

HB PETITOT - C-60

Drilling Authority No. 419
Date Issued 11 February 1970

WELL NAME HB Petitot C-60
FIELD
LOCATION: Unit C Area: 60
Section 60 Grid 60-10-121-15
Latitude 60-09-1.74 Longitude 121-25-36.7
U.W.L.R. 60-15049 - 121-42686
U.W.I. 300C606010121150

Rig Release Date:
Status:
Information Release Date:

CHANGE OF NAME:

DATE RECEIVED	INDEX
11/2/70	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
23/9/70	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
6/10/70	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.....

[illegible]

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
19-3-70	7315	7000	Not felt 170 sacks cement + 2% CaCl ₂ .								
20-3-70	850	750	Felt at 738' KB 65 sacks cement.								
21-3-70	At Surface		Weld on plate and erect identification marker - 5 sacks cement in stub.								

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.L.R.H.P.	F.S.I.R.H.P.	I.P.R.H.P.	F.F.R.H.P.	L.H.P.	F.H.P.	REMARKS
1	Mar 16/70	Presqu'ille 7165	7220		-	-	-	-	-	-	-	-	-	Misrun. No packer seat.
2	Mar 17/70	Presqu'ille 7145	7220		90	60	60	2827	2801	747	2696	3479	3368	Good air blow on preflow. Good gas blow steady throughout test TSTM. Recovered 250 feet gas cut mud, 1000 feet mud cut salt water, 4545 feet salt water.

ANALYSIS				PRESENT STATUS OF WELL			
Lab. No.	Sample	From	To	Source	Remarks	Oil	(Interval)
E70-664-4	Water	7145	7220	DST #2			
						Gas	(Interval)
						Dry and Abandoned	
						Susp.	

Company Hudson's Bay Oil & Gas Co., Ltd.
 Signed by *D. M. Morgan*
 Title District Engineer
 Date October 6, 1970
 Forms to be prepared in duplicate and forwarded to the Oil Conservation Engineer, Calgary, Alberta.



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
OIL AND MINERAL ~~Resources~~ DIVISION

Application to Abandon a Well ~~HB Petitot 0-60~~

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

Name and number of well HB Petitot 0-60
Location: Unit C Section 60 Grid 60°10'N 121°15'W
Latitude 60°09' 1.74"N Longitude 121°25' 36.7"W
From Established Reference Marker S.P. 601, Line 32
Universal Well Location Reference: Lat. 60.15049°N, Long. 121.42686°W
Permit No. 2710 Lease No. _____

Hudson's Bay Oil & Gas Co. Ltd.
(Permitter, Licensee, Lessee)

Date of commencement of proposed programme March 21, 1970

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at _____
Gas at _____
Water at 7145 - 7220' (DST #1)
Total Depth 7315 feet KB Date of last operations March 21, 1970
Present condition of well Dry and abandoned

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sack of Cement	Method	Amount Pulled
1. 10 3/4	40.5#/ft	778'	795' KB	700 + 2%	CaCl ₂	
2.						
3.						
4.						
5.						

PROPOSED ABANDONMENT PROGRAMME

No.	Plug	Geological Formation	Number of Sacks of Cement	Remarks
	Position 'KB			
1	7315-7000	Presqu'ille	170	Not felt
2	850-750	-	65	Felt at 738' KB
	At Surface	-	5	Weld on plate and erect identification marker

The following logs have been run. DIL, BHC-SGR, Continuous Dipmeter
Other operations proposed _____

Operations to be carried out by Nabors Drilling Ltd. Contractor Licence No. 524
Address 444-7th Avenue S.W. Calgary ~~Address~~
Responsible Agent in field N. Dease Address: 11630 Kingsway Avenue, Edmonton
Dated at Edmonton, this 19 Day of August, 19 70
Signed by [Signature] Company Hudson's Bay Oil & Gas Co. Ltd.
Title District Engineer Exploratory Licence No. 1268

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

(For RESOURCES DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.H.J. Thoms on the 18th March 1970.

Dated 23rd September, 19 70

Forms to be submitted in triplicate to Oil Conservation Engineer, Calgary, Alberta

Drilling Authority No. 419

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 **NE Petitot C-60**Location: Unit **C** Section **60** Grid **60° 10' N. 121° 15' W.**Latitude **60° 09' 1.74" N.**Longitude **121° 25' 36.7" W.**From Established Reference Marker **Shot point 601. Line 32**Universal Well Location Reference **Lat. 60.15049° N. Long. 121.42685° W.**Elevation: Ground **1939** K.B. **To follow** feet above sea-level.Well is expected to produce from **presquile** formation at a depth of about **6650** feet. Expected total final depth **7775° Pre-Devonian**

Area assigned to well

(For Oil Conservation Engineer's use only)

Permit No. **2710** Lease No. **EBOG** Acreage **63584**Permittee, licensee, or lessee **EBOG**Exploratory Licence No. **1268**Surface owned by Crown **gr**

(If situated submit name and address of owner and company.)

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	Notes of Cement
1. 10-3/4"	40.5	K-55	New	800'	Sufficient cement
2.					volume plus 2%
3.					CaCl2 to return
4.					to surface.
5.					

Expected water, gas, and oil horizons and type of control equipment **Anticipated production horizon will be from the Presquile. Control equipment will consist of proper drilling fluid and adequate blowout prevention equipment.**

Well will be drilled with Rotary Rig No. **6** by **Nabors Drilling Ltd.**

(Drilling Contractor or company)

Responsible agent of applicant:—

Contractor's business Licence No. **524**At well **H. Dease**At registered office **R.L. Levesque**Address **11630 Kingsway Ave.**Address **same**

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

Dated at **Edmonton**, this **9** day of **February** 19 **70**Signed by **Edson's Bay Oil & Gas Co. Ltd.**Title **District Drilling Foreman** Operator's Licence No. **1268**

(For Resource Management Division use only)

APPROVED

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

1. **The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.**
2. **During well drilling and testing operations, every effort shall be made to ensure**

Dated **11th February** 19 **70**

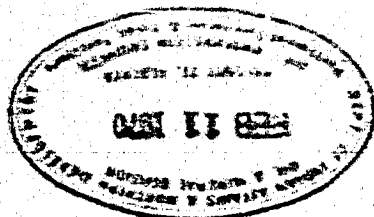
Please see over page

Oil Conservation Engineer

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

IAND 52-90-1 (3-67)

UNIQUE WELL IDENTIFIER - **300C606010121150**

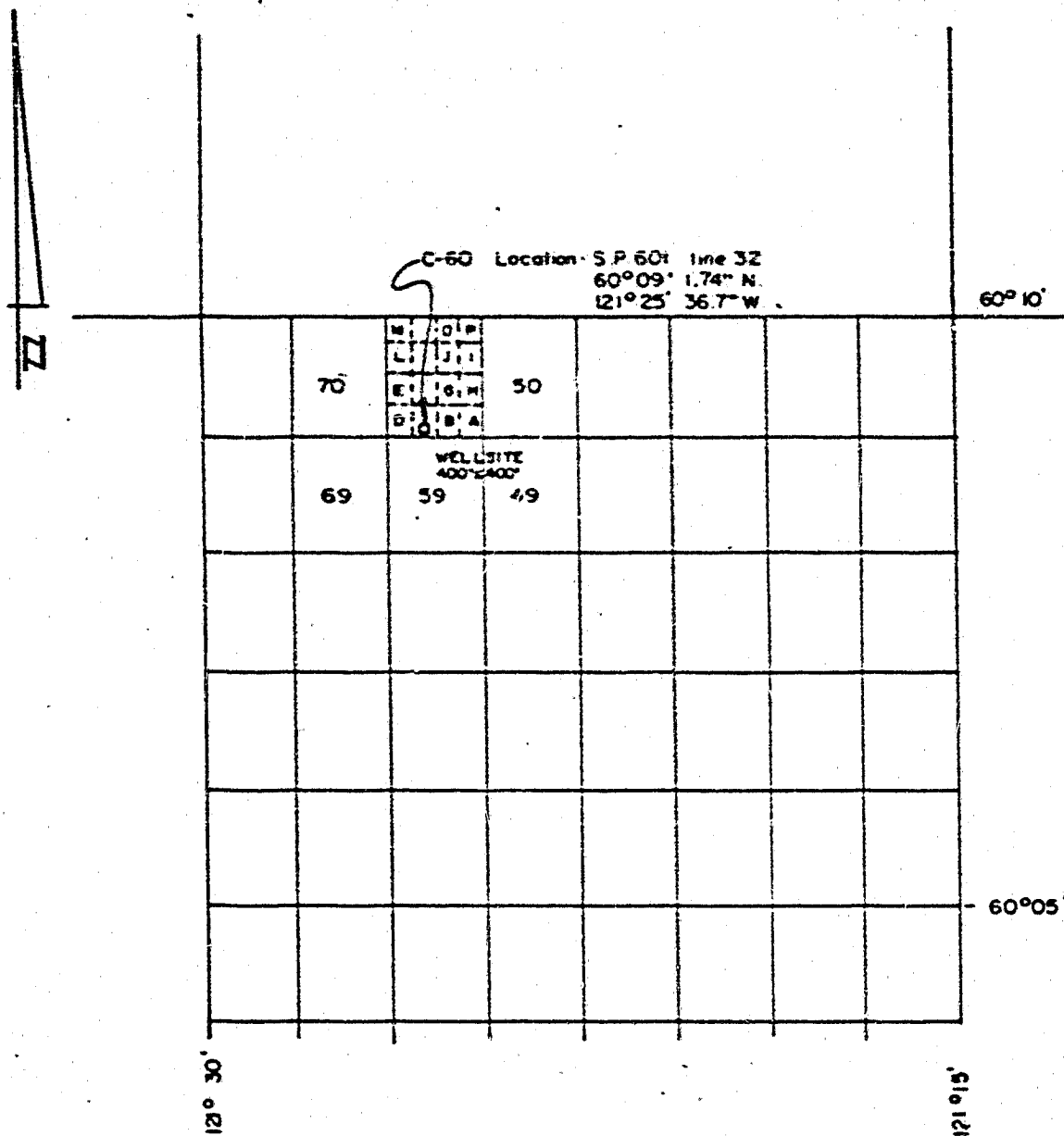


that drilling fluids, chemicals and wastes shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.

3. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.
4. Intermediate and production strings of casing are to receive the approval of the Oil Conservation Engineer.

B.H.J. Thoms

B.H.J. Thoms
Oil Conservation Engineer



U.W.L.R. - 60.16437° N.
121.42686° W

Coordinates - 1420' S. } NE Cor. Unit C Sec. 60
1056' W }

Elevation - 1939'

Hudson's Bay Oil and Gas Company Limited

[Signature]
District Analyst

PRELIMINARY PLAN

Hudson's Bay Oil and Gas Company Limited
Production Dept.

N.W.T.
HB PETITOT C60
WELLSITE
REFERENCE 60°10' N 121°15' W

Scale 1" = 2 miles	Drawn D.D.W.	Designing No.
Date FEB. 1970	Checked	

HUDSON'S BAY OIL & GAS CO. LTD.

WELL HISTORY REPORT

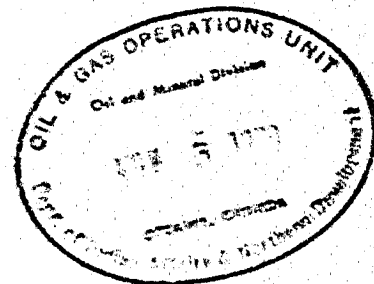
HB PETITOT C-60

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HUDSON'S BAY OIL & GAS COMPANY LIMITED

WELL HISTORY REPORT

HB Petitot C-60



SIGNED:

Danmora
DISTRICT ENGINEER

DATED:

July 10 / 70

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HB PETITOT C-60
WELL HISTORY REPORT

SECTION I - SUMMARY OF WELL DATA

- a) Well Name: HB Petitot c-60
- b) Permittee, Licensee or Lessee: Hudson's Bay Oil & Gas Co. Ltd.
- c) Name of Operator: Hudson's Bay Oil & Gas Co. Ltd.
11630 Kingsway Avenue
Edmonton 25, Alberta
- d) Location: Unit c Section 60 Grid 60°10'N 121°15'W
- e) Co-ordinates: Latitude 60°09' 1.74"N
Longitude 121°25' 36.7"W

Universal Well Locator Reference
Latitude 60.15049°N
Longitude 121.42686°W
- f) Permit No. : 2710
- g) Drilling Contractor: Nabors Drilling Limited Rig No. 6
- h) Drilling Authority: 419 issued February 11, 1970
- i) Classification: Exploratory
- j) Elevations: Ground 1939 feet
KB 1956 feet
- k) Spudded: February 16, 1970
- l) Completed Drilling: March 18, 1970
- m) Total Depth: 7315 feet KB
Plug Back Depth: Surface
- n) Well Status: Completed as a dry hole, plugged
and abandoned.
- o) Rig Released: March 21, 1970
- p) Hole Size: Surface - 15 inch - Surf to 795 feet KB
Final - 8 3/4 inch - 795-7315 feet KB
- q) Casing: Surface - 10 3/4 inch OD 40.5 lb. K-55
Set at 795 feet KB

SECTION II - GEOLOGICAL SUMMARY

a) Formation Tops:

Marker	Log Depth		Sample Depth	
	Feet KB	Subsea	Feet KB	Subsea
Banff	1835	+ 121	-	-
Exshaw	3130	-1174	-	-
Kotcho	3160	-1204	3163	-1207
Tectcho	3900	-1944	3911	-1955
Trout River	4150	-2194	4162	-2206
Kaiska	4280	-2324	4282	-2326
Jean Marie	4860	-2904	4868	-2912
Ft. Simpson	4913	-2957	4930	-2974
Muskwa	6554	-4598	6568	-4612
Presqu'ille	6595	-4639	6587	-4631
TOTAL DEPTH	7315	-5359		

b) Cored Interval:

No cores were cut.

SECTION III - ENGINEERING SUMMARY

a) Report of Drill Stem Tests

Three copies of DST's #1 & #2 were forwarded to the Department of Indian Affairs and Northern Development in Calgary on April 23, 1970.

PETITOT C-60

1700 - 1750 Shale, dark gray, pyritic
Siltstone, gray, limy

1750 - 1760 No samples

1760 - 1790 Shale, as above.

PENISKO @ 1790' Lagged to 1776'

1790 - 1860 Limestone, cream, white, fine to medium crystalline, glauconitic, bioclastic,
Crinoids, Brachiopods, tight.

BANFF @ 1860' Lagged to 1835'

1860 - 1880 Sandstone, quartzose, fine to medium grained, poorly sorted, subangular,
basically tight, trace pyrobitumen, trace intergranular porosity, no floor,
no cut.

1880 - 1832 Limestone, cream, light brown, bioclastic, very fine crystalline, partially
interbedded with shale, green, Crinoids.

1930 - 1980 Limestone, as above, bioclastic, pyritic, very slightly argillaceous and
silty, interbedded with shale, as above.

1980 - 2000 Shale, gray, splintery.

2000 - 2020 Shale, gray, as above.
Siltstone, gray, slightly sandy.
Limestone, as above.

2020 - 2040 Shale, gray, green, partially silty, Crinoids interbedded with limestone,
as above. Crinoids and Brachiopods.

2040 - 2050 Shale, gray brown and green, silty in part.
Limestone, as above.
Rare sandstone, very fine grained, slightly silty, argillaceous, calc. no
porosity.

2050 - 2060 Shale, gray, green, brown.

2060 - 2100 Siltstone, gray, cream, calcareous.
Limestone, gray, cryptocrystalline, bioclastic in part.
Shale, green, dark gray.

2100 - 2120 Shale, gray, green.
Minor limestone, as above.

2120 - 2160 Shale, gray, green, pyritic.
Limestone, as above, rare microcrystalline.
Rare siltstone, dark gray, mica.

2160 - 2180 Limestone, light gray, microcrystalline, partially bioclastic.
Shale, green, gray, slightly calcareous.
Rare siltstone, dark gray.

- 2180 - 2190 Sandstone, gray, very fine grained, limy, no porosity. No show.
Limestone, gray, partially bioclastic, silty and sandy.
- 2190 - 2340 Limestone and sandstone, as above.
Rare siltstone, dark gray.
- 2340 - 2350 Siltstone, dark gray, limy.
Shale, gray.
Rare limestone, gray, very fine crystalline, silty and sandy, pyritic.
- 2350 - 2600 Shale, gray, green, partially limy.
Siltstone, gray, sandy in part.
- 2600 - 2650 Sandstone, gray to very light brown, very fine grained, limy, shaly.
No porosity, no show.
Shale and siltstone, as above.
- 2650 - 2660 Sandstone, as above.
Shale and siltstone, as above. Brachiopods?
- 2660 - 2670 Shale, dark gray, green, partially silty.
Siltstone, gray, scattered pyrite crystals.
- 2670 - 2700 Sandstone, light brown, very fine grained, limy, no porosity, no show.
Siltstone, gray, rare sandy, limy.
Shale, green to gray, partially silty.
Rare limestone, light brown, sandy.
- 2700 - 2710 Shale, gray to dark gray, green, partially silty.
Siltstone, gray.
Rare limestone, as above.
- 2710 - 2720 Shale, gray to dark gray, very slightly limy.
Siltstone, as above.
Sandstone, gray and white, very fine grained, rare silty, limy. No porosity, no show.
- 2730 - 2780 Shale, green to dark gray, pyritic, limy, rare quartz grains.
Sandstone, cream to light brown, very fine grained, limy, black and white mottled, rare very poor granular porosity, no show.
Siltstone, dark gray, pyritic, very slightly limy.
- 2780 - 2800 Shale, as above and siltstone, as above.
Trace sandstone, as above.
- 2800 - 2820 Siltstone, gray to dark gray, mica, pyritic, slightly limy.
Shale, dark gray.
- 2820 - 2870 Siltstone, light gray and cream, limy, pyritic, mica.
Shale, dark gray, pyritic, mica.
- 2870 - 2890 Siltstone, gray, slightly calcareous, pyritic.
Rare shale, gray, dark gray.
Rare sandstone, cream, very fine grained, silty, limy, tight, interbedded with siltstone, as above.

- 2890 - 2940 Siltstone, gray, as above and cream to very light brown, slightly limy, pyritic.
Shale, dark gray.
- 2940 - 2960 Siltstone, gray, pyritic, mica, slightly limy, interbedded with siltstone, light brown.
Rare sandstone, white, very fine grained, limy, no porosity, no show.
Rare shale, dark gray.
- 2960 - 3020 Siltstone, gray to light brown, limy, shaly.
Shale, gray, green.
- 3020 - 3030 Shale and siltstone, as above.
Sandstone, white, micro grained, limy, no porosity, no show.
- 3030 - 3140 Shale, gray, rare darkish gray, pyritic.
Siltstone, gray, rare limy, pyritic.

EXSHAW @ 3140' Lagged to 3130'

- 3140 - 3170 Shale, black, bituminous, pyritic.
Rare chert.

KOTCHO @ 3170' Lagged to 3160'

- 3170 - 3180 Limestone, black, crypto to microcrystalline, bituminous, interbedded with shale, black, bituminous, rare pyritic.
- 3180 - 3230 Shale, gray, limy.
- 3230 - 3300 Limestone, cream, cryptocrystalline, rare pyritic. Crinoids.
- 3300 - 3310 Shale, gray, limy, partially silty.
- 3310 - 3340 Shale, gray, green gray, limy.
- 3340 - 3350 Limestone, cream, cryptocrystalline, bioclastic, partially pyritic. Crinoids.
- 3350 - 3370 Limestone, as above.
- 3370 - 3400 Shale, gray, green, limy.
Siltstone, gray.
- 3400 - 3410 Shale, gray, green, rare limestone, cream, cryptocrystalline.
- 3410 - 3420 Shale, gray, green, limy, scattered pyrite, rare silty.
- 3420 - 3430 Shale, tan, calcareous.
Limestone, gray, cryptocrystalline.
- 3430 - 3440 Shale, gray, limy.
Siltstone, gray, mica, pyritic.
Limestone, cream, cryptocrystalline, Crinoids.

- 3440 - 3470 Shale, gray, limy, Crinoids.
Rare limestone, as above.
- 3470 - 3480 Shale, gray, green, limy.
Shale, dark gray, silty, pyritic in part, bituminous.
Rare Crinoidal limestone, cream.
Rare siltstone, cream.
- 3480 - 3530 Shale, gray, green.
Rare shale, dark gray, as above.
Trace limestone, cream, light brown, cryptocrystalline, @ 3530'.
- 3530 - 3560 Shale, gray green, calcareous.
Rare shale, dark gray, very slightly limy.
Rare siltstone, dark gray, very slightly limy.
Rare limestone, cream to light brown, cryptocrystalline, Crinoids.
- 3560 - 3570 Shale, as above.
- 3570 - 3580 Shale, gray green, as above, interbedded with limestone, as above.
Shale, dark gray, silty, Crinoids.
Limestone, cream to light brown, cryptocrystalline, Brachiopods.
- 3580 - 3590 Limestone, cream, cryptocrystalline, argillaceous in part, Brachiopods and Crinoids.
- 3590 - 3600 Shale, gray, limy.
Shale, dark gray, bituminous, silty.
Siltstone, dark gray.
Limestone, as above, Crinoids.
- 3600 - 3630 Shale, gray and dark gray, as above, Crinoids.
Limestone, as above, Crinoids.
- 3630 - 3700 Shale, gray, limy.
Shale, dark gray, as above.
Rare limestone, as above, Crinoids.
- 3700 - 3790 Shale, gray, green, limy.
Trace interbedded with limestone, cream to light brown, cryptocrystalline.
- 3790 - 3820 Limestone, cream to very light brown, cryptocrystalline, very slightly argillaceous, Brachiopods and Crinoids.
- 3820 - 3850 Limestone, as above, trace chalky.
Trace chert, red and yellow.
- 3850 - 3910 Limestone, cream to brown, cryptocrystalline, argillaceous, trace pyritic.
Trace interbeds of carbonaceous bands, Crinoids, Ostracods?
- TETCHO @ 3910' Lagged to 3900'
- 3910 - 3950 Limestone, cream to light brown, cryptocrystalline, partially pyritic, trace shaly partings, Fossils.
- 3950 - 3970 Limestone, as above, rare chalky, trace shaly partings, rare dolomitic.

