-30

OPERATOR: [illegible]

CONTRACTOR: CHALLENGER DRILLING

DATE: [illegible]

RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. D Harrison

DP/DC SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
11 2	N.C.	E	6"	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-200	14"

LEGAL LAND DESCRIPTION

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
	9 5/8	Nat'l	40	5	142	5.12	5005

WIRE LINE RECORD REEL NO.

SIZE 1" NO. LINES 8 FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7½	6½	6½
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	½		½
8	REPAIR RIG			½
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		1	1
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	9	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	.65	FT.
1	55	11.27	
	STB RMR OD		FT.
11	D.C. ID 6½ OD	325.14	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	Kelly	1.50	
1	Jars	30.52	
20	STANDS DP		FT.
1	SINGLES DP	30.55	FT.
	KELLY DOWN	39 00	FT.
	TOTAL	6722.18	FT.

WT. OF STRING 120,000 LBS.

BIT RECORD

BIT NO.	27
SIZE	6¾
MFG.	Reed
TYPE	FDT
JETS 1/32"	13 13 13
SER. NO.	702276
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	329
TOTAL HRS. RUN	7¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	2:00	4:00	7:30
WEIGHT	9.6	9.6	9.6+
PRESSURE GRADIENT			
VISC.-SEC.	96	114	105
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S		10.4	
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1260#		
DD-68	3gal		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6671	6722	51		Ewell - 3-1	70	20	1000	5½	58			
				Morrow - 4-2 045								
				Keller Water Zone								

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼		Rig Serv. & B.O.P.
12:15	7:00	7¾		Drlg.

DRILLER [illegible]

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
6722	6796	44	4		70	24	950	5½	58			
			5									

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6739	¾°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
7:00	7:15	¼		Rig Service & B.O.P.
7:15	10:00	2¾		Drlg. 8½" Hole
10:00	12:00	1½		Survey @ 6731 Trip for Bit
12:00	4:00	4		Drlg

DRILLER [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	.65	FT.
1	55	11.27	
	STB RMR OD		FT.
11	D.C. ID 6½ OD	325.14	FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	Kelly	1.53	
1	Jars	30.52	
20	STANDS DP		FT.
1	SINGLES DP	30.55	FT.
	KELLY DOWN	39	FT.
	TOTAL	6722.18	FT.

WT. OF STRING 120,000 LBS.

BIT RECORD

BIT NO.	27
SIZE	6¾
MFG.	Reed
TYPE	FDT
JET 1/32"	13 13 13
SER. NO.	702276
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	423
TOTAL HRS. RUN	7¾
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	8:00	12:00	4:00
WEIGHT	9.6	9.6	9.5+
PRESSURE GRADIENT			
VISC.-SEC.	80	90	90
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	10.2	10.2	
pH	9	9.5	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
DD 68	2gal		
Caustic	100		
Gel	1100		

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6796	6817	51			70	20	950	5½	58			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6796	¾°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		Rig Service & T.O.P.
4:15	5:30	1¼		Drlg.
5:30	5:45	¼		Tighten Swivel
5:45	9:30	3¾		Drlg
9:30	10:30	1		Survey.
10:30	12:00	1½		TRIG.

DRILLER [illegible]

EVENING TOUR

Form 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

C-30

CONTRACTOR **CHALLENGER DRILLING** RIG NO. 2

DATE

SIGNATURE OF OPERATOR'S REPRESENTATIVE R. L. Redrick

SIGNATURE OF CONTRACTOR'S TOOL PUSHER N. D. Flanagan

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4½	16.6	E	6⅜	XH	1	1	Emsco	D-375	14"

LEGAL LAND DESCRIPTION

WIRE LINE RECORD REEL NO.

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	BKR. TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	7"	Lone Star	23#	161	6808		6808

SIZE 7/16 NO. LINES 2 FT. SLIPPED

FT. CUT OFF PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	7¾	6¾	
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	½	½	½
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY		1	1
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		7	7	3

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		6⅝ FT.
1		55	1127 FT.
	STB RMR OD	9 5/8	24 FT.
11	D.C. ID 2¼	OD 9	355.64 FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1		60	1.00 FT.
1		5 jts.	213.12 FT.
72	STANDS DP		6617.72 FT.
	SINGLES DP		FT.
	KELLY DOWN		31.00 FT.
	TOTAL		6882 FT.
WT OF STRING		195,000	LBS.

