

PAN. AM. HOME CSP ET AL-
A-1 N. ISLAND R O-12

WELL NAME PAN AM HOME CSP et al A-1 W. Island B 0-12

FIELD
LOCATION: Unit 0 Area: 12
Latitude 60° 21' 57.2"N Section 12 Grid 60° 30'N 121° 00'W
Longitude 121° 02' 36.5"W
From Established Reference Marker

Rig Release Date:
Status
Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
MAR 2 1962	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. Approval to Commingle Production before Measurement. Application to Amend Approval No. to Commingle Production before Measurement. Application for M.P.R.—Oil. New Oil Well Report. New Gas Well Report. Well Inspection Report. Rig Inspection Report. Battery Inspection Report. Field Abandonment Programme and Approval. Well Card. Well Visit. Daily Drilling Reports.



Date Issued **Feb. 14, 1962**

Date Issued **Feb. 14, 1962**

WELL COMPLETION DATA

Well name and number	Pan Am North CSP et al A-1 N. Island R 0-12

Permit No. 1156

Home Oil Company Limited
(Incorporated in England)

Lease No. **E/A**

Exploratory Licence No. 836

Pan American Petroleum Corporation
(Continued)

Exploratory Licence No. 549

Location: Unit

Section 12

Grid **60°30'N 121°00'W**

Latitude 60°21'57.2"N

Longitude 121°02' 36.5" W

From Established Reference Marker **123. 491.5' North and 40,063.3' East of**

N.W.T./B.C. Boundary Monument No. 37

CASING RECORD

GEOLOGICAL TOPS	ELEVATION	
	Depth	Sub-Sea
Mississippian	1628	+ 133
Eocene	2332	- 571
Devonian	2554	- 793
1st. Lime	2642	- 881
2nd Lime	3158	-1397
Base 2nd Lime	3777	-2016
3rd Lime	4197	-2436
Hay River Shale	4250	-2489
Black Shale	5970	-4209
Slave Point	6006	-4245
Elk Point	6668	-4907
Detrital	6816	-5055
Pre-Cambrian	6861	-5100

CORE RECORD					
From	To	Rec.	From	To	Rec.
6040	6042	6" [±]			
6042	6092	50'			
★ Core barrel jammed					

LOG RECORD			
Run No.	Type of Log	From	To
1	Gamma Sonic Caliper	6848	119
1	Induction Electric	6870	119

NAMP 52-00(2) (1-61)



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, ~~nonoperating~~—

Name and number of well **Pan Am Home CSP et al A-1 H. Island R. 0-12**
Location: Unit **0** Section **12** Grid **60°30'N 121°00'W**
Latitude **60°21'57.2"N** Longitude **121°02'36.5"W**
From Established Reference Marker **133, 491.5' North and 40,063.3' East of**
NWT/B.C. Boundary Monument No. 87
Permit No. **1156** Lease No. **EA**

Home Oil Company Limited
(Permitter, Licensee, Lessee)

Date of commencement of proposed programme **May 2, 1962**

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at **None**
Gas at **None**
Water at **6689-6720 DST #1 Rec 5020' sulphurous salt water**
Total Depth **6874'** Date of last operations **Current**
Present condition of well **Drilling rig over hole.**

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At	Sack of Cement	Method	Amount Filled
1. 13-3/8"	54.5#	1190	1190	1075	2 Plug	—
2.						
3.						
4.						
5.						

PROPOSED ABANDONMENT PROGRAMME

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
1	6610-6874	Elk Point-TD	140	Feel after 8 hrs.
2	6060-5960	Slave Point	55	No feel
3	3210-3110	Second Limestone	100	Feel after 8 hrs.
4	1140-1240	Surf. casing shoe	150	Plus 2% CaCl ₂ . Feel after 8 hrs.

The following logs have been run **Induction Electric, Gamma Sonic Caliper**
Other operations proposed.....

Operations to be carried out by **Peter Bowden Drilling Ltd.** Contractor Licence No. **15484**
Address **620 - 7th Ave. S.W., Calgary, Alberta** Address.....
Responsible Agent in field **Mr. H.E. Bullen** c/o **Pan American Petroleum Corp., Ft. Nelson, B.C.**
Dated at **Edmonton**, this **3rd** Day of **May**, 19 **62**
Signed by **[Signature]** Company **Pan American Petroleum Corporation**
Title **Area Foreman** Exploratory Licence No. **569**

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:

Dated **7th May**, 19 **62**

[Signature]

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



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to Amend a Drilling Authority

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

In compliance with the "Canada Oil and Gas Land Regulations", application is made hereby to amend Drilling Authority No. 111, concerning

Pan Am House GIP at al A-1 N. Island R. C-12
(Name and Number of Well)

The following amendments are required:

The following should read: Well will be drilled with Rotary Rig No. 8 by
Peter Eaudan Drilling Ltd. Contractor's Licence No. 15484.

The following did read: Well will be drilled with Rotary Rig No. 2 by
Cascade Drilling Co. Ltd. Contractor's Licence No. 15444.

Reasons for the amendments: To report the change of the drilling contractor from
the one reported on the Drilling Authority.

Dated at Edmonton, this thirteenth day of March, 19 62

Signed by W. M. Bogert

Title Area Superintendent

Company Pan American Petroleum Corporation

(For Resources Division use only)

APPROVED

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

Date 14th March, 1962

B. J. Shoma

Forms to be submitted to the 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 Pan Am Home CSP et al A-1 N. Island R. #1

Location: Unit 0 Section 12 Grid 60° 30', 121° 00'

Latitude 60° 21' 57.2" Longitude 121° 02' 36.5"

From Established Reference Marker 133, 491.5' North & 40,063.3' East of

N.W.T./B.C. Boundary Monument No. 87

Elevation: Ground 1747.0' K.B. NA feet above sea-level.

Well is expected to produce from Quartzite Test formation at a depth

of about 6930 feet.

Area assigned to well

(for Oil Conservation Engineer's use only)

Permit No. 1156

Lease No. 9142

Acreage 31.646

Permittee, licensee, or lessee

Home Oil Company Limited

Exploratory Licence No. 569

Surface owned by Crown or

Crown

(If alienated submit name and address of owner and occupant.)

Petroleum and natural-gas rights owned by Home Oil Company Limited

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. <u>13-3/8"</u>	<u>54.54</u>	<u>J-55</u>	<u>-</u>	<u>New</u>	<u>700</u>	<u>To Surface</u>
2.						
3.						
4.						
5.						

Expected water, gas, and oil horizons and type of control equipment Quartzite

Drilling mud and blowout preventers.

Well will be drilled with (Rotary) Rig No. 2

—(Cable)—

by Cascade Drilling Co. Ltd.

(Drilling Contractor or company)

Responsible agent of applicant:—

Contractor's Licence No. 15444

At well H. B. Bullen

At registered office W. M. Bogert

Address Fort Nelson, B.C.

Address 600 Bentall Building, Edmonton, Alta.

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

Dated at Edmonton, this twelfth day of February 1962

Signed by W. M. Bogert Company Pan American Petroleum Corporation

Title Area Superintendent Licence No. 569

(For Resources Division use only)

APPROVED

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

That "#1" be deleted and "0-12" be inserted so that the well name will be "Pan
Home CSP et al A-1 N. Island R. 0-12". The Operator will submit at least weekly
reports as received by radio to this office on Tuesday of each week.

Dated 14th February 1962

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

B. H. Shoms

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton

Part 32, 1964

Calgary

WATER ANALYSIS REPORT

Field **N.W.T.** Well No. **Pan Am Home C.S.P. et al N. Island River**
 Operator **Pan American Petroleum Corporation** Date Received **May 18, 1962** 0-12
 Formation **Elk Point** Depth **6689 - 6720**

Other pertinent data Location: Unit 0 Section 12, Grid 60°30' N, 121°00' W. U.S.T. #1.
 K.B. 1761, Grd. 1747.6. IHP 3500 psi, ISIP 2655 psi., IFP 1061 psi., FFP 2662 psi.,
 FSIP 2676, FHP 3377. Recovered 200 feet salt water cut mud, 180 feet mud cut salt water,
 5020 sulphurous salt water. Bottom sample. Date **May 24, 1962** Lab. No. **E19534-3**
 No gas to surface.

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO ₄	CL	CO ₃	HCO ₃	OH	H ₂ S
53,188	19,071	1,897		123	121,064		390		

MILLIGRAM EQUIVALENTS

2313.70	951.64	155.93		2.56	3412.31		6.40		
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MILLIGRAM EQUIVALENTS IN PERCENT

33.81	13.91	2.28		0.04	49.87		0.09		
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Total Solids in Parts per Million

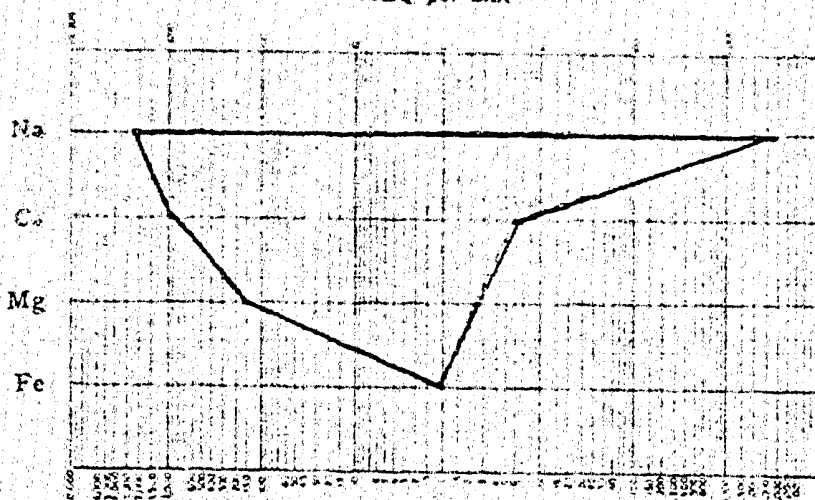
By evaporation	220,260
After ignition	187,120
Calculated	195,475
Specific Gravity	1.132
Observed pH	7.2
Resistivity	0.055 ohm meters @ 68° F.

Properties of Reaction in Percent

Primary salinity	67.62
Secondary salinity	32.20
Primary alkalinity	---
Secondary alkalinity	0.18
Chloride salinity	99.92
Sulfate salinity	0.08

Remarks and conclusions The general characteristics indicate this sample to be a formation water. There were two samples from the top and middle sampling points. Chloride content determinations were made on each. E19534-1 Top sample. Chloride content 47,970 and 48460 P.P.M.. E19534-2 Middle sample. Chloride content: 118,070 and 118,650 P.P.M..

LOGARITHMIC PATTERN MEQ per unit



REMARKS

F. E. Allen
 L. E. Bihins
 E. J. Borge
 G. A. Baker
 S. B. Richards (2)
 Supt. of Northern
 Affairs (3) ✓
 (1) Signal Oil & Gas Co.
 Soud Oil Co. (8)
 Pile (2)

WELL HISTORY REPORT

PAN AM HOME C.S.P. ET AL

A-1 N. ISLAND R. 0-12

NORTHWEST TERRITORIES

WELL HISTORY REPORT

P.O. AM HOME C.S.P. ET AL. A-1 N. ISLAND R. 9-12

Un-o, Sec. 12, 60° 30' N; 121° 00' W.

NORTHWEST TERRITORIES

Pan American Petroleum Corporation
Edmonton, Alberta

June, 1962

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Enclosures

Logs - Gamma Sonic Caliper
 Induction Electric

Analysis - Water (DST #1)

DST Chart - DST #1

WELL HISTORY REPORT
PAN AMERICAN PETROLEUM CORPORATION

SECTION I - Summary of Well Data

(a) Well Name and Number

Pan Am Home C.S.P. et al A-3 W. Island R. 6-12

(b) Permitter

Home Oil Company Limited et al

(c) Name of Operator

Pan American Petroleum Corporation
300 Bentall Building
Edmonton, Alberta

(d) Location

Twp. 6, Sec. 12, 50° 50' N; 121° 00' W.
60° 21' 57.2" N Lat; 121° 02' 56.5" W. Long.

(e) Co-ordinates

284.3' S. of N. Bdy & 613.1' E. of N. Bdy. of Twp. 6, Sec. 12, 50° N; 121° 00' W.
137,491.5' N and 40,063.5' E of N.T./C.D. Monument No. 37

(f) Permit & Lease Number

Permit No. 1156; Lease No. 3142

(g) Drilling Contractor

Peter Lawden, Rotary Rig #8, Contract No. 15481

(h) Drilling Authority

No. 111 - February ¹⁴ 1962

(i) Classification

Exploratory

(j) Elevations

Ground 1748'

A.B. 1761'

(k) Spudded

March 26, 1962

(l) Completed Drilling

April 28, 1962

(m) Total Depth

6874' - Precambrian

(a) Status

Dry and Abandoned

(b) 1st Release

May 5, 1962

(p) Hole Size

17-1/2"; 8-5/8"

(q) Casing

20" conductor pipe at 40' with 70 sack.

13-7/8" at 1120' with 1075 sack cement plus 2% CaCl_2 SECTION II - Geological Summary(1) Formation Tops

<u>Log Tops</u>	<u>Depth</u>	<u>Subsea</u>
Mississippian	1025	+ 156
Oriskany	2550	- 762
Devonian	2554	- 795
1st Limestone	2642	- 881
2nd Limestone	3156	-1397
Base 2nd Limestone	3777	-2016
3rd Limestone	4197	-2436
May River Shale	4250	-2489
Black Shale	5328	-4167
Slave Point	6004	-4843
Elk Point	6070	-4909
Detrital	6816	-5655
Precambrian or Wash	6861	-5700
Total Depth	6874	-5712

<u>Sample Tops</u>	<u>Depth</u>	<u>Subsea</u>
Mississippian	1624	- 157
Carbonate	2533	- 770
Devonian	2550	- 319
1st Limestone	2539	- 370
2nd Limestone	3138	-1597
3rd Limestone	4198	-2137
May River Shale	4258	-2407
Black Shale	5906	-4115
Slave Point	6018	-4257
Elk Point Dolomite	6693	-1932
Pre Middle Devonian Detrital	6806	-3045
Quartzite	6846	-3035
Granite Gneiss	6861	-3100
Precambrian	6972	-3111

(b) Cored Intervals

#1 - 6040 - 6042 - Slave Point - Cut 2' - Rec. 6"

#2 - 6042 - 6092 - Slave Point - Cut 50' - Rec. 50'

(c) Core Descriptions

#1 - 6040 - 6042 - Slave Point

Coring Time: 46, 96

6040 - 6042 Limestone, white to dark gray, very fine crystalline, microcrystalline in part, appears to be all re-crystallized, very stylolitic, grey color due to black bituminous material between crystals and along stylolites; trace fair to good porosity in suc. limestone, predominantly dense, trace stromatoporoids and amphipora.

#2 - 6042 - 6092 - Slave Point

Coring Time: 10, 15, 16, 16, 15, 15, 15, 12, 12, 14, 12, 11, 12, 12, 9, 8, 14, 10, 10, 9, 8, 14, 10, 10, 10, 10, 8, 9, 9, 9, 7, 10, 9, 9, 9, 9, 10, 9, 9, 9, 9, 9, 9, 9, 10, 10, 9, 9

6042 - 6043 Limestone, light to medium, crypto to microcrystalline, with relic, pelletoidal structure, secondary clear crystal calcite blebs, hard, dense, trace black bituminous material.

6043 - 6044 Limestone, very fine crystalline, as above with stromatoporeid structure - partially obliterated by recrystallization.

- 6044 - 6045 Limestone, cryptocrystalline, as above, blebs of clear crystalline calcite.
- 6045 - 6046 Limestone, as above, trace fine granular structure, trace oolites.
- 6046 - 6047 Limestone, as above.
- 6047 - 6048 Limestone, as above, trace organic fragments.
- 6048 - 6049 Limestone, as above, crypto to microcrystalline.
- 6049 - 6050 Limestone, as above, hard, tight.
- 6050 - 6051 Limestone, cryptocrystalline, as above, fossil outlines; abundant clear crystal calcite, trace pelletoidal structure.
- 6051 - 6052 Limestone, as above, pelletoidal structure visible in part.
- 6052 - 6053 Limestone, as above, trace pellets, trace stylolites with black carbon.
- 6053 - 6054 Limestone, as above, trace fracturing (vertical) with calcite and carbonate lining.
- 6054 - 6055 Limestone, as above, pelletoidal in part, trace oolites.
- 6055 - 6056 Limestone, as above, abundant round and irregular blebs of clear crystal calcite - fractured.
- 6056 - 6057 Limestone, cryptocrystalline, light to medium grey to brown, dense, flaky, with carbonaceous material, tight.
- 6057 - 6058 Limestone, as above, pelletoidal in part, abundant stylolites.
- 6058 - 6059 Limestone, as above.
- 6059 - 6060 Limestone, as above, stylolitic - trace pelletoidal structure, hard, tight.
- 6060 - 6061 Limestone, as above, trace pelletoidal structure.
- 6061 - 6062 Limestone, as above.
- 6062 - 6063 Limestone, as above, dense.
- 6063 - 6064 Limestone, as above, pelletoidal in part.
- 6064 - 6065 Limestone, as above, trace pyrite,
- 6065 - 6066 Limestone, as above, light to medium grey to brown, crypto-

crystalline, pelletoidal in part, dense, hairline fracture in fill with calcite blebs crystal calcite.

- 6066 - 6067 Limestone, as above.
- 6067 - 6068 abundant secondary clear crystal calcite.
- 6068 - 6069 Limestone, as above, trace pellets - abundant fracture infill with calcite.
- 6069 - 6070 Limestone, pelletoidal, interbedded with clear calcite, trace organic remains - stromatoporoids???
- 6070 - 6071 Limestone, as above, abundant stylolites, lined with carbonaceous material.
- 6071 - 6072 Limestone, as above, but pellets, very vague, trace stromatoporoids.
- 6072 - 6073 Limestone, as above.
- 6073 - 6074 Limestone, as above, trace pellets.
- 6074 - 6075 Limestone, as above.
- 6075 - 6076 Limestone, as above.
- 6076 - 6077 Limestone, as above, stylolitic.
- 6077 - 6078 Limestone, as above, odd trace pellets.
- 6078 - 6079 Limestone, light to medium grey to brown, abundant pelletoidal structure, clear calcite cement, oolites, abundant clear secondary crystal, calcite.
- 6079 - 6080 Limestone, as above, only trace pellets and oolites, trace brachiopods?
- 6080 - 6081 Limestone, as above,
- 6081 - 6082 Limestone, as above.
- 6082 - 6083 Limestone, as above, more pellets and oolites visible, organic fragments.
- 6083 - 6084 Limestone, as above, predominately sublithographic, crypto-crystalline, trace pelletoidal structure.
- 6084 - 6085 abundant oolites and relic pelletoidal structure.
- 6085 - 6086 Limestone, as above.
- 6086 - 6087 Limestone, as above, trace pellets, trace stylolites.
- 6087 - 6088 Limestone, as above, fractured with pyrobitumen? & calcite infill - trace stylolites.

- 6085 - 6089 Limestone, as above, abundant stylolites and secondary clear calcite.
- 6090 - 6090 Limestone, as above, trace pellets.
- 6090 - 6091 Limestone, as above.
- 6091 - 6092 Limestone, light to medium grey to brown, sublitto-graphic to cryptocrystalline, trace pelleted structure, abundant secondary clear crystal calcite, fracturing filling and large blebs, dense, tight.

(7) Sample Descriptions

- 9 - 1010 Shale, dark grey, soft, blocky, micaceous.
- 1010 - 1020 Shale, as above, slightly silty.
- 1020 - 1030 Sandstone, light to medium grey, very fine grain, quartzitic, slightly micaceous, slightly argillaceous, slightly glauconitic.
- 1030 - 1040 Sandstone, as above with sandstone, white to light grey, quartzitic, very fine grained, calcareous, very slightly glauconitic, tight.
- 1040 - 1050 Sandstone, white, calcareous, as above.
- 1050 - 1060 Sandstone, light grey, very fine grained, quartzitic and chert, calcareous, slightly glauconitic, fair cementing, tight.
- 1060 - 1070 Sandstone, as above.
- 1070 - 1080 Sandstone, as above, friable in part, with sandstone, light grey, slightly argillaceous, slightly micaceous.
- 1080 - 1090 Sandstone, as above.
- 1090 - 1100 Predominantly sandstone, light grey, very fine grained, slightly argillaceous, slightly micaceous, calcareous in part, quartz and chert, fair cementing, tight.
- 1100 - 1110 Sandstone, as above.
- 1110 - 1120 Sandstone, as above, trace pyrite, slightly argillaceous in part.
- 1120 - 1130 Sandstone, light to medium grey, salt and pepper, very fine grained, slightly calcareous in part, carbonaceous partings, slightly micaceous, tight, slightly glauconitic.
- 1130 - 1140 Sandstone, as above.
- 1140 - 1150 Sandstone, light grey, very fine grained, quartz, with minor chert, slightly micaceous, slightly argillaceous, trace pyrite, slightly glauconitic.
- 1150 - 1160 Sandstone, as above.
- 1160 - 1170 Sandstone, as above, with shale, dark grey, flaky to blocky, silty in part, slightly glauconitic in part.
- 1170 - 1180 Sandstone and shale, as above (poor sample).

- 1180 - 1190 Sandstone and shale, as above, (poor sample).
- 1190 - 1200 Shale, dark grey, blocky to flaky, fissile, contaminated sample.
- 1200 - 1210 Shale, as above.
- 1210 - 1220 Shale, as above, very dark grey.
- 1220 - 1230 Shale, as above, micromicaceous.
- 1230 - 1240 Shale, as above, very dark grey to black, slightly carbonaceous.
- 1240 - 1250 Shale, as above.
- 1250 - 1260 Shale, very dark grey, blocky to splintery, pyrite.
- 1260 - 1270 Shale, as above.
- 1270 - 1280 Shale, as above, fissile with dark grey soft, slightly waxy, shale.
- 1280 - 1290 Shale, as above, trace pyrite.
- 1290 - 1300 Shale, dark grey to black, flaky, slightly waxy, firm.
- 1300 - 1310 Shale, as above.
- 1310 - 1320 Shale, as above, blocky to flaky.
- 1320 - 1330 Shale, as above.
- 1330 - 1340 Shale, as above, soft, flaky.
- 1340 - 1350 Shale, as above.
- 1350 - 1360 Shale, as above.
- 1360 - 1370 trace mica.
- 1370 - 1380 Shale, dark grey, blocky, soft, firm.
- 1380 - 1390 soft, waxy in part.
- 1390 - 1400 splintery in part.
- 1400 - 1420 Shale, as above.
- 1420 - 1450 Shale, dark grey, blocky to splintery to soft, waxy in part.
- 1450 - 1490 trace carbonaceous material.
- 1490 - 1500 Shale, dark grey, blocky, soft, waxy in part-slight trace carbonaceous material.
- 1500 - 1510 Shale, dark grey, as above, with pyrite and sandstone, very fine grained, white quartzite, clean, slightly calcite in part, micaceous in part.

