

WELL NAME: Horn 2 Address Gulf Oil Lake 2-05
FIELD: Area: 05
LOCATION: Unit: Section: 02-00-123-00
Latitude: 31-21-11 --- 121-02-27 Longitude: 123-01-47
U.W.L.R.: 3012050200123000
U.W.I.: 3012050200123000

Rig Release Date:
Status:
Information Release Date:

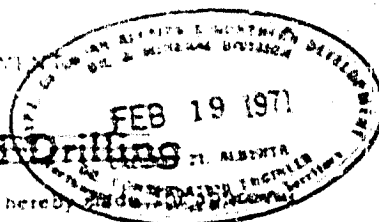
CHANGE OF NAME:

DATE RECEIVED	INDEX
24-12-70	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
23-2-71	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
	Well History Supplement.
	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells - Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells - Vitter's Method.
	M.P.R. - Oil - Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale..... Small scale.....



File No.
Drilling Authority No. 453

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 to abandon, to suspend drilling

Name and number of well: Horn R Amiless Gulf Oil Lake M-05
Location: Unit N. Section 05
Latitude: 61° 54' 58" N. Longitude: 123° 01' 47" W.
From Established Reference Marker: Lat. 61.91611° N., Long. 123.02972° W.
Universal Well Location Reference: 3367
Permit No. Lease No.

Gulf Oil Canada Ltd., Amerada-Hess Corp.
(Permitter, Lessee, Licensee)

Date of commencement of proposed program: Jan. 13, 1971 3:00 AM

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at
Gas at
Water at 4960 to 4903 DST #1 4630 to 4680 DST #2
Total Depth 6500 Date of last operations Feb. 13, 1971 4:00 AM Rig Rel.
Present condition of well Dry and abandoned

CASING RECORD

Casing Size O.D. inches	Weight	Amount	Set At	Types of Cement and Additives	Amount Pulled
1. 8-5/8"	24#	704.80	704.80	380 sacks cement + 2% CaCl ₂	NIL
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	6500 to 6400	Clastics	25 + 4% Gel	
2	5000 to 4600	Arnica, Manitou, Headless	130 + 4% Gel	Top felt at 4540
3	760 up to surface		200 + 4% Gel	
cut casing off 3 ft. below ground weld on plate and 5 ft. rod with well marker				

The following logs have been run IES, BHC SGC FD SNP
Other operations proposed NIL

Operations to be carried out by Petrolia Oilwell Drilling Contractor Licence No. 957
Address Ft. Simpson, N. W. T. Address
Responsible Agent in field Gordon Gillis

Dated at Calgary, this 19th Day of February 1971
Signed by *Gordon Gillis* Company Horn River Resources Ltd.
Title President Operator's Exploratory Licence No. 1785

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. G. E. Hine
on the 11th February 1971.

Dated 23rd February 1971

B. H. Thomas
Oil Conservation Engineer

POOR COPY

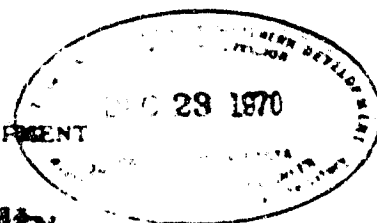
Drilling Authority No. 423

Project No.

File No.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION



Application for a Drilling Authority

The 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: Horn R. ~~Amherst~~ Gulf Oil Canada Ltd. and Amerada-Hess Corporation
Location: Unit M Section 05 Grid 62°00' N. Lat., 123°00' W. Lon.
Latitude 61°54' 58" Longitude 123°01' 20" 47"
Unique Well Identifier 300M056200123000
Universal Well Location Reference Lat. 61.91611° N., Long. 123.02972° W.
Elevation Ground 1204 K.B. 1214 (est.) feet above sea-level.
Well is expected to produce from Middle Devonian formation at a depth
of about 5000 feet. Expected total final depth 6500
Area assigned to well

(For Oil Conservation Engineer's use only)

Permit No. 5367 Lease No. Acreage 60,296
Permitter, licensee, or lessee Gulf Oil Canada Ltd. and Amerada-Hess Corporation
Exploratory License No. 12667 and 1391
Surface owned by Crown or Crown
Petroleum and natural-gas rights owned by Crown
(If different submit name and address of owner and assignee.)

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	Depth of Cement
1. 8 5/8"	24.4	J-55	New	650	320
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment Middle Devonian Carbonates
Control with B.O.P.'s - GK 10" 900 Series Hydril B.O.P.
10" 900 Series Double-gate Hydraulic Schaeffer B.O.P.

Well will be drilled with Rotary Rig No. 7 by Petrolia Oilwell Drilling Ltd.
(Drilling Contractor or company)

Responsible agent of applicant:— Contractor's business licence No.
At well G. Gillis At registered office F. L. Woolley
Address Gen. Del., Ft. Simpson Address 1020 Aquitaine Tower, 540 Fifth Ave. S.W.
Calgary 1, Alta.
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at Calgary this 22nd day of December 19 70
Signed by F. L. Woolley Company Horn River Resources Ltd.
Title President Operator's Licence No. 1785 ✓

(For Oil and Mineral Division use only)

APPROVED

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

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

Dated 24th December 19 70 Please see over page

Oil Conservation Engineer

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

POOR COPY

Drilling Authority No. 1-2

Project No.

File No.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application for a Drilling Authority

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

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

Name and number of well **North E. ~~Amur~~ Calf Oil Lake H-05**
Location Unit **M** Section **05** **67°00' N.Lat., 123°00' W.Long**
Latitude **61°34'38"** Longitude **123°01'29"**
Unique Well Identifier **123-01-29-05**
Universal Well Location Reference **Lat. 61.5772° N. Long. 123.0247° W.**
Elevation Ground **1204** **K.B. 1214 (est.)** feet above sea-level.
Well is expected to produce from **Middle Devonian** formation at a depth
of about **5000** feet. Expected total final depth **6500**
Area assigned to well

(For Oil Conservation Engineer's use only)

Permit No. **5367** Lease No. **60,296**
Permittee, licensee, or leasee **Calf Oil Canada Ltd. and Amrad-Bass Corporation**
Exploratory Licence No. **1397 and 1391**
Surface owned by Crown or **Crown** (If alienated, submit name and address of owner and occupant)
Petroleum and natural gas rights owned by **Crown**

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Stubs of Casing
1. 8 5/8"	24.9	J-55	New	650	320
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment **Middle Devonian Carbonates**
Control with B.O.P.'s - **GK 10" 900 Series Hydraulic B.O.P.**
10" 900 Series Double-gate Hydraulic Schaeffer B.O.P.

Well will be drilled with Rotary Rig No. **7** by **Petrolia Oilwell Drilling Ltd.**
(Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Business Licence No.
At well **G. Ellis** **F. L. Woolley**
Address **Can.Dal., Ft. Simpson** Address **1020 Aquitaine Tower, 340 Fifth Ave. S.W. Calgary 1, Alta.**
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at **Calgary** this **22nd** day of **December** **70**
Signed by **F. L. Woolley** Company **Horn River Resources Ltd.**
Title **President** Operator's Licence No. **1785**
(For Oil and Mineral Division use only)

APPROVED

- This application has been examined and approved subject to the following conditions:—
1. Copies of this drilling plan must be submitted to the Drilling P.C. in both the
2. The Company will submit to this office, on Tuesday of each week, the latest reports

Dated **24th December** **19 70** Please see over page

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

received by radio on the progress of the well.

3. During well drilling and testing operations, every effort shall be made to ensure that drilling fluids, chemicals and wastes shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.
4. To draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.
5. Intermediate and production strings of casing are to receive the approval of the Oil Conservation Engineer

B.H.J. Thomas

B.H.J. Thomas, Oil Conservation Engineer



Drilling Authority No. 483
Date Issued December 24 1970

LAND 52-90 (2) (3-70)

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

WELL COMPLETION DATA

To be submitted in duplicate within thirty days after the completion, rework, abandonment, recompletion or suspension of every well.



Well name and number Horn R. Amhess Gulf Cli Lake M-05
Permit No. 5367 Lease No.
Gulf Oil, Amerada Hess Exploratory Licence No. 1667 & 1391
(Permittee, Licensee, Lessee)
Horn River Resources Limited Exploratory Licence No. 1785
(Operator)
Location: Unit M Section 5 Grid 62°00' N. Lat.
Latitude 61°54'58" Longitude 123°01'47" W. Long.
Unique well identifier 300 M05620012300
Universal Well Location Reference Lat. 61.91611° N., Long. 123.02972° W.

	DATE	DEPTH	Pool(s)
Spudded	Jan. 13/71		New Field Wildcat
Suspended			Interval(s) open to production nil
Resumed Operations			
Finished Drilling	Feb. 9/71	6500	
Deepened			Elevation: Gr. 1204 K.B. 1220.5
Complete (gas/oil)			Rig No. 7 Petrolia Oilwell
Abandoned		6500	Drilling Contractor Drilling Limited
Rig released			Contractor's Business Licence No. 957

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at -	Sacks of Cement and Additives
1. 8 5/8	J-55	24#	719.70	704.9	380 sax & 2% CaCl ₂
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depths	Sub-Sea	From	To	Rec.	From	To	Rec.
Canyon Creek sand	3908	-2760	4853	4891	38'			
Black Shale	4307	-3087	4891	4903	12'			
Nahanni	4387	-3167						
Manetoe	4732	-3512						
Arnica	4958	-3738						
Pre-Devonian								
clastics	6323	-5103						
LOG RECORD								
			Run No.	Type of Log		From	To	
			1	IES		6494	705	
			1	Formation Density		6493	3800	
			1	SNP		6493	3700	
			1	BHCSGRC		6493	705	

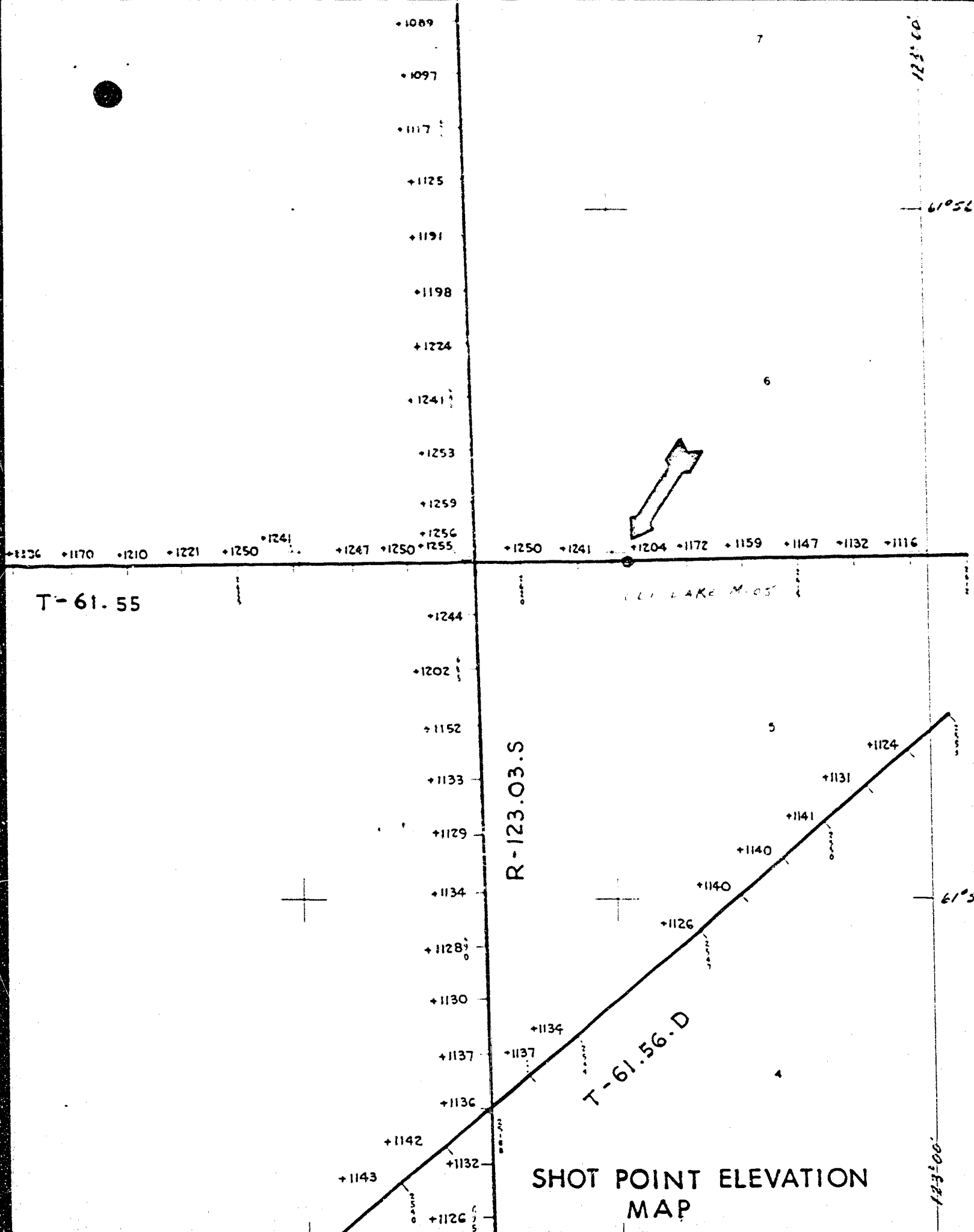
CEMENTING RECORD (Plug, Squeeze, etc.)				PERFORATING RECORD (Bullet, Jet)				SERVICING RECORD (Acidizing, Fracing, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
Feb12/71	6500	6400	25 sax & 4% Gel				nil				nil
Feb12/71	5000	4600	130 sax & 4% Gel								
Feb12/71	760	Surface	200 sax & 4% Gel								

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	L.S.L. Mins.	F.S.L. Mins.	L.S.L.B.H.P.	F.S.L.B.H.P.	L.F.B.H.P.	F.F.B.H.P.	L.H.P.	F.H.P.	REMARKS
1.	Jan31/71	Manetoe	4760	4903	60	60	60	1911	1896	536	1758	2233	2220	recovered 360' drilling mud and 3140' salt water
2.	Feb11/71	Nahanni	4630	4680	60	15	60	1746	1861	260	265	2187	2163	recovered 250' salt water cut drilling mud (63,000 ppm)

ANALYSIS						PRESENT STATUS OF WELL				
Lab. No.	Sample	From	To	Source	Remarks	Oil		(Interval.)	Company	
E 71-3925-2	water	4760	4903	Top of DST tool	223,034 ppm total solids				Signed by	<i>Chas. W. Lee</i>
C 71-2949	watery mud	4630	4680	Top of DST tool	80,840 ppm total solids	Gas		(Interval.)	Title	President
						Dry	X		Date	June 16, 1971
						Susp.				

Forms to be prepared in duplicate and forwarded to the Oil
Conservation Engineer, Calgary, Alberta.



AMERADA HESS CORPORATION

GEOLOGICAL PROGRAM

Amless Gulf Cl Lake M-5
61° 55' N. 123° 01' W.

Shot Point 2618 Line T 61.55

Ground Elev.: 1204'
K.B. Elev.: 1217' Est.

Prognosis

Jean Marie	2900 (-1683)
Unidentified Reflector #1	3700 (-2483)
Unidentified Reflector #2	4300 (-3083)
Canyon Ss.	4450 (-3233)
Nahanni	4800 (-3583)
Manetoe/Landry	5250 (-4033)
Arnica	5550 (-4333)
Clastics	6400 (-5183)

T.D. 6500 ft. or 50 ft. into Clastics.

Prognosis is based on seismic reflection and depths given could vary 100 ft. either way. Particular attention should be given to the examination of anomalous section Jean Marie to Nahanni. It should be further noted that a seismic anomaly is also seen below the top of the Nahanni.

Coring and Testing

First Objective:

Take 50 ft. core at first sign of porosity in Jean Marie carbonate. From core and sample results determine need for drill stem testing of Jean Marie.

Second Objective:

If no core taken at first objective take 50 ft. core at Manetoe level or at indications of porosity below top of Nahanni. Drill stem test if warranted by indication of porosity.

Additional coring and testing maybe required depending upon circumstances.

Samples

Amerada Hess Corporation:

10 ft. samples from surface to T.D. lagged 1 minute for each
100 ft. of hole depth.

5 ft. samples over zones of interest specified by geologist.

Partners:

Sample cuts as requested.

Gulf Oil - 10 ft. samples surface to T.D.

Federal Government:

10 ft. samples surface to T.D.

Logging

Surface casing to T.D.*

2" scale Dual Induction Laterolog	)	
2" scale Sonic Gamma Caliper	)	With 5" detail over zones of
2" scale Formation Density	)	interest and carbonate section.
2" scale Sidewall Neutron Porosity	)	

Coriband representation.

* NB - Sonic Gamma curve required from surface across casing interval.

Requirements at Wellsite

Accommodation and working space for two geologists.
Sample boy.
Unmanned portable gas detector installed at rig.
Geolograph.

J. J. Rossi
R. P. Cumner
R. L. Zell
R. V. Mills
P. P. Matkaluk
J. W. McNinch
Gulf Oil Canada Ltd.

J. R. Patterson.
7 December 1970.

OPERATION REEF
NORTHWEST TERRITORIES
CANADA

Geological and Engineering
REPORT

Horn R Amerada Gulf CLI LAKE M-05

PREPARED FOR
HORN RIVER RESOURCES LTD.

PREPARED BY
JAMES A. LEWIS ENGINEERING CO. LTD.
Petroleum Reservoir Analysts
CALGARY - ALBERTA

INTRODUCTION



This is a concise report of the operations conducted at the well

Horn R Amhess Gulf Cli Lake M-05

This well was drilled through the co-operative exploration program conducted by Horn River Resources Ltd. in the Northwest Territories of Canada under

"OPERATION REEF"

Data in this report were compiled by James A. Lewis Engineering Co. Ltd. Drilling data were taken from the tour reports of Petrolia Oilwell Drilling Ltd. Geological data were supplied by Amerada Hess Corporation.

TABLE OF CONTENTS

	Page
Section 1	
GENERAL:	
Summary of Well Data	1
Section 2	
GEOLOGICAL:	
Formation Tops	2
Sample Description	3
Core Description, Core No. 1	20
Core Description, Core No. 2	22
Section 3	
DRILLING AND ENGINEERING:	
Daily Drilling Reports	29
Bit Record	32
Summary of Mud Additives	33
Survey Record	34
Drill Stem Test Report	35
Abandonment Report	38
Section 4	
Logging Data	39
Section 5	
Water Analysis DST No. 1	40
Benzine Test DST No. 1	41
Water Analysis DST No. 2	43

SUMMARY OF WELL DATA

WELL: Horn R Amhess Gulf Cli Lake M-05

NAME OF OPERATOR: Horn River Resources Ltd.
1020 Aquitaine Tower, 540 Fifth Avenue S.W., Calgary

LEGAL DESCRIPTION: Unit M. Section 05, Grid 62° 00' N, 123° 00' W

LOCATION: LATITUDE: 61° 54' 58" LONGITUDE: 123° 01' 47"

UNIVERSAL WELL LOCATION REFERENCE: Lat 61. 91611° N, Long 123. 02972° W

UNIQUE WELL IDENTIFIER: 300M056200123000

CO-ORDINATES: _____

PERMIT OR LEASE: 5367

PERMITTEE, LICENCEE, LESSEE: Gulf Oil Canada Ltd. and Amerada-Hess Corporation

DRILLING AUTHORITY: 483 DATE: December 24, 1970

CLASSIFICATION: New Field Wildcat

ELEVATION: GROUND: 1204' K.B. 1220.5'

DRILLING CONTRACTOR: Petrolia Oilwell Drilling Ltd. Rig No. 7

WELLSITE GEOLOGIST: Amerada-Hess Corporation

SURFACE CASING: 8-5/8" - 24 lb. set @ 704.9' K.B. c/w 380 sax + 2% CaCl₂

HOLE SIZE: 0' to 725' - 12-1/4" 725' to 6495' - 7-7/8"

MUD SYSTEM: Gel-Chemical

CORES: No. 1: 4853' - 4891' No. 2: 4891' - 4903'

FORMATION TESTS: DST No. 1: 4760' - 4903', Recovered salt water
DST No. 2: 4630' - 4680', Recovered salt water

ABANDONMENT PLUGS: No. 1: 6500' to 6400' No. 2: 5000' to 4600'
No. 3: 760' to Surface

LOST CIRCULATION: None

LOGS: IES 6494' to 705' BHCSGRC 6493' to 705'
FDL 6493' to 3800'
SNP 6493' to 3700'

WELL SPUDDED: 3:00 a.m., January 13, 1971

FINISHED DRILLING: 3:00 p.m., February 9, 1971

RIG RELEASED: 8:00 a.m., February 13, 1971

TOTAL DEPTH: Driller 6500'

STATUS: Drilled and Abandoned

Section 2
GEOLOGICAL

FORMATION TOPS

Horn R Amhess Gulf Cli Lake M-05

Formation	Samples	E Log	Datum
K.B.			1220
Canyon Creek S.S.	3980		-2760
Black Shale	4330	4307	-3086
Nahanni	4400	4387	-3166
Headless			
Manetoe	4732	4732	-3511
Arnica	4958	4958	-3737
Pre-Cambrian Clastics	6350	6323	-5102

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf C11 Lake M-05 Location 61°54'58"N, 123°01'47"W
Province N.W.T. Logged by C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Str.
40-70	Sltst, lt gv, lt brn, gv sl calc, arg in part.		
70-120	Sh, gv-dk gv, fis, occ sl calc & sl arg.		
120-130	Sltst, dk gv, sl arg.		
130-150	No samples.		
150-160	Sh, dk gv, v sl calc.		
160-170	Sltst, brn, v f, v hd.		
170-250	Sh, dk gv-blk, fis, mic, occ v sl calc, occ sltv calc strg.		
250-260	Sltst, lt brn-brn, sl calc, occ v calc.		
260-280	Sh, dk gv-blk, fis.		
280-300	No samples.		
300-310	Sh, dk gv-blk, fis.		
310-320	No samples.		
320-350	Sh, dk bv-blk, fis, v sl calc.		
350-360	Sh, gv-dk gv, sltv.		
360-370	Sh a/a & Sdst off wh-brn, v f cln.		
370-380	Sh, dk gv-blk, fis.		
380-390	No samples.		
390-440	Sh, gv-blk, calc - v calc, occ sltv.		
440-460	Sltst, brn gv, sl calc, sl arg.		
460-470	Sltst a/a & ls brn, lith. frac infilled with calc spar.		
470-480	Sltst a/a.		
480-500	Sh, gv-dk gv, fis, occ pvr infilling frac.		
500-520	Sltst lt brn, sl calc - v calc, arg.		

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf Cili Lake M-05 Location 61°54'58"N. 123°01'47"W

Province N.W.T. Logged by C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Sm.
520-570	Sh, lt-dk gy, occ blk, fis, occ calc, tr c xl calc.		
570-580	Sltst, lt brn, calc, v hd, frac infilled w/xl calc.		
580-590	Sh, dk gy, v sl calc, arg & Sdst lt brn - wh, v f cln.		
590-640	Sh, gy-blk, fis.		
640-680	Sh, gy-blk, sltv, v sl calc. scat pvr & tr Sltst, brn, calc, arg.		
680-710	Sltst, gy-lt gy, lt brn, calc, arg.		
710-720	No samples.		
720-810	Sh, dk gy-blk, occ sltv - v sltv, v sl calc.		
810-900	Sh, lt gy, sltv, sl calc, tr fos shell frag.		
900-930	Sltst gy, soft, arg, v sl calc.		
930-940	Sh, lt gy, sltv, v sl calc.		
940-960	Sltst, lt gy-wh, v calc arg.		
960-990	Sh, lt gy, sl sltv, v sl calc.		
990-1010	Sltst, off wh-gy, hd, calc.		
1010-1030	Sh, lt gy, sl sltv, v sl calc.		
1030-1040	Sh a/a & Sdst, dk gy, v f calc. sl por.		
1040-1050	Sltst, brn, calc, sl arg.		
1050-1110	Sh, lt gy-gy, sl sltv, tr Sdst, dk gy, v f, v sltv, calc.		
1110-1120	Sltst, gy-dk gy, v calc.		
1120-1130	Sh & Sltst a/a & Sdst pale en. v f.		
1130-1160	Sh, lt gy, sl glauconitic.		
1160-1170	Sh, a/a & Sdst off wh-gy, v f, calc.		
1170-1190	Sltst, gy, arg.		

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf C11 Lake M-05 Location 61°54'58"N. 123°01'47"W

Province N.W.T. Logged By C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Str.
1190-1200	Sh. lt ev, fis.		
1200-1220	Sh a/a & Sdst. lt ev. v f, v calc.		
1220-1230	Sltst, lt ev, arg, sl calc.		
1230-1260	Sh, lt ev, fis, sltv.		
1260-1270	Sh, a/a & Sdst wh-lt brn, v f sl nor, cmt part calc.		
1270-1280	Sltst, ev-brn, calc.		
1280-1290	Sh, lt ev, sltv, sl calc.		
1290-1300	Sltst, lt ev, calc.		
1300-1340	Sh, lt ev, fis, occ sltv & sl calc.		
1340-1360	Sltst, lt ev, fis, occ sl sltv.		
1360-1420	Sh, lt ev, fis, occ sl sltv.		
1420-1430	Sh. a/a & Sdst, lt ev, v f, v calc.		
1430-1460	Sh, lt ev, fis, tr Sdst wh-lt ev, v f, calc.		
1460-1470	Sltst, lt gy, v calc, sl arg, friable.		
1470-1530	Sh, lt ev, sl sltv, tr Lst, lt brn, med xl.		
1530-1540	Sh, gy, scat nvr, occ elauconite.		
1540-1550	Sdst wh-lt brn, v f, calc, v hd & Sh a/a.		
1550-1590	Sh, ev, fis, occ Sdst med-dk brn, v f calc, occ fos frag.		
1590-1600	Sltst, lt brn - dk ev, calc.		
1600-1620	Sh, lt ev, sltv.		
1620-1650	Sdst, dk ev-blk, f, calc cmt, occ fos frag, Sdst, s & n. ev & brn,		
	v calc, arg, occ fos frag.		
1650-1710	Sh, lt ev, sl sltv.		

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR Amless Gulf C11 Lake M-05 Location 61°54'58"N, 123°01'47"W
Province N.W.T Logger By C. Cook & A Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Str.
1710-1740	Sh, lt gv - lt gn, sl sltv, sl calc, soft.		
1740-1770	Sdst, off wh-gv, slt - v f, calc cmt hd. Sh a/a.		
1770-1780	Sh, lt gv, occ pale gn & waxv, sl sltv, sl calc, soft.		
1780-1800	Sltst, gv-dk gv-brn, sl calc, hd.		
1800-1820	Sh, lt gv, v sltv, calc.		
1820-1850	Sh, gv sltv, tr Sdst, gv, v f, calc, tr Sh gn, waxv.		
1850-1880	Sltst, gv, calc, arg, hd.		
1880-1950	Sh, gv sltv, sl calc, occ tr Sdst, gv-brn, v f, v calc.		
1950-1990	Sh, lt gv, sltv, sl calc, occ tr Sltst, gv calc.		
1990-2000	Sltst, gv, calc, arg.		
2000-2060	Sh, lt gv, sltv, sl calc, occ tr Sdst lt-dk gv, calc.		
2060-2080	Sh, lt-dk gv, sltv in pt, sl calc.		
2080-2090	No samples.		
2090-2120	Sh, gv-dk gv, fis, soft, sl calc, tr Sdst gv-brn, v f, calc, sltv.		
2120-2260	Sh, lt gv, fis, sl calc, occ sl sltv.		
2260-2290	Sh, gv, sltv, sl calc.		
2290-2310	No samples.		
2310-2370	Sh, lt gv-gv, sltv, sl calc, tr Sdst, lt brn, v f calc, tr Sh gn.		
2370-2390	Sh, gv-dk gv, fis, sl calc.		
2390-2450	Sh, gv, sltv, fis, sl calc, tr Ls.		
2450-2510	Sh, lt gv-gv, sltv, fis, sl calc, tr Sh gn.		
2510-2550	Sh, lt gv, occ lt brn, sltv, tr Sltst, lt gn, sl calc.		
2550-2590	Sh, lt gv-gv, fis, occ Ls, lt brn, f xl, tr Sh gn.		

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf Clf Lake M-05 Location 61°54'58"N. 123°01'47"W

Province N.W.T. Logged by C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Str.
2590-2600	Sh a/a & Sltst. ev. calc. arg.		
2600-2640	Sh. lt ev, occ ev. sltv, sl calc. occ Ls. brn. lith. shv.		
2640-2650	Sdst. lt brn-ev, f, cmt v calc. sltv. sl nor & Sh a/a.		
2650-2660	Sh. ev v sltv, sl calc.		
2660-2670	Sltst. lt brn-ev, calc. arg. Sh a/a.		
2670-2710	Sh. lt ev-ev, sltv, sl calc. occ en Sh.		
2710-2820	Sh. ev sltv, sl calc. occ tr Sltst. brn. v calc. tr nvr.		
2820-2890	Sh. ev-dk ev, fis, tr Sdst, c, v lt brn, occ Sltst ev en, calc, occ sh en.		
2890-2920	Sltst. ev-brn, ev sl calc, brn v calc.		
2920-2980	Sh. ev, sl sltv, fis & mica. tr Sh en, trs Sdst. ev-brn, vf-f. calc, w/ fos frag.		
2980-2990	Sh. en-ev. waxv.		
2990-3150	Sh. ev, mica. $\pm$ sltv w/ Sh en-ev scat in tr thru. tr Sdst. lt ev-en. v f, calc, hd, Sltst ev, brn, calc com thru, occ tr Ls ev sltv.		
3150-3330	Sh. ev, mica. fis sl slty, stre Sltst. brn-ev, calc, com thru, occ tr Sdst. lt ev-brn, f cmt calc, tr Ls. lt brn. lith. v sltv $\pm$ laminar.		
3330-3350	Sdst. lt brn - dk brn, slt - v f, v calc.		
3350-3360	Sample not representative - cavings.		
3360-3380	Sdst. lt ev-en. lt-dk ev. slt - v f, cmt calc, hd.		
3380-3400	Sh. ev $\pm$ sltv, mica. stre Sltst ev. tr calc veins. Sh en.		
3400-3410	Sltst. ev, calc. alternated w/ Sh ev, mica.		

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf C1i Lake M-05 Location 61°54'58"N. 123°01'47"W
Province N.W.T. Logged by C. Cook & A. Gross Date Jan. 13 Feb.

