

N. W. T. DEEP BAY

NO. 2

Drilling Authority No.

Date Issued

WELL NAME N. W.T. Deep Bay No. 2

FIELD Wildcat

Area: Great Slave Lake

LOCATION: Unit

Section

Grid

61 20 - 116 45

Latitude 61°18' N.

Longitude

116°43' W.

From Established Reference Marker

Rig Release Date: 10-10-52

Status D & A

Information Release Date 10-10-54

CHANGE OF NAME:

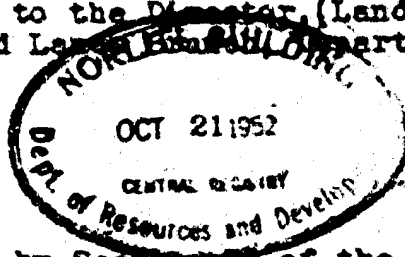
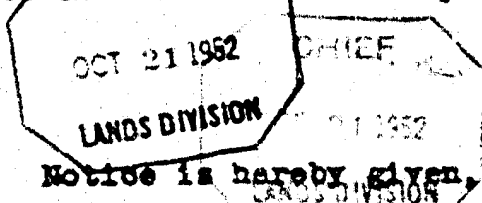
DATE RECEIVED	INDEX
	Application for a Drilling Authority. Well Completion Data. Well History Report. Application to Amend a Drilling Authority. Application to change a Well Name. Application to Abandon a Well or Suspend Drilling. Application to Alter Condition of a Well. Well History Supplement. Well 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.

61° 18'
116° 48'

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NOTICE OF INTENTION TO ABANDON A WELL

Notice to be forwarded, in duplicate, to the Director, (Lands Division), Northern Administration and Lands Branch, Department of Resources and Development, Ottawa.



Notice is hereby given, as required by Section 30 of the P. & N. G. Regulations, dated May 9, 1949, that it is the intention on or about the day of October 11 1952, to abandon Well No. 2 Elevation K.B. 510.00 feet, located on Permit No. 234 Latitude 61° 18' N Longitude 116° 48' W

registered in the name of W. L. Brintnell of Edmonton

The reasons for abandonment are:- No commercial oil or gas encountered

Oil, gas and water were encountered as follows and will be shut off as outlined below:-

Oil:- None }
Gas:- None } From last abandonment at 989' to 1416'

Water:- Water rose to (How near the surface)

The depth drilled to was 1416 feet and the following casings were inserted:

Diameter	Depth feet	Weight	Free, set or cemented	The intention is to withdraw feet
7" O.D.	349	20	to surface 100 sacks	

Abandonment plugs as follows:-

Plug #1 365' - 288' - 15 sacks common cement

Plug #2 35' - 10' - 10 sacks common cement

Installed welded steel protector plate on top of casing

Signature *W. L. Brintnell*
Title President N.W.T. Petroleum Limited
No. 7 Hangar, Municipal Airport,
Address Edmonton, Alberta.

Date

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Approved
A. B. Irvine

NOTICE OF INTENTION TO ABANDON A WELL

Notice to be forwarded, in duplicate, to the Director, (Lands Division), Northern Administration and Lands Branch, Department of Resources and Development, Ottawa.

By
CHIEF
JUL 17 1952
LANDS DIVISION

Notice is hereby given, as required by Section 89 of the P. & N. G. Regulations, dated May 9, 1949, that it is the intention on or about the day of May 31 1952, to abandon Well No. H.W.T. Elevation 502.90 feet, located in Deep Bay Area, H.W.T. Deep Bay #2 E.L. 510.00 Using Great Slave Lake Surface 495'

Latitude 61° 18'N

Longitude 116° 48'W

Permit No. 234

registered in the name of H.W.T. Oils Limited or Calgary

The reasons for abandonment are:- No commercial production of oil or gas encountered

Oil, gas and water were encountered as follows and will be shut off as outlined below:-

Oil:- traces only to final depth

Gas

Water - salt & sulphur water recovered

Interval - 357' - 441' 12 hrs. hourly to surface
349' - 357' 4.43 " " " "
672 - 682' 2.25 " " rise 300'

~~Section~~

Water rose to (~~2200-2200-2200-2200~~)

The depth drilled to was 989 feet and the following casings were inserted

Diameter	Depth feet	Weight	Section cemented	The intention is to withdraw 511 feet
7" O.D.	349	204	to surface 100 sax	

Abandonment Plugs as follows:

Plug #1 365' - 288' 15 sax common cement

Plug #2 35' - 8' 8 sax common cement

Installed welded steel protector plate on top of casing

Approved
J.B. Irwin
Supervisory Petroleum Engineer

Signature

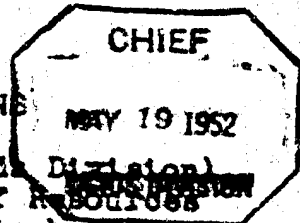
Title President, N.W.T. Petroleum Ltd.

Address #7 Hanger, Airport, Edmonton, Alta.

Date

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NOTICE OF INTENTION TO BEGIN BORING OPERATIONS



NOTICE to be forwarded, in duplicate, to the Director, (Lands Division) Northern Administration and Lands Branch, Department of Resources and Development, Ottawa, at least 15 days before work is begun

May 7

19 52

Sir:

Notice is hereby given as required by Section 34 of the Petroleum and Natural Gas Regulations, dated 9th of May, 1949, that it is our intention to begin boring a well on P. & N. G. Permit No. on or about the

day of

N. W. T. Petroleum Limited

Standing in the name of of A.B.I. in the north west corner of Permit #234; 600' west and 100' south of Punch Creek and located

(Give below distances from boundaries)

Being

N. W. T. Deep Bay No. 2

The well shall be known as

We intend using the following equipment:-

Used

Type of drilling rig:

New or used.

CASING

Size	Weight	Thread	Brand	New Used	Depth	How set
7"	23 lbs.	8		New	300'	Concreted

We expect to encounter the following oil, water and gas horizons and propose taking care of them as follows: We will inform you of any changes in this programme. Slave Point Limestone at 300'

The well is to be drilled by Company or Contractor. If contractor give name. General Petroleum of Canada Limited

The officers in charge of the operations will be:

C. Matthews, Petroleum Engineer

General Petroleum

At the well

of Canada Limited
Of the Company

E. L. Brintnell

Name of Permittee

N. W. T. Petroleum
Signature Limited.

Approved

A.B. Irwin.

Title

W. N. Brintnell

50219

COIT 42

PROGRESS REPORT.

DILLIG. CORING AND ABANDONMENT

NORTH WEST TERRITORIES DEPT. OF MINES, 1901.

N.W.T.

PROGRESS REPORT
on the
DRILLING, CORING AND ABANDONMENT
of
NORTH WEST TERRITORIES DEEP BAY NO. 2 WELL

Lat. $61^{\circ} 18'$ North Long. $116^{\circ} 48'$ West

North West Territories

Compiled by: J. Trowsdale

Approved by:
B. H. Corey - Production Manager.

July 1952.

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SCOPE

This report covers the Drilling, coring and abandonment at North West Territories Oils Ltd., N.W.T. Deep Bay No. 2 Well located by Lat: 61° 18' North Long: 116° 48' West, in the Deep Bay area, North West Territories.

All available information has been included from the time the well was spudded, and drilled or cored to completion or abandonment.

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Name of Company: North West Territories Oils Ltd.

Name of Well: N.W.T. Deep Bay No. 2

Location of Well: Lat. 61° 18' North Long. 116° 48' West

Elevations: K.B. 510' approx. Ground 502.90 approx.
(using 495' as elevation of Great Slave Lake)

Surface Casing: Set at 349.05'
341.42', 7", 20#, 8 Rd. Thd., Rge. 2, J-55
Stewart & Lloyd Casing. Cemented with 100 sack
cement and 200# Calcium Chloride. Cement returns
General Petroleum

Formation Tests:

Test #1 - 344.79' - 366.0' - Mis-run

Test #2 - 349.79' - 366.0' - Mis-run

Test #3 - 349.79' - 366.0' - Mis-run

Test #4 - 320.0' - 366.0' - Good initial puff, &
(8 mins.) slight blow. Rec. 3'
mud. Test doubtful.

Test #5 - 331.62' - 377.0' - Mis-run

Test #6 - 337.48' - 377.0' - Mis-run

Test #7 - 304.0' - 377' - open 4 hrs. - good
initial blow, plus
5 mins. breathing
Rec. 15' dead mud.
Mechanically satis-
factory.

Test #8 - 357.0' - 441.0' - Initial blow, sustained
H2S water to surface
in 15 min. Rec. 370'
salt water. Trace of
oil in drill pipe.
(Tested above and
below. tester, see
report). Shoe at 348
Packer at 357. flowed
salt water from
annulus as well as
through drill pipe.

Test #9 - 672.0' - 681.0' - open 1 hr. Rec. 300'
water. Mechanically
satisfactory.

Geological Markers:

	<u>Killick</u>	<u>E-log.</u>
Hay River Shale	40'	-
Simpson Shale	85'	-
Slave Point S.s.	345'	-
Presquille fm.	657'	-
Pint Point S.S.	900'	-

Total Depth: 989'

DATA PERTINENT TO DRILLING, COMING AND ABANDONMENT CONT'D

<u>Electrolase:</u>	None taken
<u>Date Well Headed:</u>	May 15th, 1952.
<u>Date Drilling Completed:</u>	May 30th, 1952.
<u>Date Well Abandoned:</u>	May 31st, 1952.

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DAILY PROGRESS REPORT

Date	From	to	Footage	Remarks
May 7				Picked new location cleared brush, commenced thawing and digging section and settling pits. Out poles. Cleaned up rig and equipment and made road.
May 14				Spotted rig on mt. Dosed a new road to keep on frost. Jacked up rig, spotted pump and pipe rack and levelled same. Moved supply shack, water pump, line pipe, light plant, kitchen, and bunk house into location. Raised the derrick and put up guy lines. Hooked up pump, and mixed mud.
May 15	0	41	41	Finished rigging up. Dug rat hole and put in csg. in 6 1/2 hours. Rigged up to spud and spudded in with 9" OSC bit at 11:45 A.M. Drilled ahead on boulders for 11 3/4 hours:
May 16	41	334	293'	Continued drilling for 5 hours, pulled out and changed to a 6-1/8" OSC at 45' after 16 3/4 hours usage and drilled on bottom for 5 1/2 hours. Made trip to clean hole and condition mud, and drilled for 9 1/2 hours in Limestone and shale. A survey showed: 1/4" @ 150' 1/8" @ 250'
May 17	334	366	32'	Continued drilling for 2 hours. Pulled out at hole and ran in with junk sub and new OSC bit and made 5' of hole while working junk sub. Pulled out and changed to a 6 1/8" Trusco diamond bit at 351'. Circulated and cased for 3 1/2 hours. The core jammed on trip out. When core #1 was hoisted, for 15' cut, 15' were recovered or 100%. Laid down core barrel. Made up tester and went in with tester and drill collar in preparation to run drill stem test. D.S.T. #1 - 344.79' - 366.0' Slave Point Limestone Hole diameter 6 1/8" O.D. of packer rubber 5 1/2" Length of anchor below packer 21.21' Tester started in hole 1:00 P.M. Tester on bottom 1:40 P.M. Tester opened 2:07 P.M. reset 3 times dropped 2 darts Tester closed 2:15 P.M. Tester pulled loose 2:15 P.M. Tester out of hole 2:50 P.M. Packer set with 4000# Packer pulled loose with 4000#

DAILY PROGRESS REPORT CONT'D

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Date	From	To	Footage	Remarks
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May 17 Cont'd

There was a noticeable blow when the tool was opened, air was displaced and the mud level in the casing dropped. When the pipe was pulled, 150' of dead mud was recovered. The samples were examined but no bomb was run as it was not available. The test was considered to be mechanically unsatisfactory, as the packer failed to hold. Present at the test were J. E. Routledge, O. M. Sarnitz & crew and C. G. Matthews.

Laid down tester and worked on it for 2 hours. Ran in with tester and prepared to run drill stem test. The tester was checked thoroughly before test.

D.S.T. #2 - 349.79' - 366.0' Slave Point Limestone

Hole diameter	6 1/8"
O.D. of packer rubber	5 1/2"
Length of anchor below packer	16.21'
Tester started in hole	4:55 P.M.
Tester on bottom	5:40 P.M.
Tester opened	5:45 P.M.
	Reset 3 times, 2 darts
Tester closed	7:00 P.M.
Tester pulled loose	7:00 P.M.
Tester out of hole	7:45 P.M.
Packer set with	4000#
Packer pulled loose with	4000#

There was an initial puff and no air was displaced. When the drill pipe was pulled 1' of dead mud was recovered. Samples were checked by Matthews. No bomb was run as it was not available. The test was considered to be mechanically unsatisfactory as the shutter disc was punctured but was plugged by the dart. Present at test were J.E. Routledge, Sarnitz, & crew and C. G. Matthews.

Ran out and thoroughly rechecked tester, found to be all right but a little sticky. Cleaned tester, removed darts and put in a new shutter disc. Ran in with tester.

D.S.T. #3 - 349.79' - 366.0' Slave Point Limestone

Hole diameter	6 1/8"
O.D. of packer rubber	5 1/2"
Length of anchor below packer	16.21'
Tester started in hole	8:30 P.M.
Tester on bottom	9:00 P.M.
Tester opened	9:10 P.M.
	reset 3 times

Date	From	To	Testers	Remarks
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May 17
Cont'd

D.S.T. #3 Cont'd

Tester closed	9:25 P.M.
Tester pulled loose	9:25 P.M.
Tester out of hole	10:00 P.M.
Packer set with	4000#
Packer pulled loose with	4000#

There was a noticeable blow when the tool was opened, air was displaced and the mud level dropped. When the drill pipe was pulled 60' (0.44 bbls) of dead mud were recovered. Samples were checked by Mr. Matthews. No pressure chart was run as no bomb was available. The test was considered to be mechanically unsatisfactory as the packer failed. The test was performed by Dowell Rental. Present at the test were J. E. Rontledge, Spornitz & crew and C. G. Matthews.

Pulled the tester out and changed the tail pipe. Went in again to run drill stem test.

D.S.T. #4 - 320.0' - 366.0' Slave Point Limestone

Hole diameter	6 1/8"
O.D. of packer rubber	5 1/2"
Length of anchor below packer	46.0'
Tester started in hole	10:45 P.M.
Tester on bottom	11:15 P.M.
Tester opened	11:30 P.M.
Tester closed	1:30 A.M.
Tester pulled loose	1:30 A.M.
Tester out of hole	2:15 A.M.
Packer set with	4000#
Packer pulled loose with	4000#

There was a good initial puff and the mud level in the casing did not drop. When the drill pipe was pulled, 3' of dead mud were recovered. Samples were examined by C. G. Matthews. No pressure chart was run as bomb was not available. The test was considered to be mechanically doubtful and was performed by Dowell Rental. Present at the test were J. E. Rontledge, C. M. Spornitz and crew and C. G. Matthews.

May 18th

May 18 366 77 11

Pulled out tester and picked up core barrel. Ramped to bottom for 1/2 hour. Cored for 3 hours then hoisted core #2. For 11' cut, 11' were recovered or 100%. Worked on tester for 6 1/4 hrs. cleaning valves and bypasses, removed rust, resealed packer and checked thoroughly. Ran in with tester to run drill stem test.

Date	From To	Footage	Remarks
May 18			D.S.T. #5 - 331.62' - 377.0 Slave Point Limestone
Cont'd			

Hole diameter	6 1/8"
O.D. of Packer rubber	5 1/2"
Length of anchor below packer	45.38
Tester started in hole	1:45 P.M.
Tester on bottom	2:15 P.M.
Tester opened	2:30 P.M.
Tester closed	2:45 P.M.
Tester pulled loose	2:45 P.M.
Tester out of hole	3:30 P.M.
Packer set with	4000#
Packer pulled loose with	4000#

There was a noticeable blow when the tool was opened, air was displaced and the mud level in the casing dropped. When the drill pipe was pulled, 255' (1.38 bbls) of mud were recovered. Samples were checked by C. G. Matthews. No pressure chart was run as a bomb was not available. The test was considered to be mechanically unsatisfactory as the packer failed and was performed by Dowell Rental. Present at the test were J. E. Rentledge, C. M. Spornitz & crew and C. G. Matthews.

Pulled tester out and broke down tester, rechecked operating mechanism and decided there was insufficient weight to efficiently seal off packer. Also changed tail pipe. Ran back in with tester in preparation to run drill stem test.

D.S.T. #6 - 333.48 - 377.0 Slave Point Limestone

Hole diameter	6 1/8"
O.D. of packer rubber	5 1/2"
Length of anchor below packer	43:52'
Tester started in hole	5:00 P.M.
Tester on bottom	5:30 P.M.
Tester opened	5:45 P.M.
	Reset 3 times
Tester closed	5:57 P.M.
Tester pulled loose	5:57 P.M.
Tester out of hole	6:35 P.M.
Packerset at	4000#
Packer pulled loose with	4000#

There was a noticeable blow when the tool was opened, air was displaced and the mud level in the casing dropped. When the drill pipe was pulled 180' (1.33 bbls.) of dead mud were recovered. Samples were checked by Matthews. No pressure chart was run as a bomb was not available. The test was considered to be mechanically

DAILY PROGRESS REPORT CONT'D

Date	From	To	Footage	Remarks
May 18				unsatisfactory and was performed by Dowell Rental.
<u>Cont'd</u>				Present at the test were J. E. Routledge, C. G. Matthews and C. M. Spornitz and crew.
				Pulled tester out and checked it again. Ran in with tester. Attached wench line as pull down from top of drill pipe and anchored it with snatch block on substructure and applied 10,000# additional weight to the packer. Prepared to run drill stem test.
				D.S.T. #7 - 304.0' - 377.0' Slave Point Limestone
				Hole diameter 6 1/8"
				O.D. of packer rubber 5 1/2"
				Length of anchor below packer 73.0'
				Tester started in hole 11:00 P.M.
				Tester on bottom 11:30 P.M.
				Tester opened 12:00 A.M.
				Tester closed 4:00 A.M.
				Tester pulled loose 4:00 A.M.
				Tester out of hole 5:00 A.M.
				Packer set with 15,000#
				Packer pulled loose with 4,000#
				There was a good initial blow plus 5 minutes breathing when the tool was opened, air was displaced but the mud level in the casing did not drop. When the drill pipe was pulled 15' (0.09 bbls.) of dead mud were recovered. Samples were checked by C. G. Matthews but there was no evidence of salt. A pressure chart was not run as no bomb was available. The test was considered to be mechanically satisfactory and was performed by Dowell Rental. Present at the test were J. E. Routledge, C. M. Spornitz & crew, A. J. Weber & Crew and C. G. Matthews.
May 19	377	439	62'	Pulled tester out, checked valve operation and cleaned tester. Picked up core barrel and circulated and cleaned to bottom for 1 1/4 hours. Cored for 5 hours and hoisted and examined core #3. For 25' cut, 25' were recovered or 100%. Ran in again, circulated and conditioned and cored for 3 3/4 hours/ Hoisted and examined core #4. For 23' cut, 23' were recovered or 100%. Picked up drill collar which slowed drilling time 30% circulated and cored ahead for 2 hours. Hoisted and examined core #5. For 14' cut, 13' were recovered or 93%.

DAILY PROGRESS REPORT CONT'D

Date	From To	Footage	Remarks
<u>May 20</u>	439		Laid down core barrel and picked up Kelly and 9" OSC bit. Reamed hole from 45' to 351' in 14 1/2 hours. Worked on pumps for 1 1/2 hours. Circulated and conditioned mud and made trip to clean out hole in preparation to run casing. Waited on casing for 3 1/2 hours as sleigh broke down bringing in casing.
<u>May 21</u>	439		Waited on casing and helped repair sleigh for 8 hours. Received casing, made trip in to circulate to clean hole of boulders. Rigged up to run surface casing.
			Casing started in hole 3:00 P.M. Casing all in 10:00 P.M. Started circulating 11:00 P.M. Stopped circulating 7:00 A.M. Started cementing 8:30 A.M. Cement all in pipe 12:00 A.M. Plug down 1:00 P.M.
<u>May 22</u>	439		Ran and cemented 341.42', 7" O.D., 20#, 8 Bd. Thd. Rgs. 2, J-55 Stewart & Lloyd's casing. The Baker float shoe and 2 joints were acetylene welded, a centralizer was attached at 335' and scratchers at 344', 330', 320', 310' & 300'. The shoe was landed at 349.05' below Kelly bushing, which was 7.63' above ground level. The casing was cemented with 100 sacks of cement by mixing of mud hog and jet. The plug was bumped on the baffle plate with 0 psi. and good cement returns were obtained.
			While waiting on cement, cleaned up pump, cement, centered casing and dug cellar.
<u>May 23</u>			Hipped up blow out preventer and worked on pump molar.
<u>May 24</u>			Waited on cement for total of 46 hours. Measured in and found top of cement plug. Rechecked cement plug. Drilled out baffle. Tested blow out preventers and surface connections. Ran in and drilled out cement plug with 6 1/8" OSC bit. found top of cement at 302', plug at 312', baffle at 319' and top of shoe at 348'. Cleaned out to bottom and circulated to wash hole. Well was flowing 16 bbls./hr. of sulphur water with trace of oil. Ran in with drill stem tester and prepared to test with well flowing.