BIT RECORD

BIT NO.	27
SIZE	6⅝
MFG.	Reed
TYPE	FDT
JETS 1/32"	13 13 13
SER. NO.	7-1715
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	539
TOTAL HRS. RUN	91
COND. 1/8's T/B' GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	2nd	4th	6th
WEIGHT	9.6	9.6+	9.6+
PRESSURE GRADIENT			
VISC.-SEC.	120	101	44
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	9.6		
pH	10.	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500#		
SW-62	1½ gal.		

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		6" FT.
1		1 1/4	FT.
	STB RMR OD		FT.
11	D.C. ID 2¼	OD 9	355.64 FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1		1.53	FT.
1	Jars	32.32	FT.
72	STANDS DP		FT.
1	SINGLES DP	249.47	FT.
	KELLY DOWN	41	FT.
	TOTAL	6775.99	FT.
WT. OF STRING		185,000	LBS.

BIT RECORD

BIT NO.	28
SIZE	6⅝
MFG.	Reed
TYPE	FDT
JET 1/32"	12 12 12
SER. NO.	7-1715
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	432
TOTAL HRS. RUN	114
COND. 1/8's T/B' GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	6:00	9:30	3:00
WEIGHT	9.5	9.5	9.5
PRESSURE GRADIENT			
VISC.-SEC.	75	85	82
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	10.2		
pH	10.	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000		
NUGS	2 gal.		
Caustic	5#		

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		6⅝ FT.
1		1129	FT.
	STB RMR OD		FT.
11	D.C. ID 2¼	OD 9	355.64 FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1		1.53	FT.
1	Jars	32.32	FT.
73	STANDS DP	6511.20	FT.
	SINGLES DP		FT.
	KELLY DOWN	32.00	FT.
	TOTAL	6561	FT.
WT. OF STRING		125,000	LBS.

BIT RECORD

BIT NO.	27
SIZE	6⅝
MFG.	Reed
TYPE	FP-61J
JETS 1/32"	12 12 12
SER. NO.	7-1183
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	618
TOTAL HRS. RUN	104½
COND. 1/8's T/B' GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	7:00	8:30	10:00
WEIGHT	9.6	9.7	9.6+
PRESSURE GRADIENT			
VISC.-SEC.	96	135	85
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	9.6		
pH	10	10.	10.
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL.-S PART.-P COM.-C
6217	6287	CB		FUEL 3 11 METER 41701 BILLEN WATER TANK 5 4	70	22	2000	5½	110			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:30	½		Rig Service
12:30	2:00	1½		Work on Winch

DRILLER

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL.-S PART.-P COM.-C
6882	6912	41										

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6912	?							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
7:00	9:00	2		Rig Service & TOH
9:00	10:00	1		Make up Bit
10:00	11:00	1		Wire Line Logs & TIH
11:00	16:00	5		Drlg.

DRILLER

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL.-S PART.-P COM.-C
6112	6961	38			70	22	2000	5½	116			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
6951	2½							

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		Rig Service & TOH
4:15	13:00	5¾		Drlg.
10:00	11:00	1		Survey.
11:00	12:00	1		Drlg.

DRILLER

FORM 3T5 APPROVED APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: ET. L. LOFTIN. — WELL NO.: C-30 — API WELL NUMBER — DATE: March 24 Ba

OPERATOR: ET Mobil Exp. — CONTRACTOR: C-30 — CHALLENGER DRILLING — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: K. L. Jobe — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: D. D Hughes

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6"	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-800	14"
2	"	"	"

