

F.G. EASTLAND — testers Ltd.

R.R. No. 6, NORTH EDMONTON, ALBERTA

TEST No. _____

Date 12-3-1966

Ticket No. 1357

DRILL STEM TEST PRESSURE REPORT

WELL NAME NO. CAMERON L.S.D. _____

INTERVAL 2414' - 2850' FORMATION _____ B.H. TEMP. °F _____

GAUGE No. 3077N DEPTH OF ELEMENT 2614' CALIBRATION EQUATION $P_c = 1066.01 + 38.02$

	Time	T Mins.	Pressure psig
Initial Hydrostatic			1762
Initial Shut-in	4:00am	0	260
	4:06	6	1483
	4:12	12	1488
	4:15	15	1489
Flow Pressure		F1	188
		F2	295
		F3	235
		F4	263
		F5	666
Final Shut-in	5:45am	0	666
	5:51	6	1468
	5:57	12	1475
	6:03	18	1479
	6:09	24	1482
	6:15	30	1485
	6:21	36	1487
	6:27	42	1489
	6:33	48	1491
	6:39	54	1492
	6:45	60	1493
Final Hydrostatic			1753

T.G. EASTLAND — testers Ltd.

R.R. No. 6 NORTH EDMONTON, ALBERTA

Test No. _____
Date Feb. 9, 1969
Ticket No. 1358

SERVICE REPORT

OPERATOR Hudson Bay Oil & Gas Co. Ltd.

WELL NAME HB Cameron River J12

CONTRACTOR & RIG No Brinkerhoff Rig # 39H

AREA N.W.T. LSD

TOOL PUSH D. Snyder Miller

WELL REPRESENTATIVE W. Walker

Date & time requested		DESCRIPTION OF BLOW DURING TEST				TOOL SEQUENCE & EQUIP. USED		
Call	Arr.	Min-run				Tools	Length	O.D.
Start in 2:30	On Bott. 6:00					Floor Manifold		
Pull Loose	Out Hole					Meter Run		
TESTING DATA						Safety Head		
Zone Tested						Pump Out Sub	1.00	
Interval 3130 to 3165 T.D. 3185						Tight Hole Tool		
Int. Casing: Size 5 5/8" grade		Blow Measured with: Pitot Tube ☐				Seq. Valve	2.80	
Feet of Main Hole 3185' Diam		Fluid Used: Water ☐ Mercury ☐ Side Static ☐				Test Assembly	5.20	
Feet of Rat Hole Diam		Flow Prover ☐ Gauge ☐ Size lbs.				Sampler		
Type of Test Bottom Hole		Time	Choke	Reading	MCF/Day	Jar	7.15	
Rubbers No. Two O.D. 4 1/2"						Safety Joint	1.77	
Type of Packers Conv						Straddle by-pass		
Drill Pipe: Size - Thread 3 1/2 IF						Packer	5.25	
Drill Collars: I.D. O.D.						Packer	4.60	
No. Ft. Collars D.P.		FLUID RECOVERY				TOTAL	30.31	
Pl. & Type Cushion		Pipe	Collars	Total		Packer C.	65	
Was Tool Chased No. No. Pl.		Mud	Oil	Water		B.C.	9.46	
Weight Set on Packers 46,000		Describe Fluids:				Blank sub	6.40	
Did Fluid Drop yes No Ft.						Blank sub	6.40	
Describe						Bullnose	1.55	
						Tail pipe	30.00	
Preset min. Tool opened a.m./p.m.		Sampler Drained: On Location ☐ Laboratory ☐						
Preflow min. Init. Shut-in min.		Sampler Pres. lbs.						
Flowed min. Final Shut-in min.		Bottom Hole Temp. °F						
Full Loose lbs. Swabbing?		Salinity of Recovery P.P.M.						
Drilling Fluid Type		Salinity of Mud Filtrate P.P.M.						
Visc. 10 Wgt. 10 W.L. F.C.								
							85.27	

FIELD	CORRECTED READINGS
Pressure Element No. 3077	3078
Element Capacity (psig) 4250	4200
Clock Speed (Hrs.) 12	12
Depth of Bellows 3135'	3139'
Position (Inside - Outside)	
Initial Hydrostatic	
Preflow Pressure	
Initial Shut-In	
First Flow—Choke Size	
Second Shut-In	
Second Flow—Choke Size	
Final Shut-In	
Final Hydrostatic	

1. Cross-over sub to bottom of top rubbers
 2. Bottom of top rubbers to top of lower
 3. Top of lower to bottom of lower rubbers
 4. Bottom of lower rubbers to Total Depth
 5. Bottom of top rubbers to Total Depth
- Total overall length of test assembly _____
(Delete measurement No. 5 if Straddle)
(Delete No. 2 - 3 - 4 if Std. bottom hole)
Total amount of customer's anchor _____
Damaged Rubbers and Sizes _____
No. Samplers Retained _____ No. of Reports Required _____

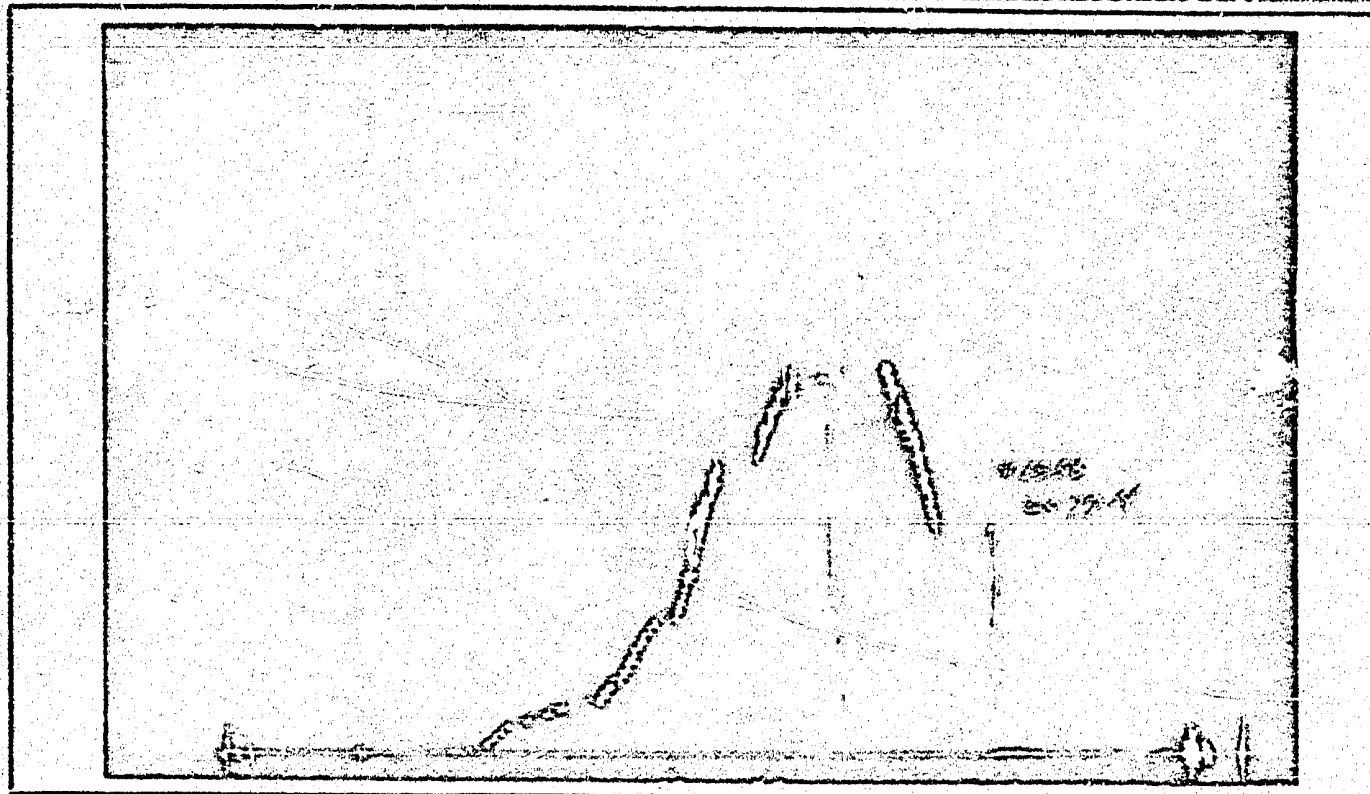
REMARKS: Failed to get packer seat, pulled out of hole to run larger rubbers.

APPROVED BY W. Walker TEST: Successful — Mis-Run OUR OPERATOR William Harder

T.G. EASTLAND-testers Ltd.

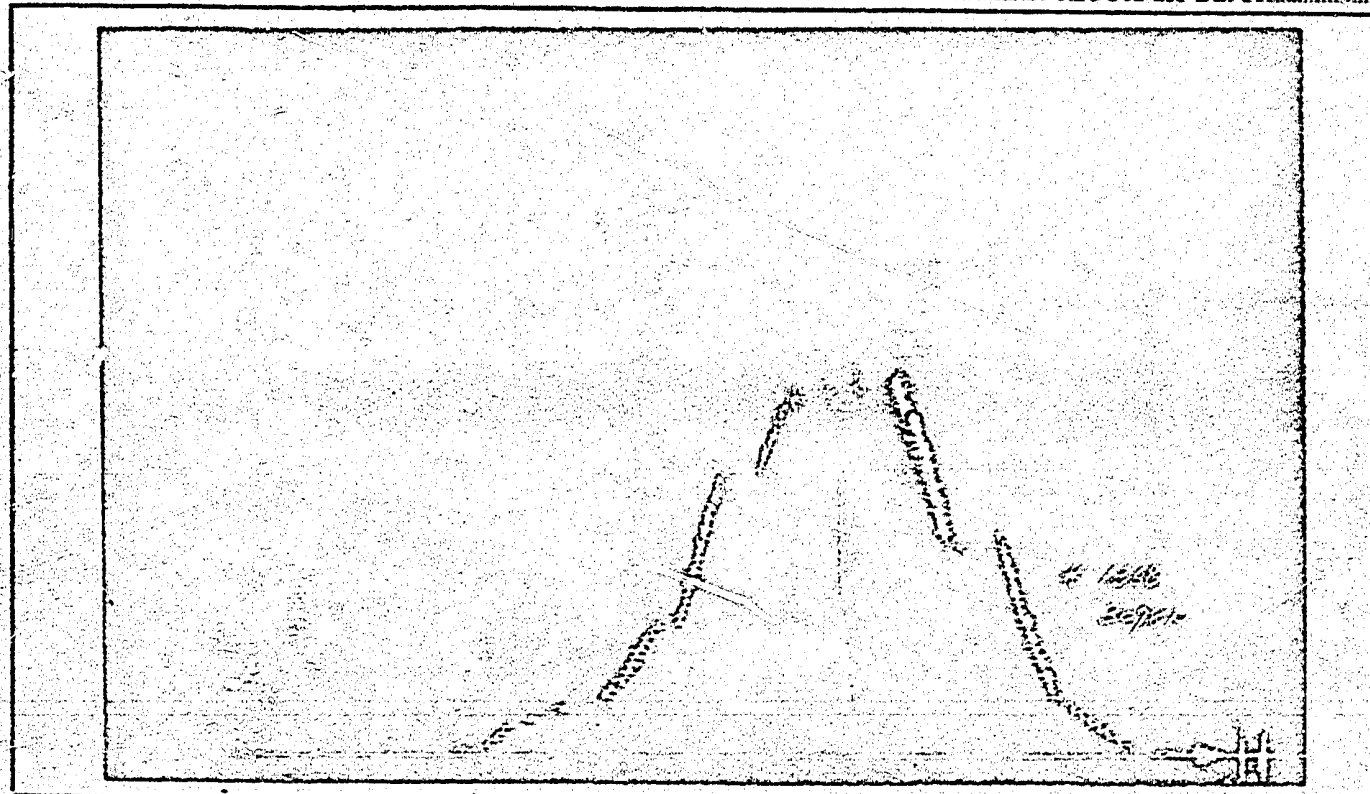
TEST No. Four
 Date Feb. 9, 1969
 Ticket No. 1358

WELL NAME HB CAMERON RIVER J12
 RECORDER No. 3077N ELEMENT RANGE 4250 P.S.I. CHART SPEED 12 HRS. RECORDER DEPTH 3135'



TIME

RECORDER No. 3078N ELEMENT RANGE 4400 P.S.I. CHART SPEED 12 HRS. RECORDER DEPTH 3139'



TIME

EASTLAND-testers Ltd.

R.R. No. 6, NORTH EDMONTON, ALBERTA

Test No. _____
Date Feb. 11, 1969
Ticket No. 1559

SERVICE REPORT

OPERATOR Hudson's Bay Oil & Gas Co. Ltd.
CONTRACTOR & RIC No. _____

WELL HB Cameron River J12

N.W.T. LED

WELL REPRESENTATIVE D. Snyder Miller

W. Walker

TESTING DATA	DESCRIPTION OF BLOW DURING TEST				TOOL SEQUENCE & EQUIP. USED		
	Time	Choke	Reading	MCF/Day	Tools	Length	O.D.
Requested _____	Mis-run.				Floor Manifold		
Arr. _____					Meter Run		
On Bott. _____					Safety Head		
Out Hole _____					Pump Out Sub	1.00	
TESTING DATA					Tight Hole Tool		
35' to 2185' T.D. 3185'					Eq. Valve	2.80	
Size 6 5/8" wgt _____ grade _____	Blow Measured with: Pivot Tube ☐				Test Assembly	8.24	
Hole 3185' Diam _____	Fluid Used: Water ☐ Mercury ☐ Side Static ☐				Sampler	7.15	
Hole _____ Diam _____	Flow Prover ☐ Gauge ☐ Size _____ lbs.				Jars	1.77	
Bottom Hole					Safety Joint		
Two O.D. 5"					Straddle By-pass		
Conv.					Packer	5.25	
Size - Thread 3 1/2 IF					Packer	4.60	
ID. _____ O.D. _____					TOTAL	30.81	
DP. _____					Packer C.	.65	
Cushion _____	FLUID RECOVERY				B.C.	9.48	
Used yes No Ft. 8'	Pipe _____	Collars _____	Total _____		Blank sub	6.40	
on Packers 46.000	Mud _____	Oil _____	Water _____		Blank sub	6.40	
Deep No. Ft. _____	Describe Fluids: _____				Tail pipe	45.00	
					Bullnose	1.55	
min. Tool opened _____ a.m./p.m.	Sampler Drained: On Location ☐ Laboratory ☐						
min. Init. Shut-in _____ min.	Sampler Press. _____ lbs.						
min. Final Shut-in _____ min.	Bottom Hole Temp. _____ °F						
lbs. Swabbing? _____	Salinity of Recovery _____ P.P.M.						
Std. Type _____	Salinity of Mud Filtrate _____ P.P.M.						
Wgt. _____ W.L. _____ F.C. _____							100.27

FIELD	CORRECTED READINGS			TOTAL
Measurement No. _____	307.8N			
Capacity (pig) _____	44.00			
Time (Hrs.) _____	12			
Flows _____	3119'			
Side - Outside) _____				
Static _____				
Pressure _____				
In _____				
Choke Size _____				
In _____				
Choke Size _____				
Static _____				

1. Cross-over sub to bottom of top rubbers
 2. Bottom of top rubbers to top of lower
 3. Top of lower to bottom of lower rubbers
 4. Bottom of lower rubbers to Total Depth
 5. Bottom of top rubbers to Total Depth
- Total overall length of test assembly _____
- (Delete measurement No. 5 if Straddle)
- (Delete No. 2 - 3 - 4 if Std. bottom hole)
- Total amount of customer's anchor _____
- Damaged Rubbers and Sizes One
- No. Samplers Retained _____ No. of Reports Required _____

The tool was chased 8 feet but failed to get a packer seat.

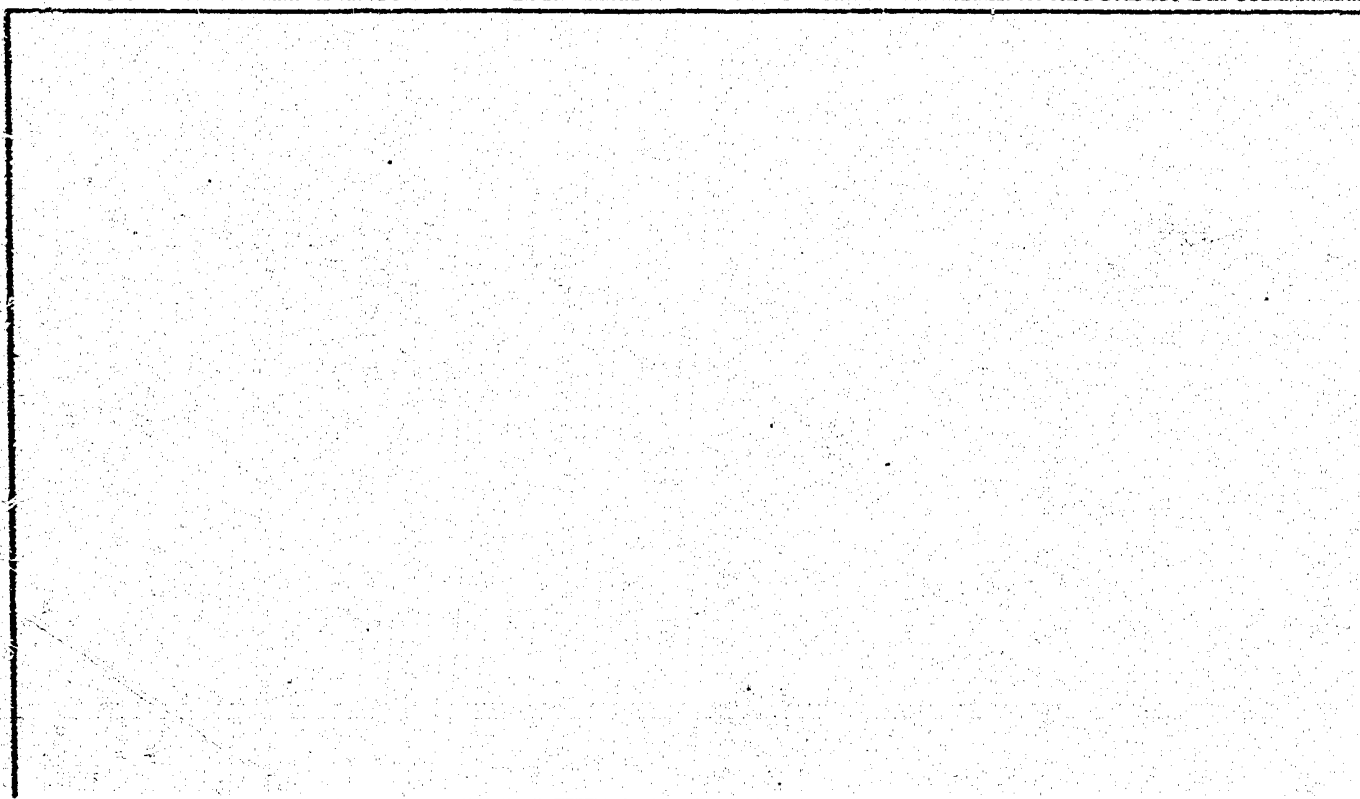
BY W. Walker TEST: Successful — Mis-Run OUR OPERATOR William Harder

T.G. EASTLAND—testers Ltd.

TEST No. FiveDate Feb. 11, 1969Ticket No. 1359WELL NAME HB CAMERON RIVER J12RECORDER No. 3078N ELEMENT RANGE 4400 P.S.I. CHART SPEED 12 HRS. RECORDER DEPTH 3119'

TIME

RECORDER No. _____ ELEMENT RANGE _____ P.S.I. CHART SPEED _____ HRS. RECORDER DEPTH _____



TIME

TESTING CORING



DRILL STEM TESTING & CORING LTD.

EDMONTON, PHONE 433-7293

CALGARY, PHONE 369-2925

P.O. BOX 4188, EDMONTON, ALBERTA

TEST NUMBER

6

Date FEBRUARY 21, 1969.
 Customer SUDSON'S OIL & GAS CO. LTD.
11030 KINGSWAY AVE.
EDMONTON, ALBERTA.
 Well Name H.B. CAMERON RIVER J-12
 Location 100 10-60-117-W5
 Area WILDCAT
 Formation KRG RIVER
 Est. Pay Thick ---
 Ticket No. 3-801
 Purchase Order No. E-51932-2

Interval 2790' TO 3185'
 Test Duration 349 MINUTES
 Initial Hydrostatic 1706
 Final Hydrostatic 1754
PRE-292
 Initial Flowing 335
 Final Flowing 437 after 240 mins.
 Initial Shut-in 1357 after 45 mins.
 Final Shut-in 1341 after 60 mins.
 Blow GOOD
 Recovery 450'

Mud Type GEL. Size Full Hole CASING 6.049" I.D. Size Rubber 5-1/2"
 Mud Wt. 10.6 Size Rat Hole --- O.D. Drill Collar 4-3/4"
 Vis. 50 Size & Type Pipe 3-1/2" I.F. O.D. Sub or T.J. 4-1/2"
 W. L. 15. Time Circulated 5-1/2 Hrs. Tool Length 75.60'
 pH 11.0 Where Circulated BOTTOM Rat Hole Length ---
 F. C. 2/32 Bit off Bottom 1.15 A.M. Difference ---
 Condition GOOD Formation KRG RIVER Total Depth 3185'
 TEST EXTRAS: SAFETY JT. DOUBLE SHUT IN. JARS. PUMP OUT SUB. SAMPLER. 1EX PACKER.

Type of Test WELL BOTTOM HOLE Wt. to Set Packer 25,000 5,000 To Pull Loose
 Initial Puff GOOD Gas Flow 10 MCF MAX. Size 3/4" Fluid Cushion NIL
 Temp. 118° Gravity --- No. Drill Collars 4(3 1/2" I.F.) Length 120' I.D.'s ---

PRESSURES

FLUID RECOVERY

Started In 4.00 A.M. Recorder No. ---
 Tool Open 8.06 A.M. Depth Run ---
 " Closed 8.10 A.M. Hydrostatics ---
 " Open 8.55 A.M. Flow ---
 " Closed 12.55 P.M. Initial S.I.P. ---
 " Loose 1.55 P.M. Final S.I.P. ---
 " Out 5.30 P.M. Difference ---

1536	1535
2768'	3181'
1562-1537	1786-1754
106-245	335-437
1124	1357
1155	1341
31	16

Mud 270'
 Oil ---
 Water 180'
 Total 450'
 Sampled at ---
TOP, MIDDLE & TOP OF
TOOL & SAMPLER.

Description of Fluid 270' GAS CUT MUD, 180' GAS CUT, WATER CUT SULPHUROUS MUD.

Witnessed By: BILL WALKER.

REMARKS: GOOD INITIAL PUFF. GOOD AIR BLOW WITH GAS TO SURFACE IN 60 MINUTES
GAS MEASURED AT 10 MCF. VALVE SHUT IN AT SURFACE 30 MINUTES PRIOR TO
FINAL SHUT IN FOR GAS SAMPLE.

TIGHT HOLE

RECORDER RAN 413' APART.

TEST SATISFACTORY.

G. LEWCHUK

Testing Supervisor

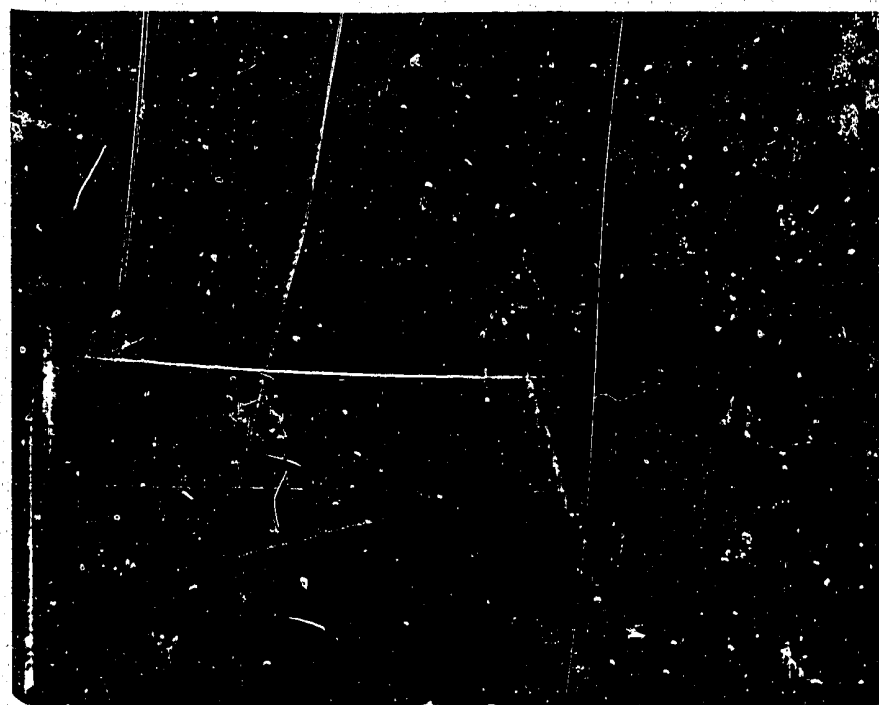
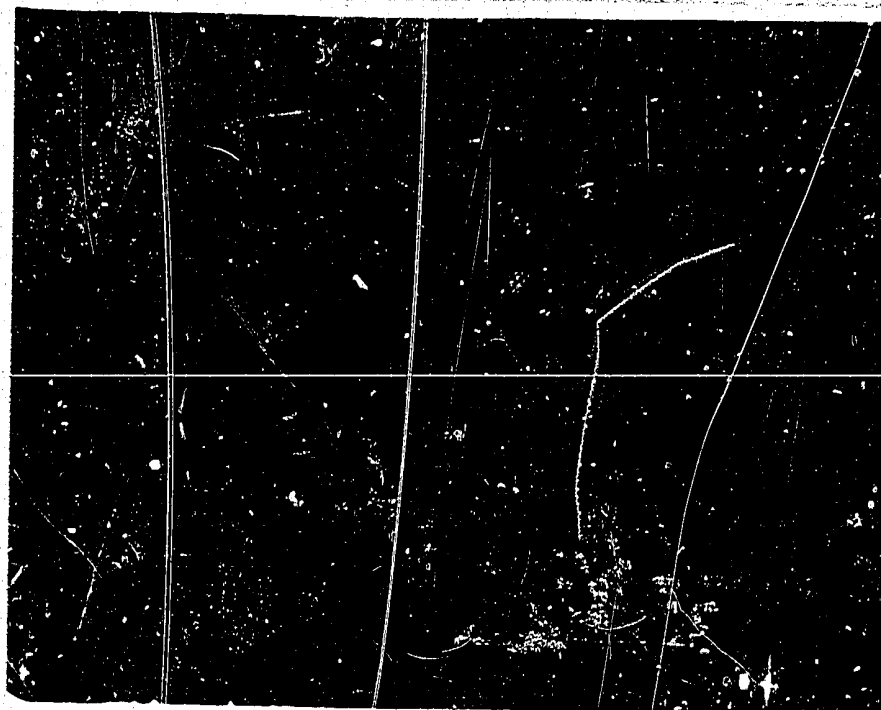
W.E. WALKER.

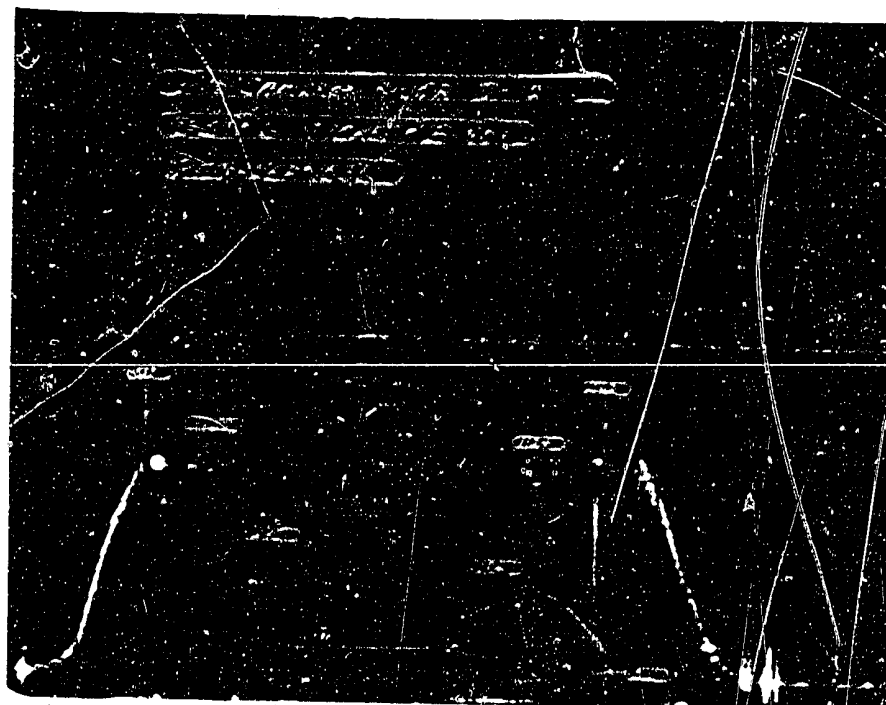
Customer's Representative

D.S.T. # 6

WELL NAME

H.B. CAMERON RIVER J-12





CHEMICAL ANALYSIS

FOR

HUDSON'S BAY OIL AND GAS COMPANY LIMITED

HB CAMERON RIVER J-12

DST No.1, No.2 and No.3

WILDCAT - CAMERON RIVER AREA

NORTHWEST TERRITORIES

CORE LABORATORIES - Canada Ltd.

