

B.A. TEXACO ARROWHEAD

N-2

Drilling Authority No. ... 145
Date Issued

WELL NAME B.A. TEXACO Arrowhead N-2

FIELD

LOCATION: Unit N Area:
Section 2 Grid 60-40; 123-00
Latitude 60-31-46 Longitude 123-01-18.02
From Established Reference Marker

Rig Release Date:
Status
Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
	Application for a Drilling Authority. Well Completion Data. Well History Report.
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	Application to Alter Condition of a Well. Well History Supplement. Well Completion Data. Work-over Report No.
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	M.P.R. — Oil — Calculations.
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	Well Card.
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	Daily Drilling Reports.
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Drilling Authority No. 145

Date Issued 12-18-64

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

WELL COMPLETION DATA

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

Well name and number B.A. Texaco Arrowhead N-2

Permit No. 1042

Lease No.

The British American Oil Company Limited & Texaco Exploration Company

Exploratory Licence No.

(Permitter, Licensee, Lessee)

The British American Oil Company Ltd. Exploratory Licence No. 688

(Operator)

Location: Unit N Section 2 Grid 60°40' N, 123°00' W

Latitude 60°31'40" N

Longitude 123°01'18.02" W

From Established Reference Marker

Shot Point 30, Line B.A.-13

	DATE	DEPTH	Pool (S)
			Interval(s) open to production
Spudded	1-10-65		
Suspended			
Resumed			
Finished Drilling	3-9-65	10,047	
Deepened			Elevation: Gr. 1464 feet
Complete (gas/oil)			K.B. 1480 feet
Abandoned	3-17-65	10,047	Drilling Contractor & Rig No. Cascade Rig. No. 2
Rig released	3-17-65	10,047	Contractor's Licence No. A118G9

CASING RECORD

Casing Size (Inches)	Weight	Amount	Set at—	Sacks of Cement	Method
1. 13-3/8" OD J-55 ST&C	54.5	949.6	966	850 + 2% C.C.	
2. 9-5/8" OD J-55 ST & C	36	3038.4	3056	1000	
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth	Sub-Sea	From	To	Rec.	From	To	Rec.
Scatter ss	1547	- 67	8604	8642	12			
Scatter lower sh.	1745	- 265	8650	8702	52			
Mattson	2079	- 599	8702	8708	5			
Flett	2250	- 770	10,010	10,014	3			
Banff	2966	-1486	10,014	10,047	32			
Ershaw	4597	-3117						
Kotcho	4647	-3167						
First ls. marker	4935	-3455						
First Tetcho marker	5678	-4198						
Tetcho	5880	-4400						
Trout River	6018	-4538						
Kakisa	6313	-4833						
Redknife Ft. Simpson	6396	-4916						
Middle Devonian	8589	-7109						
Chinchaga	10009	-8529						
T.D.	10047	-8567						

LOG RECORD

Run No.	Type of Log	From	To
1	Induction E Log	3056	966
1	Gamma Sonic Caliper	3056	966
1	Microlog Caliper	3056	966
1	Continuous Dipmeter	3056	966
1	B.E.C. Sonic Caliper G.	10047	3056
1	Dual Ind. Laterolog	10047	3056
2	Microlog Caliper	10047	3056
2	Continuous Dipmeter	10047	7000

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to Abandon a Well or Suspend Drilling

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

Name and number of well E.A. TEXACO ARECHHEAD N-2
Location: Unit # Section 2 Grid 60° 40'N - 123° 00'W
Latitude 60° 11' 46" Longitude 123° 01' 18.82 W
From Established Reference Marker 600' East and 100' North of shot-point 30,
line E.A. 13
Permit No. 1342 Lease No. _____

THE BRITISH AMERICAN OIL COMPANY LIMITED & TEXACO EXPLORATION CO.
(Permitter, Licensee, Lessee)

Date of commencement of proposed programme _____

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at _____

Gas at 9220' - 9350', 9350' - 9397'

Water at _____

Total Depth 10047 Date of last operations 3-17-65

Present condition of well Standing

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sack of Cement	Method	Amount Pulled
1. <u>13-3/8"</u>	<u>54.5</u>	<u>31 joints</u>	<u>966'</u>	<u>850 (22 Cc12)</u>		
2. <u>9-5/8"</u>	<u>36.0</u>	<u>84 joints</u>	<u>3056'</u>	<u>1600</u>		
3. _____						
4. _____						
5. _____						

PROPOSED ABANDONMENT PROGRAMME

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
<u>1</u>	<u>10047 - 9950'</u>	<u>Chinleaga</u>	<u>50 (0.52R-4)</u>	<u>Not required to seal for plug</u>
<u>2</u>	<u>8650 - 8500'</u>	<u>Watt Mountain</u>	<u>90 (0.52R-4)</u>	<u>WOC 8 hr., seal for plug and</u> <u>re-spot if necessary.</u>
<u>3</u>	<u>3105 - 3005'</u>	<u>Buff Shale</u>	<u>65 (22 Cc12)</u>	<u>WOC 8 hr., seal for plug and</u> <u>re-spot if necessary.</u>
<u>Weld steel plate on casing and cap with 10 sacks cement.</u>				

The following logs have been run. Induction laterolog, Sonic Caliper Log, Microlog Caliper & Dipmeter
Other operations proposed. & SRS

Operations to be carried out by Cascade Drilling Co. Ltd. Contractor Licence No. A-11809

Address CALGARY, ALBERTA

Address _____

Responsible Agent in field L.C. McElhenny, Financial Bldg., Edmonton

Dated at EDMONTON, this 21st Day of May 1965

Signed by W. J. STONE Company The British American Oil Company Ltd.

Title Zone Production Manager Exploratory Licence No. 688

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

(For RESOURCES DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.E.J. Thoms on the 11th March 1965

Dated 26th May, 1965

B.E.J. Thoms
Forms to be submitted in triplicate to Oil Conservation Engineer, Calgary, Alberta



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to Amend a Drilling Authority

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

In compliance with the "Canada Oil and Gas Land Regulations", application is made hereby to amend Drilling Authority No. 145, concerning B.A. Texaco Arrowhead L-2

Location: Unit 1 Section 2 60°31'44.9"N - 123°01'30"W
(Name and Number of Well)

The following amendments are required: The well designation will now have to be

B.A. Texaco Arrowhead N-2 Location: Unit 1 Section 2 - 60°31'46"N -
123°01'18.02"W.

N-2-60-40-123-00.

Reasons for the amendments: Drilling site at shot point 30, B.A. Line 13 was not suitable due to terrain and interference with air strip. Site has been moved 600' East and 100' North of shot point 30.

Dated at Edmonton, Alberta, this 22nd day of December, 19 64

Signed by ORIGINAL SIGNED BY
W. K. STEVENS

Title Edmonton Zone Production Manager

Company The British American Oil Company Limited

(For Resources Division use only)

APPROVED

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

Date 23rd December, 19 64

B. J. Shomo

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



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application for a Drilling Authority

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

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

Name and number of well **B.A. Tanco Arrowhead L-2**
Location: Unit **L** Section **2** Grid **60°40'N - 123°00'W**
Latitude **60°31'44.9" N** Longitude **123°01'39" W**
From Established Reference Marker **Shot Point 30, Line B.A. - 13**

Elevation: Ground **1385'** K.B. **1400'** feet above sea-level.
Well is expected to produce from **Middle Devonian Carbonate** formation at a depth of about **3800** feet.

Area assigned to well
(for Oil Conservation Engineer's use only)

Permit No. **1042** Lease No. **62,890**
Permittee, licensee, or lessee **The British American Oil Co. Ltd. and Tanco Exploration Company**
Exploratory Licence No. **688**

Surface owned by Crown or **Crown**
(If alienated submit name and address of owner and occupant.)

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

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	Brand	New or Used	Estimated Depth	Sacks of Cement
1. 13-3/8	54.5 STC	J-55	API - SS	New	1,000	900
2. 9-5/8	36.0 STC	J-55	API - SS	New	3,600	450
3. 7	29.0 LTC	N-80	API - SS	New	10,200	
4. 7	26.0 LTC	N-80	API - SS	New	9,200	
5. 7	23.0 LTC	N-80	API - SS	New	7,000	
6. 7	26.0 TL	J-55	API - SS	New	1,100	900

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

Middle Devonian, Scatter and Marton SdSt., Flett and Chinchaga Carbonates

Hydraulic 12" Sheader Double Gate and 12" Hydril GK-900 with 3 Station Controls and Accumulator. 12" Grant Rotary Drilling Head.

Well will be drilled with (Rotary) Rig No. **2** by **Cascade Drilling Co. Ltd.**
(Gubc) (Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Licence No. **1-11809**

At well **L.G. Mulholland** At registered office **W.I. Stevens**

Address **B.A. Financial Bldg., Edmonton** Address **B.A. Financial Bldg., Edmonton, Alberta**

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

Dated at **Edmonton, Alberta** this **17th** day of **December** **1964**

Signed by **W.I. Stevens** Company **The BRITISH AMERICAN OIL COMPANY Limited**

Title **Zone Production Manager** Licence No.

(For Resources Division use only)

APPROVED

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

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

Dated **18th December** 19 **64**

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

Canadian Pacific

CD 24

TELEGRAPHS

WORLD WIDE COMMUNICATIONS

CHECK	Class of Service Desired
☒	FULL RATE
☐	DAY LETTER
☐	NIGHT MESSAGE
☐	NIGHT LETTER

TIME FILED

Send the following message, subject to the terms on back hereof, which are hereby agreed to.

Confirmationⁿ

725 - 11th Ave. S.W.
Calgary, Alberta
18th December 1964

CHIEF, RESOURCES DIVISION, DEPARTMENT OF
NORTHERN AFFAIRS & NATIONAL RESOURCES,
KENT-ALBERT BUILDING,
OTTAWA, ONTARIO.

REQUEST BY RETURN STATUS AND SURFACE DISPOSITION PERMIT TEN FORTY TWO

B.H.J. THOM

(Phoned in)

THE BRITISH AMERICAN OIL COMPANY LIMITED

BA Arrowhead N-2
60°-31'-45" N. Lat.
123°-01'-30" Long.
North West Territories

APRIL 27, 1965.



BRITISH AMERICAN OIL COMPANY LIMITED

THE BRITISH AMERICAN OIL COMPANY LIMITED

EA Arrowhead N-2
60°-31'-45" N. Lat.
123°-01'-30" Long.
North West Territories

APRIL 27, 1965.

CORE ANALYSIS SUMMARY

LEASE: B.A. Arrowhead WELL NO.: N-2
LOCATION: 60°-31'-45" N. Lat. CORED: 2-20-65
123°-01'-30" Long. - H.W.T.
POOL: New Field RECEIVED: 4-6-65
FORMATIONS CORED: Middle Devonian Carbonate; Chinchaga.

SUMMARY:

K.B.E. - 1480

Middle Devonian Carbonate
Chinchaga
T.D. (Logger)
Dense Core

8,589 -7109
10,009 -8529
10,061 -8571
Not Analyzed

Footage Cored 160.0
Footage Recovered 107.0
Footage Analyzed 0.0



J. G. GAINER

Date: April 27, 1965.

CORE DATA SHEET

P-76 (10/64)

LEASE AND WELL NO. BA Arrowhead N-2

LOCATION

PAGE NO. 1 of 1

LS03EC	TWP	R&E	M

SAMPLE NO.	TOP DEPTH FEET	INTERV. REP. FEET	WHOLE CORE POR %	WHOLE CORE PERMEABILITY			S _w %	POROSITY FEET	SMALL PLUG POR %	SMALL PLUG PERMEABILITY		LITH.
				VERT. md.	90° md.	MAX. md.				VERT. md.	HORIZ. md.	

Core #1 8604.0 - 8642.0 Recovered 12.0'

Dense 8604.0 12.0

Loss 8616.0 23.0

Core #2 8640.0 - 8702.0 Recovered 52.0'

Dense 8640.0 52.0

Core #3 8702.0 - 8708.0 Recovered 5.0'

Dense 8702.0 5.0

Loss 8707.0 1.0

Drilled 1302.0'

Core #4 10010.0 - 10014.0 Recovered 3.0'

Dense 10010.0 3.0

Loss 10013.0 1.0

Core #5 10014.0 - 10017.0 Recovered 32.0'

Dense 10014.0 32.0

Loss 10016.0 1.0

WELL HISTORY REPORT

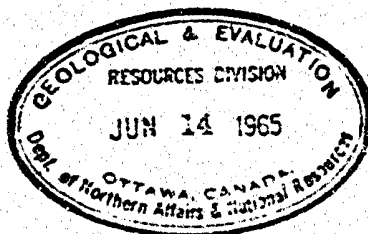
B.A. TEXACO ARROWHEAD N-2

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

WELL HISTORY REPORT

B.A. Texaco Arrowhead N-2

Unit N, Section 2
Grid 60°40' N, 123°00' W
Latitude 60°31'46" N
Longitude 123°01'18.02" W



The BRITISH AMERICAN OIL COMPANY Limited

Edmonton Production Zone

Edmonton, Alberta

May 1965

CONFIDENTIAL

I N D E X

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WELL HISTORY REPORT

B.A. Texaco Arrowhead N-2

1. SUMMARY OF WELL DATA

- (a) Well Name: B.A. Texaco Arrowhead N-2
- (b) Permittee: The British American Oil Company Limited and
Texaco Exploration Company
- (c) Name of Operator: The British American Oil Company Limited
6th Flr., Financial Building
Edmonton, Alberta
- (d) Location: Unit N, Section 2, Grid 60°40' N, 123°00' W
Latitude 60°31'46" N, Longitude 123°01'18.02" W
- (e) Co-ordinates: -
- (f) Permit Number: 1042
- (g) Drilling Contractor: Cascade Drilling Company Limited, Rig No. 2
National 100 with 2 Superior PTDS6 - 595 h.p.
each and a 131 foot L.C. Moore derrick.
License No. A11809
- (h) Drilling Authority: 145, issued December 18, 1964.
Amended on December 23, 1964
- (i) Classification: New field well
- (j) Elevations: Ground 1464 feet
Distance H 18.41 feet
Ground to K.B. 16.0 feet
K.B. Elevation 1480 feet
- (k) Spudded: 10:30 a.m. January 10, 1965
- (l) Completed Drilling: March 9, 1965
- (m) Total Depth: 10,047 feet
- (n) Well Status: Plugged and Abandoned at final total depth of
10,047 feet
- (o) Rig Released: 7:00 a.m. March 17, 1965
- (p) Hole Size: 17-1/2" 0' to 966'
12-1/4" 966' to 3056'
8-3/4" 3056' to 10,047'

(q) Casing: 13 joints 13-3/8" OD 54.5# J-55 BRT ST&C SS Class A Mannesmann. Casing set at 966 feet. Ran 3 centralizers on bottom 65 feet and no scratchers.

84 joints 9-5/8" OD 36# BRT J-55 ST&C SS Class A Mannesmann casing set at 3056 feet.
Ran 5 scratchers and 3 centralizers on bottom 90 feet.

II. GEOLOGICAL SUMMARY

(a) Formation Tops

K.B. Elevation 1480'

<u>Formation</u>	<u>Ind. E-Log Depth</u>	<u>Subsea</u>	<u>Sample Top</u>
<u>CRETACEOUS</u>			
Buckingham Formation			
Scatter sandstone	1,547'	- 67'	1,550'
Lower shale	1,745'	- 265'	1,755'
<u>PERMO-CARBONIFEROUS</u>			
Mattson Formation	2,079'	- 599'	2,075'
<u>MISSISSIPPIAN</u>			
Flett Formation	2,250'	- 770'	2,300'
Banff Formation	2,966' (?)	-1,486'	2,970'
Exshaw Formation	4,597'	-3,117'	4,605'
<u>DEVONIAN</u>			
Kotcho Formation	4,647'	-3,167'	4,650'
First Limestone Marker	4,935'	-3,455'	4,938'
First Tetcho Marker	5,678'	-4,198'	5,675'
Tetcho Formation	5,880'	-4,400'	5,883'
Trout River Formation	6,018'	-4,538'	6,021'
Kakisa Formation	6,313'	-4,833'	6,310'
Redknife-Ft. Simpson Formation	6,396'	-4,916'	6,400'
Middle Devonian Carbonate	8,589'	-7,109'	8,593'
Chinchaga Formation	10,009'	-8,529'	10,013'
Total Depth Driller	10,047'		
Total Depth Logger	10,051'		

(b) Cored Intervals

<u>Core No.</u>	<u>Interval</u>	<u>Formation</u>	<u>Recovery</u>
1	8604' - 8642'	Middle Devonian	12' (cut 38')
2	8650' - 8702'	Middle Devonian	52' (cut 52')
3	8702' - 8708'	Middle Devonian	5' (cut 6')
4	10010' - 10014'	Chinchaga	3' (cut 4')
5	10014' - 10047'	Chinchaga	32' (cut 33')

(c) Core Description: Attached

(d) Sample Description: Attached

Attached also are remaining sample descriptions

III. ENGINEERING SUMMARY

(a) Report of Drill Stem Tests

- DST #1 February 23, 1965 - Interval tested 9220 to 9350 feet in the Pine Point, by Johnston with dual 7-3/4" packers and 1/2" ss choke. Used 1055 feet water cushion. No initial shut-in, tool open 120 mins., commencing 6:30 p.m. 2-23-65, fair initial air puff gas to surface in 15 mins. measured at 410 MCFD after 60 mins. decreasing to 332 MCFD after 90 mins. and remained steady for remainder of test. 60 min. final shut-in. Fluid recovery - 1200 feet; 1055' water cushion and 145' drilling mud (4 1/2" OD drill pipe)
IHSP 4920, FHSP 4197, IFP - FFP 631, ISIP - FSIP 3959. Recorder at 9222 feet, B.H.T. - 260° F
Misrun - Tool Plugged
- DST #2 February 27, 1965 - Interval tested 9350 to 9597 feet in the Pine Point by Johnston with 7 1/2" dual packers and 1/2" ss choke. Used 785' water cushion. 30 min. initial shut-in, Tool open 60 mins. commencing 6:02 a.m. 2-27-65. Fair initial air puff increasing to strong, gas to surface in 40 mins. too small to measure, remaining steady throughout test. Final Shut-in 60 mins. Fluid recovery - 785' water cushion and 1080' very gassy drilling fluid. (4 1/2" OD drill pipe)
IHSP 4991, FHSP 4820, IFP 1344, FFP 910, ISIP 3890, FSIP 3134. Recorder at 9358, B.H.T. 255° F
- DST #3 March 11, 1965 - Misrun (unable to reach bottom)
- DST #4 March 12, 1965 - Misrun (packer seat failed)
- DST #5 March 13, 1965 - Interval tested 8785 to 8796 feet in Slave Point by Johnston with dual 7-3/4" straddle packers with by-pass and 1/2" ss choke. Used 1000 feet water cushion. 45 min. initial shut-in, tool open 60 mins. commencing 7:45 a.m. 3-13-65. Good initial air puff, dying in 6 mins. Air blow died while taking initial flow. Final shut-in 35 mins. Fluid recovery 1090'; 1000' water cushion and 90' gas cut drilling fluid (4 1/2" OD drill pipe).

IHSP 4842, FHSP 4770, IFP 572, FFP 605,
ISIP 2170, FSIP 1729. Recorder at 8757 feet. B.H.T.
200° F (estimated)

DST #6 March 13, 1965 - Interval tested 9579 to 10,047' in the Chinchaga by Johnston with dual 7-3/4" packers and 1/2" ss choke. 30 min. initial shut-in, tool open 60 mins. commencing 7:30 p.m. 3-13-65. Used 1000' water cushion. Fair initial air puff, followed by weak air blow, dying in 24 mins. Final shut-in 30 mins. Fluid recovery - 1240'; 1000' water cushion, and 240' gas cut drilling fluid (4 1/2" OD drill pipe)
IHSP 5107, FHSP 5050, IFP 586, FFP 615,
ISIP 3900, FSIP 3755. Recorder at 9599'.
B.H.T. 264°F (estimated)

Note DST Nos. 1 and 2 were submitted to your office on March 15, 1965 and DST Nos. 3, 4, 5 and 6 were forwarded to your office on March 22, 1965.

(b) Casing Record:

Ran 31 joints 13-3/8" OD 54.5 J-55 8KI ST&C SS Class A casing. Casing set at 966 feet. Ran 3 centralizers on bottom 65 feet and no scratchers. Cemented by HOWCO with 850 sacks Portland normal bulk cement with 2% CAC12 added. Pumped plug to 933 feet, plug down at 4:45 p.m. 1-16-65. Cement circulated 24 barrels. Witnessed by Seely for contractor, and Hannah for British American.

Ran 84 joints 9-5/8" OD 36# 8RT J-55 ST&C SS Class A casing and set at 3056 feet. Ran 5 scratchers and 3 centralizers on bottom 90 feet. Cemented by HOWCO with 1000 sacks, Portland cement. Pumped plug to 3020 feet. Plug down at 10:05 p.m. 1-31-65. Cement circulated 21 barrels. Witnessed by Seely for contractor and Schomaker for British American.

(c) Bit Record:

No.	Size	Type	Depth In	Depth Out	Footage	Hours
1A	17-1/2	OSC3 Retip.	0	247	247	34
2A	17-1/2	OSC3 Retip	247	580	333	26-3/4
3A	17-1/2	YT1A	580	824	244	25-1/2
4A	17-1/2	OSC3	824	966	142	21-3/4
*5A	12-1/4	YT3A	966	967	1	8-1/2
1	8-3/4	H8J	967	2191	1224	30-1/2
2	8-3/4	YHG	2191	2247	56	6-3/4
6A	12-1/4	S Opener	966	2131	1165R	18-3/4
7A	12-1/4	Reed H N-Opener	2131	2207	76R	4-1/4
8A	12-1/4	Reed H-Opener	2207	2247	40R	1-1/4

<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>
3	12-1/4	YM	2247	2303	56	10-1/4
4	12-1/4	YH	2303	2401	98	20-1/4
5	12-1/4	YM	2401	2752	351	28-3/4
6	12-1/4	YS-1	2752	3055	303	24-1/4
5	12-1/4	YM (Rerun)	3055	3056	1	1/4
7	8-3/4	OWV	3056	3144	88	2-1/2
8	8-3/4	RRG-7XJ	3144	8604	5460	86
9	6-1/8	KOEBEL	8604	8642	38C	3-3/4
10	8-3/4	OSC1-G	8604	8642	38R	1/4
10	8-3/4	OSC1-G	8642	8650	8	1
11	6-1/8	KOEBEL	8650	8702	52	7-3/4
10	8-3/4	OSC1-G	8650	8702	52R	6
9	6-1/8	KOEBEL	8702	8708	6C	2-1/2
12	8-3/4	M4N	8702	8708	6R	1/4
12	8-3/4	M4N	8708	8848	140	15-1/4
13	8-3/4	OWC	8848	8975	127	17-3/4
14	8-3/4	M4L	8975	9178	203	29-1/4
15	8-3/4	YM	9178	9350	172	27
16	8-3/4	M4L	9350	9522	172	25-1/4
17	8-3/4	OWC	9522	9597	75	10-1/2
18	8-3/4	YHWG	9597	9682	85	18-3/4
19	8-3/4	H7UG	9682	9738	56	12
20	8-3/4	H7	9738	9822	84	19
21	8-3/4	YHG	9822	9905	83	16-3/4
22	8-3/4	YHG	9905	9943	38	10
23	8-3/4	W7R2	9943	10010	61	13-1/4
24	6-1/8	KOEBEL	10010	10047	37C	18-1/4
25	8-3/4	YHG	10010	10047	37R	37

*drilled out cement, float and casing shoe.

R - Reaming

C - Coring

(d) Mud Report:

Surface Hole - Depth 0 - 966' Water gel mud

Viscosity 50 to 90 sec.

Intermediate Hole - Depth 966' to 1700' air drilled

Depth 1700' to 2190' mist drilled

Depth 2190' to 3056' gel chemical mud system
using high thinner

Mud Weight 9.0 to 10.2#
Viscosity 50 to 107 sec.
Water Loss 6.2 to 12.2 cc
pH 8.5 to 9
Filter Cake 2/32"

Bore Hole - Depth 3056' to 8170' air drilled
 Depth 8170' to 10047' gel chemical mud system
 using high thinner

Mud Weight 9.2 to 10.2#
 Viscosity 125 to 450 sec.
 Water Loss 3.0 to 5.8 cc
 pH 8.5 to 10.5
 Filter Cake 2/32"

Materials

Aquagel	99,500 pounds
Baroid	78,000 pounds
Q-Broxin	14,700 pounds
Dextrid	8,600 pounds
Carbonox	8,100 pounds
Caustic Soda	7,400 pounds
Quik-Gel	5,000 pounds
Fibertex	3,600 pounds
Lime	1,500 pounds
Bicarb	600 pounds
Microseal	34 pounds

(e) Deviation Record:

<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>
60	1/8	769	1/2	5033	3-1/8
90	3/4	799	1/2	5503	2-7/8
120	3/4	825	1/8	5970	6-1/8
150	3/4	890	7/8	6060	6
180	1/2	922	7/8	6220	6-1/8
217	1/4	950	7/8	6412	5-7/8
247	3/4	1350	1/4	6570	5-3/4
277	1/8	1571	1/2	6745	5-1/2
307	0	2020	2-1/4	6975	6
367	1/2	2120	2-1/4	7227	5-3/4
455	3/4	2303	1-1/2	7477	6
485	3/4	2401	1-1/4	7720	6-1/2
520	3/4	2746	2-1/4	7860	7-1/2
551	1/2	2750	1-1/2	8604	8
580	3/4	3008	2	8848	8-3/4
640	1/2	3360	1-1/2	8975	7
675	3/4	4000	2-1/2	9178	6-1/2
706	3/4	4500	3-1/4	9350	5-1/2
738	1/2	4750	3-1/8	9682	3

(f) Abandonment Plugs:

<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>	<u>Additives</u>
3-15-65	1	10047 - 9950	Chinchaga	50	nil	no feel	.5% HR-4
3-15-65	2	8650 - 8500	Middle Devonian	90	8	8475	.5% HR-4
3-16-65	3	3105 - 3005	Banff	65	8	2990	2% CaCl ₂

Dumped 5 sacks cement inside 9-5/8" OD casing, welded steel plates on 9-5/8" OD casing and 13-3/8" OD casing and dumped 10 sacks cement on top.

(g) Lost Circulation Zones:

Encountered water zone from 2160 to 2190 feet. Water flowed in excess of 100 barrels per hour. Lost approximately 175 barrels mud to formation. Added 85 sacks sawdust and 15 sacks Fibertex - regained circulation.

(h) Report of Blowouts:

Encountered a trace of gas in the Trout River at approximately 6050 feet, while making a connection.

IV. LOGS

<u>Date</u>	<u>Run No.</u>	<u>Interval</u>	<u>Type</u>
1-30-65	1	3,056' to 966'	Induction Electrical Log
1-30-65	1	3,056' to 966'	Gamma Sonic Caliper
1-30-65	1	3,056' to 966'	Microlog Caliper
1-30-65	1	3,056' to 966'	Continuous Dipmeter
3-9-65	1	10,047' to 3,056'	Borehole Compensated Sonic Caliper Gamma Ray
3-9-65	1	10,047' to 3,056'	Dual Induction Laterolog
3-9-65	2	10,047' to 3,056'	Microlog Caliper
3-9-65	2	10,047' to 7,000'	Continuous Dipmeter

V. ANALYSIS

(a) Core Analysis: forwarded to your office on May 4, 1965.

(b) Water Analysis:

<u>Lab. No.</u>	<u>Source</u>	<u>Date Mailed</u>
W-79-65	Water flowed to surface from depth of 2190-2160	3-15-65
W-136-65 (Mud)	DST #1	3-26-65
W-137-65 (Mud)	DST #2	4- 1-65

(c) Gas Analysis

#98-65 from DST #1 sent to you 4-5-65

(d) Oil Analysis: nil

VI. COMPLETION SUMMARY

(a) Tubing Record: nil

(b) Perforation Record: nil

(c) Cementation Record: See III (f)

(d) Acidization and Fracturing Record: nil

(e) Back Pressure and Production Tests: nil

Respectfully submitted,

The BRITISH AMERICAN OIL COMPANY Limited



W. I. Stevens

Edmonton Zone Production Manager

Edmonton, Alberta
May 12, 1965

B.A.-TEXACO ARROWHEAD N-2

Core Description

Core No. 1 (Air cored)

Interval: 8,604-8,642 feet

Recovered: 12 feet

- Top 4 feet Limestone, medium dark grey brown, very fine calcarenite, pyrobitumen very finely disseminated throughout; about 1% white dolomite crystals scattered throughout; numerous near-horizontal fractures and bedding planes with oil stain; core surface covered with oily film; trace gas bleeding, trace crinoid ossicles.
- Next 1 foot Limestone, medium dark grey brown, very fine calcarenite with minor calcisiltite; trace disseminated pyrobitumen, no oil stain; trace dolomite crystals.
- Next 2 feet Limestone, medium grey brown, calcisiltite to very fine calcarenite; trace disseminated pyrobitumen; bleeding trace gas; surface of core is covered with oily films as are bedding planes and near-horizontal fractures; fine dolomite crystals disseminated throughout.

Core No. 2

Interval: 8,650'-8,702'

Recovered: 52 feet

- Top 7 feet Limestone, medium dark grey brown, fine to medium calcarenite, poorly preserved stromatoporoid fragments, approximately 10%.
- Next 17½ feet Limestone, dark grey brown, very fine to fine calcarenite, trace crinoid ossicles, local stromatoporoid fragments.
- Next 13 feet Limestone, medium dark grey brown, very fine calcarenite, Stromatopora - mainly branching type form about 30% of interval, Amphipora primarily in bands up to 2".
- Next 6 feet Limestone, medium dark brown, very fine to fine calcarenite, branching stromatoporoids and Amphipora form most of interval, 70%.
- Next 2½ feet Limestone, medium grey brown, very fine calcarenite, shell fragments abundant.
- Next 1 foot Limestone, medium brown, 70% Stachyodes and Amphipora in very fine calcarenite matrix.

Next 4½ feet Limestone, medium dark grey brown, fine to medium calcarenite.

Basal 6 inches Limestone, medium brown, fine to medium calcarenite,
abundant stachyodes with coarse white calcite interfossil
fill.

Core No. 3

Interval: 8,702-8,708 feet
Recovered: 5 feet

Top 5 feet Limestone, dark brown, very fine to medium calcarenite,
poorly sorted, numerous Stachyodes approximately 10%, few
poorly preserved encrusting type stromatoporoids in top
two feet; Amphipora about 2%. Core breaks easily along
bedding planes and is about half rubble.

Core No. 4

Interval: 10,010-10,014 feet
Recovered: 3 feet core jammed

3 feet

(10,010-10,013 feet)

Dolomite, light grey to light grey brown, crypto- to micro-
crystalline, sandy - disseminated pyrite, sand grains -
subrounded, fine to medium grained, clear quartz.
20 to 30% sand grains in dolomite. A few thin stringers
and blebs 1/4 to 1/2 inch thick of fine to medium grained
quartzitic sandstone - calcareous cement; black bituminous
material and pyrite associated with the sandstone blebs and
stringers.

One fracture 3 inches from top of core is at 25° to
bedding 1/4 inch thick and infilled with coarse crystalline
white dolomite.
A few near-vertical fractures.

Core No. 5

Interval: 10,014-10,047 feet
Recovered: 32 feet

- 1' (10,014-15') Dolomite, light to medium grey, crypto to microcrystalline, sandy - 10 to 15% of rock is very fine to fine grained, subrounded clear quartz grains, disseminated pyrite, a few stylolites, numerous near-vertical fractures - some 1/8 inch thick infilled with medium to coarse crystalline, white dolomite, others paper thin with black bituminous material along them.
- 4 feet (10,015-10,019) Dolomite, pale brown, crypto- to microcrystalline, sandy - 10 to 20% very fine to fine grained, subrounded, clear quartz grains, numerous stylolites, numerous irregular closed, near-vertical fractures; a few blebs and irregular open fractures infilled with medium to coarse crystalline white dolomite.
- 6 inches (10,019-19.5') Dolomite, light grey, cryptocrystalline, stylolitic - patches 1 to 2 inches long and 1/2 inch thick of white, fine crystalline anhydrite.
- 1 foot (10,019.5-20.5) Dolomite, light grey to light grey brown, cryptocrystalline, sandy - 10 to 20% fine to very fine grained, subrounded quartz grains - thin vertical fractures infilled with medium crystalline, white dolomite.
- 1.5 feet (10,020.5-22') Dolomite, pale brown, microcrystalline, sandy - 10%, very fine quartz grains, disseminated pyrite - numerous patches 1/8 to 1/2 inch in diameter of white, medium to coarse crystalline dolomite.
- 6 feet (10,022-28') Dolomite, pale brown, crypto- to microcrystalline, disseminated pyrite, sandy - 10% very fine to fine grained, clear quartz grains, platy fracture - parallel to bedding, small patches (1/4 inch) and thin irregular fractures infilled with white, medium to coarse crystalline dolomite, a few stylolites, some partly open, bed 4 inches thick at the top of this zone highly fractured and contains thin (1/2 inch) irregular beds of pale brown, very fine crystalline anhydrite.
- 10 feet (10,028-38') Dolomite, light to medium grey brown, micro- to very fine crystalline, abundant, very irregular patches and thin beds of lighter colored, very dense, cryptocrystalline dolomite - gives core a mottled appearance; sandy - 10%, very fine to fine grained, clear quartz grains, abundant stylolites, numerous irregular fractures up to 1/4 inch thick infilled with white, medium crystalline dolomite, patches of white crystalline dolomite average 1/4 inch in diameter, 6 inch

(10 feet - continued)

thick zone 5 feet from base of this interval has numerous irregular fractures and black, bituminous partings up to 1/8 inch thick, a few irregular patches of pale brown, microcrystalline anhydrite - a thin zone 3 inches thick 6 inches from the base of this interval contains abundant small patches (1/8 to 1/4 inch) of white, microcrystalline anhydrite.

