

UNION PAN AM TRAINOR LAKE G-39

Drilling Authority No. 147

Date Issued

WELL NAME ^{Union} ~~Pan~~ Pan American Trainor Lake C-39

FIELD

LOCATION: Unit C Area: Section 39 Grid 60-20, 120-30
 Latitude 60-18-01 Longitude 120-37-00
 From Established Reference Marker

Rig Release Date: 15-3-65

Status *Suspended* Gas Well

Information Release Date 15-3-67

CHANGE OF NAME:

DATE RECEIVED	INDEX
	Application for a Drilling Authority. Well Completion Data. Well History Report. Application to Amend a Drilling Authority. Application to change a Well Name. Application to Abandon a Well or Suspend Drilling. Application to Alter Condition of a Well. Well History Supplement. Well Completion Data. Work-over Report No. Application to Commingle Production before Measurement. Data for Back Pressure Test on Natural Gas Wells — Monograph 7 Method. Data for Back Pressure Test on Natural Gas Wells — Vitter's Method. M.P.R. — Oil — Calculations. New Oil Well Report. New Gas Well Report. Well Inspection Report. Rig Inspection Report. Battery Inspection Report. Equipment Report. Well Card. Well Visit. Daily Drilling Reports. Logs. Large scale Small scale



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCE MANAGEMENT DIVISION

Application to Change a Well Name

Application is made hereby to change the name of the well, recorded in the Well-names Register at—

PURE PAN AM TRAINOR LAKE C-39

(Old name)

to UNION PAN AM TRAINOR LAKE C-39

(Proposed new name)

Well Location

Location: Unit C Section 39 Grid 60° - 20' x 120° - 30'

Latitude 60° - 18' - 01" Longitude 120° - 37' (est.)

From Established Reference Marker On shot point 2110 U-45-207 of Pan American Petroleum Corporation Seismic survey of March, 1962.

Reason for Changing Well Name

The Pure Oil Company was ^{merged with} ~~purchased by~~ Union Oil Company of California, followed by Union Oil Company of Canada Limited purchasing the Canadian assets of Union Oil Company of California, effective December 20, 1965. Union Oil Company of Canada Limited licence number for operating in the Northwest Territories is 720.

Dated at Calgary, Alberta this 30th day of December 1965

Signed by *[Signature]*

Title Joint Interest Superintendent

Company Union Oil Company of Canada Limited

(For Resource Management Division use only)

APPROVED

This application has been examined and approved:

Date 30th December, 1965

[Signature]
Oil Conservation Engineer

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



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to Alter Condition of a Well

NOTICE OF INTENTION TO

~~Resume Operations~~—Resume Operations—~~Recondition~~—~~Deepen~~
~~Recondition~~—~~Recondition~~—~~Recondition~~—~~Recondition~~
(Strike out words that are not applicable.)

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

Type of operation Complete and Production Test
Name and number of well Pure Pan Am Trainor Lake C-39
Location: Unit C Section 39 Grid 60°-20' x 120° - 30'
Latitude 60° - 18' - 01" Longitude 120° - 37' (est.)
From Established Reference Marker On shot point 2110 U-45-207 of Pan American
Petroleum Corporation seismic survey of March, 1962
Permit No. 2598 Lease No.
Permittee, Licensee, Lessee Pan American Petroleum Corporation

OIL, GAS, AND WATER ENCOUNTERED
(Depth)

Oil at Nil
Gas at 6102' - 6375'
Water at 6323' - 6375'
Total depth 7150' PBD 6509' Date of last operation March 15, 1965
Present condition of well 5-1/2" casing set at 6509' (not perforated), swedge and valve on top of casing, chained and locked.

CASING RECORD

Casing Size O.D. (Inches)	Weight	Amount	Set at -	Sacks of Cement	Method	Amount Pulled
1. 13-3/8"	48#	279'	286'	225	Halliburton double plug	Nil
2. 9-5/8"	36#	1789'	1805'	650	"	Nil
3. 5-1/2"	17#	6493'	6509'	500	"	Nil
4.						
5.						
6.						

OPERATION PROPOSED

(If more space is required, attach additional sheets)

Programme of operations—(Plugs, perforations, rework, etc.) Perforated, mud acid treatment, test, HCl acid treatment and A.O.F. Test

Operations to be carried out by Arrow Drilling Co. Ltd. Contractor Licence No. 24240
Address 309 - 7 Avenue S.W., Calgary, Alberta
Responsible agent in field C. E. Smith Address 1200 Elveden House, Calgary, Alta.
Dated at Calgary, this 22 day of November 19 65
Signed by [Signature] Company Union Oil Company of California
Title Division Operations Manager Exploratory Licence No. 227

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

Management
(For RESOURCES DIVISION use only)

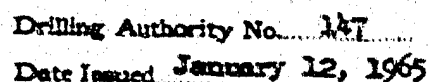
APPROVAL

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

The Company will submit to this office, on Tuesday of each week,
the latest reports received by radio on the progress of the well.

Dated 26th November, 19 65

Forms to be submitted in triplicate to Oil Conservation Engineer, Calgary, Alta.



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 **PURE PAN AM TRAILER LAKE C-39**

Permit No. **2698** Lease No. _____

Pan American Petroleum Corporation Exploratory Licence No. **684**
(Permitter, Licensee, Lessee)

The Pure Oil Company Exploratory Licence No. **912**
(Operator)

Location: Unit **C** Section **39** Grid **60° 20' N**
Latitude **60° 18' 01" N** Longitude **120° 30' W**
120° 37' (est.) W

From Established Reference Marker **on shot point 2110, Line U 45-207 of Pan American Seismic Survey of March 1962**

CASING RECORD

LOG RECORD

Run No.	Type of Log	From	To
1	Dual Induction Lateral	7138'	1807'
1	Borehole Compensated Sonic, Caliper	7138'	1807'
1	Gamma Ray Neutron	1807'	40'
1	Geophysical -SRS	7138'	1807'

NANR 82-90(2) (11-21)



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to ~~Abandon a Well or~~ Suspend Drilling

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

Name and number of well **PURE PAN AM TRAILOR LAKE C-39**

Location: Unit **C** Section **39** Grid **60° 20' N, 120° 30' W**
Latitude **60° 18' 01" N** Longitude **120° 37' (est.) W**

From Established Reference Marker **on Shot Point 2110, Line U 45-207 of Pan American Seismic Survey of March 1962**

Permit No. **2698** Lease No.

Pan American Petroleum Corporation
(Permitter, Licensee, Lessee)

Date of commencement of proposed programme **March 15, 1965**

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at **nil**

Gas at **6102' - 6375'**

Water at **6325' - 6375'**

Total Depth **7150'**

Date of last operations **March 15, 1965**

Present condition of well **5 1/2" casing set at 6509' (not perforated).**

Swedge and valve on top of casing, chained and locked.

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At	Back of Cement	Method	Amount Pulled
1. 13-3/8"	138#	279'	286'	225	Halliburton Double Plug	nil
2. 9-5/8"	36#	1789'	1805'	650	"	nil
3. 5-1/2"	17#	6493'	6509'	500	"	nil
4.						
5.						

PROPOSED ABANDONMENT PROGRAMME

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
1	6500 - 6600'	Klk Point	100	

The following logs have been run **Dual Induction Lateral, Sonic Caliper, Gamma Ray Neutron, SRS.**
Other operations proposed **Suspension until weather conditions permit re-entry.**

Operations to be carried out by _____ Contractor Licence No. _____
Address _____ Address _____

Responsible Agent in field _____
Dated at **Calgary, Alberta**, this **30th** Day of **March**, 19**65**.

Signed by **[Signature]** Company **THE PURE OIL COMPANY**
Title **Division Operations Manager** Exploratory Licence No. **912**

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

(For RESOURCES DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.H.J. Thoms on the 9th March 1965

Dated **12th April**, 19**65**

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



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application for a Drilling Authority

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

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

Name and number of well **PURE PAN AMERICAN TRAIHOR LAKE C-39**
Location: Unit **C** Section **39** Grid **60° 20' x 120° 30'**
Latitude **60° 18' 01"** Longitude **120° 37' (est.)**
From Established Reference Marker **On shot point 2110, Line U 45-207 of Pan American Petroleum Corporation Seismic survey of March, 1962**
Elevation: Ground **2255'** K.B. **2268** feet above sea-level.
Well is expected to produce from **Slave Point** formation at a depth of about **7000** feet.
Area assigned to well _____
(for Oil Conservation Engineer's use only)

Permit No. **2698** Lease No. _____ Acreage **63 534**
Permittee, licensee, or leasee **Pan American Petroleum Corporation**
Exploratory Licence No. **684**
Surface owned by Crown or _____
(If alienated submit name and address of owner and occupant.)
Petroleum and natural-gas rights owned by **Crown**
We propose to use the following strings of casing, either cementing or landing them as indicated below:—

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	Brand	New or Used	Estimated Depth	Seals of Cement
1. 13-3/8"	48	H-40	Mannesmann	New	250'	Circulated
2. 9-5/8"	36	J-55	"	"	1750'	Circulated
3. 5-1/2"	17	J-55	Youngstown	"	T.D.	Minimum of 500' above prospective producing zone.
4. _____	_____	_____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____	_____	_____

Expected water, gas, and oil horizons and type of control equipment **Surface and intermediate casing to control surface water. Blow out preventers will be used to control high pressure oil and/or gas.**

Well will be drilled with (Rotary) Rig No. **19** by **Cascade Drilling Co. Ltd.**
(Cable) (Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Licence No. **A11809**
At well **C. E. Smith** At registered office **J. T. Duree**
Address **Fort Nelson & Wellsite** Address **1200 Elveden House, Calgary, Alberta**
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at **Calgary, Alberta**, this **12th** day of **January**, 19**65**.
Signed by **J. T. Duree** Company **The Pure Oil Company**
Title **Division Operations Manager** Licence No. **912**

(For Resources Division use only)

APPROVED

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

The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.

Dated **12th January**, 19**65**

B. H. Thomas

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

● **PAN AMERICAN PETROLEUM CORPORATION**

RENTAL BUILDING
111 11th AVENUE S.W.
CALGARY, ALBERTA, CANADA

January 11, 1965

Re: H.W.T. Permit No. 2696
Pan American Lease 3832
APZ 2-1336
Island River Area
Northwest Territories, Canada

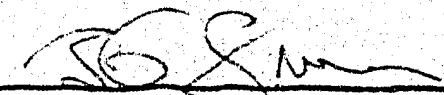
Mr. B. H. J. Thomas,
Oil Conservation Engineer,
Department of Northern Affairs and
National Resources,
725 - 11th Avenue S.W.,
Calgary, Alberta

Dear Sir:

Please accept this letter as Pan American's consent to the drilling of a well on the above captioned Permit by The Pure Oil Company. The well is being drilled in accordance with an agreement reached with The Pure Oil Company and we would, therefore, appreciate having the Drilling License issued as requested by that Company.

Yours very truly,

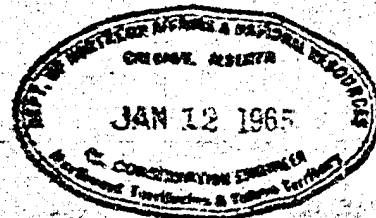
PAN AMERICAN PETROLEUM CORPORATION

By: 

J. K. Grove

JEG/st

cc: The Pure Oil Company



TEITCHO LAKE

SCALE: 1" = 1.6 MILES

PURE PAN AMERICAN TRAILOR LAKE C-39

TECHO LAKE

10000

WELL HISTORY REPORT

PURE PAN AM. TRAINOR LAKE C-30

NORTHWEST TERRITORIES



PURE PAN AM TRAINOR LAKE C-30

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- Dual Induction Laterolog	
- Borehole Compensated Sonic	
- Gamma Ray Neutron	
- Stratigraphic Log	
- <i>Geophysical Log</i>	

GENERAL INFORMATION

WELL NAME PURE PAN AM TRAINOR LAKE C-30 CLASS Wildcat

LOCATION Unit C, Sec. 30, Grid 60° 20' N; PROVINCE N.W.T.
120° 30' W.

CO-ORDINATES From established reference marker on shot point 2110, Line U 45-207
of Pan American Petroleum Corporation Seismic survey of March,
1962.

ELEVATION: 2255' Grd. 2271' K.B.

DRILLING AUTHORITY: No. 147 Dated January 12, 1965.

TITLE HOLDER Pan American Petroleum Corporation No. 684

TYPE & NO. OF TITLE Permit 2608

OPERATOR: Name The Pure Oil Company Op. Lic. No. 912

Address 1200 Elveden House, Calgary, Alberta.

DRILLING CONTRACTOR: Name Cascade Drilling Co. Ltd. Rig No. 10

Type of Rig Lee C. Moore 13' high, 26' wide, 33' long
Drawworks National 100 Double drum, grooved No. A 11800
For 1 1/4" drilling line. Mast 142' Lee C.
Moore, 860,000#.

SERVICE RIG OPERATOR _____ Rig Lic. No. _____

WELL STATUS Gas Well - Awaiting production testing.

DATES: Spudded January 29, 1965, 10:00^{PM} Finished Drilling March 10, 1965

Completed or Abandoned Completed Rig Released 3:00 a.m., Mar. 15, 1965

Release of Service Rig or Equipment _____

DEPTHS: T.D. 7150' P.B.T.D. 6780'

HOLE SIZE 17 1/2" from surface to 271'; 12 1/2" from 271' to 1805';
8-3/4" from 1805' to 7150'.

Alcon Producing Division

1200 Elwood House

CALGARY, ALBERTA

PURE PAN AM TRAINOR LAKE C-39

SAMPLES: Interval 10 feet From Surface To Total Depth

Distribution & Storage One set Pure, one set Pan American, one unwashed

set to Department of Northern Affairs (G.S.C.)

[illegible]

ENGINEERING & COMPLETION SUMMARY

PURE PAN AM TRINOR LAKE C-39

LOG RECORD

Company	Type	Run No.	Date	Interval
Schlumberger	Dual Induction			
	Latorolog	1	Mar. 12/65	7133'-1807'
Schlumberger	Borehole Compensated Sonic	1	Mar. 12/65	7133'-1807'
Schlumberger	Gamma Ray			
	Neutron	1	Mar. 12/65	1807'-40'
<i>Schlumberger</i>	<i>Geophysical</i>	<i>1</i>	<i>Mar 12/65</i>	<i>7133' - 1807'</i>
<i>Pure Oil Company</i>	<i>Geophysical</i>			<i>0' - 7150'</i>

CASING RECORD

Hole Size	Casing Size	Wt.	Grade	Manufacturer	KB Setting Depth	Amount Cement	Cement Additives	Date
17-1/2	13-3/8	48	H-40	M Japanese	270.29'	225	2% CaCl ₂	Feb. 2/65
12-1/4	9-5/8	36	J-55	Mannesmann	1805'	650	--	Feb. 6/65
8-3/4	5-1/2	17	J-55	Mannesmann	6500'	500	--	Mar. 15/65

CEMENTATION RECORD

Plug No.	Date	Zone	Interval	Amount of Cement Used	Depth Felt
1	3/14/65	Elk Point	6780'-6900'	100	6770'

DEVIATION SURVEYS

Depth	Degrees Inclination	Instrument	Depth	Degrees Inclination	Instrument
52'	1/2°	Totco	1800'	1-1/4°	Totco
122'	3/4°	"	2140'	1/3°	"
182'	5/8°	"	2470'	7/8°	"
240'	3/4°	"	2725'	1/2°	"
285'	3/4°	"	3156'	1/2°	"
510'	1/2°	"	3400'	7/8°	"
820'	3/4°	"	3550'	7/8°	"
1000'	7/8°	"	3715'	7/8°	"
1470'	1/2°	"	3860'	1°	" (over)

ENGINEERING & COMPLETION SUMMARY

PURE PAN AM TRAINOR LAKE C-39

LOG RECORD

Company	Type	Run In.	Date	Interval

CASING RECORD

Male Size	Casing Size	Wt.	Grade	Manufacturer	KB Setting Depth	Amount Cement	Cement Additives	Date

CEMENTATION RECORD

Plug No.	Date	Zone	Interval	Amount of Cement Used	Depth Felt

DEVIATION SURVEYS

Continued

Depth	Degrees Inclination	Instrument	Depth	Degrees Inclination	Instrument
4236'	7/8°	Totco	6900'	3-1/2°	Totco
4640'	1/2°	"			
5043'	3/4°	"			
5600'	3/4°	"			
6090'	3/4°	"			
6350'	2-1/3°	"			
6540'	3°	"			
6680'	3-1/4°	"			
6760'	3-1/4°	"			

ENGINEERING & COMPLETION SUMMARY

PURE PAN AM TRINOR LAKE C-39

REMARKS: (include, if applicable, Xmas tree arrangement with diagrammatic sketch, description of blow-outs, lost circulation, squeeze and plug back jobs, details of production tests and results.)

Pure Pan Am Trinor Lake C-39 reached total depth and was cased too late in the Spring of 1965 to attempt completion and production testing before Spring break-up. Such tests will be made as soon as freeze-up permits in the Winter of 1965-66, and an Engineering and Completion Summary of production testing will be forwarded to the Department of Northern Affairs as soon as the data is available.

THE PURE OIL COMPANY

Alcon Producing Division

1266 Elveden House

CALGARY, ALBERTA

DRILLSTEM TEST SUMMARY

PURE PAN AM TRAINOR LAKE C-39

TEST NO. 1 ZONE Slave Point TEST SATISFACTORY? Yes
 INTERVAL 6102' TO 6265.5' T.D. 6265.5'
 TYPE OF TEST Bottom Hole TESTING COMPANY Johnston Testers
 FLOW PERIODS: I.F. _____ I.S.I. 30 mins F. 14 hrs 10 mins F.S.I. 3 hrs 25 mins
 PRESSURES: I.H.P. 3272 I.S.P. -- I.F.P. 530 F.F.P. 1285 F.M.P. 3272
 F.S.I.P. 2307
 DESCRIPTION OF BLOW DURING TEST: Weak initial puff. Weak air blow for 42 mins.,
increasing to strong blow with gas to surface 54 mins. Flowed at
various rates from 6.8 MMcf to 1.4 MMcf with 2 hrs. and 5 mins. shut-
in period with valve closed at surface. Pressure built up to 1880 psi.
After 1 hour and 49 mins. flow, well started producing mist of water.
 RECOVERY: 122' water, 10' mud.

TEST NO. 2 ZONE Slave Point TEST SATISFACTORY? Yes
 INTERVAL 6253' TO 6275' T.D. 6275'
 TYPE OF TEST Bottom Hole TESTING COMPANY Johnston Testers
 FLOW PERIODS: I.F. _____ I.S.I. 30 mins. F. 3 hrs. F.S.I. 1 hr 20 mins
 PRESSURES: I.H.P. 3166 I.S.P. 2371 I.F.P. 404 F.F.P. 699 F.M.P. 3166
 F.S.I.P. 2371
 DESCRIPTION OF BLOW DURING TEST: Good initial puff. Gas to surface in 5 mins.
Flowed at various rates from 1.6 MMcf increasing to 6.8 MMcf at end
of test on 1" choke. Well started flowing a mist of water with the
gas after 2 hours and 30 mins.
 RECOVERY: 207' water.

THE PURE OIL COMPANY

Alcan Producing Division

1200 Elveden House

Page 2

CALGARY, ALBERTA

DRILLSTEM TEST SUMMARY

PURE PAN AM TRINOR LAKE C-39

TEST NO. 3 ZONE Slave Point TEST SATISFACTORY? Yes
 INTERVAL 6275' TO 6325' T.D. 6325'
 TYPE OF TEST Bottom Hole TESTING COMPANY Johnston Testers
 FLOW PERIODS: I.F. 4 mins. I.S.I. 30 mins. F. 180 mins. F.S.I. 200 mins.
 PRESSURES: I.H.P. 3071 I.S.P. 2349 I.F.P. 591 F.F.P. 924 F.H.P. 3040
 F.S.I.P. 2114
 DESCRIPTION OF BLOW DURING TEST: Good initial blow. Strong blow throughout
test ranging from 3.7 MMcf to 8.7 MMcf. Well produced mist of water
with gas after 80 mins.
 RECOVERY: 131' sulphurous water.

TEST NO. 4 ZONE Slave Point TEST SATISFACTORY? Yes
 INTERVAL 6325' TO 6375' T.D. 6375'
 TYPE OF TEST Bottom Hole TESTING COMPANY Johnston Testers
 FLOW PERIODS: I.F. 30 mins. I.S.I. 30 mins. F. 60 mins. F.S.I. 30 mins.
 PRESSURES: I.H.P. 3107 I.S.P. 2244 I.F.P. 344 F.F.P. 328 F.H.P. 3083
 F.S.I.P. 2117
 DESCRIPTION OF BLOW DURING TEST: Strong blow, decreasing to end of test.
Gas to surface in 3minutes.
 RECOVERY: 600' salt water cut sulphurous water (82,000 ppm)
B.H.T. 208°.

ADDENDA

DRILLSTEM TESTS

BACK PRESSURE DATA

Union
Pan American
Trainer Lake C-39
60-20-120-30

TEST NO. 1: 61021-6265.5'

Time	Back Pressure	Choke	Mcf/d	Remarks
5:15	600	1/2	3.6	
5:20	520			
5:25	440			
5:30	370	1/2	2.3	
5:35	370	1/2	2.3	
5:40	400	1/2	2.4	
5:45	430	1/2	2.6	
5:50	440	1/2	2.7	
5:55	460	1/2	2.8	
6:00	270	1	7.4	
6:05	230	1	6.4	
6:10	230	1	6.4	
6:15	225	1	6.1	
6:20	235	1	6.5	
6:25	240	1	6.55	
6:30	250	1	6.8	Flame went out (wet)
6:35	600	S.I.		
6:40	420	3/4	6.0	
6:45	340	1	9.0	
6:50	300	1	8.0	
7:00	-	-	-	Getting gas sample.
7:10	700	S.I.	-	0 mins.
7:15	900	S.I.	-	5 mins.
7:20	1120	S.I.	-	10 mins.
7:25	1340	S.I.	-	15 mins.
7:30	1480	S.I.	-	20 mins.
7:35	1630	S.I.	-	25 mins.
7:40	1720	S.I.	-	30 mins.
7:45	1780	S.I.	-	35 mins. +60# +40#
7:50	1820	S.I.	-	40 mins. Change to 3000# gauge
7:55	1860	S.I.	-	45 mins. +40#
8:00	1875	S.I.	-	50 mins. +15#
8:05	1875	S.I.	-	55 mins.
8:10	1880	S.I.	-	60 mins. +5#
8:15	1880	S.I.	-	65 mins.
8:20	1880	S.I.	-	2 hrs. 5 mins.
8:25	1800	1/8	.55	
8:35	1650	1/4	2.2	
8:40	1600	1/4	2.1	
8:45	1550	1/4	2.1	
8:50	1450	1/4	1.95	
8:55	1350	1/4	1.85	
9:00	1300	1/4	1.75	
9:05	1275	1/4	1.7	
9:10	1240	1/4	1.65	
9:15	1200	1/4	1.6	
9:20	1150	1/4	1.55	
9:25	1125	1/4	1.52	
9:30	1100	1/4	1.5	
9:35	1050	1/4	1.45	

PSY #1 (continued)

Time	Back Pressure	Choke	MMcf/d	Remarks
10:40				
10:45	1050	1/4	1.45	Flame went out.
10:50	1050	1/4	1.45	
10:55	1050	1/4	1.45	
11:00	1050	1/4	1.45	
11:20	1025	5/16	2.25	
11:25	975	5/16	2.1	
11:30	725	5/16	1.6	Flame goes out.
11:35	650	5/16	1.4	
11:40	625	5/16	1.375	
11:45	600	5/16	1.35	
11:50	450	3/8	1.45	
11:55	425	3/8	1.4	
12:00	425	3/8	1.4	
12:05	425	3/8	1.4	
12:10	400	3/8	1.35	
12:15	400	3/8	1.35	
12:20	375	13/32		
12:25	350	13/32		
12:30	350	13/32		Flame went out.
12:35	400	3/8	1.35	
12:40	400	3/8	1.35	
--	--	--	--	Flame went out.
1:00	675	3/8	2.15	
1:05	650	5/16	1.4	
1:10	625	5/16	1.37	
1:15	625	5/16	1.37	
1:20	650	1/4	.875	
1:25	700	1/4	.95	
1:30	725	1/4	1.0	
1:35	750	1/4	1.05	
1:40	750	1/4	1.05	
1:45	750	1/4	1.05	
1:50	750	1/4	1.05	
1:55	750	1/4	1.05	
2:00	750	1/4	1.05	
2:05				
2:10	1125	S.I.		Flame went out.
2:15	1225	S.I.		
2:20	1050	1/4	1.45	
2:25	975	1/4	1.35	
2:30	925	1/4	1.25	
2:35	925	1/4	1.25	
2:40	875	1/4	1.2	
2:45	850	1/4	1.175	
2:50	825	1/4	1.15	
2:55	825	1/4	1.15	
3:00	825	1/4	1.15	Flame goes out.
3:05	875	7/32		
3:10	875	7/32		
3:15	875	7/32		
3:20	885	7/32		
3:25	925	3/16	.675	
3:30	975	3/16	.7	

Time	Back Pressure	Choke	Flow/d	Remarks
3:35	980	3/16	.7	
3:40	1000	3/16	.725	
3:45	1000	3/16	.725	
3:50	1000	3/16	.725	
3:55	975	7/32		
4:00	950	7/32		
4:05	950	7/32		
4:10	875	1/4	1.2	
4:15	975	3/16	.7	
4:20	975	3/16	.7	
4:25	980	3/16	.7	
4:30	1000	3/16	.725	
4:35	975	7/32		
4:40	950	7/32		
4:45	935	7/32		
4:50	1000	3/16	.725	
4:55	1000	3/16	.725	
5:00	1000	3/16	.725	
5:05	975	7/32		
5:10	1000	7/32		
5:15	1025	3/16	.75	
5:20	1000	3/16	.725	
5:25	1025	3/16	.75	
5:30	1015	3/16	.735	
5:35	1020	3/16	.74	
5:40	1020	3/16	.74	
5:45	1020	3/16	.74	
5:50	1015	3/16	.735	
5:55	1015	3/16	.735	
6:00	1015	3/16	.735	
6:05	1015	3/16	.735	
	Shut tool.			

TEST NO. 2: 62531-62751

Time	Back Pressure	Choke	MBcf/d	Remarks
1:50	-	-	-	Valve open.
1:55	-	-	-	Closed tool for I.S.I.P.
2:25	-	-	-	Valve opened with gas flow.
2:35	50	1	1.6	
2:40	75	1	2.2	
2:45	90	1	2.6	
2:50	100	1	3.0	
2:55	110	1	3.2	
3:00	115	1	3.3	
3:05	120	1	3.4	
3:10	125	1	3.5	
3:15	130	1	3.7	
3:20	135	1	3.8	
3:25	140	1	4.0	
3:30	145	1	4.1	
3:35	150	1	4.3	
3:40	150	1	4.3	
3:45	155	1	4.4	
3:50	155	1	4.4	
3:55	160	1	4.5	
4:00	165	1	4.6	
4:05	170	1	4.7	
4:10	175	1	4.8	
4:15	185	1	5.2	
4:20	200	1	5.5	
4:25	200	1	5.5	
4:30	220	1	6.0	
4:35	230	1	6.4	
4:40	250	1	6.8	
4:45	250	1	6.8	
4:50	230	1	6.4	
4:55	225	1	6.2	
5:00	225	1	6.2	
5:05	225	1	6.2	
5:10	225	1	6.2	
5:15	210	1	5.8	
5:20	210	1	5.8	
5:25	210	1	5.8	Closed tool for F.S.I.P.

Time	Back Pressure	Choke	MMc/d	Remarks
7:46	-	-	-	Valve opened.
7:49	-	-	-	Closed tool for I.S.I.P.
8:19	-	-	-	Valve opened with good strong blow.
8:25	130	1	3.7	
8:30	150	1	4.2	
8:35	180	1	5.0	
8:40	190	1	5.3	
8:45	200	1	5.5	
8:50	210	1	5.7	
8:55	210	1	5.7	
9:00	220	1	6.0	
9:05	220	1	6.0	
9:10	230	1	6.2	
9:15	230	1	6.2	
9:20	230	1	6.2	
9:25	230	1	6.2	
9:30	230	1	6.2	
9:35	240	1	6.5	
9:40	240	1	6.5	
9:45	260	1	7.0	
9:50	280	1	7.5	
9:55	300	1	8.0	
10:00	300	1	8.0	
10:05	320	1	8.5	
10:10	320	1	8.5	
10:15	320	1	8.5	
10:20	330	1	8.7	
10:25	320	1	8.5	
10:30	310	1	8.3	
10:35	300	1	8.0	
10:40	300	1	8.0	
10:45	300	1	8.0	
10:50	300	1	8.0	
10:55	300	1	8.0	
11:00	300	1	8.0	
11:05	300	1	8.0	
11:10	300	1	8.0	
11:15	300	1	8.0	
11:20	300	1	8.0	Closed tool.

JOHNSTON TESTERS

Pressure Data

Test Ticket No.

C 2583

Recorder No.	T-132	AKI-2096		
Capacity P.S.I.G.	7000	7050		
Recorder Depth	6979	6116		
Pressure Gradient P.S.I. Ft.				
Well Temperature F.	190°	190°		
A Initial Hydrostatic	3168#	3168#		
B First Initial Flow		FALSE		
C Initial Shut-In Pres		FALSE		
D Flowing Pres	483#	490#		
E Final Flow	1329#	1369#		
F Final Shut-In	2330#	2311#		
G Final Hydrostatic	3139#	Clock Ran Out During Final Shut-In		
Remarks	D-1 2340#	D-1 2341#		

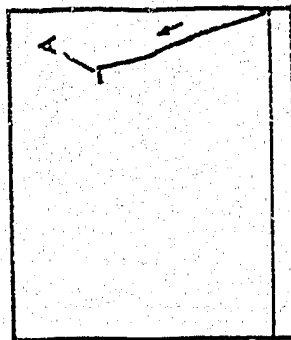
T-132 - Inside Recorder

AKI-2096 - Outside Recorder

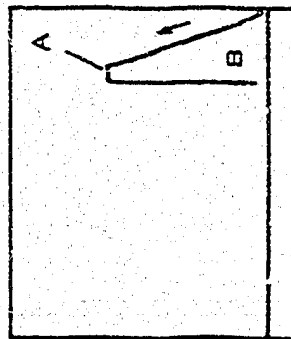
JOHNSTON TESTERS

TEST DATA						
Formation	Zone Thickness			ft	Elevation	
Interval	6102	To	6266	ID	6266	
Type of Test	Open Hole, Bottom Hole				Bottom Hole Choke Size	
Time Started in Hole	1000	Hrs	Tool Open	1515	Hrs	
First Flow	10	Min	Shut in	30	Min	
Second Flow	850	Min	Final Shut in	205	Min	
Pulled Loose (lb)	0930	Hrs	Out of Hole	1130	Hrs	
Wt Set on Packer	25,000	lb	Pulled Loose Wt	10,000	lb	
Remarks	Tool was Chased 30 Feet During Test Period.					
Description of Blow During Test					TOOL SEQUENCE	
					Tool	Length
Weak Blow, Increasing to Strong.					Sub.	.65
					Gas to Surface in 54 Minutes.	
					Hyd. Tool	7.45
					Recorder	
					Jars	4.65
					Safety Jt.	.05
					T.C. & Pkr.	.20
GAS BLOW MEASUREMENTS					T.C. & Pkr.	5.40
Measured with					ID Riser or Est.	
Type of Instrument	Back Pressure				Total	40.95
Gauge					Stub	1.00
Time	Size Choke	Reading Inches	M	Cubic Feet Day	Perf.	12.00
1715	1/2"	600#		3142	Recorder	5.90
1825	1"	240#		5021	Sub.	.85
Choke Closed @ 1910 for 2 Hours & 5 Minutes, Pressure					D.C.	116.42
Built to 1880 P.S.I. on Gauge & Held Steady.					Sub.	.75
2120	1/8"	1800#		583.4	Perf. & B. N.	27.05
0030	13/32"	350#		1460	Total Interval	163.97
0300	1/4"	825#		1097.5		
0600	3/16"	1015#		2076.5		
FLUID RECOVERY						
Was Test Reverse Circulated Yes ☐ No ☒						
Fluid Recovered (Total)					132'	Total Length
Description of Fluid Recovered					10' Drilling Fluid.	204.92
					122' Water.	
					MUD AND HOLE DATA	
					Mud Type	Gel and Chem
					Filter Cake	2/32 Visc 66
					Time Taken	February 24, 1965 @ 2200 hrs.
					Contractor	Cascade Drilling
Remarks					Rig No. 19	
					Drill Pipe Size	4 1/2 IF
					Drill Collar Size	2 7/8 ID Length 551'
					Main Hole Size	8 3/4"
					Rat Hole Size	
Co. Rep.	C. Smith				Ticket No.	C 2583
Tester	R. Quinn				Date	February 25/65
District	Edmonton				Address	1200 Elvaden House, Calgary, Alberta
Company	The Pure Oil Company				Test No.	1
Well Name	Pure Pan Am Trainor Lk. C-39				J.T.L. Test No.	1
Number	60°-18'-01"N-120°-37'W Est.				Field	Wildcat
Formation	DST#1 6102-6266				Province	N.W.T.
and Interval	Consultant					
Distribution of Reports						
8 - Calgary, 1 - Data Center (Enclosed)						

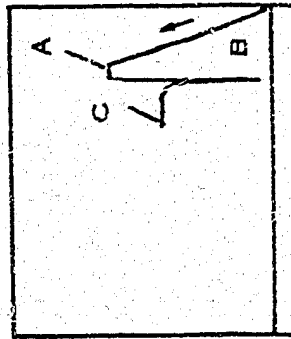
GUIDE TO INTERPRETATION AND IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



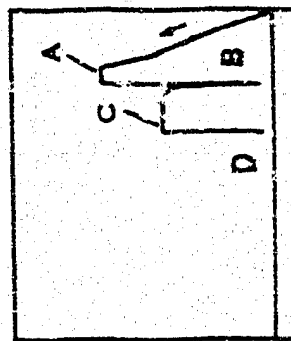
The pressure chart records the build-up in hydrostatic pressure at the testing assembly is lowered into the hole. Upon reaching the testing depth the hydrostatic head or pressure of mud column is recorded.



