

IMPERIAL  
SEPAGE LAKE  
NO. 1A

Drilling Authority No.  
Date Issued

WELL NAME Imperial Geopage Lake No. 1A

FIELD #11000

Area: Northern Wells

LOCATION: Unit

Section

Grid

Latitude 65°21'14" N.

Longitude 126°50'22" W.

From Established Reference Marker

Rig Release Date: 11-2-45

Status D & A

Information Release Date 11-1-47

CHANGE OF NAME:

DATE RECEIVED	INDEX
MAR 22 1952	<p>Application for a Drilling Authority. Well Completion Data. Well History Report.</p> <p>Application to Amend a Drilling Authority.</p> <p>Application to change a Well Name.</p> <p>Application to Abandon a Well or Suspend Drilling.</p> <p>Application to Alter Condition of a Well. Well History Supplement. Well Completion Data. Work-over Report No.</p> <p>Application to Commingle Production before Measurement.</p> <p>Approval to Commingle Production before Measurement.</p> <p>Application to Amend Approval No. to Commingle Production before Measurement.</p> <p>Application for M.P.R.—Oil.</p> <p>New Oil Well Report.</p> <p>New Gas Well Report.</p> <p>Well Inspection Report.</p> <p>Rig Inspection Report.</p> <p>Battery Inspection Report.</p> <p>Field Abandonment Programme and Approval.</p> <p>Well Card.</p> <p>Well Visit.</p> <p>Daily Drilling Reports.</p>



Drilling Authority No. ....

Date Issued .....

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES  
RESOURCES DIVISION

**WELL COMPLETION DATA**

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

Well name and number **IMPERIAL SEPAGE LAKE #1A**  
 Permit No. .... License No. **11493**  
**Imperial Oil Limited** Exploratory Licence No. **Not available**  
(Permitter, Licensee, Lessee)  
**Imperial Oil Limited** Exploratory Licence No. **Not available**  
(Operator)  
 Location: Unit **E** Section **19** Grid **55°20' 126°45'**  
 Latitude **65°17'30" N.** Longitude **126°00" W**  
 From Established Reference Marker .....

	DATE	DEPTH	Pool (S)
Spudded	<b>Dec. 15/44</b>		Interval(s) open to production
Suspended			
Resumed			
Finished Drilling			
Deepened			Elevation: Gr. <b>217</b>
Complete (gas/oil)			K.B. <b>224</b>
Abandoned	<b>Jan. 11/45</b>	<b>1636</b>	Drilling Contractor & Rig No. <b>I.O.I.</b>
Rig released	<b>Jan. 11/45</b>	<b>1636</b>	Contractor's Licence No. ....

**CASING RECORD**

Casing Size (Inches)	Weight	Amount	Set at -	Bags of Cement	Method
1. <b>8 5/8</b>			<b>264.1</b>	<b>75</b>	
2. <b>8 5/8</b>		<b>33 was recovered from the hole before it was officially abandoned.</b>			
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth	Sub-Sea	From	To	Rec.	From	To	Rec.
Recent	<b>0</b>	<b>+ 224</b>	<b>985</b>	<b>996</b>				
Up. Ft. Ck. Shale	<b>60</b>	<b>+ 164</b>	<b>996</b>	<b>1011</b>				
Bituminous Sh. Zone	<b>643</b>	<b>- 419</b>	<b>1558</b>	<b>1563</b>				
Basal Limestone	<b>989</b>	<b>- 765</b>						
Lr. Ft. Ck. Shale	<b>1035</b>	<b>- 811</b>						
Beavertail ls.	<b>1545</b>	<b>- 1321</b>						

**LOG RECORD**

Run No.	Type of Log	From	To
<b>1</b>	<b>Electric</b>	<b>50</b>	<b>1628</b>

CEMENTING RECORD (Plug, Squeeze, etc.)

PERFORATING RECORD (Bullet, Jet)

SERVICING RECORD (Acidizing, Fracing, etc.)

