HORN RIVER ET AL TOE
DEEP BAY B-01

Drilling Authority No. 480

Date Issued 17 December 1971

WELL NAME Horn River et al IE Deep Bay B-01

FIELD ..... Area: .....

LOCATION: Unit B Section 32 Grid 61-30-117-00

Latitude 61-20-36 Longitude 117-00-45

U.W.L.R. 61.33500 --- 117.61194

U.W.I. 300B61613011700 0

Rig Release Date: .....

Status .....

Information Release Date .....

CHANGE OF NAME:

DATE RECEIVED	INDEX
17-12-70	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
7-1-71	Application to Amend a Drilling Authority.
	Application to change a Well Name.
27-1-71	Application to Abandon a Well ~~or Suspend Drilling~~.
	Application to Alter Condition of a Well.
	Well History Supplement.
15-3-71	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.....

Drilling Authority No. 480

Date Issued Dec. 17/70

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL 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 Horn River et al / Deep Bay B-01 IOE

Permit No. 4490 Lease No.

Imperial Oil Enterprises Ltd. (Permittee, Licensee, Lessee) Exploratory Licence No. 1674

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

Location: Unit B Section 1 Grid 61°30' N Lat. 117°00 W Long.

Latitude 61°20'06" Longitude 117°00'43"

From Established Reference Marker

Universal Well Location Reference Lat. 61.33500°N., Long. 117.01194°W

	DATE	DEPTH
Spudded	Jan. 3/71	
Suspended		
Resumed Operations		
Finished Drilling	Jan. 9/71	
Deepened		
Complete (gas/oil)		
Abandoned	Jan. 11/71	
Rig released	Jan 11/71	1625(Log) 1622(Drlr)

Pool(s) N/A

Interval(s) open to production NIL

Elevation: Gr. 559 K.B. 570

Rig No. 57

Drilling Contractor Big Indian Drilling Co. Ltd.

Contractor's Business Licence No. 791

CASING RECORD

	Casing Size (Inches)	Grade	Weight	Amount	Set at –	Sacks of Cement and Additives
1.	7	J-55	20#	168	179(KB)	120 plus 3% $Ca Cl_2$
2.						
3.						
4.						
5.						
6.						

GEOLOGICAL TOPS	ELEVATION Depths (Log)	Sub-Sea
Fort Simpson Shale	20	+550
Slave Point	272	+398
Pine Point	950	-380
Chinchaga	1304	-734
Mirage Point	1447	-877
Precambrian	1524	-954

CORE RECORD

From	To	Rec.	From	To	Rec.
No cores cut					

LOG RECORD

Run No.	Type of Log	From	To
1	Induction-Electrical	1624	180
1	Borehole Compensated Sonic with Gamma-Ray Caliper	1623	180

CEMENTING RECORD (Plug, Squeezo, etc.)

Date	From	To	Remarks
Jan 11/71	1320	Surface	320 sax cement with 2% gel added to 100 sacks.

A steel plate was welded to the top of the surface casing and a riser with identification was installed.

PERFORATING RECORD (Bullet, Jet)

Date	From	To	Remarks
Nil			

SERVICING RECORD (Acidizing, Fracing, etc.)

Date	From	To	Remarks
Nil			

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.B.H.P.	F.S.I.B.H.P.	I.F.B.H.P.	F.F.B.H.P.	I.H.P.	F.H.P.	REMARKS
1	Jan 5/71	Slave Point	266	311	60	30	60	Recorder malfunctioned						Received 145' oil flecked drilling fluid, 80' brackish formation fluid
2	Jan 10/71	Slave Point	295	345	60	30	60	1204	1214	77	117	132	132	Re covered 240' drilling fluid with live oil flecks.

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
Nil					

PRESENT STATUS OF WELL

Oil		(Interval.)
Gas		(Interval.)
Dry	X	
Susp.		

Company Horn River Resources Ltd.

Signed by E. R. McCloy

Title President

Date March 15, 1971

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

File No.
Drilling Authority No. 480

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well [illegible] Drilling

JAN 20 1971

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made for authority to abandon, to suspend drilling:—

Name and number of well Horn River at al Deep Bay B-01

Location: Unit B Section 01 Grid 61°30' N Lat. 117°00' W L

Latitude 61°20'06" North Longitude 117°00' 43" West

From Established Reference Marker

Universal Well Location Reference Lat 61.33500° North, Long. 117.01194° West

Permit No. 4490 Lease No.

Imperial Oil Engerprises Ltd.
(Permittee, Licensee, Lessee)

Date of commencement of proposed program Spudded Jan. 3, 1971 9:45 AM

OIL, GAS, AND WATER ENCOUNTERED

(Depths)

Oil at 226-345 (DST #3 Rec. 25' water with light oil flecks)

Gas at

Water at 226 - 311, 295 - 345

Total Depth 1625 Date of last operations Jan. 11, 1971 9:00 AM

Present condition of well Dry and Abandoned

CASING RECORD

	Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1.	7"	20#	179 ft.	179 ft.	120 sacks construc.	Nil
2.						
3.						
4.						
5.						

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	1320 to surface	Hay River Shale, Slave Point, Keg River	220 sacks plus 100 sacks cement + 2% Gel	Good Returns - held ok
				cut casing off 3 ft. below ground weld on plate also rod with well name and number on flag.

The following logs have been run one IES and one Gamma Sonic Caliper

Other operations proposed

Operations to be carried out by Big Indian Drilling Contractor Licence No. 0791

Address Address

Responsible Agent in field Al Whitteron

Dated at Calgary, this 19 Day of January 19 71

Signed by [signature] 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 10th January 1971.

Dated 27th January, 19 71

[signature]
Oil Conservation Engineer

IAND 52-90 (5) (2-69)

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

File No.

Drilling Authority No. 480

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL 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. 480 , concerning Horn River Resources Ltd.

Horn River et al IOE Deep Bay C-01, 61°20'18" N. Lat., 117°00'38" W. Long.
(Name and Number of Well)

The following amendments are required:

Change Unit to read "B" instead of "C"

Change Latitude to read "61°20'06" N. Lat."

Change Longitude to read "117°00'43" W. Long."

Reasons for the amendments: Surveyors determined location in error.

Dated at Calgary, this 5th day of January, 19 71

Signed by

Title President

Company Horn River Resources Ltd.

(For Oil and Mineral Division use only)

APPROVED

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

Universal Well Location Reference: Lat. 61.33500° N., Long. 117.01194° W.

Unique Well Identifier: 300B016130117000

Date 7th January, 19 70

Oil Conservation Engineer

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

IAND 52-90-3 (9-69)

Drilling Authority No. 100

Project No.

File No.

CANADA

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 **Born River et al IOE Deep Bay G-01**

Location: Unit **G** Section **1** Grid **61°30' N.L., 117°00' W.L.**

Latitude 61° 20' 18" N. Longitude 117° 00' 38" W.