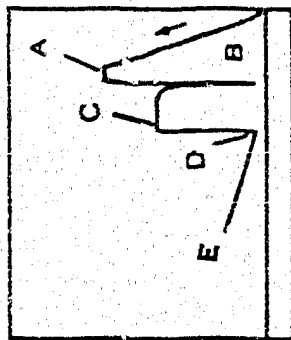
The packer is expanded and set to isolate the test zone. When the test valve is opened, a pressure drop is indicated on the pressure chart. This pressure drop is caused by removal of the hydrostatic mud pressure from the formation, allowing the formation to produce.



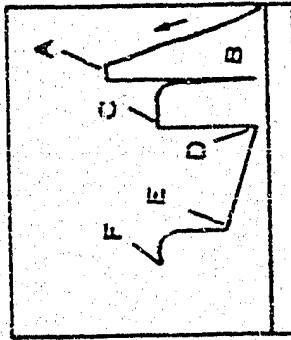
This chart shows the initial shut-in pressure. There is no mechanical method commonly used to obtain this pressure. A 4 stage shut-in tool that is run in the open position and rotated closed when the desired amount of initial flow time is obtained. This initial shut-in pressure is the best method yet devised for recording the original undisturbed reservoir pressure of a formation.



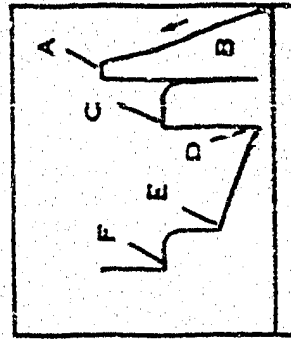
The chart indicates a pressure drop. The test tool has been opened to the surface by rotating the 4 stage shut-in tool into the open position. Permitting the open formation to produce.



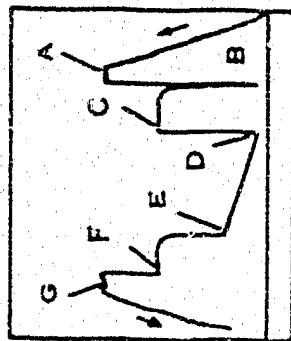
The pressure of fluid flowing from the formation into the well bore, through the perforated anchor, and into the drill pipe, is recorded on the chart.



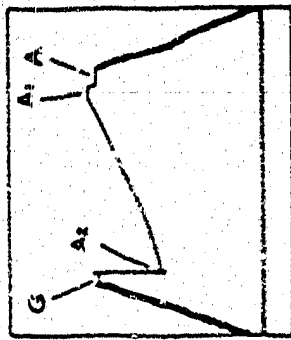
Real shut-in pressure is taken by stopping the flow of formation fluid into the drill pipe. Note the characteristic build-up curve. The well bore pressure is approaching equilibrium with the static reservoir pressure. When the shut-in curve levels off the static reservoir pressure has been reached.



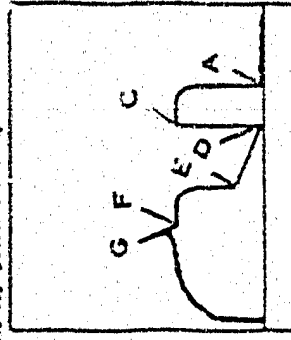
The chart shows the equalizing. The by-pass ports have been opened permitting the drilling fluid to flow through the packer to the test zone. This pressure is equalized above and below the packer. The equalization of the pressure facilitates easier removal of the packer from the packer seat.



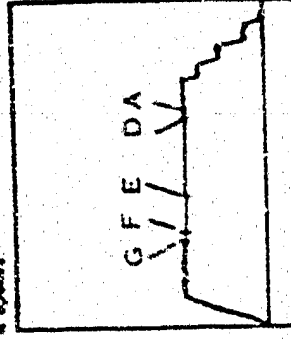
The packer has been unscrewed. The testing assembly is being removed from the hole.



The above is a typical illustration of a chart from a recorder that is run before the packer is set. The hydrostatic mud pressure is recorded. When the tool is opened, there is a pressure differential across the bottom packer. This differential is sensed by the rubber flow of the packer element, which is then causes a drop in pressure. If the below stringer's chart reads the time at a chart that is run to record pressure of the fluid zone, then the bottom packer has failed. If this occurs, it means below the top packer is being forced.



In this case a recorder has been run in as a chamber. The hydrostatic mud pressure is not indicated. The recorder is being run in or coming out of the hole. This is the main feature being shown. The flow pressure and shut-in pressure are recorded while the main feature valve is opened.



In this case a recorder has been run above the main test valve with a fluid column and in the drill pipe. No pressure is recorded as the testing tool is being lowered into the hole. Then the fluid column pressure is recorded as the drill pipe is filled with fluid. As more stands are run into the hole, the recorder registers the hydrostatic pressure of the casing. When the main testing valve is opened the pressure of the casing column or the flowing pressure of the formation, (which ever is greater), is recorded.

INDEX OF LABELED POINTS:

- A—Initial Hyd. Mud
- B—First Initial Flow
- C—Initial Shut-in
- D—Initial Flow
- E—Final Flow
- F—Final Shut-in
- G—Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other peculiar settings, (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures.
- B-1, B-2, B-3, etc. First Initial Flow.
- C-1, C-2, C-3, etc. The Initial Shut-in Pressures.
- D-1, D-2, D-3, etc. Flowing Pressures.
- E-1, E-2, E-3, etc. The Final Flow Pressures or Final Shut-in Pressures.
- F-1, F-2, F-3, etc. The Final Shut-in Pressures.
- G-1, G-2, G-3, etc. Final Hyd. Mud Pressures.

Z — Special pressure points such as pumping pressure recorded for formation breakdown.

JOHNSTON TESTERS

TEST DATA									
Formation		Zone Thickness		Elevation		2271 KB		2255 GL	
Interval	6253	To	6275	ID	6275	Bottom Hole Choke Size		1/2"	
Type of Test		Open Hole, Bottom Hole		Fluid Cushion Type					
Time Started in Hole		2215		Hrs	Tool Open	0149	Hrs	Amount	
First Flow	2	Min.	Shut In	30	Min.	TOOL SEQUENCE			
Second Flow	180	Min.	Final Shut In	80	Min.	Tool	Length	O.D.	
Pulled Loose Wt	0642	Hrs	Out of Hole	0945	Hrs	Sub.	.60		
Wt Set on Packer	25,000	# Pulled Loose Wt		10,000	#	P.O. Sub.	.85		
Remarks						Sub.	.55		
Description of Blow During Test Good Blow, Increasing to Strong Blow, Gas to Surface in 5 Minutes.						D.P. Sub.	.70		
						Shut in Tool	6.05		
						Hyd. Tool	7.45		
						Recorder	5.90		
						Sub.	.80		
						Jars	6.30		
						Sub.	.75		
						Safety Jr.	1.75		
						T.C. & Pkr.	7.20		
						T.C. & Pkr.	5.20		
GAS BLOW MEASUREMENTS						Total	44.30		
Measured with						ID Riser or Est.	☐		
Type of Instrument						Stub	1.00		
Time	Spec. Choke	Reading Inches	Cubic Feet Day		Perf.	10.00			
					Recorder	5.90			
					Perf.	4.00			
					Perf. & B.N.	1.65			
					Total Interval	22.55			
FLUID RECOVERY									
Was Test Reverse Circulated Yes ☐ No ☒									
Fluid Recovered (Total)						207'	Ft.	Total Length	65.85
Description of Fluid Recovered						207' Water.			
						MUD AND HOLE DATA			
						Mud Type	Gel and Chem	W.L.	3.8
						Filter Cake	2/32	Visc.	80
						Wt.	9.3		
						Time Taken	February 27, 1965 @ 1545 hrs.		
						Contractor	Cascade Drilling		
Remarks						Rig No. 19			
Test Satisfactory. Flowed at various rates from 1600 MCF increasing to 6800 MCF/Day in 2 hours and 15 Minutes, then decreasing to 5.8 MCF/Day at end of test on 1 inch choke.						Drill Pipe Size	4 1/2 IF		
						Drill Collar Size	2 3/4 ID Length 551'		
Co. Rep.						Main Hole Size 8 3/4"			
Tester						Rot Hole Size			
District						Fort St. John			
Company						The Pure Oil Company			
Well Name						Pure Pan Am Trainor Lk. C-39			
Number						60°-18'-01"N-120°-37' W Est.			
Formation						DST#2 6253-6275			
and Interval						Consultant			
Distribution of Reports						8 - Calgary, 1 - Data Center (Enclosed)			

JOHNSTON TESTERS

Pressure Data

Test Ticket No. C 2584

Recorder No.	T-132	AKI-2096		
Capacity (P.S.I.G.)	7000	7650		
Recorder Depth	6226	6273		
Pressure Gradient P.S.I. Ft.				
Well Temperature °F.	197°	197°		
A Initial Hydrostatic	3102#	3112#		
B First Initial Flow	493#	1447#		
C Initial Shut-In Pres.	2352#	FALSE	2368#	
D Flowing Pres.	368#	939#		
E Final Flow	690#	1023#		
F Final Shut-In	2329#	2332#		
G Final Hydrostatic	3090#	3039#		

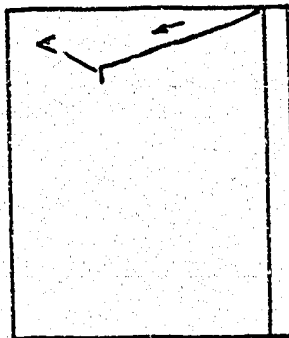
Remarks

T-132 - Inside Recorder

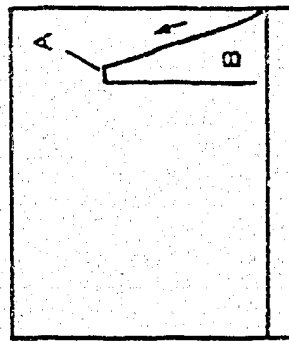
AKI-2096 - Outside Recorder

Partial Plugging Throughout Test.

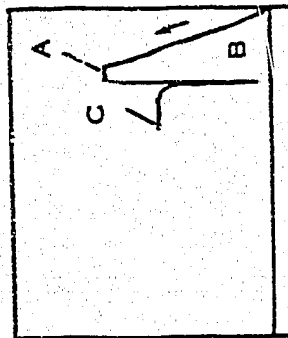
GUIDE TO INTERPRETATION AND IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



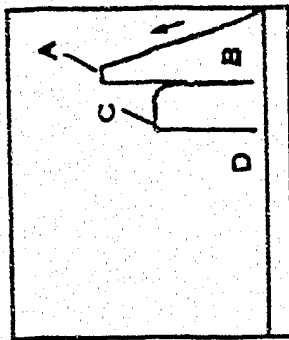
The pressure chart records the build-up in hydrostatic pressure as the testing assembly is lowered into the hole. Upon reaching the desired depth the hydrostatic head or pressure of mud column is recorded.



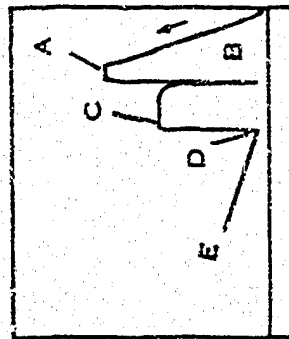
The packer is expanded and set to isolate the test zone. When the test valve is opened, a pressure drop is indicated on the pressure chart. This pressure drop is caused by removal of the hydrostatic mud pressure from the formation, allowing the formation to produce.



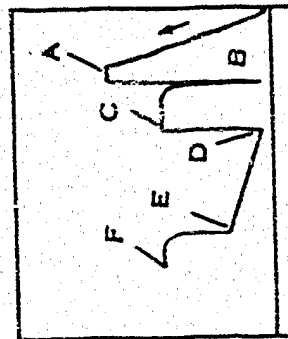
This chart shows the initial shut-in pressure. There is one mechanical method commonly used to obtain this pressure. A 4 stage shut-in tool is run-in in the open position and rotated closed when the desired amount of initial pressure is obtained. This initial shut-in pressure is the best method yet devised for recording the original undisturbed reservoir pressure of a formation.



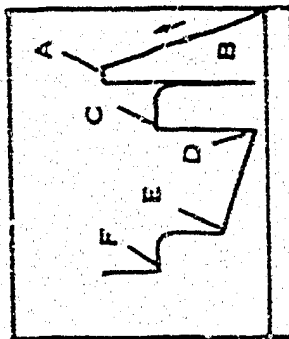
The test tool has been opened to the surface by rotating the 4 stage shut-in tool into the open position. Permitting the open formation to produce.



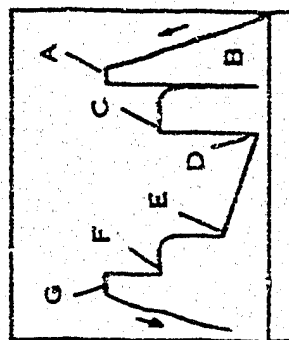
The pressure of fluid flowing from the formation into the well bore, through the perforated section, and into the drill pipe, is recorded on the chart.



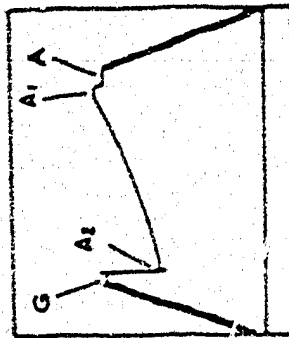
The final shut-in pressure is taken by stopping the flow of formation fluid into the drill pipe. Note the characteristic build-up curve. The well bore pressure is approaching equilibrium with the static reservoir pressure. When the shut-in curve levels off the static reservoir pressure has been reached.



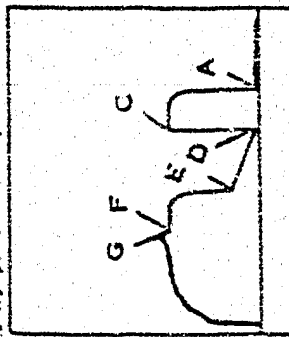
The chart shows the equalizing the bypass ports have been opened, permitting the drilling fluid to flow through the packer to the test zone. Then, pressure is equalized above and below the packer. The equalization of the pressure facilitates easier removal of the packer from the packer test.



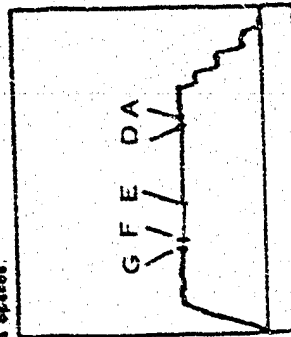
The packer has been assembled. The testing assembly is being removed from the hole.



The above is a typical illustration of a chart from a recorder that is run below the bottom packer on a conventional pressure test. Only the hydrostatic and static pressures are recorded when the tool is opened. There is a pressure differential across the bottom packer. The differential is lessened by the rubber flow of the packer element, which in turn causes a pressure drop in pressure. If this below through chart reads the same as a chart that is run to record pressures of the test zone, then the bottom packer has failed. If this occurs, at least below the top packer are being tested.



In this case a recorder has been run in an air chamber. The hydrostatic mud pressure is not influencing the recorder which gives an accurate reading of the hydrostatic pressure in the well being tested. The flow pressure and shut-in pressures are recorded while the main test valve is opened.



In this case a recorder has been run above the main test valve with a fluid cushion used in the drill pipe. No pressure is recorded as the testing tool is being lowered into the hole. Then the fluid cushion pressure is recorded as the drill pipe is filled with fluid. As more stands are run into the hole, the recorder registers the hydrostatic pressure of the section below the main test valve is opened the pressure of the cushion column at the flowing pressure of the formation, (which ever greater), is recorded.

INDEX OF LABELED POINTS:

- A—Initial Hyd. Mud
 - B—First Initial Flow
 - C—Initial Shut-in
 - D—Initial Flow
 - E—Final Flow
 - F—Final Shut-in
 - G—Final Hyd. Mud
- The following points are either fluctuating pressures or points indicating other packer settings, (testing different zones).
- A-1, A-2, A-3, etc. Initial Hyd. Pressures.
 - B-1, B-2, B-3, First Initial Flow.
 - C-1, C-2, C-3, etc. The Initial Shut-in Pressures.
 - D-1, D-2, D-3, etc. Flowing Pressures.
 - E-1, E-2, E-3, etc. The Final Flow Pressures or Final Shut-in Pressures.
 - F-1, F-2, F-3, etc. The Final Shut-in Pressures.
 - G-1, G-2, G-3, etc. Final Hyd. Mud Pressures.

- Z — Special pressure points such as pumping pressure recorded for formation breakdown.

JOHNSTON TESTERS

TEST DATA									
Formation		Zone Thickness		Fr		Elevation		2271 KB 2255 GL	
Interval 6275 To 6325 TD 6325						Bottom Hole Choke Size		1 1/2"	
Type of Test		Open Hole, Bottom Hole				Fluid Cushion Type			
Time Started in Hole 0445		Hrs. Tool Open 0746		Hrs.		Amount			
First Flow 4 Min		Shut In 30 Min				TOOL SEQUENCE			
Second Flow 180 Min		Final Shut In 200 Min				Tool		Length O.D.	
Pulled Loose @ 0240 Hrs.		Out of Hole Hrs.				Sub.		.80	
Wt Set on Packer 25,000 #		Pulled Loose Wt 28,000 #				P.O. Sub.		.85	
Remarks						Sub.		.55	
						D.P. Sub.		.70	
Description of Blow During Test		Strong Blow Throughout Test.				Shut in Tool		6.05	
		Gas to Surface in 3 Minutes.				Hyd. Tool		7.45	
						Recorder		5.90	
						Sub.		.80	
						Jara		6.30	
						Sub.		.75	
						Safety Jt.		1.75	
						T.C. & Pkr.		7.20	
						T.C. & Pkr.		5.20	
						Total		44.30	
						Stub		1.00	
						Perf.		14.00	
						Recorder		5.90	
						Perf.		27.50	
						Perf. & B.N.		1.65	
						Total Interval		50.05	
GAS BLOW MEASUREMENTS									
Measured with		I.D. Riser or Est ☐							
Type of Instrument		Gauge							
Time	Size, Choke	Reading, Inches	M	Cubic Feet Day					
0830	1"			4200					
0900	1"			6000					
0930	1"			6200					
1000	1"			8000					
1030	1"			8300					
1100	1"			8000					
1120	1"			8000					
FLUID RECOVERY									
Was Test Reverse Circulated Yes ☐ No ☒									
Fluid Recovered (Total: 131'				Ft.		Total Length		94.35	
Description of Fluid Recovered 131' Sulphurous Water.									
MUD AND HOLE DATA									
Mud Type Gel and Chem				W.L.					
Filter Cake 2/32		Visc. 85		Wt. 9.2					
Time Taken February 28, 1965 @ 2200 hrs.									
Contractor Cascade Drilling									
Remarks Test Satisfactory.						Rig No. 19			
						Drill Pipe Size 4 1/2 IF			
						Drill Collar Size 2 3/4" ID Length 551'			
						Main Hole Size 8 3/4"			
						Rot Hole Size			
Co. Rep. C. Smith									
Tester R. Quinn									
District Fort St. John				Ticket No. C 2585		Date March 1/65			
Company The Pure Gil Company				Address 1200 Elveden House, Calgary, Alberta					
Well Name Pure Pan Am Trainor Lk. C-39				Test No. 3		J.T.L. Test No. 3			
Number 60°-18'-01"N-120°-37'W Est.				Field Wildcat		Province N. W. T.			
Formation DST#3 6275-6325				Consultant					
and Interval									
Distribution of Reports				8 - Calgary, 1 - Data Center (Enclosed)					

JOHNSTON TESTERS

Pressure Data

C 2585

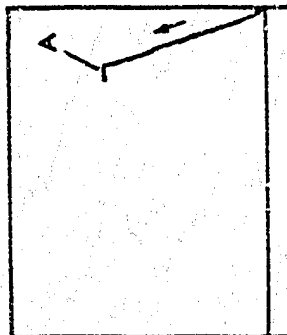
Recorder No.	T-132	AKI-2096		
Locality P.S.I.G.	7000	7650		
Recorder Depth	6248	6296		
Pressure Gradient P.S.I. ft.				
Well Temperature °F	190° Est.	190° Est.		
A Initial Hydrostatic	3071#	3080#		
B First Initial Flow	521#	676#		
C Initial Shut-In Pres.	2349#	2351#		
D Flowing Pres.	584#	623#		
E Final Flow	924#	985#		
F Final Shut-In	2114# FALSE	2113#		
G Final Hydrostatic	3040#	3045#		

Remarks

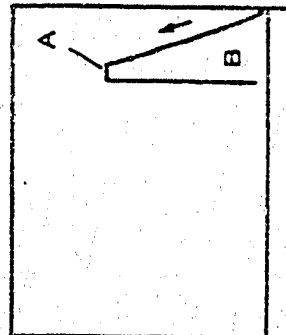
T-132 - Inside Recorder

AKI-2096 - Outside Recorder

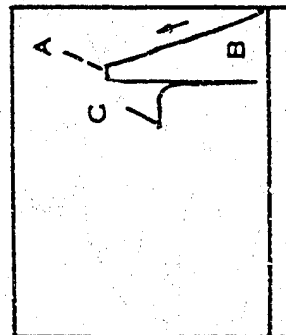
GUIDE TO INTERPRETATION AND IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



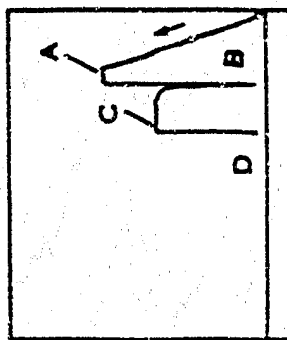
The pressure chart records the build-up in pressure. The test valve is opened and the pressure is allowed to rise. Upon reaching the desired depth the hydrostatic head or pressure of mud column is recorded.



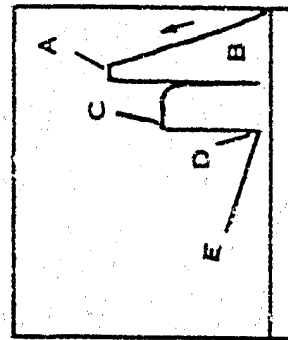
The packer is expanded and set to isolate the test zone. When the test valve is opened, a pressure drop is indicated on the pressure chart. This pressure drop is caused by removal of the hydrostatic mud pressure from the formation, allowing the formation to produce.



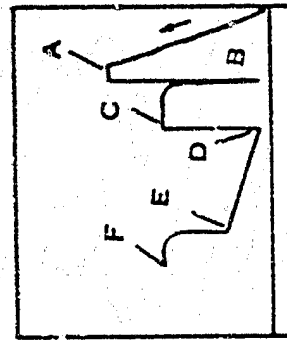
This chart shows the initial shut-in pressure. There is one mechanical method commonly used to obtain this pressure. A 4 stage shut-in tool, that is run-in in the open position and rotated closed when the desired amount of initial flow time is obtained. This initial shut-in pressure is the best method yet devised for recording the original undisturbed reservoir pressure of a formation.



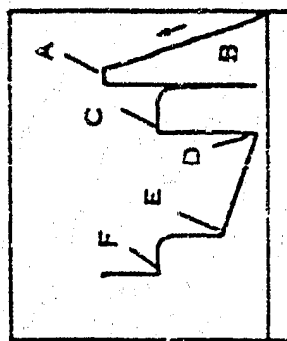
The chart indicates a pressure drop. The test tool has been opened to the surface by rotating the 4 stage shut-in tool into the open position. Permitting the open formation to produce.



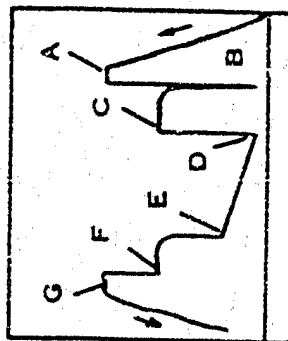
The pressure of fluid flowing from the formation into the well bore, through the perforated anchor, and into the drill pipe, is recorded on the chart.



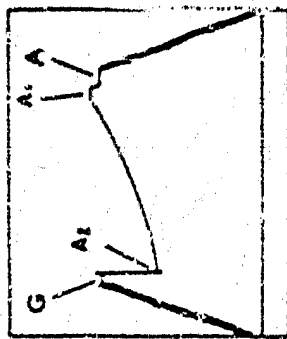
The final shut-in pressure is taken by stopping the flow of formation fluid into the drill pipe. Note the characteristic build-up curve. The well bore pressure is approaching equilibrium with the static reservoir pressures. When the shut-in curve levels-off the static reservoir pressure has been reached.



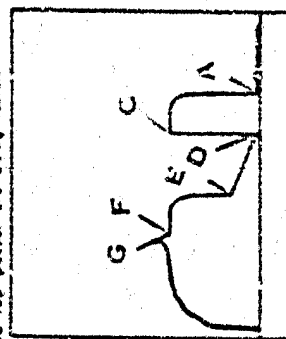
The chart shows the equalizing. The by-pass ports have been opened permitting the drilling fluid to flow through the packer to the test zone. Thus, pressure is equalized above and below the packer. The equalization of the pressure facilitates later removal of the packer from the test zone.



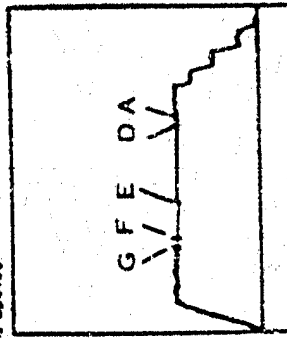
The packer has been unscrewed. The testing assembly is being removed from the hole.



The above is a typical illustration of a chart from a recorder that is in the test zone. The packer on a conventional straddle test. Only the hydrostatic mud pressure can be recorded. When the test is opened, there is a pressure differential across the packer. This differential is caused by the rubber flow of the packer element, which in turn causes a drop in pressure. If the bottom straddle chart reads the same as a chart that is in the test zone, then the packer has failed. If this occurs, all tests below the top packer are being tested.



In this case a recorder has been run in the test zone. The hydrostatic mud pressure is not influencing the recorder while it is in the test zone. The packer is being tested. The flow pressure and shut-in pressure are recorded while the main test valve is opened.



In this case a recorder has been run above the main test valve with a fluid column used in the drill pipe. The pressure is recorded as the test tool is being lowered into the hole. Then the fluid column pressure is recorded as the drill pipe is filled with fluid. At more depths are run into the hole, the recorder registers the hydrostatic pressure of the formation. When the main test valve is opened the pressure of the test zone or the flowing pressure of the formation, (which ever is greater), is recorded.

INDEX OF LABELED POINTS:

- A—Initial Hyd. Mud
 - B—First Initial Flow
 - C—Initial Shut-in
 - D—Initial Flow
 - E—Final Flow
 - F—Final Shut-in
 - G—Final Hyd. Mud
- The following points are either fluctuating pressures or points indicating other packer settings. (Testing different zones).
- A-1, A-2, A-3, etc. Initial Hyd. Pressures.
 - B-1, B-2, B-3, First Initial Flow.
 - C-1, C-2, C-3, etc. The Initial Shut-in Pressures.
 - D-1, D-2, D-3, etc. Flowing Pressures.
 - E-1, E-2, E-3, etc. The Final Flow Pressures or Final Shut-in Pressures.
 - F-1, F-2, F-3, etc. The Final Shut-in Pressures.
 - G-1, G-2, G-3, etc. Final Hyd. Mud Pressures.

- Z — Special pressure points such as pumping pressure recorded for formation breakdown.

976 024 4

[illegible]

JOHNSTON TESTERS

Pressure Data

C 2585

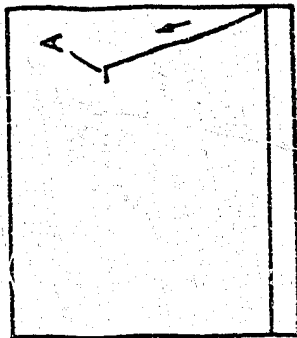
Recorder No.	T-132	AK1-2096		
Capacity P.S.I.G.	7000	7850		
Recorder Depth	6308	6343		
Pressure Gradient P.S.I. Ft.				
Well Temperature F.	190° Est.	190° Est.		
A. Initial Hydrostatic	3107#	3124#		
B. First Initial Flow	344#	590#		
C. Initial Shut-in Pres.	2244#	2250#		
D. Flowing Pres.	308#	480#		
E. Final Flow	328#	417#		
F. Final Shut-in	2117#	2121#		
G. Final Hydrostatic	3083#	3082#		

Remarks

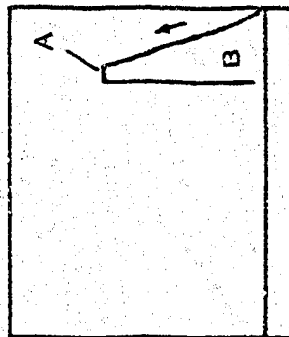
T-132 - Inside Recorder

AK1-2096 - Outside Recorder

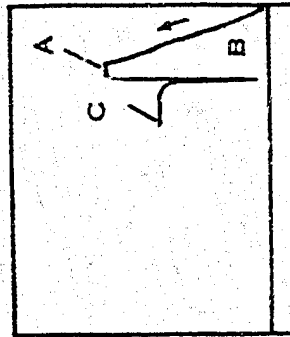
GUIDE TO INTERPRETATION AND IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



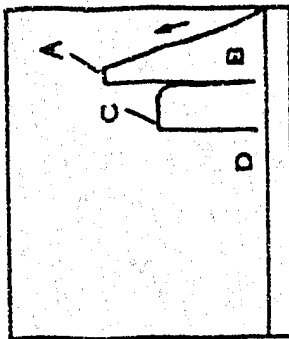
The pressure chart records the build-up in test zone. When the test valve is opened, a pressure drop is indicated on the pressure chart. This pressure drop is caused by removal of the hydrostatic mud pressure from the formation, allowing the formation to produce.



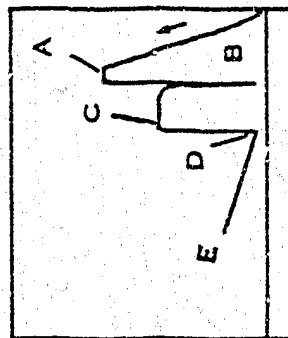
The packer is expanded and set to isolate the test zone. When the test valve is opened, a pressure drop is indicated on the pressure chart. This pressure drop is caused by removal of the hydrostatic mud pressure from the formation, allowing the formation to produce.



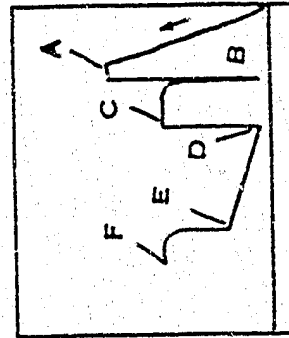
This chart shows the initial shut-in pressure. There is one mechanical method commonly used to obtain this pressure. A 4 stage shut-in tool that is run in the open position and rotated closed when the desired amount of initial flow time is obtained. This initial shut-in pressure is the best method yet devised for recording the original undisturbed reservoir pressure of a formation.



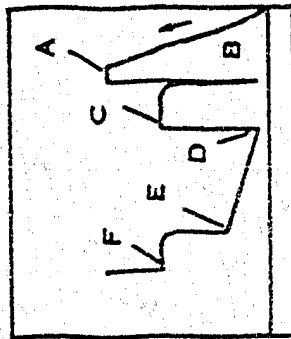
The chart indicates a pressure drop. The test tool has been opened to the surface by rotating the 4 stage shut-in tool into the open position, permitting the open formation to produce.



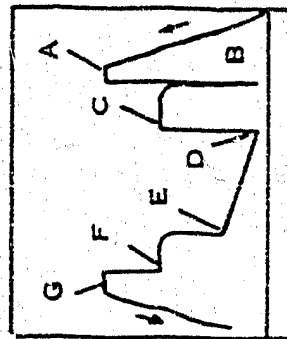
The pressure of fluid flowing from the formation into the well bore, through the perforated anchor, and into the drill pipe, is recorded on the chart.