8 feet
(10,038-46')

Dolomite, medium to dark grey brown, micro- to cryptocrystalline, slightly silty, numerous irregular shaped patches of coarse crystalline, white dolomite, abundant near vertical fractures infilled with white crystalline dolomite, numerous stylolites, a few irregular shaped black bituminous shale partings - one 1/2 inch thick occurs 2 feet from base of core.

B.A.-TEXACO ARROWHEAD N-2

Spudded 10:30 a.m. January 10, 1965

SAMPLE DESCRIPTION

700'-730'	Sandstone, light gray, fine to very fine grained, friable, glauconitic and slightly argillaceous, micaceous, with loose very coarse quartz and varicolored chert grains. Sandstone has poor to fair intergranular porosity.
730'-770'	Sandstone, as above, with 20% medium grey, blocky shale.
770'-810'	Sandstone, as above, with 30% medium grey, soft, micaceous shale, locally sandy.
810'-850'	Sandstone, with 40% shale, as above.
850'-880'	Sandstone, as above, abundant clay matrix, with 30% sandy shale, as above, with porosity, as above.
880'-900'	Shale, medium to dark grey, fissile - locally blocky, sandy, micaceous, with minor sandstone, as above, with loose sand grains, coarse, pink.
900'-920'	No sample.
920'-930'	Shale, as above, with medium brown silty shale.
930'-950'	No sample.
950'-960'	Shale, as above, with 30% sandstone, as above.
960'-970'	Shale, dark grey, blocky, micaceous, locally sandy.

Surface casing @ 996 feet

Drilled out @ 11:00 p.m. January 19, 1965.

970'-1,000'	Shale, dark grey, silty, glauconitic, locally grades to very fine grained, argillaceous, glauconitic sandstone.
1,000'-1,050'	Shale, dark grey, silty, blocky, micromicaceous, glauconitic locally medium grey.
1,050'-1,080'	Shale, as above, with very fine grained, glauconitic sandstone.
1,080'-1,100'	Sandstone, very fine grained, glauconitic, micromicaceous, locally argillaceous, friable.
1,100'-1,120'	Sandstone, as above, with interbedded medium grey, sandy shale.

- 1,120'-1,140' Shale, medium to dark grey, sandy, micromicaceous, with interbedded sandstone, as above.
- 1,140'-1,160' Shale, medium to dark grey, sandy, micromicaceous, slightly glauconitic.
- 1,160'-1,180' Shale, as above, with interbedded grey, very fine grained, glauconitic, friable sandstone, micaceous.
- 1,180'-1,190' Shale, medium grey, micaceous, silty.
- 1,190'-1,210' Shale, with interbedded sandstone, as above.
- 1,210'-1,270' Shale, dark grey, micaceous, silty and glauconitic.
- 1,270'-1,280' Shale, as above, with interbedded light grey, very fine grained, glauconitic, micaceous sandstone.
- 1,280'-1,350' Shale, medium to dark grey, micromicaceous, silty and glauconitic in part.
- 1,350'-1,400' Shale, medium grey, micaceous, locally glauconitic and silty.
- 1,400'-1,420' Shale, medium grey, micaceous, locally silty, glauconitic and pyritic.
- 1,420'-1,430' No sample.
- 1,430'-1,440' Shale, as above.
- 1,440'-1,580' No sample - returns are all dust - impossible to wash. Shale may be completely pulverized?
- SCATTER SANDSTONE 1,547 (-67) feet
- 1,580'-1,590' Sandstone, light brown, very fine to fine grained, glauconitic, micaceous; locally light grey and very glauconitic and friable.
- 1,590'-1,600' Sandstone, as above, with medium to dark grey, micaceous shale.
- 1,600'-1,610' Shale, medium to dark grey, locally silty and glauconitic, with minor sandstone, as above.
- 1,610'-1,630' Shale, as above, with sandstone, fine grained, well sorted, quartzose, glauconitic, friable, with poor intergranular porosity, with minor light brown, fine grained, glauconitic sandstone.
- 1,630'-1,660' No returns. Mist builds up and unloads.
- 1,660'-1,670' Shale, with sandstone, as above.

- 1,670'-1,690' Sandstone, light grey to pale brown, very fine grained, slightly salt and pepper, glauconitic and micaceous, very friable, with poor intergranular porosity.
- 1,690'-1,730' No returns.
- 1,730'-1,740' Sandstone, as above, with medium grey, sandy, glauconitic shale.

LOWER BUCKINGHAMSHIRE SHALE 1,745' (-265')

- 1,740'-1,760' No returns.
- 1,760'-1,770' Very poor sample - cavings.
- 1,770'-1,780' Shale, medium to dark grey, micromicaceous, locally silty and glauconitic, slightly calcareous.
- 1,780'-1,820' No returns.
- 1,820'-1,830' Shale, as above, with light brown to medium grey, argillaceous, locally glauconitic silt.
- 1,830'-1,840' No returns.
- 1,840'-1,850' Shale, medium grey, blocky, slightly calcareous.
- 1,850'-1,860' No returns.
- 1,860'-1,890' Shale, medium grey, blocky, locally micromicaceous, slightly calcareous.
- 1,890'-1,940' Shale, medium to dark grey, micromicaceous, blocky, with trace pyrite.
- 1,940'-2,000' Shale, as above, becoming more fissile, with minor medium grey, micaceous silt.
- 2,000'-2,030' No returns - hole unloads periodically - probably shale, as above.
- 2,030'-2,080' Shale, medium grey, micromicaceous, slightly silty, locally soft, waxy, carbonaceous.

MATTSON 2,079' (-599')

- 2,080'-2,090' Sandstone, pale brown, very fine grained, well sorted, sub-angular quartz, quartzose, very slightly calcareous, minor carbonaceous material, moderately friable, with fair to good intergranular porosity, trace interstitial black, pyrobituminous material, with trace light brown chert fragments.

- 2,090'-2,100' Sandstone, as above, locally more carbonaceous, with porosity, as above, with trace light brown chert fragments.
- 2,100'-2,110' No returns. Hole surges and unloads - difficult to catch sample.
- 2,110'-2,120' Sandstone, as above, pale brown, locally sand becomes fine to medium grained and very clean with better developed porosity.
- 2,120'-2,130' No returns.
- 2,130'-2,140' Sandstone, white, fine and locally medium grained, sub-angular clear quartz with a few grey and black chert grains, locally carbonaceous and friable, with fair to good intergranular porosity, with minor black interstitial pyrobituminous material.
- 2,140'-2,150' No returns. Surging - hole unloads periodically.
- 2,150'-2,160' Sandstone, white, fine to medium grained, subangular clear quartz, quartzose, clean, friable, with fair to good intergranular porosity with trace pyrobitumen, a few black and grey chert grains.
- 2,160'-2,170' Sandstone, as above, becoming more friable.
- 2,170'-2,180' Sandstone, loose medium grained, subangular quartz, with good intergranular porosity, with trace pyrobitumen, with 20% grey, black, and light brown chert fragments; chert has a trace of leach porosity. One chip has sandstone - chert contact.
- 2,180'-2,190' Sandstone and chert, as above, with 60% shale, as above; poor sample.
- 2,190'-2,200' Shale, medium grey, fissile, micromicaceous, with trace sandstone, as above. Poor sample?

Began mud drilling @ 2,191 feet

- 2,200'-2,230' No samples. lost circulation material in mud - unable to catch sample.
- 2,230'-2,240' Chert, black, medium grey and pale brown, locally sandy, with scattered poor, leached porosity, with minor limestone, pale brown, fine calcarenite with bituminous partings. Some pieces show contact with overlying chert.
- 2,240'-2,250' Limestone, pale brown, fine calcarenite, locally coarse, with black pyrobituminous partings, slightly pyritic, crinoidal, with chert, as above - cavings?

2,250'-2,260' Limestone, as above, locally chalky.

FLETT 2,250' (-770) feet

- 2,260'-2,290' Limestone, pale to medium gray brown, fine calcarenite, crinoidal, slightly pyritic, locally chert, with irregular black, bituminous partings.
- 2,290'-2,300' Limestone, as above, crinoid fragments in a fine calcarenite matrix, a few brachiopod fragments, with 5% black and medium brown chert fragments.
- 2,300'-2,340' Limestone, pale to medium grey brown, a few crinoid fragments in a fine calcarenite matrix, fewer crinoids, with 20% dark grey and medium brown, chert fragments, locally dark grey with bituminous partings.
- 2,340'-2,380' Limestone, pale to medium grey brown, fine calcarenite, very slightly pyritic, a few crinoid fragments and brachiopods.
- 2,380'-2,400' Limestone, as above, locally chalky, very slightly pyritic.
- 2,400'-2,420' Limestone, pale brown, crinoidal, fine calcarenite matrix, locally chalky, a few brachiopods, with minor medium grey, fissile shale, with crinoid stems.
- 2,420'-2,460' Limestone, pale brown, crinoidal, fine calcarenite matrix, slightly pyritic, with black irregular bituminous partings, locally argillaceous, with crinoid stems.
- 2,460'-2,470' Limestone, light grey brown, fine calcarenite, a few crinoid fragments, locally chalky, slightly pyritic.
- 2,470'-2,490' Limestone, light to medium grey brown, crinoidal, fine calcarenite matrix, with trace medium brown chert.
- 2,490'-2,520' Limestone, light to medium grey brown, fine to medium calcarenite, locally crinoidal, slightly pyritic, with trace black bituminous partings, with brachiopods, with minor medium grey, fissile shale.
- 2,520'-2,530' Limestone, light grey brown, crinoidal, fine to medium calcarenite matrix, with trace brown chert, with trace black bituminous partings.
- 2,530'-2,540' Limestone, light to medium grey brown, fine calcarenite, a few crinoid fragments and brachiopods, locally chalky, argillaceous, with minor medium grey, fissile shale.
- 2,540'-2,550' Limestone, as above, with 50% medium grey, fissile, calcareous shale.

- 2,550'-2,560' Shale, medium grey, fissile, calcareous, with 30% limestone, as above.
- 2,560'-2,570' Shale, medium grey, fissile, calcareous.
- 2,570'-2,590' Shale, as above, with interbedded limestone, as above.
- 2,590'-2,600' Shale, as above, with minor light grey brown, crinoidal limestone.
- 2,600'-2,610' Limestone, light grey brown, crinoidal, fine calcarenite matrix, with 40% shale, as above.
- 2,610'-2,620' Limestone, light grey brown, crinoidal, fine calcarenite matrix, very slightly pyritic, argillaceous in part.
- 2,620'-2,630' Shale, medium grey, fissile, calcareous.
- 2,630'-2,640' Limestone, pale brown to medium grey, fine calcarenite, crinoids, locally argillaceous, with black bituminous partings.
- 2,640'-2,650' Limestone, medium grey, fine calcarenite, argillaceous, with 50% medium grey, fissile, limy shale.
- 2,650'-2,660' Shale, medium grey, fissile, calcareous, with 20% limestone, pale brown, fine calcarenite, locally argillaceous.
- 2,660'-2,670' Shale, medium grey, fissile, limy, grades to argillaceous limestone.
- 2,670'-2,680' Shale, as above, with pyrite.
- 2,680'-2,720' Shale, medium grey, fissile, calcareous, locally dark grey, with trace pyrite.
- 2,720'-2,750' Shale, medium grey, fissile, calcareous, slightly pyritic, with a few crinoid fragments, with minor dark grey, non-calcareous shale.
- 2,750'-2,810' Shale, medium grey, fissile, calcareous, slightly pyritic, with a few crinoid fragments, with minor dark grey, non-calcareous limestone.
- 2,810'-2,820' Shale, as above, with a few brachiopod fragments.
- 2,820'-2,840' Shale, as above, with crinoid fragments.
- 2,840'-2,860' Limestone, pale brown, mottled, crinoidal, medium calcarenite matrix, pyritic, locally coarse calcarenite, with trace medium brown chert.
- 2,860'-2,870' Limestone, as above, with irregular black bituminous partings.

- 2,870'-2,880' Limestone, pale brown, medium to coarse calcarenite, crinoidal, with trace light brown chert.
- 2,880'-2,890' Shale, medium grey, fissile, calcareous, with minor limestone, as above.
- 2,890'-2,930' Limestone, pale brown, mottled, medium to coarse calcarenite, crinoidal branchiopods, pyritic, locally pelletoidal, very coarse black limestone pellets in a fine to medium calcarenite matrix.
- 2,930'-2,950' Limestone, pale to medium grey brown, medium to coarse calcarenite, crinoidal, pyritic, with 50% medium grey, fissile, calcareous shale, with trace medium grey silt.
- 2,950'-2,970' Limestone, pale brown, medium to coarse calcarenite, crinoidal, slightly pyritic, with medium grey silt, very slightly calcareous.
- 2,970'-2,980' Shale, medium to dark grey, fissile, noncalcareous, with limestone, pale brown, medium to coarse calcarenite, crinoidal, sandy in part; with 10% medium grey siltstone, argillaceous.
- 2,980'-2,990' Limestone, as above, with shale, as above, with siltstone, as above.
- 2,990'-3,000' As above, limestone, sandy.
- 3,000'-3,010' Siltstone, light grey, calcareous, with medium grained, calcareous sandstone.
- 3,010'-3,020' Siltstone, sandstone, as above, with 60% medium grey, fissile, calcareous shale.
- 3,020'-3,030' Limestone, pale brown, medium to coarse calcarenite, crinoidal, slightly pyritic; with 10% light grey to pale brown, calcareous silt.
- 3,030'-3,050' Shale, medium to dark grey, locally calcareous, fissile, locally waxy, slightly micromicaceous and pyritic, with limestone, as above, 30%, with trace siltstone, as above.
- 3,050'-3,055' Shale, as above, with crinoid stem fragments, locally silty.
- 3,055'- Shale, medium to dark grey, fissile, micromicaceous, mainly noncalcareous, locally silty.
- 3,055' (circulating) Shale, medium to dark grey, noncalcareous, locally waxy, slightly micromicaceous, locally silty, with minor light grey, locally argillaceous, calcareous siltstone, with crinoidal limestone cavings?

- 3,060'-3,090' No sample. Started air drilling after setting casing at 3,056' - no sample returns for 30 feet.
- 3,090'-3,100' Shale, dark grey, calcareous, micromicaceous. Cement from plug 75%.
- 3,100'-3,110' Limestone, light brown, crinoidal, very fossiliferous.
- 3,110'-3,120' Shale, dark grey, green tinge, calcareous.
- 3,120'-3,130' Shale, medium grey, very calcareous, less fissile than as above; limestone, light brown, fine to coarse fragmental, crinoidal, argillaceous in part, 30%.
- 3,130'-3,140' Shale, dark greenish grey, slightly calcareous, fairly fissile.
- 3,140'-3,150' Shale, as above; shale, dark brown, fissile, 10%.
- 3,150'-3,160' Shale, medium dark grey, slightly calcareous, fairly fissile.
- 3,160'-3,180' Shale, dark greenish grey, very slightly calcareous, fairly fissile; limestone, medium brown, crinoidal, argillaceous, 2 to 5%.
- 3,180'-3,200' Shale, as above; trace limestone, as above.
- 3,200'-3,220' Shale, dark grey, slight green tinge, very slightly calcareous, fairly fissile; shale, dark brown, fairly fissile, 10%.
- 3,220'-3,240' Shale, dark grey, slight green tinge, slightly calcareous, fissile; shale, dark brown, as above; trace limestone, medium brown, fine crystalline, fossiliferous, trace.
- 3,240'-3,250' Shale, medium brown grey, very calcareous, blocky fracture; limestone, medium brown, very fossiliferous, crinoids, etc. 5%.
- 3,250'-3,260' Shale, dark grey, fissile; limestone, medium grey brown, crinoidal, fine calcarenite, 70%.
- 3,260'-3,270' Shale, medium brown grey, very calcareous, blocky fracture; shale, dark grey, as above, 20%.
- 3,270'-3,280' Shale, dark grey, fairly fissile, very slightly calcareous; siltstone, medium grey brown, slightly arenaceous, slightly micromicaceous, 35%.
- 3,280'-3,310' Shale, medium dark grey, very slightly calcareous, fairly fissile, few pyrite aggregates, approximately 1% to trace.
- 3,310'-3,320' Shale, medium dark grey, as above; shale, medium grey brown, fairly fissile, 10 to 20%.

- 3,320'-3,400' Shale, medium dark grey, slight green tinge, slightly calcareous, fairly fissile, few crinoids and shell fragments.
- 3,400'-3,420' Shale, as above; shale, medium dark brown, fissile, 15%.
- 3,420'-3,430' Shale, medium reddish brown, fissile, very slightly calcareous; shale, medium dark grey, fissile, very slightly calcareous, 10%.
- 3,430'-3,440' Shale, medium reddish brown, as above, 50%; shale, medium dark grey, as above.
- 3,440'-3,460' Shale, medium grey, slight green tinge, slightly calcareous; shale, medium reddish brown, as above, 10%.
- 3,460'-3,480' Shale, medium brown grey, calcareous, blocky fracture, numerous crinoid ossicles, grades to argillaceous limestone.
- 3,480'-3,490' Shale, medium green grey, slightly calcareous, fairly fissile; shale, medium reddish brown, slightly calcareous, fairly fissile, 25%.
- 3,490'-3,520' Shale, medium grey, slight green tinge, very slightly calcareous, fairly fissile, trace pyrite aggregate; trace medium brown shale.
- 3,520'-3,550' Shale, medium grey, slight green tinge, slightly calcareous; shale, medium grey brown, fairly fissile, very slightly calcareous, 25%; trace limestone, light medium brown, numerous crinoid ossicles.
- 3,550'-3,560' Shale, medium reddish brown, slightly calcareous, slightly fissile; shale, medium grey, as above, 10 to 20%.
- 3,560'-3,570' Shale, medium reddish brown, as above, 60%; shale, medium grey, as above.
- 3,570'-3,580' Shale, predominantly medium grey, slightly calcareous, minor medium brown, as above.
- 3,580'-3,610' Shale, medium grey, slight green tinge, slightly calcareous, fairly fissile, 1% to trace crinoid ossicles.
- 3,610'-3,630' Shale, medium grey, slight green tinge, slightly calcareous, fairly fissile; shale, medium dark grey, slightly calcareous, fissile, 20%.
- 3,630'-3,640' Shale, medium grey, as above; shale, medium grey brown, fissile, 10 to 15%.
- 3,640'-3,650' Shale, medium grey, as above.
- 3,650'-3,670' Shale, medium grey, as above; shale, medium grey brown, fissile, 25%, slightly calcareous.

- 3,670'-3,740' Shale, medium grey, green tinge, slightly calcareous, fissile, minor medium grey brown shale, as above.
- 3,740'-3,850' Shale, medium grey, slight green tinge, calcareous and fissile.
- 3,850'-3,970' Shale, medium grey, slight green tinge, calcareous, slightly fissile.
- 3,970'-4,070' Shale, medium to medium dark grey, calcareous, slightly fissile.
- 4,070'-4,200' Shale, medium grey, calcareous, fairly fissile, slightly micromicaceous.
- 4,200'-4,220' Shale, medium to medium dark grey, calcareous, slightly fissile.
- 4,220'-4,290' Shale, medium grey, less calcareous than above, more competent, fairly fissile.
- 4,290'-4,300' Shale, predominantly medium grey, minor medium dark grey, slightly calcareous, fairly fissile; bentonite, very light grey, slightly calcareous, 5%.
- 4,300'-4,310' Shale, medium dark grey, as above; shale, medium grey brown, slightly calcareous, fissile, 5 to 10%.
- 4,310'-4,350' Shale, medium grey, slightly calcareous, fissile; few pyrite aggregates..
- 4,350'-4,360' Shale, medium dark grey, slightly calcareous and fissile; trace limestone, light brown.
- 4,360'-4,390' Shale, medium grey and medium grey brown, very slightly calcareous, poorly fissile, micromicaceous.
- 4,390'-4,400' Shale, medium grey to light medium grey, slightly calcareous, competent, micromicaceous, few pyrite aggregates.
- 4,400'-4,430' Shale, medium dark grey, slightly calcareous and fissile, trace pyrite aggregates.
- 4,430'-4,490' Shale, dark grey, shiny lustre, noncalcareous, fairly fissile, competent.
- 4,490'-4,570' Shale, medium dark grey, noncalcareous, fairly fissile, pyrite aggregate.
- 4,570'-4,590' Shale, dark grey, noncalcareous, fairly fissile, pyrite aggregate.
- 4,590'-4,660' Shale, dark grey, soft, fissile, fine pyrite aggregate.

- 4,650'-4,700' Shale, light medium grey, very calcareous, poorly fissile, slightly micromicaceous.
- 4,700'-4,710' Shale, medium grey, calcareous, slightly fissile, micromicaceous; shale, medium grey brown, slightly calcareous, 25%.
- 4,710'-4,720' Shale, medium reddish brown, slightly calcareous, micromicaceous, 60%; shale, medium grey, slightly calcareous, as above.
- 4,720'-4,730' Shale, medium grey, slightly calcareous, slightly fissile.
- 4,730'-4,750' Shale, as above; shale, medium reddish brown, 10%.
- 4,750'-4,760' Shale, medium grey to medium dark grey, slightly calcareous, fairly fissile.
- 4,760'-4,770' Shale, medium grey, slightly calcareous and fissile; shale, medium reddish brown, slightly calcareous and fissile, 5%.
- 4,770'-4,840' Shale, light medium grey, very calcareous, fairly fissile, micromicaceous.
- 4,840'-4,880' Shale, medium grey, calcareous, slightly fissile, slightly micromicaceous, minor medium grey brown shale, slightly calcareous.
- 4,880'-4,910' Shale, light medium grey, calcareous, fairly fissile, slightly micromicaceous.
- 4,910'-4,930' Shale, medium grey, slightly calcareous, slightly fissile.
- 4,930'-4,940' Shale, medium grey, calcareous, poorly fissile; limestone, light medium brown, microcrystalline, 5 to 10%.
- 4,940'-4,950' Shale, as above; shale, dark reddish brown, 10%; limestone, as above, 5%.
- 4,950'-4,960' Shale, light medium grey, very calcareous, slightly fissile; limestone, light grey brown, microcrystalline, argillaceous, grades to shale, 10%.
- 4,960'-4,980' Shale, medium grey, slightly calcareous; limestone, as above, 5%; shale, dark grey brown, competent, 5% to 15%.
- 4,980'-5,010' Shale, light medium grey, very calcareous, competent, grades in minor part to argillaceous limestone.
- 5,010'-5,020' Shale, light medium grey, calcareous; limestone, light grey brown, microcrystalline, 10%; shale, medium reddish brown, 5%.
- 5,020'-5,030' Shale, medium grey, calcareous; shale, medium brown, calcareous, 10%.

- 5,030'-5,040' Shale, medium grey, green tinge, calcareous.
- 5,040'-5,050' Shale, as above; shale, dark grey brown, slightly calcareous, competent, fissile, 50%.
- 5,050'-5,090' Shale, medium grey, green tinge, calcareous, fairly fissile, minor dark reddish brown shale, fissile, calcareous.
- 5,090'-5,110' Shale, light medium grey, calcareous, slightly fissile.
- 5,110'-5,130' Shale, medium grey, calcareous, slightly fissile.
- 5,130'-5,150' Shale, as above; shale, very dark brownish grey, trace.
- 5,150'-5,160' Shale, light medium grey, calcareous, slightly fissile.
- 5,160'-5,170' Shale, medium grey, calcareous; shale, dark grey brown, fissile, slightly calcareous, 5%.
- 5,170'-5,200' Shale, medium grey, calcareous, fairly fissile.
- 5,200'-5,220' Shale, medium grey, calcareous, fairly fissile, slightly micaceous; shale, dark grey brown, fissile, slightly calcareous, approximately 5%.
- 5,220'-5,230' Shale, medium grey, as above; shale, dark reddish brown, fairly fissile, slightly calcareous, 30%.
- 5,230'-5,260' Shale, medium grey, slightly calcareous and fissile; minor dark red brown shale, as above.
- 5,260'-5,270' Shale, medium grey, fairly calcareous and fissile.
- 5,270'-5,290' Shale, as above; shale, dark red brown, slightly calcareous, fissile, 10%.
- 5,290'-5,310' Shale, light medium grey, calcareous, fairly fissile; shale, dark grey brown, slightly calcareous and fissile, approximately 5%.
- 5,310'-5,370' Shale, medium grey, calcareous, fissile.
- 5,370'-5,380' Shale, medium dark grey, slightly calcareous and fissile; minor shale with dark brown tinge.
- 5,380'-5,480' Shale, medium grey, calcareous, fairly fissile.
- 5,480'-5,540' Shale, medium grey, calcareous, fairly fissile.
- 5,540'-5,550' Shale, as above; shale, very dark grey, slight brown tinge, trace.

- 5,550'-5,560' Shale, medium grey, calcareous, as above; shale, medium grey brown, slightly calcareous, fissile, 5%.
- 5,560'-5,650' Shale, medium grey, calcareous, fairly fissile, brown tinge in part.
- 5,650'-5,700' Shale, medium grey, calcareous, fairly fissile.
- 5,700'-5,720' Shale, medium dark grey, calcareous, fairly fissile, pyrite aggregate; limestone, light medium brown, microcrystalline, approximately 2%.
- 5,720'-5,740' Shale, medium grey, calcareous, fairly fissile, pyrite aggregate.
- 5,740'-5,790' Shale, medium grey, calcareous, fairly fissile, micromicaceous, trace pyrite aggregate.
- 5,790'-5,820' Shale, medium dark grey, calcareous, micromicaceous, fairly fissile, brown tinge in part.
- 5,820'-5,860' Shale, medium grey, calcareous, fairly fissile; shale, dark grey, blocky, trace.
- 5,860'-5,880' Shale, medium grey to medium dark grey, calcareous, fairly fissile, becoming increasingly competent, micromicaceous.
- 5,880'-5,950' Shale, medium dark grey, calcareous, brown tinge, fairly fissile, slightly micromicaceous.
- 5,950'-5,980' Shale, medium grey, calcareous, slightly fissile; limestone, light medium grey brown, microcrystalline, argillaceous 80%.
- 5,980'-5,990' Limestone, light medium grey brown, cryptocrystalline to microcrystalline, argillaceous, grades to very calcareous shale, 80%.
- 5,990'-6,000' Shale, dark grey, calcareous, slightly fissile.
- 6,000'-6,010' Siltstone, light medium grey brown, very calcareous, blocky fracture, slightly micromicaceous, competent.
- 6,010'-6,020' Siltstone, medium brown grey, calcareous, competent.
- 6,020'-6,030' Siltstone, light medium brown grey, slightly calcareous, slightly micromicaceous.
- 6,030'-6,060' Siltstone, light medium brown grey, very calcareous, quartzose.
- 6,060'-6,090' Siltstone, light greenish grey, slightly calcareous, micromicaceous, blocky fracture.
- 6,090'-6,110' Siltstone, medium greenish grey, slightly calcareous.

- 6,110'-6,120' Shale, dark brownish grey, slightly calcareous, silty, 40%; siltstone, as above.
- 6,120'-6,140' Siltstone, medium brown grey, slightly calcareous, argillaceous; minor shale, as above.
- 6,140'-6,160' Siltstone, light medium brownish grey, increasingly calcareous, blocky fracture, micromicaceous.
- 6,160'-6,170' Siltstone, light medium brownish grey, very calcareous, irregular fracture.
- 6,170'-6,200' Siltstone, medium brownish grey, slightly calcareous, argillaceous, grades to silty shale, micromicaceous, 50%.
- 6,200'-6,240' Shale, medium grey, slightly calcareous and fissile, silty in part, slightly micromicaceous.
- 6,240'-6,260' Shale, medium dark brownish grey, calcareous, slightly silty, slightly micromicaceous, trace light grey brown, calcareous silt.
- 6,260'-6,280' Siltstone, light medium grey brown, very calcareous.
- 6,280'-6,290' Siltstone, as above, becoming argillaceous.
- 6,290'-6,320' Shale, medium dark grey, calcareous, fissile.
- 6,320'-6,330' Shale, medium brownish grey, very calcareous, slightly silty.
- 6,330'-6,340' Limestone, medium greyish brown, very silty, slightly argillaceous, microcrystalline.
- 6,340'-6,350' Limestone, as above, grades to very calcareous silt.
- 6,350'-6,370' Limestone, light medium grey brown, microcrystalline, silty, slightly argillaceous.
- 6,370'-6,380' Limestone, light medium greyish brown, microcrystalline to cryptocrystalline, slightly silty and argillaceous.
- 6,380'-6,410' Siltstone, medium greyish brown, very calcareous, argillaceous; shale, medium brownish grey, very calcareous, silty, 20%.
- 6,410'-6,430' Shale, medium grey, green tinge, calcareous, silty in part, poorly fissile.
- 6,430'-6,450' Shale, medium grey, slight green tinge, slightly calcareous, more fissile than above shale.
- 6,450'-6,460' Shale, medium dark grey, slightly calcareous, fairly fissile.

- 6,460'-6,470' Shale, medium grey, slightly calcareous, fairly fissile.
- 6,470'-6,480' Shale, medium grey, calcareous, fairly fissile.
- 6,480'-6,490' Shale, medium grey, slightly calcareous, fairly fissile, more competent than as above.
- 6,490'-6,510' Shale, as above; shale, dark grey brown, slightly calcareous, fissile, 10%.
- 6,510'-6,620' Shale, medium grey, calcareous, fairly fissile.
- 6,620'-6,670' Shale, medium grey, slight green tinge, slightly calcareous, fairly fissile, slightly micromicaceous.
- 6,670'-6,760' Shale, medium grey, slightly calcareous, fairly fissile, slightly micromicaceous.
- 6,760'-6,770' Shale, as above; shale, medium brownish grey, very calcareous, blocky fracture, micromicaceous, 10%.
- 6,770'-6,800' Shale, medium grey, fairly calcareous, poorly fissile, slightly micromicaceous.
- 6,800'-6,810' Shale, medium grey, calcareous, fairly fissile.
- 6,810'-6,920' Shale, medium grey, slightly calcareous, fairly fissile, slightly micromicaceous, competent.
- 6,920'-7,060' Shale, medium grey, slightly calcareous, fairly fissile, slightly micromicaceous.
- 7,060'-7,200' Shale, medium grey, slightly calcareous, fairly fissile, slightly micromicaceous, competent.
- 7,200'-7,240' Shale, medium grey, very slightly calcareous, fairly fissile, slightly micromicaceous.
- 7,240'-7,250' Shale, as above; shale, medium reddish brown, very slightly calcareous, fissile, 25%.
- 7,250'-7,270' Shale, medium grey, very slightly calcareous, fissile, micromicaceous.
- 7,270'-7,290' Shale, medium dark grey, very slightly calcareous, fissile.
- 7,290'-7,300' Shale, medium reddish brown, fissile, very slightly calcareous, 40%; shale, as above.
- 7,300'-7,390' Shale, medium grey, very slightly calcareous, fissile.
- 7,390'-7,410' Shale, as above, 50%; shale, medium reddish brown, slightly fissile and calcareous.

- 7,410'-7,670' Shale, medium grey, fissile, slightly micromicaceous, noncalcareous, minor shale as above, with blocky fracture.
- 7,670'-7,730' Shale, medium grey, noncalcareous, fissile, slightly micromicaceous, minor shale, dark grey, with brown tinge.
- 7,730'-7,860' Shale, medium grey, noncalcareous, fairly fissile, slightly micromicaceous; minor dark grey shale, as above.
- 7,860'-7,960' Shale, medium grey, noncalcareous, fairly fissile, slightly micromicaceous, fairly competent.
- 7,960'-7,990' Shale, as above; shale, medium reddish brown, fissile, micromicaceous, 10%.
- 7,990'-8,010' Shale, medium grey, noncalcareous, fairly fissile, slightly micromicaceous. Trace medium reddish brown shale, as above.
- 8,010'-8,020' Shale, medium dark grey, fissile; shale, medium reddish brown, 5 to 10%.
- 8,020'-8,040' Shale, medium grey, slightly micromicaceous, fairly fissile.
- 8,040'-8,050' Shale, medium grey, brown tinge, micromicaceous, slightly calcareous.
- 8,050'-8,080' Shale, medium grey, fairly fissile, competent, micromicaceous, very slightly calcareous; shale, dark brown, poorly fissile 5%.
- 8,080'-8,100' Shale, medium grey, very slightly calcareous, fairly fissile, slightly micromicaceous.
- 8,100'-8,110' Shale, medium dark grey, very slightly calcareous, slightly fissile; shale, medium dark grey brown, fairly fissile, micromicaceous, 30%.
- 8,110'-8,140' Shale, medium grey, fairly fissile, slightly micromicaceous.
- 8,140'-8,150' Shale, medium grey, as above; shale, medium reddish brown, fairly fissile, micromicaceous, 60%.
- 8,150'-8,280' Shale, medium grey, as above.
- 8,280'-8,290' Shale, medium dark grey, micromicaceous sheen, brown tinge in part, fairly fissile.
- 8,290'-8,360' Shale, medium grey, very slightly calcareous, fairly fissile, slightly micromicaceous, slight brown tinge in part.
- 8,360'-8,420' Shale, medium dark grey, brown tinge, fairly fissile, slightly micromicaceous, noncalcareous.
- 8,420'-8,440' Shale, dark grey, micromicaceous, soft, slightly fissile; shale, light medium grey brown, fissile, 5 to 10%, calcareous.

