

IMPERIAL

LOON CREEK.

NO. 1

Drilling Authority No.

Date Issued

WELL NAME Imperial Loon Creek No. 1

FIELD Wildcat

Area: NORMAN Wells

LOCATION: Unit

Section

Grid

Latitude 65°11'06" N.

Longitude 126°54'23" W.

From Established Reference Marker

Rig Release Date: 30-3-45

Status D & A

Information Release Date 30-3-47

CHANGE OF NAME:

DATE RECEIVED	INDEX
	<p>Application for a Drilling Authority.</p> <p>Well Completion Data.</p> <p>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.</p> <p>Well History Supplement.</p> <p>Well Completion Data.</p> <p>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 LOCH CREEK #1

Permit No. P & NG #188 Lease No. ....

Imperial Oil Limited Exploratory Licence No. Not available  
(Permitter, Licensee, Lessee)

Imperial Oil Limited Exploratory Licence No. Not available  
(Operator)

Location: Unit A SPRINGBURY Section 52 Grid 65°20' - 126°45'

Latitude 65°11'06" N Longitude 126° 54'23" W

From Established Reference Marker S. 22653' W. 27537' of Discovery #1

	DATE	DEPTH	Pool (S)
Spudded	Nov. 23/43		Interval(s) open to production
Suspended	Nov. 26/43		
Resumed	Oct. 17/44		
Finished Drilling			
Deepened			Elevation: Gr. ....
Complete (gas/oil)			K.B. <u>382</u>
Abandoned	Mar. 30/45	5452	Drilling Contractor & Rig No. <u>In Co. Inc.</u>
Rig released	Mar. 30/45	5452	Contractor's Licence No. ....

## CASING RECORD

Casing Size (Inches)	Weight	Amount	Set at—	Sacks of Cement	Method
1. <u>10 3/4</u>			<u>312</u>	<u>80</u>	
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth	Sub-Sea	From	To	Rec.	From	To	Rec.
Cretaceous/Imperial	485	- 103	381	391				
Ft. Creek	1095	- 713	481	491				
Rampart	3205	- 2823	515	533				
Bear Rock	3545	- 3163	2912	2924				
Reming Group	3970	- 3588	3191	3219				
			3557	3574				
			3613	3674				
			4433	4445				
			4894	4912				

## LOG RECORD

Run No.	Type of Log	From	To
<u>1</u>	<u>Electric</u>	<u>312</u>	<u>5425</u>

CEMENTING RECORD (Plug, Squeeze, etc.)			PERFORATING RECORD (Bullet, Jet)			SERVICING RECORD (Acidizing, Fracing, etc.)					
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
	3625	& up	0 40								
	3230	& up	0 20								No Acid
	310	& up	0 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
										NO TESTS RUN				

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

Company: Imperial Oil Limited  
 Signed by: COPY ( ORIGINAL ) R. F. FINCH  
 Total: Well File Clerk  
 Date: November 16/61

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

25531

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... NORMAN WELLS... N.W.T. Designation of well... LOON CREEK NO. 1...
Lease or Permit No... 188 Registered owner... Imperial Oil Limited
Location (Survey description)... S 13132' E 19323' of post No. 1 of Loon Creek No. 1 & 3 Elevation... 512'
Date Operations commenced... Nov. 23/43 - Oct. 17/44 Date completed... Mar. 30/45
Type of Rig... Masco Skid Rotary Completed depth... 5452'
Deviations from Vertical... 164' - 0°, 375' - 1°, 1265' - 0°, 2900' - 1°

CASING & TUBING RECORD

Size 10 1/2" Weight 40.5#/ft. Thread 8R Depth 312' Cemented with 80 sacks - Oct. 21/44
no other strings of casing run
Distance between Rotary table (derrick floor) and well head... 10'
Gun Perforations... None
Nitro-glycerine... None
Initial Acid treatments... None
Initial Production Data... None
Water encountered and how shut off... None
Remarks: Well abandoned as a dry hole on March 30, 1945 as per Abandonment Notice.

GEOLOGIC LOGS

Electric Logs taken... from 312' to 5425'
Cores taken... (1) 381' to 391' (2) 481' to 491' (3) 515' to 533' (4) 2912' to 2924'
(5) 3191' to 3219' (6) 3557' to 3574' (7) 3613' to 3874' (8) 4433' to 4445'
(9) 4894' to 4912'

SUMMARY LOG

Depth Nature of Rock

(P.T.O.)