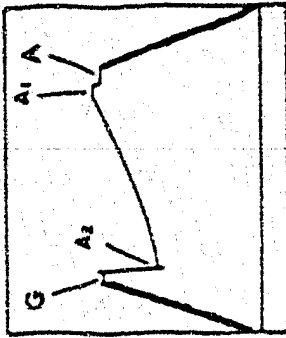
The final shut-in pressure is taken by stopping the flow of formation fluid into the drill pipe. Note the characteristic build-up curve. The well bore pressure is approaching equilibrium with the static reservoir pressure. When the shut-in curve levels off the static reservoir pressure has been reached.



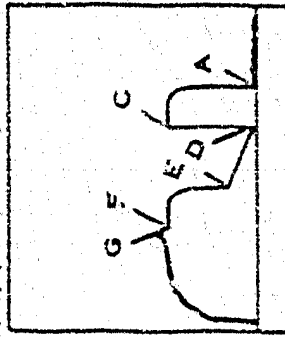
The chart shows the equalizing. The biggest flow has been opened permitting the drilling fluid to flow through the packer to the test zone. Then, pressure is equalized above and below the packer. The equalization of the pressure facilitates easier removal of the packer from the packer seat.



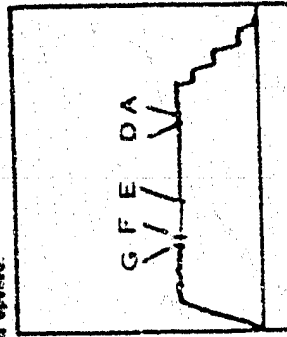
The packer has been squeezed. The testing assembly is being removed from the hole.



The above is a typical indication of a chart from a recorder that is run below the bottom packer on a conventional divide test. Only the hydrostatic mud pressure is recorded. A differential test is run when a pressure differential exists between the bottom packer. This differential is caused by the rubber flow of the packer element, which is test, then a drop-down in pressure. If the bottom stringer chart reads the same as a chart that is run to record pressure of the test zone, then the bottom packer has failed. If this occurs, at some below the top packer are being tested.



In this case a recorder has been run in an air chamber. The hydrostatic mud pressure is not indicated by the recorder while going in or coming out of the hole due to the inlet valve being closed. The flow pressure and mud pressure are recorded when the mud valve is opened.



In this case a recorder has been run above the test valve with a rigid column used in the drill pipe. No pressure is recorded as the testing tool is being lowered into the hole. Then the fluid column pressure is recorded as the drill pipe is forced into the hole. At some stage the test valve is opened. The recorder registers the hydrostatic pressure of the column. When the test valve is opened the pressure of the column column is the flowing pressure of the formation (which ever is greater), is recorded.

INDEX OF LABELED POINTS:

- A—Initial Hyd. Mud
 - B—First Initial Flow
 - C—Initial Shut-in
 - D—Initial Flow
 - E—Final Flow
 - F—Final Shut-in
 - G—Final Hyd. Mud
- The following points are either fluctuating pressures or points indicating other packer settings, (testing different zones).
- A-1, A-2, A-3, etc. Initial Hyd. Pressures.
 - B-1, B-2, B-3, First Initial Flow.
 - C-1, C-2, C-3, etc. The Initial Shut-in Pressures.
 - D-1, D-2, D-3, etc. Flowing Pressures.
 - E-1, E-2, E-3, etc. The Final Flow Pressures or Final Shut-in Pressures.
 - F-1, F-2, F-3, etc. The Final Shut-in Pressures.
 - G-1, G-2, G-3, etc. Final Hyd. Mud Pressures.
 - Z — Special pressure points such as pumping pressure recorded for formation breakdown.

APPENDIX ABULLSTEN TESTSBACK PRESSURE DATA

TEST NO. 1: 61021-6255.5'

<u>Time</u>	<u>Back Pressure</u>	<u>Choke</u>	<u>Wcf/d</u>	<u>Remarks</u>
5:15	600	1/2	3.6	
5:20	520			
5:25	440			
5:30	370	1/2	2.3	
5:35	370	1/2	2.3	
5:40	400	1/2	2.4	
5:45	430	1/2	2.6	
5:50	440	1/2	2.7	
5:55	460	1/2	2.8	
6:00	270	1	7.2	
6:05	230	1	6.4	
6:10	230	1	6.4	
6:15	225	1	6.1	
6:20	235	1	6.5	
6:25	240	1	6.55	
6:30	250	1	6.8	Flame went out (wet)
6:35	600	S.I.		
6:40	420	3/4	6.0	
6:45	340	1	0.0	
6:50	300	1	8.0	
7:00	-	-	-	Getting gas sample.
7:10	700	S.I.	-	0 mins.
7:15	900	S.I.	-	5 mins.
7:20	1120	S.I.	-	10 mins.
7:25	1340	S.I.	-	15 mins.
7:30	1480	S.I.	-	20 mins.
7:35	1630	S.I.	-	25 mins.
7:40	1720	S.I.	-	30 mins.
7:45	1780	S.I.	-	35 mins. +60# +40#
7:50	1820	S.I.	-	40 mins. Change to 3000# gauge
7:55	1860	S.I.	-	45 mins. +40#
8:00	1875	S.I.	-	50 mins. +15#
8:05	1875	S.I.	-	55 mins.
8:10	1880	S.I.	-	60 mins. +5#
8:15	1880	S.I.	-	65 mins.
8:15	1880	S.I.	-	2 hrs. 5 mins.
9:20	1800	1/8	.55	
9:35	1650	1/4	2.2	
9:40	1600	1/4	2.1	
9:45	1550	1/4	2.1	
9:50	1450	1/4	1.05	
9:55	1350	1/4	1.85	
10:00	1300	1/4	1.75	
10:05	1275	1/4	1.7	
10:10	1240	1/4	1.65	
10:15	1200	1/4	1.6	
10:20	1150	1/4	1.55	
10:25	1125	1/4	1.52	
10:30	1100	1/4	1.5	
10:35	1050	1/4	1.45	

DST #1 (continued)

Time	Back Pressure	Choke	WCF/d	Remarks
10:40				
10:45	1050	1/4	1.45	Flame went out.
10:50	1050	1/4	1.45	
10:55	1050	1/4	1.45	
11:00	1050	1/4	1.45	
11:20	1025	5/16	2.25	
11:25	975	5/16	2.1	
11:30	725	5/16	1.6	Flame goes out.
11:35	650	5/16	1.4	
11:40	625	5/16	1.375	
11:45	600	5/16	1.35	
11:50	450	3/8	1.45	
11:55	425	3/8	1.4	
12:00	425	3/8	1.4	
12:05	425	3/8	1.4	
12:10	400	3/8	1.35	
12:15	400	3/8	1.35	
12:20	375	13/32		
12:25	350	13/32		
12:30	350	13/32		Flame went out.
12:35	400	3/8	1.35	
12:40	400	3/8	1.35	
--	--	-	-	Flame went out.
1:00	675	3/8	2.15	
1:05	650	5/16	1.4	
1:10	625	5/16	1.37	
1:15	625	5/16	1.37	
1:20	650	1/4	.875	
1:25	700	1/4	.95	
1:30	725	1/4	1.0	
1:35	750	1/4	1.05	
1:40	750	1/4	1.05	
1:45	750	1/4	1.05	
1:50	750	1/4	1.05	
1:55	750	1/4	1.05	
2:00	750	1/4	1.05	
2:05				
2:10	1125	S.I.		Flame went out.
2:15	1225	S.I.		
2:20	1050	1/4	1.45	
2:25	975	1/4	1.35	
2:30	925	1/4	1.25	
2:35	925	1/4	1.25	
2:40	875	1/4	1.2	
2:45	850	1/4	1.175	
2:50	825	1/4	1.15	
2:55	825	1/4	1.15	
3:00	825	1/4	1.15	Flame goes out.
3:05	875	7/32		
3:10	875	7/32		
3:15	875	7/32		
3:20	885	7/32		
3:25	925	3/16	.675	
3:30	975	3/16	.7	

DST 31 (continued)

Time	Back Pressure	Choke	Wt/Gal	Remarks
3:35	850	3/16	.7	
3:40	1000	3/16	.725	
3:45	1000	3/16	.725	
3:50	1000	3/16	.725	
3:55	975	7/32		
4:00	850	7/32		
4:05	850	7/32		
4:10	875	1/4	1.2	
4:15	875	3/16	.7	
4:20	875	3/16	.7	
4:25	880	3/16	.7	
4:30	1000	3/16	.725	
4:35	975	7/32		
4:40	950	7/32		
4:45	935	7/32		
4:50	1000	3/16	.725	
4:55	1000	3/16	.725	
5:00	1000	3/16	.725	
5:05	975	7/32		
5:10	1000	7/32		
5:15	1025	3/16	.75	
5:20	1000	3/16	.725	
5:25	1025	3/16	.75	
5:30	1015	3/16	.735	
5:35	1020	3/16	.74	
5:40	1020	3/16	.74	
5:45	1020	3/16	.74	
5:50	1015	3/16	.735	
5:55	1015	3/16	.735	
6:00	1015	3/16	.735	
6:05	1015	3/16	.735	

Shut tool.

TEST NO. 2: 62537-62751

Time	Back Pressure	Choke	MBcf/d	Remarks
1:50	-	-	-	Valve open.
1:55	-	-	-	Closed tool for I.S.I.P.
2:25	-	-	-	Valve opened with gas flow.
2:35	50	1	1.6	
2:40	75	1	2.2	
2:45	90	1	2.6	
2:50	100	1	3.0	
2:55	110	1	3.2	
3:00	115	1	3.3	
3:05	120	1	3.4	
3:10	125	1	3.5	
3:15	130	1	3.7	
3:20	135	1	3.8	
3:25	140	1	4.0	
3:30	145	1	4.1	
3:35	150	1	4.3	
3:40	150	1	4.3	
3:45	155	1	4.4	
3:50	155	1	4.4	
3:55	160	1	4.5	
4:00	165	1	4.6	
4:05	170	1	4.7	
4:10	175	1	4.8	
4:15	185	1	5.2	
4:20	200	1	5.5	
4:25	200	1	5.5	
4:30	220	1	6.0	
4:35	230	1	6.4	
4:40	250	1	6.8	
4:45	250	1	6.8	
4:50	230	1	6.4	
4:55	225	1	6.2	
5:00	225	1	6.2	
5:05	225	1	6.2	
5:10	225	1	6.2	
5:15	210	1	5.8	
5:20	210	1	5.8	
5:25	210	1	5.8	Closed tool for F.S.I.P.

TEST NO. 3: 62551-63251

Time	Back Pressure	Choke	Wcf/d	Remarks
7:40	-	-	-	Valve opened.
7:45	-	-	-	Closed tool for I.S.I.P.
8:10	-	-	-	Valve opened with good strong blow.
8:35	130	1	3.7	
8:39	150	1	4.2	
8:39	160	1	5.0	
8:40	190	1	5.3	
8:45	200	1	5.5	
8:50	210	1	5.7	
8:55	210	1	5.7	
9:00	220	1	6.0	
9:05	220	1	6.0	
9:10	230	1	6.2	
9:15	230	1	6.2	
9:20	230	1	6.2	
9:25	230	1	6.2	
9:30	230	1	6.2	
9:35	240	1	6.5	
9:40	240	1	6.5	
9:45	260	1	7.0	
9:50	280	1	7.5	
9:55	300	1	8.0	
10:00	300	1	8.0	
10:05	320	1	8.5	
10:10	320	1	8.5	
10:15	320	1	8.5	
10:20	330	1	8.7	
10:25	320	1	8.5	
10:30	310	1	8.3	
10:35	300	1	8.0	
10:40	300	1	8.0	
10:45	300	1	8.0	
10:50	300	1	8.0	
10:55	300	1	8.0	
11:00	300	1	8.0	
11:05	300	1	8.0	
11:10	300	1	8.0	
11:15	300	1	8.0	
11:20	300	1	8.0	Closed tool.

WELL NO. 1: 61251-43751

Time	Back Pressure	Choke	WCF/d	Remarks
11:50	-	-	-	Tool opened.
11:54	-	-	-	Tool closed for I.S.I.P.
12:24	-	-	-	Tool opened.
12:30	20	1	.9	
12:35	10	1	.65	
12:40	10	1	.65	
12:45	10	1	.65	
12:50	5	1		
12:55	0			

THE PURE OIL COMPANY

Alcon Producing Division

1200 Elveden House

CALGARY, ALBERTA

DRILLING MUD RECORD

Well Name PURE PAN AM TRAINOR LAKE C-30

Location Unit C, Sec. 30, Grid 60°20', 120°30' W Prov. N.W.T.

DATE	DEPTH	Weight lbs./gal	Visc. Sec	Water Loss C.C.	pH	ADDITIVES
1-29-65	20'					5000# Gel, 50# Lime, 200# Caustic
1-30-65	70'		52			6000# Gel, 100# Lime.
2-31-65	205'		49			
2-1-65	205'		42			
2-2-65	205'		35	4.8	10.0	6000# Gel, 3250# Spersene, 500# Caustic, 250# C.M.C., 10 gals Detergent, 35 sax XP-20, 100# Bicarbonate, 1150 gals. Diesel
2-3-65	205'	8.5	40	3.4	10.5	500# Caustic, 15 sax Spersene, 2000# Gel, 20 gals. Detergent, 100# S.A.P.P., 5 sax XP-20.
2-4-65	045'	0	34	3.3	10.5	1000# Spersene, 250# XP-20, + 5 sax, 25 bbls. Diesel, 5 gals. Detergent, 3000# Gel, 50# C.M.C., 200# Caustic.
2-5-65	1501'	9.3	37	3.6	10.5	2500# Gel, 650# + 30 sax Spersene, 250# + 15 sax XP-20 100# C.M.C., 500# Caustic, 10 bbls. Diesel.
2-6-65	1815'	9.4	43	3.0	10.5	
2-7-65	1815'	9.4	43	3.0	10.5	3500# Gel, 1750# Spersene, 1000# XP-20, 200# Caustic, 150# C.M.C., 5 gals. Detergent, 400# Bicarbonate, 20 bbls. Diesel.
2-8-65	1815'	8.0	30	3.0	10.5	
2-9-65	2242'	9.4	43	2.4	10.5	1500# Gel, 500# Spersene, 250# XP-20, 100# Caustic, 15 bbls. Diesel, 5 gals. Detergent.
2-10-65	2738'	9.8	51	4.0	10.5	2000# Gel, 1550# Spersene, 100# Caustic, 800 gals. Diesel, 900# XP-20, 5 gals. Detergent, 100# C.M.C.
2-11-65	3187'	9.0	40	2.8	10.5	2000# Gel, 1300# Spersene, 100# Caustic, 650# XP-20, 350 gals. Diesel, 100# C.M.C.
2-12-65	3450'	9.7	41	3.2	10.5	50# C.M.C., 600# Spersene, 400# XP-20, 250# Caustic, 1500# Gel, 400 gals. Diesel.

1A

DRILLING MUD RECORD

Well Name

PURE PAN AM TRINOR LINE C-30

Location

Prov.

DATE	DEPTH	Weight lbs/gal	Visc. Sec	Water Loss CC	pH	ADDITIVES
2-13-65	3412'	9.7	43	2.3	10.0	100# Sperse, 200# Caustic, 400# XP-20, 1500# Gel, 400 gals. Diesel, 150# C.M.C., 5 gals. Detergent.
2-14-65	3725'	9.5	44	2.2	10.5	1150# Caustic, 23,800# Gel, 1500# Sperse, 2050# XP-20, 20 sax Fibreseal, 70 sax Cello- seal, 200 sax Sawdust, 100# C.M.C., 100 gals. Diesel.
2-15-65	3963'	9.3	50	6.0	11.0	6000# Gel, 20 sax Celloseal, 400# Caustic, 1000# Sperse, 500# XP-20, Sawdust.
2-16-65	4203'	9.3	42	5.2	11.0	2000 gals. Diesel, 7500# Gel, 1220# + 10 sax XP-20, 600# Caustic, 1000# + 15 sax Sper- sene, 100# Dicarboxate, 50# C.M.C.
2-17-65	4545'	9.4	43	6.2	11.0	
2-18-65	4830'	9.4	43	4.9	10.8	1650# + 20 sax Sperse, 1000# + 20 sax XP-20, 1300# Caustic, 16,700# Gel, 300# C.M.C., 500 gals. Diesel, 10 gals. Detergent.
2-19-65	5148'	9.7	43	3.8	11.0	2000# Gel, 600# Sperse, 600# XP-20, 450# Caustic, 400# C.M.C., 10 gals. Detergent, 1500 gals. Diesel.
2-20-65	5614'	9.9	64	3.2	13	750# + 20 sax Sperse, 950# + 20 sax XP-20, 5000# Gel, 650# Caustic, 10 gals. Detergent, 400 gals. Diesel.
2-21-65	5980'	9.6	61	2.8	12	750# + 10 sax Sperse, 750# + 20 sax XP-20, 3000# + 20 sax Gel, 550# Caustic, 400 gals. Diesel.
2-22-65	6000'	9.6	58	2.6	13	2000# Gel, 200# Caustic, 600# Sperse, 400# XP-20, 250 gals. Diesel.
2-23-65	6138'	9.6	67	2.8	13	1000# Gel, 600# Sperse, 400# XP-20, 200# Caustic, 250 gals. Diesel,
2-24-65	6242'	9.8	59	2.6	13	4000# + 20 sax Gel, 500# Caustic, 500# + 20 sax Sperse, 250# + 20 sax XP-20

Drilling Authority No.147.....
Date Issued

WELL NAME ^{UNION} ~~Pan~~ American Trainor Lake C-39
FIELD Area:
LOCATION: Unit C Section 39 Grid 60-20, 120-30
Latitude 60-18-01 Longitude 120-37-00
From Established Reference Marker

Rig Release Date: ...15-3-65...
Status ...Suspended... Gas Well...
Information Release Date ...15-3-67...

CHANGE OF NAME:

DATE RECEIVED	INDEX
	Application for a Drilling Authority. Well Completion Data. Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well. Well History Supplement. Well Completion Data. Work-over Report No.....
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells — Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells — Vitter's Method.
	M.P.R. — Oil — Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	Well Visit.
	Daily Drilling Reports.
	Logs. Large scale Small scale

DATE RECEIVED

LOGS:

Name

Run No.

Type

Interval

ANALYSES:

Sample

Lab. No.

Formation

Interval

A.O.F. Potential

Formation

Interval

MC.F.D.

Test Date

DRILL STEM TESTS:

No.

Formation

Interval



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCE MANAGEMENT DIVISION

Application to Change a Well Name

Application is made hereby to change the name of the well, recorded in the Well-names Register as—

PURE PAN AM TRAINOR LAKE C-39

(Old name)

to UNION PAN AM TRAINOR LAKE C-39

(Proposed new name)

Well Location

Location: Unit.....C..... Section.....39..... Grid 60° - 20' x 120° - 30'

Latitude 60° - 18' - 01" Longitude 120° - 37' (est.)

From Established Reference Marker On shot point 2110 U-45-207 of Pan American
Petroleum Corporation Seismic survey of March, 1962.

Reason for Changing Well Name

The Pure Oil Company was ^{merged with} purchased by Union Oil Company of California,
followed by Union Oil Company of Canada Limited purchasing the Canadian
assets of Union Oil Company of California, effective December 20, 1965.
Union Oil Company of Canada Limited licence number for operating in the
Northwest Territories is 720.

Dated at Calgary, Alberta this 30th day of December 1965

Signed by

Title Joint Interest Superintendent

Company Union Oil Company of Canada Limited

(For Resource Management Division use only)

APPROVED

This application has been examined and approved:

Date 30th December, 1965

Oil Conservation Engineer

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



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to Alter Condition of a Well

NOTICE OF INTENTION TO

~~Suspend Operations~~—Resume Operations—~~Recondition~~—~~Deepen~~
~~—Recondition~~—~~Recondition~~—~~Recondition~~—~~Recondition~~
(Strike out words that are not applicable.)

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

Type of operation.....Complete and Production Test
Name and number of well.....Pure Pan Am Trainor Lake C-33
Location: Unit.....C.....Section.....39.....Grid 60°-20' x 120° - 30'
Latitude.....60° - 18' - 01".....Longitude.....120° - 37' (est.)
From Established Reference Marker.....On shot point 2110 U-45-207 of Pan American
Petroleum Corporation Seismic survey of March, 1962
Permit No.....2698.....Lease No.....
Permittee, Licensee, Lessee.....Pan American Petroleum Corporation

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at.....Nil
Gas at.....6102' - 6375'
Water at.....6323' - 6375'
Total depth.....7150' FBTD 6509'.....Date of last operation.....March 15, 1965
Present condition of well.....5-1/2" casing set at 6509' (not perforated), swedge and valve on
top of casing, chained and locked.

CASING RECORD

Casing Size O.D. (Inches)	Weight	Amount	Set at—	Sacks of Cement	Method	Amount Pulled
1.....13-3/8"	48#	279'	286'	225	Halliburton double plug	Nil
2.....9-5/8"	36#	1789'	1805'	650	"	Nil
3.....5-1/2"	17#	6493'	6509'	500	"	Nil
4.....						
5.....						
6.....						

OPERATION PROPOSED

(If more space is required, attach additional sheet)

Programme of operations—(Plugs, perforations, rework, etc.).....Perforated, mud acid treatment, test,
HCl acid treatment and A.O.F. Test

Operations to be carried out by.....Arrow Drilling Co. Ltd.....Contractor Licence No.....24240
Address.....309 - 7 Avenue S.W., Calgary, Alberta
Responsible agent in field.....C. E. Smith.....Address.....1200 Elveden House, Calgary, Alta.
Dated at.....Calgary....., this.....22.....day of.....November.....19 65
Signed by.....*[Signature]*.....Company.....Union Oil Company of California
Title.....Division Operations Manager.....Exploratory Licence No.....
Note:—The Oil Conservation Engineer's office must be notified before work is commenced.

Management
(For RESOURCES DIVISION use only)

APPROVAL

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

The Company will submit to this office, on Tuesday of each week,
the latest reports received by radio on the progress of the well.

Dated.....26th November....., 19 65

Forms to be submitted in triplicate to Oil Conservation Engineer, Calgary, Alta.



Date Issued January 12, 1965

WELL COMPLETION DATA

Well name and number..... PURE PAN AM TRAINOR LAKE C-39

Permit No. 2698 Lease No. 684
Pan American Petroleum Corporation
 (Permitter, Licensee, Lessee) Exploratory Licence No. 684

Location: Unit C Section 39 Grid 120° 30' W
 Latitude 60° 18' 01" N Longitude 120° 37' (est.) W

	DATE	DEPTH
Spudded 10:00 p.m.	1-29-65	0'
Suspended 8:00 p.m.	3-15-65	6780' FBD
Resumed		
Finished Drilling 8:00 a.m.	3-10-65	7150'
Deepened		
Complete (gas/oil)		
Abandoned		
Rig released 8:00 p.m.	3-15-65	6780' FBD

Interval(s) open to production.....

K.B. 2271

Drilling Contractor & Rig No. Cascade #19

Contractor's Licence No. A11809

Casing Size (Inches)	Weight	Amount	Set at—	Sacks of Cement	Method
1. 13-3/8"	48#	279'	286'	225	Halliburton Double Plug
2. 9-5/8"	36#	1789'	1805'	650	"
3. 5-1/2"	17#	6493'	6509'	500	"
4.					
5.					
6.					

NANR 52-90(2) (11-61)

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
3-14-65	6900'	6780'	Elk Point								

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.B.H.P.	F.S.I.B.H.P.	I.F.B.H.P.	F.F.B.H.P.	I.H.P.	F.H.P.	REMARKS
1	2-25-65	Slave Pt.	6265.5'	6102'	850	30	205	-	2307	530	1285	3272	3272	Recovery: 122' water, 10' mud.
2	2-28-65	Slave Pt.	6275'	6253'	180	30	80	2371	2371	404	699	3166	3166	Recovery: 207' water.
3	3-1-65	Slave Pt.	6325'	6275'	180	30	200	2349	2114	591	924	3071	3040	Recovery: 131' sulphurous water.
4	3-2-65	Slave Pt.	6375'	6325'	60	30	30	2244	2117	344	328	3107	3083	Recovery: 600' sulphurous salt water.
(The above pressures are all field pressures - see Well History Report for corrected DST Charts)														

Lab. No.	Sample	From	To	Source	Remarks	PRESENT STATUS OF WELL			
CBH-2-QA-1666	Gas	6285.5	6102	DST #2		Oil			
CBH-2-WA-2998	Water	6265.5	6102	DST #1		(Interval)			
CBH-2-WA-3004	Water	6275	6253	DST #2					
CBH-2-WA-3004	Water	6325	6275	DST #3		Gas			
CBH-2-WA-3004	Water	6375	6275	DST #4		(Interval)			
CBH-2-WA-3004	Water	Water used in drilling fluid.							
CNP-4-2729	Core #1	6093	6143	Slave Point		Dry			
CNP-4-2729	Core #2	6242	6267	"		Susp.		X	

Company..... The Pure Oil Company

Signed by.....

Title..... Division Operations Manager

Date..... March 30, 1965

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



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to ~~Abandon a Well or~~ Suspend Drilling

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

Name and number of well. **PURE PAN AM TRAINOR LAKE C-39**
Location: Unit **C** Section **39** Grid **60° 20' N, 120° 30' W**
Latitude **60° 18' 01" N** Longitude **120° 37' (est.) W**
From Established Reference Marker **on Shot Point 2110, Line U 45-207 of Pan American Seismic Survey of March 1962**
Permit No. **2698** Lease No.

Pan American Petroleum Corporation
(Permittee, Licensee, Lessee)

Date of commencement of proposed programme **March 15, 1965**

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at **nil**
Gas at **6102'-6375'**
Water at **6325'-6375'**
Total Depth **7150'** Date of last operations **March 15, 1965**
Present condition of well **5 1/2" casing set at 6509' (not perforated).**
Swedge and valve on top of casing, chained and locked.

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sack of Cement	Method	Amount Pulled
1. 13-3/8"	48#	279'	286'	225	Halliburton Double Plug	nil
2. 9-5/8"	36#	1782'	1805'	650	"	nil
3. 5-1/2"	17#	6493'	6509'	500	"	nil
4.						
5.						

PROPOSED ABANDONMENT PROGRAMME

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
1	6500 - 6600'	Elk Point	100	

The following logs have been run. **Dual Induction Lateral, Sonic Caliper, Gamma Ray Neutron., SES.**
Other operations proposed. **Suspension until weather conditions permit re-entry.**

Operations to be carried out by Contractor Licence No.
Address Address
Responsible Agent in field
Dated at **Calgary, Alberta**, this **30th** Day of **March** 19**65**.
Signed by **[Signature]** Company **THE PURE OIL COMPANY**
Title **Division Operations Manager** Exploratory Licence No. **912**

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

(For RESOURCES DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.H.J. Thomas on the 9th March 1965

Dated **12th April**, 19**65**

[Signature: B.H.J. Thomas]
Forms to be submitted in triplicate to Oil Conservation Engineer, Calgary, Alberta



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application for a Drilling Authority

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

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

Name and number of well **PURE PAN AMERICAN TRAINOR LAKE C-39**
Location: Unit **C** Section **39** Grid **60° 20' x 120° 30'**
Latitude **60° 18' 01"** Longitude **120° 37' (est.)**
From Established Reference Marker **On shot point 2110, Line U 45-207 of Pan American Petroleum Corporation Seismic survey of March, 1962**
Elevation: Ground **2255'** K.B. **2268** feet above sea-level.
Well is expected to produce from **Slave Point** formation at a depth of about **7000** feet.
Area assigned to well.....
(for Oil Conservation Engineer's use only)

Permit No. **2698** Lease No. Acreage **63 534**
Permittee, licensee, or lessee **Pan American Petroleum Corporation**
Exploratory Licence No. **684**
Surface owned by Crown or.....
(If alienated submit name and address of owner and occupant.)
Petroleum and natural-gas rights owned by **Crown**

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	Brand	New or Used	Estimated Depth	Sacks of Cement
1. 13-3/8"	48	H-40	Mannesmann	New	250'	Circulated
2. 9-5/8"	36	J-55	"	"	1750'	Circulated
3. 5-1/2"	17	J-55	Youngstown	"	T.D.	Minimum of 500'
4.						above prospective
5.						producing zone.

Expected water, gas, and oil horizons and type of control equipment..... **Surface and intermediate casing to control surface water. Blow out preventers will be used to control high pressure oil and/or gas.**

Well will be drilled with (Rotary) Rig No. **19** by **Cascade Drilling Co. Ltd.**
(Cable) (Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Licence No. **A11809**
At well **C. E. Smith** At registered office **J. T. Dree**
Address **Fort Nelson & Wellsite** Address **1200 Elveden House, Calgary, Alberta**
It is understood that if changes become necessary, notice of the change of plan will be submitted.
Dated at **Calgary, Alberta**, this **12th** day of **January** 19 **65**.
Signed by **J. T. Dree** Company **The Pure Oil Company**
Title **Division Operations Manager** Licence No. **912**

(For Resources Division use only)

APPROVED

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

The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.

Dated **12th January** 19 **65**

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

PAN AMERICAN PETROLEUM CORPORATION

BENTALL BUILDING
444 - 7th AVENUE S.W.
CALGARY, ALBERTA, CANADA.

January 11, 1965

Re: N.W.T. Permit No. 2698
Pan American Lease 3832
AFE 2-1336
Island River Area
Northwest Territories, Canada

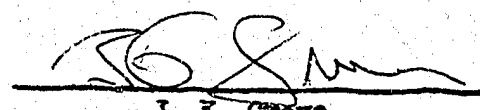
Mr. B. H. J. THOMAS,
Oil Conservation Engineer,
Department of Northern Affairs and
National Resources,
725 - 11th Avenue S.W.,
Calgary, Alberta

Dear Sir:

Please accept this letter as Pan American's consent to the drilling of a well on the above captioned Permit by The Pure Oil Company. The well is being drilled in accordance with an agreement reached with The Pure Oil Company and we would, therefore, appreciate having the Drilling License issued as requested by that Company.

Yours very truly,

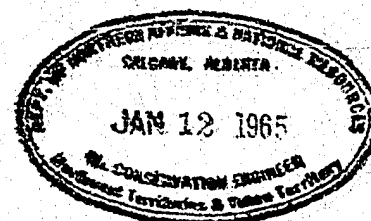
PAN AMERICAN PETROLEUM CORPORATION

By: 

J. K. Grove

JKG/st

cc: The Pure Oil Company



TETCHO LAKE

TRAINOR LAKE

60°20'

120°30'

location

SCALE: 1" = 1.5 MILES



TETCHO LAKE

SCALE 1" = 15 MILES

THE PURE OIL COMPANY

Page 3

Alcan Producing Division

1200 Elveden House

CALGARY, ALBERTA

DRILLING MUD RECORD

Well Name

PURE OIL AM TRAYNOR LAKE C-30

Location

Prov.

DATE	DEPTH	Weight lbs/gal	Visc. Sec	Water Loss CC	pH	ADDITIVES
2-25-65	6265.5'	9.5	66	2.4	10.5	7000# Gel, 500# Caustic, 1000# Spersene, 500# XP-20, 200# C.M.C., 10 gal Fibretex, 10 gal Celloncel.
2-26-65	6265.5'	9.4	82	2.4	10.5	2000# Gel, 250# XP-20, 500# Spersene, 250# Caustic, 250 gals. Diesel.
2-27-65	6275'	9.5	113	3.0	13	17,000# Gel, 2000# XP-20, 3250# Spersene, 250# Caustic, 250 gals. Diesel.
2-28-65	6275'	9.3	80	3.2	10.5	3121# Caustic, 5000# Gel, 1000# Spersene, 1000# XP-20, 300 gals Diesel, 2 gal Aluminum Sterate.
3-1-65	6325'	9.4	80	3.0	10.5	
3-2-65	6375'	9.3	125	2.4	13	2500# Gel, 1250# Spersene, 1250# XP-20, 100# Caustic, 200 gals. Diesel, 10 gals. Detergent.
3-3-65	6448'	9.4	120	3.0	10.5	5000# Gel, 400# Caustic, 50# C.M.C., 10 gals. Detergent, 200 gals. Diesel.
3-4-65	6593'	9.4	92	3.6	10.5	100# Spersene, 200# XP-20, 300# Caustic, 200# C.M.C., 2500# Gel, 200 gals. Diesel.
3-5-65	6728'	9.3	110	3.4	11.0	450# Spersene, 250# XP-20, 200# Caustic, 200# H.V.C.M.C., 200 gals. Diesel.
3-6-65	6828'	9.2	97		13	1700# Spersene, 750# XP-20, 250# Caustic, 300# C.M.C., 200 gals. Diesel.
3-7-65	6898'	9.2	87	2.5	13	750# Spersene, 350# XP-20, 1500# Gel, 100# C.M.C., 200 gals. Diesel.
3-8-65	6976'	9.2	95	2.2	12.5	200# Caustic.
3-9-65	7064	9.1	105	2.5	11.0	900# Caustic, 700# Spersene, 350# XP-20, 3000# Gel, 200 gals Diesel.