- trace hard, dark grey shale, with white specks (non calcareous).
- 1510 - 1520 Shale, as above, also dark grey to brown, carbonaceous, with trace sandstone, as above.
- 1520 - 1530 Shale with trace sandstone, as above.
- 1530 - 1540 Shale, as above, trace pyrite.
- 1540 - 1550 Shale, dark grey, blocky with trace carbonaceous fragments, pyrite, and sandstone, white, very fine grained, as above.
- 1550 - 1560 Shale, as above, dark grey, blocky with trace carbonaceous fragments, pyrite.
- 1560 - 1570 brownish grey, flaky, with resinous - carbonaceous fragments.
- 1570 - 1580 trace white calcite, sandstone, as above.
- 1580 - 1590 Shale, predominately dark to brownish grey, carbonaceous, trace pyrite and secondary calcite, soft, blocky.
- 1590 - 1600 Shale, as above, with dark grey shale.
- 1600 - 1610 Shale, dark grey, blocky.
- 1610 - 1620 Shale, as above.
- MISSISSIPPIAN 1624
- 1620 - 1630 Shale, as above, with trace light grey, calcite, sandstone.
- 1630 - 1640 Shale, as above, with sandstone, as above, slightly pyritic, slight trace waxy, light green, shale.
- 1640 - 1650 Shale, with trace sandstone, as above.
- 1650 - 1660 SS, light grey, very fine grained, quartzite clean, calcite, slightly pyritic, tight, trace fossiliferous fragments in sandstone and in secondary calcite laminae.
- 1660 - 1670 Sandstone, as above, with trace shale, light grey to green calcite.
- 1670 - 1680 Sandstone, with trace shale, as above.
- 1680 - 1690 Predominately shale, dark grey, splintery to blocky, with sandstone, as above.
- 1690 - 1700 Sandstone, light grey, as above, fair cementing, with trace

- sandstone, very fine grained, quartzite, clean, calcite, with trace fair intergranular porosity friable.
- 1700 - 1710 Sandstone, as above, with shale, light grey to green calcite, slightly pyritic.
- 1710 - 1720 Sandstone, and trace shale, as above.
- 1720 - 1730 Shale, medium grey, calcite, slightly sandy, soft, trace light grey to green shale, shale and sandstone, as above.
- 1730 - 1740 Shale, dark grey, splintery, firm.
- 1740 - 1750 Sandstone, light grey, very fine grained, calcite and shale, light grey to green, calcareous.
- 1750 - 1760 Sandstone, light to medium grey, very fine grained, calcite, slightly pyritic - hard, quartzite in part, trace crinoids and ostracods.
- 1760 - 1770 Sandstone, as above.
- 1770 - 1780 Sandstone, as above, trace crinoids and brachiopods, fragments, ostracods - slightly argillaceous.
- 1780 - 1790 Shale, light grey to green, calcareous, blocky with trace sandstone, light grey, calc. very fine grained, trace ostracods in shale.
- 1790 - 1800 Shale, and sandstone, as above, with shale, dark grey, slightly calcareous, blocky to flaky.
- 1800 - 1810 Sandstone and shale, as above.
- 1810 - 1820 Shale, dark grey, slightly calcareous, slightly sandy in part, blocky.
- 1820 - 1830 Shale, as above, with trace light grey to green calcareous, shale.
- 1830 - 1840 Shale, as above, with shale, light brown, slightly calcareous, blocky, hard.
- 1840 - 1850 Shale, dark grey, as above.
- 1850 - 1860 Shale, dark grey, blocky, slightly calcareous in part.
- 1860 - 1870 Shale, as above.
- 1870 - 1880 Shale, as above, splintery, slightly pyritic in part.
- 1880 - 1890 abundant pyrite.

- 1899 - 1900 Shale, as above.
- 1900 - 1930 Shale, as above, trace pyrite.
- 1930 - 1940 Shale, dark grey, blocky, slightly calcareous in part, abundant sandstone and shale cavings.
- 1940 - 1950 Shale, as above, with trace light brown, silty-sandy limestone.
- 1950 - 1960 Shale, as above, with trace limestone, as above, and sandstone, white, very fine grained, calcareous.
- 1960 - 1970 Shale, with trace limestone, as above.
- 1970 - 1990 Shale, dark grey, slightly calcareous in part, blocky to flaky.
- 1990 - 2000 Shale, as above, with trace limestone, light brown, slightly sandy to silty.
- 2000 - 2010 Shale, with trace limestone, as above.
- 2010 - 2020 Shale, as above, trace limestone, as above.
- 2020 - 2050 Shale, dark grey, very slightly calcareous in part, blocky to flaky.
- 2050 - 2060 Shale, dark grey, as above.
- 2060 - 2100 Shale, dark grey, very slightly calcareous, in part, blocky to flaky, trace pyrite.
- 2100 - 2120 Shale, as above, with trace light brown, calcareous siltstone.
- 2120 - 2130 Shale, as above, with trace siltstone.
- 2130 - 2160 Shale, dark grey, very slightly calcareous in part, blocky.
- 2160 - 2200 Shale, dark grey, blocky to flaky to splintery - trace pyrite, very slightly calcareous in part.
- 2200 - 2250 Shale, medium to dark grey, slightly calcareous, blocky, soft.
- 2250 - 2240 trace crinoid and pyrite.
- 2240 - 2290 Predominately medium grey, slightly calcareous, shale, blocky to lumpy.
- 2290 - 2300 Shale, medium to dark grey, slightly calcareous, soft, blocky.
- 2300 - 2320 Shale, as above, trace pyrite.

- 2320 - 2340 Shale, as above, trace fossiliferous fragments, crinoids, "pentacrinus".
- 2340 - 2350 Shale, as above, trace light brown, very fine granular, limestone.
- 2350 - 2370 Shale, medium to dark grey, very slightly calcareous, blocky, soft, slightly pyritic in part.
- 2370 - 2380 Shale, as above, trace limestone, light brown, very fine granular soft.
- 2380 - 2390 Shale, as above, very slightly calcareous in part.
- 2390 - 2400 Shale, as above, trace brown limestone.
- 2400 - 2420 splintery in part.
- 2420 - 2440 trace pyrite.
- 2440 - 2470 Shale, medium to dark grey, very slightly calcareous in part, fissil, soft, blocky.
- 2470 - 2480 Shale, medium grey, calcareous, blocky.
- 2480 - 2490 Shale, as above, with trace limestone, light brown, very fine granular crystalline, pyrite.
- 2490 - 2500 Shale, as above, with lenses, limestone, medium grey, argillaceous, slightly silty, very fine granular.
- 2500 - 2510 Shale, dark grey, slightly silty, blocky to flaky, very slightly calcareous in part.
- 2510 - 2530 Shale, medium to dark grey, bitumen, blocky, soft. hard, with chert, dark brown, (possibly very siliceous shale) pyritic in part.
- 2530 - 2540 Shale, as above, calcareous in part.
- EXSHAW 2535
- 2540 - 2550 Shale, as above, with shale, medium grey, blocky to splintery, trace pyrite, slightly calcareous(prob cave).
- 2550 - 2580 Predominately dark brown, shale, bitumen, flaky to hard, blocky, with dark brown, pyrite, chert.
- DEVONIAN 2580
- 2580 - 2590 Shale, medium grey, blocky to splintery, with trace light grey to green, slightly calcareous, splintery shale.
- 2590 - 2600 Shale, light to medium grey, slightly calcareous, blocky, trace pyrite.
- 2600 - 2610 Shale, as above.

- 2610 - 2630 Shale, as above, with shale, medium to dark grey, splintery.
- 1ST LIMESTONE 2639
- 2630 - 2640 Shale, light to medium grey, slightly calcareous, blocky, trace crinoid with slight trace limestone, fine crystalline, very fine granular, white to cream, dense, slightly silty in part.
- 2640 - 2650 Limestone, cream, cryptocrystalline, dense, chalky in part, trace secondary calcite, trace pyrite, trace crinoid stems.
- 2650 - 2660 Limestone, as above, very fine granular texture in part, trace crinoidal fragments, secondary clear crystal calcite blebs, tight.
- 2660 - 2670 Limestone, as above, trace crinoids.
- 2670 - 2680 Limestone, as above, granular texture in part.
- 2680 - 2700 Limestone, light grey to cream, crypto to microcrystalline, granular texture in part, dense, trace crinoids, trace secondary crystal calcite - chalky in part.
- 2700 - 2710 Shale, light to medium grey, blocky, slightly calcareous, with trace limestone, as above.
- 2710 - 2720 Shale, with limestone, as above.
- 2720 - 2730 Shale, with limestone, cream, grain, bioclastic, crinoid, gastropod, dense, trace pyrite.
- 2730 - 2740 Shale, with limestone, as above.
- 2740 - 2750 Shale, with limestone, as above, trace brachiopod fragments.
- 2750 - 2770 Shale, light to medium grey, blocky, slightly calcareous, with limestone, cream to light brown, bioclastic in part, very fine granular crystalline, dense, chalky in part.
- 2770 - 2780 Shale, as above, trace pyrite.
- 2780 - 2790 Shale, light grey, calcareous, blocky, fissil, soft, firm, trace pyrite.
- 2790 - 2800 Shale, as above, with trace bioclastic, cream, limestone,
- 2800 - 2810 Shale, with limestone, as above.
- 2810 - 2820 Shale, light grey, calcareous, with limestone, light grey, very fine crystalline, granular, bioclastic in part, dense, crinoids and brachiopods.

- 2820 - 2830 Shale, as above with abundant cavings.
- 2830 - 2840 Shale, as above, with limestone, such cavings.
- 2840 - 2850 Shale, light to medium grey, calcareous, blocky.
- 2850 - 2870 Shale, light grey, calcareous, soft, blocky, lumpy, fissile.
- 2870 - 2910 Shale, light grey, soft, calcareous, blocky, slightly pyritic, trace crinoids.
- 2910 - 2920 Shale, light grey to greenish grey, calcareous, soft, blocky, fissile, trace pyrite, trace crinoids and pelecypods.
- 2920 - 2930 Shale, as above, with limestone, very fine granular crystalline, light grey, fossiliferous, gastropods, crinoids, soft.
- 2930 - 2940 Shale, with limestone, as above, light grey, slightly argillaceous, dense.
- 2940 - 2950 Shale, light grey, calcareous, with trace limestone, as above.
- 2950 - 2960 Shale, with trace limestone, as above, pyritic.
- 2960 - 2990 Shale, light grey, calcareous blocky.
- 2990 - 3000 Shale, as above, with trace limestone, light grey, very fine granular, stringers.
- 3000 - 3020 Shale, light to medium grey to greyish green, calcareous, blocky, trace crinoids.
- 3020 - 3030 Shale, as above with trace limestone.
- 3030 - 3040 Shale, as above, trace crinoids, pelecypods and pyrite.
- 3040 - 3050 abundant pyrite.
- 3050 - 3070 Shale, light grey, calcareous, soft, blocky, slightly pyritic.
- 3070 - 3080 abundant crinoids throughout.
- 3080 - 3100 Shale, as above, light grey, calcareous, fissile, blocky, soft, crinoids.
- 3100 - 3140 Shale, light grey, calcareous, soft, fissile, blocky, trace pyrite, throughout, trace crinoid stems.
- 3140 - 3160 Shale, as above, trace crinoids.

- 3169 - 3170 Shale, light grey, very slightly calcareous, soft, blocky, fissile, trace crinoids, pelecypods and pyrite, through out.
- 3170 - 3180 Limestone, light grey, micro to very fine crystalline, granular in part, bioclastic in part, crinoids, brachiopods, trace pyrite - very slightly argillaceous.
- 3180 - 3190 Limestone, as above, with secondary crystalline, calcite, blebs, slightly chalky in part.
- 3190 - 3200 Limestone, as above, light grey to light brown, very fine crystalline, granular, dense, slightly argillaceous in part, trace crinoids and brachiopods.
- 3200 - 3210 Limestone, as above, cryptocrystalline, in part dense.
- 3210 - 3220 Limestone, crypto to very fine crystalline, granular texture in part, cream to light brown, dense, slightly argillaceous in part, trace crystalline calcite, vuggy lining, trace crinoids.
- 3220 - 3230 Limestone, as above, trace pyrite.
- 3230 - 3240 Limestone, predominately light brown, microcrystalline, dense, trace pyrite, secondary calcite.
- 3240 - 3250 Limestone, cryptocrystalline, very fine crystalline, light brown to cream, chalky in part, trace bituminous partings.
- 3250 - 3260 Limestone, as above, with light grey to brown, microcrystalline, argillaceous, limestone, soft.
- 3260 - 3290 Limestone, cream to light brown, microcrystalline, dense, trace secondary calcite and crinoid fragments, with shale, medium grey to brown, calcareous, soft, flaky, slightly fossiliferous, crinoids.
- 3290 - 3310 Limestone, crypto to microcrystalline, cream to light brown, dense, granular, bioclastic in part, trace crinoids, pyrite, secondary calcite, vuggy fracture filling.
- 3310 - 3320 trace secondary calcite.
- 3320 - 3330 Limestone, as above, chalky in part.
- 3330 - 3340 Limestone, cream, as above.
- 3340 - 3350 Limestone, light brown to cream, crypto to very fine crystalline, dense, chalky in part, slightly argillaceous in part, trace crinoids.
- 3350 - 3360 Limestone, as above, with shale, light to medium greyish green, calcareous, splintery to blocky.

- 3360 - 3370 Predominately shale, medium grey to green, calcareous, as above.
- 3370 - 3380 Shale, as above, with minor limestone, cream, dense.
- 3380 - 3390 Shale, light to dark grey to green, calcareous, trace pyrite, splintery to blocky, trace fossiliferous fragments.
- 3390 - 3400 Shale, as above, with trace limestone, cream, chalky, cryptocrystalline, dense.
- 3400 - 3410 Limestone, cream to light brown, microcrystalline, dense, chalky in part, with shale, as above.
- 3410 - 3420 Limestone, as above, slightly argillaceous in part.
- 3420 - 3430 Limestone, cryptocrystalline, chalky, cream as above, and very fine crystalline to granular, light brown, very sandy, limestone and light brown, very calcareous, very fine granular sandstone.
- 3430 - 3440 Limestone, as above, silty to sandy in part, abundant cavings.
- 3440 - 3450 Limestone, cream, chalky with silty to sandy limestone and sandstone, very fine grained, calcareous, pyritic.
- 3450 - 3460 Limestone, light grey to brown, cream, cryptocrystalline, chalky in part, trace crinoid with trace sandstone, as above.
- 3460 - 3470 Limestone, and shale, as above, trace crinoids.
- 3470 - 3480 Limestone, and shale, as above.
- 3480 - 3490 Predominately, shale, light grey to greyish green, calcareous, blocky to splintery (after trip).
- 3490 - 3500 Limestone, as above, with shale, light to medium greyish green, slightly calcareous, blocky to splintery.
- 3500 - 3510 Limestone, as above, cryptocrystalline, in part, dense, with shale, as above, trace pyrite.
- 3510 - 3520 Limestone, and shale, as above, trace crinoids.
- 3520 - 3530 Limestone, and shale, as above.
- 3530 - 3540 Predominately shale, light grey to greyish green, calcareous, blocky to splintery (after trip).
- 3540 - 3550 Shale, as above, trace brachiopods fragments and crinoids.

- 3550 - 3560 Shale, as above, with trace very dark grey shale, fissile, blocky to splintery.
- 3560 - 3570 Shale, as above, light to medium greyish green, calcareous, with limestone, cream, light grey, very fine granular in part, crypto crystalline, slightly sandy, slightly argillaceous, dense.
- 3570 - 3580 Limestone, cream, cryptocrystalline, sandy, slightly argillaceous, very fine granular in part, trace pyrite.
- 3580 - 3590 Sandstone, light brown, light grey, very fine grained, quartzitic, very calcareous, well cemented, argillaceous in part.
- 3590 - 3600 Sandstone, as above, medium brown, argillaceous, in part, with trace of brown silt, calcareous, shale, trace pyrite.
- 3600 - 3610 Sandstone, as above, with limestone, cream to light brown, cryptocrystalline dense, slightly sandy.
- 3610 - 3620 Sandstone, and limestone, as above.
- 3620 - 3630 Sandstone, light grey to light brown, very fine grained, clean, quartz, very calcareous, friable in part, pyrite.
- 3630 - 3640 Sandstone, as above, with siltstone, light to medium grey, green, calcareous, argillaceous, slightly pyritic.
- 3640 - 3650 Sandstone, as above, light grey to greyish green, very fine grained, quartz, slightly argillaceous in part, well cemented, tight with trace siltstone, as above.
- 3650 - 3670 Sandstone, as above.
- 3670 - 3680 Sandstone, as above, friable in part.
- 3680 - 3690 Sandstone, light grey to greyish green, very fine grained, very calcareous, clean, quartz, trace chert? grains, slightly argillaceous in part, slightly pyritic in part, friable, well cemented.
- 3690 - 3700 Sandstone, as above, trace fossiliferous fragments.
- 3700 - 3710 Sandstone, as above.
- 3710 - 3720 Sandstone, as above, very fine grained, very calcareous, well cemented, dense, slightly pyritic.
- 3720 - 3730 Sandstone, as above, with trace chalky, cream, limestone.

- 3730 - 3740 Sandstone, as above, with trace shale, medium grey to green, calcareous, slightly silty.
- 3740 - 3750 Sandstone, as above, with limestone, cream, cryptocrystalline, dense, slightly sandy in part, trace secondary calcite crystals, chalky in part.
- 3750 - 3760 Sandstone, light grey, very calcareous, very fine grained, with limestone, as above, and shale, medium greyish green, calcareous, blocky to splintery.
- 3760 - 3770 Shale, medium greyish green, slightly calcareous, blocky, splintery, silty in part, with limestone cream, cryptocrystalline, granular texture in part, crinoids.
- 3770 - 3780 Shale, light to medium grey to green, calcareous, blocky, splintery, soft, with trace limestone, as above.
- 3780 - 3790 Shale, as above.
- 3790 - 3810 Shale, as above, soft, waxy in part.
- 3810 - 3820 Shale, as above, with trace limestone, cream, very fine crystalline, granular, soft, slightly pyritic.
- 3820 - 3830 Shale, with limestone, light grey, very fine crystalline, dense, with trace fossiliferous fragments.
- 3830 - 3840 Shale, as above, light to medium grey to green, calcareous, blocky to splintery, flaky, to soft, waxy in part with trace limestone.
- 3840 - 3850 Shale, as above, with trace light grey cryptocrystalline, slightly pyritic, limestone.
- 3850 - 3860 Shale, as above, with trace limestone.
- 3860 - 3870 Shale, as above, with trace limestone, light grey, cryptocrystalline, slightly argillaceous (poor sample).
- 3870 - 3880 Shale, as above.
- 3880 - 3890 Shale, light to medium grey to green, slightly calcareous, blocky, splintery, slightly pyritic, trace brachiopods and crinoids with trace limestone.
- 3890 - 3900 Shale, with trace limestone, as above.
- 3900 - 3910 Shale, with trace limestone, light grey, cryptocrystalline, dense, hard.
- 3910 - 3930 Shale, with limestone, as above.
- 3930 - 3940 Shale, as above, slightly calcareous, light to medium greyish green.
- 3940 - 3960 Shale, light to medium greyish green, calcareous, soft, blocky to splintery, trace pyrite, trace crinoid.

- 3960 - 3980 Shale, as above, slightly calcareous.
- 3980 - 3990 Shale, as above, with trace, limestone, light brown, grey, very fine to fine crystalline, dense, slightly pyritic.
- 3990 - 4000 Shale, as above, with trace, very light greyish green, calcareous, splintery, shale.
- 4000 - 4010 Shale, as above, with trace limestone, very fine crystalline, light grey to brown, dense, vitreous.
- 4010 - 4020 Shale, medium grey to greyish green, predominately calcareous, trace crinoids.
- 4020 - 4030 Shale, with trace limestone, light grey to brown, as above.
- 4030 - 4040 Shale, as above, slightly calcareous in part.
- 4040 - 4060 Shale, as above, blocky to splintery, calcareous in part, slightly harder than above.
- 4060 - 4080 Shale, with trace limestone, as above.
- 4080 - 4090 Shale, light to medium greyish green, slightly calcareous in part, blocky to splintery, soft, waxy in part, trace crinoids and ostracods, slightly trace pyrite.
- 4090 - 4100 Shale, as above, with trace limestone, light grey to brown, very fine crystalline, dense, hard, trace pyrite.
- 4100 - 4130 Shale, as above, generally non-calcareous.
- 4130 - 4170 Shale, as above, trace pyrite (poor sample after trip).
- 4170 - 4180 Shale, as above, with trace limestone, light grey, very fine to fine crystalline, dense.
- THIRD LIMESTONE 4198
- 4180 - 4190 Shale, medium greyish to green, non-calcareous, blocky to splintery, soft, waxy in part, trace crinoids.
- 4190 - 4210 Shale, as above, with limestone, micaceous to very fine crystalline, cream, light brown, dense, chalky in part, trace ostracods, gastropods, trace pyrite.
- 4210 - 4220 Limestone, cream to tan, very fine to fine crystalline, granular in part, chalky in part, trace pyrobitumen, trace pyrite, trace poor intercrystalline porosity, in suc. limestone.
- 4220 - 4230 Limestone, tan to medium brown, very fine to fine crystalline, chalky in part, suc in part, trace stylolites, poor to fair intercrystalline porosity with dead oil stain, predominately tight.
- 4230 - 4240 Limestone, as above, medium crystalline in part, dense, trace ostracods, and pyrite.

- 4240 - 4250 Limestone, light brown, predominately, very fine crystalline to granular, suc., chalky in part, with trace pin point porosity, minor microcrystalline, dense, limestone.
- 4250 - 4260 Limestone, as above, with shale, medium grey to green, non-calcareous, blocky to splintery.
- 4260 - HAY RIVER SHALE 4238
- 4260 - 4270 Shale, as above, with trace limestone, light brown, very fine crystalline to granular, suc-chalky.
- 4270 - 4280 Shale, as above, poor sample.
- 4280 - 4290 Shale, light to medium grey to green, slightly calcareous in part, fissile, blocky to splintery.
- 4290 - 4300 Shale, as above, with trace limestone, light grey, crypto-crystalline, slightly argillaceous, dense, soft.
- 4300 - 4330 Shale, with trace limestone, light grey, very fine crystalline, slightly pyrite, trace brachiopods.
- 4330 - 4340 Shale, as above, with trace limestone, very fine crystalline, light grey, dense, hard.
- 4340 - 4350 Shale, light to medium greyish green, slightly calcareous in part, blocky to splintery.
- 4350 - 4360 Shale, as above, very slightly pyritic.
- 4360 - 4370 Shale, as above.
- 4370 - 4380 Shale, as above, with trace limestone, light grey, very fine crystalline, dense, slightly pyritic.
- 4380 - 4400 Shale, medium grey, to greyish green, slightly calcareous, in part, blocky to splintery, soft, slightly waxy in part, trace crinoids.
- 4400 - 4420 Shale, medium grey to greyish green, generally non-calcareous, blocky to splintery.
- 4420 - 4440 Shale, as above, trace pyrite.
- 4440 - 4460 Shale, as above, soft, lumpy, slightly calcareous in part.
- 4460 - 4480 Shale, as above, with trace limestone, light grey to green, slightly silty, slightly argillaceous.
- 4480 - 4490 Shale, medium greyish green, slightly calcareous in part, trace silty limestone, as above.
- 4490 - 4500 generally non-calcareous.
- 4500 - 4510 Shale, with trace limestone, light grey to brown, very fine to fine crystalline, dense, slightly pyritic.

- 4510 - 4520 Shale, as above, with trace limestone, as above.
- 4520 - 4540 Shale, medium grey to green, slightly calcareous in part, trace pyrite, blocky to splintery.
- 4540 - 4550 Shale, as above, with limestone, light grey, slightly sandy, microcrystalline, tight, trace pyrite.
- 4550 - 4560 Shale, as above, with limestone, as above, sandstone, fine grained, light grey, quartz, calcareous, with pyrobitumen? hard.
- 4560 - 4570 Shale, limestone, and sandstone, as above.
- 4570 - 4580 Sandstone, fine grained, medium grey, to green to brown, quartz, calcareous, carbonaceous, fragments, quartz grains tinted brown, argillaceous, in part, subangular to subrounded, poor to fair staining with trace sandy limestone.
- 4580 - 4590 Sandstone, with limestone, slightly pyritic, as above, trace flaky, soft, micaceous light green shale.
- 4590 - 4600 Shale, as above, with trace limestone and sandstone.
- 4600 - 4610 Sandstone, as above, very fine grained, predominately dark grey, slightly calcareous and argillaceous in part, quartzitic in part, brown in part, trace mica.
- 4610 - 4620 Sandstone, as above, with medium grey to green, slightly calcareous, argillaceous, sandstone.
- 4620 - 4630 Sandstone, as above, with shale, medium grey to green, blocky, slightly calcareous.
- 4630 - 4650 Shale, as above, silty to sandy in part, micaceous.
- 4650 - 4660 Shale, as above, with dark grey, soft, waxy shale and sandstone, as above.
- 4660 - 4680 Shale, medium, dull, grey to green, slightly sandy, slightly calcareous in part, splintery to flaky, with trace sandstone, as above.
- 4680 - 4690 Shale, as above, with trace argillaceous, slightly calcareous, grey to green, very fine grained sandstone.
- 4690 - 4700 Shale, with sandstone, as above.
- 4700 - 4710 Sandstone, light grey, very fine grained, quartz, calcareous, trace carbonaceous particles, hard, tight, grey to green, slightly argillaceous in part, slightly micaceous.
- 4710 - 4720 Sandstone, as above with limestone, light grey to brown, crypto to very fine crystalline, dense, slightly sandy, trace pyrite.

