

HORN R. DECALTA ET AL TROUT LAKE

D-66

WELL NAME Horn R Decalta et al Trout Lake D-66
 FIELD Area:
 LOCATION: Unit B Section 66 Grid 61-40-119-45
 Latitude 61-35-09.8 Longitude 119-53-06.9
 U.W.L.R. 61-35-09.8 — 119-53-06.9
 U.W.I. 30006661119450

Rig Release Date:
 Status:
 Information Release Date:

CHANGE OF NAME:

DATE RECEIVED	INDEX
10-2-71	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
15-3-71	Application to Amend a Drilling Authority.
	Application to change a Well Name.
22-3-71	Application to Abandon a Well or Suspend Drilling.
22-3-71	Application to Alter Condition of a Well.
	Well History Supplement.
	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells - Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells - Vitter's Method.
	M.P.R. - Oil - Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale..... Small scale.....



File No. _____
Drilling Authority No. 507

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to ~~XXXXXXXXXXXX~~ Suspend Drilling

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for approval ~~XXXXXXXXXXXX~~ to suspend drilling:—
Name and number of well **HOEN R. DECALTA ET AL TROUT D-66**
Location: Unit **D** Section **66** Grid **61°40' N. Lat., 119°45' W. Long.**
Latitude **61°35'09.8"** Longitude **119°58'06.9"**
From Established Reference Marker
Universal Well Location Reference **Lat. 61.58605° N., Long. 119.96859° W.**
Permit No. **4187** Lease No. _____

**Western Decalta Petroleum Limited and
Tenneco OIL & MINERAL LTD.**

Date of commencement of proposed program **March 18, 1971**

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at _____
Gas at **1495-1510**
Water at **1511-1563**
Total Depth **2265** Date of last operations **March 7, 1971**
Present condition of well **Shut in with plate welded on top and production string (4 1/2")**
run in hole as shown below - waiting on perforating truck.

CASING RECORD

Casing Size O.D. inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 7	20#	8 jts.	2 1/2 K.B.	150 sx plus 3% CaCl₂	nil
2. 4 1/2	9.5#	1640.44	1637 K.B.	40 sx neat cement	
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			

The following logs have been run **IES, GRS-Caliper**
Other operations proposed **Perforating of interval 1497-1503.**

Operations to be carried out by **McCallough Services** Contractor Licence No. _____
Address _____ Address _____
Responsible Agent in field **Al Texan** **Gen. Del., Ft. Simpson**
Dated at **Calgary**, this **15th** Day of **March**, 19 **71**
Signed by **Al Texan** Company **Horn River Resources Ltd.**
Title **President** Operator's Exploratory Licence No. **1785**

Note:—The Oil Conservation Engineer's office must be notified before work is commenced.

(For OIL AND MINERAL DIVISION use only)

APPROVAL

This application has been examined and proposed programme approved, subject to the following conditions:

Confirming oral approval given by Mr. B.H.J. Thoms
on the 3rd March 1971.

Dated **22nd March**, 19 **71**

[Signature]
Oil Conservation Engineer



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Alter Condition of a Well

Notice of intention to Resume Operations to Recondition,
Deepen, Recomplete or Reopen a Suspended Well
(Strike out words that are not applicable.)

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for approval to:
Type of operation Complete for production casing
Name and number of well HORN R. DECALTA ET AL. TROUT D-66
Location: Unit D Section 66 Grid 61°40' N. Lat., 119°43' W. Long.
Latitude 61°35'09.8" Longitude 119°38'06.5"
Unique Well Identifier 3000663110119490
Universal Well Location Reference Lat. 61.58605° N., Long. 119.96899° W.
Permit No. 4187 Lease No. _____
Permittee, Licensee, Lessee Western Decalta Petroleum Limited and Tanneco Oil & Minerals Ltd.

OIL, GAS, AND WATER ENCOUNTERED

(Days)

Oil at _____
Gas at 1495-1510
Water at 1511-1563
Total depth 2263 Date of last operation March 7, 1971
Present condition of well Shut in with plate welded on top and production string (3 1/2")
run in hole as shown below - waiting on perforating track

CASING RECORD

Casing Size O.D. (Inches)	Weight	Amount	Set at—	Sacks of Cement and Additives	Amount Pulled
1. <u>7</u>	<u>206</u>	<u>8 lbs.</u>	<u>242 K.B.</u>	<u>150 ex plus 37 CaCl₂</u>	<u>oil</u>
2. <u>3 1/2</u>	<u>9.54</u>	<u>1640.44</u>	<u>1637 K.B.</u>	<u>40 ex neat cement</u>	
3.					
4.					
5.					
6.					

OPERATION PROPOSED

(If more space is required, attach additional sheet)

Program of operations — (Plugs, perforations, rework, etc.) Install wellhead - run perforating line
and perforate 1497-1503 (K.B.) with 3 (1 11/16") Tornado jet shots/ft. -
run initial potential test, flowing gas.

Operations to be carried out by McCullough Services Contractor's Business Licence No. _____
Address _____
Responsible agent in field Al Tazan Address Gen. Del., Ft. Simpson
Dated at Calgary this 15th day of March 19 71
Signed by [Signature] Company Horn River Resources Ltd.
Title President Operator's Exploratory Licence No. 1783

Note:—The Oil Conservation Engineer's office must be notified before work is commenced.

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

This application has been examined and program of operations approved, subject to the following conditions:

Confirming oral approval given by Mr. G. E. Hux on
the 15th March 1971.

Dated 22nd March, 19 71 [Signature] Oil Conservation Engineer

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



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

Application to Amend a Drilling Authority

This application, in triplicate, must be submitted and approved before commencing operations. If the well location is changed, this application must be accompanied where required, with a plan of survey approved by the Surveyor General.

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made to amend
Drilling Authority No. 507, concerning
Horn R Decalta et al Trout D-66
(Name and Number of Well)

The following amendments are required:

Change Latitude to read: $61^{\circ}35'09.8''$

Change Longitude to read: $119^{\circ}58'06.9''$

Reasons for the amendments:

Legal survey was taken showing exact co-ordinates

Dated at Calgary, this 11th day of March, 19 71

Signed by

Title

President

Company

Horn River Resources Ltd.

(For Resource Management Division use only)

APPROVED

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

UNIVERSAL WELL LOCATION REFERENCE:

Lat. 61.58605° N.
Long. 119.96859° W.

Date 15th March, 19 71

Oil Conservation Engineer

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

Drilling Authority No. 507

Project No.

File No.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL 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 Horn R. Decalta et al Trout D-66
Location: Unit D Section 66 Grid 61°40' N. Lat., 119°45' W. Long.
Latitude 61°35'04" Longitude 119°58'02"
Unique Well Identifier 3005666140119450
Universal Well Location Reference Lat. 61.58444° N., Long. 119.96722° W.
Elevation: Ground 790 M.B. (est.) 800 feet above sea-level
Well is expected to produce from Horn Plateau Reef formation at a depth of about 1600 feet. Expected total final depth 2275'
Area assigned to well
(For Oil Conservation Engineer's use only)

Permit No. 4187 Lease No. Acreage 60948
Permittee, licensee, or lessee Western Decalta Petroleum Limited & Tenneco Oil & Minerals Ltd.
Exploratory Licence No. 1696 1389
Surface owned by Crown or Crown
(If allocated submit name and address of owner and occupant.)
Petroleum and natural-gas rights owned by Crown

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	Scale of Cement
1. 7	20	J-55	Used	* 250	100
2.					
3.				*See Condition of Approval	
4.				No. 6	
5.					

Expected water, gas, and oil horizons and type of control equipment Middle Devonian carbonates -
2 - B.O.P.'s 8" - 900 Series Ram Type B.O.P.
8" - 900 Series Regan Torus bag type B.O.P.

Well will be drilled with Rotary Rig No. 57 by Big Indian Drilling Co. Ltd.
(Drilling Contractor or company)

Responsible agent of applicant:—

Contractor's business Licence No. 791

At well Al Whitteron

At registered office F. L. Woolley

Address Gen. Del., Ft. Providence

Address 1020 Aquitaine Tower, 540 Fifth Ave. S.W.

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

Dated at Calgary, this 10th day of February 1971

Signed by *[Signature]* Company Horn River Resources Ltd.

Title President Operator's Licence No. 1785

(For Oil and Mineral Division use only)

APPROVED

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

- Copies of this Drilling Authority shall be exhibited at the Drilling Rig in both the Doghouse and the Drilling Foreman's Office between spud and rig release dates.
- The Company will submit to this office, on Tuesday of each week, the latest
Dated 18th February 1971 Please see over page

Oil Conservation Engineer

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

reports received by radio on the progress of the well.

3. During well drilling and testing operations, every effort shall be made to ensure that drilling fluids, chemicals and wastes shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.
4. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.
5. Any additional strings of casing shall receive the approval of the Oil Conservation Engineer prior to running.
6. The Surface Casing shall be set at least 75 feet into a competent formation.



B.H.J. Thoms, Oil Conservation Engineer

Geological Prognosis

Grd. 790 (est.)	K.B. 800 (est.)	
	Depth	Elevation
Glacial Drift	0	
Fort Simpson	250	+ 550
Horn River	1450	- 650
Horn Plateau Reef	1525	- 725
Silt	2040	-1240
Chinchaga	2060	-1260
Red Beds	2240	-1440
Pre Cambrian	2250	-1450

Coring - Cut core as soon as porosity in Horn Plateau reef is established.

Testing- Test upper part of reef as soon as sufficient porosity for satisfactory test has been opened up.
If water recovered resume drilling.
If water free hydrocarbon is recovered core and test until zone fully evaluated

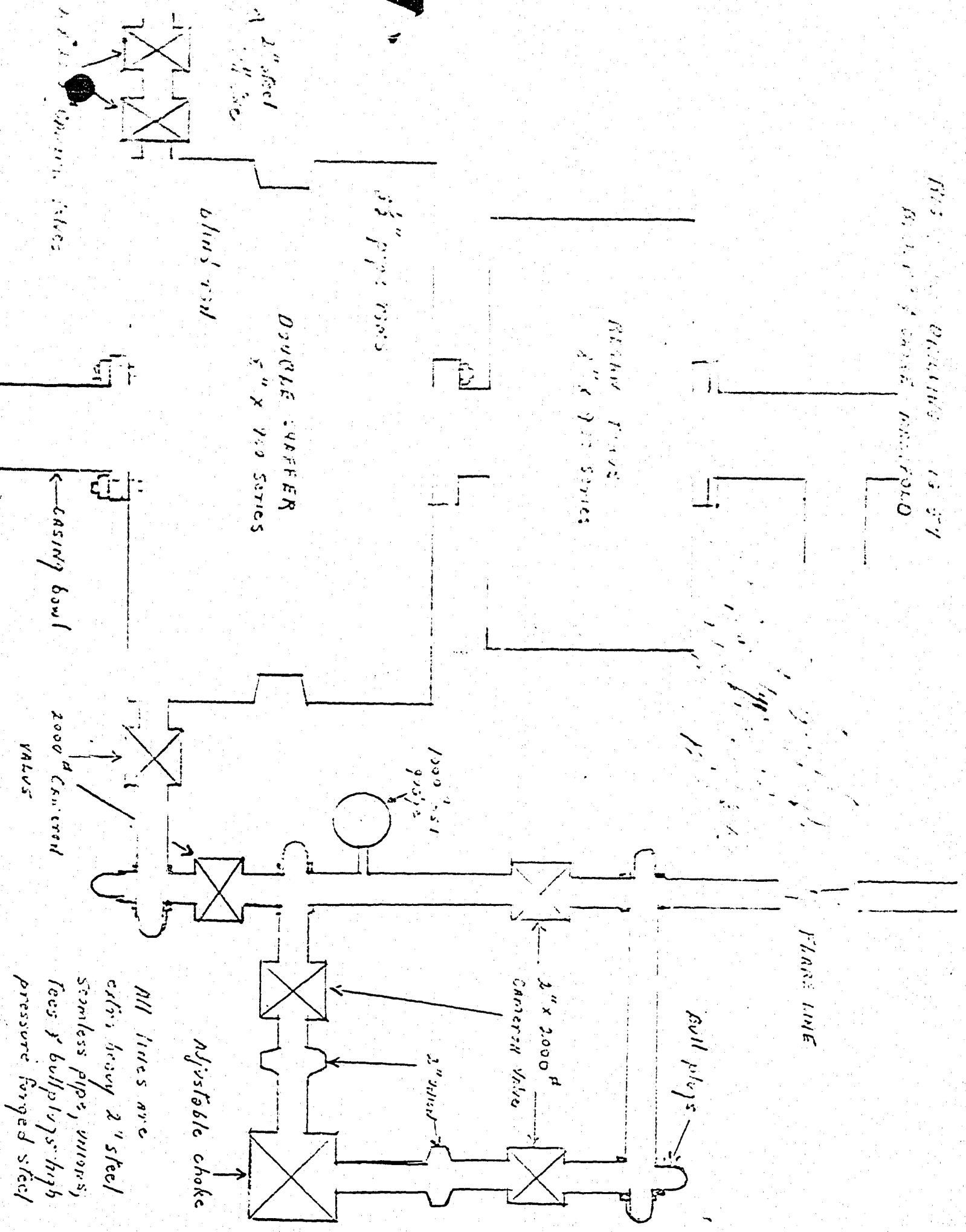
Samples - 10' Samples will be caught from grass roots to T.D.
Two sets of bottled samples will be made up at the rig.
The remainder of the sample will be forwarded to the G. S. C. in Calgary.

