

HB CAMERON

N-24

WELL NAME HB Cameron N-2h
FIELD
LOCATION: Unit H Area: 2h
Latitude 60-03-52.00 Section 2h Grid 60-10-117-15
Longitude 117-19-55.85
U.W.L.R. 60.06114 — 117.33218
U.W.I. 300K246010017150

Rig Release Date
Status
Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
25-1-71	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
24/3/71	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
	Well History Supplement.
	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells — Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells — Vitter's Method.
	M.P.R. — Oil — Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale..... Small scale.....

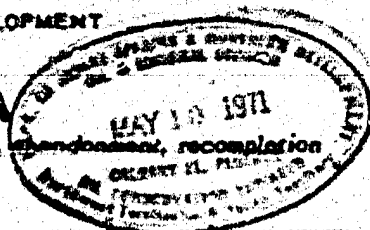


Drilling Authority No. 489
Date Issued Jan. 25/71

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

WELL COMPLETION DATA

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



Well name and number HB Cameron N-24
Permit No. 3215 Lease No. _____
Hudson's Bay Oil & Gas Co. Ltd. Exploratory Licence No. 1676
(Permittee, Licensee, Lessee)
Hudson's Bay Oil & Gas Co. Ltd. Exploratory Licence No. 1676
(Operator)

Location: Unit N Section 24 Grid 60°10'N, 117°15'W
Latitude 60°3'32"N Longitude 117°19'55.85"W
From Established Reference Marker 101 feet West of SP54
Universal Well Location Reference Latitude 60.06444°N, Longitude 117.33218°W

	DATE	DEPTH	Pool(s)
Spudded	Feb 24/71		Interval(s) open to production
Suspended			
Resumed Operations			
Finished Drilling	Mar 15/71	5190' KB	
Deepened			Elevation: Gr. 2577.7' K.B. 2591.8'
Complete (gas/oil)			Rig No. 5
Abandoned	Mar 17/71		Drilling Contractor Guthrie-McLaren
Rig released	Mar 17/71		Contractor's Business Licence No. 0908

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at -	Sacks of Cement and Additives
1. 10 3/4	H-40	32.75#/ft.	906	920	850 plus 2% CaCl ₂
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS

ELEVATION

Depth KB Sub-Sea

CORE RECORD

From To Rec. From To Rec.

Basal Cretaceous	1748	+ 844
Sand		
Trout River	1795	+ 797
Kakisa	1838	+ 754
Red Knife	1960	+ 632
Jean Marie	2224	+ 368
Tathlina	2248	+ 344
Twin Falls	2597	- 5
Hay River	3128	- 536
Muskwa	4178	-1586
Otter Park	4229	-1637
Slave Point	4309	-1717
Fort Vermilion	4413	-1821
Watt Mountain	4473	-1881
Bistcho	4487	-1895
Upper Muskeg	4517	-1925
Anhydrite		
Keg River	4913	-2321
Chinchaga	5081	-2489

No cores were cut

LOG RECORD

Run No.	Type of Log	From	To
1	Dual Induction Laterolog	5184	918
1	Borehole Compensated Sonic	5188	918

CEMENTING RECORD (Plug, Squeeze, etc.)				PERFORATING RECORD (Bullet, Jet)				SERVICING RECORD (Additive, Pretest, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
Mar 16/71	5190	4860	150 sks Oilwell cement								
Mar 16/71	4425	4250	100 sks Oilwell + 2% CaCl ₂ . Felt @ 4233'.								
Mar 17/71	970	870	70 sks oilwell + 3% CaCl ₂ . Felt @ 826'.								
Mar 17/71	At surface		Casing was cut off 3' below ground level, 5 sks cement were placed at surface and a steel plate was welded across the casing stub.								

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	L.S.L. Mins.	F.S.L. Mins.	L.S.L.R.H.P.	P.S.L.R.H.P.	L.F.R.H.P.	P.F.R.H.P.	L.H.P.	F.H.P.	REMARKS
1	Mar 9/71	Slave Point	4300	4390	90	60	90	511	145	42	48	2135	2123	Weak air blow decreasing to very weak air blow at end of flow period. Recovered 28' gas cut mud.
2	Mar 13/71	Keg River	4910	5040	90	60	90	1428	1428	275	1259	2457	2445	Fair air blow decreasing slightly to end of flow period. Recovered 270' water cut mud 2400' sulphurous salt water

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
C71-2992	Mud	4300	4390	DST #1	Sampled from top of tool
C71-2991-1	Water	4910	5040	DST #2	Sampled 2670' above tool
C71-2991-2	Water	4910	5040	DST #2	Sampled 1350' above tool
C71-2992-3	Water	4910	5040	DST #2	Sampled 90' above tool

PRESENT STATUS OF WELL

Oil					
					(Interval)
Gas					
					(Interval)
Dry					
					and abandoned
Susp.					

Company **Hudson's Bay Oil & Gas Company Limited**

Signed by *[Signature]*

Title **District Engineer**

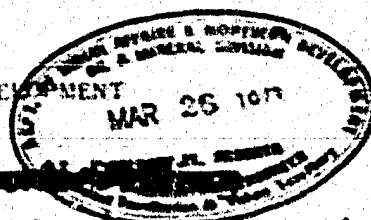
Date **May 3, 1971**

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



File No.
Drilling Authority No. 489

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION



Application to Abandon a Well

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

Name and number of well HB Cameron N-24
Location: Unit N Section 24 Grid 60°10'N, 117°15'W
Latitude 60°3'52"N Longitude 117°19'55.85"W
From Established Reference Marker 101' West of SP54
Universal Well Location Reference Lat. 60.06444°N, Long. 117.33218°W
Permit No. 3215 Lease No.

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

Date of commencement of proposed program March 16, 1971

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at
Gas at
Water at 4910-5040 feet KB
Total Depth 5190 feet KB Date of last operations March 17, 1971
Present condition of well Dry and abandoned

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At	Sacks of Cement and Additives	Amount Pulled
1. 10 3/4"	32.75	906'	920' KB	850 plus 2% CaCl ₂	
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

No.	Plug Position 'KB	Geological Formation	Number of Sacks of Cement	Remarks
1	5190-4860	Chinchaga, Keg River	150	No feel
2	4425-4250	Slave Point, Otter Park	100	Felt at 4233' KB
3	970-870	-	70	Felt at 826' KB
4	Surface	Weld on steel plate and identification marker.		Erect riser with

The following logs have been run BHCS, DIL

Other operations proposed

Operations to be carried out by Guthrie McLaren Rig #5 Contractor Licence No. 0908
Address 14630-119 Ave, Edmonton Address 11630 Kingsway Ave, Edmont
Responsible Agent in field N. Dease
Dated at Edmonton this 29 Day of March 19 71
Signed by [Signature] Company Hudson's Bay Oil & Gas Co. Ltd.
Title District Engineer Operator's Exploratory Licence No. 1676

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.H.J. Thoms on the
16th March 1971, including Plug #4.

Dated 29th March 19 71

[Signature] B.H.J. Thoms
Oil Conservation Engineer

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

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



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application for a Drilling Authority

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

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

Name and number of well HB Cameron N-24
Location: Unit N Section 24 Grid 60° 10', 117° 15'
Latitude 60° 03' 52.00" N Longitude 117° 19' 55.85" W
Unique Well Identifier 300N246010117150
Universal Well Location Reference 60.06444 Lat. 117.33218 Long.
Elevation: Ground 2,577.7 K.B. To follow feet above sea-level.
Well is expected to produce from Pre-Devonian formation at a depth
of about 5,250 feet. Expected total final depth 5,250
Area assigned to well _____
(See Oil Conservation Engineer's use only)

Permit No. 3215 Lease No. _____ Acreage 63,854
Permittee, licensee, or lessee Hudson's Bay Oil and Gas Company Limited
Exploratory Licence No. 1676
Surface owned by Crown or _____
(If allocated submit name and address of owner and occupant.)
Petroleum and natural-gas rights owned by Crown
We propose to use the following strings of casing, either cementing or landing them as indicated below:—

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Notes of Cement
1. 10 3/4	32.75	K55	New	850	Sufficient cement volume plus 2%
2.					CaCl ₂ to return to surface.
3.					
4.					
5.					

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

Well will be drilled with Rotary Rig No. 5 by Guthrie McLaren Drilling
(Drilling Contractor or company)

Responsible agent of applicant:— Contractor's business Licence No. 0908
At well N. Dease At registered office R. L. Levesque
Address 11630 Kingsway Ave. Address 11630 Kingsway Ave.
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at Edmonton this 14th day of January 1971
Signed by [Signature] Company Hudson's Bay Oil and Gas Company Limited
Title District Drilling Foreman Operator's Licence No. 1676

(For Oil and Mineral Division use only)

APPROVED

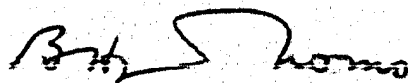
This application has been examined and approved subject to the following conditions:—

- Copies of this Drilling Authority shall be exhibited at the Drilling Rig in both the loghouse and the Drilling Foreman's Office between spud and rig release dates.
- The Company will submit to this office, on Tuesday of each week, the latest reports
Dated 25th January 1971 Please see over page

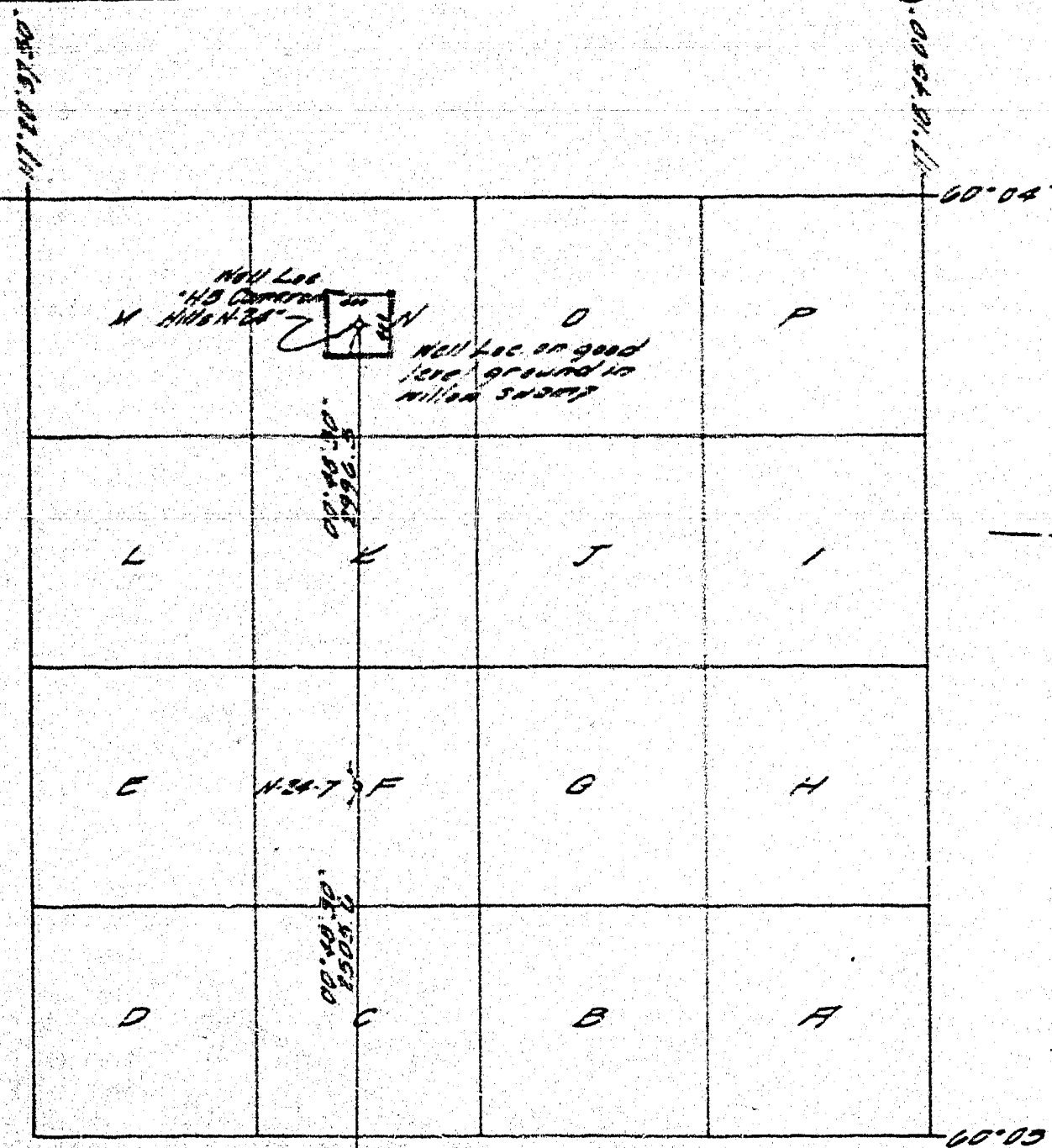
Forms to be submitted to Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.

received by radio on the progress of the well.

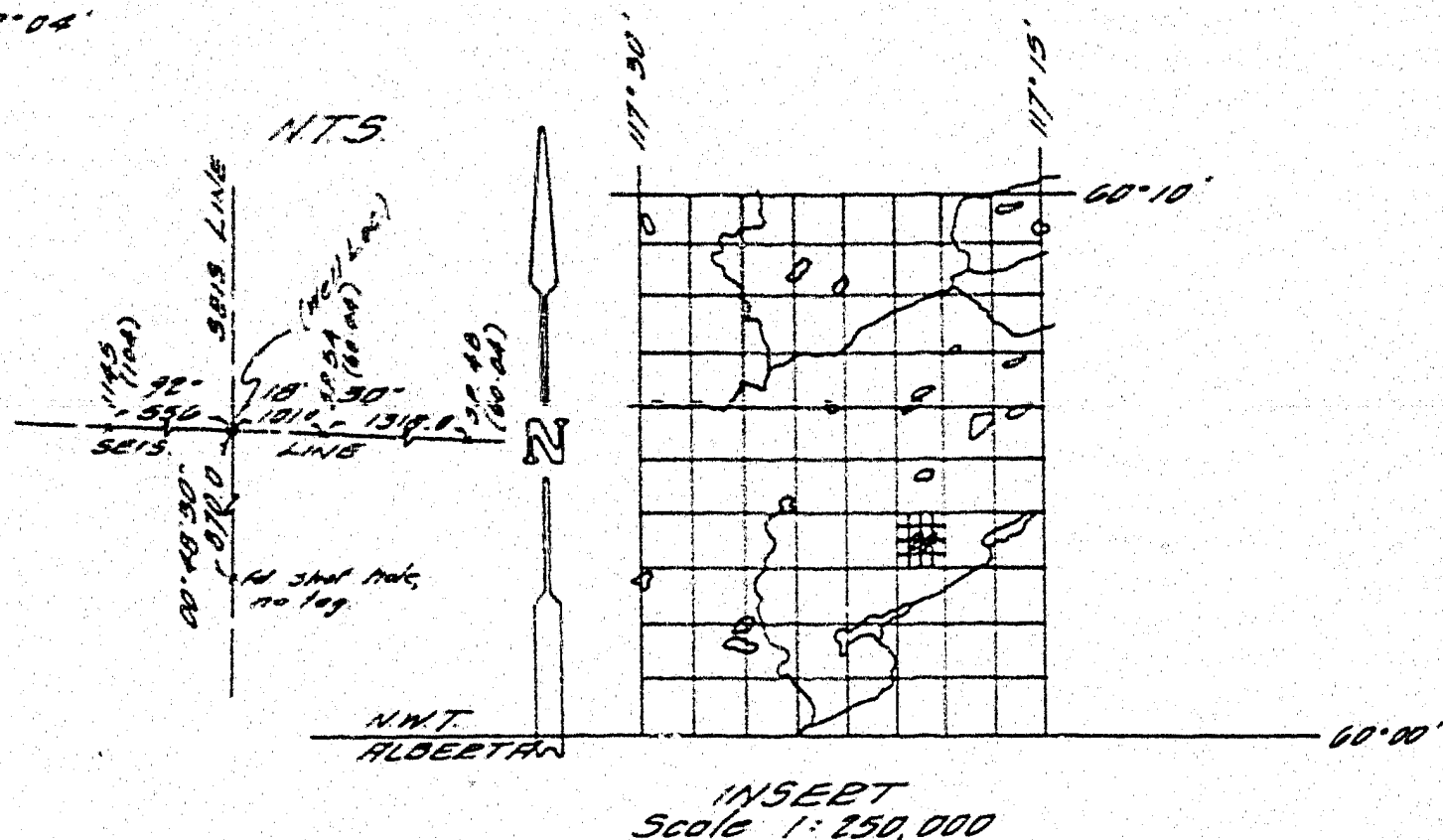
3. During well drilling and testing operations, every effort shall be made to ensure that drilling fluids, chemicals and wastes shall be disposed of or contained in such a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.
4. We draw your attention to Sections 95 and 86 of the Canada Oil and Gas Land Regulations.
5. Production and intermediate strings of casing are to be approved by the Oil Conservation Engineer before running.



B.H.J. Thomas, Oil Conservation Engineer



DETAIL
1" = 1000'



Hudson's Bay Oil and Gas Company Limited
Plan Showing Well Location For:

"HB Cameron Hills N-24"

LAT. - 60°03'52.00" N U.W.L.E. - 60.06444° N
LONG. - 117°19'55.85" W 117.33218° W

NORTHWEST TERRITORIES

Scale: As Noted
January 6th, 1971

G.E. 2577.7 GRID AREA: 60°10' N
117°15' W

For:
Hudson's Bay Oil and Gas Company Limited J. HEDINGER - D.L.S.

[Signature]
[Signature]

Hamilton & Olsen Surveys Ltd.
Edmonton - Alberta P.L.M.
N.S. 5486 267-15/16 058-09/14

TRAVERSE TABLE		
STATION	BEARING	DISTANCE
Mon. No. 281	ASSUMED	
Mon. No. 283	270°18'30"	
N-24-1	90°18'30"	3175.3
2	00°49'30"	2270.9
3	00°49'30"	1396.9
4	00°49'30"	4709.5
5	00°49'30"	4349.2
6	00°49'30"	5475.6
N-24-7	00°48'30"	2505.6
Well Location	00°48'30"	2990.5

GEOLOGICAL PROGRAM

TIGHT HOLE

December 30, 1970

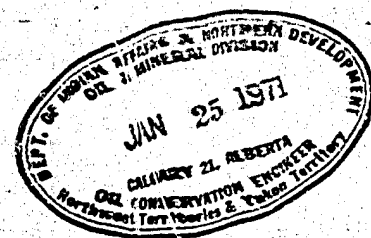
H.B. CAMERON N-24

LOCATION: N-24; 60° 10' N. 117° 15' W.

ELEVATIONS: Estimated
ActualGrd: 2600'
Grd:K.B.: 2615'
K.B.:

GEOLOGICAL MARKERS:

Formation	<u>Estimates</u>		<u>Actual</u>		Thickness
	Depth	Subsea	Depth	Subsea	
Tetcho	1740				
Trout River	1800				
Kakisa	1860				
Red Knife	1980				
Jean Marie	2260				
Tathlina	2280				
Twin Falls	2640				
Hay River	3150				
Muskwa	4170				
Otter Park	4200				
Slave Point	4280				
Fort Vermillion	4380				
Watt Mountain	4435				
Bistcho	4450				
Upper Muskeg Anhydrite	4500				
Keg River	4900				
Chinchaga	5100				
Pre-Cambrian	5225				
T.D.	5250				



Note:-

Written sample descriptions are required for this well.

SAMPLES:

1. 10' samples in vials, surface to T.D., for H.B.O.C.
2. 10' samples in bags, surface to T.D., for Department of Indian Affairs and Northern Development (Government of Canada).

LOGS:

1. Dual Induction Laterolog, T.D. to surface casing with 5" detail, T.D. to 100' above Slave Point.
2. Gamma Ray-Borehole Compensated Sonic Log, T.D. to surface casing with 5" detail, T.D. to 100' above Slave Point.
3. Compensated Formation Density Log and Sidewall Neutron Porosity Log, T.D. to 100' above Slave Point with 5" detail over same interval.
4. Porosity Lithology Log
5. Continuous Dipmeter, Four Arm Digital; interval to be determined later.

N.B.:-

Schlumberger Engineer to record formation fluid resistivities on field prints.

CORING AND TESTING:

1. In the Slave Point and Keg River, test first 15' of porosity. If productive, core and test 60' intervals until formation water is encountered or zone is penetrated.
2. In the Bistcho and Chinchaga test first 15' of porosity. If productive, core and test 25' intervals until formation water is encountered or zone is penetrated.
3. There may be a Detrital zone resting on basement. If this is porous, drill to basement which will be hard quartzite or granite and test the entire Detrital interval.

CORE, FLUID, AND GAS ANALYSES:-

1. Representative fluid and gas samples are to be taken on all drill stem tests and are to be immediately forwarded along with

cores to Chemical and Geological Labs.

2. Additional samples of formation waters are to be retained so that the Schlumberger Engineer may record resistivities on field prints.

MUD:

Drilling mud, adequate for obtaining good cuttings, should be in the hole from 4000' to T.D.

THIS WELL IS TO BE DRILLED AS A TIGHT HOLE. ONLY FOUR (4) COPIES OF FIELD PRINTS ARE TO BE PRINTED AT THE WELL SITE.

DAILY REPORTS:

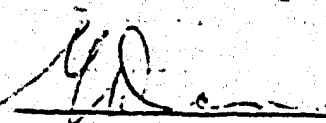
1. Phone daily reports on depth, formation tops, generalized lithologic descriptions every morning to:

Gordon L. Cox 267-2432 (office)
283-6739 (residence)

Special reports to be made as requested to:

George Nann 267-2430 (office)
249-8420 (residence)

2. Core and DST information should be transmitted immediately.


DISTRICT GEOLOGIST

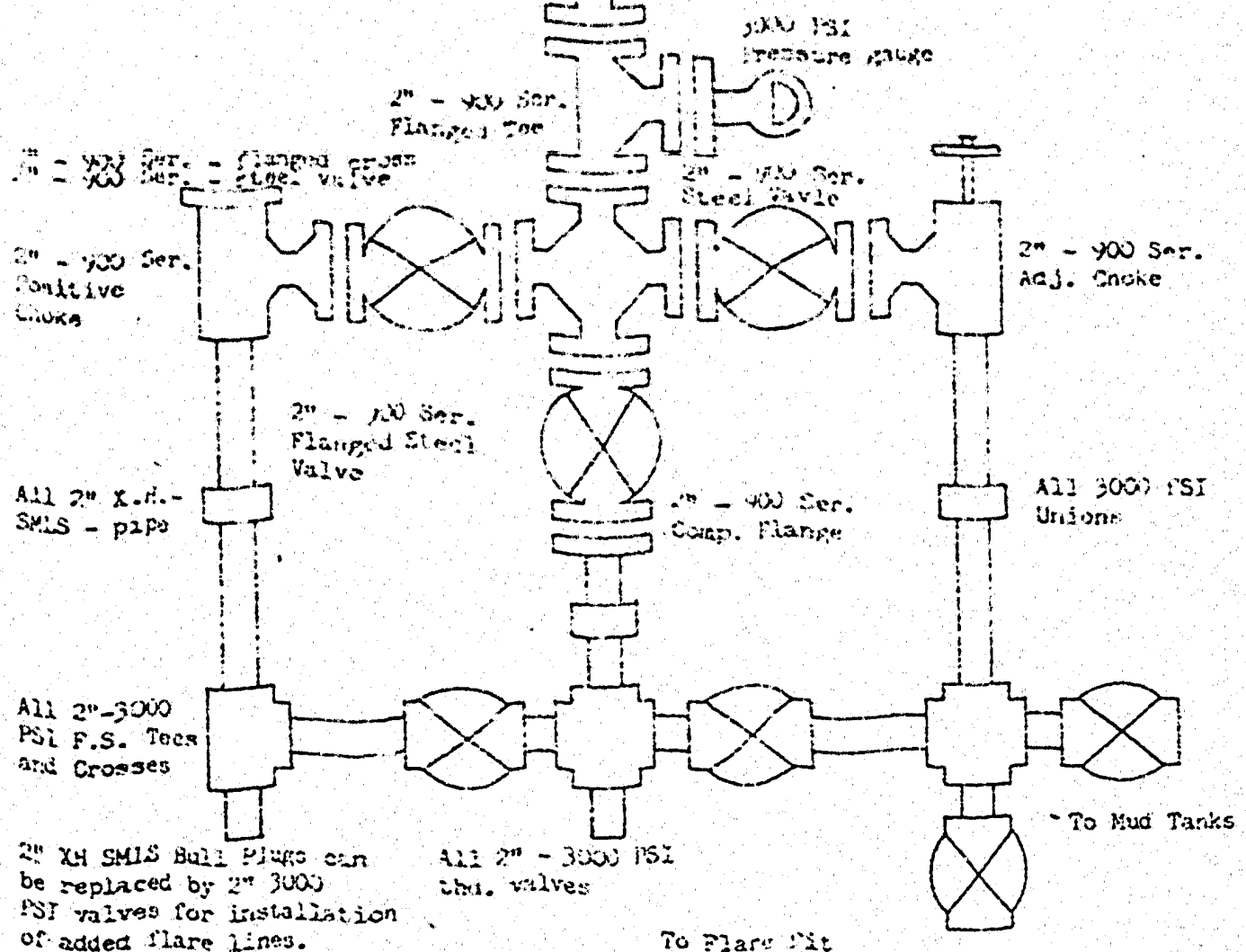
MANAGER, GEOLOGICAL SECTION

Suggested C. A. O. D. C.

Well Killing Manifold

Connected to BOP Valves

2" X.H. SMLS Pipe
Welded to 2" - 900 Ser. weld
neck flanges



This manifold can be constructed of 2" or 3" or a combination of 2" and 3" fittings.

Figure 5 - 1

Suggested C.O.D.C. Well Killing Manifold

Pump or Pump truck to return mud to tank.

MUD TANK

Separator for Gas wells
(Optional)

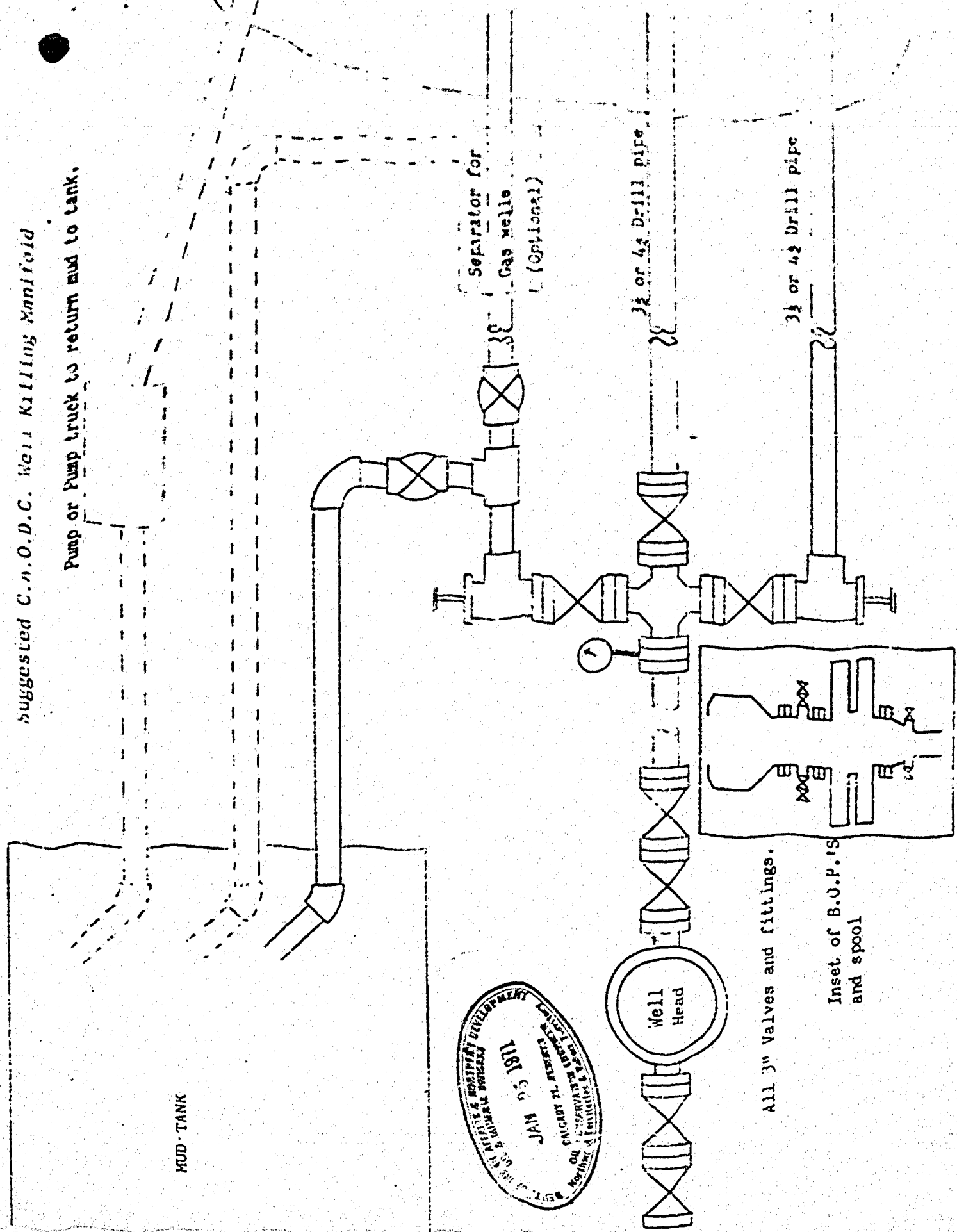
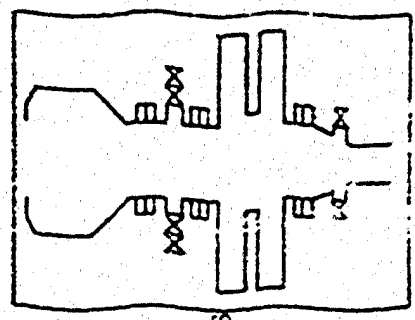
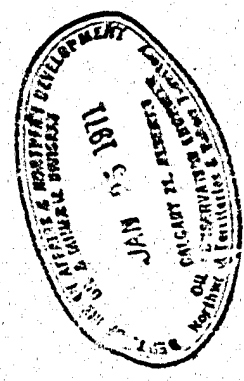
3/4 or 1/2 Drill pipe

3/4 or 1/2 Drill pipe

Well Head

All 3" Valves and fittings.

Inset of B.O.P.'S and spool



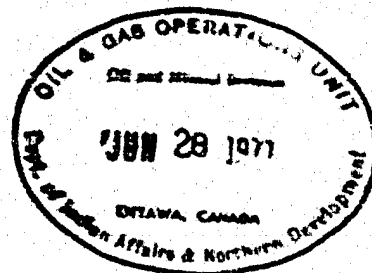
38-11-4-21.