- 4720 - 4740 Sandstone, light grey to greyish green, quartz, calcareous, slightly argillaceous in part, slightly micaceous in part, tight with shale, medium grey to green, slightly calcareous, blocky to flaky.
- 4740 - 4750 Sandstone, and shale, as above, with trace grey, micro-crystalline, limestone, slightly sandy.
- 4750 - 4760 Shale, light to medium grey to green, calcareous, blocky to splintery with trace sandstone, as above.
- 4760 - 4770 Shale, with sandstone, as above, trace slickensides in shale.
- 4770 - 4780 Shale, and sandstone, interbedded, as above.
- 4780 - 4790 Shale, as above, blocky to splintery.
- 4790 - 4800 Shale, medium grey to green, blocky to splintery to flaky, with sandstone, light to medium grey to green, calcareous, very fine grained, quartz, slightly argillaceous.
- 4800 - 4810 Sandstone, and shale, as above.
- 4810 - 4820 Shale, with sandstone, as above, hard, quartzitic, in part.
- 4820 - 4830 Shale, and sandstone, as above.
- 4830 - 4840 Shale, medium grey to green, slightly calcareous, blocky to splintery, with sandstone, light to medium grey to green, very fine grained, slightly argillaceous, slightly micaceous, grading to light grey, slightly calcareous, slightly pyritic, hard, sandstone.
- 4840 - 4850 Shale, with abundant sandstone.
- 4850 - 4860 Shale, as above, trace crinoids, with sandstone, light to medium grey to greyish green, calcareous.
- 4860 - 4870 Sandstone, light grey to greyish green, very fine grained, calcareous, slightly argillaceous, in part, slightly micaceous, trace pyrite, well cemented, hard, dense, quartzitic, in part.
- 4870 - 4880 Sandstone, as above, with shale, medium grey to green, slightly calcareous.
- 4880 - 4890 Sandstone and shale, as above.
- 4890 - 4900 Shale, trace fossiliferous fragments, with sandstone, as above.
- 4900 - 4910 Shale, and sandstone, as above.
- 4910 - 4920 Shale, with trace sandstone, as above.
- 4920 - 4940 Shale, and sandstone, as above, with trace limestone, light grey to cream, dense, cryptocrystalline, slightly fossiliferous, slightly sandy.

- 4940 - 4950 Shale, with trace sandstone, as above.
- 4950 - 4960 Shale, medium grey to green, slightly calcareous in part, with trace sandstone, as above.
- 4960 - 4970 Shale, as above, with trace sandstone, (after trip).
- 4970 - 4980 Shale, light to medium grey to green, sandy in part, very slightly calcareous in part, blocky to splintery.
- 4980 - 4990 Shale, as above, with slightly calcareous, sandy, micaceous streaks - trace limestone, light brown, microcrystalline, dense, trace fossiliferous.
- 4990 - 5000 Shale, light to medium grey to green, soft, as above.
- 5000 - 5010 Shale, as above, trace pyrite.
- 5010 - 5040 Shale, generally not calcareous, otherwise as above.
- 5040 - 5060 Shale, as above, light to medium grey to green, slightly micaceous, soft.
- 5060 - 5070 Shale, medium grey to green slightly calcareous, blocky to splintery, slightly micaceous, soft.
- 5070 - 5080 Shale, as above, slightly sandy in part.
- 5080 - 5090 Shale, as above, very slightly calcareous.
- 5090 - 5100 Shale, as above, generally non-calcareous.
- 5100 - 5120 Shale, as above, soft, blocky, very slightly calcareous in part.
- 5120 - 5140 Shale, as above, fissile, trace pyrite.
- 5140 - 5190 Shale, light to medium green to grey, non-calcareous, fissile, blocky to splintery to flaky, trace micaceous, soft.
- 5190 - 5220 Shale, as above, medium green to grey, soft, non-calcareous, fissile, blocky to splintery, slightly micaceous - trace pyrite.
- 5220 - 5230 Shale, as above, trace fossiliferous fragments.
- 5230 - 5250 Shale, as above, trace slickensides.
- 5250 - 5260 Shale, as above, trace sandy, slightly calcareous, shale.
- 5260 - 5270 Shale, as above.
- 5270 - 5280 Shale, as above.
- 5280 - 5290 Shale, medium grey to greenish grey, non-calcareous, soft, fissile, slightly waxy in part, blocky to flaky, slightly micaceous, trace pyrite.

- 5290 - 5320 Shale, as above, blocky to splintery to flaky.
- 5320 - 5330 Shale, medium grey to green, as above.
- 5330 - 5350 Shale, as above, trace slickensides.
- 5350 - 5360 Shale, as above, with trace limestone, light grey, microcrystalline, soft, dense.
- 5360 - 5370 Shale, medium grey to greenish grey, non-calcareous, soft, blocky to splintery to flaky, slightly micaceous, trace pyrite.
- 5370 - 5380 Shale, as above, with trace calcareous, argillaceous, very fine grained, sandstone streaks, very micaceous.
- 5380 - 5410 Shale, as above, light to medium greenish grey, soft, blocky.
- 5410 - 5420 Shale, as above, trace crinoids, slight trace secondary brown calcite.
- 5420 - 5440 Shale, as above, gastropods.
- 5440 - 5450 Shale, as above, medium green to grey, soft, blocky, slightly micaceous, trace pyrite.
- 5450 - 5470 Shale, as above, blocky to splintery.
- 5470 - 5490 Shale, as above, with trace limestone, light to medium brown, very fine to fine crystalline, dense, soft, chalky in part.
- 5490 - 5520 Shale, medium grey to green to grey, soft, fossiliferous, as above.
- 5520 - 5540 Shale, medium grey, soft, blocky, as above.
- 5540 - 5550 Shale, as above, with trace limestone, medium grey, cryptocrystalline, dense.
- 5550 - 5560 Shale, medium grey, non-calcareous, soft, fissile, blocky to splintery to flaky to slightly micaceous, occasional pyrite.
- 5560 - 5570 Shale, as above, trace fracturing with clear calcite infill.
- 5570 - 5580 Shale, as above, trace slickensides,
- 5580 - 5610 Shale, as above, gastropods.
- 5610 - 5620 Shale, as above, trace sandstone stringers, very fine grained, calcareous, slightly argillaceous.
- 5620 - 5630 Shale, medium grey, fissile, soft, blocky, slightly micaceous, trace pyrite.

- 5630 - 5650 Shale, as above, blocky to splintery to trace secondary calcite.
- 5650 - 5670 Shale, as above, with trace limestone, light grey, micro-crystalline, dense.
- 5670 - 5680 Shale, as above, trace fracturing, infill with calcite.
- 5680 - 5710 Shale, medium grey, soft, blocky to splintery, slightly micaceous, trace pyrite.
- 5710 - 5720 Shale, as above, soft, slightly waxy in part.
- 5720 - 5750 Shale, with trace limestone, cream to light grey, micro-crystalline, soft.
- 5750 - 5760 Shale, medium to dark grey, blocky to splintery to slightly micaceous in part.
- 5760 - 5770 Shale, as above, predominately medium grey, soft, blocky.
- 5770 - 5800 Shale, as above, trace slickensides.
- 5800 - 5810 Shale, as above, medium grey, blocky to splintery, slightly micaceous, in part soft, waxy, trace pyrite.
- 5810 - 5820 Shale, as above.
- 5820 - 5830 Shale, as above, soft, trace fossiliferous fragments.
- 5830 - 5840 Shale, as above, trace pyrite.
- 5840 - 5860 Shale, as above, trace soft, dark grey shale.
- 5860 - 5870 Shale, as above, with trace soft, fissile, dark grey, shale.
- 5870 - 5880 Shale, as above, with shale, dark grey, streaky, soft, fissile, flaky.
- 5880 - 5890 Shale, as above, with shale, dark grey, streaked with black, as above.
- 5890 - 5900 Shale, dark grey, as above, slightly micaceous.
- BLACK SHALE 5906
- 5900 - 5910 Shale, medium to dark grey, as above.
- 5910 - 5920 Shale, dark grey to black, fissile, soft, waxy, bitumen in part, blocky, trace pyrite.
- 5920 - 5930 Shale, dark grey to black, fissile, bituminous in part, blocky, abundant cavings.
- 5930 - 5950 Shale, as above, (very poor sample - abundant cavings).
- 5950 - 5970 Trace shale, as above, predominately cavings.

- 5970 - 5990 Shale, black fissile, blocky, bituminous, trace pyrite.
- 5990 - 6000 Shale, as above, black, bituminous, calcareous, in part, blocky, pyrite, trace fracturing, infill with calcite.
- 6000 - 6010 Shale, black, bituminous, calcareous, pyrite, as above, with trace limestone, tan, very fine crystalline, soft, pyrite, as thin stringers in shale.
- 6010 - 6040 Shale, as above, with limestone, cryptocrystalline, light to medium brown, chalky in part, dense, with trace clear crystalline calcite & pyrobitumen, vuggy, and fracturing.
- SLAVE POINT 6018
fillings, trace medium brown, fine to medium crystalline, limestones with pyrobitumen infill, intercrystalline, pore spaces, sublithographic in part, trace stylolites, lined with pyrobitumen, fair amount fracturing, vugs either completely filled or lined with clear crystalline calcite and pyrobitumen.
- 6040 - 6042 Core #1 - see core descriptions (Page 3)
- 6042 - 6092 Core #2 - see core descriptions (Page 3)
- 6092 - 6100 Limestone, crypto to microcrystalline, light to medium brown, dense, trace pelietoidal limestone, chalky in part, trace stylolite.
- 6100 - 6110 Limestone, as above, tight.
- 6110 - 6120 Limestone, as above, abundant, clear secondary calcite, trace pyrite.
- 6120 - 6130 Limestone, light to medium grey to brown, crypto to microcrystalline, dense, trace pellets, trace stylolites, secondary clear crystalline, calcite blebs, chalky in part with bituminous partings.
- 6130 - 6140 Limestone, as above abundant secondary calcite.
- 6140 - 6160 Limestone, crypto to microcrystalline, tight, as above.
- 6160 - 6170 Limestone, as above, abundant stylolites lined with carbonate, trace pyrite.
- 6170 - 6180 Limestone, light to medium grey to brown, chalky, tan in part, crypto to microcrystalline, slightly vitreous, dense, trace stylolites, fractures.
- 6180 - 6200 Limestone, as above, predominately medium brown, crypto-crystalline, vitreous, dense, fairly highly fractured.
- 6200 - 6210 Limestone, as above, with trace light grey limestone, cryptocrystalline, argillaceous, dense.

- 6210 - 6220 Limestone, tan, chalky, to medium grey to brown, crypto-crystalline, trace pyrite, dense, with trace shale, dark grey, blocky, slightly calcareous, (after trip).
- 6220 - 6230 Limestone, as above, with trace shale, (abundant cavings).
- 6230 - 6240 Limestone, crypto to very fine crystalline, light grey to light brown, cream, chalky in part, dense, soft, re-crystallized in part, abundant secondary calcite.
- 6240 - 6250 Limestone, predominately, cryptocrystalline, light grey to dark brown, dense, vitreous, fracturing, cream to tan, chalky in part.
- 6250 - 6260 Limestone, as above, dense, light to dark brown, fractured, trace stylolites and pyrite.
- 6260 - 6270 Limestone, tan, chalky as above, to light grey to brown, very fine to fine crystalline, dense, minor dark brown limestone, trace bituminous partings, pyrite.
- 6270 - 6280 Limestone, as above, with trace black, calcareous, blocky to flaky shale.
- 6280 - 6290 Limestone, as above, with trace shale, as above, and limestone, cryptocrystalline, dark brown to black, dense, argillaceous in part, trace pyrite.
- 6290 - 6300 Limestone, as above, with light brown to dark brown, argillaceous, chalky limestone, trace dark brown bituminous partings.
- 6300 - 6310 Limestone, medium to dark grey to brown, crypto to very fine crystalline, chalky in part, suc. in part, trace pin point porosity, dark brown bituminous partings, brachiopods, crinoids, texture.
- 6310 - 6320 Limestone, as above, tan chalky in part to black, bituminous, calcareous, shale partings.
- 6320 - 6330 Limestone, as above, trace stylolites, trace pyrite.
- 6330 - 6340 Limestone, predominately medium brown to dark grey, crypto to microcrystalline, argillaceous chalky in part, dense, with trace brachiopods and crinoids.
- 6340 - 6370 Limestone, as above, trace crinoids and pyrite.
- 6370 - 6380 Limestone, as above, with tan, chalky limestone.
- 6380 - 6390 Limestone, cream to tan, micro to very fine crystalline, dense, chalky in part, soft, trace secondary clear crystalline, calcite, pyrite.
- 6390 - 6400 Limestone, as above, fine crystalline in part, abundant secondary clear crystalline, calcite.
- 6400 - 6410 Limestone, as above, trace pyrite.

- 6410 - 6420 Limestone, as above cream to tan, clean, micro to very fine crystalline, abundant secondary clear crystalline, calcite, chalky in part, trace fractures, tight.
- 6420 - 6430 Limestone, light to dark brown, crypto to very fine crystalline, cream, chalky in part, dense, fine, tight, trace pyrite, black bituminous shale partings, trace spacing of calcite, blebs and fractures.
- 6430 - 6440 Limestone, as above, predominately medium to dark brown, cryptocrystalline, dense, vitreous, fracturing, slightly argillaceous.
- 6440 - 6450 Limestone, as above.
- 6450 - 6460 Limestone, as above, trace pyrite.
- 6460 - 6470 Limestone, as above, tan, chalky in bituminous partings, in part, trace pyrite, crinoids, bituminous partings.
- 6470 - 6480 Limestone, crypto to microcrystalline, medium to dark brown, dense, vitreous, slightly argillaceous, fractured with chalky, light grey to dark brownish grey, soft, limestone.
- 6480 - 6490 Limestone, as above, tan, very fine crystalline in part, slightly suc.
- 6490 - 6500 Limestone, predominately medium to dark brown, crypto to microcrystalline, dense, vitreous, granular to suc. fine crystalline, in part slightly argillaceous, with black bituminous shale partings, trace pyrite.
- 6500 - 6510 Limestone, brown to very dark brown, medium to very fine calcarenite, quite argillaceous, and fragments, pyrite, trace splintery calcite, bituminous zones, tight, with black bituminous shale.
- 6510 - 6520 Limestone, brown to very dark brown, as above, few fragments, fine to very fine calcarenite, appearing chalky, probably crushed by bitumen, tight.
- 6520 - 6530 Limestone, brown to very dark brown, as above, tight, may be coral fragments, few patches lime mud.
- 6530 - 6540 Limestone, as above, brown coarse to very fine calcarenite, pyrobitumen, material infill voids between grains, splintery calcite, abundant, trace crinoids and brachiopods, black shale partings.

- 6550 - 6560 Limestone, brown, as above, amphipora, brachiopods and stroms, fragments, tight, some very argillaceous, rich brachiopods, tight.
- 6560 - 6570 Limestone, brown as above, abundant brachiopod fragments, some very dark brown to black, very bituminous, tight.
- 6570 - 6580 Limestone, brown, as above, few stroms and brachiopods, some very bituminous, secondary splintery calcite infill voids, tight, scattered pyrobitumen.
- 6580 - 6590 Limestone, light brown, some very dark brown to black medium to very fine calcarenite, some very argillaceous, clean limestone, abundant pyrobitumen, pyrite, tight, brachiopods, splintery calcite.
- 6590 - 6600 Limestone, light brown to dirty white, as above, very clean, tight, much shale cavings, coarse to fine calcarenite, few coral fragments, pyrobitumen.
- 6600 - 6610 Limestone, light buff to dark brown, fine calcarenite, with splintery calcite, cement, dirty sample, abundant pyrobitumen, bit. styl, trace lime mud.
- 6610 - 6620 Limestone, as above, trace stroms. with abundant very dark brown to black bituminous limestone, and black bituminous shale, badly caved.
- 6620 - 6630 Limestone, black to very dark brown, very fine calcarenite, lime mud, poor sorting, appearing slightly rext. abundant crinoid debris, scattered brachiopods, tight, bituminous shale partings?
- 6630 - 6640 Limestone, black, as above, very crinoidal and bituminous partings, bituminous shale partings.
- 6640 - 6650 Limestone, very dark brown to black, as above, very argillaceous and bituminous, tight, numerous black bituminous shale partings.
- 6650 - 6660 Limestone, dark brown to black, as above, black, very argillaceous and bituminous, tight, abundant crinoid debris, tight, numerous black bituminous shale partings.
- 6660 - 6670 Limestone, dark brown, as above, trace black limestone, as above, with shale partings, tight, trace brachiopod debris.
- 6670 - 6680 Limestone, black to light brown, as above, light brown, slightly argillaceous, tight. - trace brachiopod fragments, trace pyrite.
- 6680 - 6690 Limestone, light brown, lime, silty mud, tight, slightly argillaceous, appears to be slightly recrystallized. some dark brown to black limestone as above.

ELK POINT DOLOMITE 6693

- 6690 - 6700 Dolomite, dirty white, to light grey to brown, slightly argillaceous, fine to very fine crystalline, scattered pyrobitumen, poor to fair vuggy intercrystalline porosity, poor oil stain.
- 6700 - 6710 Dolomite, as above, much appearance to be tight, some light brown, good pin point porosity, small quartz crystal.
- 6710 - 6720 Dolomite, as above, scattered poor porosity, no visible oil stain or cut.
- 6720 - 6730 Dolomite, dark grey to brown, trace dirty white, secondary, appearing recrystallized, dolomite, silt-mud, fine to very fine crystalline, slightly argillaceous, black bitumen partings, trace porosity.
- 6730 - 6740 Dolomite, as above, dirty grey to brown to light brown, light brown, fair to very fair dolomite, recrystallized to some degree, styl. black bituminous partings.
- 6740 - 6750 Dolomite, as above, some fine crystal, brown and white, secondary dolomite, appearing to be void filling, scattered fair vuggy porosity, poor porosity.
- 6750 - 6760 Dolomite, dark to light brown, as above, dolomite, arenaceous, slightly recrystallized, trace poor vuggy porosity, no oil stain or cut.
- 6760 - 6770 Dolomite, light to dark brown, dark brown, slightly argillaceous, dolomite, silty to mud, slightly recrystallized, fine to very fine crystalline, scattered bituminous shale partings.
- 6770 - 6780 Dolomite, light to dark grey to brown, as above, appearing mostly recrystallized, tight.
- 6780 - 6790 Dolomite, light brown to dark greyish brown, as above, dolomite, silty to muddy, recrystallized, tight.
- 6790 - 6800 Dolomite, light brown to dark greyish brown, as above, tight, some light greenish grey, shale partings.

PRE MIDDLE DEVONIAN DETRITAL 6806

- 6800 - 6810 Dolomite, as above, some very fine sandstone to siltstone, light greyish green, very fine sandstone to siltstone, slightly limy, very argillaceous, tight, micaceous.
- 6810 - 6820 Shale, light greenish grey, slightly limy, micaceous, soft, to splintery, trace silt to light greenish grey, slightly limy, poor sorting, argillaceous Anhpol.
- 6820 - 6830 Shale, Anh and Siltstone, as above, dolomite, light buff, dolomite, silty to muddy, trace pyrite, tight primary

dolomite, pres. above.

6830 - 6840 Dolomite, with trace anhydrite, as above, shale, dark greenish grey, micromicaceous, very slightly limy, lumpy.

QUARTZITE 6840

6840 - 6850 Dolomite, as above, with quartz, translucent, medium to very fine sandstone, fair sorting, subangular to subrounded, siliceous, cement, tight.

GRANITE WASH 6861

6850 - 6860 quartzite, as above, slightly pinkish, color field fragments.

6860 - 6870 Granite wash pink (flesh), medium to very fine quartz, decayed feld. and large micro fragments, tight.

6870 - 6874 Granite wash as above, some badly weathered granite, drilling break 6872'.

PRECAMBRIAN 6873

TOTAL DEPTH 6874'

Section III - ENGINEERING SUMMARY(a) Report of Drillstem Tests

DST #1 - 6689 - 6720 - VO 120 mins. SI 30 mins. Fair initial puff, increasing to strong in 10 mins. Steady throughout test. No gas to surface. Rec. 200' salt water cut mud, 150' mud cut salt water, 5020' sulphurous salt water. (120,000 ppm Cl) IHP 3500; ISIP 2655; IFP 1061; FFP 2662; PSIP 2676; PHP 3377.

(b) Casing Record

20" conductor pipe @ 40' with 50 sac.
13-3/8" @ 1190' with 1075 sac cement plus 2% CaCl₂.

(c) Bit Record

<u>Run No.</u>	<u>Size</u>	<u>Type</u>	<u>Depth Out</u>	<u>Feet</u>	<u>Hours</u>
1A	17-1/2	OSC3	421	421	20-1/4
2A	17-1/2	OSC3	672	251	18-3/4
3A	12-1/4	OSC3	1190	518	20
1	17-1/2	C.P. Reamer	1115	443	14
1A	17-1/2	OSC3	1190	75	2-1/2
1	8-3/4	DT	2044	854	13-1/4
2	8-3/4	DT	2873	829	14-1/4
3	8-3/4	DT	3408	535	12-1/4
4	8-3/4	YT3	3544	136	4-1/2
5	8-3/4	OSC1G	3774	231	10-1/2
6	8-3/4	OSC1G	4134	362	11-1/2
7	8-3/4	DT2G	4529	399	13-3/4
8	8-3/4	DT2G	4778	249	11-1/4
9	8-3/4	DT	4965	187	10-1/4
10	8-3/4	OSC3	5598	633	16-1/2
11	8-3/4	OSC3	5983	385	16
12	8-3/4	OSC3	6040	57	5
13	8-3/4	S6			
14	8-3/4	OWV	6227	135	16-3/4
15	8-3/4	M4N	6438	211	17-1/4
16	8-3/4	M4N	6599	161	14-3/4
17	8-3/4	YM	6720	121	14-1/4
18	8-3/4	YH	6799	79	10-3/4
19	8-3/4	OWL	6845	46	8-1/2
20	8-3/4	YH	6858	13	4-3/4
21	8-3/4	YH	6871	13	4
22	8-3/4	YH	6874	3	2-1/4

(d) Mud Report

<u>Type</u>	<u>Amount</u>
Gel	1144 sax
Drescose	2650 lbs.
quebracho	110 sax
Caustic	24 cans
Si-Carb	10 sax
Ante Gyp	58 sax

(e) Deviation Record

<u>Depth</u>	<u>Deviation (°)</u>
60	1/2
395	3/4
421	1
450	7/8
480	1/4
512	1/2
575	1/2
608	7/8
638	3/4
667	3/4
697	1/8
756	1/8
815	0
870	1/4
930	1/8
990	0
1050	1/2
1082	0
1142	3/4
1172	1/2
1698	1/4
2245	3/4
2742	1/2
2873	3/4
3174	1/4
3406	1/8
3544	1/4
3775	1/4
4139	1/8
4529	1/2
4965	1-1/2
5060	1-3/4

<u>Depth</u>	<u>Deviation (°)</u>
5550	2-1/2
5598	2-1/2
5719	1-3/4
5983	1-1/2
6227	1-3/4
6438	1-3/4
6599	3/4
6845	1/2

(f) Abandonment Plugs

- 1 - 6874 - 6610 with 140 sax plus 0.1% HR-12. Felt at 6543'.
 - 2 - 6060 - 5960 with 55 sax plus 0.1% HR-12. No feel.
 - 3 - 3210 - 3110 with 100 sax. Felt at 3082'.
 - 4 - 1140 - 1240 with 100 sax. Felt at 1126'.
- Cut off casing bowl, spot 5 sax cement,
weld on plate.