Petroleum Reservoir Engineering

CALGARY - EDMONTON - REGINA



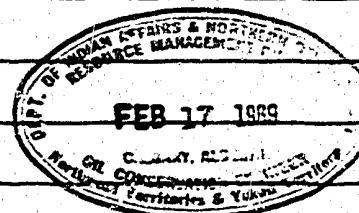
CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING



GAS ANALYSIS

Company Hudson's Bay Oil and Gas Company Limited Page 1 of 6
Well HR Cameron River J-12 File CRM-1-1371
Field Wilocat - Cameron River Area, N.W.T. Analyst DS
60 01'30.20" N.L.
Location 117 02'22.56" W.L. Elevation: K.B. 1074' Grd. 1022'
Formation Slave Point Depth 2485' - 2510'
Sampled from DST No. 1 by Eastland Testers
Sampling pressure 25 psig Sampling temp. °F Ambient temp. °F
Date sampled Jan. 25, 1969 Date received Date analyzed
Container pressure 70 Mud Water cushion
Recovery or flowrate: Gas @ 75,000 Mcf/d

<u>COMPONENT</u>	<u>MOLE %</u>	<u>IMP. GPM @ 14.65 psia and 60°F</u>	<u>SPECIFIC GRAVITY</u>
Hydrogen	<u> </u>		Calculated <u>0.611</u> Measured <u> </u>
Helium	<u>0.10</u>		
Nitrogen	<u>3.72</u>		<u>GROSS B.T.U. per SCF</u> <u>1009.3</u>
Carbon Dioxide	<u>1.85</u>		Calculated @ 14.65 psia, 60°F, moisture and acid - gas free.
Hydrogen Sulphide	<u>0.03</u>		
Methane	<u>91.44</u>		<u>VAPOR PRESSURE of PENTANES PLUS</u>
Ethane	<u>1.59</u>		(calculated) <u>12.2</u>
Propane	<u>0.72</u>	<u>0.164</u>	
Iso Butane	<u>0.13</u>	<u>0.035</u>	Critical Pressure <u>672.3</u> psia
Normal Butane	<u>0.21</u>	<u>0.055</u>	Critical Temperature <u>351.4</u> °R
Iso Pentane	<u>0.07</u>	<u>0.022</u>	
Normal Pentane	<u>0.05</u>	<u>0.015</u>	Remarks <u> </u>
Hexanes	<u>0.05</u>	<u>0.017</u>	
Heptanes Plus	<u>0.04</u>	<u>0.015</u>	
Total	<u>100.00</u>	<u>0.323</u>	
Pentanes Plus		<u>0.069</u>	





CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING



GAS ANALYSIS

Company Hudson's Bay Oil and Gas Company Limited Page 2 of 6
Well HB Cameron River J-12 File CSH-1-1371
Field Wildcat, Cameron River Area, N.W.T. Analyst PS
60 01'30.20" N.L.
Location 117 02'22.56" W.L. Elevation: K.B. 1034' Grd. 1072'
Formation Slave Point Depth 2503' - 2570'
Sampled from DST No. 2 by Eastland Testers
Sampling pressure 40 psig Sampling temp. °F Ambient temp. °F
Date sampled January 26, 1969 Date received Date analyzed
Container pressure 50 Mud Water cushion 0
Recovery or flowrate:

COMPONENT	MOLE %	1/2 AP. GPM @ 14.65 psia and 60° F	SPECIFIC GRAVITY
Hydrogen	-		Calculated <u>0.614</u> Measured <u>-</u>
Helium	<u>0.11</u>		
Nitrogen	<u>3.25</u>		GROSS B.T.U. per SCF <u>1009.5</u>
Carbon Dioxide	<u>1.78</u>		Calculated @ 14.65 psia, 60°F, moisture and acid - gas free.
Hydrogen Sulphide	<u>1.02</u>		
Methane	<u>91.05</u>		VAPOR PRESSURE of PENTANES PLUS
Ethane	<u>1.53</u>		(calculated) <u>14.8</u>
Propane	<u>0.73</u>	<u>0.166</u>	
Iso Butane	<u>0.13</u>	<u>0.035</u>	Critical Pressure <u>679.4</u> psia
Normal Butane	<u>0.21</u>	<u>0.055</u>	Critical Temperature <u>354.9</u> °R
Iso Pentane	<u>0.08</u>	<u>0.024</u>	
Normal Pentane	<u>0.06</u>	<u>0.018</u>	Remarks <u> </u>
Hexanes	<u>0.04</u>	<u>0.014</u>	
Heptanes Plus	<u>0.01</u>	<u>0.004</u>	
Total	<u>100.00</u>	<u>0.316</u>	
Pentanes Plus		<u>0.050</u>	



CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING



GAS ANALYSIS

Company Hudson's Bay Oil and Gas Company Limited Page 3 of 6
Well HE Cameron River J-12 File CPH-1-1371
Field Wildcat, Cameron River Area, N.W.T. Analyst CV
Location 60 01' 30.20" N.L.
117 02' 22.50" W.L. Elevation: K.B. 1034' Grd. 1022'
Formation Pluto Depth 2614' - 2850'
Sampled from DST No. 3 by Eastland Testers
Sampling pressure 90 psig Sampling temp. °F Ambient temp. °F
Date sampled Feb. 3, 1969 Date received Feb. 5, 1969 Date analyzed Feb. 5, 1969
Container pressure 90 Mud Water cushion 0
Recovery or flowrate: Gas @ 887,000 Mcf/d

<u>COMPONENT</u>	<u>MOLE %</u>	<u>IMP. GPM @ 14.65 psia and 60°F</u>	<u>SPECIFIC GRAVITY</u>
Hydrogen	<u>-</u>		Calculated <u>0.616</u> Measured <u>-</u>
Helium	<u>0.05</u>		
Nitrogen	<u>1.35</u>		<u>GROSS B.T.U. per SCF 1077.9</u>
Carbon Dioxide	<u>0.33</u>		Calculated @ 14.65 psia, 60°F, moisture and acid - gas free.
Hydrogen Sulphide	<u>-</u>		
Methane	<u>91.95</u>		<u>VAPOR PRESSURE of PENTANES PLUS</u>
Ethane	<u>3.37</u>		(calculated) <u>15.0</u>
Propane	<u>1.70</u>	<u>0.387</u>	
Iso Butane	<u>0.29</u>	<u>0.079</u>	Critical Pressure <u>670.0</u> psia
Normal Butane	<u>0.55</u>	<u>0.144</u>	Critical Temperature <u>360.8</u> °R
Iso Pentane	<u>0.16</u>	<u>0.048</u>	Remarks <u> </u>
Normal Pentane	<u>0.16</u>	<u>0.048</u>	<u> </u>
Hexanes	<u>0.06</u>	<u>0.020</u>	<u> </u>
Heptanes Plus	<u>0.03</u>	<u>0.011</u>	<u> </u>
Total	<u>100.00</u>	<u>0.593</u>	<u> </u>
Pentanes Plus		<u>0.127</u>	<u> </u>

CORE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

ANALYSIS "Mud Filtrate"

Company Hudson's Bay
Oil and Gas Company Limited Page 4 of 6
Well HB Cameron River J-12 File CBH-1-1371
Field Wildcat, Cameron River Area, N.W.T. Date February 11, 1962
Location 60 01'30.20" N.L.
117 02'22.56" W.L. Analysts A.M.

SAMPLING CONDITIONS

Formation Slave Point Depths 2485'-2510'
Sampled from DST #1 By Of Eastland Testers
Date Sampled Jan. 25/69 Date Received Feb. 6 Date Analyzed Feb. 7/69
Pressure psig. Temperature °F Atmospheric Temp. °F
DST Recovery
or Flowrate Gas @ 75,000 Mcf/d

Chloride - 35 mg/liter

Resistivity - 1.85 Ohm-meters @ 72 °F

ALBERTA

ANALYSIS "Water"

Company	Hudson's Bay Oil and Gas Company Limited	Page	5 of 6
Well	HB Cameron River J-12	File	CBH-i-1371
Field	Wildcat, Cameron River Area, N.W.T.	Date	February 11, 1969
Location	60 01'30.20" N.L. 117 02'22.56" W.L.	Analysts	A.M.

SAMPLING CONDITIONS

Formation Slave Point Depths 2503'-2570'
Sampled from DST #2 - Drill Collars By _____ of Eastland Testers
Date Sampled Jan. 26/69 Date Received Feb. 6 Date Analyzed Feb. 7/69
Pressure _____ psig. Temperature _____ °F Atmospheric Temp. _____ °F
DST Recovery
or Flowrate

Chloride - 311 mg/liter

Resistivity - 1.14 Ohm-meters @ 72° F

CORE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

ANALYSIS "Water"
Company Hudson's Bay Oil and Gas Company Limited Page 6 of 6
Well HB Cameron River J-12 File CBH-1-1371
Field Wildcat, Cameron River Area, N.W.T. Date February 11, 1969
Location 60 01'30.20" N.L.
117 02'22.56" W.L. Analysts A.M.

SAMPLING CONDITIONS

Formation Bistcho Depths 2614'-2850'
Sampled from DST #3 By of Eastland Testers
Date Sampled Feb. 3/69 Date Received Feb. 6 Date Analyzed Feb. 7/69
Pressure psig. Temperature °F Atmospheric Temp. °F
DST Recovery Gas @ 887,000 Mcf/d
or Flowrate

Chloride - 104 mg/liter

Resistivity - 0.57 Ohm-meters @ 72°F

CHEMICAL ANALYSIS
FOR
HUDSON'S BAY OIL AND GAS COMPANY LIMITED
HB CAMERON RIVER J-12
CAMERON RIVER AREA
NORTHWEST TERRITORIES

CORE LABORATORIES - Canada Ltd.

Petroleum Reservoir Engineering
CALGARY - EDMONTON - REGINA



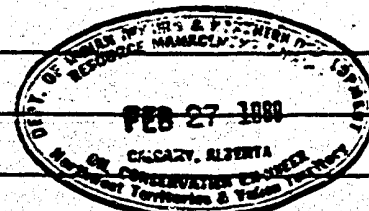
CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING



GAS ANALYSIS

Company Hudson's Bay Oil and Gas Company Limited Page 1 of 1
Well H-1 Cameron River J-12 File CSH-1-1391
Field Cameron River Area, Northwest Territories Analyst CV
Location 60 01'30.20"N.L. 117 02'22.58"W.L. Elevation: K.B. 1034' Grd. 1022'
Formation _____ Depth 2790' - 3185'
Sampled from DST #6 by W.E. Walker, Hudson's Bay
Sampling pressure 30 psig Sampling temp. _____ °F Ambient temp. _____ °F
Date sampled Feb. 11/69 Date received Feb. 17/69 Date analyzed Feb. 18/69
Container pressure 30 Mud _____ Water cushion _____
Recovery or flowrate: _____

COMPONENT	MOLE %	IMP. GPM @ 14.65 psia and 60°F	SPECIFIC GRAVITY
Hydrogen	-		Calculated <u>0.655</u> Measured _____
Helium	<u>0.28</u>		
Nitrogen	<u>7.16</u>		GROSS B.T.U. per SCF <u>1045.9</u> (acid & gas)
Carbon Dioxide	<u>0.09</u>		Calculated @ 14.65 psia, 60°F, moisture and acid - gas free.
Hydrogen Sulphide	-		
Methane	<u>83.58</u>		VAPOR PRESSURE of PENTANES PLUS
Ethane	<u>4.92</u>		(calculated) <u>13.3</u>
Propane	<u>2.42</u>	<u>0.552</u>	
Iso Butane	<u>0.34</u>	<u>0.092</u>	Critical Pressure <u>655.6</u> psia
Normal Butane	<u>0.70</u>	<u>0.183</u>	Critical Temperature <u>359.2</u> °R
Iso Pentane	<u>0.17</u>	<u>0.052</u>	
Normal Pentane	<u>0.17</u>	<u>0.015</u>	Remarks _____
Hexanes	<u>0.10</u>	<u>0.034</u>	
Heptanes Plus	<u>0.07</u>	<u>0.026</u>	
Total	<u>100.00</u>	<u>0.990</u>	
Pentanes Plus		<u>0.163</u>	



DATE Feb 17

Hudson's Bay Oil and Gas Company Limited

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																														
		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																									
BIT RECORD																																																																
		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 DATA																																																																
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.																												
		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC																												
MUD RECORD																																																																
		ADDITIVES										ADDITIVES										ADDITIVES																																										
CORING		NO.	FROM			TO			RECOVERED			FORMATION			NO.	FROM			TO			RECOVERED			FORMATION			NO.	FROM			TO			RECOVERED			FORMATION																										
SURVEY		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.																												
DRILL STEM TESTS		NO.		INTERVAL				FORMATION				NO.		INTERVAL				FORMATION				NO.		INTERVAL				FORMATION																																				
				VALVE OPEN (MINS.)				INITIAL SHUT-IN (MINS.)				FINAL SHUT-IN (MINS.)						VALVE OPEN (MINS.)				INITIAL SHUT-IN (MINS.)				FINAL SHUT-IN (MINS.)						VALVE OPEN (MINS.)				INITIAL SHUT-IN (MINS.)				FINAL SHUT-IN (MINS.)																								
				GAS TO SURFACE				MIN. @				MCF/D MAX.						GAS TO SURFACE				MIN. @				MCF/D MAX.						GAS TO SURFACE				MIN. @				MCF/D MAX.																								
				OIL TO SURFACE				MIN. @				BBL/D MAX.						OIL TO SURFACE				MIN. @				BBL/D MAX.						OIL TO SURFACE				MIN. @				BBL/D MAX.																								
				RECOVERY:														RECOVERY:														RECOVERY:																																
				PRESSURES (PSI):				HP				FP				ISIP				FSIP						PRESSURES (PSI):				HP				FP				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			Changed pipe runs to 4 1/2"																		8 ⁰⁰	4																																								

DAILY DRILLERS REPORT

Hudson's Bay Oil and Gas Company Limited

DATE Feb 16

WELL NAME		LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																										
CONTRACTOR		K. B. ELEV.																																				
RIG NO.		TOOL PUSHER		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																					
	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															
	6"								1/2 Bbl. water 18 1/2 mud.																													
DRILLING STRING	SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.															
	3 1/2		296548				476.09		2773				Plug in place 2 PM.																									
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		500		W. D. O.		8:00		8:15		Rig serv. & v BOP's.		4:00		4:15		Rig serv. & v BOP's		4:15		7:00		Lay down Pipe.															
	500		800		Run in & Lay down D.C.S		8:15		10:00		Run in Pipe.		4:15		7:00		Lay down 3 1/2 Kelly Pickup		7:00		12:00		4 1/2 Kelly put in sock Lay Back down															
							10:00		11:00		pick up 16 singles																											
							11:00		1:00		Give prior to running B.H. plug.																											
							1:00		2:00		Head up & run plug.																											
							2:00		2:30		Pull out of cement.																											
							2:30		3:00		Rig to Lay down Pipe																											
							3:00		4:00		Lay down Pipe.																											
DRILLER <i>Del. M. Adams</i> NO. HELPERS 3													DRILLER <i>Del. M. Adams</i> NO. HELPERS 4													DRILLER NO. HELPERS												

Hudson's Bay Oil and Gas Company Limited										DAILY DRILLERS REPORT										DATE Feb 15 69																			
WELL NAME Hudson Bay Cameron River										LDG. FLG. TO KB					CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR															
CONTRACTOR Brinkerhoff Bros										TYPE RIG T-20							K. B. ELEV.																						
RIG NO. 39 H										TOOL PUSHER J. J. Smith							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 3451 PROGRESS 9 END 3460 TD										START PROGRESS END										START PROGRESS END TD									
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									
13 P.W. 1427 W.R. 5 1/2 3430 3460 30 7 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									
6" 800 70 20"																																							
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.									
3 1/2										3 1/2 2965.18 476.04 28.73																													
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									
2 AM 10.5 46 16.2 11.5 3.2										Schlumberger																													
ADDITIVES										DIL										3450-2846-2"-5"										ADDITIVES									
										SAC-GRC-INT										3460-2846-2"-5"																			
										JNP-CR-LITH										3461-2846-2"-5"																			
										FDC										3461-2846-2"-5"																			
CORING										NO. FROM TO RECOVERED FORMATION										NO. FROM TO RECOVERED FORMATION										NO. FROM TO RECOVERED FORMATION									
										EDM										3457-2846-5"																			
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:																			
PRESSURES (PSI): HP FP ISIP FSIP										PRESSURES (PSI): HP FP ISIP FSIP										PRESSURES (PSI): HP FP 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 Serv. & B.O.P's										8:00 8:15 Rig Serv. & B.O.P's										4:00 4:15 Rig Serv. & B.O.P's																			
12:15 4:30 Drill 5 1/2" hole										8:15 4:00 Logging.										4:15 8:00 Logging.																			
4:30 5:15 Circ Samples																				8:00 12:00 W.D.O.																			
5:15 6:30 Trip out to log																																							
6:30 7:00 Rig To Log																																							
7:00 8:00 Logging w/ Schlumberger																																							
DRILLER Dale L. Schaefer NO. HELPERS 3										DRILLER Alvin A. Adams NO. HELPERS 4										DRILLER Chris L. Edwards NO. HELPERS 3																			

DATE Feb 14/69

WELL NAME HBOG CAMERON River										LDG. FLG. TO KB										CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR	
CONTRACTOR Brinkerhoff Bros										TYPE RIG T-20										K. B. ELEV.																	
RIG NO. 39-H										TOOL PUSHER Hydramill										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 3385		PROGRESS 10		END 3395		START 3395		PROGRESS 35		END 3430		START 3430		PROGRESS 21		END 3451																			
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												
		12	PW434	WTR 5 7/8		3354	3385	31	8 1/2		156	7245R 5 7/8		3385	3430	45	8 1/2	13	PW427	WTR 5 7/8		3430	3451	21	3												
			156002	YSR 5 7/8		3385	3395	10	3																												
								52	9																												
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													
		6		800		60		15		6		800		60		18		6"		800		60		18													
DRILLING STRING		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.													
		3 1/2		2903.83				476.09		15.08				3 1/2		2903.83				476.09		15.08															
MUD RECORD		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC													
		12 30		10.6		5.4				11.5				9		10.7		5.3				11.5															
		2 00		10.6		5.4				11.5				2 P.M.		10.5		4.8		15.2		11.5															
		ADDITIVES												ADDITIVES		Gel-1000																					
																Loustic-100																					
																B-Broxin-100																					
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		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:															
				PRESSURES (PSI):		HP		FP		ISIP		FSIP				PRESSURES (PSI):		HP		FP		ISIP		FSIP				PRESSURES (PSI):		HP		FP		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																	

DAILY DRILLERS REPORT

Hudson's Bay Oil and Gas Company Limited

DATE Feb. 18/69

WELL NAME	1800 CAMERON RIVER	LDG. FLG. TO KB		CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR
CONTRACTOR	Brinkerhoff Bros	TYPE RIG	T 280	K. B. ELEV.									WJW
RIG NO.	279 H	TOOL PUSHER	J. Hughes	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	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN				
BIT RECORD	11	20367	HW	5 7/8	3283	3346	63	12 1/4	11	20367	DWC	5 7/8	3343	3354	71	14 1/2	12	PW434	WTR	5 7/8	3334	3385	31	8					
DRILLING DATA	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT	LINER SIZE	PUMP PRESSURE	TABLE SPEED	WEIGHT ON BIT					
	6"	800	60	15	6"	800	60	18	6"	800	60	18	6"	800	60	18	6"	800	60	18	6"	800	60	18					
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.					
	3 1/2	2842	148	476.09	27.77		3 1/2	2842	148	476.09	27.77		3 1/2	2842	148	476.09	27.77		3 1/2	2842	148	476.09	27.77						
MUD RECORD	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC	TYPE OF MUD	WEIGHT	VIS	WL	PH	FC					
	100	10.6	52		12°		900	10.6	50		2/32		800	10.6	50		11.5		1130	10.6	52.		11.5						
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	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.	DEG. AT	FT.			
DRILL STEM TESTS	NO.	INTERVAL	FORMATION	NO.	INTERVAL	FORMATION	NO.	INTERVAL	FORMATION	NO.	INTERVAL	FORMATION	NO.	INTERVAL	FORMATION	NO.	INTERVAL	FORMATION	NO.	INTERVAL	FORMATION	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	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 serv. & B.O.P.s	800	815	Rig serv. & B.O.P.s	400	415	Rig serv. & B.O.P.s	1215	1230	Drill 5 7/8 hole	815	1015	Drill 5 7/8 hole	415	1145	Drill 5 7/8 hole	1230	1245	Drill 5 7/8 hole	1015	1030	Drill 5 7/8 hole	1145	1200	Drill 5 7/8 hole		

DRILLER Charles F. Hamilton NO. HELPERS 3

DRILLER Dale MacKay NO. HELPERS 3

DRILLER David Williams NO. HELPERS 3

DATE Feb 12/69

[illegible]

DATE Feb 11/69

WELL NAME H.O.B.C. CAMERON RIVER										LDG. FLG. TO KB					CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR	
CONTRACTOR Brinkerhoff Bros										TYPE RIG T 20					K. B. ELEV.																	
RIG NO. 39 H										TOOL PUSHER [Signature]					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							
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								
																		6"		800		80		15"								
DRILLING STRING		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.								
		3 1/2		271860				476.09		10.31																						
MUD RECORD		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC								
		102		10.6		50										9.10		10.6		45				11.5								
		ADDITIVES		Gel 800												ADDITIVES																
CORING		NO.		FROM		TO		RECOVERED		FORMATION		NO.		FROM		TO		RECOVERED		FORMATION		NO.		FROM		TO		RECOVERED		FORMATION		
SURVEY		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.				
DRILL STEM TESTS		NO.		INTERVAL				FORMATION				NO.		INTERVAL				FORMATION				NO.		INTERVAL				FORMATION				
		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:										
		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		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		1200		Circ. Cond mud.				800		200		Run D.S.T. # 6				400		415		Rig serv. & W.B.O.P's										
		1200		1200		SET UP BRASS & SERV RIG.				200		400		Trip out				415		615		Lay down D.S.T. Tools.										
		1200		300		TRIP OUT TO TEST.												615		800		Trip in w/ B.T.										
		300		545		PICK UP PAPER & MAKE UP SAMPLE.												800		830		Circ. out gas.										
		545		730		RUN IN HOLE												830		1200		Dr. Lg 5 7/8" Hole.										
		730		800		MAKE UP HEAD TO TEST.																										
DRILLER		Charles L. Giordano		NO. HELPERS		3		DRILLER		Dale W. Ashby		NO. HELPERS		3		DRILLER		J. M. Williams		NO. HELPERS		3										

DAILY DRILLERS REPORT

Hudson's Bay Oil and Gas Company Limited

DATE Feb 10/69

WELL NAME		LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																										
CONTRACTOR		K. B. ELEV.																																				
RIG NO.		TOOL PUSHER		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														
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								
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								
		1200		1215		Rig serv v B.O.P.S		800		900		Makeup Tool		400		530		Break & lay Down Packar		1200		1215		Rig serv v B.O.P.S		800		900		Makeup Tool								
		1215		1230		Repair WATER LINE		900		1130		Run in w/ samo		530		730		Trip in w/ bit		1215		1230		Repair WATER LINE		900		1130		Run in w/ samo								
		1230		1245		Run in hole		1130		1230		Head up + Try to seat samo		730		1200		Check cond. hole & mud		1230		1245		Run in hole		1130		1230		Head up + Try to seat samo								
		1245		1300		opends.T. Tool Didn't seat		1230		400		Trip out Check Tool Forward								1245		1300		opends.T. Tool Didn't seat		1230		400		Trip out Check Tool Forward								
		1300		1315		pull out D.S.T.														1300		1315		pull out D.S.T.														
		1315		1330		Reset Tool pick up 14' of														1315		1330		Reset Tool pick up 14' of														
		1330		1345		D.S.T Tool & Replace Rubbers														1330		1345		D.S.T Tool & Replace Rubbers														
		1345		1400																1345		1400																
		1400		1415																1400		1415																
		1415		1430																1415		1430																
		1430		1445																1430		1445																
		1445		1500																1445		1500																
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		1900		1915																1900		1915																
		1915		1930																1915		1930																
		1930		1945																1930		1945																
		1945		2000																1945		2000																
		2000		2015																2000		2015																
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		2030		2045																2030		2045																
		2045		2100																2045		2100																
		2100		2115																2100		2115																
		2115		2130																2115		2130																
		2130		2145																2130		2145																
		2145		2200																2145		2200																
		2200		2215																2200		2215																
		2215		2230																2215		2230																
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		2645		2700																2645		2700																
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		2715		2730																2715		2730																
		2730		2745																2730		2745																
		2745		2800																2745		2800																
		2800		2815																2800		2815																
		2815		2830																2815		2830																
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		2945		3000																2945		3000																
		3000		3015																3000		3015																
		3015		3030																3015		3030																
		3030		3045																3030		3045																

DATE Feb 9/6

Hudson's Bay Oil and Gas Company Limited

WELL NAME HOBBS CAMERON River										LDG. FLG. TO KB										CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR	
CONTRACTOR Drinker Hoff BAS										TYPE RIG T2										K. B. ELEV.																LSW	
RIG NO. 39 H										TOOL PUSHER Augustine										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												
		8	228610	YHW	5 3/8	305'5"	3143	88	19 3/4	9	156002	YSR	5 3/8	3143	3185	42	5 1/2																				
		9	156002	YSR	5 3/8	3143	3150	7	1																												
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													
		6"		800		60-80		15		6"		800		80		18																					
DRILLING STRING		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.													
		3 1/2		265670				476-09		17.29				3 1/2																							
MUD RECORD		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC													
		7 3/4		8.8		28				12.5				800		8.9		28				13															
														400		9.6		32				13															
		ADDITIVES		Gel 1100										ADDITIVES		Wgt 15,000																					
																Gel 2500																					
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.)											
				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:															
				PRESSURES (PSI):		HP		FP		ISIP		FSIP				PRESSURES (PSI):		HP		FP		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													
		1200		1200		Rig Serv v B.O.P's		800		815		Rig Serv v B.O.P's		400		700		Circ cond mod To Test																			
		1200		1200		Drhg. 5 3/8 hole		815		1200		Drill 5 3/8 hole		700		800		Trip out																			
		1200		1200		TRIP OUT		1200		1200		Circ Cond mod To Test		800		1000		Rig up D.S.T.																			

DATE FEB 8/69

[illegible]

DAILY DRILLERS REPORT

Hudson's Bay Oil and Gas Company Limited

DATE Feb. 7/69.

WELL NAME	H30L. Cameron River	LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR
CONTRACTOR	Brinkerhoff Bros.	TYPE RIG	T20	K. B. ELEV.								NEW
RIG NO.	39H.	TOOL PUSHER	A. Anderson	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 2923	PROGRESS 45.	END 2968	START 2968	PROGRESS 59	END 3027	START 3027	PROGRESS 38	END 3055
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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	
	7	358754	YHW	5 7/8	2920	2968	48	8 1/2		7	358754	YHW	5 7/8	2920	3027	107	16 1/4		7	358754	YHW	5 7/8	2920	3055	135

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
	6"	800	80	15	6"	800	80	15				

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.
	3 1/2	2469.95		476.09	21.96		3 1/2	2532.12		476.09	18.29			2563.22		476.09	15.79	

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		
	6 ⁰⁰	8.4	28		11.5	3/22	10 ⁰⁰	8.6	28		12 ⁰⁰		6	8.6	28		12+			
	ADDITIVES	LOWSTIC - 150#						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					
	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:							
	PRESSURES (PSI):	HP	FP	ISIP	FSIP	PRESSURES (PSI):	HP	FP	ISIP	FSIP	PRESSURES (PSI):	HP	FP	ISIP

REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	FROM	TO	DESCRIPTION OF WORK	FROM	TO	DESCRIPTION OF WORK	FROM	TO	DESCRIPTION OF WORK
	12 ⁰⁰	12 ¹⁵	Rig serv. & V BOP's.	8 ⁰⁰	8 ¹⁵	Rig serv. & V BOP's	4 ⁰⁰	7 ⁰⁰	Drill 5 7/8" hole
	12 ¹⁵	8 ⁰⁰	Drill 5 7/8" Hole.	8 ¹⁵	4 ⁰⁰	Drill 5 7/8" hole	7 ⁰⁰	7 ¹⁵	Rig serv. & BOP's
							7 ¹⁵	8 ³⁰	Drill 5 7/8" hole
							8 ³⁰	11 ⁰⁰	Trip For bit
							11 ⁰⁰	12 ⁰⁰	Slip & cut Drill Line

DRILLER	W. A. Adams	NO. HELPERS	3	DRILLER	Charles L. Hammond	NO. HELPERS	4	DRILLER	Bob L. Adams	NO. HELPERS	3
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DAILY DRILLERS REPORT

Hudson's Bay Oil and Gas Company Limited

DATE Feb. 6/64.

