

N.W.T. HEART LAKE

NO. 2

Drilling Authority No.

Date Issued

WELL NAME H.W.T. Heart Lake No. 2 I-11

FIELD Wildcat

Area: Alexandra Falls

LOCATION: Unit I

Section 44

Grid 61-00 -116-30

Latitude 60°50'30" N.

Longitude 116°37'30" W.

From Established Reference Marker

Rig Release Date: 14-1-55

Status D & A

Information Release Date 14-1-57

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.

Copy to: Chief, Lands Division

CANADA

DEPARTMENT OF RESOURCES AND DEVELOPMENT

LANDS DIVISION TERRITORIAL ADMINISTRATION AND LANDS BRANCH

(ABANDONMENT)
(COMPLETION)
(SUSPENSION)

EXPORT

(Stroke out operations which do not apply)

To be submitted in triplicate in accordance with
Section 70 of the Territorial Oil and Gas Regulations
to the Conservation Engineer at Edmonton, Alberta.

Name of well N.W.T. Heart Lake No. II ✓

Permit No. 654.....
Lease No.

Registered owner Cody R. Spencer (In trust, Drilling company General Petroleum Ltd.
for N.W.T. Petroleum Ltd.)

Location: (Survey description) 60° - 50' - 30" N. Lat......

..... 116° - 37' - 30" W. Long......

^{Information later}
Elevation: Ground Kelly bushing Depth.....

Spudded Dec. 20, 1954 Finished drilling Jan. 14, 1955 Rig released Jan. 14, 1955.....

Deviations from vertical.....

CASING

	<u>Size O.D.</u> <u>inches</u>	<u>Amount</u> <u>feet</u>	<u>Grade</u>	<u>New or</u> <u>used</u>	<u>Set at</u> <u>feet</u>	<u>Sacks</u> <u>cement</u>
1.	<u>7"</u>	<u>240.20</u>	<u>#40</u> ..	<u>Nov</u>...	.....	<u>55</u> ..
2.	.....	.....	.....	.....	.....	.....
3.	.....	.....	.....	.....	.....	.....

TUBING

.....

Status of well on completion of drilling Dry Hole.....

Producing zone None.....

Cored intervals #1. 1206' - 1213.5'; #2. 1213.5' - 1214.5'; #3. 1264' - 66'.....

Interval logged: E-log M-log

R-log Other

DRILLSTEM TESTS

<u>Test No.</u>	<u>Date</u>	<u>Interval tested</u>	<u>Duration</u>	<u>Results</u>
<u>#1</u>	<u>Jan. 7-55</u>	<u>1249' - 1266'</u>	<u>3 hrs.</u>	<u>Dry</u>
<u>#2</u>	<u>Jan. 10-55</u>	<u>1249' - 1266'</u>	<u>2 hrs.</u>	<u>Neutral</u>

(Over)

*noted
JHS*

#3	Jan. 10-55	1249' - 66'	... 32. hff.	120' - Sulphurous Salt Water
#4	Jan. 10-55	1412' - 29'	... 3. hff.	130' - Salty Sulphur Water
#5	Jan. 12-55	1557' - 74'	... 52. hff.	1246' - Salty Sulphur Water
#6	Jan. 14-55	1611' - 48'	... 32. hff.	1521' - Salty Sulphur Water

Perforations: (Gun.....))
 (Det.....))
 Shooting:)
 Hydraulically fracturing:)
 Chemical treatment:)
 Date initial production tests:)
 Initial production data:) **None**
 Pumping or flowing)
 Plug back:)
 Other:)

CEMENT PLUGS SET

<u>From</u>	<u>To</u>	<u>Sacks cement</u>	<u>Felt At</u>
..1192'	..1300'	25...	.....
..225'	..245'	8...	.....
.....			
.....			
.....			
.....			

Electric log is appended:	Yes.....	No... x ..
Radioactivity log is appended:	Yes.....	No... x ..
Micrometer log is appended:	Yes.....	No... x ..
Geologic record or strip log ^{is} submitted	Yes... x ..	No.....
Results of tests for porosity, permeability, and saturation of each stratum containing oil, gas or water are ^{will be} submitted	Yes.....	No.....

ADDITIONAL DETAILS AND COMMENTS

.....Unable to obtain E. Log due to mechanical difficulties.....

Signed
 Address

CANADA

DEPARTMENT OF RESOURCES AND DEVELOPMENT

NORTHERN ADMINISTRATION AND LANDS BRANCH

NOTICE OF INTENTION TO BEGIN DRILLING OPERATIONS

(To be submitted in triplicate to the Conservation Engineer at Edmonton, Alberta at least 15 days prior to the commencement of drilling).

In accordance with Section 59 of the Territorial Oil and Gas Regulations, notice is hereby given of our intention to begin drilling a well on Oil and Gas Permit No. **834** registered in the name of
Lease No.

Cody R. Spencer (In Trust for N.W.T. Petroleum)

TYPE OF WELL:

Stratigraphic test: Wildcat: ..X...
Structure Test: Development:
Anticipated number of holes (Required for Structure Test Only)
Expected total depth: ..**1050'**....feet.

The well will be located:

..... of S boundary) of (Permit No.....) at approx **50°-50'-30" N** Lat.
..... (S of N boundary) (Lease No.....)
..... (W of E boundary) of (Permit No.....) at approx **116°-37'-30" W** Long.
..... (E of W boundary) (Lease No.....)

Survey description of location: **Not available yet**

Approximate surface elevation of ...**775'**.....feet above sea level.

Name of well: ...**N.W.T. Heart Lake #11**

Type of drilling rig: ...**Falling 55**

Expected date of commencement: **December 18, 1964**

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

Size O.D. inches	Weight lbs/foot	Grade	Brand	New or used	Estimated depth	Sacks of cement
1. 7"	20	540	.....	New	250'	.....
2. ....	.....	.....	.....	.....	.....	.....
3. ....	.....	.....	.....	.....	.....	.....

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

.....

..... **Slave Point Limestone 1170'**

..... **Presquille dolomite 1420'**

.....

.....

(over)

Noted

An electric log (will) be run
(will)

The well will be drilled by: **General Petroleum Ltd.**, (name of company)

Responsible agents of permittee or lessee in charge of operation:

At well: **A. J. R. Bergquist** At registered office: **C. Matthews**

Postal address: **Hay River, N. W. T.** Postal address: **234 - 9th Ave. W., Calgary**

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

Dated at **Edmonton** this **18th** day of **December** 19**54**

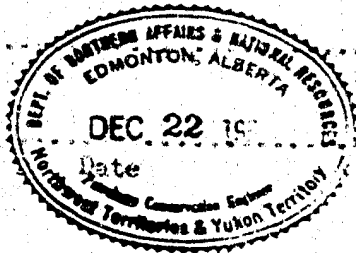
N. W. T. PETROLEUMS LTD.

Signed by **N. H. Brantwell**

Per

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

.....
.....
.....
.....
.....



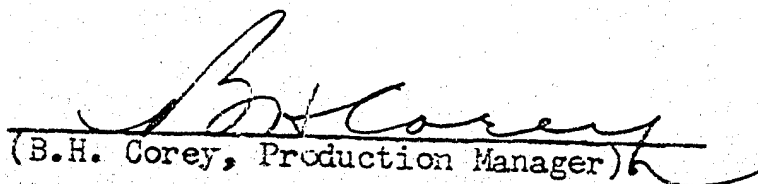
A. B. Inver
Conservation Engineer

PROGRESS REPORT
on the
DRILLING, CORING, TESTING AND ABANDONMENT
of the
NORTHWEST TERRITORIES HEART LAKE NO. 2 WELL
located at
Latitude 60° , $50'$, $30''$ North; Longitude 116° , $37'$, $30''$ West
- Heart Lake, Northwest Territories -

Compiled by:

A.J.R. Bergquist, B.Sc., and B.E. Smith.

Approved by:


(B.H. Corey, Production Manager)

Written: April 18, 1955.
Typed: April 25, 1955.

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SCOPE

This report covers the drilling, coring, drill stem testing and abandonment of the Northwest Territories Heart Lake No. 2 well located at Latitude 60° , $50'$, ~~$45''$~~ ^{$30''$} North; Longitude 116° , $37'$, $30''$ West.

All available information has been included from the time the well was spudded until it had been drilled, cored, tested and abandoned in the Presqu'ile formation of the Middle Devonian age.

- - - o o - - -

DATA PERTINENT TO DRILLING, CORING, TESTING AND ABANDONMENT

Name of Company: Northwest Territories Petroleums Limited

Name of Well: Northwest Territories Heart Lake No. 2

Location: Latitude 60°, 50', 45" North;
Longitude 116°, 37', 30" West.

Elevations: Ground: 721.9' (Survey - White & Lloyd Seismic, April, 1955).
Kelly Bushing: 729.5'.

Drilling Contractor: General Petroleums of Canada Limited - Rig #F-55, A.J.R. Bergquist, Toolpusher.

Surface Casing: Set at 240.2'.
232.6', 7", 20#, 8 Rd.Thd., Rge. 2, J-55, Stewart & Lloyds casing. Cemented with 55 sax cement. General Petroleums of Canada Limited. Cement returns obtained.

Geological Markers: Hay River Shale 30'
Slave Point Limestone 1206'
Presqu'ile Dolomite 1255'

Cored Intervals: 1206' - 1214.5', 1264' - 1266' (Diamond Cores).

Formation Tests: D.S.T. #1 - 1249' - 1266' - Slave Point/
Presqu'ile - Misrun.
Recovered 180' dead drilling mud.
D.S.T. #2 - 1249' - 1266' - Slave Point/
Presqu'ile - Misrun.
Recovered 30' dead drilling mud.
D.S.T. #3 - 1249' - 1266' - Slave Point/
Presqu'ile - valve open 3 hours, 45 minutes. Recovered 120' dead, salty, sulphurous water with oil scum.
D.S.T. #4 - 1412' - 1429' - Presqu'ile Dolomite - valve open 3 hours. Recovered 430' gassy, salty, sulphurous water with oil scum.
D.S.T. #5 - 1556' - 1573' - Presqu'ile Dolomite - valve open 5 hours, 15 minutes. Recovered 1034' slightly gassy, salty, sulphurous water.
D.S.T. #6 - 1631' - 1648' - Presqu'ile Dolomite - valve open 3 hours, 15 minutes. Shut in 3 hours. Recovered 1521' gassy, salty, sulphur water.

DATA PERTINENT TO DRILLING, CORING, TESTING AND ABANDONMENT (CONT'D)Well Logs:

None run.

Total Depth:

1648'.

Abandonment Plugs:Plug #1 - 1175' - 1300' with 25 sack
cement.Plug #2 - 220' - 260' with 8 sack cement.

Welded steel plate over 7" casing.

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DAILY PROGRESS REPORT

Date	From	To	Footage	Remarks
<u>Dec. 18/54</u>	- -	- -	- -	Rig move and general rigging up operations were completed and the rat hole was dug.
<u>Dec. 19</u>	- -	235	235	Ran in rat hole liner and rigged up to spud. Picked up 9" OSC bit, spudded the well in at 1:00 A.M., and drilled ahead with 9" bits for 20 1/4 hours. Changed bits after 7 1/2 hours at 75' and to same size OSC-3 after 3 hours at 105'.
<u>Dec. 20</u>	235	246	11	Drilled ahead with 9" OSC-3 bit for one hour to 246'. Circulated hole clean for one hour, then made 2 round trips to clean hole and circulate before pulling pipe and rigging up to run casing as follows: Started rigging up to run csg. 7:30 A.M. Casing started in hole 8:30 A.M. Casing all in 9:50 A.M. Started circulating 10:05 A.M. Stopped circulating 10:30 A.M. Started cementing 10:35 A.M. Cement all in pipe 11:15 A.M. Plug down 11:44 A.M. Ran and cemented 232.6', 7", 20#, 8 Rd. Thd., Rge. 2, J-55, Stewart & Lloyds casing. The Baker guide shoe was electrically welded, and no scratchers or centralizers were attached. The shoe was landed 240.20' below kelly bushing, which was 7.60' above ground level. The casing was cemented with 55 sax cement by General Petroleum of Canada Limited with A.J.R. Bergquist operating. The plug was measured in to 230' by displacement with 9 1/2 barrels water and cement returns were obtained. Landed casing in clamp and cleaned up around rig while standing cemented 8 1/2 hours.
<u>Dec. 21</u>	246	- -	- -	While standing cemented 24 hours, landing joint was backed off and blowout preventer installed. Serviced rig and prepared to shut in same for holidays.
<u>Dec. 22 - 30</u>	246	- -	- -	Operations suspended for Christmas holidays.
<u>Dec. 31</u>	246	- -	- -	Warmed up pump and engines and prepared to drill out plug. Made up 6 1/8" OSC bit, ran in and drilled on plug and cement for 6 hours.

DAILY PROGRESS REPORT (CONT'D)

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Date	From	To	Footage	Remarks
<u>Jan. 1/55</u>	246	275	29	Drilled out plug to shoe in 6 1/2 hours and pulled out pipe. Removed stone wedged in bit cones and re-ran same bit. Drilled out shoe in one hour, conditioned mud for 2 3/4 hours and drilled ahead with 6 1/8" OSC bits for 7 1/2 hours. Changed bits after 1 3/4 hours at 270' and made a round trip to run junk sub after 2 hours at 272'.
<u>Jan. 2</u>	275	665	390	Pulled pipe to check junk sub after 5 1/2 hours at 275' and recovered about 75% of a 2" collar stuck to the mud on the bottom of the bit plus some iron in the junk sub. Re-ran bit and junk sub and drilled ahead with 6 1/8" OSC bits for 21 1/4 hours. Bits were changed and iron cleaned out of junk sub after 18 1/4 hours at 515'.
<u>Jan. 3</u>	665	1000	335	Drilled ahead with 6 1/8" OSC bits for 21 1/2 hours, changing bits after 19 hours at 800'.
<u>Jan. 4</u>	1000	1206	206	Drilling with 6 1/8" bits continued for 16 hours. Bits were changed to same size OWS after 18 1/2 hours at 1087' and pipe was pulled after 8 1/2 hours at 1206'.
<u>Jan. 5</u>	1206	1236	30	Made up core barrel and 6 1/8" diamond core bit, measured in with pipe and cored ahead for 8 1/2 hours to 1214.5'. Two cores were pulled and for 8 1/2' cut, 7 1/2' were recovered or 88.3%. Laid back coring equipment, made up junk sub and used 6 1/8" OWS bit, ran in and drilled ahead for 2 hours.
<u>Jan. 6</u>	1236	1266	30	Pulled pipe, laid back bit and junk sub, made up 6 1/8" diamond core bit and barrel and measured in pipe. Cored ahead for 2 hours, making only 2" of hole using weights up to 6000#, pump volumes to 164 G.P.M. and rotary speeds to 90 R.P.M. Pulled pipe, laid back coring equipment and ran in with used 6 1/8" OWS bit. Drilled ahead for 5 hours to 1264', pulled out pipe and laid back bit. Made up core barrel and 6 1/8" diamond core bit and ran in. Cored ahead for 1/2 hour to 1266', pulled pipe, handled core, and for 2' cut, 19" were recovered or 79.3%.

DAILY PROGRESS REPORT (CONT'D)

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Date	From	To	Footage	Remarks
Jan. 7	1266	- -	- -	Laid back coring equipment and made up tester. Ran in seated packer and opened tool for test as follows: <u>Drill Stem Test #1</u> - Interval 1249' - 1266'. Formation Tested: Slave Point Limestone/ Presqu'ile Dolomite. Hole diameter from 246' 6 1/8" O.D. of packer rubber 5 5/8" Length of anchor below packer 17' Valve open 4 hrs., 28 mins. Shut in Nil There was a fair initial puff which died immediately after the tool opened. The mud level in the casing did not drop, and there was no gas flow. Rigged up and swabbed above tool for 1 1/2 hours with no results. When the drill pipe was pulled, it was found that the shatter disc had not broken. Recovered 180' of dead drilling mud which must have entered pipe through faulty tool joint. Pressures were recorded as follows: Hydrostatic 700 psi. Flowing Tool not opened. The test was considered to be mechanically unsatisfactory and was performed by General Petroleum with A.J.R. Bergquist operating. Broke down tester, cleaned out and re-made same, and inspected tool joints to locate leak. Ran in pipe, steaming out each single on the way in to assure that there would be no ice formation inside pipe which would slow down or stop the opening dart. Seated packer and opened tool for test as follows: <u>Drill Stem Test #2</u> - Interval 1249' - 1266'. Formation Tested: Slave Point Limestone/ Presqu'ile Dolomite. Hole diameter from 246' 6 1/8" O.D. of packer rubber 5 5/8" Length of anchor below packer 17' Valve open 1 hr., 10 mins. Shut in Nil

DAILY PROGRESS REPORT (CONT'D)

Date	From	To	Footage	Remarks
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Jan. 7 (Cont'd)

There was a slight initial puff, dying immediately after the tool was opened, the mud level in the casing did not drop and there was no gas flow. When the drill pipe was pulled, it was found that the shatter disc was still intact, and that there was 30' of dead drilling mud above same. Pressures were recorded as follows:

Hydrostatic	700 psi.
Flowing	Tool not opened

The test was considered to be mechanically unsatisfactory and was performed by General Petroleum with A.J.R. Bergquist operating.

Again inspected tool joints and found evidence of leak-past around bottom threads of drill collar. Re-made tester, ran in same without drill collar, seated packer and opened tool for test as follows:

Drill Stem Test #3 - Interval 1249' - 1266'.

Formation Tested: Slave Point Limestone/
Presqu'ile Dolomite.

Hole diameter from 246'	6 1/8"
O.D. of packer rubber	5 5/8"
Length of anchor below packer	17'
Valve open	3 hrs., 45 mins.
Shut in	Nil

<u>Jan. 8</u>	1266	1373	107
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There was a good initial puff when the tool was opened. The mud level in the casing did not drop and there was no gas flow. When the drill pipe was pulled, 120' (0.9 bbls.) dead salty, sulphurous water with scum of heavy black oil on top were recovered. Pressures were recorded as follows:

Hydrostatic	700 psi.
Flowing	0-80 psi.

The test was considered to be mechanically satisfactory and was performed by General Petroleum with A.J.R. Bergquist operating.

DAILY PROGRESS REPORT (CONT'D)

Date	From	To	Footage	Remarks				
<u>Jan. 8 (Cont'd)</u>				Broke down tester, made up drill collar and 6 1/8" OWS bit and started in hole. With bit, drill collar and one single in, pipe started "chattering" through slips. When pipe box hit slips, slips sprung open and pipe was lost down hole. Made up tap, ran in to top of fish and screwed into same in 1 1/2 hours. Pulled pipe, checked bit and drill collars for damage and ran in hole with same. Drilled ahead with 6 1/8" OWS bit for 12 hours.				
<u>Jan. 9</u>	1373	1423	50	Drilled ahead with 6 1/8" OWS bits for 9 1/4 hours. Bits were changed after 18 3/4 hours at 1406' and pipe was pulled after 2 1/2 hours at 1423'. Laid back bit and drill collars, made up tester, ran in, seated packer and opened tool for test as follows: <u>Drill Stem Test #4 - Interval 1412' - 1429'.</u> Formation Tested: Presqu'ile Dolomite. Hole diameter from 246' 6 1/8" O.D. of packer rubber 5 5/8" Length of anchor below packer 17' Valve open 3 hours Shut in Nil There was a good initial puff when the tool was opened. The mud level in the casing did not drop, and there was no gas flow. When the drill pipe was pulled, 430' (3.18 bbls.) of gassy, salty, sulphurous water, with oil scum on top were recovered. Pressures were recorded as follows: <table><tr><td>Hydrostatic</td><td>820 psi.</td></tr><tr><td>Flowing</td><td>185 psi.</td></tr></table> The test was considered to be mechanically satisfactory and was performed by General Petroleum with A.J.R. Bergquist operating. Broke down tester, made up used 6 1/8" OWS bit and started in with same.	Hydrostatic	820 psi.	Flowing	185 psi.
Hydrostatic	820 psi.							
Flowing	185 psi.							
<u>Jan. 10</u>	1423	1531	108	Finished running in with 6 1/8" OWS bit and drilled ahead with same size bits for 19 1/2 hours. Changed to same size OSC bit after 20 3/4 hours at 1527'.				

DAILY PROGRESS REPORT (CONT'D)

Date	From	To	Footage	Remarks														
<u>Jan. 11</u>	1531	1573	42	Drilled ahead with 6 1/8" OSC bit for 11 1/2 hours. Pulled out pipe and laid back bit and drill collar after 12 3/4 hours at 1537'. Made up tester, ran in, seated packer and opened tool for test as follows: <u>Drill Stem Test #5</u> - Interval 1556' - 1573'. Formation Tested: Presqu'ile Dolomite <table><tr><td>Hole diameter from 246'</td><td>6 1/8"</td></tr><tr><td>O.D. of packer rubber</td><td>5 5/8"</td></tr><tr><td>Length of anchor below packer</td><td>17'</td></tr><tr><td>Valve open</td><td>5 hrs., 15 mins.</td></tr><tr><td>Shut in</td><td>Nil</td></tr></table> There was a good initial puff when the tester was opened. The mud level in the casing did not drop, and there was no gas flow. Swabbed hole for 1/2 hour before closing tester and recovered only a little sulphur water in swab cups. There was a trace of oil on top of the swab cup on the first run but this appeared to be pipe dope. When the drill pipe was pulled, 1034' (7.67 bbls.) of slightly gassy, salty, sulphurous water were recovered. Pressures were recorded as follows: <table><tr><td>Hydrostatic</td><td>900 psi.</td></tr><tr><td>Flowing</td><td>460 psi.</td></tr></table> The test was considered to be mechanically satisfactory and was performed by General Petroleum with A.J.R. Bergquist operating. Broke down tester, made up used 6 1/8" OWS bit and started in.	Hole diameter from 246'	6 1/8"	O.D. of packer rubber	5 5/8"	Length of anchor below packer	17'	Valve open	5 hrs., 15 mins.	Shut in	Nil	Hydrostatic	900 psi.	Flowing	460 psi.
Hole diameter from 246'	6 1/8"																	
O.D. of packer rubber	5 5/8"																	
Length of anchor below packer	17'																	
Valve open	5 hrs., 15 mins.																	
Shut in	Nil																	
Hydrostatic	900 psi.																	
Flowing	460 psi.																	
<u>Jan. 12</u>	1573	1648	75	Finished tripping in with 6 1/8" OWS bit and drilled ahead for 17 1/4 hours to 1648'. Lost circulation, pulled pipe, laid back bit and made up tester. Ran in, seated packer and opened tool for test as follows: <u>Drill Stem Test #6</u> - Interval 1631' - 1648'. Formation Tested: Presqu'ile Dolomite <table><tr><td>Hole diameter from 246'</td><td>6 1/8"</td></tr><tr><td>O.D. of packer rubber</td><td>5 5/8"</td></tr><tr><td>Length of anchor below packer</td><td>17'</td></tr><tr><td>Valve open</td><td>3 hrs., 15 mins.</td></tr><tr><td>Shut in</td><td>3 hrs.</td></tr></table>	Hole diameter from 246'	6 1/8"	O.D. of packer rubber	5 5/8"	Length of anchor below packer	17'	Valve open	3 hrs., 15 mins.	Shut in	3 hrs.				
Hole diameter from 246'	6 1/8"																	
O.D. of packer rubber	5 5/8"																	
Length of anchor below packer	17'																	
Valve open	3 hrs., 15 mins.																	
Shut in	3 hrs.																	