Unique Well Identifier 3096061300117000

Universal Well Location Reference Lat. 61.33[illegible]° N., Long. 117.01055° W.

Elevation: Ground **559** K.B. **568 est.** feet above sea-level.

Well is expected to produce from **Middle Devonian Carbonates** formation at a depth of about **1000** feet. Expected total final depth **1600**

Area assigned to well

(For Oil Conservation Engineer's use only)

Permit No. **4490** Lease No. Acreage **61,272**

Permittee, licensee, or lessee **Imperial Oil Enterprises Ltd.**

Exploratory Licence No. **1674**

Surface owned by Crown or **Crown**

Petroleum and natural-gas rights owned by **Crown** (If allocated submit names and addresses of owners and acreages.)

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.	7	20#	J-55	Used	180	75
2.						
3.						
4.						
5.						

Expected water, gas, and oil horizons and type of control equipment **Middle Devonian Carbonates: Control with: 8" - 900 Series Rmp 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:—

At well **Al Whitteron** Contractor's Business Licence No. **791**

Address **Gen. Del., Ft. Providence** At registered office **F. L. Woolley**

Address **1020 Aquitaine Tower, 540 Fifth Ave. S.W. Calgary 1, Alta**

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

Dated at **Calgary**, this **15th** day of **December** 19**70**

Signed by F L Woolley Company **Born 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:—

1. 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.
2. The Company will submit to this office, on Tuesday of each week, the latest reports

Please see over page

Dated 17th December 19 70

Oil Conservation Engineer

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

IAND 52-90-1 (3-69)

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. The Surface Casing is to be set at least 100 feet into a competent formation.

6. Intermediate and production strings of casing are to be approved by the Oil Conservation Engineer before running.

B.H.J. Thom, Oil Conservation Engineer

GEOLOGICAL PROGNOSIS

Horn River et al IOE Deep Bay O-01

117°00'38" W. Lat., 61°20'18" W. Long.

Ground Elevation: 559'

K.B. 586' (est.)

MARKERS	DEPTH	ELEVATION (K.B.)
Spud in Ft. Simpson Shale		
Middle Devonian (Slave Point?)	367'	+ 200'
Keg River	977'	- 410'
Chinchaga	1327'	- 760'
Pre-Cambrian	1542'	- 975'

HORN RIVER RESOURCES LTD.

Permit 4490

Permit 4193

61° 30'

117° 00'

FOR: Horn River Resources

FROM: Imperial Oil Enterprises Ltd.

STRUCTURE: Middle Devonian Carbonate and
Shot Points and Numbers.

LOCATION: Petrolia I.O.E. G-1-117° 00'-61° 30' → S.P.# 16-703662

SCALE: 1:50,000

930-11-4-2.

OPERATION REEF
NORTHWEST TERRITORIES
CANADA

Geological and Engineering
REPORT
Horn River et al IOE DEEP BAY B-01

PREPARED FOR

HORN RIVER RESOURCES LTD.

PREPARED BY

JAMES A. LEWIS ENGINEERING CO. LTD.

Petroleum Reservoir Analysts

CALGARY · ALBERTA

830-11-4-2.

INTRODUCTION

This is a summary report of the operation conducted at the exploratory well:

Horn River et al/Deep Bay B-01 IOE

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

"Operation Reef"

This report was prepared from data supplied by J.C. Sproule and Associates of Calgary.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
SECTION I	2
SUMMARY OF PERTINENT WELL DATA	2
SECTION II	3
GEOLOGICAL SUMMARY	3
SAMPLE DESCRIPTION	3
SECTION III	7
ENGINEERING SUMMARY	7
SECTION IV	9
LOGS	9
GEOLOGICAL AND ENGINEERING SUMMARY	10

INTRODUCTION

Horn River et al I.O.E. Deep Bay G-01 was drilled in January 1971, west of Deep Bay on the north side of Great Slave Lake. It was drilled into the Precambrian basement as a test of Middle Devonian and older formations.

The well was drilled by Big Indian Drilling Co. Ltd., Rig No. 57. Operations were supervised by J. C. Sproule and Associates Ltd. for the operator, Horn River Resources Ltd. of Calgary, Alberta.

Section 1

SUMMARY OF WELL DATA

IOE

WELL: Horn River et al/Deep Bay B-01

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

LEGAL DESCRIPTION: Unit B, Section 01, Grid 61° 30' N., 117° 00' W.

LOCATION: LATITUDE: 61° 20' 06" N. LONGITUDE: 117° 00' 43" W.

UNIVERSAL WELL LOCATION REFERENCE: Lat. 61.33500° N., Long. 117. 01194° W.

UNIQUE WELL IDENTIFIER: 300B016130117000

CO-ORDINATES:

PERMIT OR LEASE: 4490

PERMITTEE, LICENCEE, LESSEE: Imperial Oil Enterprises Ltd.

DRILLING AUTHORITY: 480 DATE: December 17, 1970

CLASSIFICATION: Exploratory Wildcat

ELEVATION: GROUND: 559' Approx. K.B. 570 Est.

DRILLING CONTRACTOR: Big Indian Drilling Co. Ltd. Rig No. 57 Rotary

WELLSITE GEOLOGIST: Norman Soul, P. Geo.

SURFACE CASING: 7" - 20 lb. set @ 179' K.B. c/w 120 sax + 3% $CaCl_2$

HOLE SIZE: Surface to 179' - 9-7/8", 179' to TD 6-1/4"

MUD SYSTEM: Gel Chemical

CORES: None Taken

FORMATION TESTS: DST No. 1: 266 - 311' Misrun
DST No. 2: 295 - 345' Slave Point

ABANDONMENT PLUGS: No. 1: 1320' to surface in 3 stages
220 sax neat cement, and 100 sax w/ 2% Gel

LOST CIRCULATION: None

LOGS: Induction Electrical 1624' to 180'
Sonic Gamma Ray Caliper 1623' to 180'

WELL SPUDDED: 10:00 a.m. January 3, 1971

FINISHED DRILLING: 8:30 a.m. January 9, 1971

RIG RELEASED: 4:00 a.m. January 11, 1971

TOTAL DEPTH: 1622' Driller; 1625' Logger

STATUS: Dry and Abandoned

SECTION II

GEOLOGICAL SUMMARY

Formation Tops	Samples Feet	E-Log Feet
Fort Simpson	20	20
Slave Point	270	272
Pine Point	965	950
Chinchaga	1,330	1,304
Mirage Point	1,440	1,447
Precambrian	1,530	1,524
Total Depth	1,622	1,625

SAMPLE DESCRIPTION

Depth Feet	Description
UPPER DEVONIAN	
Fort Simpson Formation	
50-60	Shale, dark brown.
60-80	Shale, dark brown and dark green, fissile.
80-90	Shale, dark green, slightly calcareous.
90-100	Shale, green, slightly calcareous.
100-120	Shale, greenish grey, calcareous, fissile.
120-140	Shale, dark brown and dark green, silty, calcareous, hard.
140-160	Shale, dark green, fissile, calcareous, soft.
160-200	Shale, greenish grey to green, fissile, soft, slightly calcareous.
200-220	Shale, greenish grey, slightly calcareous, slightly pyritic.
220-240	Shale, green, slightly silty, slightly calcareous, minor pyrite.
240-270	Shale, dark green, non-calcareous to slightly calcareous, with finely disseminated pyrite crystals.