WELL NAME		LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																										
CONTRACTOR		K. B. ELEV.																																				
RIG NO.		TOOL PUSHER		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	157428	YSR	5 7/8	2850	2854	4'	1/2	6	157428	YSR	5 7/8	2850	2901	51	8 1/4	6	157428	YSR	5 7/8	2850	2920	70	17 1/4													
																		7	358754	YHW	5 7/8	2920	2923	3	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														
		6"		800		80		15"		6"		800		80		15"		6"		800		80		15"														
DRILLING STRING		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.														
		3 1/2		2346.19				476.09		31.72				3 1/2		2402.76				476.09		17.15																
MUD RECORD		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC														
		7.30		8.4		33								12.00		8.6		28		12.5																		
		3.00		8.6		28		13						6.5		8.6		28																				
		ADDITIVES		CAUSTIC 100#										ADDITIVES		CAUSTIC 100#																						
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:						RECOVERY:																		
		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		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														
		12.00		12.15		Rig Serv.		8.00		8.15		Rig serv & v BOP's.		4.00		4.15		Rig serv & v BOP's.		4.00		4.15		Rig serv & v BOP's.														
		12.15		3.00		Lay down 4 1/2 Kelly & pick up 3 1/2		8.15		4.00		Drill 5 7/8" Hole.		4.15		8.15		Drill 5 7/8" Hole.		4.15		8.15		Drill 5 7/8" Hole.														
		3.00		5.00		Change 4 1/2 Rams to 3 1/2 (pipe)								8.15		11.15		Trip for Bit.		8.15		11.15		Trip for Bit.														
		5.00		6.45		Pressure up on pipe & ram & Hydril								11.15		12.00		Drill 5 7/8" Hole.		11.15		12.00		Drill 5 7/8" Hole.														
		6.45		7.30		Drill out Flare & 5400.																																
		7.30		8.00		Drill 5 7/8" Hole																																
DRILLER		and A. Adams		NO. HELPERS		3		DRILLER		NO. HELPERS		3		DRILLER		Rob. Wadley		NO. HELPERS		3																		

DATE Feb 5/69

WELL NAME <u>H301 Cameron River J12-</u>										LDG. FLG. TO KB										CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																																								
CONTRACTOR <u>Brinkerhoff Bros</u>										TYPE RIG <u>T20</u>												K. B. ELEV.																																															
RIG NO. <u>394</u>										TOOL PUSHER												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									
BIT RECORD										NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN																																				
DRILLING DATA										LINER SIZE				PUMP PRESSURE				TABLE SPEED				WEIGHT ON BIT				LINER SIZE				PUMP PRESSURE				TABLE SPEED				WEIGHT ON BIT				LINER SIZE				PUMP PRESSURE				TABLE SPEED				WEIGHT ON BIT															
DRILLING STRING										SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.																									
MUD RECORD										TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC																									
										ADDITIVES										ADDITIVES										ADDITIVES																																							
CORING										NO.	FROM		TO		RECOVERED		FORMATION		NO.	FROM		TO		RECOVERED		FORMATION		NO.	FROM		TO		RECOVERED		FORMATION																																		
SURVEY										DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.																													
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:																																							
PRESSURES (PSI):										HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		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		Clean mud tanks								8 ²⁰		Clean mud tanks								4 ⁰⁰	11 ⁰⁰	Pick up Pipe																																					
											5 ⁰⁰	W.O.C								12 ³⁰	4 ⁰⁰	Pick up to pick up D.C. woc								11 ⁰⁰	12 ⁰⁰	Lay down Kelly																																					
DRILLER <u>Wm A. Adams</u>										NO. HELPERS <u>3</u>										DRILLER <u>Charles F. Hinson</u>										NO. HELPERS <u>4</u>										DRILLER <u>L. H. Haddock</u>										NO. HELPERS <u>3</u>																			

DAILY DRILLERS REPORT

Hudson's Bay Oil and Gas Company Limited

DATE Feb 4/69

WELL NAME	HOOC - Cameron River	LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR
CONTRACTOR	Brinkerhoff Bros	TYPE RIG	T 20	K. B. ELEV.								
RIG NO.	39H.	TOOL PUSHER	D. J. J. J.	GRD. ELEV.								W. J. J.

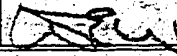
	12 P.M. TO 8 A.M.								8 A.M. TO 4 P.M.								4 P.M. TO 12 P.M.							
DEPTH	START								START								START							
	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN
BIT RECORD																								
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.			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	

DATE 1-Feb 3/65

WELL NAME HBOL Cameron River J12										LDG. FLG. TO KB					CASING		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																	
CONTRACTOR Brinkerhoff Bros										TYPE RIG T 20					K. B. ELEV.		RECORD																								
RIG NO. 344										TOOL PUSHER 1					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																	
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.	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.																	
MUD RECORD	TYPE OF MUD		WEIGHT		VIS	WL	PH	FC	TYPE OF MUD		WEIGHT		VIS	WL	PH	FC	TYPE OF MUD		WEIGHT		VIS	WL	PH	FC																	
ADDITIVES									ADDITIVES	Coustec 50%								ADDITIVES	Wgt 3500																						
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		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION													
	VALVE OPEN (MINS.)		70		INITIAL SHUT-IN (MINS.)		15		FINAL SHUT-IN (MINS.)		60		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		3		MIN. @		887,000		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:		100' mud.								RECOVERY:								RECOVERY:						RECOVERY:																
PRESSURES (PSI):		HP		1750		FP		2300		ISIP		1470		FSIP		1470		PRESSURES (PSI):		HP		FP		ISIP		FSIP															
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	FROM	TO	DESCRIPTION OF WORK																																						
	12:00	12:15	Rig serv. & V BOP's																																						
	12:15	2:00	Make up DST #3																																						
	2:00	3:30	Trip in pipe																																						
	3:30	4:00	Pick up 15 singles & head up.																																						
	4:00	7:15	Testing #3																																						
	7:15	8:00	Trip out DST #3																																						
	8:00	8:15	Rig serv. & V B.O. P's																																						
	8:15	9:15	Hoist D.S.T.																																						
	9:15	11:45	Lay down test tools &																																						
11:45	1:45	head out tester.																																							
1:45	3:00	Run in hole																																							
3:00	3:40	Pick up singles &																																							
3:40	4:00	Break circ.																																							
4:00		Circ.																																							
DRILLER		Landy J. Adams								NO. HELPERS		3		DRILLER		Charles L. Ligoncello								NO. HELPERS		4		DRILLER		Bob Wadley								NO. HELPERS		3	

DATE Feb. 2/69.

WELL NAME <i>HBOC. Cameron River. J12</i>										LDG. FLG. TO KB										CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																																																																																										
CONTRACTOR <i>Brinkerhoff Bros</i>										TYPE RIG <i>T 20</i>										K. B. ELEV.																																																																																																			
RIG NO. <i>39H</i>										TOOL PUSHER <i>J. L. L.</i>										GRD. ELEV.																																																																																																			
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.																																																																																																			
DEPTH										START										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.																																																											
										<i>4 1/2</i>										<i>2347.32</i>										<i>30.47</i>										<i>441.91</i>										<i>25.50</i>										<i>546 4.80</i>																																																											
MUD RECORD										TYPE OF MUD										WEIGHT										VIS										WL										PH										FC																																																											
CORING										NO.										FROM										TO										RECOVERED										FORMATION																																																																					
SURVEY										DEG. AT										FT.										DEG. AT										FT.										DEG. AT										FT.																																																											
DRILL STEM TESTS										NO.										INTERVAL										FORMATION																																																																																									
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										FROM										TO										DESCRIPTION OF WORK																																																																																									
										<i>12⁰⁰</i>										<i>12¹⁵</i>										<i>Rig Serv. & V Bop's.</i>																																																																																									
										<i>12¹⁵</i>										<i>1³⁰</i>										<i>Finish Laying Down Cables.</i>																																																																																									
										<i>1³⁰</i>										<i>2¹⁵</i>										<i>Lay Down Core Barrel.</i>																																																																																									
										<i>2¹⁵</i>										<i>7¹⁵</i>										<i>w. G. Log Truck</i>																																																																																									
										<i>7¹⁵</i>										<i>7⁴⁵</i>										<i>Rig up Schlumberger.</i>																																																																																									
										<i>7⁴⁵</i>										<i>8⁰⁰</i>										<i>Logging.</i>																																																																																									
DRILLER <i>L. J. L.</i>										NO. HELPERS <i>3</i>										DRILLER <i>Philip L. L.</i>										NO. HELPERS <i>4</i>										DRILLER										NO. HELPERS <i>3</i>																																																																					

WELL NAME <u>H.B.O.L. Cameron River</u>										LDG. FLG. TO KB					CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																							
CONTRACTOR <u>Brinkerhoff Bros</u>										TYPE RIG <u>T 40</u>					K. B. ELEV.					540		8 3/8	24"	JSS	300SX	7.0A	9/2																				
RIG NO. <u>39H</u>										TOOL PUSHER <u>[Signature]</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>2768</u> PROGRESS <u>42</u> END <u>2810</u>										START <u>2810</u> PROGRESS <u>36</u> END <u>2846</u>										START <u>2846</u> PROGRESS <u>4</u> END <u>2850</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														
										5	6591	XV	7 3/4	2765	2810	45	8 1/2	5	6591	XV	7 3/8	2765	2846	81	16 1/4	5	6591	XV	7 3/8	2765	2850	85	17 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									
										6X14X62				600		85		35"		6"X14				550		85		35		6"				550		85		35									
DRILLING STRING										SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.			
										4 1/2		2347.32				441.91		15.97		5 1/2		2377.79		X		441.91		21.50		4 1/2		2377.79				441.91		28.50		5 1/2		5 1/2					
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			
										3.00 AM		12.9		68				12				8 30 AM		13.0		75		11.2		12.0		3 1/2															
										6:00 AM		13.1		72		10.2		12				11:30 AM		13.1		80		-		12.0		-															
										ADDITIVES												ADDITIVES		1:30 PM		13.1		85		11.6		12.0		-													
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:																	
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS										PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP									
										FROM		TO		DESCRIPTION OF WORK				FROM		TO		DESCRIPTION OF WORK				FROM		TO		DESCRIPTION OF WORK																	
										12:00		12:15		Rig serv. & ✓ BOP's				8:00		8:15		Rig serv. & ✓ B.O.P.'s				4:00		4:30		DRlg. 7 3/8 hole																	
										12:15		6:15		DRlg. 7 3/8 Hole.				8:15		4:00		DRlg. 7 3/8 hole				4:30		4:45		work on pump Rig serv. B.O.P.'s																	
										6:15		6:45		check lost circ. mat. & test plug												4:45		5:15		DRlg																	

DAILY DRILLERS REPORT

Gudson's Bay Oil and Gas Company Limited

DATE

Jan 31

WELL NAME	HBCameron River J-12-60°10'W 117°-5'W	LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR
CONTRACTOR	Brinkerhoff Bros	TYPE RIG		K. B. ELEV.	540	8 3/8	24	J 55	300sy	70cc	1/2	
RIG NO.	39 H	TOOL PUSHER	N. Suptmell	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 2715 PROGRESS 13 END 2727										START 2727 PROGRESS 33 END 2760										START 2760 PROGRESS 8 END 2768									
BIT RECORD	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN			NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN			NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN		
	4	377568	SMG	7 3/8	2591	2727	136	29			4	377568	SMG	7 3/8	2591	2760	169	36 3/4			4	377568	SMG	7 3/8	2591	2765	174	38 1/4		
																					5	6591	XV	7 3/8	2765	2768	3	34		
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			
	6"		600		80		35				6"		600		80		35				6"		600		80		35			
DRILLING STRING	SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.					SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.					SIZE	STANDS	SINGLES	DRILL COL.	KELLY IN	CORE BBL.				
	4 1/2	2253.28		441.91	30.09	4.80					4 1/2	2284.87		441.91	28.42	4.80					4 1/2	2284.87		441.91	36.42					
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		
	2:00 AM		10.8		80	9	12.5	3.2			9:30		12.6		80	10	12	3.2			5:00 PM		12		75	10	12	9.9		
	6:00 AM		12.8		120	6.6	12.5	3.2			12:30 PM		12.8		55	10.6	12	3.2												
	ADDITIVES		Caustic - 100#		Wgt Mat - 24000						ADDITIVES		12:40 PM		12.9		60	12					ADDITIVES							
	Sawdust - 25 sax										Weight 30500#				Caustic 250#															
	Fiber sock - 10 sax										Gel 1900#				6300X 200#															
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.		
																		1 1/2		FT.			2765		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:									
	PRESSURES (PSI):		HP	FP	ISIP	FSIP					PRESSURES (PSI):		HP	FP	ISIP	FSIP					PRESSURES (PSI):		HP	FP	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	445	Mix lost circ mat.								800	815	Rig serv & w/stop								400	415	Rig serv & w/stop							
	445	800	Drill 7 3/8" hole								815	400	Drill 7 3/8" hole								415	545	Drill 7 3/8" hole							
																					545	600	SUKARY							
																					600	845	HUIST BIT # 4							
																					845	1115	Run in hole BRACK PIRC							
																					1115	1200	DRHG.							
DRILLER	Dale Madley		NO. HELPERS 3								DRILLER	David H. Adams		NO. HELPERS 4								DRILLER	Charles L. Ricciardello		NO. HELPERS 3					

DAILY DRILLERS REPORT

Hudson's Bay Oil and Gas Company Limited

DATE

Jan 30/69

WELL NAME	Hudson's Bay Cameron River J-12	LDG. FLG. TO KB		CASING	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR
CONTRACTOR	Brinkerhoff	TYPE RIG		RECORD	540	8 5/8	24"	355	300sx 2 1/2" CAC			
RIG NO.	39 H	TOOL PUSHER										

	12 P.M. TO 8 A.M.	8 A.M. TO 4 P.M.	4 P.M. TO 12 P.M.															
DEPTH	START 2633	PROGRESS 47	END 2680	START 2680	PROGRESS 20	END 2700	START 2700	PROGRESS 15	END 2715									
BIT RECORD	NO. 4	SERIAL NO. 377568	TYPE SMG	SIZE 7 7/8	FROM 2591	TO 2680	FOOTAGE 89	HRS. RUN 15 1/2	NO. 4	SERIAL NO. 377568	TYPE SMG	SIZE 7 7/8	FROM 2591	TO 2715	FOOTAGE 123	HRS. RUN 20 3/4		
DRILLING DATA	LINER SIZE 6"	PUMP PRESSURE	TABLE SPEED 85	WEIGHT ON BIT 35	LINER SIZE 6 1/2x1 1/4	PUMP PRESSURE 500	TABLE SPEED 85	WEIGHT ON BIT 35	LINER SIZE 6	PUMP PRESSURE 600	TABLE SPEED 85	WEIGHT ON BIT 35						
DRILLING STRING	SIZE 4 1/2	STANDS 219	SINGLES 189	DRILL COL. 441.91	KELLY IN DOWN	CORE BBL. 4.80	SIZE 4 1/2	STANDS 222	SINGLES 37	DRILL COL. 441.91	KELLY IN 30.92	CORE BBL. 4 1/2	STANDS 225	SINGLES 38	DRILL COL. 441.91	KELLY IN 15.01		
MUD RECORD	TYPE OF MUD 2 AM	WEIGHT 12.5	VIS 65	WL 10	PH 12.5	FC 2132	TYPE OF MUD 9:00	WEIGHT 12.5	VIS 60	WL 13	PH 2 1/2	FC 5:00 PM	WEIGHT 13.2	VIS 100	WL 12	PH 12.5	FC 2 1/2	
	6 AM	12.5	60				1:30 PM	12.8	55	12.5		7:20 PM	13.4	103	12	12.5	2 1/2	
	ADDITIVES						ADDITIVES 3:30	13.2	70	8.5	12.5							
							Gel 3200# CAUSTIC 200#											
							Weight 22000# Q-Broxin 200# CMC 25#											
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:									
	PRESSURES (PSI):	HP	FP	ISIP	FSIP		PRESSURES (PSI):	HP	FP	ISIP	FSIP		PRESSURES (PSI):	HP	FP	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. & B.O.P.s		800	815	Rig serv. & Bop's.		400	415	Rig serv. & B.O.P.s							
	1215	800	Drill 7 7/8" hole		815	915	Drill 7 7/8" Hole.		415	745	Drill.							
					915	1015	Change Switch Packing.		745		Lost Circ. Build Valve &							
					1015	400	Drill 7 7/8" Hole.		1200		171x Lost Circ Material.							
DRILLER	Paul Woodruff	NO. HELPERS	3	DRILLER	David B. Adams	NO. HELPERS	4	DRILLER	Charles L. Thordelle	NO. HELPERS	3							

DATE Nov 29

Hudson's Bay Oil and Gas Company Limited

WELL NAME		H.B. Cameron River I-12										LDG. FLG. TO KB		CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR														
CONTRACTOR		Brinkerhoff										K. B. ELEV.																									
RIG NO.		39 H										GRD. ELEV.												NEW													
12 P.M. TO 8 A.M.												8 A.M. TO 4 P.M.												4 P.M. TO 12 P.M.													
DEPTH		START 2591 PROGRESS END										START 2591 PROGRESS 26 END 2617												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												
		4	377568	SMG	7 3/8					4	377568	SMG	7 3/8	2591	2617	26	5 3/4	4	377568	SMG	7 3/8	2591	2633	42	7 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							
		6"				500		85		30"																											
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	2191.96		441.91	1733	480	4 1/2			441.91																										
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	
														10:00 AM		12.2		75				13		1/2													
														3:00 PM		11.9		10		1.3		13.5		1/2													
		ADDITIVES Caustic - 500 Q-Broxin - 500										ADDITIVES 6600 Mud Weight 350 Caustic 300 Gel 350 Q-Broxin										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:															
		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		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	Clean up Floor										8:00	8:15	Rig serv. & BOP's										4:00	4:15	Rig serv. & BOP's									
		100	300	Trip in w/ bit										8:15		Circ. & condition mud -										4:15		Work on #1 pump pull									
		300		Break circ. Circ condition												great annular by pipe & build												head & liner install liner									
				mud clean shale out of											10:15	Volume												Gasket & replace same									
			800	pump Mud antihardite contaminated										10:15	4:00	Dr Lg. 7 3/8 Hole												Replace manifold									
																												in mud line.									
																												DR Lg.									

DATE Jan 28

WELL NAME		H.B. Cameron River J-12-60°10'N9°5'										LDG. FLG. TO KB		CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																						
CONTRACTOR		BRINKERHOFF BROS.										TYPE RIG		K. B. ELEV.											JEW																				
RIG NO.		39 H										TOOL PUSHER		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	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN												
		38A	168413	M44N	7 7/8	2510	2588	78	14 3/4	38A	168413	M44N	7 7/8	2588	2591	81	15	4	377568	SM65	7 7/8																								
DRILLING DATA		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT													
		6"		800		80		6-8 M		6"		2500						6"																											
DRILLING STRING		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL CCL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.									
		4 1/2		2129.96				441.91		11.33				4 1/2		2129.96				441.91		14.33				4 1/2																			
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 Chem		6 AM		13.5		80		5																																			
		ADDITIVES												ADDITIVES												ADDITIVES																			
CORING		NO.		FROM		TO		RECOVERED		FORMATION		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.		DEG. AT		FT.					
DRILL STEM TESTS		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION			
				VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)				VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)						VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)				VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)				VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)			
				GAS TO SURFACE		MIN. @		MCF/D MAX.				GAS TO SURFACE		MIN. @		MCF/D MAX.						GAS TO SURFACE		MIN. @		MCF/D MAX.				GAS TO SURFACE		MIN. @		MCF/D MAX.				GAS TO SURFACE		MIN. @		MCF/D MAX.			
				OIL TO SURFACE		MIN. @		BBL/D MAX.				OIL TO SURFACE		MIN. @		BBL/D MAX.						OIL TO SURFACE		MIN. @		BBL/D MAX.				OIL TO SURFACE		MIN. @		BBL/D MAX.				OIL TO SURFACE		MIN. @		BBL/D MAX.			
				RECOVERY:								RECOVERY:										RECOVERY:								RECOVERY:										RECOVERY:					
				PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		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		500		Reaming Rat hole		8'00"		8'15"		Drill 7 7/8 Hole		400		500		Circ. & Treat out Andy Dr. Te																											
		500		800		Drilling 7 7/8" hole		8'15"		8'30"		Big serv. & Check Bop's		500		600		Work plugged Bit.																											
								8'30"		12'30"		Trip out. (wet) Bit plugged		600		700		Trip out w/ plugged Bit.																											
								12'30"		300		Trip in w/new Bit.		700		900		Throw mud lines																											
								300		400		Break Circ. & Beam To Bottom.		900		1200		Trip out																											
																												</																	

DAILY DRILLERS REPORT

Hudson's Bay Oil and Gas Company Limited

DATE Jan 27

WELL NAME <i>H.B. Comacoon River T-12</i>										LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR <i>(Signature)</i>												
CONTRACTOR <i>Bamkerhoff Bros.</i>										TYPE RIG			K. B. ELEV.																			
RIG NO. <i>39 H</i>										TOOL PUSHER <i>J. Andrieff</i>			GRD. ELEV.																			
12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.												
DEPTH	START <i>2510</i>		PROGRESS		END		START <i>2510</i>		PROGRESS <i>10</i>		END <i>2520</i>		START <i>2520</i>		PROGRESS <i>26</i>		END <i>2546</i>															
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									
	<i>6"</i>								<i>6"</i>		<i>500</i>		<i>80</i>		<i>8"</i>		<i>6"</i>		<i>570</i>		<i>80</i>		<i>8"</i>									
DRILLING STRING	SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.									
													<i>4 1/2</i>		<i>2038.37</i>		<i>441.91</i>		<i>34.92.</i>													
MUD RECORD	TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC									
ADDITIVES											ADDITIVES <i>WT. MAT - 8000</i>										ADDITIVES <i>WT. MAT - 12200</i>											
											<i>CAUSTIC - 100#</i>																					
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. <i>2</i>		INTERVAL <i>2503-2570</i>		FORMATION <i>5 ft.</i>		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION									
	VALVE OPEN (MINS.) <i>240</i>		INITIAL SHUT-IN (MINS.) <i>30</i>		FINAL SHUT-IN (MINS.) <i>20</i>		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. @ <i>20</i>		MCF/D MAX. <i>157 M.</i>		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:		<i>10' used.</i>				RECOVERY:						RECOVERY:						RECOVERY:													
	PRESSURES (PSI):		HP <i>1632</i> FP <i>68</i>		ISIP <i>1028</i> FSIP <i>1224</i>		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		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																					
	<i>1200</i>	<i>200</i>	<i>Testing</i>		<i>800</i>	<i>815</i>	<i>Rig Serv. & v. Rep's.</i>		<i>400</i>	<i>415</i>	<i>Rig Serv. & check Rep's.</i>																					
	<i>200</i>	<i>500</i>	<i>Tricking.</i>		<i>815</i>	<i>930</i>	<i>Pick up DC's</i>		<i>415</i>	<i>1200</i>	<i>Beaming.</i>																					
	<i>500</i>	<i>600</i>	<i>Break down tool.</i>		<i>930</i>	<i>1200</i>	<i>Trip in w/ bit To Beam.</i>																									
	<i>600</i>	<i>700</i>	<i>Wear down Rep's.</i>		<i>1200</i>	<i>400</i>	<i>Beam Bat Hole.</i>																									
	<i>700</i>	<i>800</i>	<i>Run in with bit pick up DC's.</i>																													
DRILLER <i>Lab. W. Lashley</i>				NO. HELPERS <i>3</i>				DRILLER <i>David M. Alows</i>				NO. HELPERS <i>4</i>				DRILLER <i>(Signature)</i>				NO. HELPERS <i>3</i>												

DAILY DRILLERS REPORT

Hudson's Bay Oil and Gas Company Limited

DATE Jan 25 / 69.

WELL NAME	U.B. Cameron River J 12.	LDG. FLG. TO KB		CASING	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR
CONTRACTOR	Brinkerhoff	K. B. ELEV.		RECORD								
RIG NO.	394.	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						
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.														
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	VALVE OPEN (MINS.)	INITIAL SHUT-IN (MINS.)	FINAL SHUT-IN (MINS.)												
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS	FROM	TO	DESCRIPTION OF WORK	FROM	TO	DESCRIPTION OF WORK	FROM	TO	DESCRIPTION OF WORK																					
	1200	1230	Finish out	800	1030	Trip out D.S.T.	400	430	Big serv.																					
	1230	1300	Pick up Test Tool + make up same	1030	1130	Way down Testing Tool	415	1200	cutting core #1																					
	1300	1400	Trip in w/ D.S.T. #1	1130	1200	Pick up Core Barrel.																								
	1400	1500	Head up	1200	1300	Run in slow w/ core Barrel. #1																								
	1500	1730	Testing	1300	1400	Wire prior to coring.																								
	1730	1800	Break down Testing head																											
DRILLER	NO. HELPERS		DRILLER	NO. HELPERS		DRILLER	NO. HELPERS																							
DRILLER	NO. HELPERS		DRILLER	NO. HELPERS		DRILLER	NO. HELPERS																							

DAILY DRILLERS REPORT

Hudson's Bay Oil and Gas Company Limited

DATE Jan 24/69

WELL NAME	HBOC. CAMARON RIVER 3-12	LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR
CONTRACTOR	BRINKERHOFF BROS	TYPE RIG	NAT. 2.0	K. B. ELEV.								
RIG NO.	39-H	TOOL PUSHER	Hydram	GRD. ELEV.								WEL

	12 P.M. TO 8 A.M.								8 A.M. TO 4 P.M.								4 P.M. TO 12 P.M.							
DEPTH	START 2510 PROGRESS END								START 2510 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
	3	168413	MHNN	7 1/2	2228	2510	282	12 1/4	3	168413	MHNN	7 1/2	2228	2510	282	12 1/4	3	168413	MHNN	7 1/2	2228	2510	282	12 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	
	6"								6"								6"							
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	22792		271.13	12.64	6.95			4 1/2								4 1/2	22792		271.13	12.64			
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		47	8.8	11.5	2/32											11.4		60			
	ADDITIVES		6LL 2000#		Barium 15500#				ADDITIVES		Barium 22500#						ADDITIVES		25600 Weight MAT					
	Q 32000 400#								Gel		500#													
	CARR & CALLEY 50#																							
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:						
		PRESSURES (PSI):		HP	FP	ISIP	FSIP			PRESSURES (PSI):		HP	FP	ISIP	FSIP			PRESSURES (PSI):		HP	FP	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	800	Mud mud CIRC.						800	400	CIRC mix wgt						400	1000	Circ mix wt MAT.					
																	1000	1200	S.L.M. OUT TO TEST.					

DATE Jan 23/59

WELL NAME		H.B. OC. CAMERON R. 222 T-12										LDG. FLG. TO KB		CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR	
CONTRACTOR		BRINKERHOFF BROS										TYPE RIG		NAT T-20		K. B. ELEV.															
RIG NO.		29-N										TOOL PUSHER		A. [Signature]		GRD. ELEV.														[Signature]	
		12 P.M. TO 8 A.M.										8 A.M. TO 4 P.M.										4 P.M. TO 12 P.M.									
DEPTH		START 2140 PROGRESS 210 END 2350										START 2350 PROGRESS 142 END 2492										START 2492 PROGRESS 18 END 2510									
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									
		1RR #1RR XIC 7 1/8 1126 2228 1052 25										3 168413 M44N 7 7/8 2228 2492 264 9 1/2										3 168413 M44N 7 7/8 2228 2510 282 12 1/4									
		3 168413 M44N 7 7/8 2228 2350 122 2 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									
		6 925 90 22 m										6" 900 90 20										6" 900 90 20"									
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 2080 68 271.13 40 6.95										4 1/2 2182 92 271.13 46 6.95										4 1/2 2217.92 271.13 12.64									
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									
		Water 9.0 28										Water 9.0 29										8" 9.2 29									
		8.9 28										Water										11" 9.0 40									
		ADDITIVES										ADDITIVES										ADDITIVES									
												Sapp 20"										CEL 6000 # 0-Broxin 100"									
																						Caustic 300"									
																						Cellex 150 #									
CORING		NO. FROM TO RECOVERED FORMATION										NO. FROM TO RECOVERED FORMATION										NO. FROM TO RECOVERED FORMATION									
SURVEY		DEG. AT 2228 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:									
		PRESSURES (PSI): HP FP ISIP FSIP										PRESSURES (PSI): HP FP ISIP FSIP										PRESSURES (PSI): HP FP 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 145 DRILL 7 7/8 HOLE										800 830 Rig serv work on Accumulator										4" 6" Pick up Swivel + work on pump.									
		145 200 R.C. SERV V BOP'S										830 3'5" Drill 7 7/8" hole										6" 6'5" Rig serv + BOP'S									
		200 215 SURVEY										3'5" 400 Lay Down Swivel										6'5" 6'45" Work Tight Hole.									
		215 445 TRIP FOR BOT																				6'45" 9'30" Dr Lg. 7 7/8" Hole									
		445 5'5" CLEAN 75' HALL																				9'30" 12" circ. out gas + mix mud									
		5'5" 800 DRILL																													
																						blow out									
																						JAN 29 1969									
		DRILLER [Signature] NO. HELPERS 3										DRILLER [Signature] NO. HELPERS 3										DRILLER [Signature] NO. HELPERS 3.									