- 3970 - 3980 Limestone, as above, Brachiopods and Crinoids.
Shale, brown, limy.
- 3980 - 4000 Limestone, as above, trace recrystallized fine calcite crystals, partially pyritic, partially dolomitic (pelletic appearance) Crinoids.
- 4000 - 4020 Limestone, cream, cryptocrystalline, rare bituminous partings, Crinoids.
- 4020 - 4040 Limestone, cream, light brown, as above, partially silty, trace dolomitic.
- 4040 - 4060 Limestone, as above, slightly silty and shaly.
- 4060 - 4100 Limestone, cream to very light brown, crypto to very fine crystalline, bituminous partings, rare silty, trace pyritic. Fossils.
- 4100 - 4120 Limestone, cream to very light brown, very fine crystalline, trace bituminous, silty.
- 4120 - 4130 Same as above, Brachiopod fragments.
- 4130 - 4140 Limestone, cream, fine crystalline, pyritic, silty.
Siltstone, gray, limy.
- 4140 - 4170 Limestone, cream to light brown, fine crystalline, argillaceous, pyritic, silty.
Siltstone, gray, limy.

TENT RIVER @ 4170' Lagged to 4150'

- 4170 - 4200 Shale, green, limy, pyritic.
Siltstone, gray, green, calcareous, pyritic.
Limestone, as above.
- 4200 - 4230 Limestone, light brown, fine crystalline, pyritic, silty and shaly.
Siltstone, gray, green, limy.
- 4230 - 4240 Limestone, light brown, fine crystalline, pyritic, silty in part, shaly.
Siltstone, gray green, limy.
- 4240 - 4270 Limestone, as above.
Shale, green, gray, limy.
Shale, brown, partially silty, limy @ 4250'.
- 4270 - 4290 Limestone, light brown, very fine to fine crystalline, partially silty, partially shaly, pyritic.
Shale, brown, partially silty, very slightly limy.
Siltstone, buff, limy.
- 4290 - 4300 Limestone, light brown, very fine crystalline, silty and shaly, Fossils.
Siltstone, gray, green, slightly limy.
Shale, gray, slightly limy and silty.

KAKISA @ 4300' Lagged to 4280'

- 4300 - 4310 Shale, buff to gray, slightly limy.
Trace limestone, gray to light brown, fine crystalline, partially pyritic, slightly argillaceous, slightly silty, rare specks of bitumen.

- 4320 - 4320 Shale, gray to light brown, limy.
Siltstone, gray, limy, partially pyritic.
- 4320 - 4330 Siltstone, greenish gray, limy.
Shale, gray, silty.
Limestone, cream, very fine crystalline, slightly silty, trace bituminous specks.
- 4330 - 4340 Siltstone, greenish gray to gray, very limy. Brachiopods.
Trace shale, greenish gray, rare silty.
Trace limestone, as above.
- 4340 - 4350 Siltstone and shale, as above.
- 4350 - 4380 Siltstone, gray, very limy.
Shale, green, rare silty, limy.
- 4380 - 4390 Same as above.
Trace limestone, light brown, cryptocrystalline, silty appearance.
- 4390 - 4400 Limestone, light brown to cream, crypto to microcrystalline, silty appearance.
Shale and siltstone, as above.

REDKNIFE @ 4400' Lagged to 4380'

- 4400 - 4410 Limestone, cream, very light brown, cryptocrystalline, as above. Brachiopods.
Siltstone and shale, as above.
Trace chert, white with red tint.
- 4410 - 4420 Limestone, light brown, cryptocrystalline.
Shale and siltstone, as above.
Trace chert, white.
Limestone, cream, as above.
- 4420 - 4440 Limestone, cream, brown, crypto to very fine crystalline, slightly silty, Fossils.
- 4440 - 4450 Limestone, brown, cryptocrystalline, argillaceous, rare dolomitic.
Limestone, cream, very fine crystalline, Fossils.
Shale, brown and green, slightly pyritic.
Siltstone, as above.
- 4450 - 4470 Limestone, brown, cryptocrystalline, argillaceous, slightly silty, fossils.
Shale, gray, green, limy.
- 4470 - 4480 Limestone, brown, cryptocrystalline, argillaceous.
Limestone, dark brown, very fine crystalline, bituminous, no flor, no cut.
Shale, green, very slightly limy.
- 4480 - 4500 Shale, brown, gray, green, slightly silty, slightly limy.
- 4510 - 4510 Shale, green, brown, limy, slightly pyritic, slightly silty.
Limestone, brown, cryptocrystalline, Spirifer.

- 4510 - 4540 Shale, brown, green, slightly limy.
Siltstone, green, very limy.
Trace limestone, brown, cryptocrystalline @ 4530'.
- 4540 - 4550 Shale, brown, slightly silty, very slightly limy.
Shale, green, slightly silty, slightly limy.
- 4550 - 4560 Shale, brown, tan, very slightly limy, rare silty appearance.
- 4560 - 4570 Shale, gray, green, brown.
- 4570 - 4610 Shale, gray, green, brown, slightly limy.
Trace limestone, brown, very fine crystalline, silty.
Rare siltstone, green, limy.
- 4610 - 4640 Shale, light brown to green gray, very slightly limy.
Trace siltstone, gray, limy, black and white specks.
- 4640 - 4670 Shale, brown to green gray, splintery, trace interbedded with limestone, gray brown, very fine crystalline, silty appearance, Brachiopods.
- 4670 - 4700 Shale, green gray, brown, as above, trace interbedded with limestone, cream to very light brown, very fine crystalline, silty.
Siltstone, gray with green tint, limy.
- 4700 - 4720 Shale, green, gray, platy.
Rare shale, brown.
Rare siltstone, green, limy.
Trace limestone, light brown, bioclastic, glauconitic, Crinoid and Brachiopod.
Trace limestone, cream, very fine crystalline, silty.
- 4720 - 4760 Shale, green, gray, platy and splintery, Brachiopods.
Rare shale, brown.
Trace limestone, light brown, interbedded with gray shale.
- 4760 - 4790 Shale, gray, rare brown, chunky, rare silty.
Siltstone, gray green, limy, quartzitic in part.
- 4790 - 4800 Shale, gray, rare brown, platy, trace silty.
Siltstone, gray green, limy.
Trace limestone, gray, very fine crystalline, silty, argillaceous.
- 4800 - 4810 Shale, gray, rare green, chunky.
Siltstone, gray green, limy.
Rare limestone, light brown, cryptocrystalline, slightly argillaceous.
- 4810 - 4820 Shale, gray, rare silty streaks, chunky.
Siltstone, gray, green, limy, slightly quartzitic.
- 4820 - 4830 Shale, gray green, trace brown, slightly silty.
Siltstone, gray with green tint, limy, quartzitic in part.
Trace limestone, mottled, crypto to very fine crystalline, mottled, yellow, red, gray, Fossils.

- 4830 - 4836 Shale, gray, green, rare brown.
Siltstone, as above.
Rare limestone, gray, crypto to very fine crystalline, slightly argillaceous, yellow specks, siderite staining (oxidized), trace pyritic, Crinoid Columns.
- 4836 - 4845 Limestone, mottled, red, yellow, gray, cryptocrystalline matrix, fossiliferous pelleret, Brachiopods, Gastropod, Crinoid.
Limestone, gray, microcrystalline, argillaceous in part.
- 4845 - 4850 Limestone, fossiliferous, gray to light brown, microcrystalline, slightly argillaceous, slightly pyritic, rare bitumen specks, rare yellow mottled, tight, Brachiopods and Fossils, no flor, no cut.
- 4850 - 4860 Limestone, light brown, microcrystalline, as above, rare dolomitic, fossils.
- 4860 - 4870 Limestone, light brown, microcrystalline, rare yellow mottled, slightly argillaceous, pyritic in part, rare fine calcite crystals, few chips pelleret, fossils. Amphipora.
- 4870 - 4880 Limestone, buff to vitreous brown, very fine to fine crystalline, chalky in part, tight, presence of pyrobitumen. Brachiopods and Fossils, no flor, no cut.

TOP JEAN MARIE @ 4880' Lagged to 4860'

- 4880 - 4890 Limestone, buff to brown, very fine to fine crystalline, chalky in part, presence of pyrobitumen, Amphipora, no flor, no cut.
- 4890 - 4920 Limestone, buff to brown, very fine to fine crystalline, rare chalky, trace pyritic, trace pyrobitumen, tight, no flor, no cut, fossils.
Trace poor vugular porosity @ 4890'.
- 4920 - 4940 Limestone, light brown to brown, very fine to fine crystalline, rare dolomitic, slightly chalky.
Trace pyrobitumen specks, tight, fossils, no cut, no flor.

TOP FT. SIMPSON Lagged to 4913'

- 4940 - 4980 Shale, gray to green gray, rare silty, trace limy, blacky.
Limestone, as above, caving?
- 4980 - 5060 Shale, gray green, slightly silty, blacky, interbedded with siltstone, green gray, very slightly limy, rare quartzitic.
- 5060 - 5100 Shale, as above.
Shale, brown, splintery and platy.
Rare siltstone, green, quartzitic.
- 5100 - 5140 Shale, gray to gray green, as above.
Rare shale, light gray and limy, platy.
Rare siltstone, gray green, rare limy.
Rare shale, brown, as above, slightly limy.
- 5140 - 5160 Shale, gray to green, slightly silty and splintery interbedded with limestone, gray.
Siltstone, gray to green, limy, slightly quartzose.

- 5160 - 5190 Shale, gray green, as above, splintery and chunky.
Siltstone, green, mottled, limy, quartzose.
Rare shale, brown, splintery, rare limy (platy).
- 5190 - 5200 As above, with black shale.
- 5200 - 5210 Shale, gray, green, platy and splintery.
Siltstone, gray, green, quartzose, limy, mottled.
- 5210 - 5220 Shale, gray, green, platy and splintery, rare silty.
Siltstone, green, gray, brown, limy, quartzose.
Trace limestone, cream, very fine crystalline (caving?).
- 5230 - 5240 Shale, as above, trace interbedded with limestone, brown.
Siltstone, as above, limy, mottled.
- 5240 - 5250 Shale, as above.
Siltstone, as above with rare siltstone, reddish (oxidized) quartzose.
- 5260 - 5270 Shale, green, gray, platy and splintery.
Siltstone, gray, green, limy, quartzose.
- 5270 - 5280 Siltstone, as above, quartzose, trace pyritic.
Shale, gray, green, as above, slightly limy in part.
- 5280 - 5300 Shale, brown gray, rare green, platy.
Siltstone, gray, green, limy, rare quartzose, mottled.
Rare limestone, gray to light brown, silty, rare dolomitic.
- 5300 - 5330 Siltstone, gray, green, cream, lime cemented, rare very fine sandy, quartzose.
Shale, gray and brown, splintery and chunky.
Trace limestone, light brown interbeds.
- 5330 - 5340 Siltstone, as above.
Shale, as above.
- 5340 - 5350 Shale, gray, splintery and platy.
Trace siltstone, as above.
- 5350 - 5360 Shale, gray green, partially silty.
Rare shale, brown, platy.
Rare siltstone, brown, green, slightly limy, quartzose.
- 5360 - 5370 Shale, gray, chunky.
Rare shale, brown, platy.
Rare siltstone, gray, very slightly limy, quartzose.
- 5370 - 5380 Same as above.
Rare limestone, cream, silty with fine sand grains.
- 5380 - 5420 Sandstone, gray, very fine grained, silty, slightly limy, shaly in part, quartzose.
Shale, gray, chunky and splintery.
Rare siltstone, gray, sandy in part and limy.
- 5420 - 5440 Siltstone and sandstone, as above, gray.
Shale, gray, silty and sandy, as above.
Rare limestone, gray, silty and sandy.

- 5440 - 5490 Same as above.
Trace dolomite, light brown, silty and sandy.
- 5500 - 5510 Shale, brown, gray, splintery and platy.
- 5510 - 5530 Shale, brown, gray, as above.
Rare sandstone and siltstone, as above, limy, quartzose.
Rare sandstone, green, limy, quartzose.
- 5530 - 5560 Shale, gray, splintery and platy, rare mica.
Sandstone and siltstone, as above, quartzose.
- 5560 - 5570 Shale, gray, brown, chunky and platy.
Trace limestone, gray, cryptocrystalline, dolomitic.
- 5570 - 5580 Shale, gray, darkish gray, platy.
Trace limestone, as above.
- 5580 - 5590 Shale, gray, brown.
Siltstone and sandstone, as above.
Trace limestone, as above, silty and sandy.
- 5590 - 5620 Shale, gray.
Siltstone, gray, sandy, limy, quartzose.
Trace limestone, as above.
- 5620 - 5630 Shale, gray, trace brown, chunky and splintery.
Trace limestone, gray, fossils.
Siltstone and sandstone, as above.
- 5630 - 5640 Shale, gray, platy, trace interbedded with siltstone, greenish gray, as above.
- 5640 - 5650 Shale, gray, platy.
Siltstone, green, gray, limy.
Trace limestone, light brown, cryptocrystalline, fossils.
- 5650 - 5660 Shale, gray, as above.
Siltstone, green gray, limy, quartzose interbedded with shale, gray, as above.
- 5660 - 5670 Shale, gray, slightly silty, chalky (chunky).
Trace siltstone, gray, very shaly, slightly limy.
- 5670 - 5700 Shale, gray, as above.
Rare siltstone, gray green, slightly limy, interbedded with shale, gray.
Trace limestone, brown, very fine crystalline @ 5680'.
- 5700 - 5740 Shale, gray, chunky and splintery.
Trace siltstone, gray green, very slightly limy.
- 5740 - 5760 Shale, gray, as above.
Trace siltstone, as above.
Trace limestone, light brown, silty, argillaceous, fossils.
- 5800 - 5840 Shale, gray, splintery and chunky, trace limy, trace silty, trace pyritic.
- 5840 - 5940 Shale, gray, trace silty, trace limy, splintery, firm.
- 5940 - 6000 Same as above.

- 6000 - 6120 Shale, gray, trace silty, trace limy, chunky.
- 6120 - 6180 Shale, gray, as above, trace pyritic, trace siltstone, gray green.
- 6180 - 6190 Shale, gray, as above, rare lime laminations, brown
Trace siltstone, gray, green, limy.
- 6190 - 6230 Shale, gray, chunky, very slightly limy, rare silty.
Trace limestone, brown, cryptocrystalline, rare pyritic @ 6220'.
- 6230 - 6380 Shale, gray, trace limy, chunky, rare splintery.
- 6380 - 6390 Shale, gray, as above.
Rare shale, brownish gray, chunky, very slightly limy.
- 6390 - 6400 Shale, gray, as above, brown, mottled, (carbonaceous streaks).
- 6400 - 6410 Shale, gray, as above.
Rare shale, brownish gray, platy and chunky, trace pyritic.
- 6410 - 6420 Shale, gray, as above, chunky.
- 6420 - 6430 Shale, as above, trace silty, trace limy.
One chip limestone, brown, shaly.
- 6430 - 6470 Shale, as above.
- 6470 - 6490 Shale, gray, as above.
Trace shale, darkish gray, bituminous in part.
- 6490 - 6520 Shale, gray, as above interbedded with darkish gray bituminous shale.
Trace pyritic, trace limestone, brown @ 6500'.
- 6520 - 6540 Shale, as above, gray, trace pyritic.
Trace black shale, bituminous @ 6540' (dark gray)
Trace siltstone, gray, slightly limy.
Trace dolomite, gray, light brown, fine crystalline.
- 6540 - 6560 Shale, gray with bituminous laminae as above, trace pyritic.
Rare shale, black, bituminous (dark gray).
- 6560 - 6570 Shale, as above, gray.
Rare shale, dark gray to black, as above.
- 6570 - 6580 Shale, as above, dark gray, black.

MUSKWA @ 6580' Lagged to 6554'

- 6580 - 6630 Shale, black, slightly limy in part, trace pyritic.

PRESQU'ILE LIMESTONE @ 6620' Lagged to 6595'

- 6620 - 6640 Limestone, light brown to darkish brown, rare cream, microcrystalline,
argillaceous, fossils filled with sporite, tight, bituminous, trace pyritic,
Amphipora.

- 6640 - 6650 Limestone, dark gray, brown, rare cream, micro to fine crystalline, argillaceous, rare bituminous.
Trace medium to coarse calcite crystals, tight, Amphipora.
- 6650 - 6660 Limestone, dark gray, brown, cream, micro to fine crystalline, argillaceous, rare chalky, rare fine crystals of calcite, rare calcite veins, trace pyritic.
Rare bituminous, few pelleted chips. Amphipora, rare Amphiporas filled with sporite and calcite.
- 6660 - 6670 Same as above, Amphipora and Calcisphere, very fine to medium crystalline.
- 6670 - 6680 Limestone, as above. Amphipora.
- 6680 - 6690 Limestone, brown, gray, cream, very fine to fine crystalline, rare calcite veins, trace bituminous, slightly argillaceous, tight, no porosity, now show, few chips of dolomite, tight, rare Amphipora.
- 6690 - 6700 Limestone, dark brown to cream in part, gray, microcrystalline, rare very fine crystalline, argillaceous, tight, Calcispheres, trace bituminous, rare chalky.
- 6700 - 6730 Limestone, dark brown to cream gray, micro to fine crystalline, trace bituminous, argillaceous, rare fossils lined with very fine calcite, Calcispheres and Amphipora, few chips with pelleted appearance, rare pyritic @ 6730'.
Rare chalky.
- 6730 - 6740 Limestone, as above, rare pelleted, trace dolomite crystals after acid test.
Amphipora and Calcisphere, Strom?, tight.
- 6740 - 6760 Limestone, dark brown to cream, few to rare medium crystalline, argillaceous, rare chalky, pelleted, rare fossils filled with sporite. rare fine crystalline to medium calcite, no porosity, no show. Amphipora, rare clean limestone, cream, trace silt size quartz crystals, trace bituminous.

13' Correction Down, No Samples for 6770' (11' beginning @ 1898')

- 6770 - 6780 Limestone, as above, pelleted, Amphipora, Calcisphere, trace Strom?
- 6780 - 6790 Limestone, dark brown, brown to cream, pelleted in part, very fine to micro crystalline, argillaceous, trace pyritic, rare bituminous, rare trace calcite crystal linings, Amphipora, trace Strom?, rare Calcisphere.
- 6790 - 6810 Limestone, dark brown, rare cream, chalky, micro to fine crystalline, argillaceous, bituminous, pelleted in part, rare fine calcite crystal linings, trace pyrite, some clean lime muds, Amphipora, rare chalky.
- 6810 - 6830 Limestone, as above.
Limestone, light brown, gray, crypto to microcrystalline (clean), fine calcite crystals, very dense, tight, Calcisphere, bituminous.
Trace calcite crystals, trace chalky, Sporite infills and Amphipora @ 6830'.
- 6830 - 6840 Limestone, as above, rare cream to clear, fine to medium calcite cement, rare calcite cement around Amphiporas. Coral? Trace dolomitic on acid test.

- 6840 - 6850 Limestone, brown, as above. Amphiporas, bituminous.
Limestone, gray to very light brown, crypto to micro crystalline, (pelletic in part) tight, very dense, Calcsphere? clean lime mud.
- 6850 - 6860 Limestone, gray to very light brown, microcrystalline, rare pelletic, rare calcite veins, sporite infills occasionally (clean), Calcsphere?, tight, dense, clean lime mud.
- 6860 - 6870 Limestone, as above, gray to very light brown.
Limestone, brown, bituminous, as above. Amphipora, Fossils.
- 6870 - 6880 Limestone, brown, as above, microcrystalline, slightly argillaceous, rare bituminous, pelletic appearance, Amphipora, trace pyritic, dense.
Limestone, cream, very light brown, fine to medium crystalline, rare calcite veins, rare chalky, rare sporite infills. Stroms and Brachiopods?, dense tight.
- 6880 - 6900 Limestone, brown to dark brown, micro to fine crystalline, argillaceous, bituminous, rare calcite veins, sporite infills. Fossils, Amphipora?
Limestone, cream to light brown, fine to medium crystalline, trace pyritic, Amphipora, dense.
- 6900 - 6910 Limestone, light gray to very light brown, micro to very fine crystalline, rare pelletic, rare stylolitic, rare sporite infills, trace bituminous, trace pyritic, tight, dense, Brachiopod fragments (almost clean pelletal lime mud).
- 6910 - 6940 Limestone, light gray to very light brown, as above, chalky in part, tight, sporite infills, Brachiopod.
Limestone, dark brown, fine crystalline, bituminous, argillaceous, partially pelletal, rare fine calcite crystals, tight, dense @ 6940'.
Trace dolomite remains after acid test @ 6940'.
- 6940 - 6950 Limestone, gray to very light brown, brown to dark brown, as above, pelletic in part, tight.
- 6950 - 6960 Limestone, very light gray to white, mainly micro to medium crystalline in part, trace bituminous, very chalky, pelletic, soft, brittle, no porosity, Brachiopods? (clean lime mud).
Shale, green pyritic, cavings?
- 6960 - 6980 Limestone, light gray to white, as above, pelletic, rare stylolite, rare bituminous.
Limestone, brown, fine to very fine crystalline, rare pyritic, rare sporite and calcite infills, pelletal, tight.
Trace shale, green pyritic @ 6980'.
- 6990 - 7000 Limestone, gray to very light brown, micro to fine crystalline, pelletal, rare pellets cemented by sparry calcite, clean.
Limestone, brown to dark gray, micro to fine crystalline, pelletal, argillaceous rare bituminous, tight.
- 7000 - 7020 Limestone, gray to very light brown, as above, rare chalky, pelletic, trace pyritic, dense, tight, clean, rare bituminous @ 7020'.
- 7020 - 7040 Limestone, gray to very light brown, as above, pelletic, Amphipora.
Limestone, dark brown, brown, pelletic, bituminous in part, pyritic, as above.