DAILY PROGRESS REPORT CONT'D

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<u>Date</u>	<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Remarks</u>
May 24				
<u>Cont'd</u>				D.S.T. #8 - 356.79 ⁴ - 440.62 Slave Point Limestone 349.05 - 356.79
				Hole diameter 6 1/8"
				O.D. of packer rubber 5 1/2"
				Length of anchor below packer 83.83'
				Tester started in hole 9:10 P.M.
				Tester on bottom 10:00 P.M.
				Tester opened
				Tester closed 12:00 P.M.
				Tester pulled loose 12:00 P.M.
				Tester out of hole 1:00 A.M.
May 25	439	536	97	Packer set with 5000 ⁺ $\frac{1}{2}$ est. additional 10,000 ⁺ applied by winch line pull down Packer pulled loose with 5,000 ⁺
				There was a good initial blow when the tool was opened, air was displaced and the mud level in the casing did not drop. Sulphur water flowed to surface in 15 minutes at rate of 12 bbls. hourly. There was no blow, over the stand pipe.
				Measure annulus flow 4.83/bbls. hourly of sulphur
				Measure annulus flow 4.63)water, oil speckled.
				Measure annulus flow 4.63)no gas
				Dropped dart to test formation above and below packer simultaneously. Tester was opened and there was no loss of fluid in the annulus. Mea- sured annulus flow 6 times at rate of 4.43 bbls. hourly of sulphur water, oil speckled with no trace of gas. When the drill pipe was pulled 370' (2.73 bbls) of sulphur water were recovered. Samples were checked by C. G. Matthews. No pressure chart was run as a bomb was not available. The test was considered to be mechanically sat- isfactory and was performed by Dowell Rental. Present at the test were J. E. Routledge, C. M. Spornitz & crew, A. J. Weber & crew and C. G. Matthews.
				Laid down tester and ran in with a 6 1/8" OSC bit and junk sub. Conditioned mud and tried to kill well by displacing the contaminated mud. Con- ditioned mud again and killed flow of sulphur water in 5 hours. Drilled ahead for 11 1/2 hours.

DAILY PROGRESS REPORT CONT'D

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Date	From	To	Footage	Remarks																								
May 26	536	625	89	Drilled on bottom for 6 hours. Pulled out and ran in with a 6 1/8" Trucone diamond bit. Reamed and cleaned to bottom for 2 hours as catcher sub backed off inner barrel. Checked core barrel and cored for 3 1/2 hours. Hoisted core #6 and for 25' cut, 25' were recovered or 100%. Ran back in hole and cored ahead for 3 1/4 hours. Hoisted core #7 and for 19' cut, 19' were recovered or 100%. A survey showed: 1 1/2" @ 600'																								
May 27	625	690	65	Ran in again and cored for 1 1/4 hours. Hoisted core #8 and for 10' cut, recovered 10'. Continued coring for 1 3/4 hours and hoisted core #9 and for 11' cut, 11' were recovered or 100%. Cored ahead for 1 1/4 hours and hoisted core #10 and for 10' cut, 10' were recovered or 100%. Cut core #11 in 4 1/2 hours and for 25' cut, 25' were recovered or 100%. Pulled out of hole with core barrel and ran in with tester to run drill stem test. D.S.T. #9 - 672.0' - 681.0' Slave Point Limestone <table border="0"> <tr> <td>Hole diameter</td> <td>6 1/8"</td> </tr> <tr> <td>O.D. of packer rubber</td> <td>5 1/2"</td> </tr> <tr> <td>Length of anchor below packer</td> <td>9.0'</td> </tr> <tr> <td>Tester started in hole</td> <td>6:30 P.M.</td> </tr> <tr> <td>Tester on bottom</td> <td>7:35 P.M.</td> </tr> <tr> <td>Tester opened</td> <td>7:35 P.M.</td> </tr> <tr> <td>Tester closed</td> <td>8:35 P.M.</td> </tr> <tr> <td>Tester pulled loose</td> <td>8:35 P.M.</td> </tr> <tr> <td>Tester out of hole</td> <td>9:30 P.M.</td> </tr> <tr> <td>Packer set with</td> <td>5000#</td> </tr> <tr> <td>additional 10,000# applied by winch line pull down</td> <td></td> </tr> <tr> <td>Packer pulled loose with</td> <td>5000#</td> </tr> </table> There was a noticeable blow when the tool was opened, air was displaced but the mud level in the casing did not drop. When the drill pipe was pulled 300' (2.22 bbls.) of sulphur water were recovered. Samples were taken and checked by C. G. Matthews. No pressure chart was run as no bomb was available. The test was considered to be mechanically satisfactory and was performed by Dowell Rental. Present at the test were J. E. Routledge, C. M. Spornitz & crew and C. G. Matthews. Pulled tester out of hole, ran in with a 6 1/8" O.W.S. bit at 681' and drilled for 1 hour.	Hole diameter	6 1/8"	O.D. of packer rubber	5 1/2"	Length of anchor below packer	9.0'	Tester started in hole	6:30 P.M.	Tester on bottom	7:35 P.M.	Tester opened	7:35 P.M.	Tester closed	8:35 P.M.	Tester pulled loose	8:35 P.M.	Tester out of hole	9:30 P.M.	Packer set with	5000#	additional 10,000# applied by winch line pull down		Packer pulled loose with	5000#
Hole diameter	6 1/8"																											
O.D. of packer rubber	5 1/2"																											
Length of anchor below packer	9.0'																											
Tester started in hole	6:30 P.M.																											
Tester on bottom	7:35 P.M.																											
Tester opened	7:35 P.M.																											
Tester closed	8:35 P.M.																											
Tester pulled loose	8:35 P.M.																											
Tester out of hole	9:30 P.M.																											
Packer set with	5000#																											
additional 10,000# applied by winch line pull down																												
Packer pulled loose with	5000#																											

DAILY PROGRESS REPORT CONT'D

<u>Date</u>	<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Remarks</u>
<u>May 28</u>	690	811	121	Continued drilling for 9 1/2 hours, changed to a new 6 1/8" OWS bit at 763' after 10 1/2 hours drilling footage. Conditioned mud and drilled ahead for 7 hours. Changed to a new bit again at 802' after 7 hours drilling as locked and loose. Continued drilling for 1 3/4 hours.
<u>May 29</u>	811	918	107	Pulled ahead for 3 hours. Changed to a new 6 1/8" OWS bit at 830' after 4 3/4 hours drilling footage. Drilled ahead for 5 1/2 hours changed to a 6 1/8" OSC bit at 860' after 5 1/2 hours and drilled for 5 1/2 hours. Circulated and changed bit again at 909' after 5 1/2 hrs. drilling time. Made a survey and continued drilling for 1 1/2 hours. A survey showed: 1/4° @ 900'
<u>May 30</u>	918	989	71	Drilled on bottom for 6 1/4 hours. Pulled out of hole, laid down drill collar and picked up a 6 1/8" Truco diamond bit. Ran in and reamed and circulated on bottom for 1/2 hour. Cored for 6 3/4 hours. Hoisted core #12 and for 25' cut, 25' were recovered or 100%. Strung a new drilling line and took out back twist. Ran back in, circulated and cored for 1 1/2 hours. Hoisted core #13 and for 8' cut, 8' were recovered or 100%. Received orders to abandon well at 11:45 P.M.
<u>May 31</u>	989			Laid down core barrel and ran in with open end at 365'. Cleaned out suction pit. Ran Plug #1 365' - 288' with 15 sacks of cement, displaced 2 3/4 bbls. of water. Pulled out 5 singles (150'). Float was plugged. Pulled out of hole, removed blow out preventers, cleaned drill pipe and started tearing out. Ran Plug #2 - 8' - 35' with 8 sacks of cement. Installed welded protector plate on top of 7" casing. Dismantled rig and worked on equipment.
<u>June 1</u>				Overhauled truck, generally cleaned up around rig and repaired rig.
<u>June 2</u>				Continued repairing rig and truck, cleaned up and piled up equipment. Matthews received orders to return to Edmonton with cores and samples.
<u>June 3</u>				Continued working on rig and motors, waiting on orders and transportation.
<u>June 4</u>				Working on rig and equipment, loaded out Menzies boat with cores and empty drums.

DAILY PROGRESS REPORT CONT'D

<u>Date</u>	<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Remarks</u>
<u>June 5</u>				Repaired sleigh and cat.
<u>June 6</u>				Awaited orders, cleaned up and made general repairs.
<u>June 7</u>				Covered and drained all equipment, waiting for transportation out.

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SURVEY RECORD

<u>Date</u>	<u>Depth</u>	<u>Deviation</u>
May 16	150'	1/4°
May 16	250'	1/8°
May 26	600'	1/2°
May 29	900'	1/4°

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MUD RECORD

15

Date	Wth	Mud Wt. #/U.S. Gal.	Visc.	Gel.	H ₂ O Loss cc.	Filter Cake 1/32"	pH	Additives
May 15	20	-	-	-	-	-	-	2500# gel.
May 15	41	-	-	-	-	-	-	
May 16	60	9.8	48	52	-	-	-	
May 16	-	-	-	-	-	-	-	
May 16	334	9.8	48	55	-	-	-	
May 17	359	10.2	48	54	-	-	-	
May 17	366	10.2	50	54	13.0	2/32	8.0	
May 17	366	10.2	52	56	13.0	2/32	8.0	
May 18	377	10.2	50	54	-	-	-	
May 18	377	Drill stem testing						
May 18	377	Drill stem testing						
May 19	377	Drill stem testing						
May 19	402	10.1	48	52	-	-	-	
May 19	439	10.6	47	55	11.5	2/32	8.0	
May 20	439	10.6	50	56	12.0	2/32	8.0	
May 20	439	10.4	52	56				
May 20	Running casing							
May 21	Running casing							
May 21	Running casing							
May 21	Running casing							
May 22	Waiting on cement							
May 22	"	"	"	"				
May 22	"	"	"	"				
May 23	"	"	"	"				
May 23	"	"	"	"				
May 23	"	"	"	"				

MUD RECORD CONTINUED

16

Date	Depth	Mud Wt. #/U.S. Gal.	Visc.	Gel.	H ₂ O Loss cc.	Filter Cake 1/32"	pH	Additives
May 24	439	Waiting on cement						
May 24	439	Waiting on cement						
May 24	439	Waiting on cement						
May 25	439	Conditioning to kill well						3000# gel.
May 25	475	9.0	47	49	14	2/32	8.5	1500# Gel.
May 25	536	9.2	48	52	15.0	2/32	8.0	
May 26	581	9.2	48	52	14	2/32	8.0	
May 26	596	9.2	50	54	-	-	-	
May 26	625	9.6	50	56	-	-	-	
May 27	646	9.6	46	51	14	2/32	8.0	
May 27	681	9.4	48	51	-	-	-	
May 27	690	Testing						
May 28	751	10.0	45	49	28	2/32	8.0	
May 28	777	10.0	48	52	15	2/32	9.5	100# Caustic 50# Quebraco 100# Gel. 250# Car- boxyl
May 28	811	10.5	50	54	15	2/32	9.5	
May 29	846	10.8	54	58	8.0	2/32	9.5	25# Quebraco 25# Carboxyl
May 29	884	11.0	45	48	12.0	2/32	9.5	
May 29	918	11.2	49	55	9.0	2/32	9.5	25# Quebraco 15# Caustic
May 30	956	11.2	49	54	9.0	2/32	9.5	
May 30	981	11.2	50	54	6.8	2/32	9.5	
May 30	989	11.2	50	54	7.2	2/32	9.5	

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BIT RECORDED

Well: H.W.T. Deep Bay #2

Date	Bit #	Size	Type	Pump ()	Wt. on Bit RPM M LBS.	Feet Drilled Bottom	Mrs. on Depth	Permeation	Cond.	Remarks	
May 15	1A	9"	OSC3	100	60	all	100	45	16 3/4	45	Dull
May 16	1	6 1/8"OSC	100	60	60	10	100	306	17	351	Dull
May 17	2	6 1/8"Truco Dia.	100	60	60	8	70	88	17 1/4	439	okay
May 20	3	9" OSC3	100	60	60	6	175	Reamed 306	14 1/2		Dull
May 25	4	6 1/8"OSC	100	60	60	8	100	142	18	581	Dull
May 26	2 ER	6 1/8"Truco Dia.	100	60	60	6	70	100	15 1/2	681	okay
May 27	5	6 1/8"OWS	100	60	60	7.5	100	82	10 1/2	763	Dull
May 28	6	6 1/8"OWS	100	60	60	7.5	100	39	7	802	Loose Dull
May 28	7	6 1/8"OWS	100	60	60	7.5	100	28	4 3/4	830	Limestone
May 29	8	6 1/8"OWS	100	58	58	7.5	100	30	5 1/2	860	Locked Loose
May 29	9	6 1/8"OSC	100	58	58	7.5	100	49	5 1/2	909	Locked Loose
May 29	10	6 1/8"OSC	100	60	60	7.5	100	47	7 3/4	956	Dull
May 30	2 ER	6 1/8"Truco Diamond	100	60	60	6	70	33	8 1/4	989	Okay

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CORE RECORD

Date	Core No.	From	To	Ft. Out	Ft. Rec.
May 17	1	351	366	15	15
May 18	2	366	377	11	11
May 19	3	377	402	25	25
May 19	4	402	425	23	23
May 19	5	425	439	14	13
May 26	6	581	606	25	25
May 26	7	606	625	19	19
May 27	8	625	635	10	10
May 27	9	635	646	11	11
May 27	10	646	656	10	10
May 27	11	656	681	25	25
May 30	12	956	981	25	25
May 30	13	981	989	8	8

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Superior Oils of Canada Limited

DRILL STEM TEST REPORT

19

Date May 17th, 1952

Name of Well H.V.T. Deep Bay No. 2

Test No. 1 (Normal)

Testing Company Dewall Rental

Operator General Petroleum of Canada Ltd.



Size Drill Pipe 3 1/2" O. D. of Packer Rubber 5 1/2" Size Choke 3/8"

13.30 #/ foot Type of Packer: Anchor Type X Hookwall

Formation Tested Slave Point Limestone

Depth of Well 366'

Bottom of Rubber Zone Tested: From 344.79' To 366.0'

at 344.79 feet Time Waiting on Tester N11

Mud: API Viscosity 49 Gel 54 Weight 9.9

Time Tester started in hole 1:00 P.M.

" " On Bottom 1:40 P.M.

" " Opened 2:07 Reset 3 times dropped 2 darts

" " Closed 2:15 P.M.

" " Pulled Loose 2:15 P.M.

Depth 366.0 feet " " Out of Hole 2:50 P.M.

Weight: Set on Packer 4 Thousand Lbs.; To pull Packer Loose 4 Thousand Lbs.

No. Lines 6 Size Line 1"

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

Did mud level drop in casing; Yes X Packer failed to hold No

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

Estimated by

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

Total fluid in drill pipe: 5 Stands 150 Feet Bbls.

Oil in drill pipe { Gassy Dead } N11 Stands Feet Bbls.

Mud in drill pipe { Gassy Dead } 5 Stands 150 Feet Bbls.

Water in drill pipe { Gassy Dead } N11 Stands Feet Bbls.

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: Packer failed to hold pulled out same, remarked testing tool
Put additional remarks or other information on back of sheet.

Present at test: Bontledge, Spornitz and crew, Matthews.

Do you consider that test was satisfactory? Yes No X

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No X Who has it

No Bomb Run, not available

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

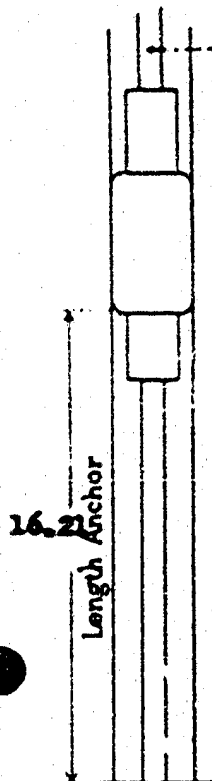
Date **May 17th, 1952**

Name of Well **H.W.F. Deep Bay No. 2**

Test No. **2**

Testing Company **Dewell Rental**

Operator **General Petroleum of Canada Ltd.**



Size Drill Pipe **3 1/2** inches O.D. Type of Packer: Anchor Type **X** Hookwall

13.30 s/ foot Formation Tested **Slave Point Limestone**

Depth of Well **366.0**

Bottom of Rubber

Zone Tested: From **349.79** To **366.0**

or **349.79** feet

Time Waiting on Tester **Nil**

Mud: API Viscosity **49** Gel **54** Weight **9.9**

Time Tester started in hole **4:55 P.M.**

" " On Bottom **5:40 P.M.**

" " Opened **5:45 P.M. Reached 3 times, 2 starts**

" " Closed **7:00**

" " Pulled Loose **7:00**

" " Out of Hole **7:45**

Depth **366.0** feet

Weight: Set on Packer **4** Thousand Lbs.; To pull Packer Loose **4** Thousand Lbs.

Weight before setting **4800 lb**

No. Lines

6

Size Line **1"**

initial puff only

When tool was opened: Was blow noticeable, Yes **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 riser: **2"** inches, I.D.; Was flare lit, Yes **No** **X**; Length flame **Nil** feet

Total fluid in drill pipe: **Nil** Stands **1** Feet **Nil** Bbls.

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

Mud in drill pipe { Gassy Dead } **Nil** Stands **1** Feet **Nil** Bbls.

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

Note: Samples of Oil and Water must be taken.

Samples ~~sent~~ checked By **Matthews**

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

Remarks: **Rechecked tester thoroughly before test - Shatter disc. Punctured but plugged by dart**
Put additional remarks or other information on back of sheet.

Present at test: **Routledge, Spornitz & crew, Matthews**

Do you consider that test was satisfactory? Yes **No** **X**

Does chart show normal operation of tester? Yes **No**

Pressure on chart (Hydrostatic) before tester opened **Nil** p.s.i.

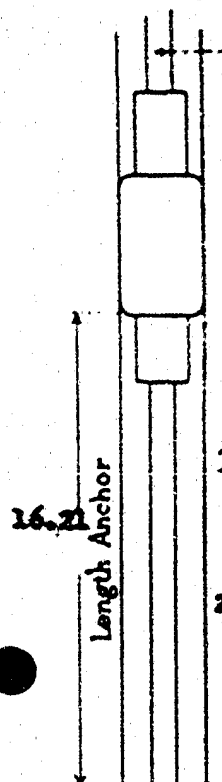
" " " (Flowing) with tester open **Nil** p.s.i. (shut in) **Nil** p.s.i.

Is chart attached: Yes **No** **X** Who has it

No Bomb Rm, not available

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

Date **May 17, 1952**Name of Well **N.W.T. Deep Bay #2**Test No. **3**Testing Company **Dowell Rental**Operator **General Petroleum of Canada Ltd.**Size Drill Pipe **3 1/2** inches O.D. O. D. of Packer Rubber **5 1/2"** Size Choke **3/8"**Type of Packer: Anchor Type **X** HockwallFormation Tested **Slave Point Limestone**Depth of Well **366'**Zone Tested: From **349.79** To **366.0**Time Waiting on Tester **Nil**Mud: API Viscosity **49** Gel **54** Weight **9.9**Time Tester started in hole **8:30 P.M.**" " On Bottom **9:00 P.M.**" " Opened **9:10 P.M. Reset 3 times**" " Closed **9:25 P.M.**" " Pulled Loose **9:25 P.M.**Depth **366** feet " " Out of Hole **10:00 P.M.**Weight: Set on Packer **4** Thousand Lbs.; To pull Packer Loose **4** Thousand Lbs.Weight before setting **4800**No. Lines **6** Size Line **1"****Packer failed**When tool was opened: Was blow noticeable, Yes **X** No ; Air displaced, Yes NoDid mud level drop in casing; Yes **X** NoGas Flow: **Nil** Thousand cf/day. Measured with Pitot tube by

Estimated by

Size riser: **2'** inches, I.D.; Was flare lit, Yes No **X**; Length flame feetTotal fluid in drill pipe: **2** Stands **60** Feet **0.44** Bbls.Oil in drill pipe { Gassy } **Nil** Stands Feet Bbls.
 { Dead }Mud in drill pipe { ~~Gassy~~ } **2** Stands **60** Feet **0.44** Bbls.
 { Dead }Water in drill pipe { Gassy } **Nil** Stands Feet Bbls.
 { Dead }

Note: Samples of Oil and Water must be taken.