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE Jan 22/69

WELL NAME	H.B.O.C. CAMELOW RIVER T-12	LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR
CONTRACTOR	BROWN & KOFF BROS	TYPE RIG	NAT T.20	K. B. ELEV.								
RIG NO.	39-H	TOOL PUSHER		GRD. ELEV.								WSEW

	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					
	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	3	IRR	X16	7 7/8	1176	1500	324	8 1/4	1	IRR	RR	X16	7 7/8	1176	1780	603	16	1	IRR	RR	X16	7 7/8	1176	2140	964	23 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			
	6		600		90		22m		6"		600		90		20m		6"		650		90		20m			
DRILLING STRING	SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.			
	4 1/2		1198.31		271.13		24		6.95		4 1/2		1474.39		271.13		28.63		4 1/2		301947.04		271.13		14.88	
MUD RECORD	TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC			
	water		8.6		28								water		8.8											
															8.7											
	ADDITIVES		SAPP. 20#		WATER								ADDITIVES		SAPP 40#											
CORING	NO.	FROM	TO	RECOVERED	FORMATION				NO.	FROM	TO	RECOVERED	FORMATION				NO.	FROM	TO	RECOVERED	FORMATION					
SURVEY	1/8 DEG. AT		1395 FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		1/8 DEG. AT		1886 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.)									
			GAS TO SURFACE		MIN. @		MCF/D MAX.						GAS TO SURFACE		MIN. @		MCF/D MAX.									
			OIL TO SURFACE		MIN. @		BBL/D MAX.						OIL TO SURFACE		MIN. @		BBL/D MAX.									
			RECOVERY:										RECOVERY:													
			PRESSURES (PSI):		HP		FP		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	R.G. SERV & BOP'S						900	915	Rig SERV WORK ON oil lines						400	415	Rig serv & BOP'S							
	1215	280	DRILL 7 7/8 HOLE WORK JUNK SUB						915	400	DRILL						415	615	DRILL 7 7/8 HOLE.							
	280	330	WORK ON PUMP														615	645	CONV SURVEY							
	330	430	DRILL														645	1200	DRILL 7 7/8 HOLE.							
	430	445	SURVEY @ 1395																							
	445	900	DRILL																							

3AX4
2, 5101A

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE Jan 21/69

WELL NAME	H.B.O.C. CAMERON RIVER J-12	LDG. FLG. TO KB		CASING	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY
CONTRACTOR	BRINKERHOFF BROS	TYPE RIG	NAT. T20	K. B. ELEV.								SUPERVISOR
RIG NO.	39-H	TOOL PUSHER	J. J. J. J.	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		1173		PROGRESS		1176		END		1176		START		PROGRESS		END		START		1176		PROGRESS		36		END		1212				
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	

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.
	4 1/2"	874.54		271.13	4.80								4 1/2"	923.68		271.13		6.95

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
	WATER						14 stds.											
							10 DCS											
							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
	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
	12:50	1:15	FINISH IN PICK UP SINGLES	8:00	10:00	Cutting core w/ Globe Basket	4:00	4:15	Rip Serv
	1:15	3:00	Clean Out Circ Work Junk Basket	10:40	10:55	Rip Serv	4:15	6:30	Trip out + clean magnet
	3:00	4:30	HOIST NO RECOVERY	10:55	11:00	Trip out + clean w/ Basket No			RECOVER 2 CONES - PART OF GROUND
	4:30	6:00	RUN IN.		11:30	RECOVERY	6:30	8:15	Trip in w/ junk sub work same
	6:00	8:00	CUTTING CORE W/ JUNK BASKET	11:30	1:00	Trip in w/ bit	8:15	9:15	HOIST
				1:00	1:45	Work same on iron	9:15	10:15	RUN IN W/ JUNK SUB + BIT
				1:45	3:45	Trip out w/ bit in w/ magnet	10:15	12:00	DRILL 7 7/8 WORK JUNK SUB
				3:45	4:00	Work magnet			

DRILLER	NO. HELPERS	DRILLER	NO. HELPERS	DRILLER	NO. HELPERS
	3		3		3

DATE 4 Jan 20/60

Hudson's Bay Oil and Gas Company Limited

WELL NAME HBDC CAMERON RIVER J-12						LDG. FLG. TO KB						CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR							
CONTRACTOR BRINKER OFF 8005						TYPE RIG NAT. J. 20						K. B. ELEV.																							
RIG NO. 39-H						TOOL PUSHER						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 1173							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										
		27	80	VIC	7/8	879	1173	394	10 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											
		6																																	
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.																
		1 1/2"	691	80																															
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.																			
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.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)				VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.) INITIAL SHUT-IN (MINS.) FINAL SHUT-IN (MINS.)																	
				GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.				GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.				GAS TO SURFACE MIN. @ MCF/D MAX.		GAS TO SURFACE MIN. @ MCF/D MAX.																	
				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:		RECOVERY:				RECOVERY:		RECOVERY:				RECOVERY:		RECOVERY:																	
				PRESSURES (PSI): HP FP ISIP FSIP		PRESSURES (PSI): HP FP ISIP FSIP				PRESSURES (PSI): HP FP ISIP FSIP		PRESSURES (PSI): HP FP ISIP FSIP				PRESSURES (PSI): HP FP ISIP FSIP		PRESSURES (PSI): HP FP 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	R.G SERU VBOPS		8 ⁰⁰	8 ¹⁵	Trip out Rig Seru		4 ⁰⁰	10 ³⁰	Magnaflex collars																							
		12 ¹⁵	12 ¹⁵	Hoist		8 ¹⁵		Trip out Break overshot		10 ³⁰	12 ⁰⁰	Pick up D.C make-up holler basket Run In																							
		12 ¹⁵	2 ¹⁵	LAY Down DC MAKE-UP OVERSHOT RUN IN			10 ³⁰	Reload same																											
		2 ¹⁵	4 ⁰⁰	WORK OVERSHOT Hoist lost fish		10 ³⁰		Trip in circ over Fish																											
		4 ⁰⁰	6 ⁴⁵	Reload OVERSHOT RUN IN			12 ³⁰	Work over Fish																											
		6 ⁴⁵		Circ OVERSHOT WORK SAME		12 ³⁰	3 ⁰⁰	Trip out Lay down Fish																											
						3 ⁰⁰	4 ⁰⁰	Magnaflex Drill collars																											

Hudson's Bay Oil and Gas Company Limited

DAILY DRILLERS REPORT

DATE Jan 19/69

WELL NAME 4806 Cameron River 512										LDG. FLG. TO KB										CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR							
CONTRACTOR Brinkerhoff Bros. TYPE RIG T20										K. B. ELEV.																										
RIG NO. 39H TOOL PUSHER J. [Signature]										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 900		PROGRESS 92'		END 992		START 992		PROGRESS 66		END 1058		START 1058		PROGRESS 115		END 1173																		
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	7480	XIG	7 3/8	879	992	113	4 1/2	2	7480	XIG	7 3/8	899	1058	179	7 1/4	2	7480	XIG	7 3/8	879	1173	294	10 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													
	6"		600		160		20"		6"		625		135		22"		6"		600		90		25													
DRILLING STRING	SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.													
	4 1/2		8		494.23		16		465.20		25.00		4 1/2		600.29		16		458.50		41		4 1/2		691.80		16		458.20		3260					
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		8.4		28								Water		8.6									
	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																			
	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																			
	12:00		12:15		Rig serv. & check BOP's		8:00		8:15		FINISHING IN		4:00		4:15		Rig serv. & B.O.P.s																			
	12:15		3:30		Drill 7 3/8" Hole.		8:15		8:30		Circ. Above Fish		4:15		4:45		Drill 7 3/8" hole																			
	3:30		5:00		Trip out & twist off collar @ 992.		8:30				WORK OVER HOT HOIST CHAIN OUT LAY		4:45		7:15		Try to make con. Tight																			
	5:00		5:30		Lay down collar & pick up same				11:15		DOWN OVERSHOT & D.C.		7:15		7:30		Work on pump																			
	5:30		8:00		make up overshot & run in		11:15		11:30		Rig serv. & B.O.P.s		7:30		9:30		Drill 7 3/8" hole & 2 pump																			
							11:30		1:15		Pick up D.C. Run in		9:30				Twisted off																			
							1:15		4:00		DRILL 7 3/8" HOLE		9:30		11:00		Repair Drawworks input Chain																			
					Left 7 collars in hole.								11:00		12:00		Break overhot at D.C.																			
					But Brake off.												Laid in D.C.s in hole																			
DRILLER Ward R. Adams. NO. HELPERS 3.										DRILLER R. M. [Signature] NO. HELPERS 3.										DRILLER Dale [Signature] NO. HELPERS 3.																

DATE Jan 18/69

WELL NAME <u>H 302 Cameron River J 12</u>										LDG. FLG. TO KB										CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR					
CONTRACTOR <u>Byriner Huff Bros.</u>										TYPE RIG <u>T 20</u>												K. B. ELEV.																			
RIG NO. <u>39 H.</u>										TOOL PUSHER <u>S. Hyatt</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		PROGRESS						END <u>879.</u>		START		PROGRESS						END <u>879</u>		START <u>879</u>		PROGRESS <u>21</u>						END <u>900</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								
DRILLING DATA		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT		LINER SIZE		PUMP PRESSURE		TABLE SPEED		WEIGHT ON BIT																	
DRILLING STRING		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.					
MUD RECORD		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC		TYPE OF MUD		WEIGHT		VIS		WL		PH		FC					
		ADDITIVES														ADDITIVES												ADDITIVES													
CORING		NO.	FROM	TO		RECOVERED		FORMATION		NO.	FROM	TO		RECOVERED		FORMATION		NO.	FROM	TO		RECOVERED		FORMATION																	
SURVEY		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.		DEG. AT		FT.					
DRILL STEM TESTS		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION		NO.		INTERVAL		FORMATION																	
		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)																	
		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.																	
		OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.		OIL TO SURFACE		MIN. @		BBL/D MAX.																	
		RECOVERY:						RECOVERY:						RECOVERY:						RECOVERY:																					
REMARKS INCLUDING: CEMENTING LOGGING PERFORATING ACIDIZING FRACTURING PLUGS		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP											
		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		FROM	TO	DESCRIPTION OF WORK									
		12 ⁰⁰	8 ⁰⁰	Nipple up BOP's		9 ⁰⁰	3 ³⁰	Nipple up by FLOGE LINES		4 ⁰⁰	5 ³⁰	Trip in hole		5 ³⁰	6 ⁴⁵	Rig 3000		6 ⁴⁵	7 ⁴⁵	Thru out section on pump		7 ⁴⁵	8 ⁴⁵	Pressure test pipe rammer hydrolic		8 ⁴⁵	9 ⁴⁵	To 1000 ⁺ Psi. For 12 min each O.K.		9 ⁴⁵	10 ⁴⁵	Drill out plug float cement									
DRILLER <u>Don H. Nelson</u>		NO. HELPERS <u>3</u>		DRILLER <u>Bob Atkins</u>		NO. HELPERS <u>3</u>		DRILLER <u>Bob Atkins</u>		NO. HELPERS <u>3</u>		DRILLER <u>Bob Atkins</u>		NO. HELPERS <u>3</u>																											

Hudson's Bay Oil and Gas Company Limited

DAIL DRILLERS REPORT

DATE Jan. 12/69

WELL NAME	HBOC. CAMERON RIVER 12	LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR
CONTRACTOR	Brinkerhoff Bros.	TYPE RIG	T 20	K. B. ELEV.	540						1 ⁰⁰ AM.	
RIG NO.	394.	TOOL PUSHER	N. Langdon	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	NO.	SERIAL NO.	TYPE	SIZE	FROM	TO	FOOTAGE	HRS. RUN																																																															
	Run 14 gals 24 #55 STL. C.S. 542' Cemented by BT at 540 K13M. using 300 lbs. cement																																																																																														
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																																																		
	800 psi. black 750.																																																																																														
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:																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				FROM				TO				DESCRIPTION OF WORK																																																		
	12 ⁰⁰				1 ⁰⁰				Cement casing & pump plug				8 ⁰⁰				10 ⁰⁰				Weld On Bowl				4 ⁰⁰				12 ⁰⁰				Nipple up B.O.P.s																																																														
	1 ⁰⁰				8 ⁰⁰				Cut off casing, weld on bowl &				10 ⁰⁰				12 ⁰⁰				Bail out conductor BBL cement same																																																																										
													12 ⁰⁰				4 ⁰⁰				HERD 4, Remove 10" Spool																																																																										
																					57 sacks cement.																																																																										
DRILLER																NO. HELPERS																DRILLER																NO. HELPERS																DRILLER																NO. HELPERS															
Dale H. Adams																3																Ralph Atchey																3																Dale Mackay																3															

Hudson's Bay Oil and Gas Company Limited										DAILY DRILLERS REPORT										DATE Jan. 16/69.																									
WELL NAME H306. Cameron River J12										LDG. FLG. TO KB					CASING RECORD		DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR																					
CONTRACTOR Brinkerhoff Bros.					TYPE RIG T20.					K. B. ELEV.																																			
RIG NO. 39H.					TOOL PUSHER					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 672. PROGRESS 120 END 792.										START 792 PROGRESS 87 END 879										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												
										421	7435	X16	7 7/8	542	792	250	13 3/4	1	7435	X16	7 7/8	542	879	337	18	3A	R.R.	cses	12 1/4	Clean	1047	To	540												
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													
										6"		500		120		25"		6		575		125		28 m		6"																			
DRILLING STRING										SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.		SIZE		STANDS		SINGLES		DRILL COL.		KELLY IN		CORE BBL.													
										4 1/2		15		272.96		1		316.7		16		465.20		15.10																					
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	
										GOL.		9		33.												Gel																			
										ADDITIVES		Gel-1000 th																Gel		1500 th															
										Sapp-10 th																																			
CORING										NO.	FROM		TO		RECOVERED		FORMATION		NO.	FROM		TO		RECOVERED		FORMATION		NO.	FROM		TO		RECOVERED		FORMATION										
SURVEY										1/4 DEG. AT 755 FT.		DEG. AT FT.		DEG. AT FT.		10 DEG. AT 879 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.									
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.)		VALVE OPEN (MINS.)		INITIAL SHUT-IN (MINS.)		FINAL SHUT-IN (MINS.)	
										GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.		GAS TO SURFACE		MIN. @		MCF/D MAX.	
										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:						RECOVERY:						RECOVERY:						RECOVERY:						RECOVERY:						RECOVERY:					
										PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP		ISIP		FSIP		PRESSURES (PSI):		HP		FP	
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 serv.		8 ⁰⁰	9 ⁰⁰	Hookup #2 Pump Build Volume		4 ⁰⁰	5 ⁰⁰	Trip in w. 12 1/4" bit																									
										12 ¹⁵	5 ⁴⁵	Drilg. 7 7/8" Hole		9 ⁰⁰	9 ¹⁵	Rig serv		5 ⁰⁰	5 ³⁰	Clean To 540' - 15' FILL																									
										5 ⁴⁵	5 ⁴⁵	Conn. & Survey @ 755		9 ¹⁵	1 ³⁰	Drill 7 7/8" Hole		5 ³⁰	7 ⁰⁰	Circ & Get csg ready To run																									
										5 ⁴⁵	8 ⁰⁰	Drilg. 7 7/8" Hole		1 ³⁰	1 ⁴⁵	Survey		7 ⁰⁰	8 ⁰⁰	Trip out																									
														1 ⁴⁵	4 ⁰⁰	Hoist Lay Down Bottom Hole D.C.		8 ⁰⁰	9 ⁰⁰	Rig To run csg																									
																		9 ⁰⁰	11 ⁰⁰	Run 8 5/8 csg																									
																		11 ⁰⁰	12 ⁰⁰	Circ csg & Rip To cement																									
DRILLER Lind H. Adams.										NO. HELPERS 3.		DRILLER H. H. Atter										NO. HELPERS 3		DRILLER Rob. Blachy										NO. HELPERS 3											

DRILLER	<i>David H. Adams.</i>	NO. HELPERS	<i>3</i>	DRILLER	<i>W. H. Stal</i>	NO. HELPERS	<i>3</i>	DRILLER	<i>W. H. Stal</i>	NO. HELPERS	<i>3</i>
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DAILY DRILLERS REPORT

Hudson's Bay Oil and Gas Company Limited

DATE Jan 14/68

WELL NAME	HBOC. Cameron River	LDG. FLG. TO KB		CASING RECORD	DEPTH	SIZE	WEIGHT	GRADE	CEMENT	ACID	PLUG DOWN	COMPANY SUPERVISOR JEW	
CONTRACTOR	Brinkley Hoff Bros.	TYPE RIG	NAT. T-29.		K. B. ELEV.								
RIG NO.	39H.	TOOL PUSHER	Hydraulic		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	130.	PROGRESS	43.	END	273.	START	273	PROGRESS	94	END	367	START	367	PROGRESS	63	END	430					
	NO.		SERIAL NO.		TYPE		NO.		SERIAL NO.		TYPE		NO.		SERIAL NO.		TYPE						
	2A	99344	53	12 1/2	133	273	140	15	3A	RT	051-3	12 1/4	273	367	94	4	3A	RT	051-3	12 1/4	273	430	157

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
	6"	100	125	25"	6	100	125	20"	6"	100	125	20"

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.
				8	33.67					219.54	40						406.70	16.53

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
	ELL.	9.3	33				Gel	94	36				-Gel	9.5	45			
	ADDITIVES						ADDITIVES						ADDITIVES					
	2400 GEL. - Supp. 10 lbs.						Gel 800# Supp 25#						Gel 1000 Caustic 50# Supp 10#					

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

SURVEY	4/8 DEG. AT	251 FT.	DEG. AT	FT.	DEG. AT	FT.	7/8 DEG. AT	340 FT.	DEG. AT	FT.	DEG. AT	FT.	1/2 DEG. AT	420 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:		
	PRESSURES (PSI): HP FP ISIP FSIP			PRESSURES (PSI): HP FP ISIP FSIP			PRESSURES (PSI): HP FP 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	300	Drill 12 1/4" Hole.	800	830	DRILL 12 1/4" HOLE	400	500	Work pip Free
	300	400	Conn. & Survey & Rig Serv.	830	845	R.G. SERO.	500	515	Rig Serv
	400	545	Drill 12 1/4" Hole.	845	1045	DRILL 12 1/4" HOLE	515	800	Drill
	545	645	Trip out	1045	1115	SURVEY	800	900	Work on mud Jet
	645	800	Make up Bit & Run in	1115	1245	DRILL 12 1/4" HOLE STUCK ON CONN	900	1100	Drill
				1245	100	THAM AIR LINE	1100	1115	Survey
				100	400	WORK STUCK PIPE	1115	1200	Drill

DRILLER	A. H. Adams	NO. HELPERS	3	DRILLER	R. B. O'Neil	NO. HELPERS	3	DRILLER	R. B. O'Neil	NO. HELPERS	3
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DATE Jan 13/68

WELL NAME <u>H.B.D.C. Cameron River</u>										LDG. FLG. TO KB										CASING RECORD		DEPTH		SIZE		WEIGHT		GRADE		CEMENT		ACID		PLUG DOWN		COMPANY SUPERVISOR																																																																																																																																																																																																																																																																																																																																																																																																																																															
CONTRACTOR <u>Brinkerhoff Bros.</u>										TYPE RIG <u>NAT. T 20</u>												K. B. ELEV.																																																																																																																																																																																																																																																																																																																																																																																																																																																													
RIG NO. <u>39H</u>										TOOL PUSHER <u>N. Smith</u>												GRD. ELEV.																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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DAILY DRILLERS REPORT

HB CAMERON RIVER J-12

Drilling Authority No. 738
Date Issued 2 January 69

WELL NAME: HB Casaron River J-12
FIELD: W. Locat Area:
LOCATION: Unit J Section 12 Grid 60-10, 117-00
Latitude 60-01-30.2 Longitude 117-02-22.56
From Established Reference Marker To be surveyed from ALA-NWT Boundary.

U.W.L.R. 60.02505 — 117.03959
U.W.I. 3005126010117000

Rig Release Date: 17-2-69
Status
Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
2-1-69	Application for a Drilling Authority. Well Completion Data. Well History Report.
22-1-69	Application to Amend a Drilling Authority. Application to change a Well Name.
27-5-69	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.
29-4-69	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. 338
Date Issued 2nd January 1969

INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
DEPARTMENT OF MINERAL RESOURCES
OIL & MINERAL RECONSTRUCTION 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 River J-12**

Permit No. **3216** Lease No. **-**

Hudson's Bay Oil and Gas Company Limited Exploratory Licence No. **1096**

Hudson's Bay Oil and Gas Company Limited Exploratory Licence No. **1096**

(Company)

Location: Unit **J** Section **12** Grid **60° 10'; 117° 00'**

Latitude **60° 01' 30.2"** Longitude **117° 02' 22.56"**

From Established Reference Marker Datum **Top Brass Cap Monument No. 269**

Elevation **992.6 feet**; Latitude **59° 59' 58.50"**; Longitude **117° 01'**

Universal Well Location Reference **Lat. 60.2505° N., Long. 117.0393° W. 46.03"**

	DATE	DEPTH
Spudded	Jan. 12/69	
Suspended		
Resumed		
Finished Drilling	Feb. 15/69	3460 ft.
Deepened		
Complete (gas/oil)		
Abandoned	Feb. 17/69	
Rig released	Feb. 17/69	

Interval(s) open to production

Elevation: Gr. **1022.6'**

K.B. **1034**

Drilling Contractor & Rig No. **Brinkerhoff Bros. Ltd. Rig No. 39H**

Contractor's Business Licence No. **A11157**

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at—	Bags of Cement and Additives
1. 8 5/8 OD	J-55	24	527'	340' KB	300 sacks type A, 2% CaCl ₂
2. 6 5/8 OD	J-55	20	2835'	2847' KB	160 ft. oilwell Diamix 1:1
3.					0.5% D-31
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth feet KB	Sub-Sur	From	To	Rec.	From	To	Rec.
Twin Falls Limestone	723	+311	2510	2570	60			
Hay River Shale	1275	-241						
Muskwa	2410	-1376						
Slave Point	2473	-1439						
Fort Vermilion	2582	-1548						
Watt Mountain	2642	-1608						
Bistcho (Sulfur Pt.)	2648	-1614						
Muskeg Anhydrite	2684	-1650						
Keg River	3082	-2048						
Chinchaga	3321	-2287						
Pre Devonian	3388	-2354						
T.D.	3460	-2426						

LOG RECORD					
Run No.	Type of Log	MEGEX	From	To	
One	Dual Induction Laterolog		2846	540	
Two	Dual Induction Laterolog		3458	2846	
One	Compensated format. Density		2850	2350	
Two	Compensated format. Density		3461	2846	
One	Sidewall Neutron Porosity		2850	2350	
Two	Sidewall Neutron Porosity		3461	2846	
One	Borehole Compensated Sonic		2849	540	
Two	Borehole Compensated Sonic		3460	2846	
One	Porosity Litholog		2850	2350	
Two	Porosity Litholog		3461	2800	
One	Continuous Dipmeter Direct.		2848	540	
Two	Continuous Dipmeter Direct.		3459	2846	

CEMENTING RECORD (Plug, Squeeze, etc.)				PERFORATING RECORD (Bullet, Jet)				SERVICING RECORD (Acidizing, Fracing, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
Feb. 16/69	3460	2660	160 sacks type A Construction cement plus 0.4% R5								
Feb. 17/69			Casing was out off 3' below ground level with a 5-sack cement plug placed on top and a plate and identification marker installed.								

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.A.I.B.H.P.	P.A.I.B.H.P.	I.F.B.H.P.	P.F.B.H.P.	I.H.P.	P.H.P.	REMARKS
1	1969 Jan. 25/69	Slave Pt.	2485	2510	30	60	1224	1224	34	68	1632	1564	Good initial puff. Gas to surface in 3 min. 75 MCFD, 60' drilling mud rec.	
2	Jan. 26	Slave Pt.	2503	2570	30	60	1088	1224	34	68	1632	1632	MP. GTS in 20 min. - too small to measure. 60' drilling mud rec.	
3	Feb. 3	Bistcho	2614	2850	15	60	1489 (Recorder @ 2614' KB)	1493	188	666	1762	1753	MP. GTS in 3 min. 887 MCFD in 45 min. steady. Recovery - 100' drilling mud.	
4	Feb. 9	Keg River	3130	3185									disrun	
5	Feb. 11	Keg River	3115	3185									disrun	
6	Feb. 11	Keg River	2790	3185	240	45	60	1124 (Recorder @ 2708' KB)	1155	106	245	1562	1537	MP. Good air blow with gas to surface in 60 min. at 10 MCFD. Recovery - 270' gas cut mud; 180' gas cut water cut mud.

ANALYSIS

ANALYSIS				PRESENT STATUS OF WELL			
Lab No.	Sample	From	To	Oil	Gas	Dry	Sup.
ONE-1-1371	gas	2485	2510				
"	gas	2503	2570				
"	gas	2614	2850				
ONE-1-1391	gas	2790	3185				
"	Core #1	2510	2570				
ONE-1-9503	Mud filtrate	2485	2510				
ONE-1-1371	water	2503	2570				
"	water	2614	2850				

Budson's Bay Oil and Gas Company Ltd.

Company: Budson's Bay Oil and Gas Company Ltd.
 Signed by: U. C. KOCH
 Title: District Superintendent
 Date: April 29, 1969

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



File No. _____
Drilling Authority No. **330**

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL ~~REGISTRATION~~ DIVISION

Application to Abandon a Well or ~~REPAIR/RECONSTRUCT~~

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 **HR Cameron River J-12**
Location: Unit **J** Section **12** Grid **60° 10' N, 117° 00' W**
Latitude **60° 01' 30.2"** Longitude **117° 02' 22.56"**
From Established Reference Marker **DeLima Top Brass Cap Monument No. 289**
Universal Well Location Reference **Lat. 60.02505° N., Long. 117.03949° W.**
Permit No. **3216** Lease No. _____

Hudson's Bay Oil and Gas Company Limited
(Petitioner, Lessee, Lessee)

Date of commencement of proposed program _____

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at _____
Gas at **2485-2510 feet KB., 2505-2570 feet KB., 2614-2830 feet KB., 2790-3185 feet KB.**
Water at _____
Total Depth **3460 feet KB** Date of last operations **February 17, 1969**
Present condition of well **Abandoned**

CASING RECORD

Casing Size O.D., inches	Weight	Amount	Set At—	Seals of Cement and Additives	Amount Filled
1. 8 5/8	24	527 ft.	540' KB	300 sacks type A	
2. _____				plus 2% CaCl₂	
3. 6 5/8	20	2835 ft.	2847' KB	160 cu. ft. oilwell	
4. _____				Diamix 1:1	
5. _____				0.5% D-31	

PROPOSED ABANDONMENT PROGRAM

No.	Flag	Position	Geological Formation	Number of Sacks of Cement	Remarks
1.		3460-2660	Missisquoi (Saguenay Point) Waskes Anhydrite, Keg River, Chinchaga to T.D.	160	No seal

Cut off casings 3 feet below ground level, place a 5 sack cement plug and weld on steel plate with well name.

The following logs have been run **DIL, SMP, SMP-LITHOLOG, GR-CALIPER, FDC, COM**
Other operations proposed **Abandonment**

Operations to be carried out by **Hudson's Bay Oil & Gas Company Limited** Contractor Licence No. **A 11157**
Address **11630 Kingway Ave., Edmonton** Address _____
Responsible Agent in field **H. Dease**

Dated at **Edmonton** By _____ this **29th** Day of **April** 19 **69**
Signed by **J. C. KOCH** Company **Hudson's Bay Oil and Gas Company Limited**
Title **District Superintendent** Operator's Exploratory Licence No. **1096**

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

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.E.J. Thoms
on the 13th February 1969.

Dated **27th May** 19 **69**

(Signature)
(for) Oil Conservation Engineer

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

File No.

Drilling Authority No. 338



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to Amend a Drilling Authority

This application, in triplicate, must be submitted and approved before commencing operations. If the well location is changed, this application must be accompanied where required, with a plan of survey approved by the Surveyor General.

In compliance with the "Canada Oil and Gas Land Regulations", application is made hereby to amend
Drilling Authority No. 338, concerning The Surface Casing setting depth
for HB Cameron River J-12

(Name and Number of Well)

The following amendments are required:

Change the Surface Casing String from:

8 5/8" 24 lb./ft., J-55, ST&C New 800 feet. Sufficient cement
to return to surface.

To:

8 5/8" 24 lb./ft., J-55, ST&C New 540 feet. Sufficient cement
to return to surface.

Reasons for the amendments: Drilling of the 12 1/4 inch Surface Hole had
penetrated deeper than 50 feet into the consolidated formation
at a depth of 552 feet KB. (Verbal approval granted by Mr. G.
Blue, January 15, 1969).

Dated at Edmonton, Alberta, this 17th day of January, 19 69

Signed by J. C. Koch Original Signed P
J. C. KOCH
Title District Superintendent
Hudson's Bay Oil and Gas
Company Limited

(For Resources Division use only)

APPROVED

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

Date

Jan 22, 19 69

G. L. Blue

Forms to be submitted to the Oil Conservation Engineer, Calgary, Alberta.