- 8,440'-8,470' Shale, dark grey, slightly calcareous, micromicaceous sheen, fairly fissile.
- 8,470'-8,510' Shale, medium dark grey, fairly fissile, slightly micromicaceous, trace pyrite aggregate.
- 8,510'-8,530' Shale, dark grey, slight brown tinge, micromicaceous sheen, fairly fissile, soft, trace pyrite aggregate.
- 8,530'-8,540' Shale, dark grey, brown tinge, slightly calcareous, very poorly fissile, abundant finely disseminated pyrite, competent - hard drilling.
- 8,540'-8,550' Shale, dark grey, fairly fissile, micromicaceous sheen, softer than above shale.
- 8,550'-8,570' Shale, dark grey, brown tinge, siliceous in part, interbedded with approximately 5% dark grey chert, trace pyrite aggregate.
- 8,570'-8,580' Shale, dark brownish grey, calcareous, micromicaceous, poorly fissile, trace disseminated pyrite.
- 8,580'-8,590' Shale, dark grey, brown tinge, poorly fissile, very calcareous, disseminated pyrite. Trace limestone, light grey brown, slightly argillaceous.
- 8,590'-8,600' Limestone, dark grey brown, slightly argillaceous, microcrystalline to cryptocrystalline, slightly dolomitic; limestone, light brown, microcrystalline, 2%.
- 8,600'-8,604' Limestone, dark grey brown, slightly argillaceous to argillaceous, microcrystalline, slightly dolomitic.
- 8,604'-8,708' Cored (#1, 2 and 3)
- 8,620'-8,630' (Reamed sample) Shale, medium green grey, very slightly calcareous, cavings.
- 8,630'-8,640' Limestone, dark brown, microcrystalline (probably recrystallized calcarenite).
- 8,640'-8,650' Limestone, dark brown, very fine calcarenite, dense.
- 8,650' Limestone, dark brown, calcisiltite to very fine calcarenite, dense.
- 8,720'-8,730' Limestone, light medium brown, calcisiltite to very fine calcarenite, slightly dolomitic.
- 8,730'-8,740' Limestone, light medium brown, minor dark brown, calcisiltite to very fine calcarenite, locally trace intergranular pyrobitumen, stylolites, slightly dolomitic.

- 8,740'-8,750' Limestone, medium to dark brown, very fine calcarenite, very fossiliferous - *Amphiporas* or *Stachyodes*, slightly dolomitic.
- 8,750'-8,760' Limestone, light medium brown plus dark brown, calcisiltite and very fine calcarenite, slightly dolomitic, fossiliferous, stylolites.
- 8,760'-8,780' Limestone, predominantly light to medium brown, minor dark brown, calcilutite to very fine calcarenite, slightly dolomitic.
- 8,780'-8,800' Limestone, predominantly light medium brown, minor dark brown, calcilutite to very fine calcarenite, slightly dolomitic, fossiliferous, minor white calcite.
- 8,800'-8,840' Limestone, very light brown, calcisiltite to calcilutite, fossiliferous, slightly dolomitic, minor white calcite, chalky.
- 8,840'-8,850' Limestone, predominantly very light brown, minor dark brown, calcisiltite to very fine calcarenite, slightly dolomitic, fossiliferous.
- 8,850'-8,860' (post-trip sample) Shale, medium grey, fissile; limestone, as above, 5%.
- 8,860'-8,870' Shale, as above, 80%; limestone, very light brown, minor dark brown, very fine to fine calcarenite, fossiliferous, slightly dolomitic.
- 8,870'-8,880' Limestone, very light brown, as above (largely pulverized by drilling bit).
- 8,880'-8,890' Limestone, predominantly very light brown, chalky texture, calcisiltite to very fine calcarenite, slightly dolomitic, fossiliferous, stylolitic.
- 8,890'-8,900' Limestone, very light brown and dark brown, calcilutite and calcisiltite, dolomitic, stylolitic, fossiliferous.
- 8,900'-8,920' Limestone, light brown and dark brown, calcisiltite and very fine to fine calcarenite, dolomitic, fossiliferous, carbonaceous partings, crinoid ossicles, etc.
- 8,920'-8,930' Limestone, light to medium grey brown, very fine calcarenite, slightly dolomitic, stylolitic.
- 8,930'-8,950' Limestone, medium grey brown, calcisiltite to very fine calcarenite, argillaceous, dolomitic.
- 8,950'-8,980' Limestone, medium grey brown, calcilutite, argillaceous, slightly dolomitic? argillaceous partings.
- Trip 8,975'

- 8,980'-8,990' Shale, medium grey, green in part, cavings; limestone, medium grey brown, very argillaceous, 10%.
- 8,990'-9,000' Shale, as above; limestone, medium to dark grey brown, calcilutite, argillaceous to very argillaceous; shale partings, trace fossils.
- 9,000'-9,010' Limestone, predominantly light medium greyish brown, calcilutite, fossiliferous; minor dark grey brown, argillaceous lutite.
- 9,010'-9,040' Limestone, light medium greyish brown to greyish brown, calcilutite, argillaceous, very fine tubular fossils - Prototaxites? argillaceous partings.
- 9,040'-9,070' Limestone, light greyish brown to dark brown, calcilutite, slightly argillaceous, slightly dolomitic, crinoidal, Prototaxites?, fossiliferous, trace white calcite.
- 9,070'-9,090' Limestone, light medium brown to medium brown, calcilutite, fine shell fragments, stylolitic, slightly dolomitic, conchoidal fracture, dark grey shale partings, trace.
- 9,090'-9,120' Limestone, predominantly medium brown, minor dark grey brown and argillaceous calcilutite, with minor very fine calcarenite, Prototaxites? shell fragments, slightly dolomitic.
- 9,120'-9,150' Limestone, light medium brown, minor dark grey brown and slightly argillaceous, calcilutite, tubular fossils with 1/8 mm. diameter cross section - abundant in parts; few carbonaceous partings.
- 9,150'-9,178' Limestone, predominantly light medium brown, dark greyish brown, approximately 5%, calcilutite, fossils as above, slightly dolomitic; black carbonaceous shale partings, 1%.
- 9,178' (30 + 60 min. circ.) Limestone, light medium brown, dark grey brown, 5%, calcilutite, very fine tubular fossils, local crinoid ossicles; carbonaceous shale partings, 1%, slightly dolomitic.
- 9,180'-9,190' (post trip) Predominantly shale cavings; limestone, as above, 10%.
- 9,190'-9,200' Limestone, predominantly medium brown, minor dark grey brown, calcilutite, trace corals? slightly dolomitic, slightly argillaceous in part.
- 9,200'-9,250' Limestone, medium to dark grey brown, calcilutite, slightly dolomitic in part, very fine tubular fossils, trace, stylolitic, trace crinoids, trace carbonaceous shale; trace coarse crystalline, white dolomite fill.
- 9,250'-9,260' Limestone, medium to dark grey brown, calcilutite, slightly argillaceous and dolomitic, fossils, as above, trace carbonaceous shale partings; trace dolomite, light grey, coarse crystalline, trace pyrobitumen; trace green shale.

- 9,260'-9,280' Dolomite, light grey to white, coarse crystalline, trace pyrobitumen along crystal boundaries, possibly a trace of intercrystalline porosity, 20%; limestone, as above; trace quartz crystals, medium grained.
- 9,280'-9,300' Dolomite, light grey to white, medium to coarse crystalline, trace pyrobitumen, local poor intercrystalline porosity, coarse quartz crystals intercrystalline with dolomite, trace, 20%; limestone, as above.
- 9,300'-9,320' Dolomite, white to light grey, medium to coarse crystalline, pyrobitumen along crystal boundaries, poor vug and intercrystalline porosity, trace pyrite. 20% limestone, medium grey brown, calcilutite and very fine calcarenite cavings? trace coarse quartz crystals.
- 9,320'-9,350' Limestone, medium grey brown calcilutite - chalky in part.
- 9,350'-9,360' Dolomite, with limestone, as above, poor sample- trip
- 9,360'-9,365' Limestone, medium to dark grey brown, calcilutite to fine calcarenite, fossiliferous - crinoid fragments, with interbeds of white to light grey, medium to coarse crystalline dolomite, with poor vug and intercrystalline porosity - with black interstitial, black pyrobituminous material.
- 9,365'-9,375' Dolomite, as above, with limestone, as above.
- 9,375'-9,390' Dolomite, as above, slightly pyritic, with porosity, as above; with interbeds limestone - grey brown to dark brown, calcisiltite to fine calcarenite, slightly pyritic, locally slightly dolomitized.
- 9,390'-9,405' Dolomite, white, light grey and pale brown, medium to coarse crystalline, slightly pyritic, with poor vug and intercrystalline porosity, black interstitial, pyrobituminous material, with trace pale green, waxy shale.
- 9,405'-9,425' Dolomite, as above, with 5% coarse, clear, secondary quartz crystals.
- 9,425'-9,440' Dolomite, white, - pale brown, and light grey, medium to coarse crystalline, slightly pyritic, with poor vug and intercrystalline porosity, with much less interstitial pyrobituminous material.
9,400 - 5% coarse, clear secondary quartz crystals.
- 9,440'-9,495' Dolomite, white to pale brown, medium to coarse crystalline, with scattered, poor, intercrystalline and vug porosity, trace of black interstitial, pyrobituminous material, with 10% secondary clear, coarse quartz crystals, locally slightly pyritic, with scattered anhydrite.

- 9,495'-9,510' Dolomite, white, pale brown, light grey, medium to coarse crystalline, slightly pyritic, with scattered poor intercrystalline and vug porosity, trace of black interstitial, pyrobituminous material, trace coarse, secondary quartz crystals.
- 9,510'-9,520' Dolomite, as above, with pale brown, chalky anhydrite, porosity, as above, very little pyrobituminous material.
- 9,522' Circ. 30 mins. Dolomite, as above.
Circ. 60 mins. As above.
Circ. 99 mins. As above.
- 9,525'-9,545' Dolomite, as above.
- 9,945'-9,560' Dolomite, white to pale brown, medium to coarse crystalline, with trace scattered, poor intercrystalline and vug porosity - trace black, interstitial, pyrobituminous material, locally pyritic, with trace coarse, clear, secondary quartz crystals.
- 9,560'-9,570' Dolomite, as above, with minor pale brown, very fine to fine crystalline dolomite, trace poor intercrystalline and micro-vug porosity.
- 9,570'-9,597' Dolomite, white, coarse crystalline, as above, slightly pyritic, with 40% light grey brown, very fine crystalline, dolomite, locally cryptocrystalline, with trace coarse, clear quartz crystals, disseminated pyrite, with trace streaky, poor intercrystalline and vug porosity; with trace black interstitial, pyrobituminous material.
- 9,597' Circ. 30 mins, as above.
circ. 60 mins. Dolomite, light grey brown, micro- to cryptocrystalline, dense.
- 9,600'-9,610' Dolomite, as above, poor sample - trip.
- 9,610'-9,625' Dolomite, light grey brown, very fine to fine crystalline, slightly pyritic, disseminated pyrite.
- 9,625'-9,635' Dolomite, as above, locally micro- to cryptocrystalline,
- 9,635'-9,650' Dolomite, light grey brown, crypto- to very fine crystalline, grades locally to fine crystalline; with trace interstitial, black pyrobituminous material, pyritic - disseminated pyrite; with trace of scattered, very poor, intercrystalline porosity; with trace coarse, clear quartz crystals.
- 9,650'-9,660' Dolomite, light grey brown to pale brown, crypto- to fine crystalline, slightly pyritic; with trace of floating quartz crystals within the dolomite. A few isolated vugs in cryptocrystalline dolomite - almost completely infilled white, medium to coarse crystalline dolomite.

- 9,660'-9,682' Dolomite, light grey brown, crypto- to microcrystalline and locally fine crystalline - disseminated pyrite; isolated vugs partially to completely infilled with white, medium crystalline dolomite.
- 9,682'-9,690' Dolomite, as above. Poor sample - trip.
- 9,690'-9,705' Dolomite, light grey brown, microcrystalline and locally very fine crystalline, locally pale brown, a few hairline fractures infilled with white crystalline dolomite, slightly pyritic.
- 9,705'-9,720' Dolomite, pale brown, micro- to cryptocrystalline - local thin beds (2 to 3 feet thick) of very fine crystalline dolomite, with trace of very poor intercrystalline porosity and trace of black interstitial, pyrobituminous material, a few isolated vugs and fractures completely infilled with medium crystalline, white dolomite; trace floating quartz crystals within the dolomite; with trace pale green, pyritic shale; with trace very fine grained, quartzose, well sorted sandstone.
- 9,720'-9,735' Dolomite, as above, locally light brown, with 10% medium grey, very fine crystalline, pyritic, slightly silty and sandy, bituminous dolomite; with poor intercrystalline porosity; with trace sandstone, as above.
- 9,735'-9,738' Dolomite, pale brown, as above, with 10% dolomite, medium grey to medium brown, very fine crystalline, slightly pyritic, slightly silty and sandy, bituminous and argillaceous in part; with poor intercrystalline porosity.
- 9,738' Circ. 30 mins.
Dolomite, pale brown to light grey brown, crypto- to very fine crystalline, dense, with 10% dark brown, very fine crystalline dolomite, slightly silty and sandy, with poor intercrystalline porosity, with interstitial, black pyrobituminous material - pyritic and bituminous.
- Circ. 60 mins. - as above.
- Circ. 90 mins. - as above.
- Drilling times suggest possibly approximately 5 to 10 feet of porosity between 9,720-9,738 feet.
- 9,740-9,745' Dolomite, pale brown, crypto- to microcrystalline.
- 9,745'-9,775' Dolomite, pale to medium brown, and light grey, crypto- to very fine crystalline, locally pyritic, a few very thin fractures completely infilled with crystalline dolomite.

- 9,775'-9,820' Dolomite, pale, medium and locally dark brown, crypto- to microcrystalline - locally pyritic; a few very thin fractures and isolated vugs completely infilled with medium crystalline white dolomite; locally slightly argillaceous, locally very fine crystalline; with trace coarse, clear quartz crystals.
- 9,820'-9,830' Dolomite, pale to medium brown, micro- to very fine crystalline, locally pyritic.
- 9,830'-9,835' Dolomite, as above, with trace of very fine crystalline, pale brown and light grey dolomite, with very poor intercrystalline porosity and interstitial pyrobitumen (thin interbeds).
- 9,835'-9,855' Dolomite, pale brown to light grey brown, crypto- to microcrystalline, a few thin fractures and isolated vugs completely infilled with white, medium crystalline dolomite, locally pyritic; with trace coarse, clear quartz crystals; with trace pale green, waxy, pyritic shale.
- 9,855'-9,905' Dolomite, pale to light grey brown, micro to very fine crystalline, a few fractures and vugs completely infilled with white, medium crystalline dolomite; locally pyritic, slightly silty in part, with trace coarse, clear quartz crystals, locally pyrite concentrated along dolomite infilled fractures, a few stylolites.
- 9,905'-9,915' Dolomite, pale to light grey brown, micro- to very fine crystalline, locally pyritic, with 10% medium to dark brown, microcrystalline dolomite, a few quartz crystals.
- 9,915'-9,925' Dolomite, as above, with a few fractures and isolated vugs completely infilled with medium crystalline dolomite.
- 9,925'-9,930' Dolomite, as above, with 20% medium to dark brown, very fine to microcrystalline dolomite, locally silty and sandy, with trace pale green, waxy, pyritic shale.
- 9,930'-9,935' Dolomite, pale to medium brown, micro- to very fine crystalline, with thin interbeds of medium to dark brown, very fine crystalline dolomite, with trace of very poor intercrystalline porosity and interstitial pyrobitumen, pyritic.
- 9,935'-9,940' Dolomite, as above, with 20% medium to dark brown, microcrystalline dolomite.
- 9,940'-9,943' Dolomite, pale to light grey brown, micro to very fine crystalline, slightly pyritic. A few fractures and isolated vugs infilled with medium crystalline dolomite.

- 9,943' Circ. 30 mins, as above.
Circ. 60 mins, as above.
Circ. 90 mins, as above.
- 9,943'-9,945' Dolomite, pale to light grey brown, crypto- to very fine crystalline, isolated vugs and fractures infilled with medium crystalline dolomite; a few irregular black bituminous partings - locally pyritic.
- 9,945'-9,960' Dolomite, as above, locally medium brown.
- 9,960'-9,965' Dolomite, as above, with minor dark brown, microcrystalline dolomite.
- 9,965'-9,970' Dolomite, pale to medium grey brown and locally dark brown, crypto- to very fine crystalline, a few floating medium grained, clear quartz sand grains in less than 1% of dolomite; a few fractures and isolated vugs infilled with white, medium crystalline dolomite, locally pyritic; with trace poor intercrystalline porosity, minor dark brown, microcrystalline dolomite.
- 9,970'-9,995' Dolomite, as above, no floating sand grains.
- 9,995'-10,000' Dolomite, pale to medium brown, crypto- to very fine crystalline, locally pyritic, isolated vugs and fractures infilled with medium to fine crystalline white dolomite; a few fractures infilled with quartz crystals; a few irregular bituminous partings, with trace poor and locally fair intercrystalline and microvug porosity.
- 10,000-10,005' Dolomite, as above, with minor medium grained, floating sand grains.
- 10,005-10,010' Dolomite, as above, with 10% light grey, cryptocrystalline dolomite.
- 10,010' Circ. 30 mins.
Dolomite, pale to light brown, micro- to very fine crystalline, isolated vugs and fractures infilled with medium crystalline white dolomite, with trace poor intercrystalline and microvug porosity; with 20% light grey, cryptocrystalline, sandy dolomite - floating, fine to medium grained, clear quartz sand grains, slightly pyritic.
- 10,010' Circ. 60 mins. As above, with anhydrite?
- 10,010' Circ. 90 mins. As above; with trace sandstone, white, fine grained, quartzose, calcareous cement, quartzitic; light grey, cryptocrystalline, sandy dolomite grades to fine grained, quartzose, slightly calcareous sandstone.

B.A.-TEXACO ARROWHEAD N-2

REAMING SAMPLES

- 1,400'-1,440' Shale, dark grey and medium grey, locally silty.
- 1,440'-1,500' Shale, as above, grades locally to very fine grained, medium grey, very argillaceous sandstone.
- 1,500'-1,550' Shale, medium to dark grey, silty, locally grades to medium grey, very fine grained, very argillaceous sandstone.
- 1,550'-1,600' Shale, medium grey, silty and micromicaceous, locally dark grey and fissile.
- 1,600'-1,620' Silt, dark to medium grey, very argillaceous, grades to dark grey locally, silty shale.

SCATTER SANDSTONE 1,547' (-67')

- 1,620'-1,640' Sandstone, light grey, very fine grained, glauconitic and micaceous, friable, calcareous matrix, with trace poor intergranular porosity - clean.
- 1,640'-1,690' Sandstone, as above, locally fine grained, locally pale brown, friable, with scattered poor intergranular porosity.
- 1,690'-1,710' Sandstone, medium grey, very fine to fine grained, calcareous, glauconitic, micaceous, locally very argillaceous, friable, with scattered poor intergranular porosity.
- 1,710'-1,720' Sandstone, as above, light brown.
- 1,720'-1,740' Sandstone, as above, becoming medium to dark grey, and very argillaceous.
- 1,740'-1,770' Sandstone, light grey, very fine grained, calcareous, glauconitic, micaceous, becoming light brown, very friable, pyritic, with scattered poor intergranular porosity.

LOWER BUCKINGHORSE SHALE 1,745' (-265')

- 1,770'-1,790' Sandstone, as above; with shale, medium to dark grey, micromicaceous, fissile.
- 1,790'-2,070' Shale, medium to dark grey, fissile, micromicaceous.
- 2,070'-2,090' Shale, medium to dark grey, fissile, micromicaceous.

MATTSON 2,079' (-599')

- 2,090'-2,140' Sandstone, pale brown, very fine grained, quartzose, carbonaceous, well sorted, subangular clear quartz; with fair intergranular porosity.
- 2,140'-2,160' Sandstone, fine to medium grained, subangular clear quartz, friable, with fair intergranular porosity.
- 2,160'-2,170' Sandstone, medium grained, very friable, subangular clear quartz, locally coarse grained; with good intergranular porosity; with trace pyrobituminous staining.
- 2,170'-2,210' Sandstone, as above, loose, with porosity, as above.
- 2,210'-2,220' Sandstone, medium grained, subangular to subrounded clear quartz, black and grey chert grains, friable, with fair intergranular porosity and black pyrobituminous staining. A few chips show contact between sandstone and light grey chert - chert has poor leached porosity - fossiliferous.
- 2,220'-2,230' Very poor sample. 100% cavings.
- 2,230'- Sandstone, as above, with good intergranular porosity and black interstitial, pyrobituminous material, with chert, as above - chert has poor leached porosity.

"TIGHT HOLE" "TIGHT HOLE" "TIGHT HOLE"

LEASE _____ BA Texaco Arrowhead N2 _____ 600 31' 14.5" N. Lat. FIELD
LOCATION 1230 01130N W. Long. 1230 01130N W. Long.

SAMPLE DATE Jan. 21/65 FORMATION Watson INTERVAL DEPTH 2191 FT. TO 1680 FT.

SAMPLE HEIGHT ABOVE TOOL FT. RECOVERY DATA Salt Water

OTHER DATA

Caught at end of Blooney line while unloading hole after connection.

ION	MILLIGRAMS/LITRE CONCENTRATION	PER CENT MILLIGRAM EQUIVALENTS
SODIUM - NA	7362	17.96
POTASSIUM - K		
CALCIUM - CA	100	.75
MAGNESIUM - MG	105	1.29
SULPHATE - SO ₄	26	.07
CHLORIDE - CL	9672	40.88
BROMIDE - BR		
IODIDE - I		
BICARBONATE - HCO ₃	3685	9.05
CARBONATE - CO ₃		
HYDROXIDE - OH		
TOTAL	20950	100.00
REMARKS AND CONCLUSIONS	Sample was contaminated with drilling soap.	

S. G. @ 60°F.	1.018
pH	7.82
H ₂ S	Nil
RESISTIVITY OHM METERS AT	77 °F
TOTAL DISSOLVED SOLIDS IN MILLIGRAMS/LITRE	17,500
AS NACL FROM RES. BY EVAPORATION AFTER IGNITION	
ANALYSED BY LAB. NO.	L. Melawchlin H-79-65
DATE RECEIVED	February 18 1965
DATE ANALYSED	February 19 1965
DATE DISTRIBUTED	February 19 1965

THE BRITISH AMERICAN OIL COMPANY LIMITED
WATER ANALYSIS REPORT

"TIGHT HOLE""TIGHT HOLE"

LEASE BA Texaco Arrowhead N-2 LOCATION 60° 31'45" N. Lat. 123° 01'30" Long. FIELD Wildcat SAMPLE DST #1

SAMPLE DATE Feb. 23, 1965. FORMATION Pine Point INTERVAL DEPTH 9220 FT. TO 9350 FT. KBE 14.81 FT.

SAMPLE HEIGHT ABOVE TOOL Top of Tool FT. RECOVERY DATA 1200' 1055' water cushion 145' mud

OTHER DATA

ION	MILLIGRAMS/LITRE CONCENTRATION	PER CENT MILLIGRAM EQUIVALENTS
SODIUM - NA		
POTASSIUM - K		
CALCIUM - CA		
MAGNESIUM - MG		
" M U D "		
SULPHATE - SO ₄		
CHLORIDE - CL		
BROMIDE - BR		
IODIDE - I		
BICARBONATE - HCO ₃		
CARBONATE - CO ₃		
HYDROXIDE - OH		
S. G. @ 60°F. _____ pH _____ H ₂ S _____ RESISTIVITY <u>0.127</u> OHM METERS AT <u>77</u> °F. TOTAL DISSOLVED SOLIDS IN MILLIGRAMS/LITRE <u>48,000</u> AS NACL FROM RES. BY EVAPORATION AFTER IGNITION		
ANALYSED BY <u>L. McLauchlin</u> LAB. NO. <u>W-136-65</u>		
DATE RECEIVED <u>March 15</u> 19 <u>65</u> DATE ANALYSED <u>March 18</u> 19 <u>65</u> DATE DISTRIBUTED <u>March 22</u> 19 <u>65</u>		
TOTAL		
REMARKS AND CONCLUSIONS		

DISTRIBUTE 1 COPY TO BOARD

THE BRITISH AMERICAN OIL COMPANY LIMITED

WATER ANALYSIS REPORT

"TIGHT HOLE""TIGHT HOLE"

LEASE BA Texaco Arrowhead N-2 LOCATION 60° 31' 45" N. Lat. 123° 01' 30" Long. FIELD Wildcat SAMPLE Dir #2

SAMPLE DATE Feb. 27/65 FORMATION Pine Point INTERVAL DEPTH 9350 FT. TO 9597 FT. KEE 1481 FT.

SAMPLE HEIGHT ABOVE TOOL Top of Tool FT. 1865' RECOVERY DATA 785' water cushion 1080' mud

OTHER DATA _____

ION	MILLIGRAMS/LITRE CONCENTRATION	PER CENT MILLIGRAM EQUIVALENTS	S. G. @ 60°F. pH H ₂ S RESISTIVITY 1.85 OHM METERS AT 77 °F. TOTAL DISSOLVED SOLIDS IN MILLIGRAMS/LITRE AS NACL FROM RES. BY EVAPORATION AFTER IGNITION 2800 ANALYSED BY LAB. NO. L. McLauchlan W-137-65 DATE RECEIVED March 15 19 65 DATE ANALYSED March 18 19 65 DATE DISTRIBUTED March 24 19 65
SODIUM - NA			
POTASSIUM - K			
CALCIUM - CA			
MAGNESIUM - MG			
SULPHATE - SO ₄			
CHLORIDE - CL			
BROMIDE - BR			
IODIDE - I			
BICARBONATE - HCO ₃			
CARBONATE - CO ₃			
HYDROXIDE - OH			
TOTAL			
REMARKS AND CONCLUSIONS			

DISTRIBUTE 1 COPY TO BOARD

GAS SAMPLE AND ANALYSIS REPORT

P 14

Field New Field FORMATION: _____ LEASE BA Texaco Arrowhead N-2
 K.B.E. _____ LOCATION 60° 31' 45" N. Lat.
 OPERATOR THE BRITISH AMERICAN OIL COMPANY LIMITED 123° 01' 30" W. Long.
 SAMPLED BY: _____ DATE: _____ ANALYZED BY W. B. Linds DATE 3-25-65
 Lab. No. 98-65

SAMPLE INFORMATION

POINT WHERE SAMPLE OBTAINED: Flare Line PRESSURE _____ PSIG TEMP. _____ °F
 SAMPLE CONTAINER: NO. _____ PRESSURE _____ PSIG
 AIR TEMPERATURE _____ °F BAROMETRIC PRESSURE: _____ MM HG
 FIELD DETERMINATIONS: AVE. H₂S: _____ AVE. CO₂: _____
 SAMPLE ENTERING CONDITIONS: CONTAINER TEMPERATURE 110 °F CONTAINER PRESSURE 55 PSIG
 REMARKS: DST #1 TIGHT HOLE

PODBIELNIAK LOW TEMPERATURE FRACTIONATION

	MOL. % AS REC'D.	MOL. % AIR FREE	G.P.M.			
OXYGEN	_____	_____	_____	_____	_____	_____
NITROGEN	_____	<u>5.39</u>	_____	_____	_____	_____
CARBON DIOXIDE	_____	<u>25.50</u>	_____	_____	_____	_____
HYDROGEN SULPHIDE	_____	<u>0.00</u>	_____	_____	_____	_____
METHANE	_____	<u>69.00</u>	_____	_____	_____	_____
ETHANE	_____	<u>0.06</u>	_____	_____	_____	_____
PROPANE and higher	_____	<u>0.05</u>	<u>0.011</u>	_____	_____	_____
ISO-BUTANE	_____	_____	_____	_____	_____	_____
N-BUTANE	_____	_____	_____	_____	_____	_____
ISOPENTANE	_____	_____	_____	_____	_____	_____
N-PENTANE	_____	_____	_____	_____	_____	_____
HEXANE	_____	_____	_____	_____	_____	_____
HEPTANES AND HIGHER	_____	_____	_____	_____	_____	_____
TOTAL	_____	<u>100.00</u>	<u>0.011</u>	_____	_____	_____

G.P.M.

GROSS BTU BY POD. (ACID GAS FREE) 936
 SPECIFIC GRAVITY BY POD. (AIR FREE) _____
 SPECIFIC GRAVITY BY POD. (AS REC'D) 0.823
 SPECIFIC GRAVITY BY WEIGHT 0.823

ACTUAL PENTANES + _____
 CALCULATED AT 12 LBS. _____
 CALCULATED AT 15 LBS. _____
 CALCULATED AT 22 LBS. _____
 CALCULATED AT 26 LBS. _____
 VAPOR PRESSURE (CALCULATED)
 ACTUAL PENTANES + _____

SPECIFIC GRAVITY _____
 AVERAGE MOLECULAR WEIGHT _____

G.F.M. AND B.T.U. REPORTED AT 60°F AND 14.65 PSIA.