HUDSON'S BAY OIL & GAS CO. LTD.

WELL HISTORY REPORT

HB CAMERON N-24

38-11-4-21



HUDSON'S BAY OIL AND GAS COMPANY LIMITED

WELL HISTORY REPORT

HB CAMERON N-24

Signed: _____

E. A. [Signature]
District Engineer

Date: _____

MAY 17, 1971

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HB CAMERON N-24
Well History Report

SECTION I - SUMMARY OF WELL DATA

- a) Well Name and Number: HB Cameron N-24
- b) permittee, Licensee or Lessee: Hudson's Bay Oil and Gas
Company Limited
- c) Name of Operator: Hudson's Bay Oil and Gas Company Limited
11630 Kingsway Avenue
Edmonton 19, Alberta.
- d) Location: Unit N, Section 24, Grid Area: 60°10'N, 117°15'W
Latitude: 60°03'32"N
Longitude: 117°19'55.85"W
Unique Well Identifier: 300N246010117150
- e) Co-ordinates:
Universal Well Location Reference: Latitude 60.06444°N
Longitude 117.33218°W
- f) Permit No.: 3215
- g) Drilling Contractor: Guthrie McLaren Drilling Ltd.
Rig No. 5
- h) Drilling Authority: No. 489 issued on January 25, 1971
- i) Classification: Exploratory
- j) Elevations: Ground: 2577.7 feet
KB : 2591.8 feet
- k) Spudded: February 24, 1971
- l) Completed drilling: March 15, 1971
- m) Total Depth: 5190 feet KB
Plug Back Depth: To surface
- n) Well Status: Abandoned
- o) Rig Released: March 17, 1971
- p) Hole Size: Surface - 15 inches 0 to 920 feet KB
Final - 8 3/4 inches 920 to 5190 feet KB
- q) Casing: Surface - 10 3/4 inch OD, H-40, 32.75 lb/ft.
Set at 920 feet KB

SECTION II - GEOLOGICAL SUMMARY

a) Formation Tops:

Marker	Log Depth		Sample Depth	
	Feet KB	Subsea	Feet KB	Subsea
Basal Cretaceous Sand	1748	+ 844	1738	+ 854
Trout River	1795	+ 797	1785	+ 807
Kakisa	1838	+ 754	-	-
Red Knife	1960	+ 632	1960	+ 632
Jean Marie	2224	+ 368	2196	+ 396
Tathlina	2248	+ 344	-	-
Twin Falls	2597	- 5	2605	- 13
Hay River	3128	- 536	3122	- 530
Muskwa	4178	-1586	4180	-1588
Otter Park	4229	-1637	-	-
Slave Point	4309	-1717	4319	-1727
Fort Vermilion	4413	-1821	4420	-1828
Watt Mountain	4473	-1881	4460	-1868
Bistcho	4487	-1895	4490	-1898
Upper Muskeg Anhydrite	4517	-1925	4521	-1929
Keg River	4913	-2321	4900	-2338
Chinchaga	5081	-2489	5060	-2468
TOTAL DEPTH	5190	-2598	5190	-2598

b) Cored Intervals: No cores were cut

c) Core Description: Same as above

d) Sample Descriptions

H. B. CAMERON N-24

60° 10' N, 117° 15' W.

NORTHWEST TERRITORIES, CANADA

Note: Sample Study Begins at 4000' in the
Devonian - Hay River Fm.

- 4000-4070 Shale: greyish green, calcareous.
- 4070-4090 Shale: as above; Trace Shale: dark greyish brown, calcareous.
- 4090-4130 Shale: greyish green, calcareous; and Shale: brown to dark greyish brown, calcareous.
- 4130-4160 Shale: greyish green, calcareous; and minor Shale: brown to dark greyish brown, - as above;
- 4160-4180 Shale: grey to greyish green, calcareous. Trace Shale: brown to dark greyish brown, calcareous.
- MUSKWA FM. 4178' (-1586')
- 4180-4220 As above - abundant cavings
- HORN RIVER Fm. - OTTER PARK Mbr. 4229' (-1637')
- 4220-4250 Shale: as above; and Shale: brown to dark greyish brown, bituminous, brown streak, calcareous.
- 4250-4290 Shale: grey to greyish green, calcareous; and minor Limestone: buff to light brownish grey, cryptograined to micrograined, argillaceous, tight; trace Pyrite.
- 4290-4300 Shale: brownish grey to greyish green, calcareous; and minor Limestone: light greyish brown to light brown, cryptograined, slightly argillaceous, tight; trace Pyrite.
- SLAVE POINT Fm. 4309' (-1717')
- 4300-4330 Limestone: light brown, cryptograined to micrograined, pyritic, (partly buff, chalky), slightly argillaceous, slightly dolomitic, tight; trace Pyrite.

- 4330-4350 Limestone: light to medium brown, micrograined to fine grained, partly pelletal, partly fragmental, (partly buff, chalky), slightly dolomitic, slightly argillaceous, scattered fossiliferous debris, trace poor intercrystalline and vugular porosity, trace spotty oil stain, fair oil cut, cream oil fluorescence.
- 4350-4360 As above, scattered poor porosity, scattered spotty oil stain.
- 4360-4370 Limestone: light to medium brown - as above, trace poor intercrystalline and vugular porosity, trace fair oil stain. Trace Ostracods.
- 4370-4380 Limestone: as above, with leached skeletal material producing scattered fair to poor vugular porosity, trace fair to good oil stain, good oil cut, (70% Amphipora?).
- 4380-4390 Limestone: as above, trace poor intercrystalline and vugular porosity, trace fair to poor oil stain. (10% Amphipora?)
- 4390-4410 As above; trace Pyrite.

FORT VERMILLION Mbr. 4413' (-1821')

- 4410-4420 Limestone: as above, partly anhydritic; trace Anhydrite: white to light brown, cryptocrystalline; trace Shale: grey, calcareous; trace Pyrite; (very poor sample)
- 4420-4430 Anhydrite: as above; and Shale: grey to greyish green, calcareous; and Limestone: brown to greyish brown, micrograined, tight; (very poor sample)
- 4430-4450 Limestone: brown, fine to medium grained, pelletal, partly micrograined, partly chalky, slightly anhydritic, trace porosity; trace Anhydrite: as above; (very poor sample @ 4440')
- 4450-4460 Limestone: as above, tight; trace Anhydrite: as above; trace Shale: light grey, calcareous, pyritic;
- 4460-4470 As above, trace oil stain and poor porosity.

WATT MTN. Fm. 4473' (-1881')

- 4470-4500 Limestone: buff to brown, cryptograined to medium grained, partly pelletal, partly fossiliferous, tight; and Shale: light green (apple green) waxy; and Shale: grey, calcareous; trace Siltstone: light grey;

MUSKEG Fm. - BISTCHO Mbr. 4487' (-1895')

4500-4510 As above, trace oil stain and poor porosity; trace Shale; green - as above;

UPPER MUSKEG ANHYDRITE 4517' (-1925')

4510-4520 As above; trace Dolomite: brown, microcrystalline to very fine crystalline, tight; trace Shale: light green - as above; trace Anhydrite - as below.

4520-4530 Anhydrite: white to light brown, cryptocrystalline, partly dolomitic; and Dolomite: light brown, microcrystalline to very fine crystalline, anhydritic, tight; - abundant cavings -

4530-4540 Anhydrite: as above; and Dolomite: light brown to brown, - as above, trace intercrystalline and vugular porosity, trace fair to poor oil stain, fair oil cut.

4540-4580 Dolomite: light brown to brown, microcrystalline to very fine crystalline, anhydritic, trace poor intercrystalline and vugular porosity, trace poor oil stain, fair oil cut, and Anhydrite: as above.

4580-4620 Dolomite: as above, tight, no oil stain; and Anhydrite - as above.

4620-4640 Dolomite: light brown to brown, microcrystalline to very fine crystalline, anhydritic, trace poor intercrystalline and vugular porosity, trace poor oil stain, fair oil cut; and Anhydrite: white to light brown, cryptocrystalline.

4640-4700 Dolomite: as above, tight, no oil stain; and Anhydrite: as above.

4700-4710 Dolomite: light brown to brown, microcrystalline to very fine crystalline, anhydritic, trace poor intercrystalline and vugular porosity, trace poor oil stain, fair oil cut; and Anhydrite: white to light brown, cryptocrystalline.

4710-4720 Anhydrite: white to light brown, cryptocrystalline; and minor Dolomite: as above.

4720-4730 Anhydrite: as above; and Dolomite: buff, microcrystalline, anhydritic, tight.

- 4730-4740 Dolomite: light brown to brown, microcrystalline to very fine crystalline, anhydritic, trace poor intercrystalline and vugular porosity, trace poor oil stain, fair oil cut; and Anhydrite: white to light brown cryptocrystalline.
- 4740-4760 Anhydrite: as above; and minor Dolomite: as above, tight.
- 4760-4770 Anhydrite: as above.
- 4770-4780 Anhydrite: as above; and minor Dolomite: light brown to brown, microcrystalline to fine crystalline, anhydritic, trace poor intercrystalline and vugular porosity, trace poor oil stain, fair oil cut;
- 4780-4810 Anhydrite: white to light brown, cryptocrystalline; trace Dolomite: as above, microcrystalline to very fine crystalline;
- 4810-4830 Dolomite: light brown to brown, microcrystalline to very fine crystalline, anhydritic, tight; and Anhydrite: as above.
- 4830-4840 Anhydrite: as above; and minor Dolomite: as above;
- 4840-4850 Anhydrite: as above; and minor Dolomite: as above, trace poor intercrystalline and vugular porosity, trace poor oil stain, fair oil cut.
- 4850-4860 Anhydrite: as above; and Dolomite: light brown to brown, microcrystalline to very fine crystalline, anhydritic, trace poor oil stain, fair oil cut, no visible porosity.
- 4860-4880 Anhydrite: as above; and minor Dolomite: as above.
- 4880-4910 Anhydrite: white to light brown, cryptocrystalline. Trace Dolomite - as above, slightly anhydritic.

KEG RIVER Fm. 4913' (-2321')

- 4910-4930 Dolomite: buff to brown, partly dark greyish brown, very fine to microcrystalline, partly fine crystalline, trace poor intercrystalline and vugular porosity, trace fair to poor oil stain, fair to good oil cut, trace Pyrobitumen.

- 4930-4950 Dolomite: as above, trace poor oil stain, very poor oil cut.
- 4950-5020 Dolomite: buff to brown, partly dark greyish brown, fine to microcrystalline, trace poor intercrystalline and vugular porosity, trace poor oil stain, very poor oil cut; trace fractures infilled with white crystalline Dolomite - rare vugs lined with Dolomite rhombs.
- 5020-5040 Dolomite: buff, partly light grey, fine to microcrystalline, scattered fair to poor intercrystalline and vugular porosity, trace poor oil stain and cut; scattered vugs lined with Dolomite rhombs. Trace Selenite crystals.
- 5040-5060 As above; poor samples - trip - (adding lost circulation material - unable to use Shale shaker).
- 5060-5080 Dolomite: buff to brown, partly dark greyish brown, microcrystalline to very fine crystalline, scattered fair to poor intercrystalline and vugular porosity, trace poor oil stain and cut, scattered vugs lined with Dolomite rhombs; trace Selenite crystals.

CHINCHAGA Fm. 5081' (-2489')

- 5080-5090 Dolomite: brown to dark greyish brown, microcrystalline to very fine crystalline, slightly anhydritic, partly argillaceous, trace fair oil stain, fair oil cut, no visible porosity.
- Scattered fractures and small vugs infilled with white crystalline Dolomite;
- Trace Selenite crystals.
- 5090-5110 Dolomite: as above, poor oil stain and cut; and minor Anhydrite: buff to light brown, cryptocrystalline; (abundant cavings) Trace Selenite crystals.
- 5110-5120 Dolomite: buff to brown, partly dark greyish brown, - as above; trace Anhydrite - as above, (abundant cavings)
- 5120-5140 Dolomite: light brown to buff, partly dark greyish brown, very fine to microcrystalline, partly argillaceous, trace poor oil stain, poor oil cut, no visible porosity. - Scattered fractures and small vugs infilled with white crystalline Dolomite; trace Anhydrite - as above; trace Selenite crystals.

- 5140-5150 Dolomite: as above, partly fine to medium crystalline, trace fair oil stain and cut; and Dolomite: brownish grey, cryptocrystalline, argillaceous, tight; trace Anhydrite: as above;
- 5150-5160 Dolomite: as above, medium to very fine crystalline, trace fair to good oil stain and cut, rare vugular porosity with Dolomite rhombs, trace Pyrobitumen; trace argillaceous Dolomite - as above; trace Anhydrite: as above;
- 5160-5170 Dolomite: as above, partly brown, microcrystalline to cryptocrystalline, no oil stain or cut, tight; and Anhydrite: buff to light brown, cryptocrystalline; trace Dolomite: greyish brown, cryptocrystalline, argillaceous, tight.
- 5170-5180 Dolomite: brown to greyish brown, microcrystalline to cryptocrystalline, slightly argillaceous, slightly anhydritic, tight; and Anhydrite: buff to light brown, cryptocrystalline, dolomitic in part; trace Chert: light brown to light greyish brown, lithographic (probably Chert stringers).
- 5180-5190
T. D. Anhydrite: buff to light brown, cryptocrystalline, dolomitic in part; and Dolomite: as above; trace Chert - as above;

Total Depth 5190' (Driller)
5190' (Logger)

SECTION III - ENGINEERING SUMMARY

a) Report of Drill Stem Tests:

Copies of DST #1 and DST #2 were sent to your office by HBOG Geological Headquarters.

Chronological Summary of Drill Stem Tests
(Pressure Recorder Readings)

	March 9, 1971 <u>DST #1</u>	March 13, 1971 <u>DST #2</u>
Formation	Slave Point	Keg River
Interval (feet KB)	4300-4390	4910-5040
Initial Flow Time (mins.)	5	5
Initial Shut in Time (mins.)	60	60
Final Flow Time (mins.)	90	90
Final Shut in Time (mins.)	90	90
Initial Hydrostatic Press. (psi)	2135	2457
Initial shut in press. (psi)	511	1428
Initial Flow Press. (psi)	42	275
Final Flow Press. (psi)	48	1259
Final shut in press. (psi)	145	1428
Final Hydrostatic press. (psi)	2123	2445

Flow Rate and Remarks:

DST #1 - Weak air blow decreasing to very weak air blow at end of flow period

DST #2 - Fair air blow decreasing slightly to end of flow period.

Pipe Recovery and Remarks:

DST #1 - 28' gas cut mud

DST #2 - 270' water cut mud
2400' sulphurous salt water

b) Casing Record:

<u>Casing Size</u> (inches)	<u>Grade</u>	<u>Weight</u> (#/ft)	<u>Amount</u> (feet)	<u>Set at</u> (feet KB)	<u>Cement and</u> <u>Additives</u>
10 3/4	H-40	32.75	906	920	850 sacks of Type A Construction Cement plus 2% CaCl ₂

c) Bit Record:

<u>No.</u>	<u>Serial Number</u>	<u>Type</u>	<u>Size (Inches)</u>	<u>Hours Run</u>	<u>Depth In</u>	<u>Out</u>	<u>Footage</u>	<u>Make</u>
1A	858595	T3A	15	18 3/4	0	389	389	Reed
2A	88768	S3	15	1 3/4	389	458	69	Security
3A	77586	T3A-J	15	13 3/4	458	732	274	Reed
4A	22104	DSJ	15	6 3/4	732	893	161	STC
5A	165689	GEMIG	8 3/4	3	893	1043	150	CP
6A(RR)	22104	DSJ	15	1 1/2 (7 1/2)	893	920	27	STC
1	30207	X3A	8 3/4	14 3/4	1043	1884	841	HW
2	23273	XV	8 3/4	40 3/4	1884	2692	808	HW
3	188750	SSIG	8 3/4	51 3/4	2692	3490	798	Reed
4	782412	STIAG	8 3/4	39	3490	4330	840	Reed
5	FZ513	4JS	8 3/4	6 1/2	4330	4390	60	STC
6(RR)	FZ513	4JS	8 3/4	75 1/2	4390	5040	650	STC
7	28539	XDV	8 3/4	25 1/2	5040	5190	150	HW

d) Mud Report:

The mud system contained the following:

Super-Col	- 75,250 pounds
Milgel	- 4,800 pounds
Kwik Seal	- 1,560 pounds
Caustic Soda	- 1,425 pounds
Uni-Cal	- 1,300 pounds
Mil-Fiber	- 520 pounds
CMC	- 400 pounds
Soda Ash	- 300 pounds
Jet Jel	- 27 1/2 pounds
Sawdust	- 193 sacks

e) Deviation Record:

<u>Depth (feet KB)</u>	<u>Deviation (Degrees)</u>
72	3/4
102	3/4
130	1
159	3/4
188	1/2
244	3/4
301	3/4
360	1
389	1
452	3/4
513	1
544	1 1/4
607	1
670	1
795	7/8
893	1
1340	1
1780	7/8
1880	3/4
2360	1 3/4
2460	1
2692	1 1/2
3052	1/2
3490	3/4
3886	1/2
4272	1/2
4804	1/2
5190	3/4

f) Abandonment Plugs:

<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 16/71	5190-4860	150 sacks	Not felt
2	March 16/71	4425-4250	100 sacks	4233
3	March 17/71	970-870	70 sacks	826
4	March 17/71	At surface	5 sacks	-

On March 17, 1971 the surface casing was cut off 3 feet below ground level. A five sack cement plug was placed at the surface and a steel plate was welded across the casing stub complete with riser and identification marker.

g) Lost Circulation Zones:

<u>Formation</u>	<u>Interval</u>	<u>Amount Lost</u>	<u>Corrective Measures</u>
-	1000-1700	-	Initially detected while at 2020 feet KB. Thief zone suspected to be between stated interval. Added 42 sacks sawdust.
Tathlina	2350-2597	-	Commenced losing circulation at 2692 feet KB. Reoccured at 2763, 3023 and 3170 feet KB. Thief zone believed to be the Tathlina. Added lost circulation material as described under "Mud Report" to the mud system as required while drilling to TD.

h) Report of Blowouts: None

SECTION IV - LOGS

Copies of each log were sent to your office by HBOG Geological Headquarters.

<u>Date</u>	<u>Run No.</u>	<u>Interval (ft KB)</u>	<u>Type</u>	<u>Scale</u>
March 15, 1971	1	5184-918	Dual Induction Laterolog	2"
March 15, 1971	1	5184-4200	Dual Induction Laterolog	5"
March 15, 1971	1	5188-918	Borehole Compensated Sonic	2"
March 15, 1971	1	5188-4200	Borehole Compensated Sonic	5"

NOTE: All of the above logs were run by Schlumberger.

SECTION V - ANALYSIS

- a) Core Analysis: None
- b) Water Analysis:
Copies of each Water Analysis for DST #1 and #2 were sent to your office by HBOG Geological Headquarters.

DST #1 - Lab. No. C71-2992
DST #2 - Lab. No. C71-2991-1
DST #2 - Lab. No. C71-2991-2
DST #2 - Lab. No. C71-2991-3

- c) Gas Analysis: None
- d) Oil Analysis: None

SECTION VI - COMPLETION SUMMARY

- a) Tubing Record - none
- b) Perforation record - none
- c) Cementation record:

<u>Plug No.</u>	<u>Date</u>	<u>Interval (feet KB)</u>	<u>Amount of Cement Used</u>	<u>Depth @ which Plug Felt</u>
1	March 16/71	5190-4860	150 sacks	Not felt
2	March 16/71	4425-4250	100 sacks	4233
3	March 17/71	970-870	70 sacks	826
4	March 17/71	At surface	5 sacks	-

On March 17, 1971 the surface casing was cut off 3 feet below ground level. A five sack cement plug was placed at the surface and a steel plate was welded across the casing stub complete with riser and identification marker.

- d) Acidization and Fracturing Record: None
- e) Back Pressure and Production Tests: None

Hudson's Bay Oil and Gas Company Limited

PRODUCTION DEPARTMENT

SUMMARY REPORT

ON

DRILLING AND COMPLETION

OF

HB CAMERON N-24

DISTRICT: Edmonton

DATE: May 12, 1971

DISTRIBUTION: Prod. HQ (2)
Edm. Dist. (1)
W. Oke (1)

PREPARED BY: H.J. Slater/bm

APPROVED BY:

indit *EAS*

Hudson's Bay Oil and Gas Company Limited

PRODUCTION DEPARTMENT

SUMMARY OF WELL DATA

WELL NAME: HB Cameron N-24

LOCATION: Unit N, Section 24, Grid 60°10'N & 117°15'W

COORDINATES: Latitude 60°3'32"N and Longitude 117°19'55.85"W

ELEVATION - GROUND: 2577.7 feet

KELLY BUSHING: 2591.8 feet

CLASSIFICATION: Exploratory

OBJECTIVE: Pre-Cambrian at 5250 feet

TOTAL DEPTH: 5190 feet KB

PLUGGED BACK TO: Surface

DATE SPUDDED: February 24, 1971

DATE RIG RELEASED: March 17, 1971

DATE COMPLETED: March 17, 1971

CONTRACTOR: Guthrie McLaren Drilling Ltd. Rig #5

WELL STATUS: Dry and abandoned

DATE: May 12, 1971

Hudson's Bay Oil and Gas Company Limited

PRODUCTION DEPARTMENT

SUMMARY OF CASING AND CEMENTINGSURFACE CASING

<u>SIZE OD</u>	<u>WEIGHT AND GRADE</u>	<u>LENGTH</u>	<u>DEPTH KB</u>	<u>CEMENTING</u>
TOP:				
10 3/4"	32.75#/ft H-40, ST&C	906'	920'	Cemented with 850 sacks Type A Construction cement plus 2% CaCl ₂

INTERMEDIATE CASING

<u>SIZE OD</u>	<u>WEIGHT AND GRADE</u>	<u>LENGTH</u>	<u>DEPTH KB</u>	<u>CEMENTING</u>
TOP:				

PRODUCTION CASING

<u>SIZE OD</u>	<u>WEIGHT AND GRADE</u>	<u>LENGTH</u>	<u>DEPTH KB</u>	<u>CEMENTING</u>
TOP:				

LINER OR CIRCULATING STRING

WELL NAME: HB Cameron N-24
DATE: May 12, 1971

Hudson's Bay Oil and Gas Company Limited

PRODUCTION DEPARTMENT

SUMMARY OF GEOLOGICAL MARKERS

<u>FORMATION MARKER</u>	<u>DEPTH (FY-KB)</u>	<u>Subsea ELEVATION (FT)</u>
Basal Cretaceous Sand	1748	+ 844
Trout River	1795	+ 797
Kakisa	1838	+ 754
Red Knife	1960	+ 632
Jean Marie	2224	+ 368
Tathlina	2248	+ 344
Twin Falls	2597	- 5
Hay River	3128	- 536
Muskwa	4178	-1586
Otter Park	4229	-1637
Slave Point	4309	-1717
Fort Vermilion	4413	-1821
Watt Mountain	4473	-1881
Bistcho	4487	-1895
Upper Muskeg Anhydrite	4517	-1925
Keg River	4913	-2321
Chinchaga	5081	-2489
TOTAL DEPTH	5190	-2598

SUMMARY OF CORES

<u>NUMBER</u>	<u>FORMATION</u>	<u>INTERVAL (FT-KB)</u>	<u>RECOVERED (FT)</u>
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No cores were cut

WELL NAME: HB Cameron N-24

DATE: May 12, 1971

PAGE 3

Hudson's Bay Oil and Gas Company Limited

PRODUCTION DEPARTMENT

SUMMARY OF MUD PROGRAM

<u>TYPE</u>	<u>INTERVAL (FT-KB)</u>	<u>AVERAGE WEIGHT (LB/GAL)</u>	<u>AVERAGE WL (CC/30 MINS)</u>
Gel	0 - 920	9.7	-
Water	920 - 1995	8.4	-
Gel	1995 - 3845	8.9	12.7
Gel	3845-5190	9.6	11.4

SUMMARY OF LOST CIRCULATION ZONES

<u>ZONE DEPTH (FT-KB)</u>	<u>MUD LOSS (BSL)</u>	<u>REMARKS</u>
2020	-	Added 42 sacks sawdust
2692	-	Added 46 sacks sawdust
2763	-	Added 30 sacks sawdust
3023	-	Added 30 sacks sawdust
3170	-	Added 25 sacks sawdust

SUMMARY OF LOGS AND SURVEYS

<u>COMPANY</u>	<u>TYPE</u>	<u>INTERVAL (FT-KB)</u>
Schlumberger	Dual Induction Laterolog	5184 - 918
Schlumberger	Borehole Compensated Sonic	5188 - 918

WELL NAME: HB Cameron N-24
 DATE: May 12, 1971

Hudson's Bay Oil and Gas Company Limited

PRODUCTION DEPARTMENT

CHRONOLOGICAL SUMMARY OF DRILL STEM TESTS

	<u>DST NUMBER 1</u>	<u>DST NUMBER 2</u>	<u>DST NUMBER</u>
FORMATION:	Slave Point	Keg River	
INTERVAL (FT KB):	4300-4390	4910-5040	
INITIAL FLOW TIME (MINS):	5	5	
INITIAL SHUT IN TIME (MINS):	60	60	
FINAL FLOW TIME (MINS):	90	90	
FINAL SHUT IN TIME (MINS):	90	90	
INITIAL SHUT IN PRESS (PSI):	511	1428	
INITIAL FLOW PRESS (PSI):	42	275	
FINAL FLOW PRESS (PSI):	48	1259	
FINAL SHUT IN PRESS (PSI):	145	1428	

FLOW RATE AND REMARKS

DST #1 - Weak air blow decreasing to very weak air blow at end of flow period.

DST #2 - Fair air blow decreasing slightly to end of flow period.

PIPE RECOVERY AND REMARKS

DST #1 - 28' gas cut mud

DST #2 - 270' water cut mud
2400' sulphurous salt water

WELL NAME: HB Cameron N-24

DATE: May 12, 1971

Hudson's Bay Oil and Gas Company Limited**PRODUCTION DEPARTMENT****SUMMARY OF COMPLETION**

After drilling to a total depth of 5190 feet KB on March 15, 1971, conditioned hole prior to logging. The open hole logs were run followed by cement plug #1 from 5190-4860 feet KB consisting of 150 sacks oilwell cement.

Ran plug #2 from 4425-4250 feet KB with 100 sacks oilwell cement plus 2% CaCl_2 . Felt plug #2 at 4233 feet KB. Ran plug #3 from 970-870 feet KB with 70 sacks oilwell cement plus 3% CaCl_2 . Felt plug #3 at 826 feet KB. The surface casing was cut off 3 feet below ground level, 5 sacks of cement were placed at the surface and a steel plate was welded across the casing stub complete with a riser and identification marker. The rig was released at 4:00 p.m. on March 17, 1971.

WELL NAME: HB Cameron N-24
DATE: May 12, 1971

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. C71-2991-2

Well: Location: H.B. Cameron N-24

Received: Mar. 18, 1971 Reported: Mar. 31, 1971

Operator: HUDSON'S BAY OIL AND GAS COMPANY LIMITED Field or Area:

Elev.: K.B. Grd. Zone/Formation: Keg River

Method of Production: D.S.T. 42

OTHER PERTINENT DATA Recovered 2670' fluid - 270' W.C.M.
-2400' S.W.

Sample Interval: 4910' - 5040'

Sampled by: Lynes United Services Ltd.

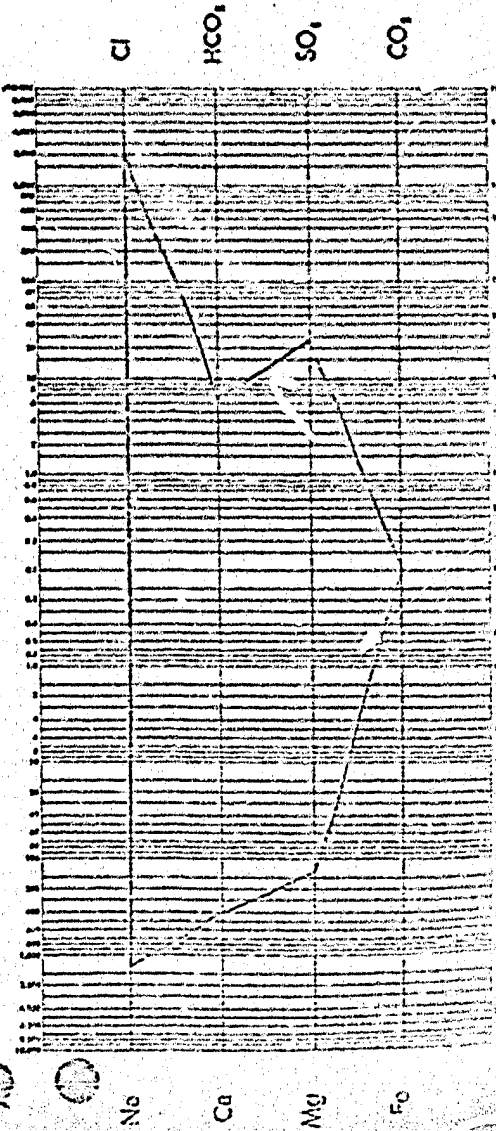
Date: Mar. 14, 1971

(Signed)

Mg/L	Na & K	K	Ca	Mg	SO ₄	Cl	CO ₂	HCO ₃	
31090			8170	1710	1320	66200		390	
1352.46			407.68	140.56	27.46	1866.84		6.40	
35.58			10.72	3.70	0.72	49.11		0.17	

Total Solids Mg/L: By Evaporation 114,480 Fo Trace Specific Gravity 1.031 @60°F Observed pH 6.6 @ 72 °F
Calculated 103,880 After Ignition 103,440 H₂S Present Refractive Index 1.3522 @25°C Resistivity 0.031 ohm meters @ 68 °F

Pattern Unit Meq/L



Remarks and Conclusions

The sample as received contained a small percentage of sediment. The filtrate was pale yellow in colour.

C71-2991-1: Sampled 2670' above Tool.
RESISTIVITY: 0.191 Ohm-meters at 68°F.

C71-2991-3: Sampled 90' above Tool.
RESISTIVITY: 0.035 Ohm-meters at 68°F.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. G/1-2992

Received: Mar. 18, 1971 Reported: Mar. 31, 1971 Well location: H.B. Cameron N-24
 Operator: HUDSON'S BAY OIL AND GAS COMPANY LIMITED Field or Area:
 Elev.: K.B. 2591.8' Grd. Zone/Formation: Slave Pt.
 Method of Production: D.S.T. #1 Sampled from: Top of Pool
 OTHER PERTINENT DATA Recovered 28' gassed drilling mud.