Application for a Drilling Authority

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

Elevation: Ground 1022.6' KB to follow feet above sea-level.
Well is expected to produce from Slave Point, Bistcho, Keg River formation at a depth of about 2550, 2750, 2850 feet respectively
Area assigned to well

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	Brand	New or Used	Estimated Depth	Notes
1. 8 5/8"	24	J-55	ST&C	New	800	Suff. cement to return to surface.
2.						
3.						
4.						
5.						

Expected water, gas, and oil horizons and type of control equipment.....
 Slave Point, Bistcho, Keg River.....
 Double gate blow-out preventor and Hydril plus adequate mud system.....

Well will be drilled with (Rotary) Rig No. 39H by Brinkerhoff Bros., Ltd.
(Gibbs) (Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Licence No. A 11157

At well N. Dease At registered office N. Dease

Address 11630 Kingsway Ave. Address 11630 Kingsway Ave. Edmonton, Alta.

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

Dated at Edmonton Original Signed By this 23rd day of December 19 68

Signed by J. C. KOCH Company Hudson's Bay Oil & Gas Co. Ltd.

Title District Superintendent Licence No. 1096

(For Resources Division use only)

APPROVED

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

1. The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.
2. We draw your attention to Sections 95 and 96 of the Canada Oil & Gas Land Regulations

Dated 2nd January 1969

Forms to be submitted to Oil Conservation Engineer, Calgary, Alberta.

HB CAMERON RIVER J-12
UNIT J SECTION 12 GRID AREA 60°10', 117°00'
LATITUDE: 60°01'30.2" LONGITUDE: 117°02'22.56"
NORTHWEST TERRITORIES

I certify that the survey represented this plan is
correct to the best of my knowledge and was completed
on the 17 day of December 1968

Lorne J. Briers
Alberta Land Surveyor

Lorne Thompson

MIDWEST SURVEYS CO. LTD.

Hudson's Bay Oil and Gas
— Company Limited —

L. L. L.

Blakely

Bearings are referred to the astronomical meridian passing
through Monument #269

ELEVATION: 422.6' Ground

CO-ORDS: 12.5' North of } SE cor Unit J Sec 12
90.8' West of }

AREA: Well Site - 3.67 acres

DATUM:
Top Brass Cap Monument #269
Elev 992.6

Scale 400 feet to 1 inch
Survey monuments found shown thus: (P)
planted " " (S)
Portions referred to outlined.
Distances are in feet and decimals.



E-484-48

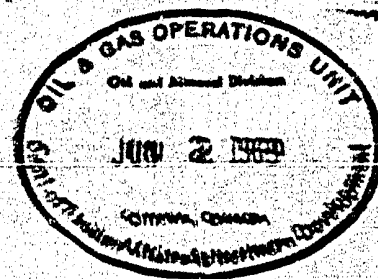
MIN. 100-11-48

HUDSON'S BAY OIL AND GAS CO. LTD.

WELL HISTORY REPORT

HB CAMERON RIVER J-12

HUDSON'S BAY OIL AND GAS COMPANY LIMITED



WELL HISTORY REPORT

HB CAMERON RIVER W-12



SIGNED: _____

Original Signed
J. C. KOCH

DISTRICT SUPERINTENDENT

DATE: _____

May 6/69

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HB CAMERON RIVER J-12

WELL HISTORY REPORT

SECTION I - Summary of Well Data

- (a) Name and Number of Well: HB Cameron River J-12
- (b) Permittee, Licencee 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, Alberta
- (d) Location: Unit J Section 12 Grid Area 60° 10'; 117° 00'
Latitude 60° 01' 30.2"
Longitude 117° 02' 22.56"
- Unique Well Identifier - 300J126010117000
- (e) Co-ordinates: 12.5 feet North and 90.3 feet West of
S.E. Corner Unit J Section 12
- (f) Permit No.: 3216
- (g) Drilling Contractor: Brinkerhoff Bros. Ltd.
Rig No. 39H National T-20
- (h) Drilling Authority: No. 338 - January 2, 1969
- (i) Classification: Exploratory
- (j) Elevations: Ground: 1022.6 feet
K.B.: 1034 feet
- (k) Spudded: January 12, 1969
- (l) Completed Drilling: February 15, 1969
- (m) Total Depth: 3460 feet K.B.
Plug Back Depth: To Surface
- (n) Well Status: Abandoned
- (o) Rig Released: February 17, 1969
- (p) Hole Size: Surface - 12 1/4 inches 0 to 540 feet KB
Intermediate - 7 7/8 inches 540 to 2850 feet KB
Final - 5 7/8 inches 2850 to 3145 feet KB
5 5/8 inches 3145 to T.D.
(3460 feet KB)

* Universal Well Location Reference - Lat. 60.02505° N., Long. 117.03959° W.

(q) Casing: Surface, 8 5/8 inch OD., J-55, 24 lb., Set at 540 feet KB with 300 sacks type A + $\frac{1}{2}$ CaCl₂
Production, 6 5/8 inch OD., J-55 20 lb., Set at 2847 feet KB with 160 ft. oilwell Diamix 1:1 0.5% L-31

SECTION II - Geological Summary

(a) Formation Tops:

<u>Marker</u>	<u>Logs</u>		<u>Samples/Core</u>	
	<u>SubSea</u>	<u>Depth</u>	<u>Subsea</u>	<u>Depth</u>
Tathlina Shales				
Twin Falls Limestone	311	723	-	-
Hay River Shale	- 241	1275	-	-
Muskwa ?	-1376	2410		
Slave Point	-1439	2473	-1434	2468
Fort Vermilion	-1540	2574 (2582?)	-1546	2580 ?
Watt Mountain	-1608	2642 ?	-1576	2610
Bistcho (Sulfur Point)	-1618	2652	-1624	2658
Muskeg Anhydrite		2683	-1648	2682
Keg River	-2048	3082	-2044	3078
Chinchaga (RB Equiv)	-2287	3321	-2316	3350
Pre Devonian Transitional				
(Ord ? Chedabucto Lake				
- La Mattre Falls Fm.				
Pre Devonian	-2354	3388	-2356	3390
(3rd ? Old Fort				
Island form.	-2374	3408	-2376	3410
Precambrian Granite-wthd?	-2408	3442	-2404	3438
Granite (fresh)	-2413	3447	-2411	3445
Total Depth	-2428	3462	-2428	3462

(b) Cored Intervals: Core No. 1 - 2510 to 2570 feet KB
Recovery - 60 feet
Formation - Slave Point

Core Description
M.R. CARRISON RIVER 3 12

(c)

- Core #1
Box #1
2510-2514.6
2510 feet to 2513 feet
4.6'
Limestone, brown, microcrystalline, finely fossiliferous, bitriced, Chama, mottled in part due to much patchy hydrocarbon staining, oil and gas bleeding common, stylolitic and black petroliferous argillaceous partings, some high angle fracture, some granular textured limestone at 2510.6 plus or minus, this has some intercrystalline porosity (leached) and scattered pin-point porosity; porosity = poor with poor permeability, in this interval, some secondary calcite. Overall porosity of this interval would be trace and microscopic. Live oil staining and gas bleeding common, rare Archi-
rom; east, strong hydrocarbon odour
- Box #2
2514.6-2518.6
4.0'
Limestone, brown, micro to cryptocrystalline, hard brittle, very finely fossiliferous, fragmental (shallow) grading to finely crystalline in parts, abundant fine black petroliferous shale and stylolitic partings, in parts finely laminated with black shale, Brachiopod common in parts
- Box #3
2518.6-2523.3
1.3'
Limestone as above
3.4'
Limestone as above, with saturation, with light oil and bleeding oil and gas in parts, trace of scattered pin-point porosity, strong hydrocarbon odour
Note: This box not sampled completely, due to necessity of leaving core intact for analysis
- Box #4
2523.3-2527.8
6.6'
Limestone, brown, micro to cryptocrystalline, very finely fossiliferous fragmental, few brachiopods, good light live oil saturation, bleeding oil and gas, strong hydrocarbon odour, trace scattered pin-point porosity
3.9'
Limestone, light brown, micro and cryptocrystalline grading to lithographic in parts, some black petroliferous shale partings very finely fossiliferous fragmental, few Brachiopod, some vertical and high angle fracturing, very light mottled brown oil staining
- Box #5
2527.8-2531.9
4.1'
Limestone, as above, slightly less scattered light oil staining mottled, not fracture, few black petroliferous shale and stylolitic partings

CORE DESCRIPTION
U.S. Coastal River # 12
(continued)

- Box #6
2531.9-2536.4 4.5'
Limestone, as above, grading to very finely crystalline, in part, with small Brachiopod common
- Box #7
2536.4-2541.2 3.7'
Limestone, brown, as above, grading to 1.4'
Limestone, buff, micro to very finely crystalline, fossiliferous, fragmental, Brachiopod, Crinoid, common, few Stromatopore, some hair line fractures, patchy oil staining and saturation, bleeding brown live oil and gas, hydrocarbon odour, trace isolated pin-point porosity and related to fossil matter.
- Box #8
2541.2-2546.0 2.0'
Limestone, as above, abundant stylolitic and black petroliferous partings, limestone, slightly argillaceous in part, trace scattered bleeding oil 2.6'
Limestone, brown, micro to very finely crystalline, and very finely granular, (fine fossilized sand), Brachiopod common, light oil saturation in most of interval, few black petroliferous shale, pyrobitumen and stylolitic partings, trace scattered isolated pin-point porosity, petroliferous odour, some water ? 0.2'
Limestone, dark brown, microcrystalline, some secondary calcite, argillaceous to shaly in part, few Brachiopod, stylolitic and petroliferous shale partings
- Box #9
2546-2550.7 4.7'
as above, .2' grading to brown in part, horizontal bedding, black petroliferous shale partings common, some fine oil staining, fractures and fossil casts, few Brachiopod, large Stromatopore fragments at 2547', high angle and vertical fracture, limestone grades to cryptocrystalline in part, stylolitic partings common, trace isolated oil bleeding, core is banded
- Box #10
2550.7-2555.3 4.6'
Limestone, dark brown; dense to cryptocrystalline, some secondary calcite inclusions, banded, abundant black petroliferous shale partings, much dark oil bleeding generally associated with black shale partings, good hydrocarbon odour

- 5 -
CORAL DESCRIPTION
H.M. CORAL REEF J 12
(continued)

Box #11
2558.3-2559.3

4.0'
Limestone, dark brown to brown, dense to crypto crystalline, to micro oolitic, (fossiliferous ? forams) brown oil saturation in part, but also salt water saturated, trace scattered pin-point porosity in rare bleeding oil and water in parts, stylolites common, some high angle fracture

Box #12
2559.3-2563.7

4.4'
Limestone, brown oil saturated, bleeding, oil gas and water, dense to cryptocrystalline few scattered brachiopods, some high angle fracture, partly calcite filled, few stylolitic partings, small isolated patches of micro pin-point (fossiliferous ?) porosity, bleeding oil, gas and water, trace amphibora, few zones and patches not oil saturated when freshly broken open, some vertical and high angle fracture

Box #13
2563.7-2568.2

1.1'
Limestone as above, very light interior staining
2.2'

Limestone, brown, mottled, (fossil and related oil saturation and bleeding), very abundant amphibora ? and brachiopods common, fossil conglomerate in part, with black petroliferous partings, some heavy oil bleeding when freshly broken, no apparent water leak or porosity: trace fracture and fossil porosity, stromatolite & fragment at base

1.2'

Limestone, brown, crypto to microcrystalline, trace brachiopods, rare isolated oil staining, black petroliferous shale partings

Box #14
2568.2-2570.7

1.2'

Limestone, brown cryptocrystalline, rare petroliferous and stylolitic partings, low angle bedding
1.0'

Limestone, cryptocrystalline, with abundant amphibora, abundant irregular black shale partings, possible stromatolite fragment
0.4'

Limestone, brown, cryptocrystalline to lithographic, trace amphibora, few brachiopods, calcite filled hair line fracture, trace granular fossiliferous limestone, trace orange-cream mineral

SAMPLE DESCRIPTION
H.B. CANNON RIVER J 12.

(d)

- 550-610 Shale, grey-green, soft, silty to shaly siltstone (dust)
- 610-620 Limestone, light grey, dense, with above shale and siltstone
- 620-650 Shale, as above, with minor above limestone
- 650-670 Sand, very fine, friable, grading to silt, much argillaceous and shaly matter, trace carbonaceous matter
- 670-750 Shale, grey-green, silty, sandy, (loose dust), much of sand is a lime sand
- 750-760 Sand, light grey, very fine, lime, with minor quartz and argillaceous matter
- 760-790 Same, grades to marl in parts
- 790-800 Shale, brown-grey, finely textured, calcareous, (from included lime), hackly trace carbonaceous matter (resembles Cretaceous-Jura shale)
- 800-810 Same, trace sand inclusions
- 810-830 Marl, sandy, soft (dust)
- 830-840 Same, much fine, dense, tan, grey limestone
- 840-860 Same, trace bright green shale
- 860-870 Shale, gray-green, finely textured, calcareous, micro-micaceous, 50%; Limestone, grey to tan, microcrystalline to dense, slightly argillaceous, trace very fine silt
- 870-890 Shale, green, splintery, platy, calcareous, 50%; Limestone, tan, dense to microcrystalline, trace medium crystalline calcite inclusions ?
- 890-900 Shale, as above, finely textured; Limestone, as above. This section appears to be very finely bedded and laminated limestone-shale; trace grey argillaceous dense limestone
- 900-920 Same, trace secondary Calcite crystals in limestone
- 920-930 Limestone, light grey, tan, dense to microcrystalline, rare fine ribbed Tentaculites; Green shale and marl common
- 930-940 Same, few small Crinoid and Brachiopod fragments, trace brown-grey microcrystalline limestone

SAMPLE DESCRIPTION
H.B. CUMMINS RIVER J 12.
(continued)

- 940-950 Same, with shale grading calcareous to limy, with trace fine pyrite
- 960-970 Same, increase green shale
- 970-980 Limestone, light grey, tan, dense to microcrystalline partly fossiliferous, few Brachiopod and Crinoid fragments, trace oil saturated "rotten" brown dense, limestone patches, grey, green, calcareous to limy shale, trace pyrite
- 980-990 Limestone, as above, trace green shale, highly micaceous in part, trace brown-grey finely textured flaky shale
- 990-1000 Shale, green, calcareous to limy, with chalky limestone, trace oil staining, contamination?
- 1000-1010 Same, splintery, trace tan dense to crystalline limestone
- 1010-1030 Sawdust
- 1030-1040 Limestone, tan-grey, dense to cryptocrystalline, Brachiopod and Ostracod fragment common, trace Crinoid, grey-green shale common
- 1040-1050 Same, increase green splintery platy, calcareous shale, some sawdust
- 1050-1060 Same, some tan silty cryptocrystalline limestone
- 1060-1080 Same, as 1050
- 1080-1090 Shale, green, splintery, calcareous to limy, with above limestone
- 1090-1100 Same, with calcareous, light grey siltstone, (stringers-laminae ?)
- 1100-1120 Shale as above, with light grey, tan, lithographic to cryptocrystalline limestone
- 1120-1130 Limestone, cream, tan, lithographic to cryptocrystalline trace light grey siltstone, green calcareous, finely textured splintery shale common
- 1130-1150 Same, with fossil shadow
- 1150-1160 Shale, green, splintery, flaky, finely textured, calcareous, micromicaceous, with brown grey finely textured splintery shale, limy, light grey siltstone laminae and partings

SAMPLE DESCRIPTION
H.B. CAMERON RIVER S 12.
(continued).

1160-1170	Same
1170-1190	Same, with dense light coloured limestone common, inclusions and stringers, partly fossiliferous
1190-1210	Limestone, and shale 50% to 50%, as above
1210-1220	Limestone, 60%, shale, 40%; trace limy siltstone
1220-1230	Limestone, light grey, dense to marly, minor green shale
1230-1240	Same, increase green splintery calcareous, finely textured shale
1240-1250	Shale, green, splintery, calcareous to limy, with above limestone common
1250-1260	Same, few <u>Ostracod</u>
1260-1270	Same, with grey-brown calcareous shale, grading to marl in parts
1270-1310	Shale as above, few <u>Brachiopod</u> and <u>Ostracod</u> , trace above limestone
1310-1340	Same, trace grey limestone, slightly silty in part
1340-1350	Missing
1350-1370	Same, trace fossiliferous
1370-1390	Shale, grey-green, calcareous to limy, with limy grey siltstone laminae and silty limestone
1390-1400	Same, decrease siltstone and limestone
1400-1410	Missing
1410-1430	Shale, grey-green, green, splintery, limy; brown finely textured, slightly calcareous, rare <u>Tentaculites</u>
1430-1490	Same, trace silt
1490-1500	Very fine laminae above shale, and silty shale, shaly siltstone and silty limestone
1500-1530	Same, shale = approximately 50%
1530-1550	Laminated limy siltstone, silty limestone and calcareous to limy green shale
1550-1570	Same, much shale

SAMPLE DESCRIPTION
H.B. CAMARON RIVER J 12.
(continued).

1570-1600	Shale, green, splintery, platy, limy, finely textured with above siltstone and silty shale laminae
1600-1610	Missing
1610-1640	Same, trace fossils
1640-1652	Same, rare Crinoid
1650-1690	Shale as above, grading to medium grey-green
1680-1710	Shale, medium grey-green, finely textured, platy, limy
1710-1730	Same, with tan, very finely crystalline to dense limestone laminae
1730-1740	Same, grading slightly darker
1740-1770	Same, with limy siltstone laminae
1770-1790	Shale as above, calcareous in part
1790-1810	Same, some light grey silt laminae
1810-1820	Same, trace pyrite
1820-1840	Shale, medium-grey, grey, finely textured, micaceous, calcareous to limy, siltstone laminae with slightly carbonaceous partings
1840-1870	Same, carbonaceous flecks common
1870-1880	Same, trace dark grey, calcareous, finely textured shale
1880-1890	Shale, dark grey, very slightly calcareous, much above grey-green shale
1890-1910	As above
1910-1930	Shale, green, limy to calcareous, trace light coloured limestone, shale, grading to medium grey-green, trace pyrite
1930-1960	Same, silty laminae common, some black finely textured shale
1960-2070	Same, trace carbonaceous flakes
2070-2150	Shale, dark grey-green, to grey, limy, splintery, platy, finely textured, some carbonaceous matter and flakes

SAMPLE DESCRIPTION
H.B. CAMERON RIVER J 12.
(continued).

- 2150-2190 Same, trace bright green finely textured shale in this sample
- 2190-2220 Same, with some dark grey carbonaceous, flecked, finely textured shale
- 2220-2240 Same, with black petroliferous limy shale
- 2240-2280 Same, trace pyrite
- 2280-2290 Same, slightly silty in part, trace pyrite
- 2290-2310 Same, pyrite common, carbonaceous matter increased
- 2310-2320 Same, trace pyritic very fine sandstone (laminae)
- 2320-2340 Shale, medium grey to grey-green, finely textured, splintery, platy, limy, finely textured, trace siltstone, carbonaceous flakes common
- 2340-2350 Same, pyrite common
- 2350-2370 Same, dark grey shale common, fragment of spine ocquina
- 2370-2410 Same, shale grading to dark grey
- 2410-2420 Shale, black, petroliferous, finely textured, limy, brown streaks, micromicaceous, very finely pyritic
- 2420-2460 Same, with light grey fossiliferous pyritic limestone, some highly fossiliferous limy *Lingula* common, partly sandy (interbedded, laminae and inclusions)
- 2460-2470 Limestone, tan, brown, dense to microcrystalline, much above shale
- 2470-2480 Limestone as above, calcite filled hair lined fracture, few *Frachionod* fragments
- 2480-2490 Same, with trace pyrobitumen
- 2490-2510 Same, grading darker brown, with oil saturation, good cut with Tet and Fluorescence, slight to medium porosity, appears to be in laminae and stringers (similar to leaching)
- 2510-2570 Core Description See Core #1 (recovered 60 feet)
- 2570-2580 Limestone, dark brown, dense to cryptocrystalline, granular in part, slight dolomitic in part, anhydritic in part, some buff micro sucrosic limestone, trace black petroliferous shale partings, limestone grades to lithographic in part

SAMPLE DESCRIPTION
H.B. CANNON RIVER J 12.
(continued).

- 2580-2590 Missing, mud contaminated with anhydrite
- 2590-2600 Anhydrite, tan, gray, massive, grading to dolomitic, tan, cryptocrystalline, granular, anhydrite to anhydritic, cryptocrystalline, granular to dense dolomite, partly silty, some fossil shadow, (Ostracod ?, algal ?) trace petroliferous partings and pyrobitumen
- 2600-2610 As above, trace brown gypsum crystalline inclusions
- 2610-2620 Shale, gray, grey-green, splintery, platy, finely textured, micro-micaceous, limy, very poor sample, mostly coarse shale, splintery, rare brachiopod fragment, trace Sarcella ?
- 2620-2630 Shale as above,; anhydrite, cream, tan, dense to cryptocrystalline, massive in part, grading to anhydrite, brown, micro crystalline dolomite, and buff dolomitic anhydrite
- 2630-2640 Very poor sample, mostly shaleavings, the log indicates anhydrite
- 2640-2650 Limestone, tan, gray, dark gray, mottled, dense to cryptocrystalline, massive, some argillaceous patches, limestone resembles dense anhydrite, some fine fractures
- 2650-2660 Limestone, as above, grading to granular, gray to tan, limestone (algal ?) with patchy trace to good intergranular porosity, trace scattered pin-point porosity 2658 to 2664 (time log)
- 2660-2670 Limestone, tan to brown, lithographic to cryptocrystalline, to fine crystalline granules, with fine brown dolomite granules: Dolomite, brown, micro-crystalline, with slight drusy appearance, (secondary?) trace of silica, some pyrite and trace bright green finely textured waxy shale
- 2670-2680 Dolomite, buff, brown, dense to cryptocrystalline, trace fine crystalline partings, and laminae
- 2680-2690 Same, with some anhydritic pelletoid dolomite : Anhydrite, tan, translucent dense
- 2690-2700 Anhydrite, tan, dense, massive, translucent: limestone, tan, dense to lithographic
- 2700-2710 As above, with buff and brown, finely crystalline, and finely granular dolomite, with anhydrite cement

SAMPLE DESCRIPTION
H.B. CANNON RIVER, J 32,
(continued).

- 2710-2720 Dolomite, dark brown, crypto to very finely crystalline, petroliferous, anhydritic, trace calcite, scattered patchy brown heavy oil staining, some pyrobitumen, scattered vugs, appears to be finely fractured with fine crystalline dolomite on fracture faces, porosity ~ 2%? (probably fracture porosity) loss in mud system, interval 2714 to 2716
- 2720-2730 Dolomite as above, lost circulation matter in system, poor sample
- 2730-2740 Anhydrite, cream, tan, brown, dense, some finely crystalline brown dolomite, samples are poor due to gunning and tank and conditioning mud, for lost circulation, weight building up volume etc.
- 2740-2750 Dolomite, dark brown, very fine to finely crystalline, petroliferous, hydrocarbon show with test and fluorescence, scattered poor vuggy porosity (vugs not visible, only crystal faces associated with vugs), trace scattered fine intercrystalline porosity, porosity appears to be in thin horizontal laminae and associated fractures, some crystalline anhydrite infill
- 2750-2760 Dolomite, buff, microcrystalline, anhydritic, with above dolomite, intermixed, trace pyrite
- 2760-2770 Dolomite, dark brown, crypto to very finely crystalline, resinous appearance in part, appears to be laminated and thin bedding, possible vugs, chips have druse faces in part, some petroliferous argillaceous partings, anhydrite inclusions and vuggy filling common, trace buff and tan microcrystalline dolomite (evaporitic) slight oil staining in parts, trace/poor porosity
- 2770-2780 Same, increase tan cryptocrystalline dolomite, anhydritic in part, trace pyrobitumen
- 2780-2790 Dolomite, brown to tan, dense to very finely crystalline, anhydritic and with anhydrite inclusions common, poor vuggy? porosity, some black shale partings, some argillaceous partings, trace scattered oil staining, (rock appears mottled in part)
- 2790-2800 As above, dark brown, dolomite increase
- 2800-2810 Dolomite, dark brown, crypto to microcrystalline, much intermixed buff and light brown finely crystalline to dense dolomite, anhydritic and with light coloured dense and very finely crystalline anhydrite inclusions common, some pyrobitumen and petroliferous shale partings, stringers and patches, trace light

BASIN DESCRIPTION
H.R. GILSON RIVER J 12,
(continued).

- 2800-2810 oil stain associated with poor scattered vascular
(contd.) porosity
- 2810-2820 Dolomite, as above, grading to medium brown, increased
anhydrite
- 2820-2840 Same, light coloured dense anhydrite common, 30%,
trace scattered porosity
- 2840-2850 Same, rare small vugs, with associated fine crystals,
trace brown oil staining
- 2850-2860 As above, dolomite, with grey-green splintery shale,
this sample after setting intermediate casing at
2850'
- 2860-2870 Dolomite, buff to brown, dense, anhydritic to very
finely crystalline, anhydrite inclusions common,
some anhydrite in bands, 1, some black petroliferous
shale and argillaceous partings
- 2870-2880 Anhydrite, light grey, massive and with much inter-
mixed medium brown finely crystalline dolomite, trace
argillaceous matter in partings
- 2880-2890 Anhydrite, tan to brown, massive, ~~dense to crypto-~~
crystalline, some dark mottling
- 2890-2900 Some minor very finely crystalline to dense tan
dolomite
- 2900-2910 Dolomite, buff to brown, micro to finely crystalline
mottled, brown crystalline gypsum and anhydrite
inclusions common, some black petroliferous shale
partings, trace pyrite, rare pin-point porosity and
some Brachiopod fossil shadow
- 2910-2920 Anhydrite, white to tan to brown, mottled, dense to
microcrystalline, massive, trace above dolomite
- 2920-2930 Some increase black petroliferous shale partings and
associated petroliferous, microcrystalline dolomite,
argillaceous in part
- 2930-2940 Anhydrite, tan, dense, massive.
- 2940-2950 Anhydrite as above, with light to dark brown, dense
to very finely crystalline dolomite, anhydritic and
gypsiferous in part, trace isolated fine intercryst-
alline and pinpoint porosity, with trace of pyrobitumen
- 2950-2960 As above, dolomite grading to finely crystalline in
part

SAMPLE DESCRIPTION
H.B. CANNON RIVER J 12,
(continued)

- 2960-2970 Anhydrite, tan, grey, dense with much very finely crystalline to dense, buff to brown dolomite, grading each in each, some stylolitic, pyrobituminous and petroliferous blackish partings
- 2970-2980 Same, decrease dolomite
- 2980-2990 Anhydrite as above, minor above dolomite, inclusions etc.
- 2990-3000 Anhydrite and dolomite as at 2970
- 3000-3010 Anhydrite as above, dolomite buff, dense, earthy to cryptocrystalline, evaporitic, anhydritic in part, coarsely crystalline, brown gypsum inclusions and light coloured anhydrite, few black petroliferous shale partings
- 3010-3020 As above, dolomite grading to dark brown, argillaceous and with pyrobitumen and petroliferous shale partings and inclusions, traces of isolated intercrystalline porosity, appears to be horizontally laminated
- 3020-3030 Same, increase dolomite and petroliferous partings and stylolite, some gypsum crystals
- 3030-3040 Anhydrite and dolomite, slight increase anhydrite
- 3040-3060 Intermixed above dolomite and anhydrite, each in each, dense to very finely crystalline, cream to buff to brown
- 3060-3070 Anhydrite, tan, dense to cryptocrystalline, massive
- 3070-3080 Same, with minor dark earthy brown to buff, dense dolomite with trace brown gypsum, and dark petroliferous shale (partings?), some minor brown green, finely textured, finely pyritic shale and light coloured anhydritic, siliceous, angular to sub-angular, fine sandstone, and argillaceous dark siliceous siltstone laminae and partings, slightly pyritic in part (3075 to 3077 drill break)
- 3080-3090 Anhydrite, white to brown, crystalline, "snowy", with much intermixed buff to brown, cryptocrystalline to microcrystalline dolomite, some dark petroliferous shale partings, minor grey anhydritic dolomitic marl stringers? inclusions?
- 3090-3095 Dolomite, buff to brown, cryptocrystalline to microcrystalline, anhydritic in part, some black petroliferous shale partings, some dark brown mottling, much included and intermixed anhydrite, white to tan, dense to finely crystalline

SAMPLE DESCRIPTION
H.B. COLUMBIA RIVER 12,
(continued).