Logs - Unless additional logs are requested. Induction Electrical and Gamma Sonic Caliper logs will be run on reaching T. D.

Prepared by A.M. Patterson

Thurley

FIG. 1. CHOKING 15-37
 BULLOCK CHOKING 15-37



All lines are
 extra heavy 2" steel
 seamless pipe, unions,
 tees & bullplugs high
 pressure forged steel



Date Issued...Feb...18...1971...

LAND 52-90 (2) (3-70)

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

Western Decalta & Tenneco
(Permittee, Licensee, Lessee) Exploratory Licence No. 1696 and 1389

Horn River Resources Ltd. Exploratory Licence No. 1785
(Operator)

Latitude 61° 35' 04" N Longitude 119° 58' 02" W.

Universal Well Location Reference... Lat. 61.58444° N... Long. 119.96722° W.

CASING RECORD

GEOLOGICAL TOPS

CORE RECORD[illegible]



Nova Scotia
Newfoundland
Gulf of St. Lawrence

☐ West Coast
☐ Northern
☐ Hudson Bay

Well Status

☐ Suspended
☒ Completed
☐ Abandoned

APPLICATION TO ALTER CONDITION OF A WELL

This application form is to be submitted in triplicate to the District Conservation Engineer at least 45 days before commencement of operations.

Well Name: Horn River Decalta et al Area: Horn River
Trout 0-66
Coordinates: Lat: 61° 35' 09.8" N Long: 119° 58' 06.9" W
Operator: Western Decalta Petroleum Contractor: Computalog and Nowco
(1977) Limited
Drilling Rig or Unit: N/A Depth: 499 m
Date ATDW Issued: 71-02-18 Date of Last Operation 71-03-17

TYPE OF OPERATION

Airlift wireline and pumping equipment to location and abandon well.

SUMMARY OF PROPOSED OPERATIONS

- Set 114 mm bridge plug at + 449 m.
- Pressure test bridge plug to 7000 kPa for 15 minutes.
- Dump bail 30 m of cement on bridge plug.
- Set second bridge plug at 18 m.
- Dump bail 10 m of cement on bridge plug.
- Dig down 1 m, cut off casing strings and weld on steel plates. Backfill hole.
(a detailed program is attached)

Signed: [Signature]
Date: October 31, 1988

Title: Drilling Superintendent
Company: Western Decalta Petroleum (1977) Limited

APPROVAL

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

Signed: [Signature]
Conservation Engineer
Date: 89-06-06
ATDW No: 507 File:



Nova Scotia	☐	West Coast	☐	Well Status	
Newfoundland	☐	Northern	☒	Suspended	☐
Gulf of St. Lawrence	☐	Hudson Bay	☐	Completed	☐
				Abandoned	☒

WELL TERMINATION RECORD

This record is submitted in triplicate in compliance with Section 184 of the Canada Oil and Gas Drilling Regulations.

WELL DATA

Well Name: Horn River Decalta Et Al Trout D-66..... Area: Jean Marie River
Grid Area: 61-40-119-45..... Field/Pool: Trout Field.....
Permit or Lease No.: 4187..... Final Coordinates: Lat: 61° 35' 9.8" Long: 119° 58' 6.9"
Drilling Unit: Big Indian #57..... Elevations-RT/KB: 243.8..... SF/GL: 240.8 m.....
Spud Date: 71-02-22..... Rig Released: 71-03-07..... Total Depth: 2265 ft. 690.4 m

CASING AND CEMENTING

C.D.:	Weight:	Grade:	Depth Set:	Cement and Additives:
177.8 mm	29.76	J-55	74 m	6 Tonne
114.1 mm	14.14	J-55	499 m	1.2 Tonne

UWI: 300D666140119450

PLUGGING PROGRAM

Approval of the following program was obtained by (person) Bert Hadley..... from
(person) M.D. Thomas..... of the Canada Oil and Gas Lands Administration by means of
Application..... on June 5th..... 19 89

Type of Plug:	Interval:	Felt:	Cement and Additives:
Bridge Plug	450 m	Pressure test to 7 MPa for 20 minutes	
Cement	450 - 420 m	Dump Bail	Class 'G' Neat
Bridge Plug	18 m		
Cement	18 m - Surface		Class 'G' Neat

Lost Circulation/Overpressure Zones: N/A

Equipment left on Seafloor (Describe): N/A

Provision for Re-entry (Describe and attach sketch): N/A

Cores: Type: Conventional Intervals: 461.8 - 477.0 m

Other Downhole Completion/Suspension Equipment: Dug down to 1 metre cut off casing strings and welded on steel caps.

CERTIFICATION

I certify on the basis of personal knowledge of operations undertaken at the above named well that the above information is accurate.

Signed: M. Osterling P. Eng.

Name: M. Osterling

Title: Manager, Drilling and Construction

Date: JULY 6, 1989

Acknowledged by: L. Skonec Engineering Branch

Date: 89-07-19

File:

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

NOTE: Well RE: 18-JUN-89
ABAND.: 20-JUN-89

CARRIED OUT WITH
PORTABLE W/L EQUIPMENT.

R.

OPERATION REEF
NORTHWEST TERRITORIES
CANADA

Geological and Engineering
REPORT

HORN R DECALTA et al TROUT D-66

PREPARED FOR
HORN RIVER RESOURCES LTD.

PREPARED BY
JAMES A. LEWIS ENGINEERING CO. LTD.
Petroleum Reservoir Analysts
CALGARY - ALBERTA

INTRODUCTION

This is a concise report of the operations conducted at the well

Horn R Decalta et al Trout D-66

This well was drilled through the co-operative exploration program conducted by Horn River Resources Ltd. in the Northwest Territories of Canada under

"OPERATION REEF"

Data in this report were compiled by James A. Lewis Engineering Co. Ltd. Technical data were supplied by Big Indian Drilling Co. Ltd. Geological data were supplied by W. B. Gallup through Western Decalta Petroleum Ltd.



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Section 1

GENERAL

HORN RIVER RESOURCES LTD.

1020 AQUITAINE TOWER
540 FIFTH AVENUE S.W.
CALGARY 1, ALBERTA

July 6, 1971

File: 9708-39

The Participants
OPERATION REEF

SUBJECT: Addendum to Trout D-66, Completion Report

Gentlemen:

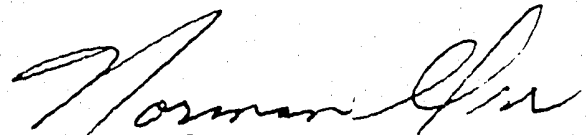
It has come to our attention that data of the Drill Stem Tests on the well Horn R Decalta et al Trout D-66 were left out of the bound report.

We have prepared these data on sheets that will slip inside your copy. These should follow page 11.

We regret the inconvenience this may have caused.

Very truly yours,

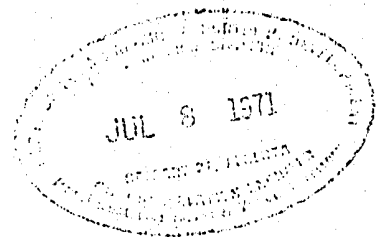
JAMES A. LEWIS ENGINEERING CO. LTD.



Norman Orr

For: HORN RIVER RESOURCES LTD.

NO:mb
Encl.



DRILL STEM TEST REPORT

WELL: Horn R Decalta et al Trout D-66

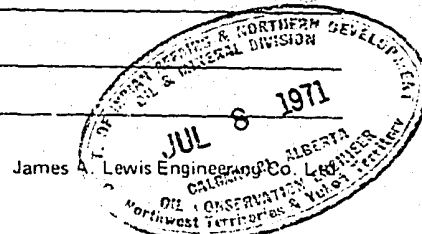
DATE: February 27, 1971 TEST NO. 1
 INTERVAL TESTED: 1511' - 1565' FORMATION: Horn Plateau Reef
 TOTAL DEPTH DRILLER: 1565' LOGS: None Run
 HOLE SIZE: 6-1/4" RAT HOLE SIZE: 6-3/16"
 TESTING COMPANY: Lynes United OPERATOR: Bell

MUD	DRILL PIPE	TEST TOOL
Type: <u>Gel Chem</u>	Type <u>I.F.</u>	Size Rubber <u>5-1/2"</u>
Wt. <u>9.1</u>	Size <u>3-1/2"</u>	Type <u>-</u>
Visc. <u>50</u>	Size T.J. <u>4-5/8"</u>	Tool Type <u>-</u>
W.L. <u>9.8</u>	Collars <u>3-1/2" I.F.</u>	Size Choke <u>5/8"</u>
pH <u>-</u>	Jars <u>-</u>	Wt. to Set <u>-</u>
F.C. <u>2/32</u>	Safety Joint <u>-</u>	Pull Loose <u>-</u>
Conditions <u>Good</u>	Pumpout Sub. <u>-</u>	Fluid Cushion <u>-</u>

Bit off Bottom <u>4:00 p.m. 2/26/71</u>	Preflow <u>5</u> min.	B.H. Temp. <u>-</u> °F.
Start Tester in <u>12:00 a.m. 2/27/71</u>	I.S.I. <u>60</u> min.	Gauge Depths <u>1522</u> K.B.
Tester on Bottom <u>2:30 a.m.</u>	Tool Open <u>60</u> min.	<u>1526</u> K.B.
Tool Open <u>2:40 a.m.</u>	F.S.I. <u>60</u> min.	
Tool Closed <u>2:45 a.m.</u>	Upper Gauge	Lower Gauge
Tool Open <u>3:45 a.m.</u>	I.H.S. <u>725</u> psig	I.H.S. <u>731</u> psig
Tool Closed <u>4:45 a.m.</u>	Preflow <u>155</u> psig	Preflow <u>175</u> psig
Tool Loose <u>5:45 a.m.</u>	I.S.I. <u>605</u> psig	I.S.I. <u>614</u> psig
Tool Out <u>8:00 a.m.</u>	Initial Flow <u>270</u> psig	Initial Flow <u>281</u> psig
Rubber Condition <u>O.K.</u>	Final Flow <u>407</u> psig	Final Flow <u>413</u> psig
Test O.K. <u>Yes</u>	Final S.I. <u>593</u> psig	Final S.I. <u>596</u> psig
	F.H.S. <u>718</u> psig	F.H.S. <u>722</u> psig

BLOW: Gas to surface in 10 minutes. Too small to measure. Fluid to surface 40 minutes.

RECOVERY: 800 feet black sulphurous salt water.



James A. Lewis Engineering Co. Ltd.

DRILL STEM TEST REPORT

WELL: Horn R Decalta et al Trout D-66

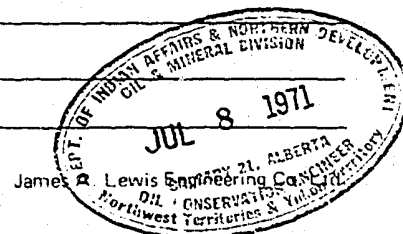
DATE: March 4, 1971 TEST NO. 2
 INTERVAL TESTED: 1481' - 1513' FORMATION: Horn Plateau Reef
 TOTAL DEPTH DRILLER: 2265' T.D. LOGS: Induction Electric and BHCSGRC
 HOLE SIZE: 6-1/4" RAT HOLE SIZE: -
 TESTING COMPANY: Lynes United OPERATOR: Bell
Straddle

MUD	DRILL PIPE	TEST TOOL
Type <u>Gel Chem</u>	Type <u>I.F.</u>	Size Rubber <u>5-1/2"</u>
Wt. <u>9.2</u>	Size <u>3-1/2"</u>	Type <u>-</u>
Visc. <u>80</u>	Size T.J. <u>4-5/8"</u>	Tool Type <u>-</u>
W.L. <u>10</u>	Collars <u>3-1/2" I.F.</u>	Size Choke <u>5/8"</u>
pH <u>-</u>	Jars <u>-</u>	Wt. to Set <u>-</u>
F.C. <u>2/32</u>	Safety Joint <u>-</u>	Pull Loose <u>-</u>
Conditions <u>Good</u>	Pumpout Sub. <u>-</u>	Fluid Cushion <u>-</u>

Bit off Bottom <u>1:30 p.m. 3/4/71</u>	Preflow <u>5</u> min.	B.H. Temp. <u>-</u> °F.
Start Tester in <u>8:00 p.m.</u>	I.S.I. <u>60</u> min.	Gauge Depths <u>1504</u> K.B.
Tester on Bottom <u>12:00 a.m. 3/5/71</u>	Tool Open <u>60</u> min.	<u>1500</u> K.B.
Tool Open <u>12:40 a.m. 3/5/71</u>	F.S.I. <u>60</u> min.	<u>1529</u>
Tool Closed <u>12:45 a.m.</u>	<u>Upper Gauge</u>	<u>Lower Gauge</u>
Tool Open <u>1:45 a.m.</u>	I.H.S. <u>730</u> psig	I.H.S. <u>735</u> psig
Tool Closed <u>2:45 a.m.</u>	Preflow <u>270</u> psig	Preflow <u>270</u> psig
Tool Loose <u>3:45 a.m.</u>	I.S.I. <u>633</u> psig	I.S.I. <u>633</u> psig
Tool Out <u>5:30 a.m.</u>	Initial Flow <u>327</u> psig	Initial Flow <u>333</u> psig
Rubber Condition <u>O.K.</u>	Final Flow <u>589</u> psig	Final Flow <u>590</u> psig
Test O.K. <u>Misrun</u>	Final S.I. <u>611</u> psig	Final S.I. <u>614</u> psig
	F.H.S. <u>733</u> psig	F.H.S. <u>737</u> psig

