

ATLANTIC S. W. AIRPORT

CREEK NO. 1

D-72

Drilling Authority No.

Date Issued

WELL NAME Atlantic S. W. Airport Creek No. 1 0-72

FIELD Wildcat

Area: Fort Good Hope

LOCATION: Unit 0

Section 72

Grid 66-30-129-00

Latitude 66°21'10" N.

Longitude 129°14'44" W.

From Established Reference Marker

Rig Release Date: 15-12-60

Status D & A

Information Release Date 15-12-62

CHANGE OF NAME:

DATE RECEIVED	INDEX
	Application for a Drilling Authority. Well Completion Data. Well History Report. Application to Amend a Drilling Authority. Application to change a Well Name. Application to Abandon a Well or Suspend Drilling. Application to Alter Condition of a Well. Well History Supplement. Well Completion Data. Work-over Report No. Application to Commingle Production before Measurement. Approval to Commingle Production before Measurement. Application to Amend Approval No. to Commingle Production before Measurement. Application for M.P.R.—Oil. New Oil Well Report. New Gas Well Report. Well Inspection Report. Rig Inspection Report. Battery Inspection Report. Field Abandonment Programme and Approval. Well Card. Well Visit. Daily Drilling Reports.

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION BRANCH

RESOURCES DIVISION

For the period from 11-21-60
to 12-18-60

REPORT of ~~COMPLETION~~
~~REPAIR~~
~~RECOMPLETION~~
~~SUSPENSION~~
~~ABANDONMENT~~ of a Well

Permit No. 1299. .

Name of well Atlantic S.W. Airport Creek No. 1 Lease No.

Registered owner The Atlantic Refining Company Drilling Company Tri City Drilling Co. Ltd.

Location 66°21'10" N. Lat. 129°14'44" W. Long.

Survey description, if available

Elevation: Ground 481.8 Last previous depth 2,385'

Kelly bushing 489.6' Present depth 2,385'

Spudded 11-21-60 Finished drilling 12-15-60 Rig Released

Deviations from vertical 400' - 0°, 700' - 1/2°, 900' - 1/2°, 1200' - 1/4°, 1617' - 3/4°
1918' - 3-1/2°, 1965' - 5°, 2072' - 6-1/4°, 2178' - 6°, 2258' - 5-1/2°.

CASING RECORD

Date	Size O.D.	Weight lbs/ft	Grade	Set at feet	Sacks Cement	Top of Cement
1 11-22-60	9-5/8"	32.3 & 36#	H-40 & J-55	61.16'	40 sack + 4% CaCl ₂	Grnd. Level
2 11-24-60	7"	20#	J-55	257'	50 sack + 4% CaCl ₂	Grnd. Level
3						
4						

TUBING RECORD

Size	Wt. Lbs/foot	Grade	Amount	Landed Depth	Remarks
.					
.					
Wellhead		(Manufacturer)	(Size)	(Series)	

Status of well on completion of drilling

Producing Zone and formation

Cord intervals No. 1. 370' - 400', No. 2. 1355' - 1367', No. 3 1950' - 1965'.

Interval logged: E-log . 2385' - 257' . . . Other logs G.R. Sonic . 2385' - 257'.

R-log Temp. Survey . 2380' - 100'.

M-log . 2385' - 257'

Velocity log 2385' - 257'

The above logs (xxx) have been
(xxxxxx) submitted in accordance with Section 65 of the
Regulations.

DRILL STEM TESTS

<u>Test No.</u>	<u>Date</u>	<u>Interval Tested</u>	<u>Duration</u>	<u>Results</u>
1	11-27-60	431 - 482'	35 min.	160' mud.
2	12-2-60	1317 - 1367'	30 min.	60' mud.
.	.	.	.	.
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(If space insufficient, attach further sheet)

(Strike out the non-applicable) (Completion) (Rework) (Recompletion)

Perforations Bullet.

Shootings

Hydraulic fracturing

Chemical treatment

Date initial production tests

Initial production data

Pumping or flowing
Plug back
Other
.
.
.
.

CEMENT PLUGS SET

<u>Date</u>	<u>Plug set at</u>	<u>Sacks cement</u>	<u>Method</u>	<u>Top found at</u>
12-17-60	2,385'	80 + 2% CaCl ₂	Pump	2,176'
12-17-60	1,740'	60 + 2% CaCl ₂	Pump	1,602'
12-18-60	1,329'	50 sack + 2% CaCl ₂	Pump	1,230'
12-18-60	307'	40 + 2% CaCl ₂	Pump	204'

Washed well samples have been sent to Geological Survey of Canada, Calgary
~~with data~~

Cores will be stored at Geological Survey of Canada, Calgary

Core analysis (was made) of the Intervals 370.0-371.0, 374.0-374.5,
(to be made) 375.0-376.3, 398.3-399.7; . .
(to be made) 1358.4-1359.1, 1950.0-1965.0
Copy has been forwarded to Oil Conservation Engineer, Calgary
Oil analysis (was made) of the Intervals.
(to be made)

Gas analysis (was made) of the Intervals.
(to be made)

Water analysis (was made) of the Intervals.
(to be made)

The above analyses (are)
(will be) submitted in accordance with Section 70(2) of
the Regulations.

ADDITIONAL DETAILS AND COMMENTS

Cut off surface casing. Welded on plate with electric weld marking . . .

"ATLANTIC S.W. AIRPORT CREEK NO. 1"

Signed *[Signature]* Address ⁵⁻²⁰⁴ 11401-124 St. Edmonton
Date 19/1/65

(To be submitted in triplicate in accordance with Sections
68, 69, 70 and 71, of the Territorial Oil and Gas Regulations
to the Oil Conservation Engineer at Calgary, Alberta.)

FORM "A"

C A N A D A

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION BRANCH

RESOURCES RESOURCES

NOTICE OF INTENTION TO BEGIN DRILLING OPERATIONS

or

TO CARRY OUT A STRUCTURE TEST PROGRAM

In accordance with Section 57 of the ~~Territorial~~ Canada Oil and Gas Regulations, notice is hereby given of our intention to begin drilling a well on Oil and Gas Permit No. 1299 registered in the name of Lease No.

THE ATLANTIC REFINING COMPANY

TYPE OF WELL:

Wildcat ~~Wildcat~~

Development

Expected total depth 2,500 feet, in the ~~Silurian-Devonian~~ Silurian-Devonian formation of ~~Silurian-Devonian~~ age.

The well will be located at 66° 21' 12" N. Lat. 129° 14' 40" W. Long.

..... (N. of S. boundary) (Permit No.)
 (S. of N. boundary) of (Lease No.)
 (W. of E. boundary) of (Permit No.)
 (E. of W. boundary) (Lease No.)

Survey description of Location, if known

Approximate surface elevation of 487 feet above sea level.

Name of well Atlantic S.M. Airport Creek No. 1

Type of drilling rig Rotary, Pilling 2500

Expected date of commencement November 23, 1960

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

Size O.D. Inches	Weight lbs/ft	Grade	Brand	New or Used	Estimated Depth	Sacks of Cement
1.9 5/8	32.3	E-40	Harvardman	New	60'	40 Sx + 45 CcL
2.7	20	J-55	National	New	250'	50 Sx + 45 CcL
3.4 1/2	9.5	E-40	Page Hersey	New	2500	170 Sx + 45 CcL, 100 Sx Heat

Expected depth of water, gas and oil horizons and method of control:

All horizons to be controlled with drilling ^{and} adequate weight. BOP's,
1 - 8" Series 600 Drill and 1 - 8" Series 600 Double Archimedes Jam type
with 3 1/2" and C. S. Q. runs.

will will
An electric log be run Other logs be run
~~will not~~ ~~will not~~

STRUCTURE TEST PROGRAM

Proposed number of holes Maximum well depth
enclosed within an area bounded by

. N. Latitudes

. W. Longitudes

will will
An electric log be run Other logs be run
will not will not

Name and address of drilling contractor **WEL-CITY DRILLING COMPANY LTD.** . . .
11903 - Kingsway.
Edmonton, Alberta.
.

Responsible agents of permittee or lessee in charge of operation:

At well **W. K. Walters** Postal address **11802 - 124 St., Edmonton, Alta.**

At registered
office **R. G. Zimonten** Postal address **as above**

It is understood that if changes in this Notice of Intention become
necessary we will promptly notify you.

Dated at **Edmonton** this . . . **17th** . . day of **November** . . 19**60** . . .

Signed by *A. G. Givens* . . .

This program is approved subject to the following provisions (if any):

. . Because of the delays which will be caused by the remoteness of your .
. . operation in furnishing the daily drilling reports each week to my office,
. . oral, or if preferred, written reports on the progress of the well are to
. . be sent based on the daily reports you receive by radio,
.

18 November 1960
Date

B. J. Shorn
Oil Conservation Engineer.

(To be submitted in triplicate to the Oil Conservation Engineer at
least 15 days prior to the commencement of drilling)

FORM "C"

C A N A D A

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION BRANCH

RESOURCES DIVISION

ABANDON

NOTICE OF INTENTION TO

or

a Well

~~EXERCISE OPERATION~~

(Strike out operation which does not apply)

In accordance with Sections 48 & 49 of the ^{Canada} ~~INDIAN~~ Oil and Gas Regulations, notice is hereby given of our intention to

... ~~abandon~~ ... the well named Atlantic S.W. Airport Creek . on Oil No. 1

and Gas Permit No. 1299 . .

Registered in the name of The Atlantic . .
Refining Company

Lease No.

Depth . 2,305 . feet. Elevation above sea level: Ground surface . 151.8 . . ft.

Kelly bushing . 189.6 . . ft.

Location 66° 21' 10" N. Lat. 129° 11' 44" W. Long.

... (N. of S. boundary) (Permit No.)
... (S. of N. boundary) of (Lease No.)
... (W. of E. boundary) of (Permit No.)
... (E. of W. boundary) (Lease No.)

Survey description, if available

CASING RECORD

Size O.D. inches	Weight lbs/ft	Grade	Amount feet	Set at feet	Sacks cement	Method	to be withdrawn
1 9-5/8"	32.3	H-40	64	61	40	Plug	No
2 7"	20	J-55	248	257	50 + 45	Plug	No
3							
4							

OIL, GAS AND WATER

Oil from feet to feet From feet to feet with
... sacks cement

Oil from feet to feet From feet to feet with
... sacks cement

Gas from feet to feet From feet to feet with
sacks of cement.

Gas from feet to feet From feet to feet with
sacks of cement.

^{H₂O}
Water from . 1317 feet to 1367 feet From 1330 feet to 1230 feet with . 50 .
sacks cement. + 2% CaCl₂

Water from feet to feet From feet to feet with
sacks cement.

Surface and bottom plugs:

1. from 2385 feet to 2226 feet with . 80 . sacks cement. + 2% CaCl₂
2. from 1760 feet to 1600 feet with . 60 . sacks cement. + 2% CaCl₂
3. from 307 feet to 207 feet with . 40 . sacks cement. + 2% CaCl₂

Date of last operation . December 18, 1960 Total depth . 2,385

Nature of liquid left in well . . Water Level from surface . 0
on suspension or abandonment

~~with~~
The following logs run . Induction Log 2,385 - 257'
have been

Microlog Caliper 2,385 - 251'; Gamma Sonic 2,385 - 100'; Temperature Survey

Produced from zone and
on abandonment of a well which has been on production.

Present condition of well in addition to above
.
.

On abandonment or suspension of drilling we shall comply with Sections 68, 69 and
70 of the Regulations.

Program of operation not included above . Feel for each plug after 8 hours and . .
B.U.I.N . Cut off surface casing below ground level, plug top and weld on plate.
Weld on 2" pipe projecting 4" above ground to mark well location. Permanently
mark well name on marker pipe.
.

Responsible agents of permittee or lessee in charge of operation:

At well . W. K. Walters Postal address 11802 - 124th St., Edmonton

At registered office R.G. Simonton Postal address 444 - 7th Avenue W., Calgary

It is understood that if changes in this Notice of Intention become
necessary we will promptly notify you.

dated at Edmonton this 22nd day of December 19.60 .

Signed by . . R.G. SIMONTON *R.G. Simonton*

This program is approved subject to the following provisions

..... Confirming oral approval to abandon given 13th December.
.....
.....
.....

..... 3 January, 1961.
Date

..... *B. H. Shams*
Oil Conservation Engineer

(To be submitted in triplicate to the Oil Conservation
Engineer at Calgary, Alberta.)



File No.
Drilling Authority No.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

WELL-SITE INSPECTION REPORT

FROM: Field Office or Area: Norman Wells Date: 11th July 1971

TO: The Oil Conservation Engineer:

RE: Atlantic SW Airport Creek No. 1 66-80-128-00

Location: 66°21'12"N., 129°14'44"W. Status: D & A December 1960

This location was inspected by the undersigned on 11th July 1971

The location is in satisfactory/unsatisfactory condition.

T.D. 2385

The following items require attention:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Other comments and recommendations: (Include Map, if necessary for clarity)

Could not locate site. If known, provide description of terrain and condition of lease to aid in next inspection trip.

Inspected by M. D. Thomas

246-11-6-16

VELOCITY OF THE AIR AT THE
THE ATLANTIC NEPHYLOID
IN AIRPORT CLOUDS
AND THE AIRPORT CLOUDS

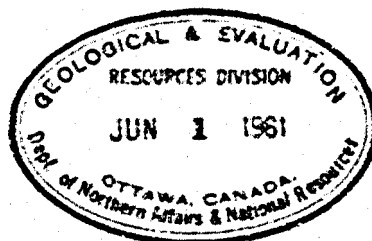
VELOCITY DETERMINATION REPORT

ON

THE ATLANTIC REFINING COMPANY

SOUTHWEST AIRPORT CREEK L.O. 1

NORTHWEST TERRITORIES, CANADA



BY

THE ATLANTIC REFINING COMPANY

1961

CONTENTS

General Information	Page 1
Geophysical Technique	Page 1
Computation	Page 1
Discussion of Results	Page 2

Enclosure:

Geophysical Log

1. Sonic Log
2. Index Map
3. Shooting Plan
4. Up-Hole Time
5. Velocity Determination
6. Time-Depth and Velocity Curves
7. Velocity Survey Records
8. Reflection Records

GENERAL INFORMATION

Schlumberger of Canada ran a sonic log and Electronic Logging and Velocity Co., Ltd. made a conventional velocity survey on December 16 and 17, 1960 in The Atlantic Refining Company, Southwest Airport Creek No. 1 well, located 66°21'10" north latitude and 129°14'44" west longitude, Northwest Territories, Canada.

Kelly block elevation was 490 feet above sea level. The well was drilled to a depth of 2385 feet.

Velocity observations were made at 12 detector levels ranging from 330 feet to 2380 feet below the kelly block. A total of 16 records were taken and are reproduced with the geophysical log.

GEOPHYSICAL TECHNIQUE

Shots were made at a 29 foot depth 100 feet north of the well. Charges varied from 1½ lbs. to 5 lbs.

Trace arrangement on the velocity records was as follows:

- 1st trace - - - - Time Break
- 2nd trace - - - - Up-Hole Seismometer
- 3rd trace - - - - Well Seismometer (High Sensitivity)
- 4th trace - - - - Well Seismometer (Medium Sensitivity)
- 5th trace - - - - Well Seismometer (Low Sensitivity)
- 6th trace - - - - Seismometer on Cable at Kelly Block
- 7th trace - - - - Reference Seismometer

The check-fork signal appears on the bottom of the records.

COMPUTATIONS

A diagram appearing on the velocity determination data sheet in the geophysical log describes the method of computation. Seismic times are

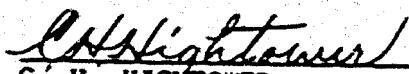
referred to a plane of 300 feet above sea level using an elevation correctional velocity of 8500 feet per second.

DISCUSSIONS OF RESULTS

A graphical representation of results is included with the log. Vertical time, average velocity and interval velocity are plotted against depth below the datum plane. The interval velocities obtained from the conventional velocity survey were converted to interval transit time in microseconds per foot and plotted on the sonic log for comparison.

All measurements are considered reliable.

THE ATLANTIC REFINING COMPANY


C. H. HIGHTOWER
Chief Geophysicist

R. E. Whitmore
District Geophysicist

Compiled by:
C. A. Petersen

CORE ANALYSIS REPORT
FOR
THE ATLANTIC REFINING COMPANY
SOUTHWEST AIRPORT CREEK No. 1
WILDCAT
NORTHWEST TERRITORIES

CORE LABORATORIES - Canada Ltd.

Petroleum Reservoir Engineering

CALGARY, CANADA

CORE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

Company - THE ATLANTIC REFINING COMPANY
Well - SOUTHWEST AIRPORT CREEK NO. 1
Field - WILDCAT, NORTHWEST TERRITORIES
Location - 66° 21' 10" N. Lat.
129° 14' 44" W. Long.