CEMENTING RECORD (Plug, Squeeze, etc.)		PERFORATING RECORD (Bullet, Jet)		SERVICING RECORD (Acidizing, Fracing, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks
	1545		C 15				No Acid
	640		C 15				
	285		C 15				

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.B.H.P.	F.S.I.B.H.P.	I.F.B.H.P.	F.F.B.H.P.	I.H.P.	F.H.P.	REMARKS
1		Imperial	267	307										No flow or fluid recovery
2		Imperial	541	570										No flow or fluid recovery
3		Canol	791	820										No flow or fluid recovery

Lab. No.	Sample	From	To	Source	Remarks	PRESENT STATUS OF WELL							
						Oil		(Interval)					
						Gas		(Interval)					
						Dry	Abandoned						
						Temp.							

Company: Imperial Oil Limited  
 Signed by: COPY ( )  
 Well File Clerk  
 Total: November 16/61  
 Date

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

(From Discovery No. 1)

0'	-	60'	Surface deposits.
60'	-	643'	Upper Fort Creek shales. Formation tests were run from 267' - 307', and from 541' - 570', with the object of testing the possibilities of obtaining production in fractures, but no traces of oil were found.
643'	-	989'	Bituminous zone. Hard, brownish-black, bituminous shale. A formation test from 791' - 820' showed no traces of oil.
989'	-	1035'	Basal Limestone member. Cores were composed of dark grey limestone with bluish-grey shale. Fossiliferous limestone occurred between 1006' - 1010'. Cores were taken from 965' - 1011'.
1035'	-	1545'	Lower Fort Creek shales. The top of this member is at 1035', on the basis of the electrolog. These shales are bituminous below 1485', and contain Tectaculites at 1530' - 1540'.
1545'	-	1636'	Beavertail-Rasparts limestone. Light grey to buff, dense, cryptocrystalline limestone with many small "birdseye" specks of clear calcite. The top of this series is placed at 1545', both from the electrolog and samples. There was no evidence of oil saturation. Cored from 1551' - 1563'.

All conclusions confirmed by electrolog.

Total Depth - 1636'.

This well was drilled by means of a rotary rig and an electrolog was taken from 50' - 1628'.

R. D. Sluzar

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... of the... of the... of the... of the... of the...

January 11th 1945 Seepage Lake No. 1A

354' Lease No. 11493 - 4651' North and 2330' East of Discovery No. 1.

T. O. Bosworth

The reasons for abandonment are - No production horizons. The sections 277' - 298' and 511' - 570' of the Upper Fort Creek shale and 791' - 820' of the Bituminous zone were tested with a Howo drill stem formation tester but no flow of oil, gas or water was encountered.

Outline...  
Well...  
Casing...  
Remarks...

The... of the... was 1636'

Diameter	Depth	Weight	Material	The intention is
	feet		used	to
2 1/2"	26 1/2'	32.0#/ft.	Cemented 75 sacks	3310'

No other strings of casing run.

Remarks:

- Abandonment plugs spotted as follows:
- (1) at 1545' with 15 sacks of cement.
  - (2) At 640' with 15 sacks of cement.
  - (3) At 285' with 15 sacks of cement
- and surface with identification marker.

Approved:

at the Wells

Dr. J. S. Stewart  
Supervisory Engineer

Signature *P. E. Lambert*  
P. E. Lambert

Bureau of Lands, Parks and Title  
Crests Branch  
Department of Mines and Resources

address Norman Wells, N. T.

File:

2922

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard tools used.

DEPARTMENT OF MINES & RESOURCES

NORTHWEST TERRITORIES BRANCH

WELL COMPLETION REPORT

As required by Section 81, sub-clause 3 of Petroleum & Natural Gas Regulations.

Field or Region... Designation of well... Lease or PATENT No... Registered owner... Location (Survey description)... Elevation... Date Operations commenced... Date completed... Type of Rig... Completed depth... Deviations from Vertical...

CASING & TUBING RECORD

Size Weight Thread Depth Cemented with
3 1/2" 32.2#/ft. SR 241' 75... - Dec. 18th
3 1/2" 32.2#/ft. SR 330' Pilled - January 10th
Distance between Rotary table (or derrick floor) and well head... 7' 10"

Gun Perforations... None

Nitro-glycerine... None

Initial Acid treatments... None

Initial Production Data... None

Water encountered and how shut off... None

Remarks: No evidence of gas or oil was encountered in drilling this hole and the well was abandoned as a non-producer on January 11th, 1945.