BLOW: Too small to measure

RECOVERY: 1200' muddy salt water.
Misrun



DRILL STEM TEST REPORT

WELL: Horn R Decalta et al Trout D-66

DATE: March 5, 1971 TEST NO. 3
 INTERVAL TESTED: 1481' - 1509' FORMATION: Horn Plateau Reef
 TOTAL DEPTH DRILLER: 2265' T.D. LOGS: IES and BHCSGRC
 HOLE SIZE: 6-1/4" RAT HOLE SIZE: -
 TESTING COMPANY: Lynes United OPERATOR: Bell

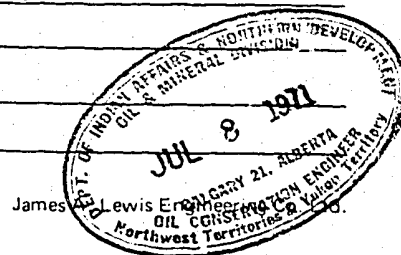
Straddle

MUD	DRILL PIPE	TEST TOOL
Type <u>Gel Chem</u>	Type <u>I.F.</u>	Size Rubber <u>5-1/2"</u>
Wt. <u>9.2</u>	Size <u>3-1/2"</u>	Type <u>-</u>
Visc. <u>80</u>	Size T.J. <u>4-5/8"</u>	Tool Type <u>-</u>
W.L. <u>-</u>	Collars <u>3-1/2" I.F.</u>	Size Choke <u>5/8"</u>
pH <u>-</u>	Jars <u>-</u>	Wt. to Set <u>-</u>
F.C. <u>2/32</u>	Safety Joint <u>-</u>	Pull Loose <u>-</u>
Conditions <u>O.K.</u>	Pumpout Sub. <u>-</u>	Fluid Cushion <u>-</u>

Bit off Bottom <u>1:30 p.m. 4/4/71</u>	Preflow <u>5</u> min.	B.H. Temp. <u>-</u> °F.
Start Tester in <u>9:00 a.m. 4/5/71</u>	I.S.I. <u>60</u> min.	Gauge Depths <u>1500</u> K.B.
Tester on Bottom <u>10:20 a.m.</u>	Tool Open <u>60</u> min.	<u>1504</u> K.B.
Tool Open <u>10:35 a.m.</u>	F.S.I. <u>60</u> min.	<u>1528</u>
Tool Closed <u>10:40 a.m.</u>	<u>Upper Gauge</u>	<u>Lower Gauge</u>
Tool Open <u>11:40 a.m.</u>	I.H.S. <u>741</u> psig	I.H.S. <u>730</u> psig
Tool Closed <u>12:40 p.m.</u>	Preflow <u>188</u> psig	Preflow <u>250</u> psig
Tool Loose <u>1:40 p.m.</u>	I.S.I. <u>611</u> psig	I.S.I. <u>610</u> psig
Tool Out <u>3:00 p.m.</u>	Initial Flow <u>302</u> psig	Initial Flow <u>289</u> psig
Rubber Condition <u>Good</u>	Final Flow <u>558</u> psig	Final Flow <u>553</u> psig
Test O.K. <u>Misrun</u>	Final S.I. <u>607</u> psig	Final S.I. <u>604</u> psig
	F.H.S. <u>737</u> psig	F.H.S. <u>719</u> psig

BLOW: Gas to surface in 25 minutes. Too small to measure.

RECOVERY: 1250' muddy salt water.
Misrun



SUMMARY OF WELL DATA

WELL: Horn R Decalta et al Trout D-66

NAME OF OPERATOR: Horn River Resources Ltd.
1020 Aquitaine Tower, 540 Fifth Avenue S.W., Calgary

LEGAL DESCRIPTION: Unit D Section 66 Grid 61° 40' N, 119° 45' W

LOCATION: LATITUDE: 61° 35' 04" N LONGITUDE: 119° 58' 02" W

UNIVERSAL WELL LOCATION REFERENCE: Lat 61. 58444° N, Long 119. 96722° N

UNIQUE WELL IDENTIFIER: 300D666140119450

CO-ORDINATES: _____

PERMIT OR LEASE: 4187

PERMITTEE, LICENCEE, LESSEE: Western Decalta Petroleum Limited and Tenneco Oil and Minerals Ltd.

DRILLING AUTHORITY: 507 DATE: February 18, 1971

CLASSIFICATION: New Field Wild Cat

ELEVATION: GROUND: 790 K.B. 800

DRILLING CONTRACTOR: Big Indian Drilling Co. Ltd.

WELLSITE GEOLOGIST: W. B. Gallup for Western Decalta Petroleum Ltd.

SURFACE CASING: 7" - 20 lb J-55 set @ 242' K.B. w/c 150 sacks plus 3% CaCl₂

HOLE SIZE: 0-245 - 9-7/8", 245 - 2265 - 7-7/8"

MUD SYSTEM: Gel Chemical

CORES: No. 1: 1515' - 1565' Recovered 19'

FORMATION TESTS: DST No. 1: 1511 - 1565' Gas to surface TSTM
DST No. 2: 1481 - 1513' Gas to Surface TSTM
DST No. 3: 1481 - 1509' Gas to Surface TSTM

PRODUCTION CASING: Ran 4-1/2" 9.5 lb. J-55 set @ 1637' Cemented with 40 sacks cement.

LOST CIRCULATION: None

LOGS: Induction Electrical 2263 - 243'
BHCSGRC 2262 - 243'

WELL SPUDED: 12:30 p.m. February 27, 1971

FINISHED DRILLING: 12:45 p.m. March 4, 1971

RIG RELEASED: 1:30 p.m. March 7, 1971

TOTAL DEPTH: 2265'

STATUS: Suspended Test Well

Section 2

GEOLOGICAL

GEOLOGY OF HORN RESOURCES

Decalta et al Trout River D-66

INTRODUCTION

The above well, at Lat. $61^{\circ} 35' 04''$, Long. $119^{\circ} 58' 02''$, was drilled February 22 - March 4, 1971, to a depth of 2075' to test an occurrence of the Horn Plateau Reef.

GEOLOGY

The Horn Plateau Reef was encountered, as anticipated, at 1498'. It is porous, bituminous and contains some gas and a very salty water (250,000 + ppm Cl.).

The Horn River formation, immediately above the reef was petroliferous over the interval 1430' - 1490'. During drilling, oil streaks appeared in the mud. On three instances samples were circulated off bottom accordingly.

The Horn Plateau reef may be subject throughout to hydrostatic pressures only, due to the outcrop of the formation near Fawn Lake, about 60 miles N. E. of the drilling location. However, since it is a bioherm it will most probably form traps which will contain hydrocarbons at pressures higher than hydrostatic.

The reef at the subject well contained only gas but since the overlying Horn River shales contained some liquid hydrocarbons, it is probable that some reef growth in the locality will have entrapped oil.

There is oil in the outcrop of the Middle Devonian Presquille formation at Windy Point.

From the above, there is evidence of oil occurring both above and below the Horn Plateau reef which is known to be biohermal. It would then seem to follow that where a large development of the reef and one having considerable relief could be found, it would contain oil.

Exploration to find an important development of Horn Plateau reef would entail considerably more detailed geology and geophysics than has been undertaken so far.

We considered that the hole was properly examined. It now stands as a capped gas well pending further production tests.

It is possible that such gas accumulations in these reefs could be deliverable to nearby communities, proximity etc. being favorable. This is an engineering problem. This well may be too remote to be considered a source of deliverable fuel at present.

W. B. Gallup
W. B. Gallup

FORMATION TOPS

<u>Formation</u>	<u>Sample</u>	<u>E. Log</u>
Ft. Simpson	50'	above casing shoe
Horn River	1390'	1400'
Horn Plateau	1500'	1498'
Pine Point	1850'	1870'
Chinchaga	2055'	2045'
Red Beds	2200'	2185'
Granite Wash	2255'	2245'
Precambrian	2263'	no log record
T.D. Driller	2265'	
Schlumberger	2264'	

Horn Resources Decalta et al Trout R. D-66

61° 35' 04" NL. 119° 58' 02" WL.
El. 790 (est.) K.B. 800' (est.)

SAMPLE AND CORE DESCRIPTIONS

0- 50	Glacial drift.
50-1390	<u>Ft. Simpson Fmt.</u> Shale, dark grey to greyish green, occasionally micaceous, somewhat fissile or platy. Minor amounts of grey, finely crystalline, argillaceous limestone increasing downwards.
1390-1500	<u>Horn River Fmt.</u> Shale and limestone: dark brown shale and dark brownish finely crystalline, argillaceous limestone. Traces of disseminated mica and pyrite throughout. Oil slicks on mud stream while drilling the lower part of this section.
1500-1515	<u>Horn Plateau Reef.</u> Limestone, coarsely crystalline, scattered porosity and small vugs, fossiliferous, pyrobituminous.
1515-1565	<u>Core No. 1</u>
1565-1730	Limestone, grey to white, coarsely crystalline, slightly porous, pyrobituminous. Occasional thin beds of finely crystalline to dense white limestone.
1730-1790	Limestone, grey to dark grey, becoming in part brownish downward. Crystalline with only traces of porosity. Pyrobitumen not present.
1790-1850	Limestone, grey and grey brown, dense to finely crystalline.
1850 1880	<u>Pine Pt. Fmt.</u> Limestone, dark grey to dense, finely crystalline, argillaceous.
1880-2010	Limestone, in part dolomitic. Grey brown, fine grained.

2010-2055 Shale, grey green, slightly silty.

2055-2200 Chinchaga Fmt.

Anhydrite and buff crystalline limestone.

2200-2255 "Red Beds", reddish, silty evaporites.

2255-2263 Granite Wash.

Precambrian

2263-2265' Granite, red, feldspathic.

T.D. 2265'.

CORE NO. 1

1515' - 1565'

Recovered 20'.

Horn Plateau Reef

Limestone -

Grey, coarsely crystalline, scattered pin point porosity and vugs, pyrobituminous. Bled traces of gas on recovery. Salty taste. 6" of brown, soft, finely crystalline, finely porous Limestone 2.5' above base of core.

Profuse coralla.

Section 2

CORING TIME

Horn R Decalta et al Trout D-66

Depth, Feet	Minutes Per Foot
1515-1516	12
1516-1517	17
1517-1518	2
1518-1519	18
1519-1520	4
1520-1521	11
1521-1522	5
1522-1523	8
1523-1524	9
1524-1525	12
1525-1526	11
1526-1527	2
1527-1528	11
1528-1529	9
1529-1530	12
1530-1531	6
1531-1532	12
1532-1533	12
1533-1534	13
1534-1535	7
1535-1536	2
1536-1537	6
1537-1538	3
1538-1539	5
1539-1540	7
1540-1541	10
1541-1542	5
1542-1543	7
1543-1544	20
1544-1545	9
1545-1546	6
1546-1547	5
1547-1548	22
1548-1549	16
1549-1550	7
1550-1551	8
1551-1552	10
1552-1553	4
1553-1554	5
1554-1555	8
1555-1556	8
1556-1557	8

Section 2

CORING TIME (Continued)

Horn R Decalta et al Trout D-66

Depth, Feet	Minutes Per Foot
1557-1558	9
1558-1559	9
1559-1560	9
1560-1561	2
1561-1562	8
1562-1563	8
1563-1564	9
1564-1565	8

Section 3

DRILLING AND ENGINEERING

SUMMARY OF DRILLING OPERATIONS

Horn R Decalta et al Trout D-66

Date	Depth	Operation
2-22-71	0'	Rigging up to spud in.
2-23-71	245'	Running Casing. Spudded well at 12:30 p.m. February 22, 1971. Drilled 9-7/8" hole to 245'. Ran 7" casing.
2-24-71	848'	Drilling 6-1/4" hole. Ran 245' of 7" - 20 lb. J-55 casing plus float collar and guide shoe set at 242' K.B. Cemented with 150 sacks cement plus 3% CaCl ₂ . Plug down 9:30 a.m. February 24, 1971. Headed up and tested BOP's. Tested Blind Rams, Pipe Rams and Hydril each to 800 psi, held pressure on each for 15 minutes, held OK.
2-25-71	1515'	Pulling out core barrel. Barrel plugged on first trip into hole.
2-26-71	1518'	Cutting Core No. 1. Mud wt. 9.5 Vis. 80
2-27-71	1565'	Pulling DST No. 1. Cut Core No. 1 1515' to 1565'. Recovered 19'. Ran DST No. 1: 1511' to 1565'. Times 5 minutes, 60 minutes, 60 minutes and 60 minutes. Recovered 800' of salt water.
2-28-71	1565'	Waiting on repairs.
3- 1-71	1803'	Drilling 6-1/4" hole. Mud wt. 9.6, Vis. 38
3- 2-71	1958'	Drilling 6-1/4" hole. Mud wt. 9.1, Vis. 35
3- 3-71	2075'	Drilling 6-1/4" hole. Mud wt. 8.8, Vis. 34
3- 4-71	2235'	Drilling 6-1/4" hole. Mud wt. 9.3, Vis. 36
3- 5-71	2265'	Running DST No. 2: 1481' to 1513'. Misrun.
3- 6-71	2265'	Waiting on casing. Ran DST No. 3: 1481' to 1511'. Misrun. Plugged back from 2265' to 1850'.
3- 7-71	1850'	PBD. Circulating casing. Ran 34 joints 4-1/2" 9.5 lb./foot K-55 new casing. 1640' overall. Landed at 1637' K.B. Cemented with 40 sacks of cement, slurry weight 15.2 lbs./gallon. Plug down 9:15 a.m.