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9⅝	Mmms	40.5	142	5912		5909

WIRE LINE RECORD — REEL NO. — SIZE: ⅛ — NO. LINES: 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH — TON MI. OR TRIPS SINCE LAST CUT — CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO. – OPERATION	MORN.	DAY	EVE.
1. RIG UP AND TEAR DOWN			
2. DRILL ACTUAL	6½	12½	3½
3. REAMING [illegible]			1
4. CORING			
5. CONDITION MUD & CIRCULATE			
6. TRIPS		6	3
7. LUBRICATE RIG	½	½	½
8. REPAIR RIG			
9. CUT OFF DRILLING LINE			
10. DEVIATION SURVEY	1		
11. WIRE LINE LOGS			
12. RUN CASING CEMENT			
13. WAIT ON CEMENT			
14. NIPPLE UP B.O.P.			
15. TEST B.O.P.			
16. DRILL STEM TEST			
17. PLUG BACK			
18. SQUEEZE CEMENT			
19. FISHING			
20. DIR. WORK			
21.			
22.			
23.			
COMPLETION A. PERF'R'T'N			
B. TBG TRIPS			
C. TREATING			
D. SWABBING			
E. TESTING			
F. ADDIT'N'L			
G.			
TOTALS	8	8	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P. | HRS. W/OPR. D.P. | HRS. WO/D.P. | HRS. STANDBY | TOTAL DAY WORK | NO. OF DAYS FROM SPUD | CUMULATIVE ROTATING HRS. | TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	.65 FT.	
1	SS	11.27	
	STB RMR OD	FT.	
11	D.C. ID 6½ OD	355.64 FT.	
	STB RMR OD	FT.	
	D.C. ID OD	FT.	
	STB RMR OD	FT.	
1	Sub	1.53	
1	Jars	30.58	
23	STANDS DP	6711.20 FT.	
1	SINGLES DP	31.09 FT.	
	KELLY DOWN	37.35 FT.	
	TOTAL	7000 FT.	
WT. OF STRING	175 M LBS.		

BIT RECORD

BIT NO.	27
SIZE	6¾
MFG.	Hycalog
TYPE	FP-62J
JETS 1/32"	13 13 13
SER. NO.	702795
DEPTH OUT	
DEPTH IN	6343
TOTAL FTG.	657
TOTAL HRS. RUN	111½
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	2:00	4:00	6:00
WEIGHT	9.7	9.7	9.7
PRESSURE GRADIENT			
VISC.-SEC.	104	128	134
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	9.0		
pH	10.	10.0	10.0
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Oil	15 00		
DU-68	1191.		

MORNING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
6961	7000	39'		Frio - 3 Miocene - 4' 1.36 Anahuac Top - 4' 4	70	22	1050	5½	46			

DEVIATION RECORD: DEPTH 1996 — DEV. 6½° — DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
12:00	12:45	¾		Rig Serv. & B.O.P.
12:45	5:00	4¼		Drlg.
5:00	6:00	1		Circulate.
6:00	6:00	2		Trip.

DRILLER

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	.65 FT.	
1	Stuck in	11.27	
	STB RMR OD	FT.	
11	D.C. ID 6½ OD	355.64 FT.	
	STB RMR OD	FT.	
	D.C. ID OD	FT.	
	STB RMR OD	FT.	
1	Sub	1.53	
1	Jars	30.52	
	STANDS DP	FT.	
	SINGLES DP	FT.	
	KELLY DOWN	FT.	
	TOTAL	FT.	
WT. OF STRING		LBS.	

BIT RECORD

BIT NO.	27
SIZE	6¾
MFG.	Reed
TYPE	FP-62J
JETS 1/32"	13 13 13
SER. NO.	702795
DEPTH OUT	7019
DEPTH IN	6343
TOTAL FTG.	667
TOTAL HRS. RUN	113
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/ /

MUD RECORD

TIME	6:00		
WEIGHT	9.6+		
PRESSURE GRADIENT			
VISC.-SEC.	82		
PV/YP	/	/	/
GELS	/	/	/
WL -CC'S	7.4		
pH	10.0		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
7000	7010	10										

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
8:00	9:15	1¼		Rig Service & B.O.P.
9:15	10:45	1½		Drlg 9½" Hole
10:45	2:00	1¼		Blank Kelly & Unit Hit "11" Tally out Run in Hole - Pick Mach Sub Slip & Cut
2:00	4:00	2		