Well Name: BLUE HAWK PLATONIAN LAKE C-30

Location

Prev.

[illegible]

DIT RECORD

Well Name PURE PAN AM TRAINOR LAKE C-39

Location Unit C, Sec. 39, Grid 60° 20' N, 120° 30' W. Prov. N.W.T.

Run No	DEPTH		Size	MAKE AND TYPE	Footage	Hours Run	REMARKS
	From	To					
1-A	0'	132'	12 $\frac{1}{2}$	S-3	132'	6	
2-A	132'	295'	"	YT3	163'	6 $\frac{1}{2}$	
3-A	0'	295'	17 $\frac{1}{2}$	Pilot Reamer	295'	10 $\frac{1}{2}$	
1-B	295'	1501'	12 $\frac{1}{2}$	Reed YT3	1206'	29 $\frac{1}{2}$	
2-B	1501'	1815'	"	Western OSC3	609'	9 $\frac{1}{2}$	
1	1815'	2262'	8-3/4	OSC-3	447'	12 $\frac{1}{2}$	
2	2262'	2733'	"	OSC-3	471'	12 $\frac{1}{2}$	
3	2733'	3187'	"	OSC-1G	454'	20	
4	3187'	3400'	"	OSC-1G	213'	10	
5	3400'	3558'	"	YT-1A	158'	14-3/4	
6	3558'	3727'	"	S-4	169'	14 $\frac{1}{2}$	
7	3727'	3884'	"	S-6	157'	13-1/5	
8	3884'	4243'	"	YS-1	359'	17-3/4	
9	4243'	4652'	"	Sec. M4N	409'	15-3/4	
10	4652'	5043'	"	Hughes OSC-1G	391'	19-3/4	
11	5043'	5614'	"	Sec. S-6	571'	25 $\frac{1}{4}$	
12	5614'	6090'	"	Hughes OSC-1G	476'	23 $\frac{1}{4}$	
13	6093'	6143'	6-1/8	Chris. Dia.	50'	12 $\frac{1}{2}$	
14	6093'	6242'	8-3/4	Sec. M4L	149'		
15	6242'	6265'	6-1/8	Chris. Dia.	23'	6 $\frac{1}{2}$	
16	6242'	6275'	8-3/4	Reed YM	33'	5 $\frac{1}{4}$	Reamed 23' Drld. 10'
17	6275'	6325'	"	Hughes OWV	50'	4-3/4	
18	6325'	6375'	"	Hughes OWV	50'	4 $\frac{1}{2}$	
19	6375'	6545'	"	Sec. M4L	170'	21-3/4	
20	6545'	6690'	"	Reed YM	145'	17	

PURE PAN AM TRINOR LAND C-30
DAILY PROGRESS

DATE	PREVIOUS TO	PRESENT TO	OPERATIONS
1-19-65			Rigging up camp.
1-20-65			Rigging up camp.
1-21-65			Rigging up rotary tools.
1-22-65			Rigging up rotary tools.
1-23-65			Rigging up rotary tools.
1-24-65			Rigging up rotary tools.
1-25-65			Rigging up rotary tools.
1-26-65			Rigging up rotary tools.
1-27-65			Rigging up rotary tools.
1-28-65			Rigging up rotary tools.
1-29-65			Rigging up rotary tools. Drld rathol.
1-30-65	0'	70'	Spudded 10:00 p.m., 1-29-65, Rigging up 19 hrs., Drilling 5 hrs.
1-31-65	70'	295'	Reamed from 0'-50'
2- 1-65	295'	295'	Reamed from 50'-295'. Rigging to run casing.
2- 2-65	295'	295'	Ran & set surface casing. W.O.C. Drilled mousehole.
2- 3-65	295'	295'	Drilled rathole. Pressured up. Tested B.O.P.'s.
2- 4-65	295'	945'	Drilled 650' of 12 $\frac{1}{4}$ " hole. Tripping for new bit.
2- 5-65	945'	1501'	Drilled 556' of 12 $\frac{1}{4}$ " hole.
2- 6-65	1501'	1815'	Drilled 314' of 12 $\frac{1}{4}$ " hole; Running 9-5/8" intermediate casing.
2- 7-65	1815'	1815'	Ran intermediate casing, set at 1805'. Plug down 10:30 p.m., 2-6-65. W.O.C.
2- 8-65	1815'	1815'	Heading up B.O.P.'s and lines.
2- 9-65	1815'	2242'	Drilled 427' of 8-3/4" hole.
2-10-65	2242'	2738'	Drilled 496' of 8-3/4" hole.
2-11-65	2738'	3187'	Drilled 449' of 8-3/4" hole.
2-12-65	3187'	3450'	Drilled 263' of 8-3/4" hole. 20

DAILY PROGRESS

DATE	PREVIOUS TD	PRESENT TD	OPERATIONS
2-13-65	3450'	3612'	Drilled 162' of 8-3/4" hole. Lost circulation at 3725'.
2-14-65	3612'	3792'	Drilled 180' of 8-3/4" hole.
2-15-65	3792'	3862'	Drilled 70' of 8-3/4" hole. 16 hrs. - failed to regain circ.
2-16-65	3862'	4202'	Drilled 340' of 8-3/4" hole.
2-17-65	4202'	4545'	Drilled 343' of 8-3/4" hole.
2-18-65	4545'	4830'	Drilled 285' of 8-3/4" hole.
2-19-65	4830'	5148'	Drilled 318' of 8-3/4" hole.
2-20-65	5148'	5614'	Drilled 466' of 8-3/4" hole.
2-21-65	5614'	5980'	Drilled 366' of 8-3/4" hole.
2-22-65	5980'	6090'	Drilled 110' of 8-3/4" hole.
2-23-65	6090'	6138'	Drilled 48' - Coring, (Pine core. 3') Cored 5'
2-24-65	6138'	6242'	Reamed 50'. Drilled 99'. Cored 23.5' of 6-1/8" hole.
2-25-65	6242'	6265.5'	Lost circulation at 6263'.
2-26-65	6265.5'	6265.5'	Ran DST #1 Reamed 23'
2-27-65	6265.5'	6275'	Drilled 10' 8--3/4" hole.
2-28-65	6275'	6275'	Ran DST #2 6253'-6275'.
3- 1-65	6275'	6325'	Drilled 50' of 8-3/4" hole.
3- 2-65	6325'	6375'	Ran DST #3, and DST #4
3- 3-65	6375'	6468'	Drilled 93' of 8-3/4" hole.
3- 4-65	6468'	6593'	Drilled 125' of 8-3/4" hole.
3- 5-65	6593'	6728'	Drilled 135' of 8-3/4" hole.
3- 6-65	6728'	6828'	Drilled 100' of 8-3/4" hole.
3- 7-65	6828'	6898'	Drilled 70' of 8-3/4" hole.
3- 8-65	6898'	6976'	Drilled 78' of 8-3/4" hole.
3- 9-65	6976'	7064'	Drilled 88' of 8-3/4" hole.
3-10-65	7064'	7150'	Drilled 86' of 8-3/4" hole. T.D.
3-11-65		7150'	W.O. Schlumberger.

Aicon Producing Division

1200 Alford House

CALGARY, ALBERTA

Page 3

DATE: 11/11/1964

2.5

THE PURE OIL COMPANY

Alcon Producing Division

CALGARY, ALBERTA

1100 Elveden House

SAMPLE & CORE RECORD

WELL NAME LURE VAN AN TRATHOR LAKE C-30

INTERVAL		TIME	DESCRIPTION
FROM	TO	MINS./FT.	
91-	120'		Gravel, coarse, with abundant granitic boulders.
120'-	310'		Gravel, fine, sandy.
310'-	810'		Shale, grey-brown, silty; varies to siltstone, carbonaceous, micaceous.
810'-	1010'		Shale, dark grey, carbonaceous, slightly silty in part, occasional fish scales.
1010'-	1370'		Shale, medium dark grey, with thin interbeds of grey, very fine grained, silty, glauconitic sandstone. Approximately 85% shale, 15% sandstone.
1370'-	1500'		Shale, dark grey, silty, carbonaceous, slightly micaceous.
1500'-	1620'		Shale, dark grey, silty, interbedded with grey, very silty, thin bedded sandstone. Approximately 70% shale, 30% sandstone.
1620'-	1660'		Shale, dark grey, silty.
1660'-	1830'		Shale, dark grey.
1830'-	1870'		Shale, dark grey, speckled white.
1870'-	1880'		Siltstone, yellow-grey, very calcareous.
1880'-	1940'		Limestone, yellow-grey, silty.
1940'-	1990'		Siltstone, grey, calcareous; contains Brachiorod fragments and Crinoid stems.
1990'-	2150'		Shale, dark grey, interbedded with limy siltstone.
2150'-	2300'		Shale, dark grey, silty.
2300'-	2360'		Shale, dark grey with siltstone interbeds.
2360'-	2685'		Shale, dark grey.
2685'-	2710'		Shale, dark brownish-black.

SAMPLE & CORE RECORD

WELL NAME PURE PAN AM TRAINOR LAKE C-29

INTERVAL		TIME MINS./FT.	DESCRIPTION
FROM	TO		
27130'-28000'			Limestone, buff, dense.
28000'-29300'			Shale, green-grey, with limestone interbeds.
29300'-30400'			Limestone, buff.
30400'-32250'			Shale, green-grey, slightly calcareous.
32250'-32600'			Interbedded shale and limestone, as above.
32600'-36100'			Limestone, buff, dense, calcilutite.
36100'-36600'			Limestone, as above, interbedded with grey siltstone.
36600'-37200'			Siltstone, grey, limy.
37200'-37500'			No samples. Lost circulation.
37500'-37600'			Siltstone, grey, limy.
37600'-38600'			No samples. Lost circulation.
38600'-38800'			Interbedded, grey-green shale and grey, limy siltstone.
38800'-39500'			Shale, grey-green, silty.
39500'-40300'			Interbedded shale, as above and grey, silty limestone.
40300'-42300'			Shale, grey-green.
42300'-43000'			Limestone, buff, calcilutite, silty in part.
43000'-45000'			Shale, green-grey, varies to medium dark grey, slightly silty in part.
45000'-52100'			Shale, dark green-grey, silty, interbedded with grey to green-grey, slightly micaceous siltstone, occasional crinoid stem; varies from 1% to 25% siltstone.
52100'-60050'			Shale, dark green-grey, silty, trace pyrite.

SAMPLE & CORE RECORD

WELL NAME PURE OIL ALTHORP LAKH C-50

INTERVAL		TIME	DESCRIPTION
FROM	TO	MINS./FT.	
			hard crinoid stem.
6071-6072			Shale, black, carbonaceous, silty, calcareous in part.
6072-6082			Limestone, grey, mottled black, argillaceous, calcarenite.
6082-6103.1'			Limestone, dark grey, calcilutite, dense, some crystalline calcite, varies to brownish-grey in color, occasional very fine calcite-filled fractures.
6103.1'-6108.3'			Limestone, grey-brown, calcilutite, occasional very thin calcite-filled fracture. Contains Amphinora and possibly some small Stromatopora; possibly some larger Stromatopora approximately 2 to 3 inches in diameter. Fossil content less than 10%; mostly Amphinora, and more abundant in lower part.
6108.3'-6110.6'			Limestone, dark brown to black, slightly argillaceous.
6110.6'-6111.8'			Limestone, buff, calcilutite with occasional Amphinora - approximately 5%
6111.8'-6119.0'			Limestone, buff, calcilutite.
6119.0'-6122.1'			Limestone, buff, siltite, containing Amphinora - less than 5%; Stromatopora (1" to 4" in diameter) - 10%, trace Brachionods.
6122.1'-6123.7'			Limestone, buff, calcilutite; trace Amphinora.
6123.7'-6126.8'			Limestone, buff to dark brown, siltite; Stromatopora 5-10%; Amphinora less than 5%.

SAMPLE & CORE RECORD

WELL NAME PURE PAN AM TRINOR LAKE C-30

INTERVAL FROM TO	TIME MINS./FT.	DESCRIPTION
6126.5'-6131.0'		Limestone, buff to dark brown, siltite, trace Amphipora, and large Stromatoroid (?). Abundant calcite-filled small cracks; Amphipora common near base.
6131.0'-6141.5'		Limestone, buff to dark brown, as above, frac- tured; nearly vertical fracture planes covered with dolomite crystals.
6141.5'-6153'		No recovery.
6153'-6242'		Limestone, buff, calcilutite and occasionally some siltite; trace Stromatoroid and Amphipora fragments; rare dolomite crystals.
6242'-6253.3'		Limestone, dark brown, calcarenite; Stromatoo- roid fragments 10-15%; Amphipora (?) 10-15%; Brachionods, less than 5%.
6253.3'-6254.0'		Limestone, dark grey-brown, siltite; Amphipora (?) less than 5%; Stromatoroid, less than 5%.
6254.0'-6258.2'		Limestone, dark grey-brown, siltite to lutite; Stromatoroid 5-10%; Amphipora 10-15%.
6258.2'-6259.0'		Limestone, dark grey-brown, siltite.
6259.0'-6260.7'		Limestone, dark grey-brown with occasional Stromatoroid and Amphipora.
6260.7'-6265.5'		Limestone, brownish-grey, Stromatoroid fragments 15%, trace porosity.
6265.5'-6330'		Limestone, buff, siltite to fine calcarenite, abundant Stromatoroid fragments, trace porosity.
6330'-6390'		Limestone, buff, calcilutite, trace Stromatoroid fragments.

SAMPLE & CORE RECORD

[illegible]

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CORE LABORATORIES-CANADA LTD.
PETROLEUM RESEARCH ENGINEERING
CALGARY, ALBERTA
GAS ANALYSIS



Company The Pure Oil Company Page 1 of 1
Well Pure Pan Am Trainor Lake C-39 File CBH-2-GA-1666
Field Wildcat, Northwest Territories Analyst JK HP
Location _____ Date March 10, 1965

SAMPLING CONDITIONS

Formation Slope Point Depth 6235.5' - 6102.0'
Sampled from DST #2 By Ray Quinn of The Pure Oil Company
Date Sampled _____ Date Received Feb. 27, 1965 Date Analyzed March 3, 1965
Pressure _____ psig Temperature _____ °F. Atmospheric Temp. _____ °F.

DST Recovery or Flowrate _____

Method of Analysis Chromatograph

COMPONENT	MOL %	Pressure in Container <u>50</u> psig. @ <u>70°F</u> when received in laboratory	
NITROGEN	<u>1.04</u>		
CARBON DIOXIDE	<u>4.66</u>		
HYDROGEN SULFIDE	<u>0.60</u>		
METHANE	<u>92.42</u>		
ETHANE	<u>1.15</u>		
PROPANE	<u>0.08</u>	<u>0.022</u>	<u>0.018</u>
ISOBUTANE	<u>0.02</u>	<u>0.007</u>	<u>0.006</u>
N-BUTANE	<u>0.01</u>	<u>0.003</u>	<u>0.002</u>
ISOPENTANE	<u>Trace</u>	<u>-</u>	<u>-</u>
N-PENTANE	<u>Trace</u>	<u>-</u>	<u>-</u>
HEXANES			
Heptanes plus	<u>0.02</u>	<u>0.009</u>	<u>0.007</u>
TOTAL	<u>100.00</u>	<u>0.041</u>	<u>0.033</u>
	Actual Pentanes +	<u>0.009</u>	<u>0.007</u>
	Vapor pressure (Calculated) of actual Pentanes +	<u>0.5</u>	<u>Psia @ 100°F</u>

Hydrogen Sulphide—Grains per 100 cu. ft. _____

Gross Heating Value B.T.U. per SCF _____

964.1
psia & 60°F at 14.696

961.1
psia & 60°F at 14.65

Specific Gravity—Measured _____

Calculated 0.614

REMARKS:

The above datum complies with requirements of the Alberta Oil and Gas Conservation Board.



CORE LABORATORIES-CANADA LTD.

PETROLEUM RESERVE ENGINEERING

CALGARY, ALBERTA

WATER ANALYSIS

File CBH-2-WA-3004Company The Pure Oil CompanyWell Name Pure Pan Am Trainor Lake C-39Sample No. 1

Water used in

Sampled From drilling fluidFormation - Depth -Location - Field WildcatProvince N.W.T.Date Sampled - Date Analyzed March 6, 1965Analyst GS

Recovery

Constituents

Constituents

Meq/L ppm

Constituents

Meq/L ppm

1. Total Solids 273 ppm

6. Sodium

Absent

11. Chloride

0.1 32. pH 7.58

7. Calcium

2.9 58

12. Bicarbonate

3.2 1983. Sp. gr. 1.0018 @ 60 °F.

8. Magnesium

1.2 14

13. Sulfate

Absent4. Resistivity 32.80 @ 72 °F.

9. Iron

Absent

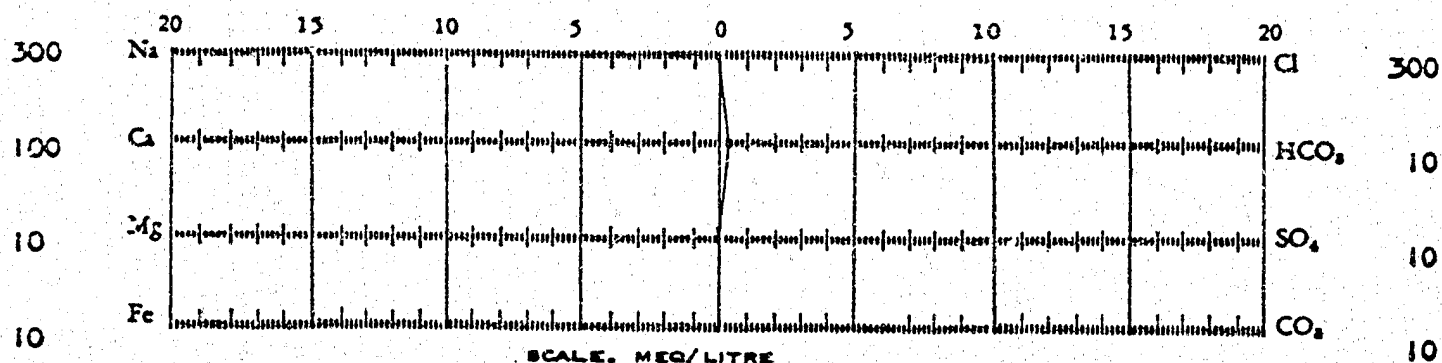
14. Carbonate

AbsentOHMS/M²M

10. Barium

Absent

15. Hydroxide

Absent5. Hydrogen Sulfide Absent



CORE LABORATORIES-CANADA LTD

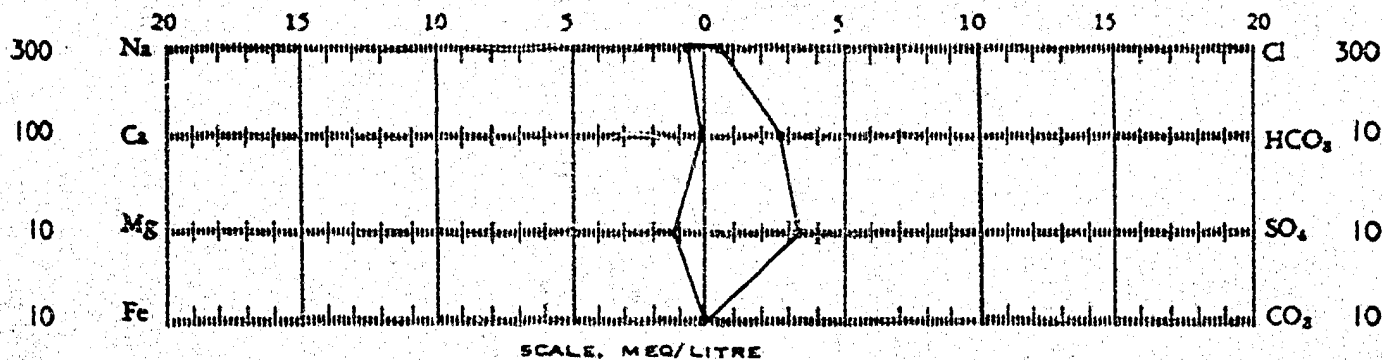
PETROLEUM RESERVOIR ENGINEERING

CALGARY, ALBERTA

WATER ANALYSIS

File CDM-2-WA-2998Company The Pure Oil CompanyWell Name Pure Pan An Trainor Lk / -39Sample No. 1Formation _____ Depth 6265' - 6102'Sampled From DST #1Location _____ Field WildcatProvince Northwest TerritoriesDate Sampled Feb 25/65 Date Analyzed March 12/65Analyst G.S.Recovery 132% of fluid

Constituents		Constituents	Meq/L	ppm	Constituents	Meq/L	ppm
1. Total Solids	<u>14,233</u> ppm	6. Sodium	<u>203.9</u>	<u>4,690</u>	11. Chloride	<u>163.0</u>	<u>5,780</u>
2. pH	<u>7.52</u>	7. Calcium	<u>9.4</u>	<u>188</u>	12. Bicarbonate	<u>27.3</u>	<u>1,662</u>
3. Sp. gr.	<u>1.0156</u> @ <u>60</u> °F.	8. Magnesium	<u>13.4</u>	<u>163</u>	13. Sulfate	<u>36.4</u>	<u>1,750</u>
4. Resistivity	<u>0.542</u> @ <u>73</u> °F. OHMB/M ² M	9. Iron	<u>absent</u>		14. Carbonate	<u>absent</u>	
5. Hydrogen Sulfide	<u>absent</u>	10. Barium	<u>absent</u>		15. Hydroxide	<u>absent</u>	





CORE LABORATORIES-CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

CALGARY, ALBERTA

WATER ANALYSIS

File CBH-2-HA-3004Company The Pure Oil CompanyWell Name Pure Pan Am Trainor Lake C-39Sample No. 2Formation Slave Point Depth 6275' - 6253'Sampled From DST # 2Location - Field WildcatProvince N.W.T.Date Sampled - Date Analyzed March 6, 1965Analyst GSRecovery 207' sulphurous water

Constituents

1. Total Solids 13,665 ppm2. pH 8.113. Sp. gr. 1.0165 @ 60 °F.4. Resistivity 0.504 @ 71 °F.OHMS/M²M5. Hydrogen Sulfide Absent

Constituents

Meq/L

ppm

6. Sodium

1904,370

7. Calcium

17.2345

8. Magnesium

3.441

9. Iron

Absent

10. Barium

Absent

Constituents

Meq/L

ppm

11. Chloride

1394,928

12. Bicarbonate

422,562

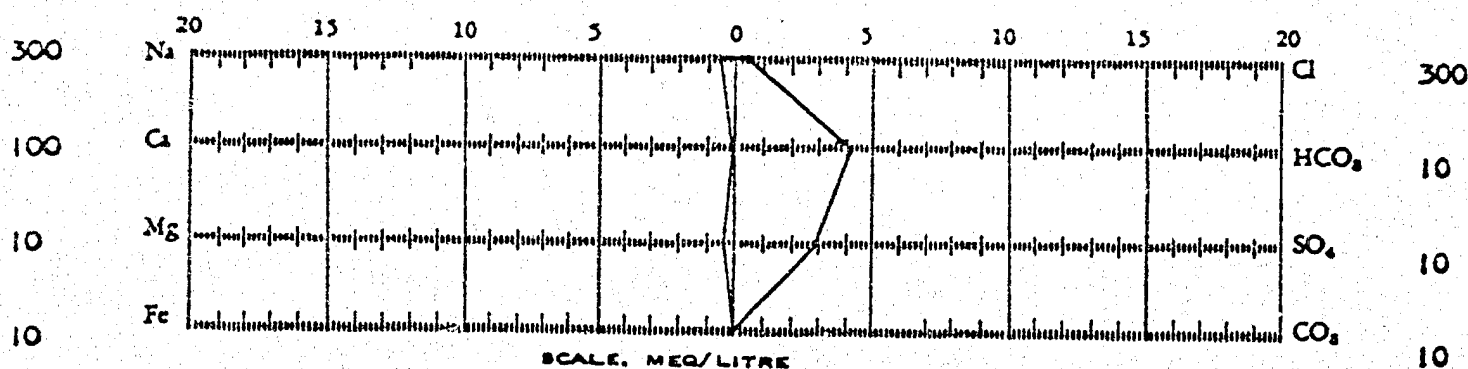
13. Sulfate

29.11,400

14. Carbonate

0.619

15. Hydroxide

Absent



CORE LABORATORIES-CANADA LTD

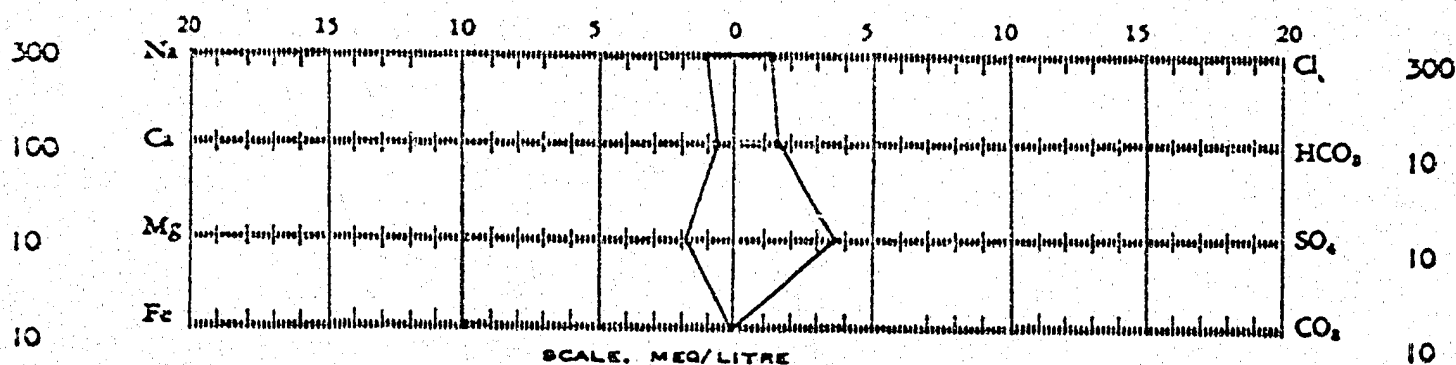
PETROLEUM RESEARCH ENGINEERING

CALGARY, ALBERTA

WATER ANALYSIS

File CBH-2-WA-3004Company The Pure Oil CompanyWell Name Pure Pan Am Trainor Lake C-39Sample No. 3Formation Slave Point Depth 6325' - 6275'Sampled From DST #3 (Top)Location - Field WildcatProvince N.W.T.Date Sampled - Date Analyzed March 6, 1965Analyst GSRecovery 131' of Sulphurous water

Constituents		Constituents	Meq/L	ppm	Constituents	Meq/L	ppm
1. Total Solids	<u>25,544</u> ppm	6. Sodium	<u>349</u>	<u>8,027</u>	11. Chloride	<u>378</u>	<u>13,400</u>
2. pH	<u>6.98</u>	7. Calcium	<u>62.2</u>	<u>1,246</u>	12. Bicarbonate	<u>14.8</u>	<u>905</u>
3. Sp gr	<u>1.0218</u> @ <u>60</u> °F.	8. Magnesium	<u>17.8</u>	<u>216</u>	13. Sulfate	<u>36.4</u>	<u>1,750</u>
4. Resistivity	<u>0.278</u> @ <u>71</u> °F. ohms/M ² M	9. Iron	<u>Absent</u>		14. Carbonate	<u>Absent</u>	
5. Hydrogen Sulfide	<u>Absent</u>	10. Barium	<u>Absent</u>		15. Hydroxide	<u>Absent</u>	





CORE LABORATORIES-CANADA LTD.

PETROLEUM RESEARCH ENGINEERING

CALGARY, ALBERTA

WATER ANALYSIS

File CBH-2-WA-3004Company The Pure Oil CompanyWell Name Pure Pan Am Trainor Lake C-39Sample No. 4Formation Slope Point Depth 6375' - 6325'Sampled From DST #4 (Bottom)Location _____ Field WildcatProvince N.W.T.Date Sampled _____ Date Analyzed March 6, 1965Analyst GS

Recovery _____

Constituents

Constituents

Meq/L

ppm

Constituents

Meq/L

ppm

1. Total Solids 142,630 ppm

6. Sodium

1,75640,388

11. Chloride

2,51089,0052. pH 6.40

7. Calcium

52010,421

12. Bicarbonate

8.04893. Sp. gr. 1.1018 @ 60 °F.

8. Magnesium

1521,847

13. Sulfate

10.04804. Resistivity 0.074 @ 71 °F.

9. Iron

Absent

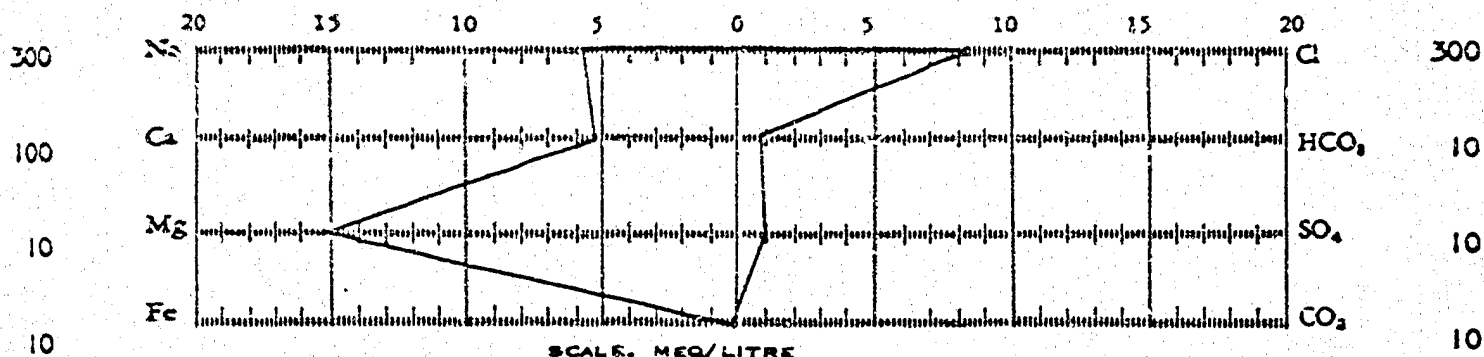
14. Carbonate

AbsentOHM CM/M²M

10. Barium

Absent

15. Hydroxide

Absent5. Hydrogen Sulfide Absent

CORE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

Company	- THE PURE OIL COMPANY	Date Report	- MARCH 17, 1965	Page	- 1 of 4
Well	- PURE PAN AM TRA INDR LK C-39	Formation	- SLAVE POINT	File	- CNP-4-2729
Field	- WILDCAT, NORTHWEST TERRITORIES	D. Fluid	- WATER BASE MUD	Analysts	- JA:RM
Location	-	Analysis	- FULL DIAMETER	Cores	- DIAMOND

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY TO AIR (HORIZONTAL)		POROSITY PER CENT	POROSITY X FEET	DENSITY	VISUAL EXAMINATION
			K MAX	K 90°				
CORE NO. 1 6093' - 6143' (Rec. 45.0') (10 Boxes)								
-	6093.0-6103.0	10.0	-	-	-	-	-	Dense
1	6103.0-6106.2	3.2	0.19	0.05	<0.01	9.60	2.63	2.71
-	6106.2-6130.4	24.2	-	-	-	-	-	Dense
2	6130.4-6131.5	1.1	*	0.04	*	3.08	2.63	2.70
3	6131.5-6131.8	0.3	*	0.32	*	2.16	2.51	2.71
4	6131.8-6133.3	1.5	0.68	0.17	<0.01	9.60	2.54	2.71
5	6133.3-6134.9	1.6	0.03	0.02	<0.01	5.12	2.62	2.70
-	6134.9-6138.0	3.1	-	-	-	-	-	Dense
-	6138.0-6143.0	5.0	-	-	-	-	-	Lost core

* - Broken or fractured core.
K 90° used for summary purposes.

Core with Permeability 0.00 to less than 0.10 Md.

Total footage of core with permeability 0.00 to less than 0.10 millidarcys	2.7'
Weighted average porosity of core with permeability 0.00 to less than 0.10 millidarcys	3.0 % (8.20)
Per cent of analyzed core having permeability 0.00 to less than 0.10 millidarcys	35.1 %
Weighted average horizontal permeability of core with permeability 0.00 to less than 0.10 md.	0.03 md. (0.092)

Core with Permeability 0.10 to 0.99 Millidarcys

Total footage of core with 0.10 to 0.99 millidarcys permeability	5.0'
Weighted average porosity of core with 0.10 to 0.99 millidarcys permeability	4.3 % (21.36)
Per cent of analyzed core having 0.10 to 0.99 millidarcys permeability	64.9 %
Weighted average horizontal permeability of core with 0.10 to 0.99 millidarcys	0.34 md. (1.724)

Core with Permeability 1.0 to 9.9 Millidarcys Nil

Core with Permeability 10 Millidarcys and Greater Nil

Cored Interval	6093' - 6143'
Total footage	50.0'
Footage analyzed	7.7'
Footage not analyzed	42.3'
Weighted average porosity of core analyzed	3.8 % (29.56)
Weighted average horizontal permeability of core analyzed	0.24 md. (1.816)

Note: Figures in parentheses indicate porosity feet and permeability feet.