(g) Lost Circulation Zones

None.

(h) Report of Blowouts

None.

Section IV - LOGS

<u>Type</u>	<u>Date</u>	<u>Interval</u>	<u>Run No.</u>
Gamma Sonic Caliper	4-29-62	1190-6848	1
Induction Electric	4-28-62	1190-6870	1

Section V - ANALYSIS(a) Core Analysis

None.

(b) Water Analysis

DST #1 - 6689 - 6720

(c) Gas Analysis

None.

(d) Oil Analysis

None.

Section VI - CONCLUSION SUMMARY

(a) Tubing Record

None.

(b) Perforation Record

None.

(c) Cementation Record

1. 6874-6810 w/140 sx plus 0.1% HR-12. Felt at 6845' - 5-3-62 (Elk Point)
2. 6060-5960 w/55 sax plus 0.1% HR-12. No feel - 5-3-62 (Slave Point)
3. 3210-3110 w/100 sx. Felt at 3082' - 5-4-62 - (2nd Limestone)
4. 1140-1240 w/100 sx. Felt at 1126. - 5-4-62 - (Cretaceous)
Cut off casing bowl, spot 5 sx cement, weld on plate.

(d) Acidization and Fracturing Record

None.

(e) Back Pressure and Production Tests

None.

SUBMITTED BY

N. A. Meyers

APPROVED BY

G. F. Stansberry, Prof. Geologist (Alta.)

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton

Fort St. John

Calgary

WATER ANALYSIS REPORT

Field N.W.T. Well No. Pan Am Home C.S.P. et al N. Island River 0-12

Operator Pan American Petroleum Corporation Date Received May 18, 1962

Formation Elk Point Depth 6689 - 6720

Other pertinent data Location: Unit 0 Section 12, Grid 60°30' N, 121°00' W, D.S.T. = 1. K.B. 1761, Grd. 1747.6. IHP 3500 psi, ISIP 2655 psi., IFP 1061 psi., FFP 2662 psi., FSIP 2676, FHP 3377. Recovered 200 feet salt water cut mud, 180 feet mud cut salt water, 5020 sulphurous salt water. Bottom sample. Date May 24, 1962 Lab. No. E19534-3 No gas to surface.

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO ₄	Cl	CO ₂	HCO ₃	OH	H ₂ S
53,188	19,071	1,897		123	121,004		390		

MILLIGRAM EQUIVALENTS

2313.70	951.64	155.93		2.56	3412.31		6.40		
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MILLIGRAM EQUIVALENTS IN PERCENT

33.81	13.91	2.28		0.04	49.87		0.09		
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Total Solids in Parts per Million

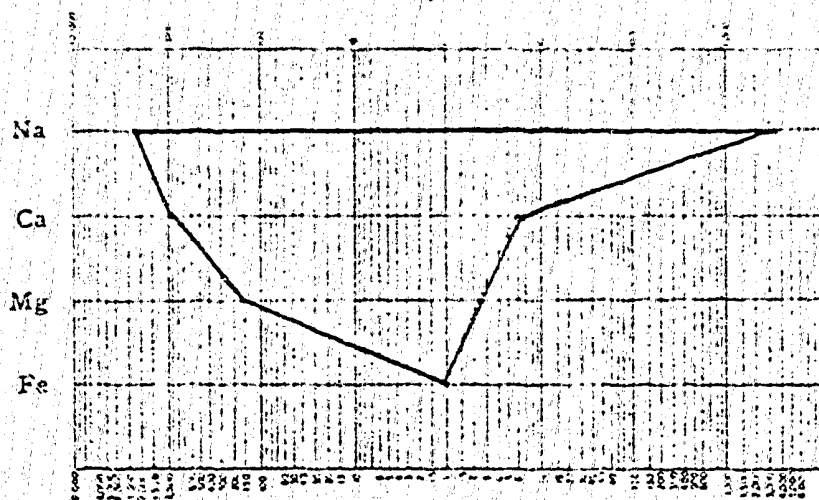
By evaporation	220,260
After ignition	187,120
Calculated	195,475
Specific Gravity	1.132
Observed pH	7.2
Resistivity	0.055 ohm meters @ 68° F.

Properties of Reaction in Percent

Primary salinity	67.62
Secondary salinity	32.20
Primary alkalinity	---
Secondary alkalinity	0.18
Chloride salinity	99.92
Sulfate salinity	0.08

Remarks and conclusions The general characteristics indicate this sample to be a formation water. There were two samples from the top and middle sampling points. Chloride content determinations were made on each. E19534-1 Top sample. Chloride content 47,970 and 48460 P.P.M.. E19534-2 Middle sample. Chloride content: 118,070 and 118,650 P.P.M..

LOGARITHMIC PATTERN MEQ per unit



DIST:

F. H. Allen
L. E. Elkins
E. J. Barge
H. A. Baker ✓
S. B. Richards (2)
Dept. of Northern
Affairs (3)
(1) Signal Oil & Gas Co.
Home Oil Co. (8)
File (2)

JOHNSTON TESTERS

TEST DATA									
Formation	Elk Point	Zone Thickness	Fr. Elevation						
Interval	6689	To 6720	TD	6720	Bottom Hole Choke Size 1/2"				
Type of Test	Open Hole				Fluid Cushion Type				
Time Started in Hole	1045	Mins	Tool Open	1407	Mins	Amount			
First Flow	3	Min	Shut In	30	Min	TOOL SEQUENCE			
Second Flow	120	Min	Final Shut In	30	Min	Tool	Length	O.D.	
Pulled Loose @	1730	Mins	Out of Hole	2200	Mins	Sub.		.70	
Wt. Set on Packer	28,000	Pulled Loose Wt. 50,000				PO Sub.		.84	
Remarks	Tool was chased 5 feet during test period.					Sub.		.74	
Description of Blow During Test Strong blow throughout test.						D.P. Sub.		.84	
						SIT		6.05	
						Hyd. Tool		8.37	
						Jars		4.11	
						Recorder		5.06	
GAS BLOW MEASUREMENTS						Safety Jr.		1.75	
						TC & Pkr.		7.11	
						TC & Pkr.		5.10	
						Total		40.67	
						Stub		1.25	
Measured with	I.D. Rider or Est.				Perf.		23.33		
Type of Instrument					Recorder		5.50		
Time	Size Choke	Reading Inches	Cubic Feet Day		B.N.		.75		
					Total Intv.		30.83		
FLUID RECOVERY									
Was Test Reverse Circulated Yes ☐ No ☒									
Fluid Recovered Total	5400		Fr.		Total Length	71.50			
Description of Fluid Recovered	200' of salt water cut mud.				MUD AND HOLE DATA				
	180' of muddy salt water.				Mud Type	Gel	V/L	5.9	
	5020' of salty sulphurous salt water.				Filter Cake	2/32	Visc	120	
					Time Taken				
Remarks	Test Satisfactory.				Contractor	Peter Bawden Drilling			
					Rig No	8			
					Drill Pipe Size	4 1/2 FH			
					Drill Collar Size	2 1/2 ID length 180'			
					Main Hole Size	8 3/4			
					Rat Hole Size				
Co. Rep.	G. W. Blinn				Ticket No.	B5782			
	G. Fenton				Date	April 25/62			
District	Peace River				Address	10180-102 Street, Edmonton, Alberta			
Company	Pan American Petroleum Corp.				Test No.	1			
Well Name	Pan Am et al Island River A-1				J.T. Test No.	1			
Number	#60°-30'N-121°-00'W DST #1				Field	Wildcat			
Formation	Elk Point-6689-6720				Province	N.W.T.			
and Interval					Consultant				
Distribution of Reports 17-Calgary									

JOHNSTON TESTERS

Pressure Data

Test Ticket No. 85782

Barometer	T-49	T-18		
Barometer	7000	7000		
Barometer	6672	6714		
Barometer	2420	2420		
Barometer	3500#	3514#		
Barometer	8694	1143#		
Barometer	2655#	2678#		
Barometer	1061#	1141#		
Barometer	2662#	2678#		
Barometer	2676#	2694#		
Barometer	3377#	3392#		

T-49 - Inside Recorder

T-18 - Outside Recorder

Pressure Breakdown Data

April 25, 1962

Ten Ticket No. 35782

7-49

Capacity 7000

Recorder Depth: 8671

Clock travel _____ inches per min.

Well Temperature 242 F

Going

	Pressure
Initial Hydrostatic	3500#
First Initial Flow	869#
Initial Shut-in Pres	2655#
Flowing Pres	1061#
Final Flow	2562#
Final Shut-in	26876#
Final Hydrostatic	3377#

	Time Given	Time Computed
Opened Tool _____	1407 _____ M.	
First Flow _____	3 _____ Mins.	_____ Mins.
Initial Shut-In _____	30 _____ Mins.	_____ Mins.
Flow _____	120 _____ Mins.	_____ Mins.
Final Shut-In _____	30 _____ Mins.	_____ Mins.

PRESSURE INCREMENTS

Initial Shut-in

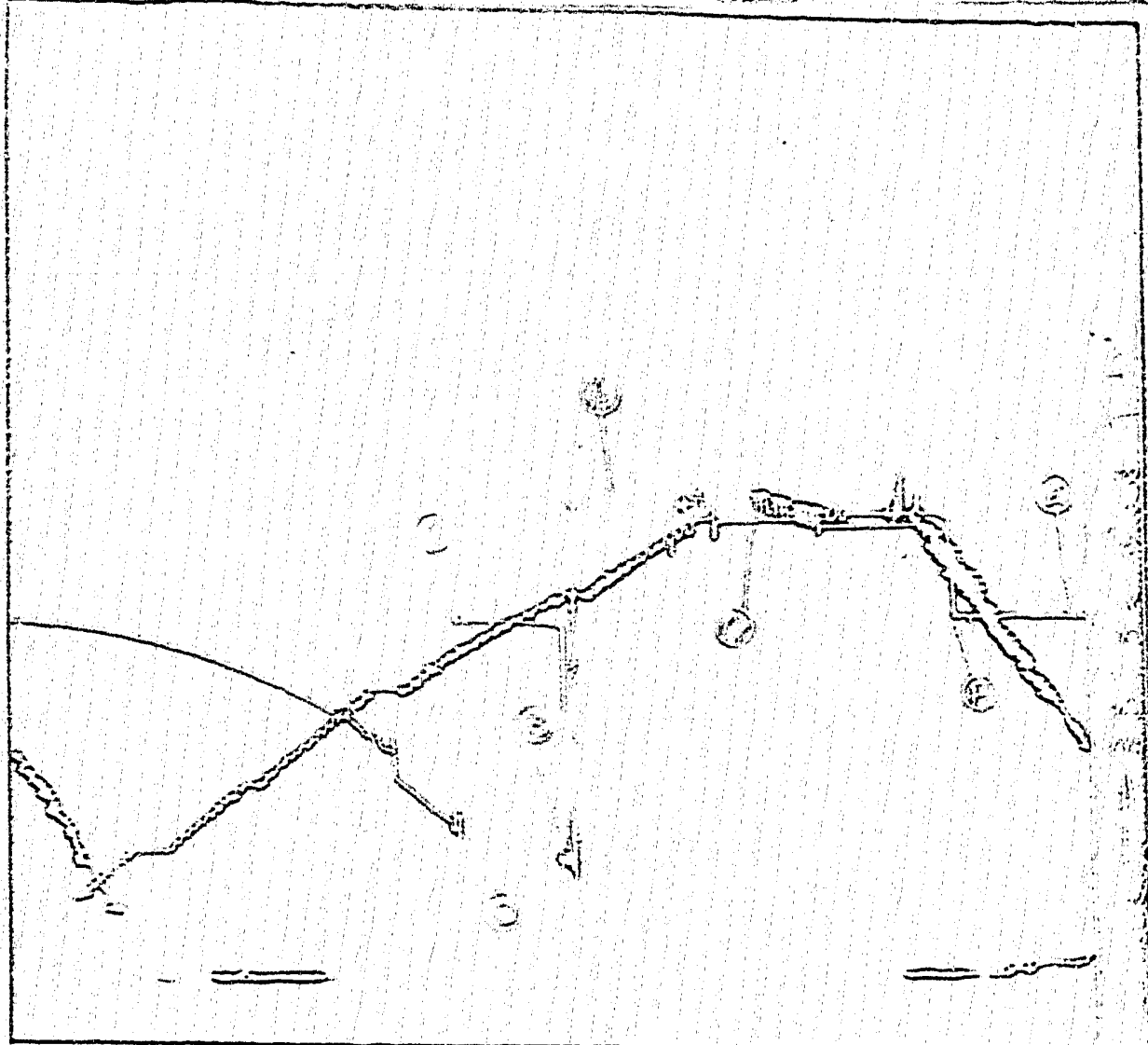
Shutdown 6 increments
 of 5 mins. and a final
 increment of mins.

Final Shut-in

Breakdown: 6 increments
of 5 mins. and a final
increment of mins.

Breakdown: _____ increments
of _____ mins. and a final
increment of _____ mins.

[illegible]



JOHNSTON TESTERS

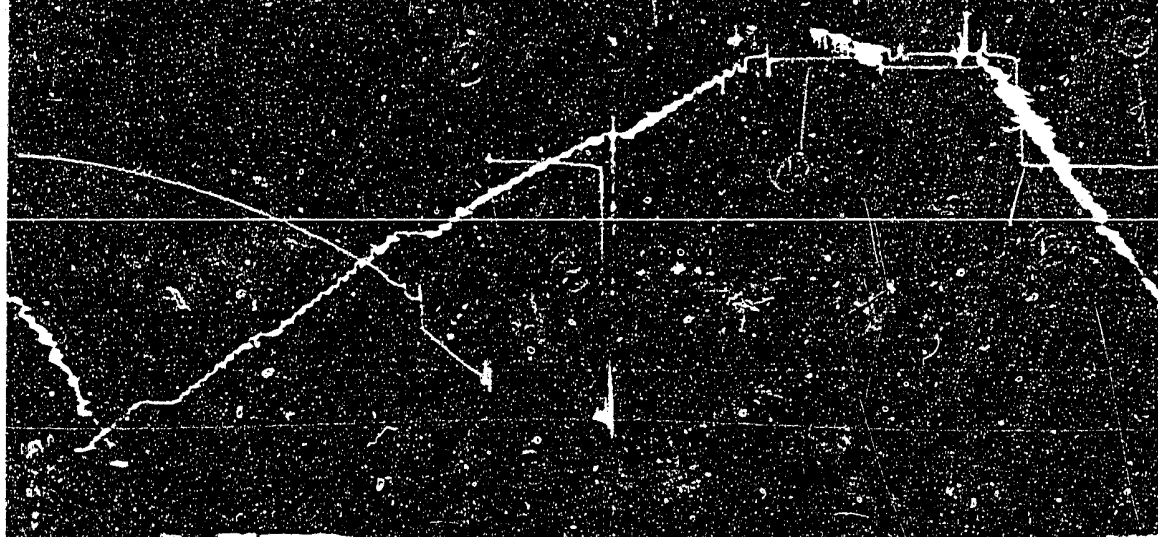
TECHNICAL REPORT

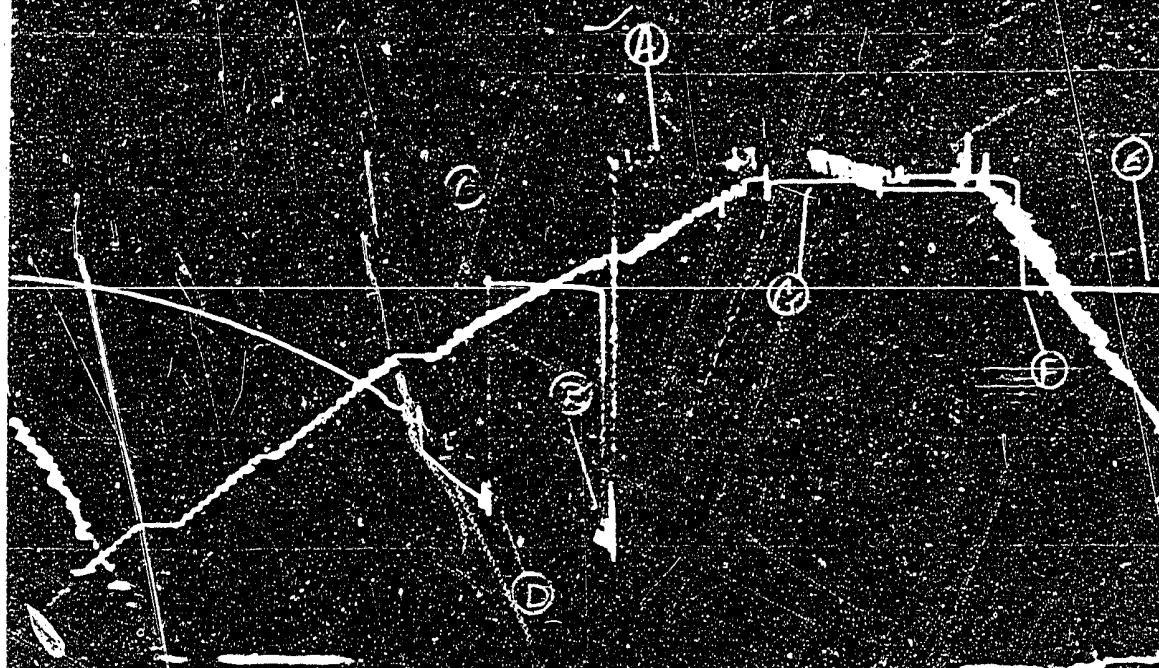
Nath Island River

Pan American Petroleum Corp.
Pan Am et al Island River A-1
#60°-30'N-121°-00'W DST #1
Elk Point-6689-6720

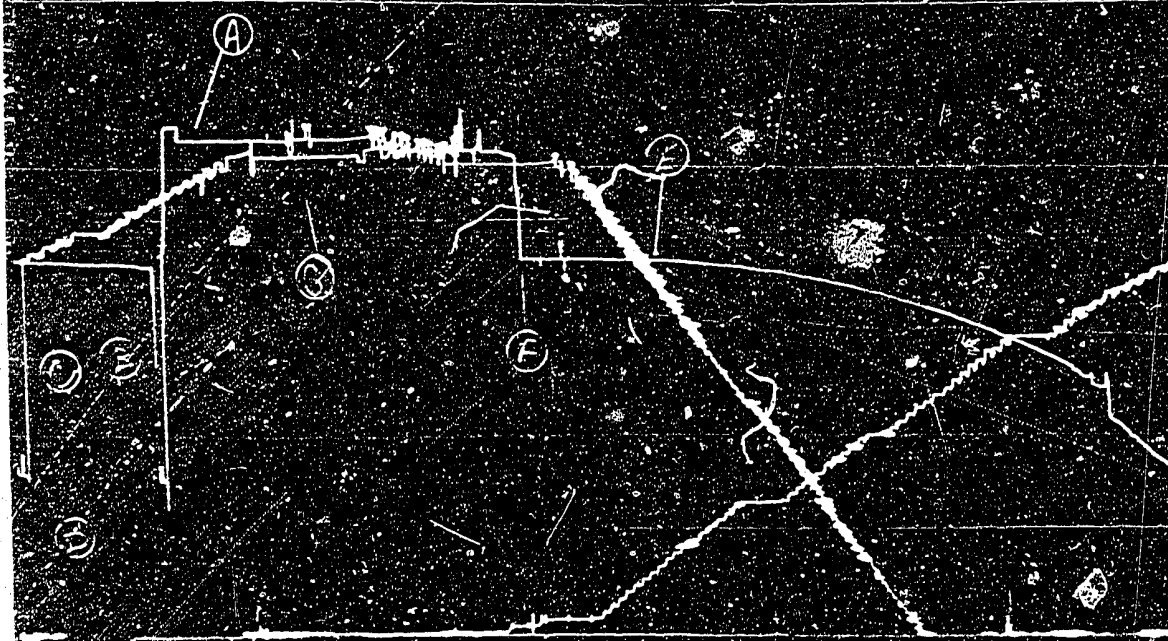
JOHNSTON TESTERS

TEST DATA					
Formation	Elk Point	Cone Thickness		Pipe Size	
No.	8689	6720	ID	6720	Borehole Seal Chain Size 1/2"
Type of Test	Open Hole				Fluid Cushion Type
Date Started	1945	Meters Open	1407	Fits Around	
Rig No.	3	Min. Spacing	30	Max.	
Drill Pipe Flow	120	Flow Rate	30	Tool	TOOL SEQUENCE
Weight of Mud	1710	Cost of Work	2200	Sub.	.70
Total Cost	28,000	Estimated Value	50,000	PO Sub.	.85
Total was chased 5 feet during test period.				Sub.	.75
				D.P. Sub.	.85
				SIT	6.05
				Hyd. Tool	8.37
				Jars	4.11
				Recorder	5.06
				Safety Jt.	1.75
				TC & Pkr.	7.11
				TC & Pkr.	5.10
				Total	40.67
				Stub.	1.25
				Perf.	23.33
				Recorder	5.50
				B.N.	.75
				Total Intv.	30.83
GAS BLOW MEASUREMENTS					
Gas Pressure at Well Head					
Water Pressure at Well Head					
Time Interval Between Readings					
Remarks					
Strong blow throughout test.					
FLUID RECOVERY					
Was Test Reverse Circulated? Yes ☐ No ☒					
Fluid Recovered - Total		5400	F:		Total Length 71.50
Description of Fluid Recovered		200' of salt water cut mud. 180' of muddy salt water. 5020' of salty sulphurous salt water.	MUD AND HOLE DATA		
			Mud Type Gel	V/L	5.9
			Filter Cake 2/32 Vols	120	V/L 10.1
			Time Taken		
			Contractor Peter Bowden Drilling		
			Rig No. 3		
Remarks Test Satisfactory.		Drill Pipe Size 4 1/2 FH			
		Drill Collar Size 2 1/2 ID length 180'			
		Main Hole Size 8 3/4			
		Rot Hole Size			
Co. Rep G. W. Blinn	Tester G. Fenton	Ticket No. B5782	Date April 25/62		
District Peace River	Company Pan American Petroleum Corp.	Address 10180-102 Street, Edmonton, Alberta			
Well Name Pan Am et al Island River A-1	Test No. 1	J.L.T. No. 1			
Number #60°-30'N-121°-00'W DST #1	Field Wildcat	Province N.W.T.			
Formation Elk Point-8689-6720	Consultant				
Drill Interval					
Description of Reports	17-Calgary				





35782 Rev. 118



35782 Rev. 118

JOHNSTON TESTERS

Pressure Data

BS782

	T-49	T-10		
	7000	7000		
	6671	6714		
	2420	2420		
	3500#	3514#		
	8694	1143#		
	2655#	2678#		
	1061#	1141#		
	2662#	2678#		
	2676#	2694#		
	3377#	3392#		

T-49 - Inside Recorder

T-10 - Outside Recorder

W. C. C. 131

File No. 6 B5782

Copies: 7000

Recorder: Dean 6671

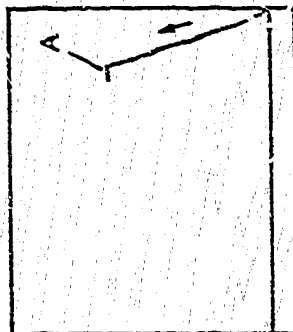
Clock No. _____ Clock Time: _____ inches per min. Wet Temperature 242°

	Time Given	Time Computed
Operate Tool	1407 M	
First Flow	3 Mins	Mins
Initial Shut-in	30 Mins	Mins
Flow	120 Mins	Mins
Final Shut-in	30 Mins	Mins

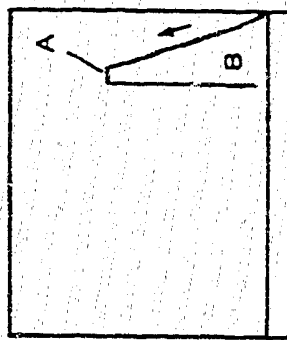
2000

[illegible]

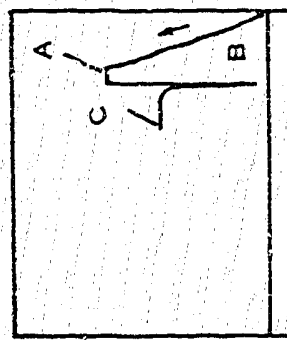
GUIDE TO INTERPRETATION AND IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



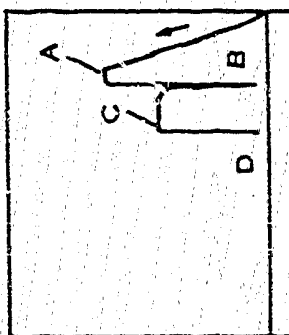
The pressure chart records the buildup of hydrostatic pressure as the testing assembly is lowered into the hole. Upon reaching the testing depth the hydrostatic head or pressure of mud column is recorded.