Sample Interval 4300' - 4390'

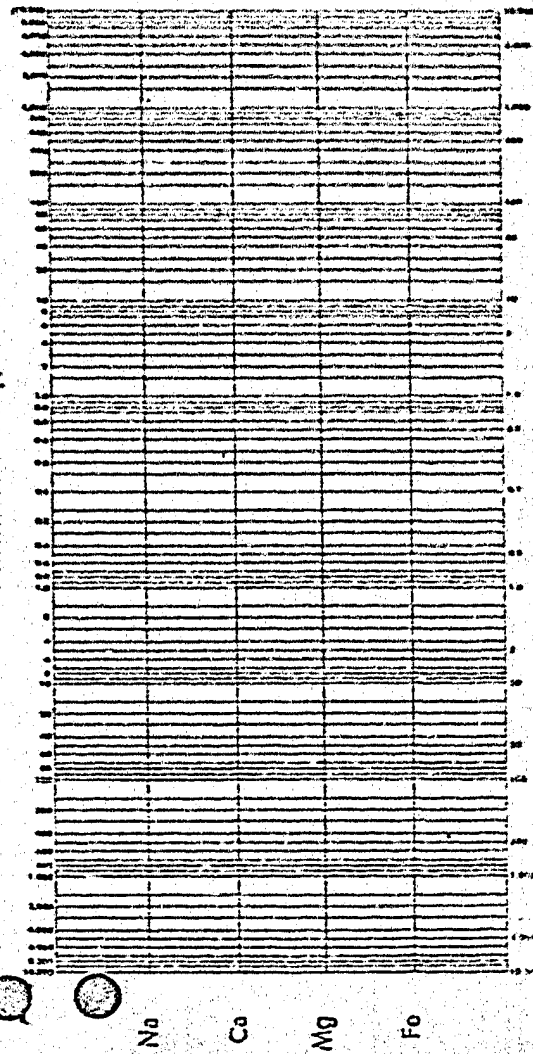
Sampled by: Lynes United Services Ltd. Date: Mar. 9, 1971

(Signed)

Na & K		K	Ca	Mg	SO ₄	Cl	CO ₃	HCO ₃	
						240			
						6.77			

Total Solids Mg/L: By Evaporation 2000 Fe Trace Specific Gravity @ 60°F Observed pH 9.1 @ 72 °F
 Calculated After Ignition 1420 H₂S N11 Refractive Index @ 25°C Resistivity 3.95 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

The sample as received was a mud. The filtrate was pale yellow in colour.

LYNES UNITED SERVICES LTD.

TEST DATA				GENERAL INFORMATION			
Formation	Sludge point	T.D.	4390	Company	Hudsons Bay Oil & Gas Co. Ltd.		
Interval Tested	6300	Fr. to	4390	Address	320 - Seventh Avenue S.W.		
Net Pay Tested	90				Calgary, Alberta		
Type of Test	Bottom Hole Conventional						
Cashion	Amount	Fr.	Well Name	HB Cameron N-24			
Started in Hole at	0500	Mrs. Test Open at	0925	Mrs. Well Number	500 03°52.00 1170 19' 55.85		
Pre-Flow	5	Initial Shut-in	60	K.S. Elevation	2591.8 Sub-Sea Elevation		
Test Flow		Final Shut-in		Area	Cameron Province N.W.T.		
Final Flow	90	Final Shut-in	90	Company Rep.	R. Syndmiller		
Remarks:				Tester	M. Housenga		
				Contractor	Guthrie McLaren		
				Ticket No.	2617	Date	March 9/71
				Service Reports To:	5 - above address		
Blows	On pre-flow - weak initial puff. Weak air blow. On flow - weak air blow decreasing to very weak blow at the end of the flow period.						
GAS FLOW MEASUREMENTS				MUD AND HOLE DATA			
Measured with				No gas to surface.			
				Mud Type Unigas Supercol			
				Weight 9.4 Viscosity 64 Water Loss 7.2			
				Filter Cake 2/32" Bottom Hole Temperature 1180			
Time	Surface Choke	Brading Inches	Cubic Feet/Day	Drill Pipe Size 4 1/2" FH Weight 16.3			
				Drill Collars 4 1/2" H90 L.D. 2 7/8" Steel Run 817			
				Main Hole or Casing Size R 3/4"			
				Rathole or Liner Size No. of Feet			
				Bottom Hole Choke Size 5/8"			
				Surface Choke Size			
				Packer Rubber Size 7 3/4"			
				REMARKS Shut-in pressures suggest virtually no permeability within the interval tested.			
				Clock stopped on recorder # 5794			
RECOVERY							
TOTAL FLUID RECOVERED 28 Ft. Consisting of							
28 Ft. of gasified drilling mud							
Ft. of							
Ft. of							
Ft. of							
Ft. of							
Test was/was not Reverse Circulated							
Oil Recovery A.P.I.				Water Specific Gravity			
Salinity							
PRESSURE READINGS							
Inside Outside X		Inside Outside X		Inside Outside		Inside Outside	
Recorder No. 5794		Recorder No. 5795		Recorder No.		Recorder No.	
Capacity 3000		Capacity 3000		Capacity		Capacity	
Depth 4320		Depth 4325		Depth		Depth	
NUMBER KEY:							
1 - INITIAL HYDROSTATIC		2124		2135			
2 - PRE-FLOW		clock		34			
3 - INITIAL SHUT-IN		stopped		511			
4 - 2nd INITIAL FLOW							
4L - 2nd FINAL FLOW							
4c - 2nd SHUT-IN							
5 - 3rd INITIAL FLOW				42			
6 - FINAL FLOW				48			
7 - FINAL SHUT-IN				145			
8 - FINAL HYDROSTATIC		2105		2123			

Hudsons Bay Oil & Gas Co. Ltd.

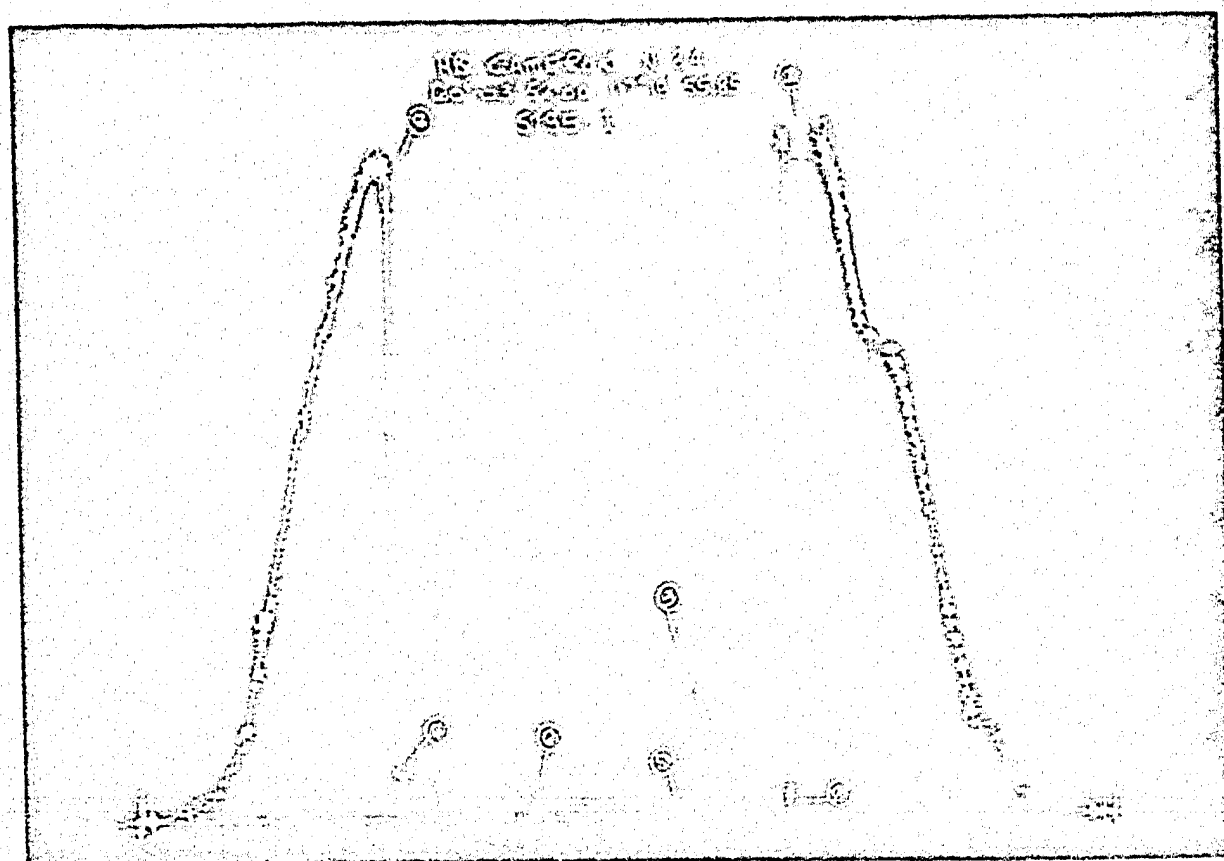
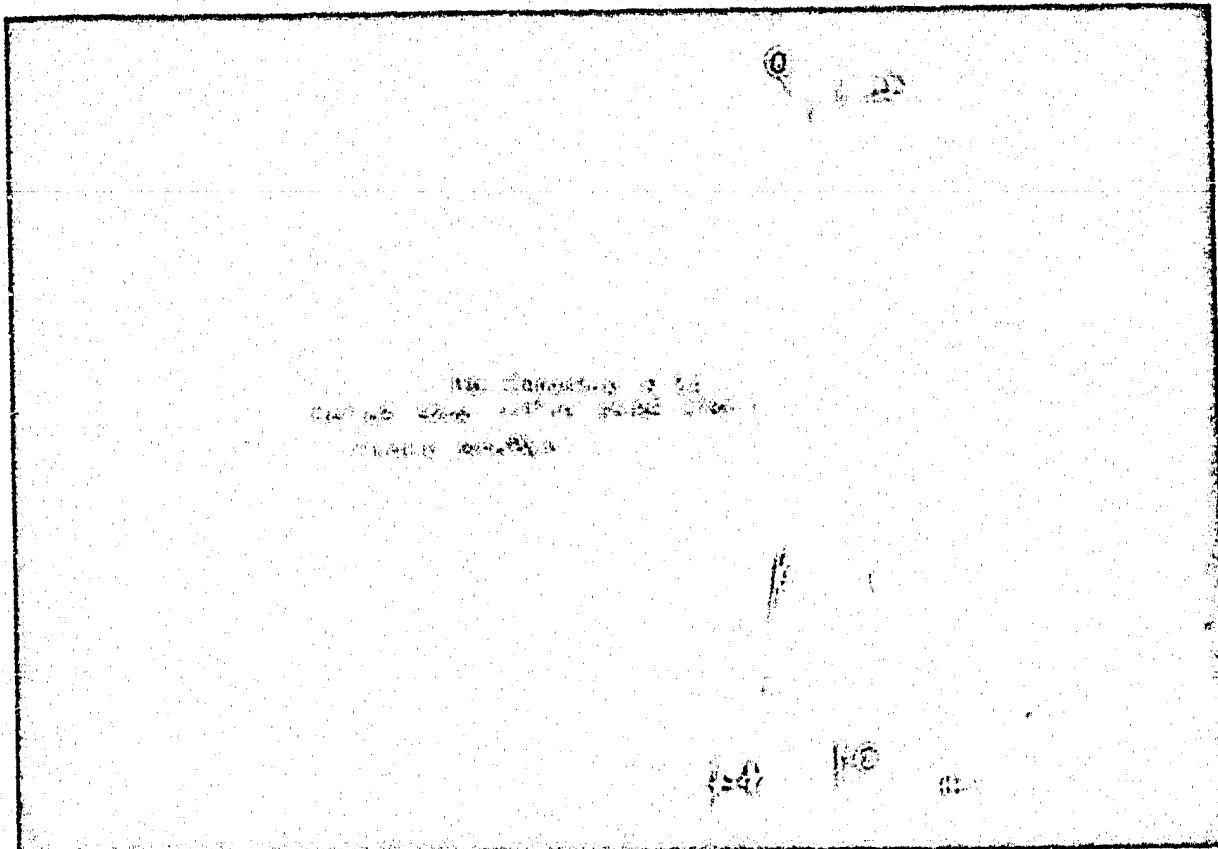
HB Cameron n-24 - 600 03° 52.00 1170 19' 55.85

Well Name and Description

Test No.

March 9/71

Date of Test



LYNES UNITED SERVICES LTD.

Test No. 2		Lynes Test 2		GENERAL INFORMATION	
Location Keg River		T.D. 5040		Company Hudsons Bay Oil & Gas Co. Ltd.	
Interval Tested 4910		Ft. to 5040		Address 11630 - Kingsway Avenue	
Feet of Test Pay Tested 130				City Edmonton, Alberta	
Type of Test Bottom Hole Conventional					
Position		Ft.		Well Name H.B. Cameron N-24	
Started in Hole at 3:15 Hrs.		Test Open at 5:50		Well Number 500 03' 52.00 117° 19' 55.85	
Pre-Flow 5 Min.		Initial Shut-in 60 Min.		K.R. Elevations 2587 Sub-Sea Elevation	
2nd Flow 5 Min.		Second Shut-in		Area Cameron Hills Province N.W.T.	
Final Flow 90 Min.		Final Shut-in 90 Min.		Company Rep. B. Syndmiller	
Remarks				Tester H. McKinlay	
				Contractor Guthrie McLaren R/O No. 5	
				Ticket No. 3003 Date March 13/71	
				Service Reports Tax	
Blows Good initial puff. Fair blow dying down near the end of the test.				5 - above address	

GAS FLOW MEASUREMENTS				MUD AND HOLE DATA			
Measured with				Mud Type Gol Chem			
				Weight 9.7 Viscosity 65 Water Loss 14.0			
				Filter Cake 2/32" Bottom Hole Temperature 158°			
				Drill Pipe Size 4 1/2" FH Weight			
				Drill Collar 5 1/2" H90D. 2 7/8 Feet Run 574			
				Main Hole or Casing Size 8 3/4"			
				Reholer or Liner Size			
				Bottom Hole Choke Size 1/2"			
				Surface Choke Size			
				Packer Rubber Size 7 3/4"			
				REMARKS Shut-in pressures suggest high permeability within the interval tested.			

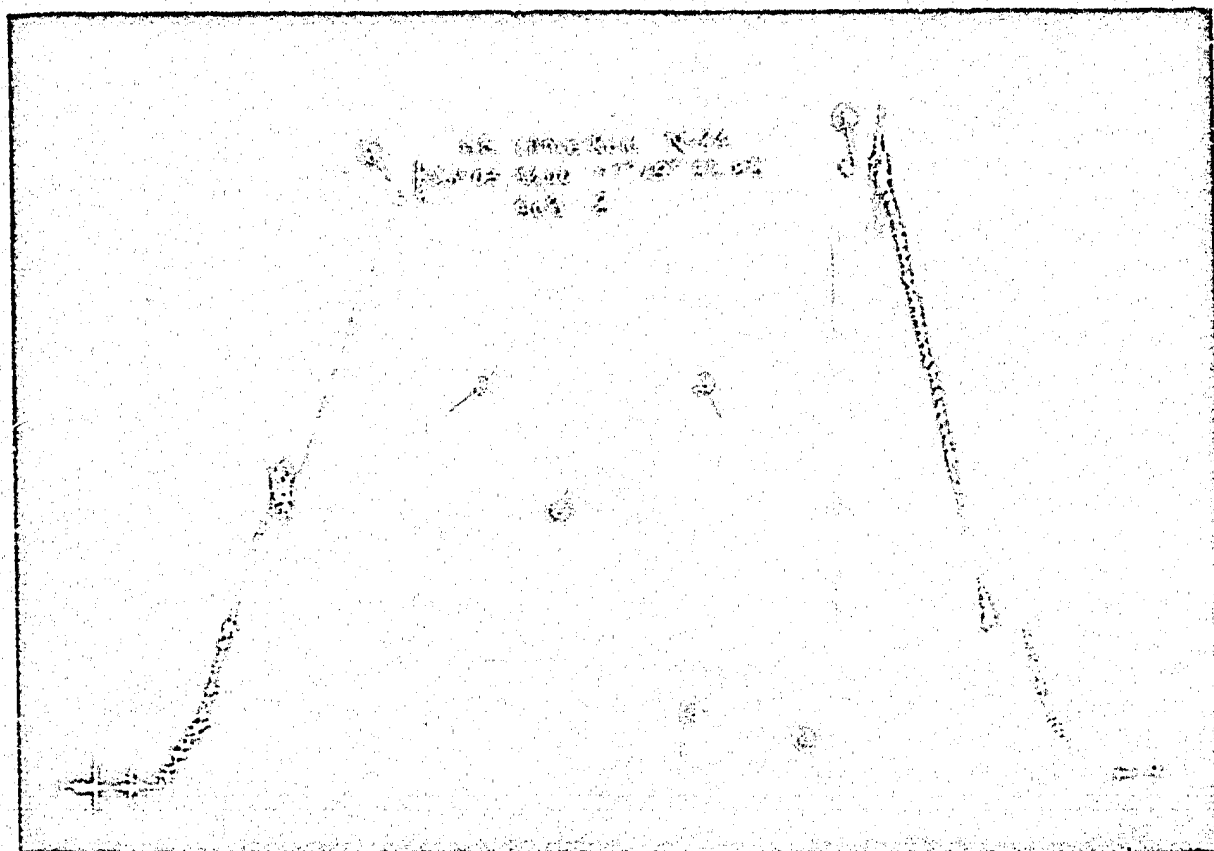
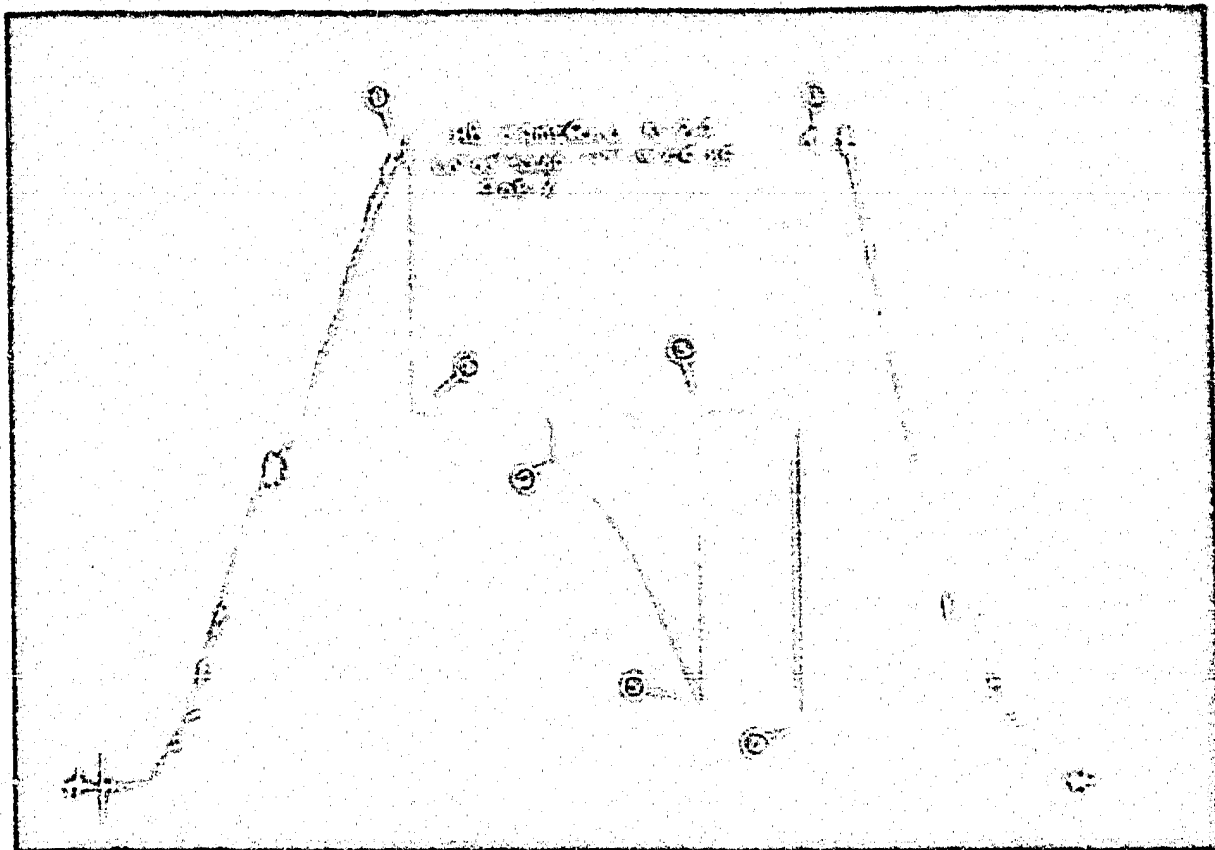
RECOVERY	
TOTAL FLUID RECOVERED 2670 Ft. Consisting of:	
2670 Ft. of salt water	
Ft. of	
Ft. of	
Ft. of	
Test was/was not Reverse Circulated	
Oil Recovery A.P.I.	Water Specific Gravity
Salinity 100,000 PPM	

PRESSURE READINGS		INSIDE _____ OUTSIDE _____ X		INSIDE _____ OUTSIDE _____ X		INSIDE _____ OUTSIDE _____		INSIDE _____ OUTSIDE _____	
Recorder No. 905		Recorder No. 909		Recorder No.		Recorder No.		Recorder No.	
Capacity 3700		Capacity 4000		Capacity		Capacity		Capacity	
Depth 4920		Depth 5025		Depth		Depth		Depth	
NUMBER KEY:									
1 - INITIAL HYDROSTATIC		2493		2457					
2 - PRE-FLOW		259		247					
3 - INITIAL SHUT-IN		1461		1428					
4a - 2nd INITIAL FLOW									
4b - 2nd FINAL FLOW									
4c - 2nd SHUT-IN									
5 - 3rd INITIAL FLOW		313		275					
6 - FINAL FLOW		1277		1259					
7 - FINAL SHUT-IN		1459		1428					
8 - FINAL HYDROSTATIC		2479		2445					

Hudsons Bay Oil & Gas Co. Ltd.
Company

H.B. Cameron N-24 600 03' 52.00 117° 19' 55.85
Well Name and Description

March 13/71
Date of Test



74

- 6 - FINAL FLOW/
- 7 - FINAL SHUT-IN
- 8 - FINAL HYDROSTATIC

PRESSURE DATA

PRESSURE EXTRAPOLATION PLOT

1277	1259
1459	1428
2479	2445

Test No. 909
 Depth 5025 ft.
 P₁ (Conn) _____ psig²
 P₂ 1430 psig
 m 7 psig/cycle
 Initial SIP 1430 psig.
 2nd SIP Δ
 Final SIP 1430 psig.

3.1

10
9
8
7
6
5
4
3
2
1.5
1

5
0
74

1000 1100 1200 1300 1400 1500 1600

PSIG (OIL OR WATER)

DST # 2

PRESSURE EXTRAPOLATION PLOT

- 6 - FINAL FLOW
- 7 - FINAL SHUT-IN
- 8 - FINAL HYDROSTATIC

1277
1459
2479

1259
1428
2445

HB Cameron N-24 600 03' 52.00 1170 19' 55.85
 Well Name and Description
 March 13/77
 Date of Test

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MARCH 14 1971

WELL NAME <u>H.B. CAMERON W-247</u>	LDG. FLG. TO KB <u>14.10</u>	CASING RECORD	DEPTH <u>920</u>	SIZE <u>10 3/4</u>	WEIGHT <u>32.75</u>	GRADE <u>4.40</u>	CEMENT <u>850</u>	ACID <u>2%</u>	PLUG DOWN <u>15.00/21</u>	COMPANY SUPERVISOR <u>W.R.8</u>
CONTRACTOR <u>GUTHRIE MCDONNELL DRILLING LTD.</u>	K. B. ELEV. <u>2591.8</u>									
RIG NO. <u>FIVE</u>	TOOL PUSHER <u>Luci Sweeney</u>		GRD. ELEV. <u>2577.7</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>5040</u>				PROGRESS <u>24</u>				END <u>5064</u>				START <u>5064</u>		PROGRESS <u>54</u>				END <u>5118</u>				START <u>5118</u>		PROGRESS <u>43</u>				END <u>5161</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	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN											
	<u>7</u>	<u>28539</u>	<u>XDV</u>	<u>8 3/4</u>	<u>5040</u>	<u>5064</u>	<u>24</u>	<u>2 1/4</u>	<u>7</u>	<u>28539</u>	<u>XDV</u>	<u>8 3/4</u>	<u>5040</u>	<u>5118</u>	<u>78</u>	<u>10</u>	<u>7</u>	<u>28539</u>	<u>XDV</u>	<u>8 3/4</u>	<u>5040</u>	<u>5161</u>	<u>121</u>	<u>17 3/4</u>																			
DRILLING DATA		LINER SIZE <u>5 1/2</u>		PUMP PRESSURE <u>900</u>		TABLE SPEED <u>70</u>		WEIGHT ON BIT <u>38,000</u>		LINER SIZE <u>5 1/2</u>		PUMP PRESSURE <u>900</u>		TABLE SPEED <u>70</u>		WEIGHT ON BIT <u>38,000</u>		LINER SIZE <u>5 1/2</u>		PUMP PRESSURE <u>900</u>		TABLE SPEED <u>70</u>		WEIGHT ON BIT <u>38,000</u>																			
DRILLING STRING		SIZE <u>4 1/2</u>		STANDS <u>44</u>		SINGLES <u>43</u>		DRILL COL. <u>574.25</u>		KELLY IN <u>20.42</u>		CORE BBL. <u></u>		SIZE <u>4 1/2</u>		STANDS <u>45</u>		SINGLES <u>32</u>		DRILL COL. <u>574.15</u>		KELLY IN <u>11.30</u>		CORE BBL. <u></u>																			
MUD RECORD		TYPE OF MUD <u>GEL</u>		WEIGHT <u>9.7</u>		VIS <u>57</u>		WL <u>14.0</u>		PH <u>10.0</u>		FC <u>2/32</u>		TYPE OF MUD <u>GEL</u>		WEIGHT <u>9.6</u>		VIS <u>56</u>		WL <u>10.8</u>		PH <u>10.0</u>		FC <u>2/32</u>																			
ADDITIVES		<u>SUPERCOL 20 SKS</u>										<u>SUPERCOL 21 SKS</u>										<u>SUPERCOL 21 SKS</u>																					
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.											
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.		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.									
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		FROM		TO		DESCRIPTION OF WORK		FROM		TO		DESCRIPTION OF WORK		FROM		TO		DESCRIPTION OF WORK							
		<u>1200</u>		<u>200</u>		<u>HOIST TEST NO. 2</u>		<u>900</u>		<u>1100</u>		<u>DRILLING</u>		<u>400</u>		<u>400</u>		<u>RIG SERVICE</u>		<u>400</u>		<u>1200</u>		<u>DRILLING 8 3/4" HOLE</u>																			
		<u>200</u>		<u>300</u>		<u>LAY DOWN PACKER & LOAD SAME</u>		<u>1100</u>		<u>1115</u>		<u>RIG SERVICE & B.O.P. ✓</u>																															
		<u>300</u>		<u>315</u>		<u>RIG SERVICE</u>		<u>1115</u>		<u>400</u>		<u>DRILLING</u>																															
		<u>315</u>		<u>530</u>		<u>RUN IN / IN BIT NO. 7</u>																																					
		<u>530</u>		<u>545</u>		<u>BREAK CIRC</u>																																					
		<u>545</u>		<u>800</u>		<u>DRILLING</u>																																					
DRILLER		<u>A. McArthur</u>		NO. HELPERS		<u>4</u>		DRILLER		<u>Donald Ostrander</u>		NO. HELPERS		<u>4</u>		DRILLER		<u>A. McArthur</u>		NO. HELPERS		<u>4</u>																					

DATE MARCH 13 1971

WELL NAME <u>H.B. CAMERON N-24</u>										LDG. FLG. TO KB <u>14.10</u>										CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR			
CONTRACTOR <u>GUTHRIE McLAREN DRIG. NAT 50 A</u>										K. B. ELEV. <u>2591.8</u>										RECORD		<u>920</u>		<u>10 3/4</u>		<u>32.75</u>		<u>H-40</u>		<u>850</u>		<u>2%</u>		<u>FEB 27/71</u>		<u>W.R.B.</u>			
RIG NO. <u>FIVE</u>										TOOL PUSHER <u>Leah L. L...</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>4948</u> PROGRESS <u>87</u> END <u>5035</u>										START <u>5035</u> PROGRESS <u>5</u> END <u>5040</u>										START <u>5040</u> PROGRESS END <u>5040</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									
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									
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									
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										FROM TO DESCRIPTION OF WORK										FROM TO DESCRIPTION OF WORK										FROM TO DESCRIPTION OF WORK									
DRILLER <u>John McL...</u> NO. HELPERS <u>4</u>										DRILLER <u>Donald C...</u> NO. HELPERS <u>4</u>										DRILLER <u>John McL...</u> NO. HELPERS <u>4</u>																			

DATE MARCH 12 1971

WELL NAME <u>H.B. CAMERON M-24</u>										LDG. FLG. TO KB <u>14.10</u>										CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR <u>W.R.B.</u>								
CONTRACTOR <u>GUTHRIE McLAREN DRILL</u>										TYPE RIG <u>NAT 50 A</u>												K. B. ELEV	<u>2591.8</u>	920	10 3/4	32.75	H. 40	850			22 Feb 27/71						
RIG NO. <u>FIVE</u>										TOOL PUSHER <u>Leah Sawyer</u>												GRD. ELEV.	<u>2577.7</u>														
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																	
DEPTH		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													
		5 1/2		925		55		38,000		5 1/2		925		55		38,000		5 1/2		925		55		38,000													
DRILLING STRING		SIZE		STANDS		SINGLES		DRILL COLL.		KELLY IN.		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COLL.		KELLY IN.		CORE BBL.													
		4 1/2		425		2.04		574.15		9.81		4 1/2		422		0.71		62.31		574.15		33.92		4 1/2		434		5.04		574.15		28.81					
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		9.6		49		18.0		10.5		2/32		GEL		9.6		48		20.0		10.5		2/32		GEL		9.6		46		10.6		10.5		2/32	
				9.6		50										9.6		44				10.5						9.7		52							
		ADDITIVES		SUPERCOL		8		SKS.								ADDITIVES		SUPERCOL		22		SKS.						ADDITIVES		MIL GEL		35		SKS.			
CORING		NO.		FROM		TO		RECOVERED		FORMATION		NO.		FROM		TO		RECOVERED		FORMATION		NO.		FROM		TO		RECOVERED		FORMATION							
SURVEY		1/2		DEG. AT		4804		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									
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		3 45		DRILLING		8 00		12 00		DRILLING 8 3/4" HOLE		4 00		5 00		DRILLING 8 3/4" HOLE																			
		3 45		4 00		RIG SERVICE		12 00		12 15		RIG SERVICE & B.O.P. ✓		5 00		5 15		RIG SERVICE																			
		4 00		4 15		SURVEY		12 15		4 00		DRILLING 8 3/4" HOLE		5 15		12 00		DRILLING																			
		4 15		8 00		DRILLING																															
DRILLER <u>W.R. McLAREN</u> NO. HELPERS <u>4</u>										DRILLER <u>Herold Ottmann</u> NO. HELPERS <u>4</u>										DRILLER <u>W.R. McLAREN</u> NO. HELPERS <u>4</u>																	

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MARCH 11 1971

WELL NAME <u>H.B. CAMERON N-24</u>	LDG. FLG. TO KB <u>14.10</u>	CASING RECORD	DEPTH <u>920</u>	SIZE <u>10 3/4</u>	WEIGHT <u>32.75</u>	GRADE <u>4.40</u>	CEMENT <u>850</u>	ACID <u>22</u>	PLUG DOWN <u>FEB. 27/71</u>	COMPANY SUPERVISOR <u>W.A.B.</u>
CONTRACTOR <u>GUTHRIE McLAUREN DRILL LTD.</u>	TYPE RIG <u>NAT. 50A.</u>		K. B. ELEV. <u>2591.8</u>							
RIG NO. <u>FIVE</u>	TOOL PUSHER <u>John Sweeney</u>		GRD. ELEV. <u>2577.7</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>4567</u>	PROGRESS <u>78</u>	END <u>4645</u>	START <u>4645</u>	PROGRESS <u>65</u>	END <u>4710</u>	START <u>4710</u>	PROGRESS <u>64</u>	END <u>4774</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
	<u>RR6 F2513</u>	<u>455</u>	<u>8 3/4</u>	<u>4390</u>	<u>4645</u>	<u>255</u>	<u>28 3/4</u>			<u>RR6 F2513</u>	<u>455</u>	<u>8 3/4</u>	<u>4390</u>	<u>4710</u>	<u>320</u>	<u>36 1/2</u>			<u>RR6 F2513</u>	<u>455</u>	<u>8 3/4</u>	<u>4390</u>	<u>4774</u>	<u>384</u>

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
	<u>5 1/2</u>	<u>1200</u>	<u>55</u>	<u>38,000</u>	<u>5 1/2</u>	<u>1125</u>	<u>55</u>	<u>38,000</u>	<u>5 1/2</u>	<u>1125</u>	<u>55</u>	<u>38,000</u>

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.
	<u>4 1/2</u>	<u>4033.99</u>	<u>574.15</u>	<u>36.86</u>			<u>4 1/2</u>	<u>4033.99</u>	<u>61.63</u>	<u>574.15</u>	<u>41.15</u>		<u>4 1/2</u>	<u>4189.19</u>	<u>574.15</u>	<u>10.61</u>		

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			
	<u>GEL</u>	<u>9.4</u>	<u>56</u>				<u>GEL</u>	<u>9.4</u>	<u>58</u>	<u>10.8</u>	<u>10.5</u>	<u>2/32</u>		<u>9.5</u>	<u>44</u>						
		<u>9.4</u>	<u>53</u>	<u>13.4</u>	<u>10.5</u>	<u>2/32</u>		<u>9.6</u>	<u>45</u>	<u>15.8</u>	<u>10.5</u>	<u>2/32</u>		<u>9.6</u>	<u>48</u>	<u>14.6</u>	<u>10.5</u>	<u>2/32</u>			
	ADDITIVES	<u>CAUSTIC 1 SKS.</u>						ADDITIVES	<u>C.M.C. 1 SK</u>						ADDITIVES	<u>C.M.C. 1 SKS.</u>					
		<u>UNICAL 1 SKS.</u>							<u>SUPERCOL 8 SKS</u>							<u>SUPERCOL 27 SKS.</u>					

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.