GEOLOGIC LOGS

Electric Logs taken... (1) 50' to 262'... (2) 262' to 1628'

Cores taken... (1) 285' to 296'... (2) 296' to 1011'... (3) 1451' to 1563'

SUMMARY LOG

Table with 2 columns: Depth and Nature of Rock. Rows include: 0' to 60' Recent; 60' to 643' Upper Fort Creek shale; 643' to 989' Bituminous shale zone; 989' to 1035' Basal limestone; 1035' to 1545' Lower Fort Creek shale; 1545' to 1636' Beavertail limestone.

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard tools used.

DEPARTMENT OF MINES & RESOURCES

NORTHWEST TERRITORIES BRANCH

WELL COMPLETION REPORT

As required by Section 81, sub-clause 3 of Petroleum & Natural Gas Regulations.

Field or Region: **Haynes Falls, N.W.T.** Designation of well: **Source Lake No. 1**  
 Lease or Permit No.: **11499** Registered owner: **Frank T. G. Research**  
 Location (Survey description): **14621' 2215' of Discovery No. 1 Well** Elevation: **324'**  
 Date Operations commenced: **December 3, 1944** Date completed: **December 15, 1944**  
 Type of Rig: **Frank's Solid Rotary** Completed depth: **260'**  
 Deviations from Vertical: **25° - 1/2°, 60° - 1/2°**

CASING & TUBING RECORD

Size	Weight	Thread	Depth	Cemented with
.....	<b>No casing strings run.</b>	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
Distance between Rotary table (or derrick floor) and well head.....				
<b>None</b>				
Gun Perforations.....				
<b>None</b>				
Nitro-glycerine.....				
<b>None</b>				
Initial Acid treatments.....				
<b>None</b>				
Initial Production Data.....				
<b>None</b>				
Water encountered and how shut off.....				
<b>None</b>				

Remarks: **This well was abandoned at 260' because of failure to recover lost fish consisting of 12 1/2' bit, drill collar sub and torque instrument. A wooden plug was driven in the hole and a 25 sack cement plug spotted at the surface.**

GEOLOGIC LOGS

Electric Logs taken: **None**

Cores taken: **None**

SUMMARY LOG

Depth	Nature of Rock
<b>0' to 50'</b>	<b>Recent</b>
<b>50' to 260'</b>	<b>Upper Fort Creek shale</b>

(if more space required use back of page)

**POOR COPY**

December 16th 44

Lease  
XXXXXX 11493

16th December 44

T. O. Roworth  
1 Mile North of Norman Wells.

4651' North of and 2390' East of Discovery No. 1.  
Seepage Lease No. 1A

Rotary YES

							Completed
1st	8 1/2"	328/ft.	SR	Spang	Low	290'	60 sacks
2nd	5 1/2"	148/ft.	SR	Spang	Low	1000'	60 sacks

Notes: None  
Oil and Gas 900'  
Probable depths 1100'

*Walter T. Row*  
Field Superintendent I  
Imperial Oil Limited

*Walter T. Row*  
for P. W. Lambright  
Manager



29282

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard tools used.

DEPARTMENT OF MINES & RESOURCES  
NORTHWEST TERRITORIES BRANCH

DAILY SUMMARY OF DRILLING (Rotary Tools)  
As required by Section 61 of the Petroleum & Natural Gas Regulations.

Field Norman Wells, Mackenzie River Basin, NWT  
Company or Contractor Imperial Oil Limited  
Well designation Seepage 1A

Day ending	Footage drilled				Depth at end of day	Drilling Mud		Slope Tests		Remarks
	1st tour	2nd tour	3rd tour	Total		Average viscosity	Average weight	Depth	Inclination	
January 7	- - -	- - -	- - -	- - -	1563					Repairs & replacements
January 8	-25	- -47	1	73	1636	42	11.5			Ran electro-log
January 9	- - -	- - -	3	- - -	1639					(Laid down drill pipe, Kelly, etc)
January 10	- - -	- - -	- - -	- - -	1639					(Preparing to abandon well.)
January 11	- - -	- - -	- - -	- - -	1639					(Tearing out.) .....Ditto
										Abandoned hole.

Recovered one (1) joint of 8 5/8" casing (33').