- 3095-3100 Same, trace grey-anhydritic marl
- 3100-3110 Dolomite, buff, cryptocrystalline to microcrystalline slightly sacroscopic in part, partly anhydritic, some dense anhydrite inclusions, trace black petroliferous shale, partings and stringers, trace dark brown resinous very finely crystalline dolomite, appears to be in stringers
- 3110-3120 Same, trace slight isolated porosity
- 3120-3130 Same, increase black petroliferous shale partings and stylolites, dolomite grading to light grey
- 3130-3140 Dolomite, tan to grey, finely crystalline, some petroliferous shale partings and associated resinous dark brown very finely crystalline dolomite
- 3140-3150 Dolomite, medium brown, with some dark brown shaly intermixed dolomite, micro to very finely crystalline, some anhydrite and crystalline gypsum vug filling, and inclusions, petroliferous black shale partings, trace green finely textured shale
- 3150-3160 As above, sample very fine, very light oil stain in part, slight to poor intercrystalline ? porosity, possibly fine vugular, gypsum crystals common, some light tan cryptocrystalline dolomite, trace show with Tet and Fluorescope (weight increased on bit weight indicator frozen)
- 3160-3170 Dolomite, dark brown, finely crystalline, resinous, (brown reef type), much crystalline anhydrite and gypsum vugular filling and intermixed, some black petroliferous shale, some mottling of dolomite due to medium brown in parts, poor to medium vuggy porosity, light cut with Tet and Fluorescope, asphaltic odour when drying, some argillaceous to shaly, fine to medium crystalline dolomite, stringers and inclusions
- 3170-3175 As above, infill suggests possible Amchipsora ? completely replaced and recrystallized
- 3175-3180 Dolomite, as above, with tan, very finely crystalline dolomite, grading to cryptocrystalline and light grey-tan in part, very finely crystalline tan dolomite possibly replaced and recrystallized Stromatoporeid ? no fossil structure seen however
- 3180-3185 Dolomite, dark brown, finely crystalline, resinous appearance, petroliferous appearance, slight hydrocarbon show with Tet and Fluorescope, slight to poor vugular porosity, scattered isolated fine

SAMPLE DESCRIPTION
H.B. CANNON RIVER J 12
(continued).

- 3180-3185 (contd). intercrystalline porosity, crystalline gypsum and anhydrite infill common, tan finely crystalline dolomite patches and inclusions, some fossil shadow Amphipora ? some tan, dark grey and light mottled medium to coarse crystalline dolomite
- 3185-3190 Dolomite, tan to medium brown, finely crystalline to microcrystalline, mottled, much gypsum and anhydrite infill, trace pyrobitumen and pyrite poor to medium ? vicular porosity
- 3190-3200 As above, grading to dark brown, mottled, possible fracture with gypsum infill
- 3200-3210 Dolomite, light to dark brown, mottled, very finely crystalline, grading to cryptocrystalline in part, anhydrite, gypsum inclusions and infill common
- 3210-3240 Same, grading darker, petroliferous, black petroliferous shale partings and laminas, trace to slight porosity, minor gypsum and anhydrite infill
- 3240-3250 Dolomite as above, medium to dark brown, petroliferous and resinous in part
- 3250-3260 Same, trace waxy bright green mineral ?
- 3260-3270 Same, increase gypsum and anhydrite infill
- 3270-3280 Dolomite, medium to dark brown, micro to very finely crystalline, mottled, resinous in part, some gypsum and anhydrite crystalline infill, some light coloured dense dolomitic anhydrite, one chip with green waxy staining
- 3280-3290 Dolomite, dark brown, fine to very finely crystalline, with tan mottling, (Grinoid, Amphipora? Stromatoperoïd? shadow) petroliferous to resinous appearance in part, trace pyrite, (marcasite ?) some crystalline gypsum infill, black petroliferous shale partings
- 3290-3300 Same, increase gypsum infill, appears fractured
- 3300-3310 Dolomite, medium to dark brown, micro to very finely crystalline, some tan inclusions (Stromatoperoïd ?) much clear crystalline gypsum, inclusions and fracture infill
- 3310-3320 Same, with some black petroliferous shale partings, trace stylolite
- 3320-3330 Same, rare crystalline quartz inclusions
- 3330-3350 Dolomite, as above grading medium to light brown

WASHLE DESCRIPTION
H.B. CARLSON AFTER J 12,
(continued)

- 3350-3354 Circulating sample
Drill break (hardened)
Dolomite, as above, and trace crypto dolomite,
black petroliferous shale partings common, rare
trace pin-point porosity, Grinoid shadow
- 3354-3360 Dolomite, grey, tan, dense to cryptocrystalline,
brown floating gypsum crystals common in part,
slightly limy in part: Anhydrite 10%, grey, tan,
dense to micro crystalline, dolomitic, black petrol-
iferous shale partings and stringers
- 3360-3370 Dolomite as above, anhydrite increase to 20%, light
to medium brown dolomitic, dense to microcrystalline
- 3370-3380 Dolomite as above, anhydritic, grading to dolomitic
brown dense, cryptocrystalline anhydrite, some dark
shale partings, trace buff earthy dolomite, with
trace isolated oil staining, section appears finely
laminated, with some isolated fracture faces
- 3380-3385 Anhydrite, cream to light brown, dense, partly dolo-
mitic, some of above dolomite appears laminated
and very finely bedded
- 3385-3390 Same, trace coarse floating clear round frosted
quartz grains
- 3390-3400 Dolomite, light grey, tan, buff, dense to crypto,
coarse floating round frosted quartz grains common,
some secondary gypsum crystals, dolomite is partly
anhydritic, and grades to dolomitic, anhydrite in
part, trace dark grey, anhydritic finely textured
shale, trace green shale, quartzitic, medium to
coarse, sandstone laminae
- 3400-3410 Dolomite, light grey, dense, argillaceous to shaly,
grading to tan, light grey, cryptocrystalline, with
shadowy granular appearance, medium to coarse,
floating sub angular to round quartz grains, frosted
to greasy appearance; light grey dolomite grades
to dolomitic sandy silty shale, some hair line fracture
- 3410-3415 Dolomite, light grey, tan grey, slightly limy, dense,
fine to coarse, granular (poorly defined), some
fossil shadow, floating fine to coarse quartz grains
and granules, trace rare blind pin-point porosity
- 3415-3420 Dolomite as above, partly limy; Sandstone, cream,
light grey, fine to coarse, poorly sorted, grading
to grit, limy, quartzitic to quartzose, finely pyritic
in part, appears finely laminated and banded with
grey-green soft finely textured shale, sandy and
silty in part, some minor breccia

SEATTLE DISCUSSION
R.B. CUMMINS RIVER J 12,
(continued)

- 3423-3430 Sandstone, some, some black finely textured shale stringers, much loose coarse angular to round quartz grains, granules, and pebbles, quartzitic sandstone is finely laminated and in stringers in soft grey to grey-green finely textured shale, some hair line fracture in buff cryptocrystalline dolomite
- 3430 Circulating sample
Sandstone, as above, trip sample, loose, coarse, angular to subround, frosted in part, quartzose to quartzitic, porous in part?
- 3430-3440 Granite, light pink to salmon pink, quartz, and feldspar, chlorite common, this grades upwards to above quartzitic to quartzose coarse sandstone, with chlorite common, good drilling time break at 3445. Top of Granite - possibly slightly weathered
- 3440-3444 Granite as above, grading to dark red, much chlorite some brick red, argillaceous partings and inclusions
- 3444-3445 Same
- 3445-3446 Granite, (very fine pink to red quartzite, with green clay and chlorite)
- 3446-3460 Granite, pink, red to red brown, grading coarser, biotite common
- 3460 Circulating sample 10 min.
Same, with bright green and red patches

SECTION III - Engineering Summary

(a) Drill Stem Tests - (Two copies of each mailed to the Department of Indian Affairs and Northern Development, Calgary on February 17, 1969.)

Drill Stem Test Summary:

DST #1 - January 25, 1969 - Slave Point - 2425-2510' VO 50 minutes, ISI 30 minutes, FSI 60 minutes, ISI 1224, FSI 1224, IFP 34, FFP 68, IHP 1632, FHP 1564 - Good initial puff. Gas to surface in 4 minutes - 75 MCFD. 60 feet drilling mud recovery.

DST #2 - January 26, 1969 - Slave Point - 2503-2570' VO 240 minutes, ISI 30 minutes, FSI 60 minutes, ISI 1088, FSI 1224, IFP 34, FFP 68, IHP 1632, FHP 1632 - Good initial puff. Gas to surface in 20 minutes - too small to measure. 60 feet drilling mud recovery.

DST #3 - February 3, 1969 - Bistcho - 2614-2850' VO 90 minutes, ISI 15 minutes, FSI 60 minutes, ISI 1489, FSI 1493, IFP 188, FFP 666, IHP 1762, FHP 1753 - (Recorder at 2614 feet KB) Good initial puff. Gas to surface in 3 minutes. 887 MCFD in 45 minutes, steady. Recovery - 100 feet drilling mud.

DST #4 - February 9, 1969 - Keg River - 3130-3185' Misrun.

DST #5 - February 11, 1969 - Keg River - 3115-3185' Misrun.

DST #6 - February 11, 1969 - Keg River - 2790-3185' VO 240 minutes, ISI 45 minutes, FSI 60 minutes, ISI 1124, FSI 115, IFP 106, FFP 245, IHP 1562, FHP 1537 - (Recorder at 2768 feet KB) Good initial puff. Good air blow with gas to surface in 60 minutes at 10 MCFD. Recovery - 270 feet gas cut mud; 180 feet gas cut water cut sulfurous mud.

(b) Casing Record:

Casing Size (inches)	Grade	Weight lb./ft.	Amount feet	Set at feet KB	Cement and Additives
8 5/8" OD	J-55	24	527	540	300 sacks Type "A" Plus 2% CaCl ₂
6 5/8" OD	J-55	20	2835	2847	160 feet ³ Oilwell Diamix 1:1 plus 0.5% D-31

(c) Bit Record:

<u>No.</u>	<u>Size</u>	<u>Type</u>	<u>Make</u>	<u>In</u>	<u>Out</u>	<u>Hrs.</u>	<u>Feet</u>	<u>TBG</u>
1A	12 1/4	S4	RT	0'	133'	11	133'	
2A	12 1/4	S3	Sec.	133'	273'	15	140'	
3A	12 1/4	OSC3	RT	273'	542'	17 3/4	269'	
1	7 7/8	XIGJ	HW	542'	879'	18	337'	
2	7 7/8	XIGJ	HW	879'	1173'	10 3/4	294'	
1B	7 7/8	XIGJ	HW	1173'	2225'	25	1052'	
3	7 7/8	M44NJ	Reed	2225'	2510'	12 1/4	285'	
1	6 1/8			2510'	2570'	13 1/4	60'	
3RR	7 7/8	M44NJ	Reed	2510'	2591'	15	60'	Ream
							21'	Drill
4	7 7/8	SNG	Sec.	2591'	2765'	38 1/4	174'	
5	7 7/8	XV	HW	2765'	2850'	17 1/4	85'	
6	5 7/8	YSR	Reed	2850'	2920'	12 1/4	70'	
7	5 7/8	YHW	Reed	2920'	3055'	20 1/2	135'	
8	5 7/8	YHW	Reed	3055'	3143'	20	88'	
9	5 5/8	YSR	Reed	3143'	3185'	5 1/2	42'	
10	5 5/8	YSR	Reed	3185'	3283'	17 1/4	98'	
11	5 5/8	OWC	HW	3283'	3354'	14 1/4	71'	
12	5 5/8	W7R	HW	3354'	3385'	8 1/2	31'	
12RR	5 5/8	YSR	Reed	3385'	3430'	8 1/2	45'	
13	5 5/8	W7R	HW	3430'	3460'	7 1/4	30'	

(d) Mud Report:

The mud system contained the following:

Gel:	- 41,100 pounds
Baroid: (Wt. Mat.)	- 203,900 pounds
Quebroxin:	- 3,550 pounds
Caustic Soda:	- 3,200 pounds
Calcium Chloride:	- 800 pounds
Cellex:	- 375 pounds
SAPP:	- 210 pounds
Bicarbonate:	- 200 pounds
Lime:	- 50 pounds
Sawdust:	- 25 sacks
Fibroseal:	- 10 sacks

(c) Deviation Record:

<u>Depth - Ft.K.B.</u>	<u>Deviation - Degrees</u>
90	7/8
162	7/8
251	3/4
340	7/8
420	1/2
540	1
650	7/8
755	1/4
879	1
1395	1/8
1886	1/8
2228	5/8
2765	1 1/4
3283	1 1/2

(f) Abandonment Plugs:

Plug No. 1 - 3460 to 2660 feet KB - 160 sacks Construction Cement plus 0.4% R5.

The plug was displaced with 1 1/2 barrels water and 18 1/2 barrels mud, plug down - 2 P.M. February 16, 1969.

Casing was cut off 3' below ground level and a plate and identification marker

(g) Lost Circulation Zones: installed over a 5-sack cement plug.

A total of 400 barrels mud was lost at 2715 feet KB. Circulation was regained by adding 50 sacks sawdust and 10 sacks Fibroseal.

(h) Report of Blowouts:- NONE.

SECTION IV

LOGGING SUMMARY
H.B. CUMBER RIVER 12

			<u>Date</u>
Schlumberger. Dual Induction Lateralog			
Run #1	2" = 100'	2846' to 540'	2nd February 1969
	5" = 100'	2846' to 2350'	
Worchole Sonic Gamma Ray Caliper			"
	2" = 100'	2846' to 540'	
	5" = 100'	2846' to 2350'	
Sidewall Neutron Porosity			"
	2" = 100'	2850' to 2350'	
	5" = 100'	2850' to 2350'	
Formation Density			"
	2" = 100'	2850' to 2350'	
	5" = 100'	2850' to 2350'	
Porosity Lithology			"
	2" = 100'	2850' to 2350'	
	5" = 100'	2850' to 2350'	
Continuous Dipmeter Directional			"
		2848' to 540'	
Run #2			15th February 1969
Dual Induction Lateralog			
	2" = 100'	3458' to 2846'	
	5" = 100'	3458' to 2846'	
Worchole Sonic Gamma Ray Caliper			"
	2" = 100'	3460' to 2846'	
	5" = 100'	3460' to 2846'	
Sidewall Neutron Porosity			"
	2" = 100'	3461' to 2846'	
	5" = 100'	3461' to 2846'	
Formation Density			"
	2" = 100'	3461' to 2846'	
	5" = 100'	3461' to 2846'	
Porosity Lithology			"
	2" = 100'	3461' to 2800'	
	5" = 100'	3461' to 2800'	
Continuous Dipmeter Directional			"
		3459' to 2846'	

Final logs transmitted to you by Calgary Geological Headquarters, April 30, 1969.

SECTION V - Analysis:

(a) Core Analysis: #1 2510-2570' - Lab Report No. CNP-1-9503

(b) Water Analysis:

DST #1	"Mud Filtrate"	2485-2510	Slave Point	Lab Report CBH-1-1371
DST #2	Water	2503-2570	Slave Point	"
DST #3	Water	2614-2850	Bistcho (Sulfur Point)	"

(c) Gas Analysis:

DST #1	2485-2510	Slave Point	Lab Report CBH-1-1371
DST #2	2503-2570	Slave Point	"
DST #3	2614-2850	Bistcho (Sulfur Point)	"
DST #6	2790-3185	Keg River	Lab Report CBH-1-1391

(d) Oil Analysis: NONE

SECTION VI - Completion Summary

None due to hole abandonment.

Alberta

100

CORE LABORATORIES-CANADA LTD.
CALGARY
ALBERTA

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File - C-1-1
- 1-1-1

Company HUDSON'S BAY OIL AND GAS COMPANY LIMITED
Date Report February 5, 1969
Field, Prov. 117-02-22-36 W.L.
Location 60-01-30-20 N.L.
Formation
Corus
Type of Anal. Full Diameter
Analysts CK CH WD
Remarks

Well Code (1-4) - - -
Catalogue No. (5)
Depths (6-10) -
Well Name (11-46) -
Survey System (47)
Location Except (48-49) -
Location (50-61) -

Well Except (62)
File No. (63)
KB Elevation (64-68) -
Deviated Hole DC (59-73) -
Correlation DC (74-77) -
Lab Code (78-79) -
Mud Code (80) -

Note: Do not punch decimals or special characters.
Bracketed figures refer to column numbers.

Plug No.	Interval	Represented Top	Base	Thick	Permeability (md)		Porosity %	Density		Saturations (SPV)		Plug Description	Fc
					Maximum	90° Vertical		Bulk	Grain	Oil	Water		
					(20-26)	(27-33)	(34-40)	(41-43)	(44-46)	(47-49)	(50-52)	(53-55)	
CORE INTERVAL 2510.01 - 2570.0 (REC. 60.0") (16 BOXES)													
1	2510.0	10.9	0.9	0.9	0.37	20.01	20.01	1.5	2.62	2.66	--	0.5	6
2	13.9	11.7	0.8	0.8	0.06	20.01	20.01	1.9	2.66	2.71	--	0.5	6
3	11.7	12.2	0.5	0.5	20.01	20.01	20.01	3.0	2.51	2.64	--	0.5	6
4	12.2	13.4	1.2	1.2	20.01	20.01	20.01	6.6	2.51	2.43	--	0.5	6
5	13.4	14.2	0.8	0.8	0.07	20.01	20.01	6.9	2.47	2.66	--	0.5	6
6	14.2	15.9	1.7	1.7	20.01	20.01	20.01	0.7	2.70	2.71	--	0.5	6
7	15.9	20.0	4.1	4.1	--	--	--	--	--	--	--	0.5	6
8	20.0	20.9	0.9	0.9	0.06	20.01	20.01	1.0	2.39	2.72	--	0.5	6
9	20.9	22.3	1.4	1.4	0.06	20.01	20.01	5.0	2.57	2.71	--	0.5	6
10	22.3	23.3	1.0	1.0	20.01	20.01	20.01	5.0	2.56	2.70	--	0.5	6
11	23.3	23.3	0.5	0.5	20.01	20.01	20.01	1.6	2.61	2.66	--	0.5	6
12	23.3	24.6	0.8	0.8	20.01	20.01	20.01	1.1	2.66	2.69	--	0.5	6
13	24.6	29.0	15.2	15.2	--	--	--	--	--	--	--	0.5	6
14	29.0	41.5	1.5	1.5	20.01	20.01	20.01	1.0	2.67	2.70	--	0.5	6
15	41.5	43.4	2.1	2.1	--	--	--	--	--	--	--	0.5	6
16	43.4	46.1	0.7	0.7	20.01	20.01	20.01	3.5	2.59	2.69	--	0.5	6
17	46.1	48.3	0.7	0.7	20.01	20.01	20.01	3.0	2.57	2.67	--	0.5	6
18	48.3	49.0	1.1	1.1	20.01	20.01	20.01	3.7	2.57	2.69	--	0.5	6
19	49.0	50.3	1.1	1.1	0.73	0.37	20.01	1.1	2.63	2.70	--	0.5	6
20	50.3	50.3	3.3	3.3	--	--	--	--	--	--	--	0.5	6

HOSONIS OIL AND GAS COMPANY LIMITED

CONCRETE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

Plug No.	Interval Represented		Thick (17-19)	Permeability (md)		Porosity %	Density		Residual Saturations (RFV)		plus Description
	Top (5-10)	Base (11-16)		Max (20-26)	90° Vertical (27-33)		Bulk (44-46)	Grain (47-49)	Oil (50-52)	Water (53-55)	
17	53.3	51.4	1.1	0.08	2.07	20.01	1.5	2.64	2.68	--05--	3617 2 2-1--
18	51.4	52.3	1.4	0.06	20.01	20.01	1.6	2.64	2.68	--05--	3617 2 2-1--
19	52.3	54.0	1.2	20.01	20.01	20.01	2.0	2.62	2.67	--05--	3617 0 2-1--
20	54.0	55.2	1.2	0.13	0.09	20.01	1.2	2.65	2.68	--05--	3617 0 2-1--
21	55.2	56.2	1.0	0.03	20.01	20.01	1.3	2.56	2.68	--05--	3617 1 2-1--
22	56.2	56.9	0.7	20.01	20.01	20.01	5.7	2.53	2.69	--05--	3617 1 2-1--
23	55.9	57.5	0.6	0.05	20.01	20.01	2.5	2.59	2.68	--05--	3617 1 2-1--
24	57.5	58.8	1.3	20.01	20.01	20.01	2.3	2.64	2.70	--05--	3617 0 2-1--
25	58.8	60.1	1.3	0.10	20.01	0.09	3.2	2.63	2.71	--05--	3617 1 2-1--
26	60.1	61.1	1.0	0.09	20.01	20.01	2.1	2.65	2.71	--05--	3617 2 2-1--
27	61.1	62.2	1.1	2	20.01	2	2.2	2.61	2.61	--05--	3617 1 2-1--
28	62.2	63.1	0.9	2	20.01	2	4.6	2.50	2.72	--05--	3617 1 2-1--
29	63.1	64.5	1.5	0.17	0.09	20.01	2.1	2.60	2.71	--05--	3617 2 2-1--
30	64.5	65.4	0.8	0.09	0.04	20.01	3.1	2.62	2.68	--05--	3617 1 2-1--
31	65.4	66.3	0.9	20.01	20.01	20.01	1.8	2.61	2.61	--05--	3617 1 2-1--
--	66.3	70.0	3.7	--	--	--	--	--	--	--05--	7- - - - -

CORE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

HUSON'S OIL AND GAS COMPANY LIMITED

Plug No.	Interval Represented		Permeability (md)		Porosity %		Density		Residual Saturations (SPV)		Plan Description	
	Top	Base	Max	90° Vertical	%	Bulk	Grain	Oil	Water			
17	50.3	51.4	1.1	0.08	2.07	20.01	1.5	2.64	2.68	--05--	153--	361702-1--
18	51.4	52.8	1.4	0.06	20.01	20.01	1.6	2.64	2.68	--05--	6--	361702-1--
19	52.8	54.0	1.2	20.01	20.01	20.01	2.0	2.62	2.67	--05--	6--	361702-1--
20	54.0	55.2	1.2	0.13	0.09	20.01	1.2	2.65	2.68	--05--	63--	361702-1--
21	55.2	56.2	1.0	0.03	20.01	20.01	1.3	2.56	2.68	--05--	6--	361702-1--
22	56.2	56.9	0.7	20.01	20.01	20.01	5.7	2.53	2.69	--05--	6--	361702-1--
23	56.9	57.5	0.6	0.05	20.01	20.01	2.5	2.59	2.68	--05--	63--	361702-1--
24	57.5	58.6	1.3	20.01	20.01	20.01	2.3	2.64	2.70	--05--	63--	361702-1--
25	58.6	60.1	1.3	0.40	20.01	0.09	3.2	2.63	2.71	--05--	63--	361702-1--
26	60.1	61.1	1.0	0.09	20.01	20.01	2.1	2.65	2.71	--05--	63--	361702-1--
27	61.1	62.2	1.1	K	20.01	K	2.8	2.61	2.61	--05--	63--	361702-1--
28	62.2	63.1	0.9	K	20.01	K	4.6	2.50	2.72	--05--	63--	361702-1--
29	63.1	64.6	1.5	0.17	0.01	20.01	2.1	2.64	2.71	--05--	68--	361702-1--
30	64.6	65.4	0.3	0.09	0.04	20.01	2.1	2.63	2.68	--05--	63--	361702-1--
31	65.4	66.3	0.9	20.01	20.01	20.01	1.8	2.64	2.67	--05--	63--	361702-1--
--	66.3	70.0	3.7	--	--	--	--	--	--	--05--	7--	--

CORRELATION

1954's *and* 1955's *and*

FILED 117 01 12 30 P.M.

FILE: 027-1-508

WILLIAM CARPENTER RICHARDSON

DATE: 01-27-64

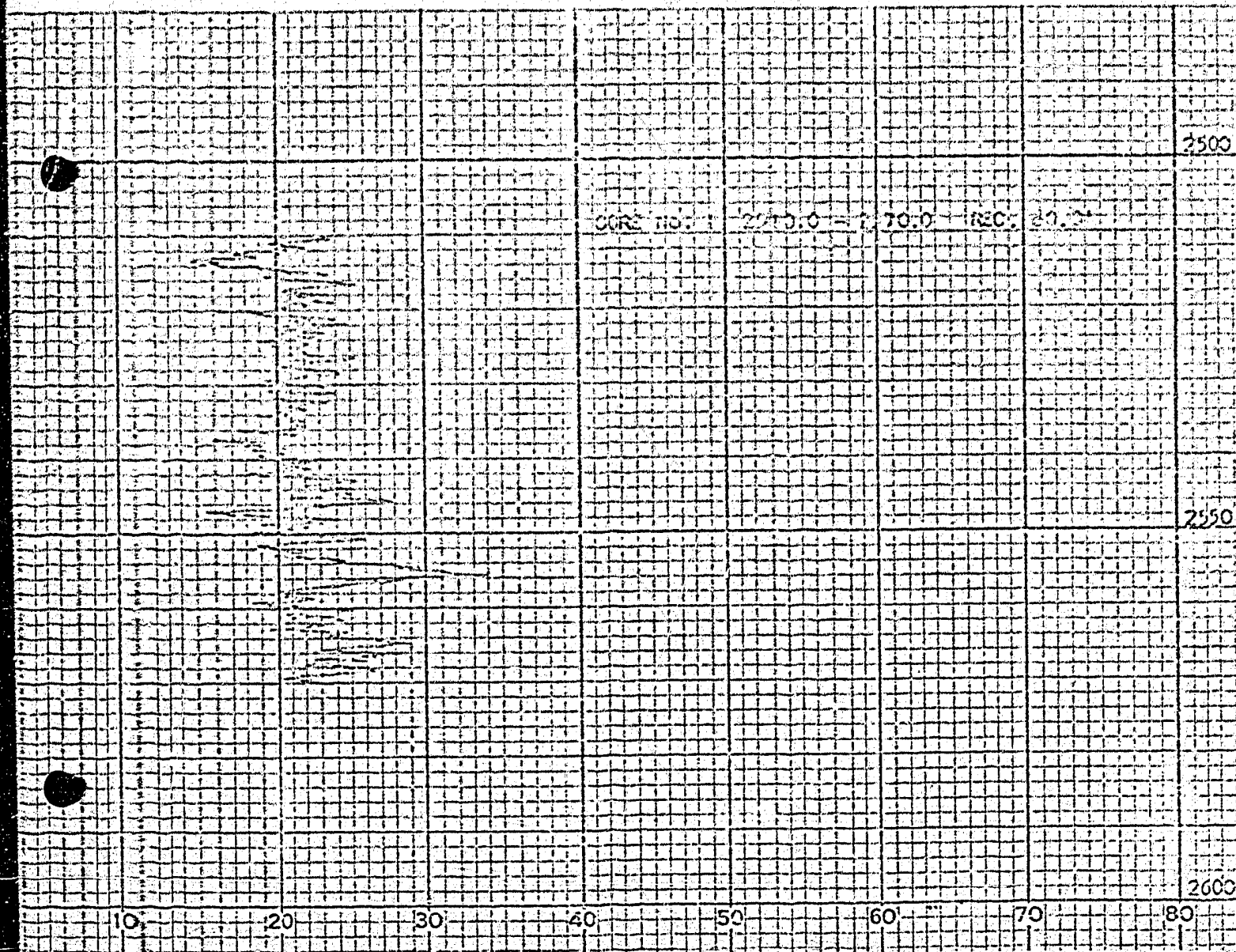
LOCATION: Loc. 60 at 190.20" H.L.

PROV 1334

ELEV. _____

These analyses, dependent on measurements on sound as a phenomenon and a strategy revealed by the change in pitch and the above mentioned and considered on the system to exist. The representation of systems required conceptual the best interest of (some) phenomena. Canada 8/11 last summer and produced accordingly but from literature... Canada 8/11 and a others and system... sound on structures and such a... traditional or non-traditional, on the production, process creation, or production of the 8/11 and a others system not as well as... sound and such system a need of other system.

VERTICAL SCALE: 5" = 100' SEIS 2500 CPM



CHEMICAL ANALYSIS

for

HUDSON'S BAY OIL AND GAS COMPANY LIMITED

NE Cameron River J-12
Northwest Territories



CORE LABORATORIES - CAMERON LTD.
PETROLEUM RESERVOIR ENGINEERING



GAS ANALYSIS

Company Hudson's Bay Oil and Gas Company Limited Page 1 of 1
Well 1F Cameron River J-12 File CRH-1-1321
Field Cameron River, Northwest Territories Analyst GV
Location J-12-60° 10' N. 117° 00' W. Elevation: K.B. 1046' Grd. 1022'
Formation Slave Point-Eischna River Depth 2700' - 3185'
Sampled from DST No. 6 by H. F. Walker, Hudson's Bay Oil and Gas
Sampling pressure 30 psig Sampling temp. °F Ambient temp. °F
Date Sampled Feb. 11, 1969 Date received Feb. 17, 1969 Date analyzed Feb. 18, 1969
Container pressure 30 Mud Gel Chem Water cushion 0
Gas to surface 60 mins. @ 10,000 Mcf/d.
Recovery of flowrate: Recovered 270' mud, 180' sulphurous water-cut mud.