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
	<u>12⁰⁰</u>	<u>2⁰⁰</u>	<u>DRILLING</u>	<u>8⁰⁰</u>	<u>8¹⁵</u>	<u>RIG SERVICE & B.O.R. ✓</u>	<u>4⁰⁰</u>	<u>4¹⁵</u>	<u>RIG SERVICE</u>
	<u>2⁰⁰</u>	<u>2¹⁵</u>	<u>RIG SERVICE</u>	<u>8¹⁵</u>	<u>4⁰⁰</u>	<u>DRILLING 8 3/4" HOLE</u>	<u>4¹⁵</u>	<u>12⁰⁰</u>	<u>DRILLING 8 3/4" HOLE</u>
	<u>2¹⁵</u>	<u>8⁰⁰</u>	<u>DRILLING</u>						

DRILLER <u>John McLauren</u>	NO. HELPERS <u>4</u>	DRILLER <u>Bernard Oetters</u>	NO. HELPERS <u>4</u>	DRILLER <u>John McLauren</u>	NO. HELPERS <u>4</u>
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Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MARCH 10 1971

WELL NAME		LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																																																																	
CONTRACTOR		K. B. ELEV.																																																																											
RIG NO.		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				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																																																				
		6	FZ513	4JS	8 3/4	4390	4440	50	6	RR6 FZ513	4JS	8 3/4	4390	4498	108	13 1/4	RR6 FZ513	4JS	8 3/4	4390	4567	177	21																																																						
DRILLING DATA		LINER SIZE				PUMP PRESSURE				TABLE SPEED				WEIGHT ON BIT				LINER SIZE				PUMP PRESSURE				TABLE SPEED				WEIGHT ON BIT																																															
		5 1/2				900				50				38,000				5 1/2				1100				55				38,000																																															
DRILLING STRING		SIZE				STANDS				SINGLES				DRILL COL.				KELLY IN				CORE BBL.				SIZE				STANDS				SINGLES				DRILL COL.				KELLY IN				CORE BBL.																															
		4 1/2				3845.55				574.15				20.30				4 1/2				3908.01				574.15				15.84				4 1/2				3910.93				574.15				21.92																															
MUD RECORD		TYPE OF MUD				WEIGHT				VIS				WL				PH				FC				TYPE OF MUD				WEIGHT				VIS				WL				PH				FC																															
		GEL				9.4				52				7.4				8.0				432				GEL				9.3				200				11.0				GEL				9.4				48				10.2				11.0				2132															
		ADDITIVES				SUPERCOL				22 SKS.				UNICAL				1 SKS.				CAUSTIC				1 SKS.				ADDITIVES				UNICAL				20 SKS.				CAUSTIC				8 SKS.				ADDITIVES				SUPERCOL				14 SKS.				CAUSTIC				3 SKS.				UNICAL				3 SKS.			
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																																											
		12 ⁰⁰		12 ¹⁵		RIG SERVICE										9 ⁰⁰		9 ¹⁵		DRILLING 8 3/4" HOLE										4 ⁰⁰		6 ³⁰		DRILLING 8 3/4" HOLE																																											
		12 ¹⁵		1 ⁴⁵		RUN IN IN BIT 6										9 ¹⁵		9 ³⁰		WORK ON C-250										6 ³⁰		6 ⁴⁵		RIG SERVICE & CHECK Bops.																																											
		1 ⁴⁵		2 ⁰⁰		BREAK CIRC. & CLEAN TO BOTTOM										9 ³⁰		11 ⁰⁰		DRILLING 8 3/4" HOLE										6 ⁴⁵		12 ⁰⁰		DRILLING																																											
		2 ⁰⁰		8 ⁰⁰		DRILLING (FILL 38')										11 ⁰⁰		11 ¹⁵		RIG SERVICE & B.O.P. ✓																																																									
																11 ¹⁵		1 ³⁰		DRILLING																																																									
																1 ³⁰		1 ⁴⁵		WORK ON C-250																																																									
																1 ⁴⁵		4 ⁰⁰		DRILLING 8 3/4" HOLE																																																									
																				(C-1508 NEEDED TO MIX MUD)																																																									
DRILLER		J. M. McArthur		NO. HELPERS		4		DRILLER		L. O. Oltmann		NO. HELPERS		4		DRILLER		J. M. McArthur		NO. HELPERS		4																																																							

DATE MARCH 9 1971

WELL NAME <u>H.B. CAMERON N-24</u>										LDG. FLG. TO KB <u>14.10</u>										CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR	
CONTRACTOR <u>GUTHRIE McCLAREN DRILLING LTD.</u>										K. B. ELEV. <u>2591.8</u>												920		10 3/4		32.75		H.40		850		2%		FEB 27/71		W.R.B.	
RIG NO. <u>FIVE</u>										GRD. ELEV. <u>2577.7</u>																											
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																	
DEPTH		START		PROGRESS				END <u>4300</u>		START		PROGRESS				END <u>4390</u>		START		PROGRESS				END <u>4390</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												
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													
		<u>5 1/2</u>		<u>950</u>																																	
DRILLING STRING		SIZE		STANDS		SINGLES		DRILL COL.		SIZE		STANDS		SINGLES		DRILL COL.		SIZE		STANDS		SINGLES		DRILL COL.													
		<u>4 1/2</u>		<u>3782.65</u>		<u>574.15</u>		<u>2990</u>		<u>63.30</u>								<u>4 1/2</u>		<u>3782.65</u>		<u>574.15</u>		<u>33.20</u>													
MUD RECORD		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC													
				<u>9.4</u>		<u>64</u>		<u>7.2</u>		<u>9.5</u>		<u>432</u>																									
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.					
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:		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											
		<u>12:00</u>		<u>2:00</u>		<u>CIRC WAIT ON TESTER.</u>						<u>8:00</u>		<u>8:15</u>		<u>FINISH IN W/ PACKER</u>						<u>4:00</u>		<u>4:15</u>		<u>RIG SERVICE & B.O.P.</u>											
		<u>2:00</u>		<u>4:00</u>		<u>HOIST OUT</u>						<u>8:15</u>		<u>8:30</u>		<u>RIG UP TO TEST</u>						<u>4:15</u>		<u>6:30</u>		<u>RUN IN W/ B.I.T No 6 (PERM)</u>											
		<u>4:00</u>		<u>6:00</u>		<u>MAKE UP PACKER</u>						<u>8:30</u>		<u>12:30</u>		<u>TESTING W/ LYNES UNITED</u>						<u>6:30</u>		<u>6:45</u>		<u>TRY TO BREAK CIRC</u>											
		<u>6:00</u>		<u>8:00</u>		<u>RUN IN W/ PACKER</u>						<u>12:30</u>				<u>PULL PACKER LOOSE & TEAR</u>						<u>6:45</u>		<u>7:15</u>		<u>TRY TO UNPLUG B.I.T</u>											
														<u>12:45</u>		<u>OUT TESTING HEAD & LINES</u>						<u>7:15</u>		<u>10:15</u>		<u>TRIP OUT TO UNPLUG BIT.</u>											
												<u>12:45</u>		<u>2:45</u>		<u>HOIST OUT W/ PACKER</u>						<u>10:15</u>		<u>11:00</u>		<u>CLEAN UP BIT & BOTTOM COLLAR</u>											
												<u>2:45</u>				<u>SERVICE TEST TOOLS &</u>						<u>11:00</u>		<u>12:00</u>		<u>RUN IN W/ BIT 6.</u>											
														<u>4:00</u>		<u>LAY DOWN SAME</u>																					
DRILLER <u>Jim McArthur</u> NO. HELPERS <u>4</u>										DRILLER <u>Sam Ostrander</u> NO. HELPERS <u>4</u>										DRILLER <u>Jim McArthur</u> NO. HELPERS <u>4</u>																	

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MARCH 8 1971

WELL NAME : <u>H.B. CAMERON N-24</u>										LDG. FLG. TO KB <u>4.10</u>										CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR	
CONTRACTOR <u>GUTHRIE McCLAREN DRILLING LTD. NAT 50A</u>										K. B. ELEV. <u>2591.8</u>										RECORD		<u>920</u>		<u>10 3/4</u>		<u>32.75</u>		<u>4.40</u>		<u>850</u>		<u>290</u>		<u>Feb 27/71</u>		<u>W.R.D</u>	
RIG NO. <u>FIVE</u>										TOOL PUSHER <u>A. S. J. J.</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>4182</u> PROGRESS <u>138</u> END <u>4320</u>										START <u>4320</u> PROGRESS <u>28</u> END <u>4348</u>		START <u>4348</u> PROGRESS <u>42</u> END <u>4390</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													
	<u>4</u>	<u>782412</u>	<u>STING</u>	<u>8 3/4</u>	<u>3490</u>	<u>4320</u>	<u>830</u>	<u>38 1/4</u>	<u>4</u>	<u>782412</u>	<u>STING</u>	<u>8 3/4</u>	<u>3490</u>	<u>4330</u>	<u>840</u>	<u>39</u>	<u>5</u>	<u>F2513</u>	<u>4JS</u>	<u>8 3/4</u>	<u>4330</u>	<u>4390</u>	<u>90</u>	<u>6 1/2</u>													
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																			
	<u>5 1/2</u>	<u>950</u>	<u>70/75</u>	<u>38,000</u>				<u>5 1/4</u>	<u>6950</u>	<u>50</u>	<u>38,000</u>				<u>5 1/2</u>	<u>950</u>	<u>50</u>	<u>38,000</u>																			
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.																			
	<u>4 1/2</u>	<u>39</u>	<u>2</u>	<u>3120.27</u>	<u>574.15</u>	<u>25.58</u>	<u>4 1/2</u>	<u>375.85</u>	<u>574.15</u>	<u>22.00</u>	<u>4 1/2</u>	<u>3782.65</u>	<u>574.15</u>	<u>33.20</u>																							
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																			
	<u>GEL</u>	<u>9.5</u>	<u>53</u>				<u>GEL</u>	<u>9.4</u>	<u>50</u>				<u>GEL</u>	<u>9.4</u>	<u>55</u>	<u>9.0</u>	<u>9.5</u>	<u>432</u>																			
	ADDITIVES	<u>SUPERCOL 32 SKS</u>					ADDITIVES	<u>SUPERCOL 31 SKS</u>					ADDITIVES	<u>SUPERCOL 42 SKS.</u>																							
		<u>KWIK SEAL 5 SKS</u>						<u>CAUSTIC 4 SKS.</u>																													
CORING	NO.	FROM	TO	RECOVERED	FORMATION				NO.	FROM	TO	RECOVERED	FORMATION				NO.	FROM	TO	RECOVERED	FORMATION																
	<u>4</u>		<u>200</u>																																		
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.	DEG. AT	FT.	DEG. AT	FT.	DEG. AT	FT.													
	<u>1/2</u>	<u>4272</u>																																			
	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.)																							
	<u>4 40</u>	<u>4 40</u>		<u>4 40</u>		<u>4 40</u>	<u>4 40</u>		<u>4 40</u>		<u>4 40</u>	<u>4 40</u>		<u>4 40</u>																							
DRILL STEM TESTS	GAS TO SURFACE	MIN. @		MCF/D MAX.		GAS TO SURFACE	MIN. @		MCF/D MAX.		GAS TO SURFACE	MIN. @		MCF/D MAX.																							
	<u>4 40</u>	<u>4 40</u>		<u>4 40</u>		<u>4 40</u>	<u>4 40</u>		<u>4 40</u>		<u>4 40</u>	<u>4 40</u>		<u>4 40</u>																							
	OIL TO SURFACE	MIN. @		BBL/D MAX.		OIL TO SURFACE	MIN. @		BBL/D MAX.		OIL TO SURFACE	MIN. @		BBL/D MAX.																							
	<u>4 40</u>	<u>4 40</u>		<u>4 40</u>		<u>4 40</u>	<u>4 40</u>		<u>4 40</u>		<u>4 40</u>	<u>4 40</u>		<u>4 40</u>																							
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	FROM	TO	DESCRIPTION OF WORK										FROM	TO	DESCRIPTION OF WORK										FROM	TO	DESCRIPTION OF WORK										
	<u>12 00</u>	<u>1 00</u>	<u>DRILLING</u>										<u>8 00</u>	<u>8 40</u>	<u>DRILLING</u>										<u>4 00</u>	<u>6 00</u>	<u>DRILLING</u>										
	<u>1 00</u>	<u>1 15</u>	<u>RIG SERVICE</u>										<u>8 45</u>	<u>9 30</u>	<u>CIRC SAMPLE</u>										<u>6 00</u>	<u>6 15</u>	<u>RIG SERVICE</u>										
	<u>1 15</u>	<u>4 00</u>	<u>DRILLING</u>										<u>9 30</u>	<u>11 30</u>	<u>HOLE</u>										<u>6 15</u>	<u>8 30</u>	<u>DRILLING</u>										
	<u>4 00</u>	<u>4 30</u>	<u>SURVEY</u>										<u>11 30</u>	<u>11 45</u>	<u>RIG SERVICE & B.O.P</u>																						

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE March 7 1971

WELL NAME <u>H.B. CAMERON N-24</u>		LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR <u>W.R.B.</u>
CONTRACTOR <u>GUTHIE McLAREN / DRILLER</u>		K. B. ELEV.			<u>920</u>	<u>10 3/4</u>	<u>32.75</u>	<u>H.40</u>				
RIG NO. <u>FIVE</u>		GRD. ELEV.										

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	PROGRESS	END											START	PROGRESS	END											START	PROGRESS	END															
	<u>3684</u>	<u>161</u>	<u>3845</u>											<u>3845</u>	<u>177</u>	<u>4022</u>											<u>4022</u>	<u>160</u>	<u>4182</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
	<u>4</u>	<u>782412</u>	<u>STING</u>	<u>8 3/4</u>	<u>3490</u>	<u>3845</u>	<u>355</u>	<u>17</u>											<u>4</u>	<u>782412</u>	<u>STING</u>	<u>8 3/4</u>	<u>3490</u>	<u>4022</u>	<u>532</u>	<u>24 1/2</u>											<u>4</u>	<u>782412</u>	<u>STING</u>	<u>8 3/4</u>	<u>3490</u>	<u>4182</u>	<u>692</u>	<u>31</u>

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										
	<u>5 1/2</u>	<u>950</u>	<u>70/75</u>	<u>38,000</u>											<u>5 1/2</u>	<u>950</u>	<u>70</u>	<u>38,000</u>											<u>5 1/2</u>	<u>950</u>	<u>70</u>	<u>38,000</u>										

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.											
	<u>4 1/2</u>	<u>32</u>	<u>52.31</u>	<u>574.15</u>	<u>18.54</u>												<u>4 1/2</u>	<u>33</u>	<u>76.72</u>	<u>31.04</u>	<u>574.15</u>	<u>41.15</u>												<u>4 1/2</u>	<u>35</u>	<u>95.27</u>	<u>574.15</u>	<u>12.58</u>											

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																						
	<u>GEL</u>	<u>9.0</u>	<u>53</u>	<u>12</u>	<u>8.0</u>	<u>2/32</u>											<u>GEL</u>	<u>9.3</u>	<u>80</u>														<u>GEL</u>	<u>9.5</u>	<u>60</u>																									
		<u>9.0</u>	<u>52</u>															<u>9.4</u>	<u>52</u>															<u>9.5</u>	<u>53</u>																									
ADDITIVES	<u>SUPERCOL 55 SKS.</u>																				<u>SUPER COL 20 SKS.</u>																				<u>SUPERCOL 33 SKS.</u>																			
	<u>KWIKSEAL 10 SKS.</u>																				<u>KWIKSEAL 8 SKS</u>																																							
	<u>SAWDUST 10 SKS.</u>																																																											

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.											
																	<u>1/2</u>	<u>3886</u>																															

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																						
	<u>12⁰⁰</u>	<u>1³⁰</u>	<u>DRILLING</u>											<u>8⁰⁰</u>	<u>9⁰⁰</u>	<u>DRILLING</u>											<u>4⁰⁰</u>	<u>4¹⁵</u>	<u>RIG SERVICE</u>																						
	<u>1⁰⁰</u>	<u>1¹⁵</u>	<u>RIG SERVICE</u>											<u>9⁰⁰</u>	<u>9¹⁵</u>	<u>RIG SERVICE & B.O.P.V</u>											<u>4¹⁵</u>	<u>10⁰⁰</u>	<u>DRILLING 8 3/4" HOLE</u>																						
	<u>1¹⁵</u>	<u>8⁰⁰</u>	<u>DRILLING</u>											<u>9⁴⁵</u>	<u>10³⁰</u>	<u>DRILLING</u>											<u>10⁰⁰</u>	<u>11⁰⁰</u>	<u>~~DRILLING~~ CIRC. SAMPLE</u>																						
														<u>10³⁰</u>	<u>11⁰⁰</u>	<u>SURVEY</u>											<u>11⁰⁰</u>	<u>12⁰⁰</u>	<u>DRILLING</u>																						

DRILLER <u>W. McArthur</u>	NO. HELPERS <u>4</u>	DRILLER <u>Gerald O. Thomas</u>	NO. HELPERS <u>4</u>	DRILLER <u>W. McArthur</u>	NO. HELPERS <u>4</u>
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Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MARCH 6 1971

WELL NAME <u>H.B. CAMERON N-24</u>		LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR <u>W. R. D.</u>
CONTRACTOR <u>GUTHRIE McLAUREN DRILLING LTD. NAT. 50A</u>		K. B. ELEV.			920	10 3/4	32.75	H 40	850	270	Feb 27/71	
RIG NO. <u>FIVE</u>		GRD. ELEV.										
TOOL PUSHER <u>A. S. Sudo</u>												

12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.									
DEPTH		START		PROGRESS		END		START		PROGRESS		END		START		PROGRESS		END											
3324		146		3470		3470		44		3514		3514		170		3684													
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					
	3	188750	SS16	8 3/4	2692	3470	778	49 3/4	3	188750	SS16	8 3/4	2692	3490	798	51 1/4	4	782412	ST16	8 3/4	3490	3684	194	9 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	1200	70/80	39,000		5 1/2	825	60/70	38,000		5 1/2	825	70	38,000															
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	2875.07	574.15	20.78			4 1/2	2906.74	574.15	33.11				4 1/2	3095.11	574.15	14.74												
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	51	10.0	7.2	7.2	GEL	8.9	52				GEL	9.0	48														
	8.9	52					8.9	48					9.0	52															
ADDITIVES	SUPER COL 63 SKS.						SUPER COL 10 SKS						SUPER COL 87 SKS.																
	MIL FIBER 3 SKS.												MIL FIBER 10 SKS.																
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.	34 DEG. AT	3490 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 SERVICE		8 00	9 30	DRILLING		4 00	4 30	DRILLING																		
	12 15	8 00	DRILLING		9 30	9 45	SURVEY		4 30	4 45	RIG SERVICE																		
					9 45	12 15	HOIST OUT (DOUBLE STRAP)		4 45	12 00	DRILLING																		
							CALIPER ALL DECS																						
					12 15	12 30	RIG SERVICE & B.O.P.V																						
					12 30	2 15	RUN IN W/B.T No 4																						
					2 15	2 30	BREAK CIRC SIGNATURE																						
							Pipe tally 2875.07 collar tally 574.15																						
							Pipe near 2876.91 near 574.25																						
				2 30	4 00	DRILL Dye 1.84 Dye 1.10																							
DRILLER <u>W. McLaure</u>		NO. HELPERS <u>4</u>		DRILLER <u>Donald O. ...</u>		NO. HELPERS <u>4</u>		DRILLER <u>W. McLaure</u>		NO. HELPERS <u>4</u>																			

DATE MARCH 5 1971

WELL NAME <u>H.B. CAMERON N 24</u>										LDG. FLG. TO KB										CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR							
CONTRACTOR <u>GUTHRIE McLAUREN DRILLING</u>										TYPE RIG <u>WAT. SOA</u>												K. B. ELEV.										920		10 3/4		32.75		H. 40					
RIG NO. <u>FIVE</u>										TOOL PUSHER <u>A. Seld</u>												GRD. ELEV.																				<u>W.P. 8</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>2958</u>		PROGRESS <u>102</u>		END <u>3060</u>		START <u>3060</u>		PROGRESS <u>118</u>		END <u>3178</u>		START <u>3178</u>		PROGRESS <u>146</u>		END <u>3324</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																		
		<u>3</u>	<u>188750</u>	<u>SS16</u>	<u>8 3/4</u>	<u>2692</u>	<u>3060</u>	<u>368</u>	<u>26 3/4</u>	<u>3</u>	<u>188750</u>	<u>SS16</u>	<u>8 3/4</u>	<u>2692</u>	<u>3178</u>	<u>486</u>	<u>34 1/4</u>	<u>3</u>	<u>188750</u>	<u>SS16</u>	<u>8 3/4</u>	<u>2692</u>	<u>3324</u>	<u>632</u>	<u>42</u>																		
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																			
		<u>5 1/2</u>		<u>1100</u>		<u>70/80</u>		<u>32,000</u>		<u>5 1/2</u>		<u>1100</u>		<u>70/80</u>		<u>35,000</u>		<u>5 1/2</u>		<u>1200</u>		<u>70/80</u>		<u>38,000</u>																			
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.																								
		<u>4 1/2</u>	<u>26</u>	<u>1</u>	<u>20</u>	<u>12.17</u>		<u>4 1/2</u>	<u>25</u>	<u>31.68</u>	<u>31.51</u>	<u>574.15</u>	<u>41.15</u>		<u>4 1/2</u>	<u>27</u>	<u>19.84</u>	<u>574.15</u>	<u>30.01</u>																								
MUD RECORD		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC																			
		<u>GEL</u>		<u>8.9</u>		<u>42</u>								<u>GEL</u>		<u>8.9</u>		<u>55</u>																									
				<u>8.8</u>		<u>52</u>		<u>15.0</u>		<u>8.5</u>		<u>432</u>				<u>8.9</u>		<u>53</u>																									
		ADDITIVES <u>SUPER COL 40 SKS.</u>										ADDITIVES <u>SUPER COL - 50 SKS</u>										ADDITIVES <u>SUPER COL 60 SKS.</u>																					
CORING		NO.	FROM	TO	RECOVERED	FORMATION	NO.	FROM	TO	RECOVERED	FORMATION	NO.	FROM	TO	RECOVERED	FORMATION																											
SURVEY		1/2 DEG. AT <u>3058</u>		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															
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS		FROM	TO	DESCRIPTION OF WORK		FROM	TO	DESCRIPTION OF WORK		FROM	TO	DESCRIPTION OF WORK																															
		<u>1200</u>	<u>700</u>	<u>DRILLING</u>		<u>800</u>	<u>945</u>	<u>DRILLING</u>		<u>400</u>	<u>415</u>	<u>RIG SERVICE</u>																															
		<u>700</u>	<u>715</u>	<u>SURVEY</u>		<u>945</u>	<u>1000</u>	<u>RIG SERVICE & B.O.P. ✓</u>		<u>415</u>	<u>1200</u>	<u>DRILLING 8 3/4" HOLE</u>																															
		<u>715</u>	<u>800</u>	<u>DRILLING</u>		<u>1000</u>	<u>1100</u>	<u>DRILLING</u>																																			
						<u>1100</u>	<u>1115</u>	<u>O.G.C.B. RIG CHECK</u>																																			
						<u>1115</u>	<u>400</u>	<u>DRILLING 8 3/4" HOLE</u>																																			
				<u>LOST CIRC AT 3023'</u>				<u>lost circulation at 3120'</u>																																			
DRILLER <u>G. McLaurean</u> NO. HELPERS <u>4</u>										DRILLER <u>Bernard Detman</u> NO. HELPERS <u>4</u>										DRILLER <u>G. McLaurean</u> NO. HELPERS <u>4</u>																							

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MARCH 4 1971

WELL NAME <u>H.B. CAMERON N/24</u>		LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																														
CONTRACTOR <u>GUTHRIE McLAREN</u>		TYPE RIG <u>WAT 50A</u>			K. B. ELEV.	920	10 3/4	32.15	H.40				W.R.B.																													
RIG NO. <u>FIVE</u>		TOOL PUSHER <u>Link Supply</u>			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 <u>2692</u> PROGRESS <u>58</u> END <u>2750</u>											START <u>2750</u> PROGRESS <u>103</u> END <u>2853</u>											START <u>2853</u> PROGRESS <u>105</u> END <u>2958</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																		
	3	188750	SSIG	8 3/4	2692	2750	58	3 1/2	3	188750	SSIG	8 3/4	2692	2853	161	11 1/4	3	188750	SSIG	8 3/4	2692	2958	266	19																		
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		1000		70-80		40		5 1/2		1000		70/80		36,000		5 1/2		1100		70/80		37,000																			
DRILLING STRING	SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.																			
	4 1/2		2153.93		574.15		21.92		2248.12		574.15		30.73		4 1/2		2342.75		574.15		41.15																					
MUD RECORD	TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC																			
			8.1		45										8.8		42																									
			8.8		38		12.4		9.5		3/32				8.8		42																									
	ADDITIVES		34 SUPER COL 75 SKS SAWDUST 46 SKS CAUSTIC 3 SKS											ADDITIVES		105 SUPER COL 105 SKS SAWDUST 30 SKS											ADDITIVES		21 SUPER COL 21 SKS													
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		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.)													
	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:															
	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										
	1200	100		FINISH OUT Tight Hole AT 1700											800	915		DRILLING LOST CIRC. AT 2763											400	445		DRILLING										
	100	115		RIG SERV.											915	930		RIG SERVICE, CHECK POPS.											445	500		RIG SERVICE										
	115	315		RUN IN Hole Tight AT 2100 +											930	400		DRILLING											500	1200		DRILLING										
				15 FT. FILL ON BOTTOM																																						
	315	430		LOST CIRC. MIX MUD																																						
	430	800		DRILLING																																						
DRILLER <u>Royal Short</u>		NO. HELPERS <u>3</u>		DRILLER <u>J. H. McArthur</u>		NO. HELPERS <u>4</u>		DRILLER <u>Donald Oltmann</u>		NO. HELPERS <u>4</u>																																

DATE MARCH 3 1971

WELL NAME CAMERON N24										LDG. FLG. TO KB 14.10										CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR W.F.8																																							
CONTRACTOR GUTHRIE-MCLAREN										TYPE RIG NAT. 50												K. B. ELEV.		920		10 3/4		32.75		14.40		850		290				2621.7																																					
RIG NO. FIVE										TOOL PUSHER Julie Bunnag												GRD. ELEV.		2577.7																																																			
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																																																							
DEPTH		START 2272										PROGRESS 2459										END 187										START 2459		PROGRESS 150										END 2609										START 2609		PROGRESS 83										END 2692									
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	23273	XV	8 3/4	1884	2459	575	2674	2	23273	XV	8 3/4	1884	2609	725	34 1/4	2	23273	XV	8 3/4	1884	2692	808	40 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		1150		80		25-40		5 1/2		1000		70/80		37,000		5 1/2		1050		70/80		40,000																																																			
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	1814.10		574.15	40.58		4 1/2		1999.83	574.15	35.02		4 1/2	2061.82	30.52	574.15	25.51																																																									
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																																							
				88		40								GEL		8.8		37		15.						GEL		8.8		40		13.0		2.0		7/32																																							
				89		42										8.8		38										8.9		37																																													
		ADDITIVES		SUPER COL 43 SKS.										ADDITIVES		SUPER COL 47 SKS.										ADDITIVES		SUPER COL 32 SKS.																																															
CORING		NO.	FROM	TO	RECOVERED	FORMATION	NO.	FROM	TO	RECOVERED	FORMATION	NO.	FROM	TO	RECOVERED	FORMATION																																																											
SURVEY		1 1/4 DEG. AT 2360 FT.		DEG. AT		FT.		DEG. AT		FT.		1 DEG. AT 2460 FT.		DEG. AT		FT.		DEG. AT		FT.		1 1/2 DEG. AT 2692 FT.		DEG. AT		FT.		DEG. AT		FT.																																													
DRILL STEM TESTS		NO. 210		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																																															
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS		FROM	TO	DESCRIPTION OF WORK		FROM	TO	DESCRIPTION OF WORK		FROM	TO	DESCRIPTION OF WORK																																																															
		1200	1215	Rig serv.		800		Rig SERVICE, CHECK BOPS,		445	430	DRILLING																																																															
		1215	345	DRILLING		815	815	MOTOR SHUT OFFS		430	445	Rig SERVICE & B.O.P. ✓																																																															
		345	400	SURVEY		815	830	SURVEY		445	1045	DRILLING																																																															
		400	800	DRILLING		830	400	DRILLING		1045	1100	Circ SAMPLE																																																															
										1100	1115	DROP SURVEY																																																															
DRILLER Paul Hunt										NO. HELPERS 3										DRILLER M. McArthur										NO. HELPERS 4										DRILLER Gerald Ottmann										NO. HELPERS 4																									