Depth	Description	Por.	Str.
3410-3470	Sh. gy. $\pm$ slty. mica. w/ intbd Sltst. gy. ooc gy-gn gy brn. calc. hd. ooc strg Sdst gy. gy-brn. slt. v f - f calc. hd.		
3470-3490	Sh. gy. waxv. Sh gy $\pm$ slty. mica.		
3490-3510	Sh a/a. altern. w/ Sh dk brn. bituminous (bitumin seen within sh chips), ooc strg Sltst. lt gn-gv.		Bit.
3510-3600	Sh. gy $\pm$ slty. mica. w/ strg Sdst. gy-brn. slt-f. calc. strg Sltst gn. gy. brn. rd calc & non calc.		
3600-3630	Sh. gy & brn $\pm$ slty w/ strg Sdst. lt gy. slt - v f. calc. v hd. strg Sltst. gy.		
3630-3750	Sh. gy w/ intbd Sltst. gy-brn. calc. Sdst gy-brn. slt - f. calc hd.		
3750-3760	Sh a/a w/Sst. transl-wh. slt-v f. $\pm$ calc. cmt calc partly dolomitized. hd - v hd.		
3760-3780	Sdst transl-wh. slt-v f. cmt calc. pt dolomitized. mica. hd - v hd.		
3780-3850	Sh. gy $\pm$ slty. mica. sl calc w/ strg Sdst. lt gy-lt brn. slt-v f.		
3850-3910	Sdst. brn-gv. slt-v f. cmt calc. $\pm$ dolomitized. sl nor less than 1%. ooc Sh. gy. mica. sl slty. (cavings?).		
3910-3980	Sh. gy mica. fis. sl slty. sl calc. Sdst a/a. Sltst brn-gv. v calc. hd. scat thru.		
	Canyon Creek Sandstone - 3980 (-2760)		
3980-4010	Sdst. lt-dk brn. gy. slt-v f. cmt calc. v hd. sl nor 1%.		sl
4010-4130	Sdst. wh-lt brn. gn-gv. slt-v f. $\pm$ arg. cmt calc. dol in pt. v hd.		sl

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf Cl1 Lake M-05 Location 61°54'58"N, 123°01'47"W
Province N.W.T. Logged by C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Str.
	sl por (0-2%) in cln sdst, some earthy por, occ frac filled w/ xl calc.		
4130-4170	Sh, gy-dk gy, fis, v sl calc, mica, sl sltv, Sh dk brn, fis, v sl calc, sltv, tr Sdst a/a.		
4170-4180	Sh, lt gy-gv, fis, mica, occ Sltst, gv, hd, calc, sl arg.		
4180-4190	Sdst, wh-lt brn-brn, gn-gv, slt-v f, cmt calc, sl arg, por (1-3%).	sl	
4190-4220	Sh, lt gy-gv, fis, sl mica, sltv, occ Sltst & Sdst, lt brn-gv. calc hd.		
4220-4250	Sh, gv a/a, Sh, dk gv, sltv, occ Sltst & Sdst a/a, frac filled w/ xl Dol, complete inter xl filling of bitumin.		
4250-4320	Sh, gv a/a, tr Sh gv-lt ern, fis, mica, Sh dk gy-blk, occ nvr, tr Sdst, Sltst, lt gv-gn & dk gv, sl arg, calcite scat thru.		
	Black Shale - 4330 (-3110)		
4320-4370	Sh, dk gv, blk, abdt pyr, ± sltv, mica, Sh a/a, tr Sltst & Sdst a/a		
4370-4400	Sh a/a w/ frac infilled w/ calc wh, v f xl.		
	Nahanni - 4400 (-3180)		
4400-4420	Ls, lt brn-bf, dk gv, brn, v f - f xl, sl sltv & arg, frag & vug, vugs lined & filled w/ calc & dol, clr xl, occ fos, frag shells.	sl	
4420-4440	Ls, lt-dk gy, brn, mic - v f xl, frag & frac, vug, frac & vugs	sl	

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf Cti Lake M-05 Location 61°54'58"N, 123°01'47"W
Province N.W.T. Logged by C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Str.
	filled with calc xl. Lst, lt ev-bf, lith.		
4440-4470	Lst, lt-dk ev, bf-brn. v f - f xl, sl slty & arg, frag & frac.	sl	
	frac filled w/ calc & dol xl. Lst ev-brn, lith. fos shell frag com.		
4470-4510	Lst, lt brn-ev, lith & Lst brn-ev. v f - f xl, arg, frag & frac.	sl	
	frac filled w/ calc xl.		
4510-4530	Lst, brn-ev, v f - f xl, arg, frag & frac, frac filled w/ calc xl.	sl	
	Some Lst, lt brn, lith.		
4530-4540	Lst, a/a & Sh, lt ev, fis.		
4540-4570	Sh, lt ev-ev, fis, sl slty, occ Slst, v calc.		
4570-4580	Sh, a/a & Lst brn-ev, v f - f xl, frag & frac, frac infilled	sl	
	w/ calc xl.		
4580-4590	Lst, bf-ev, v f - f xl, arg, slty, frag & frac, frac infilled	sl	
	w/ calc xl.		
4590-4600	Lst, brn-ev, v f xl, arg & slty, frag & frac, frac infilled w/ calc	sl	
	xl. Lst, bf-lt brn, f xl, frag & frac, frac infilled w/ calc xl.		
4600-4610	Sh, lt ev-ev, slty, calc.		
4610-4620	Lst, bf, brn-ev, s & n, v f - f xl, frag & frac, frac infilled w/		
	calc xl. The Lst brn-ev is slty & arg w/ thin needle like	sl	
	prismatic xl.		
4620-4640	Lst a/a, tr dol wh, f xl, ovr. Dol seems to have replaced calc in	sl	
	places, fills vugs.		
4640-4660	Lst bf, lt brn - ev blk, v f - f xl, dol & arg, frag & frac, frac	sl	
	infilled w/ calc xl		

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf Clf Lake M-05 Location 61°54'58"N, 123°01'47"W
Province N.W.T. Logged by C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Str.
4660-4670	Lst a/a, Lst blk-dk ev, micxl, dol, arg, nvr, bit.		
4670-4690	Lst, blk. micxl, v arg, dol, nvr, freq clr xl calc infillings, when dissolved in HCl gives brown oily residue on surface.	sl	
	Tr dol, gv-brn, v f - f xl, vugov, nor max 2% in dol.	sl	
4690-4700	Dol, dk ev-brn to lt ev, mic - f xl, vugov: 3% nor. Crvstal size and vug distribution is irregular. Vugov nor best developed in f xl dol, nor occ 5-10%.	sl	
4700-4710	Sltst, dk ev, dol, calc, arg, leaves residue of clear prismatic crvstals (Gvn?). In places coarse Dol lining fine xl Dol.		
4710-4720	Lst, s & n, v f xl, dol. Prismatic needle like crvstals as in (4610-4620). Lst & Sltst a/a.		
4720-4730	Sltst, dk ev, Lst lt ev, s & n w/ vugs or frac infilled w/ atz. idiomorphic xl & calc. dol, arg.		
	Manetoe - 4732 (-3512)		
4730-4740	Dol, wh, co xl, infilled w/ silt, blk, arg, nvr, bit. Roughly 50% dol, 50% silt. Some calc present.		
4740-4750	Sh. med-lt ev, sl sltv, hd. dol & silt a/a.		
4750-4760	No samples.		
4760-4765	Dol, wh c xl, Dol ev, med-c xl, tr bit.		
4765-4770	Dol a/a, tr of bit in sl vug space. In places inter xl space filled w/ silt dk ev.	sl	

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR Amless Gulf Clt Lake M-05 Location 61°54'58"N, 123°01'47"W
Province N.W.T. Logged by C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Str.
4770-4780	Dol a/a, bit & silt scat thru sl inter xl nor. Tr vug nor. scat	sl	Bit.
	pvr.		
4780-4790	Dol a/a. 1 frag Dol w/ tar & brn oil - fluoresces.	sl	Bit.
			Tr Oil
4790-4850	Dol wh. c xl, Dol lt ev. med c xl. scat nvr thru. sl xl & vug nor.	sl	Bit.
	tr bit.		
4850-4903	Cored - Samples not taken.		
4903-4950	Dol wh. c xl. Dol lt ev. med-c xl. w/ scat bit & arg. tr of vugs	sl	Bit.
	lined & infilled w/ Dol wh. cl xl.		
	Arnica - 4958 (-3738)		
4950-4960	Dol a/a. Dol bf-gv brn. med xl w/ inter xl. bit & arg.	sl	Bit.
4960-4980	Dol bf. lt gy-brn. mic-f xl & some med xl, sl arg. Also dol wh &	sl	Bit.
	ev. med-c xl.		
4980-4990	Dol bf-gv brn. pred med xl. some v f - f xl. tr bit.	sl	Bit.
4990-5000	Dol a/a. Dol brn mic xl. Dol. gy v f xl. tr vugs infilled w/ dol	sl	Bit.
	wh c xl.		
5000-5010	Dol bf-gv brn. f-med xl. interxl bit thru, tr pvr.	sl	Bit.
5010-5050	Dol bf-gv. med xl. Dol lt brn-gv. v f - f xl. sl bit. tr vugs &	sl	Bit.
	frac infilled w/ Dol wh. c xl. The Dol v f - f xl is occ arg &		
	bit. occ tr Dol blk micxl.		
5050-5080	Dol lt brn-gv. blk. mic-f xl. tr bit. vugs infilled a/a. Dol blk	sl	Bit.

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf C11 Lake M-05 Location 61°54'58"N, 123°01'47"W

Province N.W.T. Logged by C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Str.
	f xl, v arg & bit, occ dol wh, c xl - med xl, w/ interxl bit.	sl	Bit.
5080-5090	Dol, lt brn-gy blk, mot, f-med xl, arg, bit w/ vugs infilled a/a	sl	
	and Dol, lt brn-gv, mic-v f xl, sl arg & bit.		
5090-5100	Dol, wh, c xl, occ interxl bit, Dol, lt brn-dk ev, mic-v f & f-med	sl	
	xl, vugs infilled a/a.		
5100-5110	Dol, lt brn-gv-blk, mic-f xl, arg & bit, tr atz c, vugs infilled	sl	
	a/a.		
5110-5120	Dol, lt brn-gv-blk, v f-f xl, sl arg & bit, Dol, lt brn, f-med xl,	sl	
	w/ some interxl bit, tr vugs & frags infilled w/ Dol wh, c xl & nvr.		
5120-5150	Dol, lt brn-gv-blk, mic-f xl, frag & frac, Dol, blk, arg & bit &	sl	Bit.
	sl nvr, vugs & frags infilled a/a, tr of bit in vug lining.		
5150-5160	Dol, bf-dk ev, mic-f xl, pred bf & micxl, tr vugs & frags a/a.	sl	
5160-5180	Dol, bf-lt ev-ev, a/a.		
5180-5190	Dol, bf-blk, a/a, blk Dol highly bit.	sl	
5190-5200	Dol, bf-dk ev, mic-med xl, tr bit, tr nvr, some frags infilled		
	w/ Dol c xl.		
5200-5280	Dol, bf-dk ev, mic-f xl, frags infilled a/a, tr nvr, v bit in	sl	
	places, rare tr atz c crnd.		
5280-5310	Dol, v f-f xl, lt brn-gv, tr bit, tr vugs & frags infilled a/a.	sl	
5310-5330	Dol, lt brn, f xl, sach & fri, Dol a/a.	sl	
5330-5360	Dol, lt brn-gv, pred lt brn, v f-f xl, occ Dol blk, f xl,	sl	
	highly bit, vugs & frags infilled w/ Dol wh c xl.		
5360-5370	Dol, med gv-brn, mic-f xl, w/ tr of xl nor & nos good vug nor.	good?	

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf Cl Lake M-05 Location 61°54'58"N, 123°01'47"W
Province N.W.T. Logged By C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Sm.
5370-5390	Dol. bf-lt gy-brn. mic-f xl. vugs infilled w/ dol. wh. c xl.	good?	
	Note: No gradation between light & dark Dol probably alternation		
5390-5400	Dol. bf-lt gy-brn. mic-f xl. Dol wh. med-c xl: vug lining.	tr	
5400-5450	Dol. bf-med gy-brn. mic-f xl. w/ vug nor: nor is erratic. Dol is basically tight developing in places. many tiny vugs to large vugs lined with Dol wh. c xl, occ vugs infilled w/ bit.	tr	bit.
		(good)	
5450-5510	Dol. bf-dk gy-brn. mic-v f xl. Dol. cl wh. c xl. indicate vug linings. tr Dol bf. crp-micxl. pseudo ool.	tr	Rare
		(good)	tr
5510-5640	Dol. lt gy-bf. dk gy-brn. crp-v f xl. w/ vugs infilled w/ Dol c xl. occ scat pyr. tr pseudo ool frags.	tr	
5640-5660	Dol. lt brn-dk brn. crp-v f xl. pred lt brn. tr vugs a/a.	tr	
5660-5670	Dol. bf. crpxl. gy brn. mic-f xl. dk gy brn. mic-v f xl. tr vugs a/a.	tr	
5670-5690	Dol. bf-lt gy. mic-f xl. vugs a/a.	tr	
5690-5700	Dol. bf-gy brn-lt gy. mic-f xl. pred lt brn. v f xl. tr bit, occ Dol wh. c xl: evidence of occ vug-infilled w/ Dol c xl.	tr	tr
5700-5720	Dol. lt gy-wh. bf. med-dk gy. brn. mic-f xl. vugs infilled w/ dol cl. f-med xl. Some pyr in lt gy-wh Dol.	tr	
5720-5730	Dol. lt gy-wh. crp-f xl. w/ minor Dol a/a. pyr a/a.		
5730-5740	Dol. lt gy-wh. crp-f xl. tr of pyr.		
5740-5750	Dol. lt gy-wh. crp-v f xl. mainly dense. tr of vug nor infilled a/a.		
5750-5780	Dol. bf. lt gy-wh. crp-v f xl. dense tr of vugs a/a.		
5780-5820	Dol. bf-lt gy-wh. crp-micxl. w/ some disn pyr. Dol lt brn-gy.		

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf Clf Lake M-05 Location 61°54'58"N, 123°01'47"W
Province N.W.T. Logged By C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Stn.
	v f-med xl. tr vuggy por infilled w/ Dol. c xl. lt ev. Dol is sltv		
	w/ diss pvr.		
5820-5870	Dol. lt ev-wh. crp-micxl. sltv w/ finely diss pvr. Dol. lt brn-	sl	Bit.
	brn-ev, mic-f xl, tr of vugs & or frags infilled w/ Dol. wh. c xl,		
	occ tr bit. occ frag Dol w/ c grains evp. some ev dol. v sltv. arg.		
5870-5880	Dol. br-lt ev. crp-micxl. pvr. Dol lt brn-blk. mic-f xl.	sl	Bit.
5880-5900	No samples.		
5900-5930	Dol. lt brn-lt ev. brn-blk. mic-f xl. scat pvr thru. some Dol dk	tr	Bit.
	ev. v sltv & pvr. tr of vug fillings: Dol wh. c xl.		
5930-5940	Dol. lt brn & brn-ev. mic-f xl. pvr com thru micxl Dol. vug fillings	tr	Bit.
	a/a.		
5940-5970	Dol. lt brn-lt ev & brn-ev. mic-f xl: f xl Dol sl vug w/ tr bit &	tr	Bit.
	pvr. some Dol v sltv-shv & pvr. tr fos hash red-brn. calc.		
5970-6010	Dol. lt ev-brn. v f-med xl. tr vug por. tr bit. occ Dol dk ev-blk,		
	v sltv. w/ pvr thru.		
6010-6050	Dol. wh-lt ev-lt brn & brn blk. mic-f xl. pvr thru. occ chert frag.	tr	Bit.
	tr vug por. vugs filled w/ Dol. wh c xl.		
6050-6090	Dol. lt ev brn-brn-blk. crp-f xl. pvr com thru. occ frag chert,	tr	Bit.
	occ atz idiomorphic. xl. some sltst ev. blk. arg. sl dol. tr pvr.		
	tr vugs filled a/a. occ Dol blk w/ pvr c xl.		
6090-6110	Dol. lt brn-ev. blk. mic-f xl. occ chert wh. sl tr vugs a/a.	tr	
6110-6130	Dol. lt brn-brn ev-blk mic-c xl. c spars scat in brn. f xl. dol.	tr	
	abnt pvr. tr vugs a/a.		

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf Clf Lake M-05 Location 61°54'58"N. 123°01'47"W
Province N.W.T. Logged by C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Str.
6130-6140	Dol, lt brn-gv-brn blk, mic-med xl, scat pvr, brn blk dol is slty & arg.		
6140-6150	Dol, lt gv-lt gv brn-med dk gv brn, v f-f xl, vug, bit abnt in vugs, vugs lined w/ Dol wh & dk gv brn, c xl. pvr com.	tr	Abnt Bit.
6150-6170	Dol, lt-dk gv brn, v f-c xl, spar in places, calc, pseudo ool in places.	tr	Bit.
6170-6180	Dol, lt-dk gv brn, v f-c xl, spar in places, dk brn Dol is arg. some earthy silicious frag, scat pvr. tr of Sdst, lt-dk gv, med gr cl qtz in dol & arg cmt.	tr	Bit.
	Note: Variation in colour and crystal size _____ i.e. brn-f xl, gv-micxl Suggests Interbedding thru the Arnica		
6180-6200	Sdst a/a, Sdst blk, cl, med gr qtz, floating in crpxl, mtx (chert like), some chert frag, milky.		
6200-6220	Sdst, cl, med-c xl, w/ sl dol cmt. pvr. occ Sh blk, some scat bit & dol: tr of vug por. Sdst a/a, Sdst, dk gv-blk, slt-v f, nvr, sl dol, some chert lt gv to milkv wh. Dol is still com, either as cavings or possibly as interbeds.	tr	Bit.
6220-6240	Sdst a/a & Sdst blk, wh, v c, consisting of frags of chert, milky, angular, cmted by blk chert. Dol. bf-med gv brn, mic-med xl.	tr	Bit.

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf Clf Lake M-05 Location 61°54'58"N, 123°01'47"W
Province N.W.T Logged by C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Sm.
	sl vug in places. Dol & qtz are mixed as Sdst w/ dol cmt or Dol		
	w/ vugs & frags infilled w/ cl qtz, tr Sltst, reddish.		
6240-6270	Sdst, lt-med gv-blk. c. cmt: dol, Dol lt brn-gv. micxl, Sdst	tr	Bit.
	blk, v f-f, v dol, tr gvp, scat nvr, tr Sltst. gn tr of vugs		
	infilled w/ dol c xl.		
6270-6290	Dol, lt brn-lt gy, micxl, scat nvr thru, Dol, blk, f xl, sl arg,	tr	
	Sltst, lt gy, hd, w/ nvr scat thru & some Sdst a/a, occ Dol w/		
	qtz grains, f-c well rounded.		
6290-6300	Sdst, cl, colourless, gv-blk, c, cmt: dol, & Dol a/a, tr vugs.	tr	
	filled w/ Dol wh, c xl, occ nvr.		
6300-6320	Dol, lt brn-lt gy, micxl, Dol, brn-blk, mic-f xl, arg, tr vug &	tr	
	frac a/a, Sdst s & p, lt brn-blk, med-c, dol cmt.		
6320-6330	Dol, bf-med gv, crp-micxl, Sdst cl, wh, f-c, well-rounded, cmt:		
	dol. Minor Sdst blk, v f. w/ dol cmt.		
6330-6340	Dol a/a & Sdst, cl-gv, in places s & p c-v c, consisting of qtz.		
	Dol, chert, frags (milky). Sltst frags, blk, in dol cmt. Pvr com		
	thru.		
	Note: In interval from 6180-6340 it appears sdst and dol are		
	interbedded.		
	Pre-Cambrian Clastics - 6350 (-5130)		

**AMERADA DIVISION
AMERADA HESS CORPORATION
SAMPLE DESCRIPTION**

Well HornR AmHess Gulf Clf Lake M-05 Location 61°54'58"N, 123°01'47"W
Province N.W.T. Logged By C. Cook & A. Gross Date Jan. 13 - Feb.

Depth	Description	Por.	Stn.
6340-6360	Dol. bf-gv, mic-f xl, Dol wh. f, grnl, calc, Sdst cl-gv. s & n. c-v c. consists qtz, dol. cht frags. Sdst blk, v f-med, sl dol cmt. few chips Sh, brick red, en frag, Sdst, wh - brick red tinge. v f, tr Sltst wh, chalkv evp, dol, occ nvr, Dol cl colourless sparry.		
6360-6370	Sltst, gn, nk, wh, lt ev, hd dol & Sltst, wh, chalkv, evp, dol, (mud visc increas 74-170). Sh, gn, brick red & Sdst & Dol a/a.		
6370-6390	Sltst, pkish, ev-wh, burgundv, hd, dol & Sltst, wh-lt ev, chalkv, v soft, evp, dol, Sh gn, brick red, burgundv, lt & dk ev, chert. en & ev, Sdst & Dol a/a, w/ nvr.		
6390-6400	Dol. bf-gv-en, mic-f xl. w/ scat nvr, occ Sdst, cl, colourless, c, dol cmt, Sltst & Sh a/a.		
6400-6410	Sh, brk rd, nk, burgundv, ev, Sltst, brk red, nk, gn, Dol bf-gv, mic-f xl, Dol blk, v sltv & arg, occ Sdst, cl-blk, med-c, sl dol cmt.		
6410-6420	No samples.		
6420-6440	Sh, brk rd, ev & ev gn, Sltst gn, dol & Sltst, brk rd, nk, w/ gr of qtz, c-v c, Sltst, ev, dol, w/ Dol & Sdst a/a. Some Dol wh-gv, grn, lt brn, mic-f xl.		
6440-6450	Dol, wh, ev, lt brn, lt en, mic-f xl, dol, blk, f xl, v sltv & arg, tr vugs filled w/ Dol wh c xl. Sh & Sltst a/a, tr Sh, blk, tr Sdst a/a.		
6450-6470	Sltst, ev-rd, v sl dol, w/ wh patches evp(?). Sh gn, sltv, hd, dol.		

AMERADA DIVISION
AMERADA HESS CORPORATION

Well HornR AmHess Gulf Clt Lake M-05 location 61°54'58"N, 123°01'47"W

Province N.W.T. Logged by C. Cook & A. Gross Date Jan. 13 - Feb.

[illegible]

AMERADA DIVISION AMERADA HESS CORPORATION

CORE DESCRIPTION

Well HornR AmHess Gulf Cli Lake M-05 Location 61°54'58"N. 123°01'47"W

Province N.W.T. Logged by C. Cook & A. Gross Date January 30, 1971.

Core No. 1 Core Interval 4853-4891 Cut 38'
Recovered 38'

From	To	Interval	Description	Good	Fair	Silt	Trace	Net	Porosity
0	1.0	1.0	Dol. lt brnsh-gv, f-med xl, with about 30% vug space infilled with Dol, wh coarse xl, itself vuggy (5-10% vuggy por). Extremely abdt stylolitic its lined with bit.					X	4%
1.0	3.3	2.3	Dol, lt brnsh-gv, f-coarse xl, with irregular vug and frac space infilled with Dol, wh, coarse xl. On the whole interval, about 30% of the volume is occupied by wh Dol. Both Dol are vuggy - gv Dol: 10% vuggy por. wh Dol: 20% vuggy por. Verv abdt stylolitic its infilled with bit.					XX	12%
3.3	4.0	0.7	Alternation of stringers of gv and wh Dol a/a. Large vugs: vug shape is irregular, but there is generally a pred horizontal largest dimension, especially in large vugs: one such vug, at 3.9 covers the whole section of the core. Good vuggy por. Numerous stylolitic its lined with bit.					X	20%
4.0	5.2	1.2	Alternation of very irregularly shaped stringers and patches of gv and wh Dol a/a. Possible remnants of organic structures (completely recrystallized), especially between 4.5 and 5.2 Vuggy por developed mainly in the wh portion. Numerous stylolitic its infilled with bit.					X	5%

AMERADA DIVISION
AMERADA HESS CORPORATION
CORE DESCRIPTION

Well HornR AmHess Gulf Clf Lake M-05 Location 61°54'58"N, 123°01'47"W

Province N.W.T. Logged by C. Cook & A. Gross Date January 30, 1971

Core No. 1

Core Interval 4853-4891

Cut 38'

Recovered 38'

From	To	Interval	Description	Good	Fair	Slight	Trace	Net	Porosity
5.2	5.8	0.6	Dol. gv f-coarse xl, vuggy, with large lenticular vugs partly infilled with Dol. wh coarse xl. Vugs in gv Dol: 1-15%, size of vugs very variable. Vugs in wh Dol: approx 50%. Occasional stylolitic it infilled with bit.	X	X				10%
5.8	6.5	0.7	Dol. gv to brnsh-gv a/a f-coarse xl, vuggy (numerous scat lenticular vugs, up to 1/4" thick and 1/2" long). 5-10% por with a net of thin strngers of dol wh coarse xl. Part of the vugs are lined with nprite, med xl. Possible organic structure, recrystallized. Numerous stylolitic its with bit. The bottom of this interval shows a dip of approx 20°.	X			X		10%
6.5	10.0	3.5	Dol wh, coarse to v coarse xl. vuggy (vugs rather scarce and large: one vug @ 8.8 covers the whole section of the core) with numerous lenticular strngers of Dol. gv med-coarse xl, with vugs and inter xl space saturated with bit and blk shaly material (15-20% of the interval is gv Dol). Por is variable from poor to excellent.	X			X		10%

AMERADA DIVISION AMERADA HESS CORPORATION

CORE DESCRIPTION

Well HornR AmHess Gulf Clf Lake M-05 Location 61°54'58"N. 123°01'47"W

Province N.W.T. Logged by C. Cook & A. Gross Date January 30, 1971

Core No. 1

Core Interval 4853-5891

Cut 38'
Recovered 38'

From	To	Interval	Description	Good	Fair	Slight	Trace	Net	Porosity
10.0	17.7	7.7	Dol wh a/a with much thicker lenses and natches of gy bit and arg Dol. a/a: thus between 13 & 14 the core is nearly all one thick dk gy lump. with some wh Dol patches. vuggy. On the whole interval. 30-40% is gy Dol. The wh Dol shows irregular por a/a. At 12.3 and 15.0 one vug covers approx half of the section of the core: vugs are large and scarce. The gy Dol shows very little vuggy por. Occasional stvrolitic it with Bit.	X			X		8%
17.7	18.3	0.6	Dol wh a/a with ribbon-like stvrolitic its lined with bit (and arg material). 1/4" to 1/2" apart. Some vuggy por.				X		5%
18.3	19.9	1.6	Dol wh coarse xl. with thick lenses (up to 1 1/2" thick of Dol gy med coarse xl. bit and arg. Approx 10-15% of the interval is gy Dol. Some vuggy por: vugs small and large, with scat coarse pyrite crystals. Note: Very often. the lower limit of a "gy lense" is a bituminous stvrolitic it.				X		3%
19.9	20.5	0.6	Dol wh coarse xl. with interbedded strngers (1/8" - 1/2" thick) of Dol gy med coarse xl. bit arg. developed around stvrolitic its. About 25% of the interval is gy Dol. Some vuggy por in wh strngers (rare vugs, small-med size).				X		2%

AMERADA DIVISION AMERADA HESS CORPORATION

CORE DESCRIPTION

Well HornR AmHess Gulf Clf Lake M-05 Location 61°54'58"N, 123°01'47"W

Province N.W.T. Logged By C. Cook & A. Gross Date January 30, 1971

Core No. 1 Core Interval 4853-4891 Cut 38'
Recovered 38'

From	To	Interval	Description	Good	Fair	Shale	Lenses	Net	Porosity
20.5	22.4	1.9	Dol wh coarse xl with scat lenticular and patchy interbeds of Dol gy med coarse xl bit are generally overlying a stylolitic it. Pyrite present in blk lenses. Some vuggy por developed in wh Dol (large vugs scat). Possible fantoms of organic structure ? Badly recrystallized.	X					4%
22.4	22.7	0.3	Dol wh coarse xl with interbedded strngers (1/4" - 1/2" thick) of Dol gy med coarse xl bit are overlying bit stylolitic it. About 50% of the interval is gy Dol. Very poor vuggy por.				X		1%
22.7	30.3	7.6	Dol wh coarse-v coarse xl, with various amounts and shapes of gy Dol interbeds. Breakdown, description of gy Dol: 22.7-23.5: strngers 1/4" to 1/2" thick, approx 10% of interval. Vugs med scat. 23.5-24.5: patches, irregular lenses, sub vertical fract approx 30% of interval. 24.5-25.0: fract, dissolution features (vugs, stylolites) approx 40% of interval abdt bit. 25.0-25.4: small patches approx 20% small scat vugs. 25.4-25.7: interbeds, lenticular up to 1" thick approx 50% of interval. Tight. 25.7-27.0: small patches approx 10-20% of int. small med sized vugs scat.						6%

**AMERADA DIVISION
AMERADA HESS CORPORATION
CORE DESCRIPTION**

Well HornR AmHess Gulf C11 Lake M-05 Location 61°54'58"N, 123°01'47"W

Province N.W.T. Logged By C. Cook & A. Gross Date January 30, 1971

Core No. 1 Core Interval 4853-4891 Cut 38'
Recovered 38'

From	To	Interval	Description	Good	Fair	Slime	Trace	Net	Porosity
			27.0-27.8: irregular lenses up to 1" thick, scat approx						
			10% rare large vugs.						
			27.8-30.3: irregular interbeds overlying stylolites abdt						
			pyrite approx 30-40% of interval small med						
			sized vugs scat.						
30.3	36.8	6.8	Dol wh coarse xl with irregular organic-like patches and	X					10%
			lenses of Dol gy med-coarse xl arg bit and Dol wh coarse-						
			v coarse xl with abdt dissolution features, stylolitic						
			its infilled with bit. vugs: gy portion - 40-50%. large						
			vugs in wh Dol portion. Pyrite in some vugs. Structures						
			thoroughly recrystallized.						
36.8	37.4	0.6	Dol a/a still more finely intermixed and more por.	X					20%
			Rubble in lower part of interval. Gy portion 60%.						
37.4	38.8	1.4	Dol wh coarse xl with few small patches of Dol gy arg bit.	X	X				8%
			Most patches are elongated, streak-like. Possible organic						
			origin. Recrystallized. Few stylolitic its, bit. Gy						
			portion 10%. Vugs med large scat.						
38.8	39.4	0.6	Dol gy med-coarse xl, arg bit pyrite with patches of Dol,	XX					12%
			wh coarse xl. Portion of wh Dol 10%. Vuggy por, small to						
			med sized vugs, numerous. Very numerous bit stylolites.						

**AMERADA DIVISION
AMERADA HESS CORPORATION
CORE DESCRIPTION**

Well HornR AmHess Gulf Cl1 Lake M-05 Location 61°54'58"N, 123°01'47"W

Province N.W.T Logged By C. Cook & A. Gross Date January 31, 1971

Cut 12'

Core No. 2

Core Interval 4891-4903

Recovered 12'

From	To	Interval	Description	Good	Fair	Slits	Trace	Not	Porosity
2.7	1.8	1.8	Dol gy. med-coarse xl. arg and bit. pyr scat thru patches and strngers of Dol wh. coarse xl prop 10-15%. Patches are infilled vugs. Numerous vugs small-large scat thru. Lined with Dol wh coarse xl. Pyr in some vugs. Abnt stylolitic jts ($\pm$ 1 jt per 2") filled with bit. 1 vertical fract 1/32"-1/16" running length of interval. Other minor facts. Fracts infilled with dol coarse xl: no fract ϕ . Note: vugs 0-1" sm, 1"-2" med, greater than 2" lg.	X			X		15%
1.8	2.7	.9	Dol wh coarse xl with Dol. gy med-coarse xl a/a, scat thru in irregular patches & strngers 1/16"-1/4", prop 20-30%. Numerous vugs, small, scat thru, lined with Dol wh coarse xl. Some vugs compl infilled.				X	X	5%
2.7	3.4	.7	Dol gy a/a med-coarse xl with thin strngers $\pm$ 1/16" of dol wh coarse xl scat irregularly thru. Few small patches Dol wh. coarse xl. appear to be infilled vugs. Abnt small to v-small vugs lined with dol. wh. coarse xl. In few cases vugs lined with pyrite & Dol. Abnt stylolitic jts ($\pm$ 1 jt per inch) filled with bit.				X		2%

**AMERADA DIVISION
AMERADA HESS CORPORATION
CORE DESCRIPTION**

Well HornR AmHess Gulf C11 Lake M-05 Location 61°54'58"N, 123°01'47"W

Province N.W.T. Logged By C. Cook & A. Gross Date January 31, 1971

Core No. 2

Core Interval 4891-4903

Cut 12'
Recovered 12'

From	To	Interval	Description	Good	Fair	Shale	Trace	Not	Porosity
3.4	4.0	.6	Dol wh coarse xl with abdt strngers Dol gy med coarse xl ± 4 strngers per inch. Strngers usually enveloped with thin cover of bit dol. Vugs, numerous pred small, few med lined with Dol wh, coarse xl. Fract 1/16" lined with gv Dol. Inside filled with wh Dol.			X	X		2%
4.0	4.9	.9	Dol wh coarse xl with strngers 1/8" - 1/2" Dol, gy, med. coarse xl. in most cases. The gv Dol is overlying stylolitic joints filled with bit. Strngers are ± 1" apart. Pyrite com with bit in the joints. Few small vugs scat thru interval, with occ med vug. Vugs lined with Dol coarse xl.					X	1%
4.9	5.7	.8	Dol wh a/a with abdt small discontinuous strngers Dol gy med coarse xl overlying stylolitic jts filled with bit. In latter 1/2 of interval strngers become more continuous. Few scat vugs small, occ vug med. Vugs lined with Dol, coarse xl.					X	1%
5.7	6.7	1.0	Dol wh a/a abdt strngers 1/16" - 1/4", Dol gy med coarse xl overlying fine stylolitic jts filled with bit. Small vugs scat thru with occ med vug. Vugs lined with Dol wh coarse xl. Many small vugs infilled with Dol coarse xl. Few hairline fractis lined with pyrite.						