Depth Feet	Description
MIDDLE DEVONIAN	
Slave Point Formation - 272' Logs	
270-290	Dolomite, dark brown, microcrystalline to finely crystalline, abundant pyrite, oil-stained, poor to fair intercrystalline porosity.
290-300	Limestone, greyish white to buff, dense, fractured and slickensided.
300-310	Dolomite, medium to dark brown, microcrystalline to finely crystalline.
310-330	Dolomite, dark brown, very fine-grained, fair porosity, oil-stained.
330-370	Limestone, buff, dense.
370-380	Limestone, greyish white to buff, dense.
380-390	Limestone, dolomitic, fine-grained, reefoidal.
390-400	Limestone, dolomitic, light brown, microcrystalline.
400-420	Dolomite, brown, finely crystalline, reefoidal, calcite crystals in vugs.
420-440	Limestone, buff to light brown, dense.
440-450	Limestone, cream to buff, dense.
450-470	Limestone, cream to light brown, dense to microcrystalline.
470-620	Limestone, greyish white to buff, dense to cryptocrystalline.
620-700	Limestone, brown, reefoidal, fair porosity, traces oil staining, calcite crystals in vugs.
700-710	Limestone, grey to buff, dense to microcrystalline, tight.
710-720	Dolomite, dark brown, fine-grained, earthy lustre, poor porosity.
720-730	Limestone, greyish white to buff, dense.
730-760	Limestone, cream to buff, dense to microcrystalline, tight.
760-850	Limestone, as above, with minor interbedded dolomite, dark brown, finely crystalline, earthy, and shale, green, non-calcareous.
850-880	Limestone, greyish white to buff, dense; Dolomite, dark brown, fine-grained and finely crystalline; Shale, green, pyritic.

Depth Feet	Description
880-930	Dolomite, as above, and shale, green, as above.
930-950	Limestone, greyish white, dense; Shale, green.
950-960	Limestone and shale, as above, with minor dolomite, brown, fine-grained, earthy lustre.
	Pine Point Formation - 950' Logs
960-1000	Limestone, dark brown, dense to microcrystalline, argillaceous, partings of black, bituminous shale.
1000-1020	Limestone, light to dark brown, mottled, bituminous shale partings, interbedded with shale, dark green.
1020-1030	Dolomite, brown, finely crystalline; Limestone and shale, as above; pyrite.
1030-1080	Shale, dark brown to black, bituminous.
1080-1120	Limestone, buff, dense to microcrystalline.
1120-1140	Limestone, buff to brown, dense to microcrystalline.
1140-1170	Limestone, as above, with minor interbedded shale, green, pyritic.
1170-1210	Limestone and shale, as above, with minor interbedded dolomite, light brown, fine-grained.
1210-1230	Limestone, buff to brown, fossiliferous fragmental; Limestone and shale, as above.
1230-1280	Dolomite, brown, microcrystalline to finely crystalline, fair to poor intercrystalline porosity, slight oil staining; Limestone, buff, dense to microcrystalline, tight.
1280-1330	Limestone, greyish brown to brown, dense, with interbedded dolomite, brown, finely crystalline, fair to poor porosity, no oil staining.
	Chinchaga Formation - 1,304' Logs
1330-1380	Limestone, buff to light brown, dense; Anhydrite, grey to buff, dense.
1380-1390	Anhydrite, buff to light brown, dense; Dolomite, light brown, dense; Limestone, greyish white to buff, dense.
1390-1410	Anhydrite, buff to light brown, dense.

Depth Feet	Description
1410-1440	Anhydrite, as above; Dolomite, light brown, dense; Shale, bright green; Pyrite.

ORDOVICIAN AND ?OLDER

Mirage Point Formation - 1,447' Logs

1440-1460	Dolomite, reddish brown, shaly.
1460-1500	Anhydrite, buff to light brown, dense; Limestone, buff, dense; Dolomite, reddish brown, shaly; Shale, red and green.
1500-1530	Limestone and dolomite, as above; Sandstone, reddish brown, fine-grained, tight; Shale, green; Pyrite.

PRECAMBRIAN - 1,524' Logs

1530-1622	Weathered granite.

SECTION III

ENGINEERING SUMMARY

(a) Report of Drill Stem Tests

Drill Stem Test No. 1

Interval:	266'-311'
Formation:	Slave Point
Type of Test:	Conventional Bottom Hole
Date:	January 5, 1971
Preflow:	5 minutes
Initial Shut-In:	30 minutes
Flow Period:	60 minutes
Final Shut-In:	60 minutes
Results:	Misrun. No pressures recorded.

Drill Stem Test No. 2

Interval:	295'-345'
Formation:	Slave Point
Type of Test:	Straddle
Date:	January 10, 1971
Preflow:	3 minutes
Initial Shut-In:	30 minutes
Flow Period:	60 minutes
Final Shut-In:	60 minutes
Results:	Fair air blow on preflow. Fair blow on final flow decreasing after 15 minutes to weak air blow. No gas to surface. Recovered 240' of drilling fluid. Resistivity 0.77 ohms at 75°F.

Field Pressures

Initial Hydrostatic:	153 psi
Preflow:	25 psi
Initial Shut-In:	129 psi
Initial Flow:	76 psi
Final Flow:	129 psi
Final Shut-In:	129 psi
Final Hydrostatic:	153 psi

(b) Casing Record

6 joints (168') x 7" x 20-lb., J-55, Rge 2, ST&C casing landed at 179' K.B. Cemented with 120 sacks and 3% calcium chloride. Plug down at 1:00 a.m. January 4, 1971.

(c) Bit Record

No.	Size Inches	Make	Type	In Feet	Out Feet	Footage	Hours
1A	9 7/8	Hughes	RT	11	179	168	8.5
1	6 1/4	Smith	DGJ	179	566	387	15
2	6 1/4	Smith	DGJ	566	1020	454	22
3	6 1/4	Smith	V2J	1020	1392	372	25
4	6 1/4	Smith	V2J	1392	1622	230	16.25

(d) Mud Report

Date 1971	Depth Feet	Weight Lb./Gal.	Viscosity	Additives
Jan. 3	179			
4	311			
5	480	8.9	35	Gel 6 sacks.
6	960	8.6	29	
7	1,310	8.6	29	
8	1,525	8.9	33	Gel 27 sacks; Salt gel 9 sacks; Sawdust 5 sacks; Fibreseal 2 sacks.
9	1,622	8.8	60	Soda ash 25 lb.; Salt gel 36 sacks; Sawdust 3 sacks.