SUMMARY OF DRILLING OPERATIONS

Horn R Decalta et al Trout D-66

Date	Depth	Operation
3- 8-71	1607'	PBD. Standing cemented awaiting testing. Rig released 1:30 p.m. March 7, 1971.

WELL: Horn R Decalta et al Trout D-66

WELL: Horn R Decalta et al Trout D-66

SUMMARY

Surface Hole 245 of 9-7/8 " 14-1/4 hours on bottom.
Main Hole 1970 of 6-1/4 " 102-1/2 hours on bottom.
Core Hole 50 of 6-3/16 " 8-1/2 hours on bottom.

James A. Lewis Engineering Co. Ltd.

SUMMARY OF MUD ADDITIVES

Horn R Decalta et al Trout D-66

Bentonite (Gel)	136 Sacks
Rapid Drill	20 Sacks
Caustic	50 Pounds

SURVEY RECORD

Horn R Decalta et al Trout D-66

Depth, Feet	Deviation, Degrees
50	3/4
85	1/2
113	1/2
153	1/2
404	3/4
728	2
1056	1-3/4
1300	1-7/8
1835	1-3/4
1983	1-1/2
2265	1-5/8

Section 4

LOGGING DATA

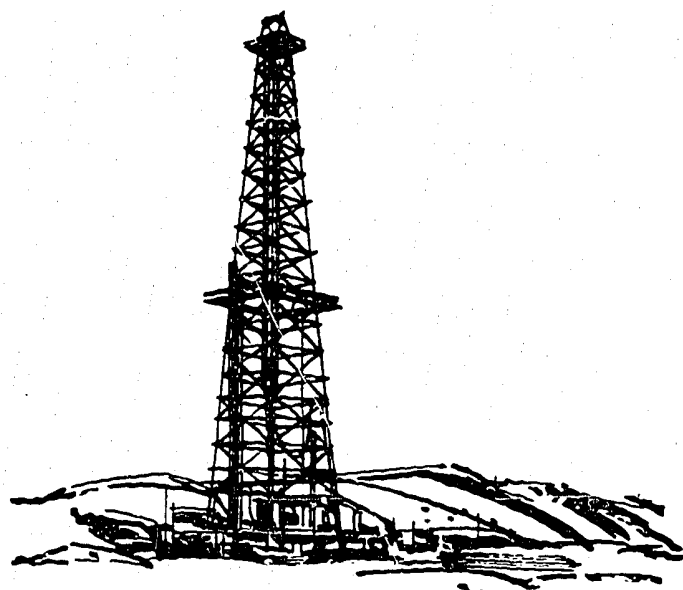
Horn R Decalta et al Trout D-66

Log	Scale	Depth
Induction Electrical	2" & 5"/100'	2263' to 243'
Borehole Compensated Sonic Gamma-Ray Caliper	2" & 5"/100'	2262' to 243'

LYNES

BRIGHT NAME IN THE OIL PATCH

Inflatable and Conventional Packer Tools



**DRILL STEM TEST
TECHNICAL SERVICE REPORT**

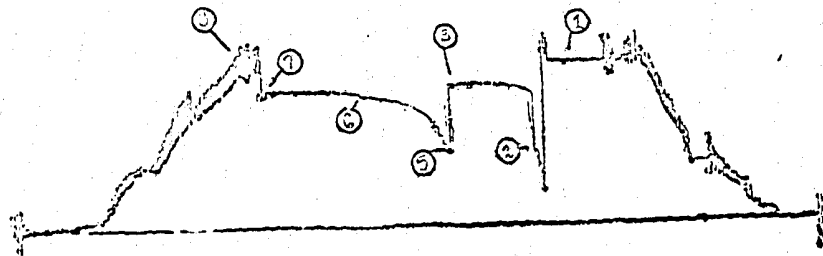
Vertical Circular Drilling

610 351 04.00 1190 581 02.00

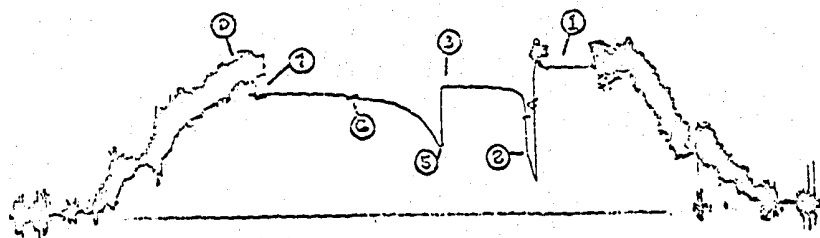
5/2

March 4/71

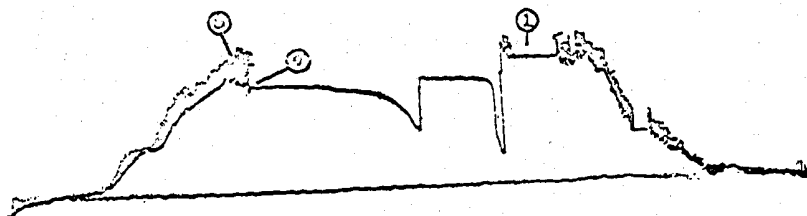
11.25 RIVER DECALTA at of TRIBUT RIVER D-66
 61° 35' 04.00 119° 53' 02.00 1097-2



11.25 RIVER DECALTA at of TRIBUT RIVER D-66
 61° 35' 04.00 119° 53' 02.00 2216-2



11.25 RIVER DECALTA at of TRIBUT RIVER D-66
 61° 35' 04.00 119° 53' 02.00 966-2
 BELOW BOTTOM PACKER
 PACKER FAILED



LYNES UNITED SERVICES LTD.

TEST DATA				GENERAL INFORMATION			
Test No.	2			Lynes Test	2		
Formation	Horn Plateau Reef			T.D.	2265		
Interval Tested	1481			Ft. to	1513		
Feet of Net Pay Tested	32			Ft.			
Type of Test	Conventional Straddle						
Cushion	Amount			Ft.	Well Name	Horn River Decalta et al Trout River	
Started in Hole at	2200		Hrs.	Tool Open at	2440		Hrs.
Pre-Flow	5		Mins.	Initial Shut-in	60		Mins.
2nd Flow			Mins.	Second Shut-in			Mins.
Final Flow	60		Mins.	Final Shut-in	60		Mins.
Remarks:							
Blow: Good initial blow in pail.				5 - James A. Lewis Engineering Ltd.			
Gas to surface in 20 minutes.				+ 40 xeroxed copies.			
GAS BLOW MEASUREMENTS				MUD AND HOLE DATA			
Measured with Too small to measure.				Mud Type Gel			
				Weight 9.2 Viscosity 80 Water Loss			
				Filter Cake 2/32" Bottom Hole Temperature			
Time	Surface Choke	Reading Inches	Cubic Feet/Day	Drill Pipe Size 3 1/2" IF Weight			
				Drill Collars 3 1/2" IF I.D. Feet Run			
				Main Hole or Casing Size 6 1/4"			
				Rathole or Liner Size No. of Feet			
				Bottom Hole Choke Size 5/8"			
				Surface Choke Size 1"			
				Packer Rubber Size 5 1/2"			
				REMARKS Lower recorder indicates that the bottom packers failed. Misrun.			
RECOVERY							
TOTAL FLUID RECOVERED 1200				Ft. Consisting of:			
1200 Ft. of muddy salt water							
Ft. of							
Ft. of							
Ft. of							
Test was/was not Reverse Circulated							
Oil Recovery A.P.I.				Water Specific Gravity			
Salinity							
PRESSURE READINGS							
Inside _____ Outside _____ X		Inside _____ Outside _____ X		Inside _____ Outside _____ X		Inside _____ Outside _____	
Recorder No. 2816		Recorder No. 1097		Recorder No. 966		Recorder No. _____	
Capacity 4600		Capacity 4100		Capacity 5000		Capacity _____	
Depth 1504		Depth 1500		Depth 1529		Depth _____	
NUMBER KEY:							
1 - INITIAL HYDROSTATIC		730		735		750	
2 - PRE-FLOW		270		270		285	
3 - INITIAL SHUT-IN		633		633		649	
4a - 2nd INITIAL FLOW							
4b - 2nd FINAL FLOW							
4c - 2nd SHUT-IN							
5 - 3rd INITIAL FLOW		327		333		346	
6 - FINAL FLOW		589		590		603	
7 - FINAL SHUT-IN		611		614		635	
8 - FINAL HYDROSTATIC		733		737		758	

Kenting Oilwell Drilling Company

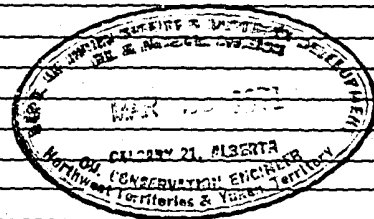
Horn River Decalta et al Trout River D-66

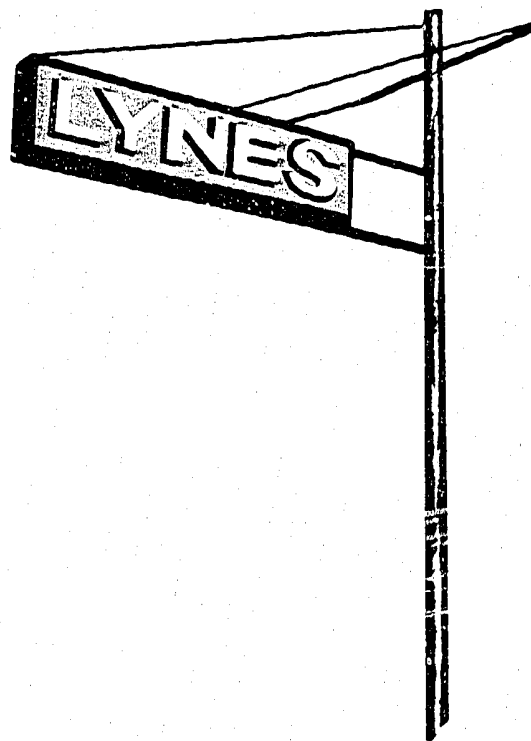
Test No. #2

March 4/71

Date of Test

610 35' 04.00 1190 58' 02.00





LYNES UNITED SERVICES LTD. 252-4501 CALGARY, ALBERTA

CORE ANALYSIS REPORT
FOR
HORN RIVER EXPLORATION LIMITED
HORN R. DECALTA ET AL TROUT D-66
WILDCAT, TROUT LAKE AREA
N. W. T.

CORE LABORATORIES - CANADA LTD.

Petroleum Reservoir Engineering
CALGARY - EDMONTON - REGINA

CORE LABORATORIES - CANADA LTD.

COMPANY HORN RIVER EXPLORATION LIMITED
WELL HORN R. DECALTA ET AL TROUT D-66
FIELD WILDCAT, TROUT LAKE AREA, N.W.T.
LOCATION 61 35' 04.00 NORTH LAT.
119 58' 02.00 WEST LONG.

FORMATION
DRILLING FLUID
ELEVATION
ANALYSIS
REMARKS

WATER BASE MUD

FULL DIAMETER
ALL SAMPLES SANDBLASTED
PRIOR TO KH ANALYSIS.