**AMERADA DIVISION
AMERADA HESS CORPORATION
CORE DESCRIPTION**

Well HornR Amiless Gulf Clf Lake M-05 Location 61°54'58"N, 123°01'47"W

Province N.W.T. Logged By C. Cook & A. Gross Date January 31, 1971

Cut 12'

Core No. 2

Core Interval 4891-4903

Recovered 12'

From	To	Interval	Description	Good	Fair	Slim	Trace	Not	Persehy
6.7	6.9	.2	Dol gy med coarse xl. Discontinued stringers Dol wh coarse xl. Many stylolitic its filled with bit.					X	<1%
6.9	7.9	1.0	Dol wh coarse xl with abdt stringers Dol gy, med coarse xl, highlv bit: stringers 1/8" - 1/4". Interval 7.0-7.2, ⁺ 2 stringers per inch. Interval 7.3-7.4, one large stringr. Interval 7.6-7.9, 3 stringers per inch. Many vugs very small to small scat thru. Vugs lined to infilled with Dol wh coarse xl.					X	1%
7.9	8.8	.9	Dol wh coarse xl with discontinued thin stringers Dol gy, med coarse xl, arg & bit. ⁺ 4 stringers per inch. Fracts 1/8" sub vert lined with Dol gy, filled with Dol wh. Vugs numerous, med. lined with Dol wh, coarse xl. Interval may be an organic build up.	X				X	5%
8.8	9.4	6	Dol gy, med-coarse xl, arg & bit. Few stringers Dol wh, coarse xl, stringers 1/4" - 1/2". 1/8" - 1/4" vein of bit at 9.0. Verv few small vugs lined with Dol wh, coarse xl.					X	<1%
9.4	10.6	1.2	Dol wh coarse xl with stringers and patches of Dol gy a/a. Patches may be infilled vugs. Stringers generally appear to be overlying stylolitic its filled with bit. Vugs small to med lined with Dol wh, coarse xl.	X				X	10%

AMERADA DIVISION
AMERADA HESS CORPORATION
CORE DESCRIPTION

Well HornR AmHess Gulf C11 Lake M-05 Location 61°54'58"N, 123°01'47"W

Province N.W.T. Logged by C. Cook & A. Gross Date January 31, 1971

Cut 12'

Core No. 2

Core interval: 4891-4903

Recovered 12'

Core No.		Interval		Description	Good	Fair	Slim	Trace	Not	Possibly
From	To									
10.6	10.9	.3	Dol gy, med-coarse xl, saturated with very fine veinlets of bit. Some Dol wh, coarse xl scat thru. Virtually tight.				X	<1%		
10.9	11.5	.6	Dol wh coarse xl scat strngers & patches of Dol gy med- coarse xl. 11.1-11.3 pred Dol gy. Few very small vugs lined & infilled with Dol, coarse xl.				X	1%		
11.5	11.8	.3	Dol wh coarse xl with thin 1/32" - 1/16" discontinued strngers Dol gy & bit. Some Dol lt gy-brn f-med xl, often bordered by very thin veins bit. Interval has mound like appearance - may be organic in origin.							

Section 3

DRILLING AND ENGINEERING

SUMMARY OF DAILY DRILLING OPERATIONS

Horn R Amhess Gulf Cli Lake M-05

Date	Depth	Operation
1-12-71	0'	Rigging Up.
1-13-71	136'	Drilling 12¼" surface hole. Spudded well at 3:00 a.m. January 13, 1971.
1-14-71	725'	Circulating to run casing.
1-15-71	725'	Waiting on cement. Ran 23 joints plus Float Collar and Guide Shoe 8-5/8" - 24 lb. J55 Range 2 new casing. Overall 719.70' landed - 704.90' K.B. Cemented with 380 sacks of Neat Portland cement plus 2% Calcium Chloride. Plug down 7:00 p.m. January 14, 1971.
1-16-71	725'	Pressure testing B.O.P.'s Head up and tested Blind Rams to 1100 psi for ½ hour, held O.K.
1-17-71	1117'	Drilling 7-7/8" hole. Pressure tested pipe rams and hydriil to 1,000 psi, held O.K.
1-18-71	2087'	Drilling 7-7/8" hole. Mud wt. 9.0 Vis. 40.
1-19-71	2349'	Drilling 7-7/8" hole. Mud wt. 9.1 Vis. 60
1-20-71	3065'	Drilling 7-7/8" hole. Mud wt. 9.1 Vis. 64
1-21-71	3524'	Drilling 7-7/8" hole. Mud wt. 9.2 Vis. 65
1-22-71	3978'	Drilling 7-7/8" hole. Mud wt. 9.0 Vis. 60
1-23-71	4123'	Drilling 7-7/8" hole. Mud wt. 9.2 Vis. 65
1-24-71	4319'	Drilling 7-7/8" hole. Mud wt. 9.1 Vis. 56
1-25-71	4467'	Drilling 7-7/8" hole. Mud wt. 9.1 Vis. 70
1-26-71	4601'	Drilling 7-7/8" hole. Mud wt. 9.1 Vis. 68
1-27-71	4760'	Drilling 7-7/8" hole. Mud wt. 9.1 Vis. 68
1-28-71	4760'	Fishing for cones from Bit No. 7.

SUMMARY OF DAILY DRILLING OPERATIONS (Continued)

Horn R Amhess Gulf Cli Lake M-05

Date	Depth	Operation
1-29-71	4853'	Circulating to condition hole to core. Mud wt. 9.1 Vis. 120 3.6' correction made to tally.
1-30-71	4891	Tripping in with bit after coring 38'. Recovered 38'
1-31-71	4903'	Running in with DST No. 1. Ran bit and junk sub after recovering Core No. 1. Reamed hole from 4853' to 4891'. Cut Core No. 2, 4891' to 4903'. Recovered 12'. Pick up test tools for DST No. 1.
2-1-71	4950'	Drilling 7-7/8" hole. Mud wt. 9.0 Vis. 56 Ran DST No. 1: 4760'-4903' (Manetoe). Good initial puff. Times 5,60,60,60 min. Press. IH 2236, P.F. 101, ISI 1907, IF 530, F.F. 1783, FSI 1896, F.H. 2213, Recovered 3500' salt water and drilling mud. 202,000 ppm.
2-2-71	5254'	Drilling 7-7/8" hole. Mud wt. 8.8 Vis. 52
2-3-71	5475'	Drilling 7-7/8" hole. Mud wt. 9.0 Vis. 55
2-4-71	5673'	Drilling 7-7/8" hole. Mud wt. 9.0 Vis. 56
2-5-71	5690	Drilling 7-7/8" hole. Mud wt. 9.9 Vis. 60
2-6-71	5904'	Drilling 7-7/8" hole. Mud wt. 9.1 Vis. 75
2-7-71	6156'	Drilling 7-7/8" hole. Mud wt. 9.0 Vis. 72
2-8-71	6300'	Drilling 7-7/8" hole. Mud wt. 9.0 Vis. 70
2-9-71	6414'	Drilling 7-7/8" hole.
2-10-71	6500'	Logging.
2-11-71	6500'	Running DST No. 2 Ran IES Log 6494' - 705' Ran SNP Log 6493' - 3700' Ran FDL 6493' - 3800' Ran BHCSGRC 6493' - 705'

SUMMARY OF DAILY DRILLING OPERATIONS (Continued)

Horn R Amhess Gulf Cli Lake M-05

Date	Depth	Operation
2-12-71	6500'	Running Plug No. 2. Ran DST No. 2: 4630'-4680' (Nahanni-Headless) Fair blow. Times 5,15,60,60 min. Pressures: IH 2180, ISI 1748, I.F.P. 255, FFP 255, F.SI 1774, IHP 2198. Recovered 540' muddy water SA ² 64,300 ppm Ran Plug No. 1: 6500' to 6400' - 100 feet 25 sacks cement + 4% Gel.
2-13-71	6500'	Rig released 8:00 a.m. February 13, 1971. Ran Plug No. 3: 760' to surface. Cut off surface casing, welded on plate and marker.

BIT RECORD

WELL: Horn R Amhess Gulf Cli Lake M-05

BIT NO.	SIZE & TYPE	DEPTH OUT, Feet	FOOTAGE, Feet	HOURS	WEIGHT, M Pounds	R.P.M.	PUMP PRESSURE, Psi
1A	12 1/4 X1G	725	725	20 1/2	30	110	400
1	7-7/8 X3A	2318	1593	29	25	110	1300
2	7-7/8 X3A	3364	1046	30 3/4	25	110	1200
3	7-7/8 X3A	3978	614	25 1/2	25	110	1200
4	7-7/8 X1G	4123	145	13 1/2	20	65	1200
5	7-7/8 ODV	4414	291	19 3/4	20	100	1100
6	7-7/8 X1G	4607	193	17 1/2	40	85	1200
7	7-7/8 ODV	4760	153	14	40	80	1450
8	7-7/8 OWV	4760	-	Fish Only			
9	7-7/8 OWC	4857	97	6	40	60	1300
Dia	6-3/16 Dia	4891	50	6 3/4	4	70	1150
9	7-7/8 OWC	4903	12	1 1/2	4	70	1150
10	7-7/8 X55R	5356	463	35 1/4	35	50	1000
11	7-7/8 X55R	5673	307	22 1/4	35	48	1000
12	7-7/8 L4H	5800	127	12 3/4	40	80	1400
13	7-7/8 X55R	6156	356	27	35	48	1300
14	7-7/8 SCH5	6390	234	32 3/4	35	48	1100
15	7-7/8 X55R	6500	110	10	35	50	1100

SUMMARY

Surface Hole 725' of 12-1/4 " 20 1/2 hours on bottom.
Main Hole 5775' of 7-7/8 " 297 1/2 hours on bottom.
Core Hole 50' of 6-3/16 " 6 3/4 hours on bottom.

James A. Lewis Engineering Co. Ltd.

SUMMARY OF MUD ADDITIVES

Horn R Amhess Gulf Cli Lake M-05

Bentonite	131,800 lbs.
Caustic Soda	900 lbs.
Soda Ash	200 lbs.
Bicarbonate of Soda	100 lbs.
"Hi Vis"	250 lbs.
CMC	1650 lbs.
DV68	102 gal.

SURVEY RECORD

Horn R Amhess Gulf Cli Lake M-05

Depth Feet	Deviation Degrees
Surface Hole	
107	1/2
191	1/4
309	1/8
427	1/2
540	1/2
654	3/4
Main Hole	
1117	1
1399	1-3/4
1491	1-1/4
1930	1-3/4
2276	1-3/4
2505	2
2755	3
2877	2-1/2
3095	2-1/2
3281	3
3364	3-1/4
3563	3-1/2
3656	3
3782	3-1/4
3907	3
3978	3-1/4
4096	5-1/2
4123	5
4194	6-1/4
4257	6
4319	6-1/4
4663	5
4760	5-1/4
5131	5
5800	3
6390	1-1/4

DRILL STEM TEST REPORT

WELL: Horn R Amhess Gulf Cli Lake M-05

DATE: January 31, 1971 TEST NO. 1
 INTERVAL TESTED: 4760' - 4903' FORMATION: Manetoe
 TOTAL DEPTH DRILLER: 4903' LOGS: None
 HOLE SIZE: 7-7/8" RAT HOLE SIZE: 6-3/16 x 50'
 TESTING COMPANY: Lynes United OPERATOR: D. Morrison

MUD	DRILL PIPE	TEST TOOL
Type <u>Gel Chemical</u>	Type <u>IF</u>	Size Rubber <u>7"</u>
Wt. <u>9.1</u>	Size <u>4 1/2"</u>	Type _____
Visc. <u>120</u>	Size T.J. <u>-</u>	Tool Type _____
W.L. <u>25</u>	Collars <u>6 1/4"</u>	Size Choke <u>1/2"</u>
pH <u>-</u>	Jars <u>-</u>	Wt. to Set _____
F.C. <u>2/32</u>	Safety Joint <u>-</u>	Pull Loose _____
Conditions <u>Good</u>	Pumpout Sub. <u>-</u>	Fluid Cushion _____

Bit off Bottom <u>12:00 a.m. 1-31-71</u>	Preflow <u>5</u> min.	B.H. Temp. <u>113</u> °F.
Start Tester in <u>5:30 a.m.</u>	I.S.I. <u>60</u> min.	Gauge Depths <u>4792</u> K.B.
Tester on Bottom <u>8:00 a.m.</u>	Tool Open <u>60</u> min.	<u>4797</u> K.B.
Tool Open <u>11:15 a.m.</u>	F.S.I. <u>60</u> min.	
Tool Closed <u>11:20 a.m.</u>	<u>Upper Gauge</u>	<u>Lower Gauge</u>
Tool Open <u>12:20 p.m.</u>	I.H.S. <u>2241</u> psig	I.H.S. <u>2233</u> psig
Tool Closed <u>1:20 p.m.</u>	Preflow <u>311</u> psig	Preflow <u>276</u> psig
Tool Loose <u>2:30 p.m.</u>	I.S.I. <u>1915</u> psig	I.S.I. <u>1911</u> psig
Tool Out <u>5:15 p.m.</u>	Initial Flow <u>560</u> psig	Initial Flow <u>536</u> psig
Rubber Condition <u>Good</u>	Final Flow <u>1759</u> psig	Final Flow <u>1758</u> psig
Test O.K. <u>Yes</u>	Final S.I. <u>1902</u> psig	Final S.I. <u>1896</u> psig
	F.H.S. <u>2237</u> psig	F.H.S. <u>2220</u> psig

BLOW: Good initial puff. Good blow during flow period.

RECOVERY: 360' Drilling mud
3140' Salt Water 200,000 ppm

DRILL STEM TEST REPORT

WELL: Horn R Amhess Gulf Cli Lake M-05

DATE: February 11, 1971 TEST NO. 2
 INTERVAL TESTED: 4630' - 4680' FORMATION: Nahanni (Headless)
 TOTAL DEPTH DRILLER: 6500' LOGS: IES, FDL, SNP, BCS
 HOLE SIZE: 7-7/8 RAT HOLE SIZE: 7-7/8
 TESTING COMPANY: Lynes United OPERATOR: Gunderson

"Straddle By Pass"

MUD	DRILL PIPE	TEST TOOL
Type <u>Gel Chemical</u>	Type <u>FH</u>	Size Rubber <u>7-7/8</u>
Wt. <u>9.1</u>	Size <u>4 1/2"</u>	Type <u>-</u>
Visc. <u>85</u>	Size T.J. <u>5"</u>	Tool Type <u>Straddle</u>
W.L. <u>10</u>	Collars <u>6 1/4"</u>	Size Choke <u>1/2"</u>
pH <u>8.5</u>	Jars <u>-</u>	Wt. to Set <u>-</u>
F.C. <u>2/32</u>	Safety Joint <u>-</u>	Pull Loose <u>-</u>
Conditions <u>Good</u>	Pumpout Sub. <u>-</u>	Fluid Cushion <u>-</u>

Bit off Bottom <u>6:45 a.m. Feb. 11/71</u>	Preflow <u>1</u> min.	B.H. Temp. <u>-</u> °F.
Start Tester in <u>2:30 p.m.</u>	I.S.I. <u>15</u> min.	Gauge Depths <u>4650</u> K.B.
Tester on Bottom <u>4:30 p.m.</u>	Tool Open <u>60</u> min.	<u>4655</u> K.B.
Tool Open <u>5:00 p.m.</u>	F.S.I. <u>60</u> min.	
Tool Closed <u>5:01 p.m.</u>	Upper Gauge	Lower Gauge
Tool Open <u>5:16 p.m.</u>	I.H.S. <u>2176</u> psig	I.H.S. <u>2187</u> psig
Tool Closed <u>6:16 p.m.</u>	Preflow <u>318</u> psig	Preflow <u>332</u> psig
Tool Loose <u>7:30 p.m.</u>	I.S.I. <u>1752</u> psig	I.S.I. <u>1746</u> psig
Tool Out <u>11:30 p.m.</u>	Initial Flow <u>252</u> psig	Initial Flow <u>260</u> psig
Rubber Condition <u>Good</u>	Final Flow <u>272</u> psig	Final Flow <u>265</u> psig
Test O.K. <u>Shut Mud L</u>	Final S.I. <u>1871</u> psig	Final S.I. <u>1861</u> psig
	F.H.S. <u>2145</u> psig	F.H.S. <u>2163</u> psig

BLOW: Stop

RECOVERY: 25% Water Out Mud 63,000 ppm

SURFACE CASING DETAIL

Horn R Amhess Gulf Cli Lake M-05

Size: 8-5/8" O.D.
Weight: 24 lb/ft
Grade: J55 New
Amount: 719.70' including Guide shoe and Float Collar
Landed At: 704.90' K.B.
Cemented With: 380 sax of Neat Portland Cement plus 2% Calcium Chloride
Circulated: Approximately 3 barrels of returns.
Plug Down: 7:00 p.m. January 14, 1971. Bumped plug with 750 psi

ABANDONMENT PLUGS

Horn R Amhess Gulf Cli Lake M-05

Plug No. 1	6500' - 6400' Precambrian Clastics. 25 sacks cement + 4% Gel.
Plug No. 2	5000' - 4600' Headless. 130 sacks + 4% Gel. Felt at 4620'.
Plug No. 3	760' Surface, surface casing. 200 sacks + 4% Gel. Not Felt.

Cut off surface casing welded on steel plate and marker.

Section 4

LOGGING RECORD

Horn R Amhess Gulf Cli Lake M-05

Log Type	Scale	Intervals Logged
February 9 & 10, 1971		
Induction Electric	2" & 5"/100'	6494' to 705'
Borehole Compensated Sonic Gamma Ray Caliper	2" & 5"/100'	6493' to 705'
Sidewall Neutron Porosity	2" & 5"/100'	6493' to 3700'
Formation Density (Gamma Ray)	2" & 5"/100' 5"/100'	6493' to 3800' Through Surface

Section 5

Water Analysis DST No. 1
Benzine Test DST No. 1
Water Analysis DST No. 2

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. E71-3925-2

Received: Feb. 9, 1971 Reported: Feb. 24, 1971

Well: Location: Horn R - AMIESS - Gulf CLILK M-05 61° 54' N 123° 01' W

Operator: AMERADA HESS CORPORATION

Field or Area:

Elev.: K.B.

Grd.

Zone/Formation: Manetoe

Sample Interval: 4760' - 4903'

Method of Production: D.S.T. #1

Sampled from: Top of tool

Sampled by: Lynes United
Services Ltd.

Date: Jan. 31, 1971

OTHER PERTINENT DATA

(Signed)

	Na	K	Ca	Mg					SO ₄	Cl			CO ₂	HCO ₃		
Mg./L	79937		6006	753					640	135600			---	98		
Meq./L	3477.24		299.70	61.90					13.31	3023.92			---	1.61		
Meq. %	45.29		3.90	0.81					0.17	49.81			---	0.02		

Total Solids Mg/L: By Evaporation 254,740

Fe Much

Specific Gravity 1.051

@60°F

Observed pH 6.0 @ 75 °F

Calculated 223,034 After Ignition 222,100

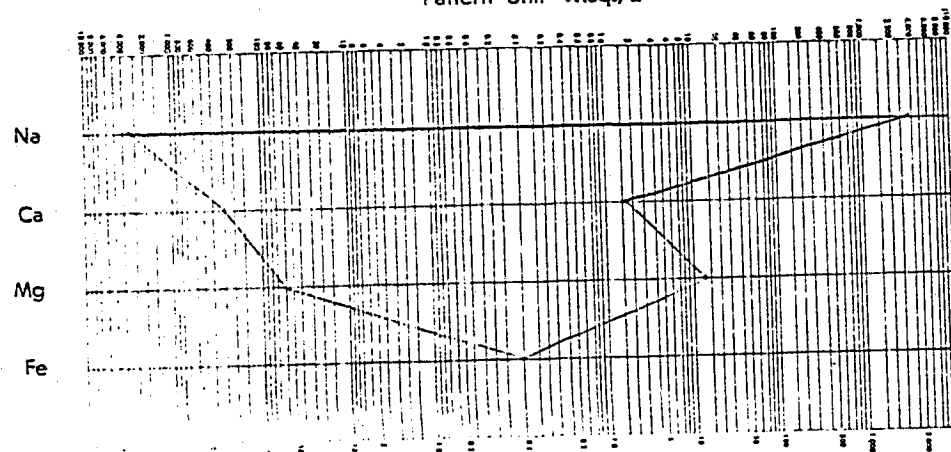
H₂S Nil

Refractive Index 1.3700

@25°C

Resistivity 0.053 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

Sample consisted of colourless water with a thin layer of sediment. The filtered water deposited air-oxidized iron.

E71-3925-1: Sample from middle of fluid.

RESISTIVITY: 0.055 Ohm-meters at 68°F.

Colourless water with a thin layer of sediment.

CHEMICAL & GEOLOGICAL LABORATORIES LIMITED

OPERATOR: AMERADA HESS CORPORATION

REPORT NUMBER: E71-3925-1

DATE SAMPLED: Jan. 31, 1971

DATE RECEIVED: Feb. 9, 1971

DATE REPORTED: Feb. 24, 1971

KIND OF SAMPLE: Water

Well: Horn R-AMHESS-Gulf CLIILK M-05

61° 54' N 123° 01' W

Formation: Manetoe

Interval: 4760' - 4903'

Method of Production: D.S.T. #1

Sampled from: Middle of fluid

Sampled by: Lynes United Services Ltd.

BENZENE CONTENT: 0.02 p.p.m.

Sample was received in a 1 quart metal container with a foil insert present in the screw cap.

Container was full, water was clear and appeared to be a good sample.

CHEMICAL & GEOLOGICAL LABORATORIES LIMITED

OPERATOR: AMERADA HESS CORPORATION

REPORT NUMBER: E71-3925-2

DATE SAMPLED: Jan. 31, 1971

DATE RECEIVED: Feb. 9, 1971

DATE REPORTED: Feb. 24, 1971

KIND OF SAMPLE: Water

Well: Horn R-AMHESS-Gulf CLILK M-05

61° 54' N 123° 01' W

Formation: Manetoe

Interval: 4760' - 4903'

Method of Production: D.S.T. #1

Sampled from: Top of tool

Sampled by: Lynes United Services Ltd.

BENZENE CONTENT: No trace of benzene indicated.

Sample was received in a 1 quart metal container with a foil insert present in the screw cap.

Container was 3/4 full, water was clear and appeared to be a good sample.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. C71-2949

Received: Mar. 2, 1971 Reported: Mar. 12, 1971

Well: Location: Horn R Am Hess Gulf Cl1 Lake M-05

Operator: AMERADA HESS CORPORATION

Field or Area:

61° 54' 58" N - 123° 01' 47" W

Elev.: K.B. 1220' Grd. 1206'

Zone/Formation: Headless

Sample Interval: 4630' - 4680'

Method of Production: D.S.T. #2

Sampled from: Top of Tool

Sampled by: Lynes United
Services Ltd.

Date: Feb. 11, 1971

OTHER PERTINENT DATA

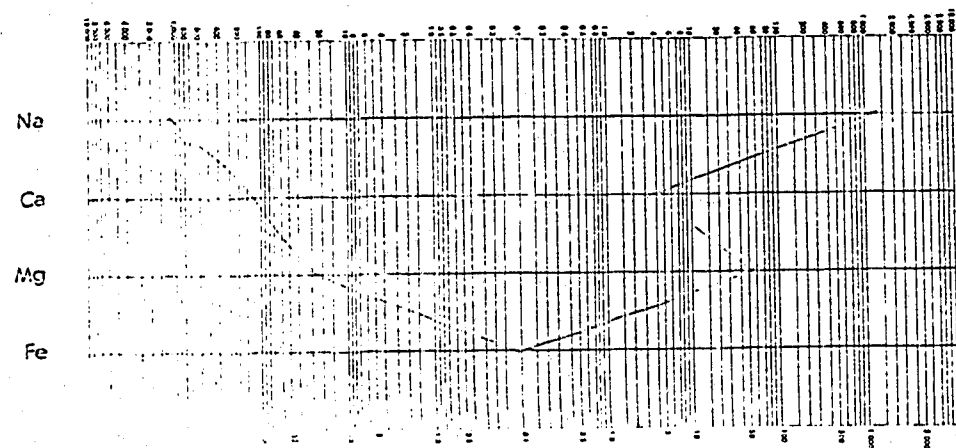
Recovered 540' mud cut salt water

(Signed)

	Na & K	Ca	Mg					SO ₄	Cl			CO ₃	HCO ₃		
Mg./l	27,900	2790	340					2570	47,000				240		
Meq./L	1215.63	139.22	27.95					53.46	1325.40				3.94		
Meq. %	43.96	5.03	1.01					1.93	47.93				0.14		

Total Solids Mg/L: By Evaporation 83,610 Fe Trace Specific Gravity 1.061 @60°F Observed pH 8.1 @ 73 °F
 Calculated 80,840 After Ignition 79,250 H₂S Nil Refractive Index 1.3465 @25°C Resistivity 0.10 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

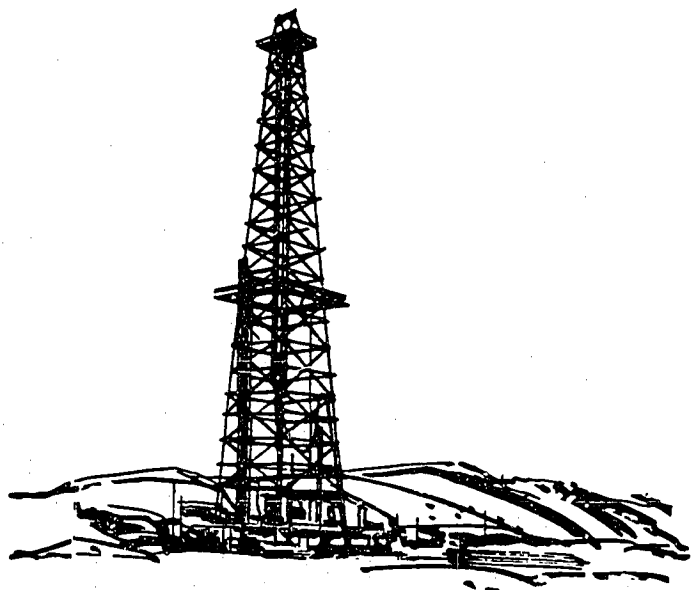
Cl The sample as received, contained approximately 50 percent sediment. The filtrate was colorless.

HCO₃SO₄CO₃

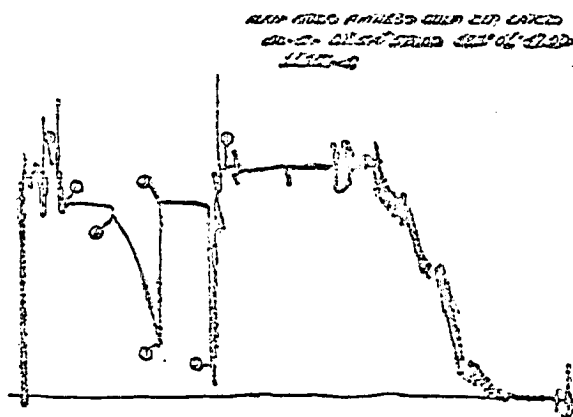
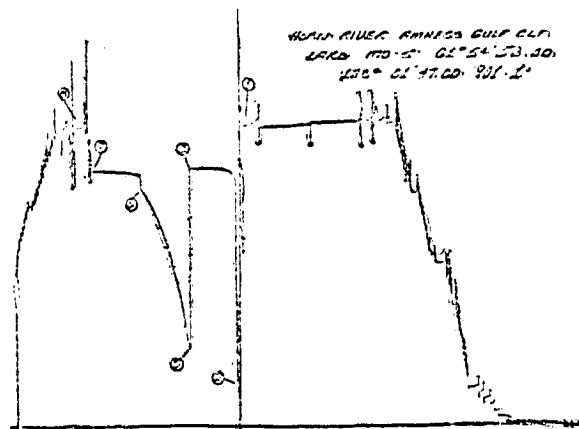


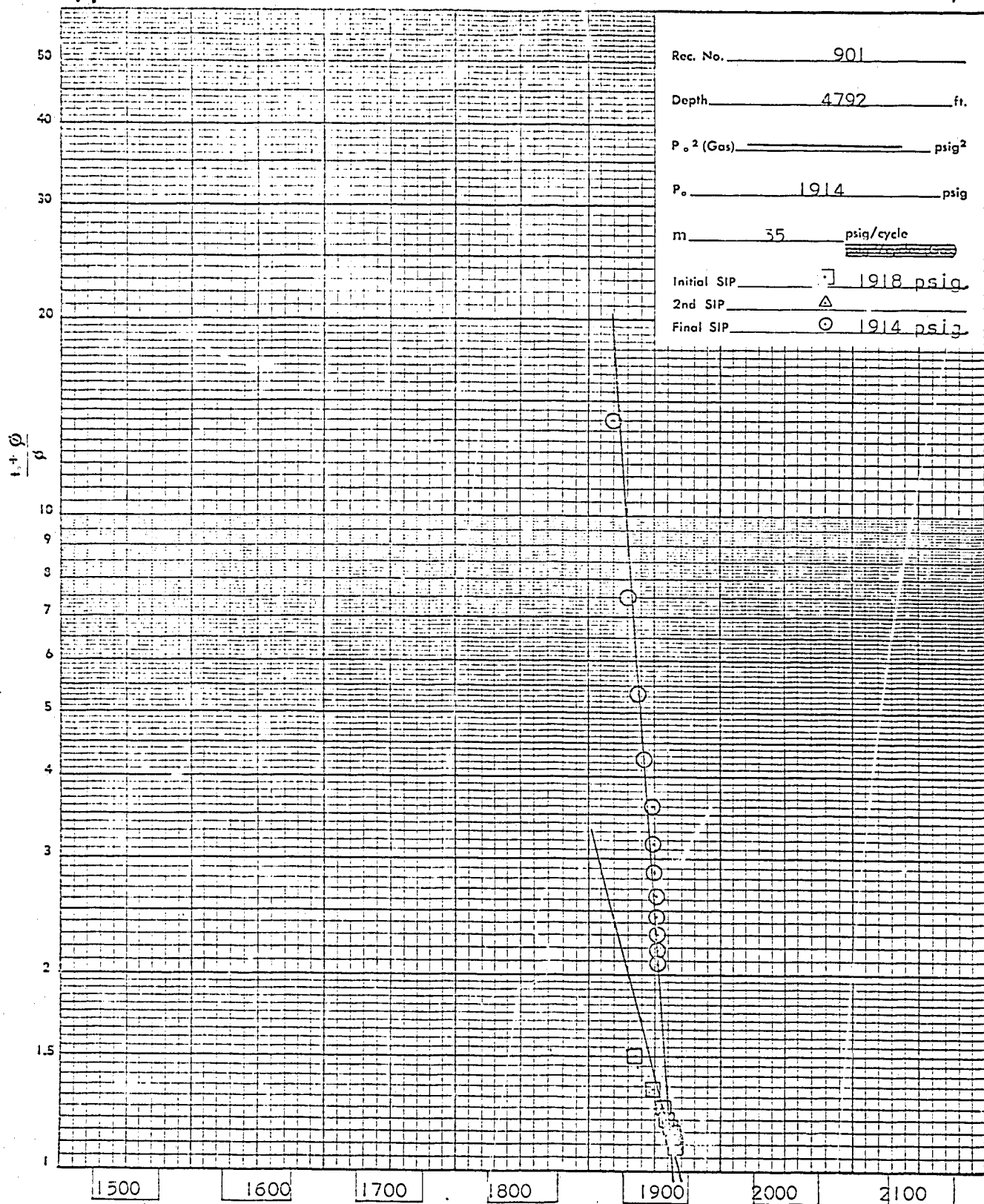
BRIGHT NAME IN THE OIL PATCH

Inflatable and Conventional Packer Tools



DRILL STEM TEST
TECHNICAL SERVICE REPORT





PRESSURE EXTRAPOLATION PLOT

OST # 1

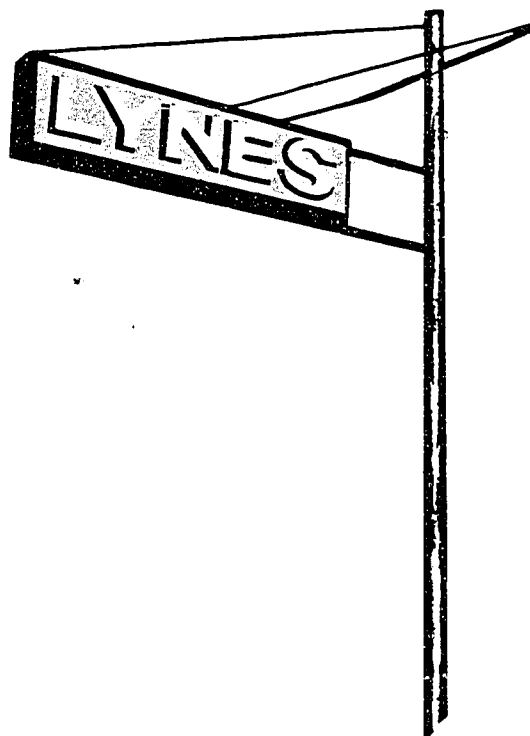
Horn River Resources Ltd.