(e) Deviation Record

Depth Feet	Deviation Degrees
179	3/4
566	1/2
1,080	3/4

(f) Abandonment Plugs

Plugged from 1,320 feet to surface in three stages with 220 sacks neat cement and 100 sacks cement with 2% gel. Plug in place at 4:00 a.m., January 11, 1971.

SECTION IV

LOGS

Company	Date 1971	Name	Interval Feet	Scale
Schlumberger	Jan. 9	Induction-Electrical	1,624-180	2" and 5" to 100'
Schlumberger	Jan. 9	Sonic-Gamma Ray-Caliper	1,623-180	2" and 5" to 100'

GEOLOGICAL AND ENGINEERING SUMMARY

Horn River et al I.O.E. Deep Bay G-01 was spudded on January 3, 1971, and completed drilling at a total depth of 1,622 feet on January 9, 1971.

The top of the Middle Devonian Slave Point Formation was picked at 272 feet. No coring was done on the well. After logging the well at total depth, a drill stem test was made of the interval 295 feet to 345 feet, which yielded 240 feet of drilling fluid. Several other zones in the well indicated salt water saturation on the logs and in the samples. The well was plugged with cement from 1,320 feet to the surface and abandoned in accordance with government regulations approved by the Oil Conservation Engineer.

Norman Soul

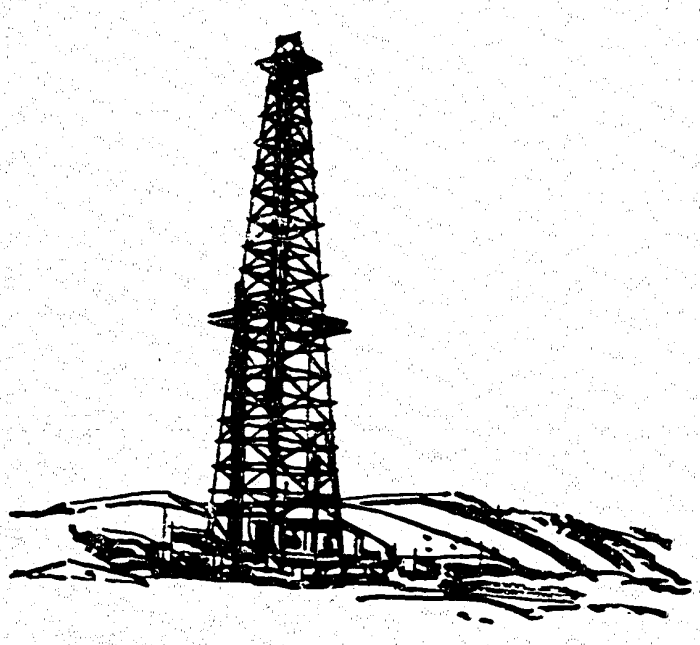
Norman Soul, P. Geol.

1009 Fourth Avenue S.W.,
Calgary 1, Alberta.
February 4, 1971
Ns/fc

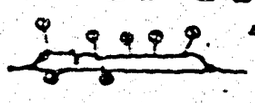
LYNES

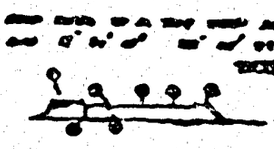
BRIGHT NAME IN THE OIL PATCH

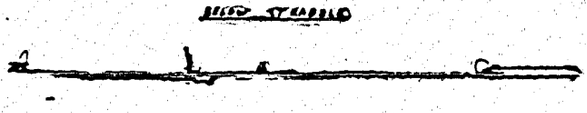
Inflatable and Conventional Packers

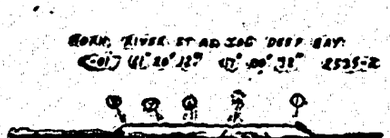


DRILL STEM TEST
TECHNICAL SERVICE REPORT









LYNES UNITED SERVICES LTD.

TEST DATA						GENERAL INFORMATION	
Test No.	2	Lynes Test	2				
Formation	Slave point	T.D.	1624	Ft.	Company	Kenting Oilwell Drilling	
Interval Tested	295	Ft. to	345	Ft.	Address	Horn River Resources Ltd.	
Feet of Net Pay Tested	50			Ft.			
Type of Test	Dual Conventional straddle						
Cushion	nil	Amount		Ft.	Well Name	Horn River et al 10E Deep Bay	
Started in Hole at	3:00 Hrs.	Tool Open at	4:07 Hrs.		Well Number	61° 20' 18.00 117° 00' 36.00	
Pre-Flow	3 Mins.	Initial Shut-in	30 Mins.		K.B. Elevation	Sub-Sea Elevation	
2nd Flow	Mins.	Second Shut-in	Mins.		Area	Ft. Providence Province N.W.T.	
Final Flow	60 Mins.	Final Shut-in	60 Mins.		Company Rep.	D. Comm	
Remarks:					Tester	W. Goodwin	
					Contractor	Big Indian Rig No. 57	
					Ticket No.	2885 Date January 10/71	
Blow:	Fair blow decreasing to light in 30 minutes.				Service Reports To:	5 - above address	

GAS BLOW MEASUREMENTS			
Measured with			
Time	Surface Choke	Reading Inches	Cubic Feet/Day

MUD AND HOLE DATA	
Mud Type	Gel
Weight	9.5 Viscosity 1 65 Water Loss 9
Filter Cake	2/32" Bottom Hole Temperature
Drill Pipe Size	3 1/2" IF Weight
Drill Collars	4 3/4" I.D. 2 3/8" Feet Run 310
Main Hole or Casing Size	6 1/4"
Rathole or Liner Size	No. of Feet
Bottom Hole Choke Size	1/4"
Surface Choke Size	
Packer Rubber Size	6 1/4"
REMARKS	Shut-in pressures suggest high permeability within the interval tested.