REMARKS: _____

JOHNSTON TESTERS

TEST DATA									
Formation	Pine Point		Zone Thickness		Ft. Elevation 1480 KB		1465 GL		
Interval	9220	To	9350	I.D.	9350	Bottom Hole Choke Size		1/2"	
Type of Test	Open Hole, Bottom Hole					Fluid Cushion Type		Water	
Time Started in Hole	1430	Hrs.	Tool Open	1830	Hrs.	Amount		1055'	
First Flow	0	Min	Shut In	0/21/50	Min.	TOOL SEQUENCE			
Second Flow	120	Min	Final Shut in	50	Min	Tool	Length	O.D.	
Pulled Loose @	2130	Hrs.	Out of Hole		Hrs.	McCullough Jars	6.11	6 5/8"	
Wt. Set on Packer	30,000	* Pulled Loose Wt		130,000	Sub.		.76	6"	
Remarks	Tool was Chased 3 Feet During Test Period.					Shut in Tool	6.06	4 3/4"	
Description of Blow During Test Fair Blow. Gas to Surface in 15 Minutes.						Hyd. Tool	7.04	4 3/4"	
						Safety Jt.	1.75	4 3/4"	
						T.C. & Pkr.	6.32	6 5/8"	
						T.C. & Pkr.	5.20	6 5/8"	
						Total	33.24		
GAS BLOW MEASUREMENTS						Stub	1.82	4 3/4"	
						Perf.	24.00	4 3/4"	
						Recorder	6.00	4 5/8"	
						Recorder	6.00	4 5/8"	
						Sub.	.80	6"	
Time	Size Choke	Reading Inches	Cubic Feet/Day		Sub.	3.84	6"		
	1" Orifice		410 MCF		D.P. Sub.	1.49	5 3/4"		
			Decreased		D.C.	86.37	4 3/4"		
			to 332 MCF.		Total Interval	130.32			
FLUID RECOVERY									
Was Test Reverse Circulated Yes ☐ No ☒									
Fluid Recovered (Total)		1200'		Ft. Total Length		163.56			
Description of Fluid Recovered		145' Drilling Fluid.		MUD AND HOLE DATA					
		1055' Water Cushion.		Mud Type		Caustic Obroxin		W.L.	
				Filter Cake		2/32		Visc. 180	
				Time Taken				Wt. 9.3	
Remarks		Mis-Run, Plugged Tool.		Contractor		Cascade Drilling		Rig No. 2	
				Drill Pipe Size		4 1/2 IF			
				Drill Collar Size		Length		155'	
				Main Hole Size		8 3/4"			
				Rat Hole Size					
Co. Rep.	T. Ramsay		Ticket No. C 3555		Date February 23/65				
Tester	L. Navratil		Company		British American Oil Co. Ltd. Address Financial Building, Edmonton, Alberta				
District	Fort St. John		Well Name		B-A Texaco Arrowhead N-2				
			Number		60°-31'-45"N-123°-1'-30"W				
			Formation		Pine Point DST#1				
			and Interval		9220-9350				
Distribution of Reports		5 - Edmonton							

JOHNSTON TESTERS

TEST DATA									
Formation	Pine Point		Zone Thickness		Ft. Elevation 1480 KB		1465 GL		
Interval	9220	To	9350	I.D.	9350	Bottom Hole Choke Size		1/2"	
Type of Test	Open Hole, Bottom Hole					Fluid Cushion Type		Water	
Time Started in Hole	1430	Hrs.	Tool Open	1830	Hrs.	Amount		1055'	
First Flow	0	Min	Shut In	0/150	Min	TOOL SEQUENCE			
Second Flow	120	Min	Final Shut In	60	Min	Tool	Length	O.D.	
Pulled Loose @	2130	Hrs.	Out of Hole		Hrs.	McCullough Jars	6.11	6 5/8"	
Wt. Set on Packer	30,000	#	Pulled Loose Wt.	130,000	#	Sub.	.76	6"	
Remarks	Tool was Chased 3 Feet During Test Period.					Shut In Tool	6.06	4 3/4"	
						Hyd. Tool	7.04	4 3/4"	
						Safety Jt.	1.75	4 3/4"	
Description of Blow During Test	Fair Blow, Gas to Surface in 15 Minutes.					T.C. & Pkr.	6.37	6 5/8"	
						T.C. & Pkr.	5.20	6 5/8"	
						Total	33.24		
						Stub	1.82	4 3/4"	
						Perf.	24.00	4 3/4"	
GAS BLOW MEASUREMENTS						Recorder	6.00	4 5/8"	
Measured with	2	I.D. Riser or Est. ☐				Recorder	6.00	4 5/8"	
Type of Instrument	Critical Flow Prover					Sub.	.80	6"	
						Sub.	3.84	6"	
Time	Size Choke	Reading Inches	Cubic Feet Day			D.P. Sub.	1.49	5 3/4"	
	1" Orifice		410 MCF			D.C.	86.37	4 3/4"	
			Decreased to 332 MCF.			Total Interval	130.32		
FLUID RECOVERY									
Was Test Reverse Circulated Yes ☐ No ☒									
Fluid Recovered (Total)	1200'					Ft. Total Length	163.56		
Description of Fluid Recovered	145' Drilling Fluid.					MUD AND HOLE DATA			
	1055' Water Cushion.					Mud Type	Caustic Obroxin	W.L.	
						Filter Cake	2/32	Visc.	180
						Time Taken		Wt.	9.3
						Contractor	Cascade Drilling		
Remarks	Mis-Run, Plugged To 1.					Rig No. 2			
						Drill Pipe Size	4 1/2 IF		
						Drill Collar Size	Length	155'	
						Main Hole Size	8 3/4"		
						Rat Hole Size			
Co. Rep.	T. Ramsay		Ticket No. C 3655		Date February 23/65				
Tester	L. Navratil		Company British American Oil Co. Ltd. Address Financial Building, Edmonton, Alberta						
District	Fort St. John		Test No. 1		J.T.L. Test No. 1				
Well Name	B-A Texaco Arrowhead N-2		Field Wildcat		Province N.W.T.				
Number	60°-31'-45"N-123°-1'-30"W								
Formation	Pine Point DST#1		Consultant						
and Interval	9220-9350								
Distribution of Reports 5 - Edmonton									

JOHNSTON TESTERS

Pressure Data

Test Ticket No

C 3655

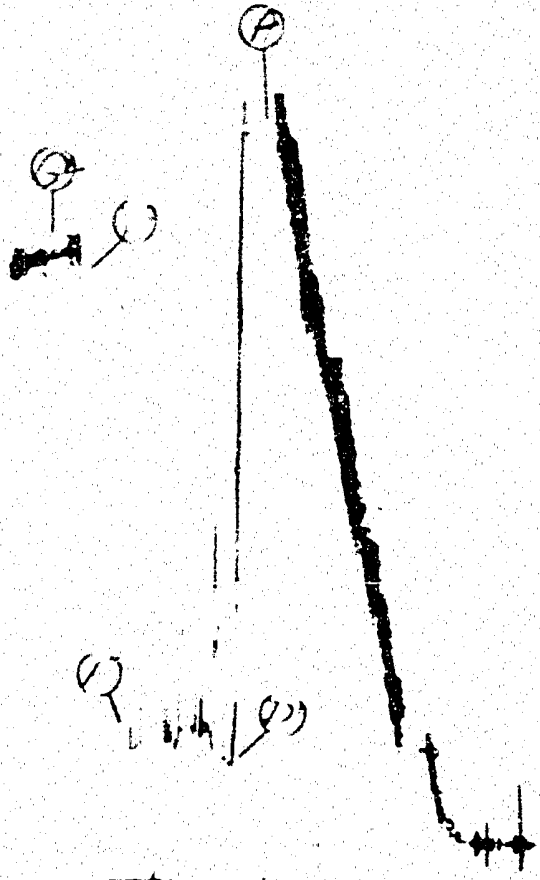
Recorder No	AK1-1934	T-373			
Capacity P.S.I.G.	7000	3000			
Recorder Depth	9222	9228			
Pressure Gradient P.S.I. Ft.					
Well Temperature °F	260°	260°			
A Initial Hydrostatic	4920#	RAN			
B First Initial Flow		OVER			
C Initial Shut-In Pres		CAPACITY			
D Flowing Pres	542#	1038#			
E Final Flow	631#	1103#			
F Final Shut-In	3959#	RAN OVER			
G Final Hydrostatic	4197#	CAPACITY			

Remarks

AK1-1934 - Inside Recorder

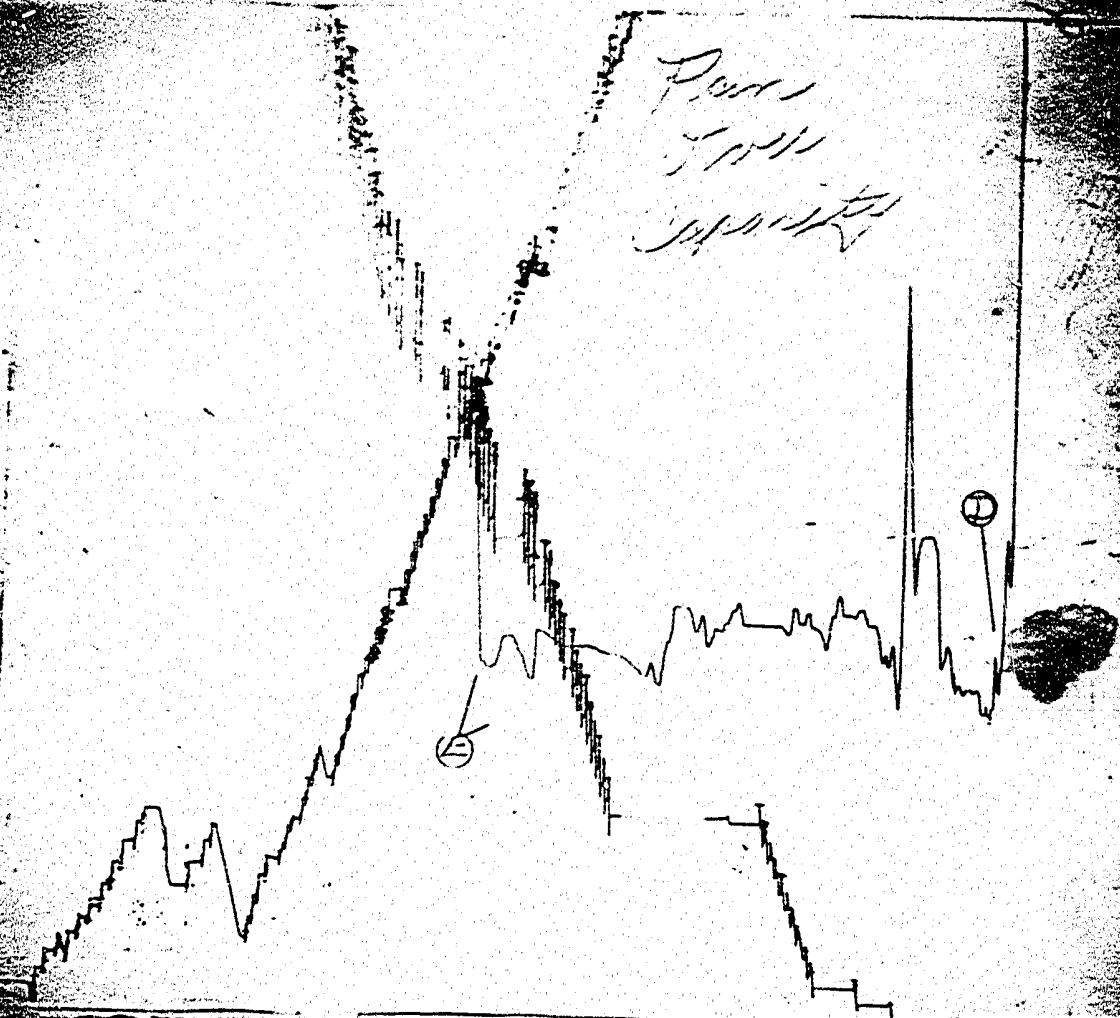
T-373 - Outside Recorder

Mis-Run, Plugged Tool.



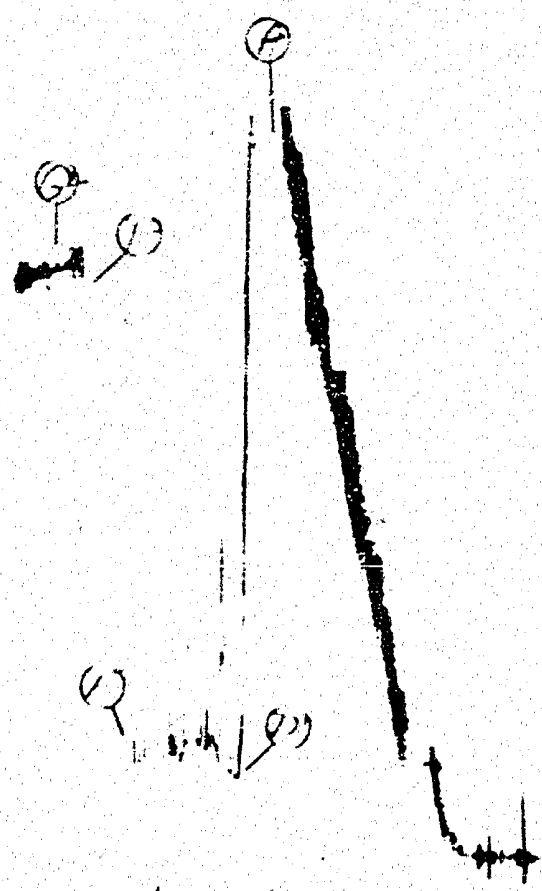
Ticket # 13655 Rect 191-1934

Power
Line
Supply

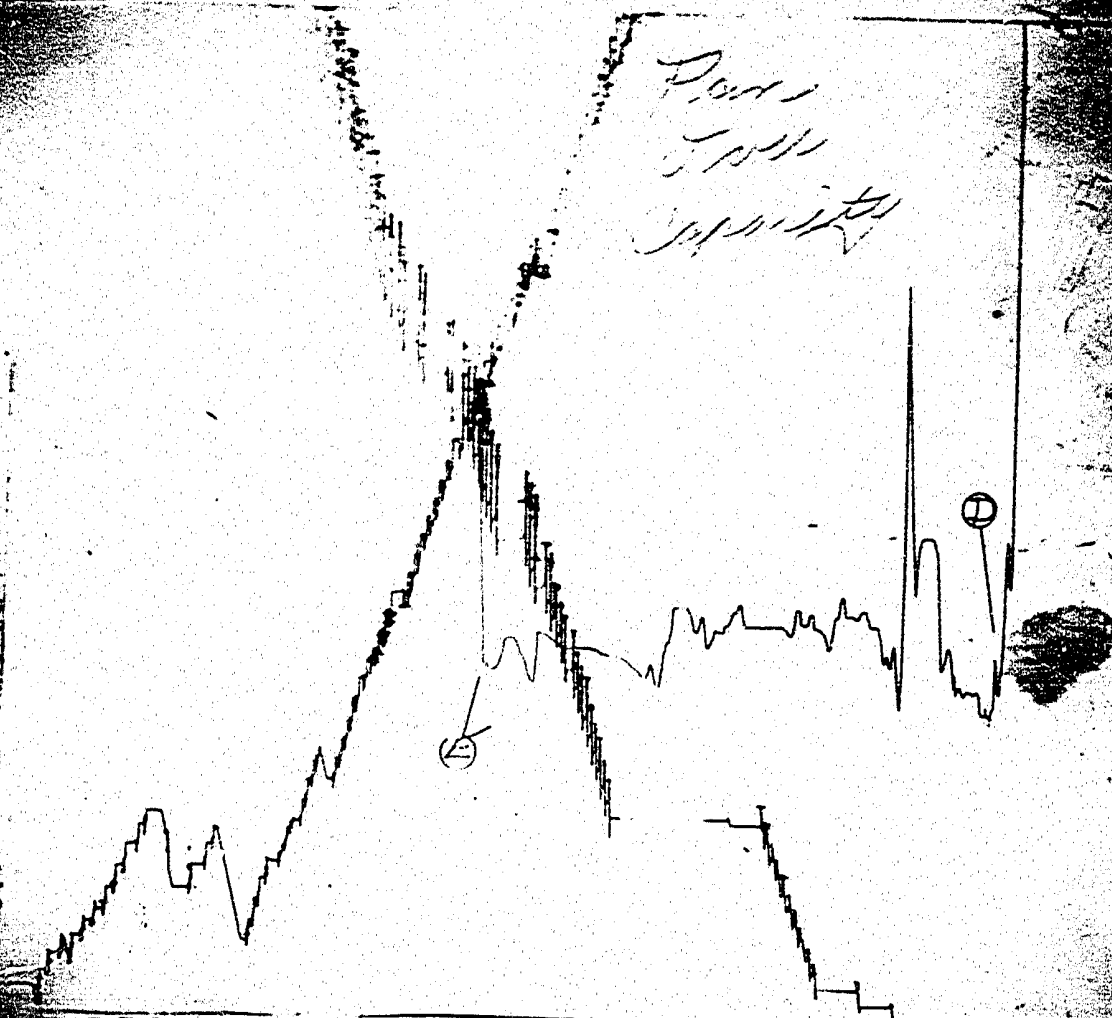


Ticket # 13655 Rect 191-1934

TICHEL #123658 REC # 911-1934



Power
Loss
Capacity



TICHEL #123658 REC # 911-1934

JOHNSTON TESTERS

TEST DATA									
Formation	Zone thickness				Ft. Elevation	1480 KB	1465 G		
Interval	9350	To	9597	TD	9597	Bottom Hole Choke Size	1 1/2"		
Type of Test	Open Hole, Bottom Hole					Fluid Cushion Type	Water		
Time Started in Hole	0230	Hrs.	Tool Open	0527	Hrs.	Amount	785'		
First Flow	3	Min	Shut In	30	Min	TOOL SEQUENCE			
Second Flow	60	Min	Final Shut In	60	Min	Tool	Length	O.D.	
Pulled Loose @	0.600	Hrs.	Out of Hole	1330	Hrs.	McCullough Jars	6.11	6 5/8"	
Wt. Set on Packer	40,000	#	Pulled Loose Wt.	40,000	#	Sub.	.76	6"	
Remarks						Shut in Tool	6.06	4 3/4"	
						Hyd. Tool	7.04	4 3/4"	
Description of Blow During Test						Jars	4.17	4 3/4"	
						Safety Jt.	1.75	4 3/4"	
Fair Blow. Gas to Surface in 40 Minutes. (4)						T.C. & Pkr.	6.32	6 5/8"	
						T.C. & Pkr.	5.20	6 5/8"	
GAS BLOW MEASUREMENTS						Total	37.41		
						Stub	1.82	4 3/4"	
Measured with						Perf.	26.00	4 3/4"	
						Recorder	6.00	4 5/8"	
Type of Instrument						Recorder	6.00	4 5/8"	
						Sub.	.60	6"	
Time	Sfco. Choke	Reading	Inches	Cubic Feet, Day		Sub.	3.84	6"	
				T. S. T. M.		Sub.	1.49	5 3/4"	
						D.C.	203.19	4 3/4"	
						Total Interval	240.14		
FLUID RECOVERY									
Was Test Reverse Circulated Yes ☐ No ☒									
Fluid Recovered (Total)		1865'			Ft.	Total Length	286.55		
Description of Fluid Recovered		1080' Very Gassy Drilling Fluid.			MUD AND HOLE DATA				
		785' Water Cushion.			Mud Type Caustic Qbroxin Wt. 3.5				
					Filter Coke 2/32 Visc. Wt. 10.0				
					Time Taken February 26, 1965 @ 1400 hrs.				
					Contractor Cascade Drilling				
Remarks		Test Satisfactory.			Rig No. 2				
					Drill Pipe Size 4 1/2 FH				
					Drill Collar Size Length 155 & 203'				
					Main Hole Size 8 3/4"				
					Rot Hole Size				
Co. Rep.	T. Ramsay			Ticket No. C 3656			Date February 27/65		
Tester	L. Navratil			Address			Financial Building, Edmonton, Alberta		
District	Fort St. John			Test No.			2		
Company	British American Oil Co. Ltd.			Field			Wildcat		
Well Name	B-A Texaco Arrowhead N-2			Province			N. W. T.		
Number	60°-31'-45"N-123°-1'-30"W			Consultant					
Formation	DST#2 9350-9597								
and Interval									
Distribution of Reports				5 - Edmonton					

JOHNSTON TESTERS

Pressure Data

Test Ticket No. _____

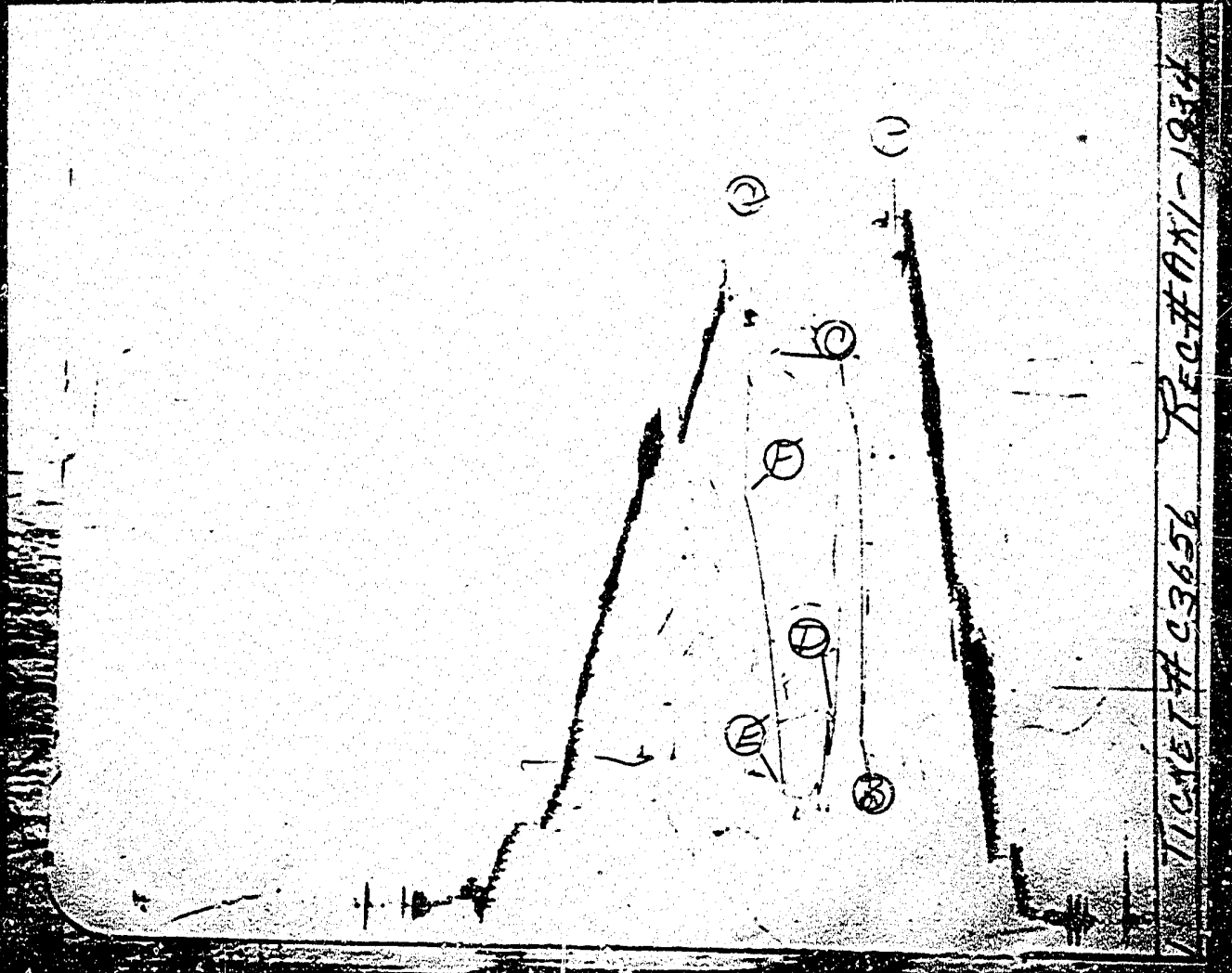
C 3656

Recorder No	AK1-1934	T-196		
Capacity P.S.I.G	7000	7000		
Recorder Depth	9358	9364		
Pressure Gradient P.S.I. Ft.				
Well Temperature °F	255°	255°		
A Initial Hydrostatic	4991#	5016#		
B First Initial Flow	1344#	1333#		
C Initial Shut-In-Press	3890#	3928#		
D Flowing Pres	1201#	1188#		
E Final Flow	910#	895#		
F Final Shut-In	3134#	3171#		
G Final Hydrostatic	4820#	4895#		

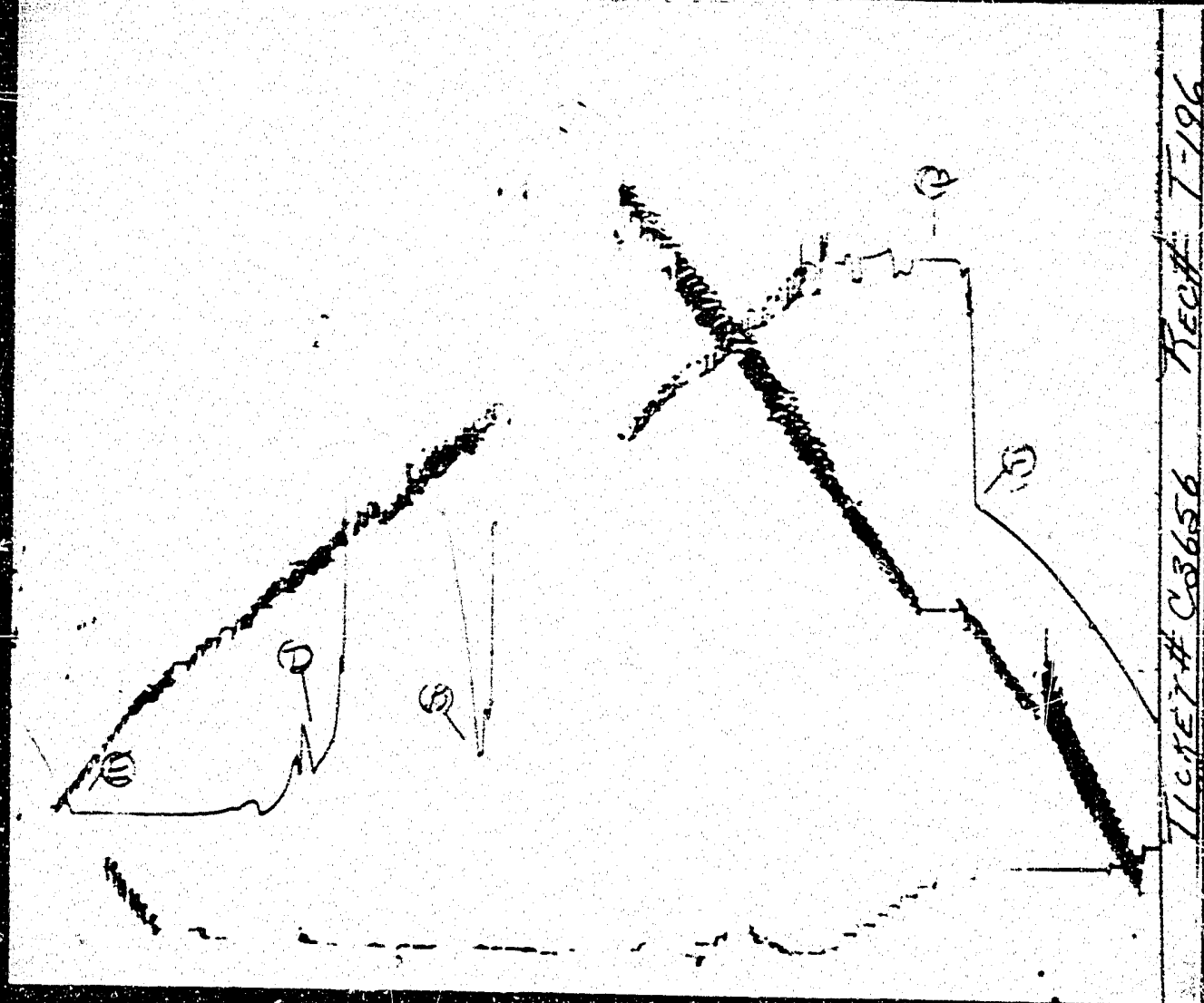
Remarks

AK-1934 - Outside Recorder

T-196 - Outside Recorder - Called in for Recalibration.



SECRET # C3656 REC# 011-1934



SECRET # C3656 REC# 7-196

93-734

[illegible]

JOHNSTON TESTERS

Pressure Data

Test Field No. C 3583

Recorder No.	AK1-1934	T-196			
Capacity P.S.I.G.	7000	7000			
Recorder Depth					
Pressure Gradient P.S.I. Ft.					
Well Temperature °F	200°	200°			
A. Initial Hydrostatic					
B. First Initial Flow					
C. Initial Shut-in Pres.	Mis-Run, Unable to Reach Bottom. Static on chart.				
D. Flowing Pres.					
E. Final Flow					
F. Final Shut-in					
G. Final Hydrostatic					

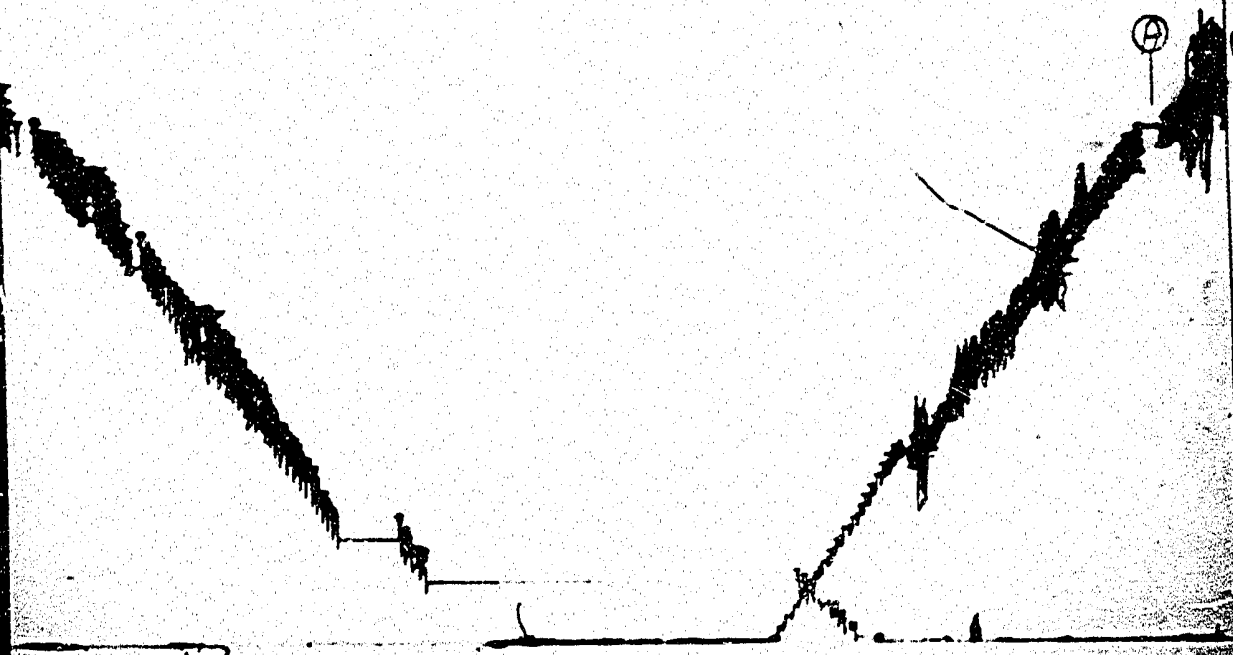
Remarks

AK1-1934 - Outside Recorder

T-196 - Outside Recorder



TICINET# C.35-83 REC# P11-1934



TICINET# C.35-83 REC# T-196

111 CO 4

TEST DATA												
Formation	Zone Thickness			Fr	Elevation	1480 KB	1465 GL					
Interval	9602	To	10047	ID	10047	Bottom Hole Choke Size	1/2"					
Type of Test	Open Hole, Bottom Hole					Fluid Cushion Type	Water					
Time Started in Hole	1330	Hrs	Tool Open	1815	Hrs	Amount	1000'					
First Flow	0	Min	Shut In	0	Min	TOOL SEQUENCE						
Second Flow	0	Min	Final Shut in	0	Min	Tool	Length	O.D.				
Pulled Loose @	1820	Hrs	Out of Hole		Hrs	McCullough Jars	6.11					
Wt. Set on Packer	40,000		Pulled Loose Wt			D.P. Sub.	1.10					
Remarks	Tool was Chased 8 Feet During Test Period.					Shut In Tool	6.05					
Description of Blow During Test Mis-Run, Seat Failure.						Hyd. Tool	7.06					
						Jars	4.05					
						Safety Jt.	1.75					
						T.C. & Pkr.	7.08					
						T.C. & Pkr.	5.95					
						Total	39.15					
						Stub	1.60					
						Perf.	20.00					
						Recorder	5.90					
						Recorder	5.90					
GAS BLOW MEASUREMENTS						Sub.	.80					
Measured with						I.D. Riser or Est.	☐					
Type of Instrument						D.P.	407.55					
Time	Sfcs. Choke	Reading	Inches	Cubic Feet Day		Perf. & B.N.	3.25					
						Total Interval	445.00					
FLUID RECOVERY												
Was Test Reverse Circulated Yes ☐ No ☒												
Fluid Recovered (Total)						450'	Fr	Total Length	484.15			
Description of Fluid Recovered						450' Drilling Fluid.	MUD AND HOLE DATA					
Remarks						Mud Type				High PH	W.L.	
						Filter Cake				2/32	Visc.	Wt.
						Time Taken						
						Contractor				Cascade Drilling		
						Rig No.						
Drill Pipe Size						4 1/2 FH						
Drill Collar Size						2 3/8 ID Length 90'						
Main Hole Size						8 3/4"						
Rot Hole Size												
Co Rep.	T. Ramsay					Ticket No. C 3584						
Tester	J. Withers					Date March 12/65						
District	Fort St. John					Address Financial Building, Edmonton, Alberta						
Company	British American Oil Co. Ltd.					Test No. 4						
Well Name	B-A Texaco Arrowhead N-2					J.T.L. Test No. 4						
Number	60°-31'-45"N-123°-1'-30"W					Field Wildcat						
Formation	DST#4					Province N. W. T.						
and Interval	9602-10047					Consultant						
Distribution of Reports						5 - Edmonton						

JOHNSTON TESTERS

Pressure Data

New Ticker No.