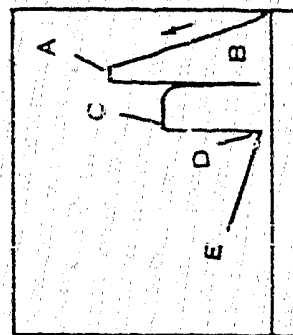
The packer is expanded and set to isolate the test zone. When the test valve is opened, a pressure drop is indicated on the pressure chart. This pressure drop is caused by removal of the hydrostatic mud pressure from the formation, allowing the formation to produce.



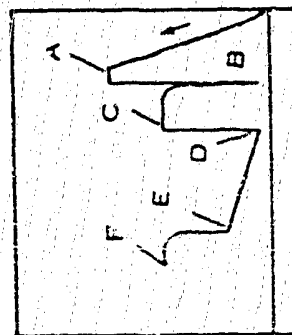
This chart shows the initial shut-in pressure. There is one mechanical method commonly used to obtain this pressure. A 4 stage shut-in tool that is run in the open position and rotated closed when the desired amount of initial flow time is obtained. This initial shut-in pressure is the best method yet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



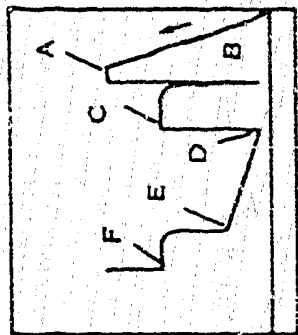
The chart indicates a pressure drop. The test tool has been opened to the surface by rotating the 4 stage shut-in tool into the open position. Permitting the open formation to produce.



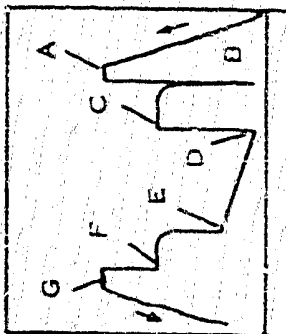
The pressure of fluid flowing from the formation into the well bore, through the perforated anchor, and into the drill pipe, is recorded on the chart.



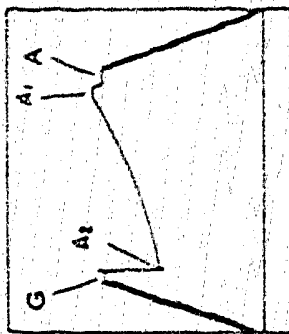
The final shut-in pressure is taken by stopping the flow of formation fluid into the drill pipe. While the characteristic build-up curve. The well bore pressure is approaching equilibrium with the static reservoir pressure. When the shut-in curve levels off the static reservoir pressure has been reached.



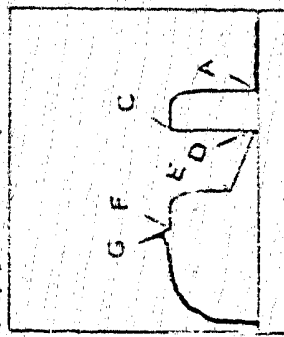
The chart shows the equalizing. The upper part have been opened permitting the drilling fluid to flow through the packer to the test zone. Thus, pressure is equalized above and below the packer. The equalization of the pressures facilitates easier removal of the packer from the packer seat.



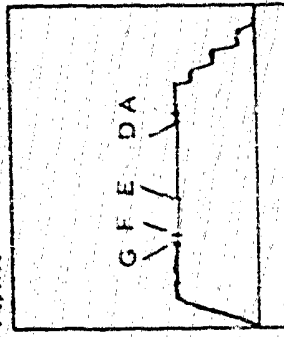
The packer has been created. The testing assembly is being removed from the hole.



This is a typical illustration of a chart from a recorder that is run below the bottom packer on a conventional mudgauge test. Only the hydrostatic mud pressure is recorded. When the tool is opened the pressure is equalized across the bottom packer. This differential action is recorded by the chart line of the testing element which is run across a draw down in pressure. If the bottom packer is closed reads the same as a chart that is run to bottom. The packer has failed if it occurs, at times below the top packer or being failed.



In this case a recorder has been run in an air chamber. The hydrostatic mud pressure is not influencing the recorder as a pump is coming out of the hole due to the mud testing valve being closed. The flow pressure and shut in pressure are recorded while the mud testing valve is opened.



In this case a recorder has been run above the mud testing valve with a fixed carbon steel in the drill pipe. No pressure is recorded at the testing tool. Being removed along the hole. Then the fixed carbon pressure is recorded at the drill pipe is filled with fluid. At this point the mud testing valve is opened. The recorder reads the hydrostatic pressure of the mud column. When the mud testing valve is opened the pressure of the carbon column in 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 testings, (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.

PAN AM HOME DEP BT AL A-1 N. ISLAND R. 0-12

May 11, 1962

FINAL REPORT

T.D. 6,874' - Dry and abandoned

Rig released 5th May 1962

Plug #1	-	6,874'-6,610'	with 140 sacks.	Top @ 6,543'
Plug #2	-	6,060'-5,960'	" 55 "	No feel.
Plug #3	-	3,210'-3,110'	" 100 "	Top @ 3,082'
Plug #4	-	1,240'-1,140'	" 100 "	Top @ 1,126'

Cut off casing and welded on plate with riser and
well-name plate.

LEASE NAME Four Arm Island G.S.P. N. Island WELL NO. 4-1 FIELD U. N. C.

FIRST TOUR FROM _____ M. TO _____ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
1200	8:10	Topsoil	0.0		Found lignite down 50 ft. and old casing head & mud on slaty c/w river & well same slate.
					Clear out mud tanks
			6874		
			6875		

DAYWORK: HOURS 9 hrs. RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
								DRILLER'S SIGNATURE		

SECOND TOUR FROM _____ M. TO _____ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	11:00	Leaving rig			Formal cleaning out mud tank. Tank and water pump & clean pump
					Key down track
					@ 12:01 P. 55-62
					Key released

DAYWORK	HOURS	HOURS	RATE	HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KYND
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
								DRILLER'S SIGNATURE		

THIRD TOUR FROM _____ M. TO _____ M.

[illegible]

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

[illegible]

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CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME Peter Sander Drilling 24 HOUR PERIOD ENDING AT MIDNIGHT MAY 4 1962
 LEASE NAME Low Amherst CSDA Toluca P. Sec. WELL NO. D-1 FIELD N.W.T.

FIRST TOUR FROM 12⁰⁰ 2 M. TO 2⁰⁰ A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	12 ³⁰	11.0.1			FINISH Pulling up to 2002
12 ³⁰	1 ¹⁵	11.0.1			Run P.L.C. #3 (1200-2100) w/ 100 ft. C.C. = 11.0.1
					Down C.L.S. 11.0.1 (5-4-62)
1 ¹⁵	2 ⁰⁰	11.0.1			11.0.1. Log down Drill Pipe.

DAYWORK: HOURS 8 RATE 1.00 HOURS 8 RATE 1.00 HOURS W/D PIPE 8

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND

SECOND TOUR FROM 2⁰⁰ M. TO 4⁰⁰ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
2 ⁰⁰	6 ³⁰	W.O.C.	6874		Waiting to find plug #3.
6 ³⁰	7 ⁰⁰	1st plug			Run in 6874 - 1st plug #3 @ 3062.
7 ⁰⁰	10 ⁰⁰	1st plug			Pull up to 1200 to run plug #4
10 ⁰⁰	10 ⁴⁵	1st plug			Run plug #4 1200-1140 w/ 150' of 11.0.1 cement
					2nd plug. Plug down @ 10:45 A.M.
10 ⁴⁵	4 ⁰⁰	W.O.C.			Wait on cement - log down drill pipe

DAYWORK: HOURS 8 RATE 1.00 HOURS 8 RATE 1.00 HOURS W/D PIPE 8

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND

THIRD TOUR FROM 4⁰⁰ P.M. TO 12⁰⁰ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4 ⁰⁰	6 ⁰⁰	W.O.C.			Wait to find plug #4 - log down drill pipe
6 ⁰⁰	6 ¹⁵	Run in			Run in 6 ⁰⁰ 1st plug #4 @ 1126.
6 ¹⁵	12 ⁰⁰	1st plug			Log down drill pipe - run in 11.0.1

DAYWORK: HOURS 8 RATE 1.00 HOURS 8 RATE 1.00 HOURS W/D PIPE 8

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND

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CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME Peter R. DeWitt 24 HOUR PERIOD ENDING AT MIDNIGHT MAY 3 1962
LEASE NAME PAN Am. Offshore OSPA Island Ref. WELL NO. A-1 FIELD N.W. I

FIRST TOUR FROM 12⁰⁰ 13 M. TO 6⁰⁰ 12 M.

[illegible]

SECOND TOUR FROM _____ M. TO _____ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.				
FROM	TO		FROM	TO					
8:00	9:00	Circ			Circ - went to cement Ran Plug # 1 @ 6610 - 6874 w/ 140 bit & .130 HR12 Plug down @ 2000 f.m. W.O.C.				
1:00	2:00	Cement							
2:00	4:00								
DAYWORK: HOURS <u>8</u>		RATE <u>\$12.00 per hour</u>		HOURS <u>3</u> RATE <u>\$3.00</u> HOURS W/D PIPE <u>8</u>					
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF				
							6 men crew DRILLER'S SIGNATURE <u>J. Mayes</u>		

THIRD TOUR FROM 4.00 M. TO 12.00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.				
FROM	TO		FROM	TO					
4:00	9:30	W.O.C.			W.O.C.				
9:30	10:00	Pull			Pull Tell Plug #1 to 6543				
10:00	11:15	Trip			Pull to 6060				
11:15	12:00				Ran Plug #2 6060 - 5960 w/ 55 lbs Inland Cement + .190 HRIZ Fine down @ 7:45				
					Pulling up to Run Plug #3				
DAYWORK: HOURS		RATE		HOURS	RATE	HOURS W/D PIPE			
8				8		8			
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF		5 man Crew		
							DRILLER'S SIGNATURE Tony Livingston		

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CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME Peter B. De. Drilling 24 HOUR PERIOD ENDING AT MIDNIGHT May 2 1962
LEASE NAME Pan Am Home CSPN T-land Rider WELL NO. A-1 FIELD N.W.T.

FIRST TOUR FROM _____ M. TO _____ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	12 ¹⁵	3 min			R.L. Seals
12 ¹⁵	4 ⁰⁰	1.5 min			Round Trip to Run Cementing SHEET.
4 ⁰⁰	8 ⁰⁰	4 min			Once down to Cement.
T.D. 6874 Stand by w/crow					

DAYWORK: HOURS 8 RATE Full HOURS _____ RATE _____ HOURS W/D PIPE 8

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		1 ⁰⁰	10 ⁰	120	26	1/2	9.		
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF				
				6845	1/2		DRILLER'S SIGNATURE		

SECOND TOUR FROM _____ M. TO _____ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	4 ⁰⁰	CIRK			CIRK waiting to Cement
T.D. 6874 Stand by w/crow					

DAYWORK: HOURS 8 RATE Full HOURS _____ RATE _____ HOURS W/D PIPE 8

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
			101	120	2	1/2			
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF				
				6845	1/2		DRILLER'S SIGNATURE		

THIRD TOUR FROM 4⁰⁰ P.M. TO 12⁰⁰ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4 ⁰⁰	12 ⁰⁰	CIRK			CIRK waiting to Cement
T.D. 6874 Stand by w/crow					

DAYWORK: HOURS 8 RATE Full HOURS _____ RATE _____ HOURS W/D PIPE 8

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF				
				6845	1/2		DRILLER'S SIGNATURE		

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CONTRACTOR'S REPRESENTATIVE

FIRST TOUR FROM 1200 M. TO 200 M.

SECOND TOUR FROM 8:00 A.M. TO 7:00 P.M.

THIRD TOUR FROM 4.00 P.M. TO 12.00 M.

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FIRST TOUR FROM 12:00 M. TO 2:00 M.

DAYWORK: HOURS 8 RATE 10.00 HOURS RATE HOURS W/D PIPE 3

SECOND TOUR FROM 8:00 M. TO 12 P. M.

DAYWORK	HOURS	RATE	HOURS	RATE	HOURS W/D PIPE
	8	12.00			

THIRD TOUR FROM 4:00 P. M. TO 12:00 M.

DAYWORK: HOURS 8 RATE 1.25 HOURS 1 RATE 1.25 HOURS W/D PIPE 0

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COPIES OF THE REPORT

FIRST TOUR FROM _____ M. TO _____ M.

DAYWORK: HOURS 5 RATE \$40 HOURS 1 RATE 1 HOURS W/D PIPE 1

SECOND TOUR FROM 8:00 M. TO 4:00 M.

DAYWORK	HOURS	RATE	HOURS	RATE	HOURS W/D PIPE

THIRD TOUR FROM _____ M. TO _____ M.

DAYWORK: HOURS 9 RATE \$41 HOURS x RATE x HOURS W/D PIPE x

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CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 2 CONTRACTOR'S NAME P. J. Bo. Dr. Co. 24 HOUR PERIOD ENDING AT MIDNIGHT April 28 1962
 LEASE NAME P. J. Bo. Dr. Co. P. J. Bo. Dr. Co. WELL NO. 0-1 FIELD A. W. T.

FIRST TOUR FROM 12:00 M. TO 5:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12:00	1:00	Drill	1022	6878	Drill 8 3/4 Hole
1:00	2:00	Run			Run to hole
2:00	3:00	Trig.			Trig. to hole

DAYWORK: HOURS 9 RATE 4.8 HOURS 7 RATE 7 HOURS W/D PIPE 9

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
		1:00	10	115	6.7	1/2	7	21	8 3/4	YH. # 015322
		5:00	10	120	6.8	1/2	9			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
		1000		6845		1/2		5 MAN CREW		
								DRILLER'S SIGNATURE <u>W. J. Bo. Dr. Co.</u>		

SECOND TOUR FROM 5:00 M. TO 12:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
5:00	6:00	Trig.			Trig. to hole
6:00	7:00	Run			Run to hole
7:00	8:00	Trig.			Trig. to hole
8:00	9:00	Run			Run to hole
9:00	10:00	Trig.			Trig. to hole
10:00	11:00	Run			Run to hole
11:00	12:00	Trig.			Trig. to hole

DAYWORK: HOURS 9 RATE 4.8 HOURS 7 RATE 7 HOURS W/D PIPE 5 3/4

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
1:00	Run	2:00	10	120	6.5	1/2	25	22	8 3/4	YH. # 015375
2:00	Run	4:00	10	115	6.8	1/2	9			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
				6845		1/2		6 MAN CREW		
								DRILLER'S SIGNATURE <u>E. J. Bo. Dr. Co.</u>		

THIRD TOUR FROM 12:00 M. TO 12:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	6:00	House			House Bit # 22
6:00	7:00	Run			Run to hole
7:00	8:00	Run			Run to hole
8:00	9:00	House			House to hole
9:00	12:00	Log			Logging w/ SPINNING GEAR

DAYWORK: HOURS 8 RATE 4.8 HOURS 7 RATE 7 HOURS W/D PIPE 5 3/4

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
		1:00								
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
				6845		1/2		5 MAN CREW		
								DRILLER'S SIGNATURE <u>W. J. Bo. Dr. Co.</u>		

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CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR NAME Baker Bros. Drilling Co. Ltd. 24 HOUR PERIOD ENDING AT MIDNIGHT April 27 1942
LEASE NAME Barren Hill CSP# 1st & 2nd WELL NO. 6-1 FIELD N.W.T.

FIRST TOUR FROM 12.00 M. TO 8.00 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12-00	12-15	Service			Reg Service
12-15	4-15	Drill	6825	6845	Drill 8 3/4" Hole.
4-15	4-45	Survey			Dropped Survey
4-45	8-00	Trip			Trip for new bit.

DAYWORK: HOURS	8	RATE	\$11	HOURS	7	RATE	*	HOURS W/D PIPE	5
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DAYWORK - HOURS									
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
1500#	Barium Carbonate	12:30	100	200	6.7	1/2	8.5	20	83 1/2" CWL # 7093
150#	QX	4:00	100	200	6.5	3/32	8.5	20	87 1/2" YH # 912151
50	Driscore	DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
	Conductor			5845		1/2		5 Man Crew	
								DRILLER'S SIGNATURE Tom Cunningham	

SECOND TOUR FROM 600 A. M. TO 1 P. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	8 ⁰⁰	Scuba			Rk - Se. J. c. chert BOP's.
8 ⁴⁵	9 ³⁰	Rk. 1000			Rk. 1000 D.W.L.S.
9 ³⁰	11 ⁰⁰	T.R.O.			Rk. 1000 B.L. 20
11 ⁰⁰	11 ³⁰	Rk. 1000			Rk. 1000 chert BOP's
11 ³⁰	12 ⁰⁰	Drill	6245	6250	Drill 8 3/4 H.L.E.
		T.D	6257		

DAYWORK	HOURS	RATE	HOURS	RATE	HOURS W/D PIPE
					6.72

DAYWORK - HOURS		RATE									
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.D.	BIT NO.	SIZE	KIND	
200	Caustic	1-10	100	160	6.5	3/32	9.0	15	8 1/4	YH. 5000 900 51	
1000	Barium Carbonate	5-00	100	130	6.5	4/32	9.0				
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF				
		EAS. 1000			6295		1/2		6 mm. CR 2		
									DRILLER'S SIGNATURE E. S. 11/10/50		

THIRD TOUR FROM 2:30 M. TO 4:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	4:30	DRILL	4857	4858	DRILL 5 7/8" HOLE
4:30	4:45	LOG			LOG SAMPLE
4:45	5:00	LOG SER			LOG SER.
5:00	5:40	HOIST			HOIST FID 1314
5:40	10:00	RUN IN			RUN IN
10:00	17:00	DRILL	4853	4866	DRILL 5 7/8" HOLE

DAYWORK: HOURS 8 RATE \$11 HOURS 1 RATE 1 HOURS W/D PRE 8

DAYWORK: HOURS										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
		11:00	4.0	40	6.4	3.5	5.5	51	1 1/2	414 #11.227
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
					6545		1.0	5' 4" (P.H.W.)		
								DRILLER'S SIGNATURE J. M. [Signature]		

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PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME Peter Burdick Drilling Co. 24 HOUR PERIOD ENDING AT MIDNIGHT April 26 1962
 LEASE NAME From the Home CSPM Island River WELL NO. 13-1 FIELD N. 10. T.

FIRST TOUR FROM 12:00 M. TO 8:00 A. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12:00	12:15	Service			Rig Service
12:15	2:00	Trips			Grip in w/ Bit # 18
2:00	2:30	Ream	6709	6720	Clear 11 feet to Btm.
2:30	8:00	Drill	6720	6765	Drill 8 3/4" Hole

DAYWORK: HOURS 9 RATE del HOURS 2 RATE X HOURS W/D PIPE 9

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
1300#	Grk.	3:20	100	155	5.5	3/2	25	18	3 3/4	1/4 # 015357
50#	Grain	7:00	100	109	6.7	3/2	8.5			
100#	Grain	DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
200#	Grk.			6599		3/4		5 Year Crew		
500#	Bicarb.							DRILLER'S SIGNATURE Tom Cunningham		

SECOND TOUR FROM 8:00 A. M. TO 4:00 P. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	8:15	Service			Rig Service
8:15	1:00	Drill	6765	6796	Drill 8 3/4" Hole
1:00	1:30	Ream			Work on Pump
1:30	2:00	Drill	6796	6797	Drill 8 3/4" Hole
2:00	4:00	Ream			Ream to Bit # 18

DAYWORK: HOURS 8 RATE del HOURS 2 RATE X HOURS W/D PIPE 9

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
700 ^{lb}	Grk.	9:00	10'	150	6.0	3/2	25	18	3 3/4	1/2 # 015339
50 ^{lb}	Grain	2:00	10'	140	6.3	3/2	21			
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
		F-100			6500		3/4		6 on 1000 size w/.	
									DRILLER'S SIGNATURE P. L. Hutto	

THIRD TOUR FROM 4:00 P. M. TO 12:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	4:15	Host	6799		Host 15' 4 1/2"
4:15	5:30	Run Ser.			Run Ser.
5:30	7:30	Run In			Run In
7:30	12:00	Drill		6825	Drill 8 3/4" Hole

DAYWORK: HOURS 8 RATE del HOURS 2 RATE X HOURS W/D PIPE 9 1/4

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
1000 #	Grk.	9:55	10.0	150	7.0	3/2	5.6	18	5 3/4	CWK # 7093
50 #	Grk.	11:15	10.0	140	7.5	3/2	5.0			
300 #	Grk.	DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
					1.99		3/4"	S. HANN CREW		
								DRILLER'S SIGNATURE <u>P. L. Hutto</u>		

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PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME Perry Bros. Drilling Co. Ltd. 24 HOUR PERIOD ENDING AT MIDNIGHT April 25 1962
LEASE NAME Pan. Am. Pipe Line Co. Deland River WELL NO. A-1 FIELD N.W.T.
FIRST TOUR FROM 1200 M. TO 800 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12-00	12-15	Service			Rig Service
12-15	4-00	Drill	6689	6720	Drill 8 ³ / _{16"} Hole
4-00	7-00	Circ.			Circ. To Test
7-00	8-00	Weip			Pullout to Run Drill Stem test

DAYWORK: HOURS 9 RATE 21 HOURS 7 RATE 7 HOURS W/D PIPE 9

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH	BIT NO.	SIZE	KIND
		12-30	101	124	6-1	7-2	8-5	17	8 3/4	Y.M.# 914990
		9-15	10-1	126	5-9	7-2	8-5			
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
					6599		30		5 Man Crew	
									DRILLER'S SIGNATURE Tom Cunningham	

SECOND TOUR FROM 8⁰⁰ A M. TO 4⁰⁰ P M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	9 ⁰⁰	Drill			Drill to 125'
9 ⁰⁰	10 ⁵⁰	Misc			Put up 4 more up Packer
10 ⁰⁰	1 ⁰⁰	Drill			Run in at Packer & DST #1 6699-6720
1 ⁰⁰	4 ⁰⁰	Testing			Test 1st. ELV PT DOG OVER BOTTOM HOLE
					Initial SIZING FAIR (initial BUD) INCREASE TO
					D.S.T. / STAKE WITHIN 10 MINS REMAIN
		T.D. 6720			STARTING TO END OF TEST TO 2 hrs SIZING

DAY WORK: HOURS 8 RATE 2.17 HOURS 2 RATE 2.17 HOURS W/D PIPE 2.17

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		<i>Rec 200' salty water at mud</i>						<i>180' mud salt water 5030' salt</i>	
		<i>sulfur water 151 2640 IN 3550</i>						<i>IF HQ EF 270 SI 290 FH 3500</i>	
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF		BHT 242	
		<i>CORRECTION 15.97</i>		<i>NA</i>				<i>CMAN CREW</i>	
								DRILLER'S SIGNATURE <i>F. S. Hendrix</i>	

THIRD TOUR FROM 1002 M. TO 1303 M.