(if more space required use back of page)

SUMMARY LOG

<u>Depth</u>		<u>Nature of Rock</u>
0'	to 485'	Cretaceous
485'	to 1095'	Eosworth
1095'	to 2215'	Upper Fort Creek Shale
2215'	to 2612'	Bituminous Shale Zone
2612'	to 2636'	Essex Limestone
2636'	to 3205'	Lower Fort Creek Shale
3205'	to 3545'	Beavertail - Rampart Series
3545'	to 3970'	Bear Rock Dolomite
3970'	to 5452'	Mount Ronning (Silurian)

Report File (Edm)  
Pet. Eng.  
Toronto  
Dept. Mines etc (2)

# NOBLE DRILLING CORPORATION

Contract No. \_\_\_\_\_ Date 12-21-43 19\_\_

Lease LOON CREEK Company \_\_\_\_\_

Well No. 0012 Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ Range \_\_\_\_\_ County \_\_\_\_\_

	TOUR 1				TOUR 2				TOUR 3			
	Hoisting Hours	Time Change Bit	Going In Time	Total Trip Time	Hoisting Hours	Time Change Bit	Going In Time	Total Trip Time	Hoisting Hours	Time Change Bit	Going In Time	Total Trip Time
Trip 1												
Trip 2												
Trip 3												
PLEASE SHOW TIME & SIZE FOR HOLE DRILLED HOLE CORED HOLE REAMED AND FEET RECOVERY OF CORE.	From	To	FORMATION	Size Hole Rec'd	From	To	FORMATION	Size Hole Rec'd	From	To	FORMATION	Size Hole Rec'd
CLEANING OUT CAVING AND REAMING TIGHT HOLE SHOWN BELOW.	<p style="font-size: 2em; font-family: cursive;">Drilling started on this well on Nov. 23<sup>rd</sup> 44.</p> <p style="font-size: 1.5em; font-family: cursive;">Work was suspended on orders from U.S. Army Nov. 28<sup>th</sup></p>											
Core and Day Work Hrs. Drill Pipe in use	Coring Hours											
Day Work Drill Pipe Not in use	Nature of Work											
Run Tight Hole (G.O.) Savings	Feet											
Casing, Tubing Rods Run or Pulled	No. Joints											
Cementing and Time	Sacks											
Bailing, Swabbing and Shooting	Nature of Work											
Shot Down for Repair of Equip.	Nature of Repair											
Time Making Hole Surveys	Type Survey											
Hole Survey	Depth											
Bits	No.											
Corsheds	Size											
Mud Mixed	Sacks											
Mud Weights	18:01 A. M.											
Mud Viscosity	4:00 A. M.											
GENERAL INFORMATION	WAITING ON ORDERS											
DRILLER'S SIGNATURE	/s/ O.O. CONSTANT (eight)											

APPROVED BY \_\_\_\_\_ /s/ R.O. HARRIS (eight) APPROVED BY \_\_\_\_\_ /s/ R. BAKER

POOR COPY

NOTICE OF INTENTION TO BEGIN DRILLING OPERATIONS

Notice is hereby given, in duplicate, to the Director, Lands, Parks and Forests Branch, Department of Mines and Resources, Ottawa, at least 15 days before work is begun.

October 2

43

Sir:

Notice is hereby given as required by Section 14 of the Petroleum and Natural Gas Regulations, dated January 25, 1943, that it is our intention to begin boring a well on P. & M. G. Permit No. **Loon Ck. No 8** about the 15th day of **October** 19 **43**

Standing in the name of **Imperial Oil Ltd. by its Agent Kenneth F. MacLennan**

and located near Loon Creek 13152 ft south and 19323 ft east of Post No 1 of Loon Creek 1 and Loon Creek 3.

Note: Post No 1 of Loon Ck. 1 is 22653 ft south & 27537 ft west of Discovery Well No. 1

Being            feet of            line and            feet of            line

The well shall be known as **Loon Creek** No. **1**

We intend using the following equipment:-

Type of drilling rig	Rotary		<del>XXXXXX</del> Used				
CASING							
	Size	Weight	Thread	Brand	New Used	Depth	How set
Surface	10 3/4	40 1/2	8		new	250	cemented
	7"	26	8		"	2400	"
					or	3500	"
					or	3900	"

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.