Samples ~~same~~ checked By **Matthews**

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

Remarks: **Packer again failed - Valves, bypasses, checked found okay, little sticky**
Put additional remarks or other information on back of sheet. **cleaned same.**Present at test: **Houtledge, Spornitz & crew, Matthews**Do you consider that test was satisfactory? Yes No **X**

Does chart show normal operation of tester? Yes No

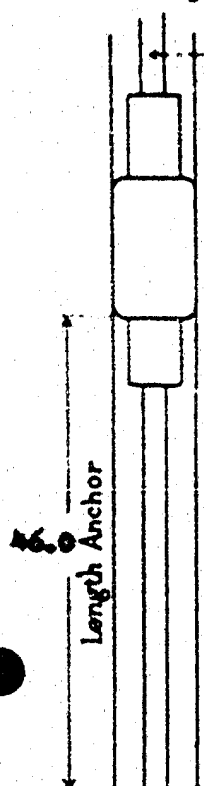
Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No **X** Who has it**No Bomb available**

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

Date **May 18, 1952**Name of Well **H.V.T. Deep Bay #2**Test No. **4**Testing Company **Howell Rental**Operator **General Petroleum of Canada Ltd.**Size Drill Pipe **3 1/2** inches O.D. O. D. of Packer Rubber **5 1/2** Size Choke **3/8**Type of Packer: Anchor Type **X** HookwallFormation Tested **Slave Point Limestone**Depth of Well **366'**Zone Tested: From **320.0** To **366.0'**Time Waiting on Tester **Nil**Mud: API Viscosity **49** Gel **54** Weight **9.9**Time Tester started in hole **10:45 P.M.**" " On Bottom **11:15 P.M.**" " Opened **11:30 P.M.**" " Closed **1:30 A.M.**" " Pulled Loose **1:30 A.M.**" " Out of Hole **2:15 A.M.**Depth **366.0** feetWeight before setting, **4800#**Weight: Set on Packer **4** Thousand Lbs.; To pull Packer Loose **4** Thousand Lbs.No. Lines **6**Size Line **1"**

Good initial puff & slight blow for 8 mins.

When tool was opened: Was blow noticeable, Yes **X** No ; Air displaced, Yes NoDid 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 flare lit, Yes No **X**; Length flame feetTotal fluid in drill pipe: **Nil** Stands **3** Feet Bbls.Oil in drill pipe { Gassy } **Nil** Stands Feet Bbls.Mud in drill pipe { Gassy } **Nil** Stands **3** Feet Bbls.Water in drill pipe { Gassy } **Nil** Stands Feet Bbls.

Note: Samples of Oil and Water must be taken.

Samples ~~sent to~~ checked By **Matthews**

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

Remarks: **Valves operated okay, perforations clean**

Put additional remarks or other information on back of sheet.

Present at test: **Boutledge, Spornitz & crew. Weber & crew, Matthews.**Do you consider that test was satisfactory? Yes No **Doubtful**

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No Who has it

No Bomb available

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

Date **May 18, 1952**Name of Well **H.V.I. Deep Bay #2**Test No. **5**Testing Company **Dorrell Rental**Operator **General Petroleum of Canada Ltd.**Size Drill Pipe **3 1/2"** O. D. of Packer Rubber **5 1/2"** Size Choke **3/8"****3 1/2"** inches O.D. Type of Packer: Anchor Type **X** Hookwall**13.30** #/ foot Formation Tested **Slave Point Limestone**Depth of Well **377.0'**Bottom of Rubber Zone Tested: From **331.62'** To **377.0**Time Waiting on Tester **6 hours overhauling same**Mud: API Viscosity **48** Gel **52** Weight **10.0**Time Tester started in hole **1:45 P.M.**" " On Bottom **2:15 P.M.**" " Opened **2:30 P.M. Reset & spudded**" " Closed **2:45 P.M.**" " Pulled Loose **2:45 P.M.**" " Out of Hole **3:30 P.M.**Depth **377.0** feet
Weight before setting **4700#**Weight: Set on Packer **4** Thousand Lbs.; To pull Packer Loose **4** Thousand Lbs.No. Lines **6** Size Line **1"****Packer failed**When tool was opened: Was blow noticeable, Yes **X** No ; Air displaced, Yes NoDid mud level drop in casing; Yes **X** NoGas Flow: **Nil** Thousand cf/day. Measured with Pitot tube by

Estimated by

Size riser: **2"** inches, I.D.; Was flare lit, Yes No **X**; Length flame feetTotal fluid in drill pipe: **8 1/2** Stands **255** Feet **1.38** Bbls.Oil in drill pipe { Gassy } Stands Feet Bbls.
DeadMud in drill pipe { Gassy } **8 1/2** Stands **255** Feet **1.38** Bbls.
DeadWater in drill pipe { Gassy } **Nil** Stands Feet Bbls.
Dead

Note: Samples of Oil and Water must be taken.

Samples sent to **checked** By **Matthews**

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

Remarks: **Before running tester broken down all valves, bypasses cleaned, rust removed, resetted packing, checked complete & thorough workover, ok.**
Put additional remarks or other information on back of sheet.

Present at test:

Routledge, Spornitz & crew, MatthewsDo you consider that test was satisfactory? Yes No **X**

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No **X** Who has it**No Bomb available**

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

Date May 18, 1952Name of Well H.W.T. Deep Bay #2Test No. 6Testing Company Dowell RentalOperator General Petroleum of Canada Ltd.Size Drill Pipe 3 1/2" O. D. of Packer Rubber 5 1/2 Size Choke 3/8"13.30 #/ foot Type of Packer: Anchor Type X HookwallFormation Tested Slave Point LimestoneDepth of Well 377.0

Bottom of Rubber

Zone Tested: From 333.48 To 377.0at 333.48 feetTime Waiting on Tester 1 1/2 hours recheckingMud: API Viscosity 48 Gel 52 Weight 10.0Time Tester started in hole 5:00 P.M." " On Bottom 5:30 P.M." " Opened 5:45 P.M. Reset 3 times" " Closed 5:57 P.M." " Pulled Loose 5:57 P.M.Depth 377.0 feet " " Out of Hole 6:35 P.M.Weight: Set on Packer Weight before setting 4700# Thousand Lbs.; To pull Packer Loose 4 Thousand Lbs.No. Lines 6 Size Line 1"Packer failedWhen tool was opened: Was blow noticeable, Yes X No ; Air displaced, Yes NoDid mud level drop in casing; Yes X NoGas Flow: Nil Thousand cf/day. Measured with Pitot tube by

Estimated by

Size riser: 2" inches, I.D.; Was flare lit, Yes No X; Length flame feetTotal fluid in drill pipe: 6 Stands 180 Feet 1.33 Bbls.

Oil in drill pipe { Gassy } Stands Feet Bbls.

Mud in drill pipe { Dead } 6 Stands 180 Feet 1.33 Bbls.Water in drill pipe { Gassy } Nil Stands Feet Bbls.

Note: Samples of Oil and Water must be taken.

Samples checked By Matthews

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

Remarks: Before running - rechecked tester operating mechanism - tried to invert tester no go. Tester mechanically ok.
Put additional remarks or other information on back of sheetPresent at test: Decision insufficient weight to efficiency seal off packerBoutledge, Matthews, Spornitz & crewDo you consider that test was satisfactory? Yes No X

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No X Who has itNo Bomb Available

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

Date **May 18. - 19. 1952**Name of Well **H.M.T. Deep Bay #2**Test No. **7**Testing Company **Dowell Rental**Operator **General Petroleum of Canada Ltd.**Size Drill Pipe **3 1/2**O. D. of Packer Rubber **5 1/2"**Size Choke **3/8"**

inches O.D.

Type of Packer: Anchor Type **X**

Hookwall

13.30

/ foot

Formation Tested **Slave Point Limestone**Depth of Well **377.0**Bottom of Rubber
at **304.00**
feetZone Tested: From **304.0**To **377.0**Time Waiting on Tester **Nil**Mud: API Viscosity **48**Gel **52**Weight **10.0**Time Tester started in hole **11:00 P.M.**" " On Bottom **11:30 P.M.**" " Opened **12:00 P.M.**" " Closed **4:00 P.M. May 19/52**" " Pulled Loose **4:00 A.M.**" " Out of Hole **5:00**Depth **377.0**
Weight drill pipe **4700#**Weight: Set on Packer **15**Thousand Lbs.; To pull Packer Loose **4**

Thousand Lbs.

No. Lines **6**Size Line **1"**When tool was opened: Was blow noticeable, Yes **X** No **Good initial pull, plus 5 min. breathing**
Air displaced, Yes **X** 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 flare lit, Yes No, Length flame feetTotal fluid in drill pipe: **1/2** Stands **15** Feet **0.09** Bbls.Oil in drill pipe { Gassy } Stands Feet Bbls.
DeadMud in drill pipe { ~~Gassy~~ } **1/2** Stands **15** Feet **0.09** Bbls.
DeadWater in drill pipe { Gassy } **Nil** Stands Feet Bbls.
Dead

Note: Samples of Oil and Water must be taken.

Samples sent to **Checked no salt**By **Matthews**

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

Remarks: **Tester checked ok. before running - attached winch line as pull down to top of drill pipe and anchored with snatch block on substructure - applied 10,000#**
Put additional remarks or other information on back of sheet. **additional weight to packer ok**Present at test: **Boutledge, Spornitz & crew, Weber & crew**Remarks Cont'd: **Valve operation checked all ok after pulling out tester, perforations clean**Do you consider that test was satisfactory? Yes **Mechanically** No

Does chart show normal operation of tester? Yes No

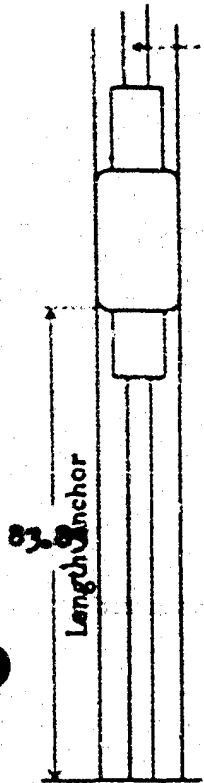
Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No **X** Who has it**No bomb available**

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

Date May 24/52Name of Well N.W.T. Deep Bay #2Test No. 8Testing Company Bowall RentalOperator General Petroleum of Canada Ltd.Size Drill Pipe 3 1/2 inches O.D. O. D. of Packer Rubber 5 1/2" Size Choke 3/8"Type of Packer: Anchor Type X HookwallFormation Tested Slave Point LimestoneDepth of Well 440Bottom of Rubber Zone Tested: From 356.79 To 440.62
at 356.79 feet To 356.79Time Waiting on Tester nilMud: API Viscosity water Gel WeightTime Tester started in hole 9:10 P.M." " On Bottom 10:00 P.M." " Opened See Data Sheet #17 to be typed on back on this report" " Closed 12:00 P.M." " Pulled Loose 12:00 P.M.Depth 440.62 feet " " Out of Hole 1:00 A.M., May 25/52Weight: Set on Packer 5 Thousand Lbs.; To pull Packer Loose 5 Thousand Lbs.

Est. additional 10,000# applied by winch line pull down

No. Lines 6 Size LineWhen tool was opened: Was blow noticeable, Yes X No ; Air displaced, Yes X No Sulphur water to surface in 15 mins.Did mud level drop in casing: Yes No XGas Flow: nil Thousand cf/day. Measured with Pitot tube by

Estimated by

Size riser: 2" inches, I.D.; Was flare lit, Yes No X; Length flame Nil feetTotal fluid in drill pipe: 12.4 Stands 370 Feet 2.73 Bbls.Oil in drill pipe { Dead } trace Stands Feet Bbls.Mud in drill pipe { Gassy } Nil Stands Feet Bbls.Water in drill pipe { Dead } 12.4 Stands 370 Feet 2.73 Bbls.

Note: Samples of Oil and Water must be taken

Samples sent to By MatthewsWater: Sulphur Sulphur, Burkholder Burkholder (Cross out terms that do not apply).Remarks: Test of sulphur water flow above and below packer, - tester run in with well
Flowing - see Data Sheet on Back

Put additional remarks or other information on back of sheet.

Present at test: Routledge, Spornitz & crew, Weber & crew, MatthewsDo you consider that test was satisfactory? Yes X No Does chart show normal operation of tester? Yes No Pressure on chart (Hydrostatic) before tester opened p.s.i." " " (Flowing) with tester open p.s.i. (shut in) p.s.i.Is chart attached: Yes No X Who has it

No bomb available

Superior Oil of Canada Limited

DRILL STEM TEST REPORT

Time	Notes
4:58	5:02 Top float shoe 397.7'
5:02	5:02 Drilling shoe
5:42	5:45 Hole: Clear at 351'
5:45	6:20 Clean out to bottom tally 440'
6:20	6:45 Circulate to wash hole
6:45	Noted well flowing, pulled out leaving drill collar, 1 single in B.O.P. and Kelly up to test
7:25	Measured water flow 16.1 bbls. hourly water
8:00	" " " 16.0 " traces of oil
8:15	" sulphur water 16.0 bbls. hourly oil, speckled no gas
8:30	Laid down drill collar and single to make up tester
9:10	Made up tester to set 357'
10:00	Run in test #8 with well flowing
10:05	Set packer winch hold down
10:15	Measured annulus flow 4.83 bbls. hrly - sulphur
10:30	" " " 4.63 water, oil speckled
10:45	" " " 4.63 no gas
10:46	Dropped dart to test formation above & below, packer simultaneously
10:46	Tester open - no loss of fluid in annulus
11:00	Measured annulus flow 4.43 bbls. hrly (all
11:01	" " " 4.43 " (speckled
11:15	" " " 4.43 " (no
11:30	" " " 4.43 " (gas
11:45	" " " 4.43 " "
12:00	" " " 4.43 " "
12:00	Pulled tester loose
1:00	Pulled out of hole
	Laid down tester and prepared to run in with bit & mix mud to kill water flow.

Test	Flow	Pressure	Temperature	Remarks
1st	16.1	16.0	16.0	Water flow, traces of oil
2nd	4.83	4.63	4.63	Sulphur water, oil speckled
3rd	4.43	4.43	4.43	Water, oil speckled
4th	4.43	4.43	4.43	No gas
5th	4.43	4.43	4.43	Gas

Notes: (1) The test was conducted in accordance with the standard procedure for well testing. (2) The flow rate was measured by the volume of fluid collected in a known time interval. (3) The pressure was measured by a pressure gauge connected to the test line. (4) The temperature was measured by a thermometer inserted into the test line. (5) The remarks column contains any additional information regarding the test results.

Flow rate	16.1 bbls/hr	Pressure	16.0 psi	Temperature	16.0 °F	Remarks	Water flow, traces of oil
Flow rate	4.83 bbls/hr	Pressure	4.63 psi	Temperature	4.63 °F	Remarks	Sulphur water, oil speckled
Flow rate	4.43 bbls/hr	Pressure	4.43 psi	Temperature	4.43 °F	Remarks	Water, oil speckled
Flow rate	4.43 bbls/hr	Pressure	4.43 psi	Temperature	4.43 °F	Remarks	No gas
Flow rate	4.43 bbls/hr	Pressure	4.43 psi	Temperature	4.43 °F	Remarks	Gas

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

Date **May 27, 1952**Name of Well **Deep Bay No. 2 (L.W.T.)**Test No. **9**Testing Company **Dewell Rental**Operator **General Petroleum of Canada Ltd.**

	Size Drill Pipe	O. D. of Packer Rubber	5 1/2"	Size Choke	3/8"
	3 1/2 inches O.D.	Type of Packer: Anchor Type	X	Hookwall	
	13.30 #/ foot	Formation Tested	Slave Point Limestone (second perons)		
		Depth of Well	681.0		
	Bottom of Rubber	Zone Tested: From	672.0	To	681.0
	at 672.0 feet	Time Waiting on Tester	Nil (checked only)		
		Mud: API Viscosity	48	Gel	51 Weight 9.4
	3' perforations	Time Tester started in hole	6:30 P.M.		
		" " On Bottom	7:35 P.M.		
	2' perforations	" " Opened	7:35 P.M.		
	" " Closed	8:35 P.M.			
	" " Pulled Loose	8:35 P.M.			
	" " Out of Hole	9:30 P.M.			
	Depth 681.0 feet				
	Weight before 5600#				
	Weight: Set on Packer 5 Thousand Lbs.; To pull Packer Loose 5 Thousand Lbs.				
	Additional 10,000# applied by winch line pull down				
	No. Lines 8	Size Line	1"		

When tool was opened: Was blow noticeable, Yes **X** No ; Air displaced, Yes **X** NoDid 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 flare lit, Yes No **X**; Length flame feetTotal fluid in drill pipe: **10** Stands **300** Feet **2.22** Bbls.Oil in drill pipe { Gassy Dead } **nil** Stands Feet Bbls.Mud in drill pipe { Gassy Dead } **nil** Stands Feet Bbls.Water in drill pipe { Gassy Dead } **10** Stands **300** Feet **2.22** Bbls.

Note: Samples of Oil and Water must be taken.

Samples sent to **taken P55** By **Matthews**

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

Remarks: **test satisfactory mechanically**

Put additional remarks or other information on back of sheet.

Present at test: **Routledge, Spornitz & crew, Matthews**Do you consider that test was satisfactory? Yes **X** No

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

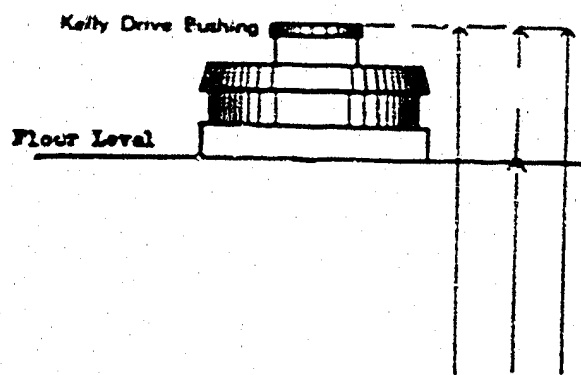
Is chart attached: Yes No **X** Who has it**No Bomb available**

Superior Oils of Canada Limited

CASING REPORT

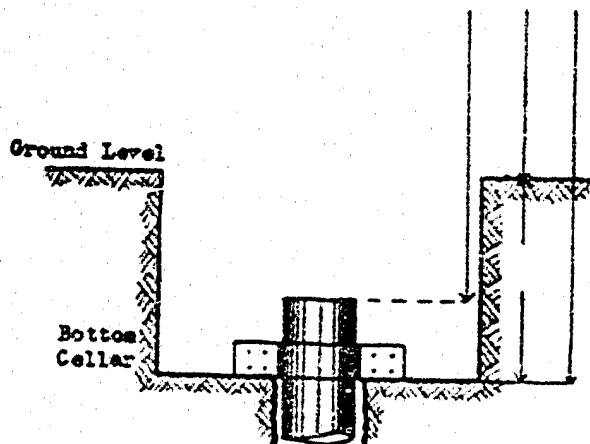
NAME OF WELL N.Y.T. Deep Bay #2

DATE May 21 - 22, 1952



Make of Casing Stewart & Lloyd
 Size 7" O.D.
 Weight 20#
 No. of Threads 8 Round
 Range 2
 Grade J-55

Make and Type of Casing Shoe Baker Float Welded on? yes
 Make and Type of Collar Baffle Welded on? no
 Centralizers at 335



Welding—Electric Acetylene X
 No. of Joints Welded 2
 Welding Co. General Petroleum of Canada Limited
 Operator B. Weber
 Scratchers at 344 - 330 - 320 - 310 - 300

Calcium Chloride Added 200#
 Aquagel added Nil
 Cementing Co. General Petroleum of Canada Limited
 Cementer Company
 Helper
 Drive Bushing Elevation

Distance Kelly Drive Bushing to Bottom Cellar No cellar Ft.
 Distance Top of Casing Landed Above Bottom Cellar No cellar Ft.
 Distance Top of Casing Landed Below Kelly Drive Bushing 7.63 Ft.
 Total Amount of Casing Used 341.42 Ft. + Ldg. Jr. 31.51 Ft. or Cut-off
 Total Amount of Casing Left in Hole 341.42 Ft.
 Depth of Shoe Below Drive Bushing 349.95 Ft.
 Time Rigging up to Run Casing 2 Hrs.
 Time Casing Started in Hole 3:00 P.M. M.
 Time Running Casing 7 Hrs.
 Time Started Circulating 11:50 P.M. M.
 Time Stopped Circulating Heated hole & mud 7:00 A.M. M.
 Time Started Cementing Mixed in section pit 8:30 A.M. M.
 Time Cement in Pipe 12:00 A.M. M.
 Time Plug on Bottom 1:00 P.M. M.
 Plug Measured in to by (Wire Line, displacement with 14 Bbls, bumped float Cellar.)
 Bumped on Collar Baffle Plate with 0 P.S.I.
 Number of Sax Cement Used 100 Sax
 Hours Cement to Set 48 - 72 Hrs.
 Method of Cementing mixed with mud bag & jet
 Cement Returns? X Yes or No good returns
 Casing Landed in Clamps, Casinghead, Casing Suspender (State Make)

REMARKS:

Boulders near surface slowed running of casing, weather clear, and warm,
used clamps as rig set up does not allow use of spider and slips.

