

GULF AMERADA CL. LAKE

G-15

Drilling Authority No. 359
Date Issued 19 February 1969

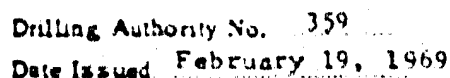
WELL NO. 1 Gulf America Oil Lake G-1
FIELD Wilcox Area: 15 Grid 62-10-123-00
LOCATION: Unit G Section 15 Longitude 123-02-47.713
Latitude 62-04-25.418
From Established Reference Marker at 636193-4083.0

U.W.L.R. 62.07373 --- 123.04558
U.W.I. 300G156210123000

Rig Release Date:
Status
Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
19/2/69	Application for a Drilling Authority.
20-5-69	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
16/4/69	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
	Well History Supplement.
	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells — Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells — Vitter's Method.
	M.P.R. — Oil — Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale Small scale



WELL COMPLETION DATA

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

Well name and number	Gulf Amerada CII Lake G-15
Permit No. 5369	Lease No. N/A
Gulf Oil Canada & Amerada Petroleum (Permitter, Licensee, Lessee)	Exploratory Licence No. 1205
Gulf Oil Canada Ltd. (Operator)	Exploratory Licence No. 1205

Location: Unit C Section 15 Grid 62° 10' 123° 00'
Latitude 62° 04' 25" .418 North Longitude 123° 02' 47" .713 West
From Established Reference Marker at 63-A-193 = 4083.0
Universal Well Location Reference Lat. 62.07173° N, Long. 123.04658° W.

	DATE	DEPTH
Spudded	Feb. 23/69	0
Suspended	-	-
Resumed Operations	-	-
Finished Drilling	Mar. 17/69	5702'
Deepened	-	-
Complete (gas/oil)	-	-
Abandoned	Mar. 21/69	0
Rig released	Mar. 21/69	-

Pool(s)

Interval(s) open to production

Elevation: Gr. 678.9 K.B. 694'

Rig No. 12

Drilling Contractor Cascade

Contractor's Business Licence No. A 11266

CASING RECORD

Coating Size (Inches)	Grade	Weight	Amount	Set at -	Sacks of Cement and Additives
1. 13-3/8"	H-40	48#	609.5'	625' KB	700 W/2% CaCl ₂
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth	Sub-Sea	From	To	Rec.	From	To	Rec.
Jean Marie	1486	-791	4139'	4179'	40'			
Fort Simpson	1643	-948						
Horn River	4396	-3701						
Nahanni	4463	-3768						
Headless	4751	-4056						
Landry	4786	-4091						

[illegible]

CEMENTING RECORD (Plug, Squeeze, etc.)				PERFORATING RECORD (Bullet, Jet)				SERVICING RECORD (Acidizing, Fracing, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
3-21-69	5702'	4800'	500 sacks Felt @ 4769'								
3-21-69	650'	625'	100 sacks + 2% CaCl ₂ Felt @ 480'.								Nil
3-21-69	Cut off casing, welded on steel riser with name plate.		dumped 7 sacks cement in top, plate and erected a 4' steel riser with name plate.								

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Min.	I.S.L. Min.	F.S.L. Min.	I.S.L.R.H.P.	F.S.L.R.H.P.	L.F.R.H.P.	P.F.R.H.P.	I.N.P.	F.H.P.	REMARKS
1	3-14-69	Manetoe	4851	4901	60	30	30	2205	2162	200	559	2318	2318	Pressures - office corrected. Rec. 180' mud and 870' S.W.
2	3-20-69	Arnica	5370	5470	60	30	30	2419	2236	94	279	2628	2585	Pressures - office corrected. Rec. 765' mud and 225' S.W.

ANALYSIS				PRESENT STATUS OF WELL			
Lab. No.	Sample	From	To	Source	Remarks	Oil	(Interval)
W-123-69	Water	4851	4901	Manetoe	257 H ₂ O		
						Gas	(Interval)
						Dry	X D & A
						Susp.	

Company Gulf Oil Canada Limited

Signed by *G. J. G. G. G.*

Title Area Production Manager

Date May 13, 1969

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



File No. _____
Drilling Authority No. 359

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

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

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

Name and number of well Gulf Amerada C11 Lake C - 15
Location: Unit _____ Section 15 Grid 62° 10', 123° 00'
Latitude 62° 04' 25" .418 North Longitude 123° 02' 47" .713 West
From Established Reference Marker at 63-A-193 - 4093.0
Universal Well Location Reference 62.0737° N. Lat.; 123.04658 W. Long.
Permit No. 5369 Lease No. N/A

Gulf Oil Canada Limited, and Amerada Petroleum Corporation
(Operations, Location, License)

Date of commencement of proposed program _____

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at Nil
Gas at Nil
Water at 4831' - 4901'; 5370' - 5470'
Total Depth 5702' Date of last operations March 20, 1969
Present condition of well Standing

CASING RECORD

Casing Size O.D. inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Paid
1. 13-3/8"	489	609.5'	625' KB	700 (7% CaCl ₂)	Nil
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

No.	Plug	Geological Formation	Number of Sacks of Cement	Remarks
	Position			
1	5702' - 4800'	Arnica - Menstoe	500	Felt plug at 4769'
2	650' - 525'	Shale	100	Felt plug at 480'

Verbal approval obtained March 20, 1969 from Mr. Thomas. Lithology Log.

The following logs have been run Dual Induction Laterolog, SBC Sonic-Caliper, SPT Log, FD Log.
Other operations proposed Weld steel name plate on 4" riser and cap with 7 sacks cement.

Operations to be carried out by Cascade Drilling Co. Ltd. Contractor Licence No. A 11256
Address Calgary, Alberta
Responsible Agent in field W. C. Harrett, 10235 - 124 St., Edmonton Alberta
Dated at Edmonton this 25th Day of March 1969
Signed by *W. C. Harrett* Company Gulf Oil Canada Limited
Title Area Production Manager Operator's Exploratory Licence No. 1205

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

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.H.J. Thomas
on the 20th March 1969

Dated 16th April 1969

[Signature]
Oil Conservation Engineer

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

Drilling Authority No. 359

Project No.

File No.



OIL & GAS DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
REGULATIONS DIVISION

Application for a Drilling Authority

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

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

Name and number of well **Gulf Amerada C11 Lake G-13**
 Location: Unit **G** Section **13** Grid **62°10', 123° 00'**
 Latitude **62°04' 23. "418 North** Longitude **123°02' 47.713 West**
 From Established Reference Marker **at 63-A-193 = 4083.0**
 Universal Well Location Reference **62.07373° N. Lat. 123.04458 W. Long**
 Elevation: Ground **678.9'** K.B. **695'** feet above sea-level.
 Well is expected to produce from **Archie** formation at a depth
 of about **3510** feet. Expected total final depth **5700'**
 Area assigned to well
 (For Oil Conservation Engineer's use only)

Permit No. **3369** Lease No. **39,968**
 Permittee, licensee, or lessee **Gulf Oil Canada Limited and Amerada Petroleum**
 Exploratory Licence No. **1205**
 Surface owned by Crown **CP**
 (If alternate landowner, name and address of owner and occupant.)

Petroleum and natural-gas rights owned by **Crown**

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Feet of Cement
1. 13-3/8	480	J-40	New	600'	770
2. 9-5/8	360 & 400	J-55	New	*	as required
3. 7	200 & 230	J-55	as required		
4.					
5. 9-5/8" set at top of carbonates, if required.					

Expected water, gas, and oil horizons and type of control equipment **Primary prospects are reef developments. Drilling and with sufficient overbalance will be maintained.**
1 - 12" CK 900 Hydril, 1 - 12" 900 series double gate hydraulic Shaffer with manual control also.

Well will be drilled with Rotary Rig No. **12** by **Casade Drilling Co. Ltd.**
 (Drilling Contractor or company)

Responsible agent of applicant:— **W. C. Barrett** Contractor's Business Licence No. **A 11266**
 At well **W. C. Barrett** At registered office **Hjalmar B. Holmberg**
 Address **10235 - 124 Street** Address **10235 - 124 Street, Edmonton 40, Alberta**
 It is understood that if changes become necessary, notice of the change of plan will be submitted.
 Dated at **Edmonton, Alberta** this **14** day of **February** 19**69**
 Signed by **Area Production Manager** Company **Gulf Oil Canada Limited**
 Title **Area Production Manager** Operator's Licence No. **1875**

(For Resource Management Division use only)

APPROVED

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

1. The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.
2. Should 7" casing be required, details of the proposed string are to be submitted in

Dated **19th February** 19**69**

Oil Conservation Engineer

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

LAND 52-90-1 (3-67)

UNIQUE WELL IDENTIFIER: 300G156210123000

advance of it being set, as well as the design details of the 9 5/8" string.

3. During well drilling and testing operations every effort shall be made to ensure that drilling fluids, chemicals and wastes shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.
4. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.



E.H.J. Thoms
Oil Conservation Engineer

GULF AMERADA CLI LAKE G-15

WELL HISTORY REPORT



WELL HISTORY REPORT

Gulf Amerada Cli Lake G-15

62° 04' 25.418" N.

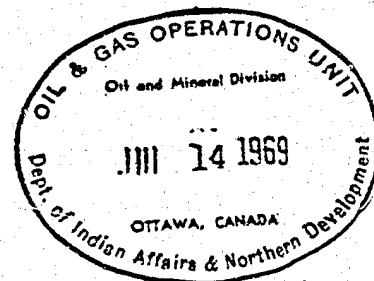
123° 02' 47.713" W.

GULF OIL CANADA LIMITED

Edmonton Production Area
Edmonton, Alberta

April 1969

CONFIDENTIAL



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WELL HISTORY REPORT

Date of Report: April 8, 1969 Operator: Gulf Oil Canada Limited
P.O. Box 130,
Calgary, Alberta.

I. GENERAL INFORMATION

- (a) Well Name: (Gulf Amerada C11 Lake C-15)
- (b) Well Licence: 359 Date Approved: February 19, 1969
- (c) Title Holder: Gulf Oil Canada Limited and Amerada Petroleum
- (d) Type and Number of Title: Permit No. 5369
- (e) Owners: Gulf Oil Canada Limited
Amerada Petroleum
- (f) Drilling Contractor: Cascade Drilling Company Limited
Rig No. 12
Licence No. A 11266
- (g) Service Company: None Used
- (h) Location: (Grid 62° 10', 123° 00') Unit G, Section 15
Co-ordinates: (Latitude 62° 04' 25.418" N) (Longitude 123° 02' 47.713" W)
Unique Well Identifier: 300G156210123000
Universal Well Location Reference: Lat. 62.07373° N., Long. 123.04658° W.
- (i) Elevations: Ground Elevation -- 678.9'
Ground to K.B. -- 15.5
Distance "H" -- 15.5
K.B. Elevation -- 694'
- (j) Well Status: Plugged and abandoned at the total depth of 5702'
- (k) Date Spudded: 11:00 p.m., February 23, 1969
- (l) Date Drilling Finished: March 17, 1969
- (m) Date Drilling Rig Released: 12:00 p.m., March 21, 1969
- (n) Total Depth and Plugged Back Total Depth: TD 5702'; PBTD 0
- (o) Date Completed or Abandoned: March 21, 1969
- (p) Date Service Rig Released: None Used
- (q) Hole Size: 17 3/4" 0 - 625'
8 3/4" 625 - 5702'
- (r) Classification: Wildcat
- (s) Casing: 19 jts. 13 3/8" OD 48# SRT H-40 casing set at 625'. Cemented full length with 700 sacks cement + 2% CaCl₂.

II. GEOLOGICAL SUMMARY

(a) Formation Tops:

<u>Formation</u>	<u>Log Tops</u>	<u>Sample Tops</u>
Jean Marie	1486	1480
Fort Simpson	1643	1645
Horn River	4396	4420
Nahanni	4463	4475
Headless	4751	
Landry	4786	
Manitowish	4839	4850
Arnica	5125	5225
Total Depth Logger	5700'	
Total Depth Driller	5702'	

(b) Cored Intervals: Core #1 4139' - 4179'

(c) Core Description: Cut 40', recovered 40'

4139-4140 Sandstone, white to light grey, mainly silica and calcite cement, very fine grained, small fractures containing white calcite, traces pyrite, traces laminar planes. Very thin dark grey shale at base of this interval.

4140-4141 70% sandstone as above with ripple mark bedding. 30% shale, dark grey to black, micaceous, slightly fissile, non-calcareous. All dipping generally horizontal.

4141-4142 As above.

4142-4143 Interbedded sandstone and shale as above.

4143-4144 As above but 50% sandstone, 50% shale.

4144-4145 Shale as above with occasional very thin sandstone beds as above about 1/16 to 1/4 inch thick.

4145-4147 As above.

4147-4148 60% shale, 40% sandstone; sandstone is in one bed about 5" thick.

4148-4153 As at 4144-4145.

4153-4154 Shale and sandstone interbeds about 2:1; sandstone contains slump and ripple bed features.

4154-4158 Sandstone and shale in thin interbed; shale content probably 60%, sandstone 40%.

4158-4159 10" sandstone bed as above with shale at base.

4159-4169 Shale, as above with occasional thin sandstone stringers.

4169-4173 Sandstone/shale as above; shale content about 70%, Sandstone 30%.

4173-4179 Sandstone/shale as above but about 50%:50%.

(d) Sample Description: Attached

III. ENGINEERING SUMMARY

(a) Drill Stem Tests:

DST #1 March 14, 1969 -- Interval: 4851' - 4901' Manetoe. Howco. 7 3/4" packers, 1/2" SS choke, no water cushion, 4 minute preflow, 30 minute initial shut-in. Tool open 60 minutes, 30 minute final shut-in. Fair initial air puff increasing to strong, remaining steady throughout test. 5" drill pipe recovery: 180' mud and 870' salt water. IHSP 2328, FHSP 2301, IFP 273, FFP 546, ISIP 2191, FSIP 2137, BHT 95°F.

DST #2 March 20, 1969 -- Interval: 5370' - 5470' Arnica. Howco. 7 3/4" straddle packers, 1/2" SS choke, no water cushion, 5 minute preflow. 30 minute initial shut-in. Tool open 60 minutes, 30 minute final shut-in. Weak initial air puff increasing to fair air blow for remainder of test. 5" drill pipe recovery: 980' of muddy salt water. IHSP 2631, FHSP 2603, IFP 164, FFP 273, ISIP 2462, FSIP 2447 BHT 195°F.

(b) Casing Record:

February 27, 1969 -- Ran 19 joints of 13 3/8" O.D. 48# 8PT H-40 ST&C SS Range 2 Class A casing set at 625' KB. Ran 3 scratchers and 3 centralizers on bottom 150'. Cemented by Howco with 700 sacks Oilwell cement plus 2% CaCl₂. Pumped plug to 600'. Plug down at 5:15 a.m. 2-27-69. Average slurry weight 14.8#/gal. Average displacement rate 3 bbls/min. Witnessed by Seely for contractor and Unis for Gulf. Surface hole size 17 1/2". Bowl size 12" Ser. 900.

Tubing Record: Nil

(c) Xmas Tree: Nil

(d) Mud Report:

Surface Hole - water gel system

Mud Weight -- 9.1 to 10.0#
Viscosity -- 55 to 150

Depth 625 to 5702 feet -- gel-benex low solids system

Mud Weight -- 8.4 to 9.8#
Viscosity -- 42 to 360

Materials

Gel	100,500 pounds
Caustic	1,650 pounds
Benex	286 pounds
CMC	410 pounds
Peltex	850 pounds
Sawdust	250 pounds
Cement	500 pounds
Weight Material	Nil

(a) Bit Record:

<u>No.</u>	<u>Size</u>	<u>Type</u>	<u>Depth</u> <u>In</u>	<u>Depth</u> <u>Out</u>	<u>Footage</u>	<u>Hours</u>
1RR	12 $\frac{1}{2}$	OSC3	0	70	70	5 $\frac{1}{2}$
1A	12 $\frac{1}{2}$	STIAGJ	70	595	525	18
2A	12 $\frac{1}{2}$	STIAGJ	595	630	35	1
3A	17 3/4	Reamer	0	625	625	23 3/4
1	8 3/4	X3A	630	1563	933	22 $\frac{1}{2}$
2	8 3/4	X1C	1563	2623	1060	30 $\frac{1}{2}$
3	8 3/4	X1C	2623	4018	1395	46
4	8 3/4	X1C	4018	4139	121	6 3/4
1B	6 1/8	Diamond Core	4139	4179	40	11
5	8 3/4	SS1C	4179	4442	263	30 3/4
6	8 3/4	SS1C	4442	4601	159	23 $\frac{1}{2}$
7	8 3/4	X55R	4601	4863	262	26 $\frac{1}{2}$
8	8 3/4	X55R	4863	5322	459	32 3/4
9	8 3/4	H88	5322	5702	380	29 $\frac{1}{2}$
10	8 3/4	WDR	5702	Clean Out	N/A	N/A

(f) Deviation Record:

<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>
70	$\frac{1}{2}$	778	1	3324	1/8
139	$\frac{1}{2}$	1121	1	3797	3/4
205	$\frac{1}{2}$	1432	1 $\frac{1}{2}$	4015	3/4
290	$\frac{1}{2}$	1562	1 $\frac{1}{2}$	4139	0
350	1/8	1860	1 1/8	4601	Mis-run
412	$\frac{1}{2}$	2414	1 $\frac{1}{2}$	4863	1 3/4
533	$\frac{1}{2}$	2620	1 $\frac{1}{2}$	5322	3/4
630	3/4	3056	1/8		

(g) Report of Blowouts: Nil

(h) Lost Circulation Zones: Nil

IV. COMPLETION SUMMARY

(a) Perforation Record: Nil

(b) Cementation Record:

<u>Date</u>	<u>Plug No.</u>	<u>Position</u>	<u>Geological Formation</u>	<u>Sacks Cement</u>	<u>WOC Hrs.</u>	<u>Depth Plug Felt</u>
3-21-69	1	5702-4800	Arnica	500	6	4769
3-21-69	2	650-625	Shale	100	8	480

Added 2% CaCl_2 to plug No. 2. Cut off casing and dropped 7 sacks cement on top.

(c) Acidization Record: Nil

(d) Chronological Daily Completion Report:

3-17-69 Tripped out to log.

3-18-69 Ran DIL log and BHC gamma sonic caliper log from total depth to surface casing. Ran sidewall neutron log and formation density logs from 5660' to 4350'. Fifty feet fill on bottom.

3-19-69 Running in for DST No. 2.

3-20-69 Ran DST No. 2 from 5370' - 5470'.

3-21-69 Ran plug and abandon plug No. 1 by Howco. Ran plug No. 2 by Howco. Cut off casing 2 feet below ground level, welded on steel plate and dropped 7 sacks cement on top. Rig released at 12 midnight 3-21-69.