Date Report - JANUARY 6, 1961
Formation - See note below
D. Fluid - WATER BASE MUD
Elevation - KB 490'
Analysis - FULL DIAMETER

Page - 1 of 1
File - CNP-4-1023
Analysts - DR
Cores - DIAMOND
Remarks -

SAMPLE NUMBER	DEPTH REPRESENTED FEET	FOOTAGE REPRESENTED	PERMEABILITY TO AIR HORIZONTAL) K MAX K 90°) VERTICAL			POROSITY PER CENT	DENSITY		VISUAL EXAMINATION
							BULK	GRAIN	
1	370.0-371.0	1.0	29.	0.74	3.8	8.1	2.48	2.70	Intergran. fractures
2	374.0-374.5	0.5	0.33	0.31	<0.01	6.8	2.51	2.69	Intergranular
3	375.0-376.3	1.3	0.54	0.45	<0.01	9.3	2.52	2.78	Intergranular
4	398.3-399.7	1.4	5.4	4.4	0.09	5.1	2.54	2.68	Intergran. fracture
5	1358.4-1359.1	0.7	1.2	0.59	0.05	5.8	2.56	2.72	Small vugs
6	1950.0-1965.0 Probably bottom	0.6	10.	9.1	1.6	3.0	2.63	2.71	Small vugs, calcite

Formations:

Samples 1 - 4 (incl.)

Upper Ramparts Limestone

Sample 5

Lower Ramparts Limestone

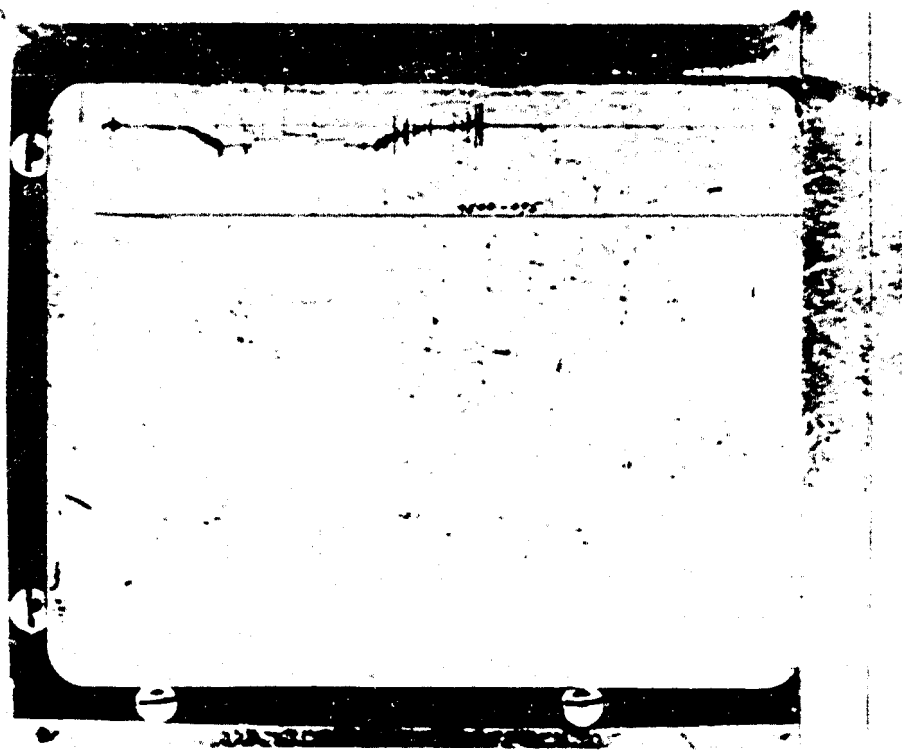
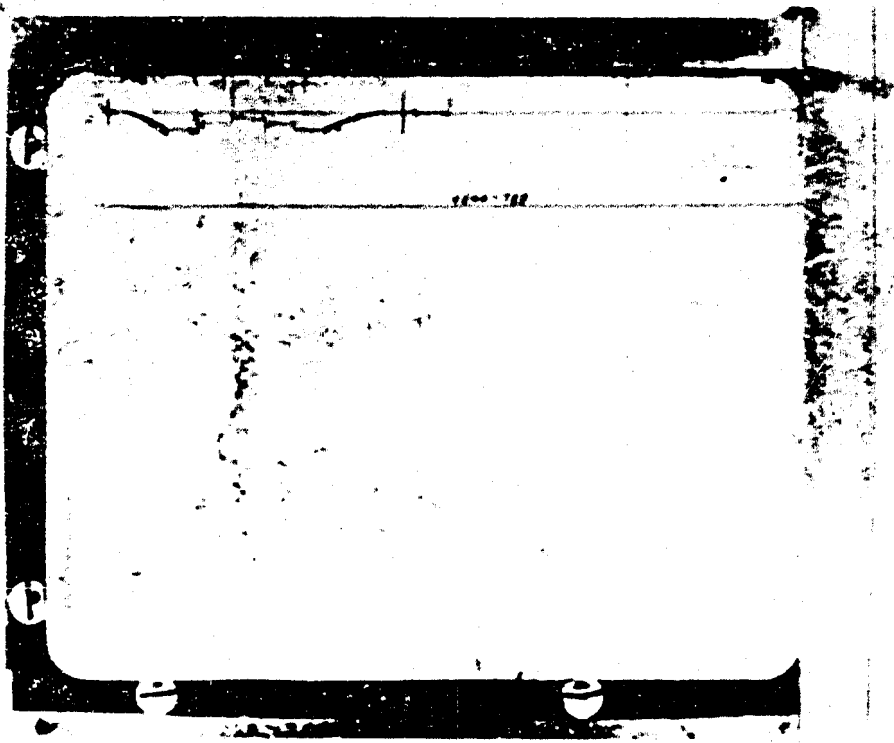
Sample 6

Bear Rock Formation

ATLANTIC SOUTHWEST AIRPORT CREEK NO. 1

Northwest Territories

Test No. 1



Initial Hydro Mod Pressure		Time	PSI					
-			227					
1	Initial Flow	-	64					
	Final Flow	5 minutes	79					
Initial Closed In Pressure		30 minutes	160					
2	Initial Flow	-	88					
	Final Flow	30 minutes	128					
Final Closed In Pressure		30 minutes	160					
Final Hydro Mod Pressure			227					
Ticket No.				4540				
Lease				Atlantic Airport Creek				
Well No.		1	Test No.	1				
BT No.		495	Depth	478'				
12 Hr. Clock No.								
Temperature Corrected to				100 ° F				
1st Flow Pressure		Initial CIP		2nd Flow Pressure		Final CIP		
Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.	Time Defl. .000"	PSI Temp. Corr.	
P0	.000 64	.000 78		.000 88		.0000 128		
P1	.006 66	.020 155		.045 101		.0205 174		
P2	.012 69	.040 158		.090 107		.0410 166		
P3	.018 72	.060 160		.135 115		.0615 163		
P4	.024 75	.080 160		.180 122		.0820 162		
P5	.030 78	.100 160		.225 128		.1025 160		
P6		.120 160				.1230 160		
P7		.140 160				.1435 160		
P8		.160 160				.1640 160		
P9		.180 160				.1845 160		
P10		.200 160				.2050 160		
1	Minute Intervals	3	Minute Intervals	6	Minute Intervals	3	Minute Intervals	

Remarks:

Company THE ATLANTIC REFINING COMPANY

Date November 27, 1960

Time		PSI
Initial Hydro Mod Pressure	-	189
1	Initial Flow	-
	Final Flow	23
5 minutes		35
Initial Closed In Pressure	30 minutes	120
2	Initial Flow	-
	Final Flow	44
30 minutes		89
Final Closed In Pressure	30 minutes	121
Final Hydro Mod Pressure		187

Ticket No. 4540

Atlantic
Lease Airport Creek

Well No. 1 Test No. 1

BT No. 788 Depth. 407'

12 Hr. Clock No.

Temperature Corrected to 100 ° F

1st Flow Pressure			Initial CIP		2nd Flow Pressure		Final CIP	
	Time Dett. .000"	PSI Temp. Corr.	Time Dett. .000"	PSI Temp. Corr.	Time Dett. .000"	PSI Temp. Corr.	Time Dett. .000"	PSI Temp. Corr.
P0	.000	23	.0000	35	.000	44	.000	89
P1	.006	25	.0205	117	.046	61	.021	133
P2	.012	26	.0410	118	.092	71	.042	127
P3	.018	31	.0615	120	.138	78	.063	123
P4	.024	34	.0820	120	.184	84	.084	121
P5	.030	35	.1025	120	.230	89	.105	121
P6			.1230	120			.126	121
P7			.1435	120			.147	121
P8			.1640	120			.168	121
P9			.1845	120			.189	121
P10			.2050	120			.210	121
1	Minute Intervals	3	Minute Intervals	6	Minute Intervals	3	Minute Intervals	

Remarks:

NO. 1001

ATLANTIC & GULF CREEK

WILLIAM J. WILSON

THE ATLANTIC REFINING COMPANY

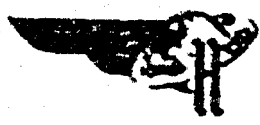
EMORYTON OWNERS DISTRICT

LOCATION Airport Creek

FILE 1001

COUNTY North West Territorial

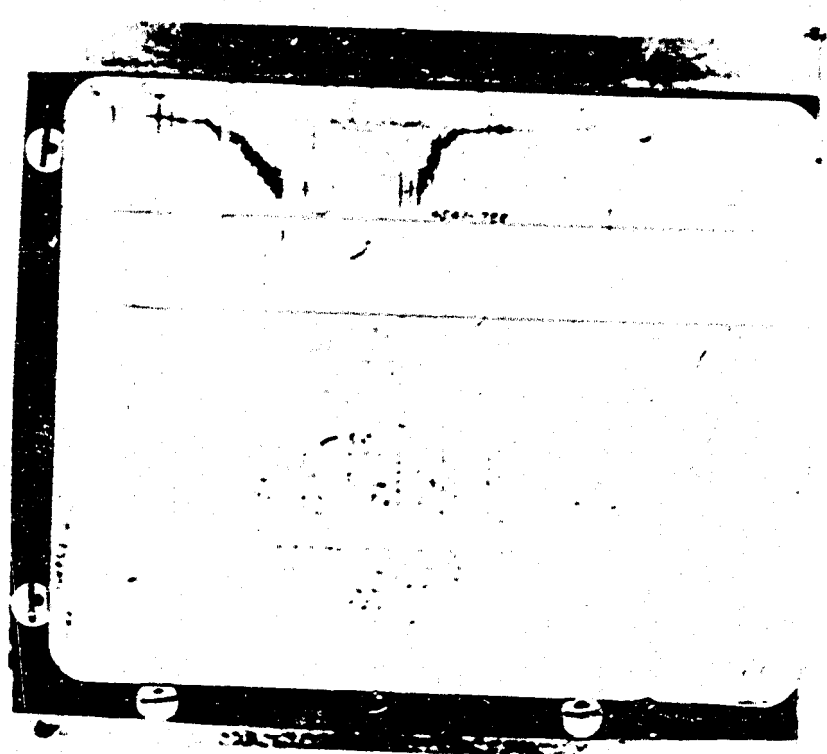
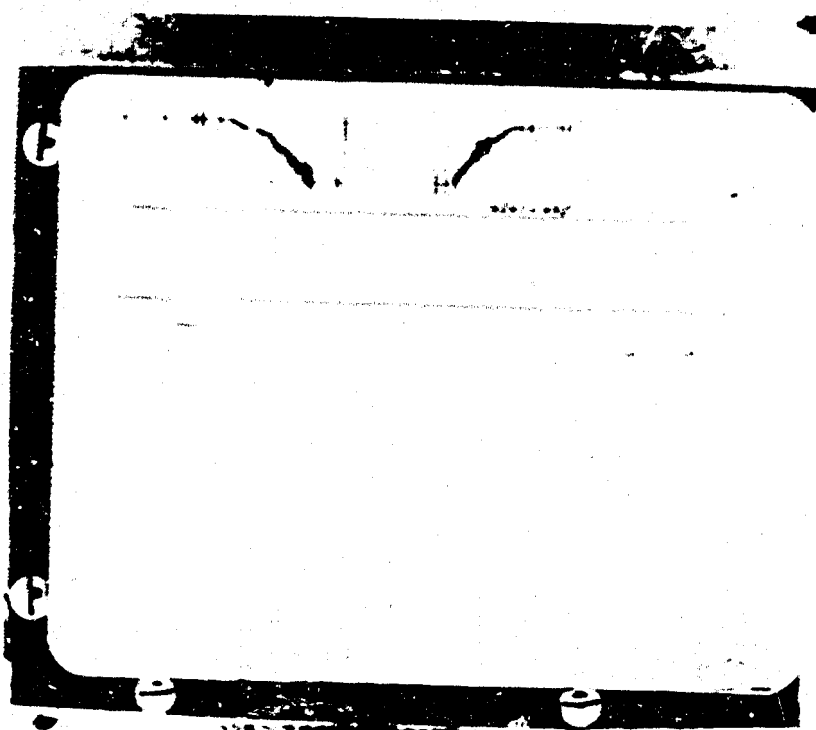
STATE

Initial Closed In Time 30 Minutes				Date November 27, 1960	
Tool Open Flow Period 1st 5 / 2nd 30 Minutes				Ticket No. T4540	
Final Closed In Time 30 Minutes				HOWCO DISTRICT Red Deer	
Depth Top Gauge 407 Ft. Blanked Off No				Kind of Job Bottom hole	
ST. P.R.D. No 766		12 Hr. Clock		CONTRACTOR Tri City	
Pressure Readings Field		Office Corrected		HOLE & TOOL DATA	
Initial Hydro Mud Pressure 190		189		Elevation 490' Top Packer Depth -	
Initial Closed in Pres. 120		120		Total Depth 482' Bottom Packer Depth 431'	
Initial Flow Pres. 30		44		Casing or Hole Size 6 1/4" Size & Type Well Packer 2 1/2" S&P	
Final Flow Pres. 100		89		Liner or Reelhole Size - Size Bottom Choke 1/2"	
Final Closed in Pres. 120		121		Casing Perforations Top Bottom Size Surface Choke -	
Final Hydro Mud Pressure 165		187		Interval Tested 482' - 431' ID & Length Air Chamber -	
Depth Center Gauge Fr.		Blanked Off		Formation Tested Ram Parts ID & Length Drill Collars 1 1/2" x 400'	
ST. P.R.D. No		Hr. Clock		Est. Gauge Depth Temp. - Size Drill Pipe 3 1/2" I.F.	
Pressure Readings Field		Office Corrected		MUD DATA Weight 9.0 Viscosity 65	
Initial Hydro Mud Pressure				All depths measured from Kelly Bushing No. Folders Reproduced 8	
Initial Closed in Pres.				REMARKS: Tool open with very weak initial	
Initial Flow Pres.				air blow. Flow started with weak air blow	
Final Flow Pres.				decreasing to nil after 15 minutes.	
Final Closed in Pres.					
Final Hydro Mud Pressure					
Depth Bottom Gauge 478 Ft.		Blanked Off Yes			
ST. P.R.D. No 495		12 Hr. Clock			
Pressure Readings Field		Office Corrected			
Initial Hydro Mud Pressure 220		229			
Initial Closed in Pres. 153		160		Recovered 195 / 55 Feet of Drilling mud	
Initial Flow Pres. 42		88		Recovered Feet of	
Final Flow Pres. 100		128		Recovered Feet of	
Final Closed in Pres. 153		160		Recovered Feet of	
Final Hydro Mud Pressure 190		227		Witnessed By B. Walters	
Amount-Type of Cushion nil				Tester G. Thebuk	

ATLANTIC SOUTHWEST AIRPORT CREEK NO. 1

Northwest Territories

Test No. 2



Initial Hydro Mod Pressure		Time	PSI	Ticker No. 4541 Atlantic Lease Airport Creek Well No. 1 Test No. 2 ST No. 495 Depth 1308' 12 Hr. Clock No. _____ Temperature Corrected to 100 ° F					
-			658						
2	Initial Flow	-	6						
	Final Flow	3 minutes	8						
Initial Closed In Pressure		30 minutes	493						
1st	Initial Flow	-	11						
	Final Flow	30 minutes	34						
Final Closed In Pressure		30 minutes	493						
Final Hydro Mod Pressure			658						
1st Flow Pressure		Initial CIP							
	Time Diff. .000"	PSI Temp. Corr.	Time Diff. .000"	PSI Temp. Corr.	Time Diff. .000"	PSI Temp. Corr.	Time Diff. .000"	PSI Temp. Corr.	
P0	.000	6	.000	8	.000	11	.000	34	
P1	.005	6	.019	488	.044	14	.021	419	
P2	.010	6	.038	491	.088	21	.042	486	
P3	.015	8	.057	493	.132	26	.063	490	
P4			.076	493	.176	29	.084	491	
P5			.095	493	.220	34	.110	491	
P6			.114	493			.132	493	
P7			.133	493			.154	493	
P8			.152	493			.176	493	
P9			.171	493			.198	493	
P10			.190	493			.210	493	
1	Minute Intervals	3	Minute Intervals	6	Minute Intervals	3	Minute Intervals		

Remarks:

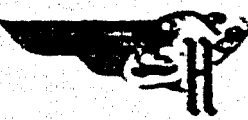
Company THE ATLANTIC REFINING COMPANY

Date December 2, 1960

Time		PSI	Ticket No. 4541 Atlantic Lease Airport Creek Well No. 1 Test No. 2 ST No. 788 Depth 1363' 12 Hr. Clock No. Temperature Corrected to 100 ° F
Initial Hydro			
Mud Pressure	-	595	
Initial Flow	-	40	
Final Flow	3 minutes	44	
Initial Closed In Pressure	30 minutes	531	
Initial Flow	-	48	
Final Flow	30 minutes	71	
Final Closed In Pressure	30 minutes	528	
Final Hydro Mud Pressure		692	

	1st Flow Pressure		Initial CIP		2nd Flow Pressure		Final CIP	
	Time Dett. .000"	PSI Temp. Corr.	Time Dett. .000"	PSI Temp. Corr.	Time Dett. .000"	PSI Temp. Corr.	Time Dett. .000"	PSI Temp. Corr.
P0	.000	40	.0000	44	.000	48	.000	71
P1	.005	43	.0185	524	.043	52	.020	477
P2	.010	44	.0370	529	.086	57	.040	521
P3	.015	44	.0555	529	.129	61	.060	525
P4			.0740	531	.172	66	.080	526
P5			.0925	531	.215	71	.100	526
P6			.1110	531			.120	528
P7			.1295	531			.140	528
P8			.1480	531			.160	528
P9			.1665	531			.180	528
P10			.1850	531			.200	528
1	Minute Intervals		3	Minute Intervals		6	Minute Intervals	

Remarks:

Initial Closed In Time 30 Minutes				Date December 2, 1960	
Tool Open 1st 3 2nd 30 Minutes				Ticket No. T4541	
Final Closed In Time 30 Minutes				HOWCO DISTRICT Red Deer	
Depth Top Gauge 1306 Fr. Blanked OH No			Kind of Job Open hole test		
BT P.R.D. No 495 12 Hr. Clock			CONTRACTOR Tri City Drilling		
Pressure Readings Field Office Corrected			HOLE & TOOL DATA		
Initial Hydro Mud Pressure 655 655			Elevation 490' Top Packer Depth -		
Initial Closed in Pres. 475 493			Total Depth 1367' Bottom Packer Depth 1317'		
Initial Flow Pres. 0 11			Casing or Hole Size 6 1/4" Size & Type Wall Packer 5 1/2" SEAP		
Final Flow Pres. 25 34			Liner or Rehole Size - Size Bottom Choke 1/2"		
Final Closed in Pres. 475 493			Casing Perforations Top Bottom Size Surface Choke -		
Final Hydro Mud Pressure 640 655			Internal Tested 1367' - 1317' ID & Length Air Chamber -		
Depth Center Gauge Fr. Blanked OH			Formation Tested Lower Ramparts ID & Length Drill Collars 1 3/4" x 295'		
BT P.R.D. No Hr. Clock			Est. Gauge Depth Temp. Size Drill Pipe 3 1/2" I.F.		
Pressure Readings Field Office Corrected			MUD DATA Weight 9.5 Viscosity 50		
Initial Hydro Mud Pressure			All depths measured from Kelly Bushing No. Folders Reproduced 8		
Initial Closed in Pres.			REMARKS: Tool open with a weak initial air		
Initial Flow Pres.			blow. Weak blow all during flow time.		
Final Flow Pres.					
Final Closed in Pres.					
Final Hydro Mud Pressure					
Depth Bottom Gauge 1363 Fr. Blanked OH Yes					
BT P.R.D. No 785 12 Hr. Clock					
Pressure Readings Field Office Corrected					
Initial Hydro Mud Pressure 680 695					
Initial Closed in Pres. 522 531			Recovered 60 20 Feet of Drilling mud		
Initial Flow Pres. 30 48			Recovered Feet of		
Final Flow Pres. 45 71			Recovered Feet of		
Final Closed in Pres. 510 528			Recovered Feet of		
Final Hydro Mud Pressure 680 692			Witnessed By B. Walters		
Amount-Type of Cushion nil			Tester G. Chebuk		

ATLANTIC AIR FIELD

WELL NO 1

THE ATLANTIC R. FINING CO. PANY

EDMONTON

LOCATION Airport Truck

FIELD

WELL NO 1

COUNTY H.A.T.

STATE

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S. N. Airport Creek TRACT N.W.T. WELL NO. 1 DATE 12/15/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Tri City Drilling Co.
 SIZE HOLE 6 3/4 REDUCED AT 259 KIND OF TOOLS Kelly-Feathering 250'
 KIND OF FUEL Diesel FURNISHED BY Takco FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY Takco FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR		TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS			
I	2385	2385	T.D. PPD 1602'	LENGTH DRILL PIPE	KELLY DOWN			
			WCC plug No. 2 - Tagged at 1602', Pulled up and switched DP at 1329' and Ran Plug No. 3 of 50 salt in 1602' Cement plus 2% Coll. Plug down at 6:10 PM	DRILL BIT: SERIAL NO.	DRILL BIT: NUMBER			
				MAKE	TYPE			
				CORE BARREL: KIND	SIZE			
				CORE BIT: SERIAL NO.	CORE BIT: NUMBER			
				KIND	SIZE			
				STRAIGHT HOLE TEST AT DEGREES OFF				
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT	
				1. Cement	50 gal.	40 gal.		
				2. Coll.	1 "	1 "		
				3.				
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT	
				1.				
				2.				
				3.				
				4.				
				MUD TYPE				
				MUD WEIGHT				
				VISCOSITY: 1500 cc IN 1 quart OUT				
				PH				
				WATER LOSS: cc				
				FILTER CAKE	1/32"	1/32"	1/32"	
				FOR COMPANY REPRESENTATIVE ONLY				
				DRILLING				
				CORING				
				DST. OPEN HOLE				
				LOGGING				
				CASING & WOC				
				DOWNTIME				
				CONNECTIONS	8	8	1 1/2	
				LOSS CIRCULATION				
				FISHING				
				CO. TIME w/DP	8	8		
				CO. TIME w/o /DP			1 1/2	

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 P.M. DRILLING 8 HRS. TRIPPING 8 HRS. REPAIRS 8 HRS. OTHER: 8
12:00 - 5:30 WCC; 5:30 - 6:15 Tagged Plug No. 2 at 1602', pulled 12 singles and ran Plug No. 3; 6:15 - 8:00 Pulled 6 singles & WCC

SIGNED E. Hiler DRILLER

TOUR No. 2 FROM 8:00 P.M. TO 4:00 A.M. DRILLING 8 HRS. TRIPPING 8 HRS. REPAIRS 8 HRS. OTHER: 8
8:00 - 1:00 WCC Tagged Plug No. 3 at 1225'; Ran 105 Ran Plug No. 4; 1:45 - 4:00 WCC & lay down B.P.S.

SIGNED H. Sandt DRILLER

TOUR No. 3 FROM 4:00 A.M. TO 12:30 P.M. DRILLING 8:00 HRS. TRIPPING 8:00 HRS. REPAIRS 8:00 HRS. OTHER: 8:00
4:00 - 4:45 WCC & Tagged Plug No. 4 with S.L. at 204'; 4:45 - 5:15 welded plate on surface casing and install marker

SIGNED E. Hiler DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED H. Sandt

Indicate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run.

INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL"

IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S. W. Airport Creek TRACT NWT WELL NO. 1 DATE 12/17/60
 Name to be same as shown in permit to drill Designation
 FIELD Glenn CONTRACTOR The City Drilling Co.
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Kelly-Logging 2500
 KIND OF FUEL Diesel FURNISHED BY TARCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TARCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	2385	2385	T.O. Took Velocity Survey & Started Temp Survey	KELLY DOWN					
				TOTAL IN HOLE					
II	2385	2385	T.O. Finished Temperature Survey Ran Abandonment Cement Plug No. 1 of 8050+ Inland Cement plus 2% Calc from 2315' to 2150' w/ D.P. @ 2378'. Plug down at 1:45 P.M. W.C.	DRILL BIT: SERIAL NO.					
				DRILL BIT: NUMBER					
				MAKE					
				TYPE					
				CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT DEGREES OFF					
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1. Cement	8050	8050	6050		
				2. Calc	12"	12"	12"		
				3.					
III	2385	2385	T.O. WOC Plug No. 1-5 1st & tagged at 2176. Ran Cement Plug No. 2 of 6050+ Inland Cement plus 2% Calc from 1740' to 1650' w/ D.P. at 1590' with plug down at 9:50 P.M. W.C.	CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1.					
				2.					
				3.					
				4.					
				MUD TYPE					
				MUD WEIGHT					
				VISCOSITY: 1500 cc IN 1 quart OUT					
				PH					
				WATER LOSS: cc					
				FILTER CAKE	1/32"	1/32"	1/32"		
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING								
	CORING								
	DST. OPEN HOLE								
	LOGGING			8	4 1/2				
	CASING & WOC								
	DOWNTIME								
	REPAIRING								
	LOSS CIRCULATION								
	FISHING								
	CO. TIME w/DP				3 1/2				
	CO. TIME w/o /DP			8	4 1/2				

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 P.M. TO 8:00 P.M. DRILLING 8 HRS. TRIPPING 8 HRS. REPAIRS 8 HRS. OTHER: 8
12:00-6:30 Velocity Survey, 6:30-8:00 Schlumberger Temp. Survey

SIGNED B. Huber DRILLER

TOUR No. 2 FROM 8:00 P.M. TO 4:00 P.M. DRILLING 8 HRS. TRIPPING 8 HRS. REPAIRS 8 HRS. OTHER: 8
8:00-12:30 Temp Survey, 12:30-1:15 GIH & rig up to run Plug No. 1, 1:15-1:45 Run bottom plug, 1:45-2:15 Pulled 10 singles, 2:15-4:00 W.C.

SIGNED H. Sandt DRILLER

TOUR No. 3 FROM 4:00 P.M. TO 12:00 P.M. DRILLING 8 HRS. TRIPPING 8 HRS. REPAIRS 8 HRS. OTHER: 8
4:00-9:00 WOC tagged bottom plug at 2176, 9:00-9:30 pulled 19 singles & 34 cased pipe at 1590, 9:30-10:00 Run plug No. 2, 10:00-12:00 pulled 10 singles & WOC

SIGNED B. Huber DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED J. K. Mattern DRILLER

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL". IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S.W. Airport Creek TRACT NW 1 WELL NO. 1 DATE 12/16/62
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Tri-City Drilling Co.
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Rotary-Logging 2500
 KIND OF FUEL Diesel FURNISHED BY TAKCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TAKCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
1	2385	2385	T.D. Logging	KELLY DOWN	TOTAL IN HOLE				
2	2385	2385	T.D. Logging	DRILL BIT: SERIAL NO.	DRILL BIT: NUMBER	MAKE			
3	2385	2385	T.D. Logging	TYPE	CORE BARREL: KIND	SIZE			
			Schlumberger made two attempts to run Sonic log and found wires in cable burned in two by high voltage. Apparently the cable is too small to handle voltage required for Sonic. Will run as last log. Schlumberger T.D. = 2379' Kaul T-ES & S-GK on 2" x 5" scale from T.D. to Surface. Kaul T-ES & S-GK on 5' scale T.D. to Surface & 25' scale from 30' to 500' and from 1750' to T.D.	CORE BIT: SERIAL NO.	CORE BIT: NUMBER	KIND			
				SIZE	STRAIGHT HOLE TEST AT DEGREES OFF	MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT
				1	2	3			
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1	2	3			
				MUD TYPE	MUD WEIGHT	VISCOSITY: 1500 cc IN 1 quart OUT			
				PH	WATER LOSS: cc	FILTER CAKE	/32"	/32"	/32"
				FOR COMPANY REPRESENTATIVE ONLY					
				DRILLING	CORING	DST. OPEN HOLE			
				LOGGING	CASING & WOC	DOWNTIME			
				COMPLETING	LOSS CIRCULATION	FISHING			
				CO. TIME w/DP	CO. TIME w/o /DP				

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING _____ HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 8

8 hrs Logging by Schlumberger

SIGNED B. Huber

DRILLER

TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING _____ HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 8

8 hrs Logging

SIGNED G. T. Boisson

DRILLER

TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING _____ HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 8

8 hrs. Logging

SIGNED H. J. J. J.

DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED A. T. T. T.

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL". IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S. W. Airport Creek TRACT NWT WELL NO. 1 DATE 12/15/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Ten-City Drilling Co
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Rotary-Turning 2504
 KIND OF FUEL Diesel FURNISHED BY TAKCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TAKCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
<u>I</u>	<u>2344</u>	<u>2373</u>	<u>- 29' Drilling Line - Stone</u>				<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>
					<u>299.0</u>	<u>2045.0</u>	<u>299.0</u>	<u>299.0</u>	<u>299.0</u>
				KELLY DOWN		<u>29.0</u>	<u>10.0</u>	<u>10.0</u>	
				TOTAL IN HOLE	<u>2373.0</u>	<u>2385.0</u>	<u>2385.0</u>	<u>2385.0</u>	
<u>II</u>	<u>2373</u>	<u>2385</u>	<u>- 12' Drilling Line - Stone</u>	DRILL BIT: SERIAL NO.	<u>72205</u>	<u>72205</u>			
				DRILL BIT: NUMBER	<u>21</u>	<u>21</u>			
				MAKE	<u>HTC</u>	<u>HTC</u>			
				TYPE	<u>DWS</u>	<u>OKS</u>			
<u>III</u>	<u>2385</u>	<u>2385</u>	<u>- T.O. POH to Log</u>	CORE BARREL: KIND					
			<u>POH w/ DPL 2385.65</u>	SIZE					
			<u>equal 5LPI 2384.64</u>	CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
			<u>Bit locked and</u>	STRAIGHT HOLE TEST AT					
			<u>No. 4 collar pin</u>	DEGREES OFF					
			<u>twisted off. WITH</u>	MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT		
			<u>with tapered top</u>	1					
			<u>and recovered fish.</u>	2					
			<u>Bit was completely</u>	3					
			<u>worn out with 4 3/4 hrs.</u>	CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT		
			<u>drilling time.</u>	1					
				2					
				3					
				4					
				MUD TYPE	<u>Water: Loss Circulation</u>				
				MUD WEIGHT					
				VISCOSITY: 1500 cc IN 1 quart OUT					
				PH					
				WATER LOSS: cc					
				FILTER CAKE	<u>1/32"</u>	<u>1/32"</u>	<u>1/32"</u>		
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING	<u>5</u>	<u>3</u>	<u>2</u>					
	CORING								
	DST. OPEN HOLE								
	LOGGING								
	CASING & WOC								
	DOWNTIME								
	COMPLETING								
	LOSS CIRCULATION	<u>3</u>	<u>5</u>						
	FISHING			<u>6</u>					
	CO. TIME w/DP	<u>8</u>	<u>8</u>	<u>8</u>					
	CO. TIME w/o LP								

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 PM TO 8:00 PM DRILLING 2 1/2 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 5 1/2
12:00-12:15 Trip for bit; 2:15-2:30 reaming; 2 1/2 hrs drilling; 3 1/2 hrs. NOW

SIGNED B. Huber DRILLER
 TOUR No. 2 FROM 8:00 AM TO 4:00 PM DRILLING 2 1/4 HRS. TRIPPING 1/2 HRS. REPAIRS _____ HRS. OTHER: 3 3/4
2 1/4 hrs. drilling; 1/2 hr. servicing; 1/2 hr. tripping; 5 hrs NOW

SIGNED G. Poisson DRILLER
 TOUR No. 3 FROM 4:00 PM TO 12:00 AM DRILLING _____ HRS. TRIPPING 6 1/2 HRS. REPAIRS _____ HRS. OTHER: 1/2
4:00-6:00 MHO; 6:00-8:15 Make up top & G.H.; 8:15-9:15 Make fish & work loose; 9:15-12:00 POH & log down Drill Collars

SIGNED H. Jandt DRILLER
 COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility. SIGNED H. H. HALL
 Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run.
 INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL".
 IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S. H. Airport Creek TRACT N.H.T. WELL NO. 1 DATE 12/14/60
 Name to be same as shown in permit to drill Designation
 FIELD Glossier CONTRACTOR Tri City Drilling Co.
 SIZE HOLE 6 1/2 REDUCED AT 259 KIND OF TOOLS Rotary: Failing 2500
 KIND OF FUEL Diesel FURNISHED BY TAKCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TAKCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
<u>I</u>	<u>2231</u>	<u>2292</u>	<u>-61'- Drilling Line - Stone</u>		<u>299.0</u>	<u>1982.0</u>	<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>
				KELLY DOWN					
				TOTAL IN HOLE					
<u>II</u>	<u>2292</u>	<u>2321</u>	<u>-29'- D.H.O</u>	DRILL BIT: SERIAL NO.	<u>72187</u>	<u>2012.0</u>	<u>72187</u>	<u>72187</u>	<u>72187</u>
				DRILL BIT: NUMBER	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>	<u>20</u>
				MAKE	<u>HTC</u>	<u>HTC</u>	<u>HTC</u>	<u>HTC</u>	<u>HTC</u>
				TYPE	<u>OWS</u>	<u>OWS</u>	<u>OWS</u>	<u>OWS</u>	<u>OWS</u>
<u>III</u>	<u>2321</u>	<u>2344</u>	<u>-23'- D.H.O</u>	CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT					
				DEGREES OFF					
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				1					
				2					
				3					
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				1					
				2					
				3					
				4					
				MUD TYPE	<u>Water: Loss Circulation</u>				
				MUD WEIGHT					
				VISCOSITY: 1500 cc 1" 1 quart OUT					
				PH					
				WATER LOSS: cc					
				FILTER CAKE	<u>1/32"</u>	<u>1/32"</u>	<u>1/32"</u>	<u>1/32"</u>	<u>1/32"</u>
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING						<u>3</u>	<u>2</u>	<u>3 1/2</u>
	CORING								
	DST. OPEN HOLE								
	LOGGING								
	CASING & WOC								
	DOWNTIME								
	COMPLETING								
	LOSS CIRCULATION						<u>5</u>	<u>6</u>	<u>2 1/4</u>
	FISHING								
	CO. TIME w/DP						<u>8</u>	<u>8</u>	<u>8</u>
	CO. TIME w/o /DP								

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 P.M. to 8:00 P.M. DRILLING 3 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 5
Drilling 3 hrs; Wait on Water due to loss circulation 5 hrs

SIGNED B. Huber DRILLER

TOUR No. 2 FROM 8:00 A.M. to 4:00 P.M. DRILLING 2 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 6
Drilling 2 hrs; Wait on Water 6 hrs.