CORE DESCRIPTION - G. H. Killick

Blair Point Limestone

Core # 1 - 351 - 66

Rec. 13'

Limestone - gray to brown, micro-crystalline to crystalline highly coralline giving excellent vuggy and pin point porosity, well oil stained, salty taste, some brecciation.

Core # 2 - 366 - 377

Rec. 12'6"

As above

Core # 3 - 377 - 402

Rec. 25'

As above, but becoming considerably tighter.

Core # 4 - 402 - 25

Rec. 23'

Limestone - brown, micro-granular, oil stained with interbanded and brecciated limestone as above. Poor porosity.

Core # 5 - 425 - 39

Rec. 14'

Limestone - gray, micro-crystalline to finely crystalline, tight, some coral material and oil staining.

Core # 6 - 581 - 606

Rec. 25'

Limestone - as above with interbanded brown earthy micro-granular to argillaceous limestone.

Core # 7 - 606 - 625

Rec. 19'

6' Limestone - brown, argillaceous to micro-granular.

6' Limestone - green, micro-crystalline, glauconitic, stylolites

7' Limestone - brown argillaceous interbanded with some green micro-crystalline. contains stromatoperoidea.

Core # 8 - 625 - 35

Rec. 16'

Limestone - brown, micro-crystalline, to finely crystalline, tight, corals, stromatoperoidea and bryozoans.

Core # 9 - 635 - 46

Rec. 11'

4' Limestone - brown, coralline with fair vuggy porosity and trace oil staining.

7' Limestone - green, micro-crystalline, tight becoming very argillaceous towards base with many stylolitic green and dark grey shale partings.

COKE DESCRIPTIONS CONT'D

Core # 10 - 646 - 56

Rec. 10'

Limestone - as above.

Core # 11 - 656 - 81

Rec. 25'

1' Limestone - as above

6" Shale - green, to apple green, waxy, slickensided.

Top Presqu'ille Formation 657'

10' Limestone - greenish - gray, micro-crystalline, becoming fractured vertically, and developing some porosity and oil staining from coralline bands

2'6" Limestone - greenish gray, micro-crystalline, tight with apple green shale partings.

2' Limestone and shale - limestone as above with innumerable green shale partings mostly stylolitic.

9' Limestone - as above few green shale partings.

Core # 12 - 956 - 81

Pine Point Limestone

Rec. 25'

Limestone - dark chocolate brown, argillaceous, tight, containing scattered small brachiopods, corals, etc. Becomes quite black in part.

Core # 13 - 981 - 89

Rec. 8'

Limestone as above.

- - - o o o o - - -

FULL DIAMETER CORE STUDY REPORT

Operator N.W.T. Petroleum Ltd. H.W.T. Date June 13, 1952

Well No. N.W.T. Deep Bay No. 2

Formation Slave Point Lino Depths 351.01-378.11' Lab. No. 334E

Sample Number	Depth in ft.	Interval in ft.	Weight in lbs.	Volume in cu. in.	Recovery %	Recovery in lbs.	Recovery in cu. in.	Notes
Core Number 1								
1	351.2	351.0-351.9	0.9	687	1.2	1539.	14.3	2.27 C V I S
2	352.2	351.9-352.4	0.5	917	0.03	1091.	10.9	2.36 C V I S
3	352.9	352.4-353.8	1.4	933	305.	1000. +	17.3	2.21 C V I S
4	354.5	353.8-355.3	1.5	776	402.	945.	24.4	2.31 C V I S
5	355.5	355.3-355.8	0.5	545	148.	93.	28.5	2.53 C V I S
6	355.9	355.8-356.2	0.4	947	44.	294.	14.4	2.55 C V I S
7	356.4	356.2-356.9	0.7	865	0.05	3.0	3.4	2.55 C I S
8	357.4	356.9-357.8	0.9	815	2033.	1000. +	16.8	2.21 C V I S
Similar to 3		357.8-358.3	0.5	---	305.	854.	11.7	2.34 C V I S
9	358.8	358.3-359.1	0.8	1102	11.	3.0	3.4	2.34 F I S
Similar to 7		359.1-360.5	1.4	---	0.05	4502.	24.4	2.14 F V I S
Similar to 4		360.5-362.0	1.5	---	106.	225.	13.5	2.14 C V I S
10	362.6	362.0-362.8	0.8	476	(a)	515.	16.7	2.19 F V I S
Similar to 11		362.8-364.1	1.3	---	(a)	515.	16.7	2.19 C V I S
11	364.3	364.1-364.6	0.5	521	---	---	---	---
Missing	---	---	1.4	---	---	---	---	---
Core Number 2								
12	365.7	365.0-366.9	0.9	464	30.	84.	14.2	2.25 V C V I S
Similar to 14		366.9-368.2	1.3	---	0.70	867.	5.7	2.37 V F S V I S
13	368.7	368.2-369.1	0.9	920	0.98	8.4.	9.9	2.37 C S V I S
14	369.7	369.1-371.1	2.0	1106	0.70	867.	5.7	2.47 C I S
15	371.7	371.1-372.4	1.3	1137	3.5	30.	8.6	2.42 C V I S
16	374.4	372.4-374.7	2.3	1072	1.2	0.16	5.7	2.45 C I S
17	375.0	374.7-375.3	0.6	936	0.50	4.0	8.1	2.43 C S V I S
18	376.7	375.3-377.3	2.0	1150	3.6	9.1	7.1	2.43 C S V I S
19	377.6	377.3-378.1	0.8	984	0.56	8.2	6.3	2.49 C S V I S

(a) Core unsuitable for test.

CORE DESCRIPTION SYMBOLS

D	Dense
Co	Coralline Fragments
VC	Vertical Crack
HC	Horizontal Crack
C	Cracks
VF	Open Vertical Fracture
HF	Open Horizontal Fracture
F	Open Fractures
SW	Slightly Vuggy
V	Vuggy
LV	Large Vugs
I	Intergranular
S	Stained
St	Stylolite
A	Anhydrite
Sh	Shale
Bt	Buttressed
U	Unconsolidated
SS	Sandstone
LS	Limestone
Cg	Conglomerate
Py	Pyrites
Sp	Shell Plugs
Ufs	Unconsolidated fine sand
SL	Sand Lenses
ShL	Shale Lenses
CSS	Coarse Sandstone
FSS	Fine Sandstone
MSS	Medium Sandstone
Fyb	Pyrobitumen
Shy	Shaly
Clly	Clayey
Silt	Siltstone
R1	Slightly Reactive to Cold 15% HCl
R2	Reactive to Cold 15% HCl
Gl	Glaucconite
fsal	Fine Sand Lenses
Ca	Calcite
(a)	Core Unsuitable for Test.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10544 - 114th Street

Phone 25624

Edmonton, Alberta

WATER ANALYSIS REPORT

Field Northwest Territories.

Well No. N.W.T. Deep Bay Number 2.

Operator N.W.T. Petrolia.

Location Unsurveyed Territory.

Sampled by

Date Received June 6, 1952.

Formation Slave point Limestone. Depths 672' - 681'

How Sampled D.S.T.

Other pertinent data D.S.T. Number 9. Recovered 300' water.

Analyzed by Chemical & Geological Lab. Ltd.

Date June 10, 1952.

Lab. No. 3341.

PARTS PER MILLION MILLIGRAMS PER LITER)

Na + K	Ca	Mg	F	SO ₄	Cl	CO ₃	HCO ₃	OH	NaS
22896	1687	1075		175	39250		860		Present

MILLIGRAM EQUIVALENTS

952.12	84.20	28.40		3.64	1106.98		14.10		
--------	-------	-------	--	------	---------	--	-------	--	--

MILLIGRAM EQUIVALENTS IN PERCENT

42.33	3.74	3.93		0.16	49.21		0.63		
-------	------	------	--	------	-------	--	------	--	--

Total Solids in Parts
per Million

By evaporation	68,690
After ignition	63,230
Calculated	64,506

Specific Gravity	1.045
Observed pH	7

Properties of Reaction in
Percent

Primary salinity	84.66
Secondary salinity	14.08
Primary alkalinity	0
Secondary alkalinity	1.26
Chloride salinity	99.68
Sulfate salinity	0.32

Remarks and conclusions

The distribution of these ten copies are as follows:-

NEW SUPERIOR OILS OF CANADA LIMITED

Report on 4 core samples from the Devonian of Deep Bay No 2, N.W.T.
District of Mackenzie, collected by Dr. Helen Belyea (NTS 85E).

The relevant parts of any manuscript prepared for publication that
paraphrase or quote from this report should be referred to the
Western Paleontology Section, Calgary, for possible revision.

<u>Stratigraphy & Footage</u>	<u>Locality, Fauna & Age</u>	<u>GSC Loc. No.</u>
Sulphur Point Fm. 398 feet (A)	61°18'00"N., 116°48'00"W. (late Givetian) <u>Hyperammina</u> sp. (tube) calcispheres (spheres) <u>?Umbella</u> sp. (spheres w gran. wall) brachiopod shell fragments stromatoporoid fragments	C-10116
398 feet (B)	<u>?Protonina</u> sp. <u>?Bisphaera</u> sp. remainder similar to slide A	C-10117
588 feet	?tricoconarid fragments, few <u>Bisphaera</u> sp., few ?ostracods, few ?gastropod fragments, few	C-10118
646 feet	<u>Bisphaera</u> sp., few <u>Parathurammina</u> sp., common calcispheres - <u>Trochiliscus</u> sp., abundant (indeterminate - too thick)	C-10119

[Handwritten signature]

[Handwritten signature: T.P. Chamney]
T.P. Chamney

Western Paleontology Section
Institute of Sedimentary and Petroleum Geology
Calgary, July 15, 1971

PROGRESS REPORT

on the

REWORK and ABANDONMENT
OPERATIONS

at the

NORTH WEST TERRITORIES DEEP BAY No. 2 WELL

situated at

Lat. $61^{\circ} 18'$ North; Long. $116^{\circ} 48'$ West

Compiled by: B. E. Smith

Approved by:

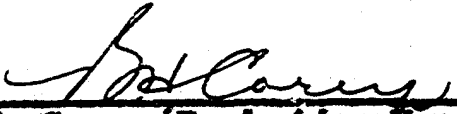

B. H. Corey (Production Manager)

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X. Strip Log in pocket	

.....

SCOPE

This report covers all operations undertaken during the re-working of the North West Territories Deep Bay # 2 Well, located at Latitude $61^{\circ} 18'$ North; Longitude $116^{\circ} 48'$ West, in the Deep Bay Area, Northwest Territories.

All available information has been included from the time the rig was moved over the location until it had been cored and abandoned.

DATA PERTINENT TO REMORKING & ABANDONMENT

Name of Company: Northwest Territories Oils Ltd.

Name of Well: Northwest Territories Deep Bay # 2.

Location: Lat. 61° 18' North
Long. 116° 48' West

Elevations: Grd. 526.9 approx.
K.B. 534 approx.
(Estimated, using 519' as the elevation of Great Slave Lake).

Geological Markers: G. H. Killick
(Core & Samples)

Hay River Shale -	40
Simpson Shale -	85
Slave Point Limestone -	345
Presquille Formation -	657
Pine Point Sandstone -	900

M. L. Yakimishyn (Cores)

Methy Dolomite -	1210
Red Beds -	1410

Total Depth:- 1416'

Cement Plugs: Plug # 1 - 365' - 288' - 15 sax
Plug # 2 - 35' - 10' - 10 sax

Date Cement Drilled Out: Sept. 30th, 1952.

Date Drilling Completed: October 8th, 1952.

Date Rig Released: October 10th, 1952.

NORTHWEST TERRITORIES DEEP BAY # 2 WELL (REWORK)

DAILY PROGRESS REPORT

<u>Date</u>	<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Remarks</u>
<u>Sept. 30</u> <u>1952</u>	989			Rigging up operations were completed. Picked up a 6 1/8" OSC bit, drilled out cement in 5 1/2 hours, and pulled pipe after cleaning hole to 989'. A survey showed: 1/4" @ 900'.
<u>Oct. 1</u>	989	1065	76	Ran in with junk sub and 6 1/8" OSC bit. Worked bit to bottom and drilled ahead for 1/2 hour to 991'. Pulled pipe, laid back junk sub and bit and picked up Core Barrel and 6 1/8" Diamond Core Bit. Ran in and cored ahead for 10 1/2 hours. Two cores were pulled and for 50' cut, 50' were recovered or 100%.
<u>Oct. 2</u>	1065	1139	74	Cored ahead for 12 hours, four cores were pulled and for 98' cut, 98' were recovered or 100%.
<u>Oct. 3</u>	1139	1189	50	Repaired clutch and pump motor. Ran in Core Barrel and 6 1/8" diamond bit and cored ahead for 8 hours. Two cores were pulled and for 50' cut; 50' were recovered or 100%.
<u>Oct. 4</u>	1189	1255	66	On bottom coring for 10 1/2 hours. Three cores were pulled and for 59' cut, 59' were recovered or 100%.
<u>Oct. 5</u>	1255	1308	53	Cored ahead for 17 1/4 hours. Two cores were pulled and for 50' cut, 50' were recovered or 100%.
<u>Oct. 6</u>	1308	1348	40	On bottom coring for 14 hours. Two cores were pulled and for 50' cut, 24' were recovered or 48%. A survey showed 1/2" @ 1300'.
<u>Oct. 7</u>	1348	1388	40	Coring was continued for 16 hours. One core was pulled and for 25' cut, 20' were recovered or 80%.
<u>Oct. 8</u>	1388	1416	28	On bottom coring for 12 1/2 hours. Two cores were pulled and for 43' cut, 43' were recovered or 100%. Laid back core barrel and bit and prepared to move to new location.

DAILY PROGRESS REPORT (Continued)

Date	From	To	Footage	Remarks
<u>Oct. 9</u>	1416	-	-	Crew worked daylight shift repairing and cleaning rig.
<u>Oct. 10</u>	1416	-	-	Ran in open end pipe and ran cement plugs as follows: Flag # 1 - 365 - 288' with 15 sax cement Flag # 2 - 35 - 10' with 10 sax cement.
Derrick was laid down, rig dismantled and moving operations begun.				

SURVEY RECORD

<u>Date</u>	<u>Depth</u>	<u>Deviation</u>
Sept. 30/52	900	1/4°
Oct. 6/52	1300	1/2°

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MUD RECORD

Date	Depth	Mud Wt. #/U.S. Gal.	Visc.	Gel.	H ₂ O Loss cc.	Filter Cake 1/32"	pH	Additives
Oct. 1	991	10.1	34	37	9.7	2	9.5	1500# Aqua- gel
Oct. 1	1024	10.1	36	39	9.2	2	9.5	
Oct. 1	1065	10.1	36	38	9.2	2	9.5	
Oct. 2	1082	10.1	36	38	11.2	2	9.5	
Oct. 2	1114	10.1	37	39	10.8	2	9.5	
Oct. 2	1139	10.1	38	40	10.8	2	9.5	500# Aqua- gel
Oct. 3	1139	10.1	35	37	11.4	2	9.5	
Oct. 3	1155	10.1	36	38	10.8	2	9.5	
Oct. 3	1189	9.9	40	43	10.0	2	9.5	
Oct. 4	1213	10.0	38	40	9.8	2	9.0	
Oct. 4	1230	10.1	36	39	9.9	2	9.5	
Oct. 4	1255	10.1	37	39	9.5	2	9.5	
Oct. 5	1273	10.1	37	39	10.3	2	9.5	
Oct. 5	1292	10.1	36	38	9.8	2	9.5	
Oct. 5	1308	10.1	36	38	10.0	2	9.5	
Oct. 6	1323	10.1	36	38	11.2	2	9.5	
Oct. 6	1327	10.1	37	39	11.0	2	9.5	
Oct. 6	1348	10.1	37	39	11.2	2	9.5	
Oct. 7	1353	10.1	36	39	10.2	2	9.5	
Oct. 7	1373	10.0	36	39	10.0	2	9.5	
Oct. 7	1388	10.1	36	39	10.0	2	9.5	
Oct. 8	1395	10.1	37	39	9.8	2	9.5	
Oct. 8	1413	10.1	36	38	9.8	2	9.5	
Oct. 8	1416	10.1	36	38	9.8	2	9.5	

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DIAMOND CORE REPORT

Date	Core No.	From	To	Feet Cut	Feet Rcv'd.	Percentage
Oct. 1	14	991	1016	25	25	100
Oct. 1	15	1016	1041	25	25	100
Oct. 2	16	1041	1066	25	25	100
Oct. 2	17	1066	1089	23	23	100
Oct. 2	18	1089	1114	25	25	100
Oct. 2	19	1114	1139	25	25	100
Oct. 3	20	1139	1164	25	25	100
Oct. 3	21	1164	1189	25	25	100
Oct. 4	22	1189	1213	24	24	100
Oct. 4	23	1213	1223	10	10	100
Oct. 4	24	1223	1248	25	25	100
Oct. 5	25	1248	1273	25	25	100
Oct. 5	26	1273	1298	25	25	100
Oct. 6	27	1298	1323	25	6	24
Oct. 6	28	1323	1348	25	18	72
Oct. 7	29	1348	1373	25	20	80
Oct. 8	30	1373	1391	18	18	100
Oct. 8	31	1391	1416	25	25	100

Total Cut - 425'
Total Recovery - 394'
Percentage
Recovery - 92.7%

TIME CORING RECORD

Depth		Time O'Clock		Time Elapsed	Rate	Remarks
From	To	From	To	Minutes	Ft./Hr.	
989	990					(Drilled with junk
990	991					(sub on.)
1	2	8:30	8:35	5	12	
2	3	8:35	8:42	7	8.5	
3	4	8:42	8:49	7	8.5	
4	5	8:49	8:57	8	7.5	
5	6	8:59	9:05	6	10	
6	7	9:05	9:13	8	7.5	
7	8	9:13	9:21	8	7.5	
8	9	9:21	9:29	8	7.5	
9	1000	9:29	9:37	8	7.5	
1000	1	9:37	9:44	7	8.5	
1	2	9:44	9:52	8	7.5	
2	3	9:52	10:03	6	10	
3	4	10:03	10:11	8	7.5	
4	5	10:11	10:21	10	6	
5	6	10:21	10:30	9	6.6	
6	7	10:30	10:39	9	6.6	10:44 - 11:13 - making
7	8	10:39	10:44	10	6	connection, cleaning
			11:13			pump.
8	9	11:13	11:21	8	7.5	
1009	1010	11:21	11:28	7	8.5	
1010	1011	11:28	11:37	9	6.6	
11	12	11:37	11:45	8	7.5	Core # 14
12	13	11:45	11:52	7	8.5	
13	14	11:52	12:00	8	7.5	
14	15	12:00	12:08	8	7.5	
15	16	12:08	12:15	7	8.5	
16	17	2:50	3:00	10	6	
17	18	3:00	3:07	7	8.5	Core # 15
18	19	3:07	3:15	8	7.5	
19	20	3:15	3:29	9	6.6	
20	21	3:29	3:34	5	12	
21	22	3:34	3:41	7	8.5	
22	23	3:41	3:49	8	7.5	
23	24	3:49	3:57	8	7.5	
24	25	3:57	4:05	8	7.5	
25	26	4:05	4:13	8	7.5	
26	27	4:13	4:19	6	10	
27	28	4:19	4:25	6	10	
28	29	4:25	4:32	7	8.5	
29	30	4:32	4:39	7	8.5	
30	31	4:39	4:48	9	6.6	
31	32	4:48	4:55	7	8.5	
32	33	4:55	5:02	7	8.5	
33	34	5:02	5:11	9	6.6	Core # 15

TIME CORING RECORD (continued)