Company

Well Name and Description

Toll No.

© Chapman & Hall 1996. All rights reserved. No part of this publication may be reproduced, stored, transmitted, or disseminated, in any form, or by any means, without prior written permission from Chapman & Hall.



LYNES UNITED SERVICES LTD. 262-4501 CALGARY, ALBERTA

Don Price December 1984

Don Price Andrew Galt Oil & Gas

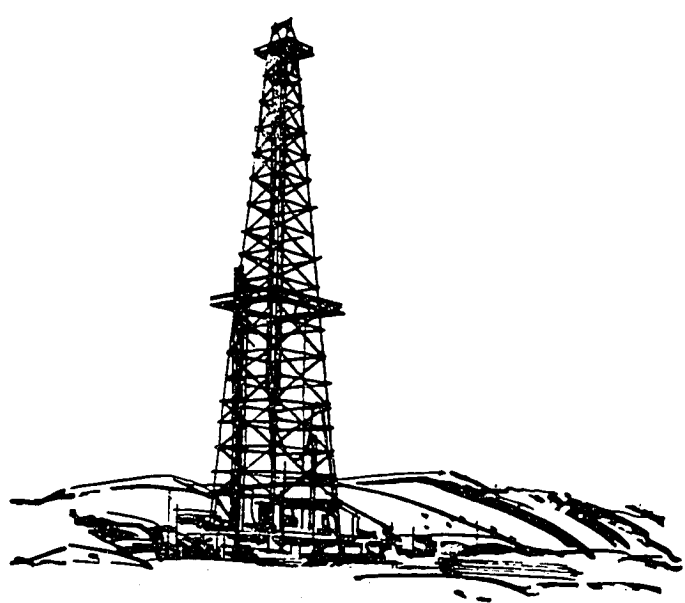
610 541 1230 01

1



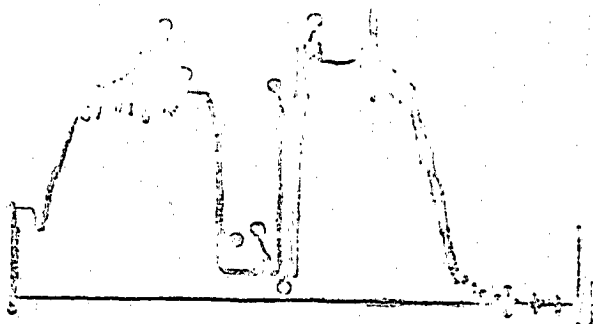
BRIGHT NAME IN THE OIL PATCH

Inflatable and Conventional Packer Tools

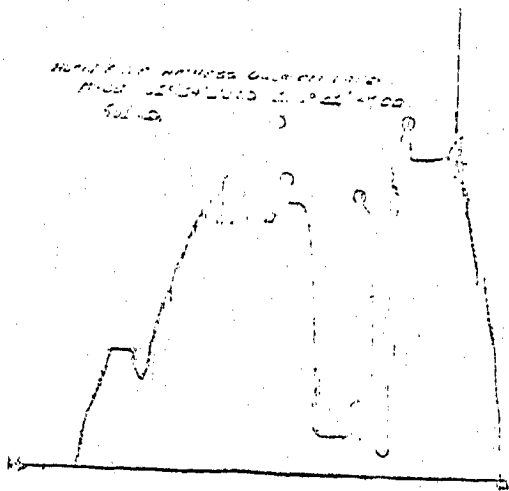


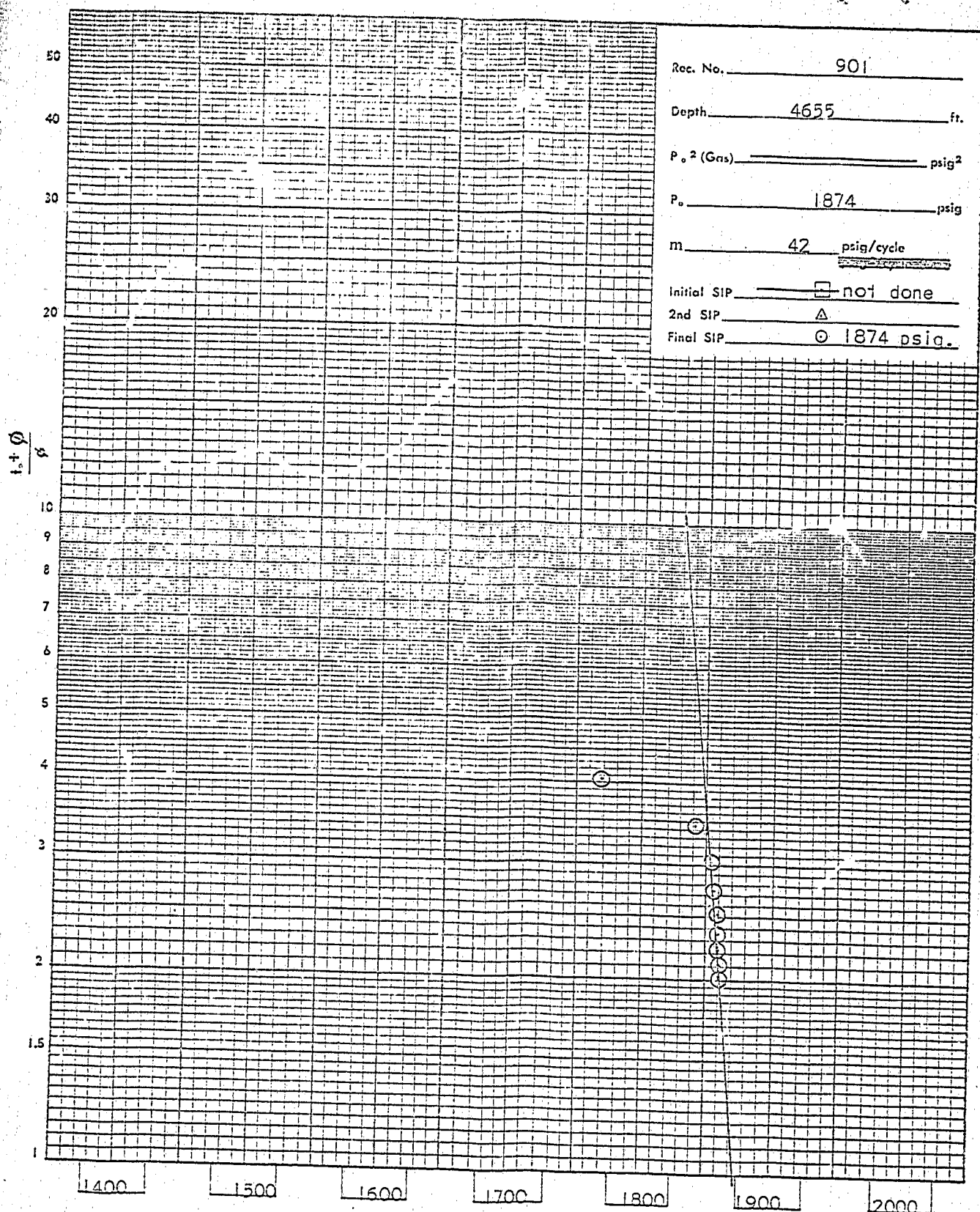
THE OIL PATCH
A MONTHLY NEWS REPORT

H-1 P-100 100 IS 0.15 0.15 0.15
 H-100 100 100 100 100 100
 100 100



H-1 P-100 100 IS 0.15 0.15 0.15
 H-100 100 100 100 100 100
 100 100





PRESSURE EXTRAPOLATION PLOT

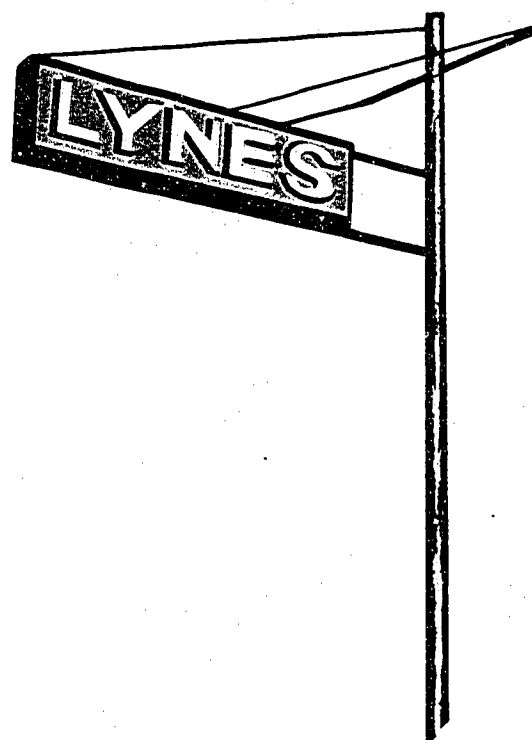
DST # 2

**Horn River Resources Ltd
Company**

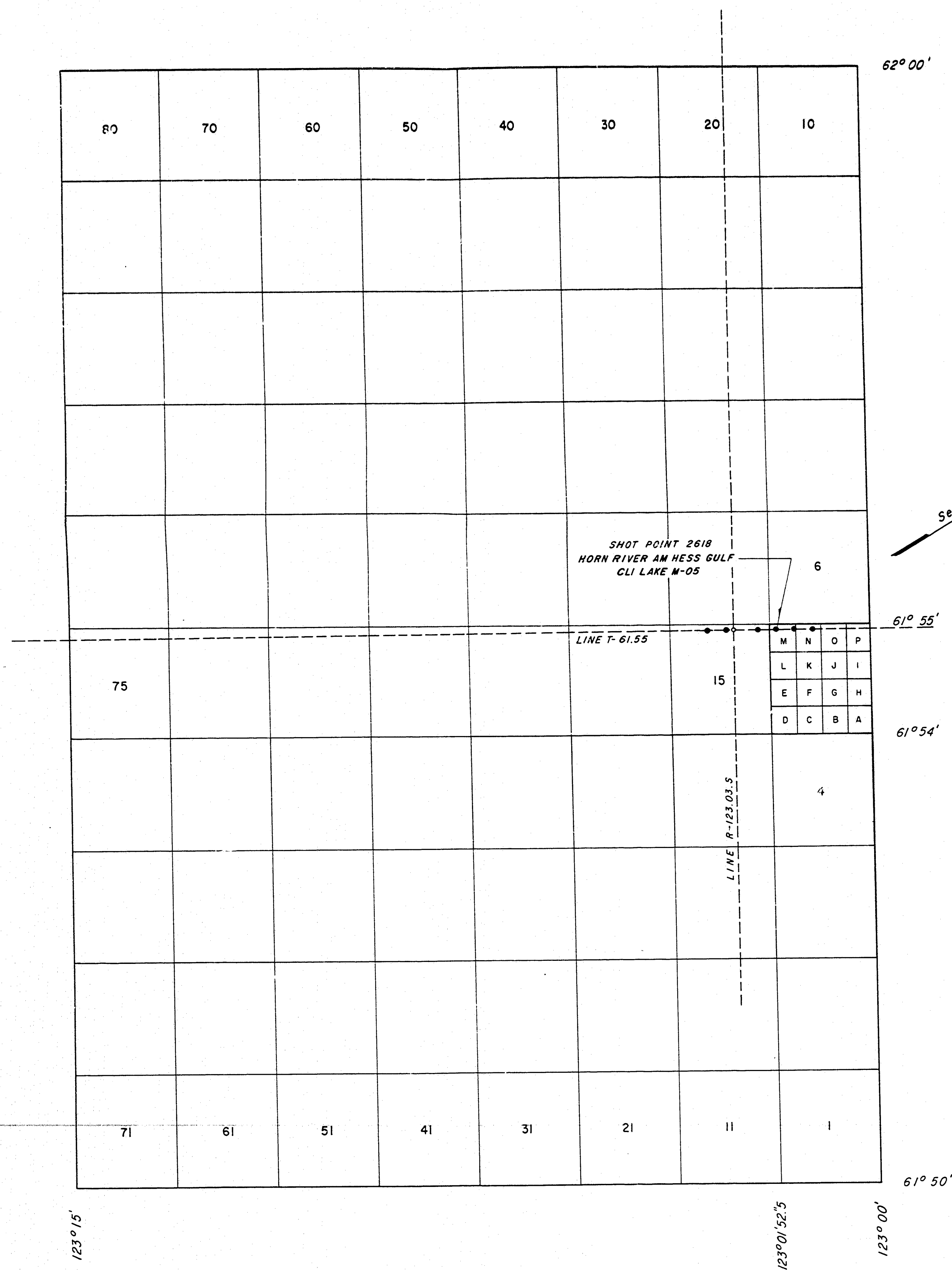
Well Name and Description	Latitude	Longitude	Depth	Water Level	Notes
Horn River Ambess Gulf C/I Lake M-05	33.1111	-111.6111	100	100	

Test No. 2

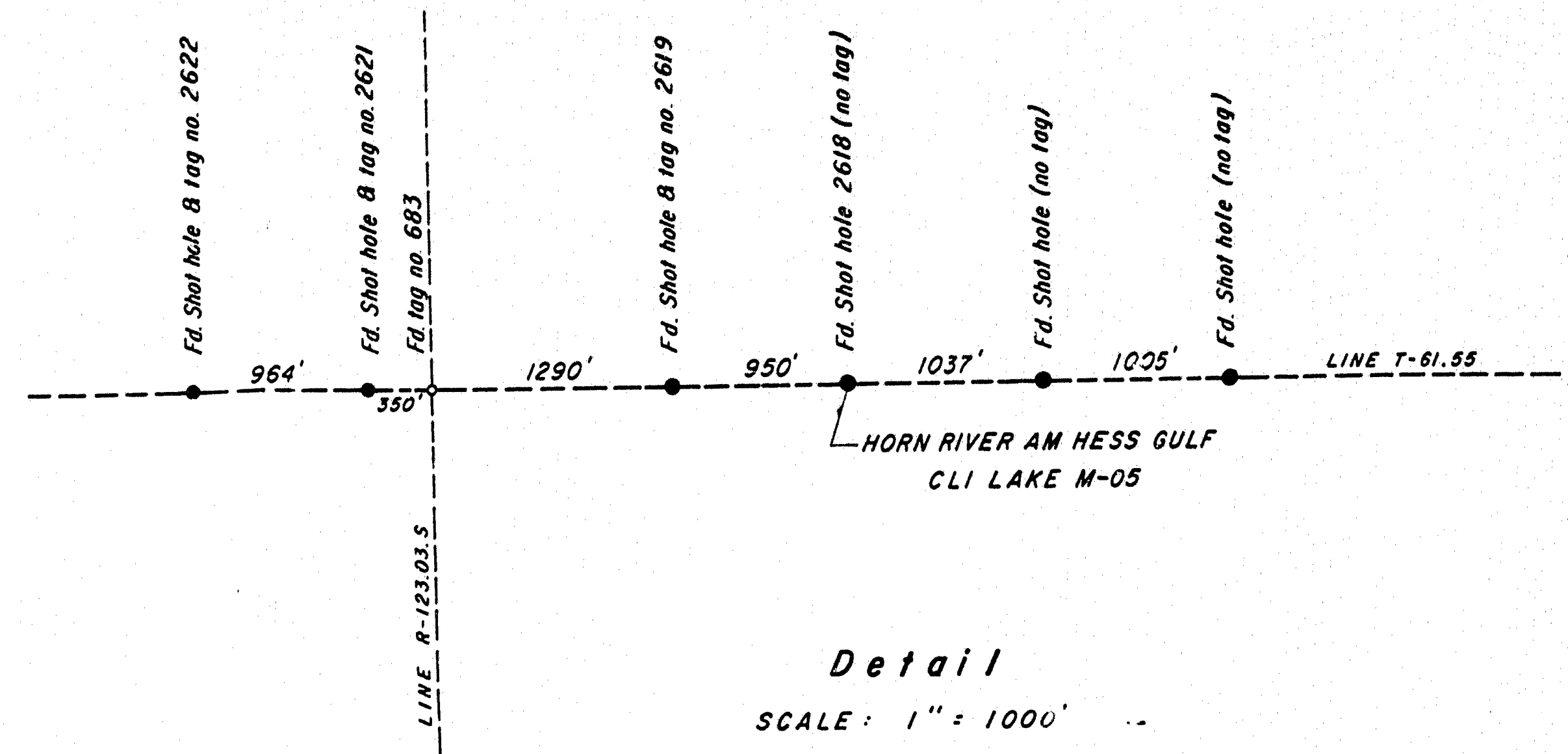
February 11/77
Date of Test



LYNES UNITED SERVICES LTD. 262-4501 CALGARY, ALBERTA



NOTE: Relative to information supplied by client.



NOTE: Well is to be drilled at Shot Point 2618, Line T-61.55

HORN RIVER RESOURCES LTD. PLAN SHOWING SHOT POINT LOCATION OF HORN RIVER AM HESS GULF CLI LAKE M-05 SIBBESTON LAKE AREA NORTHWEST TERRITORIES

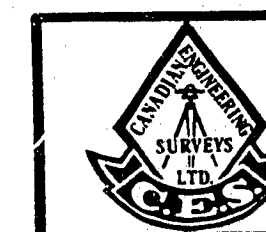
Scale: 1 in. to 1 mile

GRID AREA: 62° 00' N, 123° 00' W

Certified correct, January 8th, 1971.

A. D. Duggan
Dominion Land Surveyor

SIGNATURES FOR
HORN RIVER RESOURCES LTD.



CANADIAN ENGINEERING SURVEYS CO. LTD.
EDMONTON ALBERTA

JOB NO.:	C - 6476
DATE:	Jan. 8th/71
DRWG NO.:	6476-M-1

N.T.S. 95-G

LEASE			WELL NO.		API WELL NUMBER		DATE	
AMHSS GOLF CIL LAKE			M-05				2-13-79	
OPERATOR					CONTRACTOR		RIG NO.	
HORN RIVER RES.					PETROLIA DRILLING		7	
SIGNATURE OF OPERATOR'S REPRESENTATIVE					SIGNATURE OF CONTRACTOR'S TOOL PUSHER			
D.P. SIZE			WT. FT.		GRADE		TOOL JT Q.D.	
TYPE THREAD			STRING NO.		PUMP NO.		PUMP MANUFACTURER	
TYPE			STROKE LENGTH					

[illegible]

DAILY DRILLING REPORT REPORT NO.

LEASE <i>AGNESS GOLF LINKS</i>	WELL NO. <i>M-05</i>	API WELL NUMBER	DATE <i>2-12-71</i>						
OPERATOR <i>HORN RIVER RES</i>	CONTRACTOR <i>PETROLIA DRILLING</i>		RIG NO. <i>7</i>						
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>H. Coleman</i>							
D.P. SIZE	WT./FT.	GRADE	TOOL JT. C.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LOCATION							WIRE LINE RECORD			REEL NO.
SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	SIZE	NO. LINES	FT. S. S. D.	
LAST CASING TUBING OR LINER							FT. CUT OFF			PRESENT LENGTH
							TON MI. OR TRIPS SINCE LAST CUT			
							CUMULATIVE TON MI. OR TRIPS			

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	
1	RIG UP AND TEAR DOWN						SIZE	WEIGHT	
2	DRILL ACTUAL				STB RMR	OD	FT. MFG.	PRESSURE GRADIENT	
3	REAMING				D.C. ID	OD	FT. TYPE	VISC.-SEC.	
4	CORING				STB RMR	OD	FT. JETS 1/32"	PV.YP	
5	CONDITION MUD & CIRCULATE				D.C. ID	OD	FT. SER. NO.	GELS.	
6	TRIPS				STB RMR	OD	FT. DEPTH OUT	WL.-CC'S	
7	LUBRICATE RIG						DEPTH IN	pH	
8	REPAIR RIG						TOTAL FTG.	SOLIDS %	
9	CUT OFF DRILLING LINE						TOTAL HRS. RUN		
10	DEVIATION SURVEY				STANDS DP	FT.	COND. 1/8" T.B. GAGE	MUD & CHEMICALS ADDED	
11	WIRE LINE LOGS				SINGLES DP	FT.	GPM/ PD-PSI	TYPE	AMT.
12	RUN CASING & CEMENT				KELLY DOWN	FT.			
13	WAIT ON CEMENT				TOTAL	FT.			
14	NIPPLE UP B.O.P.				WT. OF STRING	LBS.			

MORNING TOUR

FOOTAGE		DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000'	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO								LINER SIZE	S.P.M.	SCALES
PLUG #1 - 6500 - 6400											
Run 25 lbs cement w/ 4% gel displaced w/ drilling mud											
DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
1200	330	3 1/2		LAY DOWN PACKER & LOAD OUT.							
330	500	1 1/2		LAY DOWN DRILL COLLARS							
500	630	1 1/2		RUN IN OPEN END							
630	700	1/2		CIRC.							
700	730	1/2		RUN PLUG #1 & DISPLACE							
730	800	1/2		PULL UP TO RUN PLUG #2.							
DRILLER <i>A. Mather</i>											

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	
15	TEST B.O.P.						SIZE	WEIGHT	
16	DRILL STEM TEST				STB RMR	OD	FT. MFG.	PRESSURE GRADIENT	
17	PLUG BACK				D.C. ID	OD	FT. TYPE	VISC.-SEC.	
18	SQUEEZE CEMENT				STB RMR	OD	FT. JET 1/32"	PV.YP	
19	FISHING				D.C. ID	OD	FT. SER. NO.	GELS.	
20	DIR. WORK				STB RMR	OD	FT. DEPTH OUT	WL.-CC'S	
21							DEPTH IN	pH	
22							TOTAL FTG.	SOLIDS %	
23							TOTAL HRS. RUN		
A. PERF'R'TN					STANDS DP	FT.	COND. 1/8" T.B. GAGE	MUD & CHEMICALS ADDED	
B. TBG TRIPS					SINGLES DP	FT.	GPM/ PD-PSI	TYPE	AMT.
C. TREATING					KELLY DOWN	FT.			
D. SWABBING					TOTAL	FT.			
E. TESTING					WT. OF STRING	LBS.			
F. ADDIT'L									
G.									

DAY TOUR

FOOTAGE		DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000'	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO								LINER SIZE	S.P.M.	SCALES
RUN PLUG #2 @ 5000' - 4600'											
& DISPLACE											
PULL 6 STD'S & CIRC											
W.O.C.											
DRILLER <i>[Signature]</i>											

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	
24	PERF'R'TN						SIZE	WEIGHT	
25	TBG TRIPS				STB RMR	OD	FT. MFG.	PRESSURE GRADIENT	
26	TREATING				D.C. ID	OD	FT. TYPE	VISC.-SEC.	
27	SWABBING				STB RMR	OD	FT. JETS 1/32"	PV.YP	
28	TESTING				D.C. ID	OD	FT. SER. NO.	GELS.	
29	ADDIT'L				STB RMR	OD	FT. DEPTH OUT	WL.-CC'S	
TOTALS							DEPTH IN	pH	
DAY WORK TIME SUMMARY (OFFICE USE ONLY)							TOTAL FTG.	SOLIDS %	
HRS. W/CONTR. D.P.							TOTAL HRS. RUN		
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									

EVENING TOUR

FOOTAGE		DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000'	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO								LINER SIZE	S.P.M.	SCALES
RUN IN FEEL PLUG #2 Plug @ 7620											
PULL OUT TO RUN PLUG #3											
RUN PLUG #3 760 - surface											
LAY DOWN PIPE											
DRILLER											



LEASE AMHESSE GULF CREEK LAKE	WELL NO. M-05	API WELL NUMBER	DATE 2-11-71						
OPERATOR HORN RIVER RES.	CONTRACTOR PETROLIA DRILLING		RIG NO. 7						
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>D. Coleman</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER							
D.P. SIZE	WT./FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LOCATION

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				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	WEIGHT	PRESSURE GRADIENT	VISC. - SEC.
1.	RIG UP AND TEAR DOWN				STB RMR	OD	FT.	MFG.			
2.	DRILL ACTUAL				D.C. ID	OD	FT.	TYPE			
3.	REAMING				STB RMR	OD	FT.	JETS 1 3/2"			
4.	CORING				D.C. ID	OD	FT.	SER. NO.			
5.	CONDITION MUD & CIRCULATE	5 1/4			STB RMR	OD	FT.	DEPTH OUT			
6.	TRIPS	2 1/4						DEPTH IN			
7.	LUBRICATE RIG							TOTAL FTG.			
8.	REPAIR RIG							TOTAL HRS. RUN			
9.	CUT OFF DRILLING LINE				69 STANDS DP	6483	FT.	COND. 1 1/8" T.B. GAGE			
10.	DEVIATION SURVEY				SINGLES DP		FT.	GPM/ PD-PSI			
11.	WIRE LINE LOGS				KELLY DOWN	17	FT.				
12.	RUN CASING & CEMENT				TOTAL		FT.				
13.	WAIT ON CEMENT				WT. OF STRING	95	LBS.				
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. PERFORATION											
B. TBG TRIPS											
C. TREATING											
D. SWABBING											
E. TESTING											
F. ADDITION											
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 SPUU											
CUMULATIVE ROTATING HRS.											
TOTAL MUD COST											

MORNING TOUR

DAY TOUR

EVENING TOUR

FOOTAGE		DR. D RM-R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000'	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO										
TD											
DEVIATION RECORD											
TIME LOG											
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
12 00	1 00	1		PICK UP SINGLES.							
1 00	6 45	5 1/4		CIRC & WAIT ON ORDERS.							
6 45	7 30	3 1/4		BLOW KELLY							
7 30	8 00			HOIST.							
DRILLER <i>A. J. Martin</i>											
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.	PUMP NO.	METHOD RUN
DST # 2											
FH 2180 IS 1778 IF 255 Recovered 540' mud cut salt water											
FH 2198 FS 1774 FF 255 GH 300 P.P.M.											
Dressow 5min Initial shutin 15min Tool Open 60min Final shutin 60min											
DEVIATION RECORD											
TIME LOG											
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
8 00	10 30	2 1/2		HOIST TO TEST STRAP OUT.							
10 30	11 15	3 1/4		RUN IN 18' SIDS OF TAIL PIPE							
11 15	2 30	3 1/4		FICK UP PACKER & MAKE UP SAME.							
2 30	4 00	1 1/2		RUN IN W/ PACKER.							
✓ BLIND RAMS OK											
DRILLER <i>A. J. Martin</i>											
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.	PUMP NO.	METHOD RUN
DEVIATION RECORD											
TIME LOG											
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
4 00	4 30	1/2		RUN IN W/ PACKER							
4 30				HEAD UP TO TEST ✓ PIPE RAMS & HYDRA							
				& MOTOR SHUT OFFS OK.							
				TESTING							
				HOIST P.S.T # 2							
				BREAK DOWN TEST TOOL.							
DRILLER <i>A. J. Martin</i>											



DAILY DRILLING REPORT REPORT NO.

LEASE AMHESSE GULF CAI LAKE	WELL NO. M-05	API WELL NUMBER	DATE 2-10-71						
OPERATOR HORN RIVER RES.	CONTRACTOR PETROLIA DRILLING	RIG NO. 7							
SIGNATURE OF OPERATOR'S REPRESENTATIVE D. Coleman		SIGNATURE OF CONTRACTOR'S TOOL PUSHER							
D.P. SIZE	WT. FT.	GRADE	TOOL JT Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EmSCO	D500	16
						2	NSCO	C150	14

LOCATION	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	WIRE LINE RECORD	REEL NO.
								SIZE 1 1/8	NO. LINES 8
								FT. CUT OFF	PRESENT LENGTH
								TON MI. OR TRIPS SINCE LAST CUT	998
								CUMULATIVE TON MI. OR TRIPS	8122

TIME DISTRIBUTION - HOURS					NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	PRESSURE GRADIENT	
1	RIG UP AND TEAR DOWN				STB RMR	OD	FT.	MFG.				
2	DRILL ACTUAL				D.C. ID	OD	FT.	TYPE	VISC.-SEC.			
3	REAMING				STB RMR	OD	FT.	JETS 1/32"	PV YP			
4	CORING				D.C. ID	OD	FT.	SER. NO.	GELS.			
5	CONDITION MUD & CIRCULATE				STB RMR	OD	FT.	DEPTH OUT	WL -CC'S			
6	TRIPS							DEPTH IN	pH			
7	LUBRICATE RIG							TOTAL FTG.	SOLIDS %			
8	REPAIR RIG							TOTAL HRS. RUN				
9	CUT OFF DRILLING LINE							COND. 1/8" T/B' GAGE				
10	DEVIATION SURVEY				STANDS DP	FT.		GPM/ PD-PSI				
11	WIRE LINE LOGS				1 SINGLES DP	58554	FT.					
12	RUN CASING & CEMENT				KELLY DOWN	32	FT.					
13	WAIT ON CEMENT				TOTAL	6500	FT.					
14	NIPPLE UP B.O.P.				WT. OF STRING	125	LBS.					