DAILY PROGRESS REPORT (CONT'D)

Date	From	To	Footage	Remarks
Jan. 13	1648	--	--	There was a good initial puff when the tool was opened. The mud level in the casing did not drop, and there was no gas flow. When the drill pipe was pulled, 1521' (11.25 bbls.) of gassy, salty, sulphur water were recovered. Pressures were recorded as follows:

Hydrostatic	760 psi.
Flowing	700 psi.
Shut-In	720 psi.

The test was considered to be mechanically satisfactory and was performed by General Petroleum with A.J.R. Bergquist operating.

Broke down tester, made up used 6 1/3" OWS bit and ran to bottom. Mixed mud and lost circulation material for 9 3/4 hours in effort to stop lost circulation. Pulled pipe, rigged up Brett Exploration logging unit and ran logs for 1 3/4 hours.

Jan. 14	1648	--	--	Ran logs for 3 1/2 hours, but were unable to get satisfactory self-potential curve due to failure of logging unit electrical equipment. Tore out logging unit, rigged up and ran cement plugs as follows:
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Plug #1 - 1300' - 1175' with 25 sack cement.
Plug down 7:08 A.M.
Plug #2 - 260' - 220' with 8 sack cement.
Plug down 9:01 A.M.

Welded steel plate on top of casing, laid down derrick and generally cleaned up around lease before moving out for Summer months. Rig released 4:00 P.M.

--- o o c ---

1-800-368-2246 2-88

11

[illegible]

MUD RECORD

12

Date	Depth	Mud Wt. No. /U.S. Gal.	Visc.	Gel	H ₂ O Loss cc.	Filter Cake 1/32"	pH	Additives
Jan. 8	1306	8.7	45	61	6.6	2	8.5	50# Quebracho.
Jan. 8	1373	8.9	58	68	7.2	2	7.6	100# Quebracho.
Jan. 9	1406	8.9	55	65	6.8	2	8.5	25# Quebracho.
Jan. 9	1423	--	--	--	7.2	--	8	10# Driscose.
Jan. 9	1423	TESTING						Water.
Jan. 10	1460	8.8	60	65	7	2	8.5	100# Quebracho.
Jan. 10	1500	8.8	59	62	7	2	8.5	200# Quebracho.
Jan. 10	1531	8.8	55	65	8	2	8.5	50# Quebracho.
Jan. 11	1565	8.8	60	70	8	2	8.5	
Jan. 11	1573	--	--	--	--	--	--	
Jan. 11	1573	TESTING						
Jan. 12	1601	8.7	55	65	8	2	8.5	
Jan. 12	1637	8.9	65	76	7.2	2	8.5	
Jan. 12	1648	--	--	--	7.4	2	8.5	
Jan. 13	1648	--	--	--	--	--	--	20 sax Fibre-seal.
Jan. 13	1648	--	--	--	--	--	--	2900# Gel.
Jan. 13	1648	--	--	--	--	--	--	Water.

-- o o o --

R.J. BURGER AND A.J.R. BERGQUIST.

10 - 30 Boulder fragments and pebbles.
TOP HAY RIVER SHALE 30'

30 - 40 Shale and boulder fragments.

40 - 580 Shale - grey-green, calcareous.

580 - 950 Shale - grey-green, calcareous, fossiliferous, pyritic in part.

950 - 1100 Shale - as above with trace dense, chalky, white limestone.

1100 - 1140 Shale - medium grey to slightly green, micaceous.

1140 - 1160 Shale - as above with trace pyrite.

1160 - 1200 Shale - dark grey to light medium grey, slightly greenish.

1200 - 1206 Limestone - light grey to dark grey, medium to some coarsely fragmental, tight, trace pyrite.

TOP SLAVE POINT 1206'

Core #1 - 1206' - 1213.5' - Rec. 7.5'. (Description - A.J.R. Bergquist).
2' Limestone - coarse, crystalline, infilled, very pyritic.
5 1/2' Shale - with limestone inclusion, brecciated appearance.

Core #2 - 1213.5' - 1214.5' - Rec. nil.

1206 - 1220 Limestone, coarse, crystalline, dense. Shale - dark grey, limy, abundant pyrite.

1220 - 1230 Limestone - light brownish, micro-crystalline, dense.

1230 - 1250 Limestone - light brownish, cream tinged, micro-crystalline, dense.

1250 - 1255 Limestone - light brownish, micro-crystalline to fine crystalline.

TOP PRESQU'ILE DOLOMITE 1255'

- 1255 - 1260 Dolomite - medium brown, medium crystalline, some white dolomite, euhedral, some poor inter-crystalline porosity, evidence of vugs, trace dark brown, tarry oil staining.
- Core #3 - 1264 - 1266 - Rec. 19" (Description - A.J.R. Bergquist).
- 14" Limestone - light grey, coarse crystalline with finger size vugs, partially to totally filled with calcite and poor intergranular porosity.
- 5" Limestone - light grey, coarse, crystalline, dense with pyrobitumen at top and bottom. No oil staining in core and strong sulphurous odour in fresh break.
- 1260 - 1280 Dolomite - medium brown to medium coarse crystalline, crumbly in part, some white dolomite as in samples above, poor to fair porosity.
- 1280 - 1300 Dolomite - as above, fair porosity.
- 1300 - 1350 Dolomite - light brown to cream brown as above, poor to fair porosity.
- 1350 - 1370 Dolomite - cream-brown, medium crystalline, some coarse crystalline, white dolomite, poor to fair porosity.
- 1370 - 1380 Dolomite - as above, abundant white dolomite - as above.
- 1380 - 1410 Dolomite - as above, some green-grey, medium crystalline, compact. Evidence of vugs, poor to fair porosity.
- 1410 - 1420 Dolomite - as above, abundant white, coarse euhedral dolomite crystals, fair porosity, trace dark brown, tarry oil staining.
- 1420 - 1510 Dolomite - as above, much white, coarse dolomite.
- 1510 - 1560 Dolomite - as above, fair porosity.
- 1560 - 1570 Dolomite - as above, some dark brown, tarry oil staining.
- 1570 - 1590 Dolomite - light brown and cream as above, some white dolomite as above, some dolomite - dark brown, fine, crystalline, compact.
- 1590 - 1600 Dolomite - dark brown, fine crystalline, compact, some medium brown, medium crystalline dolomite.
- 1600 - 1648 Dolomite - light brown to white and cream, fine to medium and coarse crystalline, evidence of vugs.

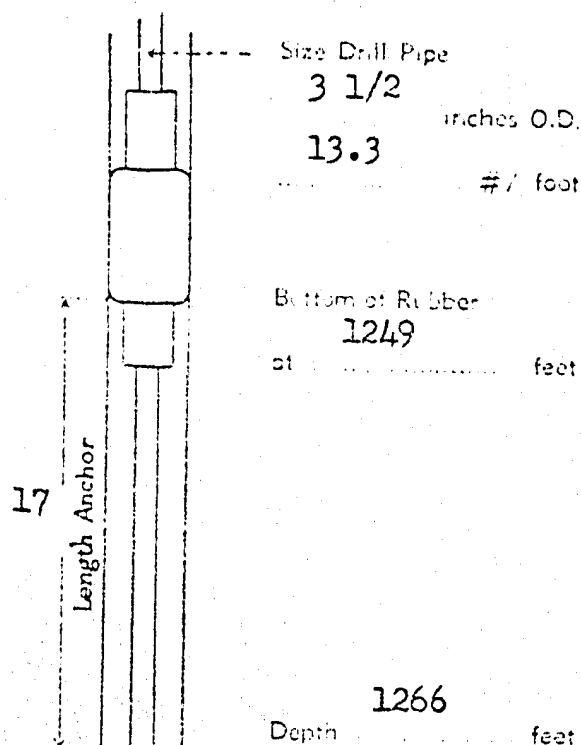
- - - o o o - - -

Drill Stem Test Report

Name of Well **N. W. T. HEART LAKE # 2**
 Testing Company **General Petroleum of Canada Limited**

Date **January 7th, 1955**

Test No **1**
 Operator **A. J. R. Bergquist**



Size Drill Pipe **3 1/2** inches O.D.
 O.D. of Her Rubber **5 5/8"**
 Size Choke **1/2"**
 Type **Anti Anchor Type** ☒
 Format Tested **Slave Pt. Limestone & Presqu'ile Dolomite**
 Depth of Well **1266'**
 Zone Tested: From **1249'** To **1266'**

Time Waiting on Tester
 Mud: API Viscosity **44** Gel. **58** Weight **8.9**

Time Tester started in hole **5:50 A. M.**
 " " On Bottom **8:40 A. M.**
 " " Opened **9:02 A. M.**
 " " Closed **1:30 P. M.**
 " " Pulled Loose **1:30 P. M.**
 " " Out of Hole **2:50 P. M.**

Weight: Set on Packer **12** Thousand Lbs.; To Pull Packer Loose **14** Thousand Lbs.
 No. Lines **6** Size Line **3/4"**

When tool was opened: Was blow noticeable, Yes ☒ No ☐ ; Air Displaced, Yes ☐ No ☒

Did mud level drop in casing: Yes ☐ No ☒

Gas Flow: **Nil** Thousand of/day. Measured with Pitot tube by

Estimated by
 Size riser: **2** inches, I.D.; Was flare lit, Yes ☐ No ☒ ; Length of flame **6** feet
 Total fluid in drill pipe: **6** Stands **180** Feet **1.3** Bbls.
 Oil in drill pipe: { Gassy } Stands Feet Bbls.
 { Dead }
 Mud in drill pipe: { Gassy } **6** Stands **180** Feet **1.3** Bbls.
 { Dead }
 Water in drill pipe: { Gassy } Stands Feet Bbls.
 { Dead }

Note: Samples of Oil and Water must be taken.

Samples sent to By

Water: Salty, Sulphur, Brackish, Fresh. (Cross out terms that do not apply.)

Remarks: **Swabbed pipe with no effect. Shatter disc not broken.**

Put additional remarks or other information on back of sheet.

Present at test: **A. J. R. Bergquist and crew.**

Do you consider that test was satisfactory? Yes ☐ No ☒

Does chart show normal operation of tester? Yes ☒ No ☐

Pressure on chart (Hydrostatic) before tester opened **700** (chart read by **J. W. Gregg**)

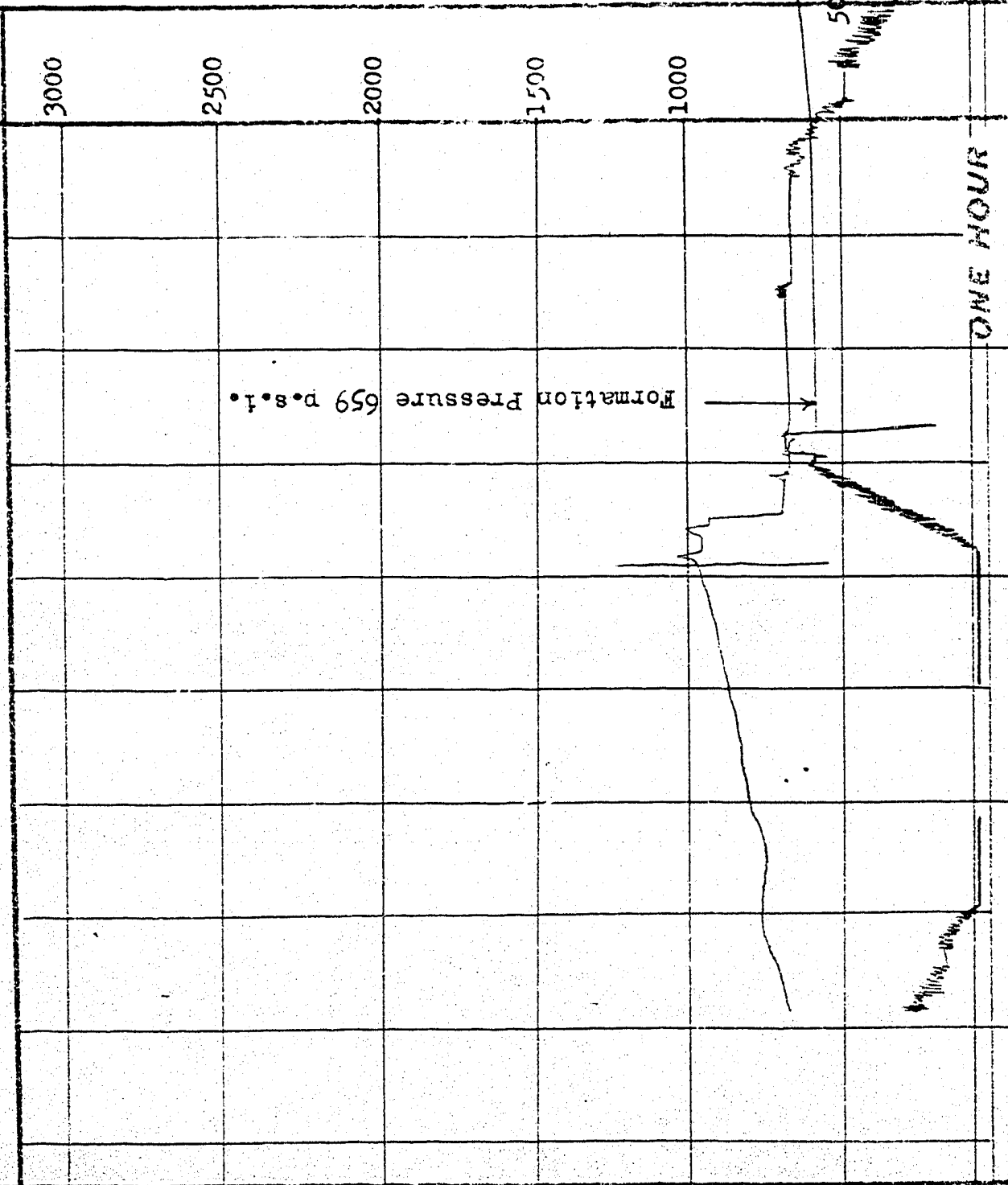
" " (Flowing) with tester open p.s.i. (Shut in) p.s.i.

Is chart attached: Yes ☒ No ☐ Who has it **A. J. R. Bergquist.**

DOWELL INC.

M. O. JOHNSON FORMATION TESTER

LBS.
PER
SQ. IN.



D.S.T # 1

Misrun

Date January 7th, 1955

Company General Petroleum

Well N.W. 1/4 Heart Lake # 2

Location

Packer Set at 1249'

Hole Open to 1266'

Recorder No. 698

Capacity

Recorder Depth

Calibrated

Temperature

Fluid Rise

Flow Period

Shut In Period

Ticket No.

Pressure

H.P. 682 p.s.i.

Drill Stem Test Report

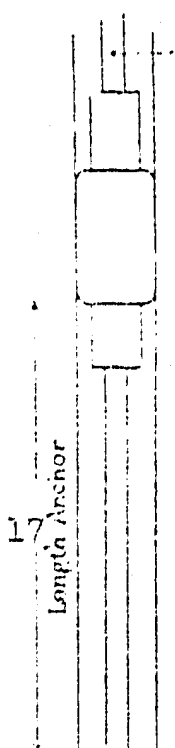
Date January 7th, 1955

Name of Well N. W. T. HEART LAKE # 2

Test No. 2

Testing Company General Petroleum of Canada Limited

Operator A. J. R. Bergquist



Size Drill Pipe 3 1/2 inches O.D.
13.3 #/ft.

O.D. of Packer Rubber 5 5/8

Size Choke 1/2

Type of Packer Anchor Type X

Hookwall

Formation Tested Slave Pt. Limestone & Presqu'ile Dolomite

Depth of Well 1266

Zone Tested: From 1249 To 1266

Bottom of Rubber

at 1249 feet

Time Waiting on Tester

Mud API Viscosity 44

Gel. 58 Weight 8.9

Time Tester started in hole

3:30 P. M.

" " On Bottom

4:40 P. M.

" " Opened

4:50 P. M.

" " Closed

6:00 P. M.

" " Pulled Loose

6:00 P. M.

" " Out of Hole

7:00 P. M.

Depth 1266 feet

Weight: Set on Packer 10 Thousand Lbs; To Pull Packer Loose 14 Thousand Lbs.

No. Lines 6 Size Line 3/4

When tool was opened: Was blow noticeable: Yes X No ; Air Displaced: Yes No X

Did mud level drop in casing: Yes No X

Gas Flow: Nil Thousand cf/day. Measured with Pirat tube by

Estimated by

Size riser: 2 inches, I.D.; Was flare lit: Yes No X Length of flame feet

Total fluid in drill pipe: 1 Stands 30 Feet Bbls.

Oil in drill pipe: { Gassy } { Dead } Stands Feet Bbls.

Mud in drill pipe: { Gassy } { Dead } 1 Stands 30 Feet Bbls.

Water in drill pipe: { Gassy } { Dead } Stands Feet Bbls.

Notes: Samples of Oil and Water must be taken.

Samples sent to By

Water: Salty, Sulphur, Brackish, Fresh. (Cross out terms that do not apply.)

Remarks: Shatter disc not broken. Recovery came from leak in drill collar threads.

Put additional remarks or other information on back of sheet.

Present at test: A. J. R. Bergquist and crew.

Do you consider that test was satisfactory? Yes No X

Does chart show normal operation of tester? Yes X No

Pressure on chart (Hydrostatic) before tester opened 700 (chart read by J. W. Gregg). p.s.i.

(Flowing) with tester open p.s.i. (shut in) p.s.i.

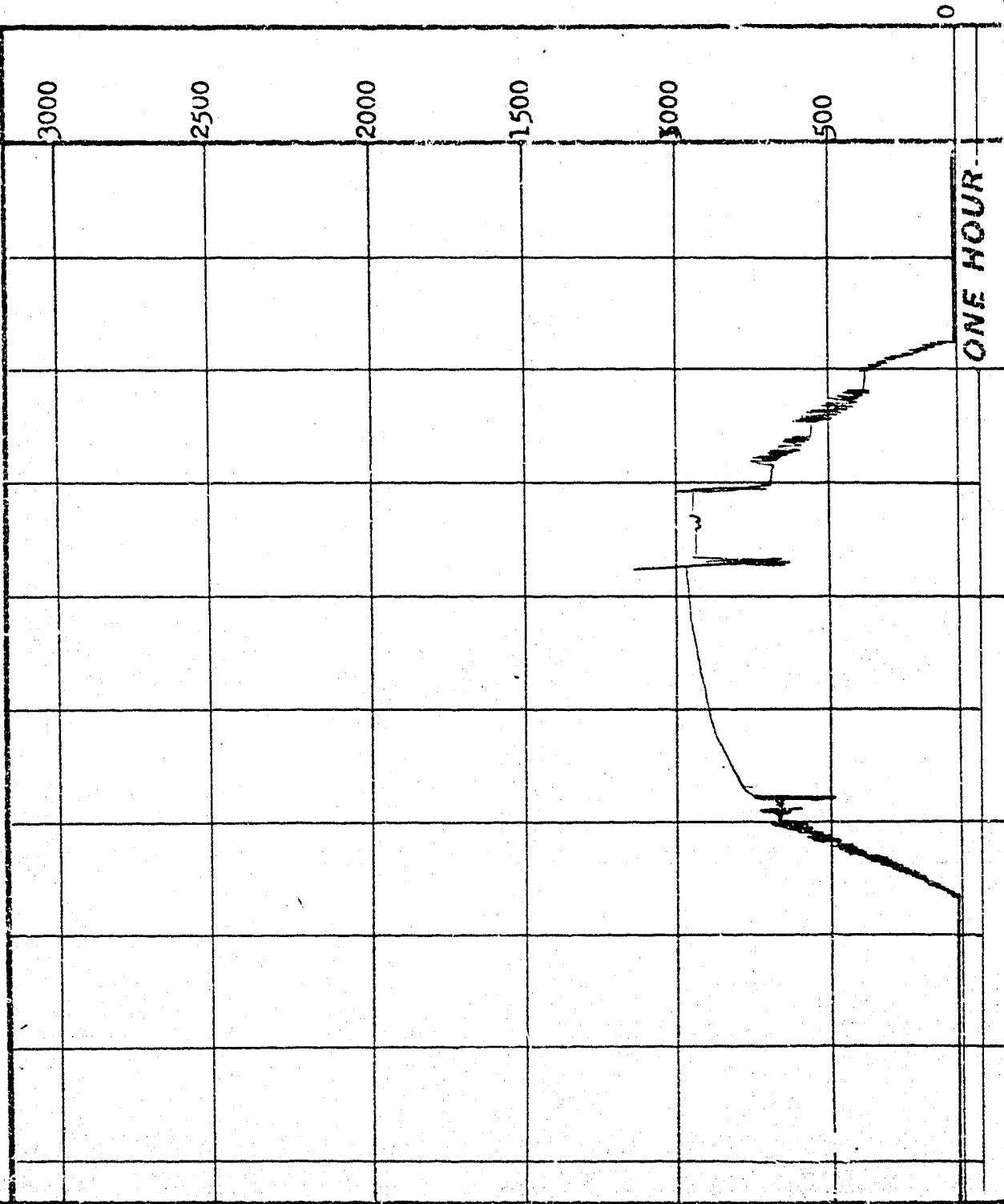
Is chart attached: Yes X No Who has it

Engineer/Toolpusher A. J. R. Bergquist.

DOWELL INC.

M. O. JOHNSON FORMATION TESTER

LBS.
PER
SQ. IN.



ONE HOUR

D.S.T. # 2

Misrun

Date January 7th, 1955

Company General Petroleum

Well N.W.T. Heart Lake # 2

Location

Packer Set at 1249'

Hole Open to 1266'

Recorder No. 698

Capacity

Recorder Depth

Calibrated

Temperature

Fluid Rise

Flow Period

Shut In Period

Ticket No.