Water - none  
Gas & Oil at 2400' Reef  
3500' Bear Rock  
3900' Silurian

The well is to be drilled by ~~Contractor~~ Contractor. If contractor give name.

**Koble Drilling Corporation**

The officers in charge of the operations will be:

*K. F. MacLennan*  
Field Superintendent 1  
Name of permitted **Imperial Oil Limited**

Approved

*J. S. Stewart*  
Supervisory Engineer.

Of the company  
Signature *J. S. Stewart*  
Title **Manager, Imperial Oil Limited, Producing Department**

25531

Imperial Oil Limited, in connection with the drilling, testing, and completion of the well, Department of Mines and Resources, Ottawa.

Active is hereby given, as required by Section 13 of the Act, to the well identified by the following information, to-wit:

March 29 45 LOON CREEK NO. 1  
512' Test, located on P. & M.G. Permit No. 188  
S13132' E19323' from Post No. 1 of Loon Creek No. 1 & 3

Imperial Oil Limited by its agent  
Kenneth F. McLennan

No producing horizons encountered

Oil, gas and water were encountered as follows and within about 100 feet of the surface:

- Oil - None
- Gas - None
- Water - None

The depth drilled to was 5452' feet and the following casing was installed:

Diameter	Depth Feet	Weight	Free, set or cemented	The intention is to withdraw	feet
10 3/4"	312'	40.5#/ft	cemented 80 sacks	None	

No other strings of casing run

Remarks:

The abandonment procedure will be carried out by spotting cement plugs as follows:

- (1) at 3625' and up - 40 sacks
- (2) at 3230' and up - 20 sacks
- (3) at 310' and up - 15 sacks

The top of the 10 3/4" casing will be capped and the location identified with a metal marking plate bearing the inscription Imperial Oil Limited - Loon Creek No. 1.

(S) as per M. & Resources (S)  
Report file (Bm)  
Toronto  
Pet. Eng. Div.  
Geol. Dept.

Approved: J. S. Stewart

Dr. J. S. Stewart  
Supervisory Engineer

Signature: G. L. T. 10  
G. L. T. 10

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

Address: Norman Wells, N.W.T.

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  
Company or Contractor Imperial Oil Limited  
Well designation Loon Creek 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 seconds	Average Weight #/cuft.	Depth	Inclination	
October 17th	-	26	20	46	82					Drilling sand and shale
" 18th	22	29	13	64	102	11	72			" shale
" 19th	35	33	21	90	251	15	75			" "
" 20th	28	23	-	51	212	11	76			Box casing to 302'
" 21st	-	-	-	-	212	-	-			Cemented

General Remarks: The first 27' drilled by Noble Drilling Corporation  
on November 22nd, 1942.

Cemented 10 1/2" casing with 30 sacks of cement.

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 4 of the Petroleum &  
Natural Gas Regulation Act

Field Norman Wells, (Mackenzie River Basin) N.W.T.  
Company or Contractor Imperial Oil Limited  
Well designation Loon Creek No. 1

Day ending	Footage drilled				Depth at end of day	Drilling Mud		Slope tests		Remarks
	1st tour	2nd tour	3rd tour	Total		Average viscosity seconds	Average Weight #/gal.	Depth	Inclination	
8060 A.M.										Standing cemented
Oct. 22					312					" "
" 23					312					" "
" 24					312					Repairing pump drive clutch bearing.
" 25					312					Drilled out plug. Drilling shale.
" 26	-	-	24	24	336	45	72			Drilling sandstone
" 27	29	22	18	69	405	42	70			Drilling shale and sandstone
" 28	25	24	12	61	466	43	72			

General Remarks: Cored 381' to 391'. Recovered 10'.  
No production.

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, N.W.T. Mackenzie River Basin  
Company or Contractor Imperial Oil Limited  
Well designation Loon Creek No. 1

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	
Oct. 29	14	13	27	54	520	42	77			Drilling shale and sand -
" 30	13	18	30	61	581	42	79			stone.
" 31	21	25	27	73	654	42	83			Drilling shale
Nov. 1	19	6	28	53	707	43	87			" "
" 2	24	25	29	78	785	42	91			" sandy shale
" 3	24	26	17	67	852	44	89			" " "
" 4	14	23	21	58	910	44	88			" shale and sand- stone.