DATE MARCH 2 1971

WELL NAME CAMERON N 24										LDG. FLG. TO KB					CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR															
CONTRACTOR GUTHRIE McLEAREN										TYPE RIG NAT 50A					K. B. ELEV.		920	10 3/4	32.75	14.40	850	20	Feb 27/77	W. R. S.															
RIG NO. FIVE										TOOL PUSHER Jacki Smokey					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 1884 PROGRESS 111 END 1995										START 1995 PROGRESS 151 END 2146										START 2146 PROGRESS 126 END 2272									
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									
										2 23273 XV 8 3/4 1884 1995 111 5 1/2										2 23273 XV 8 3/4 1884 2146 262 12 3/4										2 23273 XV 8 3/4 1884 2272 388 19 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 1150 75 40										5 1/2 950 80 40										5 1/2 1150 80 410,000									
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 1405.32 574.15 15.53										4 1/2 1531.20 574.15 40.65										4 1/2 1593.81 63.15 574.15 40.65									
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									
										8.4 28										GEL 8.6 40										GEL 8.6 37									
										8.4 28																				8.7 38									
ADDITIVES																				ADDITIVES SUPER COL 108 SKS. SANDUST 42 SKS.										ADDITIVES SUPER COL 54 SKS CAUSTIC 1 SKS									
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:										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									
										1200 1215 AIG SERV.										800 900 DRILLING										400 430 WORK TIGHT HOLE									
										1215 100 pick up 5" D.C.										900 915 RIG SERVICE & CHECK BOPS.										430 445 RIG SERVICE & L.B. OP. ✓									
										100 130 slipped & cut line										915 215 DRILLING										445 1015 DRILLING									
										130 215 FINISH RUN IN HOLE W/DT 2										215 245 WORK TIGHT CON.										1015 1030 WORK TIGHT HOLE									
										215 230 BREAK CIRC. CLEAN 35" FILL										245 400 DRILLING										1030 1200 DRILLING									
										230 8.00 DRILLING 8 3/4 HOLE																				1130 1200 WORK TIGHT HOLE									
																				NOTE																			
																				LOOSING CIRC AT 2020																			
DRILLER David H. Hart										NO. HELPERS 4										DRILLER David M. Patton										NO. HELPERS 4									
DRILLER Gerald D. Thomas										NO. HELPERS 4										DRILLER Gerald D. Thomas										NO. HELPERS 4									

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE March 1/71

WELL NAME		LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																																																					
CONTRACTOR		K. B. ELEV.			920	10 3/4	32.75	14.40	850 9x8	270	Feb 28/71	W.P.S.																																																					
RIG NO.		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 1050				PROGRESS 290				END 1340				START 1340				PROGRESS 390				END 1730				START 1730				PROGRESS 154				END 1884																															
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																																								
		1	30207	X3A	8 3/4	1043	1340	297	4 1/2	1	30207	X3A	8 3/4	1043	1730	687	8 3/4	1	30207	X3A	8 3/4	1043	1884	844	14 3/4																																								
DRILLING DATA		LINER SIZE				PUMP PRESSURE				TABLE SPEED				WEIGHT ON BIT				LINER SIZE				PUMP PRESSURE				TABLE SPEED				WEIGHT ON BIT																																			
		5 1/2				1300				80				10-20				5 1/2				1300				100				20-25																																			
DRILLING STRING		SIZE				STANDS				SINGLES				DRILL COL.				KELLY IN				CORE BBL.				SIZE				STANDS				SINGLES				DRILL COL.				KELLY IN				CORE BBL.																			
		4 1/2				87483								429.50				36.67								4 1/2				1279.72				429.50				20.78				4 1/2				1436.34				429.50				18.14											
MUD RECORD		TYPE OF MUD				WEIGHT				VIS				WL				PH				FC				TYPE OF MUD				WEIGHT				VIS				WL				PH				FC																			
						8.4				28																WATER				8.4				28																															
						8.4				28																				8.4				28																															
		ADDITIVES				WATER				JET JEL				3 SKS.				ADDITIVES				JET JEL				6 SKS.				ADDITIVES				JET JEL				2 SKS.																											
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.																											
		1°				1340												7/8°				1780				3/4°				1880																																			
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:				PRESS-URES				IHP				FHP				IFP				IFP				ISIP				FSIP				RECOVERY:				PRESS-URES				IHP				FHP				IFP				IFP				ISIP				FSIP			
REMARKS INCLUDING:		FROM	TO	DESCRIPTION OF WORK										FROM	TO	DESCRIPTION OF WORK										FROM	TO	DESCRIPTION OF WORK																																					
		1200	130	FINISH DRILLING OUT										800	815	RIG SERVICE & CHECK BOPS										400	430	DRILLING																																					
		130	245	TRIP FOR PLUG BIT										815	830	SURVEY										430	445	RIG SERVICE																																					
		245	330	CLEAN OUT PILOT HOLE										830	900	DRILLING										445	500	SURVEY																																					
		330	800	DRILLING 8 3/4 HOLE										900	1030	TRIP OUT PLUG BIT										500	1030	DRILLING																																					
														1030	1100	CLEAN SUCTION TANK										1030	1045	SURVEY																																					
														1100	1200	RUN IN										1045	1145	HOIST OUT W/ BIT #1																																					
														1200	1215	BREAK CIRC. & CLEAN TO BOTTOM										1145	1215	RUN IN D.C.																																					
														1215	400	DRILLING																																																	
DRILLER		Lloyd Stuart										NO. HELPERS										DRILLER		Lloyd Stuart										NO. HELPERS										DRILLER		Lloyd Stuart										NO. HELPERS									

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE FEB 28-1971

WELL NAME		LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																		
CONTRACTOR		TYPE RIG																												
RIG NO.		TOOL PUSHER		K. B. ELEV.		GRD. ELEV.																								
Hudson's Bay Cammon N-24		National 50 A		2591.8		2577.7							W.D.																	
12 P.M. TO 8 A.M.				8 A.M. TO 4 P.M.				4 P.M. TO 12 P.M.																						
DEPTH	START			PROGRESS			END			START			PROGRESS			END														
	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																														
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.							
MUD RECORD	TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC							
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							
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							
	1200		715		W.O.C		800		930		Welding on Casing bowl		400		600		Finish heading up by Mave line													
	715		800		cut off casing welding on bowl		930		400		Pick up BOP's & Headings BOP's		600		615		Pressure test blind runs 1000 PSI @													
													615		800		Run in drill collars & pickup 3 DC's													
													800		845		Finish running in hole													
													845				Pressure test hydro; pipe runs													
																	Kelly cock & manifold all held													
																	1000 PSI OK. Check motor shut off													
																	work on mud in tanks & blow manifold													
																	Drilling out plug & float													
DRILLER		NO. HELPERS		DRILLER		NO. HELPERS		DRILLER		NO. HELPERS		DRILLER		NO. HELPERS		DRILLER		NO. HELPERS												
Hayed Street				Wm McArthur				Hayed Street				Hayed Street				Hayed Street														

DATE FEB. 27 1921

WELL NAME H.B. CAMERON N-24										LDG. FLG. TO KB										CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR																																	
CONTRACTOR GUTHRIE McLAREN DRILLING NAT 50.										K. B. ELEV. 14.10												920		10 3/4		32.75		H-40		850 5x5		27000 lb		W.R.D.																																			
RIG NO. FIVE										TOOL PUSHER John Loney										GRD. ELEV. 2577.7																																																	
										12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.																				4 P.M. TO 12 P.M.																													
DEPTH										START 893 PROGRESS 27 END 920										START PROGRESS END										START PROGRESS END																																							
BIT PILOT RECORD R.R.										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 165689 6EM 16 8 893 1043 150 3																																																											
										22 104 DSJ 15" 893 920 27 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 1/2 400 150 15,000																																																											
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.																																							
										53 10 346.58 39.22 3.10																																																											
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																																							
										10.8 65																																																											
										ADDITIVES										ADDITIVES										ADDITIVES																																							
										Run 24 joints 10 3/4 o.d. H-40 32.75 #275C range 3 Mannesmann casing																																																											
										Total of 924.13 with float shoe & float collar landed at 220 K.B. #1																																																											
										Cemented with 950 sack type A construction cement plus 29 sacks plugdown with 900 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.										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																																							
										1200 1215 RIG SERVICE										730 800 HOIST OUT TO RUN CSG.										400 500 CIRCULATE WORK CASING																																							
										1215 100 RUN IN TO PILOT										800 830 FINISH HOISTING TO RUN CSG.										500 615 CIRCULATE & WORK CASING																																							
										100 400 DRILLING PILOT HOLE										830 930 Rig up to run 10 3/4 casing																																																	
										400 415 CIRC SAMPLE										430 345 RUNNING 10 3/4 CASING																																																	
										415 LAY DOWN 4 SINGLES										CIRC CASING, THREW TIGHT										615 CEMENTING 10 3/4 CASING																																							
										545 HOIST OUT, PICK 15' BIT RUN IN.										SPOTS AT 120 TO 553										715 AND DISPLACE PLUG.																																							
										545 615 DRILLING 15" (REAMING)										345 400 CIRC WORK CASING										715 1200 U.I.O.C.																																							
										615 630 CIRC PRIOR TO DUMMY TRIP.																																																											
										630 700 DUMMY TRIP																																																											
										700 730 CIRC PRIOR TO CASING																																																											
DRILLER Mr. J. M. Lathan NO. HELPERS 4										DRILLER Alfred D. Lathan NO. HELPERS 5										DRILLER Mr. J. M. Lathan NO. HELPERS 4																																																	

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE FEB 26-71

WELL NAME		LDG. FLG. TO KB		CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																
H.B. CAMERON N. 24				K. B. ELEV.									W.R. 2																
CONTRACTOR GUTHRIE McLAREN		TYPE RIG		GRD. ELEV.																									
RIG NO. FIVE		TOOL PUSHER Leslie Lunn																											
12 P.M. TO 8 A.M.						8 A.M. TO 4 P.M.						4 P.M. TO 12 P.M.																	
DEPTH		START 513		PROGRESS 125		END 638		START 638		PROGRESS 125		END 763		START 763		PROGRESS 130		END 893											
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				
		3A	77586	T3A	15	458	638	180	9	3A	77586	T3A	15	458	732	274	13 3/4	4A	22104	DS	15	732	893	161	6 3/4				
										4A	22104	DS-T	15	732	763	31	3/4	5A	165-689	CEN	10	87							
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		300		150		10-15,000		5 1/2		300		150		10/15000		5 1/2		300		150		10/15000					
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	186.61	62.93	346.58	40.70	2.10	4 1/2	374.50		346.58	39.82	2.10	4 1/2	531.10		346.58	13.00	3.10										
MUD RECORD		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC					
		GEL		9.8		60								GEL		10.8		65											
				10.2		48																							
		ADDITIVES		SUPER COL- 25 SKs										ADDITIVES															
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			
SURVEY		1 1/4 DEG. AT 544 FT.		10 DEG. AT 607 FT.		DEG. AT FT.		10 DEG. AT 670 FT.		DEG. AT FT.		DEG. AT FT.		7 1/8 DEG. AT 795 FT.		1 DEG. AT 893 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		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.)		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.		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.		BBL/D MAX.			
		RECOVERY:						RECOVERY:						RECOVERY:						RECOVERY:									
		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		FROM	TO	DESCRIPTION OF WORK		FROM	TO	DESCRIPTION OF WORK		FROM	TO	DESCRIPTION OF WORK		FROM	TO	DESCRIPTION OF WORK	
		1200	1215	RIG SERVICE		800	815	RIG SERVICE		400	515	DRILLING		1200	1215	RIG SERVICE		800	815	RIG SERVICE		400	515	DRILLING		1200	1215	RIG SERVICE	
		1215	1300	DRILLING 15" HOLE		815	1115	DRILLING 15" HOLE		515	530	RIG SEAT + SURVEY		1215	1300	DRILLING 15" HOLE		815	1115	DRILLING 15" HOLE		515	530	RIG SEAT + SURVEY		1215	1300	DRILLING 15" HOLE	
		1300	200	SURVEY		1115	1130	SURVEY		530	545	WORK BALLED BIT		1300	200	SURVEY		1115	1130	SURVEY		530	545	WORK BALLED BIT		1300	200	SURVEY	
		200	600	DRILLING		1130	115	DRILLING		545	1030	DRILLING		200	600	DRILLING		1130	115	DRILLING		545	1030	DRILLING		200	600	DRILLING	
		600	630	SURVEY		115	315	TRIP FOR BIT		1030	1045	WORK 4" M40 RIG		600	630	SURVEY		115	315	TRIP FOR BIT		1030	1045	WORK 4" M40 RIG		600	630	SURVEY	
		630	800	DRILLING		315	400	DRILLING		1045	1100	SURVEY		630	800	DRILLING		315	400	DRILLING		1045	1100	SURVEY		630	800	DRILLING	
										1100	1200	HOIST STRAP OUT										1100	1200	HOIST STRAP OUT					

DATE FEB. 25-71

WELL NAME <u>H.B. CAMERON N. 24</u>										LDG. FLG. TO KB										CASING		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY	
CONTRACTOR <u>GUTHRIE McLAREN</u>										TYPE RIG <u>NATSO</u>										K. B. ELEV.																SUPERVISOR	
RIG NO. <u>FIVE</u>										TOOL PUSHER <u>Paul Sawyer</u>										GRD. ELEV.																<u>W.R.D.</u>	
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																	
DEPTH		START		149		PROGRESS		95		END		244		START		244		PROGRESS		145		END		389		START		389		PROGRESS		124		END		513	
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				
		1A858595		T3A	15	0	244	244	12 1/2		1A858595		T3A	15	0	389	389	18 3/4		2A88768		S3	15	389	458	69	13 1/4	3A77586		T3A	15	458	513	55	2 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		275		150		5-15,000		5 1/2		275		150		10/12																					
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.	
								199.58		40.70		308								346.59		40.31		2.10		4 1/2		94.20		29.54		346.59		40.70		2.10	
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		8.6		45								GEL		9.6		53								GEL		9.7		80							
				9.8		49																						9.7		75							
		ADDITIVES		SUPER-COL		30 SKS										NOTE HIT BOULDERS AT THIS DEPTHS. 246, 293, 308, 329,										ADDITIVES		BOULDERS @ 458		509-511							
CORING		NO.		FROM		TO		RECOVERED		FORMATION		NO.		FROM		TO		RECOVERED		FORMATION		NO.		FROM		TO		RECOVERED		FORMATION							
SURVEY		3/4 DEG. AT		159 FT.		1/2 DEG. AT		188 FT.		3/4 DEG. AT		244 FT.		3/4 DEG. AT		301 FT.		1 DEG. AT		360 FT.		1 DEG. AT		389 FT.		3/4 DEG. AT		452 FT.		1 DEG. AT		513 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:		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																			
		12 00		13 00		DRILLING		8 00		9 45		DRILLING 15" HOLE		4 00		5 00		TRIP FOR BIT																			
		13 00		14 45		RIG SERVICE		9 45		10 00		RIG SERVICE		5 00		5 15		RIG SERVICE																			
		14 45		24 45		SURVEY (WORK ON BOULDER SECTION)		10 00		11 00		DRILLING		5 15		6 45		DRILLING																			
		24 45		3 00		DRILLING		11 00		11 30		SURVEY		6 45		7 15		SURVEY																			
		3 00		3 45		WORK ON ROTARY CHAIN & LINE		11 30		2 00		DRILLING		7 15		7 30		TRY DRILLING BIT WON'T DIG																			
						STABILIZER		2 00		2 30		SURVEY		7 30		8 30		HOIST OUT																			
		3 45		4 30		DRILLING		2 30		3 30		DRILLING		8 30		9 15		RUN IN W/ BIT NO 3A																			
		4 30		5 00		SURVEY		3 30		3 45		SURVEY		9 15		11 30		DRILLING 15" HOLE																			
		5 00		7 30		DRILLING		3 45		4 30		TRIP FOR BIT		11 30		12 00		SURVEY																			
7 30		8 00		SURVEY																																	
DRILLER		Gerald Pittman		NO. HELPERS		4		DRILLER		Gerald Pittman		NO. HELPERS		4		DRILLER		Gerald Pittman		NO. HELPERS		4															

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE FEB 24 - 1971

WELL NAME		LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																																		
CONTRACTOR		K. B. ELEV.																																												
RIG NO.		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		PROGRESS		END		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.																						
MUD RECORD		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.														
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:																						
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		8 ⁰⁰		Rig JP											8 ⁰⁰		12 ⁰⁰		MIX GEL PRIOR TO SPUD.											4 ⁰⁰		4 ³⁰		DRILLING Hit boulders @ 11-125										
																	12 ⁰⁰		3 ¹⁵		UNLOADED COLLARS & PIPE											4 ³⁰		5 ⁰⁰		SURVEY										
																	3 ¹⁵		4 ⁰⁰		SPUD IN WITH 15" BIT											5 ⁰⁰		6 ³⁰		DRILLING										
																					Spud in @ 3:15 PM Feb 24/71											6 ³⁰		7 ⁰⁰		SURVEY										
																					K.B. To Ground 14.10											7 ⁰⁰		9 ³⁰		DRILLING										
																																9 ³⁰		9 ⁴⁵		SURVEY										
																																9 ⁴⁵		12 ⁰⁰		DRILLING										
DRILLER		No. HELPERS											DRILLER		No. HELPERS											DRILLER		No. HELPERS																		
		4													4													4																		

DATE MARCH 12 1971

WELL NAME <u>H.B. CAMERON N-24</u>										LDG. FLG. TO KB					CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																																																																																															
CONTRACTOR <u>GUTHRIE McLAREN DRILL</u>										K. B. ELEV.																																																																																																													
RIG NO. <u>FIVE</u>										TOOL PUSHER <u>Fuller</u>					GRD. ELEV.		<u>920</u>	<u>10 3/4</u>	<u>32.75</u>	<u>H.40</u>	<u>850</u>	<u>22</u>	<u>FEB-27/1971 W.P.R.S.</u>																																																																																																
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																																																																																																			
DEPTH										START										PROGRESS										END																																																																																									
BIT RECORD										NO.										SERIAL NO.										TYPE										SIZE										FROM										TO										FOOTAGE										HRS. RUN																																							
DRILLING DATA										LINER SIZE										PUMP PRESSURE										TABLE SPEED										WEIGHT ON BIT																																																																															
DRILLING STRING										SIZE										STANDS										SINGLES										DRILL COL.										KELLY IN										CORE BBL.																																																											
MUD RECORD										TYPE OF MUD										WEIGHT										VIS										WL										PH										FC																																																											
										<u>Plug No. 3 interval 970-870 = 100 ft</u>																																																																																																													
										<u>Cemented with 70 sacks Dilwell Cement</u>																																																																																																													
										ADDITIVES <u>plus 370 sacks average slurry</u>																																																																																																													
										<u>of 140 PPG plug in place @ 6:05 AM March 17/71</u>																																																																																																													
										<u>Feel plug @ 1:30 PM @ 826' with 8,000 WT.</u>																																																																																																													
CORING										NO.										FROM										TO										RECOVERED										FORMATION																																																																					
SURVEY										DEG. AT										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																																																																																									
										<u>12:00</u>										<u>4:15</u>										<u>W.O.C. PLUG NO. 2</u>																																																																																									
										<u>4:15</u>										<u>4:30</u>										<u>RUN IN 5 STANDS & FEEL PLUG AT 4233 w/ 8,000 WT.</u>																																																																																									
										<u>4:30</u>										<u>5:45</u>										<u>HOIST TO RUN PLUG NO. 3</u>																																																																																									
										<u>5:45</u>										<u>6:00</u>										<u>MIX CEMENT PLUG NO. 3 & DISPLACE</u>																																																																																									
										<u>6:00</u>										<u>8:00</u>										<u>HOIST OUT OF PLUG NO. 3 & W.O.C. PLUG NO. 3.</u>																																																																																									
																																								</																																																																															

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MARCH 16 1971

WELL NAME <u>H.B. CAMERON IV-24</u>										LDG. FLG. TO KB <u>14.10</u>		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																																																			
CONTRACTOR <u>GUTHRIE MCLAREN DRILL LTD.</u> TYPE RIG <u>NAT. 50H</u>										K. B. ELEV. <u>2591.8</u>			<u>920</u>	<u>10 3/4</u>	<u>32.75</u>	<u>H.40</u>	<u>850</u>	<u>22</u>	<u>FEB 27/71</u>	<u>W.P.D.</u>																																																			
RIG NO. <u>FIVE</u> TOOL PUSHER <u>Paul L. Lundy</u>										GRD. ELEV. <u>2577.7</u>																																																													
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																																																			
DEPTH	START								PROGRESS								END								START								PROGRESS								END																														
	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	<u>Plug No 2 interval 4425-4250 cemented with 100 sacks oil well cement plus 20 sacks average slurry wt 15.5 ppg plug in place 10:22 PM</u>																																																																						
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.																																															
	<u>4 1/2</u>	<u>45</u>		<u>94.73</u>	<u>574.15</u>		<u>21.12</u>																																																																
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																																				
			<u>9.7</u>		<u>60</u>				<u>10.0</u>																																																														
	ADDITIVES																								ADDITIVES		<u>Kwik SEAL 2 SKS</u>																						ADDITIVES		<u>Kwik SEAL 3 sacks</u>																				
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	FROM	TO	DESCRIPTION OF WORK		FROM	TO	DESCRIPTION OF WORK		FROM	TO	DESCRIPTION OF WORK																																																												
	<u>12:00</u>	<u>2:00</u>	<u>RUN IN</u>		<u>8:00</u>	<u>8:15</u>	<u>RIG SERVICE & B.O.P. ✓</u>		<u>4:00</u>	<u>5:00</u>	<u>FINISH IN W/ PIPE & PICK UP 18 MORE ITS.</u>																																																												
	<u>2:00</u>	<u>8:00</u>	<u>CIRCULATING & WAIT ON ORDERS.</u>		<u>8:15</u>	<u>12:15</u>	<u>CIRCULATING & W.O. ORDERS</u>		<u>5:00</u>	<u>5:15</u>	<u>RIG SERVICE</u>																																																												
					<u>12:15</u>	<u>2:15</u>	<u>HOIST OUT</u>		<u>5:15</u>	<u>9:15</u>	<u>CIRCULATE & WAIT ON CEMENT</u>																																																												
					<u>2:15</u>	<u>3:15</u>	<u>LAY DOWN DRILL COLLARS</u>																																																																
					<u>3:15</u>	<u>4:00</u>	<u>RUN IN OPEN END W/ PIPE</u>																																																																
							<u>Cement plug no 1 interval 5190-4860</u>		<u>9:15</u>	<u>9:30</u>	<u>Mix cement plug no 1 & displace same</u>																																																												
							<u>Cemented with 150 sacks oil well</u>		<u>9:30</u>	<u>10:00</u>	<u>Hoist 8 stands to run plug no 2.</u>																																																												
							<u>Cement average slurry wt 15.5 ppg</u>		<u>10:00</u>	<u>10:15</u>	<u>Mix cement plug no 2 & displace same</u>																																																												
							<u>Plug in place @ 9:30 PM March 16/71</u>		<u>10:15</u>	<u>12:00</u>	<u>Hoist out of plug & W.O.C. plug no 2</u>																																																												
DRILLER <u>L. M. Lundy</u> NO. HELPERS <u>4</u>										DRILLER <u>Small Oldman</u> NO. HELPERS <u>4</u>										DRILLER NO. HELPERS <u>7</u>																																																			

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE MARCH 15 1971

WELL NAME	<u>H.R. CAMERON N-24</u>	L.D.G. FLG. TO KB	<u>14.10</u>	CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR <u>W.B.B.</u>
CONTRACTOR	<u>GUTHRIE MILLAREN DRILL LTD.</u>	K. B. ELEV.	<u>2591.8</u>		<u>920</u>	<u>10 3/4</u>	<u>32.75</u>	<u>H.40</u>	<u>850</u>	<u>2 1/2</u>	<u>FEB 27/71</u>	
RIG NO.	<u>FIVE</u>	GRD. ELEV.	<u>2577.7</u>									

	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>5161</u> PROGRESS <u>29</u> END <u>5190</u>								START <u>T.D.</u> PROGRESS END <u>T.D.</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
	<u>7</u>	<u>28539</u>	<u>YDU</u>	<u>8 3/4</u>	<u>5040</u>	<u>5190</u>	<u>150</u>	<u>25 1/2</u>																

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
	<u>5 1/2</u>	<u>900</u>	<u>70</u>	<u>38,000</u>	<u>5 1/2</u>	<u>900</u>						

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.
	<u>4 1/2</u>	<u>4594.73</u>		<u>574.15</u>	<u>21.12</u>		<u>4 1/2</u>	<u>4594.73</u>		<u>574.15</u>	<u>21.12</u>		<u>4 1/2</u>	<u>4594.73</u>		<u>574.15</u>	<u>21.12</u>	

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
	<u>GEL</u>	<u>9.7</u>	<u>49</u>	<u>11.2</u>	<u>10.5</u>	<u>2 1/32</u>	<u>GEL</u>	<u>9.7</u>	<u>57</u>		<u>10.5</u>		<u>GEL</u>	<u>9.7</u>	<u>62</u>		<u>10.5</u>	
		<u>9.7</u>	<u>56</u>	<u>11.0</u>	<u>10.5</u>	<u>2 1/32</u>												
	ADDITIVES <u>SUPERCOL 5 SKS.</u>						ADDITIVES <u>SUPERCOL 34</u> <u>KWIK SEAL 3 SKS</u>						ADDITIVES <u>SUPERCOL 10 S.K.S.</u>					

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							
		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

REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	FROM	TO	DESCRIPTION OF WORK	FROM	TO	DESCRIPTION OF WORK	FROM	TO	DESCRIPTION OF WORK
	<u>12⁰⁰</u>	<u>3⁰⁰</u>	<u>DRILLING</u>	<u>8⁰⁰</u>	<u>8⁴⁵</u>	<u>CIRCULATE SAMPLE</u>	<u>4⁰⁰</u>	<u>4¹⁵</u>	<u>CIRC TO CONDITION MUD</u>
	<u>3⁰⁰</u>	<u>3¹⁵</u>	<u>RIG SERVICE</u>	<u>8⁴⁵</u>	<u>9⁰⁰</u>	<u>SURVEY</u>	<u>4¹⁵</u>	<u>4³⁰</u>	<u>RIG SERVICE</u>
	<u>3¹⁵</u>	<u>8⁰⁰</u>	<u>DRILLING T.D.</u>	<u>9⁰⁰</u>	<u>9¹⁵</u>	<u>RIG SERVICE & B.O.P.</u>	<u>4³⁰</u>	<u>7⁰⁰</u>	<u>HOIST OUT w/ B.T.</u>
				<u>9¹⁵</u>	<u>11³⁰</u>	<u>STRAP OUT</u>	<u>7⁰⁰</u>	<u>7¹⁵</u>	<u>RIG TO LOG</u>
				<u>11³⁰</u>	<u>12⁰⁰</u>	<u>RUN IN w/ PIPE</u>	<u>7¹⁵</u>		<u>LOGGING w/ SCHUMBERGER</u>
				<u>12⁰⁰</u>	<u>12¹⁵</u>	<u>BREAK CIRC & CIRCULATE</u>		<u>11³⁰</u>	<u>AND TEAROUT LOGGERS.</u>
				<u>12¹⁵</u>	<u>1⁰⁰</u>	<u>FINISH IN w/ PIPE</u>	<u>11³⁰</u>	<u>12⁰⁰</u>	<u>RUN IN COLLARS.</u>
				<u>1⁰⁰</u>		<u>CIRCULATE TO CONDITION MUD</u>			<u>Dual Induction Lateralog 5190'-918' 5" Scale</u>
					<u>4⁰⁰</u>	<u>Prior to Logging</u>			<u>Bore hole Compensated Sonic 5190'-918' 5" Scale</u>

DRILLER <u>John McArthur</u>	NO. HELPERS <u>4</u>	DRILLER <u>Bernold Ottmar</u>	NO. HELPERS <u>4</u>	DRILLER <u>John McArthur</u>	NO. HELPERS <u>4</u>
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519

GUTHRIE McLAREN
Dyeing & Finishing Co.

Fig. 4

Date _____

MARCH 17 71

Weather Condition 4 - 1

Road
Conditions

P. 1

Near
Town

4-4-6-0

Water - Source Lake
Miles Hauled 2 Pumps

Camp Distance from Rig . . . 175.408
Season for Euc. L. Plant

OPERATOR
Hudson Bay Oil & Gas
SIGNATURE OF OPERATOR'S REPRESENTATIVE

Rig No. 5 DWKS	Drill Pipe String		Tool Joint
	No.	Size	Type. Thd.
Net-50	2	4 1/2	F.H.