Pressure

H.P. 682 psi

Drill Stem Test Report

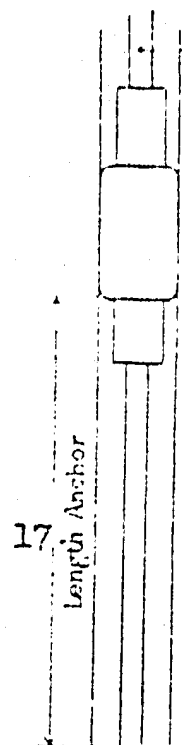
Name of Well N. W. T. HEART LAKE # 2

Date January 7th, 1955

Testing Company General Petroleum of Canada Limited

Test No. 3

Operator A. J. R. Bergquist



Size Drill Pipe

3 1/2 inches O.D.

13.3 #/ foot

Bottom of Rubber

at 1249 feet

Depth 1266 feet

O.D. of Packer Rubber

5 5/8

Size Check 1/2

Type of Packer Anchor Type

X

Hookwell

Formation Tested Slave Pt. Limestone & Presqu'ile Dolomite.

Depth of Well

1266

Zone Tested: From

1249

To

1266

Time Waiting on Tester

Mud API Viscosity

44

Gel.

58

Weight 8.9

Time Tester started in hole

7:30 P. M.

" " On Bottom

8:38 P. M.

" " Opened

8:40 P. M.

" " Closed

12:25 A. M. Jan. 8/55

" " Pulled Loose

12:25 A. M.

" " Out of Hole

2:00 A. M.

Weight: Set on Packer 10

Thousand Lbs.; To Pull Packer Loose

11

Thousand Lbs.

No. Lines

6

Size Line

3/4

When tool was opened: Was blow noticeable, Yes X

No

; Air Displaced, Yes

No

X

Did mud level drop in casing; Yes

No

X

Gas Flow:

Nil

Thousand cf/day. Measured with Pitot tube by

Estimated by

Size used

2

inches, I.D.; Was flame lit, Yes

No

X

; Length of flame

feet

Total fluid in drill pipe:

4

Stands

120

Feet

0.9

Bbls.

Oil in drill pipe

{ Gassy }
{ Dead }

Stands

Feet

Bbls.

Mud in drill pipe

{ Gassy }
{ Dead }

Stands

Feet

Bbls.

Water in drill pipe

{ Gassy }
{ Dead }

Stands

120

Feet

0.9

Bbls.

Note: Samples of Oil and Water must be taken.

Samples sent to

J. W. Gregg

By

A. J. R. Bergquist.

Water: Salty, Sulphur, ~~Barium Chloride~~ (Cross out terms that do not apply.)

Remarks:

Scum heavy oil on top of recovery.

Put additional remarks or other information on back of sheet.

Present at test:

A. J. R. Bergquist & crew

Do you consider that test was satisfactory? Yes

X

No

Does chart show normal operation of tester: Yes

X

No

Pressure on chart (Hydrostatic) before tester opened

700

(chart read by J. W. Gregg).

p.s.i.

" " " (Flowing) with tester open

0-80

p.s.i. (shut in)

p.s.i.

Is chart attached: Yes

X

No

Who has it

Engineer/Toolpusher

A. J. R. Bergquist.

DEWELL INC.

M. O. JOHNSON FORMATION TESTER

LBS.
PER
SQ. IN.

3000

2500

2000

1500

1000

500

0

ONE HOUR

D.S.T. # 3

Date January 7th, 1955

Company General Petroleum

Well N.W.T. Heart Lake # 2

Location

Packer Set at 1249'

Mole Open to 1266'

Recorder No. 698

Capacity

Recorder Depth

Calibrated

Temperature

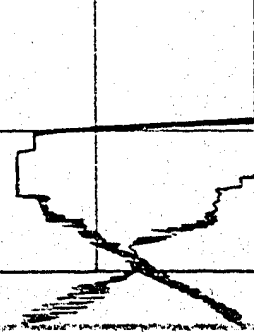
Fluid Rise 120'

Flow Period 3 hours 45 min

Shut In Period

Ticket No. 3

Pressure



Drill Stem Test Report

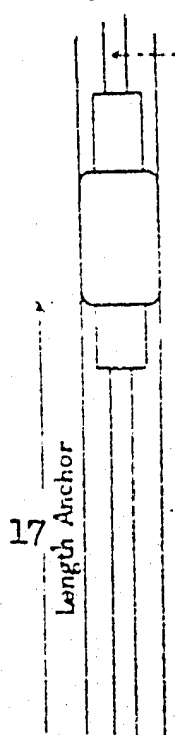
Date January 9th, 1955

Name of Well N. W. T. HEART LAKE # 2

Test No. 4

Testing Company General Petroleum of Canada Limited

Operator A. J. R. Bergquist



Size Drill Pipe
3 1/2 inches O.D.
13.3 feet

O.D. of Packer Rubber

5 5/8

Size Choke

1/2

Type of Packer Anchor Type

X

Hookwall

Formation Tested

Presqu'ile Dolomite

Depth of Well

1429

Zone Tested: From

1412

To

1429

Bottom of Rubber

at 1412 feet

Time Waiting on Tester

Mud. API Viscosity

55

Gel.

65

Weight

8.9

Time Tester started in hole

4:25 P. M.

" " On Bottom

6:21 P. M.

" " Opened

6:31 P. M.

" " Closed

9:31 P. M.

" " Pulled Loose

9:31 P. M.

" " Out of Hole

11:00 P. M.

17
Length Anchor

Depth 1429 feet

Weight: Set on Packer 10 Thousand Lbs.; To Pull Packer Loose 14 Thousand Lbs.

No. Lines 6 Size Line 3/4

When tool was opened: Was blow noticeable, Yes X No ; Air Displaced, Yes No

Did mud level drop in casing: Yes No X

Gas Flow: Nil Thousand cf/day. Measured with Pitot tube by

Estimated by

Size riser: 2 inches, I.D.; Was flame lit, Yes No X ; Length of flame feet

Total fluid in drill pipe: 14 Stands 430 Feet 3.18 Bbls.

Oil in drill pipe { Gassy } Stands Feet Bbls.

Mud in drill pipe { Dead } Stands Feet Bbls.

Water in drill pipe { Gassy } Stands Feet Bbls.

Note: Samples of Oil and Water must be taken.

Samples sent to By

Water: Salty, Sulphur, ~~Ben~~ (Cross out terms that do not apply.)

Remarks: Scum oil on top of recovery. Could not get shut in tool to latch.

Put additional remarks or other information on back of sheet.

Present at test: A. J. R. Bergquist & crew.

Do you consider that test was satisfactory? Yes X No

Does chart show normal operation of tester? Yes X No

Pressure on chart (Hydrostatic) before tester opened 820 (chart read by J.W. Gregg). p.s.i.

" " (Flowing) with tester open 185 p.s.i. (shut in) p.s.i.

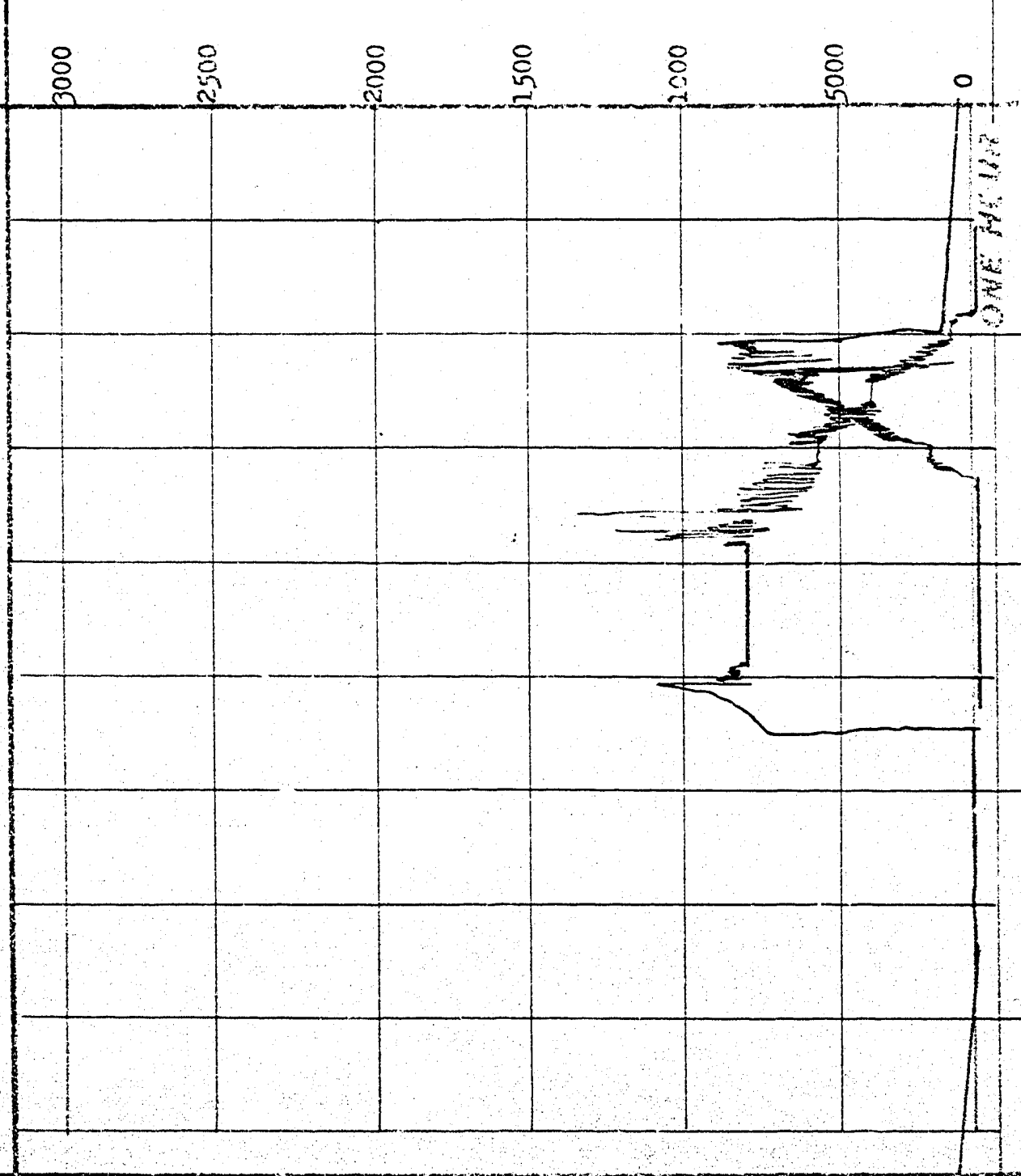
Is chart attached: Yes X No Who has it

Engineer/Toolpusher A. J. R. Bergquist.

DOWELL INC.

M. O. JOHNSON FORMATION TESTER

LBS.
PER
SQ. IN.



D.S.T. # 4

Date January 9th, 1955

Company General Petroleum

Well N.W.T. Heart Lake # 2

Location

Packer Set at 1412'

Hole Open to 1429'

Recorder No.

Capacity

Recorder Depth

Calibrated

Temperature

Fluid Rise 430'

Flow Period 3 hours

Shut In Period

Ticket No. 4

Pressure

Drill Stem Test Report

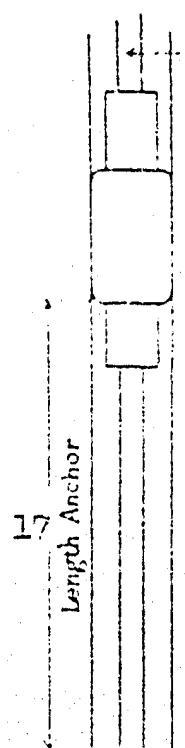
Date January 11th, 1955

Name of Well N. W. T. HEART LAKE # 2

Test No 5

Testing Company General Petroleum of Canada Limited

Operator A. J. R. Bergquist



Size Drill Pipe

3 1/2 inches O.D.

13.3 #/ foot

Bottom of Rubber

at 1556 feet

Depth 1573 feet

O.D. of Packer Rubber

5 5/8

Size Choke

1/2

Type of Packer Anchor Type

X

Hookwall

Formation Tested

Presquille Dolomite

Depth of Well

1573

Zone Tested: From

1556

To

1573

Time Waiting on Tester

Mud: API Viscosity

60

Gel

70

Weight

8.8

Time Tester started in hole

2:30 P. M.

" " On Bottom

3:45 P. M.

" " Opened

3:55 P. M.

" " Closed

9:10 P. M.

" " Pulled Loose

9:10 P. M.

" " Out of Hole

10:30 P. M.

Weight: Set on Packer

10

Thousand Lbs.: To Pull Packer Loose

17

Thousand Lbs.

No. Lines

6

Size Line

3/4

When tool was opened: Was blow noticeable, Yes

X

No

; Air Displaced, Yes

No

X

Did mud level drop in casing: Yes

No

X

Gas Flow:

Nil

Thousand cf/day. Measured with Pitot tube by

Estimated by

Size flame

2

inches, I.D., Was flame lit, Yes

No

X

Length of flame

feet

Total fluid in drill pipe

34

Stands

1034

Feet

7.67

Bbls.

Oil in drill pipe

{ Gassy }

Stands

Feet

Bbls.

Mud in drill pipe

{ Gassy }

Stands

Feet

Bbls.

Water in drill pipe

{ Gassy }

Stands

1034

Feet

7.67

Bbls.

Note: Samples of Oil and Water must be taken.

Samples sent to

J. W. Gregg

By

A. J. R. Bergquist

Water: Salty, Sulphur, Bacterial, Frothy (Cross out terms that do not apply).

Remarks: Swabbed hole. Recovered trace oil on top of swab cup on first run. Appeared to be pipe dope. Strong H₂S odor. Clinical thermometer which reads only 106° F. blew top. Could not get shut in tool to latch.

Present at test:

Do you consider that test was satisfactory? Yes

X

No

Does chart show normal operation of tester? Yes

X

No

Pressure on chart (Hydrostatic) before tester opened

900 (chart read by J. W. Gregg).

p.s.i.

" " " (Flowing) with tester open

460

p.s.i. (shut in)

p.s.i.

Is chart attached: Yes

X

No

Who has it

Engineer/Toolpusher

A. J. R. Bergquist.

DOWELL INC.

M. O. JOHNSON FORMATION TESTER

D.S.T. # 5

Date January 11, 1955

Company General Petroleum

Well N.W.T. Heart Lake # 2

Location

Packer Set at 1556'

Mole Open to 1573'

Recorder No. 698

Capacity

Recorder Depth

Calibrated

Temperature 108° F

Fluid Rise 1034'

Flow Period 5 1/2 hours

Shut In Period Nil

Ticket No. 5

Pressure

LBS.
PER
SQ. IN.

3000

2500

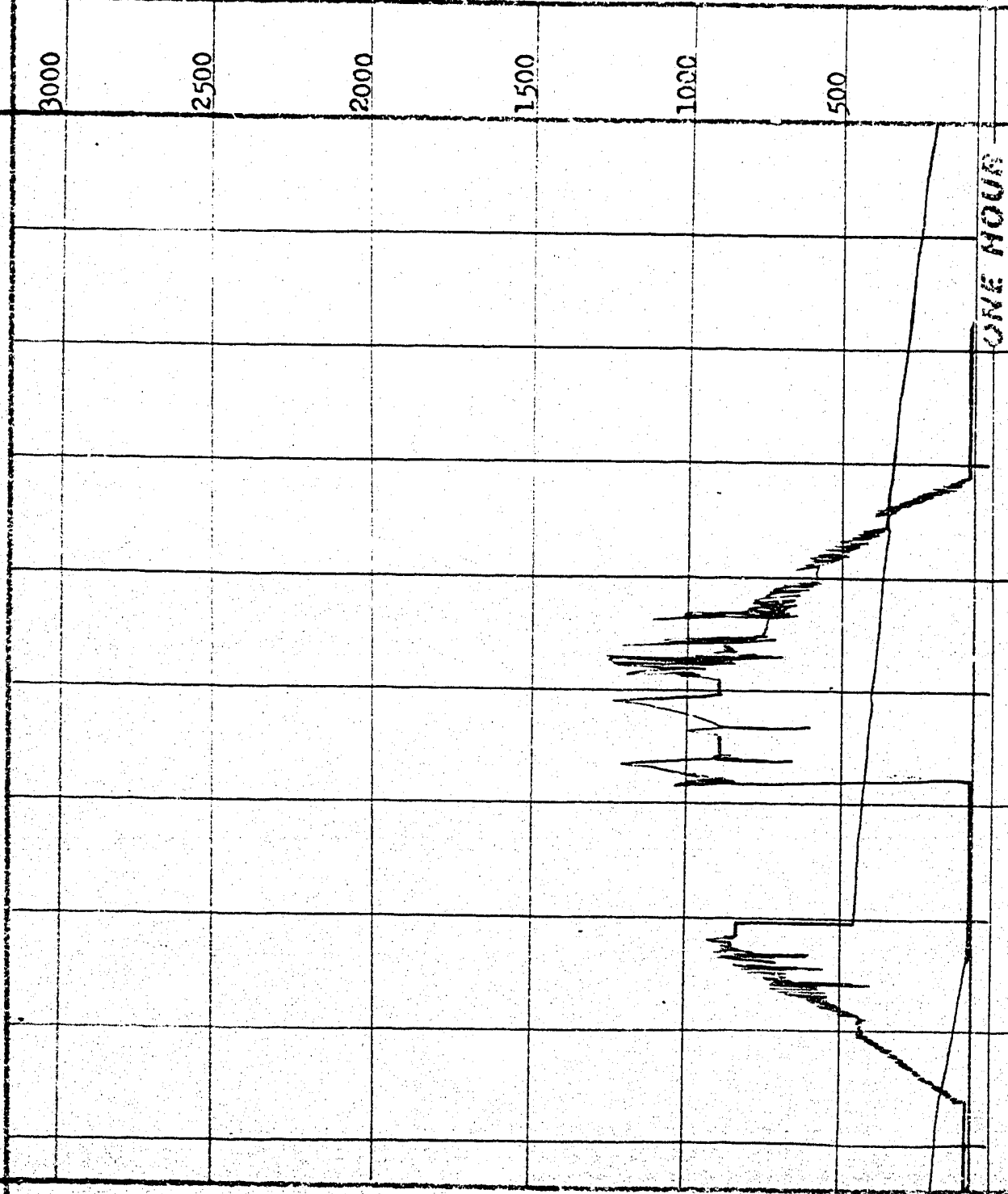
2000

1500

1000

500

ONE HOUR



DOWELL INC.

M. O. JOHNSON FORMATION TESTER

D.S.T. # 6

Date January 12, 1955

Company General Petroleum

Well N.W.T. Heart Lake # 2

Location Heart Lake

Packer Set at 1631

Hole Open to 1648

Recorder No.

Capacity

Recorder Depth

Calibrated

Temperature

Fluid Rise 1560'

Flow Period 3 hours 15 min

Shut In Period 3 hours

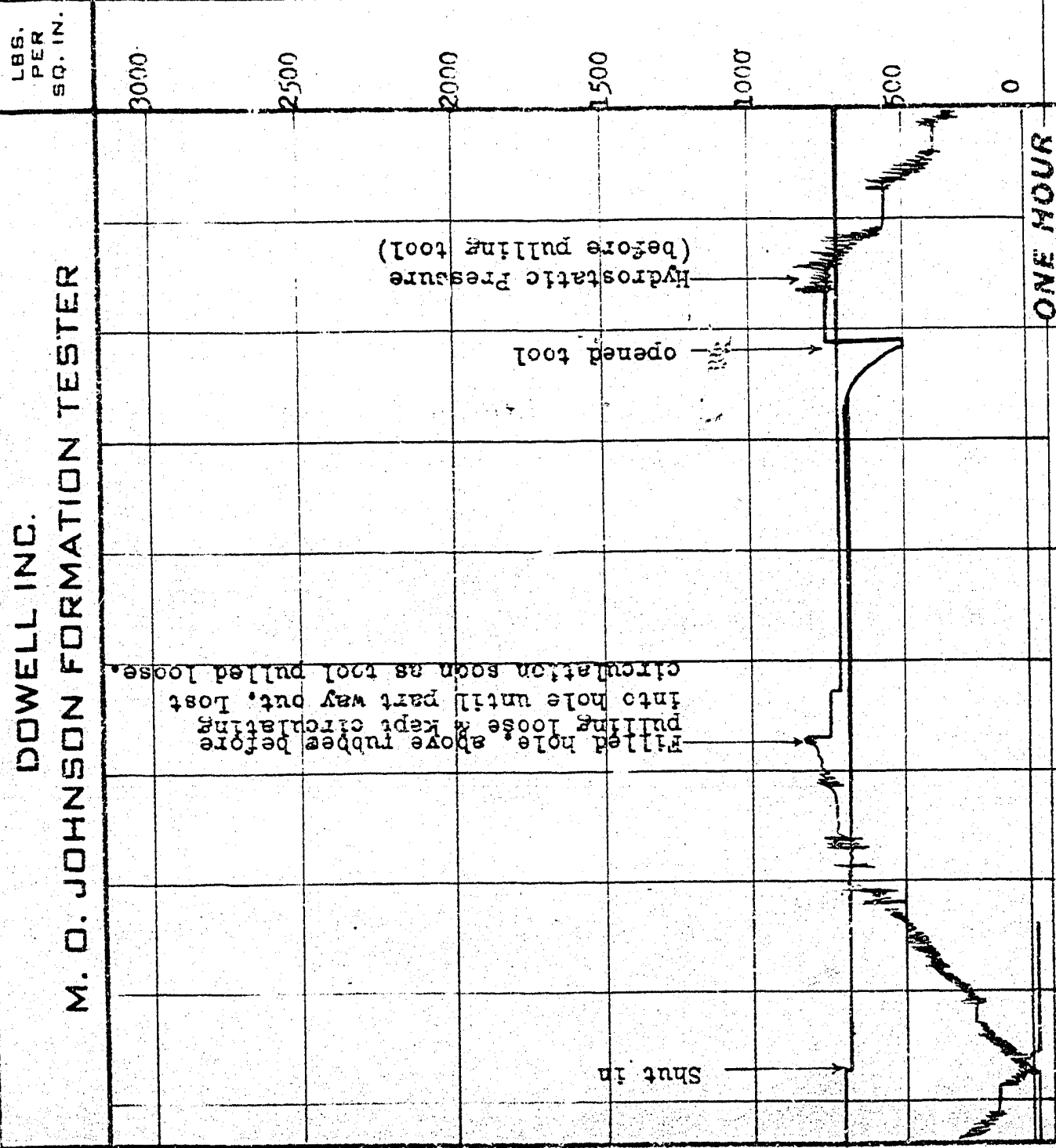
Ticket No. 6

Pressure

H.P. 744 psi

F.P. 698 psi

S.I.P. 721 psi



8735 - 117th Street,
EDMONTON, Alberta.