General Remarks: Cemented at 1545' with 15 sacks.  
2nd plug at 640' with 15 sacks.  
3rd plug at 285' with 15 sacks.

Drilling Superintendent... *J.M. Fulton* .....  
Date .....

NOTE: All depths to be reported from top of rotary table if rotary used; Gerrick floor if standard tools used.

DEPARTMENT OF MINES & RESOURCES  
NORTHWEST TERRITORIES BRANCH

DAILY SUMMARY OF DRILLING (Rotary Tools)  
As required by Section 61 of the Petroleum & Natural Gas Regulations.

Field Norman Wells, Mackenzie River Basin, NWT  
Company or Contractor Imperial Oil Limited  
Well designation Seepage 1A

Day ending	Footage drilled			Total	Depth at end of day	Drilling Mud		Slope Tests		Remarks
	1st tour	2nd tour	3rd tour			Average viscosity	Average weight	Depth	Inclination	
						Secan	#/gal.			
December 31	15	11	- - -	26	996	40	10.3			Cored 11'
January 1	- - -	- - -	- - -	- - -	996					Repairs & replacements
January 2	15	- - -	34	49	1045					Drilling shale
January 3	37	22	50	109	1154					Ditto
January 4	81	38	18	137	1291					Drilling shale & reaming
January 5	74	51	57	182	1473					Drilling shale
January 6	72	18	- - -	90	1563					Limestone contact - 1545'

General Remarks: Ran electric log.  
Cored from 996-1011'.

Drilling Superintendent... *J.M. Fulton* .....  
Date .....

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard tools used.

DEPARTMENT OF MINES & RESOURCES  
NORTHWEST TERRITORIES BRANCH

DAILY SUMMARY OF DRILLING (Rotary Tools)  
As required by Section 61 of the Petroleum &  
Natural Gas Regulations.

Field Norman Wells, Mackenzie River Basin, NWT  
Company or Contractor Imperial Oil Limited  
Well designation Seepage 1A

Day ending <b>S.O.A.</b>	Footage drilled			Total	Depth at end of day	Drilling Mud		Slope Tests		Remarks
	1st tour	2nd tour	3rd tour			Average viscosity <b>Seconds</b>	Average Weight #/gal.	Depth	Inclination	
December 24th	16	- - -	- - -	16	570	42	10.1			Took formation test.
December 25th	- - -	- - -	- - -	- - -	570					Shut down for holiday
December 26th	15	60	47	122	692	45	10.0			Drilling shale.
December 27th	42	43	43	128	820					Ditto
December 28th	- - -	6	43	49	869					"
December 29th	34	16	21	71	940	38	10.6			"
December 30th	7	5	18	30	970					Reaming

General Remarks: Ran formation tester from  
791' to 820'

Drilling Superintendent... *J.M. Fulton* .....  
Date .....

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard tools used.

DEPARTMENT OF MINES & RESOURCES  
NORTHWEST TERRITORIES BRANCH

WEEKLY SUMMARY OF DRILLING (Rotary Tools)  
as required by Section 61 of the Petroleum &  
Natural Gas Regulations.

Field Norman Wells, Mackenzie River Basin, NWT  
Company or Contractor Imperial Oil Limited  
Well designation Seepage 1A

Day ending <u>2.00 A.M.</u>	Footage drilled			Total	Depth at end of day	Drilling Mud		Slope Tests		Remarks
	1st tour	2nd tour	3rd tour			Average viscosity <u>Secs</u>	Average Weight #/gal.	Depth	Inclination	
December 17th	63	51	- - -	114	267	50	11.8	180	3/4°	Drilling Shale
December 18th	- - -	- - -	- - -	- - -	267					Can electrolog Standing cemented
December 19th	- - -	- - -	- - -	- - -	267	- - -	- - -	- - -	- - -	Ditto
December 20th	- - -	- - -	- - -	- - -	267	- - -	- - -	- - -	- - -	"
December 21st	- - -	- - -	11	11	278	- - -	- - -	- - -	- - -	Drilled out plug.
December 22nd	30	11	51	92	370	39	9.6			Drilling shale
December 23rd	43	95	46	184	554					

General Remarks: Cemented 8-5/8" casing at  
264' with 75 sacks of cement.

Drilling Superintendent... J.M. Fultz.....  
Date .....