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT	C 250	15
2.	NAT	C 150B	12

LAST
CASING
TUBING
OR LINER

Size	Make	Wt. & Gr.	No. Joints	Feet	RKB. to CSB. HD.	Set at	Remarks
10 3/4	STAC	32.75 H. 46	28	924	924	920	

TIME DISTRIBUTION--HOURS			
	Morn	Day	Even
Rise Up & Tear Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			

MORNING TOUR

NO.				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD			
Stands D.P.		Ft.		Bit No.				Time			
Singles D.P.		Ft.		Size				Weight			
D.C.				Mfg.				Visc.-Sec.			
I.D. O.D.		Ft.		Type				W.L.-C.C.			
D.C.				No.				FL. TR. CK.			
I.D. O.D.		Ft.		Nozzle Size				PH			
Sub. Bodv O.D.		Ft.		Ser. No.				SD. Cont. %			
Sub. Bodv O.D.		Ft.		Depth Out				Pressure Gradient			
Rmr. Body O.D.		Ft.		Depth In							
Subs O.D.		Ft.		Total Ftg.				Mud & Chemicals Added			
Bit or C.B.		Ft.		Total Hr. Run				Type		Amt.	
Kelly Down		Ft.		Cond. of Bit				Type		Amt.	
Total		Ft.		Reamer No.							
Wt. of String		Lbs.		Reamer Type							
Pipe in Hole		Jts.		Water Charges		Reg. Hrs. O.T. Hrs.					
Pipe on Racks		Jts.		Trucker							
Total Pipe & Lease		Jts.		Trucker							

[illegible]

Fishing				
COMPLETION WORK	A. Perforating			
	B. Tubing Trips			
	C. Swabbing			
	D. Testing			
	E. Additional			
Total				

DAY TOUR

NO.			DRILLING ASSEMBLY AT END OF TOUR			BIT RECORD			MUD RECORD			
Stands D.P.			Ft.			Bit No.			Time			
gias D.P.			Ft.			Size			Weight			
D.C.						Mfg.			Viac.-Sec.			
I.D. O.D.			Ft.			Type			W.L.-C.C.			
D.C.						No.		F. TR. CK.				
I.D. O.D.			Ft.			Nozzle		Size		PH		
Sub Body O.D.			Ft.			Ser. No.			SD. Cont. %			
Sub Body O.D.			Ft.			Depth Out			Pressure Gradient			
Sub Body O.D.			Ft.			Depth In						
Subs O.D.			Ft.			Total Ftg.			Mud & Chemicals Added			
									Type		Amt.	
Bit or C.B.			Ft.			Total Hr. Run			Type		Amt.	
Kelly Down			Ft.			Cond. of Bit						
Total			Ft.			Reamer No.						
Wt. of String			Lbs.			Reamer Type						
Pipe in Hole			Jts.			Water Charges Reg. Hrs. O.T. Hrs.						
Pipe on Racks			Jts.			Trucker <i>B & R</i>						
Total Pipe on Lease			Jts.			Trucker <i>WATER TRUCK</i>						
						Trucker <i>14 HRS</i>			Driller <i>Donald Potvin</i>			

[illegible]

Total Dry Weight				

EVENING TOUR

NO.			DRILLING AT END OF TOUR		ASSEMBLY OF TOUR		BIT RECORD		MUD RECORD			
			Stands D.P.		Ft.	Bit No.			Time			
			Singles D.P.		Ft.	Size			Weight			
			D.C.			Mfg.			Visc.-Sec.			
			I.D. O.D.		Ft.	Type			W.L.-C.C.			
			D.C.			No.			FL TR. CK.			
			I.D. O.D.		Ft.	Nozzle	Size		PH			
			Sb. Bodr. O.D.		Ft.	Ser. No.			SD. Cont. %			
			Sb. Bodr. O.D.		Ft.	Depth Out			Pressure Gradient			
			Rmr. Bodr. O.D.		Ft.	Depth In						
			Subs. O.D.		Ft.	Total Ftz.			Mud & Chemicals Added			
			Bit or C..		Ft.	Total Hr. Run			Type	Amt.	Type	Amt.
			Kelly Down		Ft.	Cond. of Bit						
			Total		Ft.	Reamer No.						
			Wt. of String		Lbs.	Reamer Type						
			Force in Pipe		Jts.	Water Charges	Reg. Hrs. O.T. Hrs.					
			Pipe on Racks		Jts.	Trucker						
			Total Pipe on Lease		Jts.	Trucker			Driller	Gerald R. Brown		

[illegible]

No

4518

GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease
Well Name *H-13. Cameron N-24* Date
Location - Lsd. *N. Sec. 24 Twp. Rge. W. M. March 16 1971*Weather
Condition *warm*Road
Condition *rough*Nearest
Town *High Level*Water - Source
Miles Hauled *2*

Pumped

Camp Distance from Rig
Reason for Extra L. Plant *150 yds Camp.*

OPERATOR

Rig No.
FIVE
DWKSDrill Pipe
String
No. *2* Size *5 3/4"*Tool Joint
Type Tbd. *F.H.*

PUMPS

MANUFACTURER TYPE STROKE LENGTH
1. *Nat.* *C 250* *15*
2. *Nat.* *C 150* *12*
3.LAST
CASING
TUBING
OR LINERSize Make Wt. & Gr. No Joints Feet RKB 13 CSB HD. Set at Remarks
10 3/4 ST+C 32.75/40 24 924 14.10 920

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION—HOURS

Morn Day Eve
Rig Up & Tear Down
Drilling Actual
Reaming
Conditioning Mud & Circulating
Trips
Lubricate Rig
Deviation Survey
Test B.O.P.
Cut Off Drilling Line
Repair Rig
Coring
Wire Line Logging
Running Casing & Cementing
Waiting on Cement
Drill Stem Test
Other

MORNING TOUR

NO. DRILLING ASSEMBLY AT END OF TOUR

49 Stands D.P. *4594.73*

Singles D.P. Ft. Size

D.C. *2 1/8 6 1/8*I.D. O.D. *574.15*

D.C.

I.D. O.D.

Sub. Body O.D.

Sub. Body O.D.

Sub. Body O.D.

Sub. Body O.D.

Sub. Body O.D.

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Sub. Body O.D.

BIT RECORD

Bit No.

Size

Mfg.

Type

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No.

No.

MUD RECORD

Time

Weight

Visc.-Sec.

W.L.-C.C.

FL TR. CK.

PH

SD. Cont. %

Pressure Gradient

Mud & Chemicals Added

Type Amt. Type Amt.

Type Amt. Type Amt.

Type Amt. Type Amt.

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FOOTAGE

From To Figs.

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DR-D

RM-R

Core-C

Core No.

Core No.

Core No.

Core No.

Core No.

Core No.

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Core No.

DAILY DRILLING REPORT

Form 5

Lease Well Name H. B. Cameron N-24 Date March 14, 71
Location - Lat. N Sec. 24 Twp. _____ Rge. _____ W. _____ M. _____

Weather Condition Warm Road Conditions rough Nearest Town High Level Water - Source _____ Miles Hauled 2 Camp Distance from Rig 150 yds. Reason for Extra L. Plant Camp

OPERATOR

Rig No. FIVE Drill Pipe String 5 3/4 O.D. Tool Joint 5 3/4 O.D.
DWKS No. 412 Size 4 1/2 Type F.H.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

PUMPS			
No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	<u>Mat.</u>	<u>C 250</u>	<u>15</u>
2.	<u>Mat.</u>	<u>C 150</u>	<u>12</u>
3.			

LAST CASING TUBING OR LINER

Size	Make	Wt. & Gr.	No. Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
<u>10 3/4 STAC</u>		<u>32.75</u>	<u>24</u>	<u>924</u>	<u>1410</u>	<u>920</u>	
		<u>H.40</u>					

TIME DISTRIBUTION - HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	<u>2 1/4</u>	<u>7 3/4</u>	<u>7 3/4</u>
Reaming	<u>1/4</u>		
Conditioning Mud & Circulating			
Trips	<u>4 1/4</u>		
Lubricate Rig	<u>1/4</u>	<u>1/4</u>	<u>1/4</u>
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other	<u>1</u>		

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
<u>47</u>	Stands D.P. <u>4468.43</u> Ft.	Bit No. <u>7</u>	Time <u>2:00</u>
<u>2</u>	Singles D.P. <u>2 1/8 6 1/8</u>	Size <u>8 3/4</u>	Weight <u>9.7</u>
	D.C. <u>574.15</u>	Mfg. <u>H.W.</u>	Visc.-Sec. <u>57</u>
<u>20</u>	I.D. O.D. <u>574.15</u>	Type <u>XDU</u>	W.L.-C.C. <u>14.0</u>
	D.C.	No. <u>2 1</u>	FL TR. CK. <u>2132</u>
	I.D. O.D.	Size <u>16 15</u>	PH <u>10.0</u>
	Sb. Body O.D.	Ser. No. <u>28539</u>	SD. Cont. %
	Sb. Body O.D.	Depth Out	Pressure Gradient
	Rmr. Body O.D.	Depth In <u>5040</u>	
	Subs O.D.	Total Ftg. <u>24</u>	
	Bit or C.B.	Total Hr. Run <u>2 1/4</u>	
	Kelly Down <u>20.42</u> Ft.	Cond. of Bit <u>IN</u>	
	Total <u>5064.00</u> Ft.	Reamer No.	
	Wt. of String <u>158,000</u> Lbs.	Reamer Type	
	Pipe in Hole <u>143</u> Jts.	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe on Racks <u>41</u> Jts.	Trucker	
	Total Pipe on Lease <u>184</u> Jts.	Trucker	

FOOTAGE			DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1		Pump No. 2		Meth Run SGL Par'el Com'd
From	To	Ftgs.							Liner Size	S.P.M.	Liner Size	S.P.M.	
5040	5064	24	12			70	38	900	5 1/2	67	5"		(3)
Deviation Record		Depth		Dev.		Direction		Depth		Dev.		Direction	
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
12 ⁰⁰	2 ⁰⁰	2						HOIST TEST NO. 2					
2 ⁰⁰	3 ⁰⁰	1						LAY DOWN PACKER AND LOAD SAM					
3 ⁰⁰	3 ¹⁵	1/4						3/4 SERVICE					
3 ¹⁵	5 ³⁰	2 1/4						RUN IN 1 1/4 BIT NO. 2.					
5 ³⁰	5 ⁴⁵	1/4						BREAK CIRC					
5 ⁴⁵	8 ⁰⁰	2 1/4						DRILLING					
								Test No 2 interval 4910-5040 = 130'					
								I.H.P 2453 I.F.P 269					
								F.H.P 2422 F.F.P 1254					
								15.1.P 1434 Recovered 270' water column &					
								581.P 1444 2400' Sulphuric Saltwater					

COMPLETION WORK	
A. Perforating	
B. Tubing Trips	
C. Swabbing	
D. Testing	
E. Additional	
Totals	<u>8 8 8</u>

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
<u>48</u>	Stands D.P. <u>4501.07</u> Ft.	Bit No. <u>7</u>	Time <u>9:00</u> <u>1:00</u> <u>5:00</u>
<u>1</u>	Singles D.P. <u>31.48</u>	Size <u>8 3/4</u>	Weight <u>9.6</u> <u>9.6</u> <u>9.6</u>
	D.C. <u>574.15</u>	Mfg. <u>H.W.</u>	Visc.-Sec. <u>56</u> <u>40</u> <u>40</u>
<u>20</u>	I.D. O.D. <u>574.15</u>	Type <u>XDU</u>	W.L.-C.C. <u>10.8</u> <u>13.0</u>
	D.C.	No. <u>1 2</u>	FL TR. CK. <u>2132</u> <u>2130</u>
	I.D. O.D.	Size <u>15 16</u>	PH <u>10.0</u> <u>11.0</u> <u>11.0</u>
	Sb. Body O.D.	Ser. No. <u>28539</u>	SD. Cont. %
	Sb. Body O.D.	Depth Out	Pressure Gradient
	Rmr. Body O.D.	Depth In <u>5040</u>	
	Subs O.D.	Total Ftg. <u>78</u>	
	Bit or C.B.	Total Hr. Run <u>10</u>	
	Kelly Down <u>11.30</u> Ft.	Cond. of Bit <u>IN</u>	
	Total <u>5118.00</u> Ft.	Reamer No.	
	Wt. of String <u>153,000</u> Lbs.	Reamer Type	
	Pipe in Hole <u>145</u> Jts.	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe on Racks <u>39</u> Jts.	Trucker	
	Total Pipe on Lease <u>184</u> Jts.	Trucker	

FOOTAGE			DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
From	To	Ftg.							Liner Size	S.P.M.	SGL- Par'd- Com'd.
5064	5118	54	D			70	38	900	5 1/2	68	5"
Deviation Record			Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS			
8:00	11:00	3						DRILLING 8 3/4" HOLE			
11:00	11:15	1/4						RIG SERVICE & B.O.P. ✓			
11:15	4:00	4 3/4						DRILLING 8 3/4" HOLE			

TIME SUMMARY (Office Use Only)			
Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			
Total Day Work			

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
<u>48</u>	Stands D.P. <u>4563.38</u> Ft.	Bit No. <u>7</u>	Time <u>5:00</u> <u>8:00</u> <u>11:00</u>
<u>2</u>	Singles D.P. <u>2 1/8 6 1/8</u>	Size <u>8 3/4</u>	Weight <u>9.6</u> <u>9.7</u> <u>9.7</u>
	D.C. <u>574.15</u>	Mfg. <u>H.W.</u>	Visc.-Sec. <u>43</u> <u>55</u> <u>48</u>
<u>20</u>	I.D. O.D. <u>574.15</u>	Type <u>XDU</u>	W.L.-C.C. <u>12.2</u>
	D.C.	No. <u>1 2</u>	FL TR. CK. <u>2132</u>
	I.D. O.D.	Size <u>15 16</u>	PH <u>11.0</u> <u>11.0</u> <u>11.0</u>
	Sb. Body O.D.	Ser. No. <u>28539</u>	SD. Cont. %
	Sb. Body O.D.	Depth Out	Pressure Gradient
	Rmr. Body O.D.	Depth In <u>5040</u>	
	Subs O.D.	Total Ftg. <u>121</u>	
	Bit or C.B.	Total Hr. Run <u>17 3/4</u>	
	Kelly Down <u>23.53</u> Ft.	Cond. of Bit <u>IN</u>	
	Total <u>5161.00</u> Ft.	Reamer No.	
	Wt. of String <u>154,000</u> Lbs.	Reamer Type	
	Pipe in Hole <u>146</u> Jts.	Water Charges	Reg. Hrs. O.T. Hrs.
	Pipe on Racks <u>38</u> Jts.	Trucker	
	Total Pipe on Lease <u>184</u> Jts.	Trucker	

FOOTAGE			DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1		Pump No. 2		Method Run SGL-S Par'd-P Comp-C	
From	To	Ftg.							Liner Size	S.P.M.	Liner Size	S.P.M.		
5118	5161	43	D			70	38	900	5 1/2	68	5"		(5)	
Deviation Record		Depth		Dev.	Direction		Depth	Dev.	Direction		Depth	Dev.	Direction	
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS						
1 ⁰⁰	4 ¹⁵	1/4						RIG SERVICE						
4 ¹⁵	12 ⁰⁰	7 3/4						DRILLING 8 3/4" HOLE						

WIRE LINE RECORD			
Reel No.	<u>F22 92</u>		
No. of Lines	<u>8</u>	Size <u>1 1/8</u>	
Feet Slipped	<u>49</u>		
Feet Cut Off	<u>49</u>		
Present Length	<u>127</u>		
Ton Mi. or Trips Since Last Cut	<u>150</u>		
Cumulative Ton Mi. or Trips	<u>6740</u>		
No. of Days From Spud	<u>18</u>		
Cumulative Rotating Hrs.	<u>289 1/2</u>		

No

4515

DAILY DRILLING REPORT

Form 6

Lease Well Name *H.B. Cameron N-24* Date *March 13, 1971*
Location - Lsd. *N* Sec. *24* Twp. *19* Rge. *W* M. *24*

Weather Condition

Road Conditions

Nearest Town

Water - Source

Miles Hauled

Pumped

Camp Distance from Rig

Reason for Extra L. Plant

OPERATOR

Rig No.

Drill Pipe String

Tool Joint

PUMPS

LAST

Casing

Tubing

OR LINER

Size

Make

Wt. & Gr.

No Joints

Feet

RKB to

CSG. HD.

Set at

Remarks

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

No.

MANUFACTURER

TYPE

STROKES

LENGTH

1.

2.

3.

TIME DISTRIBUTION—HOURS

Morn

Day

Eve

Rig Up & Tear Down

Drilling Actual

Reaming

Conditioning Mud & Circulating

Trips

Lubricate Rig

Deviation Survey

Test B.O.P.

Cut Off Drilling Line

Repair Rig

Coring

Wire Line Logging

Running Casing & Cementing

Waiting on Cement

Drill Stem Test

Other

MORNING TOUR

DAY TOUR

EVENING TOUR

NO.

DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

MUD RECORD

FOOTAGE

DR-D

RM-R

Core-C

Core No.

FORMATION (SHOW CORE RECOVERY)

Rotary RPM

Wt. on Bit 1000 Lbs.

Pump Press

Pump No. 1

Pump No. 2

Method Run

SGL-S

Par d-P

Com d-C

47

Stand D.P.

Feet

Bit No.

6 R.R.

Time

100 400 700

Weight

9.7 9.7 9.6

Visc.-Sec.

48 57 56

W.L.-C.C.

10.2 10.4 12.6

FL TR. CK.

2.32 2.32 2.32

PH

9.0 10.5 10.5

SD. Cont. %

Pressure Gradient

Hour Started

Hour Stopped

Elapsed Time

A

B

C

D

Acc. D.T.

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

1

Singles D.P.

4438.95

Size

8 3/4

Mfg.

S.T.C.

Type

455

No.

1 1 1

Size

13 1/4 18

Ser. No.

F2513

Depth Out

4390

Total Ftg.

645

Total Hr. Run

75

Cond. of Bit

IN

Reamer No.

Reamer Type

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Driller

20

D.C.

2 1/8 6 1/8

I.D. O.D.

574.15

No.

1 1 1

Size

13 1/4 18

Ser. No.

F2513

Depth Out

4390

Total Ftg.

645

Total Hr. Run

75

Cond. of Bit

IN

Reamer No.

Reamer Type

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Driller

D.C.

I.D. O.D.

Feet

No.

1 1 1

Size

13 1/4 18

Ser. No.

F2513

Depth Out

4390

Total Ftg.

645

Total Hr. Run

75

Cond. of Bit

IN

Reamer No.

Reamer Type

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Driller

D.C.

I.D. O.D.

Feet

No.

1 1 1

Size

13 1/4 18

Ser. No.

F2513

Depth Out

4390

Total Ftg.

645

Total Hr. Run

75

Cond. of Bit

IN

Reamer No.

Reamer Type

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Driller

D.C.

I.D. O.D.

Feet

No.

1 1 1

Size

13 1/4 18

Ser. No.

F2513

Depth Out

4390

Total Ftg.

645

Total Hr. Run

75

Cond. of Bit

IN

Reamer No.

Reamer Type

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Driller

D.C.

I.D. O.D.

Feet

No.

1 1 1

Size

13 1/4 18

Ser. No.

F2513

Depth Out

4390

Total Ftg.

645

Total Hr. Run

75

Cond. of Bit

IN

Reamer No.

Reamer Type

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Driller

D.C.

I.D. O.D.

Feet

No.

1 1 1

Size

13 1/4 18

Ser. No.

F2513

Depth Out

4390

Total Ftg.

645

Total Hr. Run

75

Cond. of Bit

IN

Reamer No.

Reamer Type

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Driller

D.C.

I.D. O.D.

Feet

No.

1 1 1

Size

13 1/4 18

Ser. No.

F2513

Depth Out

4390

Total Ftg.

645

Total Hr. Run

75

Cond. of Bit

IN

Reamer No.

Reamer Type

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Driller

D.C.

I.D. O.D.

Feet

No.

1 1 1

Size

13 1/4 18

Ser. No.

F2513

Depth Out

4390

Total Ftg.

645

Total Hr. Run

75

Cond. of Bit

IN

Reamer No.

Reamer Type

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Driller

D.C.

I.D. O.D.

Feet

No.

1 1 1

Size

13 1/4 18

Ser. No.

F2513

Depth Out

4390

Total Ftg.

645

Total Hr. Run

75

Cond. of Bit

IN

Reamer No.

Reamer Type

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

Trucker

Driller

D.C.

I.D. O.D.

Feet

No.

1 1 1

Size

13 1/4 18

Ser. No.

F2513

Depth Out

4390

Total Ftg.

645

Total Hr. Run

75

Cond. of Bit

IN

Reamer No.

Reamer Type

Water Charges

Reg. Hrs. O.T. Hrs.

Trucker

4514

514 GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease	Date
Well Name <i>H. B. Ramsey N 24</i>	
Location — Lat <i>N</i> Sec <i>24</i> T ₁ S R ₁ E W M	<i>March 12 1971</i>

Weather

Road

Nearest

Water -

Camp D

130 mgda.

[illegible][illegible]

COMPLETION WORK		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD			FOOTAGE			DR-D RM-R Core-C		Core No.		FORMATION (SHOW CORE RECOVERY)		Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run	
																					Liner Size	S.P.M.	Liner Size	S.P.M.	SGT-S Par e-P Com d-C	
A. Perforating		45		Stands D.P. 4220.71 Ft.		Bit No. 6RR.		Time 8 ⁰⁰ 12 ⁰⁰ 3 ⁰⁰			From To Ftg.			4836 4891 55		D				55	38	925	5 1/2	68	5"	S
B. Tubing Trips		2		Singles D.P. 62.31 Ft.		Size 8 3/4		Weight 9.6 9.6 9.6																		
C. Swabbing				D.C.		Mfg. S.T.C.		Visc.-Sec. 48 45 44																		
D. Testing				I.D. O.D.		Ft. Typ. HJS		W.L.-C.C. 20.0 15.2																		
E. Additional				D.C. 2 1/8 6 1/8		No. 1 1 1		FL TR. CK. 2 3/2 2 3/2																		
Total		8 88		I.D. O.D. 574.15 Ft.		Size 13 1/4 18		PH 10.5 10.5 10.5																		
TIME SUMMARY (Office Use Only)																										
Day Work																										
Hrs. W/DP																										
Hrs. WO/DP																										
Hrs. Standby																										

Total Day Work		DRILLING ASSEMBLY AT END OF HOUR		BIT RECORD		MUD RECORD		FOOTAGE			FORMATION (SHOW CORE RECOVERY)		Rotary RPM		Wt. on Bit 1000 Lbs.		Pump Press		Pump No. 1		Pump No. 2		Method Run SGL-S Par-el-Cor	
From	To	Frge.	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)		Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run SGL-S Par-el-Cor												
Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction	Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS "1". SEQUENCE AND REMARKS						
WIRE LINE RECORD		46 Stands D.P.		Fr. Bit No. 6 RR		Time 5 00 8 00 11 00		From 4891 To 4948 Frge. 57 D			55 38 925 5 1/2 660		5											
Reel No. F 7292		1 Singles D.P.		Size 8 3/4		Weight 54 9.6 9.7																		
No. of Lines 8 Size 1 1/8		D.C. 2186 ft		Mfg. S.T.C.		Visc.-Sec. 9.7 46 52																		
Feet Slipped 100		20 I.D. O.D. 574.15		Type 4 J.S.		W.L.-C.C. 10.6																		
Feet Cut Off 100		D.C.		No. 1 1 1		FL TR. CK. 7/32																		
Present Length 176		I.D. O.D.		Size 13 14 18		PH 10.5 10.5																		
Ton Mi. or Trips Since Last Cut 464		Sb. Body O.D.		Ser. No. F2513		SD. Cont. %																		
Cumulative Ton Mi. or Trips 6540		Sb. Body O.D.		Depth Out		Pressure Gradient																		
No. of Days From Spud 16		Rm. Body O.D.		Depth In 4390		Mud & Chemicals Added																		
Cumulative Raising Hrs. 263 1/2		Subs O.D.		Total Ftg. 558		Type Amt. Type Amt.																		
		Bit or C.B.		Total Hr. Run 61 1/4		MIL CAL 35 SKS.																		
		Kelly Down 28.81		Cond. of Bit IN		SUPER CAL 2 SKS.																		
		Total 4948.00		Reamer No.																				
		Wt. of String 140,000		Reamer Type																				
		Pipe in Hole 139		Water Charges Reg. Hrs. O.T. Hrs.																				
		Pipe on Racks 45		Trucker B+R 10																				
		Total Pipe on Lease 184		Trucker																				

No 4512
GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name *H.B. Cameron N-24*
Location - Lat. *N* Sec. *24* Twp. *10* Rge. *W* M. *10* 71

Weather Condition

Road Conditions

Nearest Town

Water Source *Lake*
Miles Hauled *2*

Camp Distance from Rig *150 yds*
Reason for Extra L. Plant *Camp*

OPERATOR

Rig No. *5* Drill Pipe String *5 3/4* O.D.
Tool Joint *5 3/4* O.D.

PUMPS

LAST CASING TUBING OR LINER

Size *10 3/4* Make *STAC* Wt. & Gr. *32.75/440* 24 *924* Feet *920*

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOC: PUSHER

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	<i>Nat.</i>	<i>Q250</i>	<i>15</i>
2.	<i>Nat.</i>	<i>C150</i>	<i>12</i>
3.			

TIME DISTRIBUTION—HOURS

Rig Up & Tear Down

Drilling Actual *6 7/8*

Reaming *1/4*

Conditioning Mud & Circulating

Trips *1 1/2*

Lubricate Rig *1/4 1/4 1/4*

Deviation Survey

Test B.O.P.

Cut Off Drilling Line

Repair Rig *1/2*

Coring

Wire Line Logging

Running Casing & Cementing

Waiting on Cement

Drill Stem Test

Other

Fishing

A. Perforating

B. Tubing Trips

C. Swabbing

D. Testing

E. Additional

Totals *8 8 8*

TIME SUMMARY (Office Use Only)

Day Work

Hrs. W/DP

Hrs. WO/DP

Hrs. Standby

Total Day Work

WIRE LINE RECORD

Reel No. *E 7292*

No. of Lines *8* Size *1 1/8*

Feet Slipped *100*

Feet Cut Off *100*

Present Length *176*

Ton Mi. or Trips Since Last Cut *464*

Cumulative Ton Mi. or Trips *6540*

No. of Days From Spud *14*

Cumulative Rotating Hrs. *217 1/4*

MORNING TOUR

DAY TOUR

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD
41	Stands D.P. <i>3845.55</i> Ft.	Bit No. <i>6 R.R.</i>
	Singles D.P.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>SMITH</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>50</i>
	Bit or C.B.	Total Hr. Run <i>6</i>
	Kelly Down <i>20.30</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4440.00</i>	Reamer No.
	Wt. of String <i>130,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>123</i> Jts.	Water Charges
	Pipe on Racks <i>23</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>146</i> Jts.	Trucker

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD
41	Stands D.P. <i>3845.55</i> Ft.	Bit No. <i>6 R.R.</i>
	Singles D.P.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>S.T.C.</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>108</i>
	Bit or C.B.	Total Hr. Run <i>13 1/4</i>
	Kelly Down <i>15.87</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4498</i>	Reamer No.
	Wt. of String <i>130,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>125</i> Jts.	Water Charges
	Pipe on Racks <i>59</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>184</i> Jts.	Trucker

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD
42	Stands D.P.	Bit No. <i>6 R.R.</i>
	Singles D.P. <i>3870.93</i> Ft.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>S.T.C.</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>177</i>
	Bit or C.B.	Total Hr. Run <i>21</i>
	Kelly Down <i>21.92</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4567.00</i>	Reamer No.
	Wt. of String <i>132,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>127</i> Jts.	Water Charges
	Pipe on Racks <i>57</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>184</i> Jts.	Trucker

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD
41	Stands D.P. <i>3845.55</i> Ft.	Bit No. <i>6 R.R.</i>
	Singles D.P.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>SMITH</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>50</i>
	Bit or C.B.	Total Hr. Run <i>6</i>
	Kelly Down <i>20.30</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4440.00</i>	Reamer No.
	Wt. of String <i>130,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>123</i> Jts.	Water Charges
	Pipe on Racks <i>23</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>146</i> Jts.	Trucker

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD
41	Stands D.P. <i>3845.55</i> Ft.	Bit No. <i>6 R.R.</i>
	Singles D.P.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>S.T.C.</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>108</i>
	Bit or C.B.	Total Hr. Run <i>13 1/4</i>
	Kelly Down <i>15.87</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4498</i>	Reamer No.
	Wt. of String <i>130,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>125</i> Jts.	Water Charges
	Pipe on Racks <i>59</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>184</i> Jts.	Trucker

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD
42	Stands D.P.	Bit No. <i>6 R.R.</i>
	Singles D.P. <i>3870.93</i> Ft.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>S.T.C.</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>177</i>
	Bit or C.B.	Total Hr. Run <i>21</i>
	Kelly Down <i>21.92</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4567.00</i>	Reamer No.
	Wt. of String <i>132,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>127</i> Jts.	Water Charges
	Pipe on Racks <i>57</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>184</i> Jts.	Trucker

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD
41	Stands D.P. <i>3845.55</i> Ft.	Bit No. <i>6 R.R.</i>
	Singles D.P.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>SMITH</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>50</i>
	Bit or C.B.	Total Hr. Run <i>6</i>
	Kelly Down <i>20.30</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4440.00</i>	Reamer No.
	Wt. of String <i>130,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>123</i> Jts.	Water Charges
	Pipe on Racks <i>23</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>146</i> Jts.	Trucker

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD
41	Stands D.P. <i>3845.55</i> Ft.	Bit No. <i>6 R.R.</i>
	Singles D.P.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>S.T.C.</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>108</i>
	Bit or C.B.	Total Hr. Run <i>13 1/4</i>
	Kelly Down <i>15.87</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4498</i>	Reamer No.
	Wt. of String <i>130,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>125</i> Jts.	Water Charges
	Pipe on Racks <i>59</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>184</i> Jts.	Trucker

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD
42	Stands D.P.	Bit No. <i>6 R.R.</i>
	Singles D.P. <i>3870.93</i> Ft.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>S.T.C.</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>177</i>
	Bit or C.B.	Total Hr. Run <i>21</i>
	Kelly Down <i>21.92</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4567.00</i>	Reamer No.
	Wt. of String <i>132,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>127</i> Jts.	Water Charges
	Pipe on Racks <i>57</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>184</i> Jts.	Trucker

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD
41	Stands D.P. <i>3845.55</i> Ft.	Bit No. <i>6 R.R.</i>
	Singles D.P.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>SMITH</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>50</i>
	Bit or C.B.	Total Hr. Run <i>6</i>
	Kelly Down <i>20.30</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4440.00</i>	Reamer No.
	Wt. of String <i>130,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>123</i> Jts.	Water Charges
	Pipe on Racks <i>23</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>146</i> Jts.	Trucker

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	Singles D.P.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>S.T.C.</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>108</i>
	Bit or C.B.	Total Hr. Run <i>13 1/4</i>
	Kelly Down <i>15.87</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4498</i>	Reamer No.
	Wt. of String <i>130,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>125</i> Jts.	Water Charges
	Pipe on Racks <i>59</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>184</i> Jts.	Trucker

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD
42	Stands D.P.	Bit No. <i>6 R.R.</i>
	Singles D.P. <i>3870.93</i> Ft.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>S.T.C.</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>177</i>
	Bit or C.B.	Total Hr. Run <i>21</i>
	Kelly Down <i>21.92</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4567.00</i>	Reamer No.
	Wt. of String <i>132,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>127</i> Jts.	Water Charges
	Pipe on Racks <i>57</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>184</i> Jts.	Trucker

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41	Stands D.P. <i>3845.55</i> Ft.	Bit No. <i>6 R.R.</i>
	Singles D.P.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>SMITH</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>50</i>
	Bit or C.B.	Total Hr. Run <i>6</i>
	Kelly Down <i>20.30</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4440.00</i>	Reamer No.
	Wt. of String <i>130,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>123</i> Jts.	Water Charges
	Pipe on Racks <i>23</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>146</i> Jts.	Trucker

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41	Stands D.P. <i>3845.55</i> Ft.	Bit No. <i>6 R.R.</i>
	Singles D.P.	Size <i>8 3/4</i>
	D.C. <i>2 7/8 6 1/8</i>	Mfg. <i>S.T.C.</i>
20	I.D. O.D. <i>574.15</i> Ft.	Type <i>4JS</i>
	D.C.	No. <i>1 1 1</i>
	I.D. O.D.	Size <i>13 1/4 18</i>
	Sub. Body O.D.	Ser. No. <i>F2513</i>
	Sub. Body O.D.	Depth Out
	Rmr. Body O.D.	Depth In <i>4390</i>
	Subs O.D.	Total Ftg. <i>108</i>
	Bit or C.B.	Total Hr. Run <i>13 1/4</i>
	Kelly Down <i>15.87</i> Ft.	Cond. of Bit <i>IN</i>
	Total <i>4498</i>	Reamer No.
	Wt. of String <i>130,000</i> Lbs.	Reamer Type
	Pipe in Hole <i>125</i> Jts.	Water Charges
	Pipe on Racks <i>59</i> Jts.	Reg. Hrs. O.T. Hrs.
	Total Pipe on Lease <i>184</i> Jts.	Trucker

NO.	DRILLING ASSEMB
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N^o 4511
GUTHRIE McLAREN
Drilling Ltd.

