

IMPERIAL RAIDER

ISLANDS.

NO. 1

Drilling Authority No.

Date Issued

WELL NAME Imperial Raider Islands No. 1

FIELD ● Wildcat

Area: Norman Wells

LOCATION: Unit

Section

Grid

Latitude 65°18'15" N.

Longitude 127°06'57" W.

From Established Reference Marker

Rig Release Date: 5-5-45

Status D & A

Information Release Date 5-5-47

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>
MAR 22 1952	



CANADA

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 RAIDER ISLAND #1

Permit No. P & NC 194 Lease No.

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

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

Location: Unit C Section 39 Grid 65° 26' 127° 00'

Latitude 65° 26' 24.6" N Longitude 127° 06' 56.58" W

From Established Reference Marker 2. 2638' W. 11686' from Post #1 Raider Island #2

	DATE	DEPTH	Pool (S)
Spudded	<u>Mar 30/45</u>		Interval(s) open to production
Suspended			
Resumed			
Finished Drilling			
Deepened			Elevation: Gr. <u>209</u>
Completed (gas/oil)			<u>K.B. 216</u>
Abandoned	<u>May 4/45</u>	<u>2190</u>	Drilling Contractor & Rig No. <u>I.O.I.</u>
Rig released	<u>May 4/45</u>	<u>2190</u>	Contractor's Licence No.

CASING RECORD

Casing Size (Inches)	Weight	Amount	Set at—	Sacks of Cement	Method
<u>10 1/2</u>			<u>252</u>	<u>75</u>	
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth	Sub-Sen	From	To	Rec.	From	To	Rec.
<u>Recent</u>	<u>50</u>	<u>+ 166</u>	<u>1753</u>	<u>1764</u>				
<u>Cretaceous</u>	<u>312</u>	<u>- 96</u>	<u>2043</u>	<u>2083</u>				
<u>Doworth Slat.</u>	<u>810</u>	<u>- 564</u>						
<u>Un. Ft. Cl. Shales</u>	<u>1795</u>	<u>- 1579</u>						
<u>Bituminous Sh. Zone</u>	<u>2035</u>	<u>- 1819</u>						
<u>Basal Limestone</u>	<u>2060</u>	<u>- 1864</u>						
<u>Un. Ft. Cl. Shale</u>	<u>2190</u>	<u>- 1974</u>						

LOG RECORD

Run No.	Type of Log	From	To
<u>1</u>	<u>Electric</u>	<u>253</u>	<u>2185</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
	2019 232	2060 272	0 20 0 20								No Acid

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.R.H.P.	P.S.I.B.H.P.	I.F.B.H.P.	F.P.B.H.P.	I.H.P.	F.H.P.	REMARKS
1		0anol	2045	2083										No formation fluid recovered

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

Company: Imperial Oil Limited
 Signed by: G.P. () R. F. FROG
 Total: Moll File Clerk
 Date: November 16/61

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

RAIDER ISLAND NO. 1.

Coordinates: S. - 2,638'
 W. - 11,586'
 (of Post No. 1 of Raider Island No. 2)

Elevation: - 338.9'
 (Rotary Table)

0'	-	50'	Recent. Fine grained surface sand.
50'	-	312'	Cretaceous. Shales, with sandy shale and some sandstone.
312'	-	810'	Bosworth sandstones and shales.
810'	-	1794'	Upper Fort Creek Shales. Impedence peak at 1070'. Dark grey to blue-grey shales, with some sandy shale and very few limestone and sandstone streaks. Cored from 1753' - 1764'.
1795'	-	2035'	Bituminous zone. Dark grey-brown bituminous shales, with pyrite. More strongly bituminous shales from 1930' - 2035'.
2035'	-	2080'	Basal Reef limestone member. There was no reef limestone present. These coral beds were medium grey to brown, dense, fossiliferous, barren limestones, with some shale and shaley limestone. Cored from 2043' - 2083'. No formation fluid recovered from the formation test.
2080'	-	2190'	Lower Fort Creek shales.

All contacts confirmed by electrolog.

Total Depth - 2190'

This well was drilled by means of a rotary rig and an electrolog was taken from 253' - 2185'.

R. D. Sluzar

POOR COPY

30485

NOTICE OF INTENTION TO ABANDON A WELL

Notice to be forwarded, in duplicate, to the Director, Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.

Notice is hereby given, as required by Section 53 of the P. & N. O. Regulations, dated January 28th, 1923, that it is the intention on or about the day of **May 4th 1945** to abandon Well **Raider Island No. 1** elevation **338 feet**, located on P & N. O. Permit No. **194** **2638' S. and 11,686' W. from Post No. 1 Raider Island No. 2**

Registered in the name of **Imperial Oil Limited**

The reasons for abandonment are:-

No productive horizons encountered.