- 7040 - 7050 Limestone, brown, dark brown, rare pelletic, rare argillaceous, rare bituminous, rare pyritic, rare needle-like quartz crystals, trace chalky, trace stylolites filled with bitumen, tight.
Trace limestone, gray, pelletic, chalky in part, as above, clean.
- 7050 - 7060 Limestone, brown to dark brown, as above, needle-like quartz crystals, rare calcareous crystals.
Limestone, gray, as above, rare medium calcite crystal linings, Amphipora clean.
- 7060 - 7070 Limestone, brown to dark brown, pelletal, as above, rare cemented by sporite.
Trace limestone, gray, pelletal, as above, clean.
- 7080 - 7110 Limestone, brown, gray to dark brown, as above, rare bituminous, rare pelletal, Limestone, light brown to gray, rare pelletal, as above, Brachiopod fragments, rare chalky, rare calcite veins, trace stylolite filled with bituminous pyritic, trace partially filled vugs (depressions on edges), Brachiopod fragments, Amphipora, tight.
- 7110 - 7120 Limestone, brown to dark brown, as above, rare pelletic, tight.
Limestone, light brown, as above, rare pelletic, tight.
- 7120 - 7160 Limestone, light gray brown to brown, micro to fine crystalline to medium crystalline, pelletal, sporite infills, rare bituminous, rare pyritic, rare fine calcite crystals on rare edges, trace chalky, trace clear calcite veins, with bituminous inclusions, trace stylolites filled with bituminous, light gray limestone, clean.
- 7160 - 7170 Limestone, as above.
Rare dolomite, light brown gray, medium crystalline, tight and trace dolomite crystals.
- 7170 - 7180 Limestone, light brown to dark brown, micro to fine crystalline, partially pelletal, rare very fine white calcite linings, rare sporite infills, trace argillaceous, trace bituminous, rare patches of porosity filled with bitumen and fine white calcite crystals. Tight (otherwise), no show, no cut.
Trace dolomite, white, fine crystalline, bituminous around rhombs, tight, rare limy, no porosity, no show, no cut (trace white, coarse dolomite rhombs)
Trace chalky, white, soft.
- Drilling brake @ 7171' (from 8-9 min./ft. to 2-4 min./ft.) to 7182'
- 7180 - 7183 Limestone, as above, chalky in part, trace patches of vugular porosity filled with bitumen, no show, no floor, no cut.
Trace dolomite, as above.
10% chalk, white, interbedded with bitumen, very soft.

Circulate @ 7183'

30 Minute Samples:

Limestone, as above, pelletal, trace patches of vugular porosity, filled with bitumen, partially chalky, rare interbedded with bitumen, no show, no cut.
Trace dolomite, white, as above.
10% chalky, as above.

45 Minute Samples:

Limestone, as above, pelletal, trace patches of vugular porosity filled with bitumen, partially interbedded with bitumen, slightly chalky, otherwise no porosity, no show, no flor.

Trace dolomite, as above, trace medium to coarse white crystals, no porosity, no flor, rare chalky, as above.

60 Minute Circulation Sample:

Limestone, as above, partially pelletal, partially bituminous, partially chalky, rare calcite veins, sporite infills, rare vugular porosity patches filled with bitumen, otherwise hard, tight, now show, no cut.

Trace dolomite, white, very fine to fine, medium, limy in part, bitumen around rhombs, no porosity, no flor.

10% chalky, as above, soft.

- 7183 - 7190 Dolomite, light brown to brown-white, medium to coarse crystalline, trace argillaceous, bituminous, trace fair intercrystalline porosity, otherwise tight, no flor, no cut.
Rare scattered medium to coarse white dolomite rhombs.
- 7190 - 7300 Dolomite, brown to white, medium to coarse crystalline, bituminous, rare argillaceous, rare fair intercrystalline porosity, otherwise tight, no show, no cut.
Rare scattered white dolomite (medium to coarse) rhombs.
- 7200 - 7210 Dolomite, as above, bituminous, rare argillaceous, rare fair intercrystalline and trace vugular porosity, no flor, no cut.
- 7210 - 7220 Dolomite, as above, brown to white, fine to coarse crystalline, bituminous, rare fair intercrystalline porosity, otherwise tight, no flor, no cut.

(Circulate for Test)

2 Hours Circulation Sample:

Dolomite, brown to white, fine to coarse crystalline, trace pyritic, bituminous rare fair intercrystalline porosity, otherwise tight, no flor, no cut.

DST #1 Packers from 7158' to 7163'

Tested Interval: 7163-7220 Misrun

DST #2 7145-7220 GTS in 8 min. Gas TSTM, steady throughout test (3' flare)

IHP 3460 FHP 3385 ISI 2781 FSI 2765 IFP 678 FFP 2675

ISI 60 minutes VO 90 minutes FSI 60 minutes

Recovery: 250' gas cut mud
1000' mud cut salt water
4545' salt water, sulphur cut

Total: 5795'

- 7220 - 7230 Dolomite, brown, very fine to fine crystalline, bituminous, trace silty (quartz?) trace pyritic, no visible porosity, no cut, no flor.
Rare dolomite, brown to white, medium to coarse crystalline, as above, no flor no cut.

- 7230 - 7240 Dolomite, brown, fine to medium crystalline, trace bituminous, trace with fair intercrystalline and vugular porosity, otherwise tight.
Dolomite, white, interbedded with medium to coarse crystalline, tight.
- 7240 - 7250 Dolomite, brown, white, medium to coarse crystalline, partially fine crystalline, partially bituminous, rare scattered medium to coarse white clusters of dolomite rhombs, tight.
Couple of chips - clusters of quartz needle crystals between coarse white dolomite rhombs with good intercrystalline porosity, no flor, no cut.
Trace coarse calcite crystals.
Trace limestone, light brown, very fine crystalline, trace quartz needle-like crystals (caving?)
- 7250 - 7270 Dolomite, light brown to white, fine to coarse crystalline, rare bituminous
Trace pyritic, trace intercrystalline porosity, no cut, no flor, otherwise tight.
Limestone, light brown, crypto to micro crystalline, rare interbedded needle quartz crystals, tight, (cavings?)
- 7270 - 7275 Dolomite, brown to dark brown, fine to trace medium crystalline, bituminous, trace patches of intercrystalline and partial vugular porosity, tight, no cut, no flor (sucrosic appearance).
- 7275 - 7280 Dolomite, brown, dark brown, sucrosic appearance (fine crystalline, trace patches of medium crystalline), bituminous, trace pyritic, trace fair intercrystalline porosity.
- 7280 - 7290 Dolomite, light brown to brown, sucrosic appearance (mainly fine crystalline) rare medium crystalline, trace rare patches of fair intercrystalline porosity, bituminous, trace pyritic, tight, no cut, no flor.
- 7290 - 7300 Dolomite, as above, trace (few chips) medium crystalline, fair to good intercrystalline porosity, trace medium white dolomitic rhombs on some chips.
- 7300 - 7315 Dolomite, gray to dark brown, fine, vugs lined with medium crystalline, sucrosic, rare with fair to good intercrystalline porosity (some with vugular)
No flor, no cut.

Submitted by: H. T. CETINAY

April, 1970

Chronological Summary of Drill Stem Tests
(Pressure Recorder Readings)

	DST No. 1 <u>March 16/70</u>	DST No. 2 <u>March 17/70</u>
Formation	Presqu'ille	Presqu'ille
Interval	7165-7220	7145-7220
Initial Flow Time (Mins.)	-	5
Initial Shut in Time (Mins.)	-	60
Final Flow Time (Mins.)	-	90
Final Shut in Time (Mins.)	-	60
Initial Hydrostatic Press. (Psi)	-	3479
Initial Shut in press. (Psi)	-	2827
Initial flow press. (Psi)	-	747
Final Flow press. (Psi)	-	2696
Final shut in press. (Psi)	-	2801
Final hydrostatic press. (Psi)	-	3368

Flow Rate and Remarks:

- #1 - Misrun. No packer seat.
- #2 - Good air blow on preflow. Good gas blow steady throughout test TSTM.

Pipe Recovery and Remarks:

- #1 - Misrun
- #2 - 250 feet gas cut mud, 1000 feet mud cut salt water, 4545 feet salt water.

b) Casing Record:

<u>Casing Size</u> <u>(Inches)</u>	<u>Grade</u>	<u>Weight</u> <u>(lbs/ft)</u>	<u>Amount</u> <u>(feet)</u>	<u>Set at</u> <u>feet KB</u>	<u>Cement and</u> <u>additives</u>
10 3/4	K-55	40.5	778	795	700 sacks of Type A Construction Cement plus 2% CaCl ₂

c) Bit Record:

No.	Serial Number	Type	Size (Inches)	Hours Run	Depth IN	OUT	Footage	Make
1A	98502	OSC3	15	35½	Surf	514	497	Hughes
2A	97674	OSC3	"	10 3/4	514	795	281	Hughes
1	95912	OSC3	8 3/4	28½	795	2146	1351	"
2	20302	XIGJ	"	16	2146	2720	574	"
3	21871	"	"	16½	2720	3220	500	"
4	21865	"	"	41	3220	4010	790	"
5	18753	XIGJ	"	79½	4010	4893	883	"
6	21867	XIGJ	"	35½	4893	5331	438	"
7	22625	"	"	56 3/4	5331	5970	639	"
8	20714	"	"	60	5970	6678	708	"
9	751252	SHG-J	"	37½	6678	6975	297	"
10	19741	X7J	"	30½	6975	7182	207	Hughes
11	860384	SHG-J	"	14½	7182	7315	133	"

d) Mud Report:

The mud system used the following:

Gel	1337 sacks
Rapid Drill	190 sacks
Caustic	28 sacks
Soda Ash	9 sacks
Lime	1 sack

e) Deviation Record:

<u>Depth (Feet KB)</u>	<u>Deviation (Degrees)</u>
74	3/4
163	1/8
254	1/4
343	3/4
374	1/2
430	3/4
460	1/2
492	1/2
553	1/2
640	1/4
740	1/2
795	1/2
1238	1
1329	3/4
1455	1/4
1640	3/8
1769	3/8
1953	1/4
2108	1/8
2295	3/8
2514	3/8
2780	1/8
2999	1/4
3216	1 1/4
3279	1 1/4
3340	1
3370	1 1/8
3435	1 1/8
3529	1
3623	7/8
3749	3/4
3843	3/4
4938	1/4
4000	3/4
4060	1/2
4155	5/8
4245	3/4
4340	3/4
4435	3/8
4525	5/8
4621	1
4714	1
4873	1
5030	7/8
5280	15/16
5700	1/4
6175	1/8
6265	1/2
6364	15/16
6460	5/8
6553	3/16
6668	1/2

Depth (Feet KB)

Deviation (Degrees)

6745	1/8
6835	2
6869	1 7/8
6931	2 5/8
6970	2 5/8
6985	3
7015	2 5/8
7056	2 5/8
7110	2 3/4
7141	2 3/4
7315	1 3/4

f) Abandonment Plugs

<u>Plug No.</u>	<u>Date</u>	<u>Interval Feet KB</u>	<u>Amount of Cement</u>	<u>Depth at which plug felt</u>
1	March 19/70	7315-7000	170 sacks of Construction Cement plus 2% Retarder.	Not felt
2	March 20/70	850-750	65 sacks of Construction Cement.	738 feet KB

On March 20, 1970, the surface casing was cut off 3 feet below ground level, a five (5) sack plug was cemented in the top of the casing, and a steel plate was welded across the casing stub. The appropriate identification sign was erected as per Section 15(5) and (6) of the Canada Oil and Gas Drilling and Production Regulations.

g) Lost Circulation:

None encountered.

h) Report of Blowouts: None.

SECTION IV - LOGS

Three copies of each log were forwarded to the Department of Indian Affairs and Northern Development in Calgary on April 23, 1970.

<u>Date</u>	<u>Run No.</u>	<u>Interval (Ft. KB)</u>	<u>Type</u>	<u>Scale</u>
March 19/70	1	7311-795	DIL	2"
"	1	7311-6400		5"
"	1	7313-795	BHC-SGR	2"
"	1	7313-6400		5"
"	1	7300-4930	Continuous Dipmeter	5" & 60"

NOTE: All logs run by Schlumberger.

SECTION V-ANALYSIS

- a) Core Analysis: None cut
- b) Water Analysis: Three copies of water analysis for DST #2 were forwarded to the Department of Indian Affairs and Northern Development in Calgary on April 23, 1970.

Lab No. E70-664-4

- c) Gas Analysis: N.A.
- d) Oil Analysis: N.A.

SECTION VI COMPLETION SUMMARY

- a) Tubing Record: N.A.
- b) Perforation Record: N.A.
- c) Cementation Record:

<u>Plug No.</u>	<u>Date</u>	<u>Interval Feet KB</u>	<u>Amount of Cement Used</u>	<u>Depth at which plug felt</u>
1	March 19/70	7315-7000	170 sacks of Construction Cement plus 2% Retarder.	Not felt
2	March 20/70	850-750	65 sacks of Construction Cement.	738 feet KB

- d) Acidization and Fracturing Record: N.A.
- e) Back Pressure and Production Test: N.A.

Received: Mar. 26, 1970 Reported: Apr. 6, 1970 Well: Location: HB Petitot C-60
 Operator: HUDSON'S BAY OIL AND GAS COMPANY LIMITED Field or Area: N.W.T. (Wildcat)
 Elev.: K.B. 1956' Grd. 1949' Zone/Formation: Presquille
 Method of Production: D.S.T. #2 Sampled from: top of tool Sampled by: E. Brown Date: Mar. 18, 1970
 Sample Interval: 7145' - 7220'

OTHER PERTINENT DATA

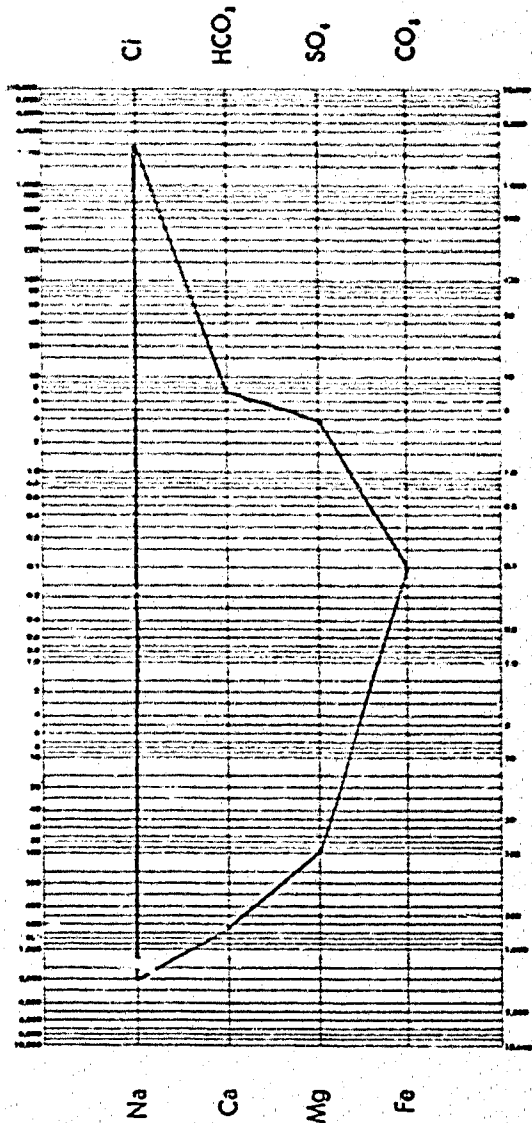
Recovered: 250' mud, 1000' mud cut salt water, 4545' sulfur cut salt water.
 Temperature at point of sampling: 169°F.

(Signed) R. Brown; R.B.O.G.

	Na	K	Ca	Mg	SO ₄	Cl	CO ₃	HCO ₃	
Mg./L	46270		12933	1142	191	97200		427	
Meq./L	2012.79		645.35	93.88	3.98	2741.04		7.00	
Meq. %	36.57		11.72	1.71	0.07	49.80		0.13	

Total Solids Mg/L: By Evaporation 176,520 Fe present Specific Gravity 1.113 @ 60°F Observed pH 6.1 @ 79 °F
 Calculated 158,164 After Ignition 155,380 H₂S present Refractive Index 1.3670 @ 25°C Resistivity 0.070 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

Sample consisted of colourless water with 5% sediment.

continued.....

CHEMICAL & GEOLOGICAL LABORATORIES LIMITED

- Page 2 -

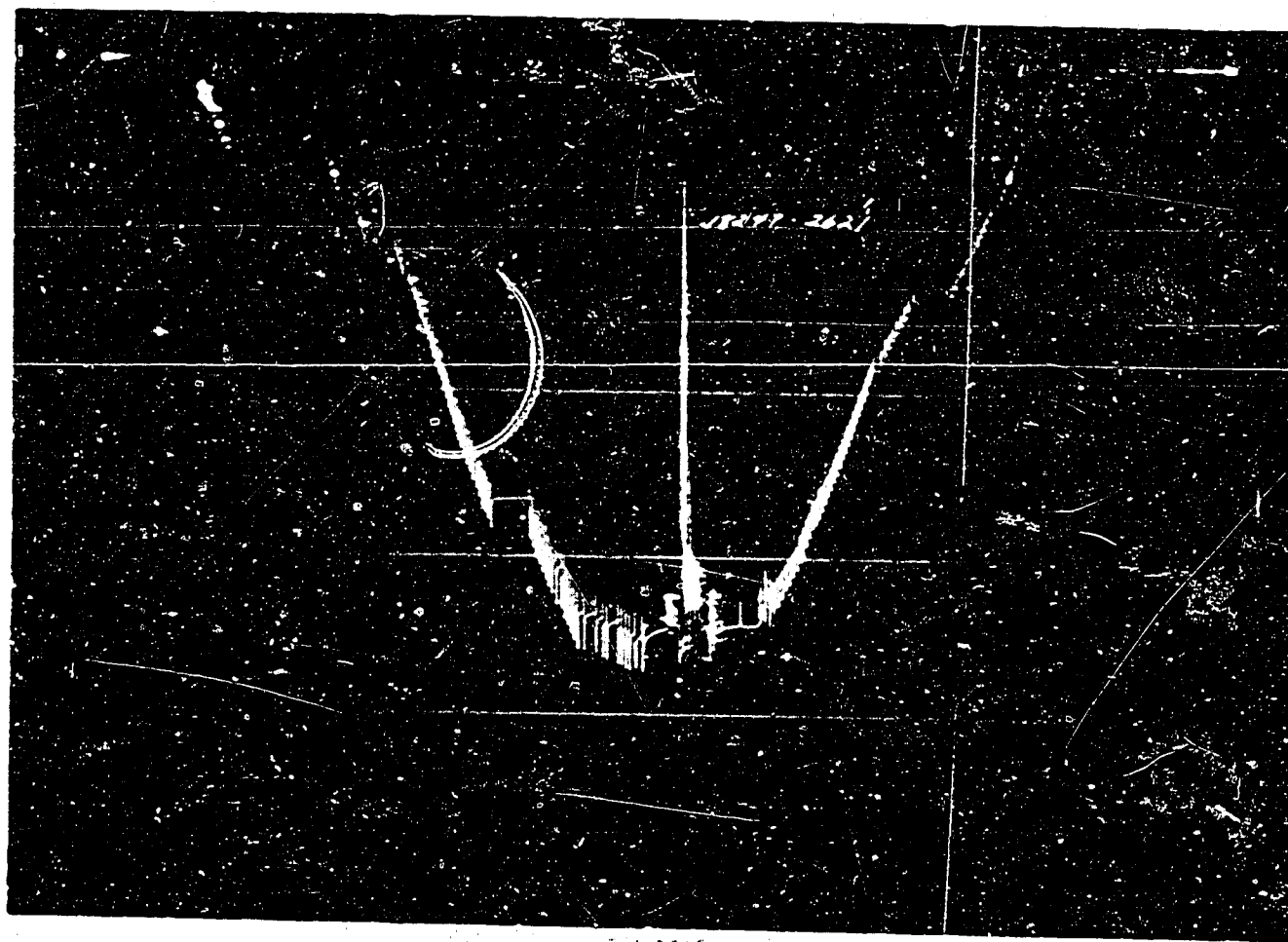
OPERATOR: HUDSON'S BAY OIL AND GAS COMPANY LIMITED REPORT NUMBER: E70-664
DATE SAMPLED: March 18, 1970 DATE RECEIVED: March 26, 1970 DATE REPORTED: April 6, 1970
Kind of Sample: Water Well: Location: HB Petitot C-60 N.W.T. (Wildcat)

LABORATORY NUMBER	SAMPLED FROM	RESISTIVITY	
		(Ohm-meters at 68°F.)	Remarks
E70-664-1	5535' above tool	0.112	Sample consisted of mud with 10% layer of colourless free water.
E70-664-2	4625' above tool	0.080	60% mud, 40% colourless free water layer. H ₂ S present.
E70-664-3	358' above tool	0.071	Colourless water with 5% sediment layer. H ₂ S present.