C 3584

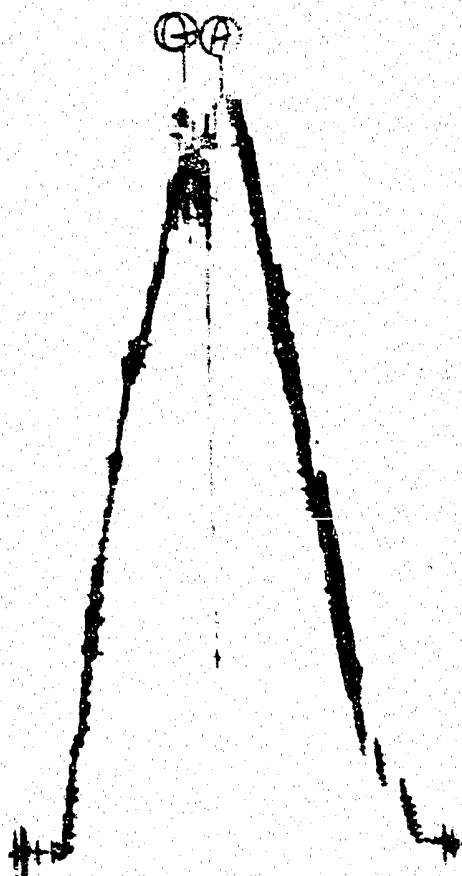
Recorder No.	AK1-1934	T-196			
Capacity P.S.I.G.	7000	7000			
Recorder Depth	9623	9630			
Pressure Gradient P.S.I. Ft.					
Well Temperature °F	200° Est.	200° Est.			
A Initial Hydrostatic	5277#	5347#			
B First Initial Flow					
C Initial Shut-in Pres					
D Flowing Pres	Mis-Run, Seat Failure.				
E Final Flow					
F Final Shut-in					
G Final Hydrostatic	5118#	5257#			

Remarks

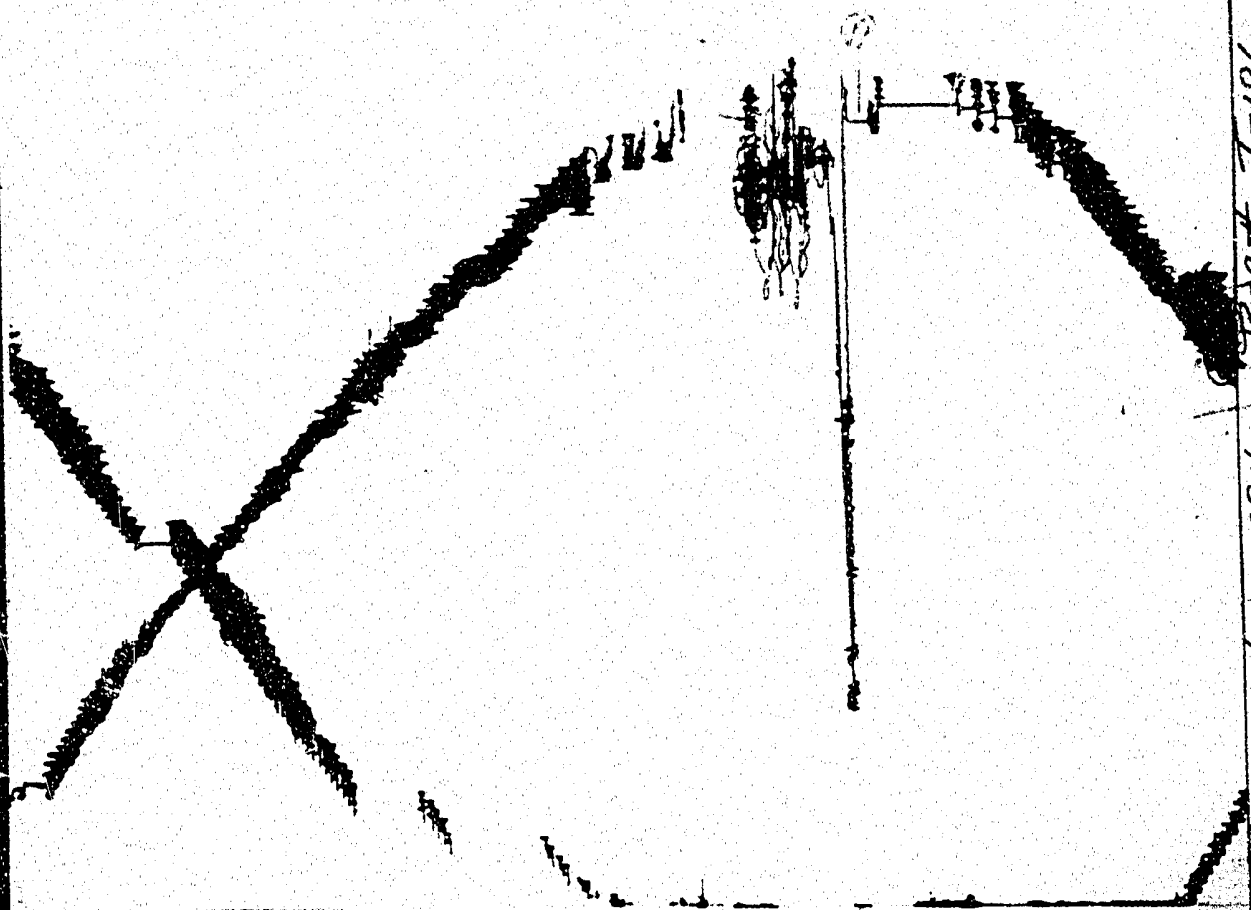
AK1-1934 - Outside Recorder

T-196 - Outside Recorder

TICKET # C3584 REC# 041-19



TICKET # C3584 REC# 7-196



JOHNSTON TESTERS

TEST DATA									
Formation		Zone Thickness		Ft		Elevation		1480 KB 1465 GL	
Interval 8781		To 8797		TD 10047		Bottom Hole Choke Size		1/2"	
Type of Test Open Hole, Straddle, By-Pass									
Time Started in Hole 0130		Hrs		Tool Open 0654		Hrs		Amount 1000'	
First Flow 6		Min		Shut In 45		Min		TOOL SEQUENCE	
Second Flow 60		Min		Final Shut In 35		Min		Tool Length O.D.	
Pulled Loose @ 0920		Hrs		Out of Hole		Hrs		D.P. Sub. .92	
Wt. Set on Packer 40,000		#		Pulled Loose Wt		#		Shut In Tool 6.05	
Remarks Tool was Chased 4 Feet During Test Period.									
Description of Blow During Test Very Weak Blow, Dead in 10 Minutes. Reset After 58 Minutes.									
Jars 4.05									
Safety Jt. 1.75									
H. Sub. .80									
T.C. & Pkr. 7.17									
T.C. & Pkr. 3.70									
Total 43.30									
GAS BLOW MEASUREMENTS									
Measured with I.D. Riser or Est. ☐									
Type of Instrument									
Stub 1.60									
Perf. 10.12									
R. Sub. .80									
T.C. & Stub 3.40									
Total Interval 15.92									
Pkr. 3.70									
T.C. & Pkr. 7.17									
Perf. 17.41									
Sub. .80									
D.P. 1220.95									
Total Below Intv. 1250.03									
FLUID RECOVERY									
Was Test Reverse Circulated Yes ☐ No ☒									
Fluid Recovered (Total) 1090' Fr. Total Length 1309.25									
Description of Fluid Recovered 90' Gas Cut Drilling Fluid. 1000' Water Cushion.									
MUD AND HOLE DATA									
Mud Type High PH W.L. 4.0									
Filter Cake 2/32 Visc. 300 Wt 10.0									
Time Taken									
Contractor Cascade Drilling									
Rig No. 2									
Remarks Test Conclusive, But not Entirely Satisfactory. Mis-Run.									
Drill Pipe Size 4 1/2 FH									
Drill Collar Size Length									
Main Hole Size 8 3/4"									
Rat Hole Size									
Co. Rep. T. Ramsay									
Tester J. Withers									
District Fort St. John Ticket No. C 3585 Date March 13/65									
Company British American Oil Co. Ltd. Address Financial Building, Edmonton, Alberta									
Well Name B-A Texaco Arrowhead N-2 Test No. 5 J.T.L. Test No. 5									
Number 60°-31'-45"N-123°-1'-30"W Field Wildcat Province N. W. T.									
Formation DST#5 8781-8797 Consultant									
and Interval									
Distribution of Reports 5 - Edmonton									

JOHNSTON TESTERS

Pressure Data

Test Ticket No. C 3585

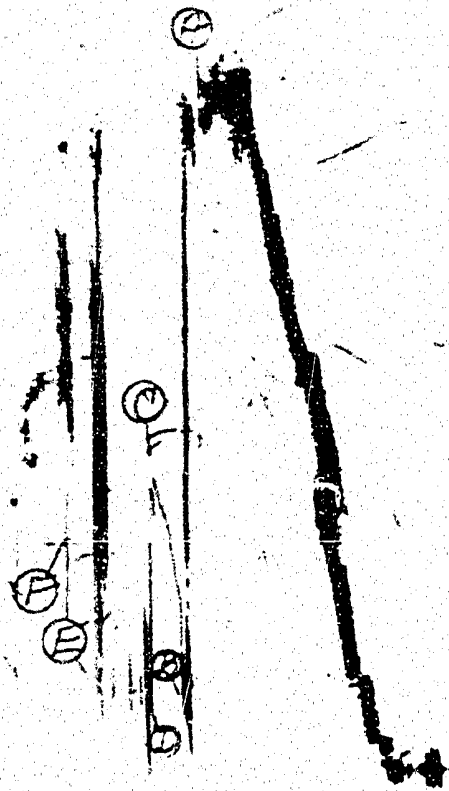
Recorder No.	AK1-1934	T-196		
Capacity P.S.I.G.	7000	7000		
Recorder Depth	8750	8757		
Pressure Gradient P.S.I. Ft.				
Well Temperature °F.	200° Est.	200° Est.		
A Initial Hydrostatic	4767#	4842#		
B First Initial Flow	391#	572#		
C Initial Shut-in Pres.	2146#	2170#		
D Flowing Pres.	587#	576#		
E Final flow	591#	605#		
F Final Shut-in		1729#		
G Final Hydrostatic		4770#		

Remarks

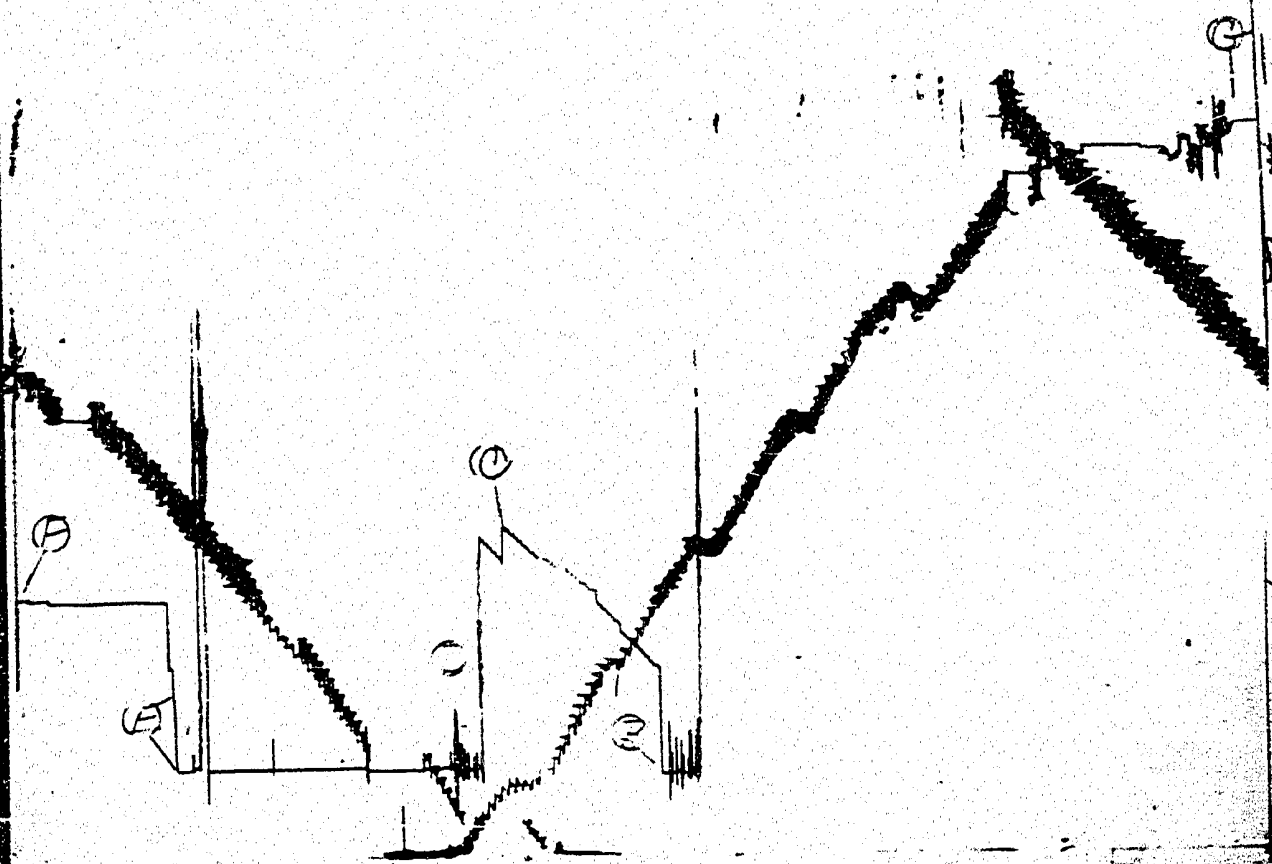
AK1-1934 - Inside Recorder

T-196 - Inside Recorder - Called in for Recalibration.

Clock
Pain
Out



TICKET# C3585 RECH# 001-1930



TICKET# C3585 RECH# 1-

JOHNSTON TESTERS

[illegible]

JOHNSTON TESTERS

Pressure Data

Test Ticket No. C 3586

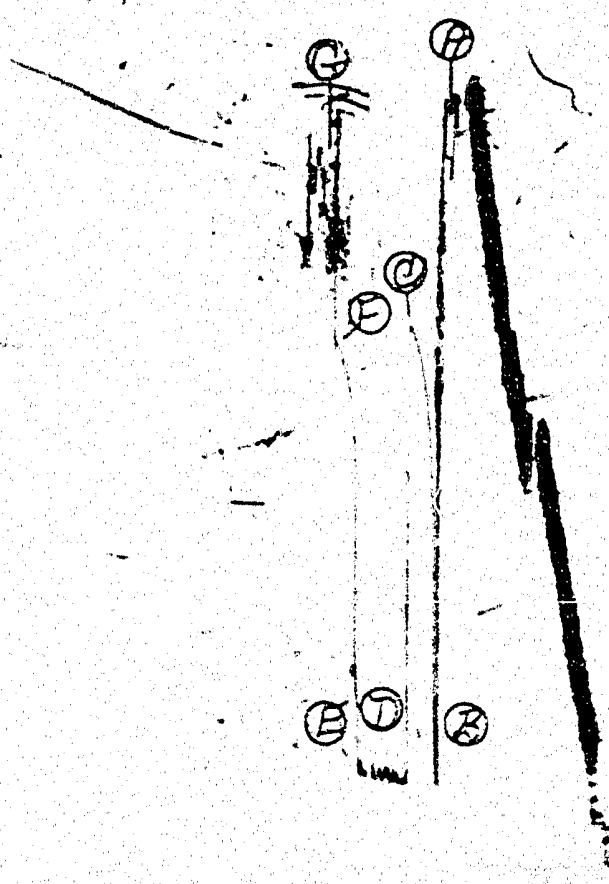
Recorder No.	AKI-1934	T-196		
Capacity P.S.I.G.	7000	7000		
Recorder Depth	9594	9599		
Pressure Gradient P.S.I. Ft.				
Well Temperature °F	264° Est.	264° Est.		
A Initial Hydrostatic	5061#	5107#		
B First Initial Flow	559#	586#		
C Initial Shut-In Pres	3831#	3900#		
D Flowing Pres	575#	601#		
E Final Flow	631#	615#		
F Final Shut-In	3702#	3755#		
G Final Hydrostatic	4959#	5050#		

Remarks

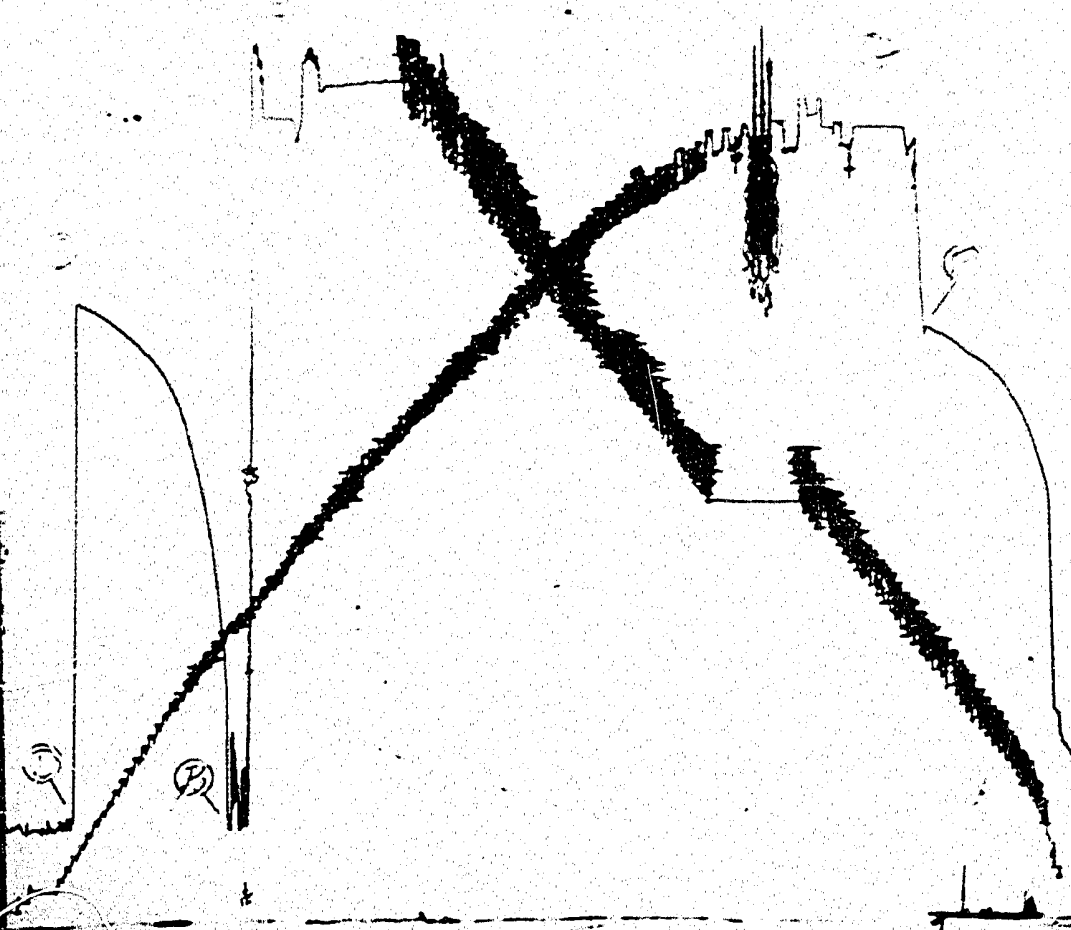
AKI-1934 - Outside Recorder

T-196 - Outside Recorder-called in for recalibration.

7000
46



REC # C-3586 REC # A-11-1934



REC # C-3586 REC # 7-196

PAGE



DATE Jan 26 1965 WELL NO. N.2 LEASE B. F. Teraco Arrowhead
SEC. T. R. PROVINCE Alut. CONTRACTOR Cascade Drilling Co.

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	1245	Running in hole							
1245	115	Cleaning To bottom							
115	8 ⁰⁰	Drilling 12 1/4" hole.							
8 ⁰⁰	4 ⁰⁰	DRLG							
4 ⁰⁰	930	DRLG							
930	945	DEEP SURVEY							
945	1100	HOIST FOR BIT							
1100	1145	LAY DOWN SHOCK SUB & STABILIZERS						45	
		CHANGE BITS RECOVER SURVEY						15	
1145	12 ⁰⁰	SLEEP DRLG LINE							
						</			

	DEPTH	SURVEY	DEPTH	SURVEY
DEVIATION RECORD	2303	1 1/2°		
	2401	1 1/4		

	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
TOTAL TIME CHARGEABLE TO B.A.	23 00		1 00			
DAY WORK PER 24 HOUR DAY						

EIT RECORD:

[illegible]

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
1 ⁰⁰	10.	70	11	2/32	9.0	
2 ⁰⁰	9.8	50	11	2/32	9.0	
3⁰⁰						
4 ⁰⁰	9.8	54	10.5	2/32	9.0	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
N:1.		
GEL- 400 ⁺		

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

	NUMBER	SIZE	TYPE
1			
2			
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DEPTH: END FIRST TOUR 2328

DEPTH END SECOND TOUR 2362

DEPTH END THIRD TOUR 2401

D. Brown
DRILLER OR WATCHMAN

JAMES B. PARKS
DRILLER OR WATCHMAN

Master Hand
DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CHARGEABLE TO BRITISH AMERICAN IS APPR
Daven
CONTRACTOR'S REPRESENTATIVE

Van C. Hansen
BRITISH AMERICAN'S REPRESENTATIVE

W. A. S. S. S.
BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE Jan 25 19 65 WELL NO. N-2 LEASE B.A. Texas Arrowhead
 SEC. T R. R PROVINCE N.W.T. CONTRACTOR Cascade Drilling Co.

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	130	Run in w/12 1/4" hole opener,							
130	330	Ream under gauge hole & bridges,							
330	445	Ream 8 3/4" - 12 1/4"							
445	800	Hoist Reamer & Run in w/12 1/4" Rock bit							
800	830	FINISH RUNNING IN w/12 1/4" BIT							
830	900	TEAM TO BIT.							
900	400	DRILL 12 1/4" HOLE							
400	445	DRILL							
445	500	SEE RIG & B.O.B.							
500	730	DRILL							
730	795	DROP SURVEY							
795	815	WORK ON HIGH CLUTCH							
815	945	Hoist double measure out							
945	1045	CHANGE BITS RECOVER SURVEY							
		CHANGE STABILIZER FROM 60' OF BOTTOM					100		
		TO 30'							
1045	1100	SLIP 15' DRILL LINE					15		
1100	1200	RUN IN D.C.							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	2303	1 1/2			23	15	22	45	1	15
					22	45	1	15		

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
8A	12 1/4	Reamer	155519	2207	2297	90	1 1/4	60	3000	900	1	15	7"	3 1/2"
3	12 1/4	Y.M.	ED-3109	2297		43	8 1/4	90	6000	900	2	56	7"	2-7"
3	12 1/4	Y.M.	ED-3109	2297	2303	56	10 1/4	90	60	900	2	56	7"	14-6 3/4"
4	12 1/4	Y.M.	ED-4039	2303										Same

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
400	9.0	85				
200	9.4	55				
400	9.0	58				
600	9.1	56	12.0	2/32	9.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
	N.L.	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR 2297 DEPTH END SECOND TOUR 2290 DEPTH END THIRD TOUR 2303

D. Brown DRILLER OR WATCHMAN JAMES B. PARKS DRILLER OR WATCHMAN Walter Shuch DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:
Dalven Leide CONTRACTOR'S REPRESENTATIVE Van G. Hurrell BRITISH AMERICAN'S REPRESENTATIVE W. W. Schuch BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

P-35

DATE Jan 24 TO 15 WELL NO. N-2 LEASE B.A. Texas Arrowhead
 SEC. 1 T. 1 R. 1 PROVINCE N.W.T. CONTRACTOR Cascade Drilling Co

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 ³⁰	Reaming 12 1/4" hole.							
1 ³⁰	2 ⁰⁰	Blow Kelly							
2 ⁰⁰	4 ⁰⁰	Hoisting (tight hole)							
4 ⁰⁰	5 ⁰⁰	Servicing 9" D.Cs.				1	00		
5 ⁰⁰	6 ⁰⁰	Cut bit off Reamer & weld on new				1	00		
6 ⁰⁰	7 ⁰⁰	Pick up & making up new Reamer.							
		Stabilizer 60' up from Spack Sub.				1	00		
7 ⁰⁰	8 ⁰⁰	Running Collars in hole.							
8 ⁰⁰	9 ⁰⁰	Pick up 5-6 3/4 D.C.							
9 ⁰⁰	10 ⁰⁰	Running in w/ 12 1/4 REAMER							
10 ⁰⁰	3 ³⁰	Reaming out Benders in Heli-d Ream UNDER GAGE HOLE							
3 ³⁰	3 ⁴⁵	W.O. AIR LINES							
3 ⁴⁵	4 ⁰⁰	Reaming 12 1/4 Hole							
4 ⁰⁰	7 ¹²	Reaming 12 1/4 Hole							
7 ¹²	7 ³⁰	Repair Rotary Churn.							
7 ³⁰	8 ¹⁵	Ream 12 1/4 hole							
8 ¹⁵	10 ⁴⁵	Hoisting & weld bit on Reamer.					2	30	
10 ⁴⁵	11 ⁴⁵	Stop 30' line check float & Steam P.P.					1	00	
11 ⁴⁵	12 ⁰⁰	Running in hole							
DEVIATION RECORD		DEPTH SURVEY DEPTH SURVEY	TOTAL TIME CHARGEABLE TO B.A.		17	30	6	30	
			DAY WORK PER 24 HOUR DAY						

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
6A	12 1/4	reamer	190225	956	2131	1175	18 1/2	160	50000	1300	142		7	5-9"
7A	12 1/4	reamer	180235	2131	2207	76	4 1/4	90	65,000	800	1	74	7	5-9"

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
1:00		50	11.8	3/12	9.0	
2:00	8.0	80				

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR 12 1/4-2131 DEPTH END SECOND TOUR 12 1/4-2131 DEPTH END THIRD TOUR 12 1/4-2207

D. Brown DRILLER OR WATCHMAN JAMES PARKS DRILLER OR WATCHMAN Walt Hinchuck DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: D. Luby CONTRACTOR'S REPRESENTATIVE Sam C. Hannah BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

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LIMITED

SEC

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY		HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
					TOTAL TIME CHARGEABLE TO B.A.	21	30	2	30		
					DAY WORK PER 24 HOUR DAY						

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DOWN 190325	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLAR
6A	12 1/4	Reamer	190325	970		148	1 1/4	160	3000	450	1	75	1"	"
6A	12 1/4	REAMER	190325	970		708	9 1/4	160	30,000	1000	1	PUMP	1 1/2"	3-4 2-3 1/4
6A	12 1/4	Reamer	190325	970	101	101	17 1/4	160	5000	1300	"	"	1"	"
						1								

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
1 st		120				
2 nd	8.8	50	11.8	3/32	9.0	

[illegible]

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

[illegible]

DEPTH END THIRD TOUR

W. Kachuk
DRILLER OR WATCHMAN

Robert Leach
CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

Plot



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATA

SEC

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

WITH	WITHOUT	OTHER
------	---------	-------

HR5.	MIN.	HR5.	MIN.	HR5.	MIN.
------	------	------	------	------	------

1200	1245	Run in	
1245	145	Pump mud in hole	
145	345	cir	
345	415	Run in	
415	800	CLEAN HILL 2000 - 2191.	
800	1145	Circ. + condition mud.	
1145	1245	Drilling	
1245	115	Repair valve on mud line.	
115	400	Drilling	
400	700	DRAG.	
700	800	THAW STEAM LINE	
800	1000	HOIST PIPE	2200
1000	1200	TAKE OFF AIR HEADS + INSTALL FLOW NIPPLE	200

**DEVIATION
RECORD**

DEPTH	SURVEY	DEPTH	SURVEY
100	100	100	100
200	200	200	200
300	300	300	300
400	400	400	400
500	500	500	500
600	600	600	600
700	700	700	700
800	800	800	800
900	900	900	900
1000	1000	1000	1000

	HRS	MIN	HRS	MIN	HRS	MIN
TOTAL TIME CHARGEABLE TO S.A.	22	00	2	00		
DAY WORK PER 24 HOUR DAY						

BIT RECORD:

DATE	SIZE	TYPE	SERIAL	DEPTH	DEPTH	FOOTAGE	HRS.	R. P. M.	BIT	PUMP	PUMP	S. P. M.	LINER	NO. AND SIZE
------	------	------	--------	-------	-------	---------	------	----------	-----	------	------	----------	-------	--------------

MUD RECORD: _____ **MUD ADDITIVES:** _____ **SWAB CUPS:** _____ **OIL-SAVER RUBBER:** _____

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
2 ⁰⁰	9.5	50	1200	7/32	9.0	20% F.
4 ⁰⁰	9.0	80	1200	7/32	9.5	50% F.
6 ⁰⁰ P.M.	8.9	78	1200	7/32	9.5	75% F.

AMOUNT	TYPE	TIME
73 sacks Cel.		8 ⁰⁰ / _{11⁰⁰}
60 sacks Sandust		" "

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

5191	2236	2247
------	------	------

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

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 JAN 21 1965 WELL NO. N-2 LEASE BA ARROWHEAD TEXAS

SEC. 2 T. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING R.G.#2

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	200	DRLG							
200	215	BLOWING HOLE CLEAN							
215	315	DRLG							
315	500	BLOWING HOLE CLEAN							
500	900	DRLG.							
900	1000	Drilling							
1000	1045	Blow hole clean + Survey @ 2020 2 1/4"							
1045	1100	Drilling							
1100	1145	Blow hole clean + Survey @ 2110 2 1/4"							
1145	315	Drilling							
315	400	Repair broken Soap line							
400	600	BLOWING W/TH							
600	800	HOIST PIPE							
800	1200	MIX LOST CIRC. MATERIAL + HAW OUT MUDLINE							
							</		

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.					
					HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	2020	2 1/4"			20	00	4	50		
	2110	2 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.	NO. AND SIZE OF DRILL COLLARS
1	2 3/4	H-85	13504	96.7	RUN.	933	39 1/2	60	20	210			1-39 1/4

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	NUMBER	SIZE	TYPE
							10 1/4	SOAP		17	Mud additive	15	Sacks	FIBERTEX
							225	lime		3	gal	3	gal	Soap
							165 lbs	lime		50	lb	10	lb	lime
							15 1/2	gal Soap						
							150	lbs Carbon						

DEPTH END FIRST TOUR	1900	DEPTH END SECOND TOUR	2191	DEPTH END THIRD TOUR	2191
Walter Schubert		A. Brown		JAMES PARKS	
DRILLER OR WATCHMAN		DRILLER OR WATCHMAN		DRILLER OR WATCHMAN	

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:			BRITISH AMERICAN FOREMAN OR SUPERINTENDENT		
Dorcas Leach		Jan C. Hannal			
CONTRACTOR'S REPRESENTATIVE		BRITISH AMERICAN'S REPRESENTATIVE			

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE Jan 20 19 65 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

SEC. T. R. N.W.T. PROVINCE N.W.T. CONTRACTOR CASCADE DRILL RIG #2

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	500	DRLG.							
500	515	REPAIR FUEL LINE							
515	800	DRLG.							
800	815	Rig Service							
815	1130	Drilling							
1130	1200	Blow hole clean & Survey @ 1350 1/4°							
1200	115	Drilling							
115	330	Working on Blooey lines.							
330	400	Drilling							
400	630	DRLG.							
630	645	SURVEY @ 1571-1/2°							
645	700	DRLG.							
700	730	Blowing well (MAKING WATER)							
730	800	DRLG.							
800	1000	Blowing well (MISTING)							
1000	1200	DRLG.							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.					
	1350	1/4°								
	1571	1/2°								
					DAY WORK PER 24 HOUR DAY					

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	ARS R/N	R.P.M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S.P.M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
1	8 3/4	H-8-J	735074	967	R.H.	253	8 1/2	60	15-25	75	-	-	-	11-6 3/4
1	8 3/4	H-8-J	735074	967	R.H.	502	13 1/2	85	2.5	44	-	-	-	11-6 3/4
1	8 3/4	H-8-J	735074	967	R.H.	702	18 3/4	102	30,000	AIR MIST	-	-	-	11-6 3/4

MUD RECORD:

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

MUD ADDITIVES:

AMOUNT	TYPE	TIME
SOAP - 1 3/4 GALS		
LIME - 50"		

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>1220</u>	DEPTH END SECOND TOUR <u>1459</u>	DEPTH END THIRD TOUR <u>1659</u>
<u>W. Shuck</u> DRILLER OR WATCHMAN	<u>D. Brown</u> DRILLER OR WATCHMAN	<u>JAMES P. PARKS</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: <u>John P. Hannah</u> CONTRACTOR'S REPRESENTATIVE	<u>John P. Hannah</u> BRITISH AMERICAN'S REPRESENTATIVE	<u>John P. Hannah</u> BRITISH AMERICAN FOREMAN OR SUPERINTENDENT
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DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE JAN 19 1965 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD
 SEC. T PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING R.G. #2

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 TO DAY BASIS. DRILLERS 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	200	BLOW & FLARE LINES						
		REPAIR 2" CAMREN VALVE						
200	500	DRAW OUT FLOAT COLLAR.						
500	800	DRUG CEMENT 927.98- 948.						
800	1000	Drilling Cement.						
1000	130	Displacing hole w/air						
130	200	Drilling out shoe.						
200	315	blowing hole dry.						
315	400	Hoisting pipe.						
400	930	TRIPPING FOR SQUARE D.C.						
930	1115	Blowing hole dry						
1115	1200	DRUG.						

DEVIATION RECORD	DEPTH		SURVEY		TOTAL TIME CHARGEABLE TO B.A.	HRS.		DAY WORK PER 24 HOUR DAY	HRS.		MIN.		HRS.	MIN.
	DEPTH	SURVEY	DEPTH	SURVEY		HRS.	MIN.		HRS.	MIN.				
						24	00							

BIT RECORD: USED TO DRILL OUT PLUGS & CEMENT, ETC. - 1 HOLE

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-A	12 1/4	Y13A	ED3125			1	60	10	500	1	72	7"	8-9"	2-2 1/2"
1	8 3/4	H.S.	735074	967		13	3/4	62	1700	AIR 100 PSI			11-6 3/4"	1 - 7 5/8"

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
							33#	MICRO CELL E							

DEPTH END FIRST TOUR <u>966'</u>	DEPTH END SECOND TOUR <u>967'</u>	DEPTH END THIRD TOUR <u>980'</u>
<u>W. Kuhn</u> DRILLER OR WATCHMAN	<u>D. Brown</u> DRILLER OR WATCHMAN	<u>JAMES B. PARKS</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:
Dale CONTRACTOR'S REPRESENTATIVE
James B. Parks BRITISH AMERICAN'S REPRESENTATIVE
James B. Parks BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE JAN 18 19 65 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

SEC. T. R. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING #2

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 800 HEAD UP

800 400 Heading up & Hooking up Blooey lines

400 700 HOOKING UP BLOOY LINE 700

700 800 DRG MARSIE HOLE

800 900 RUN IN W/1 1/4 BIT TO TOP OF PLUG @ 728

900 1100 PRESSURE TEST 4 1/2 RAMS & HYDRIL & KELLY COCK TO 1000 P.S.I. HELD OK

1100 1200 PUT ON ROTARY HEAD & BLEW AHH LINES W/STEAM

1 MAN 8 HRS. OVERTIME.

① PRESSURE TESTED KILL LINE & BLIND RAMS TO 1000 PSI HELD 15 MIN OK.

② PRESSURE TESTED 4 1/2" PIPE RAMS TO 1000 PSI HELD 15 MIN OK

③ PRESSURE TESTED HYDRIL TO 1000 PSI HELD OK

④ PRESSURE TESTED KELLY COCK FROM BOTTOM SIDE TO 1000 PSI HELD OK

⑤ OPERATED ALL MOTOR SHUT OFFS OK

⑥ FOUND PLUG @ 929'

TOTAL TIME CHARGEABLE TO B.A. 1700 700

DAY WORK PER 24 HOUR DAY

DEVIATION 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. 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 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

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE JAN 17 19 65 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING R.G.#2

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	800	DIG CELLER. 2 MEN 8Hrs OVERTIME B.A. Request.							
800	400	W.D.C. Crib Celler, Lay Flare line Cut off Casing + weld on bowl. 8 2 MEN 8Hrs OVERTIME B.A. Request.							
4 ⁰⁰	12 ⁰⁰	W.D.C. HEAD UP B.O.P.s 3 MEN 8Hrs overtime B.A. Request							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.		DAY WORK PER 24 HOUR DAY	
						2400		

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

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
<u>W. Hersh.</u>	<u>D. Brown</u>	<u>JAMES B. PARKS</u>
DRILLER OR WATCHMAN	DRILLER OR WATCHMAN	DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

D. Lofy CONTRACTOR'S REPRESENTATIVE John L. Hannah 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 JAN. 16th 1965 WELL NO N-2 LEASE B.A. TEXACO ARROWHEAD

SEC. T. R. PROVINCE N.W.T. CONTRACTOR PASCAGE #2

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASON. 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.