3-22-69 Installed well identification sign on 4' riser.

(e) Back Pressure and Production Tests: Nil

V. ANALYSES

- (a) Core Analysis: Nil
- (b) Gas Analysis: Nil
- (c) Oil Analysis: Nil
- (d) Water Analysis: Forwarded under separate cover W 123-69

VI. LOGS

<u>Date</u>	<u>Run No.</u>	<u>Interval</u>	<u>Type</u>
3-17-69	1	5658-624	Dual Induction Laterolog
3-17-69	1	5650-624	Borehole Compensated Sonic Caliper Log
3-17-69	1	5650-4350	Sidewall Neutron Porosity Log
3-17-69	1	5650-4350	Formation Density Log
3-17-69	1	5650-4350	Synergetic Lithology Log
3-17-69	1	5650-624	Continuous Dipmeter

SAMPLE DESCRIPTION

GULF AMERADA CLI G-15

NOTE: all samples are logged.

- 650 - Shale, light grey, slightly calcareous, slightly silty, 5-10% limestone, light grey-brown, microcrystalline, contains a few brach fragments.
- 660 - As above.
- 670 - As at 650; 5% limestone fragments.
- 680 - As above.
- 690 - Shale, medium grey, fissile, non-calcareous and light grey shale as above and traces limestone as above with Brach fragments.
- 700 - As above.
- 710 - Shale, light to medium grey, fissile, light grey calcite, Slightly micaceous.
- 720 - Shale, light grey, calcareous, and traces light grey to brown limestone, microcrystalline.
- 730 - Shale, medium grey, fissile, some slightly calcareous.
- 740 - Shale, medium grey, fissile, calcareous, trace fragmental limestone, light brown, micro crystalline. Crinoids?
- 750 - Shale as at 740.
- 760 - As at 740.
- 770 - As at 740.
- 780 - Shale, medium dark grey, fissile.
- 790 - As above.
- 800 - As above.
- 810 - As above, occasional traces brown limestone.
- 820 - As above.
- 830 - As above.

- 840 - Shale, medium dark grey, fissile, occasional traces brown limestone.
- 850 - As above.
- 860 - As above.
- 870 - As above.
- 880 - As above.
- 890 - As above.
- 900 - As above.
- 910 - As above.
- 920 - As above.
- 930 -
- 940 - Shales as above with 5-10%, light grey-brown limestone, micro-crystalline.
- 950 - As above, shale slightly pyritic, Brach shells in limestone stringer.
- 960 - As above, with Brachs.
- 970 - Shale, medium/dark grey, fissile, trace limestone.
- 980 - As above.
- 990 - Shale, as above with 5% light grey limestone.
- 1000 - Shale, medium/dark grey, fissile, non-calcareous.
- 1010 - As above.
- 1020 - as above.
- 1030 - As above.
- 1040 - As above.
- 1050 - As above.
- 1060 - As above.
- 1070 - As above.

- 1080 - Shale, medium/dark grey and some medium brown, fissile.
- 1090 - As above.
- 1100 - As above.
- 1110 - As above, with traces brown, biofragmental limestone (Brachs).
- 1120 - As above.
- 1130 - As at 1080.
- 1140 - Shale, medium/dark grey and some medium brown, fissile.
- 1150 - As above.
- 1160 - Shale, medium/dark grey and some medium brown, fissile, with traces brown, biofragmental limestone (Brachs).
- 1170 - As above.
- 1180 - As above.
- 1190 - As above.
- 1200 - Shale, medium/dark grey, fissile.
- 1210 - As above.
- 1220 - As above.
- 1230 - As above.
- 1240 - As above with traces brown biofragmental limestone (Crinoids?, Brachs).
- 1250 - As above.
- 1260 - As above.
- 1270 - As above.
- 1280 - Shale, medium/dark grey, fissile.
- 1290 - Shale, medium/dark grey, fissile.
- 1300 - As above.
- 1310 - As above.

- 1320 - Shale, medium/dark grey, fissile, biofragmentary limestone traces, slightly pyritic.
- 1330 - As above.
- 1340 - As above.
- 1350 - Shale, medium/dark grey, fissile.
- 1360 - As above.
- 1370 - As above.
- 1380 - As above.
- 1390 - As above.
- 1400 - As above, Crinoid ossicle.
- 1410 - As at 1390: Shale, medium/dark grey, fissile.
- 1420 - As above.
- 1430 - As above.
- 1440 - As above.
- 1450 - As above.
- 1460 - As above.
- 1470 - As above.
- Drilling
Break 1475'
- 1480 - Shale, medium/dark grey as above, and limestone light to medium brown, micro crystalline, some pyrite and pyritized crinoids.
- 1490 - As above, limestone biofragmental.
- 1500 - Limestone, light to medium brown, micro crystalline, chalky, slightly pyritized.
- 1510 - Limestone, as above, possibly slightly fossil fragmental.
- 1520 - Limestone, light grey-brown, microcrystalline, possibly bio-fragmental? traces coarse white calcite crystals.
- 1530 - As above.
- 1540 - As above.
- 1550 - As above.

- 1560 - Limestone, light grey and light brown, micro crystalline, contains coarse, white calcite crystals.
- 1570 - Shale, dark grey, very fissile and up to 10% limestone, as above.
- 1580 - Limestone as at 1560.
- 1590 - Limestone, medium brown, micro crystalline, very dense and tight. traces pyrite, fossil fragments. - Brachs?
- 1600 - Limestone, as above, and very calcareous dark brown shale, 1:1, pyrite.
- 1610 - 60% medium/dark brown limestone as above and 40% very calcareous shale as above, fossil Brachs, trace pyrite.
- 1620 - Limestone, medium to dark brown, micro crystalline, very dense and tight, good Brach frags.
- 1630 - As above.
- 1640 - As above with traces coarse white calcite recrystallization.
- 1650 - 60% calcareous dark brown/grey shale and 40% limestone as above.
- 1660 - Shale, medium/dark grey, mostly non-calcareous; fissile, traces dark brown limestone fragments as above, probably cavings.
- 1670 - Shale, medium/dark grey and medium brown, fissile, non-calcareous.
- 1680 - Shale, medium grey, fissile, trace pyrite, trace micaceous.
- 1690 - As above.
- 1700 - As above.
- 1710 - Shale, medium/dark grey, fissile, trace mica.
- 1720 - As above.
- 1730 - As above.
- 1740 - As above with 10% brown limestone as above with good Brach fossils.
- 1750 - Shale as at 1710, trace light grey calcareous siltstone.

Drilling
Break at
1633

- 1760 - Shale, medium/dark grey, fissile, trace micrite.
- 1770 - As above.
- 1780 - As above.
- 1790 - As above.
- 1800 - As above.
- 1810 - As above.
- 1820 - As above.
- 1830 - As above.
- 1840 - As above.
- 1850 - As above.
- 1860 - No sample.
- 1870 - Shale, dark grey, fissile, trace micrite.
- 1880 - As above.
- 1890 - As above.
- 1900 - As above.
- 1910 - As above.
- 1920 - As above.
- 1930 - As above.
- 1940 - As above.
- 1950 - As above.
- 1960 - As above.
- 1970 - As above.
- 1980 - As above.
- 1990 - As above.
- 2000 - As above.
- 2010 - As above.
- 2020 - As above.
- 2030 - As above.

- 2040 - Shale, dark grey, fissile, trace micrite.
- 2050 - As above.
- 2060 - As above.
- 2070 - Shales as above with stringer (5-10%) very calcareous, light grey siltstone.
- 2080 - As above.
- 2090 - As above.
- 2100 - Shale as above with 10% light grey to white very calcareous siltstone.
- 2110 - As above.
- 2120 - Shale, dark grey, slightly micaceous, fissile; trace siltstone.
- 2130 - As above.
- 2140 - Shale, as above with 10% light grey to white very calcareous siltstone.
- 2150 - Shale, as above with 20% siltstone as at 2100, trace pyrite.
- 2160 - Shale, dark grey, slightly micaceous, fissile; trace siltstone.
- 2170 - As above.
- 2180 - Shale, dark grey, fissile, slightly micaceous.
- 2190 - As above.
- 2200 - As above.
- 2210 - As above.
- 2220 - As above.
- 2230 - As above.
- 2240 - As above.
- 2250 - As above.
- 2260 - As above.
- 2270 - As above.

2280 - Shale, dark grey, fissile, slightly micaceous.

2290 - As above.

2300 - As above.

2310 - As above.

2320 - As above.

2330 - As above.

2340 - As above.

2350 - As above.

2360 - As above.

2370 - As above.

2380 - As above.

2390 - As above.

2400 - As above.

2410 - As above.

2420 - As above.

2430 - Shale, as above, with 5-10% medium brown, micro crystalline, limestone containing fossils (Brachs, Crinoids?)

2440 - As above, traces limestone.

2450 - Shale, dark grey, slightly micaceous, fissile.

2460 - As above.

2470 - As above.

2480 - As above.

2490 - As above.

2500 - As above.

2510 - As above.

- 2520 - Shale, dark grey, slightly micaceous, fissile.
- 2530 - As above.
- 2540 - As above.
- 2550 - As above.
- 2560 - As above.
- 2570 - As above.
- 2580 - As above.
- 2590 - As above.
- 2600 - As above.
- 2610 - As above.
- 2620 - As above.
- 2630 - Shale, medium to dark grey, fissile slightly micaceous.
- 2640 - 2690 - As above.
- 2700 - 2790 - As above.
- 2800 - 2890 - As above.
- 2900 - 2990 - As above.
- 3000 - 3090 - As above.
- 3100 - 3190 - As above.
- 3200 - 3290 - As above.
- 3300 - 3390 - As above.
- 3400 - 3490 - As above.
- 3500 - 3590 - As above.
- 3600 - 3690 - As above.
- 3700 - 3790 - As above.
- 3800 - 3890 - As above.
- 3900 - 3990 - As above.

- 4000 - Shale, medium gray, fissile, waxy, with occasional trace light brown limestone, dolomite, micro crystalline, trace pyrite.
- 4010 - As above.
- 4020 - As above, with 5-10% limestone, raw white calcite, trace dolomite.
- 4030 - As above.
- 4040 - As above.
- 4050 - As above.
- 4060 - Shale, medium grey, fissile, slightly waxy, traces limestone as above, 5% light to medium brown, very calcareous siltstone or sandstone, possibly slightly dolomitic.
- 4070 - Shale, medium/dark grey, fissile, traces light brown calcite and silty dolomite, sandstone, very fine grained.
- 4080 - As above.
- 4090 - Shale as above with 10% very fine grained sandstone, calcite and dolomite, light grey-brown and traces shale with floating sandstone grains, some very pyritic.
- 4100 - As above with 15-20% sandstone.
- 4110 - As above.
- 4120 - As above with 10% sandstone.
- 4130 - As above with 5% sandstone.
- 4139 - 40% sandstone—quartzitic, light grey/brown, very fine grained, dolomitic, calcite cement, trace pyritic; 60% shale as above.
- 4140 - No sample.
- 4150 = 4139-4179 core
- 4160 = interval,
- 4170 = descriptions
- 4180 = taken from
core.

Core Description 4139-4179

- 4139-4140 Sandstone, white to light grey, mainly silica and calcite cement, very fine grained, small fractures containing white calcite, traces pyrite, traces laminar planes. Very thin dark grey shale at base of this interval.
- 4140-4141 70% sandstone as above with ripple mark bedding. 30% shale, dark grey to black, micaceous, slightly fissile, non-calcareous. All dipping generally horizontal.
- 4141-4142 As above.
- 4142-4143 Interbedded sandstone and shale as above.
- 4143-4144 As above but 50% sandstone, 50% shale.
- 4144-4145 Shale as above with occasional very thin sandstone beds as above about 1/16 to 1/8 inch thick.
- 4145-4147 As above.
- 4147-4148 60% shale, 40% sandstone; sandstone is in one bed about 5" thick.
- 4148-4153 As at 4144-4145.
- 4153-4154 Shale and sandstone interbeds about 2:1; sandstone contains slump and ripple bed features.
- 4154-4158 Sandstone and shale in thin interbed; shale content probably 60%, sandstone 40%.
- 4158-4159 10" sandstone bed as above with shale at base.
- 4159-4169 Shale, as above with occasional thin sandstone stringers.
- 4169-4173 Sandstone/shale as above; shale content about 70%, Sandstone 30%.
- 4173-4179 Sandstone/shale as above but about 50%:50%.
- 4190 -
Drill stem tally correction, no samples.
- 4200 -
- 4210 - Shale, medium to dark grey, slightly fissile, slightly micaceous, and 10-20% sandstone, silic cement, traces calcite, traces pyrite, light grey to white, very fine grained, trace black specks?

- 4220 - Shale, medium to dark grey, slightly fissile, slightly micaceous, 10% sandstone, silic cement, traces calcite, traces pyrite, light grey to white, very fine grained, trace black specks?
- 4230 - As above.
- 4240 - Mainly shale as above with trace sandstone.
- 4250 - Shale, medium/dark grey as above and 10-20% sandstone as above.
- 4260 - As above with traces floating quartz grains.
- 4270 - As above with traces floating grains and pebbles.
- 4280 - As above with 10% sandstone, floating grains.
- 4290 - Shale as above and sandstone as above, 10%, significant pyrite.
- 4300 - As above.
- 4310 - As above.
- 4320 - As above.
- 4330 - Shale, medium/dark grey, slightly fissile, slightly micaceous, significant pyrite, and traces sandstone as above.
- 4340 - As above, possibly 10% sandstone, very pyritic, siliceous.
- 4350 - Sandstone, medium/dark grey brown, pyritic, slightly micaceous, some very hard siliceous.
- 4360 - As above.
- 4370 - As above, traces black shale.
- 4380 - as above.
- 4390 - As above.
- 4400 - As above.
- 4410 - Shale, dark grey and black, trace micaceous, disseminated pyrite.
- 4420 - Shale, mainly black, disseminated pyrite and mica, very hard and brittle.
- 4430 - As above.
- 4440 - As above.

- 4443 - 90% shale, very dark grey-black, micaceous, pyritic in places, 10% shale, dark grey to grey, micaceous.
- 4450 - As above.
- 4460 - As above.
- 4470 - 70% shale, very dark grey to black, pyritic in places. 30% shale, grey to dark grey.
- * 4480 - 50% limestone, grey to light grey, micro fragments, slightly top
Nahanni 5% limestone, light grey to white, fine crystalline,
4474 probably representing calcite veins.
45% shale, very dark grey to black and grey.
- 4490 - 30% limestone, light grey to grey brown, micro fragments, tight, slightly chalky; 20% limestone, dark grey, argillaceous, micro-fragments; 30% shale, very dark grey to black, 20% shale, grey.
- 4500 - 60% limestone, light grey to grey brown, micro fragments, tight, slightly chalky in places; 30% limestone, dark grey, argillaceous, micro fragments, tight; 10% shale, grey and dark grey to black. Some white calcite crystals.
- * 4510 - 30% shale, grey to dark grey fissile, shale grey and shale dark grey to black; 30% limestone, argillaceous, dark grey, micro-fragmental, tight, fossiliferous; 40% limestone, light grey to grey brown, micro to very fine fragments, tight, slightly chalky in places.
- 4520 - As 4510.
- 4530 - 30% shale, grey to dark grey, caving.
60% limestone, light grey to grey brown, micro fragments, in places fine fragments, chalky in places.
10% limestone, argillaceous, dark grey, micro fragments, tight.
- 4540 - As 4530 with white calcite veins, fine crystalline.
- 4550 - As above with white calcite veins, fine crystalline.
- 4560 - 30% shale, grey to dark grey, caving.
60% limestone, light grey to grey brown, micro fragments, in places fine fragments, chalky in places.
10% limestone, argillaceous, dark grey, micro fragments, tight.
- 4570 - 10% shale caving. 90% limestone, very light grey to grey brown, micro fragments to fine fragments, in places recrystallized in fine to medium calcite crystals, trace of pinpoint interfragmentary porosity. The light grey limestone chips often slightly chalky.

- 4580 - 10% shale caving; 10% limestone, argillaceous, dark grey, micro fragmental, tight, 80% limestone as 4570.
- 4590 - 10% shale caving; 40% limestone, light brown to dark grey, crypto fragments, slightly argillaceous in places, very tight. 50% limestone, very light grey to grey brown, micro to fine fragments as 4470.
- 4600 - As above.
- 4610 - 10% shale caving; 10% limestone light brown, crypto fragments, very tight. 50% limestone, very light grey to grey brown, micro to fine fragments, slightly chalky, tight 30% limestone, dark grey, slightly argillaceous, micro to very fine fragments, tight.
- 4620 - 50% limestone, dark grey, argillaceous, micro to very fine fragments, trace of inter fragmentary porosity; 10% shale caving; 40% limestone, very light grey to grey brown micro fragments, tight. Trace of brown chert fragments, some limestone, light brown, crypto fragments, tight.
- 4630 - As above.
- 4640 - As above.
- 4650 - As above.
- 4660 - As above.
- 4670 - As above.
- 4680 - As above.
- 4690 - As above.
- 4700 - As above, but some of the 40% limestone, very light grey to grey-brown is fine to medium fragmental.
- 4710 - As 4620, but limestone in places fine to medium fragmental.
- 4720 - 10% shale caving; 50% limestone, dark grey to grey, slightly argillaceous, micro to very fine in places fine fragments, trace of inter fragmentary pin point porosity. 40% limestone, very light grey to grey brown, micro to very fine in places fine to medium fragments, slightly chalky in part tight. In places with poor pin point interfragmentary porosity.
- 4730 - As above.
- 4740 - As above.

- 4750 - 10% shale caving; 50% limestone, dark grey to grey, slightly argillaceous, micro to very fine in places, fine fragments, trace of inter fragmentary pinpoint porosity. 40% limestone, very light grey to grey brown, micro to very fine in places fine to medium fragments, slightly chalky in part tight. In places with poor pinpoint interfragmentary porosity, and some limestone, light grey brown, crypto fragments, tight.
- 4760 - 20% limestone, light grey brown, crypto fragments, very tight. 10% shale caving, 40% limestone; dark grey, argillaceous, micro to very fine fragments, 30% limestone, very light grey to grey brown, micro to very fine in places, fine to medium fragments, tight.
- 4770 - As above.
- 4780 - As above.
- 4790 - As above.
- 4800 - 30% limestone, light grey brown, crypto fragments, very tight; 10% shale caving; 40% limestone, very light grey to grey brown, micro to very fine, in places fine to medium fragments, slightly chalky in places, tight; 20% limestone, dark grey, argillaceous, micro fragments, tight.
- 4810 - As above, some fine to medium crystalline calcite veinlets.
- 4820 - As above, some fine to medium crystalline calcite veinlets.
- 4830 - As 4800, but 40% limestone, very light grey to grey brown, micro to very fine, is mostly very fine to fine fragments.
- 4840 - 50% limestone, light grey brown, crypto fragments, 30% limestone, very light grey to grey brown, micro to fine fragments, tight. 20% limestone, dark grey, slightly argillaceous, micro to very fine fragments, tight.
- 4850 - As above.
- 4860 - Missing.
- 4870 - 50% shale caving; 40% dolomite, white, medium to coarse crystalline with some black pyrobitumen infill in fair intercrystalline porosity. 10% limestone caving.
- Manetoe
4850
approx.
- 4880 - As above.