PRESSURE

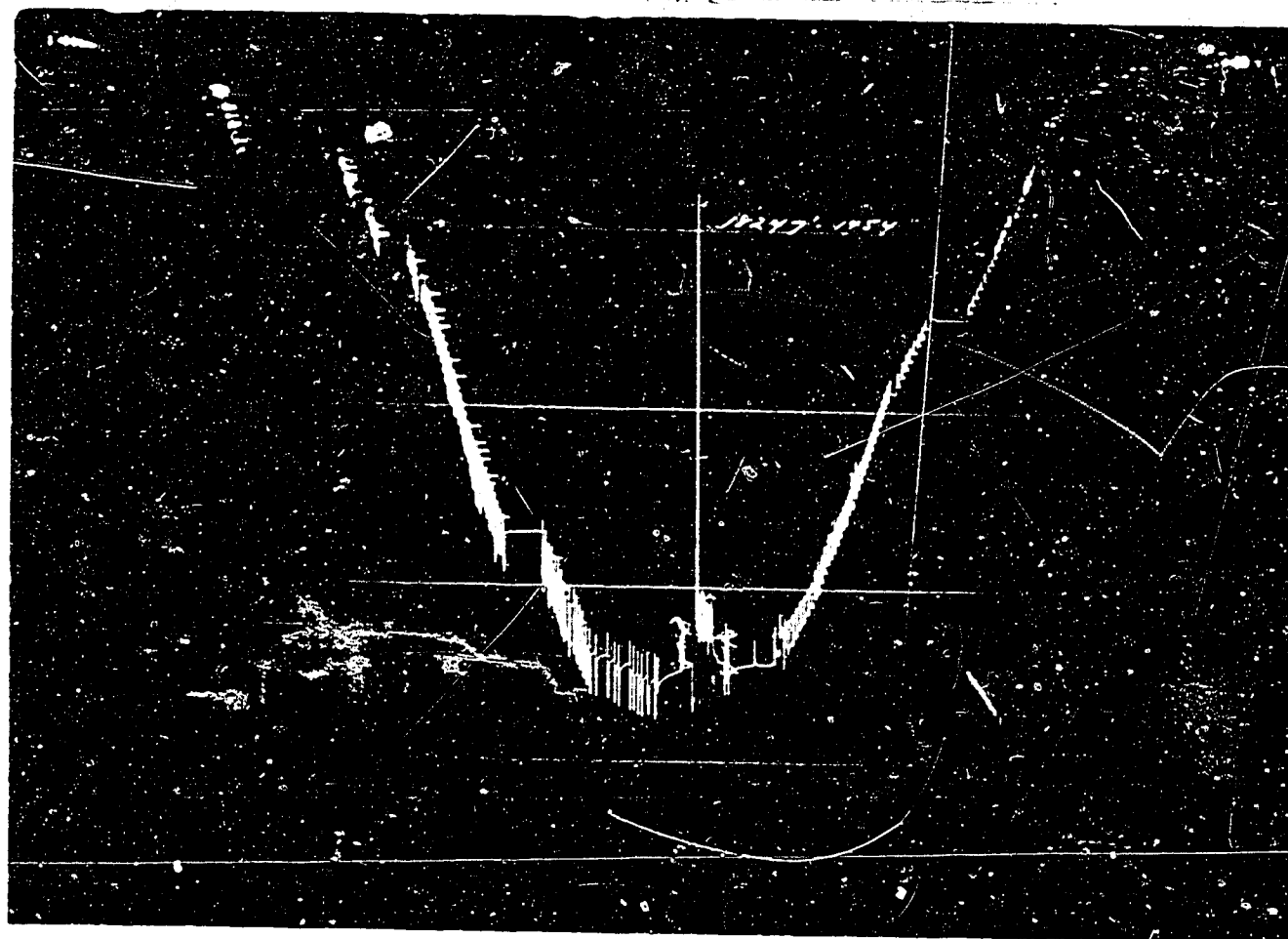
TIME

Each Horizontal Line Equal to 1000 p.s.i.



PRESSURE

TIME



Each Horizontal Line Equal to 1000 p.s.i.

Depth Top Gauge	7147	Blanked Off	No	Date	March 16, 1970	Ticket No.	T 18247
BT P.R.D. No.	2621	9570	12 Hr. Clock	Kind of Job	Dual Bottom Hole	HOWCO District	Fr. St. John
Pressure Readings	Field	Office Corrected		Tester	S. Duplessis	Witness	R. Brown
Initial Hydro Mud Pressure	3460	3411		Contractor	Nabors Drilling Limited		
Initial Closed in Pressure				K B Elevation	1956	Top Packer Depth	7165 Bottom Packer Depth
Initial Flow Pressure				Total Depth	7220	Casing Perforations	Top Bottom
Final Flow Pressure				Interval Tested	7165-7220	Formation Tested	Presqu'ile
Final Closed in Pressure				Wellbore Hole Size	8 5/8	Liner or Reelhole Size	
Final Hydro Mud Pressure	3430	3411		Size Surface Choke		Size Bottom Choke	5/8" Size and Type Well Packer 7 3/4" ES
Depth Centre Gauge		Blanked Off		Size Drill Pipe	4 1/2 FH	ID and Length Drill Collars	2 7/8" x 358'
BT P.R.D. No.			Hr. Clock	Anchors I.D.		Amount-Type of Cushion	
Pressure Readings	Field	Office Corrected		Gauge Depth Temp.	130	"F. mass. Mud "F. est. Weight	9.5 Mud Viscosity 240
Initial Hydro Mud Pressure				All Depths Measured From	K.B.	No. Folders Reproduced	5
Initial Closed in Pressure				Time Periods (Minutes)			
Initial Flow Pressure				1st Flow	Initial CIP	2nd Flow	Final CIP
Final Flow Pressure				Recovered	Feet of		
Final Flow Pressure				Recovered	Feet of		
Final Closed in Pressure				Recovered	Feet of		
Final Hydro Mud Pressure				Recovered	Feet of		
Depth Bottom Gauge	7217	Blanked Off	Yes	Oil Recovery Degrees API		Water Recovery Specific Gravity	
BT P.R.D. No.	1454	2591	12 Hr. Clock	REMARKS: Misrun. No packer seat.			
Pressure Readings	Field	Office Corrected					
Initial Hydro Mud Pressure		3430					
Initial Closed in Pressure							
Initial Flow Pressure							
Final Flow Pressure							
Final Closed in Pressure							
Final Hydro Mud Pressure		3430					

LEGAL DESCRIPTION 121 25136.70 60 09'01.74

FIELD OR AREA PETITOT RIVER

PROVINCE N.W.T.

H.R. PETITOT

Lease Name

Well No.

Tool No.

Owner's District

HUDSON'S BAY OIL & GAS CO. LTD.

Lease Owner

C-60

CALGARY

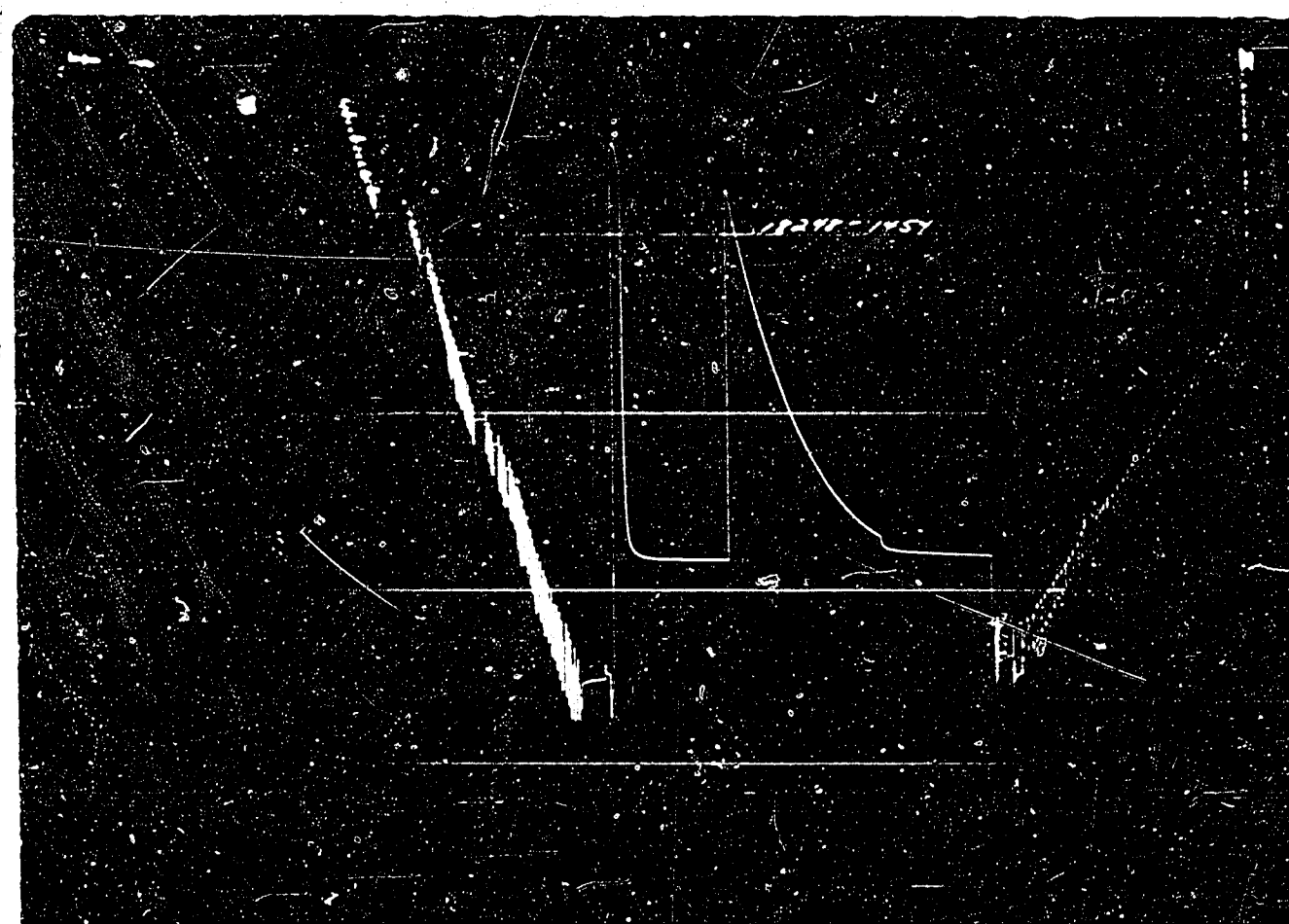
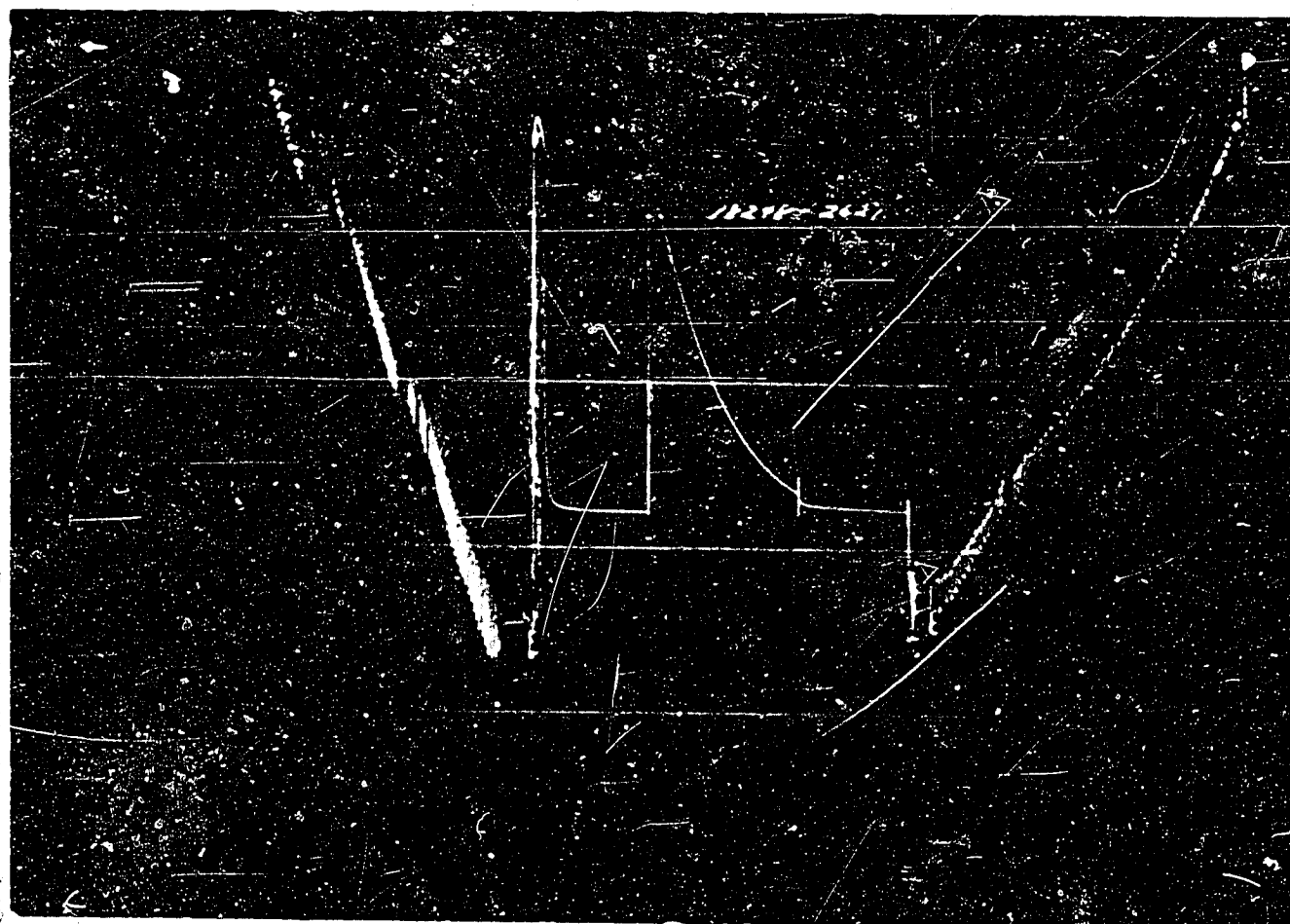
PRESSURE

TIME

Each Horizontal Line Equal to 1000 p.s.i.

PRESSURE

TIME



Each Horizontal Line Equal to 1000 p.s.i.

Depth Top Gauge	7127	Blanked Off	No	Date	March 17, 1970	Ticket No.	T 18248
BT P.R.D. No.	2021	9870 12	Mr. Clock	Kind of Job	Dual Bottom Hole	HOWCO District	Ft. St. John
Pressure Readings	Field	Office Corrected		Tester	S. Duplessis	Witness	R. Brown
Initial Hydro Mud Pressure	3460	3438		Contractor	Nabors Drilling Limited		
Initial Closed in Pressure	2781	2784		K B Elevation	1950	Top Packer Depth	7145 Bottom Packer Depth
Initial Flow Pressure	678	677		Total Depth	7220	Casing Perforations	Top Bottom
Final Flow Pressure	2675	2659		Interval Tested	7145-7220	Formation Tested	Presqu'ile
Final Closed in Pressure	2765	2766		WORK Hole Size	8 5/8	Liner or Rathole Size	
Final Hydro Mud Pressure	3385	3345		Size Surface Choke		Size Bottom Choke	5/8" Size and Type Wall Packer 7 3/4" ES
Depth Centre Gauge		Blanked Off		Size Drill Pipe	4 1/2 EH	ID and Length Drill Collars	2 7/8" x 358'
BT P.R.D. No.			Mr. Clock	Anchor I.D. Size	O.D. 5"	Amount-Type of Cushion	
Pressure Readings	Field	Office Corrected		Gauge Depth Temp.	130	"F meas. Mud of wt. Weight	9.5 Mud Viscosity 230
Initial Hydro Mud Pressure				All Depths Measured From	K.R.	No. Folders Reproduced	5
Initial Closed in Pressure				Time Periods (Minutes)			
Initial Flow Pressure				1st Flow	5	Initial CIP	60 2nd Flow 90 Final CIP 60
Final Flow Pressure				Recovered	250	Feet of Gas Cut Mud	
Final Closed in Pressure				Recovered	1000	Feet of Mud Cut Salt Water	
Final Hydro Mud Pressure				Recovered	4545	Feet of Salt Water	
Final Hydro Mud Pressure				Recovered		Feet of	
Depth Bottom Gauge	7217	Blanked Off	Yes	Oil Recovery Degrees API		Water Recovery Specific Gravity	
BT P.R.D. No.	1454	2591 12	Mr. Clock	REMARKS: Tool open 2:25 pm with good air blow.			
Pressure Readings	Field	Office Corrected		Shut in at 2:30 pm. Tool open at 3:30 pm			
Initial Hydro Mud Pressure		3479		with good gas blow immediately upon opening			
Initial Closed in Pressure		2827		tool. Steady throughout, but too small to			
Initial Flow Pressure		747		measure. Shut in at 5:00 pm. Pulled loose			
Final Flow Pressure		2696		at 6:00 pm.			
Final Closed in Pressure		2801					
Final Hydro Mud Pressure		3368					

LEGAL DESCRIPTION 121 25'36.70

FIELD OR AREA PETITOT RIVER

PROVINCE N.W.T.

H.B. PETITOT

Lease Name

C-60

Well No.

2

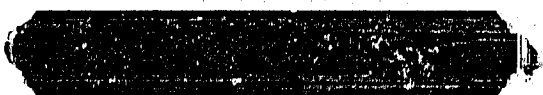
WILSON'S BAY OIL & GAS CO. LTD.

Lease Owner

A. B. Pettit
C-60

HB PETITOT C-60 - Tour Reports

D.A. 419



HB Petitot C-60

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME		DATE	
H206 PETROL C-60		Mar. 20 - 70	
CONTRACTOR		LDG. FLG. TO KB	
NABORS DRILLING LTD.		1500	
RIG NO.		K. B. ELEV.	
6		1956	
TYPE RIG		GRD. ELEV.	
NATIONAL 50 A		1939	
TOOL PUSHER		CASING RECORD	
E. PRICE		795	
12 P.M. TO 8 A.M.		8 A.M. TO 4 P.M.	
8 A.M. TO 4 P.M.		4 P.M. TO 12 P.M.	
DEPTH		START	
7315		7315	
PROGRESS		PROGRESS	
END		END	
BIT RECORD		BIT RECORD	
NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN	
DRILLING DATA		DRILLING DATA	
LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT		LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT	
DRILLING STRING		DRILLING STRING	
SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.		SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.	
MUD RECORD		MUD RECORD	
TYPE OF MUD WEIGHT VIS WL PH FC		TYPE OF MUD WEIGHT VIS WL PH FC	
ADDITIVES		ADDITIVES	
Coring		Coring	
NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION	
SURVEY		SURVEY	
DEG. AT FT. DEG. AT FT. DEG. AT FT.		DEG. AT FT. DEG. AT FT. DEG. AT FT.	
DRILL STEM TESTS		DRILL STEM TESTS	
NO. INTERVAL FORMATION		NO. INTERVAL FORMATION	
VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)	
GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.	
OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.	
RECOVERY:		RECOVERY:	
PRESS-URES IHP FHP IFP FFP ISIP FSIP		PRESS-URES IHP FHP IFP FFP ISIP FSIP	
REMARKS INCLUDING:		REMARKS INCLUDING:	
CEMENTING		CEMENTING	
LOGGING		LOGGING	
PERFORATING		PERFORATING	
ACIDIZING		ACIDIZING	
FRACTURING		FRACTURING	
PLUGS		PLUGS	
FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK	
1200 1230 TRIP OUT 12 SIDDS		500 400 W.O.C.	
1230 100 RIG UP TO LAY DOWN PIPE		RIG OUT B.O.P.	
100 515 LAY DOWN PIPE		DRAIN PUMPS.	
515 545 REPLACE BROKEN TONG HANGER		CLEAN TANKS.	
545 645 LINE			
645 700 RUN IN 11 STD & LAY SAME DOWN			
700 715 RUN IN 9 SIDDS			
715 750 RIG UP TO RUN PLUG			
750 800 RUN PLUG			
DRILLER		DRILLER	
NO. HELPERS 4		NO. HELPERS 4	
DRILLER		DRILLER	
NO. HELPERS		NO. HELPERS	