SI 7028.32 — D Line 7014.07 — 14.25 Ft. of Curb Made

DRILLER

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
7010	7046	36'			70	22	1050	5½	46			

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS
4:00	4:15	¼		Rig Service & B.O.P.
4:15	7:15	3		Rig in Hole & Measure in
7:15	8:15	1		Clean to Bottom
8:15	12:00	3¾		Drlg

DRILLER

Form 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: Ft. 21-22 BICH C-30 — WELL NO.: 1 Mar 25/86 — API WELL NUMBER: C-30 — DATE: 11-20-25-86

OPERATOR: ET Navajo Expl. — CONTRACTOR: CHALLENGER DRILLING — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: T.H. Deutsch — SIGNATURE OF CONTRACTOR'S TOOL PUSHER: H Bayley

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6"	Reg	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14"
2	"	"	"

LEGAL LAND DESCRIPTION

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	WKR. TO CSG. NO.	SET AT
LAST CASING TUBING OR LINER	9⅝	Mannes	40 J	142	5912		5905

WIRE LINE RECORD — REEL NO.: — SIZE: 4⅝ — NO. LINES: 8 — FT. SLIPPED: — FT. CUT OFF: — PRESENT LENGTH: — TON MI. OR TRIPS SINCE LAST CUT: — CUMULATIVE TON MI. OR TRIPS:

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	6¾	6¼	7¼
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			
6	TRIPS			
7	LUBRICATE RIG	½	½	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1	1	
11	WIRE LINE LOGS			
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21				
22				
23				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		6	9	8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P. — HRS. W/OPR. D.P. — HRS. WO/D.P. — HRS. STANDBY — TOTAL DAY WORK — NO. OF DAYS FROM SPUD — CUMULATIVE ROTATING HRS. — TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour) — BIT RECORD — MUD RECORD

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	2nd	4th	6th
	BIT	1.5 FT.	BIT NO.	23	TIME	2nd	4th	6th
1	[illegible]	11.27	SIZE	8¾	WEIGHT	9.7	9.7	9.6
	STB RMR OD	FT.	MFG.	Reed	PRESSURE GRADIENT			
11	D.C. ID 6¼ OD	355.64 FT.	TYPE	FDT25	VISC.-SEC.	137	135	98
	STB RMR OD	FT.	JETS 1/32"	13/13/13	PV/YP	/	/	/
	D.C. ID OD	FT.	SER. NO.	X2948	GELS	/	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S	9.4		
1	[illegible]	1.53	DEPTH IN	7010	pH	10.0	10.0	10.0
1	Jars	30.52	TOTAL FTG.	76	SOLIDS %			
74	STANDS DP	6650.11 FT.	TOTAL HRS. RUN	10½	MUD & CHEMICALS ADDED			
	SINGLES DP	FT.	COND. 1/8" T/B. GAGE		TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	39.0 FT.	GPM/ PD-PSI	/ /				
	TOTAL	7086 FT.					4	
WT. OF STRING	192,000 LBS.							

MORNING TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	8:00	12:00	4:00
	BIT	65 FT.	BIT NO.	28	TIME	8:00	12:00	4:00
1	[illegible]	11.27	SIZE	8¾	WEIGHT	9.6	9.6	9.6
	STB RMR OD	FT.	MFG.	Reed	PRESSURE GRADIENT			
11	D.C. ID 6¼ OD	355.64 FT.	TYPE	FDT25	VISC.-SEC.	98	86	95
	STB RMR OD	FT.	JET 1/32"	13/13/13	PV/YP	/	/	/
	D.C. ID OD	FT.	SER. NO.	X2948	GELS	/	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S	9.2		
1	[illegible]	1.53	DEPTH IN	7010	pH	10.	10	10
1	Jars	30.52	TOTAL FTG.	126	SOLIDS %			
74	STANDS DP	FT.	TOTAL HRS. RUN	17¼	MUD & CHEMICALS ADDED			
1	SINGLES DP	41.49 FT.	COND. 1/8" T/B/ GAGE		TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	39 FT.	GPM/ PD-PSI	/ /				
	TOTAL	7112 FT.						
WT. OF STRING	192,000 LBS.							