General Remarks: Cored from 481' to 491'.

Cored from 515' to 533'.

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

*Bony Dew.  
Bureau Sec & Lops  
Museum*

DEPARTMENT OF MINES & RESOURCES  
NORTHWEST TERRITORIES BRANCH

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

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

Field Norman Wells - Mackenzie River Basin  
Company or Contractor Imperial Oil Limited  
Well designation Loon Creek No. 1

Day ending	Footage drilled				Depth at end of day	Drilling Mud		Slope tests		Remarks
	1st tour	2nd tour	3rd tour	Total		Average viscosity seconds	Average Weight #/cu.ft	Depth	Inclination	
3.00 A.M.										
Nov. 5	17	23	26	66	976	44	88			Drilling sandy shale
" 6	23	30	18	71	1047	46	88			" " "
" 7	30	31	23	84	1131	46	86			Drilling shale
" 8	13	20	28	61	1192	43	86			" shale
" 9	26	40	25	91	1283	42	86			" "
" 10	32	19	17	68	1351	44	86	1265	0°	" "
" 11	31	28	25	84	1435	42	87			" "

General Remarks:

Drilling Superintendent J.M. Sulton  
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  
Company or Contractor Imperial Oil Limited  
Well designation Loon Creek No. 1

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 #/cu.ft	Depth	Inclination	
Nov. 12	14	19	21	54	1489	41	87	1475	10 4	Drilling shale
" 13	19	15	24	58	1547	42	87			" "
" 14	13	20	24	57	1604	42	88			" "
" 15	15	22	30	67	1671	32	88			" "
" 16	30	23	25	78	1749	42	88			" "
" 17	25	21	23	70	1819	42	89			" "
" 18	19	19	26	64	1883	42	89			" "

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  
Company or Contractor Imperial Oil Limited  
Well designation Loon Creek No. 1

Day ending	Footage drilled			Total	Depth at end of day	Drilling Mud		Slope tests		Remarks
	1st tour	2nd tour	3rd tour			Average viscosity seconds	Average Weight #/cu.ft.	Depth	Inclination	
8.00 A.M.										
Nov. 19	18	17	17	52	1935	42	88			Drilling shale
" 20	22	30	27	79	2014	42	87			" "
" 21	20	26	31	77	2091	42	88			" "
" 22	30	38	34	102	2193	42	88			" "
" 23	28	24	26	78	2271	42	87			" "
" 24	12	20	17	52	2323	43	88			" "
" 25	14	15	15	44	2367	48	87	2360	10	" "

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 Loon Creek 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 #/cu.ft.	Depth	Inclination	
November 26	1	12	24	37	2404	47	88			Repairing liner in mud Pump. Drilling shale
" 27	20	25	12	57	2461	45	86			Drilling shale
" 28	20	20	13	53	2514	48	88			" "
" 29	25	20	25	70	2584	48	86			" "
" 30	22	23	17	62	2646	55	85			" "
December 1st	31	16	30	77	2723	55	86			" "
" 2nd	26	292	22	77	2800	55	86			" "

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 Loon Creek No.1

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	Average Weight #- cu.ft.	Depth	Inclination	
December 3rd	18	28	24	70	2870	60	85			Drilling shale.
" 4th	-	-	30	30	2900	65	86			Ran electric log.
" 5th	15	10	27	52	2952	65	86	2900	$\frac{1}{4}^{\circ}$	Drilling shale
" 6th	18	31	29	78	3030	73	86			" "
" 7th	32	35	36	103	3133	66	85			" "
" 8th	27	31	18	76	3209	70	85			Limestone contact 3170'
" 9th	10	-	2	12	3221	64	85			Drilling limestone

General Remarks: Cored from 3191' to 3209'  
" " 3209' to 3219'.