- 4890 - 30% shale and limestone caving; 70% dolomite, white, medium to coarse crystalline, with some fair intercrystalline porosity partly filled with black pyrobitumen.
- 4900 - As above, Some clear dolomite crystals.
- 4910 - As 4890.
- 4920 - As 4890 with some clear dolomite crystals.
- 4930 - As 4890.
- 4940 - As 4890 with some fine pyrite crystals.
- 4950 - As 4890 with some clear dolomite crystals and pyrite.
- 4960 - As 4890 and 4950.
- 4970 - As 4890.
- 4980 - As 4890 and some clear dolomite crystals.
- 4990 - 30% shale and limestone caving; 70% dolomite, white, medium to coarse crystalline, with some fair intercrystalline porosity partly filled with black pyrobitumen.
- 5000 - As above.
- 5010 - As above.
- 5020 - As above.
- 5030 - As above, some clear dolomite crystals.
- 5040 - 30% shale and limestone caving; 70% dolomite, white, medium to coarse crystalline, with some fair intercrystalline porosity partly filled with black pyrobitumen.
- 5050 - As above.
- 5060 - As above.
- 5070 - As above.
- 5080 - As above, and some clear dolomite crystals.
- 5090 - 10% shale caving, 90% dolomite white in places grey brown, medium to coarse crystalline, poor to fair intercrystalline porosity.

- 5100 - 10% shale caving, 90% dolomite, white in places grey brown, medium to coarse crystalline, poor to fair intercrystalline porosity, and some pyrite crystals.
- 5110 - 10% shale caving, 90% dolomite white in places, grey brown, medium to coarse crystalline, poor to fair intercrystalline porosity.
- 5120 - As above.
- 5130 - As above.
- 5140 - As above.
- 5150 - As above, and some black pyrobitumen stain and infill.
- 5160 - 20% dolomite, light brown to grey brown, medium to coarse crystalline. 30% dolomite, light grey brown, micro to very fine crystalline, tight. 40% dolomite, white grading into the dolomite grey brown, medium to coarse crystalline with poor to fair intercrystalline porosity partly filled with black pyrobitumen. 10% shale caving.
- 5170 - As above.
- 5180 - 20% dolomite, light grey brown to grey brown, very fine crystalline, with fair intercrystalline porosity. 30% dolomite, grey brown, micro to very fine crystalline tight, 30% dolomite, white medium to coarse crystalline, 10% dolomite, grey to grey brown, medium to coarse crystalline, 10% shale caving.
- 5190 - As above, and trace of clear quartz crystals.
- 5200 - 20% dolomite, light grey brown to grey brown, very fine crystalline, with fair intercrystalline porosity. 30% dolomite, grey brown, micro to very fine crystalline tight, 30% dolomite, white, medium to coarse crystalline, 10% dolomite, grey to grey brown, medium to coarse crystalline, 10% shale caving, with fair to good intercrystalline porosity.
- 5210 - 20% dolomite, light grey brown to grey brown, very fine crystalline, with fair intercrystalline porosity. 30% dolomite, grey brown, micro to very fine crystalline tight, 30% dolomite, white medium to coarse crystalline, 10% dolomite, grey to grey brown, medium to coarse crystalline, 10% shale caving.
- 5220 - As above, but most of light grey brown dolomite, very fine crystalline is tight.

* 5230 - 20% dolomite, white medium to coarse crystalline; 60% dolomite, top light grey brown to grey, micro to very fine crystalline, tight; Arnica 10% dolomite, light grey brown, fine to medium crystalline with 5225 poor intercrystalline porosity, 10% shale caving.

5240 - 20% dolomite, light grey brown, faintly oil stained, very fine to fine crystalline, with good intercrystalline porosity in places excellent. 50% dolomite, light grey to grey brown, micro to very fine crystalline, tight. 10% dolomite, white, medium to coarse crystalline. 10% shale caving. 10% dolomite, light grey, brown, fine to medium crystalline, with poor intercrystalline porosity.

5250 - As above.

5260 - As above.

5270 - 20% dolomite, white medium to coarse crystalline; 20% dolomite, very light grey, micro crystalline, tight. 40% dolomite, light grey brown, very fine to fine crystalline, with fair to good intercrystalline porosity. 20% dolomite, dark grey, micro to very fine crystalline, tight. 10% shale caving.

5280 - As above.

5290 - 50% dolomite, dark grey to grey brown, micro to very fine crystalline, tight. 10% dolomite, white, medium to coarse crystalline. 10% shale caving. 30% dolomite, light brown, very fine to fine crystalline, with poor to fair intercrystalline porosity.

5300 - As above.

5310 - As above.

5320 - As above.

5330 - 40% shale caving, 10% white medium to coarse dolomite crystals; 10% dolomite, light brown, micro crystalline, tight. 20% dolomite, light brown to grey brown, micro to very fine crystalline in places with fair intercrystalline porosity. 20% dolomite, grey brown to dark grey, micro to very fine crystalline, slightly argillaceous? tight.

5340 - As above.

5350 - As above.

- 5360 - 20% shale caving; 10% dolomite, white, medium to coarse crystalline; 10% dolomite, light grey brown, micro crystalline, tight. 30% dolomite, grey brown to dark grey, micro to very fine crystalline, tight. 30% dolomite, light grey brown to grey micro to very fine in places fine crystalline, with poor to fair intercrystalline porosity.
- 5370 - As above.
- 5380 - As above.
- 5390 - As above, but light grey brown to grey dolomite also tight.
- 5400 - 10% shale caving; 10% dolomite, white, medium to coarse crystalline; 80% dolomite, light grey brown to dark grey brown, micro to very fine in places fine crystalline, tight.
- 5410 - As above.
- 5420 - As above.
- 5430 - As above.
- * 5440 - 5% shale caving; 5% dolomite, white, medium to coarse crystalline; 80% dolomite, light grey brown to grey brown, micro to very fine crystalline, in places fine crystalline, tight. 10% dolomite, light grey brown, micro to very fine crystalline, with good intercrystalline porosity and small pinpoint vug porosity.
- 5450 - As above.
- 5460 - As above.
- 5470 - As above.
- 5480 - As above.
- 5490 - 10% shale caving; 90% dolomite, light grey brown, to grey brown, micro to very fine crystalline, in places fine crystalline, mostly tight, in places some poor to fair intercrystalline porosity.
- 5500 - 5% shale caving 95% dolomite, light grey brown to grey brown, micro to very fine crystalline in places fine crystalline, tight, but in places the very fine to fine crystalline dolomite has fair to good intercrystalline porosity.
- 5510 - As above.

- 5520 - 5% shale caving 95% dolomite, light grey brown to grey brown, micro to very fine crystalline in places fine crystalline, tight, but in places the very fine to fine crystalline dolomite has fair to good intercrystalline porosity.
- 5530 - As above.
- 5540 - As above.
- 5550 - As above.
- 5560 - As above.
- 5570 - As above, but no intercrystalline porosity present.
- 5580 - 5% shale caving 95% dolomite, light grey brown to grey brown, micro to very fine crystalline in places fine crystalline, tight, but in places the very fine to fine crystalline dolomite has fair to good intercrystalline porosity, with fair intercrystalline porosity in a light grey brown dolomite with remains of a fine pelletoidal or oolitic structure.
- 5590 - 5% shale caving 95% dolomite, light grey brown to grey brown, micro to very fine crystalline in places fine crystalline, tight, but in places the very fine to fine crystalline dolomite has fair to good intercrystalline porosity, with same fine pelletoidal dolomite as 5580.
- 5600 - 40% dolomite grey brown to dark grey brown, slightly argillaceous, micro to very fine crystalline, tight. 60% dolomite, light grey brown to grey brown, micro to very fine, tight.
- 5610 - As above, and some dolomite, white, medium coarse crystalline.
- 5620 - 40% dolomite, grey brown to dark grey brown, slightly argillaceous, micro to very fine crystalline, tight. 60% dolomite, light grey brown to grey brown, micro to very fine, tight.
- 5630 - As above, some light grey brown, micro crystalline, dolomite chips show small oolitic structures.
- 5640 - 5% shale caving; 50% dolomite, grey brown to dark grey brown, slightly argillaceous, micro to very fine crystalline, tight. 45% dolomite, light grey brown to grey brown, micro to very fine crystalline, tight.
- 5650 - As above.
- 5660 - As above.

- 5670 - As 5640, but most of the light grey brown to grey brown dolomite is light grey brown and micro crystalline, lithographic, with pelletoidal structures.
- 5680 - As above.
- 5690 - 5% shale caving; 50% dolomite, grey brown to dark grey brown, slightly argillaceous, micro to very fine crystalline, tight. 45% dolomite, light grey brown to grey brown, micro to very fine crystalline, tight.
- 5700 - 30% dolomite, grey brown to dark grey brown, slightly argillaceous, micro to very fine crystalline, tight; 65% dolomite, light grey brown to grey brown, micro to very fine crystalline, in part lithographic, with in places some poor intercrystalline porosity. Some dolomite, white, medium coarse crystalline.

March 26, 1969

sm

GULF OIL CANADA LIMITED
WATER ANALYSIS REPORT

"TIGHT HOLE"

"TIGHT HOLE"

LEASE Gulf Amerada Old Lake LOCATION G-15 FIELD Wildcat SAMPLE DST #1
 SAMPLE DATE March 14, 1969 FORMATION Kanabos INTERVAL DEPTH 4851 FT. TO 1901 FT. KBE 695 FT.
 SAMPLE HEIGHT ABOVE TOOL Top of Tool FT. RECOVERY DATA 870' salt water. 180' drilling mud.

OTHER DATA

ION	MILLIGRAMS/LITRE CONCENTRATION	PER CENT MILLIGRAM EQUIVALENTS	S. G. @ 60°F.	OHM METERS AT
SODIUM - NA	86284	45.66	1.136	
POTASSIUM - K			6.63	
CALCIUM - CA	6155	3.74	Nil	
MAGNESIUM - MG	605	.60		77 °F.
SULPHATE - SO ₄	505	.13	TOTAL DISSOLVED SOLIDS IN MILLIGRAMS/LITRE	
CHLORIDE - CL	145240	42.85	AS NACL FROM RES.	
BROMIDE - BR			BY EVAPORATION	
IODIDE - I			AFTER IGNITION	
BICARBONATE - HCO ₃	126	.02	240,000	
CARBONATE - CO ₃				
HYDROXIDE - OH				
TOTAL	238915	100.00	ANALYSED BY <u>D.J. Donnelly</u>	
REMARKS AND CONCLUSIONS Composition similar to Keg River, such as BA HB Zama N16-19, W-296-68 but concentration higher. Definitely a formation water but insufficient data for correlation.			LAB. NO. <u>W-123-69</u>	
			DATE RECEIVED <u>March 28</u> 1969	
			DATE ANALYSED <u>April 16</u> 1969	
			DATE DISTRIBUTED <u>April 16</u> 1969	

← PRESSURE →

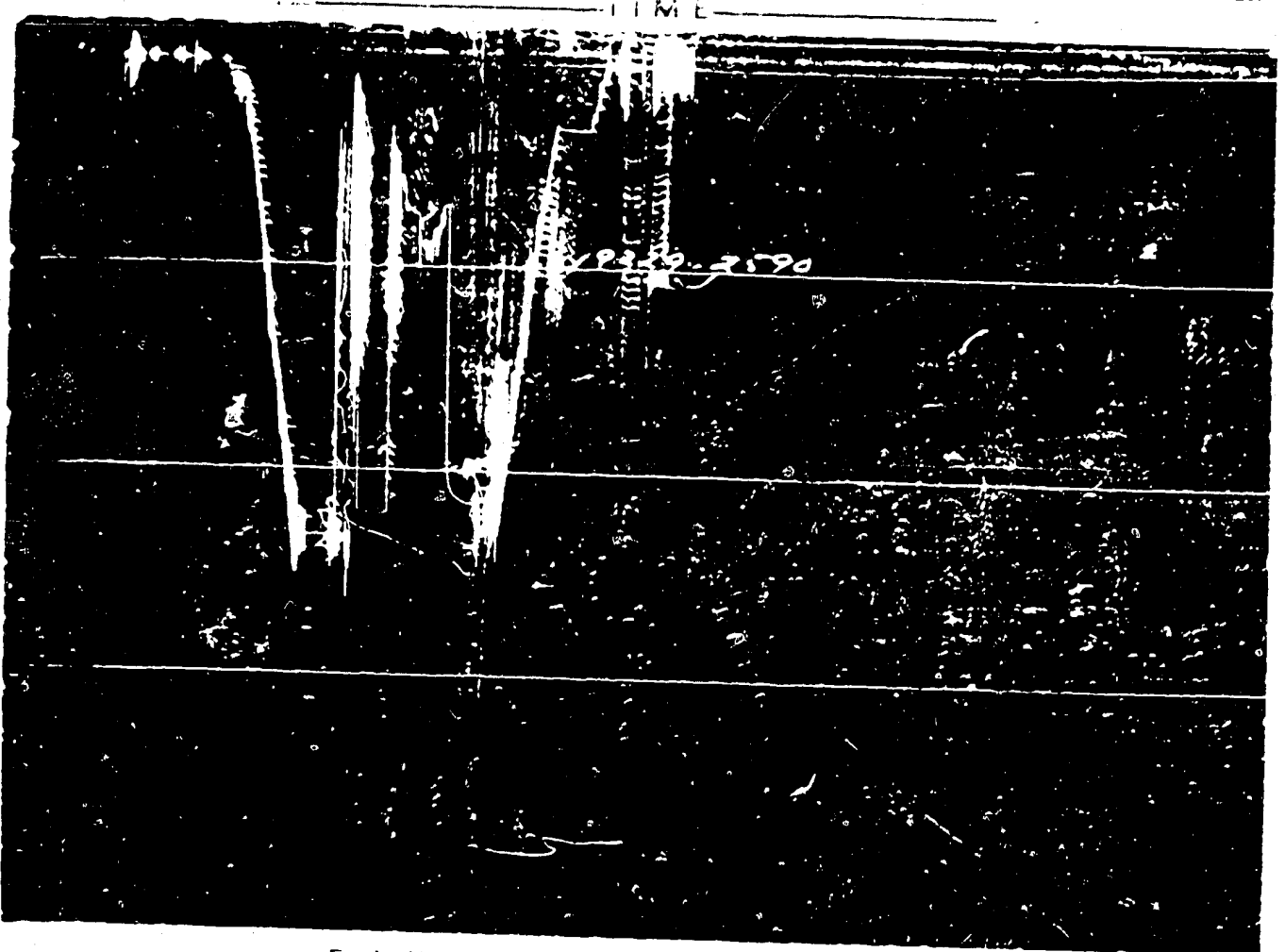
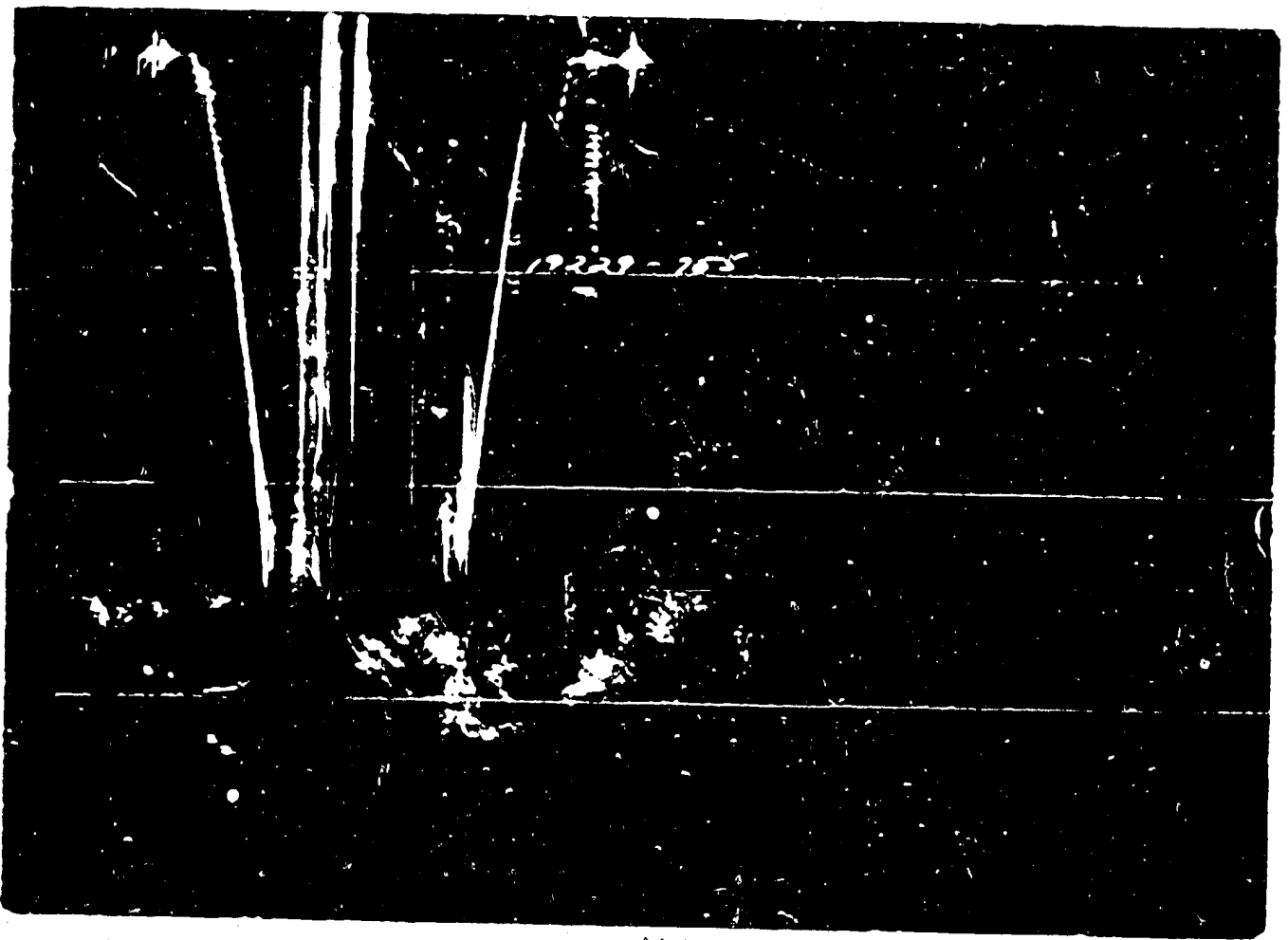
← TIME →

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

↑
PRESSURE
↓

TIME →

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



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

TEMPERATURE RECORD

Each concentric line
equals 10 °F.