RECOVERY	
TOTAL FLUID RECOVERED	240 Ft. Consisting of:
240 Ft. of	drilling fluid, with flecks of
Ft. of	live oil.
Ft. of	
Ft. of	
Test was/was not Reverse Circulated	
Oil Recovery A.P.I.	Water Specific Gravity
Salinity	

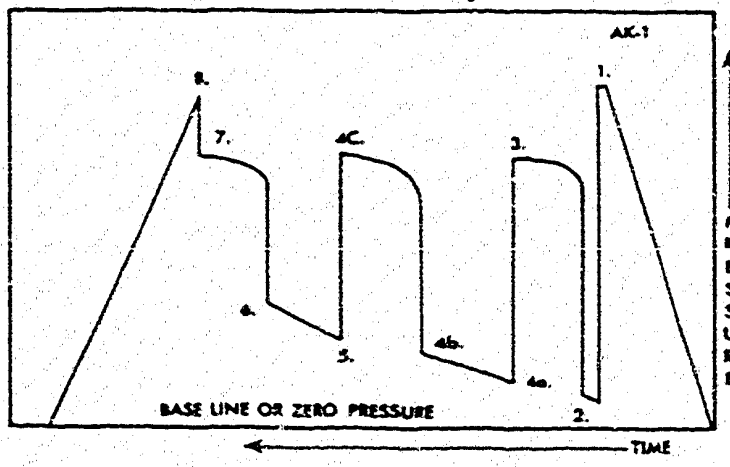
PRESSURE READINGS				
	Inside ____ Outside X	Inside ____ Outside X	Inside ____ Outside X	Inside ____ Outside ____
	Recorder No. 7499	Recorder No. 7498	Recorder No. 2835	Recorder No. ____
	Capacity 2500	Capacity 2500	Capacity ____	Capacity ____
	Depth 305	Depth 305	Depth 310	Depth ____
NUMBER KEY:				
1 - INITIAL HYDROSTATIC	132	134	120	
2 - PRE-FLOW	29	34	92	
3 - INITIAL SHUT-IN	120	118	120	
4a - 2nd INITIAL FLOW				
4b - 2nd FINAL FLOW				
4c - 2nd SHUT-IN				
5 - 3rd INITIAL FLOW	77	79	104	
6 - FINAL FLOW	117	112	120	
7 - FINAL SHUT-IN	121	119	120	
8 - FINAL HYDROSTATIC	132	133	120	

Horn River Resources Ltd. — Company
Horn River et al 10E Deep Bay 61° 20' 18.00 117° 00' 38.00 — Well Name and Description
#2 — Test No.
January 10/71 — Date of Test

LYNES

GUIDE TO INTERPRETATION AND IDENTIFICATION OF LYNES DRILL STEM TEST PRESSURE CHARTS

AK-1 recorders. Read from right to left.

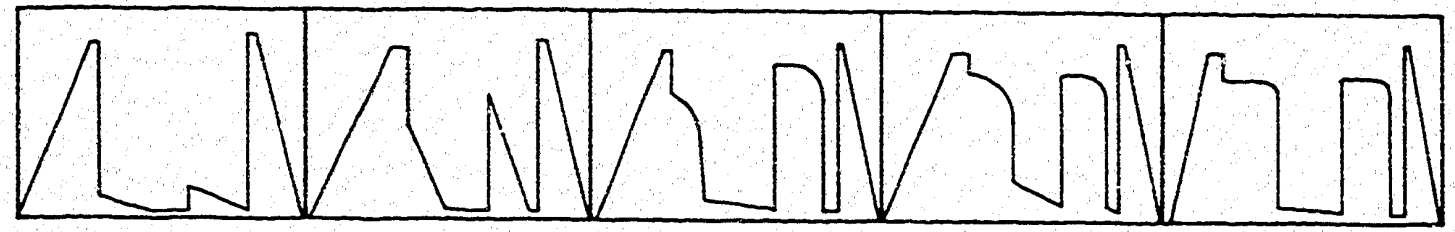


K-3 recorders. Read from left to right.

1. INITIAL HYDROSTATIC MUD PRESSURE
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 MUD PRESSURE

N.B. When only two shut-in and flow periods are run, 4a, 4b and 4c are omitted.

Typical charts for visual field analysis ranging from very low to high permeability.



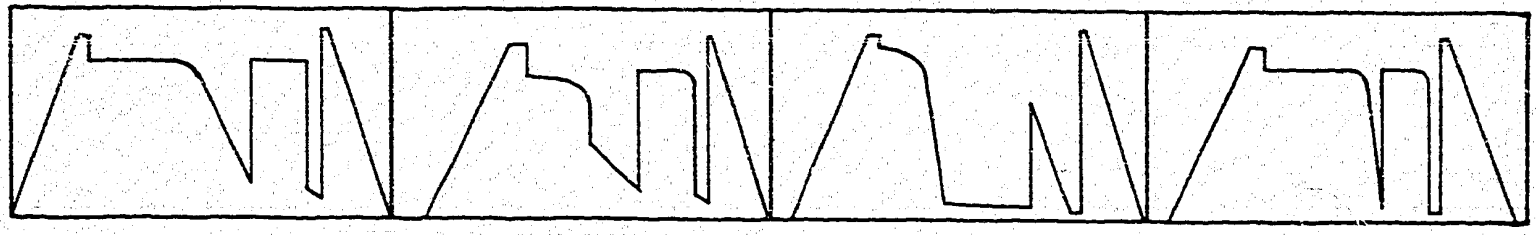
Very low permeability. Usually only mud recovered from interval tested. Virtually no permeability.

Slightly higher permeability. Again usually mud recovered.

Slightly higher permeability. Small recovery, less than 200' ft).

Average permeability. Final and initial shut-ins differ by 50 psi.

Average permeability. Strong damage effect. High shut-in pressure, low flow pressure.



Excellent permeability where final flow final shut-in pressure.

High permeability where ISIP and FSIP are within 10 psi.

Deep well bore invasion or damage. Final shut-in higher than the initial shut-in.

Tight hole chamber tester. Permeability very difficult to interpret unless the recovery is less than chamber length. Flow pressure builds up rapidly if recovery is large, similar to a shut-in.

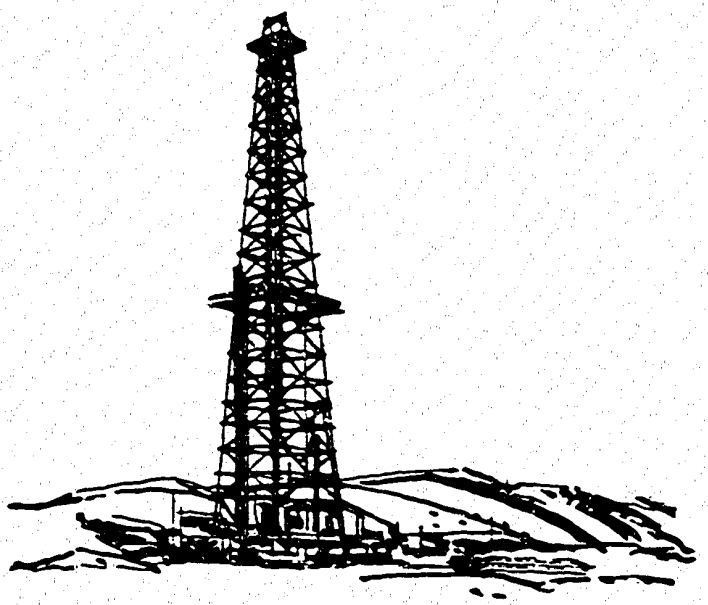
Horn River Resources Ltd.