April 12th, 1955

Mr. B. H. Corey, Production Manager
New Superior Oils of Canada Limited,
224 - Ninth Avenue West,
CALGARY, Alberta.

Dear Sir:

PROGRESS REPORT No. 4 - N. W. T.
Exploration Program - Interpretation of
Formation Test Results - N.W.T. Heart Lake No. 2

In accordance with the wishes of the companies which participate in this exploration program, I have studied, in detail, the formation test results obtained by Art Bergquist from N. W. T. Heart Lake No. 2.

Four of the six tests run on this well were mechanically successful. Tests No. 4, 5 and 6 were mechanically successful and also provided diagnostic data on formation content. Test No. 3 was mechanically successful but since the zone 1249' - 1266' was subject to high "squeeze" pressures three times there is a question about the possibility of the zone being "water blocked". A show of black, 18 - 19° API oil was found on the top of the water recovery for this test.

Tests No. 5 and 6 provided useful pressure "build-up" data. Through use of the Arps' extrapolation technique the following data were obtained:

Zone:	1557' - 1574' (Presqu'ile)	1631' - 1648' (Presqu'ile)
P.I.:	0.41 res. bbls./day/psi.	16.1 res. bbls./day/psi.
Flow Potential:	270 - 280 res. bbls./day	11,000 - 12,000 res. bbls./day.
Pstatic Formation:	665 - 685 psig.	715 - 725 psig.
Permeability:	20 - 35 mds.	9500 - 10,500 mds. (for zone 1647' - 1648').

The "build-up" pressure data for Test # 4 were insufficient to permit reasonable extrapolation to estimate static formation pressure for the zone 1412' - 1429'.

The formation temperature was measured for the zone 1557' - 1574'. The thermometer used burst at 108°F.

Detailed analysis of the formation test pressure records from this well revealed the following points of interest:

1. On Tests No. 1 through 5, the recorder read hydrostatic pressures 100 - 160 psig. less than calculated pressures, based on reported mud densities. The reason for this is not immediately explainable, especially since a very close check was obtained on Test No. 6.
2. The pressure recorder is insensitive to pressures less than about 80 psig. This point, if not recognized, can cause errors in reading pressures from the chart.
3. The stylus logs true pressures by 20 - 25 psig. if the "build-up" is slow. This even occurred in Test No. 6 where "build-up" was completed in 20 - 30 minutes and the stylus did not record true static pressure until the tool was jarred by closing the "shut-in" mechanism.
4. On Escarpment Lake No. 1 and No. 2, and also on Heart Lake No. 2 wells, the first zone tested (Slave Point Limestone) was subjected to high "squeeze" pressures three times before a mechanically satisfactory test was obtained. Can testing procedure be altered, for these relatively shallow depths, to prevent "squeezing" and possibly "water-blocking" a low permeability zone? We know that an accurate evaluation of formation content was not given by drill-stem testing of the Slave Point Limestone in Escarpment Lake No. 1.

Details of the analysis of pressure records and reports on the six formation tests run on Heart Lake No. 2 may be found in Enclosure No. 1.

The use of a pressure recorder with the testing tool and the care exercised by Art Bergquist in running the tests have provided very valuable data. These data will provide much needed guidance in the extension of the exploration program within the Hay River area.

It is recommended that a maximum recording thermometer be used in the testing tool on all future formation tests.

Respectfully submitted,

"J. W. GREGG".

Enclosure No. 1 - Interpretation of B. H. P. charts - Heart Lake No. 2 - N. W. T.

April 2nd, 1955

Enclosure 1 - INTERPRETATION OF B. H. P. CHARTS - HEART LAKE NO. 2 -
N. W. T.

<u>Drill Stem Test # 1</u> (Jan. 7/55)	<u>Recorded</u>	<u>Calculated</u>	<u>Difference</u>
1. Depth Interval: 1249-1266'			
2. V. O. - 4 hrs. & 28 mins. (Valve not actually open)			
3. H.P. - before seating packer -	700 psig.	585 psig.	/ 115
4. "Squeeze" Pressure:	1000 (approx)		
5. "Surge" Pressure:) 6. Flowing Pressure:)	Shatter disc not broken.		
7. Static Pressure:	590		
8. H. P. after unseating Packer:	700	585	/ 115
9. Bottom-Hole Temperature:	Not taken		
10. <u>Remarks:</u>			

(a) Since the shatter disc wasn't broken no formation fluid entered drill pipe. The "squeeze" pressure, in about 3 hrs., "bled back" to 590 psig. beneath the packer. The pressure "bleed" was likely due to loss of drilling fluid and filtrate to porosity between 1249' and 1266'. It is felt that the static pressure of 590 psig. beneath the packer is 30 - 50 psig. above the static formation pressure, based on the pressure correlation constructed from press.-depth data on other wells in the area.

(b) It is possible that the measured mud density is low since a mud hydrometer was used. The measurements made by this instrument are very subject to error as a result of temperature variation. Water in the hydrometer immersion vessel at a temperature less than 70°F. would give a low reading of mud density.

(c) The "squeeze" pressure exceeded the estimated static formation pressure by about 500 psig.

(d) Recorded times were just slightly less than those measured by Art Bergquist's watch.

(e) The test was not satisfactory.

Drill Stem Test # 2RecordedCalculatedDifference

(Jan. 7/55)

1. Depth Interval: 1249 - 1266'
2. V. O. - 1 hr. & 10 mins.
(Valve not actually open).
3. H.P. before seating packer - 690 psig. 585 / 105
4. "Squeeze" Pressure: 990 psig.
5. "Surge" Pressure:)
6. Flowing Pressure:) Shatter disc not broken.
7. Static Pressure:)
8. H. F. After Unseating Packer: 700 psig. 585 / 115
9. B.H. Temperature: Not recorded.
10. Remarks:

(a) It is possible that the measured mud density is low for the same reason as explained for Test # 1, (Remark b).

(b) The "squeeze" pressure exceeded the estimated static formation pressure by about 500 psig.

(c) Recorded times do not agree with times kept by Art Bergquist.

(d) The test was unsatisfactory.

Drill Stem Test # 3RecordedCalculatedDifference

(Jan. 7/55)

1. Depth Interval: 1249 - 1266'
2. V.O. - 3 hrs. & 45 mins.
3. H.P. - before seating packer: 700 psig. 585 / 115
4. "Squeeze" pressure: 1250 psig.
5. "Surge" Pressure: 0-80
6. Flowing Pressure: 0-80
7. Static Pressure: 0-80
8. H.P. after Unseating packer: 700
9. B.H. Temp: not measured.

10. Remarks:

(a) "Squeeze" pressure was very high, probably 700 psig. above static formation pressure.

(b) Before a mechanically successful test was obtained on the zone 1249' - 1266' this part of the formation was subjected to three applications of "squeeze" pressure from 500 - 700 psig. above the static formation pressure. The zone on test might well have been "water-blocked" and so would flow water to the exclusion of oil or gas. A trace of 18 - 19° API oil (black) was recovered from the top of the 120' water column in the drill pipe.

(c) The test was mechanically successful but there is question as to its validity in regard to formation fluid content.

(d) Bergquist's reported times don't agree with the recorder clock.

<u>Drill Stem Test # 4 - (Jan. 9/55)</u>	<u>Recorded</u>	<u>Calculated</u>	<u>Difference</u>
1. Depth Interval - 1412 - 1429'.			
2. Valve Open - 3 hrs.			
3. H. P. before seating packer:	820 psig.	663	+ 157
4. "Squeeze" Pressure:	1000 - 1100 psig.		
5. "Surge" Pressure:	0 - 80		
6. Flowing Pressure:	185 psig (max)	206 195	- 10 to - 20 psig.
7. Static Pressure:	Not obtained.		
8. H.P. after unseating packer:	820 psig.		
9. B. H. Temp:	Not measured.		

10. Remarks:

(a) Following opening of the valve approximately 1 hr. and 10 mins. elapsed before the recorder stylus indicated an increase in pressure due to hydrostatic column of water.

(b) The maximum recorded flowing pressure is 10 - 20 psig. less than that calculated on basis of measured liquid rise and density of water in column. The densities of course were determined following gas release from the samples - the hydro. column in the drill pipe was gasified.

(c) The test was satisfactory it seems from viewpoint of determining formation content. However, it would have been desirable to obtain static formation pressure by waiting for pressure equilibrium since the "shut-in" valve wouldn't operate. It is also regrettable that formation temperature was not measured.

<u>Drill Stem Test # 5</u>	<u>Recorded</u>	<u>Calculated</u>	<u>Difference</u>
(Jan. 11/55)			
1. Depth Interval: 1556 - 1573'			
2. V. O. - 5 1/4 hrs.			
3. H.P. before seating packer:	Difficult to read - estimated 900 psig.		
4. "Squeeze" Pressure:	1275 psig (max).		
5. "Surge" Pressure:	Less than 80 psig.		
6. Flowing Pressure:	50' - 80 psig approx. 80' - 160 " 110' - 210 " 140' - 260 " 170' - 300 " 200' - 340 " 230' - 380 " 260' - 410 " 290' - 440 " Approx.-320' - 460		
	482 psig.		- 22 psig.
7. Static Pressure:	665-685 psig by Arps' Extrapolation.		
8. H.P. after Unseating packer:	840 psig.	720	/ 120 psig.
9. B.H. Temperature:	108° F / (thermometer burst top).		
10. <u>Remarks:</u>			
(a) Art Bergquist's reported times and those shown by recorder check.			
(b) There is evidence to suggest that the reported mud density was low by 1.2 → 1.5#/U.S. gal. Atm. temperature 12°F. below zero.			
(c) Arps' extrapolation technique was successfully applied to "build-up" data and the following were calculated:			
(i) Static Formation Pressure: 665-685 psig.			
(ii) Productivity Index: 0.41 res. bbls./day/psi.			
(iii) Potential = 0.41 X 685 = 281 res. bbls./day.			
(iv) Permeability = 20 - 35 mds.			

(d) The value of 685 psig. as a value of static formation pressure at 1573 ' fits the pressure correlation for the area very well.

<u>Drill Stem Test # 6</u>		<u>Recorded</u>	<u>Calculated</u>	<u>Difference</u>
(Jan. 12/55)				
1.	Depth Interval: 1631 - 1648'.			
2.	Valve Open: 3 1/4 hrs.			
3.	H. P. before seating packer:	760 psig.	760 psig. 765 "	-0 → 5 psig.
4.	"Squeeze" Pressure:	880 psig.		
5.	"Surge" Pressure:	470 psig.		
6.	Flowing Pressures:	0' - 470 psig. 5' - 600 " 10' - 650 " 15' - 680 " 20' - 700 "		
7.	"Shut-in" Pressure:	720 psig.	715 psig. 721 psig.	+ 5 to -1 psig.
8.	H.P. after Unseating packer:	760 psig.	760 - 765 psig.	0 to -5 psig.
9.	B.H. Temperature:	not measured but greater than 108°F.		
10.	<u>Remarks:</u>			
	(a) Art Bergquist's reported times and those shown by recorder check.			
	(b) The recorded hydrostatic pressures due to mud column check the calculated values based on reported mud density. Temperature (atmospheric) was about zero °F.			
	(c) Arps' extrapolation technique provided these estimated data:			
	(i) Productivity Index $\approx$ 16.1 res. bbls./day/psi.			
	(ii) Potential $\approx$ 16.1 X 720 $\approx$ 11,600 res. bbls./day.			
	(iii) Permeability $\approx$ 9,500 - 10,500 mds.			
	(d) "Squeeze" pressure was low likely because of high permeability of zone at 1648'.			
	(e) Recorded and calculated pressures checked better than for tests run previously on Escarpment Lake No. 2 and this well.			

WATER ANALYSIS REPORTSample DescriptionWell name and number NWT Heart Lake 2Well location Lat. 60° 50' 45" N Field or area Hay River NWT
Long. 116° 37' 30" WOperating company NWT Petroleums, General Petroleums, New Superior OilsSample obtained by A. J. Bergquist Date Jan 7/55Sample obtained from DST 3Interval tested 1249 - 1266 Formation Presqu'ile dolomiteOther information Valve open 3 3/4 hours. Rec. 120° salty sulfur water.
This sample from top of column. Scum heavy oil on top of water in pipe.Appearance of sample 1/2 " of black mud in a one quart jar. Some oil.Date sample received Jan 12/55 Date of report Feb 24/55Analysis Results

	<u>Mg/liter</u>	<u>Meg/liter</u>	<u>Equivalents, %</u>		
Na ⁺ + K ⁺	<u>16,080</u>	<u>698.9</u>	<u>39.2</u>	Density, 60°F	<u>1.043</u>
Ca ⁺⁺	<u>2407</u>	<u>120.1</u>	<u>6.7</u>	pH	<u>7.2</u>
Mg ⁺⁺	<u>875</u>	<u>72.0</u>	<u>4.1</u>	H ₂ S	<u>none</u>
Cl ⁻	<u>31,350</u>	<u>854.1</u>	<u>49.6</u>	Resistivity, 77°F	<u>0.140</u>
SO ₄ ⁼	<u>159</u>	<u>3.3</u>	<u>0.2</u>	(Ohm-meters) (25°C)	
HCO ₃ ⁻	<u>223</u>	<u>3.7</u>	<u>0.2</u>	Total solids	
CO ₃ ⁼	<u>0</u>	<u>0.0</u>	<u>0.0</u>	at 110°C (230°F)	<u>57,470</u>
Solids	<u>51,090</u>			at 180°C (360°F)	<u>53,430</u>
(Calc)				after ignition	<u>49,960</u>

Palmer Hypothetical CombinationsPrimary salinity, % 78.4Secondary salinity, % 21.2Primary alkalinity, % 0.0Secondary alkalinity, % 0.4Chloride salinity 99.6Sulfate salinity 0.4W. E. Harris
Department of Chemistry
University of Alberta
Edmonton, Alberta.

WATER ANALYSIS REPORT

Sample Description

Well name and number NWT Heart Lake 2

Well location Lat. 60° 50' 45" N Field or area Hay River NWT
Long. 116° 37' 30" W

Operating company NWT Petroleums, General Petroleums, New Superior Oils

Sample obtained by A. J. Bergquist Date Jan 9/55

Sample obtained from DST 4

Interval tested 1412 - 1429 Formation Presqu'ile dolomite

Other information Rec. 430' slightly gassy, salty, sulfur water.
V.O. 3hours.

Appearance of sample 1/2" of dark mud.

Date sample received Jan 12/55 Date of report Feb 23/55

Analysis Results

	<u>Mg/liter</u>	<u>Mcd/liter</u>	<u>Equivalents, %</u>		
Na ⁺ + K ⁺	<u>21,180</u>	<u>920.6</u>	<u>38.2</u>	Density, 60°F	<u>1.051</u>
Ca ⁺⁺	<u>3640</u>	<u>181.6</u>	<u>7.5</u>	pH	<u>7.3</u>
Mg ⁺⁺	<u>1254</u>	<u>103.1</u>	<u>4.3</u>	H ₂ S	<u>none</u>
Cl ⁻	<u>42,510</u>	<u>1198.8</u>	<u>49.7</u>	Resistivity, 77°F	<u>0.110</u>
SO ₄ ⁼	<u>91</u>	<u>1.9</u>	<u>0.1</u>	(Ohm-meters) (25°C)	
HCO ₃ ⁻	<u>283</u>	<u>4.7</u>	<u>0.2</u>	Total solids	
CO ₃ ⁼	<u>0</u>	<u>0.0</u>	<u>0.0</u>	at 110°C (230°F)	<u>79,110</u>
Solids	<u>68,958</u>			at 180°C (360°F)	<u>73,580</u>
(Calc)				after ignition	<u>67,470</u>

Palmer Hypothetical Combinations

Primary salinity, % 76.4

Secondary salinity, % 23.2

Primary alkalinity, % 0.0

Secondary alkalinity, % 0.4

Chloride salinity 99.8

Sulfate salinity 0.2

W. E. Harris
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 Edmonton, Alberta.

WATER ANALYSIS REPORT

Sample Description

Well name and number NWT Heart Lake 2

Well location Lat. 60° 50' 45" N Field or area Hay River NWT
Long. 116° 37' 30" W

Operating company NWT Petroleums, General Petroleums, New Superior Oils

Sample obtained by A. J. Bergquist Date Jan 11/55

Sample obtained from DST 5

Interval tested 1557 - 1574 Formation Prescu'ile dolomite

Other information Rec. 1034' slightly gassy, salty, sulfur water. V.O.
5 1/4 hours. This sample is from middle of column.

Appearance of sample 1" of reddish mud in a one quart jar.

Date sample received Jan 12/55 Date of report Feb 24/55

Analysis Results

	<u>Mg/liter</u>	<u>Mec/liter</u>	<u>Equivalents, %</u>		
$\text{Na}^+ + \text{K}^+$	<u>22,580</u>	<u>981.9</u>	<u>38.3</u>	Density, 60°F	<u>1.053</u>
Ca^{++}	<u>3867</u>	<u>193.0</u>	<u>7.5</u>	pH	<u>6.9</u>
Mg^{++}	<u>1320</u>	<u>108.6</u>	<u>4.2</u>	H_2S	<u>none</u>
Cl^-	<u>45,180</u>	<u>1274.1</u>	<u>49.6</u>	Resistivity, 77°F	<u>0.111</u>
SO_4^{--}	<u>18</u>	<u>0.4</u>	<u>0.0</u>	(Ohm-meters) (25°C)	
HCO_3^-	<u>550</u>	<u>9.0</u>	<u>0.4</u>	Total solids	
CO_3^{--}	<u>0</u>	<u>0.0</u>	<u>0.0</u>	at 110°C (230°F)	<u>83,380</u>
Solids	<u>73,520</u>			at 180°C (360°F)	<u>77,270</u>
(Calc)				after ignition	<u>70,720</u>

Palmer Hypothetical Combinations

Primary salinity, ‰ 76.6

Secondary salinity, ‰ 22.6

Primary alkalinity, ‰ 0.0

Secondary alkalinity, ‰ 0.8

Chloride salinity 100

Sulfate salinity 0

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WATER ANALYSIS REPORTSample DescriptionWell name and number NWT Heart Lake 2Well location Lat. 60° 50' 45" N Field or area Hay River NWTLong. 116° 37' 30" WOperating company NWT Petroleums, General Petroleums, New Superior OilsSample obtained by A.J. Bergquist Date Jan 12/55Sample obtained from DST 6Interval tested 1631 - 1648 Formation Presqu'ile dolomiteOther information V.O. 3 1/4 hours. Rec. 1521' of gassy, salty, sulfur water. This sample from middle of column.Appearance of sample 2" of dark mud in a one quart jar.Date sample received Jan 12/55 Date of report Feb. 24/55Analysis Results

	<u>Mg/liter</u>	<u>Meg/liter</u>	<u>Equivalents, %</u>		
Na ⁺ + K ⁺	<u>19,075</u>	<u>829.3</u>	<u>37.6</u>	Density, 60°F	<u>1.047</u>
Ca ⁺⁺	<u>3533</u>	<u>176.3</u>	<u>8.0</u>	pH	<u>6.8</u>
Mg ⁺⁺	<u>1173</u>	<u>96.5</u>	<u>4.4</u>	H ₂ S	<u>some</u>
Cl ⁻	<u>38,570</u>	<u>1087.4</u>	<u>49.3</u>	Resistivity, 77°F	<u>0.121</u>
SO ₄ ⁼	<u>86</u>	<u>1.8</u>	<u>0.1</u>	(Ohm-meters) (25°C)	
HCO ₃ ⁻	<u>773</u>	<u>12.7</u>	<u>0.6</u>	Total solids	
CO ₃ ⁼	<u>0</u>	<u>0.0</u>	<u>0.0</u>	at 110°C (230°F)	<u>73,580</u>
Solids	<u>63,210</u>			at 180°C (360°F)	<u>68,850</u>
(Calc)				after ignition	<u>63,080</u>

Palmer Hypothetical CombinationsPrimary salinity, ‰ 75.2Secondary salinity, ‰ 23.6Primary alkalinity, ‰ 0.0Secondary alkalinity, ‰ 1.2Chloride salinity 99.8Sulfate salinity 0.2

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 Edmonton, Alberta.

WATER ANALYSIS REPORTSample Description

Well name and number NWT Heart Lake 2

Well location Lat. 60° 50' 45" N Field or area Hay River NWT
Long. 116° 37' 30" W

Operating company NWT Petroleum, General Petroleum, New Superior Oils

Sample obtained by A. J. Bergquist Date Jan 12/55

Sample obtained from DST 6

Interval tested 1631- 1648 Formation Presquille dolomite

Other information V. O. 3 1/4 hours. Rec. 1521' of gassy, salty, sulfur
water. This sample from bottom of column.

Appearance of sample 1" of dark mud in a one quart jar.

Date sample received Jan 12/55 Date of report Feb. 24/55

Analysis Results

	<u>Mg/liter</u>	<u>Mec/liter</u>	<u>Equivalents, %</u>		
Na ⁺ + K ⁺	<u>18,276</u>	<u>794.6</u>	<u>37.8</u>	Density, 60°F	<u>1.045</u>
Ca ⁺⁺	<u>2301</u>	<u>164.7</u>	<u>7.8</u>	pH	<u>7.8</u>
Mg ⁺⁺	<u>1116</u>	<u>91.8</u>	<u>4.4</u>	H ₂ S	<u>none</u>
Cl ⁻	<u>36,910</u>	<u>1040.9</u>	<u>49.5</u>	Resistivity, 77°F	<u>0.125</u>
SO ₄ ⁼	<u>88</u>	<u>1.8</u>	<u>0.1</u>	(Ohm-meters) (25°C)	
HCO ₃ ⁻	<u>515</u>	<u>8.4</u>	<u>0.4</u>	Total solids	
CO ₃ ⁼	<u>0</u>	<u>0.0</u>	<u>0.0</u>	at 110°C (230°F)	<u>68,100</u>
Solids	<u>60,206</u>			at 180°C (360°F)	<u>62,650</u>
(Calc)				after ignition	<u>58,650</u>

Palmer Hypothetical Combinations

Primary salinity, % 75.6

Secondary salinity, % 23.6

Primary alkalinity, % 0.0

Secondary alkalinity, % 0.2

Chloride salinity 99.8

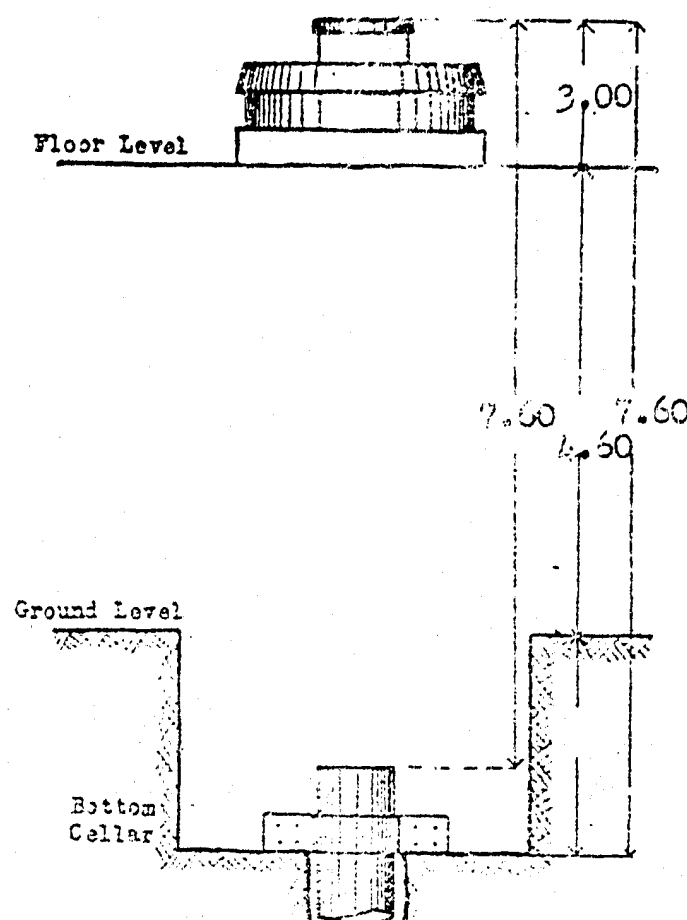
Sulfate salinity 0.2

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Casing Report

NAME OF WELL N. W. T. HEART LAKE # 2

DATE December 20/55



Make of Casing Stewart & Lloyds

Size 7" Weight 20# No. of Threads 8

Short or Long Threads Grade J-55 Range 2

Make and Type of Casing Shoe Baker Guide Welded on? yes

Make and Type of Collar nil Welded on?