Depth		Time O'Clock		Time Elapsed	Rate	Remarks
From	To	From	To	Minutes	Ft./Hr.	
1034	35	5:11	5:20	9	6.6	
35	36	5:20	5:30	10	6	
36	37	5:30	5:39	9	6.6	
37	38	5:39	5:48	9	6.6	
38	39	5:53	6:02	9	6.6	
39	40	6:02	6:11	9	6.6	
40	41	6:11	6:20	9	6.6	
41	42	8:30	8:40	10	6	Core # 16
42	43	8:40	8:49	9	6.6	
43	44	8:49	8:56	7	8.5	
44	45	8:56	9:03	7	8.5	
45	46	9:03	9:11	8	7.5	
46	47	9:11	9:18	7	8.5	
47	48	9:18	9:28	10	6	
48	49	9:28	9:38	10	6	
49	50	9:38	9:48	10	6	
50	51	9:48	9:55	7	8.5	
51	52	9:55	10:03	8	7.5	
52	53	10:03	10:13	10	6	
53	54	10:13	10:21	8	7.5	
54	55	10:21	10:30	9	6.6	Core # 16
55	56	10:30	10:37	7	8.5	
56	57	10:37	10:45	8	7.5	
57	58	10:45	10:54	9	6.6	
58	59	10:54	11:04	10	6	
59	60	11:04	11:14	10	6	
60	61	11:14	11:23	9	6.6	
61	62	11:23	11:30	7	8.5	
62	63	11:30	11:40	10	6	
63	64	11:40	11:48	8	7.5	
64	65	11:48	12:05	7	8.5	
65	66	5:125	5:32	7	8.5	
66	67	5:32	5:39	7	8.5	
67	68	5:39	6:02	8	7.5	Core # 17
68	69	6:02	6:10	8	7.5	
69	70	6:10	6:19	9	6.6	
70	71	6:19	6:27	8	7.5	
71	72	6:27	6:37	10	6	
72	73	6:37	6:45	8	7.5	
73	74	6:45	6:53	8	7.5	
74	75	6:53	7:02	9	6.6	
75	76	7:02	7:11	9	6.6	
76	77	7:11	7:18	7	8.5	
77	78	7:18	7:26	8	7.5	
78	79	7:26	7:34	8	7.5	
79	80	7:34	7:41	7	8.5	
80	81	7:41	7:50	9	6.6	
81	82	7:50	7:58	8	7.6	
82	83	7:58	8:06	8	7.6	
83	84	8:06	8:14	8	7.6	

TIME CORING RECORD (continued)

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From	To	From	To	Time Elapsed Minutes	Rate FT./ Hr.	Remarks
1084	85	8:14	8:22	8	7.6	
85	86	8:22	8:31	9	6.6	
86	87	8:31	8:38	7	8.5	
87	88	8:38	8:47	9	6.6	
88	89	8:47	8:56	9	6.6	Trip out
89	90	12:05	12:15	10	6	Core # 18
90	91	12:15	12:25	10	6	
91	92	12:25	12:35	10	6	
92	93	12:35	12:44	9	6.6	
93	94	12:44	12:54	10	6	
94	95	12:54	1:04	10	6	
95	96	1:04	1:14	10	6	
96	97	1:14	1:24	10	6	
97	98	1:24	1:34	10	6	
98	99	1:40	1:50	10	6	
99	1100	1:50	2:00	10	6	
1100	01	2:00	2:09	9	6.6	
1	2	2:09	2:18	9	6.6	
2	3	2:18	2:27	9	6.6	
3	4	2:27	2:36	9	6.6	
4	5	2:36	2:45	9	6.6	
5	6	2:45	2:53	8	7.5	
6	7	2:53	3:01	8	7.5	
7	8	3:01	3:09	8	7.5	
8	9	3:09	3:19	10	6	
9	10	3:19	3:28	9	6.6	
10	11	3:28	3:36	8	7.5	
11	12	3:36	3:45	9	6.6	
12	13	3:45	3:55	10	6	
13	14	3:55	4:02	7	8.5	
14	15	6:15	6:25	10	6	Core # 19
15	16	6:25	6:33	8	7.5	
16	17	6:33	6:42	8	7.5	
17	18	6:42	6:50	8	7.5	
18	19	6:50	6:58	8	7.5	
19	20	6:58	7:06	8	7.5	
20	21	7:06	7:14	8	7.5	
21	22	7:14	7:22	8	7.5	
22	23	7:22	7:30	8	7.5	
23	24	7:30	7:38	8	7.5	
24	25	7:38	7:46	8	7.5	
25	26	7:46	7:54	8	7.5	
26	27	7:54	8:02	8	7.5	
27	28	8:02	8:10	8	7.5	
28	29	8:15	8:23	8	7.5	
29	30	8:23	8:28	5	12	
30	31	8:28	8:36	8	7.5	
31	32	8:36	8:44	8	7.5	
32	33	8:44	8:52	8	7.5	

TIME CORING RECORD (continued)

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From	To	From	To	Time Elapsed Minutes	Rate Ft./Hr.	Remarks
1133	34	8:52	9:00	8	7.5	
34	35	9:00	9:08	8	7.5	
35	36	9:08	9:16	8	7.5	
36	37	9:16	9:25	9	6.6	
37	38	9:25	9:34	9	6.6	
38	39	9:34	9:43	9	6.6	
39	40	1:50	1:58	8	7.5	Core # 20
40	41	1:58	2:06	8	7.5	
41	42	2:06	2:14	8	7.5	
42	43	2:14	2:22	8	7.5	
43	44	2:22	2:30	8	7.5	
44	45	2:30	2:37	7	8.5	
45	46	2:37	2:46	9	6.6	
46	47	2:46	2:55	9	6.6	
47	48	2:55	3:04	9	6.6	
48	49	3:04	3:13	9	6.6	
49	50	3:13	3:22	9	6.6	
50	51	3:22	3:31	9	6.6	
51	52	3:31	3:41	10	6	
52	53	3:41	3:51	10	6	
53	54	3:51	4:01	10	6	
54	55	4:01	4:10	9	6.6	
55	56	4:10	4:20	10	6	
56	57	4:20	4:30	10	6	
57	58	4:30	4:40	10	6	
58	59	4:45	4:55	10	6	
59	60	4:44	5:04	9	6.6	
60	61	5:04	5:23	9	6.6	
61	62	5:13	5:24	11	5.45	
62	63	5:24	5:33	9	6.6	
63	64	5:33	5:43	10	6	
64	65	8:00	8:08	8	7.5	Core # 21
65	66	8:08	8:16	8	7.5	
66	67	8:16	8:24	8	7.5	
67	68	8:24	8:32	8	7.5	
68	69	8:32	8:40	8	7.5	
69	70	8:40	8:48	8	7.5	
70	71	8:48	8:56	8	7.5	
71	72	8:56	9:04	8	7.5	
72	73	9:04	9:12	8	7.5	
73	74	9:12	9:21	9	6.6	
74	75	9:21	9:30	9	6.6	
75	76	9:30	9:39	9	6.6	
76	77	9:39	9:48	9	6.6	
77	78	9:48	9:57	9	6.6	
78	79	9:57	10:06	9	6.6	
79	80	10:06	10:15	9	6.6	
80	81	10:15	10:24	9	6.6	
81	82	10:24	10:33	9	6.6	

TIME CORING RECORD (continued)

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				Time Elapsed Minutes	Rate Ft./Hr.	Remarks
From	To	From	To			
1182	83	10:33	10:42	9	6.6	
83	84	10:42	10:51	9	6.6	
84	85	10:51	11:00	9	6.6	
85	86	11:00	11:09	9	6.6	
86	87	11:09	11:18	9	6.6	
87	88	11:18	1:28	10	6	
88	89	1:28	1:38	10	6	
89	90	3:38	3:46	8	7	
90	91	3:46	3:55	9	6.6	Core # 22
91	92	3:55	4:05	10	6	
92	93	4:05	4:13	8	7.4	
93	94	4:13	4:20	7	8.4	
94	95	4:20	4:30	10	6	
95	96	4:30	4:40	10	6	
96	97	4:40	4:50	10	6	
97	98	4:50	5:01	11	5.5	
98	99	5:01	5:12	11	5.5	
99	1200	5:12	5:22	10	6	
1200	1	5:22	5:32	10	6	
1	2	5:32	5:44	12	5	
1202	1203	5:44	5:55	11	5.5	
3	4	5:55	6:08	13	4.8	
4	5	6:08	6:20	12	5	
5	6	6:20	6:31	11	5.5	
6	7	6:31	6:42	11	5.5	
7	8	6:42	6:52	10	6	
8	9	6:52	7:02	10	6	
9	10	7:02	7:10	8	7.4	
10	11	7:10	7:18	8	7.4	
11	12	7:18	7:24	6	10	
12	13	7:24	7:30	6	10	
13	14	10:52	10:59	7	8.4	
14	15	10:59	11:06	7	8.4	Core # 23
15	16	11:06	11:16	10	6	
16	17	11:16	11:28	12	5	
17	18	11:28	11:38	10	6	
18	19	11:38	11:50	12	5	
19	20	11:50	11:57	7	8	
20	21	11:57	12:02	5	12	
21	22	12:02	12:07	5	12	
22	23	12:07	12:15	8	7.4	
23	24	2:55	3:03	8	7.5	Core # 24
24	25	3:03	3:11	8	7.5	
25	26	3:11	3:20	9	6.6	
26	27	3:20	3:35	15	4	
27	28	3:35	3:45	10	6	
28	29	3:45	3:55	10	6	
29	30	3:55	4:04	9	6.6	
30	31	4:04	4:13	9	6.6	
31	32	4:13	4:21	8	7.5	
32	33	4:21	4:31	10	6	

TIME CORING RECORD (continued)

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From	To	From	To	Time Elapsed Minutes	Rate Ft./hr.	Remarks
12:33	34	4:31	4:40	9	6.6	
34	35	4:40	4:48	8	7.5	
35	36	4:48	4:55	7	8.5	
36	37	4:55	5:03	8	7.5	
37	38	5:03	5:13	10	6	
38	39	5:13	5:23	10	6	
39	40	5:23	5:33	10	6	
12:40	41	5:33	5:48	15	4	
41	42	5:48	5:58	10	6	
42	43	5:58	6:13	15	4	
43	44	6:13	6:25	12	5	
44	45	6:25	6:40	15	4	
45	46	6:40	6:52	12	5	
46	47	6:52	7:04	12	5	
47	48	7:04	7:16	12	5	
48	49	10:15	10:25	10	6	
49	50	10:25	10:35	10	6	Core # 25
50	51	10:50	11:00	10	6	Con. and working on
51	52	11:00	11:15	15	4	pump 15 mins.
52	53	11:15	11:30	15	4	
53	54	11:30	11:50	20	3	
54	55	11:50	12:10	20	3	
55	56	12:10	12:30	20	3	
56	57	12:30	12:52	22	2.16	
57	58	12:52	1:12	20	3	
58	59	1:12	1:33	21	2.18	
59	60	1:33	1:54	21	2.18	
60	61	1:54	2:15	21	2.18	
61	62	2:15	2:34	19	3.3	
62	63	2:34	2:54	20	3	
63	64	2:54	3:15	21	2.18	
64	65	3:15	3:34	19	3.3	
65	66	3:34	3:54	20	3	
66	67	3:54	4:16	22	2.16	
67	68	4:16	4:36	20	3	
68	69	4:36	4:57	21	2.18	
69	70	4:57	5:18	21	2.18	
70	71	5:18	5:38	20	3	
71	72	5:38	6:00	22	2.16	
72	73	6:00	6:22	22	2.16	
73	74	10:30	10:47	17	3.9	
74	75	10:47	11:06	19	3.3	Core # 26
75	76	11:06	11:23	17	3.9	
76	77	11:23	11:43	20	3	
77	78	11:43	12:00	12	5	
78	79	12:00	12:15	15	4	
79	80	12:15	12:37	17	3.9	
80	81	12:37	12:52	15	4	
81	82	12:52	1:07	15	4	
82	83	1:22	1:42	20	3	Con. working on pump 15 min.

TIME CORING RECORD (continued)

14

From	To	From	To	Time Elapsed Minutes	Rate Ft./hr.	Remarks
1283	84	1:42	1:59	17	3.9	
84	85	1:59	2:16	17	3.9	
85	86	2:16	2:31	15	4	
86	87	2:31	2:48	17	3.9	
87	88	2:48	3:05	17	3.9	
88	89	3:05	3:20	15	4	
89	90	3:20	3:32	12	5	
90	91	3:32	3:49	17	3.5	
91	92	3:49	4:06	17	3.5	
92	93	4:06	4:23	17	3.5	
93	94	4:23	4:43	20	3	
94	95	4:43	5:00	17	3.5	
95	96	5:00	5:17	17	3.5	
96	97	5:17	5:33	16		
97	98	5:33	5:53	20	3	
98	99	8:40	8:55	15	4	
99	1300	8:55	9:12	17	3.5	Core # 27
1300	01	9:12	9:29	17	3.5	
01	02	9:29	9:46	17	3.5	
02	03	9:46	10:03	17	3.5	
03	04	10:03	10:20	17	3.5	
04	05	10:20	10:37	17	3.5	
05	06	10:37	10:57	20	3	
06	07	10:57	11:14	17	3.5	
07	08	11:14	11:31	17	3.5	
08	09	12:00	12:18	18	3.6	Working on stand pipe
09	10	12:18	12:25	17	3.6	30 min.
10	11	12:25	12:45	20	3	
11	12	12:45	1:04	19	3.3	
12	13	1:04	1:25	21	2.18	
13	14	1:25	1:45	20	3	10 min, repairing pump
14	15	1:45	2:06	21	2.8	
15	16	2:06	2:26	20	3	
16	17	2:26	2:47	21	2.8	
17	18	2:47	3:07	20	3	
18	19	3:07	3:27	20	3	
19	20	3:27	3:47	20	3	
20	21	3:47	4:08	21	2.8	
21	22	4:08	4:28	20	3	
22	23	11:50	12:10	20	3	
23	24	12:10	3:00	20	3	
24	25	3:00	3:20	20	3	Core # 28
25	26	3:20	3:41	21	2.8	
26	27	3:41	4:06	25	2.4	
27	28	4:06	4:31	25	2.4	
28	29	4:31	4:51	20	3	
29	30	4:51	5:11	20	3	
30	31	5:11	5:31	20	3	
31	32	5:31	5:51	20	3	
32	33	5:51	6:11	20	3	

TIME CORING RECORD (continued)

15

				Time Elapsed Minutes	Rate Ft./hr.	Remarks
From	To	From	To			
1333	34	6:11	6:31	20	3	Core # 28
34	35	6:31	6:51	20	3	
35	36	6:51	7:11	20	3	
36	37	7:11	7:31	20	3	
37	38	7:31	7:51	20	3	
38	39	7:51	8:11	20	3	
39	40	8:11	8:31	20	3	
40	41	8:31	8:48	17	3.5	
41	42	8:48	9:00	17	3.5	
42	43	9:00	9:20	20	3	
43	44	9:20	9:45	25	2.5	
44	45	9:45	10:20	35	1.8	
45	46	10:20	11:15	55	1.1	
46	47	11:15	11:45	30	2	
47	48	11:45	12:20	35	1.25	
48	49	6:00	6:30	30	2	
49	50	6:30	7:00	30	2	Core # 29
50	51	7:00	7:32	32	1.28	
51	52	7:32	8:00	28		
52	53	8:00	8:32	32	1.28	
53	54	8:32	8:51	19	3.3	
54	55	8:51	9:10	19	3.3	
55	56	9:10	9:30	20	3	
56	57	9:30	9:49	19	3.3	
57	58	9:49	10:10	21	2.19	
58	59	10:10	10:32	22	2.16	
59	60	10:32	10:54	22	2.16	
60	61	10:54	11:10	16	3.12	
61	62	11:10	11:30	20	3	
62	63	11:30	11:48	18	3.6	
63	64	11:48	12:12	24	2.12	
64	65	12:12	12:32	20	3.5	
65	66	12:32	12:49	17	3.5	
66	67	12:49	1:06	17	3.5	
67	68	1:06	1:16	10	6	
68	69	1:16	1:26	10	6	
69	70	1:26	1:36	10	6	
70	71	1:36	1:54	18	3.6	
71	72	1:54	2:12	18	3.6	
72	73	2:12	2:30	18	3.6	
73	74	5:20	5:45	25	2.1	
74	75	5:45	6:10	25	2.1	Core # 30
75	76	6:10	6:35	25	2.1	
76	77	6:35	7:00	25	2.1	
77	78	7:00	7:25	25	2.1	
78	79	7:25	7:45	20	3	
79	80	7:45	8:05	20	3	
80	81	8:05	8:30	25	2.1	
81	82	8:30	9:00	30	2	

TIME CORING RECORD (continued)

16

From	To	From	To	Time Elapsed Minutes	Rate Ft./hr.	Remarks
1382	83	9:00	9:35	35	1.8	
83	84	9:35	10:05	30	2	
84	85	10:05	10:30	25	2.1	
85	86	10:31	11:01	30	2	
86	87	11:01	11:31	30	2	
87	88	11:31	12:01	30	2	
88	89	12:01	12:30	29	2.2	
89	90	12:30	12:55	25	2.10	
90	91	12:55	1:20	25	2.10	Trip out.
91	92	6:30	6:55	25	2.10	
92	93	6:55	7:20	25	2.10	
93	94	7:20	7:42	22	2.16	
94	95	7:42	8:01	19	3.3	
95	96	8:01	8:20	19	3.3	
96	97	8:20	8:39	19	3.3	
97	98	8:39	9:01	20	3	
98	99	9:01	9:22	21	2.18	
99	1400	9:22	9:42	20	3	Core # 31
1400	1	9:42	10:02	20	3	
1	2	10:02	10:28	26	2.8	
2	3	10:28	10:47	19	3.3	
3	4	10:47	10:58	19	3.3	
3	4	11:18	11:23	16	3.2	Correction
4	5	11:23	11:42	19	3.3	
5	6	11:42	12:12	30	2	Circulating 10 min.
6	7	12:12	12:55	33	1.27	
7	8	12:55	1:25	30	2	
8	9	1:25	1:55	30	2	
9	10	1:55	2:18	23	2.14	
10	11	2:18	2:45	27	2.6	
11	12	2:45	3:08	23	2.14	
12	13	3:08	3:33	25	2.8	
13	14	3:33	4:03	30	2	
14	15	4:03	4:50	47	1.2	
15	16	4:50	5:30	40	1.3	

CORE DESCRIPTION

N. W. T. DEEP BAY #2

- M. L. Yakimishyn

Core # 14 - 991 - 1016 -

Rec. 25'

Limestone - dark brown to brownish - black, argillaceous, dense, limestone; scattered inbedded - like fractures stylitic partings infilled with brown - black limestone; containing much brachiopods corals; 3" band of coralline vuggy porosity at 1001' bleeding dark brown oil.

Core # 15 - 1016 - 1041 -

Rec 25'

Limestone - dark brown to brownish-black, argillaceous, dense, limestone; scattered inbedded-like fractures stylitic partings infilled with brown limestone slightly calcareous, black, very limy shale; containing scattered brachiopods corals; no porosity or oil staining.

Core # 16 - 1041 - 1066 -

Rec. 25'

Limestone - as above.

Core # 17 - 1066 - 1089 -

Rec. 23'

Limestone as above.

Core # 18 - 1089 - 1114 -

Rec. 25'

1089 - 1090 - Shale - brownish - black, slightly calcareous shale (limy).

1090 - 1114 - Limestone - dark brown to brownish - black, argillaceous, dense, limestone; scattered inbedded - like fractures, stylitic partings infilled with brown - black limestone; containing few scattered brachiopods, corals no porosity or oil staining; strong H₂S odor.

Core # 19 - 1114 - 1139 -

Rec. 25'

Limestone - as above.

Core # 20 - 1139 - 1164 -

Rec. 25'

Limestone - as above with scattered few small patches clear, dense anhydrite.

Core # 21 - 1164 - 1189 -

Rec. 25'

Limestone - as above with increasing amount of anhydrite.

CORE DESCRIPTION (Continued)

Core #22 - 1189 - 1214 -

Rec. 25'

1189 - 1210 - Limestone - dark brown to brownish - black, argillaceous, dense, limestone; very few scattered inbedded - like fractures and stylitic partings infilled with brown and black limestone. No porosity or oil staining, strong H_2S odor; much patches clear, dense anhydrite.

TOP METHY DOLOMITE - 1210'

1210 - 1214 - Dolomite - brown to dark brown, fine micro-crystalline; dense dolomite; very few traces of pin - point corraline porosity; very strong H_2S odor; no oil staining.

Core # 23 - 1214 - 1224 -

Rec. 10'

1214 - 1216 - Dolomite - brown to dark brown, fine micro-crystalline, dense dolomite; no porosity or oil staining; strong H_2S odor.

1216 - 1220 - Limestone - dark brown, argillaceous, dense, limestone; no porosity or oil staining, strong H_2S odor; few stylitic partings containing black line.

1220 - 1224 - Dolomite - brown to dark brown, fine micro-crystalline, dense dolomite; no porosity or oil staining; strong H_2S odor.

Core # 24 - 1224 - 1248 -

Rec 24'

1224 - 1239 - Light brown to dark brown, fine micro-crystalline, dense dolomite with few scattered small patches of clear, dense anhydrite; H_2S odor, no porosity or staining.

1239 - 1248 - brown to dark brown, dense dolomite bands irregularly interbedded with brown to dark brown, very slightly argillaceous dolomitic limestone; small streaks of inbedded dark brown to black non calcareous shale and clear to white, micro-crystalline soft anhydrite; no porosity or oil staining.

Core # 25 - 1248 - 1273 -

Rec 25'

Light brown to dark brown, fine micro-crystalline, dense dolomite bands irregularly interbedded with brown to greyish dark brown very slightly argillaceous dolomitic limestone; scattered streaks of inbedded and infilled clear

CORE DESCRIPTION (Continued)

19

Core # 25 continued

light bluish, micro-crystalline, soft to dense hydrite; small scattered streaks of dark brown to black non calcareous shale; no porosity or oil staining.