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard tools used.

DEPARTMENT OF MINES & RESOURCES  
NORTHWEST TERRITORIES BRANCH

WEEKLY SUMMARY OF DRILLING (Rotary Tools)  
as required by Section 61 of the Petroleum &  
Natural Gas Regulations.

Field Norman Wells - Mackenzie River Basin, NWT  
Company or Contractor Imperial Oil Limited  
Well designation Seepage 1A

Day ending 8.00 A.M.	Footage drilled			Total	Depth at end of day	Drilling Mud		Slope Tests		Remarks
	1st tour	2nd tour	3rd tour			Average viscosity Seconds	Average weight #/gal	Depth	Inclination	
December 15th	- - -	- - -	22	22	22					Spudded in.
December 16th	36	40	55	131	153	47	11.5			Drilling sand and gravel

General Remarks:

Drilling Superintendent... *J.M. Fulton* ...  
Date .....

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard tools used.

DEPARTMENT OF MINES & RESOURCES  
NORTHWEST TERRITORIES BRANCH

WEEKLY SUMMARY OF DRILLING (Rotary Tools)  
AS required by Section 61 of the Petroleum &  
Natural Gas Regulations.

Field Norman Wells - Mackenzie River Basin - N.W.T.  
Company or Contractor Imperial Oil Limited  
Well designation Seepage Lake No. 1

Day ending 8.00 A.M.	Footage drilled				Depth at end of day	Drilling Mud		Slope tests		Remarks
	1st tour	2nd tour	3rd tour	Total		Average viscosity	Average Weight #/gal.	Depth	Inclination	
December 5th	-	-	11	11	11	-	-			Spudded in.
" 6th	13	34	25	77	88	36	10.6			Drilling sand and boulders
" 7th	10	6	14	30	118	42	11.0			Drilling sandy shale.
" 8th	30	38	25	93	211	46	11.2			" hard shale.
" 9th	-	-	33	33	244	48	10.8			" sandy shale.

General Remarks:

Drilling Superintendent J.M. Fulton  
Date.....

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard tools used.

DEPARTMENT OF MINES & RESOURCES  
NORTHWEST TERRITORIES BRANCH

WEEKLY SUMMARY OF DRILLING (Rotary Tools)  
AS required by Section 61 of the Petroleum &  
Natural Gas Regulations.

Field Norman Wells - Mackenzie River Basin - N.W.T.  
Company or Contractor Imperial Oil Limited  
Well designation Seepage Lake No. 1

Day ending 8.00 A.M.	Footage drilled				Depth at end of day	Drilling Mud		Slope tests		Remarks
	1st tour	2nd tour	3rd tour	Total		Average viscosity	Average Weight #/gal.	Depth	Inclination	
December 10	24	-	-	24	268					Lost bit and sub and tool in hole. Fishing.
" 11	-	-	-	-	268					Fishing. Found fish at 263'.
" 12	-	-	-	-	268	-	-			Fishing.
" 13	-	-	-	-	268	-	-			Fishing.
" 14	-	-	-	-	268	-	-			Abandoned hole. Moved rig approximately 15'.

General Remarks:

Drilling Superintendent... *J.M. Fulton* .....  
Date.....

**NOTE:** All depths to be reported from top of rotary table if rotary used; derrick floor if standard tools used.

DEPARTMENT OF MINES & RESOURCES  
NORTHWEST TERRITORIES BRANCH

WEEKLY SUMMARY OF DRILLING (Rotary Tools)  
AS required by Section 61 of the Petroleum &  
Natural Gas Regulations.

Field Norman Wells - Mackenzie River Basin - N.W.T.  
Company or Contractor Imperial Oil Limited  
Well designation Seepage Lake No. 1A

Day ending	Footage drilled				Depth at end of day	Drilling Mud		Slope tests		Remarks
	1st tour	2nd tour	3rd tour	Total		Average viscosity	Average Weight #/gal.	Depth	Inclination	
8.00 A.M.										
December 15th	-	-	22	22	22	-	-			Spudded in.
" 16	36	40	55	131	153	48	11.4	90'	0°	Drilling sand and shale

General Remarks:

Drilling Superintendent.....*J.M. Fulton*.....  
Date.....