CORE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

Company	- THE PURE OIL COMPANY	Date Report	- MARCH 17, 1965	Page	- 3 of 4
Well	- PURE PAN AM TRAILOR LK C-39	Formation	- SLAVE POINT	File	- CNP-A-2729
Field	- WILDCAT, NORTHWEST TERRITORIES	D. Fluid	- WATER BASE MUD	Analysts	- J.A.R.M.
Location	-	Analysis	- FULL DIAMETER	Cores	- DIAMOND

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY TO AIR		POROSITY PER CENT	POROSITY X	DENSITY	BULK GRAIN	EXAMINATION
			HORIZONTAL K MAX	VERTICAL K 90°					
CORE NO. 2 6242' - 6267' (Rec. 22.0') (5 Boxes)									
6	6242.0-6243.3	1.3	6.9	5.4	1.5	5.1	6.63	2.56	Intergranular, fracture
7	6243.3-6244.4	1.1	0.53	0.22	0.12	5.0	5.50	2.56	Intergranular, fracture
8	6244.4-6246.0	1.6	0.13	0.08	<0.01	3.8	6.08	2.60	Intergranular, stylolite
9	6246.0-6247.5	1.5	0.11	0.10	<0.01	2.2	3.30	2.64	Intergranular
10	6247.5-6248.6	1.1	0.09	0.06	<0.01	2.5	2.75	2.63	Intergranular
11	6248.6-6249.9	1.3	0.20	0.15	<0.01	3.3	4.29	2.63	Intergranular
12	6249.9-6251.0	1.1	0.10	0.08	<0.01	2.3	2.53	2.64	Intergranular
13	6251.0-6252.5	1.5	0.09	0.07	<0.01	1.7	2.55	2.66	Intergranular, stylolite
14	6252.5-6254.0	1.5	*	0.02	*	2.2	3.30	2.65	Intergranular, fracture
15	6254.0-6255.1	1.1	*	0.01	*	1.8	1.98	2.66	Intergranular, open vertical fract.,
16	6255.1-6256.4	1.3	0.04	0.03	<0.01	1.9	2.47	2.65	Intergranular, stylolite
17	6256.4-6258.2	1.8	0.06	0.03	<0.01	0.8	1.44	2.67	Dense argillaceous pyrite
18	6258.2-6259.4	1.2	0.10	0.05	<0.01	3.9	4.68	2.60	Intergranular, G.
19	6259.4-6260.5	1.1	0.76	0.52	1.8	7.2	7.92	2.50	Intergranular, vertical fract., G.
20	6260.5-6261.6	1.1	0.90	0.67	0.26	8.3	9.12	2.47	Intergranular, G.
21	6261.5-6262.8	1.2	5.7	1.2	1.1	9.2	11.04	2.46	Intergranular, fracture, G.
22	6262.8-6264.0	1.2	30.	5.5	29.	10.4	12.48	2.42	Intergranular, fracture, G.
-	6264.0-6267.0	3.0	-	-	-	-	-	-	Lost core

G -- Glazed surface removed by sand-blasting

* -- Broken or fractured core. K 90° used for summary purposes.

Core with Permeability 0.00 to less than 0.10 Md.

Total footage of core with permeability 0.00 to less than 0.10 millidarcys _____
Weighted average porosity of core with permeability 0.00 to less than 0.10 millidarcys _____
Per cent of analyzed core having permeability 0.00 to less than 0.10 millidarcys _____
Weighted average horizontal permeability of core with permeability 0.0 to less than 0.10 md. _____

Core with Permeability 0.10 to 0.99 Millidarcys

Total footage of core with 0.10 to 0.99 millidarcys permeability _____
Weighted average porosity of core with 0.10 to 0.99 millidarcys permeability _____
Per cent of analyzed core having 0.10 to 0.99 millidarcys permeability _____
Weighted average horizontal permeability of core with 0.10 to 0.99 millidarcys _____

Core with Permeability 1.0 to 2.9 Millidarcys

Total footage of core with 1.0 to 2.9 millidarcys permeability _____
Weighted average porosity of core with 1.0 to 2.9 millidarcys permeability _____
Per cent of analyzed core having 1.0 to 2.9 millidarcys permeability _____
Weighted average horizontal permeability of core with 1.0 to 2.9 millidarcys _____

Core with Permeability 10 Millidarcys and Greater

Total footage of core with permeability 10 millidarcys and greater _____
Weighted average porosity of core with permeabilities 10 millidarcys and greater _____
Per cent of analyzed core having permeabilities 10 millidarcys and greater _____
Weighted average horizontal permeability of core with permeability 10 md. and greater _____

Cored interval _____
Total footage _____
Footage analyzed _____
Footage not analyzed _____
Weighted average porosity of core analyzed _____
Weighted average horizontal permeability of core analyzed _____

Note: Figures in parentheses indicate porosity feet and permeability feet.

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 22 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pace Petroleum LOCATION Traverse 0-39 DATE Feb 8 1965

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	BBL.	SIZE	
DRILLER														
DERRICK														
MOTOR														
FLOOR														
FLOOR														
FLOOR														
FIREMAN														
EXTRA														
INJURIES														
FIRES														

Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	BBL.	SIZE	
DRILLER														
DERRICK														
MOTOR														
FLOOR														
FLOOR														
FLOOR														
FIREMAN														
EXTRA														
INJURIES														
FIRES														

Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	BBL.	SIZE	
DRILLER														
DERRICK														
MOTOR														
FLOOR														
FLOOR														
FLOOR														
FIREMAN														
EXTRA														
INJURIES														
FIRES														

REMARKS	TIME		
	START	STOP	INTERVAL
12:00	8:00	8	
Rig Service	8:00	8:15	1/4
Tighten up steam water line	8:15	9:30	3/4
Rig up to run in hole	9:30	12:00	2 1/4
Run in hole w/ 8 3/4 bit	12:00	2:00	2
Thaw out Kelly Froge up	2:00	4:00	
Pressure up - 1300	4:00	4:30	1/2
Drill out short plugs	4:30	5:00	1/2
Drilling	5:00	6:00	1
Work on mud line	6:00	8:45	2 3/4
Drill 8 3/4 hole	8:45	9:45	1
Tighten down on Kelly hose	9:45	10:15	1/2
Down	10:15	12:00	1 3/4
1956.00			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER P. Peterson

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 21 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Am LOCATION TRAINWAXES C-39 DATE FEB 7 1965

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS												
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BBL.	SIZE											
DRILLER		<table border="1"> <thead> <tr> <th>NO.</th> <th>SIZE</th> <th>TYPE</th> <th>SIZE JETS</th> <th>SERIAL NO.</th> <th>WEIGHT</th> <th>R.P.M.</th> <th>FT. DRLD.</th> <th>FT. RMD.</th> <th>HRS.</th> <th>DEPTH OUT</th> <th>CONDITION</th> </tr> </thead> </table>											NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION													
DERRICK																								
MOTOR																								
FLOOR																								
FLOOR																								
FLOOR																								
FIREMAN																								
EXTRA																								
INJURIES																								
FIRES																								
Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS												
Specify Actual Hours Worked	HRS.						NO.	O.C.	I.D.	WGT.	GALS.	BBL.	SIZE											
DRILLER		<table border="1"> <thead> <tr> <th>NO.</th> <th>SIZE</th> <th>TYPE</th> <th>SIZE JETS</th> <th>SERIAL NO.</th> <th>WEIGHT</th> <th>R.P.M.</th> <th>FT. DRLD.</th> <th>FT. RMD.</th> <th>HRS.</th> <th>DEPTH OUT</th> <th>CONDITION</th> </tr> </thead> </table>											NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION													
DERRICK																								
MOTOR																								
FLOOR																								
FLOOR																								
FLOOR																								
FIREMAN																								
EXTRA																								
INJURIES																								
FIRES																								
Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS												
Specify Actual Hours Worked	HRS.						NO.	O.C.	I.D.	WGT.	GALS.	BBL.	SIZE											
DRILLER		<table border="1"> <thead> <tr> <th>NO.</th> <th>SIZE</th> <th>TYPE</th> <th>SIZE JETS</th> <th>SERIAL NO.</th> <th>WEIGHT</th> <th>R.P.M.</th> <th>FT. DRLD.</th> <th>FT. RMD.</th> <th>HRS.</th> <th>DEPTH OUT</th> <th>CONDITION</th> </tr> </thead> </table>											NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION													
DERRICK																								
MOTOR																								
FLOOR																								
FLOOR																								
FLOOR																								
FIREMAN																								
EXTRA																								
INJURIES																								
FIRES																								

REMARKS	TIME		
	START	STOP	INTERVAL
W.O.C. Cut off casing + heading up	12:00	12:00	0
Rig Service W.O.C. Nipping up	8:00	8:15	15
	8:15	4:00	7:45
Heading up	12:00	12:00	0

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER P.J. Peterson

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 20 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Purvis & Son Ltd LOCATION TRINORAK Q-39 DATE FEB 6 1965

Tour - Midnight - 8 a.m.
Specify Actual Hours Worked _____ HRS.

DRILLER _____
DERRICK JOHN GUTSOL 16
MOTOR ED BOWCHARD 16
FLOOR FRANK WESTERSON 16
FLOOR TERRY BRADY 10
FIREMAN _____
EXTRA _____
INJURIES: Overtime
FIRES: Running
Casing

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
					NO. O.D. I.D. WGT.			SIZE	
1815	-	-	-	92	12 6 1/4 2 3/4 27				15-144.17
BITS	NO. SIZE TYPE SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLO.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	23 12 1/4 RSC-3 3/4	44678	15' 145'	314			9 1/4		
MUD	12 MN. 2 A.M. 8 A.M. 5 A.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE				
WEIGHT			1800	1 1/4	1	204			
VISCOSITY					2	180			
GEL					3	-			
PUMPS	NO. 1 PRES-SURE S.P.M.				4	208			
	NO. 2 PRES-SURE S.P.M.				5	174			
GENERAL									
W.L.	F.C.	pH.							

REMARKS	START	STOP	INTERVAL
Rig SERV	12:00	12:15	1/4
Dummy Trip to Clean	12:15		
HOLES (MEASURE OUT)		2:15	2 1/2
CIRC TO CLEAN HOLE	2:15	3:45	1
SURVEY	3:45	4:00	1/4
Hoist to Run Casing	4:00	5:15	1 1/4
Rig up to Run SAME	5:15	6:15	1
Running Casing	6:15	8:00	1 3/4

Tour - 8 a.m. - 4 p.m.
Specify Actual Hours Worked _____ HRS.

DRILLER MAURICE GOODWIN 12
DERRICK ROBERT STANTIS 10
MOTOR BERNARD BOACH 9
FLOOR RYAN GRAY 12
FLOOR RYAN GRAY 12
FIREMAN _____
EXTRA _____
INJURIES: _____
FIRES: _____

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
					NO. O.D. I.D. WGT.			SIZE	
BITS	NO. SIZE TYPE SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLO.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
MUD	8 A.M. 10 A.M. 12 NOON 2 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE				
WEIGHT					1	212			
VISCOSITY					2	188			
GEL					3				
PUMPS	NO. 1 PRES-SURE S.P.M.				4	216			
	NO. 2 PRES-SURE S.P.M.				5	182			
GENERAL									
W.L.	F.C.	pH.							

REMARKS	START	STOP	INTERVAL
Running Casing	8:00	1:00	
Circulating to Run Cement	2:00	4:00	
Run 47 Jts. - 1806.50' of 9 5/8" - 36# 8rd Thd J-55 - St. C. Mannesmann Seamless Casing			
Set at 1805' K.B. w/ 650 and Portland Cement w/ good Returns. Bumped Plug w/ 1500#. Float Held. Released Pressure.			

Tour - 4 p.m. - Midnight
Specify Actual Hours Worked _____ HRS.

DRILLER BOB OLIVER 12
DERRICK MIKE BEEB 12
MOTOR WILLIAM HARPER 12
FLOOR ALAN BAIS 8
FLOOR _____
FIREMAN _____
EXTRA _____
INJURIES: _____
FIRES: _____

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
					NO. O.D. I.D. WGT.			SIZE	
BITS	NO. SIZE TYPE SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLO.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
MUD	4 P.M. 6 P.M. 8 P.M. 10 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE				
WEIGHT					1	220			
VISCOSITY					2	196			
GEL					3				
PUMPS	NO. 1 PRES-SURE S.P.M.				4	224			
	NO. 2 PRES-SURE S.P.M.				5				
GENERAL									
W.L.	F.C.	pH.							

REMARKS	START	STOP	INTERVAL
Circ to Run Cement	4:00	9:15	5 1/4
CEMENTING	9:15	10:15	1
Plug Down @ 10:15			
WOC	10:15	12:00	1 3/4

Totco Ring on Bit No. _____ D.P. Caliper Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER P.F. Peterson

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 18 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY PAGE P&H LOCATION Trainer Lake C-39 DATE FEB 4 1965

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS		
Specify Actual Hours Worked							NO.	O.D.	I.D.	WT.	GALS.	BBL.	SIZE	SINGLES		
DRILLER		635	310	945	7 1/4	76M	12	6 3/4	2 3/4	27				6-551.04		
DERRICK		17	12 1/4	YT3	3 1/4	ENHISL	15	1 1/2	650					12-350.55		
MOTOR																
FLOOR																
FLOOR																
FIREMAN																
EXTRA																
INJURIES																
PIPES																
		MUD	12 NN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES				AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE		
		WEIGHT	9.0	9.0	9.0	9.0	500 # SPARSENE				81.0		3 1/4	1 1/2		
		VISCOSITY	35	35	34	34	250 # 10-20						2	132		
		GEL					15 BBL'S DIESEL						3			
		PUMP	NO. 1	PRES-SURE	600	600	600	600	5 GALS DIAL DET						4	164
		NO. 2	PRES-SURE	60	60	60	60	1000 # STEAM						5	134	
		NO. 3	PRES-SURE													
		NO. 4	PRES-SURE													
		NO. 5	PRES-SURE													
		NO. 6	PRES-SURE													
		NO. 7	PRES-SURE													
		NO. 8	PRES-SURE													
		NO. 9	PRES-SURE													
		NO. 10	PRES-SURE													
		NO. 11	PRES-SURE													
		NO. 12	PRES-SURE													
		NO. 13	PRES-SURE													
		NO. 14	PRES-SURE													
		NO. 15	PRES-SURE													
		NO. 16	PRES-SURE													
		NO. 17	PRES-SURE													
		NO. 18	PRES-SURE													
		NO. 19	PRES-SURE													
		NO. 20	PRES-SURE													
		NO. 21	PRES-SURE													
		NO. 22	PRES-SURE													
		NO. 23	PRES-SURE													
		NO. 24	PRES-SURE													
		NO. 25	PRES-SURE													
		NO. 26	PRES-SURE													
		NO. 27	PRES-SURE													
		NO. 28	PRES-SURE													
		NO. 29	PRES-SURE													
		NO. 30	PRES-SURE													
		NO. 31	PRES-SURE													
		NO. 32	PRES-SURE													
		NO. 33	PRES-SURE													
		NO. 34	PRES-SURE													
		NO. 35	PRES-SURE													
		NO. 36	PRES-SURE													
		NO. 37	PRES-SURE													
		NO. 38	PRES-SURE													
		NO. 39	PRES-SURE													
		NO. 40	PRES-SURE													
		NO. 41	PRES-SURE													
		NO. 42	PRES-SURE													
		NO. 43	PRES-SURE													
		NO. 44	PRES-SURE													
		NO. 45	PRES-SURE													
		NO. 46	PRES-SURE													
		NO. 47	PRES-SURE													
		NO. 48	PRES-SURE													
		NO. 49	PRES-SURE													
		NO. 50	PRES-SURE													
		NO. 51	PRES-SURE													
		NO. 52	PRES-SURE													
		NO. 53	PRES-SURE													
		NO. 54	PRES-SURE													
		NO. 55	PRES-SURE													
		NO. 56	PRES-SURE													
		NO. 57	PRES-SURE													
		NO. 58	PRES-SURE													
		NO. 59	PRES-SURE													
		NO. 60	PRES-SURE													
		NO. 61	PRES-SURE													
		NO. 62	PRES-SURE													
		NO. 63	PRES-SURE													
		NO. 64	PRES-SURE													
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		NO. 66	PRES-SURE													
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		NO. 69	PRES-SURE													
		NO. 70	PRES-SURE													
		NO. 71	PRES-SURE													
		NO. 72	PRES-SURE													
		NO. 73	PRES-SURE													
		NO. 74	PRES-SURE													
		NO. 75	PRES-SURE													
		NO. 76	PRES-SURE													
		NO. 77	PRES-SURE													
		NO. 78	PRES-SURE													
		NO. 79	PRES-SURE													
		NO. 80	PRES-SURE													
		NO. 81	PRES-SURE													
		NO. 82	PRES-SURE													
		NO. 83	PRES-SURE													
		NO. 84	PRES-SURE													
		NO. 85	PRES-SURE													
		NO. 86	PRES-SURE													
		NO. 87	PRES-SURE													
		NO. 88	PRES-SURE													
		NO. 89	PRES-SURE													
		NO. 90	PRES-SURE													
		NO. 91	PRES-SURE													
		NO. 92	PRES-SURE													
		NO. 93	PRES-SURE													
		NO. 94	PRES-SURE													
		NO. 95	PRES-SURE													
		NO. 96	PRES-SURE													
		NO. 97	PRES-SURE													
		NO. 98	PRES-SURE													
		NO. 99	PRES-SURE													
		NO. 100	PRES-SURE													

Tour - 3 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS		
Specify Actual Hours Worked							NO.	O.D.	I.D.	WT.	GALS.	BBL.	SIZE	SINGLES		
DRILLER		945	261	12:06	6	80M	12	6 3/4	2 3/4	27				9-100.00		
DERRICK		18	12 1/4	YT3	3 1/4	ENHISL	15	1 1/2	911					12-350.55		
MOTOR																
FLOOR																
FLOOR																
FIREMAN																
EXTRA																
INJURIES																
PIPES																
		MUD	9 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES				AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE		
		WEIGHT	9.0	9.0	9.0	9.0	SPARSENE 500 #				1000		7 1/2	1 1/2		
		VISCOSITY	33	36	38	37	W.C. Low Visc 50 #						2	140		
		GEL					WASTIC SODA 200 #						3			
		PUMP	NO. 1	PRES-SURE	600	600	600	500	X.P.-20 5 SPS. DIESEL 10 BBL'S						4	172
		NO. 2	PRES-SURE	50	60	60	50	GEL. 3000 #						5	142	
		NO. 3	PRES-SURE													
		NO. 4	PRES-SURE													
		NO. 5	PRES-SURE													
		NO. 6	PRES-SURE													
		NO. 7	PRES-SURE													
		NO. 8	PRES-SURE													
		NO. 9	PRES-SURE													
		NO. 10	PRES-SURE													

CASCADE DRILLING

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 17 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pacific Power & Light LOCATION TRAINER LAKE C-39 DATE FEB 3 1965

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BBLs.	SIZE
DRILLER		281	-				9	6 1/4	2 3/4				
DERRICK	8	18	12 1/4	YT 3	3/4	EN 415	6	10	80				
MOTOR	8 1/2												
FLOOR	8												
FLOOR	8 1/2												
FIREMAN													
EXTRA													
INJURIES													
FIRES													
Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BBLs.	SIZE
DRILLER	12	295	100	395	2	70	12						
DERRICK	8	18	12 1/4	YT 3	3/4	EN 415	6	15	145	100			
MOTOR	12												
FLOOR	12												
FLOOR	8												
FIREMAN													
EXTRA													
INJURIES													
FIRES													
Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BBLs.	SIZE
DRILLER	8	395	240	635	4 1/2	72	12	6 1/4	2 3/4	27			
DERRICK	8	18	12 1/4	YT 3	3/4	EN 415	6	15	145	340			
MOTOR													
FLOOR	8												
FLOOR													
FIREMAN													
EXTRA													
INJURIES													
FIRES													

REMARKS	START	STOP	INTERVAL
Drill Mouse Hole	12:00	1:00	1
Drill Rat Hole	1:00	5:30	4 1/2
Drill and Pump @ 281	5:30	8:00	2 1/2
Drilling on plug shoe	8:00	10:45	2 3/4
Drilling	10:45	11:15	1/2
Rig Service BOPS	11:15	11:30	1/4
Work on mud Ring	11:30	12:15	3/4
Drilling	12:15	1:15	1
Work on mud Ring	1:15	2:15	1
Pick up three more collars	2:15	3:30	1 1/4
Drilling	3:30	4:00	1/2
Rig Service	4:00	4:15	1/4
Drilling	4:15	5:00	3/4
Clean Flow Line	5:00	5:15	1/4
Drilling	5:15	6:30	1 1/4
Survey	6:30	7:00	3/4
Clean Flow Line - mud Ring	7:15	8:00	4/4
Drilling 12 1/4" Hole	8:00	9:00	1
Work Mud Ring	9:00	10:00	1
Drill	10:00	12:00	2

Toico Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER *P.F. Blaser*

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS _____ DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 14 COMPANY Pure Pan Am LOCATION FAIRBANKS LAKE C-39 DATE FEB 2 1965

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS	
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	BBL.	SIZE
DRILLER													
DERRICK													
MOTOR													
FLOOR													
FLOOR													
FLOOR													
FIREMAN													
EXTRA													
INJURIES													
FIRES													

Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS	
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	BBL.	SIZE
DRILLER													
DERRICK													
MOTOR													
FLOOR													
FLOOR													
FLOOR													
FIREMAN													
EXTRA													
INJURIES													
FIRES													

Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS	
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	BBL.	SIZE
DRILLER													
DERRICK													
MOTOR													
FLOOR													
FLOOR													
FLOOR													
FIREMAN													
EXTRA													
INJURIES													
FIRES													

REMARKS	TIME		
	START	STOP	INTERVAL
W.O.C. heading up	12:00	5:00	5
heading up	5:00	8:00	3
W.O.C. heading up	8:00	11:00	
W.O.C. heading up	11:00	5:00	1
Make up bit Run in with collars	5:00	6:00	1
work on B.O.P. lines	6:00	7:00	1
Pressure up - 1000	7:00	7:30	1/2
pick up collars	7:00	7:30	1/2
Day House Home	7:30	12:00	4 1/2

Totco Ring on Bit No. _____ D.P. Colipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOL-PUSHER P.J. Peterson

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 15 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY *Pace Pan Am* LOCATION *TRAINER HANE C-39* DATE *FEB 1 1964*

Tour - Midnight - 8 a.m.		Specify Actual Hours Worked		HRS.	
DRILLER					
DERRICK	<i>John G. Goss</i>				
MOTOR	<i>Ed Bouchard</i>				
FLOOR	<i>Frank W. Stinson</i>				
FLOOR	<i>Terry Barry</i>				
FIREMAN					
EXTRA					
INJURIES					
FIRES					

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS																																																						
227	68	295	4 1/4	4 6 3/4	2 1/2				1-154.5'																																																						
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MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE																																																							
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Tour - 8 a.m. - 4 p.m.		Specify Actual Hours Worked		HRS.	
DRILLER	<i>Herb J. Goodrich</i>				
DERRICK	<i>Robert Staats</i>				
MOTOR	<i>Gerald Koch</i>				
FLOOR	<i>Charlie Leigar</i>				
FLOOR	<i>Joe J. Duguay</i>				
FLOOR					
FIREMAN					
EXTRA					
INJURIES					
FIRES					

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS																																																						
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Tour - 4 p.m. - Midnight		Specify Actual Hours Worked		HRS.	
DRILLER	<i>Robert Oliver</i>				
DERRICK	<i>Mike Berry</i>				
MOTOR	<i>Neil Bliss</i>				
FLOOR					
FLOOR					
FLOOR					
FIREMAN					
EXTRA					
INJURIES					
FIRES					

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS																																																						
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MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE																																																							
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P	U	M	P	S	NO. 1 PRES-SURE	NO. 2 PRES-SURE	NO. 3 PRES-SURE	NO. 4 PRES-SURE	NO. 5 PRES-SURE	NO. 6 PRES-SURE	NO. 7 PRES-SURE	NO. 8 PRES-SURE	NO. 9 PRES-SURE	NO. 10 PRES-SURE	NO. 11 PRES-SURE	NO. 12 PRES-SURE	NO. 13 PRES-SURE	NO. 14 PRES-SURE	NO. 15 PRES-SURE	NO. 16 PRES-SURE	NO. 17 PRES-SURE	NO. 18 PRES-SURE	NO. 19 PRES-SURE	NO. 20 PRES-SURE																																							
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REMARKS	TIME		
	START	STOP	INTERVAL
Work on Sur 8 Motor	12:00	1:00	1
Reaming 12 1/4" Hane to 17 1/2"	1:00	4:00	3
Work on Rotary Chutch	4:00	4:30	3/4
Start #2 Motor	4:30	5:30	3/4
Reaming	5:30	7:00	1 3/4
Circ + work Pipe	7:00	7:40	1 2/3
Survey	7:40	8:00	1/4
Pull out to Run casing	8:00	9:15	1 1/4
Rig up to Run casing	9:15	10:15	1
Run casing	10:15	3:15	5
Rig up hole Burton to Run Cement	3:15	4:00	3/4
Run Cement + plug	4:00	5:00	1
W.O.C.	5:00	12:00	

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Ruck _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER *P.J. Peterson*

B.C.P. Test Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 14 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Am LOCATION Trainer Lake C-39 DATE Jan 31 1965

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

DRILLER JOHN BUTESOLL 8

DERRICK ED BOMCHARD 8

MOTOR FRANK WESTERSON 8

FLOOR TERRY BRADY 8

FIREMAN

EXTRA

INJURIES

FIRES

FROM 265 TO 295

FOOTAGE 30 2 95

HRS. ON BOTTOM 5 1/2

WT. DRILL STRING (1000 LBS.) 7 6 1/4 2 1/4 15

DRILL COLLARS NO. O.D. I.D. WGT. 15 14 1/2 16 3

FUEL GALS. 50

WATER BBLs. 50

DRILL PIPE SIZE 1 1/2

STANDS 2-6219

ANGLES 12 1/4" HOLE

D. COLLARS 7-203.88

OTHER FT. BEAMER

C.B. FT. BEAMING 12 1/4" HOLE TO 17 1/2"

SUBS. FT. 16.00

FT. UP ON KELLY 16.00

TOTAL 295.00

GENERAL Drilling & setting collar. Conductor P. po washed out.

Boiler 8 hrs

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS.

DRILLER Merv J. Goodrich 12

DERRICK Robert Staats 8

MOTOR Gerald Lorch 8

FLOOR Charlie Wagner 8

FLOOR Joe T. Duguay 8

FIREMAN

EXTRA

INJURIES

FIRES

FROM 50 TO 108

FOOTAGE 58 108

HRS. ON BOTTOM 4 3/4

WT. DRILL STRING (1000 LBS.) 10 14 1/2

DRILL COLLARS NO. O.D. I.D. WGT. 10 14 1/2

FUEL GALS. 108

WATER BBLs. 10 1/2

DRILL PIPE SIZE 1 1/2

STANDS 30.75

ANGLES 12 1/4" HOLE

D. COLLARS 1-28.74

OTHER FT. Repair collar jet line

C.B. FT. Repair Kelly drive 5"

SUBS. FT. Cameron Valve

FT. UP ON KELLY 11:30

TOTAL 108.21

GENERAL Reaming to 17 1/2"

Boiler 8 hrs

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS.

DRILLER ROBERT OLIVER 12

DERRICK MIKE BEAGY 8

MOTOR WILGER KUNALY 8

FLOOR NIEL BAISSE 8

FLOOR LORNE ELBERT 8

FIREMAN

EXTRA

INJURIES

FIRES

FROM 108 TO 227

FOOTAGE 119 227

HRS. ON BOTTOM 4 1/4

WT. DRILL STRING (1000 LBS.) 4 6 1/4 2 1/4

DRILL COLLARS NO. O.D. I.D. WGT. 4 6 1/4 2 1/4

FUEL GALS. 147 1/2

WATER BBLs. 147 1/2

DRILL PIPE SIZE 1 1/2

STANDS 2-6221

ANGLES 12 1/4" HOLE

D. COLLARS 4-116.23

OTHER FT. WORK ON MUD LINES & Sump Motor

C.B. FT. Reaming water for Rig #19

SUBS. FT. N. Basater & Long

FT. UP ON KELLY 13 days with 4 hrs operation

TOTAL 227.07

GENERAL Cascade P.O # 2851

Boiler 8 hrs

REMARKS	START	STOP	INTERVAL
Reaming 12 1/4" HOLE	12 00	1 00	1
HOIST & PICK UP 17 1/2" P.W.T.	1 00	2 30	1 1/2
BEAMER	2 30	2 30	5 1/2
BEAMING 12 1/4" HOLE TO 17 1/2"	2 30	2 30	5 1/2
Rig Service	8:00	8:15	1/4
Reaming 12 1/4" to 17 1/2"	8:15	9:00	3/4
Repair collar jet line	9:00		
Repair Kelly drive 5"			
Cameron Valve		11:30	2 1/2
Reaming to 17 1/2"	11:30	2:30	3
Repair Jet Line	2:30	3:00	1/2
Reaming to 17 1/2"	3:00	4:00	1
Reaming 12 1/4" to 17 1/2" HOLE	4 00	9 00	1 1/4
WORK ON MUD LINES &	8 00		
Sump P. & MOTOR	12 00	2 3/4	
Reaming water for Rig #19			
N. Basater & Long			
13 days with 4 hrs operation			
Cascade P.O # 2851			
Northwest Tankers Ltd.			
2 Tins @ 4 00 - 20 hrs @ 6 00			
Cascade P.O # 2852			

Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack TOTAL CONTRACTOR TIME HRS. TOOLPUSHER P.F. Peterson

B.O.P. Test-Operated Time Results TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

RIG No. 19 COMPANY PURE PAN-AM LOCATION TRINITY LAKE C-39 DATE JAN 30 1965

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

DRILLER Steve Masorka 4

DERRICK John Gutasoli 8

MOTOR ED Bouchard 8

FLOOR Frank Westerson 8

FLOOR TERRY BRADY 8

FLOOR Mike P. S. S.

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL	WATER	DRILL PIPE	STANDS
20	50	70	4 1/2	14,000	1	6 3/4	2 3/4					
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
1A	12 1/4	S3	3/4	788452	100	70			5		Good	1-29.63
OTHER FT.												
C.B. FT.												
SUBS. FT.												
FT. UP ON KELLY												
TOTAL												70.00
NEXT SLIP												
NO. 1 PRES-SURE												
MODEL S.P.M.												
NO. 2 PRES-SURE												
MODEL S.P.M.												
NO. 3 PRES-SURE												
MODEL S.P.M.												
GENERAL												
W.L.	F.C.	P.H.										

REMARKS	TIME		
	START	STOP	INTERVAL
Rig Service	12:00	12:15	1/4
Work on Kelly Bushings	12:15	2:00	1 3/4
Drilling 12 1/4 hole	2:00	5:00	3
Work on Motors	5:00	6:30	1 1/2
Drilling 12 1/4 hole	6:30	8:00	1 1/2

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS.

DRILLER M.J. Goodrich 12

DERRICK Robert Staats 8

MOTOR Bernard Leach 8

FLOOR Charlie Wagner 8

FLOOR Joe J. Dugan 8

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL	WATER	DRILL PIPE	STANDS
70	34	104	5	50,000	2	6 3/4	2 3/4	5M.				
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
1A	12 1/4	S3	3/4	788452	100	104			10			58.51
OTHER FT.												
C.B. FT.												
SUBS. FT.												
FT. UP ON KELLY												
TOTAL												104.01
NEXT SLIP												
NO. 1 PRES-SURE												
MODEL S.P.M.												
NO. 2 PRES-SURE												
MODEL S.P.M.												
GENERAL												
W.L.	F.C.	P.H.										

REMARKS	TIME		
	START	STOP	INTERVAL
Rig Service	8:00	8:15	1/4
Drilling	8:15	9:15	1
Survey	9:15	10:00	3/4
Drilling	10:00	2:00	4
Rig up cellar jet	2:00	6:00	2
Conductor pipe washed out			

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS.

DRILLER ROBERT WILSON 8

DERRICK MIKE BARR 8

MOTOR WILSON KENNEDY 8

FLOOR NEIL BLISS 8

FLOOR BOBIE FERGUSON 8

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL	WATER	DRILL PIPE	STANDS
104	161	265	5 1/2	60M	7	6 1/4	2 1/4					
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
1A	12 1/4	S3	3/4	788452	10	145	132		113			7-203.89
2A	12 1/4	YT3	3/4	ED3137	15	140	133		5 1/2			
OTHER FT.												
C.B. FT.												
SUBS. FT.												
FT. UP ON KELLY												
TOTAL												265
NEXT SLIP												
NO. 1 PRES-SURE												
MODEL S.P.M.												
NO. 2 PRES-SURE												
MODEL S.P.M.												
GENERAL												
W.L.	F.C.	P.H.										