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

Oil:-

Gas:-

Water:-

Water rose to (How near the surface):

The depth drilled to was **2190** feet and the following casings were inserted:-

Diameter	Depth Feet	Weight	Free, set or cemented	The intention is to withdraw	feet.
10 1/2"	252'	40.5#/ft.	Cemented-75 sacks	-	none

No other strings of casing run.

Remarks:

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

- (1) 2019' to 2060' - 20 sacks
- (2) 232' to 273' - 20 sacks.

The 10 1/2" casing will be capped and the well location identified with a metal marking plate, bearing the inscription "Raider Island No. 1", affixed to the casing cap.

cc: Dept. Mines & Res. (2) approved: Mr. P. F. Shannon Toronto Edmonton Geol. Dept. Pet. Eng. 91.0

J. S. Stewart
Dr. J. S. Stewart
Supervisory Engineer

At the Wells

Signature

E. L. Taylor
E. L. Taylor
Field Superintendent

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

Address

Norman Wells, N.W.T.

Date:

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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 51, sub-clause 3 of Petroleum & Natural Gas Regulations.

Field or Region. ~~NORTH FALLS, N.W.T.~~ Designation of well. Raider Island No. 1.
Lease or Permit No. P. & N.G. 50. 194 Registered owner. Imperial Oil Limited
2638' S. and 11686' W. of Post No. 1, Raider Island No. 2
Location (Survey description).....Elevation. 338' (R.T.)
Date Operations commenced.....March 30, 1945.....Date completed. May 4, 1945
Type of Rig. 4 1/2" Skid Rotary.....Completed depth.....2190'
Deviations from Vertical. 95'-30" 215'-0" 400'-10" 650'-20" 945'-10" 1750'-14"

CASING & TUBING RECORD

Size	Weight	Thread	Depth	Cemented with
<u>10 1/2"</u>	<u>40.5#/ft.</u>	<u>8 R.</u>	<u>252</u>	<u>75 sacks April 11/45</u>
.....
.....	<u>No other strings of casing run</u>

Distance between Rotary table (or derrick floor) and well head. 8'0"
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 May 4/45
.....
.....

GEOLOGIC LOGS

Electric Logs taken. 253' to 2135'
Cores taken. (1) 1753' to 1764' and (2) 2043' to 2083'

SUMMARY LOG

Depth	Nature of Rock
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(if more space required use back of page)

SUMMARY LOG.

<u>Depth</u>	<u>Nature of Rock</u>
0' to 50'	Recent
50' to 312'	Cretaceous
312' to 810'	Bosworth sandstone
810' to 1795'	Upper Fort Creek shales
1795' to 2035'	Bituminous shale zone
2035' to 2080'	Basal limestone
2080' to 2190'	Lower Fort Creek shales

cc: Dept. Mines & Resources (2)
Mr. P. F. Shannon
Toronto
Edmonton
Pet. Eng. 91.0

IMPERIAL OIL LIMITED - NORMAN EXPLORATION

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WELL LOG REPORT

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Name of Well RAIDER ISLAND NO. 1

Elevation 331' (ground)

Location: S. 2,633' and N. 11,636' from Post No. 1 of Raider Island No. 2
oil location

DEPTH		How Drilled	DESCRIPTION	FORMATION	REMARKS ON TESTS, ETC.
From	To				
0'	10'	Rotary	Missing		
20'	30'	Rit	Fine grained, loose light colored surface sand	Recent	
60'	90'		Dark grey to black, soft, flaky, shale with a more platy, grey sandy shale at times micaceous; much surface sand at 60' and 120'	Cretaceous	Samples commonly contain with surface sand
100'	130'		Light grey, fine grained, platy, ss and darker grey, friable, commonly micaceous silty ss. with grey, platy sandy shale. More light grey, medium grained, slightly glauconitic ss. at 110'		
140'	250'		Light grey, fine to medium grained, slightly glauconitic, clean ss. with brownish-grey soft micaceous sandy shale and dark grey crumbly, platy shale present in varying proportions. Shale is not uncommonly pyritized. Much dark grey, soft shale and brownish friable sandy shale from 250' - 90'. Some ironstone and little ls. at 250'		
290'	310'		Light to medium grey, medium grained, clean, glauconitic ss. and shaley mic.	Base of Cretaceous	312' - electrolog

IMPERIAL OIL LIMITED - NORMAN EXPLORATION

WELL LOG REPORT

Name of Well **Raider Island No. 1 (cont'd)**

Elevation

Location:

DEPTH		How Drilled	DESCRIPTION	FORMATION	REMARKS ON TESTS, ETC.
From	To				
			ss. with some dark grey shale & sandy shale		
320'	360'		Brownish grey to dark grey, platy, sandy shale, at times micaceous, and similar shaley ss. with some grey, platy, brittle shale, also light to darker grey ss. as above. More grey platy shale coming in at 340' with little ls.	Bosworth	
			More grey, fine grained shaley ss. at 350'		
370'	390'	Rt	Block light grey, clean, fine to medium grained, fine grained, micaceous ss. similar light buff-grey more shaley ss. with micaceous sandy shale & shale, much cement from 390-400'	Bosworth	
400'	510'		Ss., greenish-grey, fine grained, micaceous, and grey, platy, sandy shale often micaceous, with dark grey, more brittle shales, some light brown ss. not uncommon. Little pyrite present. More sandy shale coming in at 450'		
520'	810'		Same as above with grey to dark grey shale commonly present in varying proportions. Ss. somewhat more slabby		

IMPERIAL OIL LIMITED - NORMAN EXPLORATION

WELL LOG REPORT

Name of Well **Raider Island No. 1 (cont'd)**

Elevation

Location:

DEPTH		How Drilled	DESCRIPTION	FORMATION	REMARKS ON TESTS, ETC.
From	To				
			than above. Brown fine grained ss. to 560'. Some pyritized shale at 580' with little grey ss. at 590'		
			Light brownish-grey, finely crystalline ls. quite common, especially at 620'		
			Block more light to medium grey, medium grained micaceous, slabby ss. frgs 680-690		
520'	610'	Rig	More sandy shale and shale coming in at 730'. Ss. coarser grained at 740'	Bogworth	
			Micaceous ss. and sandy shale more common at 760'. Chiefly grey to light brown medium grained, ss. at 770', at times micaceous, with platy, brittle shales coming in and little pyritized ss.	Upper Fort	Base of Bogworth at
820'	850'		Similar to above with grey to dark blue-grey platy, brittle shale and brownish-grey platy, softer sandy shale. Little brown shale	Creek	810' - electrolog
860'	1010'		Park grey to blue-grey, platy to splintery brittle shales with grey, usually micaceous sandy shale and similar slabby ss. some grey to light brownish-grey ss. with little brown		

IMPERIAL OIL LIMITED - NORMAN EXPLORATION

WELL LOG REPORT

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Name of Well Raider Island No. 1 (cont'd) Elevation

Location:

DEPTH		How Drilled	DESCRIPTION	FORMATION	REMARKS ON TESTS, ETC.
From	To				
			finely crystalline ls., little calcite		
			Little cement present from 860-890		
			More grey shales coming in at 890		
			Much medium to fine grained, grey to light brown, commonly micaceous, peeper salt ss. from 920-1010		
1030'	1220'	Hit	Becoming more shaley, with dark grey, platy to splintery brittle shales common as are also the more sandy varieties. Some light brown ls. present, & also shaley to silty ss. Little calcite at 1060	Upper Fort Creek	Impedence peak at 1070' - electrolog
			More slabby micaceous ss. from 1000-1120		
1230'	1520'		Dark grey to blue-grey, platy to splintery brittle shales and medium grey, platy, micaceous sandy shale with some light grey shaley ss. at times micaceous and limy, little brown shale and crystalline ls; pyrite commonly present. Shales somewhat more splintery from 1270' on. Samples somewhat less sandy below 1390'. More brown shale at 1410'		

IMPERIAL OIL LIMITED - NORMAN EXPLORATION

WELL LOG REPORT

Name of Well: **Blair Island No. 1 (cont'd)** Elevation

Location:

DEPTH		How Drilled	DESCRIPTION	FORMATION	REMARKS ON TESTS, ETC.
From	To				
1530'	1790'	Bit	Chiefly shales, as above with some sandy shale, at time notably micaceous, brown shale, ls; also little ss. & pyrite; very little ironstone. Shales somewhat more splintery at 1550'. More brown shale coming in at 1630'. Below 1660, the dark grey shales are commonly micaceous. At 1760', shale becoming more blocky than above with some dark grey-brown shales also present. More sandy shale at 1780 with pyrite.	Upper Fort Creek	
<u>Core No. 1</u>					
1753'	1794'	Core	Gray to dark blue-gray, quite hard, brittle shales possessing good cleavage and approx. horizontal lying. Few thin layers of interbedded grayish-brown, hard, similar shales, sometimes sandy and exhibiting poorer cleavage		Cored 1753-64 Recovery 11/11
1800'	1920'	Bit	Dark gray to dark gray-brown, platy to splintery brittle bituminous shales with sandy shale and gray, commonly micaceous shale as above; pyrite also		Top of Bituminous zone at 1795' - electrolog

IMPERIAL OIL LIMITED - NORMAN EXPLORATION

WELL LOG REPORT

Name of Well **Raider Island No. 1 (cont'd)**

Elevation

Location:

DEPTH		How Drilled	DESCRIPTION	FORMATION	REMARKS ON TESTS, ETC.
From	To				
			present. Little calcite, odd ls. streak		
			present. Brown shale coming in at 1840		
			Little ironstone at 1880'		
			Pyrite becoming more common from 1920 on		
1930'	2040'	Bit	Dark grey-brown to dark grey, platy to blocky, more strongly bituminous shales with pyrite and brown shale	Upper Fort Creek	Strong petroliferous odor. More strongly bituminous shales from 1930'-2035'
			quite common. Usual blue-grey platy shale and some sandy material; odd ls streak present with little limy shale & calcite. Pyrite common. Shale commonly pyritized particularly from 1960-90. More dark brown to almost black bituminous shale from 1990-2030.		
			At 2040 Sample becoming more limy		
2041'	2060'		Brown to dark grey brown, massive, finely crystalline, hard, dense, ls. with similar platy limy shale, and	Basal Reef ls beds	Top of Basal Reef ls. beds 2035' electrolog
			and dark brown to almost black, bituminous shale often pyritized, also some splintery grey shale.		
			More of a light buff, crystalline ls. coming in at 2060' with little calcite.		

IMPERIAL OIL LIMITED - NORMAN EXPLORATION

WELL LOG REPORT

Name of Well **Emifer Island No. 1 (cont'd)** Elevation

Location:

DEPTH		How Drilled	DESCRIPTION	FORMATION	REMARKS ON TESTS, ETC.
From	To				
			Dark grey to brownish grey, hard, dense ls. at 2070'		
<u>Core No. 1</u>					
2043	2063'	Core	Dark grey to dark grey-brown, massive hard, dense, finely crystalline fossiliferous ls. which varies to a more shaly, bituminous variety, interbedded with dark grey-brown to black, brittle beds at times limy bituminous shales, possessing good cleavage with pyrite nodules commonly dispersed throughout. Little carbonaceous material also present.	Basal ls. beds	Cored 2043'-2063' Recovery 20/20
			Beds are horizontal lying.		
<u>Cored No. 3</u>					
2063'	2083'	Core	Similar to above. Brownish-grey to dark grey, hard, dense, massive, crystalline ls. fossiliferous, grading to a darker brown almost black shaly bituminous ls. & limy shale. Chiefly ls with minor shale breaks containing pyrite & some carbonaceous material; calcite common. Limy shale and shaly ls present from 2063-970		Cored 2063'-2083' Recovery 15/20 Formation test run. Recovered 3 strands of drilling fluid

IMPERIAL OIL LIMITED - NORMAN EXPLORATION

WELL LOG REPORT

Name of Well **Baider Island No. 1 (cont'd)** Elevation

Location:

DEPTH		How Drilled	DESCRIPTION	FORMATION	REMARKS ON TESTS, ETC.
From	To				
2090'	2120'	Mit	Grey to dark grey platy shales and some grey, to light brown, finely crystalline to fine grained, hard, dense ls; some dark grey-brown, platy shale, and little pyrite. More light to medium grey ls at 2100' Much dark grey shale at 2110 with some brown shale.	Lower Fort Creek shales	Top of Lower Fort Creek shales at 2080' electrolog
2110	2130		Grey to blue-grey, platy shales with grey to light brown streaks quite common; some brownish shales, and little calcite also present.		
			TOTAL DEPTH 2130'		
<hr/>					
F. A. McKinnon					
cc Report File					
Pet. Eng.					
Edmonton					
Toronto					
Dept. Mines & Resources					
Mr. P. P. Shannon					

New York

March 12th 1945

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Notice is hereby given that the Imperial Oil Limited is
 authorized to drill a well on Raider Island No. 1, which is in
 location in the North West Quarter of Section 194
 of the 26th Twp. of March 1945
 Imperial Oil Limited

on Raider Island - approximately eight (8) miles downstream from Norman Falls.
 Being South 2638 feet and West 11686 feet from Post No. 1 Raider Island No. 2

The well shall be known as Raider Island No. 1

Type of Drilling Rig: National Skid Rotary

Size	Weight	Material	Brand	Year	Depth	How Set
10 1/2"	40.5#/ft.	8 Rd	Spang	New	300'	Cemented

We expect to encounter the following oil, water, and gas horizons and propose taking
 care of them as follows: (If well encounters any horizons in this sequence)

Water	None)	If oil or gas are encountered tests will be made to see if the well would be a commercial producer. Should this be so a string of 7" casing will be cemented to the top of the producing horizon.
Oil and gas	1600 feet)	
Probable depth	2000 feet)	

The well is to be drilled by Company: ~~XXXXXXXXXX~~ Contractor: ~~XXXXXXXXXX~~

The officers in charge of the operations will be:

At the Well: Callahan Taylor
 Field Superintendent

Of the Company:
 Signature: [Signature]
 Title: [Title]

Name of Permittee: Imperial Oil Limited

Approved: J. S. Stewart
 Acting Supervisory Engineer
 Dept. of Mines & Resources