[illegible]

No 4510

GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease
Well Name *H.B. Cameron N-24*
Location - *Sec. 24* Twp. *10* Rge. *W* M. *March 18, 21*

Weather

Road

Nearest

Water - Source

Camp Distance from

Reason for Extra L. Plant

OPERATOR

Rig No. *5*
Drill Pipe String
Tool Joint *540 D.*
No. *2* Size *4 1/2* Type *F.H.*

PUMPS

No. MANUFACTURER TYPE STROKE LENGTH
1. *Not* *C 250* *15*
2. *Not* *C 150* *12*
3.

LAST CASING TUBING OR LINER

Size Make Wt. & Gr. No. Joints Feet RKB. to CSO. HD. Set at Remarks
10 3/4 ST&C 32.75/440 24 924 920

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION—HOURS

	Morn	Day	Even
Rig Up & Tear Down			
Drilling Actual	<i>7 1/4</i>	<i>3 1/4</i>	<i>4 1/4</i>
Reaming			
Commencing Mud & Circulating	<i>3 1/4</i>	<i>3 1/4</i>	
Trips			
Lubricate Rig	<i>1/4</i>	<i>1/4</i>	<i>1/4</i>
Deviation Survey	<i>1/2</i>		
Test B.C.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other	<i>1/4</i>		

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RMR Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
39	Stands D.P.	Feet	Bit No. <i>4</i>	Time <i>100 4 00 7 00</i>	From	To	Ftgs.						
2	Singles D.P.	Feet	Size <i>8 3/4</i>	Weight <i>9.5 9.4 9.4</i>	4182	4320	138						
	D.C.	Feet	Mfg. <i>REED</i>	Visc.-Sec. <i>53 51 52</i>									
20	I.D. O.D.	Feet	Type <i>STING</i>	W.L.-C.C. <i>10.4</i>									
	D.C.	Feet	No. <i>1 2</i>	FL TR. CK. <i>2/32</i>									
	I.D. O.D.	Feet	Size <i>15 16</i>	PH <i>7.2</i>									
	Sub. Body O.D.	Feet	Ser. No. <i>782412</i>	SD. Cont. %									
	Sub. Body O.D.	Feet	Depth Out	Pressure Gradient									
	Rmr. Body O.D.	Feet	Depth In <i>3490</i>										
	Subs O.D.	Feet	Total Ftg. <i>830</i>										
	Bit or C.B.	Feet	Total Hr. Run <i>38 1/4</i>										
	Kelly Down	Feet	Cond. of Bit <i>1N</i>										
	Total	Feet	Reamer No.										
	Wt. of String	Lbs.	Reamer Type										
	Pipe in Hole	Jts.	Water Charges Reg. Hrs. O.T. Hrs.										
	Pipe on Racks	Jts.	Trucker										
	Total Pipe on Lease	Jts.	Trucker										

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RMR Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
40	Stands D.P.	Feet	Bit No. <i>4 5</i>	Time <i>8 00 1 30</i>	From	To	Ftgs.						
	Singles D.P.	Feet	Size <i>8 3/4 8 3/4</i>	Weight <i>9.4 R 9.4</i>	4320	4348	28						
	D.C.	Feet	Mfg. <i>REED</i>	Visc.-Sec. <i>50 1 50</i>									
20	I.D. O.D.	Feet	Type <i>STING</i>	W.L.-C.C. <i>P</i>									
	D.C.	Feet	No. <i>1 2 3 1</i>	FL TR. CK.									
	I.D. O.D.	Feet	Size <i>15 16 17 18</i>	PH									
	Sub. Body O.D.	Feet	Ser. No. <i>182412 FZ515</i>	SD. Cont. %									
	Sub. Body O.D.	Feet	Depth Out <i>4330</i>	Pressure Gradient									
	Rmr. Body O.D.	Feet	Depth In <i>3490 4330</i>										
	Subs O.D.	Feet	Total Ftg. <i>840 18</i>										
	Bit or C.B.	Feet	Total Hr. Run <i>39 2 1/4</i>										
	Kelly Down	Feet	Cond. of Bit <i>4.21 1N</i>										
	Total	Feet	Reamer No.										
	Wt. of String	Lbs.	Reamer Type										
	Pipe in Hole	Jts.	Water Charges Reg. Hrs. O.T. Hrs.										
	Pipe on Racks	Jts.	Trucker										
	Total Pipe on Lease	Jts.	Trucker										

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RMR Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
40	Stands D.P.	Feet	Bit No. <i>5</i>	Time <i>5:00 8:00 11:00</i>	From	To	Ftgs.						
	Singles D.P.	Feet	Size <i>8 3/4</i>	Weight <i>9.4 9.4 9.4</i>	4348	4390	42						
	D.C.	Feet	Mfg. <i>S.T.C</i>	Visc.-Sec. <i>50 55 53</i>									
20	I.D. O.D.	Feet	Type <i>4TS</i>	W.L.-C.C. <i>9</i>									
	D.C.	Feet	No. <i>2 1</i>	FL TR. CK. <i>2/32</i>									
	I.D. O.D.	Feet	Size <i>14 18</i>	PH <i>8 8 9.5</i>									
	Sub. Body O.D.	Feet	Ser. No. <i>FZ515</i>	SD. Cont. %									
	Sub. Body O.D.	Feet	Depth Out	Pressure Gradient									
	Rmr. Body O.D.	Feet	Depth In <i>4330</i>										
	Subs O.D.	Feet	Total Ftg. <i>100</i>										
	Bit or C.B.	Feet	Total Hr. Run <i>6 1/2</i>										
	Kelly Down	Feet	Cond. of Bit										
	Total	Feet	Reamer No.										
	Wt. of String	Lbs.	Reamer Type										
	Pipe in Hole	Jts.	Water Charges Reg. Hrs. O.T. Hrs.										
	Pipe on Racks	Jts.	Trucker										
	Total Pipe on Lease	Jts.	Trucker										

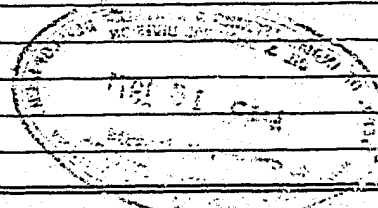
WIRE LINE RECORD

Reel No.	<i>E 2292</i>
No. of Lines	<i>8</i> Size <i>1 1/8</i>
Feet Slipped	<i>100</i>
Feet Cut Off	<i>100</i>
Present Length	<i>176</i>
Ton Mi. or Trips Since Last Cut	<i>209</i>
Cumulative Ton Mi. or Trips	<i>6285</i>
No. of Days From Spud	<i>12</i>
Cumulative Rotating Hrs.	<i>196 1/4</i>

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
<i>12 00</i>	<i>1 00</i>	<i>1</i>						<i>DRILLING</i>
<i>1 00</i>	<i>1 15</i>	<i>15</i>						<i>RIG SERVICE</i>
<i>1 15</i>	<i>4 00</i>	<i>2 45</i>						<i>DRILLING</i>
<i>4 00</i>	<i>4 30</i>	<i>30</i>						<i>SURVEY</i>
<i>4 30</i>	<i>8 00</i>	<i>3 30</i>						<i>DRILLING</i>

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
<i>8 00</i>	<i>8 45</i>	<i>45</i>						<i>DRILLING 8 3/4" HOLE</i>
<i>8 45</i>	<i>9 30</i>	<i>45</i>						<i>CIRCULATE SAMPLE</i>
<i>9 30</i>	<i>11 30</i>	<i>2</i>						<i>TRIP FOR BIT (HOLE TRIP TO 3450-35)</i>
<i>11 30</i>	<i>11 45</i>	<i>15</i>						<i>RIG SERVICE & B.O.R.V.</i>
<i>11 45</i>	<i>1 30</i>	<i>45</i>						<i>RUN IN HOLE W/ BIT NO. 5</i>
<i>1 30</i>	<i>1 45</i>	<i>15</i>						<i>BREAK CIRC & CLEAN IS. TO BIT</i>
<i>1 45</i>	<i>4 00</i>	<i>2 15</i>						<i>DRILLING 8 3/4" HOLE</i>

Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
<i>4 00</i>	<i>6 00</i>	<i>2</i>						<i>DRILLING</i>
<i>6 00</i>	<i>6 15</i>	<i>15</i>						<i>RIG SERVICE</i>
<i>6 15</i>	<i>8 30</i>	<i>2 15</i>						<i>DRILLING 8 3/4" HOLE</i>
<i>8 30</i>	<i>9 30</i>	<i>1</i>						<i>CIRCULATE SAMPLE</i>
<i>9 30</i>	<i>12 00</i>	<i>2 30</i>						<i>CIRCULATING WAIT ON TESTER</i>



DAILY DRILLING REPORT

Form 6

Lease Well Name H.B. CAMERON - N-24 Date March 19, 1971
Location - Lsd. N Sec. 24 Twp. --- Rgt. --- W. M

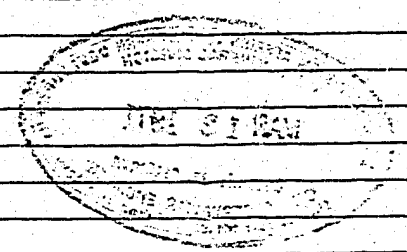
Weather Condition Cloudy Road Conditions rough Nearest Town High Level Water - Source --- Miles Hauled --- Pumped --- Camp Distance from Rig 130 yds Reason for Extra L. Plant Camp

OPERATOR <u>Nelson's Bay Oil & Gas Co. Ltd.</u>	Rig No. <u>5</u> <u>Not 500</u>	Drill Pipe String <u>2 1/2</u>	Tool Joint <u>5 1/4 O.D.</u>	PUMPS			1" ST CASING TUBING CR LINER	Size <u>10 3/4 STAC</u>	Make <u>32 25/440 24</u>	Wt. & Gr. <u>924</u>	No Joints <u>920</u>	Feet <u>920</u>	RKB. to CSG. Hd.	Set at	Remarks
SIGNATURE OF OPERATOR'S REPRESENTATIVE <u>W.B. Smyth Miller</u>	SIGNATURE OF CONTRACTOR'S TOOL PUSHER <u>A. Field</u>			No.	MANUFACTURER	TYPE	STROKE LENGTH								
				1.	<u>Not</u>	<u>C 250</u>	<u>15</u>								
				2.	<u>Not</u>	<u>C 150</u>	<u>12</u>								
				3.											

TIME DISTRIBUTION—HOURS	Morn	Day	Even	NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run SGL-S Par-el-P Com d-C																	
	Rig Up & Tear Down																	34	Stands D.P.	4	Time	1 00	4 00	7 00	From	To	Ftge.	12 00	1 00	1				
	Drilling Actual	7 1/4	7 1/4															6 1/4	2	Singles D.P.	3252.31	Size	8 3/4	Weight	9.0	9.0	9.0	3684	3845	161	D			
	Reaming																			D.C.		Mfg.	REED	Visc.-Sec.	52	52	53							
	Conditioning Mud & Circulating																			I.D. O.D.		No.	1 2	FL TR. CK.										
	Trips																			I.D. O.D.	574.15	Nozzle	15 16	PH										
	Lubricate Rig	1/4	1/4															1/4		Sb. Body O.D.		Ser. No.	782412	SD Cont. %										
	Deviation Survey																			Sb. Body O.D.		Depth Out		Pressure Gradient										
	Test B.O.P.																			Rmr. Body O.D.		Depth In	3490											
	Cut Off Drilling Line																			Subs O.D.		Total Ftg.	355											
Repair Rig				Total Hr. Run				17				Mud & Chemicals Added																						
Coring				Kelly Down				18.54				Type				Supercol 55 SKS																		
Wire Line Logging				Total				3845.00				Type				Kwik Seal 10 SKS																		
Running Casing & Cementing				Wt. of String				118,000 Lbs.				Type				SANDUST 10 SKS																		
Waiting on Cement				Pipe in Hole				104 Jts.				Water Charges				Reg. Hrs. O.T. Hrs.																		
Drill Stem Test				Pipe on Racks				42 Jts.				Trucker																						
Other				Total Pipe on Lease				146 Jts.				Trucker				Driller <u>W.B. Smyth Miller</u>																		

COMPLETION WORK	A. Perforating B. Tubing Trips C. Swabbing D. Testing E. Additional	8 8 8	NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run SGL-S Par-el-P Com d-C																		
																	36	Stands D.P.	3376.12	Bit No.	4	Time	8 00	12 00	3 00	From	To	Ftge.	70	38	950	5 1/2	68	5
																	1	Singles D.P.	31.04	Size	8 3/4	Weight	9.3	9.4	9.4	3845	4022	177	D					
																	20	D.C.		Mfg.	REED	Visc.-Sec.	80	62	58									
																		I.D. O.D.	574.15	Type	STIAG	W.L.-C.C.												
																		D.C.		No.	1 2	FL TR. CK.												
																		I.D. O.D.		Nozzle	15 16	PH												
																		Sb. Body O.D.		Ser. No.	782412	SD Cont. %												
																		Sb. Body O.D.		Depth Out		Pressure Gradient												
																		Rmr. Body O.D.		Depth In	3490													
Total				4022.66				Reamer No.																										
Wt. of String				120,000 Lbs.				Reamer Type																										
Pipe in Hole				109 Jts.				Water Charges				Reg. Hrs. O.T. Hrs.																						
Pipe on Racks				37 Jts.				Trucker																										
Total Pipe on Lease				146 Jts.				Trucker																										

WIRE LINE RECORD	Reel No. <u>E7292</u> No. of Lines <u>8</u> Size <u>1 1/8</u> Feet Slipped <u>100</u> Feet Cut Off <u>100</u> Present Length <u>176</u> Ton Mi. or Trips Since Last Cut <u>129</u> Cumulative Ton Mi. or Trips <u>6205</u> No. of Spuds From Spud <u>11</u> Rotating Hrs. <u>181 3/4</u>	NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run SGL-S Par-el-P Com d-C																		
																38	Stands D.P.		Bit No.	4	Time	5 00	8 00	11 00	From	To	Ftge.	70	38	950	5 1/2	68	5
																1	Singles D.P.	3595.27	Size	8 3/4	Weight	9.4	9.5	9.5	4022	4182	160	D					
																20	D.C.		Mfg.	REED	Visc.-Sec.	56	60	53									
																	I.D. O.D.	574.15	Type	STIAG	W.L.-C.C.												
																	D.C.		No.	1 2	FL TR. CK.												
																	I.D. O.D.		Nozzle	15 16	PH												
																	Sb. Body O.D.		Ser. No.	782412	SD Cont. %												
																	Sb. Body O.D.		Depth Out		Pressure Gradient												
																	Rmr. Body O.D.		Depth In	3490													
Total				4182.00				Reamer No.																									
Wt. of String				121,000 Lbs.				Reamer Type																									
Pipe in Hole				115 Jts.				Water Charges				Reg. Hrs. O.T. Hrs.																					
Pipe on Racks				31 Jts.				Trucker																									
Total Pipe on Lease				146 Jts.				Trucker																									



No 4508

GUTHRIE McLAREN
Drilling Co.

DAILY DRILLING REPORT

Form 5

Lease
Well Name H.B. Remson N-24 Date March 6 1971
Location - Lsd. N. Sec. 24 Twp. W. M. Rge. W. M.Weather
ConditionRoad
ConditionsNearest
Town

High Level

Water - Source LakeCamp Distance from Rig 150 ydsReason for Extra L. Plant Camp

OPERATOR

Rig No.

5

DWKS

Drill Pipe

String

Tool

Joint

5 3/4 O.D.

No.

44

Type

F.H.

No.

1

MANUFACTURER

TYPE

STROKE

LENGTH

LAST

CASING

OR LINER

Size

Make

Wt. & Gr.

No Joints

Feet

RKB to

CSG. HD.

Set at

Remarks

10 3/4 ST-C

32.25/44

24

924

920

20

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SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

H. Shield

H. Shield

H. Shield

H. Shield

H. Shield

H. Shield

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TIME DISTRIBUTION - HOURS

NO.

DRILLING ASSEMBLY

AT END OF TOUR

BIT RECORD

MUD RECORD

FOOTAGE

DR-D

RM-R

Core-C

Core No.

FORMATION

(SHOW CORE RECOVERY)

Rotary

RPM

Wt. on

Bit

1000

Lbs.

Pump

Press

Pump No. 1

Pump No. 2

Method

Run

SCL-S

Par'd-P

Comp'd-C

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

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S.P.M.

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S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

TIME DISTRIBUTION - HOURS

NO.

DRILLING ASSEMBLY

AT END OF TOUR

BIT RECORD

MUD RECORD

FOOTAGE

DR-D

RM-R

Core-C

Core No.

FORMATION

(SHOW CORE RECOVERY)

Rotary

RPM

Wt. on

Bit

1000

Lbs.

Pump

Press

Pump No. 1

Pump No. 2

Method

Run

SCL-S

Par'd-P

Comp'd-C

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

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S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

TIME DISTRIBUTION - HOURS

NO.

DRILLING ASSEMBLY

AT END OF TOUR

BIT RECORD

MUD RECORD

FOOTAGE

DR-D

RM-R

Core-C

Core No.

FORMATION

(SHOW CORE RECOVERY)

Rotary

RPM

Wt. on

Bit

1000

Lbs.

Pump

Press

Pump No. 1

Pump No. 2

Method

Run

SCL-S

Par'd-P

Comp'd-C

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

S.P.M.

Liner

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S.P.M.

Liner

S.P.M.

Liner

S.P.M.

No. 4507

GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease
Well Name *Hudson Bay Farm* W-24
Location - Lsd. *N. Sec. 24* Twp. *19* Rge. *W. M.* Date *March 5 1971*Weather Condition *33 below* Road Condition *Rough* Nearest Town *High Level* Water - Source *High Level* Miles Hauled *150 yds* Camp Distance from Rig *150 yds* Reason for Extra L. Plant *Camp*

OPERATOR <i>Hudson Bay Oil and Gas Ltd.</i>	Rig No. <i>5</i>	Drill Pipe String <i>2 4/8</i>	Tool Joint <i>5 1/2</i>	PUMPS	Size	Make	Wt. & Gr.	No. Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>R. S. Smith</i>	No. <i>1</i>	Size <i>4 1/2</i>	Type Tbd. <i>F.H.</i>	No.	MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER				
SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>A. S. Smith</i>	L. <i>Mat.</i>			1.	<i>Mat.</i>	<i>C250</i>	<i>15</i>					
	2.			2.		<i>C150</i>	<i>12</i>					
	3.			3.								

TIME DISTRIBUTION - HOURS	NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
Rig Up & Tear Down	26	Stand D.P.	Bit No. <i>3</i>	Time <i>100 400 700</i>	From To Ftg.									
Drilling Actual <i>7 1/4 7 1/4 7 1/4</i>	1	Singles D.P.	Size <i>8 3/4</i>	Weight <i>8.9 8.8 8.8</i>	2958 3060 102	D			<i>70/80</i>	<i>36</i>	<i>1100</i>	<i>5 1/2</i>	<i>54</i>	<i>5</i>
Reaming		D.C.	Mfg. <i>REED</i>	Visc. Sec. <i>42 43 52</i>										
Conditioning Mud & Circulating		I.D. O.D.	Type <i>SS16</i>	W.L.-C.C. <i>15.0</i>										
Trips	20	D.C.	No. <i>3</i>	FL TR. CK.	Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Lubricate Rig		I.D. O.D.	Nozzle Size <i>13</i>	PH <i>8.5</i>	Hour Started <i>1200</i>	Hour Stopped <i>7:00</i>	Elapsed Time <i>7</i>	A B C D Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
Deviation Survey <i>1/4</i>		Sb. Body O.D.	Ser. No. <i>188750</i>	SD. Cont. %					DRILLING					
Test B.O.P.		Sb. Body O.D.	Depth Out	Pressure Gradient					SURVEY					
Cur. Off Drilling Line		Rmr. Body O.D.	Depth In <i>2692</i>						DRILLING					
Repair Rig		Subs O.D.	Total Ftg. <i>368</i>											
Coring		Bit or C.B.	Total Hr. Run <i>26 3/4</i>											
Wire Line Logging		Kelly Down <i>17.17</i>	Cond. of Bit <i>IN</i>						LOST CIR AT 3023'					
Mud & Chemicals Added		Total <i>3060.00</i>	Reamer No.											
Waiting on Cement		Wt. of String <i>110,000</i>	Reamer Type											
Drill Stem Test		Pipe in Hole <i>79</i>	Water Charges Reg. Hrs. O.T. Hrs.											
Other		Pipe on Racks <i>67</i>	Trucker											
		Total Pipe on Lease <i>146</i>	Trucker											

COMPLETION WORK	NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
A. Perforating	27	Stand D.P.	Bit No. <i>3</i>	Time <i>8:00 1:00 3:00</i>	From To Ftg.									
B. Tubing Trips	1	Singles D.P.	Size <i>8 3/4</i>	Weight <i>8.9 8.9 8.9</i>	3060 3178 118	D			<i>90/80</i>	<i>35</i>	<i>1100</i>	<i>5 1/2</i>	<i>54</i>	<i>5"</i>
C. Swabbing		D.C.	Mfg. <i>REED</i>	Visc. Sec. <i>55 56 53</i>										
D. Testing	20	I.D. O.D.	Type <i>SS16-J</i>	W.L.-C.C.										
E. Additional		D.C.	No. <i>3</i>	FL TR. CK.	Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Totals <i>8 8 8</i>		I.D. O.D.	Nozzle Size <i>13</i>	PH	Hour Started <i>9:00</i>	Hour Stopped <i>9:45</i>	Elapsed Time <i>1 3/4</i>	A B C D Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
TIME SUMMARY (Office Use Only)		Sb. Body O.D.	Ser. No. <i>188750</i>	SD. Cont. %					DRILLING 8 3/4" HOLE					
Day Work		Sb. Body O.D.	Depth Out	Pressure Gradient					RIG SERVICE & B.O.P. ✓					
Hrs. W/DP		Rmr. Body O.D.	Depth In <i>2692</i>						DRILLING 8 3/4" HOLE					
Hrs. WO/DP		Subs O.D.	Total Ftg. <i>486</i>						O.G.C.B. CHECK					
Hrs. Standby		Bit or C.B.	Total Hr. Run <i>34 1/4</i>						DRILLING 8 3/4" HOLE					
		Kelly Down <i>41.15</i>	Cond. of Bit <i>IN</i>						LOSING CIR @ 3170'					
		Total <i>3178.49</i>	Reamer No.											
		Wt. of String <i>110,000</i>	Reamer Type											
		Pipe in Hole <i>82</i>	Water Charges Reg. Hrs. O.T. Hrs.											
		Pipe on Racks <i>64</i>	Trucker <i>B.P. 10 hrs.</i>											
		Total Pipe on Lease <i>146</i>	Trucker <i>Drilling</i>											

WIRE LINE RECORD	NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
Reel No. <i>E7292</i>	29	Stand D.P.	Bit No. <i>3</i>	Time <i>5:00 9:00 11:00</i>	From To Ftg.									
No. of Lines <i>8</i> Size <i>1 1/8</i>	1	Singles D.P.	Size <i>8 3/4</i>	Weight <i>9.0 8.9 8.9</i>	3178 3324 146	D			<i>70/80</i>	<i>38</i>	<i>1200</i>	<i>5 1/2</i>	<i>55</i>	<i>5"</i>
Feet Slipped <i>100</i>		D.C.	Mfg. <i>REED</i>	Visc. Sec. <i>52 51 52</i>										
Feet Cut Off <i>100</i>	20	I.D. O.D.	Type <i>SS16-J</i>	W.L.-C.C.										
Present Length <i>176</i>		D.C.	No. <i>3</i>	FL TR. CK.	Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Ton Mi. or Trips Since Last Cut <i>608</i>		I.D. O.D.	Nozzle Size <i>13</i>	PH	Hour Started <i>4:00</i>	Hour Stopped <i>4:15</i>	Elapsed Time <i>1/4</i>	A B C D Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
Cumulative Ton Mi. or Trips <i>6144</i>		Sb. Body O.D.	Ser. No. <i>188750</i>	SD. Cont. %					RIG SERVICE					
No. of Days From Spud <i>9</i>		Sb. Body O.D.	Depth Out	Pressure Gradient					DRILLING 8 3/4" HOLE					
Cumulative Rotating Hrs. <i>141 1/2</i>		Rmr. Body O.D.	Depth In <i>2692</i>											
		Subs O.D.	Total Ftg. <i>632</i>											
		Bit or C.B.	Total Hr. Run <i>42</i>											
		Kelly Down <i>30.01</i>	Cond. of Bit <i>IN</i>											
		Total <i>3324.01</i>	Reamer No.											
		Wt. of String <i>110,000</i>	Reamer Type											
		Pipe in Hole <i>82</i>	Water Charges Reg. Hrs. O.T. Hrs.											
		Pipe on Racks <i>59</i>	Trucker <i>Tonnes 10 hrs.</i>											
		Total Pipe on Lease <i>146</i>	Trucker											

No. 4506
GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name HUDSON'S BAY CAMERON Date MARCH 4 1971
Location - Lat. N Sec. 24 Twp. Rge. W. M.