Centralizers nil at

Welding—Electric x Acetylene

No. of Joints Welded nil

Welding Co. General Pete Operator R. Steiner

Scratchers at nil

Calcium Chloride Added nil

Aquagel Added nil

Cementing Co. General Petroleums

Cementor A.J.R. Bergquist Helper Crew

Drive Bushing Elevation 729.5

Distance Drive Bushing to Ground Level	7.60	Ft.
Total Amount of Casing Used (including Landing Joint)	259.93'	(L.J. Ft. 27.33')
Distance Top of Casing Landed Below Kelly Drive Bushing	7.60	Ft.
Total Amount of Casing Left in Hole	232.60	Ft.
Depth of Shoe Below Drive Bushing	240.20	Ft.
Time Rigging up to Run Casing	1	Hrs.
Time Running Casing	1 1/4	Hrs.
Time Stopped Circulating	10:30 A.	M.
Time Cement in Pipe	11:15 A.	M.
Plug Measured Into	230	ft. by Wire Line or displaced with
Bumped on	Collar or Baffle Plate with	P.S.
Number of Sacks Cement Used	55	Sacks: Hours Cement Set
Method of Cementing	Positive Displacement	Cement Returns? Yes
Casing Landed in Clamps, Cemented in Casing	(State Make)	National

REMARKS:

Tally

31.68	33.26
34.10	33.53
32.06	27.33 * - Landing Jt.
33.74	259.93
34.23	

Engineer/Toolpusher A. J. R. Bergquist

TIME DRILLING AND/OR CORING RECORD

DRILLED

Interval

Time Elapsed

95' - 500'
(5' drilling time)

65; 10; 15; 5; 10; 8; 26; 14; 7;
8; 10; 43; 46; 25; 15; 9; 11; 15;
17; 16; 18; 20; 21; 18; 24; 25; 29;
20; 32; 20; 4; 11; 5; 10; 6; 18;
15; 8; 7; 12; 10; 14; 20; 14; 14;
16; 25; 10; 14; 20; 19; 19; 32;
15; 19; 18; 24; 16; 35; 12; 13;
18; 14; 18; 40; 11; 13; 13; 17;
16; 24; 10; 8; 11; 10; 10; 9;
7; 8.

DRILLED

500' - 1000'
(5' drilling time)

10; 9; 9; 9; 15; 15; 16; 15; 14;
16; 13; 13; 15; 17; 15; 20; 20;
14; 18; 16; 16; 14; 15; 16; 16;
19; 15; 13; 14; 17; 17; 17; 28;
18; 18; 23; 21; 21; 21; 22; 28;
19; 18; 21; 21; 22; 38; 20; 23;
21; 23; 18; 45; 25; 23; 25; 22;
22; 18; 35; 15; 15; 10; 10; 10;
15; 16; 17; 17; 20; 17; 14; 11;
11; 11; 14; 15; 16; 17; 14; 19;
18; 17; 15; 15; 15; 11; 10; 12;
12; 15; 15; 11; 11; 12; 14; 18;
19; 15; 19.

DRILLED

1000' - 1100'
(1' drilling time)

5; 4; 4; 4; 5; 3; 5; 7; 4; 5; 5;
7; 5; 3; 5; 4; 4; 5; 5; 5; 4; 4;
6; 5; 5; 5; 4; 4; 4; 4; 3; 4; 3;
4; 4; 4; 3; 3; 3; 3; 3; 4; 4; 4;
3; 2; 2; 3; 2; 3; 5; 4; 3; 4; 4;
6; 2; 3; 4; 3; 2; 4; 3; 4; 4; 4;
3; 3; 4; 5; 4; 4; 3; 5; 5; 4; 3;
3; 3; 2; 3; 3; 4; 5; 18; 16; 5;
3; 3; 2; 3; 4; 3; 3; 3; 3; 3; 2;
2; 2.

DRILLED

1100' - 1200'
(1' drilling time)

2; 3; 3; 3; 3; 3; 4; 4; 3; 3; 3; 3;
3; 4; 3; 3; 4; 3; 4; 4; 5; 4; 3; 3;
4; 3; 4; 3; 4; 4; 4; 2; 3; 3; 4; 4;
4; 4; 4; 4; 4; 3; 4; 5; 5; 4; 4; 4;
4; 5; 4; 4; 6; 5; 4; 5; 4; 5; 4; 4;
4; 5; 4; 4; 4; 4; 3; 4; 4; 4; 4; 4;
3; 3; 4; 4; 3; 4; 4; 3; 4; 5; 4; 3;
3; 4; 4; 3; 4; 3; 3; 4; 3; 4; 3; 4;
3; 3; 3; 3.

CORED

1206' - 1214.5'
(1' coring time)

50; 45; 60; 60; 73; 52; 41; 34; 55.

TIME DRILLING AND/OR CORING RECORD (cont'd).DRILLEDIntervalTime Elapsed

1214.5' - 1264'

(1' drilling time)

3; 5; 6; 5; 6; 7; 5; 6; 7; 7; 6;
 8; 7; 6; 6; 6; 5; 6; 5; 9; 8; 7;
 7; 6; 8; 8; 7; 10; 10; 3; 7; 8;
 7; 7; 8; 7; 6; 10; 4; 5; 6; 7; 6;
 8; 7; 4; 4.

CORED

1264' - 1266'

(1' coring time)

18; 12.

DRILLED

1266' - 1400'

(1' drilling time)

6; 4; 4; 5; 6; 5; 5; 4; 6; 6; 7;
 5; 5; 6; 5; 5; 5; 4; 4; 4; 5; 4;
 5; 4; 7; 7; 4; 3; 3; 5; 6; 6; 7;
 6; 6; 5; 7; 7; 5; 5; 5; 4; 2; 5;
 5; 3; 4; 5; 6; 7; 6; 5; 5; 7; 5;
 5; 5; 5; 5; 6; 5; 3; 5; 5; 4; 6;
 5; 10; 8; 8; 9; 5; 4; 8; 8; 9; 5;
 7; 7; 8; 8; 10; 6; 6; 6; 4; 3; 6;
 5; 5; 4; 6; 7; 8; 7; 6; 8; 9; 8;
 7; 9; 7; 7; 7; 8; 8; 7; 6; 8; 7;
 12; 8; 10; 9; 11; 10; 15; 15; 15;
 20; 15; 10; 10; 15; 15; 13; 12;
 11; 10; 10; 10; 14; 11.

DRILLED

1400' - 1500'

(1' drilling time)

15; 17; 12; 10; 10; 10; 10; 7; 8;
 7; 11; 7; 12; 11; 8; 7; 8; 7; 4;
 6; 7; 6; 7; 8; 13; 32; 15; 11; 10;
 9; 12; 12; 12; 10; 12; 10; 7; 10;
 10; 8; 11; 7; 7; 12; 12; 8; 11; 8;
 11; 8; 11; 11; 10; 12; 13; 15; 15;
 14; 16; 10; 10; 15; 10; 15; 7; 10;
 10; 10; 28; 5; 10; 8; 9; 8; 13; 11;
 7; 10; 8; 7; 9; 10; 12; 18; 8; 8;
 11; 7; 11; 12; 7; 6; 9; 10; 10;
 10; 11; 10; 10; 10.

DRILLED

1500' - 1648'

(1' drilling time)

8; 10; 9; 10; 12; 12; 7; 9; 11;
 14; 10; 10; 12; 13; 7; 12; 8; 8;
 9; 9; 8; 11; 9; 10; 6; 14; 6; 10;
 10; 11; 14; 25; 17; 18; 16; 9; 11;
 18; 11; 14; 10; 9; 5; 3; 9; 11;
 14; 20; 15; 12; 13; 16; 22; 17;
 12; 18; 20; 24; 21; 25; 15; 18; 19;
 12; 19; 20; 20; 22; 29; 27; 27;
 31; 32; 12 1/2 hrs.; 14; 15; 14;
 15; 19; 17; 10; 16; 15; 13; 22;
 16; 22; 15; 7; 15; 7; 13; 17; 23;
 25; 23; 29; 13; 14; 12; 12; 12;
 10; 13; 14; 14; 13; 15; 15; 13;
 10; 13; 11; 15; 18; 13; 13; 10;
 11; 14; 10; 9; 6; 13; 13; 15; 12;
 16; 11; 13; 12; 9; 11; 10; 18;
 13; 17; 15; 13; 12; 10; 13; 11; 7;
 12; 14; 13.

D I S T R I B U T I O N

Eleven copies of the foregoing report were completed in April, 1955, and distributed as follows:

Copy No. 1 -	<u>Northwest Territories Petroleums Ltd.</u>
Copy No. 2 -	<u>New Superior Oils of Canada Limited.</u>
Copy No. 3 -	<u>Mr. W. L. Brintnell.</u>
Copy No. 4 -	<u>Dr. A. B. Irwin.</u>
Copy No. 5 -	<u>Dr. A. B. Irwin.</u>
Copy No. 6 -	<u>Dr. D. Bateman.</u>
Copy No. 7 -	<u>New Superior Oils of Canada Limited (Engr. Dept.).</u>
Copy No. 8 -	<u>Mr. H. W. Knight (Draper, Dobie Co.).</u>
Copy No. 9 -	<u>Mr. F. J. Crawford.</u>
Copy No. 10 -	<u>General Petroleums of Canada Limited.</u>
Copy No. 11 -	<u>New Superior Oils of Canada Limited.</u>

- - o o O o o - -

PUNCH STRUCTURE TEST HOLE No. 1 GREAT SLAVE LAKE

- 87 - 115 Shale - light grey-green calcareous shale.
- 115 Top Simpson
- 115 - 130 Shale - dark brown very limy shale with occasional fossil cast.
- 130 - 184 Shale - grey-green calcareous with brownish cast.
- 184 - 200 Shale - grey-green calcareous shale with some bandings of dark grey carbonaceous shale. Some small fossil remains. Shale has brown to grey specks.
- 200 - 285 Shale - as above with less carbonaceous banding. Toward base shale changes to grey with slight brownish cast.
- 285 - 306 Shale - grey-brown carbonaceous shale.
- 306 - 357 Shale - light grey brown non calcareous shale with grey to brown speckles. Some dark brown to grey carbonaceous sections. Small band of crinoid stems at 353.
- 357 - 365 Shale - grey brown slightly fossiliferous shale with bands of brown dense limestone.
- 365 Top Slave Point Limestone
- 365 - 368 Limestone - grey and brown dense crystalline limestone. One coarse vug and slight oil-staining.
- 368 - 456 Limestone - grey crystalline limestone stained brown throughout by oil staining. Intermixed medium crystalline limestone with some granular to chalky limestone. Looks reworked. Some calcite infilling vugs. Continuous oil staining throughout core though spotty in places. Porosity is largely intergranular and is good to excellent. Some vuggy type porosity.

Note On examination of core on March 9th shortly after it had been pulled, no salt water could be detected. On March 25th salt crystallization was present on the core in increasing amount toward the base.

Core Record

PUNCH #1 TEST

Deep Bay, Great Slave Lake

<u>Footage</u>		<u>Footage</u>	<u>Permeab.</u> m/d	<u>Porosity</u> %
0.0 - 60.0	Overburden			
60.0 - 115.0	Compact green gray clay shale; free from lime.			
115.0 - 130.0	Dense brown-gray clay shale; free from lime.			
130.0 - 358.0	Slightly brownish gray clay shale; thin bedding with alternating gray and brown colouration distinctive after 186.0. Core broken and fract- ured 241-243, and 245-247; promin- ent thin partings with psuedo-styl- olitic development after 263; core mudded and broken 277-285.5 and 337-338. Free from lime.			
358.0 - 365.5	As above, but with small white fl- ecks parallel to bedding planes; white limy sections 1-3 inches thick at intervals.			
365.5 - 369.5	Light brown limestone; grey to wh- ite on cored surface; dark brown oil stains at intervals to 368.5; no distinctive porosity.			
369.5 - 375.5	Brown oil-saturated limestone; fine sacchradoidal texture resulting in intergranular porosity; almost 100% of core oil-saturated. Bleeding in core box.	375	37	15.8
375.5 - 415.0	Mottled limestone with fine vuggy porosity and short sections with dis- tinctive intergranular porosity; mot- tling probably organic; saccharoidal porosity and oil saturation 378 to 379. Dark brown oil stains on 40% of core; local bleeding in core box; good gas showing reported 380-381.	380 383 391 402 406 412	16 0.4 8.5 0.5 6.4 8.8	12.3 4.1 8.4 12.4 10.9 7.7

		<u>Footage</u>	<u>Perm.</u> m/d	<u>Porosity</u> %
415.5 - 452.0	Mottled limestone with relatively coarse vuggy porosity; intergranular porosity through 60% of section. About 60 % of core saturated with dark brown oil stains. Oil bleeding in core box at intervals.	418 422 448	3.3 2.5 2.6	9.3 12.6 13.3
452.0 - 456.0	As above with decreasing porosity; puddles of oil-cut drilling mud in core box.	453	0.5	10.6
456.0	Hole abandoned.			

Interpretation of Core Record

0.0 - 60.0	Lacustrine clays overlying glacial till.
60.0 - 130.0	Hay River shale
130.0 - 365.5	Simpson shale; minor gassy and oily odor reported in fractured shale 245.0 to 247.0; otherwise completely free from signs of oil.
365.5 - End	Slave Point limestone; oil staining and saturation at intervals from shale contact to bottom; gas reported.

The hole failed to reach the Reef dolomite ("Presqu'ile"), its primary objective, which was anticipated at approximately 550 feet. The relatively high porosity and oil saturation throughout the Slave Point was unexpected. It is considered that, should the dolomite reef be present beneath the limestone, superior porosity will be encountered with assurance of permeability.

From this evidence obtained in the core of a 2½ inch hole, there is a high probability that commercial production could be maintained on pump from the Slave Point section intersected to date, providing good permeability can be found; and there are superior possibilities for production at greater depth.

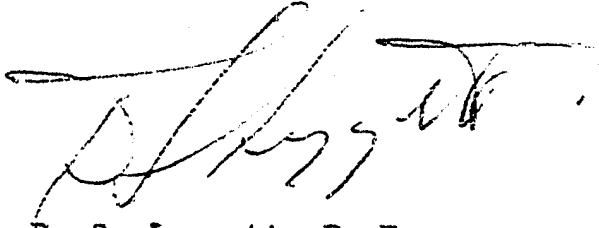
J.D. Bateman,
Yellowknife, N.W.T.,
March 15, 1952.

PUNCH PETROLEUMS LIMITED

Progress Report - Test Hole Punch #1

<u>DATE</u>	<u>FOOTAGE</u>	<u>REMARKS</u>
Feb. 23	0 - 45'	0-26 Clay; 26-45' consolidated shale gravel and boulders NX Casing
Feb. 24th	45-80'	45-60' as above; 60-80' gray green shales (dry color) Hay River ? as shown by one foot of NX core recovered at 60'.
Feb 25th	80-91'	Shales as above. AX core 87'-91' recovery 3'.
Feb 26, 27		Removing NX casing, installing pipe, cementing pipe, cement setting.
Feb. 28th	94-103'	Afternoon shift - drilling cement, collaring AX casing, installing blowout preventer. Gray green shales as above.

Feb 29th, 1952,


D. C. Leggett, P. Eng.

PUNCH PETROLEUM LIMITED

Progress Report - Test Hole Punch #1
Week ending Graveyard shift March 6.

<u>DATE</u>	<u>FOOTAGE</u>	<u>REMARKS</u>
Feb 29	103'-156'	103-115 Green shales 115-129.7' Compact, hard brown shales 129.7-141 Gray green shales shading to brownish.
Mar. 1	156'-210'	Shales as above becoming slightly browner in color
Mar. 2	210'-247'	Shales as above - 245'-247' shales badly broken, slight light oil stain and some gas. Graveyard shift thawing lines and reaming hole.
Mar. 3rd	247'-296'	Shales becoming more definitely brown in color
Mar. 4	296'-352'	Shales as above.
Mar. 5th	352'-414'	352-357 Shales as above 357-366' Shales carrying beds from 1/2" to 3" thick of hard, compact silicious material high in fine pyrite. 366'-391' - Limestone breccia recemented with fine to medium grained MAHLEKXEX material. Frequent bleeding of core where limestone tight. Considerable gas evidenced. 70% of core oil stained and with odor of gas and oil. Porosity low to fair. Possible oolitic horizons and several places where runner reported rods dropping one or two inches. Particularly 376'-383'.
Mar. 6	414'-456'	As above. Staining and bleeding not as strong. Bit muddied in hole afternoon shift - balance of day spent trying to jar rods loose.

D. C. Loggett, P. Eng.

Punch Test #2

No. 1.

~~Well report~~
~~Week ending April 5~~ ~~missing~~

PUNCH PETROLEUMS LIMITED.

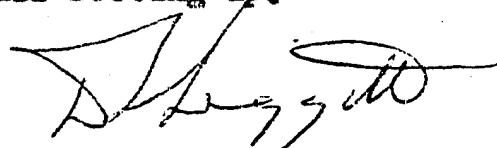
Progress Report - Week ending graveyard shift March 13th.

Mar. 7th and 8th - Reaming out hole in endeavor to recover mudded bit and rods. ✓

Mar. 9th • Casing and casing bit mudded. Hole abandoned at 456! 10' Ax casing left in hole, one Ax reaming shell, one Ax casing shoe, 70' Ax rods, one ten foot core barrel, one Ax bit and one Ax reaming shell.

Mar. 10th through Mar. 13th.

- Moving drill and camps to setup of Test Hole Punch #2, three and a half miles N-55-W from #1. Camps established, mud pit dug, and drill setting up.



D. C. Leggett, P. Eng.

CORE LABORATORIES INC.

CALGARY ALBERTA

Company	- PUNCH PETROLEUM LIMITED	Date Report	- MARCH 17, 1952	Page	- 1 of 1
Well	- TEST HOLE NO. 1 GREAT SLAVE LAKE	Elevation	-	File	- EL-305
Field	- WILDCAT	Formation	-	Analysts	- AG-SH
Province	- ALBERTA	Cores	-	Drilling Fluid	- WATER BASE MUD

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	EXAMINATION
1	375	37.	15.8	Intergranular lime
2	380	16.	12.3	Intergranular lime
3	383	0.4	4.1	Dense, fine grained lime
4	391	8.5	8.4	Intergranular lime
5	402	0.5	12.4	Intergranular lime
6	406	6.4	10.9	Intergranular lime
7	412	8.8	7.7	Intergranular lime
8	418	3.3	9.3	Intergranular lime, small vugs
9	422	2.5	12.6	Intergranular lime, small vugs
10	448	3.6	12.3	Intergranular lime, small vugs
11	453	0.5	10.6	Intergranular lime, small vugs

All core was oil stained.