TIME DISTRIBUTION - HOURS					NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	PRESSURE GRADIENT	
15	TEST B.O.P.				STB RMR	OD	FT.	MFG.				
16	DRILL STEM TEST				D.C. ID	OD	FT.	TYPE	VISC.-SEC.			
17	PLUG BACK				STB RMR	OD	FT.	JETS 1/32"	PV YP			
18	SQUEEZE CEMENT				D.C. ID	OD	FT.	SER. NO.	GELS.			
19	FISHING				STB RMR	OD	FT.	DEPTH OUT	WL -CC'S			
20	DIR. WORK							DEPTH IN	pH			
21								TOTAL FTG.	SOLIDS %			
22								TOTAL HRS. RUN				
23								COND. 1/8" T/B' GAGE				
A. PERF'R'T'N					STANDS DP	FT.		GPM/ PD-PSI				
B. TBG TRIPS					1 SINGLES DP	58554	FT.					
C. TREATING					KELLY DOWN	9	FT.					
D. SWABBING					TOTAL	6500	FT.					
E. TESTING					WT. OF STRING	125	LBS.					
F. ADDIT'N'L												
G.												

TIME DISTRIBUTION - HOURS					NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	PRESSURE GRADIENT	
TOTALS					STB RMR	OD	FT.	MFG.				
DAY WORK TIME SUMMARY (OFFICE USE ONLY)					D.C. ID	OD	FT.	TYPE	VISC.-SEC.			
HRS. W/CONTE. D.P.					STB RMR	OD	FT.	JETS 1/32"	PV YP			
HRS. W/OPR. D.P.					D.C. ID	OD	FT.	SER. NO.	GELS.			
HRS. WO. D.P.					STB RMR	OD	FT.	DEPTH OUT	WL -CC'S			
HRS. STANDBY								DEPTH IN	pH			
								TOTAL FTG.	SOLIDS %			
								TOTAL HRS. RUN				
								COND. 1/8" T/B' GAGE				
TOTAL DAY WORK					STANDS DP	FT.		GPM/ PD-PSI				
					1 SINGLES DP	58554	FT.					
					KELLY DOWN	9	FT.					
					TOTAL	6500	FT.					
					WT. OF STRING	125	LBS.					

FOOTAGE		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	
FROM	TO												
6500													
FUEL 3 1/2'													
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		8:00	8			LOG W/ SCHLUMBERGER.							

FOOTAGE		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	
FROM	TO												
6500													
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		4:00	8			Logging							

FOOTAGE		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	
FROM	TO												
4:00	5:00												
5:00	8:30												
8:30	11:30												
11:30	12:00												
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							
4:00		5:00	1			Logging							
5:00		8:30	3 1/2			LAY DOWN 4 STANDS D.C?							
8:30		11:30	3			RUN IN OPEN END.							
11:30		12:00	1/2			PICK UP 20 SINGLES TO REACH BOTTOM.							



LEASE AMHESSE BURE CH LAKE	WELL NO. M-05	API WELL NUMBER	DATE 2-9-71						
OPERATOR HORN RIVER RES.	CONTRACTOR PETROLIA DRILLING		RIG NO. 7						
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>							
D.P. SIZE	WT. FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EMSCO	D.500	16
						2	NSCO	C.150	14

LOCATION	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	WIRE LINE RECORD	REEL NO.
								NO. LINES	FT. SLIPPED
LAST CASING TUBING OR LINER								FT. CUT OFF	PRESENT LENGTH
								TON MI. OR TRIPS SINCE LAST CUT	
								CUMULATIVE TON MI. OR TRIPS	

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	7:00	7:30
1.	RIG UP AND TEAR DOWN							SIZE	7 7/8	
2.	DRILL ACTUAL		6 3/4		STB RMR OD	FT.	MFG.	H.W.		
3.	REAMING				D.C. ID OD	FT.	TYPE	XSSR	98	95
4.	CORING				STB RMR OD	FT.	JETS 1/32"	14 14 15		
5.	CONDITION MUD & CIRCULATE		1	2	D.C. ID OD	610.23	SER. NO.	20867		
6.	TRIPS		6		STB RMR OD	FT.	DEPTH OUT			
7.	LUBRICATE RIG		1/4		1 X0.508	2.15	DEPTH IN	6390		
8.	REPAIR RIG						TOTAL FTG.	24		
9.	CUT OFF DRILLING LINE						TOTAL HRS. RUN	3 1/4		
10.	DEVIATION SURVEY				61 STANDS DP	FT.	COND. 1/8" T.B. GAGE			
11.	WIRE LINE LOGS				1 SINGLES DP	576.110	FT.	GPM/ PD-PSI		
12.	RUN CASING & CEMENT				KELLY DOWN	41	FT.			
13.	WAIT ON CEMENT				TOTAL	6414	FT.			
14.	NIPPLE UP B.O.P.				WT. OF STRING	125	LBS.			
15.	TEST B.O.P.									
16.	DRILL STEM TEST									
17.	PLUG BACK									
18.	SQUEEZE CEMENT									
19.	FISHING				21 D.C. ID OD	610.23	FT.	TYPE	XSSR	
20.	DIR. WORK				STB RMR OD	FT.	JETS 1/32"	14 14 15		
21.					D.C. ID OD	FT.	SER. NO.	20867		
22.					STB RMR OD	FT.	DEPTH OUT			
23.					1 X0.508	2.15	DEPTH IN	6390		
							TOTAL FTG.	110		
							TOTAL HRS. RUN	10		
					62 STANDS DP	5855	FT.	COND. 1/8" T.B. GAGE		
					1 SINGLES DP	31.65	FT.	GPM/ PD-PSI		
					KELLY DOWN	9	FT.			
					TOTAL	6509	FT.			
					WT. OF STRING	120	LBS.			
COMPLETION										
A.	PERF'R'TN									
B.	TBG TRIPS									
C.	TREATING									
D.	SWABBING									
E.	TESTING									
F.	ADMIT'T'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										

FOOTAGE		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
FROM	TO											
6390	6414		24									
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
12:00	2:45	2 3/4		RUN IN W/BIT #15								
2:45	4:45	2		TAAW OUT KELLY & STAND PIPE.								
4:45	8:00	3 1/4		DRILL.								
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
6414	6500		86									
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
8:00	8:15	1/4		BIG SERVICE & BOP'S								
8:15	3:00	6 1/4		DRILL.								
3:00	4:00	1		CIRC SAND MUD + HOLE F/Dummy Trip								
CIRC Btm HOLE SAMPLE												
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
6500												
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
4:00	4:30	1/2		CIRC SAND MUD + HOLE F/Dummy Trip								
4:30	6:15	1 3/4		Dummy Trip 20 STD. Add Fluid in Ann.								
6:15	7:45	1 1/2		CIRC To Log.								
7:45	12:00	4 1/4		MEASURE OUT To Log.								
DOWNGASS TALLY - 6509.19												
STRAP TALLY - 6502.71												
DIFF - 6.48												
DRILLER												



LEASE ARMHESSE GULF CH LAKE	WELL NO. M-05	API WELL NUMBER	DATE 2-8-71						
OPERATOR HORN RIVER RES.	CONTRACTOR PETROLIA DRILLING	RIG NO. 7							
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>							
D.P. SIZE	WT./FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EMSCO	D500	16
						2	NSCO	C150	14

LOCATION

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	WIRE LINE RECORD	REEL NO.
							SIZE	NO. LINES
							FT. CUT OFF	PRESENT LENGTH
							TON MI. OR TRIPS SINCE LAST CUT	
							CUMULATIVE TON MI. OR TRIPS	

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT	PRESSURE GRADIENT
1	RIG UP AND TEAR DOWN						14		1200	300
2	DRILL ACTUAL	8	7 3/4	3 1/2			7 7/8		9.0	9.0
3	REAMING						REED			
4	CORING						SCHS		75	65
5	CONDITION MUD & CIRCULATE						14 1/4 15			70
6	TRIPS						14 1/4 15			
7	LUBRICATE RIG						861529			
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										

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT	PRESSURE GRADIENT
1	RIG UP AND TEAR DOWN						14		10:00	12:00
2	DRILL ACTUAL						7 7/8		9.0	9.0
3	REAMING						REED			
4	CORING						SCHS		75	70
5	CONDITION MUD & CIRCULATE						14 1/4 15			74
6	TRIPS						861529			
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										

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT	PRESSURE GRADIENT
1	RIG UP AND TEAR DOWN						14		6:00	
2	DRILL ACTUAL						7 7/8		9.1	
3	REAMING						REED			
4	CORING						SCHS		153	
5	CONDITION MUD & CIRCULATE						14 1/4 15			
6	TRIPS						861529			
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										

MORNING TOUR

DAY TOUR

EVENING TOUR

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO									
6240	6300	60						48	35	1100
								5	60	
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
1200	800	8		DRILL						

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO									
6300	6365	65						50	35	1100
								5	60	
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
800	1030	2 1/2		DRILL						
1030	1045	1 1/4		RIG SERVICE & Repair						
1045	400	5 1/4		DRILL						

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO									
6365	6390	25						48	35	1100
								5	60	
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
400	730	3 1/2		DRILL						
730	200	4 1/2		DROP SURVEY & HOIST F/BIT						



LEASE AMHESSE GULF CULAKE	WELL NO. M-05	API WELL NUMBER	DATE 2-7-71						
OPERATOR HORN RIVER RES.	CONTRACTOR PETROLIA DRILLING	RIG NO. 7							
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>John Jacobson</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER							
D.P. SIZE	WT. FT.	GRADE	TOOL JT Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EMSCO	D500	16
						2	NSCO	C150	14

LOCATION										WIRE LINE RECORD			REEL NO.
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				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	12 ⁰⁰	300	600
1	RIG UP AND TEAR DOWN						SIZE	7 7/8	9	9	9
2	DRILL ACTUAL	5 4 1/2	TH		STB RMR OD	FT.	MFG.	H.W.			
3	REAMING				D.C. ID OD	FT.	TYPE	XSSR			
4	CORING				STB RMR OD	FT.	JETS 1 3/2"	14 14 15			
5	CONDITION MUD & CIRCULATE				D.C. 6 1/2 OD	610.23	FT.	SER. NO.	28862		
6	TRIPS	2 1/4	2 3/4		STB RMR OD	FT.	DEPTH OUT	6156			
7	LUBRICATE RIG	14	14		1 X O SUB	2.15	DEPTH IN	5800			
8	REPAIR RIG						TOTAL FTG.	356			
9	CUT OFF DRILLING LINE		1/2				TOTAL HRS. RUN	27			
10	DEVIATION SURVEY				58 STANDS DP	FT.	COND. 1/8" T/B GAGE				
11	WIRE LINE LOGS				2 SINGLES DP	5510.45	FT.	GPM/ PD-PSI			
12	RUN CASING & CEMENT				KELLY DOWN	33	FT.				
13	WAIT ON CEMENT				TOTAL	6156	FT.				
14	NIPPLE UP B.O.P.				WT. OF STRING	116	LBS.				

MORNING TOUR

FOOTAGE		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
FROM	TO												
6095	6156	61					48	35	1300	5	60		
DEVIATION RECORD													
DEPTH													
DEVIATION													
DIRECTION													
DEPTH													
DEVIATION													
DIRECTION													
TIME LOG													
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
12 ⁰⁰	12 ¹⁵	1/4		RIG SERVICE									
12 ¹⁵	5 ¹⁵	5		DRILL									
5 ¹⁵	8 ⁰⁰	2 3/4		TRIP F/BIT & PROP SURVEY									

DRILLER *L. Matheson*

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	12 ⁰⁰	300	600
17	PLUG BACK						SIZE	7 7/8	9.0	9.0	9.0
18	SQUEEZE CEMENT				STB RMR OD	FT.	MFG.	REED			
19	FISHING				D.C. 6 1/2 OD	610.23	FT.	TYPE	SCS		
20	DIR. WORK				STB RMR OD	FT.	JETS 1 3/2"	14 14 15			
21					D.C. ID OD	FT.	SER. NO.	861529			
22					STB RMR OD	FT.	DEPTH OUT	6156			
23					1 X O SUB	2.15	DEPTH IN	6156			
							TOTAL FTG.	34			
							TOTAL HRS. RUN	4 1/2			
					59 STANDS DP	5541.65	FT.	COND. 1/8" T/B GAGE			
					SINGLES DP	FT.	GPM/ PD-PSI				
					KELLY DOWN		FT.				
					TOTAL	6195.38	FT.				
					WT. OF STRING	116	LBS.				

DAY TOUR

FOOTAGE		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
FROM	TO												
6156	6190	34											
DEVIATION RECORD													
DEPTH													
DEVIATION													
DIRECTION													
DEPTH													
DEVIATION													
DIRECTION													
TIME LOG													
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
8 ⁰⁰	8 ³⁰	1/2		FINISH OUT									
8 ³⁰	9 ⁰⁰	1/2		SHIP DRILL LINE									
9 ⁰⁰	11 ¹⁵	2 1/4		DOWN W/ BIT									
11 ¹⁵	11 ³⁰	1/4		BREAK CIRC									
11 ³⁰	4 ⁰⁰	4 1/2		DRILL									

DRILLER *L. Matheson*

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	12 ⁰⁰	300	600
24							SIZE	7 7/8	9	9	9
25					STB RMR OD	FT.	MFG.	REED			
26					D.C. 6 1/2 OD	610.23	FT.	TYPE	SCS		
27					STB RMR OD	FT.	JETS 1 3/2"	14 14 15			
28					D.C. ID OD	FT.	SER. NO.	861529			
29					STB RMR OD	FT.	DEPTH OUT	6156			
30					1 X O SUB	2.15	DEPTH IN	6156			
							TOTAL FTG.	84			
							TOTAL HRS. RUN	13 1/4			
					59 STANDS DP	FT.	COND. 1/8" T/B GAGE				
					SINGLES DP	5604.32	FT.	GPM/ PD-PSI			
					KELLY DOWN	23	FT.				
					TOTAL	6240	FT.				
					WT. OF STRING	116	LBS.				

EVENING TOUR

FOOTAGE		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
FROM	TO												
6190	6240	50					48	35	1100	5	60		
DEVIATION RECORD													
DEPTH													
DEVIATION													
DIRECTION													
DEPTH													
DEVIATION													
DIRECTION													
TIME LOG													
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
4 ⁰⁰	4 ³⁰	1/2		DRILL									
4 ³⁰	4 ⁴⁵	1/4		RIG SERVICE									
4 ⁴⁵	12 ⁰⁰	7 1/4		DRILL									

DRILLER

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

PETROLIA OILWELL DRILLING LTD.



APPROVED



APPROVED

LEASE AMHESSE GOLF CLUB LAKE	WELL NO. M-05	API WELL NUMBER	DATE 2-15-71						
OPERATOR HORN RIVER RES.	CONTRACTOR PETROLIA DRILLING.	RIG NO. 7							
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>							
D.P. SIZE	WT./FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EmSCO	0500	16
						2	NSCO	C150	14

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKS. TO CSG. HD.	SET AT	WIRE LINE RECORD	REEL NO.
								SIZE	NO. LINES
								FT. CUT OFF	PRESENT LENGTH
								TON MI. CR. T. IPS SINCE LAST CUT	CUMULATIVE TON MI. OR TRIPS

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	PRESSURE GRADIENT
1	RIG UP AND TEAR DOWN										
2	DRILL ACTUAL	8	5:47		STB RMR	OD	FT.	MFG.			
3	REAMING				D.C. ID	OD	FT.	TYPE			
4	CORING				STB RMR	OD	FT.	JETS 1/32"			
5	CONDITION MUD & CIRCULATE				D.C. ID	OD	FT.	SER. NO.			
6	TRIPS	2			STB RMR	OD	FT.	DEPTH OUT			
7	LUBRICATE RIG	11/4			1 X 0 SUB	2.15	DEPTH IN	5800			
8	REPAIR RIG						TOTAL FTG.	104			
9	CUT OFF DRILLING LINE						TOTAL HRS. RUN	8 1/2			
10	DEVIATION SURVEY				56 STANDS DP	5260.07	COND. 1/8" T/B" GAGE	RUN			
11	WIRE LINE LOGS				SINGLES DP		FT.	GPM/ PD-PSI			
12	RUN CASING & CEMENT				KELLY DOWN	32	FT.				
13	WAIT ON CEMENT				TOTAL	5904	FT.				
14	NIPPLE UP & C.P.				WT. OF STRING	112	LBS.				

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
FROM	TO							LINE SIZE	S.P.M.	LINE SIZE	S.P.M.
5804	5904	100				46	35	1300	5	60	
DEVIATION RECORD											
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
12:00	8:00	8		DRILL							

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	PRESSURE GRADIENT
15	TEST B.O.P.										
16	DRILL STEM TEST				STB RMR	OD	FT.	MFG.			
17	PLUG BACK				D.C. ID	OD	FT.	TYPE			
18	SQUEEZE CEMENT				STB RMR	OD	FT.	JETS 1/32"			
19	FISHING				D.C. ID	OD	FT.	SER. NO.			
20	DIR. WORK				STB RMR	OD	FT.	DEPTH OUT			
21					1 X 0 SUB	2.15	DEPTH IN	5800			
22							TOTAL FTG.	185			
23							TOTAL HRS. RUN	14 1/4			
COMPLETION					57 STANDS DP	5353.86	COND. 1/8" T/B" GAGE	RUN			
A. PERF'R'T'N					SINGLES DP		FT.	GPM/ PD-PSI			
B. TBG TRIPS					KELLY DOWN	22	FT.				
C. TREATING					TOTAL	6007.64	FT.				
D. SWABBING					WT. OF STRING	115	LBS.				
E. TESTING											
F. ADDIT'N'L											
G.											

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
FROM	TO							LINE SIZE	S.P.M.	LINE SIZE	S.P.M.
5904	5985	81				48	35	1300	5	60	
DEVIATION RECORD											
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
8:00	8:15	1/4		DRILL							
8:15	8:30	1/4		RIG SERVICE - POPS							
8:30	10:30	2		DRILL							
10:30	12:30	2		DUMMAY TRIP 20 STDS @ 5942. HOLE COLLID HO TR							
12:30	4:00	3 1/2		DRILL							

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	PRESSURE GRADIENT
24					STB RMR	OD	FT.	MFG.			
25					D.C. ID	OD	FT.	TYPE			
26					STB RMR	OD	FT.	JETS 1/32"			
27					D.C. ID	OD	FT.	SER. NO.			
28					STB RMR	OD	FT.	DEPTH OUT			
29					1 X 0 SUB	2.15	DEPTH IN	5800			
30							TOTAL FTG.	295			
31							TOTAL HRS. RUN	22			
32					58 STANDS DP	5447.98	COND. 1/8" T/B" GAGE	RUN			
33					SINGLES DP		FT.	GPM/ PD-PSI			
34					KELLY DOWN	35	FT.				
35					TOTAL	6095	FT.				
36					WT. OF STRING	116	LBS.				

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
FROM	TO							LINE SIZE	S.P.M.	LINE SIZE	S.P.M.
5985	6095	110									
DEVIATION RECORD											
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
4:00	5:30	1 1/2		DRILL							
5:30	5:45	1/4		RIG SERVICE							
5:45	12:00	6 1/4		DRILL							



DAILY DRILLING REPORT

REPORT NO.

LEASE AMHESSE GOLF C/L LAKE	WELL NO. M-05	API WELL NUMBER	DATE 2-5-71						
OPERATOR HORN RIVER RES.	CONTRACTOR PETROLIA DRILL	RIG NO. 7							
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>John Jacobson</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>John Jacobson</i>							
D.P. SIZE	WT./FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EMSCO	D-500	16
						2	NATIONAL	C-150	14

LOCATION

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	WIRE LINE RECORD	REEL NO.
							SIZE	NO. LINES
							FT. CUT OFF	PRESENT LENGTH
							TON MI. OR TRIPS SINCE LAST CUT	
							CUMULATIVE TON MI. OR TRIPS	

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	
1.	RIG UP AND TEAR DOWN										
2.	DRILL ACTUAL	2	3 1/2		STB RMR OD		FT. MFG.	SMITH			
3.	REAM'NG				D.C. ID OD		FT. TYPE	L4H			
4.	CORING				STB RMR OD		FT. JETS 1/32"	131414			
5.	CONDITION MUD & CIRCULATE				D.C. ID OD	610.23	FT. SER. NO.	EK994			
6.	TRIPS	4 1/4	4 1/2		STB RMR OD		FT. DEPTH OUT				
7.	LUBRICATE RIG				1 X O. SUB	2.15	DEPTH IN	5673			
8.	REPAIR RIG						TOTAL FTG.				
9.	CUT OFF DRILLING LINE						TOTAL HRS. RUN	2			
10.	DEVIATION SURVEY				53 STANDS DP		COND. 1/8" T/B GAGE	RUN			
11.	WIRE LINE LOGS				2 SINGLES DP	5041.28	FT. GPM/ PD-PSI				
12.	RUN CASING & CEMENT				KELLY DOWN	37	FT.				
13.	WAIT ON CEMENT				TOTAL	5690	FT.				
14.	NIPPLE UP B.O.P.				WT. OF STRING	108	LBS.				
15.	TEST B.O.P.										
16.	DRILL STEM TEST										
17.	PLUG BACK										
18.	SQUEEZE CEMENT										
19.	FISHING				31 D.C. ID OD	610.23	FT. TYPE	L4H			
20.	DIR. WORK				STB RMR OD		FT. JET 1/32"	131414			
21.	CLEAN	1 3/4			D.C. ID OD		FT. SER. NO.	EK994			
22.					STB RMR OD		FT. DEPTH OUT				
23.					1 X O. SUB	2.15	DEPTH IN	5673			
							TOTAL FTG.	105			
							TOTAL HRS. RUN	9 3/4			
					34 STANDS DP	5072.10	COND. 1/8" T/B GAGE	RUN			
					2 SINGLES DP	62.14	FT. GPM/ PD-PSI				
					KELLY DOWN	11	FT.				
					TOTAL	5789.24	FT.				
					WT. OF STRING	108	LBS.				
COMPLETION				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
				BIT		FT. BIT NO.		SIZE		TIME	
				STB RMR OD		FT. MFG.		SMITH		H.W.	
				D.C. ID OD		FT. TYPE		L4H		X55R	
				STB RMR OD		FT. JETS 1/32"		131414			
				D.C. ID OD		FT. SER. NO.		EK994			
				STB RMR OD		FT. DEPTH OUT					
				1 X O. SUB		2.15		DEPTH IN		5673	
						TOTAL FTG.		105			
						TOTAL HRS. RUN		9 3/4			
				34 STANDS DP		5072.10		COND. 1/8" T/B GAGE		RUN	
				2 SINGLES DP		62.14		FT. GPM/ PD-PSI		801 4500	
				KELLY DOWN		11		FT.		DN 68 5gal	
				TOTAL		5789.24		FT.			
				WT. OF STRING		108		LBS.			
TOTALS				8		8					
DAY WORK TIME SUMMARY (OFFICE USE ONLY)											
HRS. W/ CONTR. D.P.											
HRS. W/ OPR. D.P.											
HRS. W/ D.P.											
HRS. STANDBY											
TOTAL DAY WORK											
NO. OF DAYS FROM SPUD											
CUMULATIVE ROTATING HRS.											
TOTAL MUD COST											

MORNING TOUR

DAY TOUR

EVENING TOUR

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN	
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
5673	5690	17			80	30	1300	5	60		
DEVIATION RECORD											
DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
5673		3°									
TIME LOG											
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
12:00	1:00	1		FINISH OUT							
1:00	3:30	2 1/2		RUN IN W/ BIT #12 BRIDGE OFF @ 4370							
3:30	5:15	1 3/4		CLEAN BRIDGES FROM 4370 - 4600							
5:15	6:00	3/4		FINISH IN - NO FILL ON BIT.							
6:00	8:00	2		DRILL.							
DRILLER <i>A. Mather</i>											
FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN	
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
5690	5778	88			80	40	1400	5	60		
DEVIATION RECORD											
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 - Sup's							
8:15	4:00	7 1/4		DRILL.							
DRILLER <i>and [Signature]</i>											
FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN	
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
5778	5800	22			80	40	1400	5	60		
5800	5804	4			46	30	1300	5	6		
DEVIATION RECORD											
DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
5800		3°									
TIME LOG											
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
4:00	7:00	3		DRILL.							
7:00	11:30	4 1/2		TRIP F/ BIT.							
11:30	12:00	1/2		DRILL.							
DRILLER											



LEASE Am Hess Gulf C/L LAKE	WELL NO. M-05	API WELL NUMBER	DATE 2-4-71						
OPERATOR HORN RIVER RES.	CONTRACTOR PETROLIA OILWELL DRILLING	RIG NO. 7							
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER							
D.P. SIZE	WT. FT.	GRADE	TOOL JT Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	Emaco	D500	16
						2	NATIONAL	C150	14

LOCATION

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. CUT OFF	PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	12 ⁰⁰	3 ⁰⁰	6 ⁰⁰	
1.	RIG UP AND TEAR DOWN												
2.	DRILL ACTUAL	6 ³⁴			STB RMR	OD	FT.	MFG.	WT.				
3.	REAMING				D.C. ID	OD	FT.	TYPE	PRESSURE GRADIENT				
4.	CORING				STB RMR	OD	FT.	JETS 1/32"	VISC.-SEC.	64	52	56	
5.	CONDITION MUD & CIRCULATE	1			D.C. ID	6 1/2 OD	610.23 FT.	SER. NO.	PV YP				
6.	TRIPS				STB RMR	OD	FT.	DEPTH OUT	GELS.				
7.	LUBRICATE RIG	1/4			1 X 0 SUB	2.15	DEPTH IN	5366	WL -CC'S				
8.	REPAIR RIG						TOTAL FTG.	307	pH				
9.	CUT OFF DRILLING LINE						TOTAL HRS. RUN	22 1/4	SOLIDS %				
10.	DEVIATION SURVEY				53 STANDS DP	FT.	COND. 1/8" T/B GAGE		MUD & CHEMICALS ADDED				
11.	WIRE LINE LOGS				2 SINGLES DP	5041.17 FT.	GPM/ PD-PSI		TYPE	AMT.	TYPE	AMT.	
12.	RUN CASING & CEMENT				KELLY DOWN	20 FT.			GEL 4100#				
13.	WAIT ON CEMENT				TOTAL	5673 FT.			D.V. 68 1 GAL				
14.	NIPPLE UP B.O.P.				WT. OF STRING	106 LBS.			C.M.C. - 100#				

MORNING TOUR

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
FROM	TO								LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
5601	5673	72					48	35	1000	5	60	
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
12 ⁰⁰	12 ¹⁵	1/4		RIG SERVICE								
12 ¹⁵	7 ⁰⁰	6 3/4		DRILL								
7 ⁰⁰	8 ⁰⁰	1		CIRC & RAISE VISCOSITY F/TRIP								

DRILLER *S. Mattson*

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	12 ⁰⁰	3 ⁰⁰	6 ⁰⁰	
15.	TEST B.O.P.												
16.	DRILL STEM TEST				STB RMR	OD	FT.	MFG.	WT.				
17.	PLUG BACK				D.C. ID	OD	FT.	TYPE	PRESSURE GRADIENT				
18.	SQUEEZE CEMENT				STB RMR	OD	FT.	JETS 1/32"	VISC.-SEC.				
19.	FISHING				D.C. ID	OD	FT.	SER. NO.	PV YP				
20.	DIR. WORK				STB RMR	OD	FT.	DEPTH OUT	GELS.				
21.							TOTAL FTG.		pH				
22.							TOTAL HRS. RUN		SOLIDS %				
23.					STANDS DP	FT.	COND. 1/8" T/B GAGE		MUD & CHEMICALS ADDED				
	A. PERF'T'N				SINGLES DP	FT.	GPM/ PD-PSI		TYPE	AMT.	TYPE	AMT.	
	B. TBG TRIPS				KELLY DOWN	FT.							
	C. TREATING				TOTAL	FT.							
	D. SWABBING				WT. OF STRING	LBS.							
	E. TESTING												
	F. ADDIT'L												
	G.												

DAY TOUR

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
FROM	TO								LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
5673												
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
8 ⁰⁰	9 ⁰⁰	1	6	BLOW KENNY HOIST F/Bit Tight Hole @ 4881								
9 ⁰⁰	4 ⁰⁰	7		WORK STUCK PIPE WORK TWO SAMPLES OUT								

DRILLER *S. Mattson*

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	12 ⁰⁰	3 ⁰⁰	6 ⁰⁰	
24.					STB RMR	OD	FT.	MFG.	WT.				
25.					D.C. ID	OD	FT.	TYPE	PRESSURE GRADIENT				
26.					STB RMR	OD	FT.	JETS 1/32"	VISC.-SEC.				
27.					D.C. ID	6 1/2 OD	610.23 FT.	SER. NO.	PV YP				
28.					STB RMR	OD	FT.	DEPTH OUT	GELS.				
29.					1 X 0 SUB	2.15	DEPTH IN	5366	WL -CC'S				
30.							TOTAL FTG.	307	pH				
31.							TOTAL HRS. RUN	22 1/4	SOLIDS %				
32.					STANDS DP	FT.	COND. 1/8" T/B GAGE		MUD & CHEMICALS ADDED				
33.					2 SINGLES DP	5041.17 FT.	GPM/ PD-PSI		TYPE	AMT.	TYPE	AMT.	
34.					KELLY DOWN	20 FT.							
35.					TOTAL	5073 FT.							
36.					WT. OF STRING	106 LBS.							

EVENING TOUR

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
FROM	TO								LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
5673												
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
4 ⁰⁰	10 ⁰⁰	6		WORK STUCK PIPE								
10 ⁰⁰	12 ⁰⁰	2		HOIST F/Bit								

DRILLER



LEASE	WELL NO.	API WELL NO.	DATE
M-05	2		2/3/71
OPERATOR		CONTRACTOR	RIG NO.

OPERATOR	CONTRACTOR	RIG NO.
HORN RIVER RES.	PETROLIA DRILLING	7
SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER	

D.P. SIZE	WT./FT.	GRADE	TOOL JT Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EmSCO	D500	16
						2	NATIONAL	C150	14

[illegible]

TIME DISTRIBUTION - HOURS					NO.	DRILLING ASSEMBLY (At end of tour)		BIT RECORD				MUD RECORD			
CODE NO.	OPERATION	MORN.	DAY	EVE.		BIT	FT.	BIT NO.			TIME				
1.	RIG UP AND TEAR DOWN							SIZE	11						
2.	DRILL ACTUAL		7/4	7/4		STB RMR	OD	FT. MFG.	7 7/8			WEIGHT	12 MIN 400		
3.	REAMING					D.C ID	OD	FT. TYPE	H.W.			PRESSURE GRADIENT	8.8 8.8		
4.	CORING					STB RMR	OD	FT. JETS 1 32"	X 55 R			VISC - SEC	98 85 71		
5.	CONDITION MUD & CIRCULATE					21 D.C ID	6 1/2 OD	610.23	FT. SER. NO.	121314		PV / YP	/ /		
6.	TRIPS					STB RMR	OD	FT. DEPTH OUT	28901			GELS	/ /		
7.	LUBRICATE RIG		1/4	1/4		1 X O SUB	2.15	DEPTH IN	5366			WL - CC'S			
8.	REPAIR RIG							TOTAL FTG.				pH			
9.	CUT OFF DRILLING LINE							TOTAL HRS. RUN				SOLIDS %			
10.	DEVIATION SURVEY					50 STANDS DP	FT.	COND. 1/8" x T B GAGE				MUD & CHEMICALS ADDED			
11.	LINE LOGS					1 SINGLES DP	4728.90	FT. GPM. PD-PSI				TYPE	AMT.	TYPE	AMT.
	RUN CASING & CEMENT					KELLY DOWN	29	FT.				Hel	2200		
	WAIT ON CEMENT					TOTAL	5366	FT.				DUG	1 gal		
13.	WT. OF STRING						100	LBS.				cmc			

[illegible][illegible]

TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
FROM	TO			
12 ⁰⁰	5 ¹⁵	5 ¹⁴		3900 - 4110 CLEAN BRIDGE FROM 4225 - 4425
5 ¹⁵				RUN IN 2 STDS. CLEAN BRIDGE AT 4800.
	8 ⁰⁰			4860 RUN IN CLEAN 50' TO B.T.M.