SIGNED G. Fritsch DRILLER

TOUR No. 3 FROM 4:00 P.M. to 12:00 A.M. DRILLING 2 1/2 HRS. TRIPPING 1 1/4 HRS. REPAIRS _____ HRS. OTHER: 2 1/4
Drilling 2 1/2 hrs; Tripping 1 1/4 hrs; Service 1/2; WDW 1/4

SIGNED H. Judd DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility. SIGNED A. K. Hairell
 Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run.
 INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL"
 IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

TOUR NO.	NO. OF HOURS					
	DEPTH	FORMATION OR CORE	DATA AT END OF TOUR	TOUR 1	TOUR 2	TOUR 3

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

SIGNED B. Huber DRILLER

SIGNED G. Bissan DRILLER

SIGNED H. Sandt DRILLER

SIGNED _____

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL".
IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour.

FIELD Glacier CONTRACTOR Ty-City Pda Co

FIELD Glacier CONTRACTOR Ty-City Pda Co

104 950 771 51 21

SIZE HOLE 6 1/2 REDUCED AT 627 KIND OF TOOLS Rocky-Forming

KIND OF FUEL Diesel FURNISHED BY TPKCO FROM Storage NO. OF HOURS 24

WATER FURNISHED BY TRK 10 FROM L-400 34

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

SIGNED E. Huber DRILLER

SIGNED *G. P. Brown* DRIVER

SIGNED [Signature]

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED J. H. [Signature]

Tabulate drilling time, when taken, on Form 3B-74 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL". **IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY.**

IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

3B-10B-4-57

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE SW Airport Creek TRACT N.W.T. WELL NO. 1 DATE 12/11/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Tri-City Drilling Co.
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Rotary-Fishing 2500
 KIND OF FUEL Diescl FURNISHED BY TARCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TARCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
1	1799	1865	- 66' - Drilling blind - lost circulation at 1857' at 6:30 AM. Working on Water	3 1/2	299.0	1550.0	3 1/2	3 1/2	3 1/2
				KELLY DOWN					
				TOTAL IN HOLE					
				DRILL BIT: SERIAL NO.					
				DRILL BIT: NUMBER					
				MAKE					
				TYPE					
2	1865	1948	- 83' - Drilling blind & POH to run Cement Plug No. 4.						
				CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
3	1948	1948	- 0' - Run Cement Plug No. 4 of 50 sacks plus 2% Cellu from 1712' to 1948' w/DP at 1630' WOC						
				STRAIGHT HOLE TEST AT					
				DEGREES OFF					
				MUD MATERIAL: KIND					
				1. Cement					
				2. Cellu					
				3. Mulliber					
				CHEMICAL: KIND					
				1. Sandust					
				2.					
				3.					
				4.					
				MUD TYPE					
				MUD WEIGHT					
				VISCOSITY: 1500 cc IN 1 quart OUT					
				PH					
				WATER LOSS: cc					
				FILTER CAKE					
				FOR COMPANY REPRESENTATIVE ONLY					
				DRILLING					
				CORING					
				DST. OPEN HOLE					
				LOGGING					
				CASING & WOC					
				DOWNTIME					
				COMPLETING					
				LOSS CIRCULATION					
				FISHING					
				CO. TIME w/DP					
				CO. TIME w/o /DP					

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 4 1/2 HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 5 1/2
12:00-12:30-WOC; 12:30-2:30 Drill cut plug; 2:30-6:30-Drilg-lost circ. at 1857; 6:30-7:00 WOC; 7:00-7:15-Drilg; 7:15-8:00 WOC.
 SIGNED B. Huber DRILLER

TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING 2 1/2 HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 5 1/2
8:00-8:15-Set Rig; 8:15-8:30 Drilg; 8:30-10:00 WOC; 10:00-10:30 Drilg; 10:30-11:00 WOC; 11:00-11:45 Drilg; 11:45-12:15 WOC; 12:15-12:25 WOC; 12:25-2:15-Drilg+11:00; 2:15-2:30 Survey; 2:30-4:00 POH for run Plug
 SIGNED G. Fossion DRILLER

TOUR No. 3 FROM 4:00 P.M. TO 8:00 A.M. DRILLING HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 8
4:00-4:15-Set R. Rig & Check BOPs; 4:15-5:30 GTH w/DE; 5:30-6:00 Wait for Cement 6:00-7:00-Run Cement Plug No. 4; 7:00-8:00 POH; 8:00-12:00 WOC
 SIGNED H. Jandt DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED J. K. HALL

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL"

IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT OF LEASE S.W. Ardoot Creek TRACT N.W.T. WELL NO. 1 DATE 12/10/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Tri-City Drilling Co.
 SIZE HOLE 6 1/2 REDUCED AT 259 KIND OF TOOLS Electric-Pulling 2500
 KIND OF FUEL Diesel FURNISHED BY Conoco-TARCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TARCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
1	1761	1795	-34'- WOC. WITH # found top of plug at 1611' - had returns Drilled out plug to 1710' & lost returns. Drilling blind.	3 1/2	299.0	1488.0	3 1/2	3 1/2	3 1/2
				KELLY DOWN					
				TOTAL IN HOLE					
				DRILL BIT: SERIAL NO.					
				DRILL BIT: NUMBER					
				MAKE					
				TYPE					
				CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT					
				DEGREES OFF					
				MUD MATERIAL: KIND					
				1. Cement					
				2. Collar					
				3. Multifiber					
				CHEMICAL: KIND					
				1. Sawdust					
				2.					
				3.					
				4.					
				MUD TYPE					
				MUD WEIGHT					
				VISCOSITY: 1500 cc IN 1 quart OUT					
				PH					
				WATER LOSS: cc					
				FILTER CAKE					
				FOR COMPANY REPRESENTATIVE ONLY					
				DRILLING					
				CORING					
				DST. OPEN HOLE					
				LOGGING					
				CASING & WOC					
				DOWTIME					
				COMPLETING					
				LOSS CIRCULATION					
				FISHING					
				CO. TIME w/DP					
				CO. TIME w/o /DP					

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 5:00 A.M. DRILLING 1 3/4 HRS. TRIPPING 1/2 HRS. REPAIRS 1/2 HRS. OTHER: 6 1/4
12:00-1:30 WOC; 1:30-2:00 GIH; 2:00-2:45 Drill plug; 2:45-3:15 Drilg; 3:15-3:45 WOC; 3:45-4:00 Drilg
4:00-5:15 WOC; 5:15-5:45 Drilg; 5:45-6:30 WOC; 6:30-7:00 Drilg; 7:00-8:00 WOC.
 SIGNED B. Huber DRILLER
 TOUR No. 2 FROM 8:00 A.M. TO 12:00 P.M. DRILLING 1/2 HRS. TRIPPING 1/2 HRS. REPAIRS 1/2 HRS. OTHER: 7 1/2
8:00-8:15 Drilg; 8:15-8:30 Service Rq; 8:30-9:30 WOC; 9:30-12:00 Trip & GIH w/DE; 12:00-12:30
run Plug #3; 12:30-1:30 PCH; 1:30-4:00 WOC
 SIGNED G. Boisson DRILLER
 TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 1/2 HRS. TRIPPING 1/2 HRS. REPAIRS 1/2 HRS. OTHER: 8
4:00-10:00 WOC; Service Rq & Check BOPs; 10:00-10:15 fill hole; 10:15-11:30
GIH; 11:30-12:00 WOC
 SIGNED H. Jandi DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL"

IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S. M. Airport Creek TRACT N.W. 1/4 WELL NO. 1 DATE 12/9/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Tri-City Drilling Co.
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Kelly; Feeding 2500
 KIND OF FUEL Diesel FURNISHED BY TARCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TARCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
1	1731	1756	-25'- Drilling blind with water	KELLY DOWN	299.0	1427.0	3 1/2	3 1/2	3 1/2
				TOTAL IN HOLE					
2	1756	1761	-5'- Drilled blind & ran Cement Plug No. 2 of 50 sacks plug 2% CaCl ₂ from 1420' to 1756' w/ D.P. of 1500' POH to WOC 12 hrs.	DRILL BIT: SERIAL NO.	72172	1427.0	72172	72172	72172
				DRILL BIT: NUMBER	17		17	17	17
				MAKE	HTC		HTC	HTC	HTC
				TYPE	OWS		OWS	OWS	OWS
				CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
3	1761	1761	-0'- WOC Cement plug No. 2	STRAIGHT HOLE TEST AT DEGREES OFF					
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				1 Cement		50 sacks			
				2 Collar		200 "			
				3					
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				1					
				2					
				3					
				4					
				MUD TYPE	Water: loss circulation				
				MUD WEIGHT					
				VISCOSITY: 1500 cc IN 1 quart OUT					
				PH					
				WATER LOSS: cc					
				FILTER CAKE	/32"	/32"	/32"	/32"	/32"
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING	1	1/2						
	CORING								
	DST. OPEN HOLE								
	LOGGING								
	CASING & WOC								
	DOWNTIME								
	COMPLETING								
	LOSS CIRCULATION	7	7 1/2	8					
	FISHING								
	CO. TIME w/DP	8	5 1/2						
	CO. TIME w/o /DP		2 1/4	8					

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 AM TO 8:00 AM DRILLING 1 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER: 7
12:00-1:45 WOC; 1:45-3:15 GEN w/Bit; 3:15-3:30 fill mud tank; 3:30-4:00 Drilg; 4:00-5:00 WOC
5:00-5:15 Drilg; 5:15-6:45 WOC; 6:45-7:00 Drilg; 7:00-8:00 WOC
 SIGNED B. Huber DRILLER

TOUR No. 2 FROM 8:00 AM TO 4:00 PM DRILLING 1 1/2 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER: 7 1/2
8:00-8:15 Set. Rig; 8:15-8:45 Drilg; 8:45-11:30 Trip & GEN O.E.; 11:30-1:00 Wait for cement;
1:00-1:45 run cement plug; 1:45-3:00 POH; 3:00-4:00 WOC plug
 SIGNED G. Prission DRILLER

TOUR No. 3 FROM 4:00 PM TO 12:00 AM DRILLING 1 1/2 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER: 8
4:00-6:30 WOC, Service Rig, Check BOPs; 6:30-7:45 GEN; 7:45-12:00 WOC
Close in BOPs & installed second stream header
 SIGNED H. Javali DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED T. K. Hester

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL".

IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT OF LEASE S.W. Airport Creek TRACT N.W.T. WELL NO. 1 DATE 12/8/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Tri-City Drilling Co.
 SIZE HOLE 6 1/2 REDUCED AT 259 KIND OF TOOLS Rotary-Feeding 250
 KIND OF FUEL Diesel FURNISHED BY TARCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TARCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
1	1717	1724	-7'- Ran Diesel Gel Plug No. 1 of 5 666s Diesel & 25 649s (1250°) Supercol from 1670' to 1717' w/ D.P. at 1715' Worked 3 hrs; drilled out with returns; lost returns when plug drilled out, mixed mud & had no return Waiting for water.	3 1/2	299.0	1396.0	3 1/2	299.0	1396.0
				KELLY DOWN	29.0	36.0		36.0	
				TOTAL IN HOLE	1724	1731.0		1731.0	
				DRILL BIT: SERIAL NO.	67827	67827		67827	OK
				DRILL BIT: NUMBER	16	16		16	
				MAKE	HTC	HTC		HTC	
				TYPE	ONV	ONV		ONV	
				CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT					1731
				DEGREES OFF					1
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				1 Supercol	41 SCS				
				2 Oil Fiber	1 "				
				3 Sawdust	5 "				
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				1 Caustic	10 "				
				2 Kaylo	25 "				
				3 Cement					10 SCS
				Calcium Chloride					50 "
				MUD TYPE	Loss Circulation				
				MUD WEIGHT					
				VISCOSITY: 1500 cc IN 1 quart OUT					
				PH					
				WATER LOSS: cc					
				FILTER CAKE	/32"	/32"	/32"	/32"	/32"
				FOR COMPANY REPRESENTATIVE ONLY					
				DRILLING	1	1 1/2			
				CORING					
				DST. OPEN HOLE					
				LOGGING					
				CASING & WOC					
				DOWNTIME					
				COMPLETING					
				LOSS CIRCULATION	7	6 1/2		8	
				FISHING					
				CO. TIME w/DP	8	8		3 1/2	
				CO. TIME w/o /DP				4 1/2	

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 1 HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 7
12:00-1:00 Run Diesel Gel plug No. 1; 1:00-4:15 Stand back 45 fts, mixed mud, ran mud 45 fts
4:15-5:00 Drilled lost returns; 5:00-6:00 mix mud; 6:00-6:15 Drilling; 6:15-7:15 NOW; 7:15-7:30 Drilling; 7:30-8:00 NOW
 SIGNED B. Huber DRILLER

TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING 1 1/2 HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 6 1/2
8:00-8:15 Service Rig; 8:15-4:00 Drilling Blind & NOW

TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 8
4:00-4:15 Surveys; 4:15-4:30 Service Rig & check BOP; 4:30-6:00 P.M.; 6:00-7:30 P.M. in hole OE; 7:30-9:00 Run Cement Plug No. 1; 9:00-10:30 P.M.; 10:30-12:00 NOW
 SIGNED H. J. J. J. DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility. SIGNED H. J. J. J.
 Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run.
 INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL"
 IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S. W. Airport Creek TRACT N.W.T. WELL NO. 1 DATE 12/7/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Tu City Drilg Co.
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Rotary - Feeding 2500
 KIND OF FUEL Diesel FURNISHED BY TARCO FROM Storage NO. OF HOURS 2 1/2
 WATER FURNISHED BY TARCO FROM Loke NO. OF HOURS 2 1/2

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	1692	1712	- 20' - Drilled Limestone - last circulation at 1712' at 4:30 AM.	KELLY DOWN	299	1399	3 1/2	3 1/2	3 1/2
				TOTAL IN HOLE	1399	1712	299	299	299
II	1712	1712	- 0' - attempted to regain circulation	DRILL BIT: SERIAL NO.	16	16	16	16	16
				DRILL BIT: NUMBER	HTC	HTC	HTC	HTC	HTC
				MAKE	OWV	OWV	OWV	OWV	OWV
				TYPE					
III	1712	1717	- 5' - drilled blind to get through last circulation zone. Fluid level does not fall below 750'.	CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT					
				DEGREES OFF					
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				Supercol	3155	4655	2255	2255	2255
				Sawdust	1055	2255	1055	1055	1055
				Miltiber	655	1355	255	255	255
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				Caustic	2005	1055	1055	1055	1055
				Rayflo		2555			
				MUD TYPE	Mud White Red Mud w/ L.C.M.				
				MUD WEIGHT	10	8.6	8.5	8.5	8.5
				VISCOSITY: 1500 cc IN 1 quart OUT	40	50	47	47	47
				PH	11	10	9	9	9
				WATER LOSS: cc	10	14	11	11	11
				FILTER CAKE	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
FOR COMPANY REPRESENTATIVE ONLY.									
				DRILLING	11 1/4		4 1/4		
				CORING					
				DST. OPEN HOLE					
				LOGGING					
				CASING & WOC					
				DOWNTIME					
				COMPLETING					
				LOSS CIRCULATION	2 1/2	8	7 3/4		
				FISHING					
				CO. TIME w/DP	8	8	8		
				CO. TIME w/o /DP					