[illegible]

DAYWORK: HOURS 2 RATE \$11 HOURS 4 RATE ✓ HOURS W/D PIPE 6

[illegible]

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PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME Peter Bauder, Dalg Ltd. 24 HOUR PERIOD
ENDING AT MIDNIGHT April 24 1962
LEASE NAME Pan Am. Home CSPN Island River WELL NO. A-1 FIELD N.W.T.

FIRST TOUR FROM 12.00 M. TO 8.00 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12-00	12-15	Service			Rig Service
12-15	7-00	Drill	6528	6599	Drill 8 3/4" Hole
7-00	7-30	Survey			Dropped on Trip
7-30	8-00	Traps			Traps for new bit

DAYWORK: HOURS 9 RATE \$11 HOURS x RATE x HOURS x RATE x HOURS x RATE x

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	RH	BIT NO.	SIZE	HOURS W/D PIPE	KIND
600#	Nel	13:30	100	124	6.4	732	8.0	16	8 3/4"	MAN # 572325	
Boon #	Artigump	6:00	10.1	120	6.0	732	8.0				
50#	Dried bar										
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF					
					6438	174°					
					6599	74					
								DRILLER'S SIGNATURE			

SECOND TOUR FROM 8:00 M. TO 4:00 P.

[illegible][illegible]

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS	F.L. LOSS	CAKE	R.D.	BIT NO.	SIZE	HOURS W/D PIPE	KIND
600 [#]	M.H.	2 nd	10'	190	.55	7/8"	S-	17	8 1/4	ydr SE #91A-70	
500 [#]	Business Card	3 rd	10'	120	L	7/8"	S-				
100 [#]	Cumulative	DEVIATION INSTRUMENT		DEPTH		DIGREES OFF					
200 [#]	G.X.	F.M.S. survey		63 ft		9 1/4		6 mm m.m. CRFD.			
								DRILLER'S SIGNATURE F.J. H.T.			

THIRD TOUR FROM 400 M. TO 1200 M.

[illegible]

DAYWORK: HOURS		£	RATE	shl	HOURS	£	RATE	£	HOURS W.D. BIRT	£
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QUANTITY		MUD MATERIAL ADDED		TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
500#	BA	CL		5:00	10.0	110	2.0	3/32	2.5	17	5 3/4	1/4" x 9 1/4" 90
800#	GEL			9:00	10.0	120		3/32	8.5			
				DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
						1.99		3/4°		5' 10" HAN PIPE		
										DRILLER'S SIGNATURE		

APPROVED [Signature]
PAN AMERICAN REPRESENTATIVE

APPROVED _____
CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR NAME Porter Bowden Drilling Ltd. 24 HOUR PERIOD ENDING AT MIDNIGHT April 23 1962
 LEASE NAME Pan Am. Home C.S.M. Island River WELL NO. A1 FIELD N.W.T.
 FIRST TOUR FROM 1200 M. TO 8.00 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.				
FROM	TO		FROM	TO					
12.00	1.15	Drill	6381		Drill 8 3/4" Hole				
1.15	1.30	Service			Re Service				
1.30	8.00	Drill	6427		Drill 8 3/4" Hole				
DAYWORK: HOURS <u>8</u> RATE <u>July</u> HOURS _____ RATE _____ HOURS W/D PIPE <u>8</u>									
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		12.45	100	105	5.1	732	8.5	15	8 3/4 MAN #569819
		8.50	100	126	5.0	732	8.5		
DEVIATION INSTRUMENT			DEPTH		DEGREES OFF				
			6227		1 3/4				
			5 Man Crew						
			DRILLER'S SIGNATURE <u>Tom Cunningham</u>						

SECOND TOUR FROM 8:00 A.M. TO 4:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.					
FROM	TO		FROM	TO						
8 ⁰⁰	8 ¹⁵	Drill	6427	6438	Drill 8 ³ / ₄ Hole.					
8 ¹⁵	9 ¹⁵	Survey			Take Survey					
9 ¹⁵	10 ³⁰	Misc			Work TIGHT Hole @ 6218 @ 6078 @ 5948					
10 ³⁰	12 ⁰⁰	Trap			Hole 1 Bit # 15					
12 ⁰⁰	12 ⁴⁵	Service			B.G. Service & Check B.P.'s					
12 ⁴⁵	1 ¹⁵	Misc			Ship & cut 32' Drilling sub. 3 ⁰⁰ -3 ³⁰ (Break C. & C. clean 15')					
1 ¹⁵	3 ⁰⁰	Trap	T.O. 6441		Run in of Bit # 16 (3 ⁰⁰ -4 ⁰⁰) Drill 8 ³ / ₄ Hole.					
DAYWORK: HOURS <u>8</u> RATE <u>July</u> HOURS _____ RATE _____ HOURS W/D PIPE <u>7¹/₄</u>										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
		8 ³⁰	10	97	6.6	732	8.	15	8 ³ / ₄	MAN SER# 569819
								16	"	MAN SER# 572325
			DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
			East man		6438		1 ³ / ₄		6 man crew	
									DRILLER'S SIGNATURE E. L. Hedges.	

THIRD TOUR FROM 4:00 P.M. TO 12:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.					
FROM	TO		FROM	TO						
4 ⁰⁰	4 ¹⁵	RIG SER.	6441		RIG SER.					
4 ¹⁵	5 ⁰⁰	DRILL			DRILL 8 3/4" HOLE					
5 ⁰⁰	5 ¹⁵	MISC.			WORK ON C-360					
5 ¹⁵	12 ⁰⁰	DRILL	6528		DRILL 8 3/4" HOLE					
DAYWORK: HOURS <u>8</u> RATE <u>July</u> HOURS _____ RATE _____ HOURS W/D PIPE <u>8</u>										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
1200 [#]	GEL	5 ⁰⁰	10.8	99	6.4	732	8.0	16	8 3/4	MAN #372325
200 [#]	Q-X	11 ⁰⁰	10.9	103	6.4	732	8.5			
100 [#]	CAUSTIC	DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
100 [#]	PRISCOSE			6438		1 3/4°		5 MAN CREW		
1000 [#]	Ba. Gum							DRILLER'S SIGNATURE <u>L. Hedges</u>		

APPROVED [Signature] PAN AMERICAN REPRESENTATIVE

APPROVED [Signature] CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

FORM O-19 1-60

RIG NUMBER 8 CONTRACTOR'S NAME Proctor & Co. Inc. 24 HOUR PERIOD ENDING AT MIDNIGHT April 23 1962
 LEASE NAME Proctor & Co. Inc. C-57N 1st 1st WELL NO. A1 FIELD N.W. Te

FIRST TOUR FROM 12:00 M. TO 8:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12:00	1:15	Drill	6332		Drill 8 3/4" Hole
1:15	1:30	Service			Run Service
1:30	8:00	Drill	6427		Drill 8 3/4" Hole

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		12:45	100	105	5.1	7/32	3.5	15	8 3/4 MAN #569819
		2:30	100	185	5.0	7/32	3.5		
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF		DRILLER'S SIGNATURE		
				6227	1 3/4		5 Man Crew J. Cunningham		

SECOND TOUR FROM 8:00 P.M. TO 4:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	8:45	Drill	6427	6450	Drill 6 3/4" Hole
8:45	7:15	Service			Run Service
7:15	11:00	Drill			Drill 6 3/4" Hole
11:00	12:30	Service			Run Service
12:30	1:00	Drill			Drill 6 3/4" Hole
1:00	1:30	Service			Run Service
1:30	1:45	Drill			Drill 6 3/4" Hole
1:45	1:55	Service			Run Service
1:55	2:00	Drill			Drill 6 3/4" Hole

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		8:50	10	77	6.6	7/32	6	15	MAN 5575218
								16	MAN 5575218
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF		DRILLER'S SIGNATURE		
				6450	1 1/4		5 Man Crew J. Cunningham		

THIRD TOUR FROM 4:00 P.M. TO 12:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	4:15	Drill	6450		Drill 8 3/4" Hole
4:15	5:00	Service			Run Service
5:00	5:30	Drill			Drill 8 3/4" Hole
5:30	12:00	Drill			Drill 8 3/4" Hole

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
1200	GFL	5:00	11.4	77	6.9	7/32	5.5	16	MAN 5572323
100	G-8	11:00	11.7	113	6.9	7/32	5.5		
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF		DRILLER'S SIGNATURE		
				1435	1 3/4		5 Man Crew J. Cunningham		

APPROVED _____ PAN AMERICAN REPRESENTATIVE

APPROVED _____ CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACT NAME Pan American Borden Dely Ltd. 24 HOUR PERIOD ENDING AT MIDNIGHT April 23 1962
LEASE NAME Pan Am. Home CSPN Island River WELL NO. A-1 FIELD N.W.T.
FIRST TOUR FROM 12:00 M. TO 8:00 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.					
FROM	TO		FROM	TO						
12.00	2.00	Drill	6190		Drill 8 3/4" Hole					
2.00	2.15	Service			Rig Service					
2.15	8.00	Drill	6298		Drill 8 3/4" Hole					
DAYWORK: HOURS <u>8</u> RATE <u>\$44</u> HOURS <u>8</u> RATE <u></u> HOURS W/D PIPE <u>8</u>										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
600#	Gel	12.30	10.0	113	7.0	7.2	8.0	14	8 3/4	DWJ # 8057
100#	Driscoll	7.00	10.0	115	7.0		8.0			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
				5983		1 1/2		5 Man Crew		
								DRILLER'S SIGNATURE <u>Tom Cunningham</u>		

SECOND TOUR FROM 8:00 A M. TO 4:00 P M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.					
FROM	TO		FROM	TO						
8 ⁰⁰	8 ¹⁵	Drill	6229	6227	Drill 8 ³ / ₄ " Hole					
8 ¹⁵	8 ⁴⁵	Survey	6227		Take Survey					
8 ⁴⁵	11 ⁰⁰	Trip			Hoist Bit # 14					
11 ⁰⁰	11 ¹⁵	Service			R.G. Service check 20'ls					
11 ¹⁵	1 ³⁰	Trip			Run in Beam Bridge @ 5947					
1 ³⁰	3 ¹⁵	Cleanout			Clean out 50' FILL.					
3 ¹⁵	4 ⁰⁰	Drill	6227	6239	Drill 8 ³ / ₄ " Hole.					
DAYWORK: HOURS <u>8</u> RATE <u>\$44</u> HOURS <u>8</u> RATE <u></u> HOURS W/D PIPE <u>8</u>										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
	T.D. 6234.	8 ⁰⁰	10'	120	6	4 1/2	8.	14	8 ³ / ₄	DWJ SEA # 8057
		2 ³⁰	10'	110	6	3 1/2	8.	15	8 ³ / ₄	MAN SEA # 56981?
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
		EASIMAN		6227		1 ³ / ₄		5 Man Crew.		
								DRILLER'S SIGNATURE C. L. Mathis		

THIRD TOUR FROM 4:00 PM. TO 12:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.					
FROM	TO		FROM	TO						
4 ⁵²	5 ⁴⁵	DRILL	6234		DRILL 8 3/4" HOLE					
5 ⁴⁵	6 ⁰⁰	RIG SET			RIG SET					
6 ⁰⁰	12 ⁰⁰	DRILL	6332		DRILL 8 3/4" HOLE					
DAYWORK: HOURS <u>8</u> RATE <u>\$44</u> HOURS <u>8</u> RATE <u></u> HOURS W/D PIPE <u>8</u>										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
800 #	GEL	5 ⁰⁰	10.0	107	6.2	3/32		15	MAN	8 3/4" # 8057
100 #	DRISCOE (REG)	11 ⁰⁰	10.0	103	5.6	3/32				
100 #	CASSTIC	DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
200 #	Q-X				5983		1 1/2		5 MAN CREW	
					6234		1 3/4		DRILLER'S SIGNATURE <u>L. Majean</u>	

APPROVED

PAN AMERICAN REPRESENTATIVE

APPROVED

CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME Pan American Drilling Ltd. 24 HOUR PERIOD ENDING AT MIDNIGHT April 22, 1962
 LEASE NAME Pan Am. Home C.S.P. Island River WELL NO. 7-1 FIELD Maracaibo

FIRST TOUR FROM 12:00 M. TO 8:00 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12:00	1:00	Drill	6140		Drill 8 3/4" Hole
2:00	2:15	Leaving			Rig Service
2:15	8:00	Drill	6248		Drill 8 3/4" Hole

DAYWORK: HOURS		RATE		HOURS		RATE		HOURS W/D PIPE		
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH	BIT NO.	SIZE	KIND
600#	Gel	12:30	10.0	113	7.0	7.2	8.0	14	8 3/4	OWY # 8057
100#	Driscoll	7:00	10.0	115	7.0		8.0			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
				5983		1 1/2		5 man crew		
								DRILLER'S SIGNATURE <i>For casing run</i>		

SECOND TOUR FROM 2:00 P.M. TO 4:00 P.M.

SECOND TOUR FROM 5 M. 15

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	2 ¹⁵	Drill	6229	1227	Drill 8 ³ / ₄ " Hole
2 ¹⁵	6 ⁰⁰	Leaving	6229		Leaving
6 ⁴⁵	11 ⁰⁰	Drill			Drill 8 ³ / ₄ " Hole
11 ⁰⁰	11 ¹⁵	Leaving			Leaving
11 ¹⁵	1 ³⁰	Drill			Drill 8 ³ / ₄ " Hole
1 ³⁰	2 ¹⁵	Leaving			Leaving
2 ¹⁵	4 ⁰⁰	Drill	6229	6234	Drill 8 ³ / ₄ " Hole

DAYWORK: HOURS		RATE		HOURS		RATE		HOURS W/D PIPE		
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH	BIT NO.	SIZE	KIND
600#	Gel	2:00	10.0	120	6.0	7.2	8.0	14	8 ³ / ₄ "	Drill 8 ³ / ₄ " 8057
100#	Driscoll	2:30	10.0	110	6.0	7.2	8.0	15	8 ³ / ₄ "	MAN 8 ³ / ₄ " 56757
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
		FMS		6229		1 ³ / ₄ "		5 man crew		
								Driller's Signature: E. J. White		

THIRD TOUR FROM 4:00 P.M. TO 12:00 M.

THIRD TOUR FROM 4 MI. 10

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
1 ⁰⁰	5 ⁰⁰	DRILL	1234		DRILL 5 3/4" HOLE
5 ⁰⁰	6 ⁰⁰	RIG SET			RIG SET
6 ⁰⁰	12 ⁰⁰	DRILL	1332		DRILL 5 3/4" HOLE

DAYWORK: HOURS		RATE		HOURS		RATE		HOURS W/D PIPE		
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH.	BIT NO.	SIZE	KIND
500"	GEL	5 ⁰⁰	11.0	117	1.2	7 1/2		15	MAN 3 3/4" "	# 8057
100"	DRISCOLL (1.1%)	11 ⁰⁰	11.0	103	5.6	7 1/2				
100"	CEMENT									
200"	G-X									
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
					5753		1 1/2		5 MAN CREW	
					6234		1 3/4		DRILLER'S SIGNATURE L. M. J. [Signature]	

APPROVED

PAN AMERICAN REPRESENTATIVE

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CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME PIER & SUNDEN DRILLING 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 21 1962
 LEASE NAME PAN AM HOME CORP ISLAND RIVER WELL NO. A-1 FIELD N.W. 1.

FIRST TOUR FROM 12⁰⁰ M. TO 8⁰⁰ A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.					
FROM	TO		FROM	TO						
1200	800	CORE	6044	6086	Core # 2. Mud used by Peter Sunden drilling while on footage Sed 882 #4. Service 150 #. R-X - 3150 #. Cement 140 #. Buccinatus of beds 500 #.					
DAYWORK: HOURS 8		RATE 244		HOURS W/D PIPE 8						
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
150 #	DRISCOSE	100.	9.9	155	6.0	3/32	8.5	10	6 1/16	CHRT # EC-10103
		700	9.9	148	6.6	3/32	8.5			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
				5983		1 1/2°		5 MAN CREW		
								DRILLER'S SIGNATURE L. Mayan		

SECOND TOUR FROM 8⁰⁰ A.M. TO 4⁰⁰ P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	9:00	Coning	6086	6092	Cut 4 Core #2
9:00	11:45	Trips			Pull out w/ Core.
11:45	12:45	Ream			Reamer Core & lay down Core into Club Box.
12:45	2:30	Trips			Trips in w/ 8 3/4" Bit.
2:30	4:00	Ream	6040	6048	Reaming Bit hole to 8 3/4" hole.

DAYWORK: HOURS	8	RATE	244	HOURS		RATE		HOURS W/D PIPE	7
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QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
	Core #2							10	6 1/16	CHRT # EC
	6042-92	3:30	100	150				14	8 3/4	OWV # 8057
	REC'D 100%	DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
				5983		1 1/2		DRILLER'S SIGNATURE		

THIRD TOUR FROM 4⁰⁰ P.M. TO 12⁰⁰ P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.						
FROM	TO		FROM	TO							
4 ⁰⁰	4 ¹⁵	SERVICE			R.C SERVICE.						
4 ¹⁵	7 ¹⁵	Ream	6048	6092	Ream 6 1/2" RATHOLE TO 8 3/4" HOLE.						
7 ¹⁵	9 ⁴⁵	DRILL	6092	6117	DRILL 8 3/4" HOLE.						
9 ⁴⁵	10 ¹⁵	REPAIR			REPAIR RATHOLE CHAIN						
10 ¹⁵	12 ⁰⁰	DRILL	6117	6140	DRILL 8 3/4" HOLE.						
DAYWORK: HOURS		8	RATE	244	HOURS	RATE	HOURS W/D PIPE	8			
QUANTITY	MUD MATERIAL ADDED		TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
2300 #	GEL		500	99	90	6.4	3/32	8.0	14	8 3/4	OWV SER # 8057
100 #	DRISCOSE REG.		1100	100	115	6.0	3/32	8.0			
100 #	CASUAL		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
300 #	Q X		EASIMAN		5983		1 1/2		5 MAN CREW		
								DRILLER'S SIGNATURE		E. S. Hedges.	

APPROVED

L. P. Fontaine
PAN AMERICAN REPRESENTATIVE

APPROVED

E. S. Hedges
CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER E CONTRACTOR'S NAME REED L. S. JONES DRILLING 24 HOUR PERIOD ENDING AT MIDNIGHT 11-21-62
 LEASE NAME San Jose Alamos Coal Field, Rio Grande WELL NO. 11 FIELD N.M.

FIRST TOUR FROM 12 M. TO 5 P. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	

DAYWORK: HOURS RATE HOURS RATE HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
100"	DRILLING FLUID	1:00	2.9	155	6.0	1/2-85	10	1 1/4	CHISEL "11-1113"
		7:00	2.9	155	6.6	1/2-85			

SECOND TOUR FROM 8:00 A. M. TO 4:00 P. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	9:00	Coning	6086	6092	Cut & Core #2
9:00	11:45	Trips			Pull out w/ Core.
11:45	12:45	Trips			Recover Core & Run down core block & check 200'
12:45	2:30	Trips			Trips in w/ 8 3/4" Bit
2:30	4:00	Run	6040	6048	Running Bit hole to 8 3/4" hole.

DAYWORK: HOURS RATE HOURS RATE HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
	Core #2						10	6 1/4	CHISEL # 80
	6042-92	3:30	100	150			14	8 3/4	ONV # 8057
	Rec'd 100%								

THIRD TOUR FROM 4:00 P. M. TO 12:00 P. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	4:15	Seal			R.C. Seal
4:15	7:15	Run	6042	6092	Run 6 1/4" hole to 8 3/4" hole.
7:15	9:15	Drill	6092	6117	Drill 8 3/4" hole.
9:15	10:15	Run			Run 8 3/4" hole
10:15	12:00	Drill	6117	6140	Drill 8 3/4" hole.

DAYWORK: HOURS RATE HOURS RATE HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
2320"	C.F.L.	5:00	99	90	6.4	1/2-80	14	8 3/4	ONV S.C. # 8057
100"	DRILLING FLUID	11:00	100	115	6.0	1/2-80			
100"	CHISEL								
300"	G.T.								

APPROVED

L. P. Fontaine
PAN AMERICAN REPRESENTATIVE

APPROVED

W. S. Jones
CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACT NAME Port Bowden, Delta #1 24-HOUR PERIOD ENDING AT MIDNIGHT April 20 1962
 LEASE NAME Pan Am Home Island Rig WELL NO. A1 FIELD N.W.T.

FIRST TOUR FROM 1200 M. TO 800 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
1200	1215	Surf			Rig Surveil
1215	200	Surf			Condition Hole
200	230	Trips			Run 5 stls
230	300	Surf			clean 9" to Blm.
300	600	Surf			Condition Hole
600	800	Trips			Trips for Core #1

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
500*	Red		99106	5.7	732		13	8 1/4	5-6 # EC-10103
100*	Drillmud		100135	6.0	712				
		DEVIATION INSTRUMENT	DEPTH	DEGREES OFF					
					DRILLER'S SIGNATURE <u>J. Thompson</u>				

SECOND TOUR FROM 800 A.M. TO 400 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
800	845	Trips			Finish Trips out
845	915	Surf			Pick up core 100
915	1000	Surf			Cut & Trips only line
1000	1000	Trips			Run on w/ core 100
1000	1245	Surf			Chin. w/ core 100 then 4 feet full
1245	330	Core	6040	6042	Cut core #1
330	400	Trips			Put out core wouldn't cut.

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
	Core #1	1.30	100	125	5.0	712	85	10	6 1/4 # EC-10103
	6040-42	300	101	190	5.0	732	85		Chart
	Red 6"								
		DEVIATION INSTRUMENT	DEPTH	DEGREES OFF					
			5983	1 1/2	5 man crew				
					DRILLER'S SIGNATURE <u>John Thompson</u>				

THIRD TOUR FROM 400 P.M. TO 1200 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
400	415	Surf			Rig Surveil
415	615	Trips			No. 50 core BBL.
615	830	Surf			Surf core BBL & find 100 ft. P.P.
830	1030	Trips			Run on w/ core BBL.
1030	1130	Surf			Chin. P.P. to core.
1130	1200	Core	6042	6049	C.T. O core #2

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
							10	6 1/4	5-6 # EC-10103
		DEVIATION INSTRUMENT	DEPTH	DEGREES OFF					
		5983	5983	1 1/2	5 man crew				
					DRILLER'S SIGNATURE <u>John Thompson</u>				

APPROVED

J. Thompson
PAN AMERICAN REPRESENTATIVE

APPROVED

W. Smith
CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER E CONTRACTOR'S NAME PETER BRIDGEN DRILL 24 HOUR PERIOD ENDING AT MIDNIGHT April 19 1962
 LEASE NAME 1st AMHINE CORN ISLAND RIVER WELL NO. A-1 FIELD N.W. 1

FIRST TOUR FROM 12:00 M. TO 5:00 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12:00	12:15	TO SER			RIG SER.
12:15	1:30	CLEAN HOLE			CLEAN CUT HOLE FROM 560 - 6090
1:30	5:30	CIR			CIR. HOLE TO CONDITION FOR 2 CORE #1
5:30	8:00	TRIP			15 STD DUMMIE TRIPS (HOLE TIGHT)

DAYWORK: HOURS 8 RATE \$19.90 HOURS 8 RATE \$19.90 HOURS W/D PIPE 8

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
	CEMENT	1:00	9.7	76	8.2	3/4	6.5			
	G-X									
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF					
				5983	1 1/2		5 MAN CREW			
							DRILLER'S SIGNATURE <u>L. Johnson</u>			

SECOND TOUR FROM 8:00 A.M. TO 4:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	1:30	Reaming	5530	6090	Reaming & clean hole to Btm.
1:30	2:30	Disc.			Disc. to clean hole.
2:30	3:30	Trips			10 std Dummy Trips Bridge at 60 feet of Btm.
3:30	4:00	Reaming			Reaming to Btm.