DAY TOUR

NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	7:00	9:00	11:00
	BIT	65 FT.	BIT NO.	29	TIME	7:00	9:00	11:00
1	[illegible]	11.27	SIZE	8¾	WEIGHT	9.6	9.6	9.6
	STB RMR OD	FT.	MFG.	Reed	PRESSURE GRADIENT			
11	D.C. ID 6¼ OD	355.64 FT.	TYPE	FDT25	VISC.-SEC.	120	120	118
	STB RMR OD	FT.	JETS 1/32"	13/13/13	PV/YP	/	/	/
	D.C. ID OD	FT.	SER. NO.	X2948	GELS	/	/	/
	STB RMR OD	FT.	DEPTH OUT		WL -CC'S	9.4		
1	[illegible]	1.53	DEPTH IN	7010	pH	10	10	9.0
1	Jars	30.52	TOTAL FTG.	128	SOLIDS %			
74	STANDS DP	FT.	TOTAL HRS. RUN	25	MUD & CHEMICALS ADDED			
2	SINGLES DP	661.49 FT.	COND. 1/8" T/B/ GAGE		TYPE	AMT.	TYPE	AMT.
	KELLY DOWN	25 FT.	GPM/ PD-PSI	/ /				
	TOTAL	7139.66 FT.						
WT. OF STRING	122,000 LBS.							

EVENING TOUR

FOOTAGE — FORMATION — DEVIATION RECORD — TIME LOG

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PART.-P COMPL.-C
Surface	7086	10.		Fluvial - 6'	70	22M	1000	5½	56			
				Mesa - 50,166								

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:00	6		Rig Serv. & B.O.P.s
12:00	2:45	2¾		Wait.
2:45	3:45	1		Survey. Miss-run.
3:45	9:00	4¼		Wait.

DRILLER: [illegible]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PART.-P COMPL.-C
7086	7112	26			70	[illegible]	[illegible]	[illegible]	[illegible]			

DEVIATION RECORD: DEPTH 7091 — DEV. 9°1/4

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
7:00	8:15	¼		Rig service & C.O.P.
8:15	9:15	1		Drlg. 8¾" hole
9:15	10:15	1		Wire line survey @ 7071
10:15	4:00	5¾		Drlg.

DRILLER: [illegible]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PART.-P COMPL.-C
7112	7138	26			70	22M	1050	5½	58			

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼	7	Rig service & T.I.H.
4:15	12:00	7¾	2	Drlg.

DRILLER: [illegible]

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT — REPORT NO.

LEASE: Ethel La Rue — WELL NO.: C-30 — API WELL NUMBER — DATE: 11 Nov. 1972

OPERATOR: Ethel La Rue — CONTRACTOR: CHALLENGER DRILLING — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Ethel La Rue Co.

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: W D Bailey

LEGAL LAND DESCRIPTION

D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
4½	16.60	E	6"	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14"
2	Emsco	D-300	14"

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
9⅝	Mayhew	40 J55	142	5012		5005

WIRE LINE RECORD — REEL NO.

SIZE 1" — NO. LINES 8 — FT. SLIPPED — FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1	RIG UP AND TEAR DOWN			
2	DRILL ACTUAL	6	14½	
3	REAMING			
4	CORING			
5	CONDITION MUD & CIRCULATE			2
6	TRIPS	3½		4½
7	LUBRICATE RIG	¼	¼	¼
8	REPAIR RIG			
9	CUT OFF DRILLING LINE			
10	DEVIATION SURVEY	1	½	
11	WIRE LINE LOGS			1¾
12	RUN CASING & CEMENT			
13	WAIT ON CEMENT			
14	NIPPLE UP B.O.P.			
15	TEST B.O.P.			
16	DRILL STEM TEST			
17	PLUG BACK			
18	SQUEEZE CEMENT			
19	FISHING			
20	DIR. WORK			
21			½	
22				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8	15½	

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.
HRS. W/OPR. D.P.
HRS. WO/D.P.
HRS. STANDBY
TOTAL DAY WORK
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.
TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	6½	FT.
1		35	1127 FT.
	STB RMR OD		FT.
#1	D.C. ID 6¼ OD	3	55.64 FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X-O	1.53	
1	JARS	30.52	
75	STANDS DP	4749.65	FT.
	SINGLES DP		FT.
	KELLY DOWN	30	FT.
	TOTAL	7173.76	FT.
WT. OF STRING	125M		LBS.