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 4 1/4 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER: 2 1/4
12:00-12:15 Set Rq; 12:15-4:30 Drilg; last returns; 4:30-7:00 mix mud & LCM;
7:00-7:30-Attempted circulation; 7:30-8:00 mix mud & LCM
 SIGNED B. Heber DRILLER
 TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING 1 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER: 2
8:00-8:15 Service Rq; Mix mud w/ LCM & clean out mud tanks-
 SIGNED G. Poisson DRILLER
 TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 1 1/4 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER: 7 3/4
4:00-8:45 Mix mud & LCM; 8:45-9:00 Drill Blind; 9:00-9:15 Service Rq &
check BOPs; 9:15-12:00 Prepare to run diesel-gel plug No. 1
 SIGNED H. Jandh DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED J. K. Walker

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL". IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S. W. Airport Creek TRACT NHT WELL NO. 1 DATE 12/7/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Tri City Drilling Co.
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Rotary-Feeding 2500
 KIND OF FUEL Diesel FURNISHED BY TARCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TARCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR		
	FROM	TO		TOUR 1	TOUR 2	TOUR 3
I	1692	1712	-20'-Drilled Limestone -last circulation at 1712' at 4:30 PM.	DRILL PIPE IN USE: SIZE 3 1/2 LENGTH DRILL COLLARS 299 LENGTH DRILL PIPE 1397 KELLY DOWN 16 TOTAL IN HOLE 17120	3 1/2 299 1397 16 17120	3 1/2 299 1397 21 17120
II	1712	1712	-0'-Attempted to regain circulation	DRILL BIT: SERIAL NO. 67827 DRILL BIT: NUMBER 16 MAKE HTE TYPE ONV	67827 16 HTE ONV	67827 16 HTE ONV
III	1712	1717	-5'-drilled blind to get through last circulation zone. Fluid level does not fall below 750'. Set diesel-gel plug consist- ing of 5 bbls Diesel & 25'(1250') Supercol at 1670 to 1717'-down at 12:30 AM 12/8/60. Worked 3 hrs. drilled out, had full returns. Drilled to 1720' & lost returns	CORE BARREL: KIND SIZE CORE BIT: SERIAL NO. CORE BIT: NUMBER KIND SIZE STRAIGHT HOLE TEST AT DEGREES OFF MUD MATERIAL: KIND AMOUNT 1. Supercol 315cs 2. Sawdust 10cs 3. Miltiber 6cs CHEMICAL: KIND AMOUNT 1. Caustic 200" 2. Royflo 10" 3. 4. MUD TYPE <u>Milwhite Red Mud w/ L.C. m.</u> MUD WEIGHT 10 VISCOSITY: 1500 cc IN 1 quart OUT 40 PH 11 WATER LOSS: cc 10 FILTER CAKE 2 1/2"	AMOUNT 315cs 10cs 6cs AMOUNT 200" 10" 25" AMOUNT 48cs 2 1/2" 13" AMOUNT 22cs 10" 2" AMOUNT 8.6 50 47 9 11 2 1/2"	AMOUNT 22cs 10" 2" AMOUNT 10" 10" 25" AMOUNT 8.5 47 9 9 11 2 1/2"
				FOR COMPANY REPRESENTATIVE ONLY		
				DRILLING	1 1/4	1/2
				CORING		
				DST. OPEN HOLE		
				LOGGING		
				CASING & WOC		
				DOWNTIME		
				COMPLETING		
				LOSS CIRCULATION	2 1/2	8
				FISHING		7 1/4
				CO. TIME w/DP	8	8
				CO. TIME w/o /DP		8

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 4 1/2 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 2 1/4
12:00-12:15 Set Rtg; 12:15-4:30 Drilling lost returns; 4:30-7:00 mix mud & LCM;
7:00-7:30-Attempted circulation; 7:30-8:00 mix mud & LCM
 SIGNED B. Hider DRILLER
 TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING _____ HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 8
8:00-8:15 Service Rtg; Mix mud w/ LCM & clean out mud tanks-
 SIGNED C. Poisson DRILLER
 TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 1 1/4 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 7 1/4
4:00-8:45 Mix mud & LCM; 8:45-9:00 DNN Blind; 9:00-9:15 Service Rtg &
check BOPs; 9:15-12:00 Prepare to run diesel-gel plug No. 1
 SIGNED H. Landry DRILLER
 SIGNED J. K. Walker
 COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL". IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S. W. Airport Creek TRACT N.W.T. WELL NO. 1 DATE 12/6/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Tri-City Drilg Co.
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Rotary-Falling 250
 KIND OF FUEL Diesel FURNISHED BY TARLO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TARLO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	1617	1617	- 0' - replaced rig pump drive bearing	KELLY DOWN	299	1304	3 1/2	3 1/2	3 1/2
II	1617	1641	- 24' - drilling limestone - lost circulation (± 20 barrels mud) at 1639'	TOTAL IN HOLE	299	1334	3 1/2	3 1/2	3 1/2
III	1641	1692	- 51' - drilling limestone had returns at 4:45 and resumed drilling at 5:00 PM with no further loss of fluid	DRILL BIT: SERIAL NO.	1304	1365	14	8	28
				DRILL BIT: NUMBER	1692	1692	1692	1641	1692
				MAKE					
				TYPE					
				CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT DEGREES OFF					
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				Supercol		15	5		
				Multiber		6	1		
				Sawdust		7	4		
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				1					
				2					
				3					
				4					
				MUD TYPE					
				MUD WEIGHT		6.8	10.1		
				VISCOSITY: 1500 cc IN 1 quart OUT		38	41		
				PH		11	8		
				WATER LOSS: cc		9	10.2		
				FILTER CAKE	1/32"	2/32"	2/32"		
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING		1 1/2	4 5/4	6 1/2				
	CORING								
	DST. OPEN HOLE								
	LOGGING								
	CASING & WOC								
	DOWNTIME		6 1/2		4 1/2				
	COMPLETING								
	LOSS CIRCULATION			2 3/4	1 1/4				
	FISHING								
	CO. TIME w/DP		1 1/2	8	8				
	CO. TIME w/o /DP		6 1/2						

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 1 1/2 HRS. TRIPPING 1 1/2 HRS. REPAIRS 6 1/2 HRS. OTHER: 12:00-6:30-replace rig pump drive bearing; 6:30-8:00 GTH

SIGNED B. Huber DRILLER
 TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING 4 HRS. TRIPPING 4 HRS. REPAIRS 4 HRS. OTHER: 8:00-8:15-Service rig; 8:15-1:15-Drilg - lost circ. at 1639'; 1:15-4:00 PMK mud & lost circ. material

SIGNED G. Brisson DRILLER
 TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 6 1/2 HRS. TRIPPING 4 HRS. REPAIRS 4 HRS. OTHER: 4:00-5:15 PMK mud & lost circulation material; 5:15-6:30 Drilg; 6:30-6:45 Work on Kelly hose; 6:45-7:00 Service rig & Check BOP; 7:00-12:00 Drilg

SIGNED H. Jondt DRILLER
 SIGNED J. H. Walters
 COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.
 Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run.
 INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL".
 IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S. N. Airport Creek TRACT N.W.T. WELL NO. 1 DATE 12/5/60
 FIELD Glacier Name to be same as shown in permit to drill Designation
 CONTRACTOR Ter City Drilg Co.
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Roby-Feeling 2500
 KIND OF FUEL Diesel FURNISHED BY TAKCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TAKCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
<u>I</u>	<u>1501</u>	<u>1563</u>	<u>-62'- Drilling Shale</u>				<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>
<u>II</u>	<u>1563</u>	<u>1600</u>	<u>-31'- Drilling Limestone</u>				<u>299</u>	<u>299</u>	<u>299</u>
<u>III</u>	<u>1600</u>	<u>1617</u>	<u>-17'- Ditto</u>				<u>1243</u>	<u>1272</u>	<u>1304</u>
				KELLY DOWN			<u>21</u>	<u>29</u>	<u>14</u>
				TOTAL IN HOLE			<u>1563</u>	<u>1606</u>	<u>1617</u>
				DRILL BIT: SERIAL NO.			<u>23613</u>	<u>23613</u>	<u>67827</u>
				DRILL BIT: NUMBER			<u>15</u>	<u>15</u>	<u>16</u>
				MAKE			<u>HTC</u>	<u>HTC</u>	<u>HTC</u>
				TYPE			<u>OWV</u>	<u>OWV</u>	<u>OWV</u>
				CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT					<u>1617</u>
				DEGREES OFF					<u>7 1/2</u>
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1					
				2					
				3					
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1					
				2					
				3					
				4					
				MUD TYPE	<u>Milwhite Red Mud</u>				
				MUD WEIGHT	<u>9.8</u>	<u>9.9</u>	<u>9.8</u>		
				VISCOSITY: 1500 cc IN 1 quart OUT	<u>39</u>	<u>40</u>	<u>40</u>		
				PH	<u>10</u>	<u>10</u>	<u>10</u>		
				WATER LOSS: cc	<u>9.2</u>	<u>8.8</u>	<u>8.2</u>		
				FILTER CAKE	<u>2/32"</u>	<u>2/32"</u>	<u>2/32"</u>		
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING				<u>8</u>	<u>8</u>	<u>5 3/4</u>		
	CORING								
	DST. OPEN HOLE								
	LOGGING								
	CASING & WOC								
	DOWNTIME							<u>2 1/4</u>	
	COMPLETING								
	LOSS CIRCULATION								
	FISHING								
	CO. TIME w/DP				<u>8</u>	<u>8</u>	<u>5 3/4</u>		
	CO. TIME w/o /DP						<u>2 1/4</u>		

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 2:00 A.M. DRILLING 7 1/2 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 1/4
12:00-12:15 Service Rig; 12:15-8:00 Drilg

SIGNED B. Huber DRILLER
 TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING 7 1/2 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 1/4
8:00-8:15- Drilg; 8:15-4:00 Drilg.

SIGNED G. Poisson DRILLER
 TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 3 1/2 HRS. TRIPPING 1 1/2 HRS. REPAIRS 2 1/2 HRS. OTHER: 1 1/2
4:00-4:30 Drilg; 4:30-4:45 Serv. Rig & Check BOP; 4:45-8:00 Drilg; 8:00-8:15 Survey
8:15-9:45-POH; 9:45-12:00 Work on pump & drive

SIGNED H. Jandt DRILLER
 SIGNED J. R. Walters
 COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.
 Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run.
 INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL"
 IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S. W. Airport Creek TRACT N.W.T. WELL NO. 1 DATE 12/14/68
 FIELD Glacier Name to be used as shown in permit to drill
 SIZE HOLE 6 1/2 REDUCED AT 259 KIND OF TOOLS Rotary-Fishing 2500
 KIND OF FUEL Diesel FURNISHED BY TARCO FROM Storage NO. OF HOURS 34
 WATER FURNISHED BY TARCO FROM lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	1412	1431	-19'-Drilling limestone		299	1119	3 1/2	3 1/2	3 1/2
II	1431	1474	-13'-Ditto	KELLY DOWN			13	25	21
III	1474	1501	-27'-Drilling Shale	TOTAL IN HOLE			1431	1474	1501
				DRILL BIT: SERIAL NO.					
				DRILL BIT: NUMBER					
				MAKE					
				TYPE					
				CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT					
				DEGREES OFF					
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				<u>Supercol</u>		<u>300 #</u>			
				2					
				3					
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				<u>Rayflo</u>		<u>25 #</u>			
				2					
				3					
				4					
				MUD TYPE <u>White Red Mud</u>					
				MUD WEIGHT	<u>9.7</u>	<u>9.6</u>	<u>9.7</u>		
				VISCOSITY: 1500 cc IN 1 quart OUT	<u>37</u>	<u>36</u>	<u>39</u>		
				PH	<u>11</u>	<u>12</u>	<u>11</u>		
				WATER LOSS: cc	<u>10</u>	<u>10</u>	<u>8.2</u>		
				FILTER CAKE	<u>2/32"</u>	<u>2/32"</u>	<u>2/32"</u>		
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING	<u>8</u>	<u>8</u>	<u>8</u>					
	CORING								
	DST. OPEN HOLE								
	LOGGING								
	CASING & WOC								
	DOWNTIME								
	COMPLETING								
	LOSS CIRCULATION								
	FISHING								
	CO. TIME w/DP	<u>8</u>	<u>8</u>	<u>7</u>					
	CO. TIME w/o /DP			<u>1</u>					

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 P.M. TO 8:00 P.M. DRILLING 6 1/2 HRS. TRIPPING 1 1/2 HRS. REPAIRS 1 1/2 HRS. OTHER: 4 1/2
12:00-12:15 Service Rig; 12:15-5:15 Drilling; 5:15-5:45 Work on pump; 5:45-6:00 Dlg;
6:00-6:45 Work on pump; 6:45-8:00 Drilling

SIGNED P. Huber

DRILLER

TOUR No. 2 FROM 8:00 P.M. TO 4:00 P.M. DRILLING 7 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER: 1
8:00-8:15 Service Rig; 8:15-9:45 Drilling; 9:45-10:00 Circulate Samples; 10:00-2:15 Dlg;
2:45-3:15 Condition mud; 3:15-4:00 Dlg.

SIGNED G. P. Mason

DRILLER

TOUR No. 3 FROM 11:00 P.M. TO 12:00 P.M. DRILLING 3 1/2 HRS. TRIPPING 3 1/2 HRS. REPAIRS 1 HRS. OTHER: 4 1/2
11:00-5:15 Dlg; 5:15-5:25 Service Rig & Check BOPs; 5:30-6:45 Dlg; 6:45-8:30 P.M.; 8:30-9:30
Work on pump lines; 9:30-11:00 G.H.; 11:00-12:00 Dlg.

SIGNED H. Landl

DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED H. J. Talley

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL". IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT OF LEASE S.W. 1/4 Sec 20-1-66 Creek No. 1 TRACT N.W. 1/4 WELL NO. 1 DATE 12/13/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Tec City Drilling Co.
 SIZE HOLE 6 1/2 REDUCED AT 259 KIND OF TOOLS Rotary-Fishing-2500
 KIND OF FUEL Diesel FURNISHED BY TARCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TARCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			
	FROM	TO		TOUR 1	TOUR 2	TOUR 3	
<u>I</u>	<u>1370</u>	<u>1386</u>	<u>-18'-Drilling Limestone</u>	DRILL PIPE IN USE: SIZE <u>299</u>	<u>299</u>	<u>299</u>	
				LENGTH DRILL COLLARS <u>1057</u>	<u>1086</u>	<u>1089</u>	
				LENGTH DRILL PIPE <u>30</u>	<u>17</u>	<u>24</u>	
				KELLY DOWN <u>1386</u>	<u>1402</u>	<u>1412</u>	
				TOTAL IN HOLE <u>73286</u>	<u>7328</u>	<u>5810</u>	
<u>II</u>	<u>1386</u>	<u>1402</u>	<u>-16'-Ditto</u>	DRILL BIT: SERIAL NO. <u>13</u>	<u>13</u>	<u>14</u>	
				DRILL BIT: NUMBER <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				MAKE <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				TYPE <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				CORE BARREL: KIND <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				SIZE <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				CORE BIT: SERIAL NO. <u>13</u>	<u>13</u>	<u>14</u>	
				CORE BIT: NUMBER <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				KIND <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				SIZE <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				STRAIGHT HOLE TEST AT <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				DEGREES OFF <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				MUD MATERIAL: KIND <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				AMOUNT <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				AMOUNT <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				AMOUNT <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				CHEMICAL: KIND <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				AMOUNT <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				AMOUNT <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				AMOUNT <u>HTL</u>	<u>HTL</u>	<u>HTL</u>	
				MUD TYPE <u>Milwaukee Red Mud</u>	<u>Milwaukee Red Mud</u>	<u>Milwaukee Red Mud</u>	
				MUD WEIGHT <u>9.7</u>	<u>9.7</u>	<u>9.7</u>	
				VISCOSITY: 1500 cc IN 1 quart OUT <u>36</u>	<u>37</u>	<u>37</u>	
				PH <u>11</u>	<u>12</u>	<u>11</u>	
				WATER LOSS: cc <u>9.2</u>	<u>9.6</u>	<u>10</u>	
				FILTER CAKE <u>2/32"</u>	<u>2/32"</u>	<u>2/32"</u>	
				FOR COMPANY REPRESENTATIVE ONLY			
				DRILLING <u>8</u>	<u>8</u>	<u>8</u>	
				CORING			
				DST. OPEN HOLE			
				LOGGING			
				CASING & WOC			
				DOWNTIME			
				COMPLETING			
				LOSS CIRCULATION			
				FISHING			
				CO. TIME w/DP <u>8</u>	<u>8</u>	<u>8</u>	
				CO. TIME w/o /DP			

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 12:00 A.M. DRILLING 6 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER 1 HRS.

12:00-12:15 Service Rig; 12:15-2:00 Work on pump; 2:00-3:00 Drilling

SIGNED B. Huber

DRILLER

TOUR No. 2 FROM 8:00 P.M. TO 4:00 P.M. DRILLING 5 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER 1 HRS.