PAGE # 2

RAN 31 JTS. 13 3/8" OD, 54.5" J-55 8RD, ST. C. S.S. CASING SET @ 966' TALLY 949.59. DISTANCE GROUND TO K.B. 16'. DISTANCE "H" 18.41. RAN NO SCRATCHERS AND 3 CENTRALIZERS ON BOTTOM. 65 FEET CEMENTED BY HOWCO W/ 850 SACKS PORTLAND NORMAL DULK CEMENT, W/ 2% CALCIUM CHLORIDE ADDED. PUMPED PLUG TO 933 FEET. PLUG DOWN @ 445 PM JAN 16th 1965. CEMENT CIRCULATED 24 HRS. WITNESSED BY SEELEY FOR CONTRACTOR BY HANNAH FOR B.A. SURPLUS - 1 JT. = 26.12 E.I. CUT OFF PIECE "22" ON HAULING CRANE # ICH 24. RECIPROCATED CASING FOR DURATION OF 3 HRS. W/ A 29 FOOT STROKE, PRIOR TO CEMENTING. RECIPROCATION WAS STOPPED WHEN CEMENTING WAS STARTED BECAUSE THERE WAS NOT ENOUGH FLEXBEAR LINE AVAILABLE ALSO NO SCRATCHERS WERE RUN ON CASING. CASING HUNG UP HAD TO BE CIRCULATED DOWN FIRST 280' ALSO LAST 90' TO BOTTOM HAD TO BE CIRCULATED AND WORKED IN. AFTER GETTING TO BOTTOM, COULD NOT PICK CASING UP HIGHER THAN 30' OFF BOTTOM. OR CASING WOULD GET STUCK TEMPORARILY.

DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
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:

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:

Jan C. Hannah

CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE JAN 16 1965 WELL NO. N-2 LEASE BA. TEXACO ARROWHEAD.

SEC. T. R. PROVINCE NAT. CONTRACTOR CASCADE #2

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	1 ¹⁵	TIGHTEN PUMP BELTS.							
1 ¹⁵	200	HOIST TO RUN CASING			2	00			
200	245	RIG TO RUN CASING							
245	800	RUNNING 13 ³ / ₄ " CASING (TIGHT)					6	00	
		4 MEN 8 HRS OVERTIME B.A. REQUEST RUN CASING LAY BLOODY LINE							
800	12 ¹⁵	Running 13 ³ / ₄ " Casing							
12 ¹⁵	3 ³⁰	Circ. & working Casing							
3 ³⁰	400	Cementing Casing			8		8	00	
		2 MEN 8 HRS OVERTIME - RUN CASING							
4 ⁰⁰	4 ⁴²	CEMENTING CASING							
4 ⁴²	12 ⁰⁰	W.D.C.			8		8	00	

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

TOTAL TIME CHARGEABLE TO B.A.	2	00	22	00
DAY WORK PER 24 HOUR DAY				

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. N.	LINER SIZE	NO. AND SIZE OF DRILL COLLARS

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

DEPTH END FIRST TOUR 966 TO SURFACE DEPTH END SECOND TOUR DEPTH END THIRD TOUR

Walter Stank DRILLER OR WATCHMAN D. Brown DRILLER OR WATCHMAN JAMES E. PARKS DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: D. Seely CONTRACTOR'S REPRESENTATIVE Van C. Hannah BRITISH AMERICAN'S REPRESENTATIVE BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

12-576



DATE JAN 15 1965 WELL NO. N. 24 CASE B.A. TEXACO ARROWHEAD

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR CASCADE DRIG RIG #2

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND FLOPE 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	200	DRLG.						
200	215	SURVEY @ 922 1/2"						
215	430	DRLG						
430	600	TRIP DOUBLE MEASURE						
600	800	DRILL	8					
800	1000	Drilling						
1000	1015	Survey @ 950 7/8"						
1015	1030	Survey Rig						
1030	1230	Drilling						
1230	400	Circulate & Jack Rig.	8					
400	1200	CIRC. & JACK DERRICK	8					
		3 MEN 8 Hrs. OVERTIME STAY TO RUN CASING - B.A. REQUEST.						

	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
TOTAL TIME CHARGEABLE TO B.A.	24	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 940 DEPTH END SECOND TOUR _____ DEPTH END THIRD TOUR _____

W. Kuhl DRILLER OR WATCHMAN	D. Brown DRILLER OR WATCHMAN	JAMES P. PARKS DRILLER OR WATCHMAN
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TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:		DRILLER OR WATCHMAN	DRILLER OR WATCHMAN
<i>[Signature]</i>	<i>[Signature]</i>		
CONTRACTOR'S REPRESENTATIVE	BRITISH AMERICAN'S REPRESENTATIVE	BRITISH AMERICAN'S FOREMAN OR SUPERINTENDENT	

BRITISH AMERICA : FOREMAN OR SUPERINTENDENT

SAFETY ▽ FILM ▽ + ▽

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE JAN. 14 1965 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILL RIG #2

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	SER. RIG							
12 ¹⁵	2 ⁰⁰	DRLG.							
2 ⁰⁰	2 ³⁰	SURVEY @ 769 - 1/2°							
2 ³⁰	5 ⁰⁰	DRLG.							
5 ⁰⁰	5 ³⁰	SURVEY @ 799. 1/2°							
5 ³⁰	8 ⁰⁰	DRLG.							
8 ⁰⁰	9 ⁴⁵	Drilling							
9 ⁴⁵	10 ⁰⁰	Survey @ 825 1/2°							
10 ⁰⁰	12 ¹⁵	Trip + double measure pipe							
12 ¹⁵	4 ⁰⁰	Drilling	8						
4 ⁰⁰	5 ¹⁵	DRLG.							
5 ¹⁵	5 ³⁰	SURVEY @ 890 - 3/4°							
5 ³⁰	12 ⁰⁰	DRLG.	8						
						</			

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY
	825	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
3A	17 1/2	YTIA	33469	580	in	230	33 3/4	160	15	500	1	74	7"	3 3/4"
3A	17 1/2	YTIA	33469	580	824	242	25 1/2	160	15	500	1	74	7"	11"
4A	17 1/2	OSC-3	10009	824	in	58	35 1/4	160	45	1200	1-2	Pumps	7"	"
4A	17 1/2	OSC-3	10009	824		94	11 1/2	160	8000	500	1	74	7"	"

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
10 ⁰⁰ AM		74				
		75				

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR 812 DEPTH END SECOND TOUR 882 DEPTH END THIRD TOUR

W. Stachub. DRILLER OR WATCHMAN D. Brown DRILLER OR WATCHMAN JAMES F. PARKS 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



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE Jan 13 1965 WELL NO. N.2 LEASE BA TEXACO ARROWHEAD

SEC. T. R. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILL RIG #2

TIME BY DRILLERS	
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.

1200	330	DRILL									
330	400	SURVEY @ 580 - 3/4"									
400	600	TRIP FOR BIT									
600	800	DRILL									
800	915	Drilling									
915	1030	SURVEY @ 610 1/8" SURVEY RIG									
930	1130	Drilling									
1130	1145	SURVEY @ 640 1/2"									
1145	145	Drilling									
145	200	SURVEY @ 675 3/4"									
200	400	Drilling									
400	430	DRILL									
430	445	SURVEY @ 706 - 3/4"									
445	815	DRILL									
815	830	SURVEY @ 735 - 1/2"									
830	1200	DRILL									

DEPTH	SURVEY	DEPTH	SURVEY
640	1/2"	735	1/2"
675	3/4"		

TOTAL TIME CHARGEABLE TO B.A.	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. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
2A	17 1/2	OSC-3	RETIP 242	580		333	2 3/4	160	12	425	1	74	7 3/4	3-9 1/4
2A	17 1/2	OSC-3												
3A	17 1/2	TIA	334617580			120	7 1/4	160	1500	600	1	76	7 3/4	"
3A	17 1/2	TIA	334619580			180	16 3/4	160	15,000	575	1	76	7 3/4	"
SWAB ADDITIVES:														
SWAB CUPS:														
OIL SAVER RUBBERS:														

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
600		90				
330		65				
1000		70				

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR 600 DEPTH END SECOND TOUR 700 DEPTH END THIRD TOUR _____

W. Kachuk DRILLER OR WATCHMAN D. J. Jones DRILLER OR WATCHMAN JAMES B. PARKS DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: [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 Jan 12 1965 WELL NO. N-2 LEASE 22 B.H.A. TERRYHEAD

SEC. T PROVINCE N.W.T. CONTRACTOR CASCADE DRILL RIG #2

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.	
1260	136	DRILL							
130	145	SURVEY @ 277 1/8"							
145	345	DRILL							
345	400	SURVEY @ 307 - 0							
400	600	DRILL							
600	615	SURVEY @ 367 - 1/2"							
615	800	DRILL			7				
800	815	Rig Service & Survey							
815	1200	Drilling							
1200	1215	SURVEY @ 455 3/4"							
1215	330	Drilling							
330	345	SURVEY @ 485 3/4"							
345	400	Drilling			8				
400	715	DRILLING							
715	730	SURVEY @ 520 - 3/4							
730	1100	DRILLING							
1100	1115	SURVEY @ 551 - 1/2							
1115	1200	DRILLING			8				

DEPTH	SURVEY	DEPTH	SURVEY
4.85	7/4"	551	1/2"

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
2A	17 1/2	OSC-3	RefIP	247		140	3 1/4	160	10	400	1	74	7 3/4	3-9" 8-6 3/4"
2A	17 1/2	OSC-3	RefIP	247		241	15 3/4	160	10	400	1	74	7 3/4	3-9" 8-6 3/4"
2A	17 1/2	OSC-3	RefIP	247		306	23 3/4	160	13000	425	1	74	7 3/4	3-9" 8-6 3/4"

MUD RECORD:

TIME	WEIGHT	VIS. COSTY.	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
245	48					
1000	60					

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 387 DEPTH END SECOND TOUR _____ DEPTH END THIRD TOUR _____

W. Skalak DRILLER OR WATCHMAN D. Brown DRILLER OR WATCHMAN JAMES B. PARKS DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: D. Luby CONTRACTOR'S REPRESENTATIVE Jim C. Hammond BRITISH AMERICAN'S REPRESENTATIVE _____ BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE Jan 11th 1965 WELL NO. N-2 LEASE 3 TEXAS
 SEC. 1 T. 1 R. 1 PROVINCE N.W.T. CONTRACTOR Cascade Drilling Co.

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	Survey							
1215	345	Drilling							
345	400	Survey							
400	745	Drilling							
745	800	Survey							
800	1000	Drilling							
1000	1015	Survey							
1015	400	Drilling							
400	545	Drilling							
545	600	SURVEY							
600	900	Drilling							
900	915	SURVEY							
915	1030	TRIP FOR BIT							
1030	1200	Drilling							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	150	3/4"	217	1/4"						
	180	1/2"								

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
	1	17 1/2	OSC-3	Reman	0	153	20 1/2	160	5000			1		7 3/4	3-9"
	1	17 1/2	OSC-3	Reman	0	207	29 1/4	160	5000						2-7"
	1	17 1/2			0	247	247	34	10000			1		7 3/4	3-9"
	2	17 1/2			247		10	1 1/2	5000			1		7 3/4	6-7"

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
300		42					700/lbs Gel								
500		50					700/lbs quick Gel								
1000		50					500 LBS Gel								

DEPTH END FIRST TOUR W. Teachuck DRILLER OR WATCHMAN
 DEPTH END SECOND TOUR D. Brown DRILLER OR WATCHMAN
 DEPTH END THIRD TOUR JAMES B. PRICKS DRILLER OR WATCHMAN
 TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:
D. Leahy CONTRACTOR'S REPRESENTATIVE
Jan C. Hannah BRITISH AMERICAN'S REPRESENTATIVE
BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE Jan 10th 1965 WELL NO. N.2 LEASE James D. A. D. Road
 SEC. T. R. R. PROVINCE N.W.T. CONTRACTOR Cascade Drilling Co.

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	8 ⁰⁰	Rig to spud. Mix mud.						8	
8 ⁰⁰	10 ³⁰	Rig to spud (Spud in 10:30 AM)							
10 ³⁰	4 ⁰⁰	Drilling 17 1/2" hole on boulders.							
4 ⁰⁰	7 ⁴⁵	Drilling	3	45					
7 ⁴⁵	8 ⁰⁰	Survey.					1/4		
8 ⁰⁰	12 ⁰⁰	Drilling.	4					8	

15 men 8 hrs

SPUD 10:30 AM 10/65

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY
	70	1/2		

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	13	30				
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 OF DRILL COLLARS
1	17 1/2	OSC-3	Perma.			50	6 1/2	60			1		7 1/2	1 9"
1	17 1/2	OSC-3	"	"	"	98	14 1/2	60			1		"	2 9"

MUD RECORD:

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT

MUD ADDITIVES:

AMOUNT	TYPE	TIME
2000 lbs	Gel	
2000 lbs	Quick Gel	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR _____ DEPTH END SECOND TOUR 50 DEPTH END THIRD TOUR 98

DRILLER OR WATCHMAN D. Brown
 TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: Jan C. Hammali
 CONTRACTOR'S REPRESENTATIVE [Signature] BRITISH AMERICAN'S REPRESENTATIVE [Signature] BRITISH AMERICAN FOREMAN OR SUPERINTENDENT [Signature]

\$2.95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE 11-2-65 9:00 AM 19 65 WELL NO. 112 LEASE 112 Oil & Gas

SEC. _____ T. _____ R. _____ PROVINCE Albion CONTRACTOR Cascade Milling Co.

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	8.00							8	
8.00	4.00							8	
4.00	12.00								
		Rig up.							
		Rigging up & digging ditches.							
		Rigging up.							
		Clean out all oil lines in Dunks.							
		Working on C-350 pump.							8
		16 men 8 hrs.							

	DEPTH	SURVEY	DEPTH	SURVEY
DEVIATION				
RECORD				

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

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

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THE BRITISH AMERICAN OIL COMPANY LIMITED

SEC. _____ T. _____ R. _____ PROVINCE W. I. I. TIME CHARGEABLE TO BRITISH AMERICAN

DRILLERS	
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.

WITH	WITHOUT	STATUS
------	---------	--------

HRS.	MIN.	HRS.	MIN.	HRS.	MIN.

800	400	General Rigging up.
-----	-----	---------------------

15 men 8 hrs.

1. ~~the~~ PORT

Abstract—The purpose of this study was to determine the effect of a 10-week training program on the heart rate (HR) and energy expenditure (EE) of sedentary, middle-aged women. The subjects were 15 sedentary women, 30 to 45 years of age, who were randomly selected from a telephone directory. The subjects were divided into two groups: a control group and a training group. The control group consisted of 8 women who did not participate in any physical activity during the study. The training group consisted of 7 women who participated in a 10-week training program. The training program consisted of three sessions per week, each lasting 30 minutes. The sessions were performed on a stationary bike at a heart rate of 150 to 160 beats per minute. The HR and EE were measured at the beginning and end of the study. The HR and EE of the training group increased significantly after 10 weeks of training, while the HR and EE of the control group remained unchanged. The results of this study suggest that a 10-week training program can improve the HR and EE of sedentary, middle-aged women.

BIT RECORD:[illegible]

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:

[illegible]

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

DATE Jan 7th 19 42 WELL NO. N-2 LEASE 5442 Brown Head

SEC. T R. R PROVINCE N.W.T. CONTRACTOR Cascade Drilling Co.

TIME BY DRILLERS
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.	HRS.	MIN.
8.00	4.00						
Rigging up Steep Lines							
Conductor - 3.5 ft.							
Rig floor + put in 1st beam.							
Raise derrick.							
15 men 8 hrs							
						8	

6th DAY PORT

DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
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:

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:

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: D. Brown BRITISH AMERICAN'S REPRESENTATIVE

CONTRACTOR'S REPRESENTATIVE

Jan 6 H. H. H. BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

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

CONTRACTOR Escobar Building Co.

[illegible]

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

BUT RECORD:

[illegible]

MUD RECORD.

[illegible]

MUD ADDITIVES.

AMOUNT	TYPE	TIME

SWAB CLIPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR

DEPTH AND THIRD TOUR

DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED.

CONTRACTOR'S REPRESENTATIVE

Jan C. Kinnah.

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

SEC. _____ T. _____ F. _____

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.

800	400
-----	-----

Rig up
put up Motors & Pumps.
Spot mud tanks.

14 mess & hrs

2nd DAY RRR

TOTAL TIME CHARGEABLE TO R.A.

DAY WORK PER 24 HOUR DAY

[illegible]

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT

AMOUNT	TYPE	TIME

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

NUMBER	SIZE	TYPE

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

FEC

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	4.00	Rig up							
		Lag matting & Fin Sub Structure							3
		CEMENT CON. BBL.							
		60 sks cement							
		10 men 8 hrs.							
		100# calcium Chlor.							
		1 DAY RPT.							

1 DAY RURT

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

[illegible]

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT

[illegible]

NUMBER	SIZE	TYPE

[illegible]

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

	<i>A. Brown</i>	
DRILLER OR WATCHMAN	DRILLER OR WATCHMAN	DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH/AMERICAN IS APPROVED:

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

D. S. [Signature] *Jan C. [Signature]*
CONTRACTOR'S REPRESENTATIVE BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE Jan 1st 1965 WELL NO. N-2 LEASE 7 B. H. Brownhead
SEC. 1 T. 1 R. 1 PROVINCE N.W.T. CONTRACTOR Cascade Drilling Co.

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. § _____ CONTRACTOR Ascoak Nelson Co.

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	4.00	Rigging up Camp.						8
		7 men worked 8 hrs.						
		1 man worked 12 hrs						
		2 men worked 14 hrs.						

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:

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	FH	SAND CONTENT

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

[illegible]

OIL SAVER RUBBERS:

[illegible]

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR

DEPTH END THIRD TOUR

DRIVER 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

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE Dec 31st 1967 WELL NO. A-4 LEASE

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR Cascade Drilling Co.

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	6 ⁰⁰	Rigging up Camp.						10
		10 men worked 10 hrs.						

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

[illegible][illegible]

DEPTH END FIRST TOUR	DEPTH END SECOND TOUR	DEPTH END THIRD TOUR
	<i>D. Brown</i>	
DRILLER OR WATCHMAN	DRILLER OR WATCHMAN	DRILLER OR WATCHMAN
TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED		
<i>D. Leake</i>	<i>Sam C. Hancock</i>	
CONTRACTOR'S REPRESENTATIVE	BRITISH AMERICAN'S REPRESENTATIVE	BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

NEW YORK, ALTON, PORTER - CALGARY

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MAR 17 1965 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING CO. INC. - 2

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	8 ⁰⁰	CH4 MUD TANKS & CELLAR.			1	00		
		Rig Released at 7:00 A.M.						
		March-17-65						
8 ⁰⁰		LAY DOWN BOP.						
		CUT CASING WELD CAP ON 9 5/8 CASING						
	4 ⁰⁰	TERRING OUT.						
4	12	TEAR OUT						
			</					

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.	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 _____
<u>J. Parks</u> DRILLER OR WATCHMAN	<u>W. Stuebel</u> DRILLER OR WATCHMAN	<u>Robert Manning</u> DRILLER OR WATCHMAN
TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:		
<u>Dahen Ledy</u> CONTRACTOR'S REPRESENTATIVE	<u>W. W. Schomaker</u> BRITISH AMERICAN'S REPRESENTATIVE	<u>Robert Manning</u> BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MAR 16 1955 WELL NO. 4-2 LEASE B.A. TEXACO ARROW HEAD

SEC. T R. R PROVINCE N.W.T CONTRACTOR CASCADE DRILLING RIG 2

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	2 ⁰⁰	W. O. C.			32 ⁰⁰				
2 ⁰⁰	2 ⁴⁵	FELL Plug 2" @ 8475							
2 ⁴⁵	5 ⁰⁰	HOIST TO 3105							
5 ⁰⁰	5 ³⁰	Run Plug NO 3 3105-3055	32 ⁰⁰						
		W/ 65.5 2 CAL.							
5 ³⁰	6 ⁰⁰	HOIST 15 STDS.			43 ⁰⁰				
6 ⁰⁰	8 ⁰⁰	LAY DOWN DRILL PIPE							
8 ⁰⁰	1 ⁰⁰	Lay down drill pipe							
1 ⁰⁰	1 ³⁰	Rub in with drill pipe - felt							
		for plug #3 - found top at 2990							
1 ³⁰	4 ⁰⁰	Lay down drill pipe							
4 ⁰⁰		Lay down drill pipe							
	12 ⁰⁰	take out - clean mud tanks				18 ⁰⁰			

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.					
					HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
					24	00	20	00		
					14	00	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

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
JAMES E. PARKS	W. A. Schomaker	Robert Manning
DRILLER OR WATCHMAN	DRILLER OR WATCHMAN	DRILLER OR WATCHMAN
TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:		
D. A. Schomaker	W. A. Schomaker	
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 MAR 15 1945 WELL NO. H-2 LEASE B.A. TEXACO ARROWHEAD

SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING CO. P.G.-2

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	8 ⁰⁰	WAIT ON ORDERS							
8 ⁰⁰	4 ⁰⁰	WAIT ON ORDERS							
4 ⁰⁰	3 ⁰⁰	Run Plug NO 1 10047-9950							
		W/ 50SKS. 0.5% H.P. 4							
5 ⁰⁰	6 ¹⁵	Pull out 8650							
6 ¹⁵	6 ⁴⁵	Run Plug NO # 2 8650 - 8500							
6 ⁴⁵	7 ³⁰	Pull 15 STDS. 90 Sack Cement + 0.5 % H.P. 4.							
7 ³⁰	12 ⁰⁰	LAY down 14 STDS. + W/D.C.							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.		DAY WORK PER 24 HOUR DAY	
					24 00	50 30	24 00	50 30

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 RUBBER:		
TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT	AMOUNT	TYPE	TIME	NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR <u>10047</u>	DEPTH END SECOND TOUR <u> </u>	DEPTH END THIRD TOUR <u> </u>
<u>JAMES B. PARKS</u> DRILLER OR WATCHMAN	<u>W. Skulch</u> DRILLER OR WATCHMAN	<u>Robert Manning</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

D. Duly CONTRACTOR'S REPRESENTATIVE W. C. Schomaker 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 MAR 14 1965 WELL NO. N-2 LEASE BA TEXACO ARROW HEAD

SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING R.C. 2

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 ³⁰	HOIST DST. "6							
1 ³⁰	4 ³⁰	BK UP + LAY DOWN TESTER				3	00		
4 ³⁰	8 ⁰⁰	WAIT ON ORDERS lay down D.C's.				3	30		
8 ⁰⁰	4 ⁰⁰	WAIT ON ORDERS.					8	00	
		LAYED DOWN D.C. RAN IN OPEN END	4	00					
4 ⁰⁰	12	WAIT ON ORDERS	4	00					

9³⁰ 14³⁰
~~14³⁰ 14³⁰~~
~~14³⁰ 14³⁰~~

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.		DAY WORK PER 24 HOUR DAY	
					16 ⁰⁰	14 ³⁰	14 ³⁰	14 ³⁰

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	AMOUNT	TYPE	TIME	NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE
						75AX	OBRAON							
						75AX	CARBONK							
						55AX	BICARBONATE OF SODA							
						300	CAUSTIC							

DEPTH END FIRST TOUR DEPTH END SECOND TOUR 100 & 7. DEPTH END THIRD TOUR

JAMES E. PARKS W. J. ... Robert E. Manning
 DRILLER OR WATCHMAN DRILLER OR WATCHMAN DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:
D. Luby W. C. Schomaker
 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 Mar 13 1955 WELL NO. 21-2 LEASE B.A. Texas 1 knowned

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.

Run DST #5 by Johnston Interval 8785' - 8796' w/ dual saddle 7 1/4" packers 7 1/2" SS choke 1000' H₂O cushion 30 min. ISL Tool opened 60 min. commencing @ 745 AM 4 1/2 min FSI Good initial air puff, followed by light air flow for 6 min, on pre-flow. No air blow on flow period. 4 1/2" drillpipe recovery: 90' of gasified drill mud, plus 1000' water cushion. THSP 4885 FHSP 4658 IFP 527 FFP 530 ISIP Nil FSIP 1727 B.H.F. 255

Run DST #6 by Johnston Interval 9579' - 10047' w/ dual 7 1/4" packers, 7 1/2" SS choke, 1000' water cushion 30 min. ISP Tool opened 60 min. 30 min. final shut-in. Fair L.A.P. followed by weak air blow dying in 24 min. 4 1/2" drillpipe recovery: 240' of gasified drill mud + 1000' of water cushion. THSP 5356 FHSP 5311 IFP 750 FFP 758 ISIP 3963 FSIP 3824 B.H.F. 265

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:

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: U. W. Schenck E. Ramsay

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 MAR. 13 1965 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING P.G.-2

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	2 ⁴⁵	MAKE UP & SERV PACKER							
2 ⁴⁵	5 ⁴⁵	RUN IN W/ DST							
5 ⁴⁵	6 ⁴⁵	PICK UP 8 SINGLES & RIG UP TO TEST							
6 ⁴⁵	8 ⁰⁰	TESTING							
8 ⁰⁰	9 ³⁰	TESTING							
9 ³⁰	12 ³⁰	Hoist Packer							
12 ³⁰	4 ⁰⁰	BREAK + MAKE UP Packer SERVICE SAME				3	30		
4		RUN IN DST #6 W/ 1000 ft							
	7 ³⁰	WATER CUSHION							
7 ³⁰	10 ¹⁵	TESTING							
10 ¹⁵		Pull Packer loose BREAK DOWN							
	10 ³⁰	TESTING HEAD							
10 ³⁰	12	Hoist.							

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

TOTAL TIME CHARGEABLE TO B.A.	20 ³⁰	3 ³⁰
DAY WORK PER 24 HOUR DAY	714.88%	

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 100.47 DEPTH END SECOND TOUR 100.47 DEPTH END THIRD TOUR 100.47

JAMES B. PARKS W. Schuch Robert Manning
DRILLER OR WATCHMAN DRILLER OR WATCHMAN DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:
Debrah Suby W. W. Schuch Robert Manning
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 MARCH 12 1965 WELL NO. N-2 LEASE BA Tex Arrow Head

SEC. T T. R PROVINCE NWT CONTRACTOR CASCADE DRILLING RIG #2

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	1	Circulate & Con Mud.							
1	245	Pull out Work Tight Hole							
245	430	Run in & Beam Bridge 55' off Bottom							
430		Circulate & Con Mud.							
8 ⁰⁰	8 ⁴⁵	R.G. SERV. W.O. Low Chute							
8 ⁴⁵	10 ³⁰	HOIST TO TEST							
10 ³⁰	11 ¹⁵	BEAM TIGHT SPOT							
11 ¹⁵	1 ⁰⁰	HOIST							
1 ⁰⁰	2 ³⁰	MAKE UP PACKER					1:30		
2 ³⁰	4 ⁰⁰	RUNNING IN W/ D.S.T. (1000' WATER) CUSHION							
4 ⁰⁰	6 ⁰⁰	Finish in w/ Packer.							
6 ⁰⁰	6 ³⁰	HEAD UP TO FLARE LINE							
6 ³⁰	6 ⁴⁵	TRX SENT PACKER (NO SENT)							
6 ⁴⁵	7 ¹⁵	Pull Packer Loose							
7 ¹⁵	10 ¹⁵	Hoist Packer							
10 ¹⁵	11 ⁰⁰	BREAK PACKER						45	
11 ⁰⁰	11 ³⁰	MEASURE IN 12 STOPS TAIL PIPE							
11 ³⁰	12 ⁰⁰	make up Packer							
		Bent 3 Joints 4 1/2" DRILL PIPE using FOR TAIL PIPE							

DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
9597	10047			21	45	2	15		

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 COLLAPS
25	8 3/4	4 HG	RE RUN	10047						1600	1	73	6 1/2 6-6 3/4

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
8am															
1000'															

DEPTH END FIRST TOUR	DEPTH END SECOND TOUR 10047	DEPTH END THIRD TOUR 10047
Robert E. Manning	JAMES B. PARKS	W. J. L. L.
DRILLER OR WATCHMAN	DRILLER OR WATCHMAN	DRILLER OR WATCHMAN
TIME CHARGEABLE TO BRITISH AMERICAN'S APPROVED:		
D. Green	W. G. Schomaker	
CONTRACTOR'S REPRESENTATIVE	BRITISH AMERICAN'S REPRESENTATIVE	BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

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DATE March 16TH 1965 WELL NO. N-2 LEASE BA Tex Arrow Head

SEC. _____ T. _____ R. _____ PROVINCE NWT CONTRACTOR CASCADE DRILLING CO. LTD

[illegible]

	HRS	MIN.	HRS	MIN.	HRS	MIN.
TOTAL TIME CHARGEABLE TO B.A.			21	00		
DAY WORK PER 24 HOUR DAY			4	16	00	

[illegible][illegible]

AMOUNT	TYPE	TIME
500#	LABORBOX	
500#	Q-BACKIN	
400#	C.AUSTIC	

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR <u>10047</u>	DEPTH END SECOND TOUR <u>10047</u>	DEPTH END THIRD TOUR <u>10047</u>
-----------------------------------	------------------------------------	-----------------------------------

Robert Manning DRILLER OR WATCHMAN	JAMES B. PARKS DRILLER OR WATCHMAN	WALT TRACHUK. DRILLER OR WATCHMAN
---------------------------------------	---------------------------------------	--------------------------------------

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

W. A. D. [Signature]
BRITISH AMERICAN REPRESENTATIVE BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 9 1965 WELL NO. N-2 LEASE BATEX ARROW HEAD

SEC. T. R. PROVINCE NWT CONTRACTOR CASCADE DRILLING CO.

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	12 ¹⁵	SERVICE RIG & CHECK BOP'S							
2 ¹⁵	3 ¹⁵	REAM RAT HOLE							
3 ¹⁵	4 ⁴⁵	CIRCULATE							
4 ⁴⁵	5 ¹⁵	20 STDs TRIP							
5 ¹⁵	5 ⁴⁵	WORK ON #2 MOTOR							
5 ⁴⁵	7 ⁴⁵	FINISH TRIP (ONE MOTOR)							
7 ⁴⁵	8	BREAK CIRC.							
8 ⁰⁰	9 ³⁰	CIRC. TO LOG							
9 ³⁰	10 ³⁰	W/ TIGHT HOLE							
10 ³⁰	11 ³⁰	W.D. SCHUMBERGER.							
11 ³⁰	2 ¹⁵	HOIST PIPE							
2 ¹⁵	3 ¹⁵	WORK STUCK PIPE FREE							
3 ¹⁵	4 ⁰⁰	HOIST PIPE							
4 ⁰⁰	6 ⁰⁰	HOIST PIPE							
6 ⁰⁰	6 ¹⁵	Rig UP TO LOG						15	
6 ¹⁵	12 ⁰⁰	LOG					5:45		
Run Dual Ind. Potentiolog TD - 3056'									
Borehole Compensator Sonic - Borehole Caliper - TD - 3056'									
(w/ check shots & integrator service)									

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.					
					HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
					18	00	6	00		
					DAY WORK PER 24 HOUR DAY	14:55 ³⁰	14:16 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
25	8 3/4	YHG	EN4357	10010				160	15					21-6 3/4
25	8 3/4	YHG	EN4357	10010				160	15					21-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
8 AM	10.0	350	4.2	732	100	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
500#	CARBONOX	
500#	O-BROWN	
200#	CAUSTIC	

SWAB CUPS:

NUMBER	SIZE	TYPE
--------	------	------

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE
--------	------	------

DEPTH END FIRST TOUR 10047 DEPTH END SECOND TOUR 10047 DEPTH END THIRD TOUR 10047

Robert Manning DRILLER OR WATCHMAN JAMES B. PARKS DRILLER OR WATCHMAN WALT TRACHUK DRILLER OR WATCHMAN

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

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 8 1962

SEC. _____ T. _____ R. _____ PROVINCE NWT

CONTRACTOR CASCADE DRUG Co.

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

BIT RECORD:

MUD RECORD:

MUD ADDITIVES:

SWAB CUPS:

OIL SAVER RUBBERS:

<i>Robert E. Manning</i> DRILLER OR WATCHMAN.	<i>JAMES B. PARKS</i> DRILLER OR WATCHMAN	<i>W. Stachurs.</i> DRILLER OR WATCHMAN
--	--	--

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED.

TIME CHARGEABLE TO BRITISH AMERICAN IS

D. Green Lecky

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 MARCH 7 1965 WELL NO. N-2 LEASE BATEX HARROW HEAD

SEC. T. R. PROVINCE NWT CONTRACTOR CASCADE DRILLING CO.

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	12 ¹⁵	SERVICE RIG & CHECK BOPS							
12 ¹⁵	3	RUN IN CORE BBLE & JARS.							
3	4	BREAK CIRC & CIRC BBLE							
4	6 ¹⁵	Cut CORE							
6 ¹⁵	7	CIR & WORK JARRED BBLE							
7	8	Hoist							
8 ⁰⁰	10 ³⁰	Hoist							
10 ³⁰	11 ³⁰	RECOVER CORE & SERV. BBL.				1	00		
11 ³⁰	12 ⁰⁰	SKIP 15' D.L. & SERV. R.C.					30		
12 ⁰⁰	12 ⁴⁵	W.D. MOTOR SHED					45		
12 ⁴⁵	2 ⁴⁵	RUN IN W/CORE BBL.							
2 ⁴⁵	4 ⁰⁰	BK. CIRC. & CIRC. CORE BBL. TO BTM.							
4 ⁰⁰	12 ⁰⁰	CUTTING CORE.							

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

TOTAL TIME CHARGEABLE TO B.A.

