



Canada Oil and Gas
Lands Administration

Administration du pétrole
et du gaz des terres du Canada

D.A. # 1213

E.A. # 158

Nova Scotia	☐	West Coast	☐	Exploratory	☒
Newfoundland	☐	Northern	☒	Development	☐
Gulf of St. Lawrence	☐	Hudson Bay	☐	Delineation	☐
				Service	☐

AUTHORITY TO DRILL A WELL

APPLICATION

This application is submitted with Section 82 of the Canada Oil and Gas Drilling Regulations. When approved under Section 83 of the Regulations, it is the requisite authority for the commencement of drilling operations.

Well Name in Full: ... PCI et al Tweed Lake M-47 ✓
Operator: ... Petro-Canada Inc. ✓ Drilling Program No.: ... N/A
Contractor: ... ATCO/EQUATK ✓ Permit or Lease No.: ... N/A
Drilling Rig or Unit: ... ATCO/EQUATK #76 ✓ Estimated Well Cost: ... \$5,785,000
Location-Unit: ... M ✓ Section: ... 47 ✓ Grid Area: ... 67-00-125-45 ✓
Coordinates: Lat.: ... 66°56' 47.11" ✓ Long.: ... 125°54' 09.42" ✓
Area: ... Colville Lake ✓ Field/Pool: ... Undefined ✓
Elevation- KB: ... 435.30m ✓ (ASL) GL ... 429.10m ✓
Approx. Spud Date: ... 1985-01-12 ✓ Estimated Days on Location: ... 30 ✓
Anticipated Total Depth: ... 1483m ✓ Target Horizon(s) ... Mt. Clark ✓
UWI: 300M476700125450

EVALUATION PROGRAM

Ten-metre sample intervals
Five-metre sample intervals ... ± 20m to TD (4 bottled sets, 2 bagged sets) ✓
Canned sample intervals ... ± 20m to T.D. (3 sets every 10m) ✓
Conventional cores at ... 1-18m @ 1288m (Mt. Clark), 1-18m @ 1333m (Proterozoic) ✓
Logs and Tests ... DLL-MSFL-GR, CNL-LDT-NGT-AMS/ML-Cal, BHCS-WF-GR-Cal, SHDT-DS ✓
1 DST (Mt. Clark sand), 1DST (Proterozoic Clastic Sequence)

CASING AND CEMENTING PROGRAM

O.D.	Weight:	Grade:	Setting Depth Below Seafloor:	Cementing Program (Volumes):
508mm	140 kg/m	K-55 BTC	10m	4 t permafrost ✓
340mm	101 kg/m	K-55, BTC	60m	14 t permafrost ✓
245mm	65/60 Kg/m	S-95/L-80 LTC	500m	39 t permafrost ✓
178mm	43 kg/m	S-95 LTC	1480m	33 t "G" + .5% T.I. + .1% R ✓

B.O.P. Equipment: ... 1-346mm, 21 Mpa Hydril Annular Preventer ✓
... 1-346mm, 21MPa Blind Rams ✓
... 1-346mm, 34 MPa Pipe Rams ✓

Other Information: ... Diverter system to be used while drilling surface hole; ✓
... 346mm, 21MPa Grant rotating head
... 346mm, 21 MPa Mud Cross w/automatic HCR valve ✓
... 346mm, 21 MPa Hydril Annular preventer

Signed: ... [Signature] Title: ... LAND DRILLING MANAGER
Date: ... 1984-12-20 Company: ... PETRO-CANADA INC.

APPROVAL

An approved copy of this notice is to be posted at each wellsite.

ADEQUATE
REVIEWED BY [Signature]
DATE 85 01 09

Signed: ... [Signature] Engineering Branch
Date: ... 10 Jan 85
File: ... 9211-P28-1-4

Department of Energy,
Mines and Resources

Ministère de l'Énergie
des Mines et des Ressources

Department of Indian Affairs
and Northern Development

Ministère des Affaires indiennes
et du Nord canadien

Canada