8:00-8:15 Service Rig; 8:15-2:00 Drilling; 2:00-3:00 P.O.H.; 3:00-4:00 Slip & cut 120' drilling line

SIGNED G. P. Pison

DRILLER

TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 3 HRS. TRIPPING 1 HRS. REPAIRS 2 HRS. OTHER 1 HRS.

4:00-4:45 finish spooling drilling line; 4:45-5:15 Service Rig & check BOP's; 5:15-6:45 G.E.H.; 6:45-7:15 Drilling; 10:45-11:00 Work on pump; 11:00-12:00 Drilling

SIGNED H. Landi

DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are yours.

Tabulate drilling time, when taken, on Form 3B-744 and mail with this log. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL". IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY.

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT OF LEASE S.W. Airport Creek TRACT N.W.T. WELL NO. 1 DATE 12/2/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier CONTRACTOR Tu City Drilling Co.
 SIZE HOLE 6 1/2 REDUCED AT 259 KIND OF TOOLS Rotary-Feeding 2500
 KIND OF FUEL Diesel FURNISHED BY TAPCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TAPCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	1353	1355	0' - Tripped magnet & picked up core barrel		299	1031	299	299	299
II	1355	1367	12' - cut core No. 2. Full recovery; 12' Dolomitic ls dense w/ pockets sucrose ls which has poor fluorescence and milky cut. Upper part has few pinpoints to large vugs and fractures. Producing water and few vugs with traces light green oil		1031	1058	1031	1031	1058
III	1367	1370	- 3' - Keenied Kothole & started drilling		25	13	37	13	13
			Halliburton made TEST #2 from 1317 to 1367 w/ 5 1/2 packers set at 1317, 4 1/2 B.C.; TEST 30 mins, Test Open 30 mins, TEST 30 mins IN 680; IF 30; FF 45; IS 522; FS 510; FH 680. Very weak blow through-out test. Recovered 60' drilling mud		1355	1367	1367	1367	1370
				DRILL BIT: SERIAL NO.	KSP216	KSP216	KSP216	KSP216	73286
				DRILL BIT: NUMBER	12	12	12	12	13
				MAKE	Kellogg	Kellogg	Kellogg	Kellogg	HTC
				TYPE	□	□	□	□	FWH
				CORE BARREL: KIND	Christianson				
				SIZE	5 1/2	5 1/2			
				CORE BIT: SERIAL NO.	KSP216	KSP216			
				CORE BIT: NUMBER	1	1			
				KIND	Kellogg	Kellogg			
				SIZE	6 1/2 x 3 1/2	6 1/2 x 3 1/2			
				STRAIGHT HOLE TEST AT DEGREES OFF					
				MUD MATERIAL: KIND	Supercal				
				AMOUNT	600 lbs.				
				CHEMICAL: KIND					
				AMOUNT					
				MUD TYPE	White Red Mud				
				MUD WEIGHT	9.8	9.9			9.9
				VISCOSITY: 1500 cc IN 1 quart OUT	38	40			40
				PH	11	11			11
				WATER LOSS: cc	9.8	9.5			9.5
				FILTER CAKE	2 1/2"	2 1/2"			2 1/2"
				FOR COMPANY REPRESENTATIVE ONLY					
				DRILLING					1
				CORING	8	7			
				DST. OPEN HOLE		1			7
				LOGGING					
				CASING & WOC					
				DOWNTIME					
				COMPLETING					
				LOSS CIRCULATION					
				FISHING					
				CO. TIME w/DP	8	8			8
				CO. TIME w/o /DP					

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 P.M. TO 1:00 A.M. DRILLING 3 HRS. TRIPPING 3 HRS. REPAIRS 1/2 HRS. OTHER: 4 1/2
 12:00-1:00 Run in w/ magnet 1:00-1:15 Set. Rig 1:15-2:30 Cut & load mud; 2:30-4:30 PCH & lay down S.D.C. w; 4:30-4:45 - Pick up Core Barrel 4:45-5:15 - Work on pump; 5:15-8:00 Run in hole & put 2 singles
 SIGNED B. Huber DRILLER

TOUR No. 2 FROM 8:00 P.M. TO 12:00 A.M. DRILLING 3 HRS. TRIPPING 3 HRS. REPAIRS 3 HRS. OTHER: 5
 8:00-8:15 Set wire log; 8:15-10:00 Keen 40' to bottom with Core Barrel; 10:00-3:00 Coring 3:00-4:00 put test tool
 SIGNED G. Peterson DRILLER

TOUR No. 3 FROM 11:00 P.M. TO 1:00 A.M. DRILLING 3 1/2 HRS. TRIPPING 3 HRS. REPAIRS 1/2 HRS. OTHER: 7
 11:00-5:30 Make up & GTH w/ T.T.; 5:30-7:30 Testing; 7:30-7:45 Set. Rig & Check BOPs; 7:45-9:20 PCH & lay down T.T.; 9:20-11:00 Run in hole; 11:00-11:15 Work on pump; 11:15-11:30 Clean & set; 11:30-12:00 Drilling
 SIGNED A. Smith DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility. SIGNED J. H. Walters
 Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run.
 INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL".
 IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE Subsidiary Creek TRACT N.W.T. WELL NO. 1 DATE 12/1/60
 Name to be same as shown in permit to drill Designation
 FIELD Elmer CONTRACTOR Tri City Drilling Co.
 SIZE HOLE 6 1/2 REDUCED AT 259 KIND OF TOOLS Rotary-Following 2500
 KIND OF FUEL Diesel FURNISHED BY TAKLO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TAKLO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			
	FROM	TO		TOUR 1	TOUR 2	TOUR 3	
I	1230	1318	-88'-Drilg Limestone	DRILL PIPE IN USE: SIZE	3 1/2	3 1/2	3 1/2
				LENGTH DRILL COLLARS	448	448	448
				LENGTH DRILL PIPE	842	869	871
II	1318	1334	-16'-Drilg & Trip for bit	KELLY DOWN	28	17	36
				TOTAL IN HOLE	1318	1334	1355
III	1334	1355	-21'-Prepared to core	DRILL BIT: SERIAL NO.	60393	60393	73286
				DRILL BIT: NUMBER	10	10	11
				MAKE	HTC	HTC	HTC
				TYPE	CSC-16	CSC-16	ONV
				CORE BARREL: KIND			
				SIZE			
				CORE BIT: SERIAL NO.			
				CORE BIT: NUMBER			
				KIND			
				SIZE			
				STRAIGHT HOLE TEST AT		1320	
				DEGREES OFF		1/2	
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT
				1.			
				2.			
				3.			
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT
				1.			
				2.			
				3.			
				4.			
				MUD TYPE	Caseitic-Quelchacho		
				MUD WEIGHT	10	10	9.9
				VISCOSITY: 1500 cc IN 1 quart OUT	37	38	35
				PH	11	12	10
				WATER LOSS: cc	8.5	8.6	10
				FILTER CAKE	2/32"	2/32"	2/32"
				FOR COMPANY REPRESENTATIVE ONLY			
				DRILLING	8	8	6 1/2
				CORING			1 1/2
				DST. OPEN HOLE			
				LOGGING			
				CASING & WOC			
				DOWNTIME			
				COMPLETING			
				LOSS CIRCULATION			
				FISHING			
				CO. TIME w/DP	8	8	8
				CO. TIME w/o /DP			

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 7 1/2 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 3/4
12:00-12:15 Service Rig; 12:15-1:45 Drilg; 1:45-2:15 Circ. Sample
2:15-8:00 Drilg

SIGNED B. Huber DRILLER
 TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING 6 3/4 HRS. TRIPPING 1/2 HRS. REPAIRS _____ HRS. OTHER: 1/2
8:00-8:15 Serv. Rig; 8:15-3:00 Drilg; 3:00-3:15 Survey; 3:15-4:00 Tripping

SIGNED _____ DRILLER
 TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 2 1/2 HRS. TRIPPING 3/4 HRS. REPAIRS 3/4 HRS. OTHER: 2 1/2
4:00-4:15 Finish pot; 4:15-5:15 Service Rig & Ch. 20 PSI; 5:15-6:30 G.H. 630 T.D.
Drilg; 7:45-8:30 Change die Compressor; 8:30-9:45 Drilg; 9:45-10:15 Circ. Samples
10:15-12:00 P.O.H. Run in w/ magnet

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED _____

DRILLER

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL"

IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back, carry TD and Plugged Back Depth, each tour)

UNIT OF LEASE S.W. Airport Creek No 1 TRACT N.H.T. WELL NO. 1 DATE Nov. 30, 1960
 FIELD Glacier Name to be same as shown in permit to drill
 SIZE HOLE 6 1/2 REDUCED AT 259 KIND OF TOOLS Rotary - Forcing 2500
 KIND OF FUEL Diesel FURNISHED BY TAKCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TAKCO FROM Local NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
<u>I</u>	<u>1003</u>	<u>1086</u>	<u>- 83' - drilling shale.</u>				<u>3 1/2</u>	<u>3 1/2</u>	<u>3 1/2</u>
<u>II</u>	<u>1086</u>	<u>1168</u>	<u>- 82' " "</u>				<u>4 1/2</u>	<u>4 1/2</u>	<u>4 1/2</u>
<u>III</u>	<u>1168</u>	<u>1230</u>	<u>- 62' " "</u>				<u>6 1/2</u>	<u>6 3/4</u>	<u>7 1/2</u>
				KELLY DOWN			<u>17</u>	<u>36</u>	<u>36</u>
				TOTAL IN HOLE			<u>10 1/2</u>	<u>11 1/8</u>	<u>12 1/2</u>
				DRILL BIT: SERIAL NO.			<u>60396</u>	<u>60396</u>	<u>60393</u>
				DRILL BIT: NUMBER			<u>9</u>	<u>9</u>	<u>10</u>
				MAKE			<u>HTC</u>	<u>HTC</u>	<u>HTC</u>
				TYPE			<u>CSC-16</u>	<u>CSC-16</u>	<u>CSC-16</u>
				CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT					<u>1200</u>
				DEGREES OFF					<u>1/4</u>
				MUD MATERIAL: KIND			AMOUNT	AMOUNT	AMOUNT
				1.					
				2.					
				3.					
				CHEMICAL: KIND			AMOUNT	AMOUNT	AMOUNT
				1.					
				2.					
				3.					
				4.					
				MUD TYPE			<u>Caustic - Guebracho</u>		
				MUD WEIGHT			<u>9.8</u>	<u>9.9</u>	<u>9.9</u>
				VISCOSITY: 1500 cc IN 1 quart OUT			<u>38</u>	<u>36</u>	<u>35</u>
				PH			<u>11</u>	<u>12</u>	<u>11</u>
				WATER LOSS: cc			<u>10</u>	<u>9 1/2</u>	<u>8.5</u>
				FILTER CAKE			<u>2/32</u>	<u>2/32</u>	<u>2/32</u>
				FOR COMPANY REPRESENTATIVE ONLY					
				TIME ANALYSIS CO. TIME	DRILLING		<u>8</u>	<u>8</u>	<u>8</u>
					CORING				
					DST. OPEN HOLE				
					LOGGING				
					CASING & WOC				
					DOWNTIME				
					COMPLETING				
					LOSS CIRCULATION				
					FISHING				
					CO. TIME w/DP		<u>8</u>	<u>8</u>	<u>8</u>
					CO. TIME w/o DP				

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 7 1/4 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 1 1/4
12:00-1:00 Drilling; 1:00-1:15 Service Rig; 1:15-8:00 Drilling

SIGNED B. Huber DRILLER
 TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING 7 1/4 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 1 1/4
8:00-8:15 Service Rig; 8:15-4:00 Drilling

SIGNED G. Ponsori DRILLER
 TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 7 1/4 HRS. TRIPPING 3 HRS. REPAIRS _____ HRS. OTHER: 1 1/4
4:00-4:15 Ser. Rig & Check BOP; 4:15-6:45 Drilling; 6:45-7:00 Survey; 7:00-10:00 Trip for Bit; 10:00-12:00 Drilling

SIGNED H. Landi DRILLER
 SIGNED A. S. Walters

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

Calculate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL". IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY.

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S.W. Airport Creek No. 1 TRACT N.W.T. WELL NO. 1 DATE Nov. 29, 1962
 FIELD Glacier Project Name to be same as shown in permit to drill
 SIZE HOLE 6 7/8 REDUCED AT 259 KIND OF TOOLS Rotary; Failing 2500
 KIND OF FUEL Diesel FURNISHED BY Tarco FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY Tarco FROM hwy NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	796	886	90' - drlg Dolomitic Shale	KELLY DOWN	448.0	404.0	3 1/2	3 1/2	3 1/2
II	886	918	32' - drlg Dolomitic Shale	TOTAL IN HOLE	448.0	430.0	3 1/2	3 1/2	3 1/2
III	918	1003	85' - drlg Dolomitic Shale	DRILL BIT: SERIAL NO.	34.0	27.0	3 1/2	3 1/2	3 1/2
				DRILL BIT: NUMBER	886.0	918.0	72629	72629	60396
				MAKE	7	8	7	7	8
				TYPE	HTC	HTC	HTC	HTC	HTC
				CORE BARREL: KIND	OSC	OSC	OSC	OSC	OSC-16
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT				900	
				DEGREES OFF				1/2	
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				1. Supercol		1000#		950#	
				2. 21					
				3.					
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				1. Rayflo					300#
				2. hq co		50#			
				3.					
				4.					
				MUD TYPE	Fresh Water Gel				
				MUD WEIGHT	9.8	9.9			9.8
				VISCOSITY: 1500 cc IN 1 quart OUT	36.0	37.0			36.0
				PH	11.0	11.0			11.0
				WATER LOSS: cc	11.0	10.0			10.0
				FILTER CAKE	2/32"	2/32"			2/32"
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING				8		8		8
	CORING								
	DST. OFF: HOLE								
	LOGGING								
	CASING & WOC								
	DOWNTIME								
	COMPLETING								
	LOSS CIRCULATION								
	FISHING								
	CO. TIME w/DP				8		8		8
	CO. TIME w/o /DP								

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 8 HRS. TRIPPING 8 HRS. REPAIRS 8 HRS. OTHER 8
12:00-12:15 Drlg; 12:15-12:30 Drlg; 12:30-8:00 Drlg.

SIGNED B. Huber DRILLER
 TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING 3 HRS. TRIPPING 2 1/4 HRS. REPAIRS 1 HRS. OTHER 1 3/4
8:00-8:15 Ser. Rig; 8:15-8:45 Drlg; 8:45-9:45 Condition mud; 9:45-10:20 Drlg; 10:20-10:40 Cond. mud; 10:40-12:30 Drlg; 12:30-12:45 Survey; 12:45-1:45 - Repair hoist chain; 1:45-4:00 trip for Bit

SIGNED G. Poisson DRILLER
 TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 5 1/4 HRS. TRIPPING 3 1/4 HRS. REPAIRS 1 HRS. OTHER 1 1/2
4:00-4:45 finish going in hole; 4:45-5:00 Ser. Rig & ch. BOP's; 5:00-6:00 mix mud 6:00-8:00 Drlg; 8:00-8:15 gun mud tank; 8:15-12:00 - Drlg -

SIGNED H. Jandl DRILLER
 SIGNED W. K. Walters
 COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.
 Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run.
 INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL"
 IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S.W. Airport Creek TRACT N.W.T. WELL NO. 1 DATE Nov. 28, 1960
 FIELD Glacier Project Designation
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Rotary; Failing 2500
 KIND OF FUEL Diesel FURNISHED BY Tarco FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY Tarco FROM inake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	NO. OF HOURS			
	FROM	TO		TOUR 1	TOUR 2	TOUR 3	
I	570	650	80' - drlg. limestone.	DRILL PIPE IN USE: SIZE	3 1/2	3 1/2	3 1/2
				LENGTH DRILL COLLARS	448.0	448.0	448.0
				LENGTH DRILL PIPE	158.0	248.0	342.0
				KELLY DOWN	14.0	5.0	6.0
				TOTAL L. HOLE	650.0	701.0	796.0
				DRILL BIT: SERIAL NO.	69142	69142	72629
				DRILL BIT: NUMBER	6	6	7
				MAKE	HTC	HTC	HTC
				TYPE	OSC	OSC	OSC
				CORE BARREL: KIND			
				SIZE			
				CORE BIT: SERIAL NO.			
				CORE BIT: NUMBER			
				KIND			
				SIZE			
				STRAIGHT HOLE TEST AT DEGREES OFF		700 1/2	
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT
				1.			
				2.			
				3.			
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT
				1. Caustic		100 #	
				2. hqco		150 #	
				3.			
				4.			
				MUD TYPE	Fresh Water Gel		
				MUD WEIGHT	9.4	9.7	9.6
				VISCOSITY: 1500 cc IN 1 quart OUT	34.0	38.0	38.0
				PH	10.0	10.0	10.0
				WATER LOSS: cc	10.0	10.0	11.0
				FILTER CAKE	2/32"	2/32"	2/32"
				FOR COMPANY REPRESENTATIVE ONLY			
				DRILLING	8	8	8
				CORING			
				DST. OPEN HOLE			
				LOGGING			
				CASING & WOC			
				DOWNTIME			
				COMPLETING			
				LOSS CIRCULATION			
				FISHING			
				CO. TIME w/DP	8	8	8
				CO. TIME w/o /DP			