Temperature increases
outwardly

Ticket No T 19229

Temperature Range °F

70 °F to 170 °F

A to B — Initial CIP

B to C — 2nd Flow

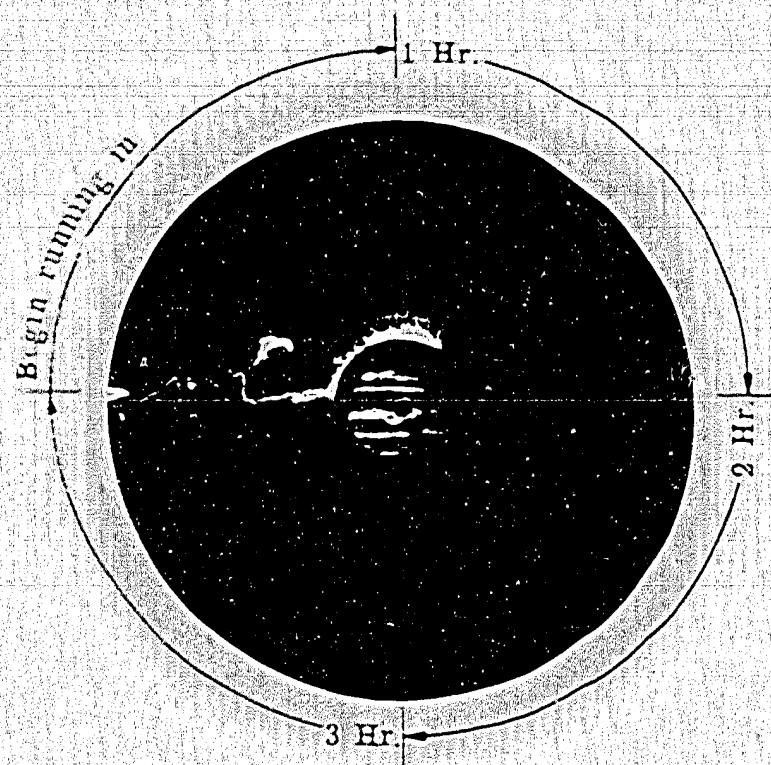
C to D — Final CIP

A °F

B °F

C MAX °F

D 110 °F



HOWCO 521020

TEMPERATURE RECORD

Each concentric line
equals 10°F.

Temperature increases
outwardly

Ticket No T. 19329

Temperature Range °F

.....70°F to170°F

A to B — Initial CIP

B to C — 2nd Flow

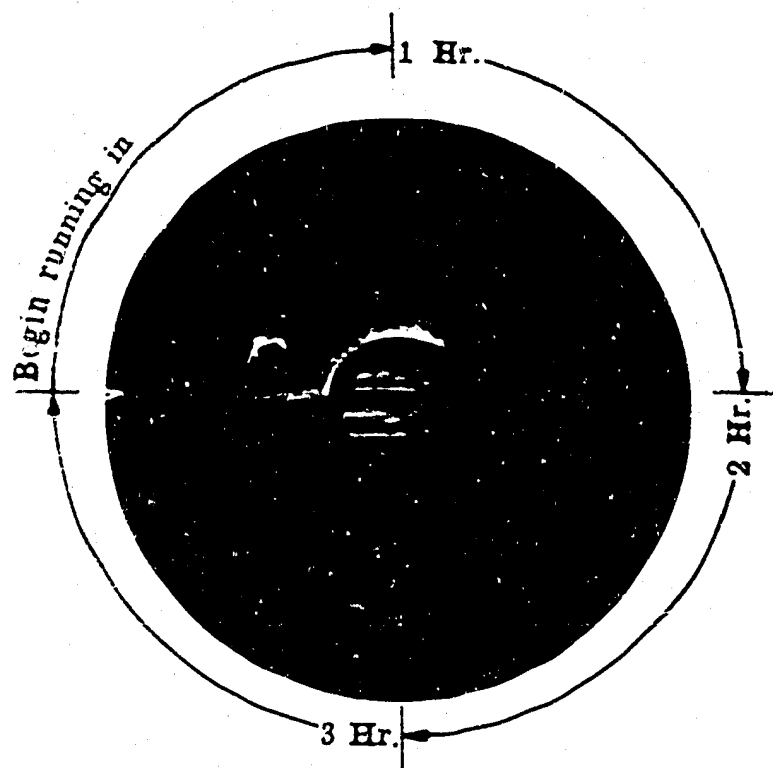
C to D — Final CIP

A °F

B °F

C MAX °F

D 110 °F



HOWCO 521020

Depth Top Gauge	4831	ft.	Blanked Off	No	Date	March 14, 1969	Ticket No.	32-19229
BT P.R.D. No.	755		9415	24 Mr. Clock	Kind of Job	Bottom Hole	HOWCO District	Whitecourt
Pressure Readings	Field		Office Corrected		Toolster	A. Mundt	Witness	T. Ramsay
Initial Hydro Mud Pressure	2328		2318		Contractor	Cascade Drilling Co. Ltd.		
Initial Closed in Pressure	2191		2206		K B Elevation	Top Packer Depth 4847	Bottom Packer Depth 4851	
Initial Flow Pressure	273		200		Total Depth	4901	Casing Perforations	Top Bottom
Final Flow Pressure	546		559		Interval Tested	4851-4901	Formation Tested	
Final Closed in Pressure	2137		2162		Casing or Hole Size	8 3/4	Liner or Rathole Size	
Final Hydro Mud Pressure	2301		2318		Size Surface Choke	3/4	Size Bottom Choke	5/8
					Size and Type Well Packer	7 3/4 ES		
Depth Centre Gauge		ft.	Blanked Off		Size Drill Pipe	5" I.F.	ID and Length Drill Collars	2 7/8" x 1590'
BT P.R.D. No.				Mr. Clock	Anchor I.D.	3	Amount-Type of Cushion	90- 7 3/4
Pressure Readings	Field		Office Corrected		Size O.D.	5		
Initial Hydro Mud Pressure					Gauge Depth Temp.	110	*F. max. Mud *F. est. Weight	9.2
Initial Closed in Pressure					All Depths Measured From	K.B.	No. Folders Reproduced	10
Initial Flow Pressure					Time Periods (Minutes)			
Final Flow Pressure					1st Flow 5 Initial CIP	30	2nd Flow 60	Final CIP 30
Final Closed in Pressure					Recovered	180	Feet of Mud.	
Final Hydro Mud Pressure					Recovered	870	Feet of Salt water.	
					Recovered		Feet of	
					Recovered		Feet of	
Depth Bottom Gauge	4855	ft.	Blanked Off	Yes	Oil Recovery Degree API		Water Recovery Specific Gravity	
BT P.R.D. No.	2590		9435	24 Mr. Clock	REMARKS:	Tool open with poor air blow at 2.55		
Pressure Readings	Field		Office Corrected		P.M. Tool shut in at	3.00 P.M.	Tool open at	
Initial Hydro Mud Pressure	2297		2332		3.30 P.M. with poor air blow. Tool shut in			
Initial Closed in Pressure	592		2220		at 4.30 P.M. Tool pulled loose at 5.00 P.M.			
Initial Flow Pressure	297		540		Charts indicate plugging perforations during			
Final Flow Pressure	317		707		flow period.			
Final Closed in Pressure	597		2172					
Final Hydro Mud Pressure	2284		2331					

LEGAL DESCRIPTION 1230 021 47.71 W.L.

62° 04' 25.41 N.L.

FIELD OR AREA CLI LAKE

PROVINCE NORTH WEST TERRITORIES

CLIF AMERADA CLI LK.

G-15

1

CLIF OIL CANADA LTD.

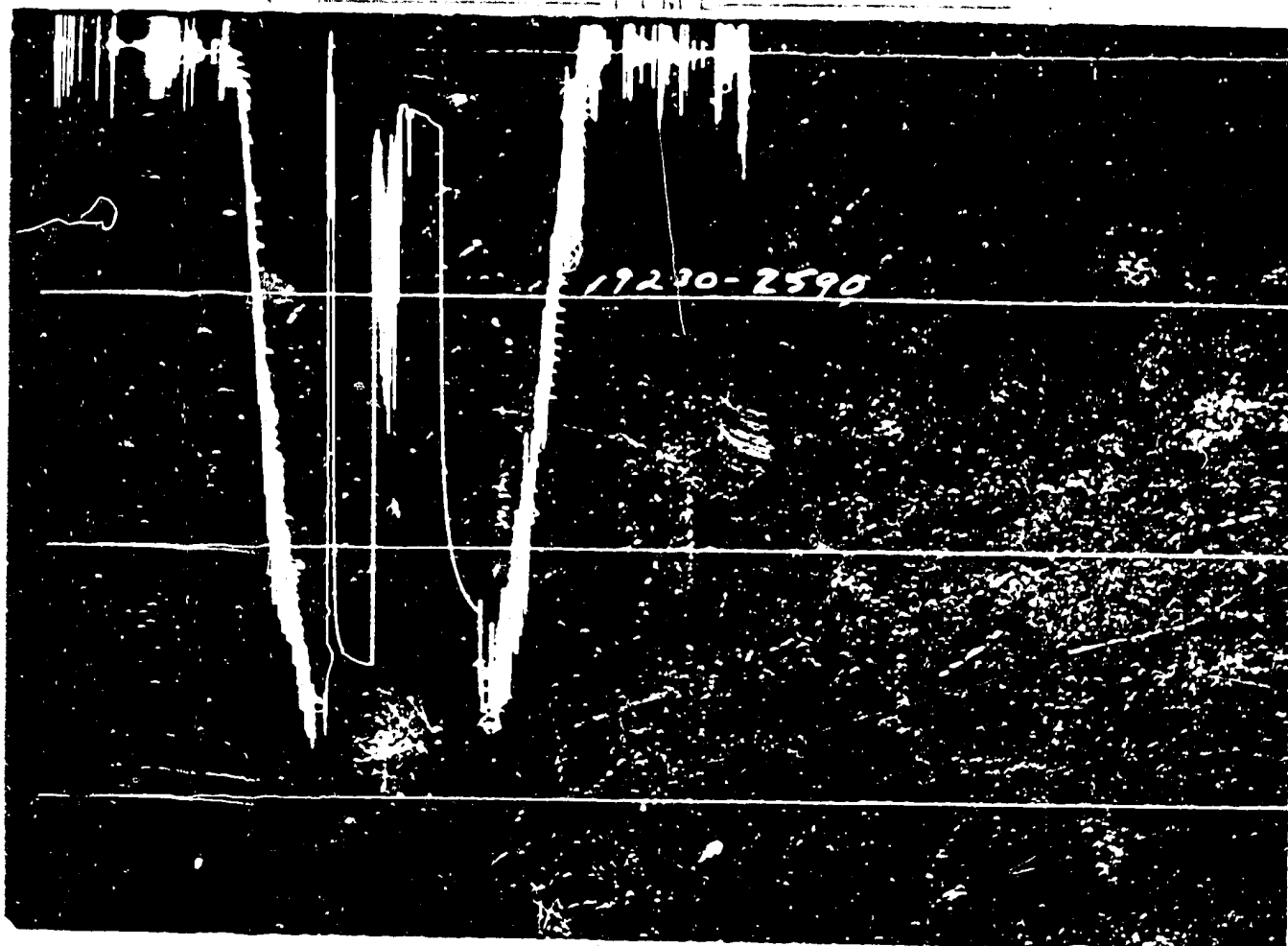
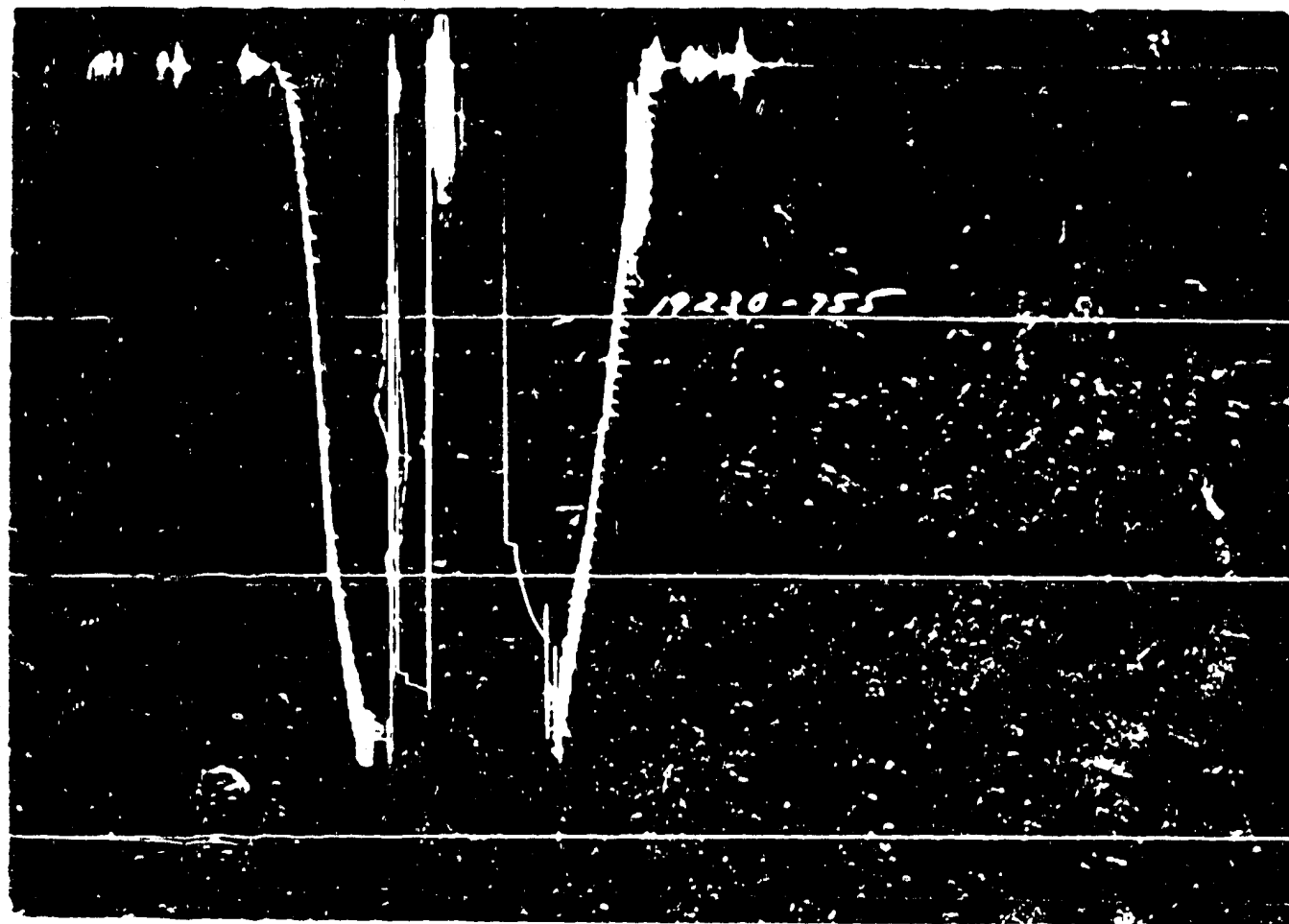
↑
PRESSURE
↓

←
TIME
→

19230-755

19230-2590

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



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

TEMPERATURE RECORD

Each concentric line
equals 10 F.
Temperature increases
outwardly

Ticket No. T 19230

Temperature Range 1

150 F to 250 F

A to B — Initial CIP

B to C — 2nd Flow

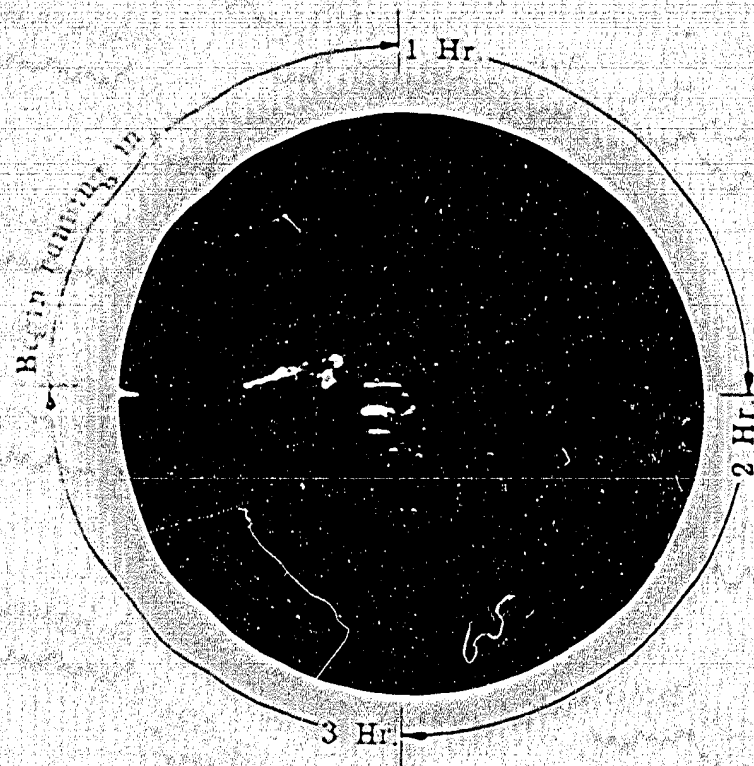
C to D — Final CIP

A °F

B °F

C MAX °F

D 195 °F



HOWCO 521020

TEMPERATURE RECORD

Each concentric line
equals 10°F.

Temperature increases
outwardly

Ticket No T. 1923.2.