DATE MAR 19 1960

WELL NAME H806 PETITOT E-60										LDG. FLG. TO KB 1500										CASING RECORD		DEPTH 795	SIZE 10 3/4	WEIGHT 40.5	GRADE K-SS	CEMENT 700 SX	ACID	PLUG DOWN	DATE MAR 19 / 20		COMPANY SUPERVISOR R. Brown.																												
CONTRACTOR NABORS DRILL LTD										TYPE RIG NATIONAL 50 A.										K. B. ELEV. 1956		GRD. ELEV. 1939																																					
RIG NO. 6										TOOL PUSHER E. PRICE																																																	
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																																							
DEPTH										START 7315 PROGRESS END 7311										START PROGRESS END 7315										START PROGRESS END																													
BIT RECORD										NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN										NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN										NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN																													
LOGGING																																																											
DRILLING DATA										LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT										LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT										LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT																													
DRILLING STRING										SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.										SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.										SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.																													
MUD RECORD										TYPE OF MUD WEIGHT VIS WL PH FC										TYPE OF MUD WEIGHT VIS WL PH FC										TYPE OF MUD WEIGHT VIS WL PH FC																													
ADDITIVES										ADDITIVES										ADDITIVES																																							
CORING										NO. FROM TO RECOVERED FORMATION										NO. FROM TO RECOVERED FORMATION										NO. FROM TO RECOVERED FORMATION																													
SURVEY										DEG. AT FT. DEG. AT FT. DEG. AT FT.										DEG. AT FT. DEG. AT FT. DEG. AT FT.										DEG. AT FT. DEG. AT FT. DEG. AT FT.																													
DRILL STEM TESTS										NO. INTERVAL FORMATION										NO. INTERVAL FORMATION										NO. INTERVAL FORMATION																													
										VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)										VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)										VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)																													
										GAS TO SURFACE MIN. @ MCF/D MAX.										GAS TO SURFACE MIN. @ MCF/D MAX.										GAS TO SURFACE MIN. @ MCF/D MAX.																													
										OIL TO SURFACE MIN. @ BBL/D MAX.										OIL TO SURFACE MIN. @ BBL/D MAX.										OIL TO SURFACE MIN. @ BBL/D MAX.																													
										RECOVERY:										RECOVERY:										RECOVERY:																													
										PRESS-URES IMP FHP IFP FFP ISIP FSIP										PRESS-URES IMP FHP IFP FFP ISIP FSIP										PRESS-URES IMP FHP IFP FFP ISIP FSIP																													
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										FROM TO DESCRIPTION OF WORK										FROM TO DESCRIPTION OF WORK										FROM TO DESCRIPTION OF WORK																													
										12:00 12:15 Rig up To LOG										8:00 12:30 LOG w/ SHLUMBERGER										4:00 4:15 Rig, SERV. v BoPs 1/4																													
										12:15 8:00 LOG w/ SHLUMBERGER										12:30 100 LAY DOWN SHLUMBERGER										4:15 5:45 LAY DOWN COLLARS 1 1/2																													
										D.H. Log 745-7515 2"										100 RUN IN W/D. PIPE +										5:45 FINISH RUNNING IN W/ PIPE																													
										D.H.C Service 745-7515 2"										4:00 DOWN D. COLLAR.										8:00 + PICK UP 23 MORE SINGLES 2 1/4																													
										Cement Plug 745-7515 2"																				8:00 CIRCULATE To Run plug																													
										Cement Plug 745-7515 2"																				10:30 11:15 Plug #1 2 1/2																													
										Cement Plug 745-7515 2"																				11:15 12:00 Hoist 9 STOPS 3/4																													
																														8																													
DRILLER J. Higgins										NO. HELPERS 4										DRILLER P. Heggen										NO. HELPERS 4										DRILLER L. Shannon										NO. HELPERS 4									

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE *Mar 18 / 70.*

WELL NAME <i>H806 PETITOT C-60</i>										LDG. FLG. TO KB <i>1500</i>										CASING RECORD	DEPTH <i>795</i>	SIZE <i>10 3/4</i>	WEIGHT <i>40.5</i>	GRADE <i>1<55</i>	CEMENT <i>700 Sx</i>	ACID	PLUG DOWN	COMPANY SUPERVISOR <i>[Signature]</i>										
CONTRACTOR <i>NABORS DRILL LTD</i>										TYPE RIG <i>NATIONAL 50 A</i>																			K. B. ELEV. <i>1956</i>									
RIG NO. <i>6</i>										TOOL PUSHER <i>E. PRICE</i>																			GRD. ELEV. <i>1939</i>									
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																		
DEPTH START <i>7220</i> PROGRESS <i>25</i> END <i>7245</i>										START <i>7245</i> PROGRESS <i>70</i> END <i>7315</i>										START <i>7315</i> PROGRESS <i>00</i> END <i>7315</i>																		
BIT RECORD										BIT RECORD										BIT RECORD																		
DRILLING DATA										DRILLING DATA										DRILLING DATA																		
DRILLING STRING										DRILLING STRING										DRILLING STRING																		
MUD RECORD										MUD RECORD										MUD RECORD																		
CORING										CORING										CORING																		
SURVEY										SURVEY										SURVEY																		
DRILL STEM TESTS										DRILL STEM TESTS										DRILL STEM TESTS																		
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS																		
DRILLER <i>[Signature]</i> NO. HELPERS <i>4</i>										DRILLER <i>[Signature]</i> NO. HELPERS <i>4</i>										DRILLER <i>[Signature]</i> NO. HELPERS <i>4</i>																		

DATE MARCH 16 1970.

WELL NAME HBOG PETITOT C-60										DATE MARCH 16 1970									
CONTRACTOR LABORS DRUG LTD										COMPANY SUPERVISOR R. BROWN									
RIG NO. 6										CASING RECORD									
TYPE RIG NATIONAL SDA										DEPTH 795 SIZE 10 3/4 WEIGHT 40.5 GRADE K-55 CEMENT 700 SX ACID 2% CaCl2 PLUG DOWN									
TOOL PUSHER E. PRICE										K. B. ELEV. 1956 GRD. ELEV. 1939									
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.									
4 P.M. TO 12 P.M.																			
DEPTH										DEPTH									
BIT RECORD										BIT RECORD									
DRILLING DATA										DRILLING DATA									
DRILLING STRING										DRILLING STRING									
MUD RECORD										MUD RECORD									
CORING										CORING									
SURVEY										SURVEY									
DRILL STEM TESTS										DRILL STEM TESTS									
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS									
DRILLER										DRILLER									
NO. HELPERS										NO. HELPERS									

NO. HELPERS 4

DATE MAR. 14 - 70

WELL NAME <u>H.R.O.G. PETIT - C-60</u>										LDG. FLO. TO KB <u>1500</u>										CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR			
CONTRACTOR <u>NABORS DRILLING LTD</u>										TYPE RIG <u>NAT. 50-A</u>										K. B. ELEV. <u>1956</u>		795		10 3/4		40.5		K.55		700 SKS		9:15 PM.		<u>2-18-70</u>					
RIG NO. <u>6</u>										TOOL PUSHER <u>L. PRICE</u>										GRD. ELEV. <u>1939</u>								2% CAL											
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																			
DEPTH										START <u>7075</u> PROGRESS <u>49</u> END <u>7124</u>										START <u>7124</u> PROGRESS <u>55</u> END <u>7179</u>										START <u>7179</u> PROGRESS <u>3</u> END <u>7182</u>									
BIT RECORD										NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN										NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN										NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN									
										10 19741 X75 8 3/4 6975 7124 149 23.										10 19741 X75 8 3/4 6975 7179 204										10 19741 X75 8 3/4 6975 7182 207 30 1/4									
																														11 860384 SH63 8 3/4									
DRILLING DATA										LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT										LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT										LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT									
										5 1/2 X 18 1400 60 35-32										5 1/2 X 15 1400 60 32-38										5 1/2 X 15 1400 60 35									
DRILLING STRING										SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.										SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.										SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.									
										4 1/2 635889 3154 716.06 13.00 3.78										4 1/2 716.06 3.78										4 1/2 6421.83 716.06 41 3.78									
MUD RECORD										TYPE OF MUD WEIGHT VIS WL PH FC										TYPE OF MUD WEIGHT VIS WL PH FC										TYPE OF MUD WEIGHT VIS WL PH FC									
										9.6 200 7.8 9.0 2 3/32										GEL 800 9.6 205 6.8 105 2 3/32										GEL									
										9.5 195 7.8 9.0 3 3/32										WATER 9.5 195 6.8 9.5 2 3/32																			
										ADDITIVES CAUSTIC 2 SKS GEL 15 SKS										ADDITIVES GEL - 19 SX WATER - 8 1/4" STREAM										ADDITIVES 8 SX GEL									
CORING										NO. FROM TO RECOVERED FORMATION										NO. FROM TO RECOVERED FORMATION										NO. FROM TO RECOVERED FORMATION									
SURVEY										5/8 DEG. AT 7015 FT. 5/8 DEG. AT 7056 FT. DEG. AT FT.										2 3/4 DEG. AT 7110 FT. DEG. AT FT. DEG. AT FT.										2 3/4 DEG. AT 7142 FT. DEG. AT FT. DEG. AT FT.									
DRILL STEM TESTS										NO. INTERVAL FORMATION										NO. INTERVAL FORMATION										NO. INTERVAL FORMATION									
										VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)										VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)										VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)									
										GAS TO SURFACE MIN. @ MCF/D MAX.										GAS TO SURFACE MIN. @ MCF/D MAX.										GAS TO SURFACE MIN. @ MCF/D MAX.									
										OIL TO SURFACE MIN. @ BBL/D MAX.										OIL TO SURFACE MIN. @ BBL/D MAX.										OIL TO SURFACE MIN. @ BBL/D MAX.									
										RECOVERY:										RECOVERY:										RECOVERY:									
										PRESS-URES IHP FHP IFP FFP ISIP FSI										PRESS-URES IHP FHP IFP FFP ISIP FSI										PRESS-URES IHP FHP IFP FFP ISIP FSI									
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										FROM TO DESCRIPTION OF WORK										FROM TO DESCRIPTION OF WORK										FROM TO DESCRIPTION OF WORK									
										12 00 1 30 DRLG 1 1/2 8 00 11 45 3 3/4 DRILL										4 00 4 15 DRILL																			
										1 30 2 15 SAND LINE SURVEY 3 3/4 11 45 12 00 1/4 RIG SERVICE 4 1/2" RAMS										4 15 5 15 CIR. SAMPLE FOR GEO.																			
										2 15 2 30 RIG. C.K. 1 1/4 12 00 12 45 3/4 SURVEY										5 15 5 45 SURVEY																			
										2 30 6 30 DRLG 4 12 45 4 00 3 1/4 DRILL										5 45 SAND LINE PARTED ON SPLICE																			
										6 30 7 00 SAND LINE SURVEY 1 1/2										5 45 SURVEY - LINE IN PIPE																			
										7 00 8 00 DRLG 8										5 45 8 30 TRIP OUT																			
																				8 30 9 15 RECOVER SAND LINE & SURVEY																			
																				9 15 10 45 TRIP OUT																			
																				10 45 11 00 CHANGE BIT. CLOSE BLIND RAMS																			
																				11 00 12 00 TRIP IN.																			
DRILLER <u>L. Shannon</u> NO. HELPERS <u>4</u>										DRILLER <u>Shannon</u> NO. HELPERS <u>4</u>										DRILLER <u>P. McGraw</u> NO. HELPERS <u>4</u>																			

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME		H.B.O.G. PETITOT - C-60		LDG. FLG. TO KB		1500		DATE		MAR. 13 - 70																																	
CONTRACTOR		LABORS DRG. LTD.		TYPE RIG		NAT. 59-A.		K. B. ELEV.		1956																																	
RIG NO.		6		TOOL PUSHER		L. PRIGE		GRD. ELEV.		1939																																	
		12 P.M. TO 8 A.M.				8 A.M. TO 4 P.M.				4 P.M. TO 12 P.M.																																	
DEPTH		START 6975		PROGRESS 9		END 6984		START 6894		PROGRESS 43		END 7027		START 7027		PROGRESS 48		END 7075																									
BIT RECORD		NO. 10		SERIAL NO. 19741		TYPE X7		SIZE 8 3/4		FROM 6975		TO 6984		FOOTAGE 9		HRS. RUN 2		NO. 10		SERIAL NO. 19741		TYPE X7-5		SIZE 8 3/4		FROM 6984		TO 7075		FOOTAGE 100		HRS. RUN 16 1/2											
DRILLING DATA		LINER SIZE 5 1/2 X 15		PUMP PRESSURE 1450		TABLE SPEED 46-58		WEIGHT ON BIT 25-m. 30.		LINER SIZE 5 1/2 X 14		PUMP PRESSURE 1400		TABLE SPEED 58		WEIGHT ON BIT 30-35m.		LINER SIZE 5 1/2 X 15		PUMP PRESSURE 1550		TABLE SPEED 60		WEIGHT ON BIT 30-35																			
DRILLING STRING		SIZE 4 1/2		STANDS 616998		SINGLES 6309		DRILL COL. 716.06		KELLY IN 31.00		CORE BBL. 378.		SIZE 4 1/2		STANDS 6295.92		SINGLES 716.06		DRILL COL. 11.24		KELLY IN 3.78		CORE BBL. 4 1/2		STANDS 6327.50		SINGLES 716.06		DRILL COL. 28		KELLY IN 3.78											
MUD RECORD		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC							
		AIR - GUT.												GEL		800 9.6		195		7.6		9.0		2/32		GEL		400 9.6		290		7.5		10.0		3/32							
		ADDITIVES												ADDITIVES		GEL 14 5K										ADDITIVES		WATER															
CORING		NO.		FROM		TO		RECOVERED		FORMATION		NO.		FROM		TO		RECOVERED		FORMATION		NO.		FROM		TO		RECOVERED		FORMATION													
SURVEY		2 1/2 DEG. AT 6970 FT.		DEG. AT		FT.		DEG. AT		FT.		3 DEG. AT 6985 FT.		DEG. AT		FT.		DEG. AT		FT.		2 1/2 DEG. AT 7015 FT.		DEG. AT		FT.		DEG. AT		FT.													
DRILL STEM TESTS		NO.		INTERVAL		FORMATION		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		NO.		INTERVAL		FORMATION		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		NO.		INTERVAL		FORMATION													
		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.													
		OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.													
		RECOVERY:						RECOVERY:						RECOVERY:						RECOVERY:						RECOVERY:																	
		PRESS-URES		IHP		FHP		IFP		FFP		ISIP		FSIP		PRESS-URES		IHP		FHP		IFP		FFP		ISIP		FSIP		PRESS-URES		IHP		FHP		IFP		FFP		ISIP		FSIP	
REMARKS INCLUDING:		FROM		TO		DESCRIPTION OF WORK		FROM		TO		DESCRIPTION OF WORK		FROM		TO		DESCRIPTION OF WORK																									
		1200		115		FINISH OUT.		114		800		1000		DRILL		2		400		415		RIG SERV. HYDRIL SWIVEL																					
		115		130		CHANGED BITS & BLIND RAMS		114		1000		1015		RIG SERVICE CLOSE 4 1/2" RAMS		1/4		415		830		DRILL 8 3/4" HOLE																					
		130		145		RIG. C.K.		114		1015		300		DRILL		43 1/4		830		900		SURVEY																					
		145		430		RIG IN + BRK GIRC @ 4750. 2 3/4		300		330		SURVEY		1/2		900		1200		DRILL																							
		430				START CLEANING 155' OFF		330		400		DRILL																															
				600		BTM - 30' FILL		1 1/2																																			
		600		800		DRILL		2																																			
CEMENTING																																											
LOGGING																																											
PERFORATING																																											
ACIDIZING																																											
FRACTURING																																											
PLUGS																																											
DRILLER		L. Shannon		NO. HELPERS		4		DRILLER		L. Shannon		NO. HELPERS		4		DRILLER		L. Shannon		NO. HELPERS		4		DRILLER		L. Shannon		NO. HELPERS		4		DRILLER		L. Shannon		NO. HELPERS		4					

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME		DATE								
H.B.O.G. PETITOT - C-60		MAR-12-1970								
CONTRACTOR	LDG. FLG. TO KB	CASING	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY
NABORS DRILLING LTD.	1500	RECORD	795	10 3/4	40.5	K.55	700 SK.		9:15 P.M.	SUPERVISOR
RIG NO. 6	TYPE RIG	K. B. ELEV.								
	JAT-50-A	1956								
	TOOL PUSHER	GRD. ELEV.								
	P. PRICE	1939								
12 P.M. TO 8 A.M.										
8 A.M. TO 4 P.M.										
4 P.M. TO 12 P.M.										
2% CAL 2-18-70 R. HARAWA										
DEPT. START 6894 PROGRESS 46 END 6940										
DEPT. START 6940 PROGRESS 35 END 6975										
DEPT. START 6975 PROGRESS 0 END 6975										
BIT RECORD										
NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN										
9 751252 SHG 8 3/4 6678 6940 256 31										
9 751252 SHG 8 3/4 6678 6975 297 37 1/4										
9 751252 SHG 8 3/4 6678 6975 297 37 1/4										
DRILLING DATA										
LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT										
5 1/2 X 15 1000 60 28 m.										
5 1/2 975 60 35 m.										
5 1/2 X 15 975 60 35										
DRILLING STRING										
SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.										
4 1/2 616998 3154 716.06 18- 3.78										
4 1/2 6233.07 716.06 22.09 3.78										
4 1/2 6233.07 716.06 22.09 3.78										
MUD RECORD										
TYPE OF MUD WEIGHT VIS WL PH FC										
9.6 10.5 8.2 9.5 2 1/2										
9.5 13.5 8.2 9.5 2 1/2										
GEL 8:AM. 9.6 9.0 7.6 10.5 2 1/2										
1200 10.5 7.6 9.5 2 1/2										
GEL 32 sacks										
GEL 32 sacks										
ADDITIVES WATER										
GEL 3 1/2 SLS.										
CAUSTIC 2 SLS.										
ADDITIVES 15 SX GEL										
CORING										
NO. FROM TO RECOVERED FORMATION										
SURVEY										
20 DEG. AT 6835 FT. 17 1/8 DEG. AT 6869 FT. DEG. AT FT.										
2 1/8 DEG. AT 6932 FT. DEG. AT FT. DEG. AT FT.										
DRILL STEM TESTS										
NO. INTERVAL FORMATION										
VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)										
GAS TO SURFACE MIN. @ MCF/D MAX.										
OIL TO SURFACE MIN. @ BBL/D MAX.										
RECOVERY:										
PRESS-URES IHP FHP IFP FFP ISIP FSIP										
REMARKS INCLUDING:										
CEMENTING										
LOGGING										
PERFORATING										
ACIDIZING										
FRACTURING										
PLUGS										
FROM TO DESCRIPTION OF WORK										
12:00 1:00 DRILL										
1:00 1:45 SURVEY @ 6869 17 1/8										
1:45 2:00 RIG. C.K.										
2:00 8:00 DRILL										
8:00 11:45 DRILL										
11:45 12:00 RIG SERVICE CLOSE 4 1/2" RAMS 1/4										
12:00 12:30 SURVEY										
12:30 3:00 DRILL										
3:00 3:15 DROP SURVEY										
3:15 4:00 TRIP OUT TIGHT.										
4:00 4:10 RIG SERV. B.O.P. ✓										
4:10 4:30 CIR. CONDITION HOLE										
4:30 4:45 PULL 1 STD. TIGHT HOLE										
4:45 5:45 CIR. COND. HOLE										
5:45 7:30 WORK TIGHT HOLE BRK. CIR.										
7:30 9:30 CIR. COND. MUD TO HIGHER VIS.										
9:30 12:00 TRIP OUT SLOW.										
DRILLER L. Shannon NO. HELPERS 4										
DRILLER H.A. Dyjia NO. HELPERS 4										
DRILLER P. Heggen NO. HELPERS 4										

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MAR-11-1970

WELL NAME	H.B.O.G. PETITOT-6-60	LDG. FLG. TO KB	1500	CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	FLUG DOWN	COMPANY SUPERVISOR	
CONTRACTOR	NABORS DRILLING LTD.	TYPE RIG	NAT-50-A		K. B. ELEV.	795	10 3/4	40.5	K.55	700 SIKS			9:15 P.M.
RIG NO.	6	TOOL PUSHER	A. PRICE		GRD. ELEV.					2% CMC			2-18-70

	12 P.M. TO 8 A.M.								8 A.M. TO 4 P.M.								4 P.M. TO 12 P.M.																																																																		
DEPTH	START 6689 PROGRESS 64 END 6753								START 6753 PROGRESS 84 END 6837								START 6837 PROGRESS 57 END 6894																																																																		
BIT RECORD	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN																																																											
	9	751252	SHG	8 3/4	6678	6753	75	9 1/2	9	751252	SHG	8 3/4	6678	6837	159	16 3/4	9	751252	SHG	8 3/4	6678	6894	216	24																																																											
DRILLING DATA	LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT																																																												
	5 1/2 X 15		1000		60		38-45 m.		5 1/2 X 15		1000		60		45		5 1/2 X 15		1000		60		45-32-28																																																												
DRILLING STRING	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.							SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.							SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.																																																					
	4 1/2	59	158	31	50	716.06	31.00	3.78							4 1/2	60	74.07	716.06	39.09	3.78							4 1/2	61	40.17	716.09	34.	3.78																																																			
MUD RECORD	TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC																																																
			12:00 4:00		9.5		160		7.2		9.5		2/32		GEL		12:00 4:00		9.5		160		7.2		10.5		2/32		GEL		500		9.5		105		7.5		10.0		2/32																																										
					9.5		110		7.2		9.5		3/32						9.5		100		7.2		10.0		2/32						11.00		9.5		115		7.5		10.0		2/32																																								
	ADDITIVES																												ADDITIVES																												ADDITIVES																										
																												GEL 14 SX																												GEL 10 SX																											
																												CAUSTIC 1 SX																												WATER																											
CORING	NO.	FROM		TO		RECOVERED		FORMATION		NO.	FROM		TO		RECOVERED		FORMATION		NO.	FROM		TO		RECOVERED		FORMATION																																																									
SURVEY	1/2 DEG. AT 6668 FT.		DEG. AT FT.		DEG. AT FT.		1/8 DEG. AT 6745 FT.		DEG. AT FT.		DEG. AT FT.		DEG. AT FT.		DEG. AT FT.		DEG. AT FT.		DEG. AT FT.		DEG. AT FT.		DEG. AT FT.																																																												
DRILL STEM TESTS	NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION																																																																		
	VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)																																																																		
	GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.																																																																		
	OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.																																																																		
	RECOVERY:						RECOVERY:						RECOVERY:																																																																						
	PRESS-URES		IHP FHP IFP FFP ISIP FSIP				PRESS-URES		IHP FHP IFP FFP ISIP FSIP				PRESS-URES		IHP FHP IFP FFP ISIP FSIP																																																																				
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	FROM	TO	DESCRIPTION OF WORK		FROM	TO	DESCRIPTION OF WORK		FROM	TO	DESCRIPTION OF WORK																																																																								
	12:00	12:15	Rig. C.K.		1/4 8:00	9:00	DRILL		4:00	4:15	RIG SEAV. HYDRAIL SWIVEL																																																																								
	12:15	8:00	DRILL		7/4 9:00	9:15	RIG SERVICE CLOSE 4 1/2" RAMS		4:15	7:30	DRILL																																																																								
					8 9:15	9:45	SURVEY		7:30	8:00	SURVEY @ 6835 2"																																																																								
					9:45	4:00	DRILL		8:00	12:00	DRILL																																																																								
		TALLY OUT 6691.25																																																																																	
		PIPE TALLY 6689.45																																																																																	
		1.80 DIFF.																																																																																	
DRILLER		L. Shannon		NO. HELPERS		4		DRILLER		B. Bujun		NO. HELPERS		4		DRILLER		P. Negren		NO. HELPERS		4																																																													