Core # 26 - 1273 - 1296 -

Rec 25'

As Above.

Core # 27 - 1296 - 1323 -

Rec 6'

As above with increasing amount of anhydrite and dolomite anhydritic in part.

Core # 28 - 1323 - 1348 -

Rec. 18'

Buff to greyish brown, dense, anhydritic to extremely anhydritic dolomite with bands brown to dark brown, soapy-like appearance, dense dolomite; scattered patches white, micro-crystalline soft to dense anhydrite.

Core # 29 - 1348 - 1373 -

Rec. 20'

As above; with thin bands of dark brown to black non calcareous and dark greenish grey, waxy-like very slightly calcareous shales and increasing amount of anhydrite.

Core # 30 - 1373 - 1391 -

Rec. 18'

As above; dolomite getting shaly.

Core # 31 - 1391 - 1416 -

Rec. 25'

1391 - 1410 - Light brown to brownish black, dense, shaly, extremely anhydritic dolomite with bands dark greenish grey, waxy-like, slightly calcareous shale.

TOP RED BEDS - 1410'

1410 - 1413 - Pale green to greyish green waxy-like, non calcareous shale.

1413 - 1416 - Greyish brown to dark greyish green, very slightly calcareous shale.

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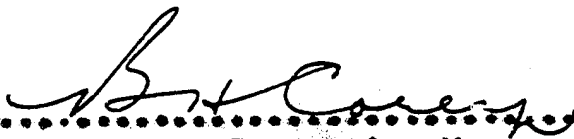
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PROGRESS REPORT
on the
DRILLING, CORING AND ABANDONMENT
of
NORTH WEST TERRITORIES DEEP BAY NO. 2 WELL

Lat. $61^{\circ} 18'$ North Long. $116^{\circ} 48'$ West

North West Territories

Compiled by: J. Trowsdale

Approved by: 
B. H. Corey - Production Manager.

July 1952.

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OIL ANALYSIS IN POCKET

S C O P E

This report covers the drilling, coring and abandonment at North West Territories Oils Ltd., N.W.T. Deep Bay No. 2 Well located by Lat: 61° 18' North Long: 116° 48' West, in the Deep Bay area, North West Territories.

All available information has been included from the time the well was spudded, and drilled or cored to completion or abandonment.

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DATA PERTINENT TO DRILLING, CORING AND ABANDONMENT

Name of Company: North West Territories Oils Ltd.

Name of Well: N.W.T. Deep Bay No. 2

Location of Well: Lat. 61° 18' North Long. 116° 48' West

Elevations: K.B. 510' approx. ⁵³⁴ Ground 502.90 approx. ⁵²⁷
(using 495' as elevation of Great Slave Lake)

Surface Casing: Set at 349.05'
341.42', 7", 20#, 8 Rd. Thd., Rge. 2, J-55
Stewart & Lloyd Casing. Cemented with 100 sack
cement and 200# Calcium Chloride. Cement returns
General Petroleum

Formation Tests:

Test #1 - 344.79' - 366.0' - Mis-run
Test #2 - 349.79' - 366.0' - Mis-run
Test #3 - 349.79' - 366.0' - Mis-run
Test #4 - 320.0' - 366.0' - Good initial puff, (8 minutes) slight blow. Rec. 3' mud, Test doubtful

Test #5 - 331.62' - 377.0' - Mis-run
Test #6 - 337.48' - 377.0' - Mis-run
Test #7 - 304.0' - 377' - open 4 hrs. - good initial blow, plus 5 mins. breathing Rec. 15' dead mud. Mechanically satisfactory.

Test #8 - 357.0' - 441.0' - Initial blow, sustained H2S water to surface in 15 min. Rec. 370' salt water. Trace of oil in drill pipe. (Tested above and below. tester, see report). Shoe at 357. Packer at 357. flowed salt water from annulus as well as through drill pipe.

Test #9 - 672.0' - 681.0' - open 1 hr. Rec. 300' water. Mechanically satisfactory.

Geological Markers:

	<u>Killick</u>	<u>E-log.</u>
Bay River Shale	40'	-
Simpson Shale	85'	-
Slave Point S.s.	345'	-
Presquille fm.	657'	-
Pint Point S.S.	900'	-
<u>Total Depth:</u>	989'	

DATA PERTINENT TO DRILLING, CORING AND ABANDONMENT CONT'D

<u>Electrologs:</u>	None taken
<u>Date Well Spudded:</u>	May 15th, 1952.
<u>Date Drilling Completed:</u>	May 30th, 1952.
<u>Date Well Abandoned:</u>	May 31st, 1952.

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DAILY PROGRESS REPORT

Date	From	to	Footage	Remarks
<u>May 3</u>				Picked new location cleared brush, commenced thawing and digging suction and settling pits. Cut poles. Cleaned up rig and equipment and made road. Spotted rig on mat. Dosed a new road to keep on frost. Jacked up rig, spotted pump and pipe rack and levelled same. Moved supply shack, water pump, line pipe, light plant, kitchen, and bunk house into location. Raised the derrick and put up guy lines. Hooked up pump, and mixed mud.
<u>May 14</u>				
<u>May 15</u>	0	41	41	Finished rigging up. Dug rat hole and put in csg. in 6 1/2 hours. Rigged up to spud and spudded in with 9" OSC3 bit at 11:45 A.M. Drilled ahead on boulders for 11 3/4 hours:
<u>May 16</u>	41	334	293'	Continued drilling for 5 hours, pulled out and changed to a 6-1/8" OSC at 45' after 16 3/4 hours usage and drilled on bottom for 5 1/2 hours. Made trip to clean hole and condition mud, and drilled for 9 1/2 hours in Limestone and shale. A survey showed: 1/4" @ 150' 1/8" @ 250'
<u>May 17</u>	334	366	32'	Continued drilling for 2 hours. Pulled out at hole and ran in with junk sub and new OSC bit and made 5' of hole while working junk sub. Pulled out and changed to a 6 1/8" Truco diamond bit at 351'. Circulated and cored for 3 1/2 hours. The core jammed on trip out. When core #1 was hoisted, for 15' cut, 15' were recovered or 100%. Laid down core barrel. Made up tester and went in with tester and drill collar in preparation to run drill stem test. D.S.T. #1 - 344.79' - 366.0' Slave Point Limestone Hole diameter 6 1/8" O.D. of packer rubber 5 1/2" Length of anchor below packer 21.21' Tester started in hole 1:00 P.M. Tester on bottom 1:40 P.M. Tester opened 2:07 P.M. reset 3 times dropped 2 darts Tester closed 2:15 P.M. Tester pulled loose 2:15 P.M. Tester out of hole 2:50 P.M. Packer set with 4000# Packer pulled loose with 4000#

DAILY PROGRESS REPORT CONT'D

Date	From	To	Footage	Remarks
<u>May 17 Cont'd</u>				
				There was a noticeable blow when the tool was opened, air was displaced and the mud level in the casing dropped. When the pipe was pulled, 150' of dead mud was recovered. The samples were examined but no bomb was run as it was not available. The test was considered to be mechanically unsatisfactory, as the packer failed to hold. Present at the test were J. E. Routledge, C. M. Sarnitz & crew and C. G. Matthews.
				Laid down tester and worked on it for 2 hours. Ran in with tester and prepared to run drill stem test. The tester was checked thoroughly before test.
				D.S.T.#2 - 349.79' - 366.0' Slave Point Limestone
Hole diameter				6 1/8"
O.D. of packer rubber				5 1/2"
Length of anchor below packer				16.21'
Tester started in hole				4:55 P.M.
Tester on bottom				5:40 P.M.
Tester opened				5:45 P.M.
				Reset 3 times, 2 darts
Tester closed				7:00 P.M.
Tester pulled loose				7:00 P.M.
Tester out of hole				7:45 P.M.
Packer set with				4000#
Packer pulled loose with				4000#
There was an initial puff and no air was displaced. When the drill pipe was pulled 1' of dead mud was recovered. Samples were checked by Matthews. No bomb was run as it was not available. The test was considered to be mechanically unsatisfactory as the shatter disc was punctured but was plugged by the dart. Present at test were J.E. Routledge, Sarnitz, & crew and C. G. Matthews.				
Ran out and thoroughly rechecked tester, found to be all right but a little sticky. Cleaned tester, removed darts and put in a new shatter disc. Ran in with tester.				
				D.S.T. #3 - 349.79' - 366.0' Slave Point Limestone
Hole diameter				6 1/8"
O.D. of packer rubber				5 1/2"
Length of anchor below packer				16.21'
Tester started in hole				8:30 P.M.
Tester on bottom				9:00 P.M.
Tester opened				9:10 P.M.
				reset 3 times

DAILY PROGRESS REPORT CONT'D

<u>Date</u>	<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Remarks</u>
May 17				
<u>Cont'd</u>				<u>D.S.T. #3 Cont'd</u>
				Tester closed 9:25 P.M.
				Tester pulled loose 9:25 P.M.
				Tester out of hole 10:00 P.M.
				Packer set with 4000#
				Packer pulled loose with 4000#
				There was a noticeable blow when the tool was opened, air was displaced and the mud level dropped. When the drill pipe was pulled 60' (0.44 bbls) of dead mud were recovered. Samples were checked by Mr. Matthews. No pressure chart was run as no bomb was available. The test was considered to be mechanically unsatisfactory as the packer failed. The test was performed by Dowell Rental. Present at the test were J. E. Rutledge, Spornitz & crew and C. G. Matthews.
				Pulled the tester out and changed the tail pipe. Went in again to run drill stem test.
				D.S.T. #4 - 320.0' - 366.0' Slave Point Limestone
				Hole diameter 6 1/8"
				O.D. of packer rubber 5 1/2"
				Length of anchor below packer 46.0'
				Tester started in hole 10:45 P.M.
				Tester on bottom 11:15 P.M.
				Tester opened 11:30 P.M.
				Tester closed 1:30 A.M.
				Tester pulled loose 1:30 A.M.
				Tester out of hole 2:15 A.M.
				Packer set with 4000#
				Packer pulled loose with 4000#
				There was a good initial puff and the mud level in the casing did not drop. When the drill pipe was pulled, 3' of dead mud were recovered. Samples were examined by C. G. Matthews. No pressure chart was run as bomb was not available. The test was considered to be mechanically doubtful and was performed by Dowell Rental. Present at the test were J. E. Rutledge, C. M. Spornitz and crew and C. G. Matthews.
<u>May 18</u>	<u>366</u>	<u>77</u>	<u>11</u>	Pulled out tester and picked up core barrel. Heaved to bottom for 1/2 hour. Cored for 3 hours then hoisted core #2. For 11' cut, 11' was recovered or 100%. Worked on tester for 6 1/4 hrs. cleaning valves and bypasses, removed rust, repeated packer and checked thoroughly. Run in with tester to run drill stem test.

DAILY PROGRESS REPORT CONT'D

Date	From	To	Footage	Remarks
May 18				D.S.T. #5 - 331.62' - 377.0 Slave Point Limestone
Cont'd				
				Hole diameter 6 1/8"
				O.D. of Packer rubber 5 1/2"
				Length of anchor below packer 45.38
				Tester started in hole 1:45 P.M.
				Tester on bottom 2:15 P.M.
				Tester opened 2:30 P.M.
				Tester closed 2:45 P.M.
				Tester pulled loose 2:45 P.M.
				Tester out of hole 3:30 P.M.
				Packer set with 4000#
				Packer pulled loose with 4000#

There was a noticeable blow when the tool was opened, air was displaced and the mud level in the casing dropped. When the drill pipe was pulled, 255' (1.38 bbls) of mud were recovered. Samples were checked by C. G. Matthews. No pressure chart was run as a bomb was not available. The test was considered to be mechanically unsatisfactory as the packer failed and was performed by Dowell Rental. Present at the test were J. E. Routledge, C. M. Spornitz & crew and C. G. Matthews.

Pulled tester out and broke down tester, rechecked operating mechanism and decided there was insufficient weight to efficiently seal off packer. Also changed tail pipe. Ran back in with tester in preparation to run drill stem test.

D.S.T. #6 - 333.48 - 377.0 Slave Point Limestone

Hole diameter	6 1/8"
O.D. of packer rubber	5 1/2"
Length of anchor below packer	43:52'
Tester started in hole	5:00 P.M.
Tester on bottom	5:30 P.M.
Tester opened	5:45 P.M.
	Reset 3 times
Tester closed	5:57 P.M.
Tester pulled loose	5:57 P.M.
Tester out of hole	6:35 P.M.
Packerset at	4000#
Packer pulled loose with	4000#

There was a noticeable blow when the tool was opened, air was displaced and the mud level in the casing dropped. When the drill pipe was pulled 180' (1.33 bbls.) of dead mud were recovered. Samples were checked by Matthews. No pressure chart was run as a bomb was not available. The test was considered to be mechanically

DAILY PROGRESS REPORT CONT'D

8

Date	From	To	Footage	Remarks
May 18 <u>Cont'd</u>				unsatisfactory and was performed by Dowell Rental. Present at the test were J. E. Routledge, C. G. Matthews and C. M. Spornitz and crew.
				Pulled tester out and checked it again. Ran in with tester. Attached wench line as pull down from top of drill pipe and anchored it with snatch block on substructure and applied 10,000# additional weight to the packer. Prepared to run drill stem test.
				D.S.T. #7 - 304.0' - 377.0' Slave Point Limestone
				Hole diameter 6 1/8"
				O.D. of packer rubber 5 1/2"
				Length of anchor below packer 73.0'
				Tester started in hole 11:00 P.M.
				Tester on bottom 11:30 P.M.
				Tester opened 12:00 A.M.
				Tester closed 4:00 A.M.
				Tester pulled loose 4:00 A.M.
				Tester out of hole 5:00 A.M.
				Packer set with 15,000#
				Packer pulled loose with 4,000#
				There was a good initial blow plus 5 minutes breathing when the tool was opened, air was displaced but the mud level in the casing did not drop. When the drill pipe was pulled 15' (0.09 bbls.) of dead mud were recovered. Samples were checked by C. G. Matthews but there was no evidence of salt. A pressure chart was not run as no bomb was available. The test was considered to be mechanically satisfactory and was performed by Dowell Rental. Present at the test were J. E. Routledge, C. M. Spornitz & crew, A. J. Weber & Crew and C. G. Matthews.
May 19	377	439	62'	Pulled tester out, checked valve operation and cleaned tester. Picked up core barrel and circulated and cleaned to bottom for 1 1/4 hours. Cored for 5 hours and hoisted and examined core #3. For 25' cut, 25' were recovered or 100%. Ran in again, circulated and conditioned and cored for 3 3/4 hours/ Hoisted and examined core #4. For 23' cut, 23' were recovered or 100%. Picked up drill collar which slowed drilling time 30% circulated and cored ahead for 2 hours. Hoisted and examined core #5. For 14' cut, 13' were recovered or 93%.

DAILY PROGRESS REPORT CONT'D

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<u>Date</u>	<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Remarks</u>
<u>May 20</u>	439			Laid down core barrel and picked up Kelly and 9" OSC bit. Reamed hole from 45' to 351' in 14 1/2 hours. Worked on pumps for 1 1/2 hours. Circulated and conditioned mud and made trip to clean out hole in preparation to run casing. Waited on casing for 3 1/2 hours as sleigh broke down bringing in casing.
<u>May 21</u>	439			Waited on casing and helped repair sleigh for 8 hours. Received casing, made trip in to circulate to clean hole of boulders. Rigged up to run surface casing.
				Casing started in hole 3:00 P.M. Casing all in 10:00 P.M. Started circulating 11:00 P.M. Stopped circulating 7:00 A.M. Started cementing 8:30 A.M. Cement all in pipe 12:00 A.M. Plug down 1:00 P.M.
<u>May 22</u>	439			Ran and cemented 341.42', 7" O.D., 20#, 8 Rd. Thd. Egs. 2, J-55 Stewart & Lloyd's casing. The Baker float shoe and 2 joints were acetylene welded, a centralizer was attached at 335' and scratchers at 344', 330', 320', 310' & 300'. The shoe was landed at 349.05' below Kelly bushing, which was 7.63' above ground level. The casing was cemented with 100 sacks of cement by mixing of mud hog and jet. The plug was bumped on the baffle plate with 0 psi. and good cement returns were obtained. While waiting on cement, cleaned up pump, cement, centered casing and dug cellar.
<u>May 23</u>				Ripped up blow out preventer and worked on pump molar.
<u>May 24</u>				Waited on cement for total of 46 hours. Measured in and found top of cement plug. Rechecked cement plug. Drilled out baffle. Tested blow out preventers and surface connections. Ran in and drilled out cement plug with 6 1/8" OSC bit. found top of cement at 302', plug at 312', baffle at 319' and top of shoe at 348'. Cleaned out to bottom and circulated to wash hole. Well was flowing 16 bbls./hr. of sulphur water with trace of oil. Ran in with drill stem tester and prepared to test with well flowing.

Date	From	To	Footage	Remarks
May 24 Cont'd				D.S.T. #8 - 356.79A - 440.62 Slave Point Limestone 349.05 - 356.79
				Hole diameter 6 1/8"
				O.D. of packer rubber 5 1/2"
				Length of anchor below packer 83.83'
				Tester started in hole 9:10 P.M.
				Tester on bottom 10:00 P.M.
				Tester opened
				Tester closed 12:00 P.M.
				Tester pulled loose 12:00 P.M.
				Tester out of hole 1:00 A.M.
May 25	439	536	97	Packer set with 5000# + est. additional 10,000# applied by winch line pull down Packer pulled loose with 5,000#
				There was a good initial blow when the tool was opened, air was displaced and the mud level in the casing did not drop. Sulphur water flowed to surface in 15 minutes at rate of 12 bbls. hourly. There was no blow, over the stand pipe.
				Measure annulus flow 4.83)bbls. hourly of sulphur
				Measure annulus flow 4.63)water, oil speckled.
				Measure annulus flow 4.63)no gas
				Dropped dart to test formation above and below packer simultaneously. Tester was opened and there was no loss of fluid in the annulus. Measured annulus flow 6 times at rate of 4.43 bbls. hourly of sulphur water, oil speckled with no trace of gas. When the drill pipe was pulled 378' (2.73 bbls) of sulphur water were recovered. Samples were checked by C. G. Matthews. No pressure chart was run as a bomb was not available. The test was considered to be mechanically satisfactory and was performed by Dowell Rental. Present at the test were J. E. Routledge, G. M. Spornitz & crew, A. J. Weber & crew and C. G. Matthews.
				Laid down tester and ran in with a 6 1/8" OSC bit and junk sub. Conditioned mud and tried to kill well by displacing the contaminated mud. Conditioned mud again and killed flow of sulphur water in 5 hours. Drilled ahead for 11 1/2 hours.