DAY WORK PER 24 HOUR DAY

21 45

2 15

24 80

24 16

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
24	6 1/8	B	7129	10010	in	19	10 1/4	75	20	1650	1	99	6 1/2	6-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
8:00 AM	10.0	200				
10:15 AM	10.1	265	3.6	3/32	7.8	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
300 #	caustic	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE
--------	------	------	--------	------	------

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 10014 DEPTH END SECOND TOUR 10014 DEPTH END THIRD TOUR 10029

DRILLER OR WATCHMAN Robert Manning DRILLER OR WATCHMAN JAMES B. PARKS DRILLER OR WATCHMAN W. Skelton

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

CONTRACTOR'S REPRESENTATIVE Dobson Selby BRITISH AMERICAN'S REPRESENTATIVE W. C. Schomaker BRITISH AMERICAN FOREMAN OR SUPERINTENDENT W. C. Schomaker

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MARCH 6 1965 WELL NO. N-2 LEASE BA TEX HERAW HEAD

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

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	8	DRLC							
8 ⁰⁰	8 ⁴⁵	DRLC							
8 ⁴⁵	10 ¹⁵	CIRC SAMPLES							
10 ¹⁵	3 ⁰⁰	HOIST PIPE VERY HARD TO BRK.							
3 ⁰⁰	4 ⁰⁰	CLN. SHALE TANK SHIP 15' DL. PICK UP CORE BBLs.					1:00		
4 ⁰⁰	4 ⁴⁵	make J.P. CORE BBLs.						45	
4 ⁴⁵	5 ⁴⁵	RUNNING IN HOLE HIT BRIDGE @ APPROX \$100							
5 ⁴⁵	6 ⁴⁵	STUCK IN HOLE TAP LOOSE.							
6 ⁴⁵	8 ⁰⁰	HOIST CORE BBL.							
8 ⁰⁰	8 ³⁰	STAND BACK CORE BBL. PICK UP BOT HOLE DC.						30	
8 ³⁰	10 ⁰⁰	RUN IN w/ BIT TO 9500							
10 ⁰⁰	12 ⁰⁰	HOIST.							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.	21:45	2:15		
DAY WORK PER 24 HOUR DAY	1450	1416		

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.	T. P. R.	LINER SIZE	NO. AND SIZE DRILL COLLARS
23	8 3/4	WTR2	39224	9943	10000	67	15	60	50	1700	1	73	6 1/2	20-6 3/4
29	6 1/8	Q												
10	8 3/4	OSC-16	HERUN											

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
10 ⁰⁰	10.0	170	4.0	7/32	9.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>10008</u>	DEPTH END SECOND TOUR <u>10010</u>	DEPTH END THIRD TOUR <u>10010</u>
<u>Robert Manning</u> DRILLER OR WATCHMAN	<u>JAMES B. PARIS</u> DRILLER OR WATCHMAN	<u>W. K. K. K.</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dobson Kelly CONTRACTOR'S REPRESENTATIVE
W. C. Schomaker BRITISH AMERICAN'S REPRESENTATIVE
W. K. K. K. BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE Mar. 5 1965 WELL NO. N-2 LEASE B.A. TEX. Arrowhead

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING CO. L.P. #2

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	2 ³⁰	DRLG.							
2 ³⁰	2 ⁴⁵	SER R.G. + BOPs.							
2 ⁴⁵	6 ¹⁵	DRLG							
6 ¹⁵	7 ⁴⁵	CIR SAMPLES.							
7 ⁴⁵	8 ⁰⁰	Hoist.							
8	12 ¹⁵	Hoist							
12 ¹⁵	12 ³⁰	SERVICE R.G. & CHECK BOPs.						15	
12 ³⁰	12 ⁴⁵	Slip 15" DRLG LINE						15	
12 ⁴⁵	1 ³⁰	RUN IN						15	
1 ³⁰	3	REPAIR WATERLINE TO BRAKE							
3	4	RUN IN							
4 ⁰⁰	5 ¹⁵	RUN IN							
5 ¹⁵	5 ³⁰	BPK. CIRC.							
5 ³⁰	11 ⁰⁰	DRLG.							
11 ⁰⁰	12 ⁰⁰	CHANGED GRAND PACKING G-780							



DEVIATION RECORD	DEPTH		SURVEY		TOTAL TIME CHARGEABLE TO B.A.					
	1	2	3	4	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
					9	30	14	00	14	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. F. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
22	8 3/4	HTG	E15034	9905	9943	38	16	60	50	1700	1	73	6 1/2	20-6 3/4
23	8 3/4	WTR-2	39224	9943	1011	31	6 1/4	60	50	1700	1	73	6 1/2	20-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
12 ⁰⁰	10.0	235	4.2	3/32	9.5	
6 ⁰⁰	10.0	240	3.4	3/32	9.5	
10 ⁰⁰	9.9	220	4.6	3/32	9.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
1500	Q-BROTH	
1500	CARBONATE	
600	CAUSTIC	
600	DEXTRIN	
1500	GEL.	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>9943</u>	DEPTH END SECOND TOUR _____	DEPTH END THIRD TOUR <u>9974</u>
<u>W. Schomaker</u> DRILLER OR WATCHMAN	<u>Robert Menning</u> DRILLER OR WATCHMAN	<u>JAMES B. PARKS</u> DRILLER OR WATCHMAN
TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:		
<u>Dahen Luby</u> CONTRACTOR'S REPRESENTATIVE	<u>W. G. Schomaker</u> BRITISH AMERICAN'S REPRESENTATIVE	<u>W. G. Schomaker</u> BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE MAR. 4 1965 WELL NO. A-1 LEASE BA TEX. ARROWHEAD
SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING CO. R.G. #2

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	SER R.G & B.O.B							
12 ¹⁵	6 ⁴⁵	DRLG.							
6 ⁴⁵	8 ⁰⁰	Hoist.							
8	11 ¹⁵	Pull out							
11 ¹⁵		CHANGE MASTER CHAIN & Slip & Cut							
	1 ⁴⁵	100' DRLG LINE				2	30		
1 ⁴⁵	4	RUN IN							
4 ⁰⁰	6 ³⁰	REAM OUT 100' BRIDGE 750'S FROM BTM							
6 ³⁰	6 ⁴⁵	FINISH IN							
6 ⁴⁵	7 ³⁰	REAM 60' TO BTM.							
7 ³⁰	10 ¹⁵	DRLG.							
10 ¹⁵	10 ⁴⁵	REPAIR AIR LINE TO D.W.							
10 ⁴⁵	12 ⁰⁰	DRLG.							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.		DAY WORK PER 24 HOUR DAY	
					2130	230		

BIT RECORD:

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE	HRS. RUN	R. P. M.	BIT WEIGHT	PUMP PRESSURE	PUMP NO.	S. P. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
21	8 3/4	Y.H.G.	EN4067	9822	9905	83	16 3/4	60	50	1675	1	73	6 1/2	20-6 3/4
22	8 3/4	Y.H.G.	E15039	9905	IN	76	4	60	50	1650	1	73	6 1/2	20-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
1200	9.9	175	4.0	3/32	9.5	
600	9.9	210	4.0	3/32	9.5	
10 PM	10.0	240	4.8	3/32	9.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
1100	2 BROWN	
1100	CARBONOX	
500	CAUSTIC	
400	DEXTRA D	
1500	GEL.	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAYER RUBBERS:

DEPTH END FIRST TOUR <u>9905.</u>	DEPTH END SECOND TOUR <u>9905</u>	DEPTH END THIRD TOUR <u>9921</u>
<u>W. H. H. H.</u> DRILLER OR WATCHMAN	<u>Robert Manning</u> DRILLER OR WATCHMAN	<u>JAMES B. PARKS</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

D. H. H. H.
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 MAR. 3 1968 WELL NO. A-1 LEASE B.A. TEX. ARROWHEAD.

SEC. T. R. PROVINCE N.W. CONTRACTOR CASCADE DRG. R.C. #2.

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	230	DRLG.								
230	600	Hoist								
600	700	CLEAN SHAKER TANK								
700	800	RUN IN					100			
8	815	SERVICE RIG & BOP								
815	11	RUN IN								
11	1	CLEAN OUT BRIDGES TO BOTTOM 9600-9822								
1		DRLG								
400	445	DRLG.								
445	500	RIG. SERV.								
500	530	DRLG.								
530	600	W.B. LOW CLUTCH								
600	1200	DRLG.								

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	23	-	1	-		
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
20	8 7/8	H-7	72194	9738	9822	84	19	60	50	1800	2	73	6 1/2	20-6 3/4
21	8 7/8	Y.H.G.	EN4007	9822	11	51	10 1/2	60	50	1600	1	73	6 1/2	20-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
8:00	9.9	140	38	7/32	9.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
750"	CARBONHOL	
750"	Q BROWN	
3000"	GEL	
300"	CAUSTIC	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>9822</u>	DEPTH END SECOND TOUR <u>9839</u>	DEPTH END THIRD TOUR <u>9873</u>
<u>W. H. K.</u> DRILLER OR WATCHMAN	<u>Robert Manning</u> DRILLER OR WATCHMAN	<u>JAMES B. PARKS</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dahm Lutz
CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

12.85



LIMITED

DA7

350

350

350

350

350

350

350

350

350

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

P-93



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE March 1 1962 WELL NO. _____

SEC. _____ T. _____ R. _____ PROVINCE _____

CONTRACTOR

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

WITH	WITHOUT	OTHER
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1200	1230	FINISH HOISTING	70	
1230	130	RECOVER SURVEY STUCK IN TONG		100
		RING 15' ABOVE BIT.		
730	800	RUN IN HOLE		
800	630	CLEANING TO BOTTOM		
		BRIDGE 5 STOPS OF BOTTOM.		
630	800	DRILLING		
8	9	DRILL		
9	930	WORK IN PUMP & SERVICE RIG		
930	315	DRILL		
315	4	REPAIR ROTARY CHAIN		
400	815	DELG.		
815	945	CIRC. SAMPLES FOR GEOL.		
945	1030	HOIST		
1030	1145	W.O. LOW CATCH		
1145	1200	HOIST		

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
TOTAL TIME CHARGEABLE TO S.A.	23	-	1	-		
DAY WORK PER 24 HOUR DAY						

BIT RECORD:

[illegible]

MUD RECORD:

TIME	WEIGHT	VIS- COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
8:00 P.M.	9.9	210	5.8	7/32	9.5	

MUD ADDITIVES:

600°	GEL.	TIME
680°	D-BEING	
600°	CARBONK	
200°	CAUSTIC	
200°	DEXTRIP	

SWAB CUPS:

[illegible]

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR	9681.	DEPTH END SECOND TOUR	9822	DEPTH END THIRD TOUR	9838
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<i>W. K. ...</i> DRILLER OR WATCHMAN	<i>R. Manning</i> DRILLER OR WATCHMAN	<i>John Parks</i> DRILLER OR WATCHMAN
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TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dariusz Lech

CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

P-95



THE BRITISH AMERICAN OIL COMPANY LIMITED

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	145	DRLG.							
145	400	TIGHTEN & INSTAL SOME NEW BOLTS IN JACK SHAFT & SECONDARY SHAFT IN DWKS							
400	800	DRLG.							
8	815	SERVICE RIG							
815	4	DRLG							
400	830	DRLG							
830	900	DROP SURVEY							
900	1200	Hoist							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	9682	3°								
TOTAL TIME CHARGEABLE TO P.A.					24	-				
DAY WORK PER 24 HOUR DAY										

BIT RECORD:[illegible]

MUD RECORD:

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
12.	99	240				
4	10	265				
12.	99	280				

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

[illegible]

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR <u>9630</u>	DEPTH END SECOND TOUR <u>9664</u>	DEPTH END THIRD TOUR <u>9682</u>
<u>W. Stach</u> DRILLER OR WATCHMAN	<u>P. Manning</u> DRILLER OR WATCHMAN	<u>JAMES POKS</u> DRILLER OR WATCHMAN
TIME CHARGEABLE TO BRITISH AMERICAN PETROLEUM		

TIME CHARGEABLE TO BRITISH AMERICAN / 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 Feb. 27 19 68 WELL NO. N.2 LEASE B.A. Tey. Arrowhead.
 SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING CO. #2

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	230	Pick & make up Packer			2	30		
230	500	Run in Hole						
500	530	Head up to Flare Line						
530	600	Initial shut in						
600	700	Tool open						
700	800	Final shut in						
8		BREAK DOWN TESTING TOOLS & Pull						
	830	Packer loose						
830	930	Pull out						
930	10	Work on Hook & Check b.d.l.s						
10	1130	Finish out to Fluid.						
1130	2	Finish out						
2	4	BREAK DOWN PACKER						
400	800	Run in						
800	1130	Beam 75' UNDERGAGE HOLE						
1130	1200	DRILL						

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.		DAY WORK PER 24 HOUR DAY	
					19	30	4	30

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
18	2 3/4	YHWGE	34125	9597		2.	1/2	60	50	1550	2	59	6	20-6 3/4

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 9597 DEPTH END SECOND TOUR DEPTH END THIRD TOUR 9599

W. Skulh Robert Manning Mr. Parks
 DRILLER OR WATCHMAN DRILLER OR WATCHMAN DRILLER OR WATCHMAN

THE CHARGEABLE TO BRITISH AMERICAN IS APPROVED: D. L. Leach
 CONTRACTOR'S REPRESENTATIVE BRITISH AMERICAN'S REPRESENTATIVE BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

P-93



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB. 26 1955 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

SEC. T. R. N.W.T. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING RIG-2

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 ¹²	FINISH IN HOLE							
12 ¹²	1 ⁰⁰	CLN OUT & REAM 10' UNDERGAGE HOLE							
1 ⁰⁰	5 ¹⁵	DRLG.							
5 ¹⁵	5 ³⁰	THAW AIR LINES TO D.W.							
5 ³⁰	8 ⁰⁰	DRLG							
8 ⁰⁰	8 ¹⁵	DRLG.							
8 ¹⁵	11 ¹⁵	WORK ON Pumps							
11 ¹⁵	2 ⁴⁵	DRLG.							
2 ⁴⁵	4 ⁰⁰	DUMMY TRIPPING 15 STDS.							
4	4 ¹⁵	TRIP IN							
4 ¹⁵	6	CIRCULATE							
6	10 ³⁰	PULL OUT FOR DST #2							
10 ³⁰	11	SLIP 15" DRLG LINE & Check B.O.P's							
11	12	Pick up small DC's						1 ³⁰	

DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.	22	30	1	30
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
17	8 3/4	DWC	42838	9522		54	6 3/4	60	50	1530	1	59	6"	20-6 3/4
17	8 3/4	DWC	42838	9522	9597	75	10 1/2	60	50	1550	2	59	6"	20-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6 ⁰⁰	10.1	235	4.0	7/32	9.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
200#	cashe	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE
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OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>9576</u>	DEPTH END SECOND TOUR <u>9597</u>	DEPTH END THIRD TOUR <u>9597</u>
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JAMES B. PARKS
DRILLER OR WATCHMAN

W. J. [Signature]
DRILLER OR WATCHMAN

Robert Manning
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 FEB. 25 1965 WELL NO. N-2 LEASE BA. TEXACO ARROWHEAD

SEC. T. R. N.W.T. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING RIG-2

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	4 ³⁰	DRLG.							
4 ³⁰	4 ⁴⁵	THAW AIR LINES TO D.W.							
4 ⁴⁵	8 ⁰⁰	DRLG.							
8 ⁰⁰	9 ⁴⁵	DRLG.							
9 ⁴⁵	10 ³⁰	WORK ON Pump.							
10 ³⁰	12 ⁴⁵	DRLG.							
12 ⁴⁵	2 ¹⁵	AIR SAMPLE							
2 ¹⁵	4 ⁰⁰	HOIST FOR BIT							
4	5	Pull out							
5	6 ³⁰	WORK ON AIR TO High Clutch							
6 ³⁰	8	Pull out							
8	9 ³⁰	SERVICE RIG. CLEAN Mud Tank							
9 ³⁰	12	SLIP 15" DRG LINE + Check B.O.L.s					1	30	
		RUN IN							
		aged 1 joint of H ¹ / ₂ Drill pipe on DST No. 1. valve in torque to work McCullough Tor.							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.		DAY WORK PER 24 HOUR DAY	
					HRS.	MIN.	HRS.	MIN.
					22	30	1	30

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.W.	LINER SIZE	NO. AND SIZE DRILL COLLARS
16	8 3/4	MAL	713141	9350		148	24	60	45000	1500	1	59	6"	20-6 3/4
16	8 3/4	MAL	713141	9350	9522	173	25	60	50	1550	2	59	6"	20-6 3/4
17	8 3/4	HTC	42838	9522										20-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6 ⁰⁰	9.9	220	3.8	3/32	10	
2 ⁰⁰	10.2	235	4.0	3/32	9.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
600	ORAGON	
300	CARBONOX	
150	CAUSTIC	
200	DETROIT	

STAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>9498</u>	DEPTH END SECOND TOUR <u>9522</u>	DEPTH END THIRD TOUR <u>9522</u>
<u>JAMES B. PARKS</u> DRILLER OR WATCHMAN	<u>W. Kauf</u> DRILLER OR WATCHMAN	<u>Robert Manning</u> DRILLER OR WATCHMAN
TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:		
<u>D. Luby</u> CONTRACTOR'S REPRESENTATIVE	<u>BRITISH AMERICAN'S REPRESENTATIVE</u>	<u>BRITISH AMERICAN FOREMAN OR SUPERINTENDENT</u>

P-91



DATE FEB. 24 1965 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR CASCADE DR/G. P.G.-2

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY
	8350	5 1/2		

BIT RECORD:[illegible]

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
12	92	285	30	32	10	
2	92	280				
4	95	145	4	32	10	
10	98	220				

MUD ADDITIVES:

AMOUNT	TYPE	TIME
600	BBroxin	
150	Caustic	
300	Carbonator	
100	Detritid	
3000	GEKs	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

	NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR	9350	3000 GEP	9385	DEPTH END SECOND TOUR	9385	8448	DEPTH END THIRD TOUR	8448
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JAMES B. PARKS	Walter Kuhl	Robert Manning
DRILLER OR WATCHMAN	DRILLER OR WATCHMAN	DRILLER OR WATCHMAN

TIME OF ARRIVAL TO BRITISH AMERICAN IS APPROVED:

NAME John L. [Signature] CONTRACTOR'S REPRESENTATIVE

NAME _____ BRITISH AMERICAN'S REPRESENTATIVE

NAME _____ BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

12-99



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE Dec 25 1965 WELL NO. N-2 LEASE B.A. Jones

SEC. _____ T. _____ R. _____ PROVINCE _____ CONTRACTOR _____

FROM	TO	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.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
------	----	---	------	------	------	------	------	------

Ran D.S.T. #1 by Johnston in Pine Pt. Interval 9220' - 9350' dual 7 $\frac{3}{4}$ " packers $\frac{1}{2}$ " SS choke 1055' of H₂O cushion. Tool opened 120 mins. commencing @ 6³⁰ P.M. 60 min. final shut-in. Favi I.A.P. G.T.S. in 15 mins. measured after 60 mins @ 410 MC/FD decreased to 332 MC/FD after 90 mins + remained steady thru out remainder of test.

4 1/2" D recovery: 1200' of fluid to 1055' of H₂O cushion.
 str 145' of dly mud.

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

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

WESTERN BUILDERS FORMED - LUNA-WASH

P-25



THE BRITISH AMERICAN OIL COMPANY LIMITED

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR CASCADE DRUG. INC-2

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

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

12 ⁰⁰	12 ¹⁵	RUNNING IN	
12 ¹⁵	1 ⁰⁰	REAM BRIDGE 14 STRS. OFF BTM.	
1 ⁰⁰	1 ³⁰	FINISH IN	
1 ³⁰	2 ⁰⁰	CIRC.	
2 ⁰⁰	3 ³⁰	STUCK WORK PIPE FREE	
3 ³⁰	4 ³⁰	CIRC & WORK PIPE	
4 ³⁰	7 ⁴⁵	TRIP OUT FOR DIST. #1	7 ⁴⁵
7 ⁴⁵	8 ⁰⁰	W.O. TESTER	15
8	12	WO TESTER	
12	2 ³⁰	PICK UP & MAKE UP PACKER	6 ³⁰
2 ³⁰	4	RUN IN HOLE 10 STRS (WATER CUSHED)	
4	6	RUN IN & CHECK B.O.P.'s	
6	6 ³⁰	HEAD UP TO TEST	
6 ³⁰	9 ³⁰	TESTING	
9 ³⁰	11	WORK STUCK PIPE	
11	12	PULL OUT	

DEVIATION RECORD

DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.

DAY WORK PER 24 HOUR DAY

HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
16	45	7	15		

BIT RECORD:

[illegible]

MUD RECORD:

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
15 min	9.4	325				

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

[illegible]

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR 9330 DEPTH END SECOND TOUR 9330 DEPTH END THIRD TOUR 1220

JAMES B. PARKS.	WALT TRACHUK	H. Manning
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. 21 1963 WELL NO. 124

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

CONTRACTOR ACME DRG INC

[illegible]

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	9347	5 1/2				24	-				
	DAY WORK PER 24 HOUR DAY										

BIT RECORD:

[illegible]

MUD RECORD:

TIME	WEIGHT	VIS- COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
10.00 2.00 1.00	9.4	165	4.0	2 1/32	9.5	
11.00	9.3	148	4.2	1 1/32	9.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
1200	CELEXIN	
500	CRUSTIC	
600	CARBONAX	
300	DETACH	

SWAB CUPS:

[illegible]

OIL SAVER RUBBERS:

[illegible]

DEPTH END FIRST TOUR 7307

DEPTH END SECOND TOUR 13-71

DEPTH END THIRD TOUR

JAMES B. PARKS
DRILLER OR WATCHMAN

W. H. H. H.
DRILLER OR WATCHMAN

B. Manning
DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

[Signature]
CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

P-05



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB. 21 1965 WELL NO. N-2 LEASE BA TEXACO ARROWHEAD

SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING P.C. 2

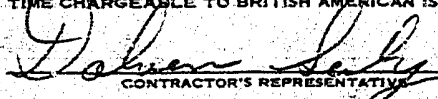
TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOPE TEST RECORDS AND ALL DELAYS OR LOST TIME, WITH REASONS. DRILLERS ACCOUNT FOR FULL 24 HOURS ON THE LEFT, INDICATING CLEARLY EACH CHANGE IN DRILLING OPERATIONS. TOOL PUSHER, OR OTHER REPRESENTATIVE OF CONTRACTOR, SHOW ON THE RIGHT ALL TIME CHARGEABLE 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 ³⁰	DRLG.							
1 ³⁰	2 ³⁰	CIRC. SAMPLE							
2 ³⁰	3 ⁰⁰	SURVEY							
3 ⁰⁰	6 ⁴⁵	HOIST PIPE							
6 ⁴⁵	8 ⁰⁰	RUNNING 14.							
8 ⁰⁰	10 ⁰⁰	RUN IN HOLE							
10 ⁰⁰	11 ⁴⁵	CLEAN BRIDE 5 STDS OF Bottom							
11 ⁴⁵	12 ⁰⁰	FINISH IN HOLE							
12 ⁰⁰	4 ⁰⁰	DRLG.							
4 ⁰⁰	6 ⁰⁰	DRLG.							
6 ⁰⁰	6 ¹⁵	SET R.P. & B.P.							
6 ¹⁵	8 ⁰⁰	DRLG.							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.					
					HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	9178	6 1/2			24	—				

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	
14	8 7/8	M.H.I.	156578	8770	9178	203	24	60	45,000	1450	2	59	6"	20-6 3/4	
15	8 3/4	Y.M.	53907	9178		77	11 3/4	60	45,000	1500	2	59	6"	20-6 3/4	

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
2 ⁰⁰ PM	9.3	175	4.6	3/32	9.5										
10 ⁰⁰ PM	9.1	212	4.0	3/32	9.5										

DEPTH END FIRST TOUR <u>9178</u>	DEPTH END SECOND TOUR <u>9209</u>	DEPTH END THIRD TOUR <u>9250</u>
JAMES B. PARKS DRILLER OR WATCHMAN	W. H. H. H. DRILLER OR WATCHMAN	ROBERT MANNING 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

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB. 20/6 19 42 WELL NO. A-2 LEASE BA TEXACO ARROWHEAD

SEC. T R. R PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING CO. 2

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.

TIME BY DRILLERS

FROM TO

12 ⁰⁰	2 ³⁰	DRILL
2 ³⁰	3 ³⁰	W.O. G-700 & C-350 & THAW AIR LINES
3 ³⁰	5 ¹⁵	DRILL
5 ¹⁵	7 ⁰⁰	W.O. PUMPS
7 ⁰⁰	8 ⁰⁰	DRILL

8 ⁰⁰	8 ⁴⁵	DRILL
8 ⁴⁵	9 ³⁰	WORK ON PUMP
9 ³⁰	1 ⁰⁰	DRILL

4 ⁰⁰	4 ³⁰	DRILL
4 ³⁰	4 ⁴⁵	SEE R.G. & B.P.
4 ⁴⁵	5 ¹⁵	WORK ON AIR COMPRESSOR
5 ¹⁵	12 ⁰⁰	DRILL

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
14	8 3/4	M.4H	756593	8975	14	94	13 1/2	60	45000	1600	1	74	6 1/2	20-6 3/4
14	8 3/4	M.4H	756598	8975	14	194	21 3/4	60	43000	1450	2	59	6"	20-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6 AM	9.3	240	4.0	3/32	9.0	
2 PM	9.2	150	4.2	3/32	9.5	
6 PM	9.2	105	4.0	3/32	9.5	
8 PM	9.1	106	4.0	3/32	9.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
600"	Q3ROXIN	
400"	CAUSTIC	
450"	CARBONOX	
500"	DEXTRID	
650"	GEL.	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 9069

DEPTH END SECOND TOUR 9120

DEPTH END THIRD TOUR 9169

JAMES B. PARKS
DRILLER OR WATCHMAN

Walter H. H.
DRILLER OR WATCHMAN

ROBERT MANNING
DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

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 19 1962 WELL NO N2 LEASE BATEY ARROW HEAD
 SEC. T. R. NW T PROVINCE NW T CONTRACTOR Cascade Drilling Rig #2

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.	2	DRILL 8 ³ / ₄ Hole							
2	3	Repair Rotary Chain & Change Gland Packing							
3	6	DRILL							
6	630	DROP SURVEY							
630	730	Pull Out							
730	8	WORK ON Low Clutch							
8 ⁰⁰	11 ³³	Hoist P.P.E							
11 ³⁰	12 ⁰⁰	SHIP 30' D.L.							
12 ⁰⁰	12 ¹⁵	R.G. SERV ✓ R.O.P.S							45
12 ¹⁵	2 ³⁰	RUNNING IN							
2 ³⁰	3 ³⁰	REAM OUT BRIDGE 10 STDS DEEP BTM							
3 ³⁰	4 ⁰⁰	FINISH RUNNING IN & CN TO BTM							
4 ⁰⁰	12 ⁰⁰	DRILL 8 ³ / ₄ " Hole							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.		DAY WORK PER 24 HOUR DAY	
	8975	6'			23	15	45	

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
13	8 3/4	DWC	42837	8848	8975	127	17 3/4	60	40	1700	1	74	6 1/2	20-6 3/4
14	8 3/4	MHL	75658	8975	in	58	8	60	45	1350	2	60	6"	20-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
12	92	95	40	3/32	90	
2	90	100				
4	91	140				
6	92	185				

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR <u>8975</u>	DEPTH END SECOND TOUR <u>8975</u>	DEPTH END THIRD TOUR <u>9030</u>
<u>H. Manning</u> DRILLER OR WATCHMAN	<u>JAMES B. PARKS</u> DRILLER OR WATCHMAN	<u>W. Stuchel</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dale Ledy 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 18 1965 WELL NO. N2 LEASE BATEX ARROWHEAD
SEC. T. R. PROVINCE NWT 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.	
12	2 30	PULL OUT							
2 30	3 15	REPAIR CHAIN IN DWKS							
3 15	4	FINISH OUT & SERVICE JARS.							
4	5 45	BREAK LAY DOWN SO DC.					1	45	
5 45	6 15	SERVICE RIG & CHECK BOP'S						30	
6 15	8	RUN IN							
8 00	9 30	RUNNING IN							
9 30	10 15	REAM OUT BRIDGE 10 SIDES OFF BTM.							
10 15	10 30	RUN IN 10 SIDES.							
10 30	11 00	CHN TO BTM.							
11 00	4 00	DPLG.							
4 00	5 15	DPLG.							
5 15	5 30	SEE R.C. & BOP'S.							
5 30	12 00	DPLG.							
		CLEANED SHAKER TANK.							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.		DAY WORK PER 24-HOUR DAY	
	8848	8 1/8			21 1/2	2 15		

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
13	8 3/4	DWC	42837	8848		49 5	80	4000	1700	1	74	6 1/2	20-6 3/4	
13	8 3/4	DWC	42837	8848		101 12 3/4	60	45	1550	1	71	6 1/2	20-6 3/4	

MUD RECORD:

TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
200	9.3	175	5.6	7/32	9.0	
1000	9.2	152	6.0	7/32	9.0	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
2200	GEL.	
200	CAUSTIC	
550	DIXTRID	
300	CARBONEX	
300	QU. BRONXIN	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>8848</u>	DEPTH END SECOND TOUR <u>8857</u>	DEPTH END THIRD TOUR <u>8899</u>
<u>R. Manning</u> DRILLER OR WATCHMAN	<u>JAMES E. PARKS</u> DRILLER OR WATCHMAN	<u>W. J. H. H.</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

[Signature] CONTRACTOR'S REPRESENTATIVE
BRITISH AMERICAN'S REPRESENTATIVE
BRITISH AMERICAN F. REMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 17 1965 WELL NO. N2 LEASE BA TEX ARROW HEAD

SEC. T R. NWT PROVINCE NWT CONTRACTOR CASCADE DRILL RIG #2

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	12 ¹⁵	SERVICE RIG				15			
12 ¹⁵	2 ⁴⁵	RUN IN							
2 ⁴⁵	6 ⁰⁰	CLEAN OUT TO TOP OF RAT HOLE							
6	6 ¹⁵	REAM 6" RAT HOLE							
6 ¹⁵	8 ⁰⁰	DRILL 8 3/4" HOLE							
8 ⁰⁰	8 ¹⁵	RIG. SERV. + B.D.P.							
8 ¹⁵	4 ⁰⁰	DRLG.							
4 ⁰⁰	8 ³⁰	DRLG 8 3/4" HOLE							
8 ³⁰	9 ⁰⁰	WORK ON PUMP.							
9 ⁰⁰	10 ¹⁵	DRLG							
10 ¹⁵	11 ¹⁵	CIR SAMPLE							
11 ¹⁵	11 ⁴⁵	DROP SURVEY.							
11 ⁴⁵	12 ⁰⁰	HOIST FOR B.T.							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY
	8848	8 3/4		

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
23.45 - 15						
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
12	8 3/4	M4	N741127	8702		80 7 1/2	80	49000	1600	1	74	6 1/2	18-6 3/4	
12	8 3/4	MAN.	241127	8702	8848	140 15/4	80	40	1650	1	74	6 1/2	18-6 3/4	

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
2 PM	9.4	140	4.2	7/32	8.5	
6 PM	9.3	140	4.2	2/32	8.0	
12 PM	9.3	207	4.0	1/32	9.0	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
GEL 600#		
300# D-BACIN		
300# CARBONOX		
400# GAUSTIC		

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>8721</u>	DEPTH END SECOND TOUR <u>8801</u>	DEPTH END THIRD TOUR <u>8848</u>
<u>Robert E. Manning</u> DRILLER OR WATCHMAN	<u>JAMES E. PARKS</u> DRILLER OR WATCHMAN	<u>W. Skul</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

P.95



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 18 1960 WELL NO. 112 LEASE 27121 110001121

SEC. _____ T. _____ R. _____ PROVINCE INDONESIA CONTRACTOR ASCAD 1816 1116

TIME BY DRILLERS		SHOW COMPLETE CASING, CORING AND SLOGZ TEST RECORDS AND ALL DELAYS OR LOSSY 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.	
12 445	445	Pick up RUBBERED PIPE							
445	8	PULL OUT & SERVICE VAS.							
800	813	TRC. SERV & B.O.P's							
813	945	MAKE UP & SERV. CORE BBL.					1	45	
945	1215	RUN IN W/ CORE FBL.							
1215	200	CIRC. CORE BBL. TO BTM.							
200	400	CORING.							
400	445	WORK W/ CORE BBL. (JAMMED)							
445	530	WORK TIGHT HOLE							
530	930	HOIST MEASURE OUT.							
930	1015	RECOVER CORE SERVICE CORE BBL.						45	
1015	1030	MAKE UP CORE B.L.						15	
1030	1145	SLIP 30' DRUG. LINE						15	
1145	1200	LAY DOWN CORE BBL'S.						15	

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

TIME	WEIGHT	VIS- COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
7:00 PM	9.3	300				

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS

NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR 11/21

DEPTH END THIRD FOUR 8 40 0

Robert E. Manning
DRILLER OR WATCHMAN

JAMES E. PARKS
DRILLER OR WATCHMAN

W. J. ...
DILLER OR KATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

[Signature]
CONTRACTOR'S REPRESENTATIVE

BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 15 1965 W.E.L. NO. 142 LEASE BATEL ARROW HEAD #2
 SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILL #2

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	1230	FINISH PULLING OUT SERVICE JARS							
1230	145	RECOVER CORE (100 PERCENT)							
145	3	SERVICE CORE & STAND BACK IN DARRICK							
3	330	SLIP 35" LINE & SERVICE RIG				3	00		
330	615	RUN INTO BREAK CIRC AT 5000							
615	730	CIRCULATE							
730	8	REAMING							
800	830	REAMING 1 1/4 TO 8 3/4							
830	845	RIG SERVO + B.D. 1 1/2							
845	215	REAMING 6 1/8 TO 8 3/4							
215	315	W.O. G-700							
315	400	W/TIGHT HOLE							
400	600	WORK TIGHT HOLE							
600	845	CIR. COLL. MUD.							
845	930	WORK TIGHT HOLE							
930	1000	HIGH RATE DOWN 60 SGLS TO PICK UP RUBBERED PIPE.							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.		DAY WORK PER 24 HOUR DAY	
					21	3		

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
10	8 1/4	OSC-16	PERON	8650	8702	52	6	60	20,000	1250	1	74	6 1/2 9-6 3/4

MUD RECORD:							MUD ADDITIVES:			SWAB CUPS:			OIL SAVER RUBBER:		
TIME	WEIGHT	VIS- COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT	AMOUNT	TYPE	TIME	NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE
2 ⁰⁰ 2 ⁰⁰ PM	9.3	140	4.8	3/32	8.5		2.900	2502	0.8% 2002 Causic 2502 D & J Aid						

DEPTH END FIRST TOUR 8702 DEPTH END SECOND TOUR 8702 DEPTH END THIRD TOUR 8792
Robert E. Manning JAMES B. PARKS W. J. Harkins
 DRILLER OR WATCHMAN DRILLER OR WATCHMAN DRILLER OR WATCHMAN
 TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: Daren Lube
 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. 14 1965 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

SEC. T. R. N.W.T. PROVINCE N.W.T. CONTRACTOR CASCADE #2

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 ⁴⁵	CIRCULATE & COND MUD.							
12 ⁴⁵	3 ⁴⁵	BLOW LINES & HOIST							
3 ⁴⁵	4 ¹⁵	REPAIR DRAW'S CHAIN							
4 ¹⁵	5 ⁴⁵	HOIST BIT # 10							
5 ⁴⁵	7 ⁰⁰	PICK UP CORE BBL. - CHANGE SWIVEL ASSEMBLY					1	15	
		CHANGE CORE CATCHER & SLEEVE - SERVICE BBL.							
7 ⁰⁰	8 ⁰⁰	RUN IN D.C.							
8 ⁰⁰	10 ³⁰	RUN IN							
10 ³⁰	1 ⁰⁰	BKK. CIRC. & CIRC. CORE BBL. TO BTL.							
1 ⁰⁰	4 ⁰⁰	CUTTING CORE # 2							
4 ⁰⁰	8 ⁴⁵	CUTTING CORE # 2							
8 ⁴⁵	9 ¹⁵	BKK. OFF CORE & BLOW KELLY							
9 ¹⁵	12 ⁰⁰	HOIST CORE # 2							

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

TOTAL TIME CHARGEABLE TO B.A.