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME <u>H.B.O.G. - PETITOT-C-60</u>										DATE <u>MAR-16-1970</u>																																																	
CONTRACTOR <u>NABORS DRILL LTD</u>										TYPE RIG <u>JAT-50-A</u>										LDG. FLG. TO KB <u>1500</u>																																							
RIG NO. <u>6</u>										TOOL PUSHER <u>6 PRICE</u>										K. B. ELEV. <u>1956</u>																																							
																				GRD. ELEV. <u>1939</u>																																							
										12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																													
DEPTH										START <u>6578</u> PROGRESS <u>79</u> END <u>6657</u>										START										PROGRESS										END																			
BIT RECORD										NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN										NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN										NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN										NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN																			
										8 20714 X195 8 3/4 5970 6657 687.5 7 1/2										8 20714 X165 8 3/4 5970 6678 708 60										8 20714 X165 8 3/4 5970 6678 708 60										9 751252 SHG 5 8 3/4 6678 6689 11 1 3/4																			
DRILLING DATA										LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT										LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT										LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT										LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT																			
										5 1/2 X 15 1050 60 35m-38-40										5 1/2 X 15 1000 60 40m										5 1/2 X 15 1050 60 35										5 1/2 X 15 1050 60 35																			
DRILLING STRING										SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.										SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.										SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.										SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.																			
										4 1/2 5876.59 3142 716.06 1900. 13.40										4 1/2 5939.10 716.06 9.44 13.40										4 1/2 5939.10 716.06 20.41 3.78										4 1/2 5939.10 716.06 20.41 3.78																			
MUD RECORD										TYPE OF MUD WEIGHT VIS WL PH FC										TYPE OF MUD WEIGHT VIS WL PH FC										TYPE OF MUD WEIGHT VIS WL PH FC										TYPE OF MUD WEIGHT VIS WL PH FC																			
										GEL 9.4 160 7.2 9.0 7/32										GEL 9.4 107 7.6 9.0 7/32										GEL										GEL																			
										RAPIDRIL 9.4 125 7.6 9.5 7/32																																																	
										ADDITIVES GEL 16 SK. D. RET. 9.4 SHAKER 9.5										ADDITIVES GEL 35 SX																																							
										RAPIDRIL D. DIS 9.8																																																	
										CAUSTIC 9 SK. D. RUN-8-HRS. - 360-TOTAL																																																	
CORING										NO. FROM TO RECOVERED FORMATION										NO. FROM TO RECOVERED FORMATION										NO. FROM TO RECOVERED FORMATION										NO. FROM TO RECOVERED FORMATION																			
SURVEY										5/8 DEG. AT 6460 FT. 5/16 DEG. AT 6553 FT. DEG. AT FT.										DEG. AT 6675 FT. 1/2 DEG. AT 6668 FT. DEG. AT FT.										DEG. AT FT. DEG. AT FT. DEG. AT FT.										DEG. AT FT. DEG. AT FT. DEG. AT FT.																			
DRILL STEM TESTS										NO. INTERVAL FORMATION										NO. INTERVAL FORMATION										NO. INTERVAL FORMATION										NO. INTERVAL FORMATION																			
										VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)										VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)										VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)										VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)																			
										GAS TO SURFACE MIN. @ MCF/D MAX.										GAS TO SURFACE MIN. @ MCF/D MAX.										GAS TO SURFACE MIN. @ MCF/D MAX.										GAS TO SURFACE MIN. @ MCF/D MAX.																			
										OIL TO SURFACE MIN. @ BBL/D MAX.										OIL TO SURFACE MIN. @ BBL/D MAX.										OIL TO SURFACE MIN. @ BBL/D MAX.										OIL TO SURFACE MIN. @ BBL/D MAX.																			
										RECOVERY:										RECOVERY:										RECOVERY:										RECOVERY:																			
										PRESS-URES IHP FHP IFP FFP ISIP FSIP										PRESS-URES IHP FHP IFP FFP ISIP FSIP										PRESS-URES IHP FHP IFP FFP ISIP FSIP										PRESS-URES IHP FHP IFP FFP ISIP FSIP																			
REMARKS INCLUDING:										FROM TO DESCRIPTION OF WORK										FROM TO DESCRIPTION OF WORK										FROM TO DESCRIPTION OF WORK										FROM TO DESCRIPTION OF WORK																			
										12:00 12:30 DRILL										1/2 8:00 10:30 DRILL										4:00 5:30 TRIP OUT										4:00 5:30 TRIP OUT																			
										12:30 1:00 SAND-LINE-SURVEY @ 6553 3/16										1/2 10:30 11:00 SURVEY										5:30 5:45 RIG SERV BLIND RAMS										5:30 5:45 RIG SERV BLIND RAMS																			
										1:00 1:15 RIG C.K.										1/4 11:00 11:15 CIRCULATE										5:45 LAY DOWN REAMER CHANGE BIT										5:45 LAY DOWN REAMER CHANGE BIT																			
										1:15 8:00 DRILL										6 3/4 11:15 11:45 TRIP OUT TIGHT										6:15 SET UP BRAKES										6:15 SET UP BRAKES																			
																				8 11:45 1:30 CIRC. MIN MUD										6:15 9:30 RUN IN W/ BIT										6:15 9:30 RUN IN W/ BIT																			
																				1:30 4:00 TRIP OUT										9:30 10:15 CLEAN 20' TO BOTTOM										9:30 10:15 CLEAN 20' TO BOTTOM																			
																														10:15 12:00 DRILL										10:15 12:00 DRILL																			
DRILLER <u>E. Shannon</u>										NO. HELPERS <u>4</u>										DRILLER <u>[Signature]</u>										NO. HELPERS <u>4</u>										DRILLER <u>P. Mcgarry</u>										NO. HELPERS <u>4</u>									

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MAR 9-70

WELL NAME <u>H.B.O.G. PET. TOT - C-60</u>				LDG. FLG. TO KB <u>1500</u>		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR
CONTRACTOR <u>NABORS DRIG LTD.</u>		TYPE RIG <u>NOT. 50-A</u>		K. B. ELEV. <u>1956</u>			795	10 3/4	40.5	K.55	700 SK.		9:15 P.M.	
RIG NO. <u>6.</u>		TOOL PUSHER <u>PRICE</u>		GRD. ELEV. <u>1939</u>							2% CAL.		2-18-70	

12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.									
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DEPTH	START <u>6325</u> PROGRESS <u>90</u> END <u>6415</u>								START <u>6415</u> PROGRESS <u>80</u> END <u>6495</u>								START <u>6495</u> PROGRESS <u>83</u> END <u>6578</u>								
	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	
BIT RECORD	8	20714	X16J8 3/4		5970	6415	445	35 1/4	8	20714	X16J8 3/4		5970	6495	525	42 1/2		8	20714	X16J8 3/4		5970	6578	608	50 1/4

DRILLING DATA	LINER SIZE				PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE				PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE				PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT	
	5 1/2 X 18				975		60		38 m. 32-		5 1/2 X 15				1050		60		32.		5 1/2 X 15				1050		60		35	

DRILLING STRING	SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.	
	4 1/2		5393.97		63.13		716.06		2800		13.40		4 1/2		5751.11		716.06		14.43		13.40		4 1/2		5814.17		716.06		35		13.40					

MUD RECORD	TYPE OF MUD							WEIGHT							VIS							WL							PH							FC						
	GEL							9.4							120							2.4							10.5							2/32						
	RAPIDRIL							9.4							120							2.4							10.5							2/32						
	ADDITIVES							GEL 20 SK.							D. RET. 9.4 SHAKER 9.5							D. DIS - 9.9							D. RET. - 9.4													
CORING	GEL							9.4							120							2.4							10.5							2/32						
	RAPIDRIL							9.4							120							2.4							10.5							2/32						
	ADDITIVES							GEL 20 SK.							D. RET. 9.4 SHAKER 9.5							D. DIS - 9.9							D. RET. - 9.4													
	RAPIDRIL							9.4							120							2.4							10.5							2/32						

CORING	NO.		FROM		TO		RECOVERED		FORMATION		NO.		FROM		TO		RECOVERED		FORMATION		NO.		FROM		TO		RECOVERED		FORMATION	

SURVEY	1/2 DEG. AT		1265 FT.		1/16 DEG. AT		6364 FT.		DEG. AT		FT.		5/8 DEG. AT		6460 FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.	

DRILL STEM TESTS	NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION											
	VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)											
	GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.											
	OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.											
	RECOVERY:		IHP		FHP		IFP		FFP		ISIP		FSIP		RECOVERY:		IHP		FHP		IFP		FFP		ISIP		FSIP	
	PRESS-URES		IHP		FHP		IFP		FFP		ISIP		FSIP		PRESS-URES		IHP		FHP		IFP		FFP		ISIP		FSIP	

REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	FROM		TO		DESCRIPTION OF WORK		FROM		TO		DESCRIPTION OF WORK		FROM		TO		DESCRIPTION OF WORK	
	12:00	12:30			DRILL	1/2	8:00	9:00			DRILL	1	4:00	6:30			DRILL	
	12:30	12:45			Rig. C.K. + Remote Control (9000)	1/4	9:00				Rig SERVICE SWIVEL CROWN & BLOCK	1/4	6:30	6:45			Rig. SERV. KELLY COCK & SWIVEL	
	12:45	5:30			DRILL	4 3/4	9:15				CLOSE 4 1/2" RAMS	1/4	6:45	12:00			DRILL	
	5:30	6:00			SAND-LINE SURVEY @ 6364	1/16	9:15	3:00			DRILL	5 3/4						
	6:00	8:00			DRILL (W/ 32,000)	2	3:00	3:30			SURVEY	1/2						
						8	3:30	4:00			DRILL	1/2						

DRILLER <u>L. Shannon</u>	NO. HELPERS <u>4</u>	DRILLER <u>J. G. Dyer</u>	NO. HELPERS <u>4</u>	DRILLER <u>P. Negus</u>	NO. HELPERS <u>4</u>
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Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MAR. 8 - 1970

WELL NAME <u>H.B.O.G. PETITOT - C-60</u>										LDG. FLG. TO KB <u>15.00</u>		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR									
CONTRACTOR <u>NABORS DRILLING LTD.</u>										K. B. ELEV. <u>1956</u>			<u>795</u>	<u>10 3/4</u>	<u>40.5</u>	<u>K.55</u>	<u>700 516</u>		<u>9:15 P.m.</u>	<u>R. WAKAWA</u>									
RIG NO. <u>6</u>										TOOL PUSHER <u>A. PRICE</u>		GRD. ELEV. <u>1939</u>						<u>2% GEL</u>	<u>2-18-70</u>										
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.									
DEPTH START <u>6028</u> PROGRESS <u>93</u> END <u>6121</u>										START <u>6121</u> PROGRESS <u>99</u> END <u>6220</u>										START <u>6220</u> PROGRESS <u>105</u> END <u>6325</u>									
BIT RECORD										BIT RECORD										BIT RECORD									
DRILLING DATA										DRILLING DATA										DRILLING DATA									
DRILLING STRING										DRILLING STRING										DRILLING STRING									
MUD RECORD										MUD RECORD										MUD RECORD									
CORING										CORING										CORING									
SURVEY										SURVEY										SURVEY									
DRILL STEM TESTS										DRILL STEM TESTS										DRILL STEM TESTS									
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS									
DRILLER <u>L. Shannon</u> NO. HELPERS <u>4</u>										DRILLER <u>A. Riggins</u> NO. HELPERS <u>4</u>										DRILLER <u>P. Mcgarry</u> NO. HELPERS <u>4</u>									

DATE MARCH-5-1970

WELL NAME H.B.D.G. PETITOT C-60										LDG. FLG. TO KB 15.00										CASING RECORD		DEPTH 795		SIZE 10 3/4		WEIGHT 40.5		GRADE K.55		CEMENT 700SX		ACID		PLUG DOWN 9:15 P.M.		COMPANY SUPERVISOR A. WARRAWA	
CONTRACTOR NABOAS DRILL LTD										TYPE RIG NAT. 50-A										K. B. ELEV. 1956		GRD. ELEV. 1939															
RIG NO. 6										TOOL PUSHER E. PRICE																											
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																	
DEPTH START 5484 PROGRESS 95 END 5579										START 5579 PROGRESS 86 END 5665										START 5665 PROGRESS 91 END 5756																	
BIT RECORD										BIT RECORD										BIT RECORD																	
DRILLING DATA										DRILLING DATA										DRILLING DATA																	
DRILLING STRING										DRILLING STRING										DRILLING STRING																	
MUD RECORD										MUD RECORD										MUD RECORD																	
CORING										CORING										CORING																	
SURVEY										SURVEY										SURVEY																	
DRILL STEM TESTS										DRILL STEM TESTS										DRILL STEM TESTS																	
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS																	
DRILLER P. Nguyen										DRILLER L. Shannon										DRILLER J. Dyer																	
NO. HELPERS 4										NO. HELPERS 4										NO. HELPERS 4																	

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME		DATE	
H B Hunt C-60		MAR. 4 1970	
CONTRACTOR Nabors Inc.		LDG. FLG. TO KB 15.00	
RIG NO. 10		K. B. ELEV. 1956	
TYPE RIG Mat-50 A		GRD. ELEV. 1939	
TOOL PUSHER		CASING RECORD	
12 P.M. TO 8 A.M.		8 A.M. TO 4 P.M.	
4 P.M. TO 12 P.M.		COMPANY SUPERVISOR R. WARAWA	
DEPTH		START 5331	
BIT RECORD		PROGRESS 0	
DRILLING DATA		END	
DRILLING STRING		START 5331	
MUD RECORD		PROGRESS 58	
CORING		END 5389	
SURVEY		START 5389	
DRILL STEM TESTS		PROGRESS 95	
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS		END 5484	
DRILLER P. Nguyen		NO. HELPERS 4	
DRILLER L. Shannon		NO. HELPERS 4	
DRILLER		NO. HELPERS 4	

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MAR. 2 1970

WELL NAME H.B.O. & G. PETITOT C-60										LDG. FLG. TO KB 15.00										CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR R. WARAWA		
CONTRACTOR NARODAS DALL LTD.										TYPE RIG NATIONAL 50-A												K. B. ELEV.	1956	795	10 3/4	40.5	K.55	700 SX			9:15 P.M.
RIG NO. 6										TOOL PUSHER E. PRICE												GRD. ELEV.	1939					27.05			2-18-70
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.											
DEPTH START 4893 PROGRESS 101 END 4994										START 4994 PROGRESS 107 END 5101										START 5101 PROGRESS 92 END 5193											
BIT RECORD										BIT RECORD										BIT RECORD											
DRILLING DATA										DRILLING DATA										DRILLING DATA											
DRILLING STRING										DRILLING STRING										DRILLING STRING											
MUD RECORD										MUD RECORD										MUD RECORD											
CORING										CORING										CORING											
SURVEY										SURVEY										SURVEY											
DRILL STEM TESTS										DRILL STEM TESTS										DRILL STEM TESTS											
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS											
DRILLER P. Neely										DRILLER G. Thompson										DRILLER [Signature]											
NO. HELPERS 4										NO. HELPERS 5										NO. HELPERS 4											

DATE MAR. 1 / 70

[illegible]

NO. HELPERS 4

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE FEB. 27 1970

WELL NAME	H.B. PETITOT C-60	LDG. FLG. TO KB	15.00	CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR	
CONTRACTOR	NABORS DALL. LTD.	TYPE RIG	NATIONAL 50-A		K. B. ELEV.	795	10 3/4	40.5	14.55	700 SK			9.15 P.M.
RIG NO.	6	TOOL PUSHER	E. PRICE		GRD. ELEV.					2% CS			2-18-70

	12 P.M. TO 8 A.M.												8 A.M. TO 4 P.M.												4 P.M. TO 12 P.M.											
DEPTH	START 4250 PROGRESS 80 END 4330												START 4330 PROGRESS 60 END 4390												START 4390 PROGRESS 92 END 4482											
BIT RECORD	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN												
	5	18753	X165	8 3/4	4010	4330	320	26	5	18753	X165	8 3/4	4010	4390	380	33 1/4	5	18753	X165	8 3/4	4010	4482	472	40 1/2												

DRILLING DATA	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT
	5 1/2 X 15	900	62	28 M.	5 1/2 X 15	900	62-104-4235 M. = 38		5 1/2 X 15	900	62	35-40

DRILLING STRING	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.
	4 1/2	3570.10		716.06	30.45	13.40	4 1/2	3633.41		716.06	2700	13.40	4 1/2	3729.99		716.06	24.55	13.40

MUD RECORD	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC					
	GEL	8.9	65	12.0	8.5	3/32	GEL	7.9	50	12.0	9.0	3/32	GEL-RAPIDRIL	8.8	55	11.6	4.90	2/32					
	RAPIDRIL	4 BAGS					RAPIDRIL	7.9	54	12.0	9.0	3/32											
	ADDITIVES	GEL 20	DESILTER RETURN	8.7	SODA ASH. 1	D. DIS.	9.3	ADDITIVES	GEL 10	D. RETURN	8.9	RAPIDRIL 2 SK.	D. DIS	9.3	ADDITIVES	GEL - 15 SACKS	RAPIDRIL - 3 SACKS						

CORING	NO.	FROM	TO	RECOVERED	FORMATION	NO.	FROM	TO	RECOVERED	FORMATION	NO.	FROM	TO	RECOVERED	FORMATION

SURVEY	DEG. AT	FT.	DEG. AT	FT.	DEG. AT	FT.	DEG. AT	FT.	DEG. AT	FT.	DEG. AT	FT.
					3/4 DEG. AT 4340 FT.						3/8 DEG. AT 4435 FT.	