CORE LABORATORIES INC.
CALGARY ALBERTA

Company - PUNCH PETROLEUMS LTD.
Well - WIIDCAT
Field -
Province -

Date Report - APRIL 10, 1952
Elevation -
Formation -
Cores - DIAMOND

Page - 1 of 1
File - EL-316
Analysts - DA-GC-SH
Drilling Fluid - WATER BASE MUD

SAMPLE NUMBER	DEPTH REPRESENTED FEET	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	RESIDUAL SATURATION		VISUAL EXAMINATION
				OIL % PORE	TOTAL WATER % PORE	
1	806'	0.5	7.9	27.9	16.5	Limestone with fine pores
2	839'	0.1	4.9	38.8	24.5	Limestone with fine pores
3	895.5'	0.2	8.0	7.5	53.7	Limestone intergranular

APR 11 1955

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

[illegible]

Toolpusher _____
Approved by _____

This Copy to Conservation Board. (Mail to Calgary Office)

No. 0436 B

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

DATE ۲۵/۱۰/۱۳۵۷

[illegible]

Cont'r Time

[illegible][illegible]

Cont'r Time

[illegible]

Cont'r Time

Toolpusher [Signature]

Approved by _____

This Copy to Conservation Board. (Mail to Calgary Office)

APR 11 1955

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

[illegible]

Company Time	Cont'r Time
Tearing out to move to 8th high ground. Cleared off space to set rig on approx. 1/4 mile E of Norma lake. Tore down fittings and loaded sleighs, unloaded loaded rig on sleighs and moved it to road.	8th 12

[illegible]

This Copy to Conservation Board. (Mail to Calgary Office)

General Petroleum of Canada Limited

DAY WORK RECORD

No. 0434 B

RIG No. F55 LOCATION HEART LAKE #2 AREA N.W.T. DATE JAN 14 1956

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

Your — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		Hrs. <u>12 48</u>											
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller	<u>W. WIGLEY</u>	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Returned	Hrs.	Liner Size	Condition
Derrick	<u>9</u>												
Motor-man													
Floor	<u>L. LAFFERTY</u>												
Floor	<u>J. ROWE</u>												
Mechanic													
Extra	<u>L. LAUTIT</u>												
Injuries:	<u>NIL</u>												
Fires	<u>NIL</u>												
Equip. Trans. or Rec'd	<u>NIL</u>												

Your — 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		Hrs.											
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Returned	Hrs.	Liner Size	Condition
Derrick													
Motor-man													
Floor	<u>Miss Thomas</u>												
Floor	<u>Miss Isaac</u>												
Mechanic													
Extra	<u>A. Norman</u>												
Injuries:													
Fires													
Equip. Trans. or Rec'd													

REMARKS	Time		
	Start	Stop	Interval
Logging	12:00	3:30	3 1/2
Lay Down Log	3:30	4:00	1/2
Run in to 1300' & prepare to run plug No. 1	4:00		
Mix Cement & Pump Plug No. 1 25 sks.		8:00	4
Plug No. 2 8 sks.	8:00		
Layed Down PIPE			
Lay Down Kelly	8:00	12:00	4
DRAIN Pump pull RAT HOLE prepare to			
Company Time			
Cont'r Time			

Your — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		Hrs.											
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller	<u>De Laval</u>	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Returned	Hrs.	Liner Size	Condition
Derrick													
Motor-man													
Floor	<u>R. B. Jones</u>												
Floor	<u>J. Thomas</u>												
Mechanic													
Extra	<u>L. Becker</u>												
Injuries:													
Fires													
Equip. Trans. or Rec'd													

Your — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		Hrs.											
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller	<u>De Laval</u>	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Returned	Hrs.	Liner Size	Condition
Derrick													
Motor-man													
Floor	<u>R. B. Jones</u>												
Floor	<u>J. Thomas</u>												
Mechanic													
Extra	<u>L. Becker</u>												
Injuries:													
Fires													
Equip. Trans. or Rec'd													

Your — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		Hrs.											
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller	<u>De Laval</u>	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Returned	Hrs.	Liner Size	Condition
Derrick													
Motor-man													
Floor	<u>R. B. Jones</u>												
Floor	<u>J. Thomas</u>												
Mechanic													
Extra	<u>L. Becker</u>												
Injuries:													
Fires													
Equip. Trans. or Rec'd													

Toice Ring on Bit No. _____ D.P. Calipered Date _____

Results _____

From Pipe Rack _____

Total Contractor Time _____ Hrs.

Toolpusher _____

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

Results _____

Total Company Time _____ Hrs.

Approved by _____

Form 1-1-56

This Copy to Conservation Board. (Mail to Calgary Office)

No. 0433 B

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

Your — 4 p.m. to Midnight		From	Footage	To	Mrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly		
Specify actual hrs. worked	Hrs.	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller	12	B	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Linear Size	Condition	
Derrick		I	7	6 3/4	OVIS	82175	Ream								
Motor-man		T													
Floor	12	S													
Floor	10	MUD		4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives		Motor Hours		NEXT OIL CHANGE AT		FUEL	
Mechanic		Wt.						700 Gel.		No. 1				Gal.	
Extra	12	Visc.								No. 2				WATER	
Injuries:	N.I.	Gel.								No. 3				Bbl.	
Fires	N.I.	Pump Pressure								No. 4				COAL	
Equip. Trans. or Rec'd	N.I.	P.M. R.P.M.								No. 5				Tons	
		W.L.		F.C.		pH		TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Grip
		At		SURVEYS		Degrees		General:							

REMARKS	Time		
	Start	Stop	Interval
TESTER OPEN	12:00	2:30	2½
CLOSE TESTER	2:50	2:55	¼
Mixing mud + Lost Cir MAT.	2:45	5:30	2¾
HOIST TESTER	5:30	8:00	2½
Company Time	Cont'r Time		
LAYED DOWN TESTER +	9:00	9:00	1
CLEANED SAME			
PREPARE TO RUN IN	9:00		
with BIT		9:30	½
RUNNING IN	9:30	11:00	1½
THROW OUT TABLE	11:00	11:15	¼
PUMPING LOST CIR MAT.	11:15	12:30	1¼
MIX MORE MUD + LOST CIR.	12:30		
MAT CLEAN PUMP,			
PUMP MUD DOWN SMALL			
RETURNS, MIX MORE MUD +			
LOST CIR MAT.		4:00	3½
Company Time	Cont'r Time		
CIR FALL LOGGING	4:00	7:00	3
TRUCK COMES	7:00	10:00	1
HOIST TO LOG	10:00	10:15	¼
RIG UP TO LOG.	10:15	12:00	1¾
LOGGING			
D. LAW'S CREW HANDED WOOD			
FOR BOILER FROM 8:00 AM			
TO 4:00 PM			
Company Time	Cont'r Time		

Toolpusher _____

Approved by _____

This Copy to Conservation Board. (Mail to Calgary Office)

General Petroleum of Canada Limited

DAY WORK RECORD

No. 0432 B

RIG No. F55 LOCATION HEART LAKE #2 AREA N.W.T. DATE JAN 12 1950

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

Tour — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	
Specify actual hrs. worked		1673	28	1601	6 3/4	15		51	1.74			1.75	18.48	
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE														
Driller	W. Wipley	12	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Returned	Hrs.	Liner Size	Condition
Derrick			12	6 3/4	OWS	80429	8		28	6 3/4				
Motor-man														
Floor	L. Lafferty	12	MUD		12 Ma.	2 a.m.	4 a.m.	6 a.m.	Additives		Motor Hours		NEXT OIL CHANGE AT	FUEL
Floor	J. Rowe	12	Wt.		8	8.7	8.7	8.7			No. 1			Gals.
Mechanic			Visc.			59	56	25			No. 2			WATER
Extra	L. Loutit	12	Gel.			69	66	62			No. 3			Bbls.
Injuries:			Pump Pressure								No. 4			COAL
Fires			Pump R.P.M.			75	75	75			No. 5			Tons
Equip. Trans. or Rec'd			W.L. 8.0		F.C. 2/32	pH 8.5	TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip
			At		SURVEYS	Degrees	6							
General:														
Tour — 8 a.m. to 4 p.m.														
Specify actual hrs. worked		1601	36	1637	2	15		52	28.74			1.75		
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE														
Driller			No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Returned	Hrs.	Liner Size	Condition
Derrick			12	6 3/4	OWS	80429	8	100	64	14 3/4				
Motor-man														
Floor	Mrs. Thomas		MUD		2 a.m.	10 a.m.	12 noon	2 p.m.	Additives		Motor Hours		NEXT OIL CHANGE AT	FUEL
Floor	Miss Isaac		Wt.					8.9			No. 1			Gals.
Mechanic			Visc.					63			No. 2			WATER
Extra	A. Norman	12	Gel.					74			No. 3			Bbls.
Injuries:			Pump Pressure								No. 4			COAL
Fires			Pump R.P.M.					75			No. 5			Tons
Equip. Trans. or Rec'd			W.L. 7.2		F.C. 2/32	pH 8.5	TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip
			At		SURVEYS	Degrees	6							
General:														
Tour — 4 p.m. to Midnight														
Specify actual hrs. worked		1637	11	1648	2 1/2	15		52	28.74			1.75		
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE														
Driller	D. Law	12	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Returned	Hrs.	Liner Size	Condition
Derrick			12	6 3/4	OWS	80429	8	100	75	17 1/4				Fair
Motor-man														
Floor	B. Rowe	12	MUD		4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives		Motor Hours		NEXT OIL CHANGE AT	FUEL
Floor	T. Thomas	12	Wt.			8.9					No. 1			Gals.
Mechanic			Visc.			65					No. 2			WATER
Extra	A. Beecher	12	Gel.			76					No. 3			Bbls.
Injuries:			Pump Pressure								No. 4			COAL
Fires			Pump R.P.M.					75			No. 5			Tons
Equip. Trans. or Rec'd			W.L. 7.4		F.C. 2/32	pH 8.5	TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip
			At		SURVEYS	Degrees	6							
General:														

REMARKS	Time		
	Start	Stop	Interval
Finish Trip in	12:00	12:30	1/2
Rig Service	12:30	12:45	1/4
Break Cir	12:45	1:00	1/4
Beam 14' To Bottom	1:00	1:15	1/4
Drilling	1:15	2:00	6 3/4
Company Time	5:00		
Cont'r Time	4:00		

Drilling			
Company Time	4:00		
Cont'r Time	4:00		

Drilling			
Last Cir. Hoist Bit	4:00	6:30	2 1/2
Pick Up Tester	6:30	8:15	1 3/4
Run in Tester	8:15	9:30	1 1/4
Open Tester	9:30	11:00	1 1/2
	11:00	12:00	1
Company Time	4:00		
Cont'r Time	4:00		

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
B.O.P. Test-Operated _____ Time _____ Results _____ This Copy to Conservation Board. (Mail to Calgary Office)

Total Contractor Time _____ Hrs.
Total Company Time _____ Hrs.

Toolpusher _____
Approved by _____

General Petroleum of Canada Limited

DAY WORK RECORD

No 0431 B

RIG No. F 55 LOCATION HEART LAKE #2 AREA N.W.T. DATE JAN. 11, 1955

NOTE—Please use FCOTAGE made while "Control Drilling" as well as MOURS.

Your — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.S. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		1531	34	1565	7 3/4	14		50	28.74			1.75	24.60
Driller	W. WIGLEY	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Returned	Hrs.	Liner Size	Condition
Motor-man		11	6 3/8	O.S.C.	81577	8	100	38	9				STILL IN
Floor	L. Lafferty	MUD 12 Mm. 2 a.m. 4 a.m. 6 a.m.											
Floor	J. Rowe	Wt.	8.8	8.8	8.8	8.8	Additives		Motor Hours		NEXT OIL CHANGE AT		FUEL
Mechanic		Visc.	55	60	58	60			No. 1				Colts.
Extra	L. Loutit	Gel.	65	71	70	70			No. 2				WATER
Injuries:	NIL	Pump Pressure							No. 3				Blts.
Fires	NIL	Pump R.P.M.	75	75	75	75			No. 4				COAL
Equip. Trans. or Rec'd	NIL	W.L.	8.0	F.C.	2/32	pH	8.5	TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped
		At	SURVEYS		Degrees				Line Length		Next Slip		
General:													

REMARKS	Time		
	Start	Stop	Interval
Drilling	12:00	1:00	1
Rig Service	1:00	1:15	1/4
Drilling	1:15	2:00	6 3/4

Your — 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.S. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		1565	8	1573				50	28.74			1.75	16.60
Driller:		IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Returned	Hrs.	Liner Size	Condition
Motor-man		11	6 3/8	O.S.C.	81577	8	100						
Floor	Miss. Isaacs	MUD 8 a.m. 10 a.m. 12 noon 2 p.m.											
Floor	Miss. Isaac	Wt.					Additives		Motor Hours		NEXT OIL CHANGE AT		FUEL
Mechanic		Visc.							No. 1				Colts.
Extra	A. Norman	Gel.							No. 2				WATER
Injuries:		Pump Pressure							No. 3				Blts.
Fires:		Pump R.P.M.							No. 4				COAL
Equip. Trans. or Rec'd		W.L.		F.C.		pH		TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped
		At	SURVEYS		Degrees				Line Length		Next Slip		
General:													

Company Time	Cont'r Time
Drilling	8:00 1:15 3 3/4
Cir. Hole - Clean To Test	1:15 1:45 3
Hoist Bit	1:45 2:15 3
Pick Up Tester	2:15 2:45 3
Run in Tester	2:45 3:15 3
Rig up To Test	3:15 3:45 3
Open Tester	3:45 4:15 3

Your — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.S. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		1573						50	28.74			1.75	
Driller	D. Law	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Returned	Hrs.	Liner Size	Condition
Motor-man		12	6 3/8	O.S.C.	80423								
Floor	B. Rowe	MUD 4 p.m. 6 p.m. 8 p.m. 10 p.m.											
Floor	J. Thomas	Wt.					Additives		Motor Hours		NEXT OIL CHANGE AT		FUEL
Mechanic		Visc.							No. 1				Colts.
Extra	R. Beecher	Gel.							No. 2				WATER
Injuries:		Pump Pressure							No. 3				Blts.
Fires:		Pump R.P.M.							No. 4				COAL
Equip. Trans. or Rec'd		W.L.		F.C.		pH		TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped
		At	SURVEYS		Degrees				Line Length		Next Slip		
General:													

Company Time	Cont'r Time
Open Tester	4:00 4:15 1/4
Swabbing	4:15 4:30 1/4
Hoist Tester	4:30 4:45 1/4
Break Down Tester	4:45 5:00 1/4
Run in OWS Return	5:00 5:15 1/4

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

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

Total Contractor Time _____ Hrs.

Total Company Time _____ Hrs.

Toolpusher _____

Approved by _____

General Petroleum of Canada Limited

DAY WORK RECORD

No. 0430 B

RIG No. *F55* LOCATION *HEART LAKE #2* AREA *N.W.T.* DATE *JAN 10 1955*

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

Tour — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		1423	37	1460	8	12		46	28.74			1.75	7.69
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller	<i>W. Wigley</i>	12	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Line Size
Derrick			10	6 1/4	O.W.S.	80153	10		37	8 1/2			
Motor-man													
Floor	<i>L. Lafferty</i>	12	MUD		12 Mm.	2 a.m.	4 a.m.	6 a.m.	Additives		Motor Hours	NEXT OIL CHANGE AT	FUEL
Floor	<i>J. Rowe</i>	12	Wt.		8.8	8.8	8.8		<i>Queb 100#</i>		No. 1		
Mechanic			Visc.		7	70	35	60	<i>WATER</i>		No. 2		
Extra	<i>L. Loutit</i>	12	Gel.			100	70	85			No. 3	<i>Light don't change</i>	
Injuries:	<i>NIL</i>		Pump Pressure								No. 4		
Fires	<i>NIL</i>		Pump R.P.M.			75	75	75			No. 5		
Equip. Trans. or Rec'd	<i>NIL</i>		W.L.	7.0	F.C.	7/32	pH	8.5	TRIPS		No. Lines	TON MILES	TOTAL
			At		SURVEYS	Degrees			General:		Line Slipped	Line Length	Next Slip

REMARKS	Time		
	Start	Stop	Interval
Finish Trip in	12:00	12:30	1/2
Thru Table	12:30	1:00	1/2
BREAK CIR	1:00	1:15	1/4
Big SERVICE	1:15	1:30	1/4
DRILLING	1:30	2:00	1/2
Work to Pump	2:00	2:30	1/2
DRILLING	2:30	8:00	5 1/2
Company Time			
Cont'r Time			
DRILLING	8:00	4:22	

Tour — 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		1460	110	1570	8	12		45	28.74			1.75	
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller			No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Line Size
Derrick			10	6 1/4	O.W.S.	80153	8		71	16 1/2			
Motor-man													
Floor	<i>Miss Thomas</i>		MUD		8 a.m.	10 a.m.	12 noon	2 p.m.	Additives		Motor Hours	NEXT OIL CHANGE AT	FUEL
Floor	<i>Miss 25930</i>		Wt.						<i>200# QUEBRACHO</i>		No. 1		
Mechanic			Visc.								No. 2		
Extra	<i>A. Thomas</i>	12	Gel.								No. 3		
Injuries:	<i>NIL</i>		Pump Pressure								No. 4		
Fires	<i>NIL</i>		Pump R.P.M.			75					No. 5		
Equip. Trans. or Rec'd	<i>NIL</i>		W.L.	7.0	F.C.	2/32	pH	8.5	TRIPS		No. Lines	TON MILES	TOTAL
			At		SURVEYS	Degrees			General:		Line Slipped	Line Length	Next Slip

Company Time			
Cont'r Time			
DRILLING	4:02	8:12	4 1/4
Hoist Bit & 10	8:12	9:32	1 1/4
Run in Bit & 11 Return	9:32	10:42	1 1/4
DRILLING	10:42	12:02	1 1/4
Company Time			
Cont'r Time			

Tour — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		1500	31	1531	5 1/2	13		49	28.74			1.75	
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller	<i>D. Law</i>	12	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Line Size
Derrick			10	6 1/4	O.W.S.	80153	8	110	98	22 1/2			
Motor-man			11	6 1/4	O.S.C.	81577	8	100	8	14			
Floor	<i>B. Rowe</i>	12	MUD		4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives		Motor Hours	NEXT OIL CHANGE AT	FUEL
Floor	<i>J. Thomas</i>	12	Wt.		8.8	8.8			<i>200# QUEBRACHO</i>		No. 1		
Mechanic			Visc.		59	55					No. 2		
Extra	<i>R. Beecher</i>	12	Gel.		62	60					No. 3		
Injuries:	<i>NIL</i>		Pump Pressure								No. 4		
Fires	<i>NIL</i>		Pump R.P.M.		75	75					No. 5		
Equip. Trans. or Rec'd	<i>NIL</i>		W.L.	8.0	F.C.	7/32	pH	8.5	TRIPS		No. Lines	TON MILES	TOTAL
			At		SURVEYS	Degrees			General:		Line Slipped	Line Length	Next Slip

Company Time			
Cont'r Time			
DRILLING	4:02	8:12	4 1/4
Hoist Bit & 10	8:12	9:32	1 1/4
Run in Bit & 11 Return	9:32	10:42	1 1/4
DRILLING	10:42	12:02	1 1/4
Company Time			
Cont'r Time			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
 B.O.P. Test-Operated _____ Time _____ Results _____
 Form 61 _____

Total Contractor Time _____ Hrs.
 Total Company Time _____ Hrs.

Toolpusher *[Signature]*
 Approved by *[Signature]*

This Copy to Conservation Board. (Mail to Calgary Office)

General Petroleum of Canada Limited

DAY WORK RECORD

No. 0429 B

RIG No. F55 LOCATION HEART LAKE # 2 AREA N.W.T. DATE JAN 9 1955

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

Tour — Midnight — 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Sigs.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		Hrs.	1373	33	1406	674	12	44	28.74			1.75	DOWN
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller	W. Wigley	12	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Condition
Derrick			9	6 1/2	OWS	82198	10		140	18 1/2			Dull
Motor-man													
Floor	L. Lafferty	12	MUD	12 Ma.	2 a.m.	4 a.m.	6 a.m.	Additives	Motor Hours		NEXT OIL CHANGE AT	FUEL	
Floor	J. Rowe	12	Wt.	8.9	8.9	8.9	8.9	Guncb 25"	No. 1				Gals.
Mechanic			Visc.	58	60	54	55	DRESCOE 10"	No. 2				WATER
Extra	L. Loutit	12	Gel.	68	70	64	65		No. 3				Bbls.
Injuries:	NIL		Pump Pressure						No. 4				COAL
Fires	NIL		Pump R.P.M.	75	75	75	75		No. 5				Tons
Equip. Trans. or Rec'd	NIL		W.L.B. 8	F.C. 332	pH 8.5	TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip							
General:													

REMARKS	Time		
	Start	Stop	Interval
DRILLING	12:00	12:15	1/4
Rig SERVICE	12:15	12:30	1/4
DRILLING	12:30	1:00	3/4
Trip out	7:00	7:30	1/2
Slips would not Hold	7:30		
Work on Slips		8:00	1/2

Tour — 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Sigs.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		Hrs.	1417	17	1423	54	12	45	28.74			1.75	
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller			No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Condition
Derrick			10	6 1/2	OWS	80553	8	100	100	11			
Motor-man													
Floor	Mrs. Thomas		MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	Additives	Motor Hours		NEXT OIL CHANGE AT	FUEL	
Floor	Mrs. Isaac		Wt.						No. 1				Gals.
Mechanic			Visc.						No. 2				WATER
Extra	A. Norman	12	Gel.						No. 3				Bbls.
Injuries:			Pump Pressure						No. 4				COAL
Fires			Pump R.P.M.						No. 5				Tons
Equip. Trans. or Rec'd			W.L. 7.2	F.C.	pH 8.0	TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip							
General:													

Company Time	Cont'r Time	
Work to Slips	8:00	8:45 3/4
Trip out	8:45	9:30 3/4
Change Bits	9:30	9:45 1/4
Run in	9:45	1:00 1 1/4
DRILLING	12:00	1:30 3/2
Hoist 8 BIT 10	1:30	2:45 1 1/2
Lay Down Drill Collars	2:45	3:00 1/4
Pick up Tester	3:00	4:00 1 1/2
Run in Tester	4:00	

Tour — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Sigs.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		Hrs.	1423			12		45	28.74			1.75	
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Driller	D. Law	12	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Condition
Derrick			10	6 1/2	OWS	80183	10	100	17	25			
Motor-man													
Floor	B. Rowe	12	MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives	Motor Hours		NEXT OIL CHANGE AT	FUEL	
Floor	J. Thomas	12	Wt.						No. 1				Gals.
Mechanic			Visc.						No. 2				WATER
Extra	R. Beecher	12	Gel.						No. 3				Bbls.
Injuries:			Pump Pressure						No. 4				COAL
Fires			Pump R.P.M.						No. 5				Tons
Equip. Trans. or Rec'd			W.L.	F.C.	pH	TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip							
General:													

Company Time	Cont'r Time	
Make up Tester	4:00	4:30 1/2
Run in Tester	4:30	5:00 1 1/2
Rig up to Test	5:00	5:30 1/2
Open Tester	5:30	9:30 3
Hoist Tester	9:30	10:30 1
Lay Down Tester	10:30	11:15 3/4
Run in Bit 10	11:15	12:00 3/4

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

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

Form 1-1

This Copy to Conservation Board. (Mail to Calgary Office)

Total Contractor Time _____ Hrs.

Total Company Time _____ Hrs.

Toolpusher _____

Approved _____

General Petroleums of Canada Limited

DAY WORK RECORD

No. 0428 B

RIG No. F55

LOCATION HEART LAKE #2

AREA N.W.T.