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 7 3/4 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 1/4
12:00-12:45 - Drlg; 12:45-1:00 Serv. Rig; 1:00-8:00 Drlg-

SIGNED B. Huber DRILLER
 TOUR No. 2 FROM 8:00 A.M. TO 1:00 P.M. DRILLING 5 HRS. TRIPPING 2 3/4 HRS. REPAIRS _____ HRS. OTHER: 1/4
8:00-8:15 Serv. Rig; 8:15-1:00 Drlg; 1:00-1:15 Survey; 1:15-4:00 Tripping

SIGNED G. Poisson DRILLER
 TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 8 1/4 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 3/4
4:00-4:30 - Serv. Rig & Check BOP's; 4:30-9:00 Drlg; 9:00-9:15 Gun mud tanks
9:15-12:00 Drlg

SIGNED H. Jandi DRILLER
 SIGNED W.K. Walker
 COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.
 Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run.
 INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL".
 IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S.W. Airport Creek TRACT N.W. T WELL NO. 1 DATE Nov. 27, 1962
 FIELD Glacier Project CONTRACTOR Tri-City Drilg
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Rotary-Fairing 2500
 KIND OF FUEL Diesel FURNISHED BY Tarco FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY Tarco FROM hake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	396	460	64'-finished cutting Core #1-Pottery core barrel	5" D.C.	448.22	2.58	5" D.C.		3 1/2
II	460	482	22'-drilled ls & prepared for DST #1		448.22	2.50			448.0
III	482	510	28'-finished DST #1 drilling ls		9.28	31.0			93.0
				TOTAL IN HOLE	460.0	482.0			510.0
				DRILL BIT: SERIAL NO.	4	60387			69142
				DRILL BIT: NUMBER		5			6
				MAKE		HTC			HTC
				TYPE		OSC-16			OSC
				CORE BARREL: KIND	Christmas				
				SIZE	5 1/2				
				CORE BIT: SERIAL NO.	KS821624				
				CORE BIT: NUMBER	1				
				KIND	Kochelite				
				SIZE	6 1/8 X 3 1/2				
				STRAIGHT HOLE TEST AT DEGREES OFF	400	0			
				MUD MATERIAL: KIND	1. Supercal				15 SKS
					2. Melbar				1 SK
					3.				
				CHEMICAL: KIND	1. Caustic				60*
					2. Hgco				1 SK
					3. Bicarb		100 =		
					4.				
				MUD TYPE	Fresh Water Gel				
				MUD WEIGHT	9.2	9.3			9.1
				VISCOSITY: 1500 cc IN 1 quart OUT	43.0	50.0			40.0
				PH	11.0	11.0			11.0
				WATER LOSS: cc	10.0	10.0			10.0
				FILTER CAKE	2/32"	2/32"			2/32"
				FOR COMPANY REPRESENTATIVE ONLY					
				DRILLING	6	1 1/2			5
				CORING	2				
				DST. OPEN HOLE		6 1/2			3
				LOGGING					
				CASING & WOC					
				DOWNTIME					
				COMPLETING					
				LOSS CIRCULATION					
				FISHING					
				CO. TIME w/DP	8	8			8
				CO. TIME w/o /DP					

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 AM TO 8:00 AM DRILLING 3 1/2 HRS. TRIPPING 3 1/2 HRS. REPAIRS 1/4 HRS. OTHER: 3/4
 12:00-12:15 Coring; 12:15-2:15 P.O.H. & lay down Core Barrel; 2:15-3:45 W.I.H. & reamed 1st; 3:45-4:15 reamed rat hole; 4:15-5:30 Drilg; 5:30-5:45 Run Survey; 5:45-6:30 Drilg; 6:30-6:45 Repairs; 6:45-8:00 Drilg
 SIGNED B. Huber DRILLER

TOUR No. 2 FROM 8:00 AM TO 4:00 PM DRILLING 1 1/2 HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 1 1/2
 8:00-8:15 Serv. Rig; 8:15-9:30 Drilg; 9:30-10:30 circulate for test; 10:30-11:30 pull out to test; 11:30-1:00 Make up test tool; 1:00-2:00 W.I.H. w/ T.T.; 2:00-4:00 Testing
 SIGNED G. Pison DRILLER

TOUR No. 3 FROM 6:00 AM TO 12:00 AM DRILLING 3 3/4 HRS. TRIPPING 1 1/4 HRS. REPAIRS HRS. OTHER: 3
 4:00-4:15 Spool Sand line; 4:15-6:30 P.O.H. & lay down T.T.; 6:30-7:00 Serv. Rig & Check B.P.s; 7:00-8:15 W.I.H.; 8:15-12:00 Drilg
 SIGNED H. Jandi DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED W.K. Walter

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL". IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S.W. Airport Creek TRACT N.W.T. WELL NO. 1 DATE Nov 26, 1960
 FIELD Glacier Project CONTRACTOR Tri-City Drilg Co.
 SIZE HOLE 6 1/4 REDUCED AT 259 KIND OF TOOLS Rotary-Fairling 2500
 KIND OF FUEL Diesel FURNISHED BY Tarco FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY Tarco FROM hake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	259	335	-76'-drilling shale.	KELLY DOWN	298.14	2.50	5"D.C.	5"D.C.	5"D.C.
II	335	370	-35'-tripped Magnet before coring.	TOTAL IN HOLE	335.00	34.36	358.00	10.00	328.60
III	370	396	-26'-cutting Core #1	DRILL BIT: SERIAL NO.	97908	3	390.00	390.00	396.00
				DRILL BIT: NUMBER	3	HTC	4		
				MAKE	HTC	OSC-3	OSC-3		
				TYPE	OSC-3	OSC-3			
				CORE BARREL: KIND					Christianson
				SIZE					5 1/2
				CORE BIT: SERIAL NO.					KSP21624
				CORE BIT: NUMBER					1
				KIND					Kobelite
				SIZE					6 1/8 x 3 1/2
				STRAIGHT HOLE TEST AT DEGREES OFF					
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1. Supercol	10 SKS				
				2. Milbar	5 "				
				3.					
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1. Bicerb	5 1/2 "				
				2. Caustic	50 "				
				3.					
				4.					
				MUD TYPE	Fresh Water	Gel			
				MUD WEIGHT	9.0	8.9	9.0		
				VISCOSITY: 1500 cc IN 1 quart OUT	37.0	39.0	37.0		
				PH	8.0	9.0	8.0		
				WATER LOSS: cc	8.0	8.0	8.0		
				FILTER CAKE	2/32"	2/32"	2/32"		
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING	8	5						
	CORING		3	8					
	DST. OPEN HOLE								
	LOGGING								
	CASING & WOC								
	DOWNTIME								
	COMPLETING								
	LOSS CIRCULATION								
	FISHING								
	CO. TIME w/DP	4	8	8					
	CO. TIME w/o /DP	4							

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 4 HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 4
 12:00-2:45 Null; 2:45-3:00 Drill out plug; 3:00-3:45 Work on rig; 3:45-4:15 Drill out plug; 4:15-4:45 Drilg; 4:45-6:15- drain mud tank & Cond. mud; 6:15-8:00 Drilling
 SIGNED B. Huber DRILLER

TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING 5 HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 3
 8:00-8:30- Drilg; 8:30-9:00 Service rig & conn; 9:00-10:00 Drilg; 10:00-11:00 trip out & run magnet for Core #1
 SIGNED G. Poisson DRILLER

TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 8
 4:00-4:45 PDH to Core; 4:45-5:15 Service rig & check BAPs; 5:15-5:45 Pick up core barrel & service same; 5:45-7:15 GTH w/ core barrel; 7:15-7:45 circulate hole; 7:45-12:00 Coring
 SIGNED H. Jandi DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility. SIGNED W.K. Walter
 Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run.
 INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL"
 IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S.W. Airport Creek TRACT NWT WELL NO. 1 DATE 11/25/60
Name to be same as shown in permit to drill
 FIELD Glacier Project CONTRACTOR Tri-City Drilling Co.
 SIZE HOLE 7" REDUCED AT Surface KIND OF TOOLS Rotary - Ealing 2500
 KIND OF FUEL Diesel FURNISHED BY Tarco FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY Tarco FROM lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			
	FROM	TO		TOUR 1	TOUR 2	TOUR 3	
I	259	259	W.O.C.	DRILL PIPE IN USE: SIZE			
				LENGTH DRILL COLLARS			
				LENGTH DRILL PIPE			
				KELLY DOWN			
				TOTAL IN HOLE			
II	259	259	W.O.C. & N.W. BOPs	DRILL BIT: SERIAL NO.			
				DRILL BIT: NUMBER			
				MAKE			
				TYPE			
III	259	259	Nipping up-	CORE BARREL: KIND			
				SIZE			
				CORE BIT: SERIAL NO.			
				CORE BIT: NUMBER			
				KIND			
				SIZE			
				STRAIGHT HOLE TEST AT			
				DEGREES OFF			
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT
				1.			
				2.			
				3.			
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT
				1.			
				2.			
				3.			
				4.			
				MUD TYPE			
				MUD WEIGHT			
				VISCOSITY: 1500 cc IN			
				1 quart OUT			
				PH			
				WATER LOSS: cc			
				FILTER CAKE	/ 32"	/ 32"	/ 32"
				FOR COMPANY REPRESENTATIVE ONLY			
				DRILLING			
				CORING			
				DST. OPEN HOLE			
				LOGGING			
				CASING & WOC	8	8	8
				DOWNTIME			
				COMPLETING			
				LOSS CIRCULATION			
				FISHING			
				CO. TIME w/DP			
				CO. TIME w/o /DP	8	8	8

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. to 8:00 A.M. DRILLING _____ HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 8
12:00 - 8:00 - W.O.C.

SIGNED B. Huber DRILLER

TOUR No. 2 FROM 8:00 A.M. to 4:00 P.M. DRILLING _____ HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 4
8:00 - 12:00 W.O.C.; 12:00 - 4:00 - lay down landing j. & P.U. BOPs -

SIGNED _____ DRILLER

TOUR No. 3 FROM 4:00 P.M. to 12:00 A.M. DRILLING _____ HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: _____
4:00 - 12:00 - Nipple up, raise & level rig

SIGNED H. Jandl DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED W. K. Walters

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL"

IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S.W. Airport Creek TRACT N.W.T WELL NO. 1 DATE 11/24/60
 Name to be same as shown in permit to drill Designation
 FIELD Glacier Project CONTRACTOR Tri-City Drilling Co.
 SIZE HOLE 8 3/4 REDUCED AT 65' KIND OF TOOLS Rotary - Failing 2500
 KIND OF FUEL Diesel FURNISHED BY Tarco FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY Tarco FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	65	140	- 75' - drilling shale	KELLY DOWN	20.69	34.50	250		
II	140	251	137' - drilling shale	TOTAL IN HOLE	140.00	251.00	259.00		
III	251	259	2' - Surface csq pt.	DRILL BIT: SERIAL NO.	80626	80626	80626		
				DRILL BIT: NUMBER	2	2	2		
				MAKE	HTC	HTC	HTC		
				TYPE	OSC-3	OSC-3	OSC-3		
				CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT	69				
				DEGREES OFF	3/4				
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1. Milbar	10 sax				
				2. Supercal	20 "				
				3. Caustic	75 lbs				
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1.					
				2.					
				3.					
				4.					
				MUD TYPE	Fresh Water Gel				
				MUD WEIGHT	9.5	9.6	9.5		
				VISCOSITY: 1500 cc IN 1 quart OUT	39	50	40.0		
				PH	11	10	9.0		
				WATER LOSS: cc	11	12	8.0		
				FILTER CAKE	2/32"	3/32"	2/32"		
				FOR COMPANY REPRESENTATIVE ONLY					
				DRILLING	5	8			
				CORING					
				DST. OPEN HOLE					
				LOGGING					
				CASING & WOC				8	
				DOWNTIME					
				COMPLETING					
				LOSS CIRCULATION					
				FISHING					
				CO. TIME w/DP	5	8			
				CO. TIME w/o /DP	3			8	

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 5 HRS. TRIPPING HRS. REPAIRS 1 HRS. OTHER: 2
12:00-12:15 Survey; 12:15-12:30 Service Rig; 12:30-1:30 Work on pump; 1:30-3:00 mix mud; 3:00-8:00 drilling

SIGNED B. Huber DRILLER

TOUR No. 2 FROM 8:00 A.M. TO 11:00 P.M. DRILLING 7 3/4 HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 4 1/4
8:00-8:15 Service rig; 8:15-4:00 Drilling

SIGNED G. Poisson DRILLER

TOUR No. 3 FROM 4:00 P.M. TO 11:00 P.M. DRILLING 1 1/4 HRS. TRIPPING HRS. REPAIRS HRS. OTHER: 6 3/4
4:00-4:15 Service rig; 4:15-5:30 P.M. to run 7" csq; 5:30-7:00 run csq- 7:00-9:00 throwing equipment; 9:00-11:00 circulate csq down; 11:00-12:00 cement csq

SIGNED H. Jandt DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility. SIGNED W. K. Walters
 Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run.
 INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL".
 IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S.W. Airport Creek TRACT N.W.T. WELL NO. 1 DATE Nov. 23, 1960
 Name to be same as shown in permit to drill Designation
 FIELD Glacier Project CONTRACTOR Tri-City Drilling Co.
 SIZE HOLE 9 5/8 REDUCED AT Surface KIND OF TOOLS Failing 2.500 Rotary
 KIND OF FUEL Diesel FURNISHED BY Tarco FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY Tarco FROM lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	65	65	Waiting on Water to drill out conductor pipe plug	KELLY DOWN	29.65	29.65		3 1/2	3 1/2
				TOTAL IN HOLE				2.50	2.50
				DRILL BIT: SERIAL NO.				34.00	36.50
II	65	65	Drilling conductor pipe plug	DRILL BIT: NUMBER				66.15	68.15
				MAKE				80626	80626
				TYPE				2	2
III	65	69	4'- Drilled out plug	CORE BARREL: KIND				HTC	HTC
				SIZE				OSC-3	OSC-3
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT					
				DEGREES OFF					
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1. Milbar		150 lb			
				2.					
				3.					
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1.					
				2.					
				3.					
				4.					
				MUD TYPE	Native				
				MUD WEIGHT					
				VISCOSITY: 1500 cc IN 1 quart OUT					
				PH					
				WATER LOSS: cc					
				FILTER CAKE	/32"	/32"	/32"		
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING			8	8				
	CORING								
	DST. OPEN HOLE								
	LOGGING								
	CASING & WOC			8					
	DOWNTIME								
	COMPLETING								
	LOSS CIRCULATION								
	FISHING								
	CO. TIME w/DP			8	8	8			
	CO. TIME w/o /DP			8					

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. to 8:00 A.M. DRILLING 1 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER: Wow 7
7:00 hrs - Waiting on water - one truck fell through lake ice - second stuck in Muck.
1:00 hr - Tripping in hole SIGNED H. Jandi DRILLER
 TOUR No. 2 FROM 8:00 A.M. to 4:00 P.M. DRILLING 6 3/4 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER: 13/4
8:00-9:45 - Preparing to drill out plug; 9:45-4:00 - Drilling on Plug
 SIGNED G. Poirson DRILLER
 TOUR No. 3 FROM 4:00 P.M. to 12:00 A.M. DRILLING 7 3/4 HRS. TRIPPING 1/4 HRS. REPAIRS 1 HRS. OTHER: 1
4:00-6:15 Drilling on Plug; 6:15-6:30 - trip to check Bit; 6:30-11:15 Drilling on Plug
11:15-12:00 Drilling SIGNED H. Jandi DRILLER
 SIGNED W.K. Walter