PAGE 1 OF 3
FILE 913-178
DATE REPORT MAR. 11/71
ANALYSTS RM, CC

AST - APPEARS SIMILAR TO
B - BROKEN CORE (K30 USED
FOR SUMMARY PURPOSES)
.. - PERMEABILITY > 2000 MD

PS - PERMEABILITY <
FS - FINE SAND
MS - MEDIUM SAND
CS - COARSE SAND

CONG - CONGLOMERATE
DOL - DOLOMITE
SH - SHALE
LMT - LIMY

SHY - SHALY
/SE - BREAK
BYT - PYROBITUMEN
CARB - CARBONACEOUS

A - ANHYDRITE
FOS - FOSSILIFEROUS
KLN - CRYSTALLINE
LAM - LAMINATION

V - VUGULAR
LV - LARGE VUG
SV - SMALL VUG
PPV - PIN POINT VUG

I - INTERGRANULAR
STY - STYLOLITIC
HF - HORIZONTAL FRACTURE
VF - VERTICAL FRACTURE

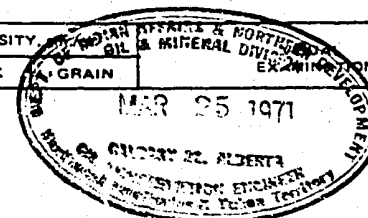
SS - SMALL FLUID SAMPLE
SL - SLIGHTLY
W - VERY
WV - WITH

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYS			PERMEABILITY FEET	POROSITY, PER CENT	POROSITY FEET	DENSITY		GRAIN
	DEPTH	THICK	KMAX	K90°	KV				BULK	GRAIN	

CORED INTERVAL 1515 - 1565

CORE NO. 1 1515 - 1565 REC. 19.0' 4 BOXES

1	1515.0-15.8	.8	1.91	.99	.44	1.53	7.8	6.24	2.46	2.67	I PPV
2	1515.8-16.2	.4	.67	.52	.41	.27	7.6	3.04	2.47	2.68	I PPV
3	1516.2-16.9	.7	469.00	140.00	11.60	328.30	19.0	13.30	2.17	2.68	I SV
4	1516.9-17.4	.5	77.50	51.90	.60	38.75	9.4	4.70	2.42	2.67	I SV
5	1517.4-18.2	.8	.22	.18	-0.1	.18	3.7	2.96	2.58	2.68	I PPV
6	1518.2-19.0	.8	.46	.41	.07	.37	3.6	2.88	2.58	2.68	I PPV
7	1519.0-19.6	.6	.62	.53	.20	.37	4.7	2.82	2.55	2.68	I PPV
8	1519.6-20.5	.9	.63	.54	.18	.57	3.9	3.51	2.57	2.67	I PPV
9	1520.5-21.3	.8	12.80	3.48	.85	10.24	6.6	5.28	2.49	2.67	I PPV
10	1521.3-21.9	.6	11.60	.53	.28	6.96	8.8	5.28	2.44	2.68	I PPV F
11	1521.9-22.5	.6	11.70	11.40	.25	7.02	7.2	4.32	2.49	2.69	I PPV
12	1522.5-23.0	.5	79.80	61.70	3.73	39.90	9.3	4.65	2.44	2.69	I SV
13	1523.0-23.6	.6	1.28	1.12	.35	.77	5.6	3.36	2.52	2.67	I PPV
14	1523.6-24.3	.7	9.75	5.31	1.81	6.83	7.7	5.39	2.48	2.69	I PPV
15	1524.3-25.2	.9	4.54	1.90	.43	4.09	6.9	6.21	2.50	2.69	I PPV
16	1525.2-25.9	.7	.86	.59	.17	.60	4.0	2.80	2.57	2.68	I PPV
17	1525.9-26.4	.5	2.03	1.48	.95	1.02	6.7	3.35	2.51	2.69	I PPV
17A	1526.4-26.7	.3	**	18.00	.21	5.40	16.7	5.01	2.24	2.69	I LVUG
18	1526.7-27.4	.7	17.00	8.53	2.01	11.90	13.3	9.31	2.33	2.68	I
19	1527.4-28.1	.7	9.91	1.61	.40	6.94	6.8	4.76	2.51	2.69	I PPV F
20	1528.1-28.7	.6	9.18	2.68	.25	5.51	8.4	5.04	2.45	2.68	I SV
21	1528.7-29.3	.6	.70	.63	.29	.42	6.0	3.60	2.52	2.68	I PPV
22	1529.3-30.5	1.2	7.49	4.10	.74	8.99	10.1	12.12	2.42	2.69	I PPV
23	1530.5-31.1	.6	20.90	6.92	3.41	12.54	9.6	5.76	2.44	2.70	I PPV
24	1531.1-31.7	.6	2.61	2.02	.93	1.57	8.3	4.98	2.46	2.68	I SV



CORE LABORATORIES - CANADA LTD.

COMPANY HORN RIVER EXPLORATION LIMITED
WELL HORN R. DECALTA ET AL TROUT D-66

PAGE 2 OF 3
FILE 913-178

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCYs			PERMEABILITY FEET	POROSITY PER CENT	POROSITY FEET	DENSITY, gm./cc.		VISUAL EXAMINATION
	DEPTH	THICK	KMAX	K _{90°}	KV				BULK	GRAIN	
25	1531.7-32.5	.8	7.22	1.74	.66	5.78	9.9	7.92	2.43	2.70	I SV
26	1532.5-33.3	.8	7.72	2.60	1.13	6.18	9.0	7.20	2.44	2.69	I SV
27	1533.3-34.0	.7	5.99	4.00	1.25	4.19	10.9	7.63	2.38	2.67	I SV
	1534.0-65.0	31.0	-	-	-	-	-	-	-	-	LOST CORE

CORE LABORATORIES - CANADA, LTD.

Petroleum Reservoir Engineering

HORN R. DECALTA ET AL TROUT D-66

PAGE: 3 OF 3

FILE: 913-178

WELL:

FORMATION:

SUMMARY INTERVAL:

1515.0 - 1565.0

TOTAL FOOTAGE:

50.0

FOOTAGE ANALYZED

19.0

FOOTAGE NOT ANALYZED:

TOTAL: 31.0 DENSE .0 LOST 31.0 DRILLED .0 *NABR .0 RUBBLE .0

SUMMARY
OF
ANALYZED CORE:

TOTAL

BY
PERM
RANGES:

LESS THAN 0.10 Md.

0.10 0.49 Md.

0.50 0.99 Md.

1.00 9.99 Md.

GREATER THAN 9.99 Md.

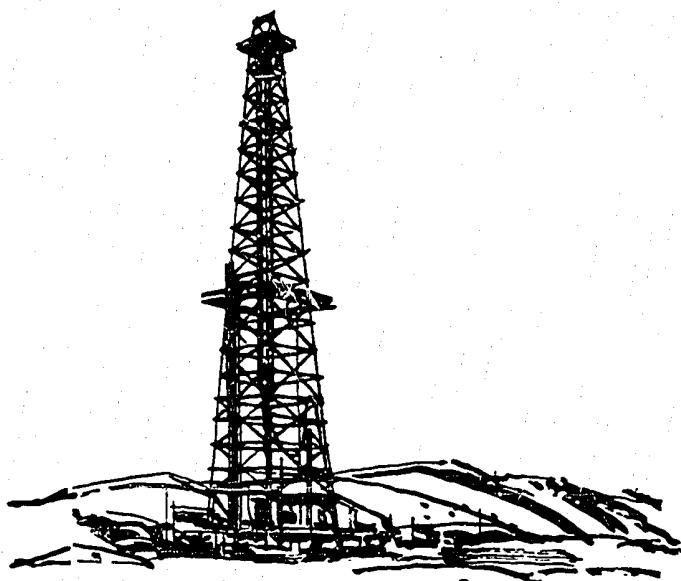
FOOTAGE	% OF ANALYZED CORE	WEIGHTED AVERAGE POROS. %	POROSITY FEET	WEIGHTED AVERAGE PERM. MD.	PERM. FEET	WEIGHTED AVERAGE RESID. OIL %	WEIGHTED AVERAGE TOT. WATER %
19.0	100.00	8.07	153.42	27.22	517.15	.00	.00
.0	.00	.00	.00	.00	.00	.00	.00
1.6	8.42	3.65	5.84	.34	.54	.00	.00
3.2	16.84	4.93	15.77	.70	2.23	.00	.00
8.9	46.85	8.34	74.20	6.00	53.37	.00	.00
5.3	27.89	10.87	57.61	86.98	461.01	.00	.00

*NOT ANALYZED BY REQUEST

LYNES

BRIGHT NAME IN THE OIL PATCH

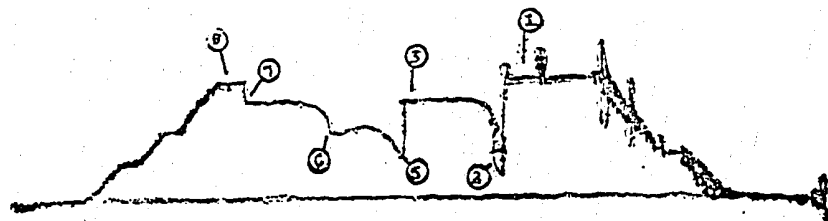
Inflatable and Conventional Packer Tools



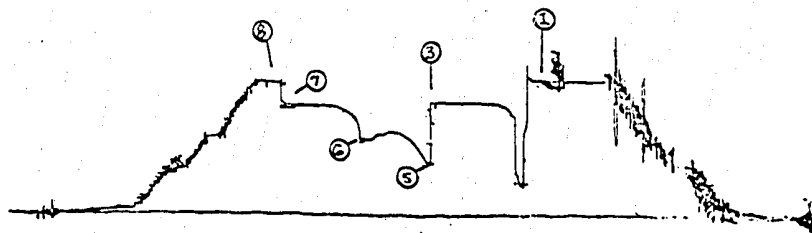
DRILL STEM TEST

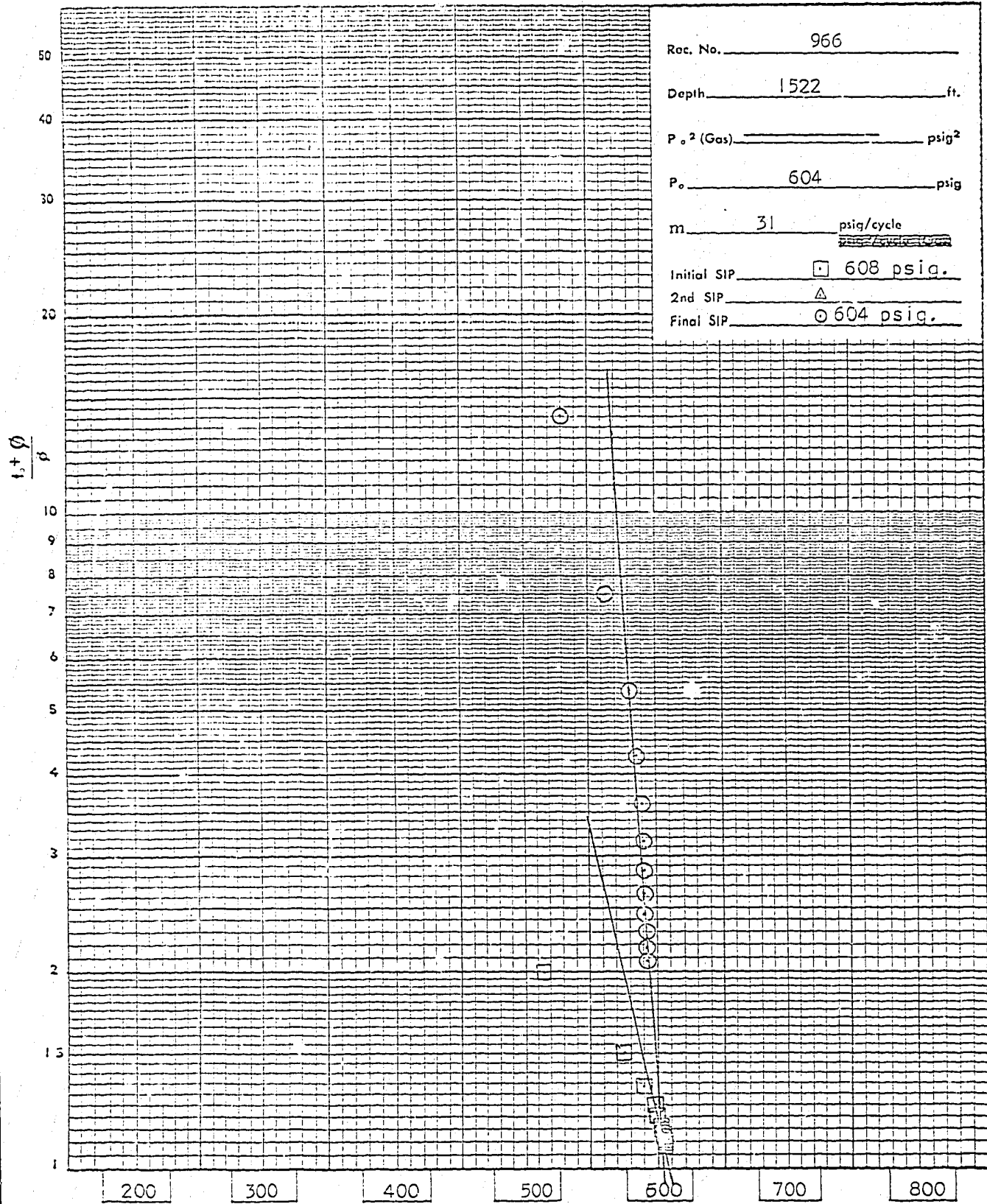
TECHNICAL SERVICE REPORT

HORN RIVER DECALTA at of FRONT D-66
 61° 35' 04.00 119° 53' 03.00 966.8



HORN RIVER DECALTA at of TROUT D-66
 61° 35' 04.00 119° 58' 02.00 1097.1





Rec. No. 966
 Depth 1522 ft.
 P_o² (Gas) _____ psig²
 P_o 604 psig
 m 31 psig/cycle
 Initial SIP 608 psig.
 2nd SIP △
 Final SIP 604 psig.

PSIG (OIL OR WATER)
 PRESSURE EXTRAPOLATION PLOT

DST # 1

LYNES UNITED SERVICES LTD.