REMARKS	TIME		
	START	STOP	INTERVAL
Finish cellar jet	4:00	5:15	1 1/4
Drilling 12 1/4 hole	5:15	6:15	1
Trip for B.T. 6 1/4" B.T. 6 1/4" 9 00-2 1/4" 1/4"	6:15	7:00	45
Survey	7:00	8:15	1 1/4
Drilling 12 1/4 hole	8:15	10:15	1
Survey	10:15	10:30	1/4
Drilling	10:30	11:30	1
Survey	11:30	11:45	1/4
Drilling	11:45	12:00	1/4

Bit Ring on Bit No. _____ D.P. Colipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER P.J. Peterson

P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

Company Limited

EDMONTON OFFICE

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

LOCATION TRINER LAKE C-39 DATE JAN 29 1965

Specify Actual Hours Worked	HR5
------------------------------------	------------

FIRES:

Specify Actual Hours Worked	NRS.
-----------------------------	------

Specify Actual Hours Worked	HRS
-----------------------------	-----

INJURIES:

FIRE:

W.L.		F.C.		pH.																	
FROM		FOOTAGE		TO		HRS. ON BOTTOM		WT. DRILL STRING (1000 LBS.)		DRILL COLLARS		FUEL		WATER		DRILL PIPE		FT. ANDS			
										NO. O.D. I.D. WGT.											
0		25																			

TIME		
START	STOP	INTERVAL

Drilling Rathole
Rising up False Floor

12:00	3:00	3
3:00	8:00	5

Rig Service
Working on pump
mixing mud - Working
on shaker - Start #1
motor & #4

8 9.30 1 1/2

Logging up
Work on Rotary Ottawa
Quarrel
May 12 '14 Hole
Work on Kelling Bushings

10 ⁰⁰			
	10 ⁰⁰	6	
10 ⁰⁰	10 ⁰⁰	10	
10 ⁰⁰	12 ⁰⁰	11	

Totco Ring on Bit No. 1

D.P. Calipered Date

Results

From Pipe Rack..

TOTAL CONTRACTOR TIME. _____ HRS

TOOLPUSHER

B.O.P. Test-Operated

Time_

Results

TOTAL COMPANY TIME _____ HRS

APPROVED: B

Company Limited

EDMONTON OFFICE

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY PURE PAN-HILL

LOCATION TRAINER LAKE C-39 DATE JAN 28 19 65

[illegible]

TOTAL CONTRACTOR TIME _____ HRS.

TOOLPUSHER W. J. Thomas

TOTAL COMPANY TIME _____ HRS.

APPROVED BY

Company Limited,

THIS IS 58 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

PAY WORK RECORD

LOCATION TRAMPOR HOLE C-39

DATE MAR 18 1960

TOUR - MIDNIGHT - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS				
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	DBLS.	SIZE	SINGLES				
DRILLER	ROBERT OLIVER	BITS	NO.	SIZE	TYPE	SIZE	JETS	SERIAL NO.	WEIGHT	D.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS		
DERRICK	MIKE BERRY																OTHER FT.	
MOTOR	WILLIAM BOORIS																C.B. FT.	
FLOOR	CHARLES TURNER																SUBS. FT.	
FLOOR	JIM BOORIS		MUD				12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES				AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE	
FLOOR			WEIGHT											1	252			
FLOOR			VISCOSITY											2	258			
			GEL											3				
FIREMAN		PUMPS	NO. 1	PRES. SURE										4	1048			
EXTRA			MODEL	S.P.M.											5	290		
				LINER SIZE														
INJURIES:			NO. 2	PRES. SURE														
			MODEL	S.P.M.														
				LINER SIZE														
FIRES:			W.L.	F.C.	P.H.	GENERAL										FEET LEFT ON SPOOL	NEXT SLIP	

Run & cemented 271 JTS 6.509 FT 5 1/2" J.55-1
 Run collar & sand through casing w/500 SFX oil
 Displaced w/150 lbs water. Plug in place

Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	WAS ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS				
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BLS.	SIZE	SINGLES				
DRILLER <i>James Wisniewski</i>	<i>12</i>	BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLO.	FT. RMD.	WTS.	DEPTH CUT	CONDITION	C. COLLARS			
DERRICK <i>Arthur Tanguay</i>	<i>12</i>															OTHER FT.		
MOTOR																C.B. FT.		
FLOOR <i>Wald Fatzner</i>	<i>12</i>															SUBS. FT.		
FLOOR <i>Louis Fournier</i>	<i>12</i>		MUD				8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES		AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE	FT. UP ON KELLY		
FLOOR			WEIGHT										1			TOTAL		
FLOOR			VISCOSITY										2					
FIREMAN			GEL										3					
EXTRA		PUMPS	NO. 1	PRES-SURE									4					
			MODEL	S.P.M.									5					
				LINER SIZE					SIZE	TRIPS	NO. LINES	TOK MILES	TOTAL MILES	SLIP FEET OR	CUT	FEET LEFT ON SPOOL	NEXT SLIP	
			NO. 2	PRES-SURE														
INJURIES: <i>Louis Fournier - Foreign body in left eye Helping Truck</i>			MODEL	S.P.M.					GENERAL									
				LINER SIZE														
			W.L.				F.C.				P.H.				<i>Boston & Lous.</i>			
															STANDS			

[illegible]

REMARKS	TIME		
	START	STOP	INTERVAL
CIRC TO CEMENT CASING	12 ⁰⁰	1 ³⁰	1 ^{1/2}
RUN CEMENT	1 ³⁰	2 ⁰⁰	1 ^{1/2}
Pump Down Plug	2 ⁰⁰	2 ³⁰	1 ^{1/2}
CLEAN MUD TANKS	2 ³⁰	8 ⁰⁰	5 ^{1/2}
Plug bumped w/ 1800 P.S.I.G. By Howco.			
7 th Mannassah w/ cement			
2 nd Mt. used. Bottom & Top Rubber Plugs.			
Finish cleaning mud tanks			
Train Pumps - Pull liners			
Test out Bot. Pick up			
B.P. - set 5 ^{1/2} " Csg 51. ps.			
Cut csg. - Lay down			
B.P. - 4			
Filled 5 ^{1/2} " & 4 ^{5/8} " Csg			
w/ Diesel oil.			
Rig Released at 8 P.M.			
March 15, 1965			
Cecil E. Smith			
Change Liners #1 pump 12:00			
Pull liners #2 pump			
Tearing out. breakdown			
mud line shock hoses.			
pump suction			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. _____

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 57 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Am LOCATION TRAINOR LAKE-39 DATE Mar 14 1965

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

DRILLER ROBERT OLIVER 18

DERRICK MIKE BERRY 18

MOTOR WILLIAM BOERIS 18

FLOOR CHAREN TURNER 18

FLOOR JIM BOERING 18

FIREMAN

EXTRA

INJURIES

FIRES

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) NO. O.D. I.D. WGT. DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS SINGLES

6510

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION D. COLLARS

MUD 12 M. 2 A.M. 4 A.M. 6 A.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT 1 228

VISCOSITY 2 234

GEL 3

NO. 1 PRES-SURE 4 1004

MODEL S.P.M. 5 266

NO. 2 PRES-SURE

MODEL S.P.M.

NO. 3 PRES-SURE

MODEL S.P.M.

NO. 4 PRES-SURE

MODEL S.P.M.

NO. 5 PRES-SURE

MODEL S.P.M.

SIZE TRIPS NO. LINES TON MILES TOTAL MILES SLIP FEET OR CUT FEET LEFT ON SPOOL NEXT SLIP

141 8 200 18821

GENERAL WORKED 3 HRS OVERTIME RUNNING CASING

W.L. F.C. pH. Boiler 8 HRS.

REMARKS	START	STOP	INTERVAL
ATTEMPT TO BREAK CIRC	12:00	1:10	1:10
CIRC + CLEAN OUT TO 6780	1:10	2:40	1:30
CIRC TO COND HOSE	2:40	4:30	1:50
laying Down Down Pipe	4:30	8:00	3:30
Felt Plug #1 @ 6780			

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS.

DRILLER Dennis Blanchard 13

DERRICK Arthur Tanguay 12

MOTOR Terry Brady 16

FLOOR Ewald Patzer 13

FLOOR Louis Fournier 13

FIREMAN

EXTRA

INJURIES

FIRES

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) NO. O.D. I.D. WGT. DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS SINGLES

7180 TO

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION D. COLLARS

MUD 8 A.M. 10 A.M. 12 NOON 2 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT 1

VISCOSITY 2

GEL 3

NO. 1 PRES-SURE 4

MODEL S.P.M. 5

NO. 2 PRES-SURE

MODEL S.P.M.

NO. 3 PRES-SURE

MODEL S.P.M.

NO. 4 PRES-SURE

MODEL S.P.M.

NO. 5 PRES-SURE

MODEL S.P.M.

SIZE TRIPS NO. LINES TON MILES TOTAL MILES SLIP FEET OR CUT FEET LEFT ON SPOOL NEXT SLIP

111 OVERTIME

GENERAL

W.L. F.C. pH. Boiler 8 HRS

Rig Service	8:00	8:15	15
Log down drill pipe	8:15	11:00	2:45
Break Kelly Cock & Guill	11:00		
on Kelly - Remove Drive Bushings	12:00		1
Rig up to run 5 1/2" Csg	12:00	1:00	1
Running 5 1/2" Csg	1:00	4:00	3
Help run Csg	4:00	9:00	(5)

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS.

DRILLER Henry J. Goodrich 14

DERRICK William Harder 14

MOTOR Don Saar 12

FLOOR Ewald Funk 7

FLOOR Terry Shank 14

FIREMAN

EXTRA

INJURIES Ewald Funk Cut Right Thumb

FIRES

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) NO. O.D. I.D. WGT. DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS SINGLES

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION D. COLLARS

MUD 4 P.M. 6 P.M. 8 P.M. 10 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT 1

VISCOSITY 2

GEL 3

NO. 1 PRES-SURE 4

MODEL S.P.M. 5

NO. 2 PRES-SURE

MODEL S.P.M.

NO. 3 PRES-SURE

MODEL S.P.M.

NO. 4 PRES-SURE

MODEL S.P.M.

NO. 5 PRES-SURE

MODEL S.P.M.

SIZE TRIPS NO. LINES TON MILES TOTAL MILES SLIP FEET OR CUT FEET LEFT ON SPOOL NEXT SLIP

GENERAL Ewald Funk Cut & Bruised Right Thumb Running casing

W.L. F.C. pH.

Running 5 1/2" casing	4:00	11:15	
circulating hole	11:15	12:00	

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 56 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY PURE PAN ARM LOCATION TRINOR LAKE C-59 DATE MAR 13 1968

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

DRILLER ROBERT OLIVER 8

DERRICK MIKE BERG 80

MOTOR WILLIAM BORRIS 80

FLOOR CHAREN TURNER 8

FLOOR JIM DORING 8

FIREMAN

EXTRA

INJURIES:

FIRES:

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS SINGLES

7150 J.D.

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION D. COLLARS

MUD 12 MN. 2 A.M. 4 A.M. 8 A.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT 1 204

VISCOSITY 2 210

GEL 3

NO. 1 PRES-SURE S.P.M. 4 980

MODEL 5 242

NO. 2 PRES-SURE S.P.M. 1/4 8 1863 1

GENERAL 4889

W.L. F.C. PH. BOILER 8 HRS.

REMARKS

START STOP INTERVAL

12:00 1:00 1

1:00 1:30 1/2

1:30 4:00 2 1/2

4:00 4:00 0

7:00 8:00 1

Running Velocity Survey

BEAR DRIFT SCHUMBERGER

Run in Hole OPEN END

4 Day Down 10 SINGLES

CIRCULATION

ALIGNMENT

Big W to Druc Pump

Tour - 8 a.m. - 6 p.m.

Specify Actual Hours Worked HRS.

DRILLER ALBERT TANGUY 8

DERRICK ALBERT TANGUY 8

MOTOR TERRY BRADY 8

FLOOR EROLD PATZER 8

FLOOR LOUIS FORTIN 8

FIREMAN

EXTRA

INJURIES:

FIRES:

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS SINGLES

7150

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION D. COLLARS

MUD 8 A.M. 10 A.M. 12 NOON 2 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT 1

VISCOSITY 2

GEL 3

NO. 1 PRES-SURE S.P.M. 4

MODEL 5

NO. 2 PRES-SURE S.P.M. 18,791 4889

GENERAL Plug under displaced 26 Singles 5"

Drill Pipe Filled with Cement. Cement set

Up in Drill Pipe. Cement will have to be drilled out.

W.L. F.C. PH.

REMARKS

START STOP INTERVAL

8:00 10:00

10:00 12:00

12:00 1:00

1:00 4:00

Run plug in cement

6660-6900

Pulling out, having down

Drill pipe

Pipe Plugged TRY

To Break Circulation

Pulling Plugged pipe

Pipe Full of Cement 26 Singles

Set up.

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS.

DRILLER HERB J. GOODRICK 8

DERRICK WILLIAM HARDER 8

MOTOR DON SAAR 8

FLOOR EROLD FORTIN 8

FLOOR TERRY BRADY 8

FIREMAN

EXTRA

INJURIES:

FIRES:

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS SINGLES

6950

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION D. COLLARS

MUD 4 P.M. 6 P.M. 8 P.M. 10 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT 1

VISCOSITY 2

GEL 3

NO. 1 PRES-SURE S.P.M. 4

MODEL 5

NO. 2 PRES-SURE S.P.M. 14,791

GENERAL

W.L. F.C. PH.

REMARKS

START STOP INTERVAL

4:00 6:35 2 1/2

6:35 9:00 1 1/2

9:00 10:00 1

10:00 12:00 2

Pulling out with drill pipe

Lay down 26 JTS Cemented

Pipe

Run in hole with bit

Pick up 29 JTS pipe

Run up Kelly working

Pipe to break circulation

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER P. J. Peterson

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 55 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY PURE Petroleum LOCATION TRAINING HOLE R-39 DATE MAR 12 1965

[illegible]

Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked		HRS.					NO.	OD.	ID.	WGT.	GALS.	CHLS.	SIZE	SINGLES
DRILLER	Dennis Nizanchuk	8												
DERRICK	Arthur Fongey	8												
MOTOR	Terry Brady	8												
FLOOR	Ewald Patzer	8												
FLOOR	Louis Fournier	8												
FLOOR														
PIREMAN														
EXTRA														
INJURIES:														
WIRES:														

[illegible][illegible]

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS

TOOLPUSHER

TOTAL COMPANY TIME _____ HRS

APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 54 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Am LOCATION TRINOR Lake C39 DATE Mar 11 1965

Tour - Midnight - 8 a.m.		FROM		FOOTAGE		TO		HRS. ON BOTTOM		WT. DRILL STRING (1000 LBS.)		DRILL COLLARS		FUEL		WATER		DRILL PIPE		STANDS	
Specify Actual Hours Worked		HRS.		7:50		-		-		180		22 63/4 12 3/4								20	
DRILLER		HRS.		NO.		SIZE		TYPE		SIZE JETS		SERIAL NO.		WEIGHT		R.P.M.		FT. DRLD.		FT. RMD.	
DERRICK		HRS.		25		8 3/4		W7R2				13712		50		60		30		5	
MOTOR		HRS.																		2-1-I	
FLOOR		HRS.																		12-638.41	
FLOOR		HRS.																		OTHER FT.	
FIREMAN		HRS.																		C.B. FT.	
EXTRA		HRS.																		SUBS. FT.	
INJURIES		HRS.																		FT. UP ON KELLY	
FIRES		HRS.																		TOTAL	
																				7150.00	
																				NEXT SLIP	

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Lucas Pave Area LOCATION Tranvor Lane C-39 DATE Mar 8 1965

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS. 8

DRILLER Robert J. Jurek

DERRICK Mike Barry

MOTOR Williams

FLOOR Charles Turner

FLOOR Terry Shanks

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS	
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS. DEPTH OUT	CONDITION
1	23 8 3/4	H	1 1/16	716868	65	60	59		11 1/2	Dang

MUD	12 M.	2 M.	4 A.M.	6 A.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT	9.2	9.2	9.2	9.2			1 86	
VISCOSITY	115	115	95	95			2 90	
GEL							3 860	
P	NO. 1 PRES-SURE	900					4 122	
U	MODEL S.P.M.						5 4999	
M	NO. 2 PRES-SURE							
P	MODEL S.P.M.							
S	LINER SIZE							

W.L. 1.5 F.C. 2.2 PH. 13 Bore 8 hrs

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS. 8

DRILLER Dennis Nizuchuk

DERRICK

MOTOR Terry Brady

FLOOR Ewald Patzer

FLOOR

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS	
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS. DEPTH OUT	CONDITION
1	23 8 3/4	H	1 1/16	716868	55	60	93		16 7000	

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT	9.2	9.2	9.2	9.2			1 94	
VISCOSITY	95	94	96				2 98	
GEL							3 868	
P	NO. 1 PRES-SURE						4 130	
U	MODEL S.P.M.						5 4999	
M	NO. 2 PRES-SURE							
P	MODEL S.P.M.							
S	LINER SIZE							

W.L. 1.2 F.C. 2.2 PH. 13 Bore 8 Hours

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS. 8

DRILLER Marion Goodrich

DERRICK William Harder

MOTOR Don Saar

FLOOR Ewald Funk

FLOOR Terry Shanks

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS	
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS. DEPTH OUT	CONDITION
1	24 8 3/4	Steel	1 1/16	ES4316	50	60	15		2 1/4	Drilling

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT			89	200*	Caustic soda		1 102	
VISCOSITY			119				2 106	
GEL							3 876	
P	NO. 1 PRES-SURE						4 138	
U	MODEL S.P.M.						5 4889	
M	NO. 2 PRES-SURE							
P	MODEL S.P.M.							
S	LINER SIZE							

W.L. 2.2 F.C. 2.2 PH. 13

REMARKS	TIME		
	START	STOP	INTERVAL
18-6321.22 Rtg SERV	12:00	12:13	1/4
Dang 8 3/4" Hous	12:10	8:00	7 1/4
19-634.41			
20-638.41			
21-638.41			
22-638.41			
23-638.41			
24-638.41			
25-638.41			
26-638.41			
27-638.41			
28-638.41			
29-638.41			
30-638.41			
31-638.41			
32-638.41			
33-638.41			
34-638.41			
35-638.41			
36-638.41			
37-638.41			
38-638.41			
39-638.41			
40-638.41			
41-638.41			
42-638.41			
43-638.41			
44-638.41			
45-638.41			
46-638.41			
47-638.41			
48-638.41			
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51-638.41			
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95-638.41			
96-638.41			
97-638.41			
98-638.41			
99-638.41			
100-638.41			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER P.J. Peterson

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 50 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 14 COMPANY *Pugh & Co. Ltd.* LOCATION *TRAINER LAKE C-39* DATE *MAR 7 1965*

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked		6864	34	6898	1 1/2	160M	19	6 1/4	2 1/4	55M			68-6320.44
DRILLER	8												
DERRICK	12												
MOTOR	8												
FLOOR	8												
FLOOR													
FLOOR													
FIREMAN													
EXTRA													
INJURIES:													
FIRES:													

Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked		6898	19	6917	5 1/4	160	19	6 1/4	3 1/4				19-1350.19
DRILLER	8												
DERRICK	8												
MOTOR	8												
FLOOR	8												
FLOOR													
FLOOR													
FIREMAN													
EXTRA													
INJURIES:													
FIRES:													

Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked		6917	19	6936	3 1/2	115	22	6 3/4	2 3/4				68-6258.72
DRILLER	8												
DERRICK	12												
MOTOR	8												
FLOOR	8												
FLOOR													
FLOOR													
FIREMAN													
EXTRA													
INJURIES:													
FIRES:													

REMARKS	TIME		
	START	STOP	INTERVAL
Rig SERV	12:00	12:10	1/4
Drilling	12:10	12:40	3 1/2
TIGHTEN Union on Mud Line	3:40	4:00	1/4
Drilling	4:00	8:00	4
Drilling	8:00	8:45	3/4
Rig Service - Close Hydrul	8:45	9:00	1/4
Drilling	9:00	1:30	4 1/2
Survey @ 6900'	1:30	1:45	1/4
Hoisting for Bit.	1:45	4:00	2 1/4
Finish pulling out & pick	4:00		
up three more collars	5:15		1 1/4
Run in hole N/BIT	5:15	8:00	2 3/4
Break Circ. Clean 35' bottom	8:00	8:30	1/2
Drilling	8:30	12:00	3 1/2

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER *P.J. Peterson*

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 49 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Am LOCATION TRINOR LAKE C-39 DATE Mar 6 1965

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	BBL'S.	SIZE
DRILLER	8	6788	40	6828	7 1/4	162 M	19	6 3/4	4 1/2	450 M			68-6258-92
DERRICK	8	B											
MOTOR	8	NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION											
FLOOR	8	21 8 3/4 W 7 1 1/2 43249 45 60 40 7 1/4 Dry											
FLOOR	8	S											
FLOOR	4	MUD 12 MN. 2 A.M. 4 A.M. 6 A.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE											
FIREMAN		WEIGHT 9.3 9.3 8.5 8.5 7.00											
EXTRA		VISCOSITY 105 125 100 20 250											
INJURIES:		GEL											
FIRES:		P NO. 1 PRES. 800 0 - 2000 200											
		MODEL S.P.M. 60 - 1000 1000											
		LINER SIZE 6 1/2 - 1000 1000											
		NO. 2 PRES. 800 0 - 2000 200											
		MODEL S.P.M. 60 - 1000 1000											
		LINER SIZE 6 1/2 - 1000 1000											
		W.L. 3 F.C. 242 PH. 13											

REMARKS	START	STOP	INTERVAL
FINISH RUNNING IN HOLE	12:00	12:15	1/4
BREAK CIRC + CLEAN	12:15	12:30	1/4
10' TO BOTTOM	12:30	12:45	1/4
Dry 8 3/4" HOLE	12:45	1:00	1/4

Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	BBL'S.	SIZE
DRILLER	8	6828	25	6853	6	162	19	6 3/4	4 1/2	450 M			14-6289-71
DERRICK	4	B											
MOTOR	8	NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION											
FLOOR	8	21 8 3/4 W 7 1 1/2 43249 45 60 65 1 1/4 Hustling											
FLOOR		S											
FLOOR		MUD 8 A.M. 10 A.M. 12 NOON 2 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE											
FIREMAN		WEIGHT 9.3 9.2 9.2 9.2											
EXTRA		VISCOSITY 97 89 92 113											
INJURIES:		GEL											
FIRES:		P NO. 1 PRES. 800 0 - 2000 200											
		MODEL S.P.M. 60 - 1000 1000											
		LINER SIZE 6 1/2 - 1000 1000											
		NO. 2 PRES. 800 0 - 2000 200											
		MODEL S.P.M. 60 - 1000 1000											
		LINER SIZE 6 1/2 - 1000 1000											
		W.L. 3 F.C. 242 PH. 13											

REMARKS	START	STOP	INTERVAL
Pro Service - Close End -	8:00	8:15	1/4
Drilling	8:15	8:30	1/4
Trip out for Bit -	8:30	8:45	1/4

Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	BBL'S.	SIZE
DRILLER	8	6853	11	6864	2 3/4	160	19	6 3/4	4 1/2	450 M			1-6289-61
DERRICK	12	B											
MOTOR	8	NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION											
FLOOR	8	22 8 3/4 W 7 1 1/2 37893 50 60 11 2 3/4 Dry											
FLOOR	8	S											
FLOOR	8	MUD 4 P.M. 6 P.M. 8 P.M. 10 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE											
FIREMAN		WEIGHT 1000 1000 1000 1000											
EXTRA		VISCOSITY 500 500 500 500											
INJURIES:		GEL											
FIRES:		P NO. 1 PRES. 800 0 - 2000 200											
		MODEL S.P.M. 60 - 1000 1000											
		LINER SIZE 6 1/2 - 1000 1000											
		NO. 2 PRES. 800 0 - 2000 200											
		MODEL S.P.M. 60 - 1000 1000											
		LINER SIZE 6 1/2 - 1000 1000											
		W.L. 3 F.C. 242 PH. 13											

REMARKS	START	STOP	INTERVAL
Finish pulling out	4:00	5:00	1
Slip drill & dump mud tank.	5:00	7:15	2 1/4
Run in hole N/BIT	7:15	9:15	2
Break circle west to bottom	9:15	9:45	1/2
Drilling	9:45	12:00	2 1/4

CASCADE DRILLING

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 48 DAY ON THIS WELL

NOTE-Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Lucas PAU, Inc. LOCATION TRAINOR LAKE C-39 DATE MAR 5 1965

[illegible]

Your - 8 a.m. - 4 p.m.		W.L. 3.4 P.C. 732 EX. 111 Borer 8 HRS																STANDS	
Specify Actual Hours Worked	HRS.	FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER		DRILL PIPE						
							NO.	O.D.	I.D.	WT.	GALS.	BBL.	CIN.	SINGLE					
DRILLER <i>Dennis Krawchuk</i>	<i>8</i>	<i>6728</i>	<i>40</i>	<i>6768</i>	<i>7 1/4</i>	<i>162</i>	<i>19</i>	<i>6 3/4</i>	<i>2 3/4</i>							<i>67-6198.3</i>			
DERRICK		BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. ORLG.	FT. RMD.	HRS.	DEPTH OUT	CONDITION		D. COLLARS			
MOTOR			<i>20</i>	<i>8 3/4</i>	<i>owc</i>	<i>1 1/16</i>	<i>38227</i>	<i>40</i>	<i>80</i>	<i>78</i>			<i>11 1/2</i>	<i>dry</i>		<i>19-551.87</i>			
FLOOR																			
FLOOR																			
FIREMAN																C.B. FT.			
EXTRA												AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE			
INJURIES:		MUD		3 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES								SUBS. FT.			
		WEIGHT		<i>9.3</i>		<i>9.3</i>	<i>9.3</i>	<i>200# HV CMC</i>						<i>1</i> <i>22</i>					
		VISCOSITY		<i>105</i>		<i>112</i>	<i>110</i>	<i>200 gallons diesel oil</i>						<i>2</i> <i>26</i>					
		GEL												<i>3</i> <i>26</i>					
		NO. 1 PRES-SURE				<i>900</i>							<i>4</i> <i>796</i>						
		MODEL S.P.M.				<i>60</i>							<i>LAZY 1/2" STEEL WATER</i> <i>66</i>						
		LINER SIZE		<i>6"</i>			SIZE	TRIPS	NO. LINES	TOW MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP					
		NO. 2 PRES-SURE					<i>1 1/4</i>		<i>8</i>	<i>1578</i>	<i>17617</i>		<i>4999</i>						
		MODEL S.P.M.		<i>60</i>			GENERAL												
		LINER SIZE		<i>108</i>															

Tour - 4 p.m. - Midnight		W.L. 32		F.C. 32		PH. 13		Boiler 8-hours										STANDS									
Specify Actual Hours Worked		HRS.		FROM		FOOTAGE		TO		HRS. ON BOTTOM		WT. DRILL STRING (1000 LBS.)		DRILL COLLARS		FUEL		WATER		DRILL PIPE							
DRILLER		HRS.		NO.		SIZE		TYPE		SIZE JETS		SERIAL NO.		WEIGHT		R.P.M.		FT. DRLD.		FT. RMD.		HRS.		DEPTH OUT		CONDITION	
DERRICK				20		8 3/4		O.W.C.		1 1/16		38227		40		80		20				1 1/4		6788			
MOTOR																											
FLOOR																											
FLOOR																											
FLOOR																											
FIREMAN																											
EXTRA																											
INJURIES:																											
F.F.R.S.																											

[illegible]

Totco Ring on Bit No.

D.P. Calipered Date.

Results

From Pipe Rack.

TOTAL CONTRACTOR TIME _____ HRS

TOOLPUSHER.

B.O.P. Test-Operated

Time.

Results

TOTAL COMPANY TIME _____ HRS

APPROVED BY

Company Limited

THIS IS 47 DAY ON THIS WELL

NOTE-Please show FOOTAGE made while "Control Drilling" as well as HOURS.

DAY WORK RECORD

RIG No. 10 COMPANY Lucas Tan, Inc.

LOCATION Trainer Lake C-39 DATE 5 Apr 4 1960

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS	
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BBLs.	5" SIZE	
DRILLER	8	6545	48	6593	5	160	19	6 3/4	2 3/4	5000			162-1014.46	
DERRICK	8	19	8 3/4	Y M	"116	E34312	40	80	48				19-551-78	
MOTOR	8												OTHER FT.	
FLOOR	8												C.B. FT.	
FLOOR	8												SUBS. FT.	
FLOOR	8												FT. UP ON KELLY	
FIREMAN													13.83	
EXTRA													TOTAL	
INJURIES:													6593.00	
FIRES:													NEXT SLIP	
		W.L.	3.6	F.C.	3 1/2	PH.	10.5	Barker 8 HRS						
Tour - 5 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS	
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BBLs.	5" SIZE	
DRILLER	8	6593	61	6654	7 1/4	160	19	6 3/4	2 3/4				16-6076.00	
DERRICK	8	19	8 3/4	Y M	"116	E34312	40	80	109				19-551-87	
MOTOR	8												OTHER FT.	
FLOOR	8												C.B. FT.	
FLOOR	8												SUBS. FT.	
FLOOR	8												FT. UP ON KELLY	
FIREMAN													21.58	
EXTRA													TOTAL	
INJURIES:													6654.00	
FIRES:													NEXT SLIP	
		W.L.	2.6	F.C.	3/32	PH.	10.5	Barker 7 HRS - Washed out Barker						
Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS	
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BBLs.	5" SIZE	
DRILLER	8	6654	38	6690	4 3/4	160	19	6 3/4	2 3/4				1-1606.16	
DERRICK	8	19	8 3/4	Y M	"116	E34312	40	80	148				19-551-87	
MOTOR	8												OTHER FT.	
FLOOR	8												C.B. FT.	
FLOOR	8												SUBS. FT.	
FLOOR	8												FT. UP ON KELLY	
FIREMAN													8.00	
EXTRA													TOTAL	
INJURIES:													6690.00	
FIRES:													NEXT SLIP	
		W.L.	4	F.C.	4 1/2	PH.		Barker 8 HRS						

[illegible]

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER P. J. Velasco

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

RIG No. 19 COMPANY Pearlman Limited

THIS IS 46 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

LOCATION TRAINER DATE Mar 3 1965

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

DRILLER Robert Dwyer 8

DERRICK Mike Begg 8

MOTOR William Bonar 8

FLOOR Ray Gaudin 8

FLOOR Urban Turner 8

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	NO.	O.D.	I.D.	WGT.	FUEL	WATER	DRILL PIPE	STANDS
1390	78	1468	7 1/4	160	19	6 3/4	2 3/4	500				14-549.73
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
18	8 3/4	MHL	1 1/16	746675	4090	93			9 1/4		Drilling	19-551.78
MUD												
WEIGHT 9.3 9.4 9.4 9.4 GEL 4000												
VISCOSITY 150 150 145 120 CMC 400												
GEL 100 100 100 100												
PUMP												
NO. 1 PRES. 800 800 800 800												
NO. 2 PRES. 800 800 800 800												
NO. 3 PRES. 800 800 800 800												
NO. 4 PRES. 800 800 800 800												
NO. 5 PRES. 800 800 800 800												
GENERAL												

REMARKS	START	STOP	INTERVAL
Rig Serv	12:00	12:05	1/4
Drilling 8 3/4" Hole	12:05	8:00	7 3/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS.

DRILLER James Hamechuk 8

DERRICK Frank Westerson 8

MOTOR Edward Loveland 8

FLOOR Terry Biddy 8

FLOOR Ewald Polzer 8

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	NO.	O.D.	I.D.	WGT.	FUEL	WATER	DRILL PIPE	STANDS
1468	48	1516	7 1/4	160	19	6 3/4	2 3/4					14-551.73
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
18	8 3/4	MHL	1 1/16	746675	4090	93			17		Drilling	19-551.78
MUD												
WEIGHT 9.3 9.3 9.3 9.3												
VISCOSITY 115 107 130 CMC 50												
GEL 100 100 100 100												
PUMP												
NO. 1 PRES. 850 850 850 850												
NO. 2 PRES. 850 850 850 850												
NO. 3 PRES. 850 850 850 850												
NO. 4 PRES. 850 850 850 850												
NO. 5 PRES. 850 850 850 850												
GENERAL												

Rig Service Check Hydrul	8:00	8:15	1/4
Drilling	8:15	4:00	7 3/4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS.