Weather Condition COLD Road Conditions ROUGH Nearest Town HIGH LEVEL Water - Source 20 mi Miles Hauled 2 Pumped 150 TDS Camp Distance from Rig 150 TDS Reason for Extra L. Plant CAMP

OPERATOR

Rig No. 5 DWKS
Drill Pipe String 534 O.D.
Tool Joint 534 O.D.
No. 1 MANUFACTURER NAT TYPE C250 STROKE LENGTH 15
No. 2 MANUFACTURER NAT TYPE C150 STROKE LENGTH 12
No. 3

SIGNATURE OF OPERATOR'S REPRESENTATIVE
W. E. Smith

SIGNATURE OF CONTRACTOR'S TOOL PUSHER
L. L. Smith

TIME DISTRIBUTION - HOURS

	Morn	Day	Eve
Rig Up & Tear Down			
Drilling Actual	3 1/2	7 1/4	1 1/4
Reaming			
Conditioning Mud & Circulating	1 1/4		
Trips	3		
Lubricate Rig	1 1/4	1 1/4	1 1/4
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
23	Stands D.P. <u>2153.93</u> Ft.	Bit No. <u>3</u>	Time <u>4:30</u> <u>6:00</u> <u>7:00</u>	From <u>2692</u> To <u>2750</u> Ftg. <u>58</u>									
	Singles D.P. <u>574.15</u> Ft.	Size <u>8 3/4</u>	Weight <u>8.7</u> <u>8.7</u> <u>8.8</u>										
	D.C. <u>574.15</u> Ft.	Mfg. <u>REED</u>	Visc.-Sec. <u>45</u> <u>40</u> <u>41</u>										
	I.D. O.D. <u>574.15</u> Ft.	Type <u>SS16</u>	W.L.-C.C. <u>12.4</u>										
	D.C. <u>574.15</u> Ft.	No. <u>3</u>	FL TR. CK. <u>9.5</u>										
	I.D. O.D. <u>574.15</u> Ft.	Size <u>13</u>	PH <u>9.5</u>										
	Sub. Body O.D. <u>574.15</u> Ft.	Ser. No. <u>188750</u>	SD. Cont. % <u>9.5</u>										
	Sub. Body O.D. <u>574.15</u> Ft.	Depth Out <u>2692</u>	Pressure Gradient <u>9.5</u>										
	Rmr. Body O.D. <u>574.15</u> Ft.	Depth In <u>2692</u>											
	Subs O.D. <u>574.15</u> Ft.	Total Ftg. <u>58</u>											
	Bit or C.B. <u>574.15</u> Ft.	Total Hr. Run <u>3 1/2</u>											
	Kelly Down <u>2192</u> Ft.	Cond. of Bit <u>1N</u>											
	Total <u>2192.00</u> Ft.	Reamer No. <u>1N</u>											
	Wt. of String <u>104,000</u> Lbs.	Reamer Type <u>1N</u>											
	Pipe in Hole <u>69</u> Jts.	Water Charges <u>Reg. Hrs. O.T. Hrs.</u>											
	Pipe on Racks <u>77</u> Jts.	Trucker <u>10</u>											
	Total Pipe on Lease <u>146</u> Jts.	Trucker <u>10</u>											
		Driller <u>Lloyd Stuart</u>											

A. Performing	
B. Tubing Trips	
C. Swabbing	
D. Testing	
E. Additional	
Totals	8 1/2

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/DP	
Hrs. WO/DP	
Hrs. Standby	

DAY TOUR

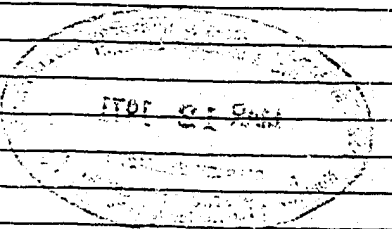
NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
24	Stands D.P. <u>2248.12</u> Ft.	Bit No. <u>3</u>	Time <u>11:00</u> <u>12:00</u> <u>3:00</u>	From <u>2750</u> To <u>2853</u> Ftg. <u>103</u>									
	Singles D.P. <u>574.15</u> Ft.	Size <u>8 3/4</u>	Weight <u>8.8</u> <u>8.8</u> <u>8.8</u>										
	D.C. <u>574.15</u> Ft.	Mfg. <u>REED</u>	Visc.-Sec. <u>42</u> <u>42</u> <u>42</u>										
	I.D. O.D. <u>574.15</u> Ft.	Type <u>SS16</u>	W.L.-C.C. <u>4.2</u>										
	D.C. <u>574.15</u> Ft.	No. <u>3</u>	FL TR. CK. <u>4.2</u>										
	I.D. O.D. <u>574.15</u> Ft.	Size <u>13</u>	PH <u>4.2</u>										
	Sub. Body O.D. <u>574.15</u> Ft.	Ser. No. <u>188750</u>	SD. Cont. % <u>4.2</u>										
	Sub. Body O.D. <u>574.15</u> Ft.	Depth Out <u>2692</u>	Pressure Gradient <u>4.2</u>										
	Rmr. Body O.D. <u>574.15</u> Ft.	Depth In <u>2692</u>											
	Subs O.D. <u>574.15</u> Ft.	Total Ftg. <u>161</u>											
	Bit or C.B. <u>574.15</u> Ft.	Total Hr. Run <u>11 1/4</u>											
	Kelly Down <u>30.73</u> Ft.	Cond. of Bit <u>1N</u>											
	Total <u>2853.00</u> Ft.	Reamer No. <u>1N</u>											
	Wt. of String <u>106,000</u> Lbs.	Reamer Type <u>1N</u>											
	Pipe in Hole <u>72</u> Jts.	Water Charges <u>Reg. Hrs. O.T. Hrs.</u>											
	Pipe on Racks <u>74</u> Jts.	Trucker <u>10</u>											
	Total Pipe on Lease <u>146</u> Jts.	Trucker <u>10</u>											
		Driller <u>G. H. McLellan</u>											

WIRE LINE RECORD

Red No. <u>F 7292</u>	
No. of Lines <u>8</u> Size <u>1 1/8</u>	
Feet Slipped <u>100</u>	
Feet Cut Off <u>100</u>	
Present Length <u>176</u>	
Ton Mi. or Trips <u>68</u>	
Since Last Cut <u>6144</u>	
Cumulative Ton Mi. or Trips <u>8</u>	
No. of Days From Spud <u>118 1/2</u>	
Cumulative Rotating Hrs. <u>118 1/2</u>	

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD	FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
25	Stands D.P. <u>2342.75</u> Ft.	Bit No. <u>3</u>	Time <u>5:00</u> <u>8:00</u> <u>11:00</u>	From <u>2853</u> To <u>2958</u> Ftg. <u>105</u>									
	Singles D.P. <u>574.15</u> Ft.	Size <u>8 3/4</u>	Weight <u>8.8</u> <u>8.8</u> <u>8.9</u>										
	D.C. <u>574.15</u> Ft.	Mfg. <u>REED</u>	Visc.-Sec. <u>52</u> <u>45</u> <u>46</u>										
	I.D. O.D. <u>574.15</u> Ft.	Type <u>SS16</u>	W.L.-C.C. <u>5.2</u>										
	D.C. <u>574.15</u> Ft.	No. <u>3</u>	FL TR. CK. <u>5.2</u>										
	I.D. O.D. <u>574.15</u> Ft.	Size <u>13</u>	PH <u>5.2</u>										
	Sub. Body O.D. <u>574.15</u> Ft.	Ser. No. <u>188750</u>	SD. Cont. % <u>5.2</u>										
	Sub. Body O.D. <u>574.15</u> Ft.	Depth Out <u>2692</u>	Pressure Gradient <u>5.2</u>										
	Rmr. Body O.D. <u>574.15</u> Ft.	Depth In <u>2692</u>											
	Subs O.D. <u>574.15</u> Ft.	Total Ftg. <u>266</u>											
	Bit or C.B. <u>574.15</u> Ft.	Total Hr. Run <u>19</u>											
	Kelly Down <u>41.5</u> Ft.	Cond. of Bit <u>1N</u>											
	Total <u>2958.05</u> Ft.	Reamer No. <u>1N</u>											
	Wt. of String <u>108,000</u> Lbs.	Reamer Type <u>1N</u>											
	Pipe in Hole <u>75</u> Jts.	Water Charges <u>Reg. Hrs. O.T. Hrs.</u>											
	Pipe on Racks <u>71</u> Jts.	Trucker <u>10</u>											
	Total Pipe on Lease <u>146</u> Jts.	Trucker <u>10</u>											
		Driller <u>G. H. McLellan</u>											



No 4505

GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name H.B. CAMERON N-4 Date MARCH 3 1971
Location - Lsd. N Sec. 24 Twp. 19 Rge. W M. 41Weather Condition COLDRoad Conditions ROUGHNearest Town LEVELWater - Source 152 ydsMiles Hauled COMPCamp Distance from Rig 152 ydsReason for Extra L. Plant COMP

OPERATOR

Rig No.

Drill Pipe

Tool Joint

5 3/4 O.D.

PUMPS

LAST
CASING
TUBING
OR LINER

Size

Make

W. & Gr.

No Joints

Feet

RKB. to
CSG. HD.

Set at

Remarks

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

No.

MANUFACTURER

TYPE

STROKE
LENGTH

1.

WAT

C250

15

2.

WAT

C150

12

3.

TIME DISTRIBUTION - HOURS

Morn

Day

Eve

Rig Up & Tear Down

Drilling Actual

Reaming

Conditioning Mud & Circulating

Trips

Lubricate Rig

Deviation Survey

Test B.O.P.

Cut Off Drilling Line

Repair Rig

Coring

Wire Line Logging

Running Casing & Cementing

Waiting on Cement

Drill Stem Test

Other

Fishing

A. Perforating

B. Tubing Trips

C. Swabbing

D. Testing

E. Additional

Totals

TIME SUMMARY (Office Use Only)

Day Work

Hrs. W/DP

Hrs. WO/DP

Hrs. Standby

Total Day Work

WIRE LINE RECORD

Reel No.

No. of Lines

Feet Slipped

Feet Cut Off

Present Length

Ton Mi. or Trips Since Last Cut

Cumulative Ton Mi. or Trips

No. of Days From Spud

Cumulative Rotating Hrs.

NO.

DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

19

Stand D.P.

18/4.10 Ft.

Bit No.

2

Time

1:00

4:00

7:00

S

Singles D.P.

Ft.

Size

8 3/4

Weight

8.8

8.9

8.9

20

D.C.

2 1/8 6 1/8

Mfg.

H.W.

Visc.-Sec.

38

42

40

I.D.

O.D.

574.15

Ft.

Type

XV

W.L.-C.C.

D.C.

No.

3

FL TR. CK.

I.D.

O.D.

Ft.

No.

13

PH

Sub.

Body

O.D.

Ft.

Ser. No.

23273

SD. Cont. %

Sub.

Body

O.D.

Ft.

Depth Out

Rmr.

Body

O.D.

Ft.

Depth In

Subs

O.D.

Ft.

Total Ftg.

575

Total Hr. Run

26 3/4

Cond. of Bit

Bit or C.B.

Ft.

Total

2459.00

Ft.

Reamer No.

Kelly Down

Ft.

Cond. of Bit

40.58

Total

2459.00

Ft.

Reamer Type

Wt. of String

95.000

Lbs.

Reamer Type

Pipe in Hole

59

Jts.

Water Charges

Reg. Hrs.

O.T. Hrs.

Pipe on Racks

Jts.

Trucker

T.C.W. KISS

Total Pipe on Lease

146

Jts.

Trucker

12 HRS

Driller

Hoyd Shout

NO.

DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

21

Stand D.P.

1999.83

Ft.

Bit No.

2

Time

10

1:00

3:00

1

Singles D.P.

Ft.

Size

8 3/4

Weight

8.8

8.8

8.8

D.C.

2 1/8 6 1/8

Mfg.

H.W.

Visc.-Sec.

37

35

37

I.D.

O.D.

574.15

Ft.

Type

XV

W.L.-C.C.

D.C.

No.

3

FL TR. CK.

I.D.

O.D.

Ft.

No.

13

PH

Sub.

Body

O.D.

Ft.

Ser. No.

23273

SD. Cont. %

Sub.

Body

O.D.

Ft.

Depth Out

Rmr.

Body

O.D.

Ft.

Depth In

Subs

O.D.

Ft.

Total Ftg.

725

Total Hr. Run

34 1/4

Cond. of Bit

Bit or C.B.

Ft.

Total

2609.00

Ft.

Reamer No.

Kelly Down

Ft.

Cond. of Bit

35.02

Total

2609.00

Ft.

Reamer Type

Wt. of String

98.000

Lbs.

Reamer Type

Pipe in Hole

64

Jts.

Water Charges

Reg. Hrs.

O.T. Hrs.

Pipe on Racks

82

Jts.

Trucker

B.R.R.

Total Pipe on Lease

146

Jts.

Trucker

10 HRS

Driller

H. M. Parthuis

NO.

DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

22

Stand D.P.

2061.82

Ft.

Bit No.

2

Time

5:00

8:00

10:00

1

Singles D.P.

Ft.

Size

8 3/4

Weight

8.8

8.9

8.9

D.C.

H.W.

Visc.-Sec.

40

36

37

I.D.

O.D.

574.15

Ft.

Type

XV

W.L.-C.C.

D.C.

No.

3

FL TR. CK.

I.D.

O.D.

Ft.

No.

13

PH

Sub.

Body

O.D.

Ft.

Ser. No.

23273

SD. Cont. %

Sub.

Body

O.D.

Ft.

Depth Out

Rmr.

Body

O.D.

Ft.

Depth In

Subs

O.D.

Ft.

Total Ftg.

808

Total Hr. Run

40 3/4

Cond. of Bit

Bit or C.B.

Ft.

Total

2692

Ft.

Reamer No.

Kelly Down

Ft.

Cond. of Bit

25.51

Total

2692

Ft.

Reamer Type

Wt. of String

No. 4502

GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name H.B. CAMERON #124
Location — Lat. N. Sec. 24 Twp. Rge. W. M. Date FEB 28 1921Weather
ConditionRoad
ConditionsNearest
TownWater - Source
Miles Hauled

Pumped

Camp Distance from Rit
Reason for Extra L. Plant

OPERATOR

Rig No.
5
DWKSDrill Pipe
String
Tool
joint
5 3/4 O.D.
No. Size Type Tbd.
2 1 1/2 F.H.

PUMPS

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT	0250	15
2.	NAT	0150	12
3.			

LAST
CASING
TUBING
OR LINER

Size	Make	Wt. & Gr.	No Joints	Feet	RKB. to CSG. HD.	Set at	Remarks
10 3/4 STC		32.15	24	924.13		930	
		H.10					

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

Leslie Ramsey

TIME DISTRIBUTION—HOURS

	Morn	Day	Eve
Rig Up & Test Down			
Drilling Actual			
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig			
Deviation Survey			
Test S.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			

MORNING TOUR

DAY TOUR

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
5	Stands D.P. 5311.0 Ft.	Bit No.	Time
10	Singles D.P. Ft.	Size	Weight
	D.C. Ft.	Mfg.	Visc.-Sec.
12	I.D. O.D. 346.58 Ft.	Type	W.L.-C.C.
	D.C. Ft.	No. No.	FL TR. CK.
	I.D. O.D. Ft.	Nozzle Size	PH
	Sub. Body O.D. Ft.	Ser. No.	SD. Cont. %
	Sub. Body O.D. Ft.	Depth Out	Pressure Gradient
	Rmr. Body O.D. Ft.	Depth In	
	Subs O.D. Ft.	Total Ftg.	Mud & Chemicals Added
	Bit or C.B. Ft.	Total Hr. Run	Type Amt. Type Amt.
	Kelly Down Ft.	Cond. of Bit	
	Total Ft.	Reamer No.	
	Wt. of String Lbs.	Reamer Type	
	Pipe in Hole 17 Jts.	Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe on Racks 129 Jts.	Trucker B & R	
	Total Pipe on Lease 146 Jts.	Trucker WATER TRUCK	
		Trucker 17 HRS.	Driller Lloyd Short

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
	Stands D.P. Ft.	Bit No.	Time
	Singles D.P. Ft.	Size	Weight
	D.C. Ft.	Mfg.	Visc.-Sec.
	I.D. O.D. Ft.	Type	W.L.-C.C.
	D.C. Ft.	No. No.	FL TR. CK.
	I.D. O.D. Ft.	Nozzle Size	PH
	Sub. Body O.D. Ft.	Ser. No.	SD. Cont. %
	Sub. Body O.D. Ft.	Depth Out	Pressure Gradient
	Rmr. Body O.D. Ft.	Depth In	
	Subs O.D. Ft.	Total Ftg.	Mud & Chemicals Added
	Bit or C.B. Ft.	Total Hr. Run	Type Amt. Type Amt.
	Kelly Down Ft.	Cond. of Bit	
	Total Ft.	Reamer No.	
	Wt. of String Lbs.	Reamer Type	
	Pipe in Hole Jts.	Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe on Racks Jts.	Trucker TONI KISS	
	Total Pipe on Lease Jts.	Trucker WATER TRUCK	
		Trucker 17 HRS.	Driller L. McLAREN

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
	Stands D.P. Ft.	Bit No. 1	Time
	Singles D.P. Ft.	Size 8 3/4	Weight
	D.C. 4 1/2 Ft.	Mfg. H.W.	Visc.-Sec.
15	I.D. O.D. 429.50 Ft.	Type X3A	W.L.-C.C.
	D.C. Ft.	No. 2 1	FL TR. CK.
	I.D. O.D. Ft.	Size 12 11	PH
	Sub. Body O.D. Ft.	Ser. No. 30207	SD. Cont. %
	Sub. Body O.D. Ft.	Depth Out	Pressure Gradient
	Rmr. Body O.D. Ft.	Depth In	
	Subs O.D. Ft.	Total Ftg.	Mud & Chemicals Added
	Bit or C.B. Ft.	Total Hr. Run	Type Amt. Type Amt.
	Kelly Down Ft.	Cond. of Bit	
	Total Ft.	Reamer No.	
	Wt. of String Lbs.	Reamer Type	
	Pipe in Hole Jts.	Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe on Racks Jts.	Trucker	
	Total Pipe on Lease Jts.	Trucker	Driller Lloyd Short

FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 2 S.P.M. Liner Size	Method Run SGL-S Par'd-P Com'd-C
From To Ftg.									
Deviation Record									
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.		

1200	715	2 1/4							
715	800	3 1/4							
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
WAIT ON CEMENT									
CUT OFF CASING									

FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 2 S.P.M. Liner Size	Method Run SGL-S Par'd-P Com'd-C
From To Ftg.									
Deviation Record									
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.		

800	930	1 1/2							
930	1400	6 1/2							
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
WELD ON BOWL									
PICK UP AND NIPPLE UP BOPS.									
CHANGED HYDRAULIC RUBBER									
CHANGED BLIND RAM RUBBERS.									
CHANGED WASH PIPE & PACKING									

FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1 Liner Size	Pump No. 2 S.P.M. Liner Size	Method Run SGL-S Par'd-P Com'd-C
From To Ftg.									
Deviation Record									
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.		

1400	600	2							
600	615	1 1/4							
615	800	1 3/4							
800	945	3 1/4							
945	1115	2 1/2							
1115	1200	3 1/4							
DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
FINISHED NIPPLEING UP LAY									
FLARE LINE									
PRESS TEST BLIND RAMS AT									
1400 PSI. HELD OK FOR 15 MINS.									
RUN IN COLLARS AND									
PICK UP THREE									
RAMS IN HOLE									
PRESS HYDRAULIC 1200 PSI 15 MIN PIPE RAMS 15 MIN									
1100 PSI PRESS MANIFOLD 950 PSI 15 MIN									
KELLY COCK 1000 PSI FOR 15 MIN									
CHECK MOTOR SHUT OFF.									
DRILL OUT LEFT CEMENT & FLOAT									

TIME SUMMARY
(Office Use Only)

Day Work			
Hrs. W/DP			
Hrs. WO/DP			
Hrs. Standby			

WIRE LINE RECORD

Red No.	
No. of Lines	Size
Feet Slipped	
Feet Cut Off	
Present Length	
Ton M.G. or Trips Since Last Cut	
Cumulative Ton M.G. or Trips	
No. of Days From Start	
Cumulative Rotating Hrs.	

No 4550

GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 6

Lease Well Name H.B. CAMERON N24 Date FEB 26 1971
Location - Lsd. Sec. Twp. Rge. W. M.Weather Condition COLDRoad Condition ROUGHNearest Town HIGH LEVELWater - Source LakeCamp Distance from Rig 100 YD

OPERATOR

Rig No.
5
DWKSDrill Pipe
StringTool Joint
5 7/8 O.D.

PUMPS

LAST
CASING
TUBING
OR LINER

Size

Make

Wt. & Gr.

No Joints

Feet

RKB. to
CSG. HD.

Set at

Remarks

Hudson Bay Oil & Gas Co. LTD

SIGNATURE OF OPERATOR'S REPRESENTATIVE
W.R. SmythSIGNATURE OF CONTRACTOR'S TOOL PUSHER
John Smyth

No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	C-250	15"
2.	NATIONAL	C-150-B	12"
3.			

TIME DISTRIBUTION—HOURS

	Morn	Day	Even
Rig Up & Tear Down			
Drilling Actual	6 3/4	5 1/2	6
Reaming			
Conditioning Mud & Circulating			
Trips			
Lubricate Rig	1 1/4	1 1/4	1 1/4
Deviation Survey	1	1 1/4	1 1/4
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other			

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
2	Stands D.P. 186.61 Ft.	Bit No. 3A	Time 12:00 4:00 7:00
2	Singles D.P. 62.93 Ft.	Size 15"	Weight 9.8 10.0 10.2
12	D.C. 346.58 Ft.	Mfg. REED	Visc.-Sec. 60 44 48
	I.D. O.D.	Type T3A-J	W.L.-C.C.
	D.C.	No. OPEN	FL TR. CK.
	I.D. O.D.	No. OPEN	PH
	Sub. Body O.D.	Ser. No. 77586	SD. Cont. %
	Sub. Body O.D.	Depth Out	Pressure Gradient
	Rmr. Body O.D.	Depth In 458	
	Sub. Body O.D.	Total Ftg. 180	
	Sub. Body O.D.	Total Hr. Run 9	
	Sub. Body O.D.	Cond. of Bit 1N	
	Kelly Down 40.70 Ft.	Reamer No.	
	Total 638.82 Ft.	Reamer Type	
	Wt. of String 50,000 Lbs.	Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe in Hole 8 Jts.	Trucker B&R	
	Pipe on Racks 139 Jts.	Trucker WATER TRUCK	
	Total Pipe on Lease 146 Jts.	Trucker 14 HRS	

FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
From To Ftg.							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par'd-P Com'd-C
513 638 125	D		BOUNDERS @ 527 551-554, 630	150	10-15	300	5 1/2 70	5"	5"
Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Hour Started Hour Stopped Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS			
12:00 12:15 15						RIG SERVICE			
12:15 12:30 15						DRILLING 15" HOLE			
12:30 12:45 15						SURVEY			
12:45 1:00 15						DRILLING			
1:00 1:15 15						SURVEY			
1:15 1:30 15						DRILLING			

A. Perforating	
B. Tubing Trips	
C. Swabbing	
D. Testing	
E. Additional	
Totals	8 5/8

TIME SUMMARY (Office Use Only)

Day Work	
Hrs. W/D	
Hrs. WO/DP	
Hrs. Standby	
Total Day Work	

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
4	Stands D.P. 374.50 Ft.	Bit No. 3A 4A	Time 8:00 12:00 3:00
	Singles D.P.	Size 15" 15"	Weight 10.2 10.8 10.9
12	D.C. 346.58 Ft.	Mfg. REED SMITH	Visc.-Sec. 47 66 65
	I.D. O.D.	Type T3A-J DS-J	W.L.-C.C.
	D.C.	No. OPEN OPEN	FL TR. CK.
	I.D. O.D.	No. OPEN OPEN	PH
	Sub. Body O.D.	Ser. No. 77586 22104	SD. Cont. %
	Sub. Body O.D.	Depth Out 732	Pressure Gradient
	Rmr. Body O.D.	Depth In 458 732	
	Sub. Body O.D.	Total Ftg. 274 31	
	Sub. Body O.D.	Total Hr. Run 13 3/4 3/4	
	Sub. Body O.D.	Cond. of Bit 6-2-1 1N	
	Kelly Down 39.82 Ft.	Reamer No.	
	Total 763.00 Ft.	Reamer Type	
	Wt. of String 52,000 Lbs.	Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe in Hole 12 Jts.	Trucker TOWN KISS	
	Pipe on Racks 134 Jts.	Trucker WATER TRUCK	
	Total Pipe on Lease 146 Jts.	Trucker 15 HRS	

FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
From To Ftg.							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par'd-P Com'd-C
638 763 125	D			150	10 1/2	300	5 1/2 70	5"	5"
Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Hour Started Hour Stopped Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS			
8:00 8:15 15						RIG SERVICE			
8:15 8:30 15						DRILLING 15" HOLE			
8:30 8:45 15						SURVEY			
8:45 9:00 15						DRILLING			
9:00 9:15 15						TRIP FOR BIT			
9:15 9:30 15						DRILLING			

WIRE LINE RECORD

Red No. E7292	
No. of Lines 4	Size 1 1/8
Feet Slipped 49	
Feet Cut Off 49	
Present Length 276	
Ton Mi. or Trips Since Last Cut 316	
Cumulative Ton Mi. or Trips 60021	
No. of Days From Spud 2	
Cumulative Rotating Hrs. 41	

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
5	Stands D.P. 531.10 Ft.	Bit No. 4A 5	Time 5:00 8:00
0	Singles D.P.	Size 15" 8 3/4	Weight 68 74
12	D.C. 346.58 Ft.	Mfg. SMITH CP	Visc.-Sec. 68 74
	I.D. O.D.	Type DS-J GEMIC	W.L.-C.C.
	D.C.	No. OPEN	FL TR. CK.
	I.D. O.D.	No. OPEN	PH
	Sub. Body O.D.	Ser. No. 22104 165-684	SD. Cont. %
	Sub. Body O.D.	Depth Out 893	Pressure Gradient
	Rmr. Body O.D.	Depth In 732 893	
	Sub. Body O.D.	Total Ftg. 161	
	Sub. Body O.D.	Total Hr. Run 16 1/4	
	Sub. Body O.D.	Cond. of Bit 6 3/4	
	Kelly Down 13.00 Ft.	Reamer No.	
	Total 993.78 Ft.	Reamer Type	
	Wt. of String 53,000 Lbs.	Water Charges Reg. Hrs. O.T. Hrs.	
	Pipe in Hole 117 Jts.	Trucker	
	Pipe on Racks 129 Jts.	Trucker	
	Total Pipe on Lease 146 Jts.	Trucker	

FOOTAGE	DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1	Pump No. 2	Method Run
From To Ftg.							Liner Size S.P.M.	Liner Size S.P.M.	SGL-S Par'd-P Com'd-C
763 893 130	D			150	15	300	5 1/2 70	5"	5"
Deviation Record	Depth	Dev.	Direction	Depth	Dev.	Direction	Depth	Dev.	Direction
Hour Started Hour Stopped Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS			
5:00 5:15 15						DRILLING			
5:15 5:30 15						RIG SERVICE & SURVEY			
5:30 5:45 15						CHECK BALLED BIT			
5:45 6:00 15						DRILLING			
6:00 6:15 15						WORK MUD RING			
6:15 6:30 15						SURVEY			
6:30 6:45 15						HOIST OUT 9 TRAP OUT			
6:45 7:00 15						NO. CHANGE IN MEASURED TALLY			

4549

549
GUTHRIE McLAREN
Distilling Ltd.

DAILY DRILLING REPORT

Lease
Well Name HUDSON BOY CAMERON
Date
Location - Lsd. N. 24 Sec. 24 Twp. 24 Rge. 24 W. 24 M. 24
FEB 25 19 71

Weather: <u>Clear</u>	Read Conditions: <u>ROCKY</u>	Nearest Town: <u>HICK LEVEL</u>	Water - Source: <u>Lake</u>	Camp Distance from Rm: <u>180 Yds</u>
Condition: <u>OK</u>			Miles Hauled: <u>3</u>	Reason for Extra Plant: <u>Camp</u>

OPERATOR

HIDEWAY BOY OIL & GAS CO LTD		DWKS
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

PUMPS			
No.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	C-250	15"
2.	NATIONAL	C-150R	15"
3.			

LAST
CASING
TUBING
OR LINER

Size	Make	Wt. & Gr.	Joints	Feet	CSG. HD.	Set at	Remarks

TIME DISTRIBUTION—HOURS

[illegible]

Fishing			
COMPLETION WORK	A. Perforating		
	d. Tubing Trips		
	C. Swabbing		
	D. Testing		
	E. Additional		
Totals		8	8

LAY TOUR

[illegible]

Total Day Work				

VENING TOUR

[illegible]

No 4548

GUTHRIE McLAREN
Drilling Ltd.

DAILY DRILLING REPORT

Form 5

Lease
Well Name H.B. CAMERON N-24
Location - Lat. _____ Sec. _____ Twp. _____ Rge. _____ W. _____ M. FEB. 24 1971Weather Condition Snowing Road Conditions Rough Nearest Town High Level Water Source U.K.P. Camp Distance from Rig 600 FT.
Miles Hauled _____ Pumped _____ Reason for Extra L. Plant _____

OPERATOR

Rig No.

Drill Pipe String

Tool Joint

54 O.D.

PUMPS

LAST
CASING
TUBING
OR LINER

Size

Make

Wt. & Gr.

No Joints

Feet

P.K.B. to
CSG. HD.

Set at

Remarks

SIGNATURE OF OPERATOR'S REPRESENTATIVE
Hudson Bay Oil & GasSIGNATURE OF CONTRACTOR'S TOOL PUSHER
Richie Simpson

No.

MANUFACTURER

TYPE

STOCK
LENGTH

1.

NAT

C250

15

2.

NAT

C250

12

3.

TIME DISTRIBUTION--HOURS

	Morn	Day	Eve
Rig Up & Tear Down	8		
Drilling Actual		3 1/4	6 3/4
Reaming			
Conditioning Mud & Circulating		4	
Trips			
Lubricate Rig			
Deviation Survey			
Test B.O.P.			
Cut Off Drilling Line			
Repair Rig			
Coring			
Wire Line Logging			
Running Casing & Cementing			
Waiting on Cement			
Drill Stem Test			
Other		3 1/4	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
	Stands D.P.	Ft.	Bit No.
	Singles D.P.	Ft.	Size
	D.C.	Ft.	Mfg.
	I.D. O.D.	Ft.	Type
	D.C.	Ft.	No.
	I.D. O.D.	Ft.	Size
	Sub. Body O.D.	Ft.	Ser. No.
	Sub. Body O.D.	Ft.	Depth Out
	Rmr. Body O.D.	Ft.	Depth In
	Subs O.D.	Ft.	Total Ftg.
	Bit or C.B.	Ft.	Total Hr. Run
	Kelly Down	Ft.	Cond. of Bit
	Total	Ft.	Reamer No.
	Wt. of String	Lbs.	Reamer Type
	Pipe in Hole	Jts.	Water Charges Reg. Hrs. O.T. Hrs.
	Pipe on Racks	Jts.	Trucker <u>BY R</u>
	Total Pipe on Lease	Jts.	Trucker <u>WATER TRUCK</u>
			Driller <u>LO. HRS.</u>

FOOTAGE			DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1		Pump No. 2		Method Run SGL-S Par'd-P Com'd-C
From	To	Ftg.							Liner Size	S.P.M.	Liner Size	S.P.M.	
Deviation Record		Depth		Dev.		Direction		Depth		Dev.		Direction	
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
12	8 ⁰⁰	8						RIG UP					

Fishing	
A. Perforating	
B. Tubing Trips	
C. Swabbing	
D. Testing	
E. Additional	
Totals	8 8 8

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
	Stands D.P.	Ft.	Bit No.
	Singles D.P.	Ft.	Size
	D.C.	Ft.	Mfg.
	I.D. O.D.	Ft.	Type
	D.C.	Ft.	No.
	I.D. O.D.	Ft.	Size
	Sub. Body O.D.	Ft.	Ser. No.
	Sub. Body O.D.	Ft.	Depth Out
	Rmr. Body O.D.	Ft.	Depth In
	Subs O.D.	Ft.	Total Ftg.
	Bit or C.B.	Ft.	Total Hr. Run
	Kelly Down	Ft.	Cond. of Bit
	Total	Ft.	Reamer No.
	Wt. of String	Lbs.	Reamer Type
	Pipe in Hole	Jts.	Water Charges Reg. Hrs. O.T. Hrs.
	Pipe on Racks	Jts.	Trucker <u>BY R</u>
	Total Pipe on Lease	Jts.	Trucker <u>WATER TRUCK</u>
			Driller <u>LO. HRS.</u>

FOOTAGE			DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1		Pump No. 2		Method Run SGL- Par'd- Com'd-
From	To	Ftg.							Liner Size	S.P.M.	Liner Size	S.P.M.	
0	50	50	D			150	5	150	5	70			(5)

Total Day Work	
----------------	--

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	BIT RECORD	MUD RECORD
	Stands D.P.	Ft.	Bit No.
	Singles D.P.	Ft.	Size
	D.C.	Ft.	Mfg.
	I.D. O.D.	Ft.	Type
	D.C.	Ft.	No.
	I.D. O.D.	Ft.	Size
	Sub. Body O.D.	Ft.	Ser. No.
	Sub. Body O.D.	Ft.	Depth Out
	Rmr. Body O.D.	Ft.	Depth In
	Subs O.D.	Ft.	Total Ftg.
	Bit or C.B.	Ft.	Total Hr. Run
	Kelly Down	Ft.	Cond. of Bit
	Total	Ft.	Reamer No.
	Wt. of String	Lbs.	Reamer Type
	Pipe in Hole	Jts.	Water Charges Reg. Hrs. O.T. Hrs.
	Pipe on Racks	Jts.	Trucker <u>Tony KISS</u>
	Total Pipe on Lease	Jts.	Trucker <u>WATER TRUCK</u>
			Driller <u>20 HRS.</u>

FOOTAGE			DR-D RM-R Core-C	Core No.	FORMATION (SHOW CORE RECOVERY)	Rotary RPM	Wt. on Bit 1000 Lbs.	Pump Press	Pump No. 1		Pump No. 2		Metho Run SGL- Par'd- Com'd.
From	To	Ftg.							Liner Size	S.P.M.	Liner Size	S.P.M.	
50	149	99	D		Hit boulders @ 118'-	150	575	275	5 1/2	70	5'	19	5
Deviation Record		Depth	Dev.	Direction		Depth	Dev.	Direction		Depth	Dev.	Direction	
72		3/4°		102		3/4°		130		7°			
Hour Started	Hour Stopped	Elapsed Time	A	B	C	D	Acc. D.T.	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS					
4:00	4:30	1/2						DRILLING 15" HOLE					
4:30	5:00	1/2						SURVEY & RIG SERVICE					
5:00	6:30	1 1/2						DRILLING					
6:30	7:00	1/2						SURVEY					
7:00	7:30	1/2						DRILLING					
7:30	7:45	1/4						SURVEY					
7:45	12:00	2 1/4						DRILLING 15" HOLE					