22 45 1 15

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
11	6 1/8	Q	7129	8650		4	3	60	6,000	1,900	1	44	6 1/2	9-6 3/4
11	6 1/8	Q	7129	8650	8702	52	7 1/2	90	14,000	1,550	1	44	6 1/2	9-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
200	9.3	300				
800	9.3	200				

MUD ADDITIVES:

AMOUNT	TYPE	TIME
750	Q-BROXIN	
100	CAUSTIC	
500	CARBONOL	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 8650 DEPTH END SECOND TOUR 8654 DEPTH END THIRD TOUR 8702

Robert E. Manning DRILLER OR WATCHMAN JAMES B. PARK DRILLER OR WATCHMAN WALT KACHUK DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dalton Sely CONTRACTOR'S REPRESENTATIVE Van C. Hannah BRITISH AMERICAN'S REPRESENTATIVE BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

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DATE Feb 13 1965 WELL NO. N-2 LEASE BA TEXAS Arrowhead

SEC. T. R. N.W.T. PROVINCE N.W.T. CONTRACTOR Cascade Drilling Rig #2

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	5	CLEANING OUT HOLE							
5	5 ⁴⁵	SURVEY + BLOW KELLEY & LINES							
5 ⁴⁵	8	PULL OUT							
8 ⁰⁰	8 ³⁰	FINISH TRIP OUT			8	30			
8 ³⁰	2 ³⁰	TEAR OUT AIR HEAD & NIPPLE UP FLOWLINE					6	-	
2 ³⁰	4 ⁰⁰	RUNNING IN							
4 ⁰⁰	5 ⁰⁰	RUNNING IN							
5 ⁰⁰	5 ³⁰	BRK CIRC 5 STDS FROM PTM.							
5 ³⁰	6 ¹⁵	RUN IN LAST 5 STDS (SLOW)							
6 ¹⁵	6 ⁴⁵	REAMING 6 1/8 TO 8 3/4							
6 ⁴⁵	7 ¹⁵	W.O. TABLE BUSHINGS.							
7 ¹⁵	9 ³⁰	REAMING 6 1/8 TO 8 3/4							
9 ³⁰	10 ³⁰	DRG.							
10 ³⁰	12 ⁰⁰	COND. CIRC. PTM MOD							

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

TOTAL TIME CHARGEABLE TO B.A.

18 - 6 -

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	DWV	REFUN					60					6 1/2	9-6 3/4
10	8 3/4	OSCRC	53941	8604		FEARED 38 DRILLED 8	3 3/4	60	20,000	1400	1	74	6 1/2	9-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
10 ⁰⁰	9.3	325	5.0	7/32	8.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
1000	GEL	
500	DEXTRID	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE
--------	------	------	--------	------	------

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR	DEPTH END SECOND TOUR <u>8642</u>	DEPTH END THIRD TOUR <u>8650</u>
<u>Robert E. Manning</u> DRILLER OR WATCHMAN	<u>JAMES B. PARKS</u> DRILLER OR WATCHMAN	<u>WALT TRACHUK</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dolven Lely CONTRACTOR'S REPRESENTATIVE John C. Hamisch 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 12 1965 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD.

SEC. T. R. N.W.T. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING CO. #2

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	SER LOG & E.P.							
12 ¹⁵	2 ⁰⁰	CLEANING OUT HOLE - 8370.-8444.							
8 ⁰⁰	8 ³⁰	CLEANING OUT HOLE 8444-							
8 ³⁰	10 ¹⁵	WORKING STUCK PIPE							
10 ¹⁵	11	WORK ON PUMPS							
11	1	WORKING TIGHT HOLE							
1	4	CLEANING OUT HOLE							
4 ⁰⁰	4 ⁴⁵	CLN. OUT HOLE							
4 ⁴⁵	5 ³⁰	WORK STUCK PIPE							
5 ³⁰	7 ⁴⁵	CLN. OUT HOLE							
7 ⁴⁵	8 ¹⁵	W.O. PUMP G.700							
8 ¹⁵	9 ¹⁵	CLN. OUT HOLE							
9 ¹⁵	9 ⁴⁵	W.O. PUMP G.700							
9 ⁴⁵	12 ⁰⁰	CLN. TO B.M.							

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. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
7	8 3/4	OWJ	PERUN				12	90	25	450	1		6 1/2	11 5/8 7/8"
7	8 3/4	OWJ	PERUN				21 3/4	60	20	1450	1	74	6 1/2	9-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS. COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
12 ⁰⁰	9.2	85	8	3/32		
6 ⁰⁰	9.3	250	4.2	3/32	8.5	
10 ⁰⁰	9.3	450	4.0	3/32	8.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
GEL	2800 #	
DEXTRIN	900 #	
QUEROXIN	800 #	
GEL	1500 #	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 8642-6 1/8 DEPTH END SECOND TOUR 8642-6 1/8 DEPTH END THIRD TOUR 8642-6 1/8

W. Harkins DRILLER OR WATCHMAN A. Manning DRILLER OR WATCHMAN JAMES B. PARKS DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Doreen Seely CONTRACTOR'S REPRESENTATIVE Jim C. Hamrah BRITISH AMERICAN'S REPRESENTATIVE BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 11 1965 WELL NO. N-2 LEASE B.A. TEX. ARROWHEAD
 SEC. T. R. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING RIG #2

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	345	WORK ON SAND LINE							
345	445	FINISH IN HOLE							
445	600	INSTAL. ROTARY HEAD							
600	000	BLOWING HOLE @ 8480							
800	1000	BLOWING HOLE w/ BIT @ 8480							
10	1230	Hoist Slow. 8480-6231 HOLE DRAGED 20-3000 8480-8170							
1230	130	BLOW LINES ETC.							
130	300	Run in Slow to 8170							
300	400	FILLING HOLE w/ STAND BY Mud.							
400	500	FILLING HOLE w/ STAND BY MUD							
500	700	CIRC. HOLE CONT. MUD							
700	845	CLN. OUT & REAM UNDERGAGE HOLE							
845	930	CHANGE LUB. PUMP IN COMPOUND							
930	1200	CLN. OUT & REAM UNDERGAGE HOLE							

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

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
1	6 3/4	ODD	43050					90	2025	1200	1	74	6 1/2 9-6 3/4

MUD RECORD:							MUD ADDITIVES:			SWAB CUPS:			OIL SAVER RUBBERS:		
TIME	WEIGHT	VIS. COSTY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT	AMOUNT	TYPE	TIME	NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE
1000	9.3	70	8.0	3/32	8.5		GEL	3000							
							DEXTRIN	600							

DEPTH END FIRST TOUR 8604-8 3/4 DEPTH END SECOND TOUR 8642-6 1/8 DEPTH END THIRD TOUR 8642-6 1/8
W. Kull DRILLER OR WATCHMAN Robert Manning DRILLER OR WATCHMAN JAMES B. PARKS DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: John C. Hannan BRITISH AMERICAN'S REPRESENTATIVE
Debrae Leiby CONTRACTOR'S REPRESENTATIVE
 BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 10 1965 WELL NO. AN-2 LEASE B.A. TEXACO ARROWHEAD

SFC. T. R. N.W.T. PROVINCE N.W.T. CONTRACTOR CASCADE DRILLING R.G. #2

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	115	make uP core BBLs.			1	15		
115	145	Run in Hole						
145	215	Work on water line to Brakes.						
215	630	Finish in Hole						
630	900	Blowing Hole						
900	930	Blowing Hole						
930	1115	Cut Core No 1						
1115	1145	Run Survey						
1145		Sand line jumped Shive						
		Broke Sand line Work on Sand						
	315	Line & Shive						
315	4	Pull Out						
400	715	Hoist core #1						
715	930	Recover Core & Stand Back Core BGL					7	15
930	1115	Running in						
1115	1200	Splicing Sand line						

Core #1 - 8604-8642 - Cut 38' Rec 12'

Top 4' - Limestone Dark Gray Brown with numerous fractures, oil stained along fractures, bearing veins - bleeding gas next 1' Limestone medium gray brown - no oil staining

Next 2' - Limestone medium gray brown - bleeding trace of gas along fractures

Base 5' - Limestone dark gray brown - no oil staining, well fractured

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	TOTAL TIME CHARGEABLE TO B.A.					
					20	30	3	30		
					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
9	6 1/8	✓	509	8604	8642	38	3 1/4	60	12	Air				9-6 3/4

MUD RECORD:

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

MUD ADDITIVES:

AMOUNT	TYPE	TIME
100"	DETRID	
200"	D-BROXIN	
2000"	GEL.	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 8604 DEPTH END SECOND TOUR 8642-6 1/8 DEPTH END THIRD TOUR 8642-6 1/8

W. Harkins DRILLER OR WATCHMAN R. Manning DRILLER OR WATCHMAN JAMES B. PARKS DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: Dolores Lohy CONTRACTOR'S REPRESENTATIVE Jim C. Harnack BRITISH AMERICAN REPRESENTATIVE BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 7 1962 WELL NO. N 4 LEASE OH-11460 BROWNIE

SEC. _____ T. _____ R. _____ PROVINCE NEW YORK CONTRACTOR AS & HAWES - 1105 11th St

[illegible]

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY		HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
						TOTAL TIME CHARGEABLE TO S.A.		21	15	2	45
						DAY WORK PER 24 HOUR DAY					

BIT RECORD:

[illegible]

MUD RECORD:

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT

MUD ADDITIVES:

AMOUNT	TYPE	TIME
23 ⁰⁰	GEK	
25 ⁰⁰	Districd.	
500	Quiboron	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 8.15.89-0241

DEPTH END SECOND TOUR 1604

DEPTH END THIRD TOUR day

DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED.

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

[Signature]

CONTRACTOR'S REPRESENTATIVE

R Manning
DRILLER OR WATCHMAN

Sam B. Hamrah
BRITISH AMERICAN'S REPRESENTATIVE

James Parks
DRILLER OR WATCHMAN

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 8 1965 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

SEC. T PROVINCE N.W.T. CONTRACTOR CASCADE DRILL RIG #2

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	DRILL							
1215	1230	Blow Hole CLEAN							
1230	100	SURVEY @ 7227-5 3/4°							
100	515	DRILL							
515	600	SURVEY @ 7272-6°							
600	800	DRILL							
8	815	Service Rig							
815	1030	DRILL							
1030	1100	Blow Hole CLEAN							
11	1130	SURVEY @ 7720-6 1/2 TEMP 190							
1130	400	DRILL							
400	415	Blowing Hole							
415	445	SURVEY MISRUN MISRUN							
445	500	Blowing Hole							
500	715	DRILL							
715	730	Blowing Well							
730	830	SURVEY @ 7860-7 1/2° TEMP 240°							
830	845	Blowing Well							
845	1200	DRILL							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	7227	5 3/4	7720	6 1/2	24	-				
	7277	6°	7860	7 1/2						

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
8	8 3/4	PRG-MT	64252	3144										157-11-6 3/4
8	8 3/4	PRG-MT	64252	3144		512176	60	5410	AIR 90	P.S.I.				11-6 3/4

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
10-	8.9	170	6.4	7/32	8.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
1400	DETRID	
4900	CEL	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE
--------	------	------	--------	------	------

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>7634</u>	DEPTH END SECOND TOUR <u>7979</u>	DEPTH END THIRD TOUR <u>8265</u>
<u>W. Skochub</u> DRILLER OR WATCHMAN	<u>R. Manning</u> DRILLER OR WATCHMAN	<u>JAMES B. PARKS</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

D. L. L. L. CONTRACTOR'S REPRESENTATIVE
Jan C. Hannah BRITISH AMERICAN'S REPRESENTATIVE
James B. Parks BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 7 19 65 WELL NO. N-2 LEASE BA. TEXAS Carroll

SEC. T R. R PROVINCE N.W.T. CONTRACTOR CASCADE DRILL R.G. 72

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	SER RIG - 600							
1215	530	DRLG							
530	600	SURVEY @ 6412 - 5 7/8"							
600	800	DRLG.							
800	900	DRLG							
900	915	Blow Hole Clean							
915	945	SURVEY @ 6570 - 5 3/4"							
945	1245	DRLG							
1245	1	Blow Hole Clean							
1	145	SURVEY 6745 - 5 1/2"							
145	2	SLIP 40 DRLG LINE							
2	4	DRILL							
4	415	Blow Hole							
415	5	DRLG							
5	700	REPAIR LOW CHAIN							
700	730	DRILL							
730	800	SURVEY @ 6975 -							
800	12	DRLG							
							</		

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	6412	5 1/2"	6745	5 1/2"	74	-				
	6570	5 3/4"	6975	6"						

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	REG-WT	3144	3144	Run	3392	96	60	10	AIR	75			139 1/4
8	8 3/4	RRGTN	3144	3144	Run	3806	52	60	15	90	AIR			150 3/4
8	8 3/4	"	3144	3144	Run	4008	57	60	10	90	AIR			"

MUD RECORD:

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

MUD ADDITIVES:

AMOUNT	TYPE	TIME
50	GEL	12

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 6536 DEPTH END SECOND TOUR 6944 DEPTH END THIRD TOUR 7244

W. Schack DRILLER OR WATCHMAN B. Manning DRILLER OR WATCHMAN J. Parks DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

D. L. Schack CONTRACTOR'S REPRESENTATIVE J. L. Manning BRITISH AMERICAN'S REPRESENTATIVE J. Parks BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

P-25

DATE Feb. 6 19 65 WELL NO. N-2 LEASE B.A. Terasa Gasfield

SEC. T. PROVINCE N.W.T. CONTRACTOR CASCADE DRILL RIG #2

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	DRILL							
12 ¹⁵	12 ⁴⁵	SURVEY							
12 ⁴⁵	8 ⁰⁰	DRILL							
8 ⁰⁰	8 ³⁰	DRILL							
8 ³⁰	8 ⁴⁵	Blow Hole							
8 ⁴⁵	9 ¹⁵	SURVEY 5503-2 3/4							
9 ¹⁵	9 ⁴⁵	SEA RIG + BOP'S Slip Line							
9 ⁴⁵	3 ⁴⁵	DRILL							
3 ⁴⁵	4 ⁰⁰	Blow Hole							
4 ⁰⁰	4 ³⁰	SURVEY 5970-6 1/4							
4 ³⁰	6 ³⁰	DRILL							
6 ³⁰	7 ⁰⁰	SURVEY MISS RUN 6060							
7 ⁰⁰	7 ¹⁵	Blow Hole							
7 ¹⁵	7 ⁴⁵	SURVEY -6060-6°							
7 ⁴⁵	11 ¹⁵	DRILL							
11 ¹⁵	11 ⁴⁵	SURVEY @ 6220 6 1/8°							
11 ⁴⁵	12 ⁰⁰	WORK ON AIR LINE							

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	5533	2 1/2			24	-				
	6060	6°								
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. M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
8	8 3/4	REG-715	64252	3144		4359	3 1/4	60	20	AIR				159 11-6 1/4
8	8 3/4	REG-715	64252	3144		3110	4 1/4	60	5	AIR				"

MUD RECORD:

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT

MUD ADDITIVES:

AMOUNT	TYPE	TIME
200	Dextrin	2
500	GEL	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>5503.</u>	DEPTH END SECOND TOUR <u>6006</u>	DEPTH END THIRD TOUR <u>6259.</u>
<u>W. Stahl</u> DRILLER OR WATCHMAN	<u>R. Manning</u> DRILLER OR WATCHMAN	<u>J. Parks</u> DRILLER OR WATCHMAN
TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:		
<u>Daleen Leibe</u> CONTRACTOR'S REPRESENTATIVE	<u>Jan C. Hannich</u> BRITISH AMERICAN'S REPRESENTATIVE	<u></u> BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 5 1965 WELL NO. N-2 LEASE BA TEXACO ARROWHEAD

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

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	8 ⁰⁰	DRLG.							
8 ⁰⁰	8 ¹⁵	1 man & 8 hrs overtime using							
8 ¹⁵	9 ³⁰	SEP R.C. + B.O.P. samples for B.A.							
8 ³⁰	9 ⁰⁰	DRLG.							
9 ⁰⁰	9 ⁰⁰	SURVEY @ 4000 - 2 1/2'							
11 ⁰⁰	11 ³⁰	DRLG.							
11 ³⁰	5 ⁰⁰	DRLG w/ 20 m on Bit							
5 ⁰⁰	8 ¹⁵	SURVEY @ 11500 3 1/4'							
8 ¹⁵	8 ⁴⁵	DRLG w/ 15 m on Bit							
8 ⁴⁵	12 ⁰⁰	SURVEY @ 11750 3 1/2'							
		DRLG w/ 20 m on Bit.							

DEPTH	SURVEY	DEPTH	SURVEY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
4000	2 1/2'	11750	3 1/4'	24	-				
11500	3 1/4'								

BIT NUMBER	SIZE	TYPE	SERIAL NUMBER	DEPTH IN	DEPTH OUT	FOOTAGE DRILLED	MIN	BIT WEIGHT	PUMP PRESSURE	FLUID NO.	S.P.M.	LINER SIZE	NO. AND SIZE DRILL COLLARS
8	8 3/4"	PRG-7X1	64252	3144	14	821	1/2	3900	AIR	60	P.S.I	11-5/8"	1-59
8	8 3/4"	PRG-7X1	64252	3144	14	1331	1/2	60	20000	AIR	60	P.S.I	11-5/8"
41	8 3/4"	"	"	"	"	1857	3/4	60	20000	"	"	"	11-5/8"

MUD RECORD:							MUD ADDITIVES:			SWAB CUPS:			OIL CATCHER RUBBERS:		
TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT	AMOUNT	TYPE	TIME	NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE
	100						3000	2% GEL							
							3000	2% GEL							
							400	2% GEL							

DEPTH END FIRST TOUR 3965 DEPTH END SECOND TOUR 4425 DEPTH END THIRD TOUR 5001

JAMES B. PARKS DRILLER OR WATCHMAN W. J. Kahan DRILLER OR WATCHMAN Dobson Luby DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: D. Luby CONTRACTOR'S REPRESENTATIVE Jan C. Hannah BRITISH AMERICAN'S REPRESENTATIVE Dobson Luby BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

DRILLING CONTRACTOR'S DAILY REPORT



THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE FEB 4 19 65 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

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

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	5 ¹⁵	BLOWING WELL DRY							
5 ¹⁵	6 ¹⁵	DRLC							
6 ¹⁵	7 ⁰⁰	BLOWING WELL							
7 ⁰⁰	7 ⁴⁵	DRLC							
7 ⁴⁵	8 ⁰⁰	HOIST PIPE							
9 ⁰⁰	9 ⁰⁰	HOIST PIPE							
9 ⁰⁰	2 ⁴⁵	CHECK D.C. w/ HOOPER							
2 ⁴⁵	3 ⁰⁰	WORK ON LIGHT PLANT							
3 ⁰⁰	4 ⁰⁰	RED IN HOLE							
4 ⁰⁰	5 ⁰⁰	INSTALL ROTATING HEAD							
5 ⁰⁰	6 ⁰⁰	BEAM 90' TO BOTTOM							
6 ⁰⁰	7 ⁰⁰	DRLC							
7 ⁰⁰	9 ⁰⁰	JACK DERRICK							
9 ⁰⁰	11 ³⁰	DRLC							
11 ³⁰	12 ⁰⁰	SURVEY @ 3360 - 1 1/2"							

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
1	8 3/4	GWV	43050	3056	3144	88	2 1/2	60	19,000	AIR 50 P.S.I.				12-6 3/4
2	8 3/4	RRG	64252	3144	in	216	3 1/2	60	20	AIR 60 P.S.I.				11 6 3/4

MUD RECORD:

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

MUD ADDITIVES:

AMOUNT	TYPE	TIME
4-GALS	50 MP.	1

SWAB CUPS:

NUMBER	SIZE	TYPE
1	6	

OIL SAVER RUBBERS:

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR 3144 DEPTH END SECOND TOUR 3144 DEPTH END THIRD TOUR 3360

JAMES B. PARKS

DRILLER OR WATCHMAN

W. Stahl

DRILLER OR WATCHMAN

W. Stahl

DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Doherty Seely

CONTRACTOR'S REPRESENTATIVE

John C. Hamer

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. 3 19 65 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD.

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

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.	
800	900	PAGE #2.							
900	1100	RUN IN HOLE							
1100	1230	INSTALL. ROTATING HEAD LINE UP. BOB.							
1230	100	THAW BY PASSES BETWEEN MUD TANKS							
100	200	CIR							
		PRESSURE UP 4 1/2 P.P.G. RAMS							
		HYDRILTS & KELLI COCK EACH SEPERATLY							
		@ 1800 PSI 15 MIN. HOLD OK. & CHECK							
		MOTOR SHUT OFF.							
200	230	DRILL FLOAT & CEMENT.							
230	400	DISPLACE HOLE w/ WATER & BLOW							
		HOLE DRY.							
400	1015	BLOWING HOLE DRY							
1015	1045	DRILL OUT SHOE & DRILL TO HELP DRY HOLE							
1045	1100	BLOWING HOLE							
1100	1115	DRILL							
1115	1200	BLOWING HOLE DRY.							

PAGE #2.

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	3	-	21	-		
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	ODD	43050	3056										
8	8 3/4	ODD	43050	3056		25	3/4	60	6	200	AR			12-6 3/4

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:	DEPTH END SECOND TOUR <u>3056</u>	DEPTH END THIRD TOUR <u>3081</u>
<u>W. Stahlh.</u>	<u>W. Stahlh.</u>	<u>W. Stahlh.</u>
DRILLER OR WATCHMAN	DRILLER OR WATCHMAN	DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

Dahen Luby
CONTRACTOR'S REPRESENTATIVE

Jan C. Hannan
BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

P-15



DATE FEB 3 1965 WELL NO. N-2 LEASE B.A. TEXACO ARROWHEAD

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

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:

[illegible]

DEPTH END FIRST TOUR 3056

DEPTH END SECOND TOUR 2056

DEPT. H. END THIRD TOUR

JAMES B. PARKS
DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

James Leiby
CONTRACTOR'S REPRESENTATIVE

ED: Jan C. Hannah
BRITISH AMERICAN'S REPRESENTATIVE

BRITISH AMERICAN FOREMAN OR SUPERINTENDENT

P-95



DATE FEB 2 1965 WELL NO. W-3 LEASE BA TEXACO ARROWHEAD

SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR CASCADIA DRILLING CO

[illegible]

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

[illegible][illegible]

AMOUNT	TYPE	TIME

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR 3056 DEPTH END SECOND TOUR 3056 DEPTH END THIRD TOUR _____

JAMES B. PARKS	W. H. H. H.	
DRILLER OR WATCHMAN	DRILLER OR WATCHMAN	DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

TIME CHARGEABLE TO BRITISH AMERICAN IS *1*

James L. [Signature]
CONTRACTOR'S REPRESENTATIVE

Gen. C. Ham
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 1 1965 WELL NO. 17-2 LEASE B.A. TEXACO ARROWHEAD

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

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	9 ⁰⁰	W.O.C.							
8 ⁰⁰	4 ⁰⁰	CUT CASING SET SLIPS HEAD UP.							
4 ⁰⁰	12 ⁰⁰	HEAD UP.							
LANDED 9 5/8" CASING IN SLIPS @ 7AM FEB 2 ND 1965. W/ 60000 PACKED OFF SAME WITH PRIMARY AND SECONDARY PACKING. INSTALLED 7" CSG. HANGER SPOOL. W/ BIT GUIDE & WEAR FLG. NIPPLED UP.									
					</				

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
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:

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

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

DEPTH END FIRST TOUR <u>3056</u>	DEPTH END SECOND TOUR <u>3056</u>	DEPTH END THIRD TOUR <u>3056</u>
<u>JAMES B. PARKS</u> DRILLER OR WATCHMAN	<u>W. Fink</u> DRILLER OR WATCHMAN	<u>Walter Fink</u> DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED: <u>Doherty</u> CONTRACTOR'S REPRESENTATIVE	<u>Jan C. Hannah</u> BRITISH AMERICAN'S REPRESENTATIVE	BRITISH AMERICAN FOREMAN OR SUPERINTENDENT
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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE 1944-21

SEC. _____ T. _____ R. _____ PROVINCE North West Terr CONTRACTOR Cascado Delgado #2

~~SEC~~ T. ~~R.~~ PROVINCE ~~NORTHWEST TERRITORIES~~ CONTRACTOR ~~CANADIAN PACIFIC RAILWAY CO.~~

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 84 lbs of 9 7/8 D.D. 36" J-55 S.T. & C. Class A
 casing - Set at 3056' - Tally 5038.39
 Distance Ground to K.B. 16' Distance H. 18.41
 Ran 5 scratchers and 3 centralizer - in bottom 90'
 Cemented by H. Davis w/ 1000 SXS of Portland Cement
 Pump plug to 3020' - Plug down at 10:05 PM
 Itap 31-615 - Cement Circulated 21 bbls
 Witness by Deely for contractor and Schom
 Ack for B.A. Oil Co. Surplus 17 lbs and 1
 cut off price 545.91. W.A.S. # 54

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:

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT

MUD ADDITIVES:

[illegible]

SWAB CUPS:

[illegible]

OIL SAVING RUBBERS:

NUMBER	SIZE	TYPE
78	10	10

DEPTH END FIRST TOUR

DEPTH END SECOND TOUR

DEPTH END THIRD TO

DRILLER OR WATCHMAN

DRILLER OR WATCHMAN

DRILLER / 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

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THE BRITISH AMERICAN OIL COMPANY LIMITED

DATE JAN 30 1965 WELL NO. N-7 LEASE BA TEXAS ARROW HEAD

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

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	6 ⁰⁰	DRLG							
6 ⁰⁰	7 ⁰⁰	CIRC. TO LOG.							
7 ⁰⁰	8 ⁰⁰	HOIST P.I.P.E							
8 ⁰⁰	11 ⁰⁰	FINISH HOISTING LAYED DOWN 7"							
		+ 9" DRILL COLLARS. SHOCK SUB							
		+ STABILIZER							
11 ⁰⁰	12 ³⁶	RUN IN HOLE							
12 ³⁰	12 ⁴⁵	CLEAN 10' FILL							
12 ⁴⁵	1 ⁰⁰	DRILL							
1 ⁰⁰	1 ³⁰	CIR							
1 ³⁰	2 ³⁰	TRIP 10 STDS.							
2 ³⁰	3 ³⁰	CIR							
3 ³⁰	4 ⁰⁰	HOIST TO LOG.							
4 ⁰⁰	4 ⁴⁵	FINISH HOISTING.							
4 ⁴⁵	12 ⁰⁰	LOGGING W/ SCHUMBERGER							
Run Induction E log		FROM 3056 to Surface Casing							
Microlog - Caliper		" " "							
Dipmeter		" " "							
Gamma-Ray Caliper		" " "							
With integrator service									

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY

TOTAL TIME CHARGEABLE TO B.A.	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	16	45	7	15		
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
6	12 1/4	Y.S.-1	EDH215	2752	3055	316	2 1/2	90	60,000	1050	2	60	7"	3-9"
5	12 1/4	Y.M.	BERUN	3055	3056	1	1/4	60	40	1050	2	56	7"	2-5"

MUD RECORD:

TIME	WEIGHT	VIS-COSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
6 ⁰⁰	10.2	102	6.8	7/32	8.5	
2 ⁰⁰	10.2	107	6.2	7/32	8.5	

MUD ADDITIVES:

AMOUNT	TYPE	TIME

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR <u>3055</u>	DEPTH END SECOND TOUR <u>3056</u>	DEPTH END THIRD TOUR <u>3056</u>
JAMES B. PARKS. DRILLER OR WATCHMAN	W. Schumberger DRILLER OR WATCHMAN	DOUG BROWN 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 Jan 29th 19 65 WELL NO. N-2 LEASE B. A. Teraco Arrowhead.
SEC. _____ T. _____ R. _____ PROVINCE N.W.T. CONTRACTOR Cascade Drilling Co.

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

D. J. L. L. *W. A. Schomaker*

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

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THE BRITISH AMERICAN OIL COMPANY LIMITED

SEC. _____ T. _____ P. _____

DEVIATION RECORD	DEPTH	SURVEY	DEPTH	SURVEY
	2300	14°		
	2746	24°		

B.I.T. RECORD:

MUD RECORD:

MUD ADDITIVES:

SWAB CUPS:

OIL SAVER RUBBERS:

	NUMBER	SIZE	TYPE

<i>D. B. Brown</i> DRILLER OR WATCHMAN	<i>JAMES E. PARKS</i> DRILLER OR WATCHMAN	<i>Walter H. H.</i> DRILLER OR WATCHMAN
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TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED.

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:

D. J. Schomaker *W. A. Schomaker*

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 Jan 27th 1965 WELL NO. N-2 LEASE B. H. Texas Arrowhead
 SEC. T. R. PROVINCE N.W.T. CONTRACTOR Cascade Drilling Co.

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	130	Run in hole. Clean To bottom. Drilling							
130	215								
215	800								
800	1145	DRLG.							
1145	1200	CHECK E.O.P.S. FOR SAFETY SUP.							
1200	400	DRLG.							
400	700	DRLG.							
700	815	DISMANTLE #2 motor clutch							
815	1200	DRLG.							

DEVIATION RECORD	DEPTH		SURVEY		TOTAL TIME CHARGEABLE TO B.A.	DAY WORK PER 24-HOUR DAY	HRS.	MIN.	HRS.	MIN.	HRS.	MIN.
	DEPTH	SURVEY	DEPTH	SURVEY								
	2400	1 1/4"			2400							

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	12 1/4"	YM	ED3107	2401	in.	48	56	56	6000	850	1	70	7"	3-4"
5	12 1/4"	YM	ED3107	2401	in.	125	135	56	6000	850	1	74	7"	3-4"
5	12 1/4"	YM	ED3107	2401	in.	206	204	56	65	750	1	71	7"	3-4"

MUD RECORD:

TIME	WEIGHT	VISCOSITY	WATER LOSS	FILTER CAKE	PH	SAND CONTENT
600	10	70				
2 PM	9.7	55	12	3/32	8.0	
800	9.6	51	28	3/32	9.0	

MUD ADDITIVES:

AMOUNT	TYPE	TIME
2500	GEL	2 PM
	WATER	
	1/2" stream water	

SWAB CUPS:

NUMBER	SIZE	TYPE	NUMBER	SIZE	TYPE

OIL SAVER RUBBERS:

DEPTH END FIRST TOUR 2449 DEPTH END SECOND TOUR 2526 DEPTH END THIRD TOUR 2607

Dr. Brown JAMES F. PARKS Walter Skunk
 DRILLER OR WATCHMAN DRILLER OR WATCHMAN DRILLER OR WATCHMAN

TIME CHARGEABLE TO BRITISH AMERICAN IS APPROVED:
Dalton Luby W. G. Schomaker
 CONTRACTOR'S REPRESENTATIVE BRITISH AMERICAN'S REPRESENTATIVE BRITISH AMERICAN'S FOREMAN OR SUPERINTENDENT