TEST DATA				Lynes Test		GENERAL INFORMATION	
Formation		Horn Plateau Reef		T.D.		Company	
Interval Tested		1511		Ft. to 1565		Ft. Address	
Feet of Net Pay Tested		54		Ft.			
Type of Test		Bottom Hole Conventional					
Cushion		Amount		Ft.		Well Name	
Started in Hole at		2400		Hrs. Tool Open at		0240	
Pre-Flow		5		Mins. Initial Shut-in		60	
2nd Flow				Mins. Second Shut-in			
Final Flow		60		Mins. Final Shut-in		60	
Remarks:				Tester			
				Contractor			
				Ticket No.			
				Date			
				Service Reports To:			
				5 - James A. Lewis Engineering Ltd.			
				+ 40 xeroxed copies.			
GAS BLOW MEASUREMENTS				MUD AND HOLE DATA			
Measured with				Mud Type			
Gas to surface in 10 minutes.				Weight			
Fluid to surface in 40 minutes.				Viscosity			
				Filter Cake			
				Bottom Hole Temperature			
				Drill Pipe Size			
				Drill Collars			
				Main Hole or Casing Size			
				Rathole or Liner Size			
				Bottom Hole Choke Size			
				Surface Choke Size			
				Packer Rubber Size			
				REMARKS			
				Shut-in pressures suggest			
				average permeability within			
				the interval tested.			
RECOVERY							
TOTAL FLUID RECOVERED				Ft. Consisting of:			
800				Ft. of			
				Ft. of			
				Ft. of			
				Ft. of			
Test was/was not Reverse Circulated				was not			
Oil Recovery A.P.I.				Water Specific Gravity			
Salinity							
PRESSURE READINGS							
Inside		Outside		Inside		Outside	
Recorder No.		966		Recorder No.		1097	
Capacity		5000		Capacity		4480	
Depth		1522		Depth		1526	
NUMBER KEY:							
1 - INITIAL HYDROSTATIC		725		731			
2 - PRE-FLOW		155		175			
3 - INITIAL SHUT-IN		605		614			
4a - 2nd INITIAL FLOW							
4b - 2nd FINAL FLOW							
4c - 2nd SHUT-IN							
5 - 3rd INITIAL FLOW		270		281			
6 - FINAL FLOW		407		413			
7 - FINAL SHUT-IN		593		596			
8 - FINAL HYDROSTATIC		718		722			

Kenting Oilwell Drilling Company

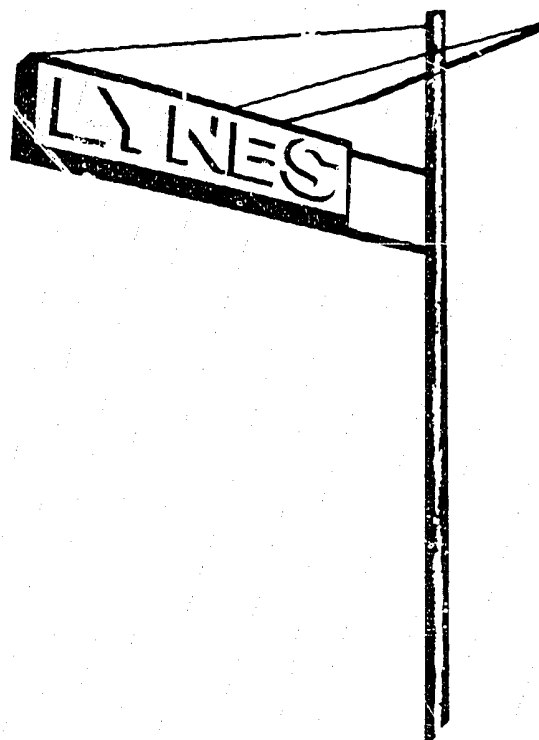
Horn River Decalta et al Trout River

Well Name and Description

#1 Test No.

February 27/71 Date of Test

D-66 61° 35' 04.00 119° 58' 02.00

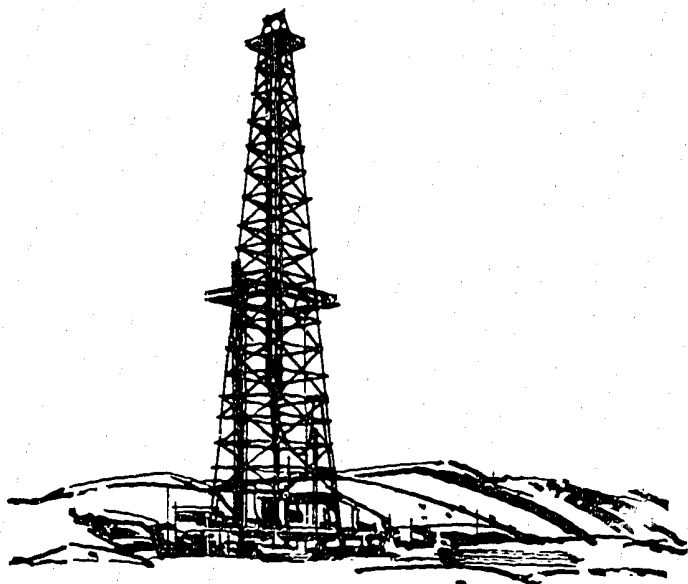


LYNES UNITED SERVICES LTD. 262-4501 CALGARY, ALBERTA

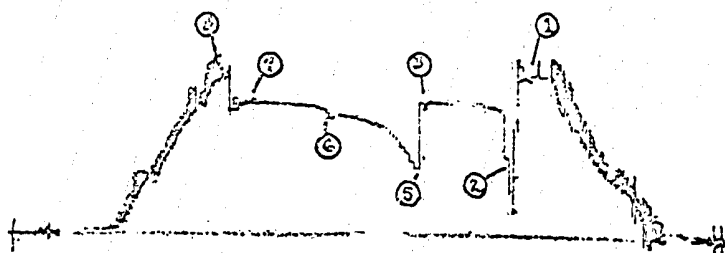
LYNES

BRIGHT NAME IN THE OIL PATCH

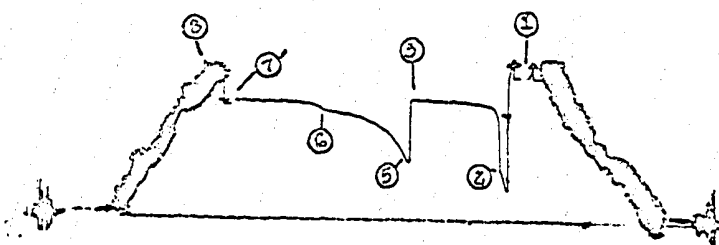
Inflatable and Conventional Packer Tools



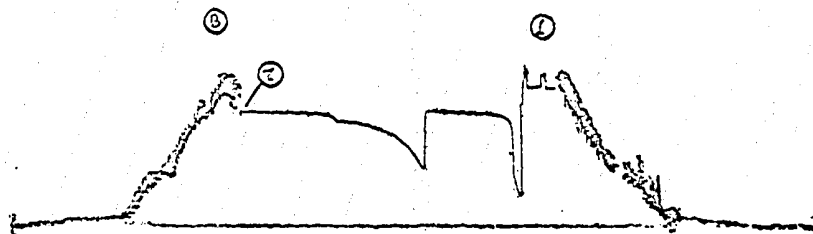
HORN RIVER DELTA at TRIBUT RIVER D-66
 C1° 35' 04.00 119° 58' 02.00 1997-3



HORN RIVER DELTA at TRIBUT RIVER D-66
 C1° 35' 04.00 119° 58' 02.00 2016-3



HORN RIVER DELTA at TRIBUT RIVER D-66
 C1° 35' 04.00 119° 58' 02.00 2000-3
 BELOW BOTTOM PACKER
 PACKER FAILED



LYNES UNITED SERVICES LTD.

TEST DATA		Test No. 3		Lynes Test 5		GENERAL INFORMATION	
Formation		Horn Plateau Reef		T.D. 2265		Company	
Interval Tested		1481		Ft. to 1509		Ft. Address	
Feet of Net Pay Tested		28				Ft.	
Type of Test		Conventional Straddle					
Cushion		Amount		Ft.		Well Name	
Started in Hole at		0900		Hrs. Tool Open at 1135		Hrs. Well Number	
Pre-Flow		5		Mins. Initial Shut-in 60		Mins. K.B. Elevation	
2nd Flow				Mins. Second Shut-in		Mins. Sub-Sea Elevation	
Final Flow		60		Mins. Final Shut-in 60		Mins. Area	
Remarks:				Company Rep. B. Gallup		Province	
				Tester H. Bell			
				Contractor Big Indian		Ria No. 57	
				Ticket No. 2114		Date March 5/71	
				Service Reports To:			
Blow:		Good initial blow in pair.					
		Gas to surface in 25 minutes.					
						5 - James H. Lewis Engineering Ltd	
						+ 40 xeroxed copies.	

GAS BLOW MEASUREMENTS

Measured with Too small to measure.

MUD AND HOLE DATA

Mud Type Gel
 Weight 9.2 Viscosity 80 Water Loss
 Filter Cake 2/32" Bottom Hole Temperature
 Drill Pipe Size 3 1/2" IF Weight
 Drill Collars 3 1/2" IF I.D. Feet Run
 Main Hole or Casing Size 6 1/4"
 Rathole or Liner Size No. of Feet
 Bottom Hole Choke Size 5/8"
 Surface Choke Size 1"
 Packer Rubber Size 5 1/2"

REMARKS

Bottom packers did not hold.
 Lower recorder indicates that
 the bottom packers failed.
 Misrun.

RECOVERY

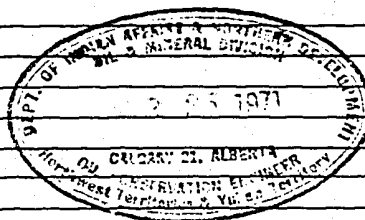
TOTAL FLUID RECOVERED 1250 Ft. Consisting of:

1250= Ft. of muddy salt water
 Ft. of
 Ft. of
 Ft. of

Test was/was not Reverse Circulated

Oil Recovery A.P.I. Water Specific Gravity

Salinity



PRESSURE READINGS

Inside _____ Outside X	Inside _____ Outside X	Inside X _____ Outside	Inside _____ Outside
Recorder No. 1097	Recorder No. 2816	Recorder No. 966	Recorder No. _____
Capacity 4100	Capacity 4600	Capacity 5000	Capacity _____
Depth 1500	Depth 1504	Depth 1528	Depth _____

NUMBER KEY:

- 1 - INITIAL HYDROSTATIC
- 2 - PRE-FLOW
- 3 - INITIAL SHUT-IN
- 4a - 2nd INITIAL FLOW
- 4b - 2nd FINAL FLOW
- 4c - 2nd SHUT-IN
- 5 - 3rd INITIAL FLOW
- 6 - FINAL FLOW
- 7 - FINAL SHUT-IN
- 8 - FINAL HYDROSTATIC

741
 188
 611
 302
 558
 607
 737

730
 250
 610
 289
 553
 604
 719

758
 265
 625
 316
 574
 625
 755

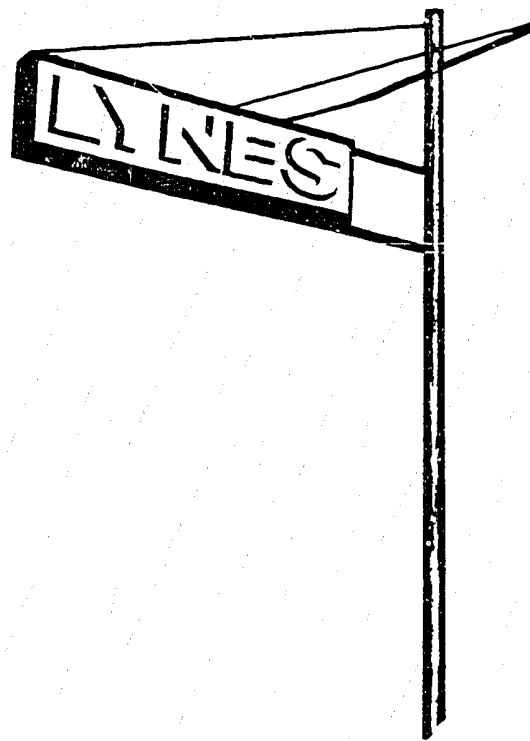
Kenting Oilwell Drilling Company

Horn River Decalta et al Trout River D-66

Test No. #3

March 5/71 Date of Test

610 35' 04.00 1190 58' 02.00



LYNES UNITED SERVICES LTD. 262-4501 CALGARY, ALBERTA

T O U R 1	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER			
	AF:	AT:													
MIDN.	BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
8 A.M.	MUD	12MN.	2A.M.	4 A.M.	6 A.M.	PUMP		PUMP		SURVEY					
		WT.				PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH	
T O	VISC.	GEL		DRILL		MOTOR HOURS		FUEL GALS.		NEXT OIL CHANGE AT		WEATHER		MIDN. 4 A.M.	
		W.L. F.C. P.H.		W. TRUCK		TEMPERATURE:		WIND VELOCITY:		RAIN, SNOW, FOG, ETC.					
8 A.M.	ADDITIVES: WATER	1.		MOB. PUMP		GENERAL:									
		2.													
T O	3.	CREW TIME SUMMARY		DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS	
		DRILLER		8								8			
8 A.M.	HELPER	T. Ottenbreit		8								8			
		HELPER		8								8			
T O	HELPER	Gary Hejman		8								8			
		TOTAL		8								8			
8 A.M.	INJURIES AND REMARKS:														
T O U R 2	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER			
	AF:	AT:													
MIDN.	BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
8 A.M.	MUD	8 A.M.	10A.M.	12 N.H.	2 P.M.	PUMP		PUMP		SURVEY					
		WT.				PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH	
T O	VISC.	GEL		DRILL		MOTOR HOURS		FUEL GALS.		NEXT OIL CHANGE AT		WEATHER		8 A.M. NOON	
		W.L. F.C. P.H.		W. TRUCK		TEMPERATURE:		WIND VELOCITY:		RAIN, SNOW, FOG, ETC.					
8 A.M.	ADDITIVES: WATER	1.		MOB. PUMP		GENERAL:									
		2.													
T O	3.	CREW TIME SUMMARY		DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS	
		DRILLER													
4 P.M.	HELPER														
		HELPER													
T O	TOTAL														
4 P.M.	INJURIES AND REMARKS:														
T O U R 3	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER			
	AF:	AT:													
MIDN.	BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
4 P.M.	MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	PUMP		PUMP		SURVEY					
		WT.				PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH	
T O	VISC.	GEL		DRILL		MOTOR HOURS		FUEL GALS.		NEXT OIL CHANGE AT		WEATHER		4 P.M. 8 A.M.	
		W.L. F.C. P.H.		W. TRUCK		TEMPERATURE:		WIND VELOCITY:		RAIN, SNOW, FOG, ETC.					
4 P.M.	ADDITIVES: WATER	1.		MOB. PUMP		GENERAL:									
		2.													
T O	3.	CREW TIME SUMMARY		DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS	
		DRILLER													
MIDN.	HELPER														
		HELPER													
4 P.M.	TOTAL														
4 P.M.	INJURIES AND REMARKS:														
4 P.M.															
4 P.M.	</														