DAYWORK: HOURS 8 RATE \$19.90 HOURS 8 RATE \$19.90 HOURS W/D PIPE 8

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
2800#	Hel.	8:00	10.0	76	7.4	3/4	8.0	13	8 3/4	S-6 #535030
250#	QX.	2:00	10.0	72	6.4	3/4	8.0			
125#	Reg Discharge									
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF					
		Eastman		5983	1 1/2		5 man crew.			
							DRILLER'S SIGNATURE <u>Tom Lunnington</u>			

THIRD TOUR FROM 4:00 P.M. TO 12:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	4:15	TO SER			RIG SER.
4:15	5:15	CLEAN HOLE			CLEAN CUT HOLE 50' F.L.H.
5:00	5:30	CIR			CIR. CONDITION HOLE
1:30	2:30	TRIP			10 STD DUMMIE TRIPS
2:30	4:15	CLEAN HOLE			CLEAN CUT HOLE 50' F.L.H.
4:15	12:00	CIR			CIR. CONDITION HOLE

DAYWORK: HOURS 8 RATE \$19.90 HOURS 8 RATE \$19.90 HOURS W/D PIPE 8

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
	C-6							13	8 3/4	SL S-6 #535030
200#	Disc.									
500#	12-7									
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF					
		Eastman		5983	1 1/2		5 man crew.			
							DRILLER'S SIGNATURE <u>E. L. Johnson</u>			

APPROVED

PAN AMERICAN REPRESENTATIVE

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CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME PIPER SHEDDEN DRILL 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 15 1967
 LEASE NAME PAN AM HOME CEN. ISLAND RIVER WELL NO. 1-1 FIELD N.W.T.

FIRST TOUR FROM 12 M. TO 5 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	12 ⁰⁵	RIG SER			TO SER
12 ⁰⁵	12 ¹⁰	DRILL	5988	6040	DRILL 5 7/8" HOLE
12 ¹⁰	12 ¹⁵	CON			CON 4 HOLE MUD TO CORE
					Reach New Point @ 2:45 A.M. @ 6018'

DAYWORK: HOURS 5 1/4 RATE Only HOURS RATE HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	R.H.	BIT NO.	SIZE	KIND
6EL	3000	35	11.1	50	7.0	1/2	7.0	12	8 7/8	56 # 19056
6-X	210	7	11.1	52	8.6	1/2	9.0			
DRILL	200									
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
				5983		1 1/2				
										5-MAN CREW
										DRILLER'S SIGNATURE <u>L. H. Haines</u>

SECOND TOUR FROM 8:00 A.M. TO 4:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	9:30	DRILL			DRILL 5 7/8" HOLE
9:30	12:15	TRIP			Full out to Core Hls
12:15	2:15	TRIP			Pick up & service Core Hls
2:15	4:00	TRIP			Run in w/ Core Hls

DAYWORK: HOURS 8 RATE Only HOURS RATE HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	R.H.	BIT NO.	SIZE	KIND
2000	100	8:30	100	54	7.2	1/2	8.0	1	6 1/2	christensen # EC-10103
250	DRILL									
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
				5983		1 1/2				
										5-MAN CREW
										DRILLER'S SIGNATURE <u>Tom Deeringer</u>

THIRD TOUR FROM 4:00 P.M. TO 12:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	4:15	DRILL			RIG SERVICE
4:15	4:30	TRIP			Run in w/ Core Hls
4:30	6:30	TRIP			Run in w/ Core Hls
6:30	8:00	TRIP			Run in w/ Core Hls
8:00	9:00	TRIP			Run in w/ Core Hls
9:00	10:00	TRIP			Run in w/ Core Hls
10:00	11:00	TRIP			Run in w/ Core Hls
11:00	12:00	TRIP			Run in w/ Core Hls

DAYWORK: HOURS 8 RATE Only HOURS RATE HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	R.H.	BIT NO.	SIZE	KIND
								10	6 1/2	christensen # EC-10103
								13	2 3/4	56 # 19056
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
				5983		1 1/2				
										5-MAN CREW
										DRILLER'S SIGNATURE <u>L. H. Haines</u>

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PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

 RIG NUMBER 6 CONTRACTOR'S NAME RTF SWEDEN DRILLING 24 HOUR PERIOD ENDING AT MIDNIGHT APRIL 17 1962

 LEASE NAME PAN AM HOME GPN ISLAND RIVER WELL NO. A-1 FIELD N.W. 1

 FIRST TOUR FROM 12⁰⁰ M. TO 2⁰⁰ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	12 ³⁰	SURVEY			RIG SER 7 SURVEY RAMP STROKES-
12 ³⁰	2 ⁰⁰	DRILL	5711	5777	DRILL 8 3/4" HOLE " PRESSURE-
					RETURN RPM's-
					WT. ON BIT-
					Put in 6" HEADS & LINERS IN C-350

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
		1 ⁰⁰	9.9	70	11.2	7/32	8.5	11	8 3/4	OSC-3 #24851
		7 ⁰⁰	9.9	40	11.4	7/32	8.5			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
				5719		1 3/4°		5 MAN CREW		
								DRILLER'S SIGNATURE <u>L. Majean</u>		

 SECOND TOUR FROM 8:00 A.M. TO 4:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	8:15	Service			Rig Service + Check B.O.P.
8:15	9:00	Drill	5929		Drill 8 3/4" hole.
9:00	9:15	Repair			Repair Pump
9:15	10:30	Drill			Drill 8 3/4" hole
10:30	10:45	Repair			Repair oil lub. in Drilling
10:45	12:00	Drill	5983		Drill 8 3/4" hole.
12:00	1:00	Log.			Log. graph. Log. Order 1:15-4:00 Trip out
					hole right

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
3900	Rel.	8:30	9.9	38	9.6	7/32	8.0	11	8 3/4	OSC-3 #24851
200	Leuten	11:30	9.9	48						
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
100# Drilling				5983		1 1/2		5 Man Crew		
200# Rx								DRILLER'S SIGNATURE <u>Tom Cunningham</u>		

THIRD TOUR FROM _____ M. TO _____ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	5:15	Temp.			No. 5 Bit # 11
5:15	5:30	Service			R.G. Service
5:30	6:15	Drill			Shut & cut 34" Drilling Line
6:15	9:20	Temp.			R.G. in W. Bit # 12
9:20	11:00	Repair	4790	5923	Change out B.O.D. HOLE
11:00	12:00	Drill	5923	5923	Drill 8 3/4" HOLE.

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
1400	Rel.	11:00	9.9	50	9.2	7/32	8	12	8 3/4	SL. OSC-3 #24851
200	Conc.									
300	Rel.									
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
		FMS-100		5923		1 1/2		5 Man Crew		
								DRILLER'S SIGNATURE <u>L. H. Hester</u>		

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CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 1 CONTRACTOR'S NAME WILLIAM BOWEN DRILLING 24 HOUR PERIOD ENDING AT MIDNIGHT April 16, 1962
 LEASE NAME WILSON HOME CORP. ISLAND PIER WELL NO. 11-1 FIELD N.W. 1

FIRST TOUR FROM 12⁰⁰ M. TO 8⁰⁰ A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	12 ¹⁵	Run SER	5271		Run SER
12 ¹⁵	3 ³⁵	DRILL	5211	5365	DRILL 8 3/4" HOLE
3 ³⁵	4 ⁰⁰	REPAIRS			REPAIR AIR LINE TO KIRBY PISTONARY RPM - 110
4 ⁰⁰	8 ⁰⁰	DRILL	5365	5513	DRILL 8 3/4" HOLE. WT. ON BIT - 45M

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
3900 ⁰⁰	GAL	3 ⁰⁰	9.8	43	9.6	3/4	8.5	10	8 3/4	OSC-3 #27694
50 ⁰⁰	WATER	7 ⁰⁰	9.7	45	10.0	3/4	8.5			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
200 ⁰⁰ Q-X		FASTMAN		4965		1 3/4		5 MAN CREW		
50 ⁰⁰ DRILLER				5060		1 3/4		DRILLER'S SIGNATURE <u>L. Majors</u>		

SECOND TOUR FROM 8⁰⁰ A.M. TO 4⁰⁰ P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	8 ¹⁵	Survey			Run Service & Check E.O.P.
8 ¹⁵	10 ¹⁵	DRILL	5513	5598	DRILL 8 3/4" HOLE
10 ¹⁵	10 ³⁰	Survey			Drill down survey on Trip
10 ³⁰	4 ⁰⁰	TRIP			Pull out for next bit & Run in

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH	BIT NO.	SIZE	KIND
1000 ⁰⁰	GAL	8:30	9.8	43	10	3/4	8.70	8 3/4	OSC-3 #27694	
50 ⁰⁰	WATER							11	8 3/4	OSC-3 #24851
200 ⁰⁰	QX	DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
50 ⁰⁰	DRILLER	FASTMAN			5550		2 1/2°		5 Man Crew	
								DRILLER'S SIGNATURE		
								John Cunningham		

THIRD TOUR FROM 4⁰⁰ P.M. TO 12⁰⁰ P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4 ⁰⁰	4 ¹⁵	CHANGE			Run in clean out 20' FILL
4 ¹⁵	4 ³⁰	SERVICES			Run SERVICES
4 ³⁰	8 ³⁰	DRILL	5518	5658	DRILL 8 3/4" HOLE
8 ³⁰	10 ⁰⁰	REPAIRS			REPAIR - Running down & GUARD.
10 ³⁰	11 ⁴⁵	DRILL	5658	5719	DRILL 8 3/4" HOLE
11 ⁴⁵	12 ⁰⁰	SURVEY			TAKE SURVEY ON SAND LINE

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
100 ⁰⁰	DRILLER	1 ⁰⁰	9.9	41	10 ⁴	3/4	8	11	8 3/4	OSC-3 SER 24-31
340 ⁰⁰	GAL 340 ⁰⁰ #	11 ⁰⁰	9.9	42	9 ⁴	3/4	8			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
		FASTMAN		5712		2 1/2		DRILLER'S SIGNATURE <u>John Cunningham</u>		

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CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 5 CONTRACTOR'S NAME PETER BUNDEN DRILLING 24 HOUR PERIOD APRIL 15 1973
LENDING AT MIDNIGHT
LEASE NAME PUN AM HENG CSPN ISLAND RIVER WELL NO. A-1 FIELD N.W.T

FIRST TOUR FROM 12⁰⁰ M. TO 7⁰⁰ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁵⁵	12 ⁵⁵	DRILL	4803	4842	DRILL 8 3/4" HOLE PUMP STROKES - 92.5 RPM
12 ⁵⁵	1 ⁰⁰	TO SET			" " PRESSURE - 900 PSI
1 ⁰⁰	8 ⁵⁵	DRILL	4842	4942	DRILL 8 3/4" HOLE ROTARY ROPES - 150
					WT ON BIT - 35' M

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DAYWORK: HOURS									
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	KIND
2600 ⁺	GEL	1 ⁰⁰	9.9	48	0.2	7/32	8.5	9	8 3/4" DT 12891
100 ⁺	DRISCOSE	6 ⁰⁰	7.6	45	0.0	7/32	8.5		
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
				1529		1/2		Main Course	
								DRILLER'S SIGNATURE L. Major	

SECOND TOUR FROM 8 AM. TO 4 PM.

TIME			DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO	OPERATION	FROM	TO	
8:30	8:15	Drilling			Rig Service & Check B.O.P. Drill 8 3/4" hole
8:15	9:30	Drill	4942	4965	
10:00	1:00	Trips			Pull out light hole working Rigs & Line. Run in w/ Bit # 10 Bridge @ 4613 Reaming Bridge to 4720
1:00	2:45	Trips			
2:45	4:00	Run			

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DAYWORK: HOURS									
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		8:30	9.942	8.7	352	8.0	9	8 3/4	DT # 62897
							10	8 3/4	OSC-3# 27694
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
		Eastman		4965		1 1/2°		5-11-62 (Cogn.)	
								DRILLER'S SIGNATURE <i>Tom Cunningham</i>	

THIRD TOUR FROM 4 P M. TO 12 M M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION; WORK PERFORMED. CONDITION OF HOLE. DIFFICULTIES ENCOUNTERED. UNUSUAL WEATHER CONDITIONS. OIL OR GAS SHOW IN MUD. ETC.
FROM	TO		FROM	TO	
4 ⁰⁰	4 ¹⁵	Run in			Run in 60' 3" tool & clean out 10' fill.
4 ¹⁵	4 ³⁰	Setting			R.G. Service.
4 ³⁰	5 ⁰⁰	Drill	4' 6"	50' 6"	Set 1" 1/4" 50' 6" 1/4" 50' 6" 1/4"
5 ⁰⁰	5 ³⁰	Survey			Tatic Survey on Sand Line (50' 6" @ 1 1/4")
5 ³⁰	11 ⁰⁰	Drill	50' 6"	52' 11"	Drill 3 3/4" Hole.
					T.D. 52' 11"

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY		MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
5000	12.5 L		500	9.7	12	28	2/32	8	10	2 3/4	OS-3
100	OS-3		1100	10	41	8.6	2/32	8			
300	12.5		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
	Drill pipe		12 1/2 ft	2965		1 3/4		J. H. H. Crew			
	Drill pipe		"	3060		1 3/4		DRILLER'S SIGNATURE J. H. H. Crew			

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PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME PETER BRADY D.R.C. 24 HOUR PERIOD ENDING AT MIDNIGHT April 14 1962
 LEASE NAME Pan Am Home OSPA Island Riser WELL NO. D-1 FIELD A.W. I.

FIRST TOUR FROM 12:00 P. M. TO 3:00 A. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12:00	12:15	Service	4778		R.C. Service
12:15	5:00	D.R.C.			Circ. Hole w/o Fishing Tools
5:00	8:00	Tr. 1			Hoist Bit & Service Drill Pads

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

DAYWORK: HOURS		RATE		HOURS		RATE		KIND	
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE
		1 ⁰⁰	10"	47	5	7/2	8	9	8 3/4
		4 ⁰⁰	10"	47	8	7/2	8		
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF		
		Eastman			4529		1/2		
							5 MAN CREW.		
							DRILLER'S SIGNATURE P. S. Hester.		

SECOND TOUR FROM 9:00 A.M. TO 4:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	8:15	Rig Ser			Rig Ser
8:15	10:00	Run in			Run in w/ 10' Cased Shot
10:30	12:00	Fishing			Fishing
12:00	1:00	Hoist			Hoist Fish Puller 100,000 w/c. 5' string
					Fish moved up. Unable to Circulate Through Fish.

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

DAYWORK: HOURS		RATE		HOURS			RATE			
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
								9	8 3/4	DT. # 62897
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
		EASTMAN		4529		1/2		5 MAN CREW		
								DRILLER'S SIGNATURE J. H. J. J.		

THIRD TOUR FROM 4:00 P.M. TO 12:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	6:30	Tr. 1			Pull out fish & Break Down Same
6:30	6:45	Service			Rig Service
6:45	-	Service			clean shale out of Btm. Hole D.C. and
-	9:30				service to D.C. & Run in D.C.
9:30	10:45	Tr. 1			Run in w/ Bit
10:45	12:00	Drill	4778	4803	Drill 8 3/4" hole.

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

DAYWORK: HOURS		RATE		HOURS		RATE		KIND	
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	
		Dipping					9	8 3/4	DT # 62897
		11:30	47	51					
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
				4529		1/2		5 man crew	
						DRILLER'S SIGNATURE		J. H. J. J.	

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FIRST TOUR FROM 12:00 P M. TO 5:00 P M.

17 4228

SECOND TOUR FROM 9:00 AM TO 11:00 AM

THIRD TOUR FROM 4:00 P.M. TO 12:00 M.

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PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME PERIN BAWDEN DRILLING 24 HOUR PERIOD ENDING AT MIDNIGHT April 12 1962
 LEASE NAME Pan. Am. Oil & Gas Co. P.M. Island Refinery WELL NO. A-1 FIELD N.W.T.

FIRST TOUR FROM 12⁰⁰ P. M. TO 2⁰⁰ A. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	12 ¹⁵	Service			R.C. Service
12 ¹⁵	7 ⁵⁰	Drill	4312	4529	Drill 8 3/4" Hole
7 ⁵⁰	2 ⁰⁰	Survey			Drop Survey

4529

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH	BIT NO.	SIZE	KIND
	Gr L 3600	1 ⁰⁰	9.7	41	8.8	1/2	7.5	7	8 3/4	DT26. 56070
	Dr. 5055-100	2 ⁰⁰	9.5	40	9.8	1/2	8.			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
		FULTON		4139		1/2		5 in. H. PHEW		
		FULTON		4529		1/2		DRILLER'S SIGNATURE <u>E. J. Hutton</u>		

SECOND TOUR FROM _____ M. TO _____ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	8 ¹⁵	Service			Service & Cnk 300's OK.
8 ¹⁵	10 ⁰⁰	Drill			Drill for Bit
10 ⁰⁰	11 ⁰⁰	Run In			Run In Bit #1
11 ⁰⁰	12 ⁰⁰	Drill			Drill 120' to Bottom
12 ⁰⁰	7 ⁵⁰	Drill	4529	4620	Drill 8 3/4" Hole

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH	BIT NO.	SIZE	KIND
1000	Gr L	1 ⁰⁰	9.6	36	8.2	1/2	7.9	8	8 3/4	DT26. 21357
50	Dr. 5055-100	3 ⁰⁰	9.6	41	8.6	1/2	8.0			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
		FULTON		4529		1/2		MAN PHEW		
								DRILLER'S SIGNATURE <u>E. J. Hutton</u>		

THIRD TOUR FROM 4:00 P.M. TO 12:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	4:15	Service			Rig Service
4:15	12:00	Drill	4620	4771	Drill 8 3/4" Hole

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	PH	BIT NO.	SIZE	KIND
4300	Gr L	4:30	9.7	38				8	8 3/4	DT26. 444357
200	Gr L	10:30	9.6	41	10.8	1/2				
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
				4529		1/2		MAN PHEW		
								DRILLER'S SIGNATURE <u>E. J. Hutton</u>		

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PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 2 CONTRACTOR'S Prior Bros. Drilling 24 HOUR PERIOD April 11 1962
NAME ENDING AT MIDNIGHT
LEASE NAME Pou Am Home Co PATS. LAND CO. WELL NO. A-1 FIELD Alv. T.

FIRST TOUR FROM 12 P. M. TO 3 P. M.

[illegible]

DAYWORK: HOURS RATE HOURS RATE HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.V.	BIT NO.	SIZE	KIND
2700 ^{lb}	CEL	1 ⁰⁰	10	36	9	1/2	7.5	6	8 3/4	OSC 10. SON #34900
75 ^{lb}	DR. 3 CASE	7 ⁰⁰	9.9	35	10	1/2	7.5			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
		FOSLIMAN		3175		14				2 MAN CREW.
								DRILLER'S SIGNATURE		E. J. Hoke.

SECOND TOUR FROM 8³⁰ M. TO 9⁰⁰ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	8:25	LOG SET			LOG SET 4 CHN BCPs
8:25	12:00	DRILL	9125	9139	DRILL 8 3/4" HOLE
12:00	1:00	SURVEY			SURVEY 4 ADDITION MUD
1:00	3:00	HOLE			HOLE SET #6
3:00	4:00	RUN IN			RUN IN BIT #7

DAYWORK- HOURS 0 RATE 0 HOURS RATE HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
GEL - 2200 #		9 ⁰⁰	98	36	9.6	1/32	7.6	L	8 3/4"	CSC16 34910
WIS DRISCOE - 75 #		1 ⁰⁰	88	38	9.8	1/32	7.6			
		DEVIATION IN INSTRUMENT		DEPTH		DEGREES OFF				
		FISHERMAN		4139		1/8°		J. Wilson (Crew)		
								DRILLER'S SIGNATURE L. J. J. J.		

THIRD TOUR FROM 4:00 P. M. TO 12:00 P. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4.00	4.15	Run			Rig Service
4.15	5.15	Running			Run in hole tight
5.15	8.30	Drill	4139	4239	Drill 8 3/4" hole
8.30	8.45	Repair			Repair on D. Mark's
8.45	12.00	Drill	4239		Drill 8 3/4" hole

DAYWORK: HOURS 0 RATE 0 HOURS RATE HOURS W/D PIPE

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	RH	BIT-NO.	SIZE	KIND
800 #		9:30	9.7	40	9.7	3/32	8.5	7	8 1/4	DT2G #56070
400 #		11:30	9.7	42						
200 #	QX Catalyst	DEVIATION INSTRUMENT		DEPTH		DEGREES OFF		5 man crew.		
5200 #	Hel.			4/39		78		1		
100 #	2.5 in 2							DRILLER'S SIGNATURE Tom Jenkins		

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PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME Pan American DATE April 10 1962 24 HOUR PERIOD ENDING AT MIDNIGHT
 LEASE NAME Pan American WELL NO. A-1 FIELD M. U. T.

FIRST TOUR FROM 12 M. TO 2 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	12 ¹⁵	Sp. 100			R. 1. Sp. 100
12 ¹⁵	4 ¹⁵	Tr. p.			Tr. 1 to 2 in Plug Bit.
4 ¹⁵	4 ⁴⁵	Wisc			Pick up 6 singles
4 ⁴⁵	5 ³⁰	clean cut			clean cut 50' fill
5 ³⁰	8 ⁰⁰	Drill	3587	3655	Drill 8 3/4" Hole

T. D. 3655

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
2100 [#]	CEL	6 ⁰⁰	98	46	11	7/2		5	8 3/4	OSC-10 H.C.
200 [#]	Consol.	7 ³⁰	98	43	11	7/2				See 29604
400 [#]	Ch X.									
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
								5' Hand Pump		
								DRILLER'S SIGNATURE <u>E. S. [Signature]</u>		

SECOND TOUR FROM 8⁰⁰ M. TO 4⁰⁰ P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	8 ¹⁵	Tr. 500			Tr. 500 CHECK T.D.D. OK
8 ¹⁵	8 ⁴⁵	Drill	3655	3715	Drill 8 3/4" Hole
8 ⁴⁵	9 ⁰⁰	Wisc			Hole 7' 10" down 10 singles (DIP Survey)

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
		9 ⁰⁰	79	35	5	3/2	9.5	5	8 3/4	OSC-16
		1 ⁰⁰	78	37	14	3/2	5.0			See 29604
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
		Furcal		3775'		14		5' Hand Pump		
								DRILLER'S SIGNATURE <u>[Signature]</u>		

THIRD TOUR FROM 4 M. TO 12 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4 ⁰⁰	7 ⁴⁵	Traps	3775		Hole tight working & lay down 10 single
7 ⁴⁵	9 ³⁰	Traps			Pull out bit & 5' & Run in D.C.
9 ³⁰	10 ³⁰	Wisc.			Slip & Cut Self Line
10 ³⁰	12 ⁰⁰	Traps			Run in & cleaning to bottom from 3475

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

DAYWORK: HOURS		RATE		HOURS							
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND	
								5	7 3/4	OSC1-G	# 28604
								6	7 3/4	OSC1-G	# 34900
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF				
					3775		14		S. Hwy Corp.		
									DRILLER'S SIGNATURE <i>For Learning Farm</i>		

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PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME B. B. Dr. Inc. 24 HOUR PERIOD ENDING AT MIDNIGHT April 7 1964
LEASE NAME Bar. B. H. Co. 2 E P M T. L. R. 3 W. L. NO. 11-1 FIELD N. W. T.

FIRST TOUR FROM 12⁰⁰ P M. TO 3 P M.

FIRST TOUR FROM [] TO []					
TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION. WORK PERFORMED. CONDITION OF HOLE. DIFFICULTIES ENCOUNTERED. UNUSAL WEATHER CONDITIONS. OIL OR GAS SHOW IN MUD. ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	12 ¹⁵	SPEAKING			R.T. SPEAKER & HOIST B.P.'s
12 ¹⁵	1 ¹⁵	CLEANING			clean cut - Top of Fish AT 3153
1 ¹⁵	3 ⁴⁵	MISC			condition mud.
3 ⁴⁵	5 ⁰⁰	T.R. 1.			HOLE BIT
5 ⁰⁰	8 ¹⁵	T.R. 2.			Run mud over spot.
			T.D.	3509	

[illegible]

DAYWORK: HOURS		RATE		FOUR		THREE		TWO		ONE		KIND	
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE				
21.00 ^{hr}	Gal.	2.00	9.7	46									
1.00 ^{hr}	Dr. case	3.00	9.7	55									
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF							
				3174		1/4		5 in. gauge					
								DRILLER'S SIGNATURE E. L. Hutto.					