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 Loon Creek No.1

Day ending 8000 A.M.	Footage drilled			Total	Depth at end of day	Drilling Mud		Slope tests		Remarks
	1st tour	2nd tour	3rd tour			Average viscosity	Average Weight #/cu.ft.	Depth	Inclination	
December 10th	25	31	21	77	3298	68	85			Drilling limestone
" 11th	15	4	13	32	3331	76	85			" "
" 12th	13	15	22	50	3381	68	84			" limestone & shale
" 13th	27	15	36	78	3459	73	84			" " "
" 14th	31	28	17	76	3535	65	84			" limestone
" 15th	-	22	14	36	3571	74	84			Fishing. Recovered fish - 4 hours.
" 16th	3	-	11	14	3585	63	84			Drilling limestone

General Remarks: Twisted off 3 stands and drill collar - recovered.  
Cored 3557' to 3571'  
3571' to 3574'

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

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

DEPARTMENT OF MINES & RESOURCES  
NORTHWEST TERRITORIES BRANCH

WELLS 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 Loon Creek No. 1

Day ending 8 A.M.	Footage drilled				Depth at end of day	Drilling Mud		Slope Tests		Remarks
	1st tour	2nd tour	3rd tour	Total		Average viscosity seconds	Average Weight #/cu.ft.	Depth	Inclination	
Dec. 17	16	12	7	35	3620	67	84			Drilling Limestone
18	9	9	14	32	3652	87	84			" "
19	5	-	-	5	3657	61	77			Cored 5'
20	-	10	12	22	3679	50	75			Drilling Limestone Beam 16'
21	14	-	16	30	3709	48	76			Drilling Limestone
22	6	14	13	33	3742	46	78			Drilling Limestone
23	3	-	-	3	3745	-	-			Cored 3'

General Remarks: Cored from 3613' - 3742'  
Jan. 19. - Formation test taken.  
Jan. 23. - Formation test taken - 3706' to 3745'

Drilling Superintendent. *J.M. [Signature]*  
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 Loon Creek 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 seconds	Average weight #/cu.ft.	Depth	Inclination	
Dec. 24	-	-	-	-	3745	-	-			Repairing Motor
25	-	-	-	-	3745	-	-			Idle 24 hrs.
26	-	-	-	-	3745					Reaming & working on motor.
27	-	-	-	-	3745					" "
28	10	10	19	39	3784	46	77			Coring
29	8	10	-	18	3802	47	78			"
30	-	-	-	-	3802					Reaming

General Remarks:

Drilling Superintendent... *J.M. Mulvaney* .....  
Date .....

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard tower 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 Loon Creek 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 second	Average Weight #/cu. ft.	Depth	Inclination	
Dec. 31	7	11	-	18	3820	-	-			Coring Idle 8 hours
Jan. 1	-	-	9	9	3829	-	-			Coring Idle 16 hours
Jan. 2	11	-	-	11	3840	45	77			Coring
Jan. 3	-	-	12	12	3852	44	78			Reaming & Coring
Jan. 4	2	2	16	20	3872	47	78			Coring and Drilling Limestone
Jan. 5	2	-	-	2	3874	42	77			Coring
Jan. 6	-	-	-	-	3874	-	-			Laid down overshot Fishing, stuck in hole Recovered twist off.

General Remarks:

Jan. 2 - Formation test from 3813' to 3840'.  
Fishing for Drill collar.  
5. - Formation Test from 3851' to 3874'

Drilling Superintendent.....

Date .....

*J.M. Fulton*

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 Ltd.  
Well designation Loon Creek No. 1

Day ending 3:00 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 #/cu.ft.	Depth	Inclination	
Jan. 7th	-	20	10	30	3881	43	78			Laid down drill collar. Drilling Limestone
8th	6	8	14	28	3909	40	77			Drilling Limestone
9th	7	14	15	36	3945	42	76			" "
10th	8	13	20	41	3986	42	77			" "
11th	13	15	16	44	4020	45	76			" "
12th	10	-	12	22	4052	44	76			" "
13	18	19	14	51	4103	43	78			" "

General Remarks:

Drilling Superintendent... *J.M. Fulton* ...  
Date ... *Jan 14 1945* ...

25531

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 Loon Creek No. 1

Day ending a.m.	Footage drilled				Depth at end of day	Drilling Mud		Slope tests		Remarks
	1st tour	2nd tour	3rd tour	Total		Average viscosity Seconds	Average Weight #/cu.ft.	Depth	Inclination	
January 14th	18	-	-	18	4121	42	78			Drilling line stranded. Changed drilling line
" 15th	-	-	12	12	4133	43	78			Changed crown. Drilling limestone
" 16th	14	12	11	37	4170	47	78			Drilling limestone
" 17th	13	19	10	42	4212	48	79			" "
" 18th	11	3	3	32	4244	49	79			" "
" 19th	7	23	17	47	4291	45	79			" "
" 20th	17	21	15	53	4344	45	78			" "

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 tool used.