[illegible]

RIG. NO. 57 LOCATION Horn River Decoltsal Trout River D. 66 DATE March 5th / 71 PROJECT NO. BIG INDIAN DRILLING CO. LTD. LOCATION Trout River D. 66 DATE March 9th / 71

TOUR 1	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG /	PUMP TEST	CLASS	REMARKS	TIME						
	AF:	AT:				2265							FROM / TIME	TO / RATE IN 16 PM	DESCRIPTION /	DEPTH TO WATER IN FT.	START	STOP	INTERVAL				
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.									
	MUD	12MN.	2A.M.	4A.M.	6A.M.	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP			
	WT.																						
	VISC.																						
	GEL																						
	W.L.	F.C.	P.H.																				
	ADDITIVES: WATER																						
	1.																						
2.																							
3.																							
CREW TIME SUMMARY													DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS					
DRILLER	Chuck Hutchinson																	12					
HELPER	Walter Federuk																	9					
HELPER	Gary Hofmann																	8					
HELPER	Sam Smith																	8					
TOTAL																							
INJURIES AND REMARKS:																							
TOUR 2	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG /	PUMP TEST	CLASS	REMARKS	TIME						
	AF:	AT:				2265							FROM / TIME	TO / RATE IN 16 PM	DESCRIPTION /	DEPTH TO WATER IN FT.	START	STOP	INTERVAL				
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.									
	MUD	8A.M.	10A.M.	12N.M.	2P.M.	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP			
	WT.																						
	VISC.																						
	GEL																						
	W.L.	F.C.	P.H.																				
	ADDITIVES: WATER																						
	1.																						
2.																							
3.																							
CREW TIME SUMMARY													DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS					
DRILLER	R. VEEHEDEN																	8					
HELPER	H. Haggins																	8					
HELPER	V. Haggins																	8					
HELPER	G. Hofmann																	4					
TOTAL																							
INJURIES AND REMARKS:																							
TOUR 3	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG /	PUMP TEST	CLASS	REMARKS	TIME						
	AF:	AT:				2265							FROM / TIME	TO / RATE IN 16 PM	DESCRIPTION /	DEPTH TO WATER IN FT.	START	STOP	INTERVAL				
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.									
	MUD	4P.M.	6P.M.	8P.M.	10P.M.	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP			
	WT.																						
	VISC.																						
	GEL																						
	W.L.	F.C.	P.H.																				
	ADDITIVES: WATER																						
	1.																						
2.																							
3.																							
CREW TIME SUMMARY													DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS					
DRILLER	G. Jacobson																	10					
HELPER	L. Baurassa																	10					
HELPER	M. Meehan																	10					
HELPER	L. Thomas																	10					
TOTAL																							
INJURIES AND REMARKS:																							
TOTAL CONTRACT TIME _____ HRS.																		TOTAL COMPANY TIME _____ HRS.			APPROVED BY _____		

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER 1/4
TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

RIG. NO. 57 LOCATION Horn River Decalta et al Trout River D-66 DATE March 2nd 1971 LOCATION Trout River D-66 DATE March 2nd 1971

TOUR 1	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG	PUMP TEST	CLASS	REMARKS	TIME			
	AF:	AT:		1905	1958								FROM	TO	DESCRIPTION	DEPTH TO WATER IN FT.	START	STOP	INTERVAL	
	BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.					
				3	6 1/4	WC	9568	2000	75	114		16 3/4						12 00	2 45	2 3/4
	MUD	12MN.	2A.M.	4 A.M.	6 A.M.	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP			
	WT.	8.7	8.9	8.9	9.0	PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH						
	VISC.	35	36	35	35	325	30	1905	375	50	19 1/2									
	GEL																			
	W.L.	F.C.	P.H.			DRILL	NO					TEMPERATURE:	10							
	ADDITIVES: WATER	1.5 gal Rapid Drill				W. TRUCK	258					WIND VELOCITY:								
TOUR 2	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG	PUMP TEST	CLASS	REMARKS	TIME			
	AF:	AT:		1958	1965								FROM	TO	DESCRIPTION	DEPTH TO WATER IN FT.	START	STOP	INTERVAL	
	BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.					
				3	6 1/4	WC	9568	2000	80	130		17 1/2								
				4	6 1/4	WC	13264	980	80	30		3 1/2								
	MUD	8 A.M.	10 A.M.	12 N.H.	2 P.M.	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP			
	WT.	9.1	8.9	8.9		PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH						
	VISC.	35	36	37		350	50	1970				19 53	15							
	GEL																			
	W.L.	F.C.	P.H.			DRILL	56					TEMPERATURE:	-5	+15						
TOUR 3	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG	PUMP TEST	CLASS	REMARKS	TIME			
	AF:	AT:		1965	2038								FROM	TO	DESCRIPTION	DEPTH TO WATER IN FT.	START	STOP	INTERVAL	
	BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.					
				4	6 1/4	WC	13264	980	80	43		11 1/4								
	MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP	PUMP			
	WT.	8.8	8.7	8.6	8.6	PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH						
	VISC.	38	32	30	32	350	50	2000												
	GEL																			
	W.L.	F.C.	P.H.			DRILL	64					TEMPERATURE:	15	5						
	ADDITIVES: WATER	10 sacs Rapid Drill				W. TRUCK	282					WIND VELOCITY:	5	10						

STRATIGRAPHIC LOG		PUMP TEST		CLASS	REMARKS	TIME		
FROM FT. TIME	TO FT. IN 16PM	DESCRIPTION	DEPTH TO WATER IN FT.			START	STOP	INTERVAL
					Drig. 6 1/4 Hole	12 00	1 30	1 1/2
					Rig. Serv	1 30	1 45	1/4
					Drig 6 1/4 Hole	1 45	8 00	6 1/4
								8
				DRILLER	Chuck Futhman			
				COMPANY TIME	CONTR TIME			
				CLASS	REMARKS	TIME		
						START	STOP	INTERVAL
					RIG SERVICE	8 00	8 15	15
					DRILL = Survey	8 15	11 15	3 00
					TRIP = SURVEY	11 15	2 10	3 00
					WORK ON PUMP	2 15	2 45	30
					DRILL	2 45	4 00	1 15
								8
				DRILLER	Michael			
				COMPANY TIME	CONTR TIME			
				CLASS	REMARKS	TIME		
						START	STOP	INTERVAL
					Drilling	4 00	6 15	2 1/4
					Rig. Serv	6 15	6 25	1/4
					Drilling	6 25	12 00	5 1/2
				DRILLER	B. Freeman			
				COMPANY TIME	CONTR TIME			
				TOTAL CONTRACT TIME	HRS.		TOOLPUSHER OR DRILLER	
				TOTAL COMPANY TIME	HRS.		APPROVED BY	

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TOUR 1	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG		PUMP TEST		CLASS	REMARKS	TIME			
	AF:	AT:		1515	1518								FROM FT.	TO FT.	RATE IN 16 P.M.	DESCRIPTION			DEPTH TO WATER IN FT.	START	STOP	INTERVAL
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.								
	MUD	12MN.	2A.M.	4A.M.	6A.M.	PUMP		PUMP		SURVEY												
	WT.					PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH								
	VISC.																					
	GEL.					DRILL	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER	MIDN.	4A.M.										
	W.L.	F.C.	P.H.			W. TRUCK				TEMPERATURE:	0	5										
	ADDITIVES: WATER					MOB. PUMP				WIND VELOCITY:	5	5										
	1.					GENERAL:	244			RAIN, SNOW, FOG, ETC.												
2.																						
3.																						
CREW TIME SUMMARY													DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS				
DRILLER C. Jacobson																		8				
HELPER A. Bourassa																		9				
HELPER M. Meehan																		8				
TOTAL A. Thomas																		8				
INJURIES AND REMARKS:																						
TOUR 2	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	Core #1 - 1515-1565		CLASS	REMARKS	TIME					
	AF:	AT:															START	STOP	INTERVAL			
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.								
	MUD	8A.M.	10A.M.	12N.M.	2P.M.	PUMP		PUMP		SURVEY												
	WT.	9.5		9.2	9.1	1900	50		1000	30												
	VISC.	80		50	40																	
	GEL.					DRILL	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER	8A.M.	NOON										
	W.L.	F.C.	P.H.			W. TRUCK				TEMPERATURE:	-10											
	ADDITIVES: WATER					MOB. PUMP				WIND VELOCITY:												
	1.	Water				GENERAL:	252			RAIN, SNOW, FOG, ETC.												
2.																						
3.																						
CREW TIME SUMMARY													DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS				
DRILLER Chuck Hutchinson																		8				
HELPER Walter Fedaruk																		8				
HELPER Gary Holmann																		8				
TOTAL Sam Smith																		8				
INJURIES AND REMARKS:																						
TOUR 3	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER			CLASS	REMARKS	TIME					
	AF:	AT:															START	STOP	INTERVAL			
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.								
	MUD	4P.M.	6P.M.	8P.M.	10P.M.	PUMP		PUMP		SURVEY												
	WT.					PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH								
	VISC.																					
	GEL.					DRILL	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER:	4P.M.	8A.M.										
	W.L.	F.C.	P.H.			W. TRUCK				TEMPERATURE:	5	0										
	ADDITIVES: WATER					MOB. PUMP				WIND VELOCITY:	20kph											
	1.					GENERAL:	260			RAIN, SNOW, FOG, ETC.	Cloudy											
2.																						
3.																						
CREW TIME SUMMARY													DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS				
DRILLER A. Jacobson																		8				
HELPER J. OTERBAEL																		8				
HELPER H. Higgins																		8				
TOTAL H. Higgins																		8				
INJURIES AND REMARKS:																						
TOUR 4	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER			CLASS	REMARKS	TIME					
	AF:	AT:															START	STOP	INTERVAL			
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.								
	MUD	4P.M.	6P.M.	8P.M.	10P.M.	PUMP		PUMP		SURVEY												
	WT.					PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	E LOG TO DEPTH								
	VISC.																					
	GEL.					DRILL	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER:	4P.M.	8A.M.										
	W.L.	F.C.	P.H.			W. TRUCK				TEMPERATURE:	5	0										
	ADDITIVES: WATER					MOB. PUMP				WIND VELOCITY:	20kph											
	1.					GENERAL:	260			RAIN, SNOW, FOG, ETC.	Cloudy											
2.																						
3.																						
CREW TIME SUMMARY													DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS				
DRILLER A. Jacobson																		8				
HELPER J. OTERBAEL																		8				
HELPER H. Higgins																		8				
TOTAL H. Higgins																		8				
INJURIES AND REMARKS:																						
TOTAL CONTRACT TIME													HRS.	TOOLPUSHER OR DRILLER								
TOTAL COMPANY TIME													HRS.	APPROVED BY								

RIG. NO.