SECOND TOUR FROM 800 A.M. TO 400 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8 ⁰⁰	8 ¹⁵	Run Sep			Run Sep
8 ¹⁵	10 ⁰⁰	FISHING			FISHING FOR D.C.
10 ⁰⁰	11 ⁰⁰	HOIST			HOIST
11 ⁰⁰	12 ³⁰	PUMP TO			MAKE UP FISHING TOOL
12 ³⁰	1 ⁰⁰	RUN IN			RUN IN
1 ⁰⁰	2 ⁰⁰	CIR			CIRCULATE
2 ⁰⁰		FISHING	T.D.	354	FISHING FOR D.C.

DATE _____ HOURS W/D PIPE _____

32-400 - HOIST FISH

[illegible]

DAYWORK: HOURS		RATE		HOURS				BIT NO.		SIZE		KIND	
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE							
200 ⁰⁰	GEL	7 ⁰⁰	16.1	56'									
		CALIBRATION INSTRUMENT			DEPTH		DEGREES OFF						
					3174		1/4		500 m. run				
									DRILLER'S SIGNATURE <i>L. McJannet</i>				

THIRD TOUR FROM _____ M. TO _____ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:30	7:30	Pollard			Pull out fish.
7:30	9:00				Break down fishy tools.
9:00	10:00				Cleaning shale out of Atom. Hole Drill Motors.
10:00	11:30	Tripp			Tripp in + measure Pipe.
11:30	12:00				Trying to break core.
			T.O.	3548	

[illegible]

DAYWORK: HOURS		RATE		HOURS						
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
			DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
					3174		14			
			DRILLER'S SIGNATURE <i>J. J. Cunningham</i>							

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PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME P. H. B. Drilling 24 HOUR PERIOD ENDING AT MIDNIGHT April 2 1962
LEASE NAME Panhandle C-PA Island P. H. B. WELL NO. A-1 FIELD N.W.T.

FIRST TOUR FROM 12 M. TO 2 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	12 ¹⁵	SIDEWIRE			R.O. SIDEWIRE CHECK B.H. ^{#2}
12 ¹⁵	6 ³⁰	FISHING			FISHING FOR CORE.
6 ³⁰	8 ³⁰	T.D.P.			R.O. END OF B.H. ^{#5} .
			T.D.	3544	

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

[illegible]

SECOND TOUR FROM 8:00 M. TO 4:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	9:00	Continued			Carried Over to 12/19/44
9:00	9:15	Re Spool			1st SP
10:00	10:30	Drill 32" 35' 8"	32" 35' 8"	35' 8"	Drill 8 1/2" HOLE 7' 4" 9' 5" 1st 100' 700'
10:30	11:00	Core			Core Hole 6' 10"
11:00	12:00	Hoist			Hoist to 100M
12:00	2:00	Run in			Run in to Fish for D.C.
2:00	2:30	Hoist			Hoist (Fishes Hoist)

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
300 ^{cc}	CLAY	1:00	51	51			5	7/8	1100 13516
100 ^{cc}	CEMENT	7:12.0							Ln 22604
150 ^{cc}	g-x	DEVIATION INSTRUMENT			DEPTH		DEGREES OFF		
					3174	1/4	50000 view		
							DRILLER'S SIGNATURE		
							1/16/90		

THIRD TOUR FROM 4:00 P.M. TO 12:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4-00	4-15	<i>Service</i>			<i>Rig Service.</i>
4-15	12-00	<i>Clean to Blm.</i>			<i>Cleaning to Btm @ 7793</i>
			T.O	35M	

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
1000#	Gel.						5	5 3/4	OSC 16 (29604)
25#	Discolor								
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
				3174		14		5 min 30 sec	
								DRILLER'S SIGNATURE Tom Cannon	

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FIRST TOUR FROM 1200 M. TO 200 M.

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

SECOND TOUR FROM 8:00 A. M. TO 4:00 P. M.

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

THIRD TOUR FROM 7:45 P M. TO 12:00 M.

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

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PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME City Builder Drilling Co. 24 HOUR PERIOD ENDING AT MIDNIGHT April 6 1962
 LEASE NAME Pan. Am. Home Island River WELL NO. A1 FIELD _____

FIRST TOUR FROM 12:00 M. TO 8:00 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12:00	12:15	Survey			Rig Service
12:15	6:00	Drill	2546	2752	Drill 8 3/4" hole.
6:00	6:15	Survey	2	2782	Survey w/ wireline
6:15	8:00	Drill	2752	2812	Drill 8 3/4" hole

DAYWORK: HOURS		RATE		HOURS		RATE		HOURS W/D PIPE	
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
4000	Gel.	1:00	9.5	33			2	8 3/4	D-T- #73076
150	Disposal	7:00	9.2	31	12.0				
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
				2782		1/2			
								DRILLER'S SIGNATURE <u>Tom Cunningham</u>	

SECOND TOUR FROM 8:00 A.M. TO 4:30 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	8:15	Drill			Rig Service
8:15	9:00	Drill	2812	2873	Drill 8 3/4" Hole.
9:00	10:00	Survey		2873	Take survey
10:00	11:30	Drill			Heist Bit 1/2
11:30	1:00	Repair			CHANGE HANDLERS 1 1/2 H. 5000
1:00	3:00	Drill			Run in work. Bit @ 2862
3:00	4:30	Drill	2873	2914	Drilling 8 3/4" Hole.

DAYWORK: HOURS		RATE		HOURS		RATE		HOURS W/D PIPE	
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
1600	GEL.	8:00	9.3	34	12.1	8	2	8 3/4	D.T. #73076
		9:30	9.2	33	11	1/32	3	5 1/4	D.T. #73162
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
		POSITIONING		2873		3/4			
								DRILLER'S SIGNATURE <u>C. E. H. H.</u>	

THIRD TOUR FROM 7:00 P.M. TO 12:00 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
7:00	7:15	Drill			Rig Service
7:15	8:00	Drill			Drill 8 3/4" Hole
8:00	8:15	Survey			SURVEY (MISRUN - PICK STOPPED)
8:15	9:00	Drill			Drill 8 3/4" Hole
9:00	9:15	Survey			SURVEY (1/4")
9:15	10:00	Drill			Drill 8 3/4" Hole
10:00	11:00	Drill	2914	2974	Drill 8 3/4" Hole

DAYWORK: HOURS		RATE		HOURS		RATE		HOURS W/D PIPE	
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
1600	GEL	1:00	9.3	33	13.0	1/32	5.0	5 1/4	D.T. #73162
100	DISPOSAL	7:00	9.3	35		1/32	7.6		
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
		CHANGING		2974		1/4			
								DRILLER'S SIGNATURE <u>L. H. H.</u>	

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CONTRACTOR'S REPRESENTATIVE

PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR NAME Bob Bawley Drilling Co. 24 HOUR PERIOD ENDING AT MIDNIGHT April 15 1962
 LEASE NAME Pan Am Shore C.S.P.N. Island River WELL NO. A1 FIELD _____

FIRST TOUR FROM 12:00 M. TO 8:00 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12:00	12:15	Rig Setup	1324	1850	Rig Service
12:15	5:45	Drill			W. 3 1/4" hole
5:45	6:00	Surfing			Surfing
6:00	8:00	Drill			W. 3 1/4" hole

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DAY WORK: HOURS									
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
1000#	Red.		87	32			1	8 3/4	D-T.
50	Drillcore		8.9	33					
500	Bitum.	DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
				1698		1/4			
						DRILLER'S SIGNATURE		A. Bawley	

SECOND TOUR FROM 9:00 A.M. TO 4:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	8:15	Surfing			R. = Seafloor about 300'
8:15	12:30	Drill	1850	2044	Drill 8 3/4" Hole
12:30	12:45	Surfing			Take Survey 300' Mass Run (Hole stopped)
12:45	1:30	Surfing			House Bit #1
1:30	4:00	Drill			Repair Survey & shape out Drill Line.

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DAYWORK RECORD										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND
		9:00	9.1	35	9.0	3/2	9.	1	8 3/4	D.T. S.F. 73856
		11:00	9.1	33	9.2	3/2	9.			
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
		1652				1/4				
		2044		MASPUN		DRILLER'S SIGNATURE		E. J. Phikis		

THIRD TOUR FROM 4:00 P.M. TO 12:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
1:00	1:20	Surfing			Surfing 120'
1:20	1:40	Surfing			1 P.H. up 6 DC's
1:40	1:55	Surfing			1 IN IN the DRILL
1:55	2:10	Surfing			1 IN S.F.
2:10	3:00	Drill			Drill 8 3/4" Hole
3:00	3:15	Surfing			Surfing 1 1/2'
3:15	12:00	Drill	2044	2546	Drill 8 3/4" Hole

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DAYWORK LOG											
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	P.H.	BIT NO.	SIZE	KIND	
1000*	G.F.	1:00	1.0	31	1.0	3/2	7.6		8 1/2	10076	
50*	1 1/2" H.S. DRILL	6:00	9.2	31	7.4	3/2	9.1				
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF					
		1 INSTRUMENT		2245'		3/4°					
		DRILLER'S SIGNATURE									

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PAN AMERICAN PETROLEUM CORPORATION
DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME Pete. Bowden Drilling 4 HOUR PERIOD April 4 1966
LENDING AT MIDNIGHT
LEASE NAME Par. am. Hugo CSPN Island River WELL NO. A1 FIELD

FIRST TOUR FROM 1200 M. TO 2.00 P. M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12:00	4:00	Finish			Wriggle up.
4:00	4:30	Pressure			Blind Ram to 450 held O.K. 15 min.
4:30	5:00	Run in			w/ 12 1/4" bit Plug to 1151.73
5:00	5:15	Circ.			
5:15	5:45	Pressure			Pipe Ram to 1000 PSI held for 15 min O.K.
5:45	6:15	Pressure			Hydril to 1000 PSI held for 15 min O.K.
6:15	8:00	Drilling			Plug.

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DAYWORK: HOURS										
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF			
									DRILLER'S SIGNATURE <i>Tom Perryman</i>	

SECOND TOUR FROM 3⁰⁰ P. M. TO 4⁰⁰ P. M.

[illegible]

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

DAYWORK - HOURS								BIT NO.	SIZE	KIND
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	LOSS	CAKE		A.A. 12'A	Pc Rm (Dsc-3)	
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF				
							DRILLER'S SIGNATURE	<i>[Signature]</i>		

THIRD TOUR FROM 7:00 P M. TO 10 M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4 ⁰⁰	8 ⁰⁰	MISC.	4	5	DRILL - MOUSEHOLE
8 ⁰⁰	9 ⁰⁰	TRIP	5	7	STUCK IN
9 ⁰⁰	10 ³⁰	REPAIRS	7	10 ³⁰	WORK ON DRUMS
10 ³⁰	12 ⁰⁰	DRILL	11 ⁴⁰	13 ²⁴	DRILL 8 3/4" HOLE
					FROM 11 ⁴⁰ TO 13 ²⁴ K.B. to G.L. 13.45

DAYWORK: HOURS _____ RATE _____ HOURS _____ RATE _____ HOURS W/D PIPE _____

LATHEWORK - HOURS										BIT NO.	SIZE	KIND
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE				7	8K	DT
		DEVIATION-INSTRUMENT		DEPTH		DEGREES OFF						
								DRILLER'S SIGNATURE <i>[Signature]</i>				

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TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12:00		Made up 2 Runs + Bit size 17 1/2" & Clear to Btm on Two Trips.			
5:30	6:00	Rig up to Ream Casing			
6:00	8:00	Ream Casing			
		T.D. 1192'			

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
								DRILLER'S SIGNATURE <i>Tom Cunningham</i>	

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
800	1000	RUN CASING.			RAW 37 1/2" 1370 O.D. - 54.5# - JIS - 5+1/2" -
1000	1130	CAS. CASING.			SS. R. 2 - CASING LAMBD ON BOTTOM.
1130	130	CEMENT.			at 1190' H.B.
20	400	W.O.C.			Cement with 1075 SKs Oil Well Cement.
					Plus Return 1:0 PM - 4 2-62 - 1000 PSI - 0
			TD	1190	

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
								DRILLER'S SIGNATURE <i>H. J. White</i>	

[illegible][illegible]

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PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME Peter Brunken Drilling Ltd. 24 HOUR PERIOD ENDING AT MIDNIGHT April 1st 1962
 LEASE NAME Pan American CSPN Island Reef WELL NO. A1 FIELD W/C.

FIRST TOUR FROM 12:00 A.M. TO 8:00 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12:00	12:15	Rig Up	672	1115	
12:15	2:00	Run 17 1/2			
2:00	5:00	Trip for Bit & Running in tight hole.			
5:00	6:30	Redrill 12 1/4" hole to 17 1/2"			
6:30	7:30	Trip to unball bit.			
7:30	8:00	Trip out			

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

DAYWORK: HOURS									
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
			11.0	115				17 1/2	Dull
			11.0	130			2A	17 1/2	
		DEVIATION INSTRUMENT	DEPTH		DEGREES OFF				
							DRILLER'S SIGNATURE <i>Tom Cunningham</i>		

SECOND TOUR FROM 8 A.M. TO 4 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	8:15	SCR Rig			330-400 Rig to Pull Casing.
8:15	9:30	Trip			Trip to unball bit.
9:30	10:30	REAM	1115	1190	12 1/4" to 17 1/2"
10:30	11:00	Circ			Circ to Run Casing.
11:00	11:45	Trip			Pull out to Run Casing.
11:45	12:15	Run Casing			Rig to Run Casing.
12:15	3:30	Run Casing			Weld & Run Casing.

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

DAYWORK: HOURS		RATE									
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND	
								24	17 1/2	OSC-3	
		DEVIATION INSTRUMENT			DEPTH		DEGREES OFF				
					1190		12°				
									DRILLER'S SIGNATURE <i>W. Medley</i>		

THIRD TOUR FROM 4:00 P.M. TO 11:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	5:00	Pull Casing	1190		11:00 - 12:00 Pull Casing
5:00	6:00	Run 17 1/2" B.T.			Run in w/ 17 1/2" B.T.
6:00	6:45	Run in			Trip
6:45	7:30	Circ			Circ
7:30	8:15	Run out			Trip
8:15	8:45	Run Casing			Trip to Run Casing
8:45	11:00	Run Casing			

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

DAYWORK: HOURS									
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND

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DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME PETER BAWDEN DRILL 24 HOUR PERIOD ENDING AT MIDNIGHT MARCH 31 1962
 LEASE NAME PAN AM SIGNOL CSP N. ISLAND RIVER WELL NO. A1 FIELD W/C

FIRST TOUR FROM 1200 P.M. TO 800 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
1200	1215	RIG SET			Rigs Set
1215	1230	SURVEY			Survey 1082-0
1230	415	DRILL	1075	1142	Drill G
415	430	SURVEY	1142		Survey 1142-3/4
430	730	DRILL	1142	1172	Drill G
730	745	SURVEY	1172		Survey 1172-1 1/2
745	800	DRILL			Drill G

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

DAYWORK: HOURS		RATE		HOURS							
QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE		BIT NO.	SIZE	KIND	
500	Sel	2 AM	109	95				3A	12 1/4	OSC 3	
		7 AM	105	64							
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF					
		Castman		1092		0		1172-1/2			
				1142		3/4		DRILLER'S SIGNATURE L. J. Bawden			

SECOND TOUR FROM 800 A.M. TO 400 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
800	930	Drill	1172	1190	Drill
930	1130	Tripping			Tripping
1130	400	Running	672	800	Running

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
			108	75			3A	10 1/2	OSE-3
			108	63			1 Run	17 1/4	
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF		DRILLER'S SIGNATURE		
							Tom Lunning		

THIRD TOUR FROM 4 P.M. TO 12 M.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
400	415	Set Rig	815	1070	
415	1200	Rig			Rig 12 1/4 To 77 1/2

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
600	GEL.	5 P.M.	108	70			1 Run	17 1/2	
		11 P.M.	109	87					
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF		DRILLER'S SIGNATURE		
							D. J. Bawden		

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PAN AMERICAN PETROLEUM CORPORATION

DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME PETER BANDEN ^{DR19} 24 HOUR PERIOD ENDING AT MIDNIGHT MARCH 30 1962
 LEASE NAME PAN AM SIGNAL NORTH ISLAND RIVER WELL NO. A-1 FIELD WIC.

FIRST TOUR FROM 1200 P.M. TO 700 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
1200	1215	RIG SET			700-900 SURVEY
1215	1230	DRILL	598	608	DELS
1230	1245	DRILL			Max Mud
1245	1300	SURVEY			SURVEY
1300	1330	DRILL	608	638	DELS
1330	1445	SURVEY	638		SURVEY
1445	745	DRILL	638	667	DELS

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
1000	Gel	2AM	10.3	86			2A	17 1/2	OSC-3
		6AM	103	84					
		DEVIATION INSTRUMENT	DEPTH	DEGREES OFF	667 = 3/4				
		Catman	608	3/8					
			638	3/4					
				DRILLER'S SIGNATURE	<i>P. Banden</i>				

SECOND TOUR FROM 8:00 A.M. TO 4:00 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
8:00	8:15	Rig down	2:15	3:00	Drill
8:15	9:00	Drill	3:00	3:15	SURVEY
9:00	10:30	Put back in line	3:15	4:00	Drill
10:30	12:00	Drill			
12:00	12:15	Survey			
12:15	2:00	Drill			
2:00	2:15	Survey			

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
1000th	Gel		10.2	43			2A	17 1/2	OSC-3
			104	63			3A	12 1/4	OSC-3
		DEVIATION INSTRUMENT	DEPTH	DEGREES OFF	815 - 0				
		Partman	697	48					
			756	48					
				DRILLER'S SIGNATURE	<i>Tom Pinnerham</i>				

THIRD TOUR FROM 4 P.M. TO 12 M.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
4:00	4:15	SET RIG	927	1075	9:15-10:45 DRILL
4:15	5:30	DRILL			10:45-11:00 SURVEY
5:30	5:45	SURVEY			11:00-12:00 DRILL
5:45	7:15	DRILL			
7:15	7:30	SURVEY			
7:30	9:00	DRILL			
9:00	9:15	SURVEY			

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
							3A	12 1/4	OSC-3
		DEVIATION INSTRUMENT	DEPTH	DEGREES OFF					
		EASTMAN	870 1/4	930 1/2					
			990 0	1050 1/2					
				DRILLER'S SIGNATURE	<i>P. Banden</i>				

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DAILY DRILLING REPORT

RIG NUMBER 8 CONTRACTOR'S NAME Peter Bandon Drilling 24 HOUR PERIOD ENDING AT MIDNIGHT MARCH 29 1962
 LEASE NAME PAN AM SIGNAL CSP NORTH ISLAND RIVER WELL NO. A1 FIELD WIC

FIRST TOUR FROM 1200 P.M. TO 900 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
1200	130	DRILL	370	295	Debs
130	135	SURVEY			Survey 395 - 3/4
135	130	SURVEY			Survey Rigs
130	445	DRILL	295	421	Debs
445	500	SURVEY			Survey
500	615	TRIP			TRIP
615	810	DRILL	421	450	Debs

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
			10.1	47			1A	17 1/2	OSC-3
			10.154				2A	17 1/2	OSC-3
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF		DRILLER'S SIGNATURE	
				395	3/4				AS [Signature]
				421	-1				

SECOND TOUR FROM 800 A.M. TO 900 P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
800	815	DRILL	305	400	DRILL
815	1045	DRILL			DRILL
1045	1100	Survey			Survey
1100	100	DRILL			Debs
100	115	Survey			Survey
115	300	DRILL			Debs
300	315	Survey			Survey

DAYWORK: HOURS 1 RATE 1 HOURS 1 RATE 1 HOURS W/D PIPE 1

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
1500	# Gel.		10	42			2A	17 1/2	OSC-3
			10	43					
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
				450		48			
				480		44			
				512		1/2		DRILLER'S SIGNATURE: [Signature]	

THIRD TOUR FROM 543 1/2 TO 1200 A.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
400	415	4.6 SUR.	546	598	
415	530	BAILED OUT			TRY TO JUBAL B.T.
530	730	TRIP			TRIP. CLEAN BIT & REAM TIGHT SPOTS.
730	900	DRILL	115	1200	Debs. { 1100-1200 Drilling
900	915	SURVEY			Survey
915	1000	DRILL			Debs
1000	1115	REPAIR			CHANGE WASH PIPE & PACKING IN CANNEL

DAYWORK: HOURS 1 RATE 1 HOURS 1 RATE 1 HOURS W/D PIPE 1

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
	452 21.0			75			2A	7 1/2	OSC-3
	WATER			45					
		DEVIATION INSTRUMENT		DEPTH		DEGREES OFF			
		EAST MAN		575		1/2			
								DRILLER'S SIGNATURE	
								J. J. Beck	

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DAILY DRILLING REPORT

RIG NUMBER 7 CONTRACTOR'S NAME Barren Drilling 24 HOUR PERIOD ENDING AT MIDNIGHT 1 MARCH 21 1961
 LEASE NAME Pan Am Signal 652 N. Island Kosswell No. 191 FIELD W/C

FIRST TOUR FROM 12⁰⁰ M. TO 1⁰⁰ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
12 ⁰⁰	5 ⁰⁰	Rig up			Rising
5 ⁰⁰	7 ⁴⁵	DRILL	0	75	Drill out
7 ⁴⁵	9 ⁰⁰	SURVEY			Survey

K.B. to 900-13.45

Spaced at 5⁰⁰ A.M. 3-21-61

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
7500	Gel	5 ⁰⁰		35			1A	17 1/2	OSC-3
		7 ⁰⁰		42					
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF		DRILLER'S SIGNATURE		
		EASTMAN		60	1/2		J. S. Halland		

SECOND TOUR FROM 9⁰⁰ A.M. TO 4⁰⁰ P.M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
9 ⁰⁰	9 ⁴⁵	DRILL	75	209	245-300 SURVEY 162-3/4
9 ⁴⁵	10 ⁰⁰	SURVEY	103 1/2		200-400 DRILL
10 ⁰⁰	12 ⁰⁰	DRILL			DRILL
12 ⁰⁰	12 ¹⁵	SURVEY	132 1/4		
12 ¹⁵	130	DRILL			DRILL
130	145	SURVEY	162 3/4		Survey
145	245	DRILL			DRILL

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
1600	Gel						1A	17 1/2	OSC-3
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF		DRILLER'S SIGNATURE		
							Tom Cunningham		

THIRD TOUR FROM 4⁰⁰ M. TO 12⁰⁰ M.

TIME		OPERATION	DEPTH		DESCRIPTION OF FORMATION, WORK PERFORMED, CONDITION OF HOLE, DIFFICULTIES ENCOUNTERED, UNUSUAL WEATHER CONDITIONS, OIL OR GAS SHOW IN MUD, ETC.
FROM	TO		FROM	TO	
7 ⁰⁰	7 ¹⁵	SET RIG	208	320	715-815 DRILL
7 ¹⁵	8 ⁰⁰	DRILL			815-830 SURVEY 305 1/4
8 ⁰⁰	8 ¹⁵	SURVEY	220 1/4		830-900 DRILL
8 ¹⁵	9 ⁰⁰	DRILL			900-915 SURVEY 335 3/4
9 ⁰⁰	9 ¹⁵	SURVEY	250 1/2		915-1130 DRILL
9 ¹⁵	10 ¹⁵	DRILL			1130-1145 SURVEY 360 3/4
10 ¹⁵	11 ⁰⁰	SURVEY	280 1/2		1145-1200 DRILL

DAYWORK: HOURS 0 RATE 0 HOURS 0 RATE 0 HOURS W/D PIPE 0

QUANTITY	MUD MATERIAL ADDED	TIME	WT.	VIS.	FL. LOSS	CAKE	BIT NO.	SIZE	KIND
							1A	17 1/2	OSC-3
		DEVIATION INSTRUMENT		DEPTH	DEGREES OFF		DRILLER'S SIGNATURE		
							Hedley		

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