Temperature Range °F

150°F to 250°F

A to B — Initial CIP

B to C — 2nd Flow

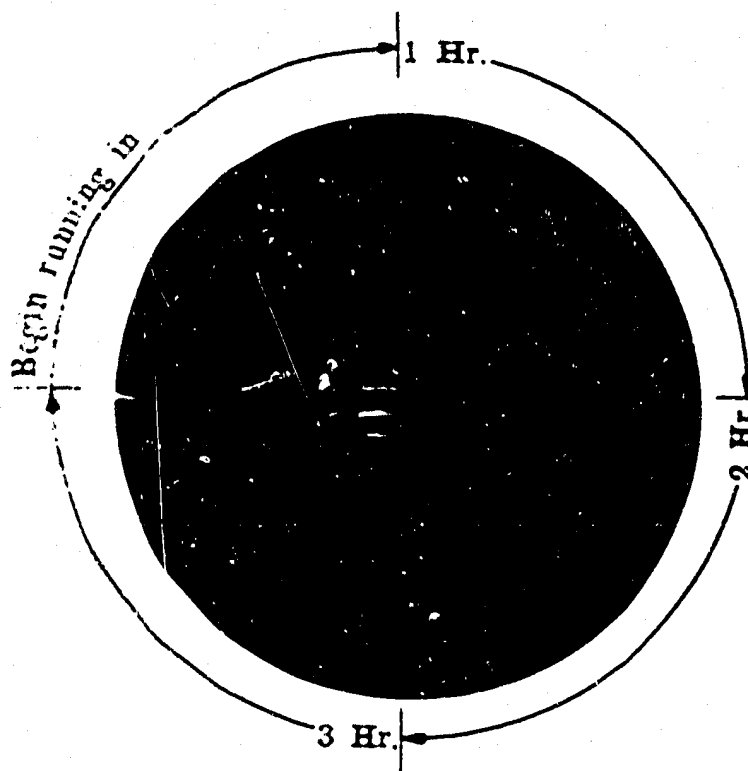
C to D — Final CIP

A °F

B °F

C MAX °F

D 195 °F



HOWCO 521020

DRILLING CONTRACTOR'S DAILY REPORT P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 21 1969 No. G-15 LEASE GULF ADIRADRA CHI-LAKE

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR CASCADE

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
1200	1230	RUN PLUG #1 4800' - TD		30				
1230	630	Pull 10 stds + W.O.C	6	00				
630	700	FEEL PLUG #1 @ 4769'		30				
700	800	LAY DOWN D.P.	1	00				
800	900	LAY DOWN D.P.		30				
900	930	RUN IN 7 STANDS	1	00				
930	1030	RUN PLUG.	5	30				
1030	400	W/O.C.						
400	630	W.O.C.	2	30				
630	700	FEEL PLUG #2 & LAY DOWN 21 SINGLES		30				
700	1200	TEAR OUT & LAY DOWN B.O.P.s	5	00				
Run in & felt for P&A plug #1 - found top at 4800' 6" off casing - dropped 7 sk cement plug on top & welded on steel plate. Rig released at 12:00 midnight 3-21-69 Robert L. Shock 50 sks sand dust, used around rig floor on this hole.								
DEVIATION RECORD			TOTAL TIME CHARGEABLE TO B.A.					
			DAY WORK PER 24 HOUR DAY					
			14 00					

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
Run P&A plug #1 TD - 4800' by HOWCO w/ 500 sps cement. Displace plug w/ 61 bbls dry mud. Plug in place @ 1230 AM. Felt plug #1 @ 630 AM & found top @ 4769'														

MUD RECORD:

TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
Run P&A plug #2 650' - 525' by HOWCO w/ 100 sps cement + 2% CaO₂ added. Displace plug w/ 6.7 bbls H₂O. Plug down @ 1030 AM.						

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR _____ DEPTH END SECOND TOUR TD DEPTH END THIRD TOUR _____

Low J. Pardo DRILLER OR WATCHMAN
A. Krosch DRILLER OR WATCHMAN
Robert L. Shock BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: _____

CONTRACTOR'S REPRESENTATIVE _____ BRITISH AMERICAN'S REPRESENTATIVE _____

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 20 1969 WELL NO. B-15 LEASE GULF AMERRON CH- LAKE

SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
12 ⁰⁰	12 ³⁰								
12 ³⁰	2 ⁰⁰	FINISH RUN IN D.Cs							
2 ⁰⁰	3 ³⁰	LAYDOWN 12 D.Cs							
3 ³⁰	5 ⁰⁰	RUN IN w/PIPE							
5 ⁰⁰	7 ⁰⁰	Pick up 12 SINGLES							
7 ⁰⁰	8 ⁰⁰	BREAK CIRC & CLEAN 46' TO BTM							
		CIRC & COND MUD & HOLE							
		PRIOR TO D.S.T.							
8 ⁰⁰	8 ¹⁵								
8 ¹⁵	8 ³⁰	RIG SERV. BOPs.							
8 ³⁰	10 ¹⁵	CIRC. PRIOR TO D.S.T.							
10 ¹⁵	12 ⁰⁰	HOIST TO D.S.T.							
		RUN IN 3 STANDS LAY DOWN							
		2 SINGLES M/UP TESTING TOOL.							
12 ³⁰	2 ⁴⁵								
2 ⁴⁵	4 ⁰⁰	RUN IN HOLE D.S.T.							
4 ⁰⁰	5 ¹⁵	TESTING.							
5 ¹⁵	7 ³⁰	TESTING							
7 ³⁰	10 ⁰⁰	HOIST							
10 ⁰⁰	12 ³⁰	SERVICE & LOAD OUT TESTER							
12 ³⁰	12 ⁰⁰	W.O.O. in Hole. W.O.O.							
		Cir							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.					
					HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
					24					
					DAY WORK PER 24 HOUR DAY					

BIT RECORD:														
BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
10	3/4	W.D.R.S	10015			CLEAN TO BTM 46'				350	1	67	5 1/4	6-7" 2 1/8

MUD RECORD:						MUD ADDITIVES:			SWAB CUPS:			OIL SAVER RUBBERS:		
T.M.F.	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT	AMOUNT	TYPE	TIME	NUMBER	SIZE	TYPE	NUMBER	SIZE

DEPTH END FIRST TOUR T.D 5702 DEPTH END SECOND TOUR 5700 TD DEPTH END THIRD TOUR 5762

Les J. Jacob DRILLER OR WATCHMAN A. Krich DRILLER OR WATCHMAN Jim M. M. M. DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: [Signature] CONTRACTOR'S REPRESENTATIVE [Signature] BRITISH AMERICAN'S REPRESENTATIVE [Signature] BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MAR 20 1969 WELL NO. G-15 LEASE Gulf Amnada Cli Lake
SEC. T. PROVINCE N.W.T. CONTRACTOR Cascade

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS, TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR. SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
Ran WLT #2 by HOWCO in Amnada Interval 5370'-5470'								
w/ 7 3/4" dual std. packers w/ by pass 1/2" SS choke No H ₂ O cushion								
5 min pre-flow 30 min H.S.I. Tool opened 60 min commencing								
@ 3:30 PM. Mar 20/69 30 min F.S.I. W.I.A.P. followed by								
fan air flow remained steady thru out test.								
5" D.P. rec: 980' of muddy salt water.								
HSP 2631 FHSP 2603 IFP 164 FFP 273 ISIP 2452 BSIP 2447 BHT 195°								

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.

TOTAL TIME CHARGEABLE TO B.A.

DAY WORK PER 24 HOUR DAY

BIT RECORD:														
BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS

MUD RECORD:						MUD ADDITIVES:			SWAB CUPS:			OIL SAVER RUBBERS:			
TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT	AMOUNT	TYPE	TIME	NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR		DEPTH END SECOND TOUR		DEPTH END THIRD TOUR	

DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

P-95



DATE MARCH 19 1969 WELL NO. G-15 LEASE GULF AMERADA CO. - LAKE

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR CASCADE

[illegible]

BIT RECORD:

[illegible]

MUD RECORD:

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

[illegible]

DEPTH END FIRST TOUR 5702 TD DEPTH END SECOND TOUR _____ DEPTH END THIRD TOUR _____

<i>Leo J. Jacob</i> DRILLER OR WATCHMAN	<i>A. Krabin</i> DRILLER OR WATCHMAN	<i>Tom Murray</i> DRILLER OR WATCHMAN
---	--	---

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

P-95

DATE MARCH 18 1969 WELL NO. G-15 LEASE GULF AMERICA CL- LAKE

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR CASCADE

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK, WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
12 ⁰⁰	12 ¹⁵	RIG SERV + B.O.P. ✓							
12 ¹⁵		CIRC + COND HOLE + MUD PRIOR							
	1 ⁴⁵	TO LOC							
1 ⁴⁵	4 ³⁰	HOIST TO LOC + S.L.M. (No Connection)							
4 ³⁰	5 ⁰⁰	RIG TO LOC							
5 ⁰⁰	7 ¹⁵	LOGGING							
7 ¹⁵	8 ⁰⁰	RUN IN TO CLEAN OUT BRIDGE							
8 ⁰⁰	9 ³⁰	RUN IN HOLE TIGHT. HOLE @ 5632.							
		PICKUP KELLY							
9 ³⁰	10 ³⁰	REAMER TO BOTTOM.							
10 ³⁰	11 ³⁰	CIRC. MIXING GEL.							
11 ³⁰	1 ³⁰	DUMMY TRIP. 15 STANDS TIGHT.							
1 ³⁰	2 ⁴⁵	REAM. 182 FT. TO BOTTOM.							
2 ⁴⁵	4 ⁰⁰	CIRC							
4 ⁰⁰	4 ⁴⁵	10 STAND DUMMY TRIP							
4 ⁴⁵	5 ⁰⁰	CLEAN 20' TO ATM.							
5 ⁰⁰	6 ³⁰	CIRC TO LOG							
6 ³⁰	8 ⁴⁵	HOIST TO LOG							
8 ⁴⁵	9 ¹⁵	RIG TO LOG							
9 ¹⁵	12 ⁰⁰	LOGGING							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.

BIT RECORD:															
BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS	
9	8 3/4	H 88	168848	5322	5702	350	24 1/2	44	40	1350	1	67	5 1/4	16-7A2 7/8	
10	8 3/4	WDRS	10015												
10	8 3/4	WDRS	10015	5700											

MUD RECORD: 1 HR 1 1/2 HR CIRC							MUD ADDITIVES:			SWAB CURS:			OIL SAVER RUBBERS:		
TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT	AMOUNT	TYPE	TIME	NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE
12 ⁴⁵	230	230	230				10.00 #	GEL							
10 ⁰⁰	9.3	240					50 #	C.M.C.							
2 ⁰⁰	9.3	360	7.4	2 1/2	105										
6 PM	9.3	230	7.2	2 1/2	105										

DEPTH END FIRST TOUR <u>T.D 5702</u>	DEPTH END SECOND TOUR <u>5700</u>	DEPTH END THIRD TOUR <u>5702</u>
<u>Joe Jacob</u> DRILLER OR WATCHMAN	<u>A. Krah-</u> DRILLER OR WATCHMAN	<u>Jim Murray</u> DRILLER OR WATCHMAN
TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:		
<u>D. H. S. S.</u> CONTRACTOR'S REPRESENTATIVE	<u>J. E. S.</u> BRITISH AMERICAN'S REPRESENTATIVE	<u>J. E. S.</u> BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

SEC. _____ T. _____ R. _____ PROVINCE N. W. T. CONTRACTOR CASCADE

12 ⁰⁰	1 ⁰⁰	DRLG
1 ⁰⁰	1 ¹²	RIG SERV + BOP ✓
1 ¹⁵	8 ⁰⁰	DRLG
8 ⁰⁰	8 ³⁰	DRIG. 8 ³ / ₄ HOLE W.T. 40. RPM. 44
8 ³⁰	8 ⁴⁵	RIG. SERV. BOP. SWIVEL.
8 ⁴⁵	4 ⁰⁰	DRIG. 8 ³ / ₄ HOLE.
4 ⁰⁰	4 ¹⁵	RIG SER + BOPS
4 ¹⁵	10 ⁰⁰	DRILLING
10 ⁰⁰	11 ⁰⁰	CIRC. SAMPLES
11 ⁰⁰	12 ⁰⁰	1 ¹ / ₂ STAND DUMMY TRIP

BIT RECORD:														
BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE OF DRILL COLLAR
9	8 ³ / ₄	H 88	168548	5322	RUN	180	16	44	40	1350	1	66	5 ¹ / ₄	18-7"2
9	8 ³ / ₄	H 88	168548	5322		296	2 ³ / ₄	44	40	1350	1	66	5 ¹ / ₄	18-7"-2
9	5 ³ / ₄	H 88	168548	5322	5702	380	29 ¹ / ₂	44	40	1350	1	67	5 ¹ / ₄	18-7X2

DEPTH END FIRST TOUR <u>5502</u>	DEPTH END SECOND TOUR <u>5618</u>	DEPTH END THIRD TOUR <u>TO 5702</u>
<u>L. L. Larch</u> DRILLER OR WATCHMAN	<u>A. Kishor</u> DRILLER OR WATCHMAN	<u>J. Murray</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 16 19 69 WELL NO. G-15 LEASE GULF HONORADA CL-1 LAKE

SEC. 1 T. 1 R. 1 PROVINCE N.W.T. CONTRACTOR CASCADE

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
12 ⁰⁰	12 ¹⁵	RIG SERV & BOP							
12 ¹⁵	8 ⁰⁰	DRLG							
8 ⁰⁰	8 ⁴⁵	DRLG 8 ³ / ₄ HOLE							
8 ⁴⁵	9 ⁰⁰	RIG SERV BOP SWIVEL.							
9 ⁰⁰	9 ⁵⁵	DRLG 8 ³ / ₄ HOLE							
9 ⁵⁵	10 ⁰⁰	CIRC. SAMPLE.							
10 ⁰⁰	12 ³⁰	HOIST FOR B.T. 8. LOCKED							
12 ³⁰	12 ⁴⁵	SLIP LINE.							
12 ⁴⁵	8⁰⁰	MAKEUP BIT RUN IN 6 COLLARS							
	2 ¹⁵	PICKUP JARS. RUN IN COLLARS.							
2 ¹⁵	3 ¹⁵	RUN IN HOLE.							
3 ¹⁵	3 ³⁰	BRAKE CIRC.							
3 ³⁰	4 ⁰⁰	DRLG 8 ³ / ₄ HOLE							
4 ⁰⁰	6 ³⁰	DRILLING							
6 ³⁰	6 ⁴⁵	RIG SERV & BOP							
6 ⁴⁵	12 ¹⁰	DRILLING							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY
	5322	3/4		

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
24						
DAY WORK PER 24 HOUR DAY						

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
8	8 3/4	XSSR	1128	4863	DRLG	451	35	44	40	1350	66	66	5 1/4	18-7 1/2 x 2 1/8
8	8 3/4	XSSR	1128	4863	5322	459	35 3/4	44	40	1350	66	66	5 1/4	18-7-2 3/8
9	8 3/4	HSS	168548	5322			1/2	44	30	1350	66	66	5 1/4	18-7-2 3/8
9	8 3/4	HSS	168548	5322		81	8 1/4	44	30-40	1350	1	67	5 1/4	18-7 x 2 1/8

MUD RECORD:

TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6 ⁰⁰	9.3	200	9	2/32	10.5	
8 ⁰⁰	9.3	200	9	2/32	10.5	
10 ⁰⁰	9.2	170	8 1/2	2/32	10	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
100 #	CAUSTIC	
10.00 #	GEL	
2 #	BENEX	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 5314 DEPTH END SECOND TOUR 5327 DEPTH END THIRD TOUR 5403

Dr. J. J. J. DRILLER OR WATCHMAN A. K. K. DRILLER OR WATCHMAN J. M. M. DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: J. J. J. CONTRACTOR'S REPRESENTATIVE J. J. J. BRITISH AMERICAN'S REPRESENTATIVE J. J. J. BRITISH AMERICAN FOREMAN OR SUPERINTENDENT



SEC. _____ T. _____ R. _____ PROVINCE N. W. T. CONTRACTOR CASCADE

[illegible]

BL-3 RECORD:

WELL NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R.P.M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S.P.M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
8	1 3/4	XSSR	1128	4863	DR LG	147	12	44	35-40	1400	1	67	5 1/4	18-7 X 2 7/8
8	8 3/4	XSSR	1128	4863	DR LG	268	19 3/4	44	40	1350	1	67	5 3/4	18-7" X 2 7/8
5	8 3/4	XSSR	1128	4863		362	27 1/4	44	40	1350	1	67	5 1/4	18-7 X 2 7/8

MURDER RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6 ⁰⁰	9.2	200	9.8	2/32	10.5	
8 ⁰⁰	9.2	200	9.8	2/32	10.5	
4 ⁰⁰	9.2	214	9.8	2/32	10.5	
10 ^{PM}	9.3	190	9.5	2/32	10.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
CAUSTIC	150#	-
60.00	GEL	
BEHEX	25#	
CMC	50#	

SWAB CUPS:

[illegible]

OIL SAVER RUBBERS:

[illegible]

DEPTH END FIRST TOUR 5010

DEPTH END SECOND TOUR. 5731

DEPTH END THIRD TOUR. 51315225

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

P-95

DATE MARCH 14 19 60 WELL NO. G-45 LEASE GULF AMERICAN CL LAKE

SEC. T. R. PROVINCE N.M.T CONTRACTOR CASCADE

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS, TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR. SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
12 ⁰⁰	12 ¹⁵	RIG SER + B.O.P. ✓							
12 ¹⁵	2 ⁰⁰	BREAK CIRC + CLEAN 55' TO BTM							
2 ⁰⁰		CIRC TO COND HOLE + MUD							
		HEAVY SHALE COMING OVER							
	5 ³⁰	SHAKER							
5 ³⁰	6 ³⁰	Dummy Trip							
6 ³⁰		CIRC TO COND HOLE + MUD							
	8 ⁰⁰	PRIOR TO D.S.T.							
8 ⁰⁰	8 ¹⁵	RIG SERV. BOFS.							
8 ¹⁵	10 ¹⁵	PULL OUT OF HOLE TO DST.							
10 ¹⁵		PICK UP PACKER AND MAKEUP							
	12 ³⁰	PACKER. CHANG RUBBERS ON PACKER.							
12 ³⁰	2 ⁰⁰	RUN IN WITH D.S.T. SLOW							
2 ⁰⁰	2 ⁴⁵	HEAD UP DST.							
2 ⁴⁵	4 ⁰⁰	TESTING.							
4 ⁰⁰	5 ⁰⁰	TESTING							
5 ⁰⁰	6 ³⁰	HOIST							
6 ³⁰	8 ³⁰	SERVICE & LAY DOWN TESTER							
8 ³⁰	10 ⁰⁰	RUN IN							
10 ⁰⁰	11 ⁰⁰	BREAK CIRC & CLEAN 120' TO BTM							
11 ⁰⁰	12 ⁰⁰	DRILLING							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.

TOTAL TIME CHARGEABLE TO B.A. 24

DAY WORK PER 24 HOUR DAY

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. H.	LINER SIZE	NO. AND SIZE DRILL COLLARS
8	8 3/4	X55R	1128	496.3		47	4 1/4	44	40	1500	1	67	5 1/4	18-7 x 2 1/8

MUD RECORD:

TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6 AM	9.2	280	7.4	9/32	10.5	
8 ⁰⁰	9.2	280	7.4	4/32	10.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR 4901 DEPTH END SECOND TOUR 4901 DEPTH END THIRD TOUR 4901

Ed Jacob DRILLER OR WATCHMAN A. Kuch DRILLER OR WATCHMAN Ed Jacob DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dale CONTRACTOR'S REPRESENTATIVE BRITISH AMERICAN'S REPRESENTATIVE BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MAR 14 19 69 WELL NO. G-15 LEASE GRUE AMERADA C/L LAKE
 SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME. WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.