BIT RECORD

BIT NO.	28
SIZE	6½
MFG.	Reed
TYPE	FP62F
JETS 1/32"	13 13 13
SER. NO.	702948
DEPTH OUT	
DEPTH IN	7010
TOTAL FTG.	164'
TOTAL HRS. RUN	21¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	2:00	4:00	11:00
WEIGHT	9.6	9.6	11
PRESSURE GRADIENT			
VISC.-SEC.	40	105	105
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.			
pH	9.5	9.5	9.5
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CAUSTIC	20 Mo		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
7138	7174	36		Meter 50%	70	22M	1050	5½	58	5½		
				Fuel 5%								
				Water 45%								

DEVIATION RECORD: DEPTH 7154 — DEV. 8° — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:15	¼	7	Rig Serv. & BOPs
12:15	3:00	2¾	2	Drlg 8½" Hole
3:00	4:00	1	10	Survey
4:00	8:00	4	2	Drlg 8½" Hole

DRILLER: W.O. Ivey

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	6½	FT.
1		35	1127 FT.
	STB RMR OD		FT.
#2	D.C. ID 6¼ OD	3	55.64 FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X-O	1.53	
1	JARS	30.52	
75	STANDS DP	4744.76	FT.
1	SINGLES DP	4744.76	FT.
	KELLY DOWN	21	FT.
	TOTAL	7200.55	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	28
SIZE	6½
MFG.	Reed
TYPE	FP62F
JET 1/32"	13 13 13
SER. NO.	702948
DEPTH OUT	
DEPTH IN	7010
TOTAL FTG.	190
TOTAL HRS. RUN	37¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	9:00	12:30	
WEIGHT	9.4	9.5	
PRESSURE GRADIENT			
VISC.-SEC.	80	160	
PV/YP	/	/	
GELS.	/	/	
WL -CC'S.	11.2	10.6	
pH	10.0	10.0	
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
KCl	1500		
Drill Gel	3 sx		

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
7174	7200	36			70	22M	1050	5½	58	5½		

DEVIATION RECORD: DEPTH 7200 — DEV. 9¼° — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9:00	9:15	¼	7	Rig Service & BOPs
9:15	12:45	4½	2	Drlg 8½" Hole
12:45	2:15	1½	5	Circ Sample TD @ 7200
2:15	3:15	1	10	Wire Line Survey
3:15	4:00	3/4	11	Dummy Trip 25 STDS.

DRILLER: W.O. Ivey

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT	6½	FT.
1		35	1127 FT.
	STB RMR OD		FT.
1	D.C. ID 6¼ OD	3	55.64 FT.
	STB RMR OD		FT.
	D.C. ID OD		FT.
	STB RMR OD		FT.
1	X-O	1.53	
1	JARS	30.52	
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	28
SIZE	6½
MFG.	Reed
TYPE	FP62F
JETS 1/32"	13 13 13
SER. NO.	702948
DEPTH OUT	7200
DEPTH IN	7010
TOTAL FTG.	190
TOTAL HRS. RUN	37¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	/

MUD RECORD

TIME	5:30		
WEIGHT	9.6+		
PRESSURE GRADIENT			
VISC.-SEC.	270		
PV/YP	/	/	/
GELS.	/	/	/
WL -CC'S.	9.6		
pH	10		
SOLIDS %			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN
7200	TD.											