[illegible]

DRILLER *L. Mattson*

[illegible][illegible]

TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
FROM	TO			
800	915	1 1/4	2.	DRUG.
915	950	3/4	7	DIS. SERVICE & 4 Bops
950	400	6 1/2	2	DRUG.

COMPLETION	A. PERF'R'T'N	TOTAL FTG.		109	SOLIDS %		
	B. TBG TRIPS	TOTAL HRS. RUN		7 3/4			
	C. TREATING	51 STANDS DP	4791.55 FT.	COND. 1/8" S	7/8" GAGE	RD	
	D. SWABBING	1 SINGLES DP	3050 FT.	GPM/ PD-PSI			
	E. TESTING		KELLY DOWN	5475.85			
	F. ADDIT'N'L		TOTAL	5475.85			
		WT. OF STRING	106 M.	LBS.			

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
CEL.	4000		
DOGB	2 gals.		

[illegible][illegible]

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

[illegible]

NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD		
TOTALS		8 8 8						
DAY WORK TIME SUMMARY (OFFICE USE ONLY)								
HRS. W/CONTR. D.P.				BIT		TIME		
HRS. W/OPR. D.P.				SIZE		WEIGHT		
HRS. WD/D.P.				FT. MFG.		PRESSURE GRADIENT		
HRS. STANDBY				D.C. ID		VISC.-SEC.		
		6 1/2		610.23		53 53. 55		
		STB RMR		FT. JETS 1-32"		PV/YP		
		OD		131314		GELS		
		D.C. ID		FT. SER. NO.		WL -CC'S		
		OD		28901		PH		
		STB RMR		FT. DEPTH OUT		SOLIDS %		
		OD		DEPTH IN				
		120.503		2.15				
				TOTAL FTG.				
				235				
				TOTAL HRS. RUN				
				15 1/2				
TOTAL DAY WORK		53 STANDS DP		4978.80		COND. 1 8" T 8" GAGE RUN		
		2 SINGLES DP		FT.		TYPE AMT. TYPE AMT.		
		KELLY DOWN		00		GEL 5000		
		TOTAL		560 1/2				
NO. OF DAYS FROM SPUD				FT.				
CUMULATIVE ROTATING HRS.				WT. OF STRING		LBS.		
TOTAL MUD COST				103				

[illegible]

APPROVED



APPROVED

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

PETROLIA OILWELL DRILLING LTD.

LEASE	WELL NO.	API WELL NUMBER	DATE
M-65	2		2/2/71
OPERATOR	CONTRACTOR		RIG NO.
HORN RIVER RES	PETROLIA DRILLING		4872

SIGNATURE OF OPERATOR'S REPRESENTATIVE
SIGNATURE OF CONTRACTOR'S TOOL PUSHER

D.P. SIZE	WT. 'FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EMSCO	D-500	16
						2	NAT.	C-150	14

LOCATION

SIZE	MAKE	WT. & CR.	NO. JOINTS	FEET	RKS. TO CSG. HD.	SET AT	WIRE LINE RECORD	REEL NO.
							SIZE	NO. LINES
							FT. CUT OFF	PRESENT LENGTH
							TON MI. OR TRIPS SINCE LAST CUT	
							CUMULATIVE TON MI. OR TRIPS	

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
1	RIG UP AND TEAR DOWN						10	12:00	3:00
2	DRILL ACTUAL	7:34	7:14	3:4	STB RMR OD	FT.	MFG.	14.0	8.8
3	REAMING				D.C. ID 6 1/2	OD 610-23	FT.	TYPE	255R
4	CORING				STB RMR OD	FT.	JETS 1 3/2"	131314	60
5	CONDITION MUD & CIRCULATE				D.C. ID	OD	FT.	SER. NO.	28897
6	TRIPS				STB RMR OD	FT.	DEPTH OUT		700
7	LUBRICATE RIG	4	14		1	40	2.15	4891	
8	REPAIR RIG								
9	CUT OFF DRILLING LINE								
10	DEVIATION SURVEY				49	STANDS DP	46 03.84	COND. 1/8" T/B GAGE	
11	WIRE LINE LOGS				SINGLES DP	FT.	GPM/ PD-PSI		
12	RUN CASING & CEMENT				KELLY DOWN	41.40	FT.		
13	WAIT ON CEMENT				TOTAL	5257.62	FT.		
14	NIPPLE UP B.O.P.				WT. OF STRING	98 m.	LBS.		

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
15	TEST B.O.P.						10	8:00	11:00
16	DRILL STEM TEST				STB RMR OD	FT.	MFG.	H.W.	8.8
17	PLUG BACK				D.C. ID	OD	FT.	TYPE	255R
18	SQUEEZE CEMENT				STB RMR OD	FT.	JETS 1 3/2"	131314	52
19	FISHING				D.C. ID 6 1/2	OD 610.23	FT.	SER. NO.	50
20	DIR. WORK				STB RMR OD	FT.	DEPTH OUT		55
21					1	X.O. SUB	2.15	4891	
22									
23									
COMPLETION				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
A	PERF'R'T'N				50	STANDS DP	4728.90	COND. 1/8" T/B GAGE	
B	TBG TRIPS				SINGLES DP	4728.90	FT.	GPM/ PD-PSI	
C	TREATING				KELLY DOWN	19	FT.		
D	SWABBING				TOTAL	5360	FT.		
E	TESTING				WT. OF STRING	99	LBS.		
F	ADIT'N'L								
G									

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
24	TEST B.O.P.						10	8:00	11:00
25	DRILL STEM TEST				STB RMR OD	FT.	MFG.	H.W.	8.8
26	PLUG BACK				D.C. ID 6 1/2	OD 610.23	FT.	TYPE	255R
27	SQUEEZE CEMENT				STB RMR OD	FT.	JETS 1 3/2"	131314	52
28	FISHING				D.C. ID 6 1/2	OD 610.23	FT.	SER. NO.	50
29	DIR. WORK				STB RMR OD	FT.	DEPTH OUT		55
30					1	X.O. SUB	2.15	4891	
31									
32									
COMPLETION				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
A	PERF'R'T'N				50	STANDS DP	4698.25	COND. 1/8" T/B GAGE	
B	TBG TRIPS				SINGLES DP	30 65	FT.	GPM/ PD-PSI	
C	TREATING				KELLY DOWN	16	FT.		
D	SWABBING				TOTAL	5350	FT.		
E	TESTING				WT. OF STRING	98 m.	LBS.		
F	ADIT'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/D. D.P.			
HRS. STANDBY			
TOTAL DAY WORK			
NO. OF DAYS FROM SPUD			
CUMULATIVE ROTATING HRS.			
TOTAL MUD COST			

FOOTAGE		DR. D. RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN
FROM	TO							LINER SIZE	S.P.M.	SC. S. P. S. COM. DEC.
5150	5254	104			48	35	1000	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				
12:00		12:15	15	1/4		RIG SERVICE				
12:15		8:00	7 3/4			DRILLING				

CHANGED OIL AND FILTERS IN ALL FLOOR MOTORS.										
FUEL 18"										
DRILLER: J. M. Mather										

FOOTAGE		DR. D. RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN
FROM	TO							LINER SIZE	S.P.M.	SC. S. P. S. COM. DEC.
5254	5360	106			48	35	1000	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				
8:00		8:15	15	1/4		DRILL				
8:15		8:30	15	1/4		RIG SERVICE & CHECK B.O.P.				
8:30		4:00	7 1/2			DRILL				

DRILLER: J. M. Mather										
-----------------------	--	--	--	--	--	--	--	--	--	--

FOOTAGE		DR. D. RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN
FROM	TO							LINER SIZE	S.P.M.	SC. S. P. S. COM. DEC.
5360	5366	6			50	35	1000	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				
4:00		4:45	45	3/4	2	DRILL				
4:45		7:00	2:15	5		COND. HOLE & MIX MUD TO RAISE VIS FOR TRIP				
7:00		9:45	2:45	6		HOIST F1 BIT				
9:45		11:30	1:45	6		RUN IN W/ BIT BRIDGE OF F @ 4225				
11:30		12:00	1/2	5		SHOW KENT & BREAK CIRC				

DRILLER: J. M. Mather										
-----------------------	--	--	--	--	--	--	--	--	--	--



DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE
17-05	2		2/1/71
OPERATOR	CONTRACTOR		
HORN RIVER RES.	PETROLIA DRILLING		
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
		D. Coleman	
D.P. SIZE	WT. FT.	GRADE	TOOL JT. Q.D.
			TYPE THREAD
			STRING NO.
			PUMP NO.
			PUMP MANUFACTURER
			TYPE
			STROKE LENGTH
			1 Emsco
			2 NAT.
			D-500
			C-150
			16
			14

LOCATION

LAST CASING TUBING OR LINER

FOOTAGE

FROM

TO

DR. D. R. M. CORE. C.

CORE NO.

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM

WT. ON BIT 1000

PUMP PRESS

PUMP NO. 1

PUMP NO.

METHOD RUN

SGL. S. PART. S. COM. DEC.

SIZE

NO. LINES

FT. SLIPPED

FT. CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

LEASE		WELL NO.		API WELL NUMBER		DATE			
M-05		2				1/31/71			
OPERATOR				CONTRACTOR					
HORN RIVER RES				PETROLIA DRILLING					
SIGNATURE OF OPERATOR'S REPRESENTATIVE				SIGNATURE OF CONTRACTOR'S TOOL FUSHER					
				D. Coleman					
D.P. SIZE	WT. 'FT.	GRADE	TOOL JT C.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	Fmsco	D-500	16
						2	Bat.	C-150	14

LOCATION								WIRE LINE RECORD REEL NO.		
	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	SIZE	NO. LINES	FT. SLIPPED
LAST CASING TUBING OR LINER								FT. CUT OFF		PRESENT LENGTH
								TON MI. OR TRIPS SINCE LAST CUT		
								CUMULATIVE TON MI. OR TRIPS		

TIME DISTRIBUTION - HOURS					NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD				MUD RECORD			
CODE NO.	OPERATION	MORN.	DAY	EVE.		BIT	FT.	BIT NO.				TIME				
1.	RIG UP AND TEAR DOWN							SIZE				WEIGHT				
2.	DRILL ACTUAL					STB RMR	OD	FT.	MFG.			PRESSURE GRADIENT				
3.	REAMING				21	D.C. ID	6 1/2 OD	6 10 23	FT.	TYPE		VISC. - SEC.				
4.	CORING					STB RMR	OD	FT.	JETS 1.32"			PV - YP				
5.	CONDITION MUD & CIRCULATE					D.C. ID	OD	FT.	SER. NO.			GELS.				
6.	TRIPS				3 3/4	STB RMR	OD	FT.	DEPTH OUT			WL - CC'S				
7.	LUBRICATE RIG				1/4	1 + 0	2.15		DEPTH IN			pH				
8.	REPAIR RIG					TEST Tools	88.30		TOTAL FTG.			SOLIDS %				
9.	CUT OFF DRILLING LINE				1				TOTAL HRS. RUN							
10.	DEVIATION SURVEY					44	STANDS DP	FT.	COND. 1/8" S T B - GAGE			MUD & CHEMICALS ADDED				
11.	WIRE LINE LOGS					2	SINGLES DP	FT.	GPM - PD - PSI			TYPE	AMT.	TYPE	AMT.	
12.	RUN CASING & CEMENT						KELLY DOWN	FT.								
13.	WAIT ON CEMENT						TOTAL	4803.	FT.							
							WT. OF STRING	LBS.								

[illegible][illegible][illegible]

TOTALS		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD				
DAY WORK TIME SUMMARY (OFFICE USE ONLY)		BIT		FT. BIT NO.	10	TIME				
HRS. W/CONTR. D.P.		STB RMR	OD	FT. MFG.	7 7/8 H.W.	WEIGHT				
HRS. W/OPR. D.P.		D.C. ID	6 1/2 OD	608.16	FT. TYPE	K55R	PRESSURE GRADIENT			
HRS. WO'D.P.		STB RMR	OD	FT. JETS 1/32"	13 13 1/4	VISC.-SEC.				
HRS. STANDBY		D.C. ID	OD	FT. SER. NO.	28897	PV/YP				
		STB RMR	OD	FT. DEPTH OUT		GELS				
		180 S.W. 2.5		DEPTH IN	4903	WL -CC'S.				
				TOTAL FTG.		pH				
				TOTAL HRS. RUN		SOLIDS %				
TOTAL DAY WORK		43 STANDS DP 4273.2 FT.		COND. 1 8" T B' GAGE 8 1/2		MUD & CHEMICALS ADDED				
		SINGLES	DP	FT.	GPM/ PD-PSI	TYPE AMT. TYPE AMT.				
		KELLY DOWN		FT.						
NO. OF DAYS FROM SPUD		TOTAL 4881.45		FT.						
CUMULATIVE ROTATING HRS.		WT. OF STRING 9000.		LBS.						
TOTAL MUD COST										

<u>FOOTAGE</u>		<u>DR-D RM-R CORE-C</u>	<u>CORE NO.</u>	<u>FORMATION</u> (SHOW CORE RECOVERY)		<u>ROTARY RPM</u>	<u>WT. ON BIT</u> 1000+	<u>PUMP PRESS</u>	<u>PUMP NO.</u>		<u>PUMP NO.</u>		METH RUI
<u>FROM</u>	<u>TO</u>								LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	SCL PAIR COMF
490.3				Recovered 360' dry mud									
				31.40 salt water									
				salinity 202.00 P.P.M									
<u>DEVIATION RECORD</u>		<u>DEPTH</u>	<u>DEV.</u>	<u>DIRECTION</u>	<u>DEPTH</u>	<u>DEV.</u>	<u>DIRECTION</u>	<u>DEPTH</u>	<u>DEV.</u>	<u>DIRECTION</u>			
<u>TIME LOG</u>		<u>ELAPSED TIME</u>	<u>CODE NO.</u>	<u>DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS</u>									
<u>FROM</u>	<u>TO</u>												
400	5 ¹⁵	1 ¹⁴	6	HOIST PACKER.									
5 ¹⁵	5 ³⁰	"4"	7	RIG SERVICE									
5 ³⁰	8 ³⁰	3	1L	BREAK DOWN PACKER & LAY SOME									
8 ³⁰	9 ³⁰	1	9	SNIP & CUT DRILL LINE									
9 ³⁰	11 ²⁰	2	6	PULL IN W / RTT									
11 ³⁰	12 ⁰⁰	12	6	PULL KIDNEY & BREAK CIRC									
				DRIFFERS - 1 @ _____									

DAILY DRILLING REPORT REPORT NO.

LEASE <i>M.C.S.</i>	WELL NO. <i>3</i>	API WELL NUMBER	DATE <i>11/30/71</i>						
OPERATOR <i>NORR RIVER RES</i>	CONTRACTOR <i>PETROLIA DRILLING</i>		RIG NO. <i>7</i>						
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>							
D.P. SIZE	WT./FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LOCATION	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	WIRE LINE RECORD	REEL NO.
LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	FT. CUT OFF	PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT								CUMULATIVE TON MI. OR TRIPS	

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORNL	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
1.	RIG UP AND TEAR DOWN								
2.	DRILL ACTUAL				STB RMR OD	FT.	MFG.		PRESSURE GRADIENT
3.	REAMING	<i>2 1/2</i>	<i>3/4</i>		D.C. ID <i>6 1/2</i> OD	<i>610.03</i>	FT.	TYPE	VISC. SEC.
4.	CORING	<i>2 1/4</i>			STB RMR OD	FT.	JETS 1/32"		PV. YP
5.	CONDITION MUD & CIRCULATE	<i>1/2</i>			D.C. ID	OD	FT.	SER. NO.	GELS.
6.	TRIPS	<i>5 1/2</i>			STB RMR OD	FT.	DEPTH OUT		WL. CC'S
7.	LUBRICATE RIG	<i>1/2</i>			1	<i>10</i>	<i>2.15</i>	DEPTH IN	pH
8.	REPAIR RIG							TOTAL FTG.	SOLIDS %
9.	CUT OFF DRILLING LINE				45	STANDS DP	FT.	COND. 1/8" T/B. GAGE	MUD & CHEMICALS ADDED
10.	DEVIATION SURVEY				2	SINGLES DP	<i>4193.19</i>	FT.	TYPE
11.	WIRE LINE LOGS					KELLY DOWN	<i>31</i>	FT.	AMT.
12.	RUN CASING & CEMENT					TOTAL	<i>4891</i>	FT.	TYPE
13.	WAIT ON CEMENT					WT. OF STRING	<i>100 m.</i>	LBS.	AMT.
14.	NIPPLE UP B.O.P.								
15.	TEST B.O.P.								
16.	DRILL ST. TEST								
17.	PLUG BACK								
18.	SQUEEZE CEMENT								
19.	FISHING								
20.	DIR. WORK								
21.									
22.									
23.									
COMPLETION				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
A.	PERF'TN				BIT	FT.	BIT NO.	TIME	WEIGHT
B.	TBG TRIPS								PRESSURE GRADIENT
C.	TREATING				STB RMR OD	FT.	MFG.		VISC. SEC.
D.	SWABBING				D.C. ID <i>6 1/2</i> OD	<i>608.16</i>	FT.	TYPE	PV. YP
E.	TESTING				STB RMR OD	FT.	JETS 1/32"		GELS.
F.	ADDITION'L				D.C. ID	OD	FT.	SER. NO.	WL. CC'S
G.					STB RMR OD	FT.	DEPTH OUT		pH
TOTALS				88		1		X.O. SUB	<i>2.15</i>
DAY WORK TIME SUMMARY (OFFICE USE ONLY)						1		J. SUB	<i>2.43</i>
HRS. W/CONTR. D.P.						45		STANDS DP	FT.
HRS. W/OPR. D.P.						1		SINGLES DP	<i>4257.37</i>
HRS. W/O.D.P.								KELLY DOWN	<i>22</i>
HRS. STANDBY								TOTAL	<i>4891</i>
TOTAL DAY WORK						WT. OF STRING		<i>100</i>	LBS.
NO. OF DAYS FROM SPUD						NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD	
CUMULATIVE ROTATING HRS.						BIT		FT.	BIT NO.
TOTAL MUD COST									SIZE
						STB RMR OD		FT.	MFG.
						D.C. ID <i>6 1/2</i> OD		<i>608.16</i>	FT.
						STB RMR OD		FT.	JETS 1/32"
						D.C. ID		OD	FT.
						STB RMR OD		FT.	SER. NO.
						STB RMR OD		FT.	DEPTH OUT
						1		X.O. SUB	<i>2.15</i>
						1		J. SUB	<i>2.43</i>
						45		STANDS DP	FT.
						1		SINGLES DP	<i>4257.37</i>
								KELLY DOWN	<i>22</i>
						TOTAL		<i>4891</i>	FT.
						WT. OF STRING		<i>100</i>	LBS.

MORNING TOUR

DAY TOUR

EVENING TOUR

FOOTAGE		DR. D RM-R CORE C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000'	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO										
4891	4891			CUT 38 FT. CORE RECOVERED 38 FT.							
DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
12 ⁰⁰	2 ¹⁵	<i>2 1/4</i>		HOIST CORE #1							
2 ¹⁵	6 ⁰⁰	<i>3 3/4</i>		RECOVER CORE + SERVICE B.O.P.							
6 ⁰⁰	8 ⁰⁰	<i>2</i>		MAKE UP BIT & J. SUB RUN IN.							
FOOTAGE		DR. D RM-R CORE C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000'	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO										
4853	4891		<i>38</i>				<i>65</i>	<i>7</i>	<i>1200</i>	<i>5</i>	<i>48</i>
DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
8 ⁰⁰	8 ²⁰	<i>1/2</i>		RIG SERVICE, REPAIR PUMP & CHECK B.O.P.							
8 ²⁰	11 ²⁰	<i>3</i>		RUN IN W/ BIT # 11.							
11 ³⁰	2 ⁰⁰	<i>2 1/2</i>		REAM RATHOLE							
2 ⁰⁰	4 ⁰⁰	<i>2</i>		HOIST TO CORE & DROP SURVEY.							
FOOTAGE		DR. D RM-R CORE C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000'	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO										
4891	4903		<i>12</i>	GUT 12' RECOVER		<i>70</i>	<i>1</i>	<i>1150</i>	<i>5</i>	<i>44</i>	
DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
4 ⁰⁰	4 ³⁰	<i>1/2</i>	<i>6</i>	FINISH OUT							
4 ³⁰	5 ¹⁵	<i>3/4</i>	<i>4</i>	PICK UP CORE 324							
5 ¹⁵	7 ¹⁵	<i>2</i>	<i>6</i>	RUN IN							
7 ¹⁵	8 ⁰⁰	<i>3/4</i>	<i>3</i>	BREAK CIRC & CLEAN 35' TO 20' CIRC - DROP BOP.							
8 ⁰⁰	9 ³⁰	<i>1 1/2</i>	<i>4</i>	CUT CORE 1024							
9 ³⁰	10 ⁰⁰	<i>1/2</i>	<i>5</i>	CIRC							
10 ⁰⁰	12 ⁰⁰	<i>2</i>	<i>6</i>	BREAK FROM & HOIST CORE 46 1/2							
FOOTAGE		DR. D RM-R CORE C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000'	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO										
4891	4903		<i>12</i>	GUT 12' RECOVER		<i>70</i>	<i>1</i>	<i>1150</i>	<i>5</i>	<i>44</i>	
DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
4 ⁰⁰	4 ³⁰	<i>1/2</i>	<i>6</i>	FINISH OUT							
4 ³⁰	5 ¹⁵	<i>3/4</i>	<i>4</i>	PICK UP CORE 324							
5 ¹⁵	7 ¹⁵	<i>2</i>	<i>6</i>	RUN IN							
7 ¹⁵	8 ⁰⁰	<i>3/4</i>	<i>3</i>	BREAK CIRC & CLEAN 35' TO 20' CIRC - DROP BOP.							
8 ⁰⁰	9 ³⁰	<i>1 1/2</i>	<i>4</i>	CUT CORE 1024							
9 ³⁰	10 ⁰⁰	<i>1/2</i>	<i>5</i>	CIRC							
10 ⁰⁰	12 ⁰⁰	<i>2</i>	<i>6</i>	BREAK FROM & HOIST CORE 46 1/2							



LEASE	WELL NO.	API WELL NUMBER	DATE
M-05	2		29
OPERATOR	CONTRACTOR	RIG NO.	
HORN RIVER RES.	PETROLIA DRILLING	7	
SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONTRACTOR'S TOOL PUSHER		
	D. Coleman		
D.P. SIZE	WT. / FT.	GRADE	TOOL JT. Q.D.
			TYPE THREAD
			STRING NO.
			PUMP NO.
			PUMP MANUFACTURER
			TYPE
			STROKE LENGTH
			1 EMSCO
			2 HAT.
			D-500
			C-150
			16
			14

LOCATION

LAST CASING TUBING OR LINER

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

PUMP NO.

METHOD RUN

SCL. S PART. P COM. DEC

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. C. TRIPS

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	PRESSURE GRADIENT
1.	RIG UP AND TEAR DOWN										
2.	DRILL ACTUAL	3 1/2									
3.	REAMING										
4.	CORING										
5.	CONDITION MUD & CIRCULATE	1 1/4	1/2								
6.	TRIPS										
7.	LUBRICATE RIG	1/4									
8.	REPAIR RIG	1									
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.	PICK CORE BL		2 3/4								
22.	CIRC SAMPLE										
23.	CLEAR OUT		1 3/4								
COMPLETION											
A. PERF. T'N											
B. TBG TRIPS											
C. TREATING											
D. SWABBING											
E. ...											
TOTAL											
HRS. W/ CONTR. D.P.											
HRS. W/ OPR. D.P.											
HRS. W/ D.P.											
HRS. STANDBY											
TOTAL DAY WORK											
NO. OF DAYS FROM SPUD											
CUMULATIVE ROTATING HRS.											
TOTAL MUD COST											

MORNING TOUR

DAY TOUR

EVENING TOUR

TIME LOG				ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
FROM	TO								
12 00	12 15			1/4					RIG SERVICE.
12 15	1 15			1					CIRC. SAMPLE.
1 15	2 00			3/4					CIRC.
2 00	3 15			1 1/4					DRILLING.
3 15	4 15			1					WORK ON #1 Pump.
4 15	6 30			2 1/4					DRILLING.
6 30	7 30			1					CIRC. SAMPLE
7 30	8 00			1/2					CIRC.
DRILLER J. M. Mather									
TIME LOG				ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
FROM	TO								
8 00	8 30			1/2					CIRC.
8 30	11 15			2 3/4					HOIST BIT #9 & STEEP OUT
11 15	2 00			2 3/4					PICK UP CORE BBL
2 00	4 00			2					RUN IN W/ CORE BBL.
(RETRIEVED 18 Pcs. BEARINGS - BROKEN CONES)									
DOGHOUSE FARRA - 4881.45									
STRAP TALLY - 4877.82									
DIFF 3.63									
DRILLER J. M. Mather									
TIME LOG				ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
FROM	TO								
4 00	4 30			1/2					FINISH IN
4 30	6 15			1 3/4					BREAK CIRC. & CLEAN To BTM. 30'
6 15	10 30			4 1/4					CUT CORE #1
10 30	12 00			1 1/2					HOIST CORE



DAILY DRILLING REPORT REPORT NO.

LEASE <i>m 0 5</i> <i>Horn River Resources</i>	WELL NO. <i>2</i>	API WELL NUMBER	DATE <i>Jan 25</i>						
OPERATOR	CONTRACTOR <i>Petrolia Drilling</i>		RIG NO. <i>7</i>						
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>D. Coleman</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER							
D.P. SIZE	WT./FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LOCATION							WIRE LINE RECORD			REEL NO.	
SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	SIZE	NO. LINES	FT. SLIPPED		
LAST CASING TUBING OR LINER							FT. CUT OFF		PRESENT LENGTH		
							TON MI. OR TRIPS SINCE LAST CUT				
							CUMULATIVE TON MI. OR TRIPS				

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT	PRESSURE GRADIENT	VISC. SEC.
1.	RIG UP AND TEAR DOWN										
2.	DRILL ACTUAL				STB RMR	OD	FT. MFG.				
3.	REAMING				D.C. ID	OD	610 23	FT. TYPE			
4.	CORING				STB RMR	OD	FT. JETS 1/32"				
5.	CONDITION MUD & CIRCULATE		1		D.C. ID	OD	FT. SER. NO.				
6.	TRIPS		6		STB RMR	OD	FT. DEPTH OUT				
7.	LUBRICATE RIG				1	70	2.15	DEPTH IN			
8.	REPAIR RIG		1/2		1	JUNKS	2.43	TOTAL FTG.			
9.	CUT OFF DRILLING LINE				1	MAG.	2.25	TOTAL HRS. RUN			
10.	DEVIATION SURVEY				43	STANDS DP	FT. COND. 1/8" T/B GAGE				
11.	WIRE LINE LOGS				1	SINGLES DP	4104 09	FT. GPM/ PD-PSI			
12.	RUN CASING & CEMENT					KELLY DOWN	38	FT.			
13.	WAIT ON CEMENT					TOTAL		FT.			
14.	NIPPLE UP B.O.P.					WT. OF STRING		LBS.			

FOOTAGE		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
FROM	TO											
DEVIATION RECORD												
TIME LOG												
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
1200	1230	1/2		HOIST								
1230	1300	1/2		SER. RIG & JUNK SUB								
1300	1300	2		RUN IN W/ MAGNET								
1300	1345	2 1/2		CLEAN OUT								
1345	1415	1/2		WORK MAGNET ON BTM.								
1415	1400	13/4		HOIST								

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT	PRESSURE GRADIENT	VISC. SEC.
15.	TEST B.O.P.										
16.	DRILL STEM TEST										
17.	PLUG BACK				STB RMR	OD	FT. MFG.				
18.	SQUEEZE CEMENT				D.C. ID	OD	610 23	FT. TYPE			
19.	FISHING				STB RMR	OD	FT. JET 1/32"				
20.	DIR. WORK				D.C. ID	OD	FT. SER. NO.				
21.	RECOVER F		1/2		STB RMR	OD	FT. DEPTH OUT				
22.					1	XO SUB	2.15	DEPTH IN			
23.					1	J. SUB	2.43	TOTAL FTG.			
					1	MAG	2.25	TOTAL HRS. RUN			
	A. PERF'ITN				43	STANDS DP	FT. COND. 1/8" T/B GAGE				
	B. TBG TRIPS				43	SINGLES DP	FT. GPM/ PD-PSI				
	C. TREATING					KELLY DOWN		FT.			
	D. SWABBING					TOTAL	4757	FT.			
	E. TESTING					WT. OF STRING	98	LBS.			
	F. ADDIT'L										
	G.										

FOOTAGE		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
FROM	TO											
DEVIATION RECORD												
TIME LOG												
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
800	830	1/2		REPAIR 2ND CHAIN								
830	930	1		FINISH OUT W/ MAGNET								
930	1000	1/2		RECOVER FISH								
1000	1000	3		RUN IN W/ MAGNET - FISH #2								
1000	2000	1		CIRC. & FISH.								
2000	4000	2		HOIST MAGNET.								

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT	PRESSURE GRADIENT	VISC. SEC.
24.											
25.					STB RMR	OD	FT. MFG.				
26.					D.C. ID	OD	610 23	FT. TYPE			
27.					STB RMR	OD	FT. JETS 1/32"				
28.					D.C. ID	OD	FT. SER. NO.				
29.					STB RMR	OD	FT. DEPTH OUT				
30.					1	70	2.15	DEPTH IN			
31.					1	J. SUB	2.43	TOTAL FTG.			
32.					1	MAG	2.25	TOTAL HRS. RUN			
33.					43	STANDS DP	FT. COND. 1/8" T/B GAGE				
34.					43	SINGLES DP	FT. GPM/ PD-PSI				
35.						KELLY DOWN		FT.			
36.						TOTAL	4789	FT.			
37.						WT. OF STRING	97	LBS.			

FOOTAGE		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
FROM	TO											
DEVIATION RECORD												
TIME LOG												
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
400	445	3/4		RECOVER FISH & RIG SERVICE								
445	500	2 1/4		RUN IN W/ BIT #9								
500	800	1		BREAK CIRC. & CLEAN TO BTM.								
800	1030	2 1/2		REAM UNDER GAUGE HOLE								
1030	1200	1 1/2		DRILLING.								

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

PETROLIA OILWELL DRILLING LTD.



FORM 3T5

APPROVED



APPROVED

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

PETROLIA GILWELL DRILLING LTD.

DAILY DRILLING REPORT REPORT NO.