DAILY PROGRESS REPORT CONT'D

Date	From	To	Footage	Remarks																								
May 26	536	625	89	Drilled on bottom for 6 hours. Pulled out and ran in with a 6 1/8" Trusco diamond bit. Reamed and cleaned to bottom for 2 hours as catcher sub backed off inner barrel. Checked core barrel and cored for 3 1/2 hours. Hoisted core #6 and for 25' cut, 25' were recovered or 100%. Ran back in hole and cored ahead for 3 1/4 hours. Hoisted core #7 and for 19' cut, 19' were recovered or 100%. A survey showed: 1/2° @ 600'																								
May 27	625	690	65	Ran in again and cored for 1 1/4 hours. Hoisted core #8 and for 10' cut, recovered 10'. Continued coring for 1 3/4 hours and hoisted core #9 and for 11' cut, 11' were recovered or 100%. Cored ahead for 1 1/4 hours and hoisted core #10 and for 10' cut, 10' were recovered or 100%. Cut core #11 in 4 1/2 hours and for 25' cut, 25' were recovered or 100%. Pulled out of hole with core barrel and ran in with tester to run drill stem test. D.S.T. #9 - 672.0' - 681.0' Slave Point Limestone <table><tr><td>Hole diameter</td><td>6 1/8"</td></tr><tr><td>O.D. of packer rubber</td><td>5 1/2"</td></tr><tr><td>Length of anchor below packer</td><td>9.0'</td></tr><tr><td>Tester started in hole</td><td>6:30 P.M.</td></tr><tr><td>Tester on bottom</td><td>7:35 P.M.</td></tr><tr><td>Tester opened</td><td>7:35 P.M.</td></tr><tr><td>Tester closed</td><td>8:35 P.M.</td></tr><tr><td>Tester pulled loose</td><td>8:35 P.M.</td></tr><tr><td>Tester out of hole</td><td>9:30 P.M.</td></tr><tr><td>Packer set with</td><td>5000#</td></tr><tr><td>additional 10,000# applied by winch line pulled down</td><td></td></tr><tr><td>Packer pulled loose with</td><td>5000#</td></tr></table> There was a noticeable blow when the tool was opened, air was displaced but the mud level in the casing did not drop. When the drill pipe was pulled 300' (2.22 bbls.) of sulphur water were recovered. Samples were taken and checked by C. G. Matthews. No pressure chart was run as no bomb was available. The test was considered to be mechanically satisfactory and was performed by Dowell Rental. Present at the test were J. E. Bontledge, C. M. Spernitz & crew and C. G. Matthews. Pulled tester out of hole, ran in with a 6 1/8" O.W.S. bit at 681' and drilled for 1 hour.	Hole diameter	6 1/8"	O.D. of packer rubber	5 1/2"	Length of anchor below packer	9.0'	Tester started in hole	6:30 P.M.	Tester on bottom	7:35 P.M.	Tester opened	7:35 P.M.	Tester closed	8:35 P.M.	Tester pulled loose	8:35 P.M.	Tester out of hole	9:30 P.M.	Packer set with	5000#	additional 10,000# applied by winch line pulled down		Packer pulled loose with	5000#
Hole diameter	6 1/8"																											
O.D. of packer rubber	5 1/2"																											
Length of anchor below packer	9.0'																											
Tester started in hole	6:30 P.M.																											
Tester on bottom	7:35 P.M.																											
Tester opened	7:35 P.M.																											
Tester closed	8:35 P.M.																											
Tester pulled loose	8:35 P.M.																											
Tester out of hole	9:30 P.M.																											
Packer set with	5000#																											
additional 10,000# applied by winch line pulled down																												
Packer pulled loose with	5000#																											

DAILY PROGRESS REPORT CONT'D

<u>Date</u>	<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Remarks</u>
<u>May 28</u>	690	811	121	Continued drilling for 9 1/2 hours, changed to a new 6 1/8" OWS bit at 763' after 10 1/2 hours drilling footage. Conditioned mud and drilled ahead for 7 hours. Changed to a new bit again at 802' after 7 hours drilling as locked and loose. Continued drilling for 1 3/4 hours.
<u>May 29</u>	811	918	107	Pulled ahead for 3 hours. Changed to a new 6 1/8" OWS bit at 830' after 4 3/4 hours drilling footage. Drilled ahead for 5 1/2 hours changed to a 6 1/8" OSC bit at 860' after 5 1/2 hours and drilled for 5 1/2 hours. Circulated and changed bit again at 909' after 5 1/2 hrs. drilling time. Made a survey and continued drilling for 1 1/2 hours. A survey showed: 1/4" @ 900'
<u>May 30</u>	918	989	71	Drilled on bottom for 6 1/4 hours. Pulled out of hole, laid down drill collar and picked up a 6 1/8" Trucco diamond bit. Ran in and reamed and circulated on bottom for 1/2 hour. Cored for 6 3/4 hours. Hoisted core #12 and for 25' cut, 25' were recovered or 100%. Strung a new drilling line and took out back twist. Ran back in, circulated and cored for 1 1/2 hours. Hoisted core #13 and for 8' cut, 8' were recovered or 100%. Received orders to abandon well at 11:45 P.M.
<u>May 31</u>	989			Laid down core barrel and ran in with open end at 365'. Cleaned out suction pit. Ran Plug #1 365' - 288' with 15 sacks of cement, displaced 2 3/4 bbls. of water. Pulled out 5 singles (150'). Float was plugged. Pulled out of hole, removed blow out preventers, cleaned drill pipe and started tearing out. Ran Plug #2 - 8' - 35' with 8 sacks of cement. Installed welded protector plate on top of 7" casing. Dismantled rig and worked on equipment.
<u>June 1</u>				Overhauled truck, generally cleaned up around rig and repaired rig.
<u>June 2</u>				Continued repairing rig and truck, cleaned up and piled up equipment. Matthews received orders to return to Edmonton with cores and samples.
<u>June 3</u>				Continued working on rig and motors, waiting on orders and transportation.
<u>June 4</u>				Working on rig and equipment, loaded out Menries boat with cores and empty drums.

DAILY PROGRESS REPORT CONT'D

<u>Date</u>	<u>From</u>	<u>To</u>	<u>Footage</u>	<u>Remarks</u>
<u>June 5</u>				Repaired sleigh and cat.
<u>June 6</u>				Awaited orders, cleaned up and made general repairs.
<u>June 7</u>				Covered and drained all equipment, waiting for transportation out.

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SURVEY RECORD

<u>Date</u>	<u>Depth</u>	<u>Deviation</u>
May 16	150'	1/4°
May 16	250'	1/8°
May 26	600'	1/2°
May 29	900'	1/4°

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MUD RECORD

Date	Depth	Mud Wt. #/U.S. Gal.	Visc.	Gel.	H ₂ O Loss cc.	Filter Cake 1/32"	pH	Additives
May 15	20	-	-	-	-	-	-	2500# gel.
May 15	41	-	-	-	-	-	-	
May 16	60	9.8	48	52	-	-	-	
May 16	-	-	-	-	-	-	-	
May 16	334	9.8	48	55	-	-	-	
May 17	359	10.2	48	54	-	-	-	
May 17	366	10.2	50	54	13.0	2/32	8.0	
May 17	366	10.2	52	56	13.0	2/32	8.0	
May 18	377	10.2	50	54	-	-	-	
May 18	377	Drill stem testing						
May 18	377	Drill stem testing						
May 19	377	Drill stem testing						
May 19	402	10.1	48	52	-	-	-	
May 19	439	10.6	47	55	11.5	2/32	8.0	
May 20	439	10.6	50	56	12.0	2/32	8.0	
May 20	439	10.4	52	56				
May 20	Running casing							
May 21	Running casing							
May 21	Running casing							
May 21	Running casing							
May 22	Waiting on cement							
May 22	" " "							
May 22	" " "							
May 23	" " "							
May 23	" " "							
May 23	" " "							

MUD RECORD CONTINUED

Date	Depth	Mud Wt. #/U.S. Gal.	Visc.	Gel.	H ₂ O Loss cc.	Filter Cake 1/32"	pH	Additives
May 24	439	Waiting on cement						
May 24	439	Waiting on cement						
May 24	439	Waiting on cement						
May 25	439	Conditioning to kill well						3000# gel.
May 25	475	9.0	47	49	14	2/32	8.5	1500# Gel.
May 25	536	9.2	48	52	15.0	2/32	8.0	
May 26	581	9.2	48	52	14	2/32	8.0	
May 26	596	9.2	50	54	-	-	-	
May 26	625	9.6	50	56	-	-	-	
May 27	646	9.6	46	51	14	2/32	8.0	
May 27	681	9.4	48	51	-	-	-	
May 27	690	Testing						
May 28	751	10.0	45	49	28	2/32	8.0	
May 28	777	10.0	48	52	15	2/32	9.5	100# Caustic 50# Quebraco 100# Gel. 250# Carboxyl
May 28	811	10.5	50	54	15	2/32	9.5	
May 29	846	10.8	54	58	8.0	2/32	9.5	25# Quebraco 25# Carboxyl
May 29	884	11.0	45	48	12.0	2/32	9.5	
May 29	918	11.2	49	55	9.0	2/32	9.5	25# Quebraco 15# Caustic
May 30	956	11.2	49	54	9.0	2/32	9.5	
May 30	981	11.2	50	54	6.8	2/32	9.5	
May 30	989	11.2	50	54	7.2	2/32	9.5	

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Well: N.W.T. Deep Bay #2BIT RECORD

Date	Bit #	Size	Type	Pump () Press	RPM	Wt. on Bit N LBS.	R.P.M. Feet Drilled	Hrs. on Bottom	Depth	Formation	Cond.	Remarks
May 15	1A	9"	OSC3	100	60	all	100 45	16 3/4	45		Dull	
May 16	1	6 1/8"	OSC	100	60	10	100 306	17	351		Dull	
May 17	2	6 1/8"	Trace Dia.	100	60	8	70 88	17 1/4	439		okay	
May 20	3	9"	OSC3	100	60	6	175 Reamed 306	14 1/2			Dull	Reaming
May 25	4	6 1/8"	OSC	100	60	8	100 142	18	581		Dull	
May 26	2 RR	6 1/8"	Trace Dia.	100	60	6	70 100	15 1/2	681		okay	
May 27	5	6 1/8"	OWS	100	60	7.5	100 82	10 1/2	763		Dull Loose	Limestone
May 28	6	6 1/8"	OWS	100	60	7.5	100 39	7	802		Dull	Limestone
May 28	7	6 1/8"	OWS	100	60	7.5	100 28	4 3/4	830		Dull	Limestone
May 29	8	6 1/8"	OWS	100	58	7.5	100 30	5 1/2	860		Locked Loose	Limestone
May 29	9	6 1/8"	OSC	100	58	7.5	100 49	5 1/2	909		Locked Loose	Limestone
May 29	10	6 1/8"	OSC	100	60	7.5	100 47	7 3/4	956		Dull	Limestone
May 30	2 RR	6 1/8"	Trace Diamond	100	60	6	70 33	8 1/4	989		Okay	Limestone

NEW SUPERIOR OILS OF CANADA LIMITED

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CORE RECORD

Date	Core No.	From	To	Ft. Out	Ft. Rec.
May 17	1	351	366	15	15
May 18	2	366	377	11	11
May 19	3	377	402	25	25
May 19	4	402	425	23	23
May 19	5	425	439	14	13
May 26	6	581	606	25	25
May 26	7	606	625	19	19
May 27	8	625	635	10	10
May 27	9	635	646	11	11
May 27	10	646	656	10	10
May 27	11	656	681	25	25
May 30	12	956	981	25	25
May 30	13	981	989	8	8

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Superior Oils of Canada Limited

DRILL STEM TEST REPORT

19

Date May 17th, 1952

Name of Well N.W.T., Deep Bay No. 2 Test No. 1 (Miscrun)

Testing Company Dowell Rental Operator General Petroleum of Canada Ltd.

Size Drill Pipe 3 1/2" O. D. of Packer Rubber 5 1/2" Size Choke 3/8"

Type of Packer: Anchor Type X Hookwall

Formation Tested Slave Point Limestone

Depth of Well 366'

Zone Tested: From 344.79' To 366.0'

Time Waiting on Tester Nil

Mud: API Viscosity 49 Gel 54 Weight 9.9

Time Tester started in hole 1:00 P.M.

" " On Bottom 1:40 P.M.

" " Opened 2:07 Reset 3 times dropped 2 darts

" " Closed 2:15 P.M.

" " Pulled Loose 2:15 P.M.

" " Out of Hole 2:50 P.M.

Weight: Set on Packer 4 Thousand Lbs.; To pull Packer Loose 4 Thousand Lbs.

No. Lines 6 Size Line 1"

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

Did mud level drop in casing; Yes X Packer failed. No to hold

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

Estimated by

Size riser: 2" inches, i.D.; Was flare lit, Yes No ; Length flame feet

Total fluid in drill pipe: 5 Stands 150 Feet Bbls.

Oil in drill pipe { Gassy } Nil Stands Feet Bbls.

Mud in drill pipe { Gassy } 5 Stands 150 Feet Bbls.

Water in drill pipe { Gassy } Nil Stands Feet Bbls.

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: Packer failed to hold pulled out same, reworked testing tool

Put additional remarks or other information on back of sheet.

Present at test: Routledge, Sparnits and crew, Matthews.

Do you consider that test was satisfactory? Yes No X

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No X Who has it

No Run, not available

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

20

Name of Well N.W.T. Deep Bay No. 2 Date May 17th, 1952 Test No. 2
 Testing Company Dowell Rental Operator General Petroleum of Canada Ltd.

Size Drill Pipe 3 1/2" O. D. of Packer Rubber 5 1/2" Size Choke 3/8"
 Type of Packer: Anchor Type X Hookwall
 #/ foot 13.30 Formation Tested Slave Point Limestone

Depth of Well 366.0

Zone Tested: From 349.79 To 366.0

Time Waiting on Tester Nil

Mud: API Viscosity 49 Gel 54 Weight 9.9

Time Tester started in hole 4:55 P.M.

" " On Bottom 5:40 P.M.

" " Opened 5:45 P.M. Reset 3 times, 2 darts

" " Closed 7:00

" " Pulled Loose 7:00

" " Out of Hole 7:45

Weight: Set or Packer 4 Thousand Lbs.; To pull Packer Loose 4 Thousand Lbs.

Weight before setting 4800#

No. Lines 6 Size Line 1"

When tool was opened: Was blow noticeable, Yes 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 riser: 2" inches, I.D.; Was flare lit, Yes No X; Length flame feet

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

Oil in drill pipe { Gassy } Nil Stands 1 Feet Bbls.
 { Dead }

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

Water in drill pipe { Gassy } Nil Stands 1 Feet Bbls.
 { Dead }

Note: Samples of Oil and Water must be taken.

Samples ~~sent~~ checked By Matthews

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

Remarks: Rechecked tester thoroughly before test - Shatter disc. Punctured but
Put additional remarks or other information on back of sheet. plugged by dart

Present at test: Matthews, Spornitz & crew, Matthews

Do you consider that test was satisfactory? Yes No X

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No X Who has it

No Bomb Run, not available

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

Name of Well N.W.T. Deer, Bay #2 Date May 17, 1952 Test No. 3

Testing Company Dowell Rental Operator General Petroleum of Canada Ltd.

Size Drill Pipe 3 1/2 inches O.D. O. D. of Packer Rubber 5 1/2" Size Choke 3/8"
 #/ foot 13.30 Type of Packer: Anchor Type X Hookwall
 Formation Tested Slave Point Limestone

Depth of Well 366'

Zone Tested: From 349.79 To 366.0

Bottom of Rubber at 349.79 feet Time Waiting on Tester Nil

Mud: API Viscosity 49 Gel 54 Weight 9.9

Time Tester started in hole 8:30 P.M.

" " On Bottom 9:00 P.M.

" " Opened 9:10 P.M. Reset 3 times

" " Closed 9:25 P.M.

" " Pulled Loose 9:25 P.M.

" " Out of Hole 10:00 P.M.

Depth 366 feet

Weight: Set on Packer 4 Thousand Lbs.; To pull Packer Loose 4 Thousand Lbs.

Weight before setting 4800

No. Lines 6 Size Line 1"

Packer failed

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 flare lit, Yes No X; Length flame feet

Total fluid in drill pipe: 2 Stands 60 Feet 0.44 Bbls.

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

Mud in drill pipe { ~~Blank~~ } 2 Stands 60 Feet 0.44 Bbls.
 { Dead }

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

Note: Samples of Oil and Water must be taken.

Samples ~~same~~ checked By Matthews

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

Remarks: Packer again failed - Valves, by-passes, checked found okay, little sticky
Put additional remarks or other information on back of sheet. cleaned same.

Present at test: Bentley, Spornin & crew, Matthews

Do you consider that test was satisfactory? Yes No X

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No X Who has it

No Bomb available

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

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May 18, 1952

Name of Well **N.W.T. Deep Bay #2** Date **4** Test No. **4**

Testing Company **Dovell Rental** Operator **General Petroleum of Canada Ltd.**

Size Drill Pipe **3 1/2"** O. D. of Packer Rubber **5 1/2"** Size Choke **3/8"**

Type of Packer: Anchor Type **X** Hookwall

Formation Tested **Slave Point Limestone**

Depth of Well **366'**

Zone Tested: From **320.0** To **366.0'**

Time Waiting on Tester **N11**

Mud: API Viscosity **49** Gel **54** Weight **9.9**

Time Tester started in hole **10:45 P.M.**

" " On Bottom **11:15 P.M.**

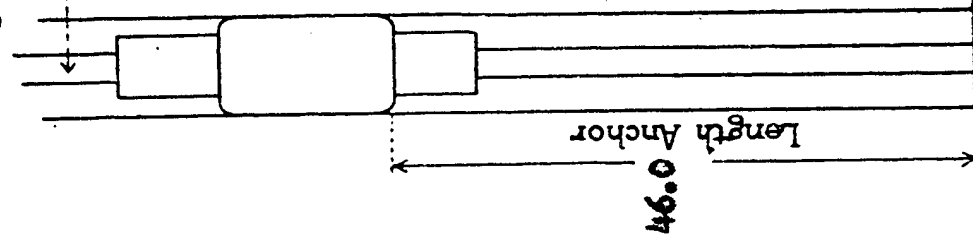
" " Opened **11:30 P.M.**

" " Closed **1:30 A.M.**

" " Pulled Loose **1:30 A.M.**

" " Out of Hole **2:15 A.M.**

Weight: Set on Packer **4** Thousand Lbs.; To pull Packer Loose **4** Thousand Lbs.



No. Lines **6** Size Line **1"** **Good initial puff & slight blow for 8 mins.**

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

Did mud level drop in casing; Yes **No** No **X**

Gas flow: **N11** Thousand cf/day. Measured with Pitot tube by **Matthews**

Estimated by **Matthews**

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

Total fluid in drill pipe: **N11** Stands **3** Feet **3** Bbls.

Oil in drill pipe **N11** Stands **3** Feet **3** Bbls.

Mud in drill pipe **N11** Stands **3** Feet **3** Bbls.

Water in drill pipe **N11** Stands **3** Feet **3** Bbls.

Note: Samples of Oil and Water must be taken.

Samples **checked** By **Matthews**

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

Valves operated okay, perforations clean

Remarks: Put additional remarks or other information on back of sheet.

Present at test: **Routledge, Spornis & crew, Weber & crew, Matthews.**

Do you consider that test was satisfactory? Yes **No** **Doubtful**

Does chart show normal operation of tester? Yes **No**

Pressure on chart (Hydrostatic) before tester opened **p.s.i.**

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

Is chart attached: Yes **No** Who has it **No**

No Bomb available

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

23

Date May 18, 1952

Name of Well N.W.T. Deep Bay #2 Test No. 5

Testing Company Dowell Rental Operator General Petroleum of Canada Ltd.

Size Drill Pipe 3 1/2" O.D. of Packer Rubber 5 1/2" Size Choke 3/8"

Type of Packer: Anchor Type x Hookwall

Formation Tested Slave Point Limestone

Depth of Well 377.0'

Zone Tested: From 331.62' To 377.0'

Bottom of Rubber at 330.62 feet

Time Waiting on Tester 6 hours overhauling same

Mud: API Viscosity 48 Gel 52 Weight 10.0

Time Tester started in hole 1:45 P.M.

" " On Bottom 2:15 P.M.

" " Opened 2:30 P.M. Reset & spudded

" " Closed 2:45 P.M.

" " Pulled Loose 2:45 P.M.

" " Out of Hole 3:30 P.M.

Depth 377.0 feet
Weight before setting 4700#

Weight: Set on Packer 4 Thousand Lbs.; To pull Packer Loose 4 Thousand Lbs.

No. Lines 6 Size Line 1"

When tool was opened: Was blow noticeable, Yes x No ; Air displaced, Yes No

Did mud level drop in casing; Yes x No

Gas Flow: 111 Thousand cf/day. Measured with Pitot tube by

Estimated by

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

Total fluid in drill pipe: 8 1/2 Stands 255 Feet 1.38 Bbls.

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

Mud in drill pipe { Gassy } Stands Feet 1.38 Bbls.
{ Dead }

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

Note: Samples of Oil and Water must be taken.

Samples sent to checked By Matti

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

Remarks: Before running tester broken down all valves. Bypasses cleaned. Rust removed. Put additional remarks or other information on back of sheet. Reset packing, checked complete & thorough workover, ok.

Present at test:

Routledge, Spornitz & crew, Matthews

Do you consider that test was satisfactory? Yes No x

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No x Who has it

No Bend available

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

Date May 18, 1952

Name of Well N.W.T. Deep Bay #2 Test No. 6

Testing Company Dowell Kent-1 Operator General Petroleum of Canada Ltd.

Size Drill Pipe 3 1/2" inches O.D. O. D. of Packer Rubber 5 1/2" Size Choke 3/8"
 #/ foot 13.30 Type of Packer: Anchor Type x Hookwall
 Formation Tested Slave Point Limestone

Depth of Well 377.0

Zone Tested: From 333.48 To 377.0

Bottom of Rubber at 333.48 feet Time Waiting on Tester 1 1/2 hours rechecking

Mud: API Viscosity 48 Gel 52 Weight 10.0

Time Tester started in hole 5:00 P.M.

" " On Bottom 5:30 P.M.

" " Opened 5:45 P.M. Packer 3 times

" " Closed 5:57 P.M.

" " Pulled Loose 5:57 P.M.

Depth 337.0 feet " " Out of Hole 6:35 P.M.

Weight before setting 4700# Thousand Lbs.; To pull Packer Loose 4 Thousand Lbs.

No. Lines 6 Size Line 1" Packer failed

When tool was opened: Was blow noticeable, Yes x No ; Air displaced, Yes No

Did mud level drop in casing; Yes x No

Gas Flow: 111 Thousand cf/day. Measured with Pitot tube by

Estimated by

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

Total fluid in drill pipe: 6 Stands 180 Feet 1.33 Bbls.

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

Mud in drill pipe { Gassy } { Dead } 6 Stands 180 Feet 1.33 Bbls.

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

Note: Samples of Oil and Water must be taken.

Samples checked By Matthews

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

Remarks: Before running - rechecked tester operating mechanism - tried to invert tester no go, tester mechanically ok.