DRILLER Wm J. Goodrich 8

DERRICK William Huxler 8

MOTOR Don Spar 8

FLOOR Ewald F. H. H. 8

FLOOR Terry Shank 8

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	NO.	O.D.	I.D.	WGT.	FUEL	WATER	DRILL PIPE	STANDS
1516	29	1545	4 3/4	160	19	6 3/4	2 3/4					2-5952.96
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
18	8 3/4	MHL	1 1/16	746675	4080	80	170		2 1/4			19-551.84
MUD												
WEIGHT 9.3 9.3												
VISCOSITY 164 103												
GEL 100 100 100 100												
PUMP												
NO. 1 PRES. 950 950 950 950												
NO. 2 PRES. 950 950 950 950												
NO. 3 PRES. 950 950 950 950												
NO. 4 PRES. 950 950 950 950												
NO. 5 PRES. 950 950 950 950												
GENERAL												

Drilling	4:00	8:45	4 3/4
Straiten up Kelly hose	8:45	9:00	1/4
Survey	9:00	9:30	1/2
Tripping For A/BIT	9:30		
Tight hole coming off bottom	12:00		

CASCADE DRILLING

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 45 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY *Pearce & Son Ltd.* LOCATION *Trainer LK C-39* DATE *Mar 2 1965*

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS			
Specify Actual Hours Worked		NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLO.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
DRILLER	<i>Robert Dwyer</i>	8	17	4 3/4	OWU	"11/16	46223	35	90	50	W/1	6375	Pulled to Test	19-551.78
DERRICK	<i>Michael Berg</i>	8												
MOTOR	<i>William Roberts</i>	8												
FLOOR	<i>Ray Beaverville</i>	8												
FLOOR	<i>Charles Turner</i>	8												
FIREMAN														
EXTRA														
INJURIES														
FIRES														

Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS			
Specify Actual Hours Worked		NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLO.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
DRILLER	<i>Dennis Niwuchuk</i>	8	19	0	DS#4		19	63/239						
DERRICK	<i>Frank Westerson</i>	8												
MOTOR	<i>Edward Bouchard</i>	8												
FLOOR	<i>Terry Brady</i>	8												
FLOOR	<i>Ewald Faltzer</i>	8												
FIREMAN														
EXTRA														
INJURIES	<i>NIL</i>													
FIRES	<i>N.L.</i>													

Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS			
Specify Actual Hours Worked		NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLO.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
DRILLER	<i>Merwin Goodnick</i>	8	19	15	6390	1 1/2	158	19	6 3/4	2 3/4				
DERRICK	<i>William Harder</i>	8												
MOTOR	<i>Don Saar</i>	8												
FLOOR	<i>Ewald Funk</i>	8												
FLOOR	<i>Terry Shank</i>	8												
FIREMAN														
EXTRA														
INJURIES														
FIRES														

REMARKS	TIME		
	START	STOP	INTERVAL
<i>Run 8 3/4" Hole</i>	12:00	1:30	2 1/2
<i>Circ Sample</i>	2:30	3:00	1/2
<i>Drill</i>	3:00	4:00	1
<i>Circ to Clean Hole</i>	4:00	5:00	1
<i>Survey</i>	5:00	5:45	1/4
<i>Hoist to Test</i>	5:45	6:00	2 3/4
<i>Rig Service v Blind</i>	8:00	8:15	1/4
<i>4 1/2" Kms -</i>			
<i>Pick up & make</i>	8:15		
<i>up Packer -</i>		9:30	1 1/4
<i>Trip in w/ Packer</i>	9:30	11:45	2 1/2
<i>Testing - Dst #4 -</i>	11:45	2:00	2 1/4
<i>Pull packer Looser &</i>	2:00		
<i>Break down Surface Equip</i>	2:15		1/4
<i>Hoist Packer</i>	2:15	4:00	1 3/4
<i>Note - Layed 2 single down out of drilling string</i>			
<i>Finish Pulling out w/ packer</i>	4:00	6:00	2
<i>Lay down packer</i>	6:00	7:30	1 1/2
<i>Run in w/ drill collars</i>	7:30	8:00	1/2
<i>Slip 15" drill line</i>	8:00	8:30	1/2
<i>Finish Run in hole w/ bit</i>	8:30	10:00	1 1/2
<i>wash to bottom</i>	10:00	10:30	1/2
<i>Drilling</i>	10:30	12:00	1 1/2

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER *P.F. Peterson*

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

RIG No. 19 COMPANY Pace Petroleum LOCATION Trainer H.K. C-39 DATE May 1 1965

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	DBLS.
DRILLER	8	6325					19	6 3/4	2 3/4	50		5
DERRICK	8											
MOTOR	8											
FLOOR	8											
FLOOR	8											
FIREMAN												
EXTRA												
INJURIES:												
FIRES:												

Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	DBLS.
DRILLER	8	6325	0		0	140	19	6 3/4	2 3/4			5
DERRICK	8											
MOTOR	8											
FLOOR	8											
FLOOR	8											
FIREMAN												
EXTRA												
INJURIES:												
FIRES:												

Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.	GALS.	DBLS.
DRILLER	8	6325	6	6331	3/4	165	19	6 3/4	2 3/4			5
DERRICK	8											
MOTOR	8											
FLOOR	8											
FLOOR	8											
FIREMAN												
EXTRA												
INJURIES:												
FIRES:												

REMARKS	TIME		
	START	STOP	INTERVAL
HAIST TURN Packer	12:00	2:45	2 1/4
APPEL up Tool-D.S.T. #3	2:45	4:00	2
Run in w/ same	4:00	7:15	2 1/4
HEAD up	7:15	7:45	1/2
INITIAL SHUT IN	7:45	8:00	1/4
Run in Dual Johnson			
Packer 7" Rubbers			
TO TEST INTERVAL			
6275-6325			
Testing DST #3	8:00	2:45	
Pull Packer Loose &	2:45	3:00	
Break down testing head			
Tripp out w/ Packer	3:00	4:00	
(First 4 stands tight)			
Flushed out and			
changed oil in			
Drums & Compound			
Pulling out w/ Packer	4:00	6:00	2
Lay down test tool	6:00	7:30	1 1/2
Run in with collar	7:30	8:15	3/4
Ship Drill Line 15 FT.	8:15	8:45	1/2
Run in hole w/ bit	8:45	10:15	1 1/2
Clean out to bottom	10:15	11:15	1
Drilling	11:15	12:00	3/4

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
 B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS.

TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS.

APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

NOTE: Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Russ Rowan LOCATION Tramway LK C-29 DATE FEB 28 1965

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

DRILLER Robert Oliver 8

DERRICK Mike Berg 8

MOTOR William Burgess 8

FLOOR Ray Gannette 8

FLOOR Chasen Turner 8

FIREMAN

EXTRA

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBL.	DRILL PIPE SIZE	STANDS
6275					19							41
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
1												19-55187
2												OTHER FT.
3												C.B. FT.
4												SUBS. FT.
5												FT. UP ON KELLY
6												TOTAL
7												NEXT SLIP
8												
9												
10												
11												
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15												
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99												
100												

W.L. P.C. pH. Recovered 207 ST Fluid.

TH-3166- I-57-2371 I-F-404 F-Flow-694 F-53-2371

Boiler 8 hrs

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS

6275 3 6278 1/2 14 19 13/4 3/4

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION D. COLLARS

16 8 3/4 O.W.V. 1 1/16 41389 10 70 3 1/2 D.W. 19-55187

OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL NEXT SLIP

MUD 8 A.M. 10 A.M. 12 NOON 2 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT VISCOSITY GEL

NO. 1 PRES-SURE S.P.M. LINDER SIZE

NO. 2 PRES-SURE S.P.M. LINDER SIZE

GENERAL

W.L. P.C. pH. Boiler 8 hrs

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS

6278 47 6325 3 3/4 110 12 17 6 3/4 2 3/4

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION D. COLLARS

16 8 3/4 O.W.V. 1 1/16 41389 30 80 50 4 1/4 19-55187

OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL NEXT SLIP

MUD 4 P.M. 6 P.M. 8 P.M. 10 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT VISCOSITY GEL

NO. 1 PRES-SURE S.P.M. LINDER SIZE

NO. 2 PRES-SURE S.P.M. LINDER SIZE

GENERAL

W.L. P.C. pH. Boiler 8 hrs

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS

6278 47 6325 3 3/4 110 12 17 6 3/4 2 3/4

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION D. COLLARS

16 8 3/4 O.W.V. 1 1/16 41389 30 80 50 4 1/4 19-55187

OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL NEXT SLIP

MUD 4 P.M. 6 P.M. 8 P.M. 10 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT VISCOSITY GEL

NO. 1 PRES-SURE S.P.M. LINDER SIZE

NO. 2 PRES-SURE S.P.M. LINDER SIZE

GENERAL

W.L. P.C. pH. Boiler 8 hrs

REMARKS

START STOP INTERVAL

Run in w/ Packer 12:00 1:30 1 1/2

Rig up Head & C.H. Saws & 1:30

Set Packer 2:00 2:30 1/2

Initial Shut in 2:00 2:30 1/2

Tool OPEN 2:30 5:30 3

Final Shut in 5:30 6:30 1

Hayden Head & Packer Packer 6:30

Losses 7:00 7:30 1/2

Hoisting 7:00 8:00 1

Run in w/ Packer 8:00 9:15 1 1/4

Finish Hoisting Packer 8:15 10:00 1 3/4

Break & Lay down 10:00 11:30 1 1/2

Packer

Slip Drilling Line 11:30 12:00 1/2

Trip in w/ 8 3/4 Bit 12:00 2:45 2 3/4

Clean 30' to bottom 2:45 3:30 3/4

Drilling 3:30 4:00 1/2

Drilling 4:00 6:00 2

Core work on shaker 6:00 7:30 1 1/2

Circ. Sample

Drilling 7:30 8:15 3/4

Circ. Sample 8:15 9:00 3/4

Drilling 9:00 9:30 1/2

Tighten up mud line 9:30 9:45 1/4

Drilling 9:45 10:15 1/2

Circ Sample 10:15 11:15 1

Pulling For DST. 11:15 12:00

Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack

B.O.P. Test-Operated Time Results

TOTAL CONTRACTOR TIME HRS.

TOTAL COMPANY TIME HRS.

TOOLPUSHER P. J. Peterson

APPROVED BY

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS NO DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Am. LOCATION Tranor Lake C-37 DATE Feb. 27 1965

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS	
Specify Actual Hours Worked		NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS	
DRILLER	Mervin Goodrich	8	15 1/4	YM	1/16	E3430	15	70	10		34			19-55187	
DERRICK	William Harder	8													
MOTOR	Don Saar	8													
FLOOR	Ewald Funk	8													
FLOOR	Terry Shank	8													
MUD		12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES				AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE	
WEIGHT		95				Sol 2000 #				1		706			
VISCOSITY		113				XP 20 250 #				2		660			
GEL						SPERSCHE 500 #				3					
PUMP		NO. 1	PRES-SURE	1000		COASTIC 250 #		4		698					
MODEL		S.P.M.		54		DIPOL Fuel 250 Gals.		5		64					
LINER SIZE		6				SIZE TRIPS NO. LINES TON MILES TOTAL MILES		SLIP FEET OR CUT		FEET LEFT ON SPOOL		NEXT SLIP			
NO. 2		PRES-SURE				114		8							
MODEL		S.P.M.				GENERAL		200		1500					
LINER SIZE															

Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS	
Specify Actual Hours Worked		NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS	
DRILLER	Robert Dwyer	8	15 1/4	YM	1/16	E3430	15	70	10		34			19-55187	
DERRICK	Mike Begg	8													
MOTOR	Wynne Bucaris	8													
FLOOR	Ray Bravelle	8													
FLOOR	Charles Turner	8													
MUD		8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES				AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE	
WEIGHT		-				GEL 13500 #				1		714			
VISCOSITY		-				SPERSCHE 2750 #				2		668			
GEL		-				XP 20 1750 #				3					
PUMP		NO. 1	PRES-SURE	200		4		706							
MODEL		S.P.M.		45		5		72							
LINER SIZE		6				SIZE TRIPS NO. LINES TON MILES TOTAL MILES		SLIP FEET OR CUT		FEET LEFT ON SPOOL		NEXT SLIP			
NO. 2		PRES-SURE				114		8		15143		4999			
MODEL		S.P.M.				GENERAL									
LINER SIZE															

Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS	
Specify Actual Hours Worked		NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS	
DRILLER	Dennis Niewchuk	8	15 1/4	YM	1/16	E3430	15	70	10		34			19-55187	
DERRICK	Frank Warkson	8													
MOTOR	Ed Bouchard	8													
FLOOR	Terry Buddy	8													
FLOOR	Ewald Tolzer	8													
MUD		4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES				AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE	
WEIGHT						GEL 1500				1		722			
VISCOSITY										2		676			
GEL										3					
PUMP		NO. 1	PRES-SURE			4		704							
MODEL		S.P.M.				5		80							
LINER SIZE						SIZE TRIPS NO. LINES TON MILES TOTAL MILES		SLIP FEET OR CUT		FEET LEFT ON SPOOL		NEXT SLIP			
NO. 2		PRES-SURE				114		8		15143		4999			
MODEL		S.P.M.				GENERAL									
LINER SIZE															

63-570855 Circulate Sample
Drilling
12:00 11:30 1/2
19-55187 Circulate Sample.
1:30 2:00 1/2
Circ. For DST # 2
2:00 5:00
Pulling out For DST.
5:00
working Tight hole
8:00

63-570855 Pulling Out of the Hole
8:00 10:30 2 1/2
Circ. Mud & cleaning
10:30
Back to Bottom.
2:30 4:00 1 1/2
Circ to Clean Hole

63-570855 Rig Set
4:00 4:15 1/4
Trip out to Test.
4:15 4:45 1/2
Work through light
4:45
hole @ 6117-6085
5:45 1
Finish Trip out.
5:45 8:00 2 1/4
Make up Packer
8:00 10:30 2 1/2
Trip in - DST #2
10:30 11:30 1
Start stalled engines
11:30
work on air lines
12:00 1/2

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER P. J. Turner
TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

THIS IS 39 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Am. LOCATION Trainer Lake C-39 DATE Feb 26 1965

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BBL.	SIZE
DRILLER <u>Mac J. Goodrich</u>	<u>8</u>	<u>12165</u>				<u>115000</u>	<u>19</u>	<u>6 3/4</u>	<u>2 3/4</u>				
DERRICK <u>William Harder</u>	<u>8</u>												
MOTOR <u>Garco Turner</u>	<u>8</u>												
FLOOR <u>Ewald Funk</u>	<u>8</u>												
FLOOR <u>Terry Shank</u>	<u>8</u>												
FIREMAN													
EXTRA													
INJURIES													
FIRES													
Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BBL.	SIZE
DRILLER <u>Robert Oliver</u>	<u>8</u>	<u>6265</u>											
DERRICK <u>Mike Benge</u>	<u>8</u>												
MOTOR <u>William Berts</u>	<u>8</u>												
FLOOR <u>Ray Bouchard</u>	<u>8</u>												
FLOOR <u>Don Sack</u>	<u>8</u>												
FIREMAN													
EXTRA													
INJURIES													
FIRES													
Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS			FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BBL.	SIZE
DRILLER <u>D. Nizuchuk</u>	<u>8</u>	<u>4266</u>	<u>4</u>	<u>4270</u>	<u>1/2</u>	<u>152</u>	<u>19</u>	<u>6 3/4</u>	<u>2 3/4</u>				
DERRICK <u>Frank Westerson</u>	<u>8</u>												
MOTOR <u>Ed Bouchard</u>	<u>8</u>												
FLOOR <u>Terry Brady</u>	<u>8</u>												
FLOOR <u>Ewald Palzer</u>	<u>8</u>												
FIREMAN													
EXTRA													
INJURIES													
FIRES													

REMARKS	START	STOP	INTERVAL
DST #1			
6103-6265	12:00		
Johnson Testers			
Duck-7 3/4 Packers			
W/16 1/2 Tail pipe	6:00	6:00	6
Tool Shut in	6:00	8:00	2
Toolover (Flowing) 12 1/2 - 6 1/2			
Final Shut in 6 05			
Big Seal & Check BOPs	8:00	8:10	1/4
Waiting for gas to	8:10		
Break off pipe	9:15	9:18	1
Hoist packer	9:15	9:18	2 1/4
Break down packer	11:40	9:00	2 1/4
Run in DC's	9:00	2:00	3 1/4
Sur 20' Drro	2:00	3:10	1 1/4
Running in hose	3:15	4:00	3/4
Big Service	4:00	4:15	1/4
Finish Trip in	4:15	6:00	1 3/4
Through out frozen	6:00		
Mud lines & Kelly hose	8:05		2 1/4
Clean out 45 ft to	8:15		
Top of rat hole	9:30		1 1/4
Reaming rat hole	9:30	11:15	1 3/4
Drilling - (6266-6270)	11:15	11:45	1/2
Circulate Sample	11:45	12:00	1/4

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 38 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Am. LOCATION Trainor Lake C-39 DATE Feb 25 1965

Tour - Midnight - 8 a.m.
Specify Actual Hours Worked HRS.

DRILLER Mel J. Goodrich 12
DERRICK William Harder 12
MOTOR Loren Turner 13
FLOOR Ewald Funk 12
FLOOR Terry Shank 12
FIREMAN
EXTRA

INJURIES: Over time -
FIRES: 14 x in 4 1/2 in.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL	WATER	DRILL PIPE	STANDS
6262	3	6265	3/4	150 M. 19	63 1/2	2 3/4					5" SIZE	41-56150
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
13	6 1/8	CHRIST	0	EC-12111	14	92				13 CMC-614	6265	19-551:78
MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE	SUBS. FT.	FT. UP ON KELLY	TOTAL	FEET LEFT ON SPOOL
WEIGHT	9.5						1	658			6262	4999
VISCOSITY	87						2	612				
GEL							3					
NO. 1 PRES-SURE	725						4	650				
MODEL S.P.M.	450						5	16				
LINER SIZE	6											
NO. 2 PRES-SURE												
MODEL S.P.M.												
LINER SIZE												

Tour - 8 a.m. - 4 p.m.
Specify Actual Hours Worked HRS.

DRILLER Robert Driver 8
DERRICK Mike Beag 8
MOTOR Wynnon Bowers 8
FLOOR Ray Bravette 8
FLOOR
FIREMAN
EXTRA

INJURIES:
FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL	WATER	DRILL PIPE	STANDS
6265												
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE	SUBS. FT.	FT. UP ON KELLY	TOTAL	FEET LEFT ON SPOOL
WEIGHT							1	666				
VISCOSITY							2	620				
GEL							3					
NO. 1 PRES-SURE							4	635				
MODEL S.P.M.							5	24				
LINER SIZE												
NO. 2 PRES-SURE												
MODEL S.P.M.												
LINER SIZE												

Tour - 4 p.m. - Midnight
Specify Actual Hours Worked HRS.

DRILLER Dennis Niewolue 16
DERRICK Frank Westerson 16
MOTOR Ed Bouchard 16
FLOOR Terry Badt 16
FLOOR Ewald Palzer 16
FIREMAN
EXTRA

INJURIES: Over time - Mixing
FIRES: 14 x 4.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL	WATER	DRILL PIPE	STANDS
6265				115000	17	6 3/4	2 3/4					
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS
MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE	SUBS. FT.	FT. UP ON KELLY	TOTAL	FEET LEFT ON SPOOL
WEIGHT	Build Volume				Gel - 7000 lbs		2000 H.V	CMC-674				
VISCOSITY	for lost Circ				Caustic - 500#			2	628			
GEL	on 2000 6 800				Shersene - 1000#			3				
NO. 1 PRES-SURE	four -				4020 - 500#			4	666			
MODEL S.P.M.	656				Fiber-tex 10 Sav - Cells Seal 10 Sav			32				
LINER SIZE	6"											
NO. 2 PRES-SURE												
MODEL S.P.M.												
LINER SIZE	1 1/2"											

Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack TOTAL CONTRACTOR TIME HRS. TOOLS/PURSER P. J. [Signature]
B.O.P. Test-Operated Time Results TOTAL COMPANY TIME HRS. APPROVED BY

REMARKS	START	STOP	INTERVAL
Cutting Core # 2	12:00	12:45	3/4
Lost Circulation	12:45	1:30	3/4
Pulling out w/ Core # 2	1:30	5:15	3 1/2
Recover Core & service bbl	5:15	6:30	1 3/4
Making up tail pipe	6:30	8:00	1 1/2
To Run 3 S.T #1			
Make up Bower	8:00	10:10	2 1/4
Run in with Parker	10:10	1:30	3 1/4
Hook up Head & CHIL-SANS	1:30	2:00	1/2
Man out from line	2:00	2:45	3/4
Attempt to open Tool	2:45	3:30	3/4
Initial Start in	3:30	4:00	1/2
Dst - #1 -	4:00	12:00	8
6103 - 6265 -			
Run Johnson testers -			
Dual - 1 1/2" Packers -			
w/ 162' tail pipe			
Bottom packer set @ 6102.			
Tool open 4:05 - 12:00			
Note Crew worked 1200 to 600 hours to			
Clean mud tanks & Mix Mud			
To build Volume in tanks			

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 37 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY *Pure Pan Am* LOCATION *Trainer Lake C-39* DATE *Feb 24 1965*

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS		
Specify Actual Hours Worked	HRS.	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
DRILLER <i>Ment Goodrich</i>	8	14	8 3/4	MHL	1 1/16	713118	40	80	99	8	19	551:28	19-551:28
DERRICK <i>William Harder</i>	8												
MOTOR <i>William Barris</i>	12												
FLOOR <i>Claren Turner</i>	14												
FLOOR <i>Ray Grouelle</i>	12												
FIREMAN													
EXTRA													
INJURIES													
FIRES													
Tour - 8 a.m. - 4 p.m.													
Specify Actual Hours Worked	HRS.												
DRILLER <i>Robert Oliver</i>	8	14	8 3/4	MHL	1 1/16	713118	40	80	99	62	42	10-551:28	10-551:28
DERRICK <i>Alex Berg</i>	8												
MOTOR													
FLOOR <i>Larry Lemon</i>	4												
FLOOR													
FLOOR													
FIREMAN													
EXTRA													
INJURIES													
FIRES													
Tour - 4 p.m. - Midnight													
Specify Actual Hours Worked	HRS.												
DRILLER <i>Dennis Nizuchuk</i>	8	15	6 1/8	Chnst-Q		EC12111	14	92	20	5 1/2		12-551:87	12-551:87
DERRICK <i>Frank Westerson</i>	10												
MOTOR <i>Ed Bouchard</i>	12												
FLOOR <i>Terry Brady</i>	12												
FLOOR <i>Ewald Patzer</i>	8												
FIREMAN													
EXTRA													
INJURIES													
FIRES													

REMARKS	START	STOP	INTERVAL
Drilling	12:00	6:00	6
Circulating For D.S.T.	6:00	7:00	1
Tripping For DST #1	7:00	8:00	1
Hoisting (HOLE TIME)	8:00	9:00	1
Run 15 rods + Run in Same	9:00	9:30	1/2
Break Core + Clean to Bottom	9:30	11:30	2
Circ to Conn. Hole	11:30	12:30	3
Hoist to Core	12:30	1:30	1
Pickup Core Box + 3 rods	1:30	2:30	1
Check Same	2:30	3:30	1
Slip Down Line	3:30	4:00	1/4
Work on Beans Luggage	4:00	4:30	1/4
Rig Service	4:00	4:15	1/4
Trip in to Core	4:15	7:00	2 3/4
Clean 30' to Bottom	7:00	7:15	1/4
Circulate off Bottom	7:15	7:30	1/4
Cutting Core #2	7:30	12:00	4 1/2

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 36 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure P.A.M. LOCATION Trainor Lake C-39 DATE Feb. 23 1965

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.		
DRILLER	Mrs. Goodrich	8	6109	27	6138	8	155	19	6 3/4	1 3/4		
DERRICK	William Harder	8										
MOTOR	Serald Leach	8										
FLOOR	Clara Turner	12										
FLOOR	Ray Gravell	12										
FIREMAN												
EXTRA												
INJURIES												
FIRES												

Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.		
DRILLER	Robert Miller	8	6138	5	6143	1/2	155	19	6 3/4	1 3/4		
DERRICK	Ming Berg	12										
MOTOR	William Boeris	8										
FLOOR												
FLOOR												
FIREMAN												
EXTRA												
INJURIES												
FIRES												

Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS		FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked							NO.	O.D.	I.D.	WGT.		
DRILLER	Dennis Nizarchuk	8	6143	23	6166	2	155	19	6 3/4	1 3/4		
DERRICK	Frank Westerson	8										
MOTOR	Ed Boulhard	12										
FLOOR	Terry Brady	12										
FLOOR												
FIREMAN												
EXTRA												
INJURIES	NIL											
FIRES	NIL											

REMARKS	START	STOP	INTERVAL
Cutting Core #1	12:00	8:00	8
Cutting Core #2	9:20	9:30	1/10
Big Sand + small BOPs	9:30	9:45	1 1/4
Lost Core Box	9:45	10:15	2 1/2
Recover Core, Service	10:15		
Box + Stand Rock	9:45	10:15	2
Run in to Ream 6 1/8" Box Hole	10:15	10:30	1 1/4
Rig Service	4:00	4:15	1/4
Clean out to Top of 4 1/2			
rat hole	5:00	5:30	3/4
Ream rat hole to 8 3/4"	5:00	10:00	5
Drilling ahead	10:00	12:00	2

THIS IS 35 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Am LOCATION Tramson Lake C-39 DATE Feb. 22 1965

[illegible][illegible]

Totco Ring on Bit No.

D.P. Calipered Date

Results.

From Pipe Rack

TOTAL CONTRACTOR TIME _____ HRS.

TOOLPUSHER

B.O.P. Test-Operated

Time.

Results

TOTAL COMPANY TIME _____ HRS.

APPROVED BY

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 34 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Am LOCATION Tachon Lake C-39 DATE Feb 21 1965

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

DRILLER *Meritt Goodrich* 8
DERRICK *William Harder* 8
MOTOR *Gerald Loach* 8
FLOOR *Claren Turner* 8

FROM 5852 TO 5980
FOOTAGE 128
HRS. ON BOTTOM 6
WT. DRILL STRING (1000 LBS.) 155 M. 19 6 3/4 2 3/4
NO. O.D. I.D. WGT. 19 6 3/4 2 3/4
FUEL GALS. 143 1/2
WATER BBLs. 5
DRILL PIPE 5" SIZE 58'
STANDS SINGLES 2-5398-91
D. COLLARS 19-551-78
OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL 11:19
NEXT SLIP 5980

MUD WEIGHT 9.5 VISCOSITY 68 GEL 950
ADDITIVES 20 SKs SPERSONE 20 SKs XP 20 20 SKs Gel 250 Caustic
AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE
1 556 2 506 3 552 4 40
SLIP FEET OR CUT FEET LEFT ON SPOOL 5059

PUMPS NO. 1 MODEL S.P.M. 950 NO. 2 MODEL S.P.M. 60
LINER SIZE 6" GENERAL 14,298

W.L. 2.5 F.C. 3/32 PH. 12 Boiler 8 hrs.

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS.

DRILLER *Roosar Dumas* 8
DERRICK *Mike Berry* 8
MOTOR *William Borris* 8
FLOOR *Ray Graulich* 8

FROM 5980 TO 6090
FOOTAGE 110
HRS. ON BOTTOM 6 1/2
WT. DRILL STRING (1000 LBS.) 158 M. 19 6 3/4 2 3/4
NO. O.D. I.D. WGT. 19 6 3/4 2 3/4
FUEL GALS. 23 1/2
WATER BBLs. 5
DRILL PIPE 5" SIZE 60'
STANDS SINGLES 10-521-81
D. COLLARS 19-551-78
OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL 24:18
NEXT SLIP 6090.00

MUD WEIGHT 9.5 VISCOSITY 62 GEL 1000
ADDITIVES SPERSONE - 750 50 20 750 3000 3000
CAUSTIC 3000 DIESEL FUEL 400 GALs
AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE
1 564 2 534 3 560 4 48
SLIP FEET OR CUT FEET LEFT ON SPOOL 6090.00

PUMPS NO. 1 MODEL S.P.M. 1000 NO. 2 MODEL S.P.M. 60
LINER SIZE 6" GENERAL 14,298

W.L. 2.4 F.C. 3/32 PH. 13 Boiler 8 hrs.

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS.

DRILLER *Dennis Nizuchuk* 8
DERRICK *Frank Westerson* 8
MOTOR *Ed. Bouchard* 8
FLOOR *Terry Brady* 8
FLOOR *William Borris* 4
FLOOR *Wm. Harder* 4

FROM 6090 TO 1600
FOOTAGE 0
HRS. ON BOTTOM 0
WT. DRILL STRING (1000 LBS.) 160 M. 19 6 3/4 2 3/4
NO. O.D. I.D. WGT. 19 6 3/4 2 3/4
FUEL GALS. 6090
WATER BBLs. 5
DRILL PIPE 5" SIZE 60'
STANDS SINGLES 60-552-81
D. COLLARS 19-551-78
OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL 55:60
NEXT SLIP 1600

MUD WEIGHT 9.5 VISCOSITY 62 GEL 1000
ADDITIVES N.L. -
AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE
1 577 2 542 3 568 4 56
SLIP FEET OR CUT FEET LEFT ON SPOOL 14298

PUMPS NO. 1 MODEL S.P.M. 1000 NO. 2 MODEL S.P.M. 60
LINER SIZE 6" GENERAL 14,298

W.L. 2.4 F.C. 3/32 PH. 13 Boiler 8 hrs.