LEASE HORN RIVER RES. MDS	WELL NO. 2	API WELL NUMBER	DATE 1/26/77						
OPERATOR HORN RIVER RES.	CONTRACTOR PETROLIA DRILLING		RIG NO. 7						
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER D. Coleman							
D.P. SIZE	WT./FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EMSCO	D-500	16
						2	WAT.	C-150	14

LAST CASING TUBING OR LINER	LOCATION							WIRE LINE RECORD			REEL NO.
	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEE	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				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	
1.	RIG UP AND TEAR DOWN										
2.	DRILL ACTUAL	3/4	5/4	7	STB RMR OD		FT. MFG.	14 W.			
3.	REAMING				D.C. ID OD		FT. TYPE	XIG			
4.	CORING				STB RMR OD		FT. JETS 1/32"	10 11 11			
5.	CONDITION MUD & CIRCULATE				D.C. ID 6 1/2 OD	610.23	FT. SER. NO.	29958			
6.	TRIPS	7			STB RMR OD		FT. DEPTH OUT	4607			
7.	LUBRICATE RIG				1 X 0	2.15	DEPTH IN	4414			
8.	REPAIR RIG						TOTAL FTG.	193			
9.	CUT OFF DRILLING LINE						TOTAL HRS. RUN	17 1/2			
10.	DEVIATION SURVEY	1/4	1		42 STANDS DP		COND. 1/8" T/B GAGE	8 6 1			
11.	WIRE LINE LOGS				1 SINGLES DP	3978.36	FT. GPM/ PD-PSI				
12.	RUN CASING & CEMENT				KELLY DOWN	16 00	FT.				
13.	WAIT ON CEMENT				TOTAL	4608.17					
14.	NIPPLE UP B.O.P.				WT. OF STRING	100 M.	LBS.				
15.	TEST B.O.P.										
16.	DRILL STEM TEST										
17.	PLUG BACK										
18.	SQUEEZE CEMENT										
19.	FISHING										
20.	DIR. WORK										
21.	CLEAN	2 3/4									
22.											
23.											
COMPLETION											
A. PERF'R'TN											
B. TBG TRIPS											
C. TREATING											
D. SWABBING											
E. TESTING											
F. ADDIT'NL											
G.											
TOTALS				8 8							
DAY WORK TIME SUMMARY (OFFICE USE ONLY)											
HRS. W/CONTR. D.P.											
HRS. W/OPR. D.P.											
HRS. W/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		MUD RECORD	
BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT		
STB RMR OD		FT. MFG.	4 W.				
D.C. ID 6 1/2 OD	610.23	FT. TYPE	ODV				
STB RMR OD		FT. JETS 1/32"	10 11 11				
D.C. ID OD		FT. SER. NO.	29058				
STB RMR OD		FT. DEPTH OUT	4607				
1 X 0 SUB	2.15	DEPTH IN	4607				
		TOTAL FTG.	56				
		TOTAL HRS. RUN	5 1/4				
42 STANDS DP	3947.65	FT. COND. 1/8" T/B GAGE	RUN				
2 SINGLES DP	61.92	FT. GPM/ PD-PSI					
KELLY DOWN	41.40	FT.					
TOTAL	4663.35	FT.					
WT. OF STRING	102	LBS.					

NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT		
STB RMR OD		FT. MFG.	4 W.				
D.C. ID 6 1/2 OD	610.23	FT. TYPE	ODV				
STB RMR OD		FT. JETS 1/32"	10 11 11				
D.C. ID OD		FT. SER. NO.	29058				
STB RMR OD		FT. DEPTH OUT	4607				
1 X 0 SUB	2.15	DEPTH IN	4607				
		TOTAL FTG.	139				
		TOTAL HRS. RUN	12 1/4				
43 STANDS DP		FT. COND. 1/8" T/B GAGE					
2 SINGLES DP	4104.88	FT. GPM/ PD-PSI					
KELLY DOWN	30.00	FT.					
TOTAL	4776.46	FT.					
WT. OF STRING	100 M.	LBS.					

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN	
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
4601	4607	7			85	40	1200	5	43		
DEVIATION RECORD											
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
1200	1245	3/4		DRILLING							
1245	100	1/4		SURVEY RIG SER.							
100	900	7		TRIP							
MORNING TOUR											
FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN	
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
4607	4663	56			85	40	1400	5	48		
DEVIATION RECORD											
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
800	1045	2 3/4		BREAK CIRC. & CLEAN 130' TO BTM. HOLE TIGHT.							
1045	400	5 1/4		RIG SERVICE & CHECK B.O.P.							
DAY TOUR											
FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN	
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
4663	4746	83			85	40	1400	5	43		
DEVIATION RECORD											
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
400	500	1		CIRC. SURVEY & RIG SERVICE, HOLE TIGHT.							
500	1300	7		DRILL							
EVENING TOUR											
FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN	
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
4663	4746	83			85	40	1400	5	43		
DEVIATION RECORD											
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
400	500	1		CIRC. SURVEY & RIG SERVICE, HOLE TIGHT.							
500	1300	7		DRILL							

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

PETROLIA OILWELL DRILLING LTD.



APPROVED



APPROVED

DAILY DRILLING REPORT

REPORT NO.

LEASE M-05	WELL NO. 2	API WELL NUMBER	DATE 1/25/71											
OPERATOR HORN RIVER RES.	CONTRACTOR PETROLIA DRILLING	RIG NO. 7												
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>												
D.P. SIZE	WT. / FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH					
						1	EMSCO	2500	16					
						2	NAT.	6-120	14					
TIME DISTRIBUTION - HOURS														
CODE NO.	OPERATION	MORN.	DAY	EVE.										
1.	RIG UP AND TEAR DOWN													
2.	DRILL ACTUAL	5 1/4	4 1/4	7 1/4										
3.	CLEAN 2													
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.	CIRC. SAMPLE 3/4													
22.	CIRC. W.D.O. 3/4													
23.														
COMPLETION														
A.	PERF'RTN													
B.	TBG TRIPS													
C.	TREATING													
D.	SWABBING													
E.	TESTING													
F.	ADDIT'NL													
G.														
TOTALS					8 8									
DAY WORK TIME SUMMARY (OFFICE USE ONLY)														
HRS. W/CONTR. D.P.														
HRS. W/OPR. D.P.														
HRS. W/D. 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					MUD RECORD				
BIT					FT. BIT NO.					TIME				
SIZE					7 1/8					WEIGHT				
STB RMR OD					FT. MFG.					PRESSURE GRADIENT				
D.C. ID					FT. TYPE					VISC.-SEC.				
610.23					XIG					63				
STB RMR OD					FT. JETS 1/32"					PV/YP				
610.23					10 11 11									
D.C. ID					FT. SER. NO.					GELS.				
28958														
STB RMR OD					FT. DEPTH OUT					WL.-CC'S.				
2.15					4414					pH				
1 X.D.					DEPTH IN					SOLIDS %				
2.15					53									
TOTAL FTG.					53									
TOTAL HRS. RUN					5 1/4									
COND. 1/8" T.B. GAGE					MUD & CHEMICALS ADDED									
3822.25					TYPE AMT. TYPE AMT.									
32.70					Gel 1600#									
4467.03					DVB 8 gal									
WT. OF STRING 100 M					LBS.									
NO. DRILLING ASSEMBLY (At end of tour)					BIT RECORD					MUD RECORD				
BIT					FT. BIT NO.					TIME				
SIZE					7 1/8					WEIGHT				
STB RMR OD					FT. MFG.					PRESSURE GRADIENT				
D.C. ID					FT. TYPE					VISC.-SEC.				
610.23					XIG					100 87				
STB RMR OD					FT. JETS 1/32"					PV/YP				
610.23					10 11 11									
D.C. ID					FT. SER. NO.					GELS.				
28958														
STB RMR OD					FT. DEPTH OUT					WL.-CC'S.				
2.15					4414					pH				
1 X.D. Sub					DEPTH IN					SOLIDS %				
2.15					102									
TOTAL FTG.					102									
TOTAL HRS. RUN					9 1/2									
COND. 1/8" T.B. GAGE					MUD & CHEMICALS ADDED									
3853.89					TYPE AMT. TYPE AMT.									
31.67					Gel 2100									
28.40					DVB 8 gal									
4526.40					CAUSTIC 100#									
WT. OF STRING 100					LBS.									
NO. DRILLING ASSEMBLY (At end of tour)					BIT RECORD					MUD RECORD				
BIT					FT. BIT NO.					TIME				
SIZE					7 1/8					WEIGHT				
STB RMR OD					FT. MFG.					PRESSURE GRADIENT				
D.C. ID					FT. TYPE					VISC.-SEC.				
610.23					XIG					63				
STB RMR OD					FT. JETS 1/32"					PV/YP				
610.23					10 11 11									
D.C. ID					FT. SER. NO.					GELS.				
28958														
STB RMR OD					FT. DEPTH OUT					WL.-CC'S.				
2.15					4414					pH				
1 X.D. Sub					DEPTH IN					SOLIDS %				
2.15					177									
TOTAL FTG.					177									
TOTAL HRS. RUN					16 3/4									
COND. 1/8" T.B. GAGE					MUD & CHEMICALS ADDED									
3947.65					TYPE AMT. TYPE AMT.									
41.40					Gel 3900									
4601.43					DVB 3 Gals.									
WT. OF STRING 100 M					LBS.									

LOCATION

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RYS. TO CSG. HD.	SET AT	WIRE LINE RECORD	REEL NO.
							SIZE	NO. LINES
							FT. CUT OFF	PRESENT LENGTH
							TON MI. OR TRIPS SINCE LAST CUT	
							CUMULATIVE TON MI. OR TRIPS	

FOOTAGE	DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN
FROM	TO						LINE SIZE	S.P.M.	SCHEMATIC
4414			LIMESTONE & SHALE	85	20	850	5	48	

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

TIME LOG	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
FROM	TO		
12:00	2:00	2	CLEAN 120 FT. TO BOTTOM
2:00	7:15	5 1/4	DRILLING
7:15	8:00	3/4	CIRC. SAMPLE AT 4467

FOOTAGE	DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN
FROM	TO						LINE SIZE	S.P.M.	SCHEMATIC
4467	4526	49		85	35	1200	5	53	

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

TIME LOG	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
FROM	TO		
8:00	11:45	3 3/4	CIRCULATE & WAIT ON ORDERS. CHECK B.O.P.
11:45	4:00	4 1/4	DRILL

FOOTAGE	DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN
FROM	TO						LINE SIZE	S.P.M.	SCHEMATIC
4526				85	40	1200	5	53	

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

TIME LOG	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
FROM	TO		
4:00	4:45	3/4	DRILL
4:45	5:30	3/4	CIRC & SURVEY
5:30	12:00	6 1/2	DRILL

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

PETROLIA OILWELL DRILLING LTD.



APPROVED



APPROVED

DAILY DRILLING REPORT REPORT NO.

LEASE M-05	WELL NO. 2	API WELL NUMBER	DATE 1/24/71						
OPERATOR HORN RIVER RES.	CONTRACTOR PETROLIA DRILLING	RIG NO. 7							
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>							
D.P. SIZE	WT./FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EMSCO	D-500	16
						2	NAT.	C-150	14

LOCATION 11-54-58N 123 01 47W	WIRE LINE RECORD	REEL NO.							
SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	SIZE	NO. LINES	FT. SLIPPED
							FT. CUT OFF		PRESENT LENGTH
LAST CASING TUBING OR LINER							TON MI. OR TRIPS SINCE LAST CUT		
							CUMULATIVE TON MI. OR TRIPS		

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
1	RIG UP AND TEAR DOWN				STB RMR	OD	FT. MFG.	SIZE	9.0
2	DRILL ACTUAL	5 1/4	6		D.C. ID	610.23	FT. TYPE	7 1/2	9.0
3	REAMING				STB RMR	OD	FT. JETS 1/32"	9.0	9.1
4	CORING				D.C. ID	OD	FT. SER. NO.	DDV	50
5	CONDITION MUD & CIRCULATE				STB RMR	OD	FT. DEPTH OUT	50	50
6	TRIPS	8	5		1	40	21 5	DEPTH IN	57
7	LUBRICATE RIG						TOTAL FTG.	4123	
8	REPAIR RIG	2 1/4	1				TOTAL HRS. RUN	21 6	
9	CUT OFF DRILLING LINE				39	STANDS DP	FT. COND. 1/8" T/B GAGE	13 3/4	
10	DEVIATION SURVEY	1 1/2	1 1/2		1	SINGLES DP	3697.42	GPM/ PD-PSI	
11	WIRE LINE LOGS					KELLY DOWN	36	FT.	
12	RUN CASING & CEMENT					TOTAL	4385.80	FT.	
13	WAIT ON CEMENT					WT. OF STRING	997	LBS.	
14	NIPPLE UP B.O.P.								

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO									
4278	4345	67			86	30	900	5	43	
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
12 50	2 15	2 1/4		WORK ON AIR COMP.						
2 15	3 30	3 1/4		DRILLING 778 HOLE.						
3 30	6 00	1 1/2		SURVEY						
6 00	8 00	2		DRILLING.						

NO. DRILLING ASSEMBLY (At end of tour)				BIT RECORD		MUD RECORD	
BIT	FT.	BIT NO.	TIME	WEIGHT	PRESSURE GRADIENT	VISC.-SEC	PV-YP
STB RMR	OD	FT. MFG.	SIZE	9.1	9.1	9.1	
D.C. ID	610.23	FT. TYPE	DDV	52	94	65	
STB RMR	OD	FT. JETS 1/32"	10 11 11				
D.C. ID	OD	FT. SER. NO.	28510				
STB RMR	OD	FT. DEPTH OUT	4414				
1	X.D. SUB.	2.15	DEPTH IN	4123			
		TOTAL FTG.	291				
		TOTAL HRS. RUN	19 3/4				
40	STANDS DP	3759.48	FT. COND. 1/8" T/B GAGE	7 8 1			
1	SINGLES DP	31.14	FT. GPM/ PD-PSI				
	KELLY DOWN	2	FT.				
	TOTAL	4444.40	FT.				
	WT. OF STRING	96	LBS.				

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO									
4345	4414	69			98	20	1100	5	54	
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
8 00	8 45	3/4		DRILL.						
8 45	9 15	1/2		RIG SERVICE & CHECK B.O.P. PIPE RAMS OK.						
9 15	12 00	2 3/4		DRILL						
12 00	12 45	3/4		CIRC. & SURVEY.						
12 45	3 00	2 1/4		DRILL						
3 00	3 45	3/4		SURVEY						
3 45	4 00			DRILL						

NO. DRILLING ASSEMBLY (At end of tour)				BIT RECORD		MUD RECORD	
BIT	FT.	BIT NO.	TIME	WEIGHT	PRESSURE GRADIENT	VISC.-SEC	PV-YP
STB RMR	OD	FT. MFG.	SIZE				
D.C. ID	610.23	FT. TYPE	X 16				
STB RMR	OD	FT. JETS 1/32"	10 11 11				
D.C. ID	OD	FT. SER. NO.	28958				
STB RMR	OD	FT. DEPTH OUT	4414				
1	X.D. SUB.	X.D. 2.15	DEPTH IN	4414			
		TOTAL FTG.					
		TOTAL HRS. RUN					
1	STANDS DP	FT. COND. 1/8" T/B GAGE					
	SINGLES DP	FT. GPM/ PD-PSI					
	KELLY DOWN	FT.					
	TOTAL	FT.					
	WT. OF STRING	LBS.					

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO									
4414	4414	-								
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
4 00	6 00	2		HOIST BIT #5						
6 00	8 00	3		RUN IN W/BIT #6						
8 00	10 00	1		REPAIR LOW CHAIN						
10 00	12 00	2		WORK TIGHT HOLE TO BREAK CIRC						



LEASE		WELL NO.		API WELL NUMBER		DATE													
1705		2				1/23/71													
OPERATOR				CONTRACTOR															
HORN RIVER RESOURCES				PETROLIA DRILLING CO INC															
SIGNATURE OF OPERATOR'S REPRESENTATIVE				SIGNATURE OF CONTRACTOR'S TOOL PUSHER															
				D. Coleman															
D.P. SIZE		WT./FT.		GRADE		TOOL JT Q.D.		TYPE THREAD		STRING NO.		PUMP NO.		PUMP MANUFACTURER		TYPE		STROKE LENGTH	
												1		Emeco		D-500		16	
												2		NATIONAL		C-150		14	
TIME DISTRIBUTION - HOURS				NO.				DRILLING ASSEMBLY (At end of tour)				BIT RECORD				MUD RECORD			
CODE NO. - OPERATION MORN. DAY EVE.				BIT				FT. BIT NO.				TIME							
1. RIG UP AND TEAR DOWN				STB RMR OD				SIZE				WEIGHT							
2. DRILL ACTUAL 5 1/2 2 6/2				D.C. ID 6 1/2 OD 698.94				MFG. H.W.				PRESSURE GRADIENT							
3. REAMING				STB RMR OD				TYPE				VISC-SEC							
4. CORING				D.C. ID				JETS 1/32"				PV-YP							
5. CONDITION MUD & CIRCULATE				STB RMR OD				SER. NO. 28951				GELS							
6. TRIPS 2 1/2 5 3/4				1 X.O. SUB 2 1/5				DEPTH OUT 4123				WL-CC'S							
7. LUBRICATE RIG 1/4								DEPTH IN 3978				pH							
8. REPAIR RIG								TOTAL FTG. 145				SOLIDS %							
9. CUT OFF DRILLING LINE								TOTAL HRS. RUN 13 1/2											
10. DEVIATION SURVEY 1/2				36 STANDS DP 3384.65				COND. 1/8" T/B GAGE TRIP 8 8				MUD & CHEMICALS ADDED							
11. WIRE LINE LOGS				SINGLES DP				GPM/ PD-PSI				TYPE AMT. TYPE AMT.							
12. RUN CASING & CEMENT				KELLY DOWN 4								CMC 100							
13. WAIT ON CEMENT				TOTAL 4127								DVB 196							
14. NIPPLE UP B.O.P.				WT. OF STRING 9200. LBS.															
15. TEST B.O.P.				NO.				DRILLING ASSEMBLY (At end of tour)				BIT RECORD				MUD RECORD			
16. DRILL STEM TEST				BIT				FT. BIT NO.				TIME							
17. PLUG BACK				STB RMR OD				SIZE				WEIGHT							
18. SQUEEZE CEMENT				D.C. ID 6 1/2 OD 610.33				MFG. H.W.				PRESSURE GRADIENT							
19. FISHING				STB RMR OD				TYPE				VISC-SEC							
20. DIR. WORK				STB RMR OD				JETS 1/32"				PV-YP							
21.				D.C. ID				SER. NO.				GELS							
22.				STB RMR OD				DEPTH OUT				WL-CC'S							
23.				1 X.O. SUB 2 1/5				DEPTH IN 38510				pH							
								TOTAL FTG.				SOLIDS %							
								TOTAL HRS. RUN 2											
				37 STANDS DP				COND. 1/8" T/B GAGE				MUD & CHEMICALS ADDED							
				1 SINGLES DP 3509.61				GPM/ PD-PSI				TYPE AMT. TYPE AMT.							
				KELLY DOWN 25								H.VIS. 50							
				TOTAL 4146.99															
				WT. OF STRING 9400. LBS.															
COMPLETION				NO.				DRILLING ASSEMBLY (At end of tour)				BIT RECORD				MUD RECORD			
A. PERF'R'TN				BIT				FT. BIT NO.				TIME							
B. TBG TRIPS				STB RMR OD				SIZE				WEIGHT							
C. TREATING				D.C. ID 6 1/2 OD 610.23				MFG. H.W.				PRESSURE GRADIENT							
D. SWABBING				STB RMR OD				TYPE				VISC-SEC							
E. TESTING				STB RMR OD				JETS 1/32"				PV-YP							
F. ADDIT'N'L				D.C. ID				SER. NO.				GELS							
G.				STB RMR OD				DEPTH OUT				WL-CC'S							
				1 X.O. SUB 2 1/5				DEPTH IN 38510				pH							
								TOTAL FTG.				SOLIDS %							
								TOTAL HRS. RUN 2											
				37 STANDS DP				COND. 1/8" T/B GAGE				MUD & CHEMICALS ADDED							
				1 SINGLES DP 3509.61				GPM/ PD-PSI				TYPE AMT. TYPE AMT.							
				KELLY DOWN 25								H.VIS. 50							
				TOTAL 4146.99															
				WT. OF STRING 9400. LBS.															
TOTALS				NO.				DRILLING ASSEMBLY (At end of tour)				BIT RECORD				MUD RECORD			
8 8				BIT				FT. BIT NO.				TIME							
				STB RMR OD				SIZE				WEIGHT							
				D.C. ID 6 1/2 OD 610.23				MFG. H.W.				PRESSURE GRADIENT							
				STB RMR OD				TYPE				VISC-SEC							
				STB RMR OD				JETS 1/32"				PV-YP							
				D.C. ID				SER. NO.				GELS							
				STB RMR OD				DEPTH OUT				WL-CC'S							
				1 X.O. SUB 2 1/5				DEPTH IN 4123				pH							
								TOTAL FTG.				SOLIDS %							
								TOTAL HRS. RUN 2 1/2											

LOCATION										WIRE LINE RECORD																													
61.54.58N 123 01 4W										REEL NO.																													
SIZE		MAKE		WT. & GR.		NO. JOINTS		FEET		RKB. TO CSG. HD.		SET AT		SIZE		NO. LINES		FT. SLIPPED																					
LAST CASING TUBING OR LINER										FT. CUT OFF				PRESENT LENGTH																									
										TON MI. OR TRIPS SINCE LAST CUT																													
										CUMULATIVE TON MI. OR TRIPS																													
FOOTAGE										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									
FROM		TO		DR. D RM-R CORE-C		CORE NO.																																	
4096		4123		2		2						65		20		1300		5		60																			
DEVIATION RECORD										DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION													
										4123		5																											
TIME LOG										ELAPSED TIME										CODE NO.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
FROM		TO																																					
1200		1215		1/4		2		DRNG.																															
1215		1230		1/4		7		RIG SERVICE																															
1230		530		5		2		DRNG.																															
530		800		2 1/2		6		SURVEY - HOIST TO CHECK BIT #4																															
FOOTAGE										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									
FROM		TO		DR. D RM-R CORE-C		CORE NO.																																	
4132		4147		24								60		27		12		5		54																			
DEVIATION RECORD										DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION													
TIME LOG										ELAPSED TIME										CODE NO.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
FROM		TO																																					
820		143		5 3/4		6		HOIST FOR BIT - LAY DOWN 3 - 6 3/8 D.C.S.																															
143		200		1/4		2		BREAK CIRC.																															
200		400		2		2		DRILLING 7 7/8 HOLE.																															
FOOTAGE										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									
FROM		TO		DR. D RM-R CORE-C		CORE NO.																																	
4147		4194		47								65		24		1300		5		60																			
4194		4272		78								115		20		1300		5		60																			
DEVIATION RECORD										DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION													
										4194		6 1/4				4257		6°																					
TIME LOG										ELAPSED TIME										CODE NO.										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
FROM		TO																																					
400		645		2 3/4				DRILL																															
645		730		3/4				SURVEY & RIG SERVICE																															
730		1030		3				DRILL																															
1030		1115		3/4				SURVEY																															
1115		1200						DRILL																															
FOOTAGE										FORMATION (SHOW CORE RECOVERY)										ROTARY RPM		WT																	

DAILY DRILLING REPORT

REPORT NO. 12

LEASE	WELL NO.	API WELL NUMBER	DATE						
1105	2		1/22/71						
OPERATOR	CONTRACTOR	RIG NO.							
Hazen Research	Petrolia Oilwell Drilling Ltd.	7							
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER							
D. Coleman									
D.P. SIZE	WT. / FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	Emeco	2-500	16
						2	National	C-150	14

LOCATION	61-54 58N 123.01 47W.	WIRE LINE RECORD	REEL NO.						
SIZE	MAKE	WT. & CR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	SIZE	NO. LINES	FT. SLIPPED
							FT. CUT OFF		PRESENT LENGTH
LAST CASING TUBING OR LINER					TON MI. OR TRIPS SINCE LAST CUT				
					CUMULATIVE TON MI. OR TRIPS				

TIME DISTRIBUTION - HOURS				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	PRESSURE GRADIENT
1.	RIG UP AND TEAR DOWN				STB RMR	OD	FT.	MFG.	REED		
2.	DRILL ACTUAL	5 1/2	1	7 1/4	D.C. ID	6 1/2	698.94	TYPE	S35		
3.	REAMING				STB RMR	OD	FT.	JETS 1/32"	10 11 11		
4.	CORING				D.C. ID	OD	FT.	SER. NO.			
5.	CONDITION MUD & CIRCULATE				STB RMR	OD	FT.	DEPTH OUT	3978		
6.	TRIPS	1 3/4	7		D.C. ID	6 1/2	698.94	TYPE	X16		
7.	LUBRICATE RIG				STB RMR	OD	FT.	JET 1/32"	10 11 11		
8.	REPAIR RIG				D.C. ID	OD	FT.	SER. NO.	28951		
9.	CUT OFF DRILLING LINE				STB RMR	OD	FT.	DEPTH OUT	3978		
10.	DEVIATION SURVEY	3/4	1/2		D.C. ID	6 1/2	698.94	TYPE	X16		
11.	WIRE LINE LOGS				STB RMR	OD	FT.	JET 1/32"	10 11 11		
12.	RUN CASING & CEMENT				D.C. ID	OD	FT.	SER. NO.	28951		
13.	WAIT ON CEMENT				STB RMR	OD	FT.	DEPTH OUT	3978		
14.	NIPPLE UP & O.P.				D.C. ID	OD	FT.	SER. NO.	28951		
15.	TEST B.O.P.				STB RMR	OD	FT.	DEPTH OUT	3978		
16.	DRILL STEM TEST				D.C. ID	OD	FT.	SER. NO.	28951		
17.	PLUG BACK				STB RMR	OD	FT.	DEPTH OUT	3978		
18.	SQUEEZE CEMENT				D.C. ID	OD	FT.	SER. NO.	28951		
19.	FISHING				STB RMR	OD	FT.	DEPTH OUT	3978		
20.	DIR. WORK				D.C. ID	OD	FT.	SER. NO.	28951		
21.					STB RMR	OD	FT.	DEPTH OUT	3978		
22.					D.C. ID	OD	FT.	SER. NO.	28951		
23.					STB RMR	OD	FT.	DEPTH OUT	3978		
COMPLETION				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
A.	PERF'T'N				BIT	FT.	BIT NO.	SIZE	TIME	WEIGHT	PRESSURE GRADIENT
B.	TBG TRIPS				STB RMR	OD	FT.	MFG.	H.W.		
C.	TREATING				D.C. ID	6 1/2	698.94	TYPE	X16		
D.	SWABBING				STB RMR	OD	FT.	JET 1/32"	10 11 11		
E.	TESTING				D.C. ID	OD	FT.	SER. NO.	28951		
F.	ADDIT'N'L				STB RMR	OD	FT.	DEPTH OUT	3978		
G.					D.C. ID	OD	FT.	SER. NO.	28951		
TOTALS				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

DAY TOUR

EVENING TOUR

FOOTAGE		DR. D. R. CORE. C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN		
FROM	TO							LINE SIZE	S.P.M.	LINE SIZE	S.P.M.	SC. S. P. M. COM. DEC.
3861	3978	117			110	25	1300	5	60			
DEVIATION RECORD												
DEPTH		DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION			
3907		3°										
TIME LOG												
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
1200	200	2	2	DRILL								
200	245	3/4	10	CIRCUIT SURVEY RIG SERVICE								
245	615	3 1/2	2	DRILL								
615	800	1 3/4		SURVEY & HOIST F/BIT								
DRILLER												
FOOTAGE												
FROM	TO	DR. D. R. CORE. C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN		
3978	3988	10			110	15	1200	5	60			
DEVIATION RECORD												
DEPTH		DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION			
3978		3 1/4										
TIME LOG												
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
800	300	7	6	HOIST FOR BIT CHANGE OUT & RECALLIPER								
300	400	2	2	DRILLING 7 1/2 HOIST								
DRILLER												
FOOTAGE												
FROM	TO	DR. D. R. CORE. C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN		
3988	4096	108			65	35	1200	5	60			
DEVIATION RECORD												
DEPTH		DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION			
4096		5 1/2										
TIME LOG												
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
400	415	1/4		DRILL								
415	430	1/4		RIG SERVICE								
430	1115	6 3/4		DRILL								
1115	1145	1/2		SURVEY								
1145	1200	1/4		DRILL								
DRILLER												

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

PETROLIA OILWELL DRILLING LTD.



APPROVED



APPROVED

DAILY DRILLING REPORT

REPORT NO. 11

LEASE 1105	WELL NO. 2	API WELL NUMBER	DATE JAN 21/77						
OPERATOR HORN RIVER RESOURCES	CONTRACTOR PETROLIA OILWELL DRILLING	RIG NO. 7							
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>							
O.P. SIZE	WT./FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
						1	EMSCO	B-500	16
						2	NATIONAL	C-150	14

LOCATION 61.54581123 01 47W.	WIRE LINE RECORD	REEL NO.							
SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	SIZE	NO. LINES	FT. SLIPPED
							FT. CUT OFF		PRESENT LENGTH
LAST CASING TUBING OR LINER					TON MI. OR TRIPS SINCE LAST CUT				
					CUMULATIVE TON MI. OR TRIPS				

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	3.00	5.00	7.00
1	RIG UP AND TEAR DOWN						SIZE	7 7/8	9.2	9.2	9.2
2	DRILL ACTUAL	6	42	7/4	STB RMR OD	FT.	MFG.	REED			
3	REAMING				D.C. ID 6 1/2 OD	698.94	FT.	TYPE	ST3		
4	CORING				STB RMR OD	FT.	JETS 1 3/2"	10 11 11			
5	CONDITION MUD & CIRCULATE				D.C. ID	OD	FT.	SER. NO.	880726		
6	TRIPS	1/2			STB RMR OD	FT.	DEPTH OUT				
7	LUBRICATE RIG	4	14		1 X 0 SUB	2.15	DEPTH IN	3364			
8	REPAIR RIG						TOTAL FTG.	160			
9	CUT OFF DRILLING LINE						TOTAL HRS. RUN	6			
10	DEVIATION SURVEY	1/4	1/2		29 STANDS DP	2726.93	FT.	COND. 1/8" T.B. GAGE	Run		
11	WIRE LINE LOGS				2 SINGLES DP	6329	FT.	GPM/ PD-PSI	1	GEL 2000 #	
12	RUN CASING & CEMENT				KELLY DOWN	8	FT.			DV 68	2 GALS.
13	WAIT ON CEMENT				TOTAL	3532	FT.				
14	NIPPLE UP B.O.P.				WT. OF STRING	94m	LBS.				
15	TEST B.O.P.										
16	DRILL STEM TEST										
17	PLUG BACK										
18	SQUEEZE CEMENT										
19	FISHING										
20	DIR. WORK										
21	W.T.H.	1/2									
22											
23											

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	7.00	9.00	11.00
1	RIG UP AND TEAR DOWN						SIZE	7 7/8	9.2	9.2	9.2
2	DRILL ACTUAL				STB RMR OD	FT.	MFG.	REED			
3	REAMING				D.C. ID 6 1/2 OD	698.94	FT.	TYPE	ST3		
4	CORING				STB RMR OD	FT.	JETS 1 3/2"	10 11 11			
5	CONDITION MUD & CIRCULATE				D.C. ID	OD	FT.	SER. NO.	880726		
6	TRIPS				STB RMR OD	FT.	DEPTH OUT				
7	LUBRICATE RIG				1 X 0 SUB	2.15	DEPTH IN	3364			
8	REPAIR RIG						TOTAL FTG.	336			
9	CUT OFF DRILLING LINE						TOTAL HRS. RUN	12 1/2			
10	DEVIATION SURVEY				31 STANDS DP	2977.17	FT.	COND. 1/8" T.B. GAGE	Run		
11	WIRE LINE LOGS				2 SINGLES DP	31.78	FT.	GPM/ PD-PSI	1	GEL 2500 #	
12	RUN CASING & CEMENT				KELLY DOWN	31.78	FT.			DV 65	2 GALS.
13	WAIT ON CEMENT				TOTAL	3700.04	FT.				
14	NIPPLE UP B.O.P.				WT. OF STRING	90m	LBS.				
15	TEST B.O.P.										
16	DRILL STEM TEST										
17	PLUG BACK										
18	SQUEEZE CEMENT										
19	FISHING										
20	DIR. WORK										
21	W.T.H.	1/2									
22											
23											

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD			
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	11.00	1.00	3.00
1	RIG UP AND TEAR DOWN						SIZE	7 7/8	9.1	9.1	9.1
2	DRILL ACTUAL				STB RMR OD	FT.	MFG.	REED			
3	REAMING				D.C. ID 6 1/2 OD	698.94	FT.	TYPE	ST3		
4	CORING				STB RMR OD	FT.	JETS 1 3/2"	10 11 11			
5	CONDITION MUD & CIRCULATE				D.C. ID	OD	FT.	SER. NO.	880726		
6	TRIPS				STB RMR OD	FT.	DEPTH OUT				
7	LUBRICATE RIG				1 X 0 SUB	2.15	DEPTH IN	3364			
8	REPAIR RIG						TOTAL FTG.	497			
9	CUT OFF DRILLING LINE						TOTAL HRS. RUN	19 3/4			
10	DEVIATION SURVEY				33 STANDS DP	3102.86	FT.	COND. 1/8" T.B. GAGE	Run		
11	WIRE LINE LOGS				1 SINGLES DP	31.20	FT.	GPM/ PD-PSI	1	GEL 3000	
12	RUN CASING & CEMENT				KELLY DOWN	15	FT.			DV 66	3 GALS.
13	WAIT ON CEMENT				TOTAL	3876.55	FT.				
14	NIPPLE UP B.O.P.				WT. OF STRING	84	LBS.				
15	TEST B.O.P.										
16	DRILL STEM TEST										
17	PLUG BACK										
18	SQUEEZE CEMENT										
19	FISHING										
20	DIR. WORK										
21	W.T.H.										
22											
23											

FOOTAGE		DR. D. RMR. COR. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN		
FROM	TO							LINE SIZE	S.P.M.	LINE SIZE	S.P.M.	SC. S. PARTS COM. DEC.
3364	3524	160			110	25	1200	5	60			
DEVIATION RECORD												
TIME LOG												
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
1200	1230	1/2	6	Run in w/ Bit								
1230				BREAK CIRC, LIGHT HOLE WORK TWO SURVEYS								
200	200	1/2	21	OUT, REGRIND CIRC & WORK BACK TO B.T.M. CLEAN								
200	800	6	2	DRILL								
DRILLER: <i>[Signature]</i>												

FOOTAGE		DR. D. RMR. COR. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN		
FROM	TO							LINE SIZE	S.P.M.	LINE SIZE	S.P.M.	SC. S. PARTS COM. DEC.
3524	3700	176		SHALE	110	30	1200	5	55			
DEVIATION RECORD												
TIME LOG												
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
800	815	1/4	7	RIG SERVICE & CHECK BOP								
815	945	1 1/2	2	DRILLING								
945	1015	1/2	10	SURVEY								
1015	130	3 1/4	2	DRILLING								
130	215	3/4	10	SURVEY								
215	400	1 3/4	2	DRILLING								
PUMP STROKES ON IDLE 21 - 451 250												
DRILLER: <i>[Signature]</i>												

FOOTAGE		DR. D. RMR. COR. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN		
FROM	TO							LINE SIZE	S.P.M.	LINE SIZE	S.P.M.	SC. S. PARTS COM. DEC.
3700	3861	161		SHALE & SANDSTONE	100	35	1200	5	6			
DEVIATION RECORD												
TIME LOG												
FROM	TO	ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
400	445	3/4		DRILL								
445	500	1/4		RIG SERVICE								
500	745	2 3/4		DRILL								
745	815	1/2		SURVEY								
815	1200	3 3/4		DRILL								
DRILLER: <i>[Signature]</i>												

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

PETROLIA OILWELL DRILLING LTD.