Horn River et al 10F Dean Lav 610 21' 18 M #1 January 5/71

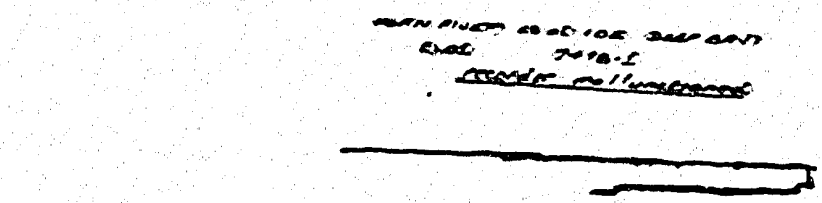
LYNES

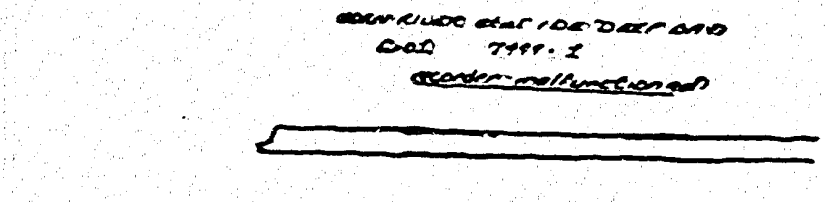
BRIGHT NAME IN THE OIL PATCH

Inflatable and Conventional Packer Tools



DRILL STEM TEST
TECHNICAL SERVICE REPORT





LYNES UNITED SERVICES LTD.

TEST DATA: Test No. 1 Lynes Tool

Formation		T.D. 311 Ft.	
Interval Tested	266	Ft. to 311	Ft.
Feet of Net Pay Tested	55		Ft.
Type of Test	Dual Bottom Hole		
Cushion		Amount	Ft.
Started in Hole at	11:30 Hrs.	Tool Open at	11:55 Hrs.
Pre-Flow	5 Mins.	Initial Shut-in	30 Mins.
2nd Flow	Mins.	Second Shut-in	Mins.
Final Flow	60 Mins.	Final Shut-in	60 Mins.
Remarks:			

Blow: Fair blow decreasing to very light during the test period.

GENERAL INFORMATION

Company	Horn River Resources Ltd.
Address	
Well Name	Horn River et al IOE Deep Bay
Well Number	61° 21' 18.00 117° 00' 38.00
K.B. Elevation	Sub-Sea Elevation
Area	Ft. Providence Province N.W.T.
Company Rep.	N. Soul. D. Comm
Tester	W. Goodwin
Contractor	Big Indian Rig No. 57
Ticket No.	2884 Date January 5/71
Service Reports To:	5 - above address

GAS BLOW MEASUREMENTS

Measured with

Time	Surface Choke	Reading Inches	Cubic Feet/Day

MUD AND HOLE DATA

Mud Type	Gel Chem
Weight	8.7 Viscosity 35 Water Loss
Filter Cake	2/32" Bottom Hole Temperature
Drill Pipe Size	3 1/2" IF Weight
Drill Collars	4 3/4" I.D. 2 3/4" Feet Run
Main Hole or Casing Size	6 1/4"
Rathole or Liner Size	No. of Feet
Bottom Hole Choke Size	1/2"
Surface Choke Size	
Packer Rubber Size	6 1/4"

REMARKS No fluid lost in hole during the test. Recorders malfunctioned so chart readings are impossible.

RECOVERY

TOTAL FLUID RECOVERED 225 Ft. Consisting of:

145	Ft. of	drilling fluid oil flecked
80	Ft. of	brackish formation fluid.
	Ft. of	
	Ft. of	

Test was/was not Reversed Circulated

Oil Recovery A.P.I. Water Specific Gravity

Salinity

PRESSURE READINGS

Inside ____ Outside ____	Inside ____ Outside ____	Inside ____ Outside ____	Inside ____ Outside ____
Recorder No. ____	Recorder No. ____	Recorder No. ____	Recorder No. ____
Capacity ____	Capacity ____	Capacity ____	Capacity ____
Depth ____	Depth ____	Depth ____	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				

Horn River Resources Ltd. — Company

Horn River et al IOE Deep bay 61° 21' 18.00 117° 00' 38.00 — Well Name and Description

#1 — Test No.

January 5/71 — Date of Test

LYNES

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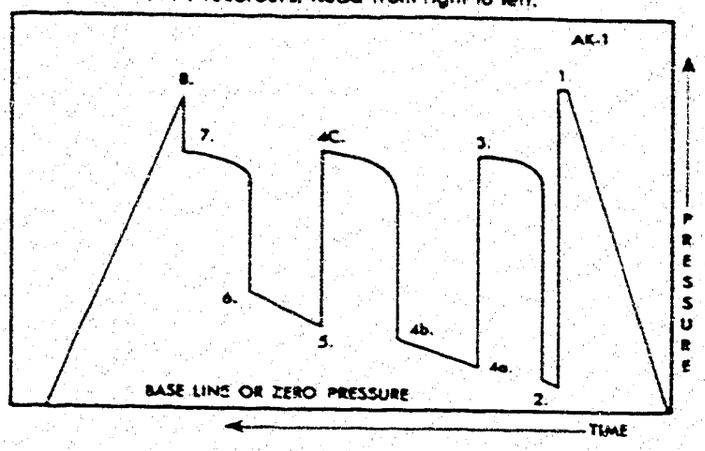

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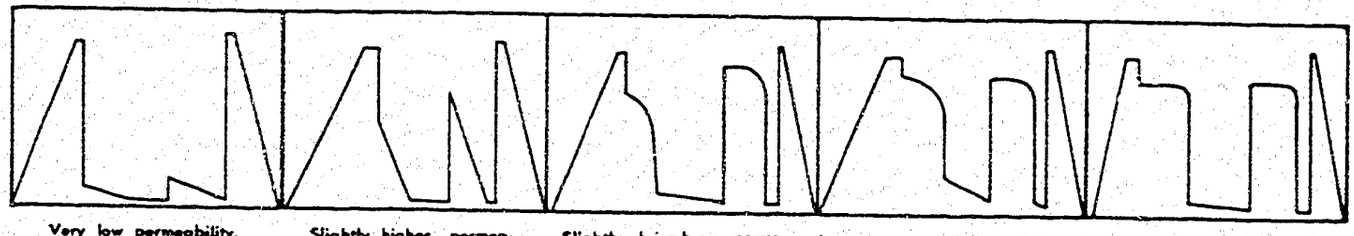
4a. 2nd INITIAL FLOW
4b. 2nd FINAL FLOW
4c. 2nd SHUT-IN
5. 3rd INITIAL FLOW
6. FINAL FLOW
7. FINAL SHUT-IN
8. FINAL HYDROSTATIC MUD PRESSURE

N.B. When only two shut-in and flow periods are run, 4a, 4b and 4c are omitted.