Ran DST #1 by HOWCO in Manetor Interval 4850'-4901' w/ 7 3/4" OO dual packers 1/2" SS choke 4 min pre-flow 30 min L.S.I. Tool opened 60 mins commencing @ 3:55 PM 30 min F.S.I. G.I.A.P. followed by good air blow remaining some thru-out test

4 1/2" D.P. recovery: 180' of dily mud + 870' salt water

14SP 2321 HSP 2301 IFP 273 FFP 546 ISIP 2191 PSIP 2137
 BHT ~~2137~~

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.

BET RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR	DEPTH END SECOND TOUR	DEPTH END THIRD TOUR
DRILLER OR WATCHMAN	DRILLER OR WATCHMAN	DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:
 CONTRACTOR'S REPRESENTATIVE _____ BRITISH AMERICAN'S REPRESENTATIVE _____ BRITISH AMERICAN FOREMAN OR SUPERINTENDENT L. Ransay

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 13 1969 WELL NO. G-15 LEASE GULF AMERADA CHI LAKE

SEC. T. H. K. PROVINCE N.W.T.

CONTRACTOR CASCADE #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	CONTRACTOR <u>CASCADE #12</u>					
FROM	TO		TIME CHARGEABLE TO BRITISH AMERICAN					
			WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
12 ⁰⁰	12 ⁴⁵	DRILLING						
12 ⁴⁵	1 ⁰⁰	RIG SER						
1 ⁰⁰	4 ⁰⁰	DRILLING						
4 ⁰⁰	4 ¹⁵	SURVEY						
4 ¹⁵	8 ⁰⁰	TRIP FOR BIT #8						
8 ⁰⁰	8 ¹⁵	RIG SERV + B.O.P.s ✓						
8 ¹⁵	8 ³⁰	BREAK CIRC & CLEAN 18' TO BTM						
8 ³⁰	10 ⁰⁰	DRILL						
10 ⁰⁰	11 ⁴⁵	CIRC BTM HOLE SAMPLE						
11 ⁴⁵	2 ³⁰	CIRC BTM HOLE SAMPLE +						
2 ³⁰	4 ⁰⁰	COND MUD PRIOR TO D.S.T.						
		HOIST TO D.S.T.						
4 ⁰⁰	4 ¹⁵	RIG SERV. B.O.P.s.						
4 ¹⁵	5 ¹⁵	FINISH DUMMIE TO COLLARS.						
5 ¹⁵	6 ⁰⁰	RUN IN HOLE 27 FT. OF FILL						
6 ⁰⁰	8 ¹⁵	CIRC. COND MUD TO D.S.T.						
8 ¹⁵	9 ³⁰	SETS RUBBER IN BIT. HOIST.						
9 ³⁰	10 ³⁰	PICK UP OLD BIT. NO SETS.						
		RUN IN COLLARS.						
10 ³⁰	12 ⁰⁰	RUN IN HOLE.						
		55 FT. OF FILL.						

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY
	4863	1 3/4		

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	24					
DAY WORK PER 24 HOUR DAY						

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
7	8 3/4	X55R	214	4601	4863	262	2 1/2	44	40	1500	1	67	5 1/4	15-7 X 2 7/8
8	8 3/4	X55R	1128	4863		38	1 1/2	44	85	1600	1	66	5 1/4	15-7 X 2 7/8
8	8 3/4	X55R	1128	4863	4901	38								

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
2 AM	9.2	120				
6 AM	9.2	160				
10 AM	9.2	275				

MUD ADDITIVES:

AMOUNT	TYPE	TIME
20.00	#GEL	
6.00	BEN-EX	
PEL-TEX	150	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 4863

DEPTH END SECOND TOUR 4901

DEPTH END THIRD TOUR 4901

Jim Murray
DRILLER OR WATCHMAN

Les Spaul
DRILLER OR WATCHMAN

A. Kash
DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dale S. Saly
CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 11 1968 WELL NO. G15 LEASE GULF AMERADA CHI LAKE

SEC. T. R. PROVINCE NWT CONTRACTOR CASCADE #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
12 ⁰⁰	12 ¹⁵	FINISH PACKING SWIVEL		15					
12 ¹⁵	12 ³⁰	RIG SER & BOPS		15					
12 ³⁰	1 ³⁰	DRILLING		1 00					
1 ³⁰	2 ³⁰	CLEAN SUCTION G 700 & CHANGE PUMPS		1 00					
2 ³⁰	8 ⁰⁰	DRILLING		5 30					
8 ⁰⁰	10 ⁴⁵	DRLG		2 45					
10 ⁴⁵	11 ⁰⁰	RIG SERV & BOP ✓		15					
11 ⁰⁰	4 ⁰⁰	DRLG		5 00					
4 ⁰⁰	7 ³⁰	DRLG 8 3/4 HOLE WT 40M RPM 80		3 30					
7 ³⁰	8 ³⁰	CORE SAMPLE		1 00					
8 ³⁰	9 ⁴⁵	DROP SURVEY HOIST FOR BIT 6		1 15					
9 ⁴⁵	10 ⁰⁰	MAKE UP BIT (7) RUN IN COLLARS		15					
10 ⁰⁰	10 ³⁰	PICK UP KELLY PAT. NEW WASH		30					
		PPE COMPLETE							
10 ³⁰	11 ⁰⁰	PICK UP 2 COLLARS		30					
11 ⁰⁰	12 ⁰⁰	RUN IN HOLE		1 00					
									</

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.	24 00
DAY WORK PER 24 HOUR DAY	

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS RUN	P.M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S.P.M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
6	8 3/4	SS15-J	482341	4442		83	13 1/4	80	40	1500	1	66	5 1/4	16-7 X 2 7/8
6	8 3/4	SS16-J	482342	4442	DRILL	136	20	80	40	1500	1	66	5 1/4	16-7 X 2 7/8
7	8 3/4	XSSR	214	4601										
6	8 3/4	SS16S	482342	4442	4601	159	22 1/2	80	40	1500	1	66	5 1/4	16-7 X 2 7/8

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6 AM	9.4	135	8.4	2 1/32	10.5	
8 PM	9.4	145	8.0	2 1/32	10.5	
4 ⁰⁰	9.5	160	6.4	2 1/32	10.5	
8 ⁰⁰	9.3	140	6.4	2 1/32	10.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
4200#	GEL	
16#	BEN-EX	
150#	CAOTIC	
50#	PELTIX	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>4525</u>	DEPTH END SECOND TOUR <u>4578</u>	DEPTH END THIRD TOUR <u>4601</u>
<u>[Signature]</u> DRILLER OR WATCHMAN	<u>[Signature]</u> DRILLER OR WATCHMAN	<u>[Signature]</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

[Signature] CONTRACTOR'S REPRESENTATIVE
[Signature] BRITISH AMERICAN'S REPRESENTATIVE
[Signature] BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 10 19 69 WELL NO. G-15 LEASE GULF AMERADA CH LAKE

SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS, TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR. SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
12 ⁰⁰	1 ⁰⁰	DRILLING						
1 ⁰⁰	2 ³⁰	CHANGE WASH PIPE + PACKING						
2 ³⁰	6 ¹⁵	DRILLING						
6 ¹⁵	7 ³⁰	WORK ON SWIVEL						
7 ³⁰	9 ²⁰	DRILLING						
8 ⁰⁰	8 ¹⁵	DRLG						
8 ¹⁵	8 ³⁰	RIG SERV + B.O.R						
8 ³⁰	12 ¹⁵	DRLG						
12 ¹⁵	1 ⁰⁰	CORE BTM HOLE SAMPLE						
1 ⁰⁰	1 ¹⁵	SURVEY @ 442'						
1 ¹⁵	3 ⁰⁰	HOIST						
3 ⁰⁰		CHANGE BIT & CHECK JARS +						
	3 ³⁰	TIGHTEN SAMPLER						
3 ³⁰	3 ⁴⁵	SLIP 8' LINE						
3 ⁴⁵	4 ⁰⁰	RUN W/ D.C.						
4 ⁰⁰	4 ⁰⁵	RIG SERV. B.O.P. SWIVEL.						
4 ⁰⁵	4 ⁴⁵	RUN IN COLLARS PICKUP KELLY FIX						
		WASH PIPE						
4 ⁴⁵	5 ³⁰	RUN IN HOLE BIT ⑥						
5 ³⁰	5 ⁴⁵	BREAK CIRC.						
5 ⁴⁵	11 ³⁰	DRLG 8 3/4 HOLE WT. 35 RPM 80						
11 ³⁰	12 ⁰⁰	PUT NEW PACKING IN WASH PIPE.						

DEVIATION RECORD

DEPTH	SURVEY	DEPTH	SURVEY
4421	B 3/4		

TOTAL TIME CHARGEABLE TO B.A.

DAY WORK PER 24 HOUR DAY

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
5	8 3/4	SS16-J	182345	4179		24	22	190	35	2150	1	66	5 1/4	16-7" x 2 7/8
5	8 3/4	SS16-J	182345	4179				80	35					
6	8 3/4	SS16-J	482342	4442										
6	8 3/4	SS16-J	482342	4442		41	7 1/2	80	35	1500	1	66	5 1/4	16-7-2 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
9.6	175					
10	155	7.2	3/32	10.5		
6.0	125	7.4	3/32	10.5		
10.0	130	7.4	3/32	10.5		

MUD ADDITIVES:

AMOUNT	TYPE	TIME
58.00	GEL	
29#	BENEX	
100#	PEL-TEL	
100#	CAUSTIC	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 4419 DEPTH END SECOND TOUR 4442 DEPTH END THIRD TOUR 4483

J. Murray DRILLER OR WATCHMAN Low J. Jacob DRILLER OR WATCHMAN A. Knobel DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 9 19 69 WELL NO. G15 LEASE GULF AMERADA CL1 LAKE

SEC. T. PROVINCE NWT CONTRACTOR CASCADE #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR. SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
12 ⁰⁰	12 ¹⁵	RIG SER & B.O.P.s.		15					
12 ¹⁵	12 ³⁰	SLIP 10' LINE		15					
12 ³⁰	2 ⁰⁰	MEASURE IN		30					
2 ⁰⁰	3 ⁰⁰	BREAK CIRC & CLEAN 130' TO BTM.		00					
3 ⁰⁰	6 ⁴⁵	REAM TO 8 3/4 FROM 4168 TO 4207 39'		45					
6 ⁴⁵	8 ⁰⁰	DRILLING		15					
8 ⁰⁰	8 ⁴⁵	DRLG		45					
8 ⁴⁵	9 ⁰⁰	RIG SERV & BOP ✓		15					
9 ⁰⁰	4 ⁰⁰	DRLG		00					
4 ⁰⁰	5 ⁴⁵	DRLG 8 3/4 HOLE WT. 33M. RPM. 180		45					
5 ⁴⁵	6 ⁰⁰	RIG. SERV. BOP. SWIVEL.		15					
6 ⁰⁰	12 ⁰⁰	DRLG 8 3/4 HOLE. WT. 33M. RPM. 180		00					

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.

TOTAL TIME CHARGEABLE TO B.A.

24 00

DAY WORK PER 24 HOUR DAY

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE RECORDED	HRS. RUN	R.P.M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S.P.M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
65	8 3/4	SS16-J	182345	4207	4207	39'	3 3/4	44	76	2000	1	66	5 1/4	16-7X2 7/8
5	8 3/4	SS16-J	182345	4207		13'	1 1/4	80	30	2000	1	66	5 1/4	16-7X2 7/8
5	8 3/4	SS16-J	182345	4179		96'	9	180	30-35	2150	1	66	5 1/4	16-7X2 7/8
5	8 3/4	SS16-J	182345	4179	RUN	179'		180	33	2150	1	66	5 1/4	16-7X2 7/8

MUD RECORD:

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6AM	9.5	115	8.6	1/32	10.5	
12 Noon	9.5	130				
4 ⁰⁰	9.5	90	9.0	3/32	10.5	
10 ⁰⁰	9.5	130	9.0	2/32	10.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
6500#	GEL	
21#	BEN-EX	
100#	PEL-TEX	
100#	CAUSTIC	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 4220 DEPTH END SECOND TOUR 4275 DEPTH END THIRD TOUR 4358

J. Murray DRILLER OR WATCHMAN Leo J. Jacob DRILLER OR WATCHMAN A. Kuhn DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: D. H. Murray CONTRACTOR'S REPRESENTATIVE Robert S. Lock BRITISH AMERICAN FOREMAN OR SUPERINTENDENT



DATE MARCH 8 19 69 WELL NO. G-15 LEASE GULF AMERADA C/LI LAKE

SEC. T. R. PROVINCE NWT CONTRACTOR CASCADE 12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
12 ⁰⁰	12 ¹⁵	RIG SER & B.O.P.		15				
12 ¹⁵	1 ¹⁵	FINISH OUT	1	00				
1 ¹⁵	2 ³⁰	PICKUP CORE BBL.	1	15				
2 ³⁰	4 ⁰⁰	RUN IN (MEASURE)	1	30				
4 ⁰⁰	5 ³⁰	CLEAN 90' TO BTM	1	30				
5 ³⁰	6 ⁰⁰	CIRC. + DROP BALL		30				
6 ⁰⁰	7 ³⁰	CHANGE PUMPS & CHECK PUMP PRESSURE	1	30				
7 ³⁰	8 ⁰⁰	COREING		30				
8 ⁰⁰	12 ¹⁵	COREING	4	15				
12 ¹⁵	12 ³⁰	ROTATING TO WEAR CORE		15				
12 ³⁰	12 ⁴⁵	CONN + RIG SERV + B.O.P. ✓		15				
12 ⁴⁵	4 ⁰⁰	COREING	3	15				
4 ⁰⁰	7 ⁰⁰	COREING 6 1/2 HOLE.	3	00				
7 ⁰⁰	9 ³⁰	START OUT OF HOLE HOLE TO TIGHT	2	30				
		71 MIXING BEL BRING. VIS. UP. TO 100.						
9 ³⁰	9 ³⁰							
9 ³⁰	10 ⁰⁰	HOIST OUT OF HOLE WITH CORE	1	30				
11 ⁰⁰	11 ³⁰	RECOVER CORE		30				
11 ³⁰	12 ⁰⁰	MAKE UP CORE BBL		30				

DEPTH	SURVEY	DEPTH	SURVEY
4169	2.0		

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.
24 00				
DAY WORK PER 24 HOUR DAY				

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
5	1 1/8	JOBOBEL	9740	4167				30	5000	500	1	34	5 1/4	16-7 1/2 2 3/8
5	1 1/8	JOBOBEL	9740	4167		29	8	60	8400	800	1	42		
5	1 1/8	JOBOBEL	9740	4167	4207	40	11	60	1400	900	1	42	5 1/4	16-7 1/2 2 3/8

MUD RECORD:

TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6 AM	9.3	72				
2 PM	9.4	70	8.5	1/32	11	
4 PM	9.4	60				
10 PM	9.4	140				

MUD ADDITIVES:

AMOUNT	TYPE	TIME
500#	BEL.	
8#	BEN-EX	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>4168</u>	DEPTH END SECOND TOUR <u>4196</u>	DEPTH END THIRD TOUR <u>4207</u>
<u>J. J. J.</u> DRILLER OR WATCHMAN	<u>Leo J. J.</u> DRILLER OR WATCHMAN	<u>A. K.</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:
D. J. J. CONTRACTOR'S REPRESENTATIVE
Robert J. J. BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 7 19 69 WELL NO. G-15 LEASE GULF AMERADA C11 LAKE

SEC. T. R. PROVINCE NWT CONTRACTOR CASCADE #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME. WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS, TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR. SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
1 ⁰⁰	12 ¹⁵	SURVEY		15					
1 ¹⁵	12 ³⁰	RIG SER. + B.O.P.		15					
1 ³⁰	9 ⁰⁰	DRILLING	7	30					
8 ⁰⁰	8 ¹⁵	RIG SER. + B.O.P. ✓		15					
8 ¹⁵	8 ³⁰	DALG		15					
8 ³⁰	9 ¹⁵	CIRC Btm HOLE SAMPLE		45					
9 ¹⁵	9 ³⁰	SURVEY @ 4015		15					
9 ³⁰	11 ⁰⁰	HOIST FOR B.T. (Tight)	1	30					
11 ⁰⁰		LAYDOWN JARS CHECK + TIGHTEN							
	11 ³⁰	UP SAME		30					
11 ³⁰	11 ⁴⁵	SLIP LINE		15					
11 ⁴⁵	12 ⁴⁰	RUN IN D.C. + Pick up JARS	1	00					
12 ⁴⁰	2 ¹⁵	RUN IN	1	30					
2 ¹⁵		BREAK CIRC + REAM OUT BRIDGE							
	3 ⁰⁰	60' of Btm + CLEAN TO Btm		45					
3 ⁰⁰	4 ⁰⁰	DRIG	1	00					
4 ⁰⁰	4 ¹⁵	FLOW LINE PLUGGED		15					
4 ¹⁵	4 ⁴⁵	DRIG 8 ³ / ₄ HOLE WT. 30M. RPM. 80		30					
4 ⁴⁵	5 ⁰⁰	RIG SERV. B.O.P.S. SWIVEL		15					
5 ⁰⁰	10 ⁰⁰	DRIG 8 ³ / ₄ HOLE WT. 30M. RPM. 80	5	00					
10 ⁰⁰	11 ⁰⁰	CIRC. SAMPLE @ 7072.	1	00					
11 ⁰⁰	12 ⁰⁰	HOIST TO PICKUP MORE COLLARS AND HARDER B.T.	1	00					
DEVIATION RECORD		DEPTH SURVEY DEPTH SURVEY	TOTAL TIME CHARGEABLE TO B.A.		24 00				
		3797 7/4							
		4,015 3/4			DAY WORK PER 24 HOUR DAY				

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
3	9 3/4	XIG	9557	2623	4018	1375	45 3/4	80	30 40	1950	1	66	5 1/4	16-7" x 2 1/2"
4	8 3/4	XIG	9482	4018	41	12	1	80	30 28	1950	1	66	5 1/4	16-7" x 2 1/2"
4	8 3/4	XIG	9482	4018	4168	154	6 3/4	80	30	1950	1	66	5 1/4	16-7" x 2 1/2"

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6 AM	9.2	55	8.6	1/32	10.5	
4 PM	9.3	100	7.4	1/32	9.5	
10 PM	9.3	75	7.4	1/32	9.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
2000#	GEL	
8#	BEN-EX	
50#	C.M.C.	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 4010 DEPTH END SECOND TOUR 4030 DEPTH END THIRD TOUR 4168