DATE JAN 8 1955

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

Hour — Midnight - 8 a.m.	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Sds.	Slings	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	
Specify actual hrs. worked	1266												
Driller W. Wigley	12	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man		1	6 1/8	OWS	82198								
Floor L. Lafferty	12	MUD 12 Mm. 2 a.m. 4 a.m. 6 a.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL											
Floor J. Rowe	12	Wt. Visc. Gel. Pump Pressure Pump R.P.M. W.L. F.C. pH At SURVEYS Degrees											
Mechanic		TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip											
Extra L. Loutit	12	General:											
Injuries:													
Fires													
Equip. Trans. or Rec'd													

Hour — 8 a.m. to 4 p.m.	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Sds.	Slings	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	
Specify actual hrs. worked	1266	40	1306	4	12		41	28.74			1.75	6	
Driller		IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man		1	6 1/8	OWS	82198	13	100	70	4				SPILL
Floor Mrs. Thomas		MUD 8 a.m. 10 a.m. 12 noon 2 p.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL											
Floor Miss Isaac		Wt. Visc. Gel. Pump Pressure Pump R.P.M. W.L. F.C. pH At SURVEYS Degrees											
Mechanic		TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip											
Extra A. Norman	12	General:											
Injuries:													
Fires													
Equip. Trans. or Rec'd													

Hour — 4 p.m. to Midnight	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Sds.	Slings	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	
Specify actual hrs. worked	1306	67	1373	8	12		43	28.74			1.75	3	
Driller D. Law	12	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man		1	6 1/8	OWS	82198	12	100	107	12				SPILL
Floor B. Rowe	12	MUD 4 p.m. 6 p.m. 8 p.m. 10 p.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL											
Floor J. Thomas	12	Wt. Visc. Gel. Pump Pressure Pump R.P.M. W.L. F.C. pH At SURVEYS Degrees											
Mechanic		TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip											
Extra R. Beecher	12	General:											
Injuries:													
Fires													
Equip. Trans. or Rec'd													

REMARKS	Time		
	Start	Stop	Interval
TEST	12:00	12:30	1/2
PULL TESTER LOOSE	12:30	12:45	1/4
SHUT IN	12:45	1:00	1/4
HOIST TESTER	1:00	2:30	1 1/2
BREAK + LAY DOWN TESTER	2:30		
CLEAN SAME		3:30	1
PICK UP DRILL COLLAR	3:30	3:45	1/4
PREPARE TO RUN IN TO	3:45		
DRILL AHEAD		4:00	1/4
RUNNING IN - WHILE hooking	4:00		
THROW OUT ROTARY TABLE			
COMP. DRILLING ELEC. TIME ON ANOTHER			
RIP SERVICES SINGLE -		6:30	2 1/2
ONE SINGLE - D.C. slipped			
THOUGHT slips			
RUN IN TAP TO FISH	10:30		
D.C. & SINGLE out			
SET TAP		8:00	1 1/2
HOIST SLOW	8:00	10:30	2 1/2
CHECK BIT & D.C. O.K.	10:30	11:00	1/2
RUNNING IN TO DRILL	11:00	12:00	1
DRILLING	12:00	4:00	4
Company Time	Cont'r Time		
Drilling	7:00	11:00	4
Company Time	Cont'r Time		

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

B.O.P. Test-Operated Time Results

Form

Total Contractor Time Hrs.

Total Company Time Hrs.

Toolpusher

Approved by

This Copy to Conservation Board. (Mail to Calgary Office)

General Petroleum of Canada Limited

DAY WORK RECORD

No. 0427 B

RIG No. F55 LOCATION HEART LAKE #2AREA N.W.T.DATE JAN 7 1953

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

Tour — Midnight - 8 a.m.	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	
Specify actual hrs. worked	Hrs.	1266											
Driller <u>W. Wigley</u>	12	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man													
Floor <u>L. Lafferty</u>	12	MUD 12 Mn. 2 a.m. 4 a.m. 6 a.m. Additives											
Floor <u>J. Rowe</u>	12	Motor Hours											
Mechanic		NEXT OIL CHANGE AT FUEL											
Extra <u>L. Loutit</u>	12	Wt. Visc. Gel. Pump Pressure Pump R.P.M. W.L. F.C. pH At SURVEYS Degrees											
Injuries:		TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip											
Fires		General:											
Equip. Trans. or Rec'd													

Tour — 8 a.m. to 4 p.m.	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	
Specify actual hrs. worked	Hrs.												
Driller		IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man													
Floor <u>Mrs. Thomas</u>		MUD 8 a.m. 10 a.m. 12 noon 2 p.m. Additives											
Floor <u>Miss. Isaac</u>		Motor Hours											
Mechanic		NEXT OIL CHANGE AT FUEL											
Extra <u>H. Norman</u>	12	Wt. Visc. Gel. Pump Pressure Pump R.P.M. W.L. F.C. pH At SURVEYS Degrees											
Injuries:		TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip											
Fires		General:											
Equip. Trans. or Rec'd													

Tour — 4 p.m. to Midnight	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	
Specify actual hrs. worked	Hrs.												
Driller <u>D. Law</u>	12	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man													
Floor <u>B. Rowe</u>	12	MUD 4 p.m. 6 p.m. 8 p.m. 10 p.m. Additives											
Floor <u>J. Thomas</u>	12	Motor Hours											
Mechanic		NEXT OIL CHANGE AT FUEL											
Extra <u>H. Beecher</u>	12	Wt. Visc. Gel. Pump Pressure Pump R.P.M. W.L. F.C. pH At SURVEYS Degrees											
Injuries:		TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip											
Fires		General:											
Equip. Trans. or Rec'd													

REMARKS	Start	Stop	Interval
BREAK & BIT OFF	12:00		
LAY DOWN CORE BBL.		12:30	1/2
Pick up TESTER + make up	12:30	2:30	2
Run in W/TESTER			
Rig up FLARE LINE	2:30		
TEST B.O.P. O.K.		5:45	3 1/4
Run in W/TESTER	5:45	8:00	2 1/4
Company Time	Cont'r Time		
Finish Running TESTER	8:00	9:45	3/4
Set TESTER	9:15		
Rigging up To Swab	9:15	12:00	2 3/4
Swabbing	12:00	1:30	1 1/2
Hoist TESTER	1:30	2:30	1
Break Down TESTER	2:30	3:00	1/2
Make up TESTER MISC.	3:00	3:30	1/2
Run in TESTER	3:30	4:00	1/2
Company Time	Cont'r Time		
Run in TESTER	4:00	4:45	1 1/2
Open TESTER	4:45	6:00	1 1/2
Hoist TESTER	6:00	7:00	1
Break Down TESTER	7:00	7:30	1/2
Make up TESTER	7:30	8:00	1/2
Run in TESTER	8:00	9:00	1 1/2
Open TESTER	9:00	12:00	3 1/2
Swabbing 11:00 To 12:00			
Company Time	Cont'r Time		

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

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

Form 141

Total Contractor Time _____ Hrs.

Total Company Time _____ Hrs.

Toolpusher E. J. LangApproved by E. J. Lang

This Copy to Conservation Board. (Mail to Calgary Office)

General Petroleum of Canada Limited

DAY WORK RECORD

No. 0426 B

RIG No. *F-5* LOCATION *N.W.T. HEART LAKE #2*AREA *N.W.T.*DATE *Jan. 6/54*

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

Tour — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	
Specify actual hrs. worked		Hrs.	1236			11			2874	23.86	2.03			
Driller	<i>W. Wigley</i>	12	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick			No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man			1	6 7/8	Ø CORE									
Floor	<i>L. Lafferty</i>	12	MUD											
Floor	<i>J. Rowe</i>	12	Wt.	12 Mm.	2 a.m.	4 a.m.	6 a.m.	Additives	Motor Hours		NEXT OIL CHANGE AT		FUEL	
Mechanic			Visc.	48			47		No. 1				Gals.	
Extra	<i>L. Loutit</i>	12	Gel.	58			56		No. 2				WATER	
Injuries:			Pump Pressure	250			75		No. 3				Bbls.	
Fires			Pump R.P.M.	75			50		No. 4				COAL	
Equip. Trans. or Rec'd			W.L. 4.0	F.C. 432	pH 9.5	TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip	
			At	SURVEYS	Degrees	General:		<i>Correct pipe tally 3'</i>						

Tour — 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	
Specify actual hrs. worked		Hrs.	1236	23	1259	3 1/2	11	40	2874			1.75		
Driller			IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick			No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man			1	6 3/4	Ø WS		11	100	161	1 1/2				
Floor	<i>Miss Thomas</i>		MUD											
Floor	<i>Miss Isaac</i>		Wt.	8 a.m.	10 a.m.	12 noon	2 p.m.	Additives	Motor Hours		NEXT OIL CHANGE AT		FUEL	
Mechanic			Visc.				8.6	8.6	No. 1				Gals.	
Extra	<i>A. Norman</i>	12	Gel.				42	42	No. 2				WATER	
Injuries:			Pump Pressure				54	54	No. 3				Bbls.	
Fires			Pump R.P.M.				75	75	No. 4				COAL	
Equip. Trans. or Rec'd			W.L. 6.5	F.C. 242	pH 8.5	TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip	
			At	SURVEYS	Degrees	General:								

Tour — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	
Specify actual hrs. worked		Hrs.	1259	7	1266									
Driller	<i>D. Law</i>	12	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick			No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man			1	6 3/4	Ø WS		11	100	163	1 3/4				
Floor	<i>B. Rowe</i>	12	MUD											
Floor	<i>J. Thomas</i>	12	Wt.	4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives	Motor Hours		NEXT OIL CHANGE AT		FUEL	
Mechanic			Visc.				8.6	8.6	No. 1				Gals.	
Extra	<i>A. Beecher</i>	12	Gel.				42	42	No. 2				WATER	
Injuries:			Pump Pressure				56	56	No. 3				Bbls.	
Fires			Pump R.P.M.				75	75	No. 4				COAL	
Equip. Trans. or Rec'd			W.L. 6.4	F.C. 242	pH 9.5	TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip	
			At	SURVEYS	Degrees	General:								

REMARKS	Time			Total
	Start	Stop	Interval	
Cir. Samples	12:00	12:30	1/2	
Hoist Bit #8 To Core	12:30	2:00	1 1/2	
Lay D.C. pick Core Bbl.	2:00			
check same pick up D.C.				
MEASURE IN.		4:30	2 1/2	
Cir To Btm	4:30	5:45	1 1/4	
Cut CORE #3	5:45			
Ø Bit would not dig		7:30	1 3/4	
Hoist	7:30	8:30	1	
Check Bbl. - Bit				
Run in Bit				
Company Time	Cont'r Time			
Lay Down CORE Bbl.				
pick up D.C.				
Run in Bit #8 to				
Drill ahead		12:00		
Run in Bit #8	12:00	12:30	1/2	
Drilling	12:30	4:00	3 1/2	
Company Time	Cont'r Time			
Drilling	4:00	5:30	1 1/2	
Hoist To Core	5:30	6:00	1	
Pick up Service BBL	6:00	7:00	1	
Run in to Core	7:00	8:15	1 1/4	
Clean to Bottom	8:15	10:15	2	
Coring	10:15	10:45	1/2	
Hoist Core #4	10:45	11:45	1	
Lay down Core	11:45	12:00	1/4	
Company Time	Cont'r Time			

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

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

Form _____

Total Contractor Time _____ Hrs.

Total Company Time _____ Hrs.

Toolpusher *E. J. Suggs*Approved by *E. J. Suggs*

This Copy to Conservation Board. (Mail to Calgary Office)

General Petroleum of Canada Limited

DAY WORK RECORD

No. 2150 B

RIG No. 555 LOCATION HART LAKE # 2

AREA N.W.T.

DATE JAN 5 1955

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

Tour — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly		
Specify actual hrs. worked		1206	3	1209	2 3/4	10		37	28.74		22.86	2.03	19.20		
Driller	W. Wipley	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Line Size	Condition		
Motor-man				Q CORE		3	45	3	2 3/4				Still in		
Floor	L. Lafferty	MUD 12 Mts. 2 a.m. 4 a.m. 6 a.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL													
Floor	J. Rowe	Wt.							No. 1				Colts.		
Mechanic		Visc.							No. 2				WATER		
Extra	L. Lafferty	Gel.							No. 3				Bbls.		
Injuries:		Pump Pressure				150			No. 4				COAL		
Fires		Pump R.P.M.				45			No. 5				Tons		
Equip. Trans. or Rec'd		W.L. 6.4	F.C. 2/32	PH 9.5					TRIPS	No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip
		At	SURVEYS	Degrees											
		General:													

Tour — 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly		
Specify actual hrs. worked		1209	5	1214	1 1/2	10									
Driller		IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Line Size	Condition		
Motor-man				Q CORE		3	45								
Floor	M. J. Thomas	MUD 8 a.m. 10 a.m. 12 noon 2 p.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL													
Floor	L. L. Thomas	Wt.				85			No. 1				Colts.		
Mechanic		Visc.	60			42			No. 2				WATER		
Ext	A. N. Thomas	Gel.	70			54			No. 3				Bbls.		
Injuries:		Pump Pressure	150						No. 4				COAL		
Fires		Pump R.P.M.	45						No. 5				Tons		
Equip. Trans. or Rec'd		W.L. 6.0	F.C. 2/32	PH 9.5					TRIPS	No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip
		At	SURVEYS	Degrees											
		General:													

Tour — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly		
Specify actual hrs. worked		1214	19	1233	2 1/2	11		39	28.74			1.75			
Driller	D. L. Thomas	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Derrick		No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Line Size	Condition		
Motor-man				Q CORE		11	100	135	1 1/2				Still in		
Floor	K. L. Thomas	MUD 4 p.m. 6 p.m. 8 p.m. 10 p.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL													
Floor	L. L. Thomas	Wt.	8.1	8.4	8.6	8.6			No. 1				Colts.		
Mechanic		Visc.	40	40	40	41			No. 2				WATER		
Extra	L. L. Thomas	Gel.	58	58	58	53			No. 3				Bbls.		
Injuries:		Pump Pressure	150						No. 4				COAL		
Fires		Pump R.P.M.	75	75	75	75			No. 5				Tons		
Equip. Trans. or Rec'd		W.L.	F.C.	PH					TRIPS	No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip
		At	SURVEYS	Degrees											
		General:													

REMARKS	Time		
	Start	Stop	Interval
TRIP OUT	1200	100	1
LAY DOWN D.C.	100		
PICK UP C. Bbl.			
CHECK SAME + MEASURE IN		4.45	3 3/4
CIB TO BTM.	4.45	5.15	1/2
CUT CORE #1	5.15		
	8:00	2 3/4	
Company Time	Cont'r Time		
CUT CORE #1	7.45	12.15	4 1/2
HOIST CORE #1	12.15	1.25	1 1/2
WORK ON BOILER	1.25	4.25	3
HOIST CORE #1	4.25	4.45	1/2
SERVICE CORE #1	4.45	4.55	1/10
Company Time	Cont'r Time		
HANDLE CORE	7.00	7.45	1/2
SERVICE CORE BRL	7.45	4.30	1/2
RUN IN TO CUT CORE #2	4.30	5.30	1
CUT CORE #2	5.30	7.00	1 1/2
HOIST CORE BRL	7.00	8.00	1
LAY DOWN CORE BRL	8.00	8.15	1/10
RIG IN OVERSEA TANK SUB	8.15	9.45	1 1/2
DRILLING	9.45	1.45	2 1/2
CIB B-H S.	1.45	12.20	1 1/4
Company Time	Cont'r Time		

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

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

Form 1-1

This Copy to Conservation Board. (Mail to Calgary Office)

Total Contractor Time _____ Hrs.

Total Company Time _____ Hrs.

Toolpusher _____

Approved by _____

DAY WORK RECORD

General Petroleum of Canada Limited

RIG No. ESS LOCATION HEART LAKE #2 AREA N.W.T. DATE JAN 4 1955

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

RIG No. <u>ESS</u> LOCATION <u>HEART LAKE #2</u>		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Tour — Midnight - 8 a.m.		1000	79	1079	3	9		34	28.74			1.75	23.10
Specify actual hrs. worked													
Driller	<u>W. WIGLEY</u>	12											
Derrick													
Motor-man													
Floor	<u>L. LAFFERTY</u>	12											
Floor	<u>J. ROWE</u>	12											
Mechanic													
Extra	<u>L. LOUTIT</u>	12											
Injuries:													
Fires													
Equip. Trans. or Rec'd													

Tour — 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		1079	23	1102	3	8		35	28.74			1.75	
Driller													
Derrick													
Motor-man													
Floor													
Floor													
Mechanic													
Extra													
Injuries:													
Fires													
Equip. Trans. or Rec'd													

Tour — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked		1112	94	1206	7	9		38	28.74			1.75	
Driller													
Derrick													
Motor-man													
Floor													
Floor													
Mechanic													
Extra													
Injuries:													
Fires													
Equip. Trans. or Rec'd													

REMARKS	Time		
	Start	Stop	Interval
DRILLING	12:00	5:45	5 3/4
WORK TO Pump Motor	5:45	6:15	1/2
DRILLING	6:15	6:30	1/4
WORK TO Pump change	6:30		
HEADS AND ONE NEW ROD	8:00		1 1/2
Company Time	8:00	10:30	2 1/2
Putting Pump Together			
CLEAN Suction +			
PRIME SAME			
DRILLING	10:30	11:30	1
HOIST BIT 47	11:30	12:00	1/2
Run in Bit 48	12:00	12:30	1/2
Work on Pump	12:30	1:00	1/2
Drilling	1:00	1:30	1/2
Company Time	4:00	11:00	7
DRILLING			
Circ. B.H.S.	11:30	12:00	1/2
HOIST BIT 48			
Company Time			

Totco Ring on Bit No. _____ D.P. Caliper Date _____ Results _____ From Pipe Rack _____ Total Contractor Time _____ Hrs. _____ Toolpusher _____
 B.O.P. Test-Operated _____ Time _____ Results _____ This Copy to Conservation Board. (Mail to Calgary Office) Total Company Time _____ Hrs. _____ Approved by _____
 Form 1-1

General Petroleum of Canada Limited

DAY WORK RECORD

No. 2148 B

RIG No. F55 LOCATION HEART LAKE #2 AREA N.W.T. DATE JAN 3 1955

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

Tour — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly				
Specify actual hrs. worked		665	100	765	7:34	90	—	24	28.74			1.75	29.99				
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE																	
No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Linear Size	Condition						
1	6 1/2	OSC	81580	8	100	250	16 1/2				Still in						
MUD																	
Wt.	8.5	8.5	8.5	8.5	Additives				Motor Hours		NEXT OIL CHANGE AT	FUEL					
Visc.	58	45	47	55	Queb 50*				No. 1			Gals.					
Gel.					Water				No. 2			WATER					
Pump Pressure	100	100	100	100					No. 3			Bbls.					
Pump R.P.M.	75	75	75	75					No. 4			COAL					
								No. 5			Tons						
W.L. 8				F.C. 2/32				PH 9.0		TRIPS		No. Lines	TON MILES	TOAL	Line Slipped	Line Length	Next Slip
At				SURVEYS				Degrees		6							
General:																	

Tour — 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly				
Specify actual hrs. worked		765	95	850				25	28.74			1.75					
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE																	
No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Linear Size	Condition						
1	6 1/2	OSC	81580	8	100	289	19				Part						
2	7 1/2	OSC	88745	8	100	50	3				Still in						
MUD																	
Wt.	8.6	8.6	8.5	8.6	Additives				Motor Hours		NEXT OIL CHANGE AT	FUEL					
Visc.	60	40	40	47	WATER				No. 1			Gals.					
Gel.	74	60	59	60					No. 2			WATER					
Pump Pressure									No. 3			Bbls.					
Pump R.P.M.	75	75	75	75					No. 4			COAL					
								No. 5			Tons						
W.L. 7.0				F.C. 2/32				PH 9.5		TRIPS		No. Lines	TON MILES	TOAL	Line Slipped	Line Length	Next Slip
At				SURVEYS				Degrees		6							
General:																	

Tour — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. FT.	O.D. WT.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly				
Specify actual hrs. worked		850	150	1000	9	9	—	31	28.74			1.75	5.19				
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE																	
No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Linear Size	Condition						
1	6 1/2	OSC	88745	8	100	200	11				Still in						
MUD																	
Wt.	8.4	8.4	8.6	8.5	Additives				Motor Hours		NEXT OIL CHANGE AT	FUEL					
Visc.	42	40	50	45	75 Que.				No. 1			Gals.					
Gel.	60	61	70	64	70 Driecase				No. 2			WATER					
Pump Pressure									No. 3			Bbls.					
Pump R.P.M.	75	75	75	75					No. 4			COAL					
								No. 5			Tons						
W.L. 7.4				F.C. 2/32				PH 8.5		TRIPS		No. Lines	TON MILES	TOAL	Line Slipped	Line Length	Next Slip
At				SURVEYS				Degrees		6							
General:																	

REMARKS	Time		
	Start	Stop	Interval
DRILLING	12:00	1:45	78 1/4
TIGHTEN KELLY HOSE	7:45	8:00	1/4
Company Time			
DRILLING	9:00	10:15	2 1/4
TIGHTEN KELLY HOSE AT GOOSE NICK	10:15	10:30	1/2
DRILLING	10:30	11:00	1/2
TRIP OUT	11:00	12:00	1
RUN NEW BIT & RE-RUN	12:00	12:12	1/2
DRILLING	12:12	4:00	3
Company Time			
DRILLING	4:12	12:00	7 48
Company Time			
Cont'r Time			

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

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

Form I-1

This Copy to Conservation Board. (Mail to Calgary Office)

Total Contractor Time _____ Hrs.

Total Company Time _____ Hrs.

Toolpusher _____

Approved by _____

General Petroleum of Canada Limited

DAY WORK RECORD

No. 2147 B

RIG No. F55 LOCATION HARET LAKE #2AREA N.W.T.DATE JAN 2 1955

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

Tour — Midnight - 8 a.m.	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked	275	122	397	6 3/4	5		11	28.74			1.75	80.44
Driller <u>W. Wigley</u>	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man	5	6 1/8	OSC	88731	300	100	127	12 1/2	12 1/2			Still in
Floor	MUD 12 Mh. 2 a.m. 4 a.m. 6 a.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL											
Floor	Wt. WATER No. 1 75 Gals.											
Mechanic	Visc. 45 50 60 No. 2 WATER											
Extra	Gel. 75 75 No. 3 15 Bbls.											
Injuries:	Pump Pressure No. 4 COAL											
Fires:	Pump R.P.M. 75 75 No. 5											
Equip. Trans. or Rec'd	W.L. 6.8 F.C. 2/32 pH 2.0											
	At SURVEYS Degrees											
	General: Recovered Sum Iron											

REMARKS	Time		
	Start	Stop	Interval
Hoist Junk Sub Clean	1200	1230	1/2
Run in w/ Junk Sub	1230	125	3/4
Drilling	1:15	900	6 3/4
Company Time	Cont'r Time		

Tour — 8 a.m. to 4 p.m.	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked	397	128	525	6 1/2	5			28.74			1.75	
Driller	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man	5	6 1/8	OSC	88731	3	100	203	18 1/2				Fair
Floor	MUD 8 a.m. 10 a.m. 12 noon 2 p.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL											
Floor	Wt. WATER No. 1 Gals.											
Mechanic	Visc. 55 60 40 40 No. 2 WATER											
Extra	Gel. 75 62 62 50 lbs Quebracho No. 3 Bbls.											
Injuries:	Pump Pressure No. 4 COAL											
Fires:	Pump R.P.M. 75 75 75 No. 5											
Equip. Trans. or Rec'd	W.L. 2.2 F.C. 2/32 pH 9.5											
	At SURVEYS Degrees											
	General: Recovered Sum Iron											

REMARKS	Time		
	Start	Stop	Interval
Drilling	8:00	22	6
Hoist BOT 75	22	245	3/4
Run in BOT 75	245	330	3/4
Drilling	330	412	1/2
Company Time	Cont'r Time		

Tour — 4 p.m. to Midnight	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
Specify actual hrs. worked	525	140	665	8	6		20	28.74			1.75	6
Driller	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
Derrick	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
Motor-man	5	6 1/8	OSC	81550	6	100	150	8 1/2				Still in
Floor	MUD 4 p.m. 6 p.m. 8 p.m. 10 p.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL											
Floor	Wt. 50 One No. 1 Gals.											
Mechanic	Visc. 40 42 40 41 No. 2 WATER											
Extra	Gel. 61 62 62 62 No. 3 Bbls.											
Injuries:	Pump Pressure No. 4 COAL											
Fires:	Pump R.P.M. 75 75 75 75 No. 5											
Equip. Trans. or Rec'd	W.L. F.C. pH											
	At SURVEYS Degrees											
	General:											

REMARKS	Time		
	Start	Stop	Interval
Drilling	412	122	8
Company Time	Cont'r Time		

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

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

Form 1-1

This Copy to Conservation Board. (Mail to Calgary Office)

Total Contractor Time _____ Hrs.