COMPONENT	MOLE %	IMP. GPM @ 14.65 psia and 60°F	SPECIFIC GRAVITY
Hydrogen			Calculated <u>0.655</u> Measured <u> </u>
Helium	<u>0.28</u>		
Nitrogen	<u>7.16</u>		GROSS B.T.U. per SCF <u>1045.9</u>
Carbon Dioxide	<u>0.09</u>		Calculated @ 14.65 psia, 60°F, moisture and acid - gas free.
Hydrogen Sulphide			
Methane	<u>83.58</u>		VAPOR PRESSURE of PENTANES PLUS
Ethane	<u>4.92</u>		(calculated) <u>13.3 Psia @ 100°F</u>
Propane	<u>2.42</u>	<u>0.552</u>	
Iso Butane	<u>0.34</u>	<u>0.092</u>	Critical Pressure <u>655.6</u> psia
Normal Butane	<u>0.70</u>	<u>0.183</u>	Critical Temperature <u>359.2</u> °R
Iso Pentane	<u>0.17</u>	<u>0.052</u>	
Normal Pentane	<u>0.17</u>	<u>0.051</u>	Remarks <u>Packer set in casing.</u>
Hexanes	<u>0.10</u>	<u>0.034</u>	<u>Casing to 2847'</u>
Heptanes Plus	<u>0.07</u>	<u>0.026</u>	
Total	<u>100.00</u>	<u>0.990</u>	
Pentanes Plus		<u>0.163</u>	



CORE LABORATORIES - CANADA LTD.
PETROLEUM RESEARCH ENGINEERING



GAS ANALYSIS

Company Hudson's Bay Oil and Gas Company Limited Page 1 of 6
Well 101 Cameron River J-12 File 011-1-1371
Field Wildcat - Cameron River Area, N.M.T. Analyst P.S.
60 01'30.20" N.L.
Location 117 02'22.56" W.L. Elevation: K.B. 1021' Grid 1022'
Formation Slave Point Depth 2485' - 2510'
Sampled from DST No. 1 by Eastland Testers
Sampling pressure 25 psig Sampling temp. °F Ambient temp. °F
Date sampled Jan. 25, 1969 Date received Date analyzed
Container pressure 70 Mud Water cushion
Recovery or flowrate: Gas @ 75,000 Mcf/d

COMPONENT	MOLE %	IMP. GPM @ 14.65 psia and 60°F	SPECIFIC GRAVITY
Hydrogen	-		Calculated <u>0.611</u> Measured <u>-</u>
Helium	<u>0.10</u>		
Nitrogen	<u>3.72</u>		GROSS B.T.U. per SCF <u>1009.3</u>
Carbon Dioxide	<u>1.85</u>		Calculated @ 14.65 psia, 60°F, moisture and acid - gas free.
Hydrogen Sulphide	<u>0.03</u>		
Methane	<u>91.44</u>		VAPOR PRESSURE of PENTANES PLUS
Ethane	<u>1.59</u>		(calculated) <u>12.2</u>
Propane	<u>0.72</u>	<u>0.164</u>	
Iso Butane	<u>0.13</u>	<u>0.035</u>	Critical Pressure <u>672.3</u> psia
Normal Butane	<u>0.21</u>	<u>0.055</u>	Critical Temperature <u>351.4</u> °R
Iso Pentane	<u>0.07</u>	<u>0.022</u>	
Normal Pentane	<u>0.05</u>	<u>0.015</u>	Remarks <u> </u>
Hexanes	<u>0.05</u>	<u>0.017</u>	
Heptanes Plus	<u>0.04</u>	<u>0.015</u>	
Total	<u>100.00</u>	<u>0.323</u>	
Pentanes Plus		<u>0.069</u>	



CORE LABORATORIES - CANADA LTD.
PETROLEUM RESEARCH ENGINEERING



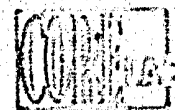
GAS ANALYSIS

Company Hudson's Bay Oil and Gas Company Limited Page 2 of 6
Well 121 Cameron River 3-12 File CCH-1-1371
Field Wildcat, Cameron River Area, R.M.T. Analyst PS
60 01'30.20" N.L.
Location 117 02'22.56" N.L. Elevation: K.B. 1034' Grd. 1022'
Formation Slave Point Depth 2503' - 2570'
Sampled from DST No. 2 by Eastland Testers
Sampling pressure 40 psig Sampling temp. °F Ambient temp. °F
Date sampled January 26, 1969 Date received Date analyzed
Container pressure 50 Mud Water cushion 0
Recovery or flowrate:

COMPONENT	MOLE %	IMP. GPM @ 14.65 psia and 60°F	SPECIFIC GRAVITY
Hydrogen	<u> </u>		Calculated <u>0.614</u> Measured <u> </u>
Helium	<u>0.11</u>		
Nitrogen	<u>3.25</u>		GROSS B.T.U. per SCF <u>1009.5</u>
Carbon Dioxide	<u>1.78</u>		Calculated @ 14.65 psia, 60°F, moisture and acid - gas free.
Hydrogen Sulphide	<u>1.02</u>		
Methane	<u>21.05</u>		VAPOR PRESSURE of PENTANES PLUS
Ethane	<u>1.53</u>		(calculated) <u>14.8</u>
Propane	<u>0.73</u>	<u>0.166</u>	
Iso Butane	<u>0.13</u>	<u>0.035</u>	Critical Pressure <u>679.4</u> psia
Normal Butane	<u>0.21</u>	<u>0.055</u>	Critical Temperature <u>354.9</u> °R
Iso Pentane	<u>0.08</u>	<u>0.024</u>	
Normal Pentane	<u>0.05</u>	<u>0.018</u>	Remarks <u> </u>
Hexanes	<u>0.04</u>	<u>0.014</u>	
Heptanes Plus	<u>0.01</u>	<u>0.004</u>	
Total	<u>100.00</u>	<u>0.316</u>	
Pentanes Plus		<u>0.060</u>	



CORE LABORATORIES - CANADA LTD.
PETROLEUM RESEARCH ENGINEERING



CAS ANALYSIS

Company Hudson's Bay Oil and Gas Company Limited Page 3 of 6
Well H-1 Cameron River J-12 File CEH-1-1371
Field Wildcat, Cameron River Area, N.W.T. Analysis CV
60 01' 20.20" N.L.
Location 117 02' 22.55" W.L. Elevation: K.P. 1034' Grd. 1022'
Formation Picacho Depth 2614' - 2850'
Sampled from DST No. 3 by Eastland Testers
Sampling pressure 90 psig Sampling temp. °F Ambient temp. °F
Date sampled Feb. 3, 1969 Date received Feb. 5, 1969 Date analyzed Feb. 5, 1969
Container pressure 90 Mud Water cushion 0
Recovery or flowrate: Gas @ 887,000 Mcf/d

COMPONENT	MOLE %	ILAP. GPM @ 14.65 psia and 60°F	SPECIFIC GRAVITY
Hydrogen	-		Calculated <u>0.616</u> Measured <u>-</u>
Helium	<u>0.05</u>		
Nitrogen	<u>1.35</u>		GROSS B.T.U. per SCF <u>1077.9</u>
Carbon Dioxide	<u>0.33</u>		Calculated @ 14.65 psia, 60°F, moisture and acid - gas free.
Hydrogen Sulphide	-		
Methane	<u>91.95</u>		VAPOR PRESSURE of PENTANES PLUS
Ethane	<u>3.37</u>		(calculated) <u>15.0</u>
Propane	<u>1.70</u>	<u>0.387</u>	
Iso Butane	<u>0.29</u>	<u>0.079</u>	Critical Pressure <u>670.0</u> psia
Normal Butane	<u>0.55</u>	<u>0.144</u>	Critical Temperature <u>360.8</u> °R
Iso Pentane	<u>0.16</u>	<u>0.048</u>	
Normal Pentane	<u>0.16</u>	<u>0.048</u>	Remarks <u> </u>
Hexanes	<u>0.06</u>	<u>0.020</u>	
Heptanes Plus	<u>0.03</u>	<u>0.011</u>	
Total	<u>100.00</u>	<u>0.593</u>	

COPE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

ANALYSIS "Mud Filtrate"

Company Hudson's Bay Page 4 of 6
Oil and Gas Company Limited
Well HD Cameron River J-12 File CBH-1-1371
Field Wildcat, Cameron River Area, N.M.T. Date February 11, 1969
Location 60 01'30.20" N.L.
117 02'22.55" W.L. Analysts A.M.

SAMPLING CONDITIONS

Formation Slave Point Depths 2485'-2510'
Sampled from DST #1 By 01 Eastland Testers
Date Sampled Jan. 25/69 Date Received Feb. 6 Date Analyzed Feb. 7/69
Pressure _____ psig. Temperature _____ °F Atmospheric Temp. _____ °F
DST Recovery _____
or Flowrate Gas @ 75,000 Mcf/d

Chloride - 35 mg/liter

Resistivity - 1.85 Ohm-meters @ 72°F

CORE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

ANALYSIS "Water"

Company Hudson's Bay Page 5 of 6
Oil and Gas Company Limited
Well NO Cameron River J-12 File CEH-1-1371
Field Wildcat, Cameron River Area, N.W.T. Date February 11, 1969
60 01'30.20" N.L.
Location 117 02'22.56" W.L. Analysts A.M.

SAMPLING CONDITIONS

Formation Slave Point Depths 2503'-2570'
Sampled from DST #2 - Drill Collars By _____ of Eastland Testers
Date Sampled Jan. 26/69 Date Received Feb. 6 Date Analyzed Feb. 7/69
Pressure _____ psig. Temperature _____ °F Atmospheric Temp. _____ °F
DST Recovery
or Flowrate _____

Chloride - 311 mg/liter

Resistivity - 1.14 Ohm-meters @ 72 °F

COPE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

ANALYSIS "Water"
Company Hudson's Bay Oil and Gas Company Limited Page 6 of 6
Well HD Cameron River J-12 File CEH-1-1371
Field Wildcat, Cameron River Area, N.W.T. Date February 11, 1969
Location 60 01'30.20" N.L.
117 02'22.56" W.L. Analysts A.M.

SAMPLING CONDITIONS

Formation Bistcho Depths 2614'-2850'
Sampled from DST #3 By of Eastland Testers
Date Sampled Feb. 3/69 Date Received Feb. 6 Date Analyzed Feb. 7/69
Pressure psig. Temperature °F Atmospheric Temp. °F
DST Recovery
or Flowrate Gas @ 887,000 Mcf/d

Chloride - 104 mg/liter

Resistivity - 0.57 Ohm-meters @ 72°F

T.G. EASTLAND—testers Ltd.

R.R. No. 6, NORTH EDMONTON, ALBERTA

Test No. _____
Date Jan. 23, 1960
Ticket No. 1355

SERVICE REPORT

OPERATOR Hudson's Bay Oil and Gas Co. Ltd.
CONTRACTOR & RIG No. Brinkerhoff Rig #39

WELL NAME HB Cameron River J-2

AREA N.W.T. L.S.D.

TOOL PUSH D. Snyder

WELL REPRESENTATIVE

W. Walker

Date & time requested _____
Call Jan. 23 7:pm
Start in 2:30pm On Bott. 9:50pm
Pull Loose 7:45pm Out Hole

TESTING DATA

Zone Tested Save Point
Interval 2485 to 2510' T.D. 2510'
Int. Casing: Size _____ wgt. _____ grade _____
Feet of Main Hole 2510' Diam. 7.7/8"
Feet of Rat Hole _____ Diam. _____
Type of Test Bottom Hole
Rubbers: No. Two O.D. 7"
Type of Packers Conu
Drill Pipe: Size - Thread 4 1/2 FH
Drill Collars: I.D. _____ O.D. 6"
No. Ft. Collars 271.13 D.P. 2214.28
Pl. & Type Cushion _____
Was Tool Chased NO No. Ft. _____
Weight Set on Packers 30,000
Did Fluid Drop NO No. Ft. _____
Describe _____

DESCRIPTION OF BLOW DURING TEST
Good initial air blow. Gas to surface in 1 min. staying steady through out test.

Blow Measured with: Pilot Tube ☐
Fluid Used: Water ☐ Mercury ☐ Side Static ☐
Flow Prover ☐ Gauge ☐ Size _____ lbs.

Time	Choke	Reading	MCF/Day
15 min		4"	70
30		5"	75
45		6"	75
60		5"	75

FLUID RECOVERY

Pipe Collars 60' Total 60'
Mud 60' Oil _____ Water _____
Describe Fluid Drilling mud.

TOOL SEQUENCE & EQUIP. USED

Tool	Length	O.D.
Floor Manifold		
Meter Run		
Safety Head		
Pump Out Sub	97	
Tight Hole Tool		
Test Assembly	8.24	
Sampler	5.5	
Jars	2.77	
Safety Jumper		
Straddle By-pass	5.43	
Packer	4.68	
Packer	28.43	
TOTAL		
C.O.S.	1.58	
Dble pin	.79	
C.O.S.	.84	
Eg. Valve	2.80	
P. Bottom	.88	
B.C.	9.56	
Tail pipe	13.00	
Bullnose	1.55	
TOTAL	59.43	

Preset _____ min. Tool opened 4:50 a.m./p.m.
Pretlow 3 min. Init. Shut-in 30 min.
Flowed 50 min. Final Shut-in 60 min.
Pull Loose _____ lbs. Swabbing? NO
Drilling Fluid Type _____
Visc. 30 Wgt. 12.0WJ. F.C.

Sampler Drained: On Location ☐ Laboratory ☐
Sampler Press. _____ lbs.
Bottom Hole Temp. _____ °F
Salinity of Recovery _____ P.P.M.
Salinity of Mud Filtrate _____ P.P.M.

FIELD	CORRECTED READINGS
Pressure Element No. 3077N	3077N 3078N
Element Capacity (psig) 4250	4250 4400
Clock Speed (Hrs.) 12	12 12
Depth of Bellows 2491'	2491'
Position (Inside - Outside) Inside	
Initial Hydrostatic 1632	1622 Clock
Pretlow Pressure 102	Stopped.
Initial Shut-In 1224	No chart.
First Flow—Choke Size 34	46
Second Shut-In	
Second Flow—Choke Size 68	82
Final Shut-In 1224	1239
Final Hydrostatic 1574	1607

1. Cross-over sub to bottom of top rubbers
 2. Bottom of top rubbers to top of lower
 3. Top of lower to bottom of lower rubbers
 4. Bottom of lower rubbers to Total Depth
 5. Bottom of top rubbers to Total Depth
- Total overall length of test assembly _____
(Delete measurement No. 5 if Straddle)
(Delete No. 2 - 3 - 4 if Std. bottom hole)
Total amount of customer's anchor _____
Damaged Rubbers and Sizes _____
No. Samplers Retained _____ No. of Reports Required 5

REMARKS:

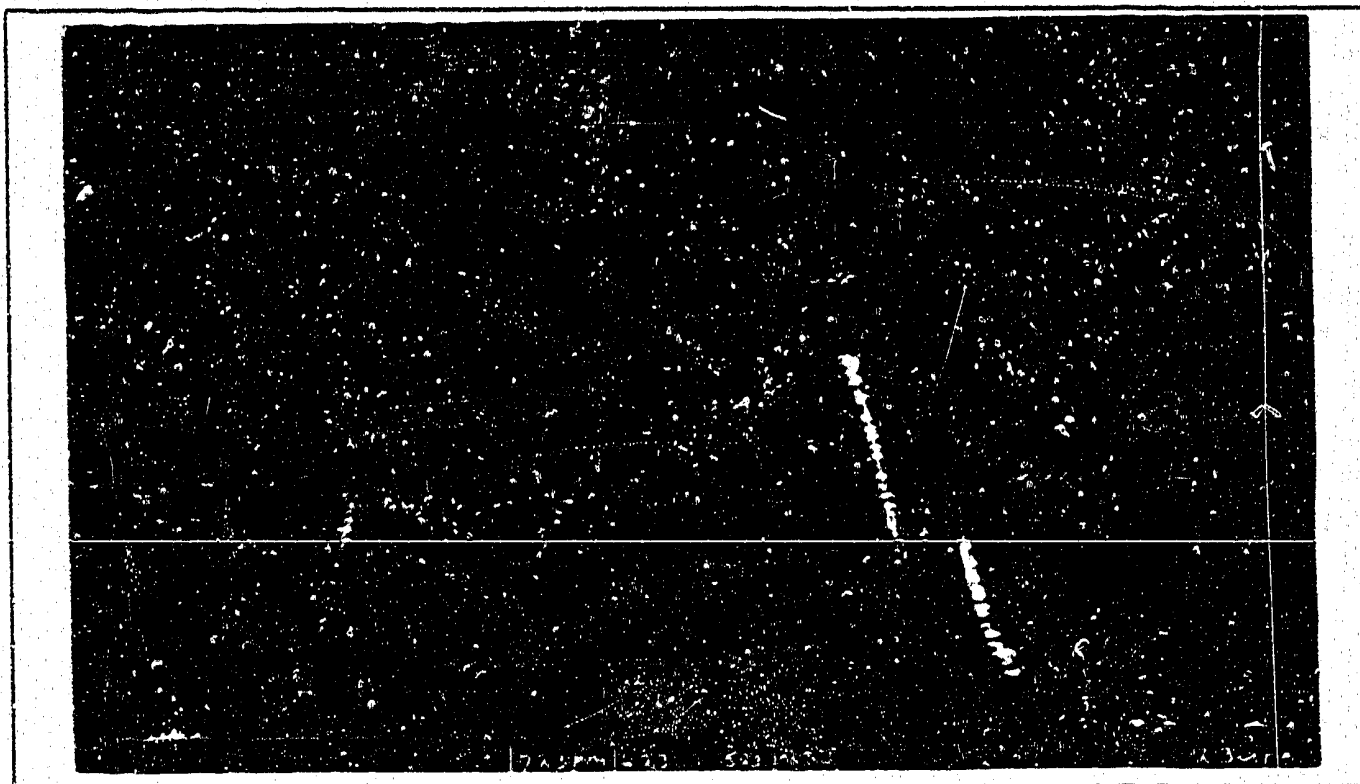
APPROVED BY W. Walker

TEST: Successful ☒ Mis-Run OUR OPERATOR William Harder

T.G. EASTLAND—testers ltd.

TEST No. One
Date Jan. 25, 1969
Ticket No. 1355

WELL NAME HB CAMERON RIVER J12
RECORDER No. 3077N ELEMENT RANGE 4250 P.S.I. CHART SPEED 12 HRS. RECORDER DEPTH 2491'



TIME

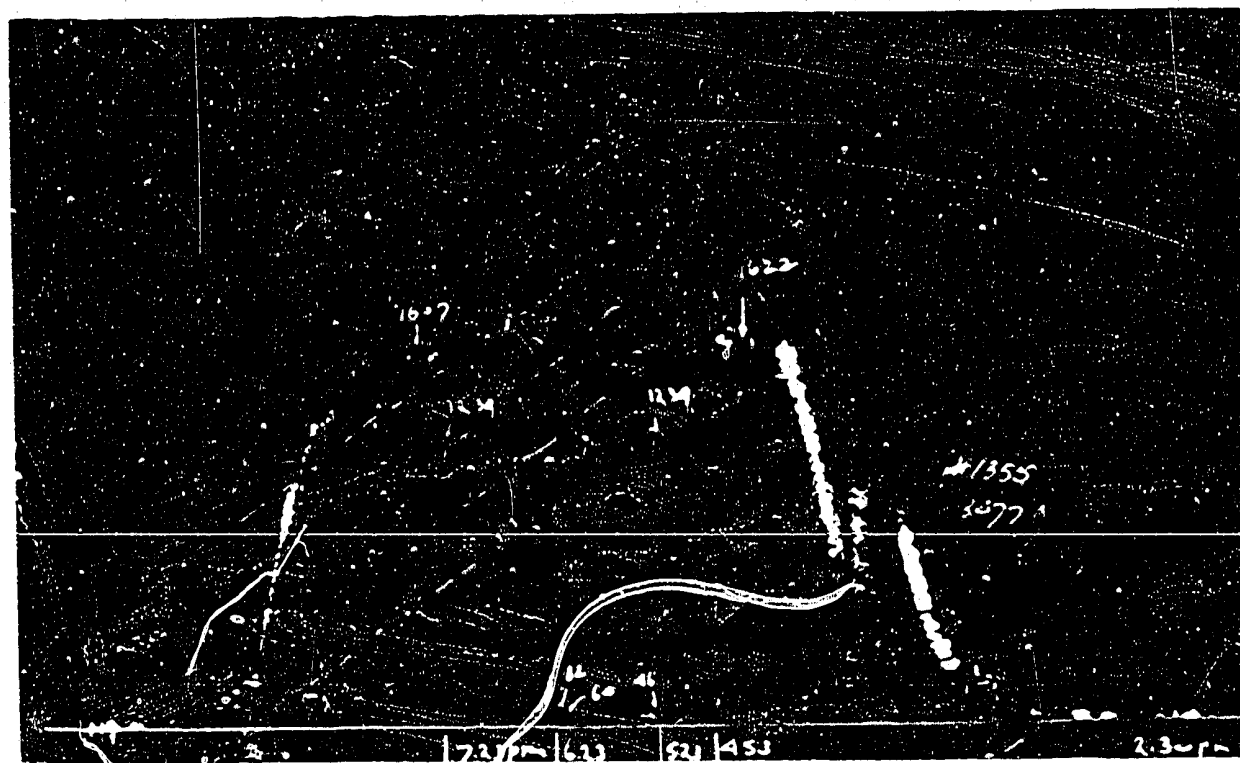
RECORDER No. 3078N ELEMENT RANGE 4400 P.S.I. CHART SPEED 12 HRS. RECORDER DEPTH

CLOCK STOPPED.

NO CHART.

TIME

I.G. EASTLAND *testers Ltd.*



T.G. EASTLAND

testers Ltd.

R.R. No. 8, NORTH EDMONTON, ALBERTA

TEST No. One

Date Jan. 20, 1949

Ticket No. 1355

DRILL STEM TEST PRESSURE REPORT

WELL NAME HP CAMERON RIVER L.D.

INTERVAL 2485' - 2510' FORMATION B.H. TEMP. 7

GAUGE No. 3077N DEPTH OF ELEMENT 2491' CALIBRATION EQUATION P = 1006.01 - 18.02

	Time	T Mins.	Pressure psig
Initial Hydrostatic			1622
Initial Shut-in	4:53pm	0	73
	4:59	6	910
	5:05	12	1198
	5:11	18	1236
	5:17	24	1239
	5:23	30	1239
Flow Pressure		F1	46
		F2	64
		F3	82
Final Shut-in	6:23pm	0	82
	6:29	6	1066
	6:35	12	1223
	6:41	18	1233
	6:47	24	1235
	6:53	30	1236
	6:59	36	1237
	7:05	42	1238
	7:11	48	1238
	7:17	54	1239
	7:23	60	1239
Final Hydrostatic			1607

T.G. EASTLAND — testers Ltd.

R.R. No. 6, NORTH EDMONTON, ALBERTA

Test No. _____
Date Jan. 20, 1969
Ticket No. 1556

SERVICE REPORT

WELL NAME HB Cameron River #12 OPERATOR Hudson's Bay Oil and Gas Co. Ltd.
CONTRACTOR & RIG No. Brinkerhoff Rig #395

AREA N.W.T. LSD
TOOL PUSH D. Snymiller WELL REPRESENTATIVE W. Walker

Date & time requested		DESCRIPTION OF BLOW DURING TEST Small air blow. Gas to surface in 20 min. Small blow through outflow.	TOOL SEQUENCE & EQUIP. USED		
Call	Arr.		Tools	Length	O.D.
Start in 4:30pm	On Box 8:30pm		Floor Manifold		
Pull Loose	Out Hole		Meter Run		
TESTING DATA			Safety Head		
Zone Tested			Pump Out Sub	.97	
Interval 2503' to 2570' T.D.			Tight Hole Tool		
Int. Casing: Size wgt. grade		Blow Measured with: Plot Tube ☐	Test Assembly	8.29	
Feet of Main Hole 2510 Diam 7 7/8"		Fluid Used: Water ☐ Mercury ☐ Side Static ☐	Sampler	7.15	
Feet of Rat Hole 60 Diam 6 3/16"		Flow Prover ☐ Gauge ☐ Size _____ lbs.	Jars	1.77	
Type of Test Bottom Hole			Safety Joint	5.42	
Rubbers: No. Two O.D. 7"			Straddle By-pass	2.88	
Type of Packers Conv.			Packer	28.42	
Drill Pipe: Size - Thread 4 1/2 FH			TOTAL	9.46	
Drill Collars: I.D. O.D. 6"			B.C.	.88	
No. Ft. Collars 271.13 D.P. 2271			Packer C.	30.95	
Ft. & Type Cushion			D.P.	1.53	
Was Tool Chased NO No. Ft.		FLUID RECOVERY	C.O.S.	23.00	
Weight Set on Packers 30,000		Pipe Collars Total	C.O.S.	.84	
Did Fluid Drop No. Ft.		Mud Oil Water	C.O.S.	1.53	
Describe		Describe Fluids: Gasified mud.	Dble pin	.79	
			Eq. Valve	2.80	
			TOTAL	102.08	
Preset _____ min. Tool opened 8:30 PM/p.m.		Sampler Drained: On Location ☐ Laboratory ☐			
Preflow 3 min. Init. Shut-in 30 min.		Sampler Press. _____ lbs.			
Flowed 240 min. Final Shut-in 60 min.		Bottom Hole Temp. _____ °F			
Pull Loose _____ lbs. Swabbing?		Salinity of Recovery _____ P.P.M.			
Drilling Fluid Type		Salinity of Mud Filtrate _____ P.P.M.			
Visc. 60 Wgt. 12.0 W.L. F.C.					

	FIELD	CORRECTED READINGS	
Pressure Element No.	3077N	3077N	3078N
Element Capacity (psig)	4250	4250	4400
Clock Speed (Hrs.)	12	12	12
Depth of Bellows	2507'	2507'	2512
Position (Inside - Outside)	Inside		
Initial Hydrostatic	1632	1635	1637
Preflow Pressure	68		
Initial Shut-In	1088	1129	1131
First Flow—Choke Size	34	31	33
Second Shut-In			
Second Flow—Choke Size	68	61	63
Final Shut-In	1224	1220	1210
Final Hydrostatic	1632	--	--

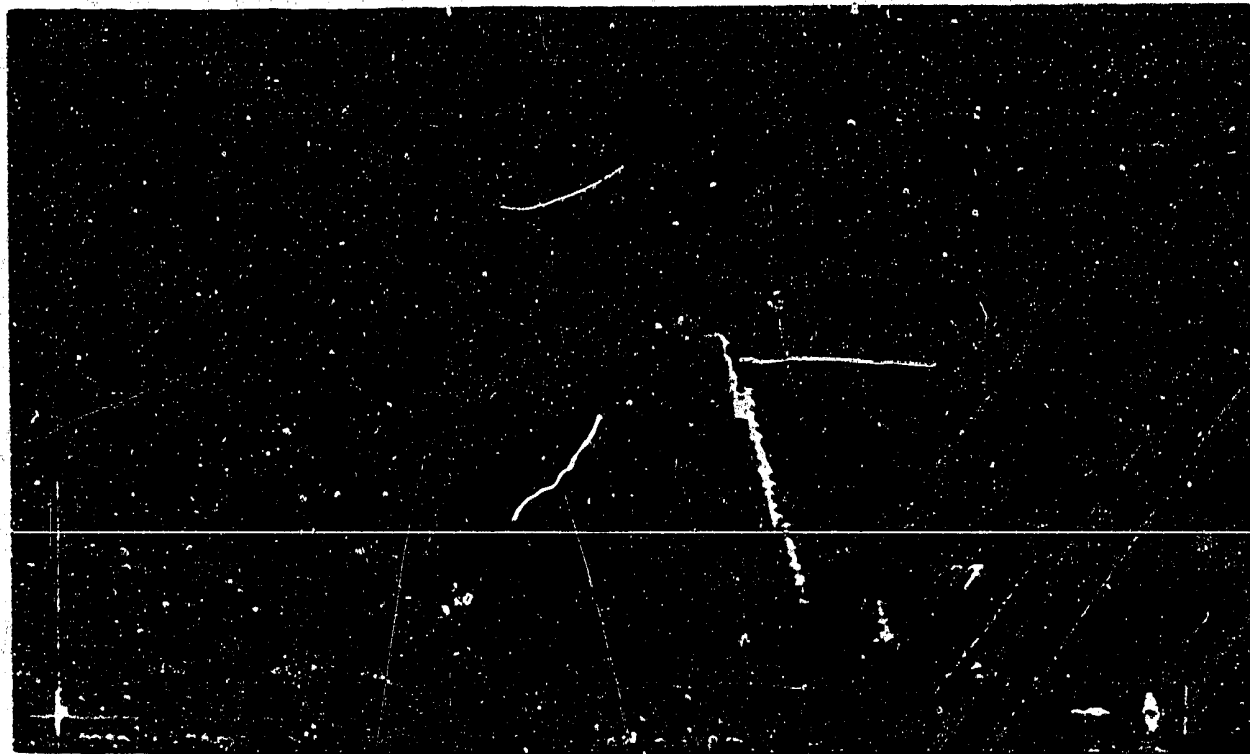
TOTAL	
1. Cross-over sub to bottom of top rubbers	
2. Bottom of top rubbers to top of lower	
3. Top of lower to bottom of lower rubbers	
4. Bottom of lower rubbers to Total Depth	
5. Bottom of top rubbers to Total Depth	
Total overall length of test assembly	
(Delete measurement No. 5 if Straddle)	
(Delete No. 2 - 3 - 4 if Std. bottom hole)	
Total amount of customer's anchor	
Damaged Rubbers and Sizes	
No. Samplers Retained	No. of Reports Required 5

REMARKS: _____
APPROVED BY W. Walker TEST: Successful ☒ Mis-Run OUR OPERATOR William Harder.

T.G. EASTLAND—testers Ltd.