DEPARTMENT OF MINES & RESOURCES  
NORTHWEST TERRITORIES BRANCH

25581

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

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

Day ending	Footage drilled			Total	Depth at end of day	Drilling Mud		Slope Tests		Remarks
	1st tour	2nd tour	3rd tour			Average viscosity seconds	Average Weight #/cu.ft.	Depth	Inclination	
8.00 A.M.										
January 21st	10	21	5	36	4380	48	78			Drilling limestone
" 22nd	-	-	15	15	4395	45	79			Changed drilling line Drilling limestone
" 23rd	14	17	7	38	4423	46	79			" "
" 24th	5	7	12	24	4457	48	79			" "
" 25th	13	7	7	33	4490	43	78			" "
" 26th	3	6	13	27	4517	42	78			" "
" 27th	11	6	12	29	4546	42	78			" "

General Remarks: January 21st - Drilling line broke.

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 - N.W.T.  
Company or Contractor Imperial Oil Limited  
Well designation Loon Creek No. 1

Day ending	Footage drilled			Total	Depth at end of day	Drilling Mud		Slope Tests		Remarks
	1st tour	2nd tour	3rd tour			Average viscosity seconds	Average weight #/cu.ft.	Depth	Inclination	
8.00 A.M.										
January 28th	2	12	10	24	4570	44	79			Changed the deadline. Drilling limestone.
" 29th	-	17	13	30	4600	42	79			Drilling limestone
" 30th	11	13	20	44	4644	42	79			" "
" 31st	10	-	-	10	4654	43	79			Fishing for drill collar.
February 1st	-	-	-	-	4654	50	79			Recovered fish
" 2nd	-	-	-	-	4654	-	-			Preparing to lay down drill pipe and pick up string of 3"
" 3rd	-	-	-	-	4654	-	-			Preparing to lay down derrick.

General Remarks: Top section of derrick twisted.  
Replaced with new section.

Drilling Superintendent J.M. Fulton  
Date February 8th

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard to 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 Loon Creek No. 1

Day ending	Footage drilled			Total	Depth at end of day	Drilling Mud		Slope Tests		Remarks
	1st tour	2nd tour	3rd tour			Average viscosity seconds	Average Weight #/cu.ft.	Depth	Inclination	
8.00 a.m.										
February 4	-	-	-	-	4654	-	-			Working on derrick and rotary clutch.
" 5	-	-	-	-	4654	-	-			Hoisted derrick Rigging up.
" 6	-	-	-	-	4654	-	-			Rigging up.
" 7	-	-	-	-	4654	-	-			Ran in. Bit bridge at 2650' and one at 4100'.
" 8	7	11	1	19	4673	-45	79			Drilling limestone
" 9	-	-	-	-	4673	0	-			Working on motor and mud pump.
" 10	1	-	2	3	4676	50	78			Changing bits. Reaming.

General Remarks:

Drilling Superintendent W. S. Mackenzie  
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 Loon Creek No. 1

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	
<u>8.00 A.M.</u>						seconds	#/cu. ft.			
February 11	5	9	17	31	4707	45	80			Drilling limestone.
12	16	14	12	42	4749	45	79			" "
13	5	19	17	41	4790	42	79			Reaming and Drilling
14	2	6	16	24	4814	42	78			General repairs
15	12	8	16	36	4850	45	79			Drilling limestone
16	12	7	3	22	4872	-	-			Reaming and drilling
17	11	11	-	22	4894	-	-			Plugged core bit

General Remarks:

Drilling Superintendent..... *De Haack*  
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 Loon Creek No. 1

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	
3.00 A.M.						seconds	#/cu. ft.			
February 18	-	9	9	18	4912	45	79			Drilling limestone
19	..	1	8	19	4931	44	79			" "
20	10	12	16	38	4969	44	79			" "
21	15	12	8	35	5004	48	80			" "
22	17	12	6	35	5039	46	80			" "
23	17	13	6	36	5075	45	80			" "
24	16	7	14	37	5112	45	81			" "

General Remarks: February 18 - 12' - 12' Recovery 12'.

Drilling Superintendent... R. C. ...  
Date .....