Put additional remarks or other information on back of sheet Decision insufficient weight to efficiency seal off packer

Present at test:

Routledge, Matthews, Sparling & Orr

Do you consider that test was satisfactory? Yes No x

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No x Who has it

No Bomb Available

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

Date May 18, - 19, 1952

Name of Well H.W.T. Deep Bay #2 Test No. 7

Testing Company Dowell Rental Operator General Petroleum of Canada Ltd.

Size Drill Pipe 12 inches O.D. O. D. of Packer Rubber 5 1/2" Size Choke 3/8"
Type of Packer: Anchor Type x Hookwall

13.30 #/ foot Formation Tested Slave Point Limestone

Depth of Well 377.0

Zone Tested: From 304.0 To 377.0

Bottom of Rubber
at 304.00 feet

Time Waiting on Tester Nil

Mud: API Viscosity 48 Gel 52 Weight 10.0

Time Tester started in hole 11:00 P.M.

" " On Bottom 11:30 P.M.

" " Opened 12:00 P.M.

" " Closed 4:00 P.M. May 19/52

" " Pulled Loose 4:00 A.M.

Depth 377.0 feet " Out of Hole 5:00

Weight drill pipe 4700#

Weight: Set on Packer 15 Thousand Lbs.; To pull Packer Loose 4 Thousand Lbs.

No. Lines 6 Size Line 1"

When tool was opened: Was blow noticeable, Yes x No Good initial blow, plus 5 min. breathing; Air displaced, Yes x 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 flare lit, Yes No ; Length flame feet

Total fluid in drill pipe: 1/2 Stands 15 Feet 0.09 Bbls.

Oil in drill pipe { Gassy } Stands Feet Bbls.

Mud in drill pipe { Gassy } 1/2 Stands 15 Feet 0.09 Bbls.

Water in drill pipe { Gassy } Nil Stands Feet Bbls.

Note: Samples of Oil and Water must be taken.

Samples sent to Checked no salt By Matthews

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

Tester checked ok. before running - attached winch line as pull down to top of drill pipe and anchored with snatch block on substructure - applied 10,000#

Put additional remarks or other information on back of sheet. additional weight to packer ok

Present at test: Routledge, Spornitz & crew, Weber & crew

Remarks: Control Valve operation checked all ok after pulling out tester, perforations clean

Do you consider that test was satisfactory? Yes Mechanically No

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No x Who has it

No data available

Superior Oils of Canada Limited

DRILL STEM TEST REPORT

26

H.M.T. Deep Bay #2

Date May 24/52

Test No. 8

Name of Well

Testing Company

Dowell Rental

Operator General Petroleum of Canada Ltd.

Size Drill Pipe 3 1/2 inches O.D. O. D. of Packer Rubber 5 1/2" Size Choke 3/8" Type of Packer: Anchor Type # Hookwall 13.3 #/ foot Formation Tested Slave Point Limestone

Depth of Well 440

Zone Tested: From 356.79 To 440.62 349.05 to 356.79

Bottom of Rubber at 356.79 feet Time Waiting on Tester nil

Mud: API Viscosity water Gel Weight

Time Tester started in hole 9:10 P.M.

" " On Bottom 10:00 P.M.

" " Opened See Data Sheet #17 to be typed on back on this report

" " Closed 12:00 P.M.

" " Pulled Loose 12:00 P.M.

Depth 440.62 feet " " Out of Hole 1:00 A.M. May 25/52

Weight: Set on Packer 5 Thousand Lbs.; To pull Packer Loose 5 Thousand Lbs. 10,000# applied by winch line pull down Size Line No. Lines 6

When tool was opened: Was blow noticeable, Yes x No ; Air displaced, Yes x No Sulphur water to surface in 15 mins. 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 flare lit, Yes No x ; Length flame nil feet

Total fluid in drill pipe: 12 1/2 Stands 370 Feet 2.73 Bbls.

Oil in drill pipe { Empty } Dead { trace } Stands Feet Bbls.

Mud in drill pipe { Gassy } Dead { nil } Stands Feet Bbls.

Water in drill pipe { Empty } Dead { 12 1/2 } Stands 370 Feet 2.73 Bbls.

Note: Samples of Oil and Water must be taken.

Samples sent to By Matthews

Water: Satisfactory Sulphur, Satisfactory. (Cross out terms that do not apply).

Test of sulphur water flow above and below packer - tester run in with well Remarks: Flowing see Data Detail on Back

Put additional remarks or other information on back of sheet.

Present at test: Routledge, Spornitz & Gray, Weber & Gray, Matthews

Do you consider that test was satisfactory? Yes x No

Does chart show normal operation of tester? Yes No

Pressure on chart (Hydrostatic) before tester opened p.s.i.

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

Is chart attached: Yes No x Who has it

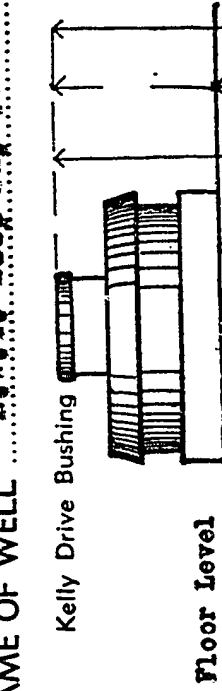
No bomb available

Superior Oils of Canada Limited

CASING REPORT

NAME OF WELL **N.W.T., Deep Bay #2**

DATE **May 21 - 22, 1952**

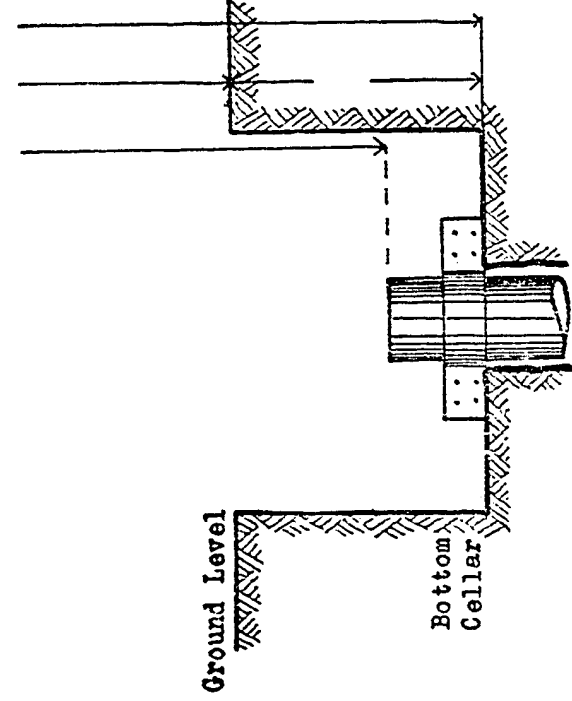


Make of Casing **Stewart & Lloyd**
 Size **7" O.D.**
 Weight **20#**
 No. of Threads **8 Round**
 Range **2**
 Grade **J-55**

Make and Type **Baker Float** Welded on? **yes**
 of Casing Shoe
 Make and Type **Baffle** Welded on? **no**
 of Collar
 Centralizers at **335**

Welding—Electric **Acetylene**
 No. of Joints Welded **2**
 Welding Co. **General Petroleum of Canada Limited**
 Operator **D. Weber**
 Scratchers at **340 - 320 - 310 - 300**

Calcium Chloride Added **200#**
 Aquagel added **Nil**
 Cementing Co. **General Petroleum of Canada Limited**
 Cementer **Company**
 Helper
 Drive Bushing Elevation



Distance Kelly Drive Bushing to Bottom Cellar **No cellar** Ft.
 Distance Top of Casing Landed Above Bottom Cellar **No cellar** Ft.
 Distance Top of Casing Landed Below Kelly Drive Bushing **7.63** Ft.
 Total Amount of Casing Used **341.42** Ft. + Ldg. Jt. **31.51** Ft. or Cut-off
 Total Amount of Casing Left in Hole **341.42** Ft.
 Depth of Shoe Below Drive Bushing **349.05** Ft.
 Time Rigging up to Run Casing **1** Hrs.
 Time Casing Started in Hole **3:00 P.M.** M.
 Time Running Casing **7** Hrs.
 Time Started Circulating **11:00 P.M.** M.
 Time Stopped Circulating **Heated hole & mud 7:00 A.M.** M.
 Time Started Cementing **Mixed in motion pit 8:30 A.M.** M.
 Time Cement in Pipe **12:00 A.M.** M.
 Time Plug on Bottom **1:00 P.M.** M.
 Plug Measured in to **by (Wire Line, displacement with 14 Bbls, bumped float Collar.)** P.S.I.
 Bumped on **Collar Baffle** Plate with **0** P.S.I.
 Number of Sax Cement Used **100** Sax
 Hours Cement to Set **48 - 72** Hrs.
 Method of Cementing **mixed with mud bag & jet**
 Cement Returns? **2** Yes or No **Good returns**
 Casing Landed in Clamps, Casinghead, Casing Suspender (State Make)

REMARKS:

Realders near surface allowed running of casing. weather clear. and warm.
used clamps to rig set up does not allow use of spider and slips.

CORE DESCRIPTION - G. H. KillikSlave Point Limestone

Core # 1 - 351 - 66

Rec. 13'

Limestone - grey to brown, micro-crystalline to crystalline highly coralline giving excellent vuggy and pin point porosity, well oil stained, salty taste, some brecciation.

Core # 2 - 366 - 377

Rec. 12'6"

As above

Core # 3 - 377 - 402

Rec. 25'

As above, but becoming considerably tighter.

Core # 4 - 402 - 25

Rec. 23'

Limestone - brown, micro-granular, oil stained with interbanded and brecciated limestone as above. Poor porosity.

Core # 5 - 425 - 39

Rec. 14'

Limestone - grey, micro-crystalline to finely crystalline, tight, some coral material and oil staining.

Core # 6 - 581 - 606

Rec. 25'

Limestone - as above with interbanded brown earthy micro-granular to argillaceous limestone.

Core # 7 - 606 - 625

Rec. 19'

6' Limestone - brown, argillaceous to micro-granular.

6' Limestone - green, micro-crystalline, glauconitic, stylolites

7' Limestone - brown argillaceous interbanded with some green micro-crystalline. contains stromatoporeoids.

Core # 8 - 625 - 35

Rec. 10'

Limestone - brown, micro-crystalline, to finely crystalline, tight, corals, stromatoporeoids and bryozoans.

Core # 9 - 635 - 46

Rec. 11'

4' Limestone - brown, coralline with fair vuggy porosity and trace oil staining.

7' Limestone - green, micro-crystalline, tight becoming very argillaceous towards base with many stylolitic green and dark grey shale partings.

CORE DESCRIPTIONS CONT'D

Core # 10 - 646 - 56

Rec. 10'

Limestone - as above.

Core # 11 - 656 - 81

Rec. 25'

1' Limestone - as above

6" Shale - green, to apple green, waxy, slickensided.

Top Presqu'ille Formation 657'

10' Limestone - greenish - grey, micro-crystalline, becoming fractured vertically, and developing some porosity and oil staining from coralline bands

2'6" Limestone - greenish grey, micro-crystalline, tight with apple green shale partings.

2' Limestone and shale - limestone as above with innumerable green shale partings mostly stylolitic.

9' Limestone - as above few green shale partings.

Core # 12 - 956 - 81

Pine Point Limestone

Rec. 25'

Limestone - dark chocolate brown, argillaceous, tight, containing scattered small brachiopods, corals, etc. Becomes quite black in part.

Core # 13 - 981 - 89

Rec. 8'

Limestone as above.

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CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114th Street

Edmonton, Alberta

Phone 25624

FULL DIAMETER CORE STUDY

Operator **N.W.T. Petroleum Ltd.** Field **N.W.T.** Date **June 13, 1953**Well No. **N.W.T. Deep Bay No. 2** Location **Unsurveyed**Formation **Slave Point Lime** Depths **351.0'-378.1'** Lab. No. **3348**

Footage of Slave Point Lime formation cored	(Cores 1 & 2)	26.0'
Feet of core received at laboratory for analysis		25.7'
Feet of core not accounted for		0.3'
Number of representative samples selected for analysis		19.
Feet of core represented by samples		19.7'
Feet of core compared (to tested samples)		6.0'
Feet of dense sections not represented		0
Feet of badly fractured sections not represented		0

SUMMARY OF REPRESENTED SECTIONS:

Footage of core: (1) $\frac{\text{represented}}{\text{received}} = \frac{25.7}{25.7}$; (2) $\frac{\text{represented}}{\text{cored}} = \frac{25.7}{26.0}$

Weighted average porosity	12.08 %
Weighted average radial permeability	487.96 md.
Weighted average vertical permeability (on 23.9' only)	688.16 md.
Weighted average maximum permeability	952.15 md.
Porosity feet	310.57

Maximum porosity	28.5 %
Minimum porosity	3.4 %
Maximum radial permeability	1539. md.
Minimum radial permeability	0.16 md.
Maximum vertical permeability	4602. md.
Minimum vertical permeability	0.03 md.

Core with maximum permeability of 10.0 md. or greater

Footage	17.0'
Weighted average porosity	15.15 %
Weighted average radial permeability	735.25 md.
Weighted average vertical permeability (on 15.2') ...	1081.27 md.
Porosity feet	257.31

Core with maximum permeability between 1.0 and 9.9 md. inclusive

Footage	8.7'
Weighted average porosity	6.12 %
Weighted average radial permeability	4.76 md.
Weighted average vertical permeability	1.34 md.
Porosity feet	53.26

Core with maximum permeability less than 1.0 md.

Footage	0
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10568 - 114th Street

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FULL DIAMETER CORE STUDY REPORT

Operator N.W.T. Petroleum Ltd. Field N.W.T. Date June 13, 1952Well No. N.W.T. Deep Bay No.2 Location UnsurveyedFormation Slave Point Lime Depths 351.0'-378.1' Lab. No. 3348

Sample Number	Midpoint of Sample in ft.	Representative Interval	Porosity Ref.	Core Wt. Gms	Permeability md.		% Porosity	Bulk Density	Description	
					Vertical	Radial				
Core Number 1			351'-366'		Recovered 13.6'					
1	351.2	351.0-351.9	0.9	687	1.2	1539.	14.8	2.27	2.66	C V I S
2	352.2	351.9-352.4	0.5	917	0.03	1091.	10.9	2.36	2.65	C V I S
3	352.9	352.4-353.8	1.4	933	305.	1000. +	17.3	2.21	2.67	C V I S
4	354.5	353.8-355.3	1.5	776	4602.	945.	24.4	2.01	2.66	C V I S
5	355.5	355.3-355.8	0.5	545	148.	93.	28.5	1.90	2.65	C V I S
6	355.9	355.8-356.2	0.4	947	44.	294.	14.4	2.27	2.66	C V I S
7	356.4	356.2-356.9	0.7	865	0.05	3.0	3.4	2.55	2.64	C I S
8	357.4	356.9-357.8	0.9	815	2033.	1000. +	16.8	2.21	2.55	C V I S
Similar to 3		357.8-358.3	0.5	---	305.	1000. +	17.3	---	---	C V I S
9	358.8	358.3-359.1	0.8	1102	11.	854.	11.7	2.34	2.65	C V I S
Similar to 7		359.1-360.5	1.4	---	0.05	3.0	3.4	---	---	F I S
Similar to 4		360.5-362.0	1.5	---	4602.	945.	24.4	---	---	F V I S
10	362.6	362.0-362.8	0.8	476	106.	226.	13.6	2.14	2.63	C V I S
Similar to 11		362.8-364.1	1.3	---	(a)	515.	16.7	---	---	F S V I S
11	364.3	364.1-364.6	0.5	521	(a)	515.	16.7	2.19	2.62	C S V I S
Missing	---	---	1.4	---	---	---	---	---	---	---
Core Number 2			366'-377'		Recovered 12.1'					
12	366.7	366.0-366.9	0.9	464	30.	84.	14.5	2.26	2.64	V C V I S
Similar to 14		366.9-368.2	1.3	---	0.70	867.	5.7	---	---	V F S V I S
13	368.7	368.2-369.1	0.9	920	0.98	8.4	9.9	2.37	2.64	C S V I S
14	369.7	369.1-371.1	2.0	1106	0.70	867.	5.7	2.47	2.64	C I S
15	371.7	371.1-372.4	1.3	1137	3.5	30.	8.6	2.42	2.65	C V I S
16	374.4	372.4-374.7	2.3	1072	1.2	0.16	5.7	2.45	2.60	C I S
17	375.0	374.7-375.3	0.6	936	0.50	4.0	8.1	2.43	2.64	C S V I S
18	376.7	375.3-377.3	2.0	1150	3.6	9.1	7.1	2.43	2.64	C S V I S
19	377.6	377.3-378.1	0.8	984	0.56	8.2	6.3	2.49	2.65	C S V I S

(a) Core unsuitable for test.

CORE DESCRIPTION SYMBOLS

D	Dense
Co	Corraline Fragments
VC	Vertical Crack
HC	Horizontal Crack
C	Cracks
VF	Open Vertical Fracture
HF	Open Horizontal Fracture
F	Open Fractures
SV	Slightly Vuggy
V	Vuggy
LV	Large Vugs
I	Intergranular
S	Stained
St	Stylolite
A	Anhydrite
Sh	Shale
Bt	Buttomed
U	Unconsolidated
SS	Sandstone
LS	Limestone
Cg	Conglomerate
Py	Pyrites
Sp	Small Spings
Ufs	Unconsolidated fine sand
SL	Sand Lenses
ShL	Shale Lenses
CSS	Coarse Sandstone
fss	Fine Sandstone
MSS	Medium Sandstone
Pyb	Pyrobitumen
Shy	Shaly
Cly	Clayey
Sil	Siltstone
R1	Slightly Reactive to Cold 15% HCl
R2	Reactive to Cold 15% HCl
Gl	Glaucinite
fssL	Fine Sand Lenses
Ca	Calcite

(a) . Core Unsuitable for Test.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

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Edmonton, Alberta

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WATER ANALYSIS REPORT

Field Northwest Territories. Well No. N.W.T. Deep Bay Number 2.
 Operator N.W.T. Petroleum. Location Unsurveyed Territory.
 Sampled by Date Received June 6, 1952.
 Formation Slave point Limestone. Depths 672' - 681' How Sampled D.S.T.
 Other pertinent data D.S.T. Number 9. Recovered 300' water.

Analyzed by Chemical & Geological Lab. Ltd. Date June 10, 1952. Lab. No. 3341.

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na & K	Ca	Mg	Fe	SO ₄	Cl	CO ₂	HCO ₃	OH	H ₂ S
21896	1687	1075		175	39250		860		Present

MILLIGRAM EQUIVALENTS

952.12	84.20	88.40		3.64	1106.98		14.10		
--------	-------	-------	--	------	---------	--	-------	--	--

MILLIGRAM EQUIVALENTS IN PERCENT

42.33	3.74	3.93		0.16	49.21		0.63		
-------	------	------	--	------	-------	--	------	--	--

Total Solids in Parts
per Million

By evaporation 68,690
 After ignition 63,230
 Calculated 64,506

Specific Gravity 1.045
 Observed pH 7

Properties of Reaction in
Percent

Primary salinity 84.66
 Secondary salinity 14.08
 Primary alkalinity 0
 Secondary alkalinity 1.26
 Chloride salinity 99.68
 Sulfate salinity 0.32

Remarks and conclusions

Ten copies of the foregoing report were completed in July, 1952.

The distribution of these ten copies are as follows:-

Original: North West Territories Limited.....
 Copy No. 1. Superior Oils of Canada Limited (New).....
 Copy No. 2. Mr. W. L. Brintnell.....
 Copy No. 3. Dr. J. D. Bateman - Yellowknife, N.W.T.....
 Copy No. 4. Dr. A. B. Irwin - " " " ".....
 Copy No. 5. General Petroleum of Canada Limited (B.H. Carey).....
 Copy No. 6. New Superior Oils of Canada Limited (Engineering Dept.).....
 Copy No. 7. General Petroleum of Canada Limited.....
 Copy No. 8. C. G. Matthews.....
 Copy No. 9. New Superior Oils of Canada Limited.....

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114th Street

Phone 25624

Edmonton, Alberta

ANALYTICAL REPORT

From New Superior Oils of Canada Limited. Product Grade OIL
 Address Calgary, Alberta. Date Received May 1, 1952.
 Other Pertinent Data Northwest Territories.
 Analyzed by Chemical & Geological Lab. Ltd. Date May 6, 1952. Lab. No. 3182.

CRUDE OIL ANALYSIS

Specific Gravity	0.928	
A.P.L. Gravity	21.0°	
Sulfur Content	1.36 %	
Salt Content	3.4 lbs. Salt / 1000 lbs. Crude.	
Pour Point	+5 °F.	
B.S. & W.	1.5 % with 1.3 % H ₂ O.	
Saybolt Universal Viscosity	@ 70°F @ 100°F	677.4 Seconds 258.5 Seconds.

NWT Deep Bay No 2