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL". IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S.W. Airport Creek TRACT N.W.T WELL NO. 1 DATE 11/24/60
Name to be same as shown in permit to drill
Designation
 FIELD Glacier Project CONTRACTOR Tri-City Drilg Co.
 SIZE HOLE 8 3/4 REDUCED AT 65' KIND OF TOOLS Rotary - Failing 2500
 KIND OF FUEL Diesel FURNISHED BY Tarco FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY Tarco FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	65	140	- 75' - drilling shale	5" DC's	119.35	2.50	5" DC's	5" DC's	5" DC's
II	140	251	137' - drilling shale	KELLY DOWN	20.69	20.69	34.50	250	250
III	251	259	2' - Surface csq pt.	TOTAL IN HOLE	140.00	257.00	259.00	259.00	259.00
			Ran Surface casing of 9 lts 7"-20" J55 csq. Pipe 246.92	DRILL BIT: SERIAL NO.	80626	80626	80626	80626	80626
			Howco guide shoe 1.25	DRILL BIT: NUMBER	2	2	2	2	2
			Total Pipe 248.17	MAKE	HTC	HTC	HTC	HTC	HTC
			RKB to CH collar 8.85	TYPE	OSC-3	OSC-3	OSC-3	OSC-3	OSC-3
			Pipe Set at 259.02	CORE BARREL: KIND					
			Howco S-2 centralizers at 252 & 58'	SIZE					
			Halliburton cemented w/ 50 sac Inland Cement plus 4% CaCl ₂ - cement circulated	CORE BIT: SERIAL NO.					
			Plug displaced w/ water & 3 barrels diesel at surface	CORE BIT: NUMBER					
			Plug down at 231' w/ 500 psi at 12:05 AM "hrs/b W.O.C.	KIND					
				SIZE					
				STRAIGHT HOLE TEST AT DEGREES OFF	69	3/4			
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				1. Milbar	10 sac				
				2. Supercal	20 "				
				3. Caustic	75 lbs				
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT	AMOUNT	AMOUNT
				1.					
				2.					
				3.					
				4.					
				MUD TYPE	Fresh Water Gel				
				MUD WEIGHT	9.5	9.6	9.5		
				VISCOSITY: 1500 cc IN 1 quart OUT	39	50	40.0		
				PH	11	10	9.0		
				WATER LOSS: cc	11	12	8.0		
				FILTER CAKE	2/32"	3/32"	2/32"		
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING	5	8						
	CORING								
	DST. OPEN HOLE								
	LOGGING								
	CASING & WOC							8	
	DOWNTIME								
	COMPLETING								
	LOSS CIRCULATION								
	FISHING								
	CO. TIME w/DP	5	8						
	CO. TIME w/o /DP	3						8	

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 AM TO 8:00 AM DRILLING 5 HRS. TRIPPING HRS. REPAIRS 1 HRS. OTHER 2
 12:00-12:15 Survey; 12:15-12:30 Service Rig; 12:30-1:30 Work on pump; 1:30-3:00 mix mud; 3:00-8:00 drilling

SIGNED B. Huber DRILLER

TOUR No. 2 FROM 8:00 AM TO 11:00 PM DRILLING 7 3/4 HRS. TRIPPING HRS. REPAIRS HRS. OTHER 1/4
 8:00-8:15 Service rig; 8:15-4:00 Drilling

SIGNED G. Poisson DRILLER

TOUR No. 3 FROM 4:00 PM TO 12:00 AM DRILLING HRS. TRIPPING 1 1/4 HRS. REPAIRS HRS. OTHER 6 3/4
 4:00-4:15 Service rig; 4:15-5:30 P.O.H. to run 11" csq; 5:30-7:00 run csq - 7:00-9:00 thawing equipment; 9:00-11:00 circulate csq. down; 11:00-12:00 cement csq

SIGNED H. Sandl DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility. SIGNED W. K. Walter
 Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL".
 IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

PIPE TALLY

SUB TOTALS

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S.W. Airport Creek TRACT N.W.T. WELL NO. 1 DATE Nov. 23, 1960
Name to be same as shown in permit to drill
 FIELD Glacier Project CONTRACTOR Tri-City Drilling Co.
 SIZE HOLE 9 5/8 REDUCED AT Surface KIND OF TOOLS Failing 2500 Rotary
 KIND OF FUEL Diesel FURNISHED BY Tarco FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY Tarco FROM hose NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			TOUR 1	TOUR 2	TOUR 3
	FROM	TO		DRILL PIPE IN USE: SIZE	LENGTH DRILL COLLARS	LENGTH DRILL PIPE			
I	65	65	Waiting on Water to drill out conductor pipe plug					3 1/2	3 1/2
								29.65	29.65
								2.50	2.50
								34.00	36.50
								66.15	68.15
II	65	65	Drilling conductor pipe plug	DRILL BIT: SERIAL NO.				80626	80626
				DRILL BIT: NUMBER				2	2
				MAKE				HTC	HTC
				TYPE				OSC-3	OSC-3
III	65	69	4' - Drilled out plug	CORE BARREL: KIND					
				SIZE					
				CORE BIT: SERIAL NO.					
				CORE BIT: NUMBER					
				KIND					
				SIZE					
				STRAIGHT HOLE TEST AT DEGREES OFF					
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1. <u>Milbar</u>		150			
				2.					
				3.					
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT		
				1.					
				2.					
				3.					
				4.					
				MUD TYPE	Native				
				MUD WEIGHT					
				VISCOSITY: 1500 cc IN 1 quart OUT					
				PH					
				WATER LOSS: cc					
				FILTER CAKE	/32"	/32"	/32"		
FOR COMPANY REPRESENTATIVE ONLY									
TIME ANALYSIS CO. TIME	DRILLING			8		8			
	CORING								
	DST. OPEN HOLE								
	LOGGING								
	CASING & WOC			8					
	DOWNTIME								
	COMPLETING								
	LOSS CIRCULATION								
	FISHING								
	CO. TIME w/DP					8		8	
	CO. TIME w/o DP			8					

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 8:00 A.M. DRILLING 1 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER: Wow?
7:00 hrs - Waiting on water - one truck fell through lake ice - second stuck in
musky
1:00 hr. Tripping in hole
 SIGNED H. Jandl DRILLER
 TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING 6 3/4 HRS. TRIPPING 1 HRS. REPAIRS 1 HRS. OTHER: 13/4
8:00-9:45 - Preparing to drill out plug; 9:45-4:00 - Drilling on Plug
 SIGNED G. Parsson DRILLER
 TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 7 3/4 HRS. TRIPPING 1/4 HRS. REPAIRS 1 HRS. OTHER: 1
4:00-6:15 Drilling on Plug; 6:15-6:30 - trip to check Bit; 6:30-11:15 Drilling on Plug
11:15-12:00 Drilling
 SIGNED H. Jandl DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED W.K. Walter

Tabulate drilling time, when taken, on Form 3B-741 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL".

IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S. H. Airport Creek No. 1 TRACT N. 1/2 WELL NO. 1 DATE Nov. 22, 1960
 Name to be same as shown in permit to drill Designation
 FIELD Glacier Project CONTRACTOR Tri-City Drilling Co. #3
 SIZE HOLE 13 3/4 REDUCED AT _____ KIND OF TOOLS Tooling 2500
 KIND OF FUEL Diesel FURNISHED BY TARCO FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY TARCO FROM Lake NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			
	FROM	TO		TOUR 1	TOUR 2	TOUR 3	
1	41	65	Conductor Casing point	DRILL PIPE IN USE: SIZE <u>3.50</u>			
				LENGTH DRILL COLLARS <u>29.65</u>			
				LENGTH DRILL PIPE			
				KELLY DOWN <u>21.85</u>			
				TOTAL IN HOLE <u>65.00</u>			
			Run Conductor 9 7/8	DRILL BIT: SERIAL NO. <u>22590</u>			
			Casing string as follows:	DRILL BIT: NUMBER <u>2</u>			
			Howco Guide Shoe 12 3/4	MAKE <u>HTC</u>			
			1 H 9 7/8 - 32.30 * H 40 - 30.06	TYPE <u>OSC-3</u>			
			1 H 9 7/8 - 36.0 * 155 - 32.07	CORE BARREL: KIND			
			Total Pipe <u>53.36</u>	SIZE			
			RKB to G.L. <u>7.80</u>	CORE BIT: SERIAL NO.			
			Pipe Set at <u>61.16</u>	CORE BIT: NUMBER			
				KIND			
				SIZE			
				STRAIGHT HOLE TEST AT			
				DEGREES OFF			
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT
				1.			
				2.			
				3.			
			Halliburton cemented w/ 40 50 x Halliburton	CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT
			Inland Cement plus	1.			
			4% CaCl ₂ - plug down	2.			
			at 6:20 AM w/ 500 lbs.	3.			
			P.P. - displaced top	4.			
			casing to 3 bbls diesel	MUD TYPE <u>Water</u>			
			to eliminate freezing	MUD WEIGHT			
			Temperature: -20°F	VISCOSITY: 1500 cc IN 1 quart OUT			
				PH			
				WATER LOSS: cc			
				FILTER CAKE	/ 32"	/ 31"	/ 32"
			Installed 9 7/8 casing clamp.	FOR COMPANY REPRESENTATIVE ONLY			
				DRILLING	2:45		
				CORING			
				DST. OPEN HOLE			
				LOGGING			
				CASING & WOC	5 1/2		
				DOWNTIME			
				COMPLETING			
				LOSS CIRCULATION			
				FISHING			
				CO. TIME w/DP	2 3/4		
				CO. TIME w/o /DP	5 1/2		

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 PM TO 8:00 PM DRILLING 2 1/4 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER 5 1/2
2 1/4 hrs. drilling 13 3/4 conductor hole; 3 3/4 hrs. circulating, running
2 1/2 hrs. 9 7/8 casing; 1 1/2 hrs. W.O.C.

SIGNED _____ DRILLER

TOUR No. 2 FROM 8:00 PM TO 4:00 PM DRILLING _____ HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER 8
8 hrs. W.O.C.

SIGNED _____ DRILLER

TOUR No. 3 FROM 4:00 PM TO 12:00 AM DRILLING _____ HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER 8
2 1/2 hrs WOC; 5 1/2 hrs waiting on water - one truck fell through
lake ice second truck fell through muskeg

SIGNED J. H. Walters DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

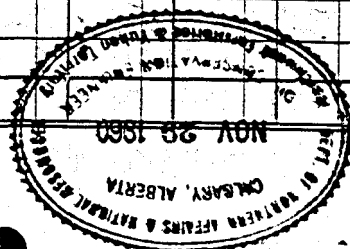
SIGNED _____

Tabulate drilling time, when taken, on Form 3B-744 and mail with this form. Note depth each time bit pulled and reason for pulling and depth sharp bit run. INDICATE DATE AND HOUR RIG RELEASED AND MARK LAST REPORT "FINAL".

IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

JTS	FEEET	WT.	GRADE	TH.	CL	CMTD. W/SLURRY CONSISTING OF
1	33296	32.3	Hallo	KT	L	LL0 Hawco Island
1	2987	36.0	LS5	L	L	CMT. PLUS LL% Co Ch
						SCRATCHERS: —
						CENTRALIZERS: Halliburton hinge at 60'55"
						TIME PLUG DOWN: 6:20 AM TOP CMT. PLUG: 59'
						CSG. HD.:
						TBG. HD.:

SETTING DATA		XMAS TREE:
SHOE:		
SET JT.	123	
COLLAR		
2 JTS PIPE	5213	
TOTAL	5336	
RKS TO BHP	780	PICKUP JT.:
DEPTH SET	6116	PACKER:

[illegible]

THE ATLANTIC REFINING COMPANY

LOG: DRILLING WELL ☒ WORKOVER ☐

(Place "X" in proper space above. After TD is reached, if well is plugged back carry TD and Plugged Back Depth, each tour)

UNIT or LEASE S.W. Airport Creek TRACT _____ WELL NO. 1 DATE Nov. 21, 1960
 Name to be same as shown in permit to drill
 FIELD Glacier Project CONTRACTOR Tu-City Drilling Co. #3
 SIZE HOLE 13 3/4 REDUCED AT _____ KIND OF TOOLS Rotary
 KIND OF FUEL Diesel FURNISHED BY Atlantic FROM Storage NO. OF HOURS 24
 WATER FURNISHED BY Atlantic FROM Creeks NO. OF HOURS 24

TOUR NO.	DEPTH		FORMATION OR CORE CORE INTERPRETATION MUST BE SIGNED	DATA AT END OF TOUR			
	FROM	TO		TOUR 1	TOUR 2	TOUR 3	
1	0	0	Rigging up	DRILL PIPE IN USE: SIZE			
2	0	0	Rigged up & drilled Rathole	LENGTH DRILL COLLARS			29.65
				LENGTH DRILL PIPE			5.50
				KELLY DOWN			6.75
3	0	40	Well Spudded at 5:30 PM	TOTAL IN HOLE			39.90
				DRILL BIT: SERIAL NO.			22590
				DRILL BIT: NUMBER	1	2	
				MAKE	Hawthorne	HTC	
				TYPE	King	CSC-3	
				CORE BARREL: KIND			
				SIZE			
			Est'd Gr. Elev.: 487'	CORE BIT: SERIAL NO.			
			RKB to G.L.: 780'	CORE BIT: NUMBER			
				KIND			
				SIZE			
				STRAIGHT HOLE TEST AT			
				DEGREES OFF			
				MUD MATERIAL: KIND	AMOUNT	AMOUNT	AMOUNT
				1.			—
				2.			—
				3.			—
				CHEMICAL: KIND	AMOUNT	AMOUNT	AMOUNT
				1.			—
				2.			—
				3.			—
				4.			—
				MUD TYPE			Water
				MUD WEIGHT			
				VISCOSITY: 1500 cc IN 1 quart OUT			
				PH			
				WATER LOSS: cc			
				FILTER CAKE	/32"	/32"	/32"
FOR COMPANY REPRESENTATIVE ONLY							
TIME ANALYSIS CO. TIME	DRILLING						6 1/2
	CORING						
	DST. OPEN HOLE						
	LOGGING						
	CASING & WOC Rathole & 20 DOWNTIME						1 1/2
	COMPLETING						
	LOSS CIRCULATION						
	FISHING						
	CO. TIME w/DP						6 1/2
	CO. TIME w/o /DP						1 1/2

Concise explanation of all delays and reasons therefor SHALL be indicated by each driller and verified by Company representative. Time chargeable to Company on day rate basis SHALL be fully explained.

TOUR No. 1 FROM 12:00 A.M. TO 2:00 A.M. DRILLING _____ HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 8
Rigging up

SIGNED _____

DRILLER

TOUR No. 2 FROM 8:00 A.M. TO 4:00 P.M. DRILLING _____ HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 8
2 3/4 hrs. Rigging up rathole digger and throwing blocks
5 1/4 hrs digging rathole

SIGNED _____

DRILLER

TOUR No. 3 FROM 4:00 P.M. TO 12:00 A.M. DRILLING 6 1/2 HRS. TRIPPING _____ HRS. REPAIRS _____ HRS. OTHER: 1 1/2
1 hr. Drilling Rathole; 1/2 hr. rigging up to drill; 6 1/2 hrs drilling
13 3/4 Conductor hole

SIGNED J. H. Hester

DRILLER

COMPANY REPRESENTATIVE: Accuracy and Completeness are your responsibility.

SIGNED _____

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IMPORTANT: ALL APPLICABLE SPACES MUST BE FILLED BEFORE MAILING. REPORT TO BE MAILED EACH DAY

246-11-6-16

VELOCITY DETERMINATION REPORT

ON

THE ATLANTIC REFINING COMPANY

SOUTHWEST AIRPORT CREEK NO. 1

NORTHWEST TERRITORIES, CANADA



BY

THE ATLANTIC REFINING COMPANY

1961

C O N T E N T S

General Information - - - - -	Page 1
Geophysical Technique - - - - -	Page 1
Computation - - - - -	Page 1
Discussion of Results - - - - -	Page 2

Enclosure:

Geophysical Log

1. Sonic Log
2. Index Map
3. Shooting Plan
4. Up-Hole Time
5. Velocity Determination
6. Time-Depth and Velocity Curves
7. Velocity Survey Records
8. Reflection Records

GENERAL INFORMATION

Schlumberger of Canada ran a sonic log and Electronic Logging and Velocity Co., Ltd. made a conventional velocity survey on December 16 and 17, 1960 in The Atlantic Refining Company, Southwest Airport Creek No. 1 well, located 66°21'10" north latitude and 129°14'44" west longitude, Northwest Territories, Canada.

Kelly block elevation was 490 feet above sea level. The well was drilled to a depth of 2385 feet.

Velocity observations were made at 12 detector levels ranging from 330 feet to 2380 feet below the kelly block. A total of 16 records were taken and are reproduced with the geophysical log.

GEOPHYSICAL TECHNIQUE

Shots were made at a 29 foot depth 100 feet north of the well. Charges varied from 1½ lbs. to 5 lbs.

Trace arrangement on the velocity records was as follows:

- 1st trace - - - - Time Break
- 2nd trace - - - - Up-Hole Seismometer
- 3rd trace - - - - Well Seismometer (High Sensitivity)
- 4th trace - - - - Well Seismometer (Medium Sensitivity)
- 5th trace - - - - Well Seismometer (Low Sensitivity)
- 6th trace - - - - Seismometer on Cable at Kelly Block
- 7th trace - - - - Reference Seismometer

The check-fork signal appears on the bottom of the records.

COMPUTATIONS

A diagram appearing on the velocity determination data sheet in the geophysical log describes the method of computation. Seismic times are

referred to a plane of 300 feet above sea level using an elevation correctional velocity of 8500 feet per second.

DISCUSSIONS OF RESULTS

A graphical representation of results is included with the log. Vertical time, average velocity and interval velocity are plotted against depth below the datum plane. The interval velocities obtained from the conventional velocity survey were converted to interval transit time in microseconds per foot and plotted on the sonic log for comparison.

All measurements are considered reliable.

THE ATLANTIC REFINING COMPANY

C. H. Hightower
C. H. HIGHTOWER
Chief Geophysicist

R. E. Whitmore
District Geophysicist

Compiled by:
C. A. Petersen