8 A.M.

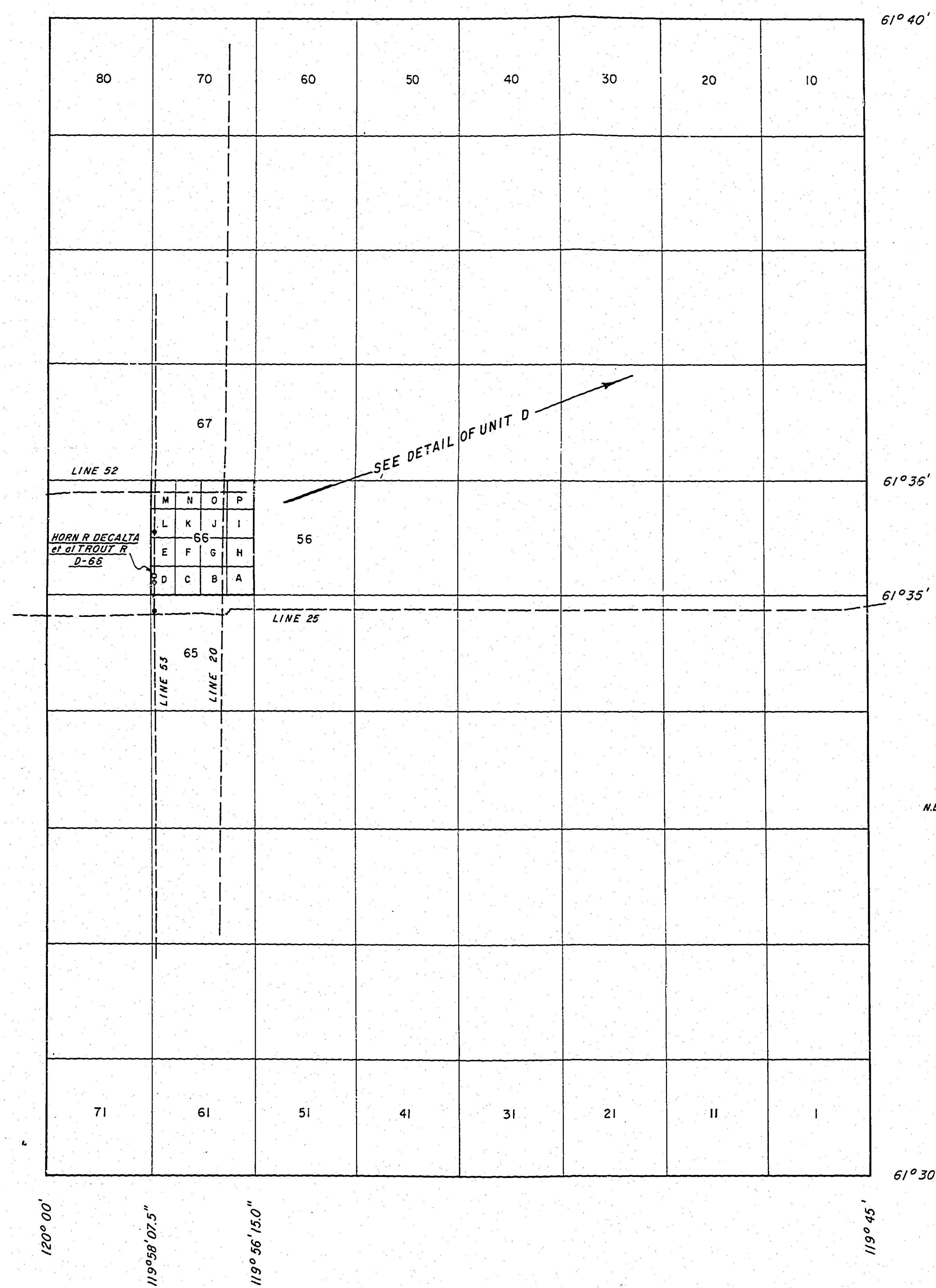
4 P.M.

MIDN

DRILLER *E. J. Johnson*

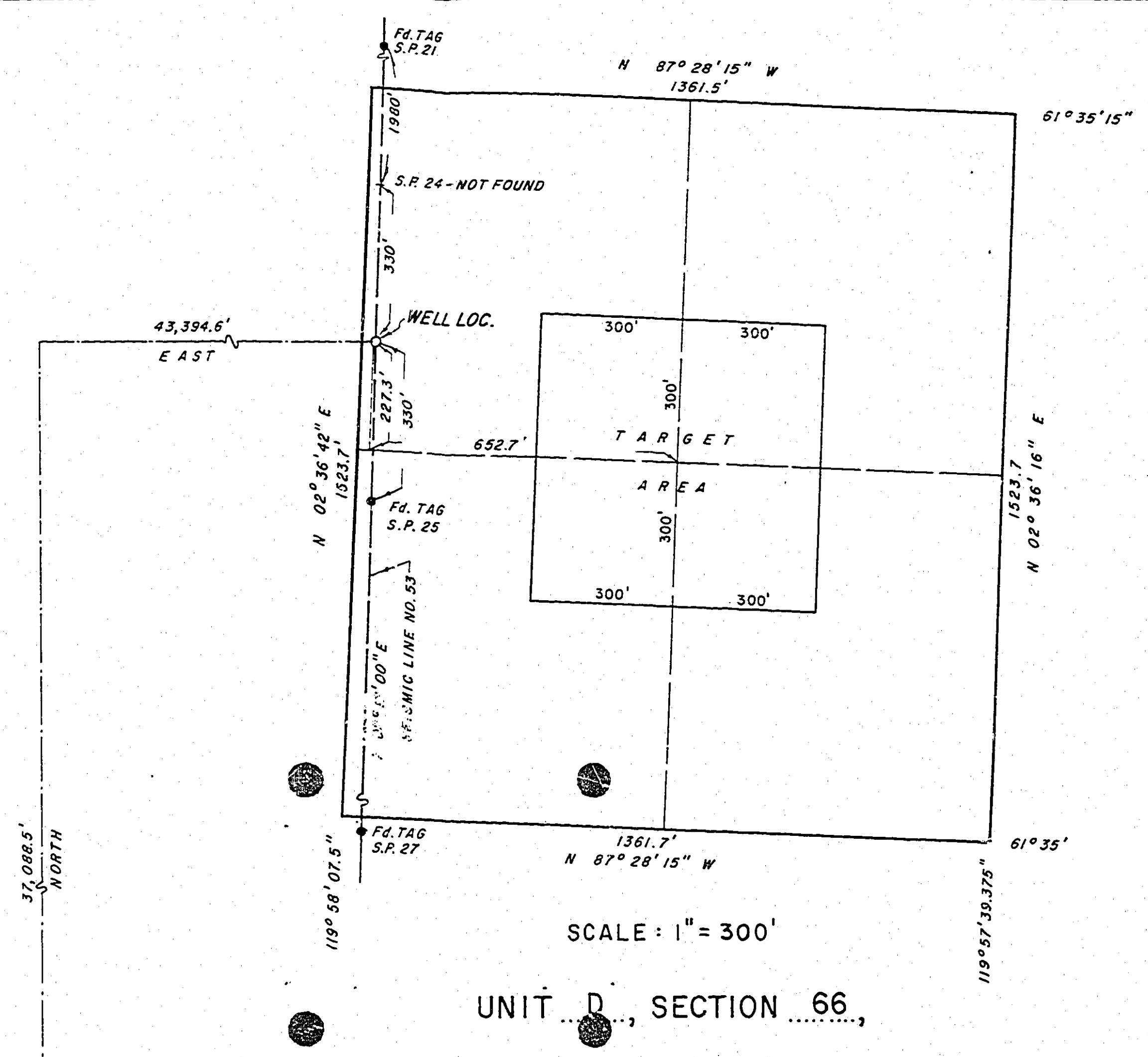
COMPANY TIME _____ CONT'R TIME _____

DRILLER	<i>[Signature]</i>
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N.E. COR. TP. 143, R. 13, W. 61st MER.
 LAT. 61° 28' 44.9"
 LONG. 120° 12' 24.5"

NOTE:
 All distances are reduced to Sea Level.
 Bearings referred to reference meridian 117° 00' 00" (UTM GRID ZONE 9).
 Well location is one half way between Shot Points 25 & 24, Line 53.



SCALE: 1" = 300'
 UNIT D, SECTION 66,

HORN RIVER RESOURCES LTD. PLAN SHOWING PRELIMINARY SURVEY OF HORN R DECALTA et al TROUT R D-66 AT LAT. 61° 35' 09.8", LONG. 119° 58' 06.9" UNIT D, SECTION 66, GRID AREA: Lat. 61° 40', Long. 119° 45' MILLS LAKE AREA NORTHWEST TERRITORIES

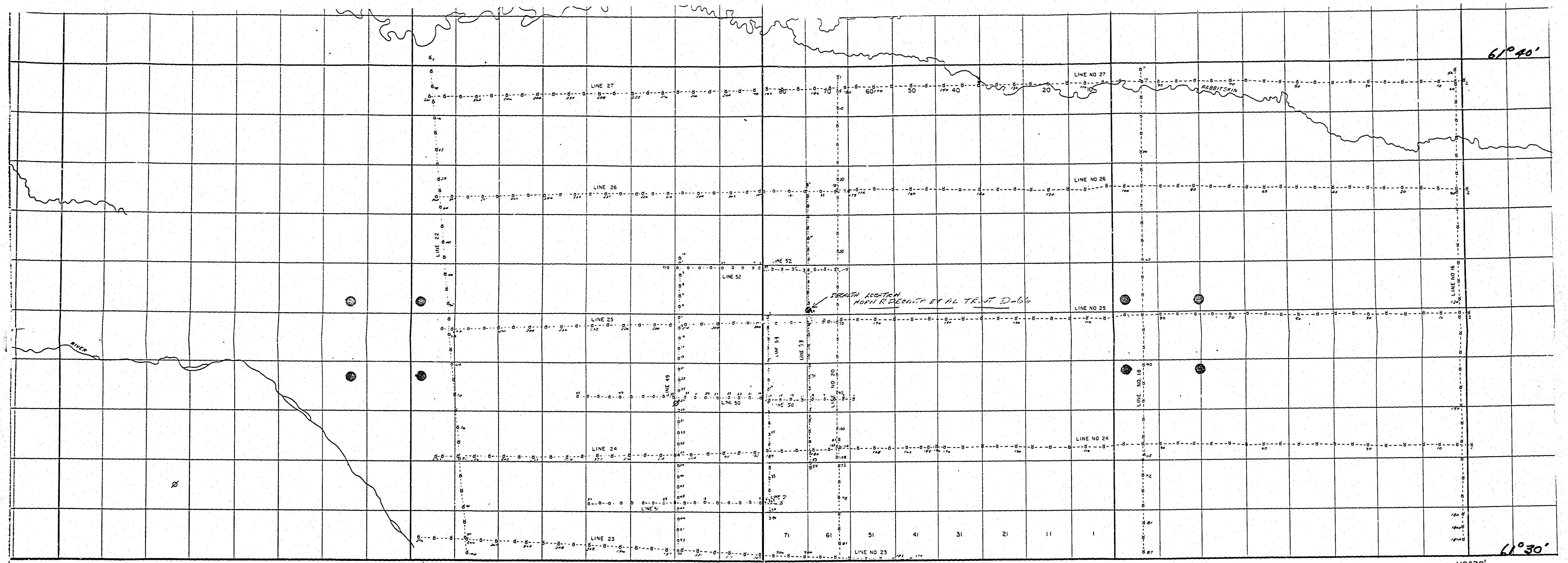
Scale: 1" = 1 mile

I certify that the survey represented by this plan is correct
 and true and was completed on February 28th, 1971.

[Signature] Dominion Land Surveyor
[Signature] Witness

SIGNATURES FOR
 HORN RIVER RESOURCES LTD.

	CANADIAN ENGINEERING SURVEYS CO. LTD.		JOB NO. : C - 6493
	EDMONTON ALBERTA		DATE : MARCH 4th/71
			DRWG. NO. : 6493 - M - 1



120°30'
(MATCH 95-H-5-E)
WEST TERRITORIES

119°30'
(MATCH 85-E-5-W)
NORTHWEST TERRITORIES

HORIZONS

SHOOTING BY
TROUT RIVER - TX 620,627
N. GEOPH 3

- LEGEND**
- | | |
|------------------------------------|---|
| ~~~~~ NO CORRELATION | = - PHANTOM VALUE |
| ~~~~~ DOUBTFUL CORRELATION | = - SMOOTHED VALUE |
| ~~~~~ FAULT | ? - QUESTIONABLE DATA |
| ~~~~~ POSSIBLE FAULT | * - CHARACTERISTIC EVENT |
| ~~~~~ QUESTIONABLE FAULT | * - DATA NO GOOD |
| ~~~~~ VALUE NOT USED IN CONTOURING | * - NOT SHOT |
| | * - RAW TIME |
| o - MAGNETIC RECORDING | ~ - HORIZONTAL STACK |
| o - REFLECTION SHOT POINT | ~ - B.A. SHOOTING PRIOR TO JULY 1, 1956 |
| o - SHOOTING BY OTHER COMPANIES | ~ - B.A. SHOOTING PRIOR TO JULY 1, 1956, COINCIDENT WITH GULF CONTROL |
| x - REFRACTION CONTROL POINT | |
| o - MIGRATED POSITION AND VALUE | |

- WELL SYMBOLS**
- | | |
|---------------------|--------------------------|
| o - LOCATION | o - SUSPENDED |
| o - PRODUCER - GAS | o - PRODUCER - OIL |
| o - DRY HOLE | o - ABANDONED - OIL |
| o - ABANDONED - GAS | o - BOTTOM HOLE POSITION |
| o - WATER INJECTION | |
-

NOTE: SURVEY INFORMATION & TOPOGRAPHIC FEATURES ARE TAKEN FROM NAT. TOPOGRAPHIC SERIES 1: 250,000

HORIZON