DRILL STEM TESTS	NO.	INTERVAL	FORMATION	NO.	INTERVAL	FORMATION	NO.	INTERVAL	FORMATION				
	VALVE OPEN (MINS.)	INITIAL SHUT-IN (MINS.)	FINAL SHUT-IN (MINS.)	VALVE OPEN (MINS.)	INITIAL SHUT-IN (MINS.)	FINAL SHUT-IN (MINS.)	VALVE OPEN (MINS.)	INITIAL SHUT-IN (MINS.)	FINAL SHUT-IN (MINS.)				
	GAS TO SURFACE	MIN. @	MCF/D MAX.	GAS TO SURFACE	MIN. @	MCF/D MAX.	GAS TO SURFACE	MIN. @	MCF/D MAX.				
	OIL TO SURFACE	MIN. @	BBL/D MAX.	OIL TO SURFACE	MIN. @	BBL/D MAX.	OIL TO SURFACE	MIN. @	BBL/D MAX.				
	RECOVERY:			RECOVERY:			RECOVERY:						
	PRESS-URES	IHP	FHP	IFP	FFP	ISIP	FSIP	PRESS-URES	IHP	FHP	IFP	FFP	ISIP

REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	FROM	TO	DESCRIPTION OF WORK	FROM	TO	DESCRIPTION OF WORK	FROM	TO	HRS	DESCRIPTION OF WORK
	12.00	2.30	DRILL	8.00	9.15	DRILL	1 1/4	4.00	5.15	1 1/4 DRILL
	2.30	2.45	RIG SERV. B.O.P. ✓	9.15	9.30	RIG C.I.S.	1/4	5.15	5.30	1/4 RIG SERVICE CLOSE 4 1/2 RAMS
	2.45	8.00	DRILL	9.30	10.00	SURVEY @ 4340 3/4	1/2	5.30	8.00	2 1/2 DRILL
				10.00	4.00	DRILL	6	8.00	8.30	1/2 SURVEY
							8	8.30	12	3 1/2 DRILL

DRILLER	P. Hegarty	NO. HELPERS	4	DRILLER	B. Shannon	NO. HELPERS	4	DRILLER	Halpin	NO. HELPERS	4
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Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE FEB 26 1970

WELL NAME		LDG. FLG. TO KB		CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR		
H.B. PETITOT C-60		15.00		17.00		795	10 3/4	40.5	K-55	7005X		9.15 PM	R. WARREN		
CONTRACTOR NABORS DRILL LTD		K. B. ELEV.		GRD. ELEV.						2 1/2 CCL	2-12-70				
RIG NO. 6		TYPE RIG NATIONAL 50A		TOOL PUSHER E. PRICE											
12 P.M. TO 8 A.M.															
8 A.M. TO 4 P.M.															
4 P.M. TO 12 P.M.															
DEPTH		START 4010		PROGRESS 55		END 4065		START 4065		PROGRESS 105		END 4170			
BIT RECORD		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN			
		5 18753 X16 8 3/4 4010 4065 55 4 1/4		5 18753 X16 8 3/4 4010 4170 160 11		5 18753 X16 8 3/4 4010 4250 240 18 1/4									
DRILLING DATA		LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT		LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT		LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT		LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT		LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT		LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT		LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT	
		5 1/2 X 16 1250 105 25 m.		5 1/2 X 16 1275 90-100 25-28 m.		5 1/2 X 16 1275 62 28 m. - 25 m.									
DRILLING STRING		SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.		SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.		SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.		SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.		SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.		SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.		SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.	
		4 1/2 3321.78 716.06 1322 13.40		4 1/2 3353.23 62.28 716.06 24.00 13.40		4 1/2 3507.29 716.06 13.25 13.40									
MUD RECORD		TYPE OF MUD WEIGHT VIS WL PH FC		TYPE OF MUD WEIGHT VIS WL PH FC		TYPE OF MUD WEIGHT VIS WL PH FC		TYPE OF MUD WEIGHT VIS WL PH FC		TYPE OF MUD WEIGHT VIS WL PH FC		TYPE OF MUD WEIGHT VIS WL PH FC		TYPE OF MUD WEIGHT VIS WL PH FC	
		GEL 9.9 60		GEL 7.9 45 11.0 9.0 2/32		GEL 7.9 68 11.0 8.5 2/32		GEL 9.8 60 11.0 9.0 2/32		GEL 9.8 60 11.0 9.0 2/32		GEL 9.8 60 11.0 9.0 2/32		GEL 9.8 60 11.0 9.0 2/32	
		RAPIDRIIL		RAPIDRIIL		RAPIDRIIL		RAPIDRIIL		RAPIDRIIL		RAPIDRIIL		RAPIDRIIL	
		ADDITIVES GEL 5 SX RAPIDRIIL 1 SV		ADDITIVES GEL 20 SKS. D. RETURNED 8.8 RAPIDRIIL 4 SKS. D. DIS 9.3		ADDITIVES GEL 20 SKS. D. RETURNED 8.8 RAPIDRIIL 4 SKS. D. DIS 9.3		ADDITIVES 2 SX 90DA AGIT 13 SX GEL 2 1/2 SX RAPIDRIIL		ADDITIVES 2 SX 90DA AGIT 13 SX GEL 2 1/2 SX RAPIDRIIL		ADDITIVES 2 SX 90DA AGIT 13 SX GEL 2 1/2 SX RAPIDRIIL		ADDITIVES 2 SX 90DA AGIT 13 SX GEL 2 1/2 SX RAPIDRIIL	
CORING		NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION	
SURVEY		1/2 DEG. AT 4060 FT.		1/2 DEG. AT 4155 FT.		1/2 DEG. AT 4245 FT.		1/2 DEG. AT 4245 FT.		1/2 DEG. AT 4245 FT.		1/2 DEG. AT 4245 FT.		1/2 DEG. AT 4245 FT.	
DRILL STEM TESTS		NO. INTERVAL FORMATION		NO. INTERVAL FORMATION		NO. INTERVAL FORMATION		NO. INTERVAL FORMATION		NO. INTERVAL FORMATION		NO. INTERVAL FORMATION		NO. INTERVAL FORMATION	
		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)	
		GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.	
		OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.	
		RECOVERY: PRESS-URES IHP FHP IFP FFP ISIP FSIP		RECOVERY: PRESS-URES IHP FHP IFP FFP ISIP FSIP		RECOVERY: PRESS-URES IHP FHP IFP FFP ISIP FSIP		RECOVERY: PRESS-URES IHP FHP IFP FFP ISIP FSIP		RECOVERY: PRESS-URES IHP FHP IFP FFP ISIP FSIP		RECOVERY: PRESS-URES IHP FHP IFP FFP ISIP FSIP		RECOVERY: PRESS-URES IHP FHP IFP FFP ISIP FSIP	
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS		FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK	
		12:00 1:00 TRIP OUT CLOSE BLIND RAMS		8:00 8:15 Rig. C.K.		1/4 4:00 5:15 DRILL		1/4 4:00 5:15 DRILL		1/4 4:00 5:15 DRILL		1/4 4:00 5:15 DRILL		1/4 4:00 5:15 DRILL	
		1:00 1:15 RIL SERVICE		8:15 2:00 DRILL		5 3/4 5:15 5:30 Rig. C.K.		5 3/4 5:15 5:30 Rig. C.K.		5 3/4 5:15 5:30 Rig. C.K.		5 3/4 5:15 5:30 Rig. C.K.		5 3/4 5:15 5:30 Rig. C.K.	
		1:15 3:00 TRIP IN		2:00 SURVEY @ 4155 5/8 FIRST		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL	
		3:00 BREAK CIRCULATION CLEAN		3:00 SURVEY WAS A (MISS RUN)		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL	
		3:00 TO BOTTOM 5' FILL		3:00 4:00 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL	
		3:15 7:15 DRILL				5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL	
		7:15 7:45 SURVEY				5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL	
		7:45 8:00 DRILL				5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL		5 3/4 5:15 5:30 DRILL	
DRILLER A.G. Aggie		NO. HELPERS 5		DRILLER B. Shannon		NO. HELPERS 4		DRILLER A. Aggie		NO. HELPERS 4		DRILLER A. Aggie		NO. HELPERS 4	

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME		DATE	
HB PETITOT C-60		FEB 25 1970	
CONTRACTOR Nabors Drilling Ltd		TYPE RIG NATIONAL SO A.	
RIG NO. 6		TOOL PUSHER E. PRICE	
LDG. FLG. TO KB 15.00		K. B. ELEV. 1956	
GRD. ELEV. 1939		CASING RECORD	
DEPTH 795		SIZE 10 3/4	
WEIGHT 40.5		GRADE K-55	
CEMENT 700 SAX		ACID 2% CaCl ₂	
PLUG DOWN 9:15 PM		COMPANY SUPERVISOR R. WARAWA	
12 P.M. TO 8 A.M.		9 A.M. TO 4 P.M.	
4 P.M. TO 12 P.M.			
DEPTH START 3717		PROGRESS 126	
END 3843		START 3843	
PROGRESS 96		END 3939	
START 3939		PROGRESS 71	
END 4010			
BIT RECORD		BIT RECORD	
NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN	
4 21865 X16 8 3/4 3220 3843 623 27 1/2		4 21865 X16 8 3/4 3220 3939 719 34 3/4	
4 21865 X16 8 3/4 3220 4010 790 41			
DRILLING DATA		DRILLING DATA	
LINER SIZE 5 1/2 X 16		PUMP PRESSURE 1250	
TABLE SPEED 62-104		WEIGHT ON BIT 25-35	
LINER SIZE 5 1/2 X 16		PUMP PRESSURE 1250	
TABLE SPEED 100-62-90		WEIGHT ON BIT 25 m. 30	
LINER SIZE 5 1/2 X 16		PUMP PRESSURE 1350	
TABLE SPEED 90		WEIGHT ON BIT 35 m.	
DRILLING STRING		DRILLING STRING	
SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.		SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.	
4 1/2 3072.34 716.06 41.20 13.40		4 1/2 3167.04 716.06 40.00 13.40	
4 1/2 3258.89 716.06 21.65 13.40			
MUD RECORD		MUD RECORD	
TYPE OF MUD WEIGHT VIS WL PH FC		TYPE OF MUD WEIGHT VIS WL PH FC	
GEL RAPIDRI 12 AM 9.1 48		GEL 8.8 75	
RAPIDRI 7 SAX		RAPIDRI 7.8 60	
ADDITIVES GEL 20 SK		D. RET. 9.8	
RAPIDRI 4 SK		D. DIS. 9.6	
SODA ASH 7 SK		D. RUN 8 HRS	
CORING		CORING	
NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION	
3/4 DEG. AT 3749 FT. 3/4 DEG. AT 3843 FT. DEG. AT FT.		1/4 DEG. AT 3938 FT. DEG. AT FT. DEG. AT FT.	
SURVEY		SURVEY	
NO. INTERVAL FORMATION		NO. INTERVAL FORMATION	
3/4 DEG. AT 3749 FT. 3/4 DEG. AT 3843 FT. DEG. AT FT.		1/4 DEG. AT 3938 FT. DEG. AT FT. DEG. AT FT.	
VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)	
GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.	
OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.	
RECOVERY: PRESS-URES IMP FHP IFP FFP ISIP FSIP		RECOVERY: PRESS-URES IMP FHP IFP FFP ISIP FSIP	
FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK	
12:00 12:15 RIG SERVICE & HYDRUL		8:00 8:15 RIG, CK	
12:15 1:30 DRILL		8:15 3:15 DRILL	
1:30 2:00 SURVEY		3:15 3:45 SURVEY @ 3938 1/4	
2:00 7:30 DRILL		3:45 4:00 DRILL	
7:30 8:00 SURVEY			
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS		REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	
DRILLER [Signature]		DRILLER [Signature]	
NO. HELPERS 4		NO. HELPERS 4	
DRILLER [Signature]		DRILLER [Signature]	
NO. HELPERS 4		NO. HELPERS 4	

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE Feb 24 - 1970

WELL NAME	H.B. PETITOT C-60	LDG. FLG. TO KB	15.00	CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR	
CONTRACTOR	NABORS DRILL LTD	TYPE RIG	NATIONAL 50 A.		K. B. ELEV.	795	10 3/4	40.5	K 55	700 SK			9:15 PM
RIG NO.	6	TOOL PUSHER	E. PRICE		GRD. ELEV.					2 1/2 CAL.	2-18-70		R. WARRICK

12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.									
DEPTH	START 3248		PROGRESS 182		END 3430		START 3430		PROGRESS 127		END 3557		START 3557		PROGRESS 160		END 3717												
BIT RECORD	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN					
	4		X16	8 3/4	3220	3430	210	8 1/2	4		X19 1/2	8 3/4	3220	3557	337	13 3/4	4		X19 1/2	8 3/4	3220	3717	503	20 3/4					

DRILLING DATA	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT
	5 1/2 x 14	1250	106	32 -	5 1/2 x 16	1250	106	25 m.	5 1/2 x 16	1250	106	25 m.

DRILLING STRING	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.
	4 1/2			716.06		1340	4 1/2	2789.59		716.06	26.00	13.40	4 1/2	2977.32		716.06	10.22	13.40

MUD RECORD	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC
	GEL	8.9	49				GEL. 15 SK	9.0	40				GEL. 30 SK	9.0	49			
	RAPIDRIL						RAPIDRIL 3 SK	8.9	40				RAPIDRIL 6 SK					
ADDITIVES	GEL 20 SK												GEL 30 SK					
	RAPIDRIL 4 SK												RAPIDRIL 6 SK					

CORING	NO.	FROM	TO	RECOVERED	FORMATION	NO.	FROM	TO	RECOVERED	FORMATION	NO.	FROM	TO	RECOVERED	FORMATION

SURVEY	1 1/4 DEG. AT 3279 FT.	1 1/4 DEG. AT 3340 FT.	1 1/4 DEG. AT 3370 FT.	1 1/8 DEG. AT 3435 FT.	1 1/8 DEG. AT 3529 FT.	7/8 DEG. AT 3623 FT.
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DRILL STEM TESTS	NO.	INTERVAL	FORMATION	NO.	INTERVAL	FORMATION	NO.	INTERVAL	FORMATION				
	VALVE OPEN (MINS.)	INITIAL SHUT-IN (MINS.)	FINAL SHUT-IN (MINS.)	VALVE OPEN (MINS.)	INITIAL SHUT-IN (MINS.)	FINAL SHUT-IN (MINS.)	VALVE OPEN (MINS.)	INITIAL SHUT-IN (MINS.)	FINAL SHUT-IN (MINS.)				
	GAS TO SURFACE	MIN. @	MCF/D MAX.	GAS TO SURFACE	MIN. @	MCF/D MAX.	GAS TO SURFACE	MIN. @	MCF/D MAX.				
	OIL TO SURFACE	MIN. @	BBL/D MAX.	OIL TO SURFACE	MIN. @	BBL/D MAX.	OIL TO SURFACE	MIN. @	BBL/D MAX.				
	RECOVERY:			RECOVERY:			RECOVERY:						
	PRESS-URES	IHP	FHP	IFP	FFP	ISIP	FSIP	PRESS-URES	IHP	FHP	IFP	FFP	ISIP

REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	FROM	TO	DESCRIPTION OF WORK	FROM	TO	DESCRIPTION OF WORK	FROM	TO	DESCRIPTION OF WORK
	12:00	12:15	Rig SERVICE CHASE 4 1/2 RAMS	8:00		SURVEY @ 3435 @ 1 1/8 & Rig. CLK. CLK.	4:00	6:30	Drill
	12:15	1:00	DRILL	8:30		HYDRIL W/ REMOTE CONTROL (good)	6:30	7:10	SURVEY @ 3623 @ 7/8 & Rig. CLK
	1:00	1:15	SURVEY	8:30	10:00	DRILL	7:00	11:30	DRILL
	1:15	4:00	DRILL	10:00		REPLACE W/ NEW CLUTCH FOR CAT	11:30	12:00	SURVEY
	4:00	4:15	SURVEY	10:45		HEAD BRAKE.			
	4:15	5:30	DRILL	10:45	12:15	DRILL			
	5:30	5:45	SURVEY 3:00 - 4:00 DRILL	12:15		WORK ON MAIN FUEL LINE TO			
	5:45	8:00	DRILL	1:15		FLOOR MOTORS.			
				1:15	2:30	DRILL			
			2:30	3:00	SURVEY @ 3529 @ 1 1/8				

DRILLER	NO. HELPERS	4	DRILLER	NO. HELPERS	4	DRILLER	NO. HELPERS	4
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Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME		DATE	
H.B. PETITOT C-60		Feb. 23 - 1970	
CONTRACTOR Nabors DRUG LTD		TYPE RIG NATIONAL 50 A	
RIG NO. 6		TOOL PUSHER E. PRICE	
LDG. FLG. TO KB 15.00		K. B. ELEV. 1956	
GRD. ELEV. 1939		CASING RECORD	
DEPTH 295		SIZE 10 3/4	
WEIGHT 405		GRADE K55	
CEMENT 700 SX		ACID 2% CaCl2	
PLUG DOWN		COMPANY SUPERVISOR P. L. HAWK	
12 P.M. TO 8 A.M.		8 A.M. TO 4 P.M.	
4 P.M. TO 12 P.M.			
DEPTH START 2720 PROGRESS 255 END 2975		START 2975 PROGRESS 215 END 3190	
START 3190 PROGRESS 58 END 3248			
BIT RECORD		BIT RECORD	
NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN	
3 21871 X16 8 3/4 2720 2975 255 7 1/2		3 21871 X16 8 3/4 2720 3190 470 15	
		4 21871 X16 8 3/4 3220 3248 28 1 1/2	
DRILLING DATA		DRILLING DATA	
LINER SIZE 5 1/2 X 16 PUMP PRESSURE 1200 TABLE SPEED 10.5 WEIGHT ON BIT 35 m.		LINER SIZE 5 1/2 X 16 PUMP PRESSURE 1200 TABLE SPEED 10.5 WEIGHT ON BIT 35 m.	
DRILLING STRING		DRILLING STRING	
SIZE 4 1/2 STANDS 2227.57 SINGLES 716.06 DRILL COL. 17.97 KELLY IN 13.40 CORE BBL. 13.40		SIZE 4 1/2 STANDS 2414.10 SINGLES 3136 DRILL COL. 716.06 KELLY IN 13.40 CORE BBL. 13.40	
MUD RECORD		MUD RECORD	
TYPE OF MUD GEL WEIGHT 8.8 VIS 45 WL PH FC		TYPE OF MUD GEL WEIGHT 8.8 VIS 40 WL PH FC	
RAPIDRIIL ADDITIVES GEL 45 SX RAPIDRIIL 8 SX		RAPIDRIIL ADDITIVES 25 GAL 5" RAPIDRIIL DESILTER-RETURN 8.8 DIS. 29.6	
CORING		CORING	
NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION	
SURVEY		SURVEY	
1/4 DEG. AT 2780 FT. DEG. AT FT. DEG. AT FT.		1/4 DEG. AT 2999 FT. DEG. AT FT. DEG. AT FT.	
DRILL STEM TESTS		DRILL STEM TESTS	
NO. INTERVAL FORMATION		NO. INTERVAL FORMATION	
VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)	
GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.	
OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.	
RECOVERY: PRESS-URES IMP FHP IFP FFP ISIP FSIP		RECOVERY: PRESS-URES IMP FHP IFP FFP ISIP FSIP	
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS		REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	
FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK	
1200 100 DRILL		800 800 RIG C.K. & SERVICE, SWIVEL +	
100 15 RIG SERVICE CLOSE 4 1/2" RAMS.		830 830 SURVEY @ 2999 1/4	
15 20 DRILL		830 400 DRILL	
20 25 SURVEY			
25 800 DRILL			
DRILLER H. A. Duggan		DRILLER L. Shannon	
NO. HELPERS 4		NO. HELPERS 4	
DRILLER		DRILLER	
NO. HELPERS 4		NO. HELPERS 4	

	12 P.M. TO 8 A.M.												8 A.M. TO 4 P.M.												4 P.M. TO 12 P.M.																						
DEPTH	START 2146				PROGRESS 242				END 2388				START 2388				PROGRESS 282				END 2670				START 2670				PROGRESS 50				END 2720														
BIT RECORD	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN															
	2	20302	X16	8 3/4	2146	2388	242	6 1/2	2	20302	X19 3/8	8 3/4	2146	2670	524	14	2	20302	X19 3/8	8 3/4	2146	2720	557	16																							
DRILLING DATA	LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT																								
	5 1/2 X 15		1200		130		40 m.		5 1/2 X 16		1200		110		40 m.		5 1/2 X 16		1200		110		40 m.																								
DRILLING STRING	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.																													
	4 1/2	1576.46	30.84	716.06	4100	1340	4 1/2	1857.35	3144	716.06	40.00	1340	4 1/2	1951.58		716.06	38.76	1340																													
MUD RECORD	TYPE OF MUD		WEIGHT		VIS	WL	PH	FC	TYPE OF MUD		WEIGHT		VIS	WL	PH	FC	TYPE OF MUD		WEIGHT		VIS	WL	PH	FC																							
	GEL		9.3		55				GEL +		8.00		9.2	45			GEL		8.8		38.																										
	RAPID DRILL		8.9		36				RAPID DRILL		12.00		8.9	36			RAPID DRILL																														
	ADDITIVES GEL - 30 SK RAPID DRILL 6.												ADDITIVES GEL # 65 SK. RAPID DRILL 11 SK.												ADDITIVES GEL 17 SKS RAPID DRILL 3 SKS.																						
CORING	NO.	FROM		TO		RECOVERED		FORMATION		NO.	FROM		TO		RECOVERED		FORMATION		NO.	FROM		TO		RECOVERED		FORMATION																					
SURVEY	3/8 DEG. AT 228 FT.				DEG. AT FT.				DEG. AT FT.				3/8 DEG. AT 2514 FT.				DEG. AT FT.				DEG. AT FT.				DEG. AT FT.				DEG. AT FT.																		
DRILL STEM TESTS	NO.		INTERVAL				FORMATION				NO.		INTERVAL				FORMATION				NO.		INTERVAL				FORMATION																				
	VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)				FINAL SHUT-IN (MINS.)				VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)				FINAL SHUT-IN (MINS.)				VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)				FINAL SHUT-IN (MINS.)																				
	GAS TO SURFACE		MIN. @				MCF/D MAX.				GAS TO SURFACE		MIN. @				MCF/D MAX.				GAS TO SURFACE		MIN. @				MCF/D MAX.																				
	OIL TO SURFACE		MIN. @				BBL/D MAX.				OIL TO SURFACE		MIN. @				BBL/D MAX.				OIL TO SURFACE		MIN. @				BBL/D MAX.																				
	RECOVERY:														RECOVERY:														RECOVERY:																		
	PRESS-URES		IHP	FHP	IFP	FFP	ISIP	FSIP					PRESS-URES		IHP	FHP	IFP	FFP	ISIP	FSIP					PRESS-URES		IHP	FHP	IFP	FFP	ISIP	FSIP															
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	FROM	TO	DESCRIPTION OF WORK												FROM	TO	DESCRIPTION OF WORK												FROM	TO	DESCRIPTION OF WORK																
	12:00	12:30	DRILL												8:00	8:15	Rig. CK.												4:00	4:15	Rig. CK.																
	12:30	2:45	Rig SERVICE CLOSE HYDRAULIC												8:15	10:15	DRILL												4:15	6:15	DRILL																
	12:45	4:00	DRILL												10:15	10:30	SURVEY @ 2514 @ 3/8"												6:15	7:00	FINISH MIXING MUD FOR TRIP																
	4:00	4:15	SURVEY												10:30	4:00	DRILL												7:00	9:45	TRIP OUT FOR BIT BACK REAMING																
	4:15	6:00	DRILL																										9:45	11:45	RUN IN-REAM BRIDGES AT 1850.																
	6:00	7:00	WORK ON NO. 1 PUMP																										11:45	12:00	BREAK CIRCULATION CLEAN 15' FILL																
	7:00	7:15	DRILL																												4:00 p.m.																
																															DESILTERED RETURN 8.5																
																															DE. Dis. 13.2																
DRILLER H.A. Ogden												NO. HELPERS 4				DRILLER L. Shannon												NO. HELPERS 4				DRILLER H.A. Ogden												NO. HELPERS 4			