TEST No. Two
Date Jan. 26, 1959
Ticket No. 1356

WELL NAME HB CAMERON RIVER J12
RECORDER No. 3077N ELEMENT RANGE 4250 P.S.I. CHART SPEED 12 HRS. RECORDER DEPTH 2507'



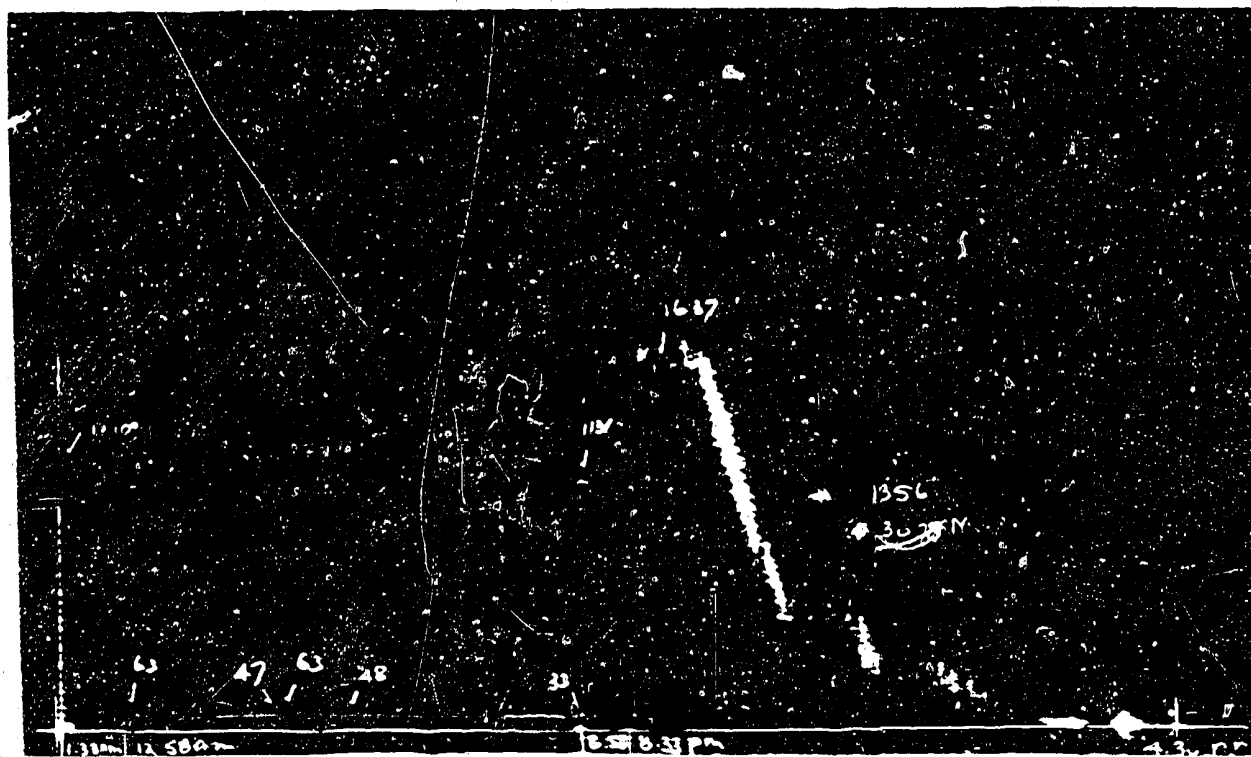
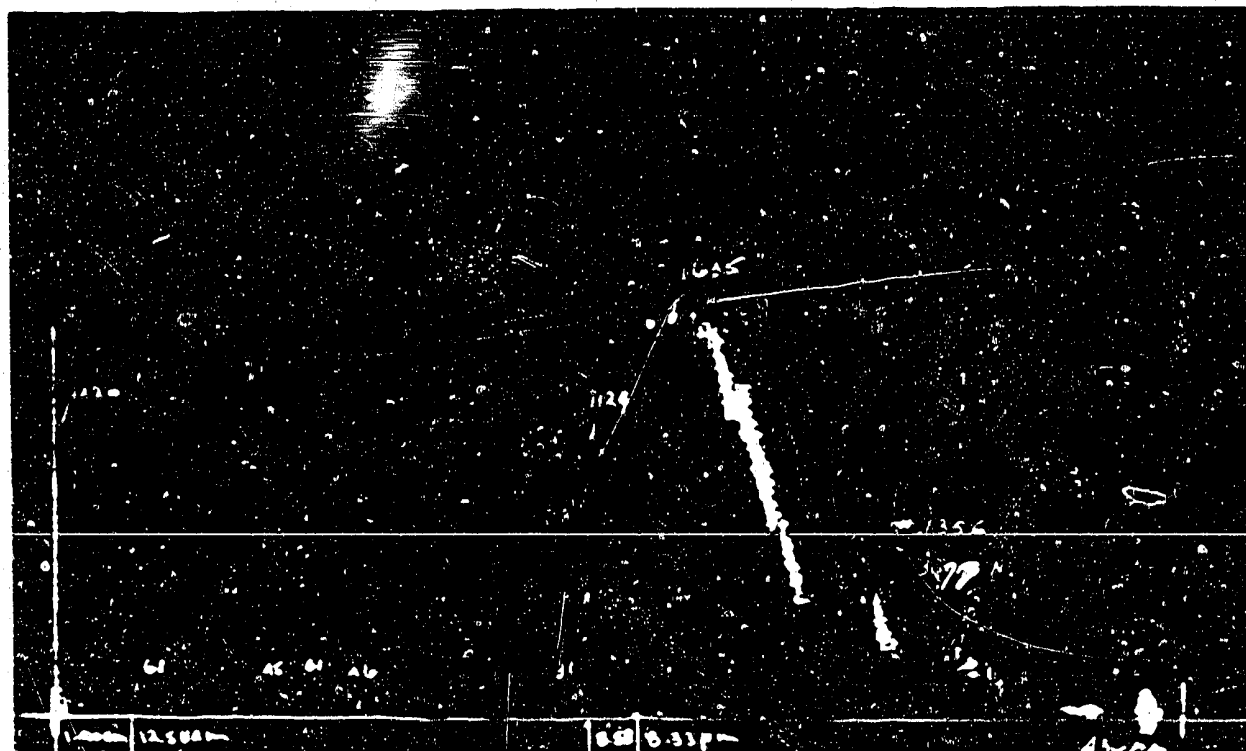
TIME

RECORDER No. 3078N ELEMENT RANGE 4400 P.S.I. CHART SPEED 12 HRS. RECORDER DEPTH 2512'



TIME

T.G. EASTLAND *testers ltd.*



TIME

T.G. EASTLAND—testers Ltd.

R.R. No. 8, NORTH EDMONTON, ALBERTA

TEST No. _____
Date Jan. 20, 1969
Ticket No. 1326

DRILL STEM TEST PRESSURE REPORT

WELL NAME HB CAMERON RIVER J12 L.S.D. _____
INTERVAL 2503' - 2570' FORMATION _____ B.H. TEMP. °F _____
GAUGE No. 3077N DEPTH OF ELEMENT 2507' CALIBRATION EQUATION $P_c = 1066.01 + 38.02$

	Time	T Mins.	Pressure psig
Initial Hydrostatic			1635
Initial Shut-in	8:33pm	0	59
	8:39	6	341
	8:45	12	619
	8:51	18	892
	8:57	24	1106
	8:58	25	1129
Flow Pressure		F1	31
		F2	46
		F3	61
		F4	45
		F5	61
Final Shut-in	12:58 am	0	61
	1:04	6	443
	1:10	12	745
	1:16	18	968
	1:22	24	1135
	1:28	30	1199
	1:34	36	1217
	1:40	42	1220
Final Hydrostatic			---

T.G. EASTLAND—testers Ltd.

R.R. No. 6, NORTH EDMONTON, ALBERTA

Test No. _____

Date Feb. 3, 1968

Ticket No. 1357

SERVICE REPORT

OPERATOR Hudson's Bay Oil and Gas Co. Ltd.

WELL NAME HB Cameron River #12

CONTRACTOR & RIG No. Brinkerhoff Drig.

AREA N.W.T. L.S.D.

TOOL PUSH D. Snymiller

WELL REPRESENTATIVE

W. Walker

Date & time requested _____
Call _____ Arr. _____
Start in 2:00pm On Bott. 3:00pm
Pull Loose _____ Out Hole _____

TESTING DATA

Zone Tested _____
Interval 2850 to 2850 T.D. 2850
Int. Casing: Size _____ wgt _____ grade _____
Feet of Main Hole 2850 Diam. 7 7/8"
Feet of Rat Hole _____ Diam. _____
Type of Test Bottom Hole
Rubbers: No. Two O.D. 7"
Type of Packers Conv.
Drill Pipe: Size Thread 4 1/2"
Drill Collars: I.D. _____ O.D. 6"
No. Ft. Collars 58 D.P. 2530
Ft. & Type Casing _____
Wax Tool Chased No. Ft. _____
Weight Set on Packers 20,000
Did Fluid Drop No. Ft. _____
Describe _____

DESCRIPTION OF BLOW DURING TEST
Good initial air blow. Gas to surface in 3 min. Mud spray for 60 min.

Blow Measured with: Pitot Tube ☐
Fluid Used: Water ☐ Mercury ☐ Side Static ☐
Flow Prover ☐ Gauge ☐ Size _____ lbs.

Time	Choke	Reading	MCF/Day
15min		2.1	517
30min		2.1	734
45min		3"	887
60min		3"	887

FLUID RECOVERY

Pipe _____ Collars 100' Total 100'
Mud 100' Oil _____ Water _____
Describe Fluids: Drilling mud

TOOL SEQUENCE & EQUIP. USED

Tools	Length	O.D.
Floor Manifold		
Meter Run		
Safety Head		
Pump Out Sub	97	
Tight Hole Tool		
Eq. Valve	2.80	
Test Assembly	8.24	
Sampler		
Jar	7.15	
Safety Joint	1.77	
Straddle By-pass		
Packer	5.42	
Packer	4.88	
TOTAL	31.23	
D.P.	79.00	
C.O.S.	.84	
B.N.	1.55	
C.O.S.	.85	
D.C.	187.98	
C.O.S.	.85	
T.P.	35.00	
B.C.	9.40	
Packer C.	.88	

Preset 3 min. Tool opened 3:45 a.m./p.m.
Pretlow 15 min. Init. Shut-in 15 min.
Flowed 30 min. Final Shut-in 60 min.
Pull Loose _____ lbs. Swabbing? no
Drilling Fluid Type _____
Visc. 799 Wgt. 13.1 W.L. _____ F.C. _____

Sampler Drained: On Location ☐ Laboratory ☐
Sampler Press. _____ lbs.
Bottom Hole Temp. _____ °F
Salinity of Recovery _____ P.P.M.
Salinity of Mud Filtrate _____ P.P.M.

	FIELD	CORRECTED READINGS
Pressure Element No.	3077N	3077N 3078N
Element Capacity (prig)	1250	1250 1400
Clock Speed (Hrs.)	12	12 12
Depth of Bellows	2614	2614 2619
Position (Inside - Outside)	inside	
Initial Hydrostatic	2614	1762 1764
Pretlow Pressure	344	
Initial Shut-In	1496	1489 1497
First Flow—Choke Size	204	188 190
Second Shut-In		
Second Flow—Choke Size	272	666 668
Final Shut-In	1496	1493 1495
Final Hydrostatic	1700	1753 1755

TOTAL

1. Cross-over inh to bottom of top rubbers
 2. Bottom of top rubbers to top of lower
 3. Top of lower to bottom of lower rubbers
 4. Bottom of lower rubbers to Total Depth
 5. Bottom of top rubbers to Total Depth
- Total overall length of test assembly _____
(Delete measurement No. 5 if Straddle)
(Delete No. 2 - 3 - 4 if Std. bottom hole)
Total amount of customer's anchor _____
Damaged Rubbers and Sizes _____
No. Samplers Retained _____ No. of Reports Required 5

REMARKS:

APPROVED BY W. Walker TEST: Successful ☒ Mis-Run OUR OPERATOR William Harder

T.G. EASTLAND-testers Ltd.

R.R. No. 6 NORTH EDMONTON, ALBERTA

Test No. _____
Date Feb. 3, 1969
Ticket No. 1367

SERVICE REPORT

OPERATOR Hudson's Bay Oil and Gas Co. Ltd.
CONTRACTOR & RIG No. Brinkerhoff Drig.

WELL NAME HB Cameron River J12

AREA N.W.T. LSD

TOOL PUSH D. Snyder Miller

WELL REPRESENTATIVE

W. Walker

Date & time requested

Call Arr. _____

Start in 2:00pm On Bott 3:00pm

Pull Loose Out Hole

TESTING DATA

Zone Tested

Interval 2114 to 2850 I.D. 2850

Int. Casing: Size _____ wgt. _____ grade _____

Feet of Main Hole 2850.1 Diam 7.7/8"

Feet of Rat Hole _____ Diam _____

Type of Test Bottom Hole

Rubbers: No. Two O.D. 7"

Type of Packers Conv.

Drill Pipe: Size - Thread 4 1/2" PH

Drill Collars: I.D. _____ O.D. 6"

No. Ft. Collars 58 D.P. 2530

Ft. & Type Cushion

Was Tool Chased No. Ft. _____

Weight Set on Packers 20,000

Did Fluid Drop No. Ft. _____

Describe _____

Preset 3 min. Tool opened 3:45 a.m./p.m.

Preflow 15 min. Init. Shut-in 15 min.

Flowed 30 min. Final Shut-in 60 min.

Pull Loose lbs. Swabbing? no

Drilling Fluid Type

Vbc 75 Wgt 13.1 W.L. F.C.

DESCRIPTION OF BLOW DURING TEST

Good initial air blow. Gas to surface in 3 min. Mud spray for 60 min.

Blow Measured with: Pitot Tube ☐

Fluid Used: Water ☐ Mercury ☐ Side Static ☐

Flow Prover ☐ Gauge ☐ Size _____ lbs.

Time	Choke	Reading	MCF/Day
15min		1"	517
30min		2"	734
45min		3"	887
60min		3"	887

FLUID RECOVERY

Pipe _____ Collars 100' Total 100'

Mud 100' Oil _____ Water _____

Describe Fluids: Drilling mud

Sampler Drained: On Location ☐ Laboratory ☐

Sampler Press _____ lbs.

Bottom Hole Temp. _____ °F

Salinity of Recovery _____ P.P.M.

Salinity of Mud Filtrate _____ P.P.M.

TOOL SEQUENCE & EQUIP. USED

Tools Length O.D.

Floor Manifold

Meter Run

Safety Head

Pump Out Sub 97

Tight Hole Tool

Eq. Valve 2.50

Test Assembly 8.24

Sampler

Jars 7.15

Safety Joint 1.77

Straddle By-pass

Packer 5.42

Packer 4.88

TOTAL 31.23

D.P. 79.00

C.O.S. .85

B.N. 1.55

C.O.S. .85

D.C. 187.98

C.O.S. .85

T.P. 35.00

B.C. 9.40

Packer C. .88

TOTAL

TOTAL

1. Cross-over sub to bottom of top rubbers
 2. Bottom of top rubbers to top of lower
 3. Top of lower to bottom of lower rubbers
 4. Bottom of lower rubbers to Total Depth
 5. Bottom of top rubbers to Total Depth
- Total overall length of test assembly _____
- (Delete measurement No. 5 if Straddle)
- (Delete No. 2 - 3 - 4 if Std. bottom hole)
- Total amount of customer's anchor _____
- Damaged Rubbers and Sizes _____
- No. Samplers Retained _____ No. of Reports Required 5

	FIELD	CORRECTED READINGS
Pressure Element No.	3077N	3077N 3078N
Element Capacity (psig)	4250	4250 4400
Clock Speed (Hrs.)	12	12 12
Depth of Bellows	2614'	2614 2619'
Position (Inside - Outside)	Inside	
Initial Hydrostatic	2614	1762 1764
Preflow Pressure	344	
Initial Shut-In	1496	1489 1491
First Flow Choke Size	20 1/2	188 190
Second Shut-In		
Second Flow Choke Size	272	666 668
Final Shut-In	1496	1493 1495
Final Hydrostatic	1700	1753 1755

REMARKS

APPROVED BY W. Walker

TEST: Successful ☒ Mis-Run OUR OPERATOR

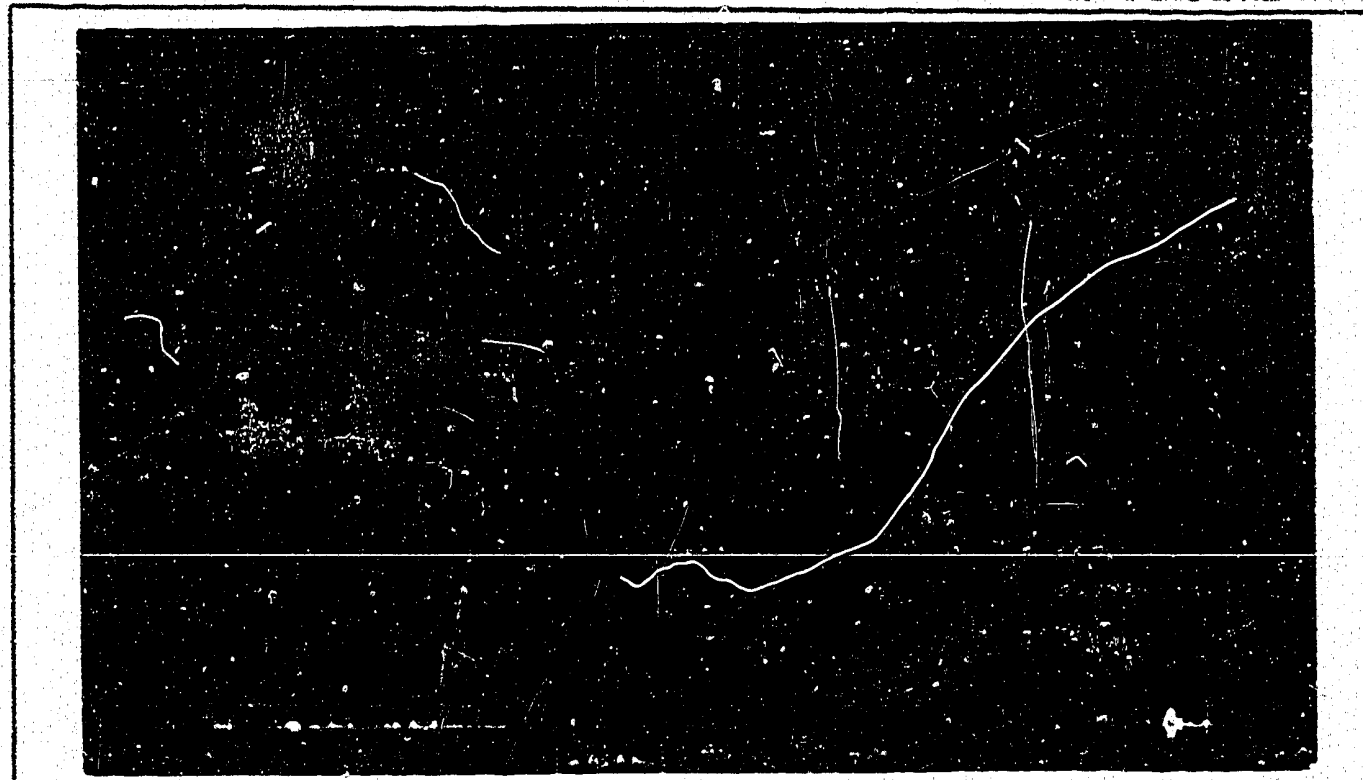
William Harder

F.G. EASTLAND—testers ltd.

TEST No. Three
Date Feb. 3, 1969
Ticket No. 1357

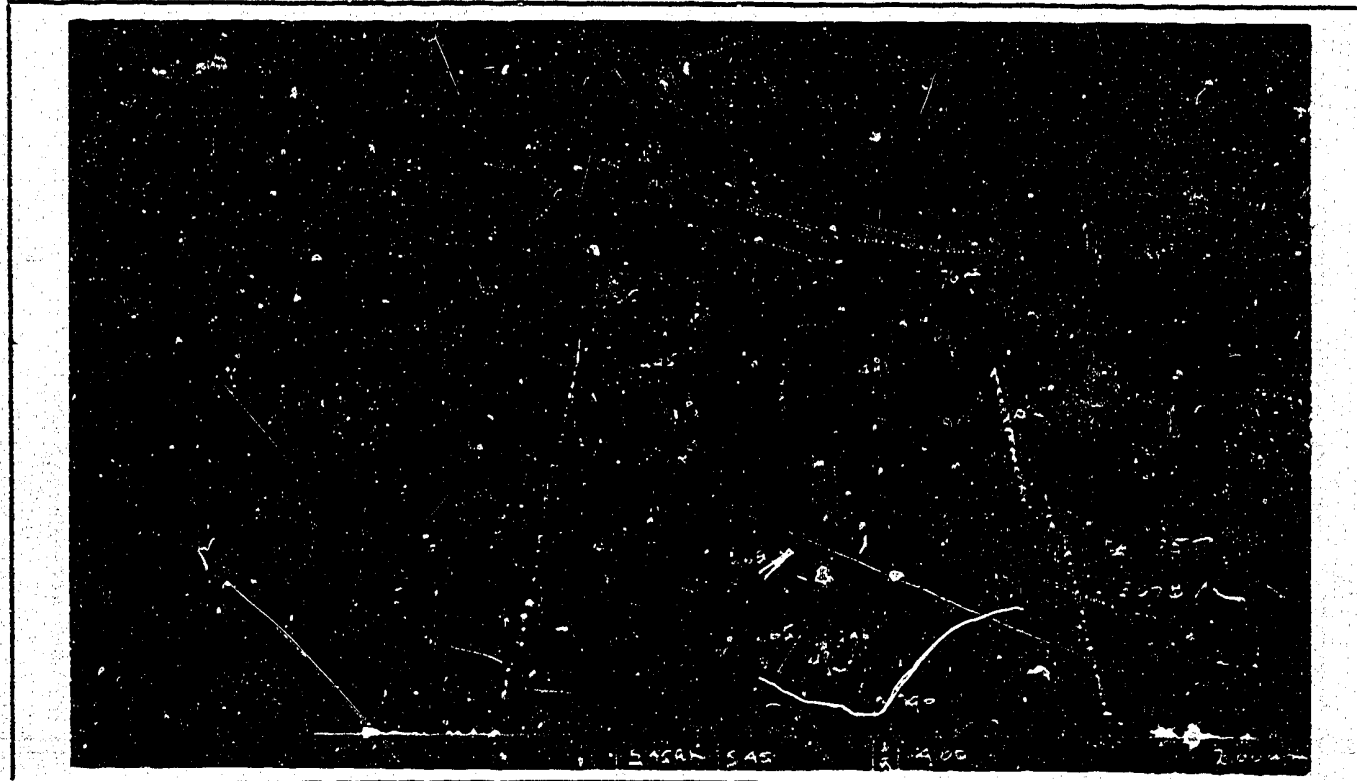
WELL NAME HB CAMERON RIVER J12

RECORDER No. 3077N ELEMENT RANGE 4250 P.S.I. CHART SPEED 12 HRS. RECORDER DEPTH 2614'



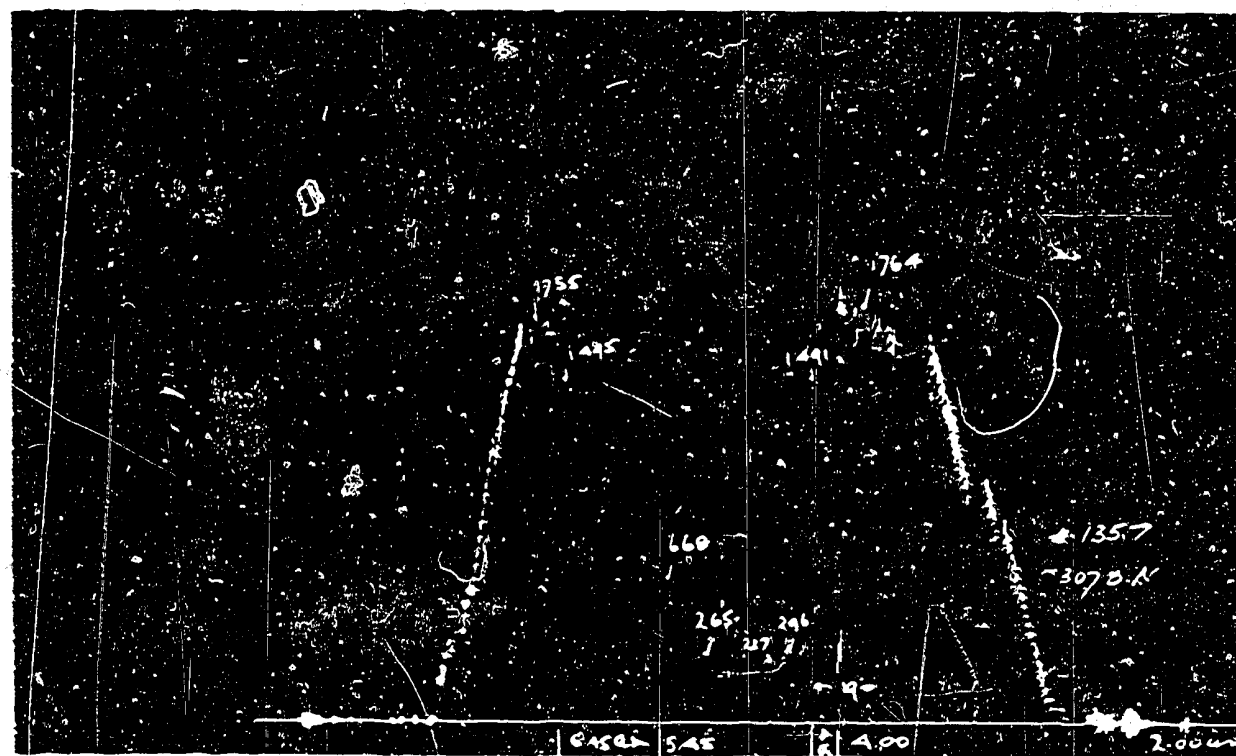
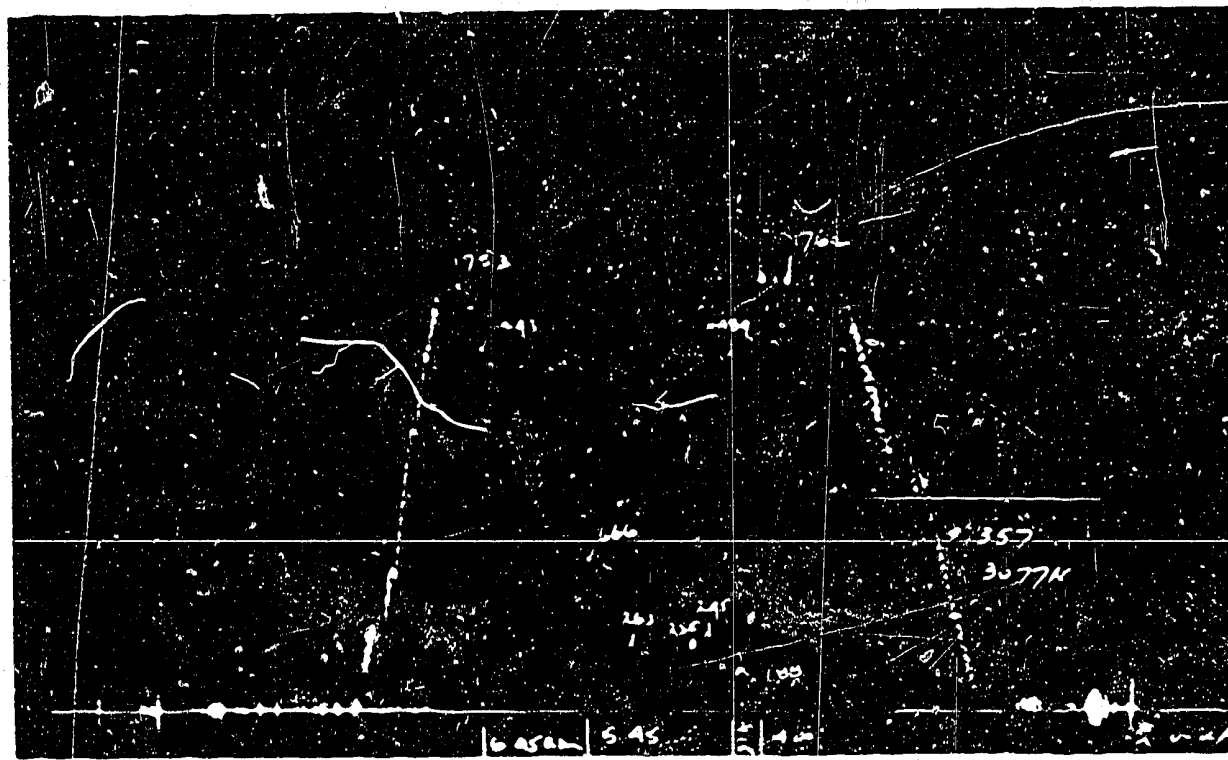
TIME

RECORDER No. 3078N ELEMENT RANGE 4400 P.S.I. CHART SPEED 12 HRS. RECORDER DEPTH 2619'



TIME

R. G. EASTLAND *testers ltd.*



TIME