REPORT NO. 10

LOCATION								WIRE LINE RECORD			REEL NO.
	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	SIZE	NO. LINES	FT. SLIPPED	
LAST CASING TUBING OR LINER								FT. CUT OFF	PRESENT LENGTH		
								TON MI. OR TRIPS SINCE LAST CUT			
								CUMULATIVE TON MI. OR TRIPS			

FOOTAGE		DR. & CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 100'	PUMP PRESS	PUMP NO. 1		PUMP NO.		METHOD RUN																						
FROM	TO	CORE NO.						LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	50' - 5' PARALLEL COM 12'																						
2859	3065	206			110	20/30	1200	5	60																									
<table border="1"> <thead> <tr> <th colspan="2">DEVIATION RECORD</th> <th>DEPTH</th> <th>DEV.</th> <th>DIRECTION</th> <th>DEPTH</th> <th>DEV.</th> <th>DIRECTION</th> <th>DEPTH</th> <th>DEV.</th> <th>DIRECTION</th> </tr> </thead> <tbody> <tr> <td colspan="2">2877</td> <td>2 1/2</td> <td></td> <td></td> <td>3002</td> <td>2 3/4</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>													DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	2877		2 1/2			3002	2 3/4				
DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION																								
2877		2 1/2			3002	2 3/4																												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																														
FROM	TO																																	
1200	1215	14	7	RIG SERVICE																														
1215	1245	18	10	SURVEY																														
1245	515	4 1/2	2	DRILL																														
515	600	3/4	10	SURVEY																														
600	800	2	2	DRILL																														
DRILLER <i>[Signature]</i>																																		

[illegible]

FOOTAGE		DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000*	PUMP PRESS	PUMP NO.		PUMP NO.		METH KIL COR																				
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.																					
3313	3364	51			100	32	1200	5	60																							
<table border="1"> <thead> <tr> <th rowspan="2">DEVIATION RECORD</th> <th>DEPTH</th> <th>DEV.</th> <th>DIRECTION</th> <th>DEPTH</th> <th>DEV.</th> <th>DIRECTION</th> <th>DEPTH</th> <th>DEV.</th> <th>DIRECTION</th> </tr> </thead> <tbody> <tr> <td></td> <td>3364</td> <td>3 1/4</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>													DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION		3364	3 1/4							
DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION																							
		3364	3 1/4																													
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS																												
FROM	TO																															
4:00	6:00	2		DRILL																												
6:00	8:15	2 1/4		SURVEY & HOIST F/BIT																												
8:15	9:30	3/4		RUN IN WITH 3 COLLARS.																												
9:00	11:30	2 1/2		SLIP & CUT DRILLING LINE. REPAIR AIR LINE RIG SERVICES. SET BRAKES																												
11:30	12:00	1/2		RUN IN W/ BIT # 3.																												
DRILLER <i>L. Matthe</i>																																

LEASE	WELL NO.	API WELL NUMBER	DATE
OPERATOR <i>MOS</i>	<i>2</i>	<i>61° 54' 58" N 123° 01' 47" W</i>	<i>7-19-14</i>
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>HORN RIVER RESOURCES</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>PETROLIA OILWELL DRILLING</i>	
D.P. SIZE		WT./FT.	GRADE
TOOL JT. Q.D.		TYPE	THREAD
STRING NO.		PUMP NO.	PUMP MANUFACTURER
TYPE		STROKE LENGTH	
1		<i>EM-500</i>	<i>D-500</i>
2		<i>NATIONAL</i>	<i>C-150</i>

LOCATION

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	WIRE LINE RECORD	REEL NO.
							SIZE	NO. LINES
							FT. CUT OFF	PRESENT LENGTH
							TON MI. OR TRIPS SINCE LAST CUT	
							CUMULATIVE TON MI. OR TRIPS	

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
1	RIG UP AND TEAR DOWN								
2	DRILL ACTUAL	<i>1 1/2</i>	<i>7 1/4</i>	<i>6 3/4</i>					
3	REAMING	<i>6 1/2</i>							
4	CORING								
5	CONDITION MUD & CIRCULATE								
6	TRIPS								
7	LUBRICATE RIG	<i>1/4</i>							
8	REPAIR RIG								
9	CUT OFF DRILLING LINE								
10	DEVIATION SURVEY	<i>1/2</i>	<i>1 1/4</i>						
11	WIRE LINE LOGS								
12	RUN CASING & CEMENT								
13	WAIT ON CEMENT								
14	HI-PPLE 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									

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
1	RIG UP AND TEAR DOWN								
2	DRILL ACTUAL	<i>1 1/2</i>	<i>7 1/4</i>	<i>6 3/4</i>					
3	REAMING	<i>6 1/2</i>							
4	CORING								
5	CONDITION MUD & CIRCULATE								
6	TRIPS								
7	LUBRICATE RIG	<i>1/4</i>							
8	REPAIR RIG								
9	CUT OFF DRILLING LINE								
10	DEVIATION SURVEY	<i>1/2</i>	<i>1 1/4</i>						
11	WIRE LINE LOGS								
12	RUN CASING & CEMENT								
13	WAIT ON CEMENT								
14	HI-PPLE 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									

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
1	RIG UP AND TEAR DOWN								
2	DRILL ACTUAL	<i>1 1/2</i>	<i>7 1/4</i>	<i>6 3/4</i>					
3	REAMING	<i>6 1/2</i>							
4	CORING								
5	CONDITION MUD & CIRCULATE								
6	TRIPS								
7	LUBRICATE RIG	<i>1/4</i>							
8	REPAIR RIG								
9	CUT OFF DRILLING LINE								
10	DEVIATION SURVEY	<i>1/2</i>	<i>1 1/4</i>						
11	WIRE LINE LOGS								
12	RUN CASING & CEMENT								
13	WAIT ON CEMENT								
14	HI-PPLE 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									

MORNING TOUR

DAY TOUR

EVENING TOUR

FOOTAGE		DR. D. RM. R. CORE. C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000'	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO									
2318	2349	31		<i>FUEL 2'</i>	110	29	1125	5	59	
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
1200	639	6 1/2	3	<i>CLEAN 182' TO BTM.</i>						
630	800	1 1/2	2	<i>DRILL.</i>						

FOOTAGE		DR. D. RM. R. CORE. C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000'	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO									
2349	2649	300		<i>SHALE.</i>	110	95	1000	5	60	
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
800	815	1/4		<i>RIG SERVICE CHECK BOPS OK.</i>						
815	1200	3 3/4	3 3/4	<i>DRILLING 7 1/2 HOLE.</i>						
1200	1230	1/2		<i>SURVEY</i>						
1230	400	3 1/2	3 1/2	<i>DRILLING.</i>						

FOOTAGE		DR. D. RM. R. CORE. C.	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000'	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO									
2649	2859	210			100	25	1200	5	60	
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
400	515	1 1/4		<i>DRILL</i>						
515	600	3/4		<i>CIRC. SURVEY - MISS RUN</i>						
600	800	2		<i>DRILL</i>						
800	830	1/2		<i>SURVEY</i>						
830	1200	3 1/2		<i>DRILL</i>						



DAILY DRILLING REPORT

REPORT NO. 8

LEASE <i>M05</i>	WELL NO. <i>2</i>	API WELL NUMBER	DATE <i>Jan 18/19</i>
OPERATOR <i>HORN RIVER RESOURCES</i>	CONTRACTOR <i>PETROLIA OILWELL DRILLING</i>		RIG NO. <i>7</i>
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>	
D.P. SIZE	WT./FT.	GRADE	TOOL JT Q.D.
			TYPE THREAD
			STRING NO.
			PUMP NO.
			PUMP MANUFACTURER
			TYPE
			STROKE LENGTH

LOCATION <i>61°54'58"N 123°01'47"W</i>	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				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	
1	RIG UP AND TEAR DOWN								
2	DRILL ACTUAL	<i>7 4/4</i>							
3	REAMING								
4	CORING								
5	CONDITION MUD & CIRCULATE								
6	TRIPS	<i>2 3/4</i>							
7	LUBRICATE RIG	<i>1/4 4</i>							
8	REPAIR RIG								
9	CUT OFF DRILLING LINE								
10	DEVIATION SURVEY	<i>3/4 1</i>							
11	WIRE LINE LOGS								
12	RUN CASING								
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									

MORNING TOUR

FOOTAGE		DR. D R.M.-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000*	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN
FROM	TO									
1853	2087				110	25	1300	5	60	
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
12:00	12:15	1/4		DRILLING						
12:15	12:30	1/4		RIG SERVICE - BOPS						
12:30	2:15	1 3/4		DRILLING						
2:15	3:00	3/4		SURVEY						
3:00	8:00	5		DRILLING						

DAY TOUR

FOOTAGE		DR. D R.M.-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000*	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN
FROM	TO									
2087	2318			shale	110	25	1200	5	55	
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
8:00	8:15	1/4		RIG SERVICE						
8:15	12:15	4	4	DRILLING 7 7/8 Hole						
12:15	1:15	1		CONN & SURVEY						
1:15	2:00	3/4	3/4	DRILLING 7 7/8 Hole						
2:00	4:00	2		MADE CONN. Hole SLOPPED IN WORKING TIGHT HOLE.						

EVENING TOUR

FOOTAGE		DR. D R.M.-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000*	PUMP PRESS	PUMP NO. 1	PUMP NO.	METHOD RUN
FROM	TO									
2318							1000	5	45	
DEVIATION RECORD										
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
FROM	TO									
4:00	5:45	1 3/4	6	TRIP OUT W/ BIT #1						
5:45	7:00	1 1/4	6	RUN IN DRILL COLLARS						
7:00	7:30	1/2	9	SLIP LINE 46'						
7:30	9:15	1 3/4	6	RUN IN BIT #2 LAY 9 SINGLES						
9:15	11:00	1 3/4	5	BREAK CIRC HOLE TIGHT LAY 3 SINGLES						
11:00	12:00	1	5	CIRC. & CONDITION MUD.						

COMPLETION

A. PERF'R'TN	
B. TBG TRIPS	
C. TREATING	
D. SWABBING	
E. TESTING	
F. ADDIT'L	
G.	
TOTALS	<i>8 8 8</i>
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	<i>5</i>
NO. OF DAYS FROM START	
CUMULATIVE ROTATING HRS.	
TOTAL MUD COST	

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

PETROLIA OILWELL DRILLING LTD.



APPROVED



APPROVED

DAILY DRILLING REPORT

REPORT NO. 7

LEASE	WELL NO. 2	API WELL NUMBER	DATE
OPERATOR	CONTRACTOR		RIG NO.
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER	
D.P. SIZE	WT. FT.	GRADE	TOOL JT. Q.D.
TYPE	THREAD	STRING NO.	PUMP NO.
PUMP MANUFACTURER		TYPE	STROKE LENGTH

LOCATION

LAST CASING
TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT
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				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
1	RIG UP AND TEAR DOWN				STB RMR OD	FT.	MFG.		
2	DRILL ACTUAL	3:14	7	6:34	D.C. ID 6 1/2 OD	FT.	TYPE		
3	REAMING				STB RMR OD	FT.	JETS 1/32"		
4	CORING				D.C. ID	OD	SER. NO.		
5	CONDITION MUD & CIRCULATE	3:14			STB RMR OD	FT.	DEPTH OUT		
6	TRIPS						DEPTH IN		
7	LUBRICATE RIG		4	1/4			TOTAL FTG.		
8	REPAIR RIG						TOTAL HRS. RUN		
9	CUT OFF DRILLING LINE						COND. 1/8" T/B GAGE		
10	DEVIATION SURVEY	1/4	3/4	1	STANDS DP	FT.	GPM/ PD-PSI		
11	WIRE LINE LOGS				SINGLES DP	FT.			
12	RUN CASING & CEMENT				KELLY DOWN	FT.			
13	WAIT ON CEMENT				TOTAL	FT.			
14	NIPPLE UP B.O.P.				WT. OF STRING	LBS.			
15	TEST B.O.P.								
16	DRILL STEM TEST								
17	PLUG BACK								
18	SQUEEZE CEMENT								
19	FISHING								
20	DIR. WORK								
21									
22									
23									

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
1	RIG UP AND TEAR DOWN				STB RMR OD	FT.	MFG.		
2	DRILL ACTUAL	3:14	7	6:34	D.C. ID 6 1/2 OD	FT.	TYPE		
3	REAMING				STB RMR OD	FT.	JETS 1/32"		
4	CORING				D.C. ID	OD	SER. NO.		
5	CONDITION MUD & CIRCULATE	3:14			STB RMR OD	FT.	DEPTH OUT		
6	TRIPS						DEPTH IN		
7	LUBRICATE RIG		4	1/4			TOTAL FTG.		
8	REPAIR RIG						TOTAL HRS. RUN		
9	CUT OFF DRILLING LINE						COND. 1/8" T/B GAGE		
10	DEVIATION SURVEY	1/4	3/4	1	STANDS DP	FT.	GPM/ PD-PSI		
11	WIRE LINE LOGS				SINGLES DP	FT.			
12	RUN CASING & CEMENT				KELLY DOWN	FT.			
13	WAIT ON CEMENT				TOTAL	FT.			
14	NIPPLE UP B.O.P.				WT. OF STRING	LBS.			
15	TEST B.O.P.								
16	DRILL STEM TEST								
17	PLUG BACK								
18	SQUEEZE CEMENT								
19	FISHING								
20	DIR. WORK								
21									
22									
23									

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	WEIGHT
1	RIG UP AND TEAR DOWN				STB RMR OD	FT.	MFG.		
2	DRILL ACTUAL	3:14	7	6:34	D.C. ID 6 1/2 OD	FT.	TYPE		
3	REAMING				STB RMR OD	FT.	JETS 1/32"		
4	CORING				D.C. ID	OD	SER. NO.		
5	CONDITION MUD & CIRCULATE	3:14			STB RMR OD	FT.	DEPTH OUT		
6	TRIPS						DEPTH IN		
7	LUBRICATE RIG		4	1/4			TOTAL FTG.		
8	REPAIR RIG						TOTAL HRS. RUN		
9	CUT OFF DRILLING LINE						COND. 1/8" T/B GAGE		
10	DEVIATION SURVEY	1/4	3/4	1	STANDS DP	FT.	GPM/ PD-PSI		
11	WIRE LINE LOGS				SINGLES DP	FT.			
12	RUN CASING & CEMENT				KELLY DOWN	FT.			
13	WAIT ON CEMENT				TOTAL	FT.			
14	NIPPLE UP B.O.P.				WT. OF STRING	LBS.			
15	TEST B.O.P.								
16	DRILL STEM TEST								
17	PLUG BACK								
18	SQUEEZE CEMENT								
19	FISHING								
20	DIR. WORK								
21									
22									
23									

MORNING TOUR

DAY TOUR

EVENING TOUR

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
1117	1523	406		SHALE	108	30	1300	5	60		
DEVIATION RECORD											
TIME LOG		ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
FROM	TO										
1117	1523	406		SHALE	108	30	1300	5	60		
DRILLER											

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
1117	1523	406		SHALE	108	30	1300	5	60		
DEVIATION RECORD											
TIME LOG		ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
FROM	TO										
1117	1523	406		SHALE	108	30	1300	5	60		
DRILLER											

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN	
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
1523	1853	330			95	25	1300	5	60		
DEVIATION RECORD											
TIME LOG		ELAPSED TIME		CODE NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
FROM	TO										
1523	1853	330			95	25	1300	5	60		
DRILLER											



LEASE			WELL NO.			API WELL NUMBER			DATE				
OPERATOR						CONTRACTOR						RIG NO.	
SIGNATURE OF OPERATOR'S REPRESENTATIVE						SIGNATURE OF CONTRACTOR'S TOOL PUSHER							
						D. Coleman							
D.P. SIZE	WT./FT.	GRADE	TOOL JT Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER			TYPE		STROKE LENGTH	

[illegible][illegible][illegible]

14. NIPPLE UP B.O.P.	12. 8	NO.	DRILLING ASSEMBLY (At end of tour)	BIT RECORD	MUD RECORD
15. TEST B.O.P.		BIT	FT.	BIT NO.	TIME
16. DRILL STEM TEST				SIZE	WEIGHT
17. PLUG BACK		STB RMR	OD	FT. MFG.	PRESSURE GRADIENT
18. SQUEEZE CEMENT		D.C ID	OD	FT. TYPE	VISC.-SEC.
19. FISHING		STB RMR	OD	FT. JET 1/32"	PV/YP
20. DIR. WORK		D.C ID	OD	FT. SER. NO.	GELS
21.		STB RMR	OD	FT. DEPTH OUT	WL.-CC'S.
22.				DEPTH IN	pH
23.				TOTAL FTG.	SOLIDS %
				TOTAL HRS. RUN	
A. PERF'R'T'N		STANDS DP	FT.	COND. 1-8's T.B. GAGE	MUD & CHEMICALS ADDED
B. TAG TRIPS		SINGLES DP	FT.	GPM/ PD-PSI	TYPE AMT. TYPE AMT.
C. TREATING		KELLY DOWN	FT.		
D. SWABBING		TOTAL	FT.		
E. TESTING		WT. OF STRING	LBS.		
F. ADDIT'N'L					

FOOTAGE		DR...D RM...R CORE...C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000±	PUMP PRESS	FUMP NO.	PUMP NO.	METHOD RUN		
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	SHO...S CORE...C
725	—	—										
DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION		
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
800	400	8		PRESSURE TESTING BOP'S & REPAIRING HY DRILL LINE LEAKS.								
				PRESS TEST HY DRILL & PIPE RAMS TO 1000 P.S.I. HELD OK								
				CHECK MOTOR WILLS OK.								

G.		NO.		DRILL ASSEMBLY		BIT RECORD		MUD RECORD			
TOTALS		BIT		FT.		BIT NO.		TIME			
DAY WORK TIME SUMMARY (OFFICE USE ONLY)		STB				SIZE		WEIGHT			
HRS. W/CONTR. D.P.		RMR		OD		FT. MFG.		PRESSURE GRADIENT			
HRS. W/OPR. D.P.		D.C.		ID		FT. TYPE		VISC - SEC			
HRS. WO/D.P.		24		6 1/2		OD 698.94		P.P. YP			
HRS. STANDBY		STB		RMR		OD		GELS			
		D.C.		ID		OD		WL - CC'S			
		STB		RMR		OD		pH			
		1		X.O. SUB		2.15		SOLIDS %			
		STANDS DP		FT.		COND. 1 8" T/B GAGE		MUD & CHEMICALS ADDED			
TOTAL DAY WORK		1		SINGLES DP		31.62		TYPE		AMT.	
		KELLY DOWN		FT.		GPM PD-PSI		TYPE		AMT.	
NO. OF DAYS FROM SPUD		TOTAL		FT.		742.02		TYPE		AMT.	
CUMULATIVE ROTATING HRS.		WT. OF STRING		LBS.		75		TYPE		AMT.	
TOTAL MUD COST											

FOOTAGE		D.R. RM-R CORE C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000"	PUMP PRESS	PUMP NO.		PUMP NO.		METHOD RUN
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	
725	742	17		PLUG @ 668'	110	20	900	5'	70			
DEVIATION RECORD		DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION		
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
400	600	2		DRILL OUT SUREPLUG & CEMENT. & SHOE								
6	645	3/4		LAY SINGLE & PICK D.C.								
645	800	1 1/4		DRILL OUT CEMENT								
800	845	3/4	8	WORK ON PUMP								
845	900	1/4	2	DRILL 7 7/8 HOLE								
900	1200	3	5	CIRCUMFERENCE & CONDITION MUD.								

DAILY DRILLING REPORT

REPORT NO.

LEASE	WELL NO.	API WELL NUMBER	DATE						
05			12/15/71						
OPERATOR	CONTRACTOR	RIG NO.							
How River	PETROLIA OILWELL DRILLING	7							
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER							
N. Coleman									
D.P. SIZE	WT. FT.	GRADE	TOOL JOINT	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LOCATION

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RK. TO CSG. HD.	SET AT	WIRE LINE RECORD	REEL NO.
							SIZE	NO. LINES
							FT. CUT OFF	PRESENT LENGTH
							TON MI. OR TRIPS SINCE LAST CUT	
							CUMULATIVE TON MI. OR TRIPS	

TIME DISTRIBUTION - HOURS				NO. DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	TIME	
1.	RIG UP AND TEAR DOWN						SIZE	WEIGHT	
2.	D RILL ACTUAL				STB RMR	OD	FT. MFG.	PRESSURE GRADIENT	
3.	REAMING				D.C. ID	OD	FT. TYPE	VISC.-SEC.	
4.	CORING				STB RMR	OD	FT. JETS 1 32"	PV YP	
5.	CONDITION MUD & CIRCULATE				D.C. ID	OD	FT. SER. NO.	GELS.	
6.	TRIPS				STB RMR	OD	FT. DEPTH OUT	WL -CC'S	
7.	LUBRICATE RIG						DEPTH IN	pH	
8.	REPAIR RIG						TOTAL FTG.	SOLIDS %	
9.	CUT OFF DRILLING LINE				STANDS DP	FT.	COND. 1/8" T.B. GAGE	MUD & CHEMICALS ADDED	
10.	DEVIATION SURVEY				SINGLES DP	FT.	GPM/ PD-PSI	TYPE	AMT.
11.	WIRE LINE LOGS				KELLY DOWN	FT.			
12.	RUN CASING & CEMENT				TOTAL	FT.			
13.	WAIT ON CEMENT	8	4		WT. OF STRING	LBS.			
14.	NIPPLE UP B.O.P.		4	8					
15.	TEST B.O.P.								
16.	DRILL STEM TEST								
17.	PLUG BACK								
18.	SQUEEZE CEMENT				STB RMR	OD	FT. MFG.	PRESSURE GRADIENT	
19.	FISHING				D.C. ID	OD	FT. TYPE	VISC.-SEC.	
20.	DIR. WORK				STB RMR	OD	FT. JET 1 32"	PV/YP	
21.					D.C. ID	OD	FT. SER. NO.	GELS.	
22.					STB RMR	OD	FT. DEPTH OUT	WL -CC'S	
23.							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.
					KELLY DOWN	FT.			
					TOTAL	FT.			
					WT. OF STRING	LBS.			
COMPLETION									
	A. PERF'RTN								
	B. TBG TRIPS								
	C. TREATING								
	D. SWABBING								
	E. TESTING								
	F. ADDIT'NL								
	G.								
TOTALS									
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

DAY TOUR

EVENING TOUR

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000+	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN
FROM	TO								LINER SIZE	S.P.M.	SCALING
725											
DEVIATION RECORD											
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
1200	800	8		W.C.C.							
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.	PUMP NO.	METHOD RUN
									LINER SIZE	S.P.M.	SCALING
DEVIATION RECORD											
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
800	1200	4		W.O.C.							
1200	400	4		SLACK OFF NIPPLE UP BOPS.							
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.	PUMP NO.	METHOD RUN
									LINER SIZE	S.P.M.	SCALING
DEVIATION RECORD											
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										
400	1200	8	14	NIPPLE UP BOP							
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.	PUMP NO.	METHOD RUN
									LINER SIZE	S.P.M.	SCALING
DEVIATION RECORD											
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FROM	TO										



LEASE 61-54-38 N 123 01 47 W		WELL NO.	API WELL NUMBER	DATE JAN 31					
OPERATOR		CONTRACTOR PETROLIA OILWELL DRILLING		RIG NO. 7					
SIGNATURE OF OPERATOR'S REPRESENTATIVE D. Coleman		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	FIRISCO	2.500	16
						2	NATIONAL	1.500	14
TIME DISTRIBUTION - HOURS									
CODE NO.	OPERATION	WORN	DAY	EVE.					
1	RIG UP AND TEAR DOWN	3							
2	DRILL ACTUAL	4 3/4	1/4	6 1/2					
3	REAMING								
4	CORING								
5	CONDITION MUD & CIRCULATE								
6	TRIPS								
7	LUBRICATE RIG	1/4							
8	REPAIR RIG								
9	CUT OFF DRILLING LINE								
10	DEVIATION SURVEY	1/4	1/2	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'RT'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. W/D.P.									
HRS. STANDBY									
TOTAL DAY WORK									
NO. OF DAYS FROM SPUD									
CUMULATIVE ROTATING HRS.									
TOTAL MUD COST									
NO. OF DAYS FROM SPUD									
CUMULATIVE ROTATING HRS.									
TOTAL MUD COST									

FOOTAGE		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. 2 S.P.M.	PUMP NO. 3 LINER SIZE	PUMP NO. 4 S.P.M.	METHOD RUN
FROM	TO											
126	126				80	10	250	5 1/2	68			
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
1200	200	3		RIG TO SPUD - LIFT AN ON RIG - 12 1/4 HOLE.								
300	545	2 1/4		SPUD W/ 12 1/4 BIT - 10 1/4 HOLE (S.P.M.)								
545	600	1/4		SURVEY @ 107' 1/2"								
600	800	2		DRILL 12 1/4 HOLE.								
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. 2 S.P.M.	PUMP NO. 3 LINER SIZE	PUMP NO. 4 S.P.M.	METHOD RUN
136	397	261		SHALE.	110	30	275	5 1/2	73			
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
800	815	1/4		RIG SERVICE.								
815	1045	2 1/4		DRILLING 12 1/4 HOLE.								
1045	1100	1/4		SURVEY								
1100	230	3 1/2		DRILLING 12 1/4 HOLE.								
230	275	1/4		SURVEY								
275	400	1 1/4		DRILLING.								
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. 2 S.P.M.	PUMP NO. 3 LINER SIZE	PUMP NO. 4 S.P.M.	METHOD RUN
397	680	283			110	20	275	5 1/2	72			
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
400	445	3/4		DRILL 12 1/4 HOLE								
445	530	3/4		SURVEY & RIG SERVICE								
530	745	2 1/4		DRILL 12 1/4 HOLE								
745	815	1/2		SURVEY								
815	1100	2 3/4		DRILL 12 1/4 HOLE								
1100	1115	1/4		SURVEY								
1115	1200	3/4		DRILL 12 1/4 HOLE								



DAILY DRILLING REPORT

REPORT NO.

LEASE H.R. AMHESS GULF CL-1-KM-D 5	WELL NO. 61° 54' 58" 123° 01' 47"	API WELL NUMBER CONTRACTOR	DATE 7						
OPERATOR Petrolia Drilling		RIG NO. 7							
SIGNATURE OF OPERATOR'S REPRESENTATIVE R. Coleman		SIGNATURE OF CONTRACTOR'S TOOL PUSHER R. Coleman							
D.P. SIZE	WT. FT.	GRADE	TOOL JT. Q.D.	TYPE THREAD	STRING NO.	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH

LOCATION

LAST CASING TUBING OR LINEP

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				NO.		DRILLING ASSEMBLY (At end of tour)		BIT RECORD		MUD RECORD	
CODE	OPERATION	MORN.	DAY	EVE.	BIT	FT.	BIT NO.	SIZE	WEIGHT	PRESSURE GRADIENT	VISC.-SEC.
1	RIG UP AND TEAR DOWN				STB RMR	OD	FT.	MFG.			
2	DRILL ACTUAL				D.C. ID	OD	FT.	TYPE			
3	REAMING				STB RMR	OD	FT.	JETS 1 32"			
4	CORING				D.C. ID	OD	FT.	SER. NO.			
5	CONDITION MUD & CIRCULATE				STB RMR	OD	FT.	DEPTH OUT			
6	TRIPS							DEPTH IN			
7	LUBRICATE RIG							TOTAL FTG.			
8	REPAIR RIG							TOTAL HRS. RUN			
9	CUT OFF DRILLING LINE				STANDS DP	FT.	COND. 1 8" 7 8 GAGE				
10	DEVIATION SURVEY				SINGLES DP	FT.	GPM. PD-PSI				
11	WIRE LINE LOGS				KELLY DOWN	FT.					
12	RUN CASING & CEMENT				TOTAL	FT.					
13	WAIT ON CEMENT				WT. OF STRING	LBS.					
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. PERFORATION											
B. TBG TRIPS											
C. TREATING											
D. SWABBING											
E. TESTING											
F. ADDITION											
G.											
TOTALS											
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

DAY TOUR

EVENING TOUR

FOOTAGE		DR. D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000	PUMP PRESS	PUMP NO.	PUMP NO.	METHOD RUN		
FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	PAV. FL. P. COMD.
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
1200	800	8		Rigging up								
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
800	400	8		Rig to spud								
DEVIATION RECORD												
TIME LOG		ELAPSED TIME	CODE NO.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS								
FROM	TO											
400	1200	8		Rig to spud								

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

PETROLIA OILWELL DRILLING LTD.



APPROVED



APPROVED