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME		DATE	
HB PETITOT C-60		FEB 21 1970	
CONTRACTOR		LDG. FLG. TO KB	
NABORS DRILL LTD		15.00	
RIG NO. 6		K. B. ELEV. 17.00	
TYPE RIG NATIONAL SOA		GRD. ELEV. 1939	
TOOL PUSHER E. PRICE		CASING RECORD	
12 P.M. TO 8 A.M.		8 A.M. TO 4 P.M.	
4 P.M. TO 12 P.M.		COMPANY SUPERVISOR	
P. J. WARAWA			
DEPTH		START	
1660		PROGRESS	
240		END	
1900		START	
1900		PROGRESS	
246		END	
2146		START	
2146		PROGRESS	
-		END	
2146			
BIT RECORD			
NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN	
1 95912 OSC 8 3/4 795 1900 1125 2 1/4		1 95912 OSC 8 3/4 795 2146 1351 28 1/2	
		2 8 3/4 X 16 8 3/4 2146	
DRILLING DATA			
LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT		LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT	
5 1/2 X 16 1400 130 25		5 1/2 X 16 1325 130 25 m.	
DRILLING STRING			
SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.		SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.	
4 1/2 114.08 716.06 29.46 13.40		4 1/2 1389.30 - 716.06 1600. 13.40	
MUD RECORD			
TYPE OF MUD WEIGHT VIS WL PH FC		TYPE OF MUD WEIGHT VIS WL PH FC	
GEL 8.9 38		GEL 9.1 33	
ADDITIVES 34 SK GEL 12" RAPID DRILL		ADDITIVES 30 SK GEL 6 SK RAPID DRILL	
CORING			
NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION	
SURVEY			
3/8 DEG. AT 1769 FT. DEG. AT FT. DEG. AT FT.		1/4 DEG. AT 1953 FT. 1/8 DEG. AT 2108 FT. DEG. AT FT.	
DRILL STEM TESTS			
NO. INTERVAL FORMATION		NO. INTERVAL FORMATION	
VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)	
GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.	
OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.	
RECOVERY:		RECOVERY:	
PRESS-URES INP FMP IFP FFP ISIP FSIP		PRESS-URES INP FMP IFP FFP ISIP FSIP	
REMARKS INCLUDING:			
CEMENTING			
LOGGING			
PERFORATING			
ACIDIZING			
FRACTURING			
PLUGS			
FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK	
12 00 12 15 DRILL		8 00 8 15 R.C. OK	
12 15 12 30 RIG SERVICE CHARGE 4 1/2 ROPS OK		8 15 9 45 DRILL	
12 30 2 30 DRILL		9 45 10 00 SURVEY @ 1953 @ 1/4"	
2 30 3 30 WORK TIGHT PIPE		10 00 1 45 DRILL	
3 30 3 45 SURVEY		1 45 2 00 SURVEY @ 2108 @ 1/8"	
3 45 8 00 DRILL		2 00 4 00 DRILL	
DRILLER H.G. Dygin		DRILLER H. J. Dygin	
NO. HELPERS 4		NO. HELPERS 4	
DRILLER H.G. Dygin		DRILLER H.G. Dygin	
NO. HELPERS 4		NO. HELPERS 4	

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME		DATE	
HB PETITOT C-60		Feb 20-1970	
CONTRACTOR NABORS DRILL LTD		LDG. FLG. TO KB 15.00	
RIG NO. 6		K. B. ELEV. 17'	
TYPE RIG NATIONAL SOA		GRD. ELEV. 1939	
TOOL PUSHER E. PRICE		CASING RECORD	
12 P.M. TO 8 A.M.		8 A.M. TO 4 P.M.	
DEPTH		4 P.M. TO 12 P.M.	
START 795		START 914	
PROGRESS 119		PROGRESS 324	
END 914		END 1238	
BIT RECORD		BIT RECORD	
NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN	
1 95912 OSC 3 8 3/4 795 914 119 13 1/4		1 95912 OSC 3 8 3/4 795 1238 443 7 1/2	
DRILLING DATA		DRILLING DATA	
LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT		LINER SIZE PUMP PRESSURE TABLE SPEED WEIGHT ON BIT	
5 1/2 x 16 1200 60 5-20		5 1/2 x 16 1200 60 25.000	
DRILLING STRING		DRILLING STRING	
SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.		SIZE STANDS SINGLES DRILL COL. KELLY IN CORE BBL.	
4 1/2 716.06		4 1/2 468.72 716.06 40.00	
MUD RECORD		MUD RECORD	
TYPE OF MUD WEIGHT VIS WL PH FC		TYPE OF MUD WEIGHT VIS WL PH FC	
WATER 8.4 28		GEL 9.6 38	
ADDITIVES		ADDITIVES	
		22.5% Gel 8" Rapid Drill	
CORING		CORING	
NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION	
SURVEY		SURVEY	
DEG. AT FT. DEG. AT FT. DEG. AT FT.		DEG. AT FT. DEG. AT FT. DEG. AT FT.	
1/2 DEG. AT 795 FT. 10 DEG. AT 1238 FT.		3/4 DEG. AT 1329 FT. 1/4 DEG. AT 1455 FT. 3/8 DEG. AT 1640 FT.	
DRILL STEM TESTS		DRILL STEM TESTS	
NO. INTERVAL FORMATION		NO. INTERVAL FORMATION	
VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)	
GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.	
OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.	
RECOVERY:		RECOVERY:	
PRESS-URES IHP FHP IFP FFP ISIP FSIP		PRESS-URES IHP FHP IFP FFP ISIP FSIP	
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING		REMARKS INCLUDING: CEMENTING LOGGING PERFORATING	
FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK	
1200 1215 LAY DOWN 2 SINGLES		800 845 TRIP OUT	
1215 1230 RIG SERVICE		845 915 PICK UP STABILIZER & 2 SUBS	
1230 200 PICK UP 8 COLLARS		915 930 PUT 60' FROM BIT	
200 515 DRILL OUT FLOAT CEMENT		930 1015 RIG SER. & PIPE RANS	
515 615 1/2 SHOE DRILL 10" HOLE		1015 1045 RUN IN	
615 645 DUMP & CLEAN TANKS DISPLACE		1045 1115 DRILL 8 3/4" HOLE	
645 800 HOLE		1115 1145 SURVEY @ 1238	
800 815 DRILL 8 3/4" HOLE			
DRILLER H. A. DYJUR		DRILLER H. A. DYJUR	
NO. HELPERS 4		NO. HELPERS 4	
DRILLER H. A. DYJUR		DRILLER H. A. DYJUR	
NO. HELPERS 4		NO. HELPERS 4	

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE FEB 18 1970

WELL NAME		H.B. PETITOT C-60		LDG. FLG. TO KB		CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR		
CONTRACTOR		NABORS DRILL LTD		TYPE RIG NATIONAL 50A		K. B. ELEV.		17									
RIG NO.		6		TOOL PUSHER E. PRKE		GRD. ELEV.		1939									
12 P.M. TO 8 A.M.																	
8 A.M. TO 4 P.M.																	
4 P.M. TO 12 P.M.																	
DEPTH		START 623				PROGRESS 758				END 758							
BIT RECORD		NO. 2A				SERIAL NO. 97674				TYPE 0563 15"				SIZE 514			
DRILLING DATA		LINER SIZE 5 1/2 x 16				PUMP PRESSURE 500				TABLE SPEED 180				WEIGHT ON BIT 25,000			
DRILLING STRING		SIZE 4 1/2				STANDS				SINGLES				DRILL COL. 475.95			
MUD RECORD		TYPE OF MUD GEL				WEIGHT 10.4				VIS 12.5				WL			
CORING		NO.				FROM				TO				RECOVERED			
SURVEY		1/4 DEG. AT 646 FT.				1/2 DEG. AT 740 FT.				DEG. AT				FT.			
DRILL STEM TESTS		NO.				INTERVAL				FORMATION				VALVE OPEN (MINS.)			
REMARKS INCLUDING:		FROM 1200				TO 1215				DESCRIPTION OF WORK DRILL				FROM 800			
CEMENTING		1215				1230				RIG SERVICE				830			
LOGGING		1230				1245				SURVEY				845			
PERFORATING		1245				315				DRILL				1130			
ACIDIZING		315				330				SURVEY				1230			
FRACTURING		330				430				DRILL				1245			
PLUGS		430				630				CLEAN OUT BLOW LINE				145			
		630				730				PLUGGED w/ MUD RINGS				245			
										TRIP OUT TO CLEAN MUD				400			
										RINGS SUM							
										DRILLER CLEAN MUD							
										NO. HELPERS 4				DRILLER L. Shannon			
														NO. HELPERS 4			
														DRILLER H. A. Dyer			
														NO. HELPERS 4			

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME		DATE	
H.B. PETITOT C-60		Feb. 17-70	
CONTRACTOR NABORS DRILL LTD		LDG. FLG. TO KB	
RIG NO. 6		K. B. ELEV. 17'	
TYPE RIG NATIONAL SOA.		GRD. ELEV. 1939	
TOOL PUSHER F PRICE		CASING RECORD	
12 P.M. TO 8 A.M.		8 A.M. TO 4 P.M.	
4 P.M. TO 12 P.M.		COMPANY SUPERVISOR R. WARAWA	
DEPTH START 343 PROGRESS 417 END 460		START 460 PROGRESS 622 END 522	
BIT RECORD		START 522 PROGRESS 101 END 623	
NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN		NO. SERIAL NO. TYPE SIZE FROM TO FOOTAGE HRS. RUN	
1A 98502 OSC3 15" 350 460 417 7		1A 98502 OSC3 15" 0 514 514 35 1/4	
460 30		2A 97674 " 15" 514 522 9 3/4	
DRILLING DATA		DRILLING DATA	
LINER SIZE 5 1/2 x 16 PUMP PRESSURE 600 TABLE SPEED 180 WEIGHT ON BIT 25 M		LINER SIZE 5 1/2 x 16 PUMP PRESSURE 600 TABLE SPEED 180 WEIGHT ON BIT 25 M	
DRILLING STRING		DRILLING STRING	
SIZE 5 1/2 STANDS 543 SINGLES 414.35 DRILL COL. 40.22		SIZE 5 1/2 STANDS 543 SINGLES 475.95 DRILL COL. 41.00	
MUD RECORD		MUD RECORD	
TYPE OF MUD GEL-LIME WEIGHT 9.1 VIS 48 WL PH FC		TYPE OF MUD GEL. WEIGHT 10.3 VIS 64 WL PH FC	
CORING		CORING	
NO. FROM TO RECOVERED FORMATION		NO. FROM TO RECOVERED FORMATION	
SURVEY		SURVEY	
3/4 DEG. AT 343 FT. 1/2 DEG. AT 374 FT. 3/4 DEG. AT 430 FT. 1/2 DEG. AT 460 FT. 1/2 DEG. AT 492 FT. 1/2 DEG. AT 553 FT.		3/4 DEG. AT 430 FT. 1/2 DEG. AT 460 FT. 1/2 DEG. AT 492 FT. 1/2 DEG. AT 553 FT.	
DRILL STEM TESTS		DRILL STEM TESTS	
NO. INTERVAL FORMATION		NO. INTERVAL FORMATION	
VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)	
GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.	
OIL TO SURFACE MIN. @ BBL/D MAX.		OIL TO SURFACE MIN. @ BBL/D MAX.	
RECOVERY:		RECOVERY:	
PRESS. URES IHP FHP IFP FFP ISIP FSIP		PRESS. URES IHP FHP IFP FFP ISIP FSIP	
REMARKS INCLUDING:		REMARKS INCLUDING:	
CEMENTING		CEMENTING	
LOGGING		LOGGING	
PERFORATING		PERFORATING	
ACIDIZING		ACIDIZING	
FRACTURING		FRACTURING	
PLUGS		PLUGS	
FROM TO DESCRIPTION OF WORK		FROM TO DESCRIPTION OF WORK	
12 00 12 15 RIG SERVICE		8 15 8 15 SURVEY @ 411 1/2'	
12 15 12 30 SURVEY		8 15 11 00 SURVEY @ 411 1/2' (CONTROL DRILL)	
12 30 2 15 DRILL		11 15 11 15 SURVEY @ 492 1/2'	
2 15 2 30 SURVEY		11 15 1 15 DRILL 15" HOLE	
2 30 5 30 DRILL		1 15 3 15 TRIP FOR NEW B.T.	
5 30 5 45 SURVEY		3 15 4 00 DRILL 15" HOLE	
5 45 8 00 DRILL			
DRILLER H.A. Dyer		DRILLER H.A. Dyer	
NO. HELPERS 4		NO. HELPERS 4	
DRILLER H.A. Dyer		DRILLER H.A. Dyer	
NO. HELPERS 4		NO. HELPERS 4	

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME H.B.O.G. PETITOT 2-60 DATE Feb 16 - 1970
CONTRACTOR NABORS DRILL LTD. TYPE RIG NATIONAL 50 A. LDG. FLG. TO KB
RIG NO. 6 TOOL PUSHER E. PRICE K. B. ELEV. 17'
GRD. ELEV.

12 P.M. TO 8 A.M. 8 A.M. TO 4 P.M. 4 P.M. TO 12 P.M.
COMPANY SUPERVISOR R. WARSWA

DEPTH	12 P.M. TO 8 A.M.								8 A.M. TO 4 P.M.								4 P.M. TO 12 P.M.							
	START				PROGRESS				END				START				PROGRESS				END			
BIT RECORD	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN
		1A	98502	OSG	15"	0	74	74	8	1A	98502	OSG	15"	0	180	15 1/2		1A	98502	OSG	15"	0	343	343

DRILLING DATA	12 P.M. TO 8 A.M.				8 A.M. TO 4 P.M.				4 P.M. TO 12 P.M.			
	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT
	5 1/2 x 1 1/2	200	50	ALL	5 1/2 x 1 1/2	200	50 - 180	12 - m	5 1/2 x 1 1/2	600	180	25

DRILLING STRING	12 P.M. TO 8 A.M.					8 A.M. TO 4 P.M.					4 P.M. TO 12 P.M.				
	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN

MUD RECORD	12 P.M. TO 8 A.M.						8 A.M. TO 4 P.M.						4 P.M. TO 12 P.M.					
	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC
	GEL & LIME	8.4	55				GEL	8.8	60				GEL	91	47			
	ADDITIVES 12 SAK GEL						ADDITIVES 12 SAKS						ADDITIVES GEL					

CORING	12 P.M. TO 8 A.M.				8 A.M. TO 4 P.M.				4 P.M. TO 12 P.M.			
	NO.	FROM	TO	RECOVERED	NO.	FROM	TO	RECOVERED	NO.	FROM	TO	RECOVERED

L M ESTS	12 P.M. TO 8 A.M.						8 A.M. TO 4 P.M.						4 P.M. TO 12 P.M.					
	NO.	INTERVAL	FORMATION	VALVE OPEN (MINS.)	INITIAL SHUT-IN (MINS.)	FINAL SHUT-IN (MINS.)	NO.	INTERVAL	FORMATION	VALVE OPEN (MINS.)	INITIAL SHUT-IN (MINS.)	FINAL SHUT-IN (MINS.)	NO.	INTERVAL	FORMATION	VALVE OPEN (MINS.)	INITIAL SHUT-IN (MINS.)	FINAL SHUT-IN (MINS.)

REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	12 P.M. TO 8 A.M.		8 A.M. TO 4 P.M.		4 P.M. TO 12 P.M.	
	FROM	TO	FROM	TO	FROM	TO
	12 ⁰⁰	8 ⁰⁰	8 ⁰⁰	8 ¹⁵	4 ⁰⁰	5 ⁰⁰
	DRILL 15" HOLE.		SURVEY @ 74' 3/4" RIG SERV.		DRILL 15" HOLE.	
			DRILL 15" HOLE.		RIG SERV.	
			SURVEY @ 163' 1/2" RIG SERV.		DRILL 15" HOLE.	
			DRILL 15" HOLE.		SURVEY @ 254	
					DRILL	

DRILLER H.A. DYKUR NO. HELPERS 4 DRILLER R. Warswa NO. HELPERS 4 DRILLER H.A. DYKUR NO. HELPERS 4

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

WELL NAME *H.B. Pettit C-60* DATE *Feb 13 1970*
CONTRACTOR *Hudson's Bay* TYPE RIG *Mat 50A* LDG. FLG. TO KB
RIG NO. *6* TOOL PUSHER *Chris L...* K. B. ELEV.
GRD. ELEV.

CASING
RECORD

DEPTH SIZE WEIGHT GRADE CEMENT ACID PLUG DOWN

COMPANY
SUPERVISOR*R. Warkawa*

12 P.M. TO 8 A.M.

8 A.M. TO 4 P.M.

4 P.M. TO 12 P.M.

DEPTH	12 P.M. TO 8 A.M.								8 A.M. TO 4 P.M.								4 P.M. TO 12 P.M.																			
	START				PROGRESS				END				START				PROGRESS				END				START				PROGRESS				END			
BIT RECORD	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN												
	DRILLING DATA	LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT												
DRILLING STRING	SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.	
MUD RECORD	TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC	
	ADDITIVES								ADDITIVES								ADDITIVES																			
CORING	NO.	FROM		TO		RECOVERED		FORMATION		NO.	FROM		TO		RECOVERED		FORMATION		NO.	FROM		TO		RECOVERED		FORMATION										
SURVEY	DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.									
DRILL STEM TESTS	NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION													
	VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)													
	GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.													
	OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.													
	RECOVERY:		PRESS-URES		IHP		FHP		IFP		FFP		ISIP		FSIP		RECOVERY:		PRESS-URES		IHP		FHP		IFP		FFP		ISIP		FSIP					
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	FROM	TO	DESCRIPTION OF WORK						FROM	TO	DESCRIPTION OF WORK						FROM	TO	DESCRIPTION OF WORK																	
	800	802	<i>Finish logging up camp.</i>						802	803	<i>Log up rig at new</i>																									
			<i>Rig up rig at new</i>																																	
DRILLER		<i>L. Shannon</i>		NO. HELPERS		DRILLER		<i>M. Dyer</i>		NO. HELPERS		DRILLER				NO. HELPERS																				

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE *Feb 12 1970*

WELL NAME <i>H.B. Leblond C-60</i>	LDG. FLG. TO KB	CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR <i>R. Warawa</i>
CONTRACTOR <i>Nabors Drilling</i>	TYPE RIG <i>National 50A</i>		K. B. ELEV.							
RIG NO. <i>6</i>	TOOL PUSHER <i>Brace Tail</i>		GRD. ELEV.							

	12 P.M. TO 8 A.M.								8 A.M. TO 4 P.M.								4 P.M. TO 12 P.M.							
DEPTH	START								START								START							
BIT RECORD	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN
DRILLING DATA	LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT	
DRILLING STRING	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.			SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.			SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.		
MUD RECORD	TYPE OF MUD		WEIGHT	VIS	WL	PH	FC		TYPE OF MUD		WEIGHT	VIS	WL	PH	FC		TYPE OF MUD		WEIGHT	VIS	WL	PH	FC	
	ADDITIVES								ADDITIVES								ADDITIVES							
CORING	NO.	FROM	TO	RECOVERED	FORMATION				NO.	FROM	TO	RECOVERED	FORMATION				NO.	FROM	TO	RECOVERED	FORMATION			
SURVEY	DEG. AT	FT.	DEG. AT	FT.	DEG. AT	FT.			DEG. AT	FT.	DEG. AT	FT.	DEG. AT	FT.			DEG. AT	FT.	DEG. AT	FT.	DEG. AT	FT.		
DRILL STEM TESTS	NO.	INTERVAL				FORMATION			NO.	INTERVAL				FORMATION			NO.	INTERVAL				FORMATION		
	VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)				VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)				VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)			
	GAS TO SURFACE		MIN. @		MCF/D MAX.				GAS TO SURFACE		MIN. @		MCF/D MAX.				GAS TO SURFACE		MIN. @		MCF/D MAX.			
	OIL TO SURFACE		MIN. @		BBL/D MAX.				OIL TO SURFACE		MIN. @		BBL/D MAX.				OIL TO SURFACE		MIN. @		BBL/D MAX.			
	RECOVERY:								RECOVERY:								RECOVERY:							
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	PRESS- URES	IHP	FHP	IFP	FFP	ISIP	FSIP		PRESS- URES	IHP	FHP	IFP	FFP	ISIP	FSIP		PRESS- URES	IHP	FHP	IFP	FFP	ISIP	FSIP	
	FROM	TO	DESCRIPTION OF WORK						FROM	TO	DESCRIPTION OF WORK						FROM	TO	DESCRIPTION OF WORK					
	<i>7⁰⁰</i>	<i>1⁰⁰</i>	<i>Big out Camp and Move to new lease. rig up Camp.</i>						<i>7⁰⁰</i>	<i>7⁰⁰</i>	<i>Big out Camp and move to new lease. rig up same.</i>													
			<i>Camp operating at new lease</i>																					
			<i>7⁰⁰ PM Feb 12/70</i>																					
DRILLER <i>Ed Shannon</i>		NO. HELPERS		DRILLER <i>H. Dwyer</i>		NO. HELPERS		DRILLER		NO. HELPERS		DRILLER		NO. HELPERS										