Typical charts for visual field analysis ranging from very low to high permeability.



Very low permeability. Usually only mud recovered from interval tested. Virtually no permeability.

Slightly higher permeability. Again usually mud recovered.

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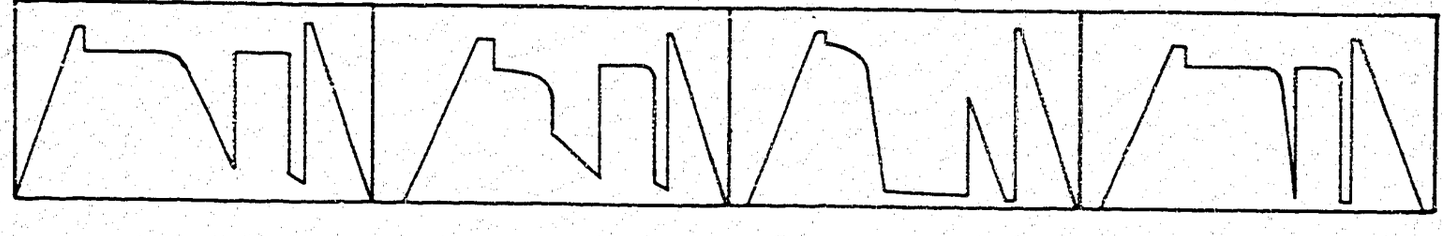
Average permeability. Final and initial shut-ins differ by 50 psi.

Average permeability. Strong damage effect. High shut-in pressure, low flow pressure.



Excellent permeability where final flow final shut-in pressure.

High permeability where ISIP and FSIP are within 10 psi.

Deep well bore invasion or damage. Final shut-in higher than the initial shut-in.

Tight hole chamber tester. Permeability very difficult to interpret unless the recovery is less than chamber length. Flow pressure builds up rapidly if recovery is large, similar to a shut-in.

BIG INDIAN DRILLING CO. LTD. PROJECT NO.....

RIG. NO. 57 LOCATION Hay River Reserves ETAL Deer Bay Bf 01 DATE Jan 11-71

BIG INDIAN DRILLING CO. LTD. PROJECT NO.....

LOCATION Hay River Reserve Lot 1 DATE Jan 11-71

TOUR 1

MIDN. TO 8 A.M.

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF M.	LOST DRILL TIME WAIT ON WATER
AF:	AT:										

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.				
VISC.				
GEL.				
W.L. F.C. P.H.				

ADDITIVES: WATER GALS.
1.
2.
3.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER	MIDN.	4 A.M.
DRILL	40			TEMPERATURE:	-30	-40
W. TRUCK	40			WIND VELOCITY:	—	—
MOB. PUMP	13½			RAIN, SNOW, FOG, ETC.	—	—

GENERAL: 40

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER Burt E Bouvay						
HELPER W. Ereruck						
HELPER: Hester Barnstein						
R.T. Weninger						
TOTAL						

INJURIES AND REMARKS:

STRATIGRAPHIC LOG / PUMP TEST FROM FT./TIME	TO FT./RATE IN 16PM	DESCRIPTION / DEPTH TO WATER IN FT.

Plug # 1-B20 to Surface

Mixed 220 sax Cement

mixt

100 sax wi 2% gel

Slurry 15, 2 lbs/gal

Bong plug in 3 stage

Plug down @ 4 PM 11/71

Cementing by Big Indian

D.S.C

Rig Released @ 8 PM

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Run Cement Plugs	1200	400	4
	Lay Down Pipe	400	500	1
	Rig Out	500	800	3
	Move Camp From Old Lease to New Lease.			

DRILLER Burt E Bouvay

COMPANY TIME CONT'R TIME

TOUR 2

8 A.M. TO 4 P.M.

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF M.	LOST DRILL TIME WAIT ON WATER
AF:	AT:										

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.				
VISC.				
GEL.				
W.L. F.C. P.H.				

ADDITIVES: WATER GALS.
1.
2.
3.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER	8 A.M.	NOON
DRILL				TEMPERATURE:		
W. TRUCK				WIND VELOCITY:		
MOB. PUMP				RAIN, SNOW, FOG, ETC.		

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER						
HELPER						
HELPER						
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Tear Out	8	9	

DRILLER

COMPANY TIME CONT'R TIME

TOUR 3

4 P.M. TO MIDN.

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF M.	LOST DRILL TIME WAIT ON WATER
AF:	AT:										

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	4 P.M.	6 P.M.	8 P.M.	10P.M.
WT.				
VISC.				
GEL.				
W.L. F.C. P.H.				

ADDITIVES: WATER GALS.
1.
2.
3.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER:	4 P.M.	8 A.M.
DRILL				TEMPERATURE:		
W. TRUCK				WIND VELOCITY:		
MOB. PUMP				RAIN, SNOW, FOG, ETC.		

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER						
HELPER						
HELPER						
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL

DRILLER

COMPANY TIME CONT'R TIME

TOTAL CONTRACT TIME HRS. TOOLPUSHER OR DRILLER i/c

TOTAL COMPANY TIME HRS. APPROVED BY

BIG INDIAN DRILLING CO. LTD. PROJECT NO.....

RIG. NO. 51 LOCATION HORN RESOURCES ETAL DEEP BAY E-01 DATE JAN 10-71

BIG INDIAN DRILLING CO. LTD. PROJECT NO.....

LOCATION HOLE RESOURCES DATE JAN 10-71

TOUR 1

LT: LF: HOLE NO. FROM TO T.D. IF FIN. 1622 SIZE CASING SET TO DEPTH AMOUNT SAC CEMENT AVERAGE TIME PER LOAD OF W. LOST DRILL TIME WAIT ON WATER

AF: AT:

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD | 12MN. | 2A.M. | 4 A.M. | 6 A.M.

WT.
VISC.
GEL.
W.L. F.C. P.H.
ADDITIVES: WATER GALS.
1.
2.
3.