DEVIATION RECORD: DEPTH — DEV. — DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼	7	Rig Service & BOPs
4:15	5:00	¾	6	Run in Hole 25 STDS
5:00	7:00	2	5	Circ To Logs
7:00	10:00	3	6	Hoist To Log
10:00	10:15	¼	6	Lay Down Tags
10:15	11:00	¾	11	Rig To Log
11:00	12:00	1	11	Logging

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE: Et al La Rue — WELL NO.: C-30

API WELL NUMBER

DATE: MAR. 27/[illegible]

OPERATOR: Et Norman Exp.

CONTRACTOR: CHALLENGER DRILLING — RIG NO.: 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: R. L. & L. Jedrich

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: J Bayley

LEGAL LAND DESCRIPTION

	D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
	4½	16.60	E	6"	F.H.	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D-300	14"
2	Emsco	D-300	14"

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	9 5/8	MANNS.	40 J-55	147	5012		5005

WIRE LINE RECORD — REEL NO.

SIZE — NO. LINES: 8 — FT. SLIPPED

FT. CUT OFF — PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			7
6.	TRIPS			
7.	LUBRICATE RIG	½		½
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS	7½		
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.	PICK UP SINGLES			½
22.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS		8		8

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		.65 FT.
1	[illegible]		11.27
	STB RMR	OD	FT.
9	D.C. ID 6 1/2	OD	355.64 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	K.O.		1.52
1	JAR [illegible]		32.52
71	STANDS DP		FT.
1	SINGLES DP		1771.96 FT.
	KELLY DOWN		21.00 FT.
	TOTAL		7200.55 FT.

WT. OF STRING 122M LBS.

BIT RECORD

BIT NO.	28
SIZE	7⅞
MFG.	Reed
TYPE	FP12J
JETS 1/32"	12 12 12
SER. NO.	702642
DEPTH OUT	7200
DEPTH IN	7010
TOTAL FTG.	190
TOTAL HRS. RUN	37¼
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS	
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
7200	T.D											

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12 00	12 15	¼	7	Rig Serv. & BOP
12 15	4 00	9¾	11	Loggins #1 B.H.C.-G.R. #
4 00	7 00	3	11	#2 D.L.L.
7 00	8 00	1		#3 H.D.T.

DRILLER: [illegible]

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
1	[illegible]		11.27
	STB RMR	OD	FT.
7	D.C. ID 6 1/2	OD	355.64 FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
1	K.		1.52
1	Jars		32.52
71	STANDS DP		FT.
1	SINGLES DP		1771.96 FT.
	KELLY DOWN		21.00 FT.
	TOTAL		7200.55 FT.

WT. OF STRING 122 M LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JET 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS	
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
7200	T.D.											

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	11:30	3½		Loggins
11:30	2:00	2½		Run in Hole & Lay Down, Drill Collars
2:00	4:00	2		Run Pipe in Hole

DRILLER: [illegible]

EVENING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
78	STANDS DP		FT.
2	SINGLES DP	7186.03	FT.
	KELLY DOWN	14.00	FT.
	TOTAL	7200.03	FT.

WT. OF STRING 110 M LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
COND. 1/8's T/B/ GAGE	
GPM/ PD-PSI	

MUD RECORD

TIME	
WEIGHT	
PRESSURE GRADIENT	
VISC.-SEC.	
PV/YP	
GELS	
WL -CC'S	
pH	
SOLIDS %	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN
7200	T.D.											

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼		Rig Service
4:15	5:00	¾		Pick up 10 singles & Break Circ.
5:00	12:00	7		Circ. & wait on drivers

DRILLER

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
Ford Lucille			11/21/78

OPERATOR: [illegible] Ford

CONTRACTOR: CHALLENGER DRILLING — RIG NO. 2

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible] Bayley

LEGAL LAND DESCRIPTION:

	D.P. SIZE	WT./FT.	GRADE	TOOL JT O.D.	TYPE THREAD	STRING NO.
	4½	16.6	E	6⅜	FH	1

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	Emsco	D 375	14
2	"	D 375	14

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
LAST CASING TUBING OR LINER	7⅝	Armco	29.7	142	5012		5005

WIRE LINE RECORD — REEL NO.