REMARKS	TIME		
	START	STOP	INTERVAL
Drilling	12:00	12:15	1/4
Work on mud line	12:15	1:45	1 1/2
Drilling	1:45	5:30	3 3/4
Dump mud tank	5:30	6:00	1/2
Drilling	6:00	8:00	2
Drilling	8:00	8:15	1/4
Work on 5 3/4" Hole	8:15	11:30	3 1/4
Core Sample	11:30	12:00	1/4
Core Sample	12:00	3:00	3 1/4
Core Sample	3:00	4:00	1/4
Circulate to Core	4:00	4:45	3/4
Survey	4:45	5:00	1/4
Trip out - Measure	5:00		
Pipe -		8:15	3 1/4
Repair High Drum Chain	8:15	9:00	3/4
Rig Service	9:00	9:15	1/4
Pickup Core Bll.	9:15	11:45	2
Trip in	11:15	12:00	3/4

Note: Layed down single 30.60
5951x double left in depth of 11:15

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____
TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 32 DAY ON THIS WELL

NOTE - Please show FOOT. made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Am. LOCATION Traverse Lake C-39 DATE Feb 19 1965

TOUR - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS				
Specify Actual Hours Worked		NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	NO. COLLARS	OTHER FT.
DRILLER	<u>8</u>	<u>5043</u>	<u>105</u>	<u>5148</u>	<u>4</u>	<u>140M</u>	<u>19 1/4</u>	<u>234</u>				<u>419</u>			
DERRICK	<u>16</u>	<u>11</u>	<u>8 3/4</u>	<u>56</u>	<u>1 1/16</u>	<u>650886</u>	<u>40</u>	<u>100</u>	<u>125</u>		<u>4</u>		<u>DRG</u>		
MOTOR	<u>8</u>														
FLOOR	<u>8</u>														
FLOOR	<u>8</u>														
FIREMAN															
EXTRA															
INJURIES															
FIRES															
TOUR - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS				
Specify Actual Hours Worked		NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	NO. COLLARS	OTHER FT.
DRILLER	<u>8</u>	<u>5148</u>	<u>177</u>	<u>5325</u>	<u>7 3/4</u>	<u>144 M</u>	<u>19 1/4</u>	<u>234</u>				<u>514756.38</u>			
DERRICK	<u>8</u>	<u>11</u>	<u>8 3/4</u>	<u>56</u>	<u>1 1/16</u>	<u>650886</u>	<u>40</u>	<u>80</u>	<u>282</u>		<u>174</u>		<u>DRG</u>		
MOTOR	<u>8</u>														
FLOOR	<u>8</u>														
FLOOR	<u>8</u>														
FIREMAN															
EXTRA															
INJURIES															
FIRES															
TOUR - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS				
Specify Actual Hours Worked		NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	NO. COLLARS	OTHER FT.
DRILLER	<u>8</u>	<u>5325</u>	<u>175</u>	<u>5500</u>	<u>7 3/4</u>	<u>145 M</u>	<u>19 1/4</u>	<u>234</u>				<u>5325.00</u>			
DERRICK	<u>8</u>	<u>11</u>	<u>8 3/4</u>	<u>56</u>	<u>1 1/16</u>	<u>650886</u>	<u>40</u>	<u>80</u>	<u>457</u>		<u>19 1/2</u>		<u>DRG</u>		
MOTOR	<u>8</u>														
FLOOR	<u>8</u>														
FLOOR	<u>8</u>														
FIREMAN															
EXTRA															
INJURIES															
FIRES															

REMARKS
 Finish pulling out
 Run in hole w/ bit
 Clean out 30 FT. to bottom
 Drilling

TIME
 START STOP INTERVAL
 12:00 12:30 1/4
 12:30 2:45 2 1/4
 2:45 4:00 1 1/4
 4:00 8:00 4

REMARKS
 Big secret check ROP's
 Drilling 8 3/4" Hole

TIME
 START STOP INTERVAL
 8:00 8:15 1/4
 8:15 4:00 7 1/4

REMARKS
 Rig Service - Close Hydric -
 Drilling

TIME
 START STOP INTERVAL
 4:00 4:15 1/4
 4:15 12:00 7 3/4

Totco Ring on Bit No. _____ D.F. Calipered Date _____ Results _____ From Pipe Rack _____
 B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER P.J. Peterson
 TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 31 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY *Trainer Lake C-39* LOCATION *Pure Pan AM* DATE *Feb 18 1965*

Tour - Midnight - 8 a.m.		Specify Actual Hours Worked		HRS.
DRILLER	<i>Merv J. Goodrich</i>	8		
DERRICK	<i>Robert Stotts</i>	8		
MOTOR	<i>Berold Knack</i>	8		
FLOOR	<i>Don Saar</i>	8		
FLOOR	<i>Claren Turner</i>	8		
FIREMAN				
EXTRA				
INJURIES				
FIRES				

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
					NO. O.D. I.D. WGT.	GALS.	BLS.	SIZE	SINGLES
H460	170	H830	7 1/4	135	19 6 3/4 2 3/4			5"	414268.07
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLO.	FT. RMD.	HRS.
10	8 3/4	OSC-1G	1 1/16	53959	40	100	183		7 3/4
MUD									
WEIGHT 9.4 9.4 9.4 9.4 9.4 9.4 9.4 9.4 9.4 9.4									
VISCOSITY 40 40 40 40 40 40 40 40 40 40									
GEL 40 40 40 40 40 40 40 40 40 40									
PUMPS									
NO. 1 PRES. 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000									
MODEL S.P.M. 60 60 60 60 60 60 60 60 60 60									
LINER SIZE 6" 6" 6" 6" 6" 6" 6" 6" 6" 6"									
NO. 2 PRES. 11 11 11 11 11 11 11 11 11 11									
MODEL S.P.M. 8 8 8 8 8 8 8 8 8 8									
LINER SIZE 8 8 8 8 8 8 8 8 8 8									

REMARKS	START	STOP	INTERVAL
Drilling	12:00	12:15	1/4
working on pumps	12:15	12:45	1/2
Drilling	12:45	8:00	7 1/4

Tour - 8 a.m. - 4 p.m.		Specify Actual Hours Worked		HRS.
DRILLER	<i>Roscoe Dimes</i>	8		
DERRICK	<i>Mike Berg</i>	8		
MOTOR	<i>William Hordoe</i>	8		
FLOOR	<i>William Booris</i>	8		
FLOOR	<i>Ray Beaverville</i>	8		
FIREMAN				
EXTRA				
INJURIES				
FIRES				

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
					NO. O.D. I.D. WGT.	GALS.	BLS.	SIZE	SINGLES
4930	129	4959	6 1/2	125	19 6 1/4 2 1/4				414390.93
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLO.	FT. RMD.	HRS.
10	8 3/4	OSC-1G	1 1/16	53959	35	100	312		11 1/4
MUD									
WEIGHT 9.5 - - - SPERSINE 1500									
VISCOSITY 40 - - - 40-20									
GEL 40 - - - 40-20									
PUMPS									
NO. 1 PRES. 950 - - - CMC 200 D DET 10 GPH 496									
MODEL S.P.M. 60 - - - CAUSTIC 500 550 WATER 147									
LINER SIZE 6" - - -									
NO. 2 PRES. 1200 - - -									
MODEL S.P.M. 8 - - -									
LINER SIZE 8 - - -									

REMARKS	START	STOP	INTERVAL
Drilling	8:00	8:20	1/2
Rig Service check BOP's	8:20	8:50	1/4
Work on Pump	8:50	9:30	3/4
Drilling	9:30	10:15	3/4
Work on BOP's	10:15	10:50	1/2
Drilling	10:50	4:00	5 1/4

Tour - 4 p.m. - Midnight		Specify Actual Hours Worked		HRS.
DRILLER	<i>Dennis Mawguk</i>	8		
DERRICK	<i>John Gylgshill</i>	8		
MOTOR	<i>Ed Baichard</i>	8		
FLOOR	<i>Frank Westerson</i>	8		
FLOOR	<i>Terry Brady</i>	8		
FIREMAN				
EXTRA				
INJURIES	<i>N.L.</i>			
FIRES	<i>N.L.</i>			

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
					NO. O.D. I.D. WGT.	GALS.	BLS.	SIZE	SINGLES
4959	84	5043	5 1/2	135	19 6 1/4 2 3/4				48-4030.76
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLO.	FT. RMD.	HRS.
10	8 3/4	OSC-1G	1 1/16	53959	35	100	391		19 1/4
MUD									
WEIGHT 9.6 9.5 9.5 4000 # Gel									
VISCOSITY 40 38 37 900 # SPERSINE									
GEL 40 38 37 500 # 40-20									
PUMPS									
NO. 1 PRES. 950 950 950 500 # CAUSTIC Soda									
MODEL S.P.M. 60 60 60 1000 # 16" Stream of 100									
LINER SIZE 6 1/8									
NO. 2 PRES. 11 11 11 1 1/4									
MODEL S.P.M. 8 8 8 8 8 8 8 8 8 8									
LINER SIZE 8 8 8 8 8 8 8 8 8 8									

REMARKS	START	STOP	INTERVAL
Rig Service close Pipe Rams	4:00	4:15	1/4
Tighten Union on Stand	4:15	4:30	1/4
Pipe Drilling	4:30	10:00	5 1/2
Survey	10:00	10:15	1/4
Trip out For Bit.	10:15	12:00	1 3/4

Totco Ring on Bit No.	D.P. Calipered Date	Results	From Pipe Rack	TOTAL CONTRACTOR TIME	HRS.	TOOLPUSHER	<i>P. J. Plummer</i>
B.O.P. Test-Operated	Time	Results		TOTAL COMPANY TIME	HRS.	APPROVED BY	

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 30 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure - Pan Am. LOCATION Trainer Lake C-39 DATE Feb 17 1965

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked 8 HRS.

DRILLER Men-J Goodrich

DERRICK Robert Staats

MOTOR Gerald Leach

FLOOR Don Saar

FLOOR Claren Turner

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.
4390	155	4545	5	130 M1	19	6 3/4	2 3/4		
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M. <td>FT. DRLD.</td> <td>FT. RMD.</td> <td>HRS.</td>	FT. DRLD.	FT. RMD.	HRS.
9	8 3/4	MHN	11/16	763697	40	100	302		13
MUD									
WEIGHT									
VISCOSITY									
GEL									
PUMPS									
NO. 1 PRES-SURE									
NO. 2 PRES-SURE									
GENERAL									

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked 8 HRS.

DRILLER Robert Niver

DERRICK Mike Beag

MOTOR William Hadden

FLOOR William Boers

FLOOR Ray Gravenne

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.
4445	107	4652	2 3/4	130 M1	19	6 3/4	2 3/4		
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M. <td>FT. DRLD.</td> <td>FT. RMD.</td> <td>HRS.</td>	FT. DRLD.	FT. RMD.	HRS.
9	8 3/4	MHN	11/16	763697	35	100	409		5 1/2
MUD									
WEIGHT									
VISCOSITY									
GEL									
PUMPS									
NO. 1 PRES-SURE									
NO. 2 PRES-SURE									
GENERAL									

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked 8 HRS.

DRILLER Dennis Nawchuk

DERRICK John Gutgsoll

MOTOR Ed Bouchard

FLOOR Frank Westerson

FLOOR Terry Brady

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.
4449	13	4660	1/2	135	19	6 3/4	2 3/4		
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M. <td>FT. DRLD.</td> <td>FT. RMD.</td> <td>HRS.</td>	FT. DRLD.	FT. RMD.	HRS.
9	8 3/4	MHN	11/16	763697	35	700	409		15
10	8 3/4	OSC 19	11/16	53959	15	100	13		1/2
MUD									
WEIGHT									
VISCOSITY									
GEL									
PUMPS									
NO. 1 PRES-SURE									
NO. 2 PRES-SURE									
GENERAL									

REMARKS	TIME		
	START	STOP	INTERVAL
Drilling	12:00	12:15	1/4
Rig Service - 4 hours on #2 pump	12:15	1:30	1 1/4
Drilling	1:30	1:45	1/4
work on pump	1:45	2:00	1/4
Drilling	2:00	6:30	4 1/2
Replace belts on # pump	6:30	8:00	1 1/2
Change liners in #1 Pump			
Done 8 3/4" HOLE	8:00	8:30	1/2
Rig Service - Check Bore	8:30	9:00	1/4
Work on #1 & #2 pumps	9:00	11:00	2 1/4
Done 8 3/4" HOLE	11:00	2:15	2 1/4
Survey	2:15	2:30	1/4
Hour for W.B.T	2:30	6:00	1 1/2
Measure One			
Correction - Board - 4652			
Measured 4647			
			5'
Finish trip out -	4:00	5:15	1 1/4
Rig Service - Check B. Raws	5:15	5:30	1/4
Clean mud tank.	5:30	6:00	1/2
Slip Drilling Line	6:00	6:30	1/2
Trip in w/B.T #10	6:30	8:45	2 1/4
Break Circ & Clean out	8:45	10:00	
40' Fill			1 1/4
Repair Chain in Compound	10:00		
Work on #1 pump	11:30		1 1/2
Drilling	11:30	12:00	1/2

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER P.F. Peterson

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 29 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure-Pan Am LOCATION Trainer Lake C-39 DATE Feb. 16 1965

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

DRILLER *Marion Goodrich* 8

DERRICK *Robert Staals* 8

MOTOR *Bernard Leach* 8

FLOOR *Don Saar* 8

FLOOR *Clarence Turner* 8

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.
3994	209	4203	7 3/4	1135 M	17	6 3/4	2 3/4		410-3699-37
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M. <td>FT. DRLD.</td> <td>FT. RMD.</td> <td>HRS.</td>	FT. DRLD.	FT. RMD.	HRS.
8	8 3/4	451	1 1/16	F34296	100	319			15 3/4
MUD									
WEIGHT 9.2 9.0 9.0 FUEL 1400 GAL.									
VISCOSITY 48 47 47 GEL 4500 #									
GEL 48 47 47 XP-20 10 SKS WATER									
PUMP									
NO. 1 PRES-SURE 1000 1000 1000 CAUSTIC 300 #									
MODEL S.P.M. 45 45 45 SPERSONE 15 SKS									
LINER SIZE 1 1/2 1 1/2 1 1/2									
NO. 2 PRES-SURE									
MODEL S.P.M.									
LINER SIZE									
W.L. 6.0 F.C. 7/32 PH. 11.0									

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS.

DRILLER *Robert Oliver* 8

DERRICK *Mike Berg* 8

MOTOR *William Haarer* 8

FLOOR *William Barais* 8

FLOOR *Ray Graubelle* 8

FIREMAN

EXTRA

INJURIES

FIRES

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.
4203	43	4246	2 3/4	120 M	19	6 3/4	2 3/4		39-3665-57
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M. <td>FT. DRLD.</td> <td>FT. RMD.</td> <td>HRS. </td>	FT. DRLD.	FT. RMD.	HRS.
8	8 3/4	451	1 1/16	F34296	40	100	359		11 3/4
8	8 3/4	M4N	1 1/16	763697	20				10 3/4
MUD									
WEIGHT 4736 38									
VISCOSITY									
GEL									
PUMP									
NO. 1 PRES-SURE 1000									
MODEL S.P.M. 45									
LINER SIZE 1 1/2									
NO. 2 PRES-SURE									
MODEL S.P.M.									
LINER SIZE 6 1/2									
W.L. F.C. PH. BOILER 8 HRS									

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS.

DRILLER *Dezais Niewchuk* 8

DERRICK *Jahn Gutzwill* 8

MOTOR *Ed Bruchard* 8

FLOOR *Frank Westerton* 8

FLOOR *Terry Brady* 8

FIREMAN

EXTRA

INJURIES: none

FIRES: none

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.
4246	144	4390	7 1/4	130	19	6 3/4	2 3/4		41-3801-22
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M. <td>FT. DRLD.</td> <td>FT. RMD.</td> <td>HRS. </td>	FT. DRLD.	FT. RMD.	HRS.
8	8 3/4	M4N	1 1/16	763697	100	147			13
MUD									
WEIGHT 9.2 9.1 9.1 9.4 3000 # GEL									
VISCOSITY 42 41 40 45 1000 # SPERSONE									
GEL 42 41 40 45 1000 # XP-20									
PUMP									
NO. 1 PRES-SURE 300 300 300 1000 300 # CAUSTIC 50 # C.M.C. (LOUIS)									
MODEL S.P.M. 44 44 44 44 100 # BICARB 500 GALS DIESEL									
LINER SIZE 1 1/2 1 1/2 1 1/2 1 1/2									
NO. 2 PRES-SURE									
MODEL S.P.M.									
LINER SIZE 6 1/2									
W.L. 6.4 F.C. 2/32 PH. 11.0									

REMARKS	TIME		
	START	STOP	INTERVAL
Drilling	12:00	5:30	5 1/2
Pump - Rig Service	5:30	5:45	1/4
Drilling	5:45	8:00	2 1/4
Rig down + check BOP's	8:00	8:10	1/10
Bring 8 3/4" Hole	8:10	10:00	2 1/2
Survey	10:00	11:00	1/1
Hoist Rod Bit	11:00	1:00	2
Change Bit + Pump Rams	1:00	1:10	1/10
Run in 2 OC's	1:10	2:00	1/2
Pick up 2 OC's	2:00	2:10	1/10
Run in Hole	2:10	3:10	1
Clean 20' to Bottom	3:10	3:20	1/10
Drilling	3:20	4:00	1/1
Rig Service - close Pipe Rams	4:00	4:15	1/15
Drilling 8 3/4" hole	4:15	6:45	2 3/4
Clean mud tanks	6:45	7:15	1/2
Drilling	7:15	12:00	4 3/4

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER *P.J. Peterson*

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 28 DAY ON THIS WELL.

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 17 COMPANY Parc- Pan Am LOCATION Trainer Lake C-39 DATE Feb 15 19 65

Tour - Midnight - 8 a.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO. O.D. I.D. WGT.	FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked											
DRILLER	8	3777	86	3863	7 3/4	125	17 6 3/4 2 3/4			5	30
DERRICK	8										1-3355-20
MOTOR	8										12-1194-15
FLOOR	8										OTHER FT.
FLOOR	8										C.B. FT.
FLOOR	8										SUBS. FT.
FIREMAN	8										FT. UP ON KELLY
EXTRA	8										TOTAL
INJURIES:											3863
FIRES:											

Tour - 8 a.m. - 4 p.m.		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO. O.D. I.D. WGT.	FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked											
DRILLER	8	3863	24	3887	2 3/4	125	17 6 3/4 2 3/4				36-3355-20
DERRICK	8										12-1194-15
MOTOR	8										OTHER FT.
FLOOR	8										C.B. FT.
FLOOR	8										SUBS. FT.
FLOOR	8										FT. UP ON KELLY
FIREMAN	8										TOTAL
EXTRA	8										3887
INJURIES:											
FIRES:											

Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO. O.D. I.D. WGT.	FUEL	WATER	DRILL PIPE	STANDS
Specify Actual Hours Worked											
DRILLER	8	3887	107	3994	7 1/4	125	17 6 3/4 2 3/4				37-3416-7
DERRICK	8										2-6048
MOTOR	8										17-194-15
FLOOR	8										OTHER FT.
FLOOR	8										C.B. FT.
FLOOR	8										SUBS. FT.
FIREMAN	8										FT. UP ON KELLY
EXTRA	8										TOTAL
INJURIES:											3994
FIRES:											

REMARKS	START	STOP	INTERVAL
Pumping mud down hole	12:00	12:15	15
Drilling	12:15	8:00	7 3/4
Regain circulation @ 12:15 AM			
Formation taking mud when pressure is over 800 ^{PSI}			
Drilling 2 3/4" hole	8:00	10:30	2 1/2
Survey	10:30	10:48	1 1/4
Wait for N/BIT	10:48	12:30	1 3/4
Run SERV + CHECK BDCs	12:30	12:45	1 1/2
Run into N/BIT	12:45	2:15	1 1/2
Break C-39 + Ream to bottom	2:15	3:45	1 3/4
Drilling	3:45	5:00	1 1/4
Rig Service - Check Hydr.	14:00	15:15	1 1/4
Drilling	15:15	7:30	2 1/4
Clean Mud Tank	7:30	8:00	1/2
Drilling	8:00	12:00	4

Total Ring on Bit No. D.P. Calipered Date Results From Pipe Rack TOTAL CONTRACTOR TIME HRS. TOOLPUSHER P.J. Peterson

B.O.P. Test-Operated Time Results TOTAL COMPANY TIME HRS. APPROVED BY

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 26 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY PURE - PAN AM LOCATION TRINOR Lake C39 DATE Feb 13 1965

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

DRILLER Dennis Nianchuk 8

DERRICK John Guttsell 8

MOTOR Ed Bouchard 8

FLOOR Frank Westerson 8

FLOOR Terry Brady 8

FIREMAN

EXTRA

INJURIES: Nil

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	NO.	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
3558	54	3612	3 3/4	135M	17	6 3/4	2 3/4			33-3077-94
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT
6	8 3/4	54	1 1/16	741056	35	100	54		3 3/4	Drig.
MUD 12 MN. 2 A.M. 4 A.M. 6 A.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE										
WEIGHT 9.7 9.7										
VISCOSITY 43 43										
GEL										
PUMP NO. 1 PRE-SURE 900 900										
MODEL S.P.M. 45 45										
LINER SIZE 7 1/2 7 1/2										
NO. 2 PRE-SURE 900 900										
MODEL S.P.M. 45 45										
LINER SIZE 7 1/2 7 1/2										
W.L. 2.8 F.C. 1/32 PH. 100										

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS.

DRILLER Merle J. Goodrich 8

DERRICK Robert Stalls 8

MOTOR Gerald Loach 8

FLOOR Don Sore 8

FLOOR Claren Turner 8

FIREMAN

EXTRA

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	NO.	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
3612	77	3689	6 3/4	137M	17	6 3/4	2 3/4			31-3170-07
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT
6	8 3/4	54	1 1/16	741056	35	100	131		10 1/4	Run
MUD 8 A.M. 10 A.M. 12 NOON 2 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE										
WEIGHT 9.6 9.6 9.6 9.6										
VISCOSITY 42 40 40 47										
GEL										
PUMP NO. 1 PRE-SURE 900 900 1000 1000										
MODEL S.P.M. 45 45 44 44										
LINER SIZE 7 1/2 7 1/2 7 1/2 7 1/2										
NO. 2 PRE-SURE 900 900 1000 1000										
MODEL S.P.M. 45 45 44 44										
LINER SIZE 7 1/2 7 1/2 7 1/2 7 1/2										
W.L. 3.4 F.C. 3/32 PH. 10.5										

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS.

DRILLER Gusatilluwa 8

DERRICK Mike Berg 8

MOTOR William Harper 8

FLOOR William Baross 8

FLOOR Ray Bravelle 8

FIREMAN

EXTRA

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	NO.	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
3689	38	3727	4	137M	17	6 3/4	2 3/4			34-3280-91
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT
6	8 3/4	54	1 1/16	741056	35	100	169		10 1/4	Boose
MUD 4 P.M. 6 P.M. 8 P.M. 10 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE										
WEIGHT 9.5 9.5										
VISCOSITY 45 45										
GEL										
PUMP NO. 1 PRE-SURE 1000										
MODEL S.P.M. 49										
LINER SIZE 7 1/2										
NO. 2 PRE-SURE 1000										
MODEL S.P.M. 49										
LINER SIZE 7 1/2										
W.L. 2.4 F.C. 1/32 PH. 11										

REMARKS	TIME		
	START	STOP	INTERVAL
Rig Service	12:00	12:15	1/4
Work on Hydro-matic clutch.	12:15	12:45	1/2
Trip in w/ New Bit.	12:45	2:15	1 1/2
Clean out Pill & Room	2:15		
15' OG Hole		4:00	1 3/4
Drilling 8 3/4" Hole	4:00	6:00	2
Tighten 4" Union on Mud line	6:00	6:15	1/4
Drilling	6:15	8:00	1 3/4
Rig Service & B.O.P.	8:00	8:30	1/2
Drilling	8:30	11:30	3
Repair Seal on Rotary Drive	11:30	12:15	3/4
Drilling	12:15	4:00	3 3/4
Drill 8 3/4" Hole	4:00	5:30	1 1/2
Rig Seal	5:30	5:45	1/4
Work on Bit Lines	5:45	6:15	1/2
Drill	6:15	8:45	2 1/2
Survey	8:45	9:30	1/4
Hoist for Bit	9:30	11:00	2
Change Bits & Bit Lines	11:00	11:15	1/4
Slip Drill Line	11:15	12:00	3/4

Company Limited

THIS IS 25 DAY ON THIS WELL

DAY WORK RECORD

NOTE-Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure-Pan Am

LOCATION Trainer Lake C-39 DATE Feb. 12, 1965

Tour - Midnight - 8 a.m.		FRGM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS				FUEL	WATER	DRILL PIPE	STANDS		
Specify Actual Hours Worked	HRS.						NO.	O.D.	I.D.	WGT.	GALS.	BOLS.	SIZE	SINGLES		
DRILLER Dennis Niemczuk B		3400	50	3450	4	125	17	6 3/4	29 1/2					21,286.5		
DEWICK John Guttsoll B		BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS	
MOTOR Ed Bouchard B			5	8 3/4	YT-1A	"11/16"	15333	30	100	50		4		Running Drift	17-49 1/2 = 15 OTHER "X".	
FLOOR Frank Westerson B															C.B. FT.	
FLOOR Terry Brady B		MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES					AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE	SUBS. FT.	
FIREMAN		WEIGHT			9.7	9.7							1	338		FT. UP ON KELLY
EXTRA		VISCOSITY			43	41							2	308		TOTAL
		GEL											3			9.00
		PUMP	NO. 1 PRES-SURE		900	900						4	344			
		MODEL S.P.M.			45	45	Large 1 1/2" stream of H ₂ O					5	128		3450.15	
		LINER SIZE		7 1/2			SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP		
		NO. 3 PRES-SURE					1 3/4		8	146	13596	15	N.I.	5092		
		MODEL S.P.M.					GENERAL	(92)								
		LINER SIZE		6 1/2												
FIRES:		W.L.	3 2	F.C.	1 1/2	PH.	MS									

[illegible]

Tour - 4 p.m. - Midnight		FROM	FOOTAGE	TO	HRS. ON BOTTOM	WE DAILY STRING (1000 LBS.)	NO.	O.D.	I.D.	WGY.	FUEL	WATER	DRILL FIP-1	STANDS		
Specify Actual Hours Worked	HRS.	2512 46 3558 5 1/4 130 17 6 1/4 2 1/4										GALS.	BALS.	SIZE	33-30 1/2	
DRILLER	8	BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRCD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION	D. COLLARS	
BERRICK	8		5	5 1/4	4T1A	"1/16	15333	35	100	158		17 3/4	HOUSE	17-49 1/2		
MOTOR	8													OTHER FT.		
FLOOR	8													C.B. FT.		
FLOOR	8	MUD		4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES				AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE	SUBS. FT.
FLOOR	8	WEIGHT				9.6	SPERSENE 600 #				3550	7/8	1	35.4		
FLOOR	8	VISCOSITY				45	XP 20 400 #						2	32.4		
FIREMAN		GEL					CAUSTIC 250 #						3	-	FT. UP ON KELLY	
EXT. LA		PUMPS	NO. 1	PRES-SURE	900	✓	CEL 1500 #						4	36.0	TOTAL	
			MODEL	S.P.M.	45	✓	DIESEL FUEL 400 BALS						5	11	25.84.00	
			C	LINER SIZE	2 1/4		SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP	
			NO. 2	PRES-SURE			1 1/4		8							
INJURIES:		PUMPS	MODEL	S.P.M.			GENERAL									
FIRES:			C	LINER SIZE	350											
		W.L. 3 1/2 F.C. 2 1/2 P.H. 11														

	REMARKS	TIME		
		START	STOP	INTERVAL
6	Rig Service.	1200	1215	$\frac{1}{4}$
	Skip drill line	1215	1250	$\frac{3}{4}$
5	Trip in w/ new Bit (Pick up one 2. collar)	1250	335	$2\frac{1}{2}$
	Close out 30' to Bottom	335	400	$\frac{3}{4}$
	Drilling	400	800	4
8	Rig service by chuff	800	830	$\frac{1}{2}$
	Drilling	830	900	1
5	Working on mud line	900	1000	1
	Drilling	1000	2:45	$4\frac{3}{4}$
	Change belts on air compress	2:45	3:15	$\frac{1}{2}$
	C.P. Oliver Feb 12 1965 Mining Inspector.			
8	Drilling	3:15		$\frac{3}{4}$
11	Dug & 7 1/2" Hole	400	500	1
	Rig Serv	500	512	$\frac{1}{4}$
7	Dug	512	930	$4\frac{1}{4}$
	Survey	930	940	$\frac{1}{4}$
	Hoist for H/B.T	940	1000	2
	Change Bit - ✓ Blunt Rams	1000	1200	$\frac{1}{4}$

Total Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER *R. F. [Signature]*

B.O.P. Test - Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 23 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Pan Bar LOCATION Tarnoruk C-39 DATE FEB 10 1965

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

DRILLER

DERRICK

MOTOR

FLOOR

FLOOR

FLOOR

FIREMAN

EXTRA

INJURIES

FIRES

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) NO. O.D. I.D. WGT. DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS SINGLES

2646 92 2738 4'12 110M 136 1/4 2 3/4 30

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION

2 8 1/4 OSC-3 1 1/16 3962625 145 471 2733 12 1/2 100 NEW

3 8 1/4 OSC-16 1 1/16 8464670 100 5

MUD 12 M. 2 A.M. 4 A.M. 6 A.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT 98 2725 1/2 1 292

VISCOSITY 51 2 268

GEL 3 296

5 80

NO. 1 PRES-SURE 900 48 7 1/2 1 1/4 1 8 75 12405 13 1/2 30

NO. 2 PRES-SURE 48 7 1/2 1 1/4 1 8 75 12405 13 1/2 30

NO. 3 PRES-SURE 48 7 1/2 1 1/4 1 8 75 12405 13 1/2 30

NO. 4 PRES-SURE 48 7 1/2 1 1/4 1 8 75 12405 13 1/2 30

NO. 5 PRES-SURE 48 7 1/2 1 1/4 1 8 75 12405 13 1/2 30

W.L. 40 F.C. 1/22 PH. 25 BOWER 8 HRS

REMARKS	START	STOP	INTERVAL
24-221440 8 3/4" Hole	12:00	4:00	1/4
Summary	4:00	4:00	1/4
Hurst For New Bit	4:15	5:30	1 1/4
Change Bit & Check Boring Bars	5:30	5:40	1/4
Run in Dr's	5:40	6:00	1/4
Run Wp 2 Dr's	6:00	6:10	1/4
Run in Hole	6:10	7:00	3/4
Break Circ & Clean To Bottom	7:00	7:30	1/2
Drilling	7:30	8:00	1/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS.

DRILLER

DERRICK

MOTOR

FLOOR

FLOOR

FLOOR

FIREMAN

EXTRA

INJURIES

FIRES

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) NO. O.D. I.D. WGT. DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS SINGLES

2738 124 2862 7 3/4 15 6 3/4 2 3/4

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION

3 8 3/4 OSC-15 1 1/16 8414620 145 8 1/4 Run

MUD 8 A.M. 10 A.M. 12 NOON 2 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT 9.8 9.7 9.6 GEL 2000 SPERSENE 750

VISCOSITY 45 45 44 CAUSTIC 100 FUEL 400 GAL

GEL 45 45 44 XP-20 500 DET 5 GAL

NO. 1 PRES-SURE 900 900 900 C.M.C LOUIS 100

NO. 2 PRES-SURE 48 48 48

NO. 3 PRES-SURE 48 48 48

NO. 4 PRES-SURE 48 48 48

NO. 5 PRES-SURE 48 48 48

W.L. 3.2 F.C. 3/32 PH. 11.0 BOWER 8 HRS

REMARKS	START	STOP	INTERVAL
24-221440 8 3/4" Hole	8:00	8:15	1/4
Drilling 8 3/4"	8:15	4:00	7 3/4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS.

DRILLER

DERRICK

MOTOR

FLOOR

FLOOR

FLOOR

FIREMAN

EXTRA

INJURIES

FIRES

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.) NO. O.D. I.D. WGT. DRILL COLLARS NO. O.D. I.D. WGT. FUEL GALS. WATER BBL. DRILL PIPE SIZE STANDS SINGLES

2862 220 3082 7 1/4 112M 15 6 3/4 2 3/4 30M

NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION

3 8 1/4 OSC-16 1 1/16 8464625 145 349 16 Drilling

MUD 4 P.M. 6 P.M. 8 P.M. 10 P.M. ADDITIVES AT SURVEYS DEGREE MOTOR HOURS NEXT OIL CHANGE

WEIGHT 9.7 9.7 9.7 SPERSENE 800

VISCOSITY 42 42 43 XP 20 400

GEL 42 42 43 DIESEL FUEL 400 GALS

NO. 1 PRES-SURE 900 - - - 5 STREAM WATER

NO. 2 PRES-SURE 42 - - -

NO. 3 PRES-SURE 42 - - -

NO. 4 PRES-SURE 42 - - -

NO. 5 PRES-SURE 42 - - -

W.L. 2.6 F.C. 3/32 PH. 11 BOWER 8 HRS

REMARKS	START	STOP	INTERVAL
24-221440 8 3/4" Hole	4:30	5:00	1/4
Drilling	5:00	5:10	1/4
Drilling	5:10	12:00	6 3/4

Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack TOTAL CONTRACTOR TIME HRS. TOOLPUSHER P. J. Peterson

P.O.P. Test-Operated Time Results TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING

Company Limited

DAILY DRILLING REPORT

EDMONTON OFFICE

DAY WORK RECORD

THIS IS 23 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY Pure Can Am LOCATION Tractor Lake C-39 DATE Feb 9 1965

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked HRS.

DRILLER: JOHN QUINLAN 8

DERRICK: ED BROWN 8

MOTOR: FRANK WESTERSON 8

FLOOR: MARY BRADY 8

FIREMAN:

EXTRA:

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS. DEPTH OUT
1	8 3/4	OSC-3	1 1/16	38598	20	145	427		11 1/4

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT	9.2	9.3	9.4	9.4	1500 # Gel	2140	1/3	1 268
VISCOSITY	41	42	43	43	500 # Slicks			2 245
GEL					250 # 12-20			3 -

PUMP	NO. 1	PRES-SURE	NO. 2	PRES-SURE	GENERAL
MODEL	800	800	800	800	100 # CAUSTIC
S.P.M.	60	60	60	60	15 BBL'S DIESEL
LINE SIZE	7/16	7/16	7/16	7/16	5 Gals. Detergent

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/4	1	8	25	13380				

REMARKS	START	STOP	INTERVAL
Drilling 8 3/4" hole	12:00	5:00	3
Survey	5:00	5:15	1/4
Drilling	5:15	8:00	2 3/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked HRS.

DRILLER: NEW J. GOODRICH 12

DERRICK: ROBERT STOUTS 8

MOTOR: GERALD LOACH 8

FLOOR: JACOB TURNER 8

FLOOR: DON SAAR 8

FIREMAN:

EXTRA:

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS. DEPTH OUT
1	8 3/4	OSC-3	1 1/16	38598	20	145	444		12 1/4
2	8 3/4	OSC-3	1 1/16	39626			34		12 1/4

MUD	4 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT	9.5						1 276	
VISCOSITY	40						2 252	
GEL							3 -	

PUMP	NO. 1	PRES-SURE	NO. 2	PRES-SURE	GENERAL
MODEL	800	800	800	800	
S.P.M.	46	46	46	46	
LINE SIZE	7/16	7/16	7/16	7/16	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/4	1	8	25	13405	20	116	5167	

REMARKS	START	STOP	INTERVAL
Drilling 8 3/4" hole	8:00	8:45	3/4
Tripping For N/BIT	8:45	11:30	2 3/4
Slip & cut drill line	11:30	1:00	1 1/2
Run in hole New bit	1:00	2:15	1 1/4
Work tight hole to break circ.	2:15	3:00	3/4
Drilling 8 3/4" hole	3:00	4:00	1

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked HRS.

DRILLER: ROBERT QUINLAN 12

DERRICK: MIKE BERRY 8

MOTOR: WILLIAM BARNES 8

FLOOR: RAY CRAWLER 8

FIREMAN:

EXTRA:

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS	FUEL	WATER	DRILL PIPE	STANDS
NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS. DEPTH OUT
1	8 3/4	Hughes	1 1/16	39626	25	145	384		8 1/4

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT	9.5	-	-	-		2470	7/8	1 284
VISCOSITY	41	41	-	-				2 260
GEL					5 AOW 5" STREAM WATER			3 -

PUMP	NO. 1	PRES-SURE	NO. 2	PRES-SURE	GENERAL
MODEL	900	-	-	-	
S.P.M.	56	-	-	-	
LINE SIZE	7/8	-	-	-	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/4								

REMARKS	START	STOP	INTERVAL
Drilling 8 3/4" hole	4:00	6:00	2
Circ. & work tight hole	6:00	6:15	1/4
Drilling	6:15	9:15	3
Survey	9:15	9:30	1/4
Drilling	9:30	12:00	2 1/2