G. Murray DRILLER OR WATCHMAN Leo J. Jacobs DRILLER OR WATCHMAN A. Kuehn DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: Robert S. Lock BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

CONTRACTOR'S REPRESENTATIVE: Robert S. Lock BRITISH AMERICAN'S REPRESENTATIVE

DRILLING CONTRACTOR'S DAILY REPORT

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 6 1969 WELL NO. G-15 LEASE GULF AMERADA C/L LAKE

SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS, TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR. SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
12 ⁰⁰	12 ¹⁵	RIG SER + BOPS		15					
12 ¹⁵	3 ³⁰	DRILLING	2	15					
3 ³⁰	3 ⁴⁵	WORK ON AIR LINES		15					
3 ⁴⁵	5 ⁰⁰	DRILLING	1	15					
5 ⁰⁰	5 ³⁰	REPAIR 4" VALVE ON MUD LINE		30					
5 ³⁰	8 ⁰⁰	DRILLING	2	30					
8 ⁰⁰	8 ³⁰	DRLG		30					
8 ³⁰	8 ⁴⁵	RIG SERV + BOP ✓		15					
8 ⁴⁵	9 ⁰⁰	SURVEY @ 3324 1/8"		15					
9 ⁰⁰	4 ⁰⁰	DRLG	7	00					
4 ⁰⁰	4 ¹⁵	DRLG 8 3/4 HOLE WT 30M. RPM. 80		15					
4 ¹⁵	4 ³⁰	RIG SERV BOPS-SWIVEL		15					
4 ³⁰	8 ³⁰	DRLG 8 3/4 HOLE WT. 30M. RPM 80	4	00					
8 ³⁰	8 ⁴⁵	CHECK MUD FLOW OUT OF WELL BORE OK		15					
8 ⁴⁵	12 ⁰⁰	DRLG 8 3/4 HOLE WT. 30M RPM. 80	3	15					

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY
	3324	1/8"		

TOTAL TIME CHARGEABLE TO B.A.	24	00				
DAY WORK PER 24 HOUR DAY						

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
3	8 3/4	XIG	9557	2623		124	13 1/4	80	30	1950	1	66	5 1/4	16-7X2 3/8
3	8 3/4	XIG	9557	2623	Run	943	30 3/4	80	30	1950	1	66	5 1/4	16-7X2 3/8
3	8 3/4	XIG	9557	2623	Run	1174	38 1/4	80	30	1950	1	66	5 1/4	16-7X2 3/8

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6AM	9.2	55	8.4	3/32	10.0	
8AM	9.1	68	8.2	3/32	10.0	
4 ⁰⁰	9.3	48				

MUD ADDITIVES:

AMOUNT	TYPE	TIME
GEH	85 SKS	
BENEX	25#	
CAUSTIC	250#	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 3347 DEPTH END SECOND TOUR 3566 DEPTH END THIRD TOUR 3797

J. Murray DRILLER OR WATCHMAN Leo J. Jacob DRILLER OR WATCHMAN R. Kishor DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dalmeida CONTRACTOR'S REPRESENTATIVE Robert S. Lock BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 5 1969 WELL NO. G-15 LEASE GULF AMERADA CKI LAKE

SEC. T. R. R. PROVINCE N.W.T.

CONTRACTOR CASCADE RIG #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
12 ⁰⁰	12 ¹⁵	RIG SER + BOPs		15					
12 ¹⁵	2 ³⁰	WORK TIGHT HOLE	1	15					
2 ³⁰	3 ³⁰	HOIST + CHECK FOR WASH OUT	1	00					
3 ³⁰	4 ⁰⁰	CHANGE JARS (WASHED OUT)		30					
4 ⁰⁰	5 ⁰⁰	RUN IN	1	00					
5 ⁰⁰	5 ¹⁵	BREAK CIRC. + CLEAN 15' TO BTM.		15					
5 ¹⁵	8 ⁰⁰	DRILLING	2	45					
8 ⁰⁰	8 ¹⁵	DRLG		15					
8 ¹⁵	8 ³⁰	RIG SERV + BOP ✓		15					
8 ³⁰	8 ⁰⁰	DRLG	7	30					
4 ⁰⁰	4 ¹⁵	RIG SERV. BOPs SWIVEL.		15					
4 ¹⁵	4 ⁴⁵	DRLG. 8 ³ / ₄ HOLE WT 30M. RPM 80		30					
4 ⁴⁵	5 ¹⁵	CHANG. PUMPS NIPEL WASHED OUT ON 700 POPS							30
5 ¹⁵	5 ⁴⁵	CHANG. PUMPS TO 6 700 FIX NIPEL.							30
5 ⁴⁵	6 ³⁰	DRLG 8 ³ / ₄ HOLE WT 30M. RPM 80.		45					
6 ³⁰	6 ⁴⁵	SURVEY @ 3056 8'		15					
6 ⁴⁵	12 ⁰⁰	DRLG. 8 ³ / ₄ HOLE WT. 30. RPM 44.	5	15					
								</	

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY
	3056	1/8		

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	13	00			1	00
DAY WORK PER 24 HOUR DAY						

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
3	8 3/4	XIG	9557	2623		107	2 3/4	80	30	1950	1	66	5 1/4	16-7 X 2 3/8
3	8 3/4	XIG	9557	2623	RUN	372	10 1/2	80	30	1950	1	66	5 1/4	16-7-2 7/8
3	8 3/4	XIG	9557	2623	RUN	552	16 3/4	44	30	1950	1	66	5 1/4	16-9-2 7/8

MUD RECORD:

TIME	WEIGHT	VIS. COSIFY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6AM	9.2	44	10.0	2/32	10.5	
10 ⁰⁰	9.4	65	9.8	2/32	10.5	
10 ⁰⁰	9.0	50	10.0	2/32	11.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
76.00 #	GEL	
24 #	BEN-EL	
50 #	CAUSTIC	
50 #	C.M.C	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 2730 DEPTH END SECOND TOUR 2995 DEPTH END THIRD TOUR 3175

DRILLER OR WATCHMAN Bo J. Jacob DRILLER OR WATCHMAN P. K. Kuhn

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE Robert S. Lock BRITISH AMERICAN'S REPRESENTATIVE Robert S. Lock BRITISH AMERICAN FOREMAN OR SUPERINTENDENT



DATE MARCH 4 1969 WELL NO. G-15 LEASE GULF AMERADA CLI LAKE

SEC. T. R. N.W.T. PROVINCE N.W.T. CONTRACTOR CASCADE RIG #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
12 ⁰⁰	12 ¹⁵	RIG SER & CHECK B.O.P.s		15				
12 ¹⁵	1 ³⁰	DRILLING		15				
1 ³⁰	1 ⁴⁵	CLEAN SHALE OUT OF FLOW LINE		15				
1 ⁴⁵	8 ⁰⁰	DRILLING		6	15			
8 ⁰⁰	8 ⁴⁵	DRLG		45				
8 ⁴⁵	10 ⁰⁰	INSTALL WASH PIPE & Packing on SURVIEL		15				
10 ⁰⁰	10 ¹⁵	Rig SER & B.O.P.s		15				
10 ¹⁵	11 ³⁰	DRLG		1	15			
11 ³⁰	11 ⁴⁵	SURVEY @ 2414 1 1/4"		15				
11 ⁴⁵	3 ³⁰	DRLG		3	45			
3 ³⁰	4 ⁰⁰	CLEAN OUT Suction on G-700 & TRY TO LOCATE Lost in Pump PRESSURE		30				
4 ⁰⁰	4 ¹⁵	RIG SERV. B.O.P.s		15				
4 ¹⁵	5 ⁴⁵	DRLG 8 3/4 HOLE		1	30			
5 ⁴⁵	6 ³⁰	CIRC. SAMPLE @ 2623		1	45			
		HOIST OUT OF HOLE BIT @						
7 ²⁰	8 ⁰⁰	SKIP LINE		30				
8 ⁰⁰	9 ³⁰	RUN IN HOLE BIT @		1	30			
9 ³⁰	11 ⁰⁰	WORK ON PUMP		2	00			
11 ⁰⁰	12 ⁰⁰	PIPE WASHED OUT START OUT OF HOLE PULLED TIGHT PICKUP		1	00			
		KELLY						

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.					
					HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	2414	1 1/4"			24	00				
	2623	1 1/4"								
					DAY WORK PER 24 HOUR DAY					

BIT RECORD:													
BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S.P.M.	NO. AND SIZE DRILL COLLARS
2	8 3/4	XIG	9564	1563		833	23	180	30	1950	1	66	5 1/4 16-7 1/2
2	8 3/4	XIC	9564	1563		1024	26 3/4	150	30	1550	1	66	5 1/4 16-7 1/2
2	8 3/4	XIG	9564	1563		1050	30 1/2	180	30	1850	1	66	5 1/4 16-7 1/2
3	8 3/4	XIC	9557	2623									5 1/4 16-7 1/2

MUD RECORD:							MUD ADDITIVES:			SWAB CUPS:			OIL SAVER RUEBERS:		
TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT	AMOUNT	TYPE	TIME	NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE
4AM	9.2	54	8.4	2 1/32	10.5		5 5/8	GEL							
12 noon	9.2	43	10	3 1/32	10.5		22 #	BENEX							
4:00	9.1	43	10	3 1/32	10.5		50 #	C.M.C							
							100 #	CAUSTIC							

DEPTH END FIRST TOUR <u>2391</u>	DEPTH END SECOND TOUR <u>2587</u>	DEPTH END THIRD TOUR <u>2623</u>
<u>I Murray</u> DRILLER OR WATCHMAN	<u>Leo I Jacob</u> DRILLER OR WATCHMAN	<u>P Kuster</u> DRILLER OR WATCHMAN

SEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE: Robert A. Luck BRITISH AMERICAN'S REPRESENTATIVE: Robert A. Luck BRITISH AMERICAN FOREMAN OR SUPERINTENDENT: Robert A. Luck

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

P-95

DATE MARCH 3 1969 WELL NO. G-15 LEASE GULF AMERADA C/L LAKE

SEC. T. R. R. PROVINCE ALBERTA CONTRACTOR CASCADE #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS, TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR. SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
12 ⁰⁰	12 ¹⁵	RIG SER & BOPS		15					
12 ¹⁵	12 ⁴⁵	CHANGE GLAND PACKING G-700		30					
12 ⁴⁵	3 ⁰⁰	DRILLING	2	15					
3 ⁰⁰	3 ¹⁵	SURVEY		15					
3 ¹⁵	5 ⁰⁰	WORK STOCK PIPE	4	45					
8 ⁰⁰	11 ⁴⁵	WORK JARS DOWNWARD & FREE PIPE	3	45					
11 ⁴⁵		BREAK CIRC @ 2500 P.S.T. ON JOLE							
	12 ⁴⁵	ROTATE PIPE & CIRC TO CLEAN OUT HOLE	1	00					
12 ⁴⁵	2 ⁰⁰	HOIST OUT TO CHECK PIPE	1	30					
2 ⁰⁰	2 ⁴⁵	CLEAN OUT SHALE OF SQUARE SUBS & BIT		30					
2 ⁴⁵	3 ¹⁵	MAKE UP SAME BIT & RUN IN D.C.		30					
3 ¹⁵		PULL OUT D.C. & LAY DOWN SQUARE SUBS							
	4 ⁰⁰	& Pick up Btm D.C.		45					
4 ⁰⁰	4 ¹⁵	RIG SERV. BOPS. SWIVEL		15					
4 ¹⁵	5 ⁰⁰	PICK UP BOTTOM HOLE COLLAR		45					
		AND RUN IN. LAY DOWN JARS PICK UP NEW SET.							
5 ⁰⁰	5 ³⁰	RUN IN HOLE.		30					
5 ³⁰	5 ⁴⁵	BREAK CIRC.		15					
5 ⁴⁵	12 ⁰⁰	DRILL 8 ³ / ₄ HOLE WT. 30M. RPM. 180	6	15					

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY
	1863	1 1/8"		

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	24	00				
DAY WORK PER 24 HOUR DAY						

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
2	8 3/4	X 1 G	9564	1563		300	9 1/4	80	20	1900	1	66	5 1/4	15-7"
2	8 3/4	X 1 G	9564	1563										
2	8 3/4	X 1 G	9564	1563	RUN	571		180	30	1850	1	66	5 1/4	16-7" 23

MUD RECORD:

TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
2 AM	9.1	52	9.5	2 1/2	10.0	
4 ⁰⁰						
6 ⁰⁰	90.	55			10.0	1
10 ⁰⁰	90.	60				

MUD ADDITIVES:

AMOUNT	TYPE	TIME
50#	C.M.C	
50#	PEATEX	
2000	GE L	
4#	GENEX	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 1863

DEPTH END SECOND TOUR 1863

DEPTH END THIRD TOUR 2134

A. M. M.
DRILLER OR WATCHMAN

L. J. Jacob
DRILLER OR WATCHMAN

O. K. K.
DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

D. M. M.
CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

R. B. B.
BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 2 1969 WELL NO. G-15 LEASE GULF AMERADA C/L LAKE

SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE RIG #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY, EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
12 ⁰⁰	12 ¹⁵	RIG SER + B.O.P.S.		15					
12 ¹⁵	6 ¹⁵	DRILLING	6	00					
6 ¹⁵	6 ³⁰	SURVEY @ 1432 1 1/4"		15					
6 ³⁰	8 ⁰⁰	DRILLING	1	30					
8 ⁰⁰	9 ⁰⁰	DRLG	1	00					
9 ⁰⁰	9 ¹⁵	RIG SER + BOP ✓		15					
9 ¹⁵	12 ³⁰	DRLG	3	15					
12 ³⁰	12 ⁴⁵	CIRC Btm HOLE SAMPLE		15					
12 ⁴⁵	1 ⁰⁰	SURVEY		15					
1 ⁰⁰	3 ³⁰	TRIP FOR #2 BIT	2	30					
3 ³⁰	3⁴⁵	DRLG PUT TOP SINGLE IN #							
		MOVE HOLE BREAK CIRC & CLEAN		15					
	3 ⁴⁵	TO Btm							
3 ⁴⁵	4 ⁰⁰	DRLG		15					
4 ⁰⁰	4 ¹⁵	RIG SERV. B.O.P.S.		15					
4 ¹⁵	4 ³⁰	DRLG 8 3/4 HOLE WT. 30M. RPM. 180		15					
4 ³⁰	5 ⁰⁰	WORK ON WASHED OUT RUBBER ON KELLY		30					
5 ⁰⁰	8 ¹⁵	DRLG 8 3/4 HOLE WT. 30M. RPM. 120	3	15					
8 ¹⁵	8 ³⁰	SERV. SWIVEL		15					
8 ³⁰	8 ⁴⁵	DRLG 8 3/4 HOLE WT. 30M. RPM. 44		15					
8 ⁴⁵	9 ⁰⁰	NO SUCTION		15					
9 ⁰⁰	12 ⁰⁰	DRLG 8 3/4 HOLE WT. 30M. RPM. 44	3	00					
DEVIATION RECORD:		DEPTH SURVEY DEPTH SURVEY	TOTAL TIME CHARGEABLE TO B.A.		24 00				
		1432 1 1/4"	DAY WORK PER 24 HOUR DAY						
		1563 1 1/4"							

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
1	8 3/4	X3A	8764	625		955	18 1/4	180	20	1850	1	66	5 1/4	15-7"
1	8 3/4	X3A	8764	625	1563	938	22 1/2	180	30	1850	1	66	5 1/4	15-7"
2	8 3/4	X1C	9564	1563	RUN	5'	1/4	180	25	1850	1	66	5 1/4	" " "
2	8 3/4	X1C	9564	1563	RUN			180	30	1850	1	66	5 1/4	15.7"-2 7/8"

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
12 ⁰⁰	8.9	46				
12 ⁰⁰	9.0	33				
4 ⁰⁰	9.0	36	9	2 1/2	9.0	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
6100	BEL	
122#	BENEX	
50#	C.M.C	
150#	PEATEX	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR 1480 DEPTH END SECOND TOUR 1568 DEPTH END THIRD TOUR 1761

J. Murray DRILLER OR WATCHMAN Les J. Jacob DRILLER OR WATCHMAN A. Kuchner DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Robert J. Lock BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 1 19 69 WELL NO. G-15 LEASE GULF AMERAD C/L LAKE

SEC. T. R. R. PROVINCE N.W.T. CONTRACTOR CASCADE RIG #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
12 ⁰⁰	1 ⁰⁰	RUN IN	1	00				
1 ⁰⁰	8 ⁰⁰	CIRC & MIX MUD	7	00				
8 ⁰⁰	10 ⁰⁰	CIRC & COND MUD	2	00				
10 ⁰⁰	10 ¹⁵	RIG SERV & BOPS		15				
10 ¹⁵	1 ⁰⁰	DRLG	2	45				
1 ⁰⁰	1 ¹⁵	SURVEY @ 778 1°		15				
1 ¹⁵	2 ⁴⁵	DRLG	1	30				
2 ⁴⁵		WORK TIGHT CON & LAY DOWN						
	3 ³⁰	BENT SINGLE		45				
3 ³⁰	4 ⁰⁰	DRLG		30				
4 ⁰⁰	4 ¹⁵	RIG SERV. BOPS. SWIVIL.		15				
4 ¹⁵	9 ⁰⁰	DRLG. 8 3/4 HOLE W.T. 20M. RPM 180	4	45				
9 ⁰⁰	9 ³⁰	SURVEY @ 1089. MISBLN		30				
9 ³⁰	10 ⁰⁰	DRLG. 8 3/4 HOLE W.T. 20M. RPM 180		30				
10 ⁰⁰	10 ¹⁵	SURVEY @ 1121 1°		15				
10 ¹⁵	12 ⁰⁰	DRLG. 8 3/4 HOLE W.T. 20M. RPM 180	1	45				

8155 S-CSC 625 376°		DEPTH	SURVEY	DEPTH	SURVEY
DEVIATION RECORD		778	1°		
		1121	1°		

TOTAL TIME CHARGEABLE TO B.A.		HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
		24	00				
DAY WORK PER 24 HOUR DAY							

BIT RECORD:

BIT RECORD.