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard bits 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, N.W.T. Mackenzie River Basin  
Company or Contractor Imperial Oil Limited  
Well designation Loon Creek No. 1

Day ending	Footage drilled				Depth at end of day	Drilling Mud		Slope Tests		Remarks
	1st tour	2nd tour	3rd tour	Total		Average viscosity seconds	Average weight #/cu.ft	Depth	Inclination	
3.00 A.M.										
February 25	4	9	12	25	5139	45	81			General repairs Drilling limestone
26	1	19	14	34	5173	44	80			" "
27	7	16	13	36	5209	45	81			" "
28	6	14	15	35	5244	43	80			" "
March 1	7	14	20	41	5285 (5301)	45	8			" "
2	15	11	10	36	5277	47	81			" "
3		13	14	42	5379	44	89			" "

General Remarks:

1 1/2" pipe measure - 16 ft. over hole.  
Corrected depth 5301'.

Drilling Superintendent.....

Date .....

*C. W. Mackenzie*

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 Loon Creek No. 1

Day ending	Footage drilled			Total	Depth at end of day	Drilling Mud		Slope Tests		Remarks
	1st tour	2nd tour	3rd tour			Average viscosity seconds	Average Weight #/cu.ft.	Depth	Inclination	
8.00 A.M.										
March 4	9	3	22	34	5413	43	80			Drilling limestone
5	17	17	5	39	5452	44	81			" "
6	-	-	-	-	5452	45	81			Stack in hole
7	-	-	-	-	5452	46	80			" "
8	-	-	-	-	5452	46	80			" "
9	-	-	-	-	5452	47	81			" "
10	-	-	-	-	5452	45	80			" "

General Remarks: Circulated 20 barrels oil past bit in an attempt to loosen pipe and then made two attempts to loosen pipe by circulating acid; first stage 8 barrels acid, second stage 10 barrels acid.

Drilling Superintendent.....  
Date .....

*C. W. Mackenzie*

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if standard tower 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 Loon Creek No. 1

Day ending	Rotary Drilling			Total	Depth at end of day	Drilling Mud		Slope tests		Remarks
	Is	2nd	3rd			Average viscosity seconds	Average Weight #/cu.ft.	Depth	Inclination	
8.00 A.M.	-	-	-	-	5452	50	81			Working on stuck drill pipe and circulating.
March 11	-	-	-	-	5452	-	-			Circulating and mixing mud.
12	-	-	-	-	5452	-	-			Circulating and working stuck drill pipe.
13	-	-	-	-	5452	45	79			Waiting for fishing tools.
14	-	-	-	-	5452	44	79			Backing off drill pipe.
15	-	-	-	-	5452	-	-			" " " " 23 1/2 stands and drill collar left in hole.
16	-	-	-	-	5452	-	-			Pulled wash over pipe. Ran cutter.
17	-	-	-	-	5452	-	-			

General Remarks: March 12 - Circulated 10 bbls. acid - 1 barrel every 10 minutes out of bit.

Drilling Superintendent.....  
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 Loon Creek No. 1

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 #/cu.ft.	Depth	Inclination	
March 18					5452	11	78			Waiting on pipe cutter.
19					5452					Velocity shooting - Seismic. Ran in with cutter. Cutter stuck on tool joint.
20					5452					Working on tool joint and pulling cutter out of hole.
21					5452					Ran in wash-over pipe.
22					5452					Pulled out wash pipe, Ran cutter
23					5452					Working on stuck drill pipe.
24					5452					

General Remarks:

Drilling Superintendent.....  
Date.....

NOTE: All depths to be reported from top of rotary table if rotary used; derrick floor if stand 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 Loon Creek No. 1

Day Ending	Footage Drilled			Total	Depth at end of Day	Drilling Mud		Slope Tests		Remarks
	1st Tour	2nd Tour	3rd Tour			Average Viscosity seconds	Average Weight #/cu. ft.	Depth	Inclinations	
S. O. A. N.										
March 25					5452					Circulating. Pulled washover. Ran cutter. 5 studs 2 drill collars left in hole.
26					5452					Working on drill pipe. Recovered drill collar and drill pipe.
27					5452					Ran electric log. to 5425'.
28					5452					Cementing.
29					5452					Cementing. Tearing out.
30					5452					

General Remarks: Spotted abandonment plugs at:  
3625' - 40-sack cement plug.  
3230' - 20-sack cement plug.  
310' - 15-sack cement plug.

Drilling Superintendent C. W. Mackenzie  
Date .....