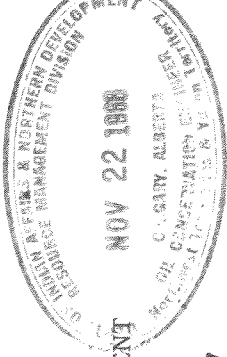




Drilling Authority No. 320

Project No.

File No.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

Application for a Drilling Authority

This notice of intention to begin drilling operations, in triplicate, and where required a plan of survey approved by the Surveyor General showing the target area or the site of the well must be submitted and approved before commencing operations.

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for approval to drill:—

Name and number of well McD GCO Northup Taylor Lake Y.T. K-15

Location: Unit K Section 15 Grid 66°00'; 133°00'

Latitude 65° 54' 39" N Longitude 133° 03' 00" W

From Established Reference Marker Shot Point #19 Shell Seismic Line #5-642

Universal Well Location Reference Lat. 65.91083° N., Long. 133.05000° W.

Elevation: Ground 1525' K.B. 1536' estimated feet above sea-level.

Well is expected to produce from Bear Rock formation at a depth

of about 5500 feet. Expected total final depth. 7500'

Area assigned to well (for Oil Conservation Engineer's use only)

Permit No. 2448 Lease No. N.A. Acreage 52,306

Permittee, licensee, or lessee Northup Exploration Ltd.

Exploratory Licence No. 1869

Surface owned by Crown or

(If alienated submit name and address of owner and occupant.)

Petroleum and natural-gas rights owned by

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1. 13-3/8"	48#	H 40	New	60'	75 Gyp Seal 75 Portland
2. 9-5/8"	36#	J 55	New	750'	270 Fondy 160 Portland
3. 7"	23#	4000' J55 on top 2000' N80 on bottom	New	6000'	720 Portland + 2%
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment (1) Bear Rock - 5500 Feet - Control Drill - Case Off If Necessary (2) Silurian - Ordovician Porosity - Control Drill.

10" 900 Series GK Hydril & 10" 900 Series Shaffer Hydraulic

Well will be drilled with Rotary Rig No. IE by S & T Drilling Co. (Western) Ltd.
(Drilling Contractor or company)

Responsible agent of applicant:—

At well L. Pajak

Address c/o Norman Wells

It is understood that if changes become necessary, notice of the change of plan will be submitted.

Dated at Calgary

R. Linker

day of November 19 68

Signed by

Manager, Canadian Division

Operator's Licence No. 1102

(For Resource Management Division use only)

Contractor's business Licence No. Exempted
At registered office V. Hunter & Associates
Address P.O. Box 5853, Edmonton, Alberta

Company J. Ray McDermott Canada, Ltd.

APPROVED

This application has been examined and approved subject to the following conditions:—

The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.

Dated 25th November 19 68

J. Ray McDermott

Oil Conservation Engineer

Forms to be submitted to Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.