Total Company Time _____ Hrs.

Toolpusher _____

Approved by _____

General Petroleums of Canada Limited

DAY WORK RECORD

No. 2146 B

RIG No.	LOCATION	AREA	DATE
12	N. 21. Heart Lake	7	JAN 1 1955
Tour — Midnight - 8 a.m. Specify actual hrs. worked Hrs. 24 1/2			
Driller W. Wigney	12	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE	
Derrick	12	No. 4 6 1/2 OSC 88774 ALL 135	
Motor-man	12	MUD 12 Mn. 2 a.m. 4 a.m. 6 a.m. Additives Motor Hours	
Floor J. MORIN	12	Wt. 27 27 30 36 Guebrach 100 No. 1	
Floor Lafferty	12	Visc. 27 27 30 36 Caustic 50 No. 2	
Mechanic	12	Gel. 10 sks. No. 3	
Extra J. Rowe	12	Pump Pressure 75 75 75 75 No. 4	
Injuries:	12	Pump R.P.M. 75 75 75 75 No. 5	
Fires	12	W.L. F.C. pH 7.0	
Equip. Trans. or Rec'd	12	At SURVEYS Degrees	
Tour — 8 a.m. to 4 p.m. Specify actual hrs. worked Hrs. 24 24 270 5 3 8 28.74			
Driller	12	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE	
Derrick	12	No. 4 6 1/2 OSC 88774 ALL 135	
Motor-man	12	MUD 8 a.m. 10 a.m. 12 noon 2 p.m. Additives Motor Hours	
Floor Mrs. J. Thomas	12	Wt. 3 36 40 500 Gell No. 1	
Floor Mrs. E. Isaac	12	Visc. 36 40 46 100 Duc. No. 2	
Mechanic	12	Gel. 46 46 48 25 Caustic No. 3	
Extra A. Norman	12	Pump Pressure 75 75 75 75 No. 4	
Injuries:	12	Pump R.P.M. 75 75 75 75 No. 5	
Fires	12	W.L. 6.5 F.C. 132 pH 7.0	
Equip. Trans. or Rec'd	12	At SURVEYS Degrees	
Tour — 4 p.m. to Midnight Specify actual hrs. worked Hrs. 270 5 275 5 3 8 28.74			
Driller D. Low	12	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE	
Derrick	12	No. 5 6 1/2 OSC 88731 ALL 135	
Motor-man	12	MUD 4 p.m. 6 p.m. 8 p.m. 10 p.m. Additives Motor Hours	
Floor K. Lewis	12	Wt. 42 42 43 No. 1	
Floor J. Thomas	12	Visc. 42 42 43 No. 2	
Mechanic	12	Gel. 48 48 48 No. 3	
Extra K. Reecher	12	Pump Pressure 75 75 75 75 No. 4	
Injuries:	12	Pump R.P.M. 75 75 75 75 No. 5	
Fires	12	W.L. 6.5 F.C. 132 pH 7.0	
Equip. Trans. or Rec'd	12	At SURVEYS Degrees	

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

REMARKS	Time		
	Start	Stop	Interval
Drilling Plug	12:00	3:30	3 1/2
Pump out old Mud	3:30	4:30	1
Drilling Cond-Mud	4:30		
Drilling Thawing			
out Mud & Mixer + Line		6:00	
Drilling Plug			2 3/4
Work to Pump Motor	8:45	9:00	1/4
Drilling Plug	9:00	9:45	1/4
0 PAIRS STONE IN BIT	9:45	11:00	1 1/4
Drilling Plug Shoe	11:00	12:00	1
Company Time	Cont'r Time		
Drilling	12:00	12:30	1/2
Condition Mud	12:30	2:30	2 1/2
Drilling	2:30	4:00	1 1/2
Company Time	Cont'r Time		
Hoisted Bit 24 osc 6 1/2	4:00	4:45	3/4
Run in Bit 25	4:45	5:30	3/4
Drilling	5:30	7:30	2
Hoist To Run Junk Sub.	7:30	8:00	1/2
Run in Junk Sub	8:00	8:30	1/2
Drilling	8:30	10:00	1 1/2
Company Time	Cont'r Time		

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

B.O.P. Test-Operated Time Results

Total Contrac or Time Hrs.

Total Company Time Hrs.

Toolpusher

Approved by

General Petroleum of Canada Limited

DAY WORK RECORD

No. 2144 B

RIG No. *FS-5* LOCATION *NWT Heart Lake #2* AREA *W.C.* DATE *Dec. 22* *Dec. 30 incl.*

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

Tour — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	REMARKS			Time			
Specify actual hrs. worked		Hrs.													Start	Stop	Interval			
Driller			IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE																	
Derrick			No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition						
Motor-man																				
Floor			MUD				12 Mm.	2 a.m.	4 a.m.	6 a.m.	Additives	Motor Hours		NEXT OIL CHANGE AT	FUEL					
Floor			Wt.								No. 1									
Mechanic			Visc.								No. 2									
Extra			Gel.								No. 3									
Injuries:			Pump Pressure								No. 4									
Fires			Pump R.P.M.								No. 5									
Equip. Trans. or Rec'd			W.L.				F.C.	pH	TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip				
			At				SURVEYS		Degrees	General:										
Tour — 8 a.m. to 4 p.m.			From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	Company Time			Cont'r Time		
Specify actual hrs. worked		Hrs.	245																	
Driller			IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE																	
Derrick			No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition						
Motor-man																				
Floor	<i>A. Norman</i>		MUD				8 a.m.	10 a.m.	12 noon	2 p.m.	Additives	Motor Hours		NEXT OIL CHANGE AT	FUEL					
Floor	<i>watchman</i>		Wt.								No. 1									
Mechanic			Visc.								No. 2									
Extra			Gel.								No. 3									
Injuries:			Pump Pressure								No. 4									
Fires			Pump R.P.M.								No. 5									
Equip. Trans. or Rec'd			W.L.				F.C.	pH	TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip				
			At				SURVEYS		Degrees	General:										
Tour — 4 p.m. to Midnight			From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	Company Time			Cont'r Time		
Specify actual hrs. worked		Hrs.																		
Driller			IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE																	
Derrick			No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition						
Motor-man																				
Floor			MUD				4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives	Motor Hours		NEXT OIL CHANGE AT	FUEL					
Floor			Wt.								No. 1									
Mechanic			Visc.								No. 2									
Extra			Gel.								No. 3									
Injuries:			Pump Pressure								No. 4									
Fires			Pump R.P.M.								No. 5									
Equip. Trans. or Rec'd			W.L.				F.C.	pH	TRIPS		No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip				
			At				SURVEYS		Degrees	General:										

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

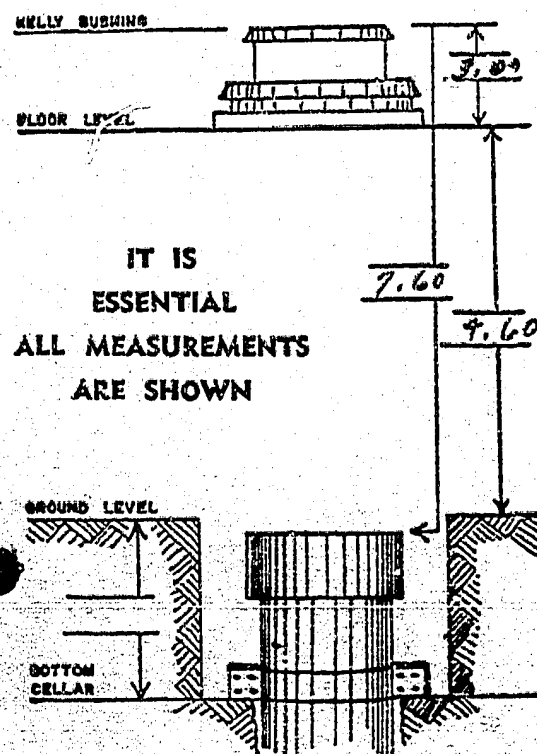
B.O.P. Test-Operated _____ Time _____ Results _____ Total Contractor Time _____ Hrs.

Toolpusher *[Signature]*
Approved by *[Signature]*

CASING REPORT

28 DEC 1961

FOR SURFACE CASING ONLY



IT IS
ESSENTIAL
ALL MEASUREMENTS
ARE SHOWN

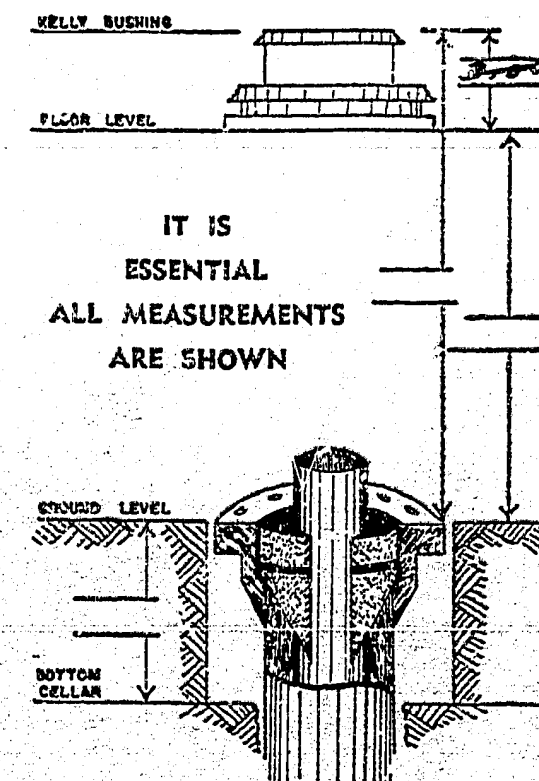
FOR PRODUCTION CASING ONLY

[illegible]

FOR LINERS ONLY

Make and Type of Liner								Length of Drillpipe and Subs Used	
Make and Type of Collar								Length of Setting Tool Made Up	(add)
Make and Type of Shoe								(i.e., tool made up in packer or hanger)	
SIZE OD	WT. Lbs./Ft.	GRADE	RGE.	THDS. PER IN.	MAKE	No. OF JOINTS	AMOUNT IN FEET	Length of Casing + Collar + Shoe	(add)
								Total Length Run in Hole	=
								Distance Tool Joint Above Top K.B.	(subt.)
								Depth of Shoe Below K.B.	=
								Distance K.B. to Casing Bowl	(subt.)
								Depth of Shoe Below Casing Bowl	=
TOTAL FOOTAGE (including collar and shoe)									

PRODUCTION CASING DIAGRAM



IT IS
ESSENTIAL
ALL MEASUREMENTS
ARE SHOWN

Make and Type of Casing Shoe *Baker Guide*
 Make and Type of Collar *Nil*
 Shoe Welded On? (Yes or No) *Yes*
 Collar Welded On? (Yes or No) *N/A*
 No. of Joints Welded *Nil*
 Welding Co. *General Pat. & S. W. S.*
 Operator *R. Steiner*
 Centralizers (give No. and Jt. No.) *Nil*

 Scratchers (give No. and Jt. No.) *Nil*

COMPLETE THIS SECTION FOR ALL REPORTS

Started Rigging to Run Casing	7:30 A	M.	Plug Measured to Depth
Time Casing Started in Hole	8:30 A	M.	(a) Wire Line
Time Casing All In	9:30 A	M.	(b) Displaced With
Time Started Circulating	10:05 A	M.	(c) Bumped on Float Collar With
Time Stopped Circulating	10:30 A	M.	(d) Bumped on Baffle Plate With
Time Started Cementing	10:35 A	M.	Casing Landed in Clamps (make)
Time Cement in Pipe	11:15 A	M.	Casing Landed in Casinghead (make)
Time Plug on Bottom	11:44 A	M.	Casing Suspender (make)
Actual Pumping Time to Land Plug	8 B. min.		

SECTION FOR ALL REPORTS

Plug Measured to Depth 230 ft.

(a) Wire Line ft.

(b) Displaced With 9 1/2 bbls. water

(c) Bumped on Float Collar With psi

(d) Bumped on Baffle Plate With psi

Casing Landed in Clamps (make) National

Casing Landed in Casinghead (make)

Casing Suspender (make)

No. Sacks Cement Used 535
Amt. of Calc. Chl. Added Nil
Amt. of Gel Added Nil
Method of Cementing Positive Displacement
Hours of Cement to Set 45
Cement Returns (yes or no) Yes
Cementing Co. General Packer Service
Operator P. Bergquist
Helper

Toolpusher *[Signature]*
Engineer *[Signature]*

THREADS OFF CASING TALLY

[illegible]

N.B.—First joint of casing to include length of collar and shoe.

This Copy to Conservation Board (Mail to Calgary Office)

Form 1-6

REMARKS:

General Petroleums of Canada Limited

DAY WORK RECORD

No. 2142 B

RIG No. F.55 LOCATION Well after NW 1 Encampment Rd #2 AREA W.C. DATE Dec 20

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

Tour — Midnight - 8 a.m.	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly			
Specify actual hrs. worked	2 35	11	2 46	1	2		6	2874			2.00	0			
Driller <u>F. Connersh</u>	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE														
Derrick	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition			
Motor-man	1	9	OSC 3	19443	3	100	11					good			
Floor <u>R. Lafferty</u>	MUD 12 Mh. 2 a.m. 4 a.m. 6 a.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL														
Floor	Wt.											No. 1		Colts.	
Mechanic <u>F. Rowe</u>	Visc.	15											No. 2		WATER
Extra <u>J. Moran</u>	Gel.												No. 3		Bbls.
Injuries:	Pump Pressure												No. 4		COAL
Fires	Pump R.P.M.	15											No. 5		Tons
Equip. Trans. or Rec'd	W.L.	F.C.	pH	TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip											
	At	SURVEYS		Degrees	General:										

REMARKS	Time		
	Start	Stop	Interval
Drilling	12 ⁰⁰	1 ⁰⁰	1
circulating	1 ⁰⁰	2 ⁰⁰	1
Tripping & Reaming	2 ⁰⁰	6 ⁰⁰	4
Calculating	6 ⁰⁰	7 ⁰⁰	1
Hoist	7 ⁰⁰	7 ³⁰	1/2
Rig to run csg.	7 ³⁰	8 ³⁰	1
Running 232' - 20"	8 ³⁰		
2' csg.		10 ⁰⁰	1 1/2
Rig to cement	10 ⁰⁰	10 ³⁰	1/2
Cementing	10 ³⁰	11 ¹⁵	3/4
Displacing	11 ¹⁵	11 ³⁰	1/4
Company Time			
Cont'r Time			

Tour — 8 a.m. to 4 p.m.	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly		
Specify actual hrs. worked			2 46											
Driller	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Derrick	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition		
Motor-man	1													
Floor <u>Mrs J. Thomas</u>	MUD 8 a.m. 10 a.m. 12 noon 2 p.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL													
Floor <u>Mrs L. Tsace</u>	Wt.											No. 1		Colts.
Mechanic	Visc.											No. 2		WATER
Extra <u>A. Norman</u>	Gel.											No. 3		Bbls.
Injuries:	Pump Pressure											No. 4		COAL
Fires	Pump R.P.M.											No. 5		Tons
Equip. Trans. or Rec'd	W.L.	F.C.	pH	TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip										
	At	SURVEYS		Degrees	General:									

Standing Cemented	11 ³⁰	12 ⁰⁰	1/2
Left Pit and Cellar	12 ⁰⁰	4 ⁰⁰	2
Land Casing in Ch.			
Company Time			
Cont'r Time			

Tour — 4 p.m. to Midnight	From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly		
Specify actual hrs. worked														
Driller <u>L. L. L.</u>	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE													
Derrick	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition		
Motor-man	1													
Floor <u>R. Rowe</u>	MUD 4 p.m. 6 p.m. 8 p.m. 10 p.m. Additives Motor Hours NEXT OIL CHANGE AT FUEL													
Floor <u>J. Thomas</u>	Wt.											No. 1		Colts.
Mechanic	Visc.											No. 2		WATER
Extra <u>R. B. L.</u>	Gel.											No. 3		Bbls.
Injuries:	Pump Pressure											No. 4		COAL
Fires	Pump R.P.M.											No. 5		Tons
Equip. Trans. or Rec'd	W.L.	F.C.	pH	TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip										
	At	SURVEYS		Degrees	General:									

Company Time			
Cont'r Time			

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

B.O.P. Test-Operated _____ Time _____ Results _____ Total Contractor Time _____ Hrs.

Form 1-1

This Copy to Conservation Board. (Mail to Calgary Office)

Total Company Time _____ Hrs.

Toolpusher J. J. J.
Approved by J. J. J.

General Petroleum of Canada Limited

DAY WORK RECORD

No. 2141 B

RIG No. *F55* LOCATION *Well after NWT Escarpment Lake #2 AREA NC.*DATE *Dec 19/54* NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS.

From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
0	68	68	6	2			2874			2.00	26
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
1	9	OSC	11078	2	100	68	6				Good
MUD 12 Mn. 2 a.m. 4 a.m. 6 a.m. Additives											
Motor Hours											
NEXT OIL CHANGE AT											
FUEL											
Wt.											
Visc. 60 68 67 56											
Gel.											
Pump Pressure											
Pump R.P.M.											
TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip											
W.L. F.C. pH											
At SURVEYS Degrees											
General:											

From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
68	82	150	6 1/2	3		4	2874			200	5
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
2	9	OSC	11083	3	100	30	3				Good
1	9	OSC	11078	2	100	75	1 1/2				Good
2	9	OSC	19443	3	100	45	2				
MUD 8 a.m. 10 a.m. 12 noon 2 p.m. Additives											
Motor Hours											
NEXT OIL CHANGE AT											
FUEL											
Wt.											
Visc. 68 54 60											
Gel.											
Pump Pressure											
Pump R.P.M.											
TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip											
W.L. F.C. pH											
At SURVEYS Degrees											
General:											

From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly
150	55	235	8			6	2874			300	11
IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE											
No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Liner Size	Condition
3	7	OSC	19443	3	100	130	10				
MUD 4 p.m. 6 p.m. 8 p.m. 10 p.m. Additives											
Motor Hours											
NEXT OIL CHANGE AT											
FUEL											
Wt.											
Visc. 67 54 58 54											
Gel.											
Pump Pressure											
Pump R.P.M.											
TRIPS No. Lines TON MILES TOTAL Line Slipped Line Length Next Slip											
W.L. F.C. pH											
At SURVEYS Degrees											
General:											

REMARKS	Time		
	Start	Stop	Interval
Drill rat hole	12:00		
install sock		1:00	1
Speed #00 Drilling	1:00	7:00	6
Work on pump	7:00	8:00	1

Company Time	Cont'r Time
Drilling	8:00 9:30 1 1/2
at Trip	9:30 10:00 1/2
Drilling	10:00 12:00 2
Drilling	12:00 1:00 1
Trips & reaming tight hole	1:00 2:30 1 1/2
Drilling	2:30 4:00 1 1/2

Company Time	Cont'r Time
Drilling	4:00 12:00 8

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

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

Form 1-1

This Copy to Conservation Board. (Mail to Calgary Office)

Total Contractor Time _____ Hrs.

Total Company Time _____ Hrs.

Toolpusher: *[Signature]*Approved by: *[Signature]*

28 DEC 1955

Total Contractor Time..... Hrs.
 Total Company Time..... Hrs.
 Approved by: *[Signature]*

No. 0437 B

APR 11 1955

[illegible]

Total Contractor Time ----- Hrs. Toolpusher
Total Company Time ----- Hrs. Approved by

Form 1-1 This Copy to Conservation Board. (Mail to Calgary Office)

No. 0436 B

RIG No. *F55* LOCATION *NWT Heart Lake #2*

AREA NWT

DATE *March 31/52*

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

APR 11 1955

[illegible][illegible]

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

B.O.P. Test-Operated	Time	Results
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Forms 1-4

This Copy to Conservation Board. (Mail to Calgary Office)

Total Contractor Time - - - - - Hrs.

Total Company Time _____ Hrs.

Toolpusher

Approved

No. 0435 B

APR 11 1955

Tour — 4 p.m. to Midnight?		From	Footage	To	Hrs. on Bottom	Wt. D.P.M. Lbs.	Stds.	Singles	D.C. Ft.	O.D. Wt.	C.B. Ft.	Subs. Ft.	Ft. Up On Kelly	
Specify actual hrs. worked	Hrs.	IT IS ESSENTIAL THAT ALL JET BITS BE DESIGNATED — ALSO JET SIZE												
Driller		B	No.	Size	Type & Jet Size	Ser. No.	Weight	RPM	Ft. Drilled	Hrs.	Ft. Reamed	Hrs.	Line Size	Condition
Derrick		I												
Motor-man		T												
Floor		S												
Floor		MUD		4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives			Motor Hours		NEXT OIL CHANGE AT	FUEL
Mechanic		Wt.									No. 1			Gas
Extra		Visc.									No. 2			WATER
		Gel.									No. 3			Blk
Injuries:		Pump Pressure									No. 4			COAL
		Pump R.P.M.									No. 5			Tool
Fires		W.L.		F.C.		pH		TRIPS	No. Lines	TON MILES	TOTAL	Line Slipped	Line Length	Next Slip
		At		SURVEYS		Degrees		General:						
Equip. Trans. or Rec'd														

[illegible]

Toolpusher _____
Approved by _____

This Copy to Conservation Board. (Mail to Gallery Office)