SIZE | NO. LINES | FT. SLIPPED

FT. CUT OFF | PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.
1.	RIG UP AND TEAR DOWN			
2.	DRILL ACTUAL			
3.	REAMING			
4.	CORING			
5.	CONDITION MUD & CIRCULATE			
6.	TRIPS			
7.	LUBRICATE RIG			
8.	REPAIR RIG			
9.	CUT OFF DRILLING LINE			
10.	DEVIATION SURVEY			
11.	WIRE LINE LOGS			
12.	RUN CASING & CEMENT			
13.	WAIT ON CEMENT			
14.	NIPPLE UP B.O.P.			
15.	TEST B.O.P.			
16.	DRILL STEM TEST			
17.	PLUG BACK			
18.	SQUEEZE CEMENT			
19.	FISHING			
20.	DIR. WORK			
21.				
22.				
23.				
COMPLETION	A. PERF'R'T'N			
	B. TBG TRIPS			
	C. TREATING			
	D. SWABBING			
	E. TESTING			
	F. ADDIT'N'L			
	G.			
TOTALS				

DAY WORK TIME SUMMARY (OFFICE USE ONLY)

HRS. W/CONTR. D.P.

HRS. W/OPR. D.P.

HRS. WO/D.P.

HRS. STANDBY

TOTAL DAY WORK

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

TOTAL MUD COST

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD

BIT NO. | SIZE | MFG. | TYPE | JETS 1/32" | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1/8's T/B/ GAGE | GPM/ PD-PSI

MUD RECORD

TIME | WEIGHT | PRESSURE GRADIENT | VISC.-SEC. | PV/YP | GELS | WL-CC'S. | pH | SOLIDS %

MUD & CHEMICALS ADDED: TYPE | AMT. | TYPE | AMT.

MORNING TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD

BIT NO. | SIZE | MFG. | TYPE | JET 1/32" | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1/8's T/B/ GAGE | GPM/ PD-PSI

MUD RECORD

TIME | WEIGHT | PRESSURE GRADIENT | VISC.-SEC. | PV/YP | GELS | WL-CC'S. | pH | SOLIDS %

MUD & CHEMICALS ADDED: TYPE | AMT. | TYPE | AMT.

DAY TOUR

DRILLING ASSEMBLY (At end of tour)

NO.			
	BIT		FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	D.C. ID	OD	FT.
	STB RMR	OD	FT.
	STANDS DP		FT.
	SINGLES DP		FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD

BIT NO. | SIZE | MFG. | TYPE | JETS 1/32" | SER. NO. | DEPTH OUT | DEPTH IN | TOTAL FTG. | TOTAL HRS. RUN | COND. 1/8's T/B/ GAGE | GPM/ PD-PSI

MUD RECORD

TIME | WEIGHT | PRESSURE GRADIENT | VISC.-SEC. | PV/YP | GELS | WL-CC'S. | pH | SOLIDS %

MUD & CHEMICALS ADDED: TYPE | AMT. | TYPE | AMT.

EVENING TOUR

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL'S PARKER-P COMP.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
Mcc	1215	11		Rig Rpr. - Brk.
12-5	3cc	2 30		Rig repair engine.
3cc	4cc	1		Run Plug #1 Collar Locr.
4cc	5cc	1		Hyd 23 sxs + 2 Sacks
5cc	6cc	1		Run Plug #2 4815.
6cc	8cc	2		Wait C.

DRILLER [illegible]

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCHL'S PARKER-P COMP.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
6cc	2cc	6		W. C.
9cc	2.5	11-1		Fish Plug #2 TP 4815
2.5	4cc	1 3/4		P.U. 4 1/2" casing Slips + Free Point

DRILLER [illegible]

FOOTAGE / FORMATION

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCHL'S PARKER-P COMP.-C

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG

FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4cc	10cc	6		WT. Free Point
10cc	12cc	2		Lay down Drill Pipe

DRILLER [illegible]

FORM 3T5 — APPROVED — APPROVED

A.A.O.D.C.--A.P.I. OFFICIAL DAILY DRILLING REPORT FORM