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S.T.M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
1	8 ³ / ₄	X3A	8764	624										
1	8 ³ / ₄	X3A	8764	625	DRLG	278	3 ³ / ₄	180	20-25	1850	1	66	5 ¹ / ₄	15-7" 2 ³ / ₈
1	8 ³ / ₄	X3A.	8764	625	DRLG	565	10 ³ / ₄	180	20	1850	1	66	5 ³ / ₄	15-7-2 ³ / ₈

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6 AM	8.4	42				
3 PM	8.6	38				

MUD ADDITIVES:

AMOUNT	TYPE	TIME
GEL	7200	
GENEX	14 II	
GEL	3500	
GENEX	14 II	
CNIC	150 II	
PERFECT	50 II	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>624</u>	DEPTH END SECOND TOUR <u>903</u>	DEPTH END THIRD TOUR <u>1190</u>
<u>G. M. M.</u> DRILLER OR WATCHMAN	<u>Les L. Lamb</u> DRILLER OR WATCHMAN	<u>A. Kuchner</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dalton Luby CONTRACTOR'S REPRESENTATIVE
Robert B. Lock BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 28 1969 WELL NO. G-15 LEASE GULF AMERADA CLI LAKE

SEC. T. R. R. PROVINCE N.W.T. CONTRACTOR CASCADE RIG #12

TIME BY DRILLERS			TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
7:20	8:00	NIPPLE UP						
8:00	10:00	NIPPLE UP						
10:00	10:15	PRESUR Blind Ram 2000 PSE. 15 min ok						
10:15	12:00	RUN IN HOLE STD DC + Pick up 3 single						
12:00		PRESURE UP P. RAM 15 min ok } 2000						
	1:00	PRESURE UP HYDRILL 15 min ok } P.S.T						
1:00	4:00	DRILL PLUG @ 573.54						
4:00	8:00	DRILL PLUG AND SHOE						
8:00	10:00	HOIST TO REFLECTOSCOPE COLLARS						
10:00	10:30	LAY DOWN 9" COLLARS						
10:30	12:00	PICK UP 3" COLLARS 19 FT COLLAR AND JARS. AND START IN HOLE.						

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.					
DAY WORK PER 24 HOUR DAY					

BIT RECORD:											
BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.

MUD RECORD:						
TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT

MUD ADDITIVES:		
AMOUNT	TYPE	TIME
1500	ILL	

SWAB CUPS:			OIL SAVER RUBBERS:		
NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR _____ DEPTH END SECOND TOUR _____ DEPTH END THIRD TOUR 627

A. Murray DRILLER OR WATCHMAN B. Jacob DRILLER OR WATCHMAN A. Kuhn DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: Robert G. Lock BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

BRITISH AMERICAN'S REPRESENTATIVE _____

CONTRACTOR'S REPRESENTATIVE _____

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 25 19 69 WELL NO. B-15 LEASE GULF HMERADA CULHAK (Page 2)

SEC. T PROV. NWT CONTRACTOR CASCADE DRILL

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS, TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR. SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
1200	1215	RIG SERV.		15				
1215	115	WELD & REPAIR JET & LINES	1	00				
115	215	DRILL	1	00				
215	245	CLEAN GRAVEL FROM PUMP		30				
245	345	DRILL	1	00				
345	415	WELD & REPAIR JET & LINES		30				
415	430	DRILL		15				
430	445	SURVEY		15				
445	545	DRILL	1	00				
545	600	CLEAN GRAVEL FROM PUMP		15				
600	700	DRILL	1	00				
700	715	SURVEY		15				
715	800	HOIST TO REAM 16 1/2		45				
800	815	RIG SER		15				
815	930	HOIST TO REAM TO 17 1/2	1	15				
930	1130	REAM TO 17 1/2	2	00				
1130	1200	CLEAN GRAVEL FROM PUMP		30				
1200	200	REAM TO 17 1/2	2	00				
200	300	CHANG SHOCK SUB END FOR END	1	00				
300	330	REAM TO 17 1/2		30				
330	400	REPAIR CELLAR JET		30				

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY
	533	1/2		
	630	3/4		

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	10	00				
DAY WORK PER 24 HOUR DAY						

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BI. WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
2	12 1/4	STIAG	332454	75	630	555	19	150	20	1600	1	60	7 3/4	15-7-2 7/8
3	17 1/2	REAMER		0		180	4 1/2	150	10	200	1	65	7 1/4	3-9-3"
3	17 1/2	REAMER		0						200				

MUD RECORD:

TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
		HEAVY				

MUD ADDITIVES:

AMOUNT	TYPE	TIME
CAUSTIC	50#	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR 180

DEPTH END THIRD TOUR

[Signature]
DRILLER OR WATCHMAN

[Signature]
DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

[Signature]
CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

[Signature]
BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

P-93



THE BRITISH AMERICAN OIL COMPANY LIMITED

PLEASE

GULF AMIRATU CH - baki = (20/2)

SEC. _____ T. _____ R. _____ PROVINCE N.W.T

CONTRACTOR CASCADE

[illegible]

PAGE # 2

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
TOTAL TIME CHARGEABLE TO G.A.	8	00				
DAY WORK PER 24 HOUR DAY						

[illegible][illegible]

AMOUNT	TYPE	TIME

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR.

DEPTH END THIRD TOUR

DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

P-95

DATE FEB 27 1969 WELL NO. 15-15 LEASE GOLF HMERADA CUL LAKE
 SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS, TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR. SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
1200	430	DRILL	4	30				
430	515	PICK UP PACK SUB 9" DC		45				
515	600	SURVEY		15				
600	745	DRILL	1	15				
745	800	SURVEY		15				
800	800	DRILL	1	00				
800	815	RIG SER		15				
815	845	DRILL		30				
845	900	SURVEY		15				
900	145	DRILL	4	45				
145	200	SURVEY		15				
200	400	DRILL	2	00				
400	430	DRILL		30				
430	445	RIG SER		15				
445	500	SURVEY @ 350 1/8"		15				
500	630	DRILL		30				
630		CLEAN OUT SECTION + SECTION	1	00				
	730	VALVES IN G-700						
730	900	DRILL	1	30				
900	915	SURVEY @ 412 1/4"		15				
915	1030	DRILL		15				
1030	1100	REPLACE NIPPLE + ELBOW ON CELLAR JET		30				
1100	1130	DRILL		20				
1130	1240	DEPT SURVEY						
DEVIATION RECORD			70	1/4	200	1/2		
			139	1/2	290	1/4		
			TOTAL TIME CHARGEABLE TO B.A.					
			DAY WORK PER 24 HOUR DAY					

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R.P.M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S.P.M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
1	12 1/4	OSL	R-R	0	75	95	4 1/2	180	5-10	175	1	66	1 3/4	3-9" 2-7"
2	12 1/4	STIAC	382454	75		120	2 1/4	180	15	600	1	66	1 3/4	
2	12 1/4	STIAC	382454	75		260	9 1/2	180	15-20	1300	1	66	7 3/4	3-9", 7-7"

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6:00	9.1	55				

MUD ADDITIVES:

AMOUNT	TYPE	TIME
400 LBS	GEH	
300 #	CAUSTIC	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>195</u>	DEPTH END SECOND TOUR <u>335</u>	DEPTH END THIRD TOUR <u> </u>
<u>D. Newkirk</u> DRILLER OR WATCHMAN	<u>G. Murray</u> DRILLER OR WATCHMAN	<u>Leo J. French</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

D. Newkirk CONTRACTOR REPRESENTATIVE
Rudy E. Yriza BRITISH AMERICAN FOREMAN OR SUPERINTENDENT
 BRITISH AMERICAN'S REPRESENTATIVE

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 23 1969 WELL NO. G-15 LEASE GULF AMERAD CH 1444

SEC. _____ T. _____ R. _____ PROVINCE N.W. CONTRACTOR CHISEL

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
12 ⁰⁰		DRILL RAT HOLE IN BOLDER						
	7 ⁰⁰	& GRAVEL PIT						
7 ⁰⁰		RUN RAT HOLE PIPE & RIG						
	8 ⁰⁰	TO DRILL MOUSE HOLE						
8 ⁰⁰	4 ⁰⁰	RIG TO DRILL MOUSE HOLE & DRILL IT						
4 ⁰⁰	11 ⁰⁰	DRILL MOUSE HOLE IN Rock						
		BOLDER & HAMMER MOUSE HOLE						
	11 ²⁰	IN 5' OF Rock FILL						
11 ⁰⁰	12 ⁰⁰	DRLG SURFACE HOLE	1	00				
		SPUD IN @ 11 ²⁰ PM FEB 23/69						

1 hr @ operating rate.
2 1/2 hrs @ rig up rates

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHANGEABLE TO S.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
							1	00			
					DAY WORK PER 2 HOUR DAY.						

[illegible][illegible]

AMOUNT	TYPE	TIME
14 SKS	GEK	
5 SKS	SAWDUST	
5 SKS	CEMENT	

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR

DEPTH END THIRD TOUR

TH END FIRST TOUR

News

DRILLER OR WATCHMAN

DEPTH END SECOND TOUR. _____
J. Murray
 DRILLER OR WATCHMAN

DEPTH END THIRD TOUR _____
Leo J. Jones
 DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED

CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

P.953



THE BRITISH AMERICAN OIL COMPANY LIMITED

SEC. _____ T. _____ R. _____ PROVINCE _____

FROM	TO
------	----

SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.

TIME CHARGEABLE TO BRITISH AMERICAN

WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
HRS.	MIN.	HRS.	MIN.	HRS.	MIN.

RIG REPAIRS FLOOR REPAIR
LEAKS IN STEAM LINES
INSTALL RUN AROUND MUD TANKS
800 PUT ON MUFFLER ON TRACTORS

8 ⁰⁰	4 ⁰⁰	RIG UP
-----------------	-----------------	--------

DEVIATION RECORD

DEPTH	SURVEY	DEPTH	SURVEY
-------	--------	-------	--------

TOTAL TIME CHARGEABLE TO B.A.

DAY WORK PER 24 HOUR DA

BIT RECORD:[illegible]

MUD RECORD:

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

	NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR

DEPTH END THIRD TOUR

DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

~~DRILLER OR WATCHMAN~~

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

P-95



DATE FEB 21 1969 WELL NO. G15 LEASE GULF HEMERADA CHI LAKE

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING

[illegible]**BIT RECORD:**[illegible]

MUD RECORD:

[illegible]

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

	NUMBER	SIZE	TYPE

DEPTH END / EST TOUR

DEPTH END SECOND TOUR

DEPTH END THIRD TOUR

PTH END F 1ST TOUR _____
D. Newkirk
 DRIVER OR WATCHMAN

J Murray
DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dahm Lech
CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

Robert H. Lock
BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 20 19 69 WELL NO. G-15 LEASE GULF AMERADACH LAKE

SEC. _____ T. _____ R. _____ PROVINCE NWT CONTRACTOR CASCADE RIG 12

[illegible]

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.

DAY WORK PER 24 HOUR DAY

BIT RECORD:

[illegible]

MUD RECORD:

[illegible]

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

	NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR.

DEPTH END SECOND TOUR.

DEPTH END THIRD TOUR

2 ~~James~~
DRILLER OR WATCHMAN

J. Murray
DRILLER OR WATCHMAN

Lo S. Jacob
DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED.

Dale H. Hilly
CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

SEC. _____ T. _____ R. _____ PROVINCE _____

CONTRACTOR

SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME. WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT-ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.

TIME CHARGEABLE TO BRITISH AMERICAN					
WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
HRS.	MIN.	HRS.	MIN.	HRS.	MIN.

TOTAL TIME CHARGEABLE TO B.A.

DAY WORK PER 24 HOUR DAY

[illegible]

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR

DEPTH END THIRD TOUR

DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 18 19 69 WELL NO. G-15 LEASE GULF AMERICA CO. LAKE

JEC. T. R. PROVINCE NWT CONTRACTOR CASCADE RIG #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS, TOOL, PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
8 ⁰⁰	8 ⁰⁰	P.I.C. JO PUT CHAINS out TO GETHER GUARDS ON COMPOUND LINE PUMPS & P.N.D. DERRICK RAISE A LEGS.						
8 ⁰⁰	9 ⁰⁰	RIG UP						
8 ⁰⁰	6 ⁰⁰	TERRING OUT PREFAB IN CAMP + MAKE READY TO MOVE CLEAN UP AROUND OLD LEASE BLANK + ETC						

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
TOTAL TIME CHARGEABLE TO B.A.						
DAY WORK PER 24 HOUR DAY						

BIT RECORD:[illegible]

MUD RECORD:

[illegible]

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR

DEPTH END THIRD TOUR

D. Newbo
DRILLER OR WATCHMAN

G. Murray
DRILLER OR WATCHMAN

By Lo J. J. J. J.
DRIVER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED

ME/CHARGEABLE TO BRITISH AMERICAN
James L. ...
 CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

Robert L. Lock
BRITISH AMERICAN FOREMAN OR SUPERINTENDENT



DATE FEB 11 1969 WELL NO. G-13 LEASE

SEC. _____ T. _____ R. _____ PROVINCE _____ 19.10.11

CONTRACTOR CASCADE RIG TX

8 ⁰⁰	7 ⁰⁰	RIG UP PUT SUB TOGETHER & LEVEL PUT MOTORS & DRAWWORKS ON SUB BOLT DOWN
-----------------	-----------------	--

8 ⁰⁰	6 ⁰⁰	TEAR OUT SECTION ON DERRICK TO MOVE ON NEW LOCATION CLEAN UP AROUND OLD LOCATION
-----------------	-----------------	--

TOTAL TIME CHARGEABLE TO B.A.

DAY WORK PER 24 HOUR DAY

[illegible][illegible]

AMOUNT	TYPE	TIME

[illegible]

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR

DEPTH END THIRD TOUR

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

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DATE FEB 16 19 69 WELL NO. G15 LEASE GULF AMERADA CHI LAKE

SEC. _____ T. _____ R. _____ PROVINCE N. W. T. CONTRACTOR CASCADE DRUG Rtg #12

[illegible]

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
TOTAL TIME CHARGEABLE TO S.A.						
DAY WORK PER 24 HOUR DAY						

BIT RECORD:[illegible]

MUD RECORD:

[illegible]

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

	NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR

DEPTH END THIRD TOUR

D. Newko
DRILLER OR WATCHMAN

J Murray
DRILLER OR WATCHMAN

GRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dalvin Leiby
CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 27 19 69 WELL NO. B-15 LEASE GULF HMERADALLI LAKE
 SEC. T PROVINCE N.W.T CONTRACTOR CASCADE DRILL RIG-12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN					
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER	
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
1200	245	FINISH RUNNING 13 3/8 PIPE	2	45				
245	345	RIG TO CIR. & CIR. & WORK PIPE	1	00				
345	515	CEMENT & PUMP PLUG	1	30				
515	800	WOC	2	45				
800	900	W.O.C.	1	00				
900		DIG CELLAR, CUT OFF CSG. &						
	400	WELD ON BOWL	7	00				
400	600	WELD ON CSG BOWL	2	00				
600	1200	W. JPLING UP	6	00				
Ran 199 ft 13 3/8" O.D. 48" 8Rd Hd H40 Rpt 2. At casing set @ 625' cemented by Howesup 700 lbs Dickwell cement w/ 20% bubble added. Pumped plug to 589. Cement just circulated. Started cementing @ 4:15 A.M. Plug down @ 5:15 A.M. 2-77-69 Ran 3 batches of 3 centralizers on bottom 150' Dist H 15.5' Dist KB to ground 15.5' K.B. elevation 694'								

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS

MUD RECORD:

TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>625</u>	DEPTH END SECOND TOUR	DEPTH END THIRD TOUR
<u>D. Howes</u> DRILLER OR WATCHMAN	<u>J. Murray</u> DRILLER OR WATCHMAN	<u>Les J. Jacobs</u> DRILLER OR WATCHMAN
TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:		
<u>John Luby</u> CONTRACTOR'S REPRESENTATIVE	<u>Robert B. Lock</u> BRITISH AMERICAN'S REPRESENTATIVE	<u>Robert B. Lock</u> BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

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DATE FEB 26 19 69 WELL NO. G15 LEASE GULF AMERADA C11 LAKE

SEC. T. R. R. PROVINCE N.W.T. CONTRACTOR CASIARDE RIG #12

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS, TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR. SHOW ON THE RIGHT ALL TIME CHARGEABLE TO BRITISH AMERICAN ON A DAY WORK BASIS. INVOICE MUST CHECK WITH TIME SHOWN ON THE RIGHT.	TIME CHARGEABLE TO BRITISH AMERICAN						
FROM	TO		WITH DRILL PIPE		WITHOUT DRILL PIPE		OTHER		
			HRS.	MIN.	HRS.	MIN.	HRS.	MIN.	
12 ⁰⁰	12 ¹⁵	RIG SER		15					
12 ¹⁵	12 ³⁰	WELD JET LINES		15					
12 ³⁰	4 ⁴⁵	REAM TO 17 1/2	2	15					
4 ⁴⁵	5 ³⁰	WELD JET		45					
5 ³⁰	8 ⁰⁰	REAM	2	30					
8 ⁰⁰	8 ¹⁵	RIG SER		15					
8 ¹⁵	12 ³⁰	REAM	4	15					
12 ³⁰	1 ⁴⁵	CLEAN GRAVEL FROM PUMPS + CHANGE HEAD IN C-350	1	15					
1 ⁴⁵	3 ⁰⁰	REAM	1	15					
3 ⁰⁰	3 ¹⁵	CLEAN GRAVEL FROM PUMP		15					
3 ¹⁵	4 ⁰⁰	REAM		45					
4 ⁰⁰	6 ⁰⁰	REAM TO 17 1/2 HOLE	2	00					
6 ⁰⁰	6 ¹⁵	RIG SER		15					
6 ¹⁵	6 ³⁰	CLEAN OUT GRAVEL FROM PUMP		15					
6 ³⁰	8 ¹⁵	REAM TO 17 1/2 HOLE	1	45					
8 ¹⁵	8 ³⁰	CIRC TO RUN S-CSG		15					
8 ³⁰	10 ⁰⁰	HOIST TO RUN S-CSG + SKM	1	30					
10 ⁰⁰	10 ³⁰	RIG TO RUN S-CSG		30					
10 ³⁰	12 ⁰⁰	RUNNING S-CSG	1	30					

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	24	00				
DAY WORK PER 24 HOUR DAY						

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	I.D. AND SIZE OF COLLARS
3	17 1/2	REAMER	R.R.	0		444	13 3/4	180	20	250	1	65	7 3/4	
3	17 1/2	REAMER	R.R.	0		535	19	180	20	600	1	65	7 3/4	
3	17 1/2	REAMER	R.R.	0	625	625	28 3/4	180	40	650	1	65	7 3/4	

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
8 ⁰⁰ AM	100	100				

MUD ADDITIVES:

AMOUNT	TYPE	TIME
7500	GEL	24 HRS

SWAB CUPS:

NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR _____ DEPTH END SECOND TOUR 535 DEPTH END THIRD TOUR 625

DRILLER OR WATCHMAN [Signature] DRILLER OR WATCHMAN [Signature] DRILLER OR WATCHMAN [Signature]

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE [Signature] BRITISH AMERICAN'S REPRESENTATIVE [Signature] BRITISH AMERICAN FOREMAN OR SUPERINTENDENT [Signature]