PUMP: PRESS | RPM | DEPTH
PUMP: PRESS | RPM | DEPTH
SURVEY: AT | DEG. | E LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT		MIDN.	4 A.M.
DRILL	16		250	WEATHER:		
W. TRUCK	16			TEMPERATURE:	-20	-35
MOB. PUMP	1/2			WIND VELOCITY:	—	—
GENERAL:	16			RAIN, SNOW, FOG, ETC.	Clear	Clear

CREW TIME SUMMARY

	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER Bob LaBOUCANE						8
HELPER W. FRELOUCK						8
HELPER CHESTER PRANTEAU						8
T. THERIAULT						8
TOTAL						

INJURIES AND REMARKS:

STRATIGRAPHIC LOG / PUMP TEST

FROM FT. / TIME	TO FT. / RATE IN 16PM	DESCRIPTION / DEPTH TO WATER IN FT.
		Water Cost 97.50 12.5 hrs
		Ran Induction Electric Log from 190 to 1625
		Ran Sonic Gamma Ray Caliper from Surface to 1625

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Log Hole	1200	130	1 1/2
	Rig out Loggers	130	200	1/2
	Wait on orders	200	800	6

DRILLER Bob LaBoucane

COMPANY TIME CONT'R TIME

TOUR 2

LT: LF: HOLE NO. FROM TO T.D. IF FIN. 1622 SIZE CASING SET TO DEPTH AMOUNT SAC CEMENT AVERAGE TIME PER LOAD OF W. LOST DRIL. TIME WAIT ON WATER

AF: AT:

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD | 8 A.M. | 10A.M. | 12 N'n. | 2 P.M.

WT.
VISC.
GEL.
W.L. F.C. P.H.
ADDITIVES: WATER GALS.
1.
2.
3.

PUMP: PRESS | RPM | DEPTH
PUMP: PRESS | RPM | DEPTH
SURVEY: AT | DEG. | E LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT		8 A.M.	NOON
DRILL	24			WEATHER		
W. TRUCK	24			TEMPERATURE:	30°	
MOB. PUMP	1 20			WIND VELOCITY:	9 mph	
GENERAL:	24			RAIN, SNOW, FOG, ETC.	Clear	

CREW TIME SUMMARY

	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER M. WHEELDON						8
HELPER J. OTTENBREIT						8
HELPER H. HIGGINS						8
V. HIGGINS						8
TOTAL						

INJURIES AND REMARKS:

Drill Stem test #2

Tested from 2956 to 3456

5 min preflow
30 min Initial Shut in
60 min flow
60 min final Shut in

Recovered 240 feet of drilling fluid w/ flecks of live oil
Fair blow throughout
Fair decreasing to light in 30 min.

Initial hydrostatic 1553 PSI.
Preflow 25 "
I.S.I. 129 "
First flow 76 "
Final flow 129 "
F.S.I. 129
Final hydrostatic 1553

Tested by Lynes United D.T.C.

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Wait on Orders	800	1230	4.30
	Pull out to Test	1230	130	1
	Make up Test Tool	130	400	2.30

DRILLER L. Jacobson

COMPANY TIME CONT'R TIME

TOUR 3

LT: LF: HOLE NO. FROM TO T.D. IF FIN. 1622 SIZE CASING SET TO DEPTH AMOUNT SAC CEMENT AVERAGE TIME PER LOAD OF W. LOST DRILL TIME WAIT ON WATER

AF: AT:

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD | 4 P.M. | 6 P.M. | 8 P.M. | 10P.M.

WT.
VISC.
GEL.
W.L. F.C. P.H.
ADDITIVES: WATER GALS.
1.
2.
3.

PUMP: PRESS | RPM | DEPTH
PUMP: PRESS | RPM | DEPTH
SURVEY: AT | DEG. | E LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT		4 P.M.	8 A.M.
DRILL	32		280	WEATHER:		
W. TRUCK	32			TEMPERATURE:	-25	-30
MOB. PUMP	1 28			WIND VELOCITY:	—	—
GENERAL:	32			RAIN, SNOW, FOG, ETC.	—	—

CREW TIME SUMMARY

	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER G. Jacobson						11
HELPER L. Bourassa						11
HELPER L. Perreault						11
G. Campbell						11
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Service	400		
	Testing		645	2.75
	Pull test tool	645		
	Lay down tools		845	2.00
	Run pack in & lay down D.C.	845		
	Pick up 8 singles.			
	Get ready to cement.		1200	3.25

DRILLER L. Jacobson

COMPANY TIME CONT'R TIME

8

TOTAL CONTRACT TIME HRS. TOOLPUSHER OR DRILLER i/c

TOTAL COMPANY TIME HRS. APPROVED BY

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

RIG. NO. 57 LOCATION Horn Resources Et al FOF Deep Bay C-01 DATE Jan 9/71

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

LOCATION Horn Resources DATE Jan 9/71

TOUR 1 — MIDN. TO 8 A.M.

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:		1525	1620							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			4	6 3/4	~~J33~~ U2J	DW654	20000	78	228		16			

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WT.	8.6	8.6	8.7	8.7
VISC.	28	28	29	29
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____
2. _____
3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	228		
W. TRUCK	288		
MOB. PUMP	18		

GENERAL: 298

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-20	-25
WIND VELOCITY:	5	5
RAIN, SNOW, FOG; ETC.	—	—

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER G. Jacobson						8
HELPER L. Bourassa						9
HELPER L. Paranteau						8
G. Campbell						8
TOTAL						

INJURIES AND REMARKS:

STRATIGRAPHIC LOG FROM FT. / TIME	TO FT.	RATE IN 16PM	DESCRIPTION	PUMP TEST DEPTH TO WATER IN FT.
			Water Cost	
			~~4150 12.5 hrs~~	
			@ 125.50 - 14.5 hrs	

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Service	12 00	12 15	.25
	Drilling	12 15	8 00	7.75

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

RIG. NO. 57 LOCATION Horn Resources Etal 10E Deep Bay E-01 DATE Jan 8/71

STRATIGRAPHIC LOG / PUMP TEST

FROM FT. / TIME	TO FT. / RATE IN 16PM	DESCRIPTION / DEPTH TO WATER IN FT.
		Water Cost
		151.50

TOUR 1 — MIDN. TO 8 A.M.

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:		1316	1380							

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
		3	6 1/4	V25	DW882	20m	75	380		24			

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.	30	32	33	31
VISC.	28	28	29	34
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER 27 GEL GALS.
1. 9 salt gel
2. 6 Sawdust
3. 2 Fiber Seal

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	SURVEY ℄ LOG TO DEPTH
300	50	1380						

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	207		
W. TRUCK	214		
MOB. PUMP	64		

GENERAL: 274

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-10	-25
WIND VELOCITY:	5	5
RAIN, SNOW, FOG; ETC.	—	—

CREW TIME SUMMARY

	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER B. Jacobsen						8
HELPER L. Bourassa						7
HELPER L. Lorentzen						8
G. Campbell						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Service	12 00	12 15	15
	Drilling	12 15	8.00	7.75

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

RIG. NO. 57 LOCATION Horn Resources Etal IOF Deep Bay G-01 DATE Jan 7/71

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

LOCATION Horn Resources DATE Jan 7/71

TOUR 1 — MIDN. TO 8 A.M.

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:		~~Surface~~ 960	1080							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			2	6 1/4	OC-J	EZ860	20 000	80	454		22			
			3	6 1/4	V25	DW882	20 000	80	30		2			

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WT.	8.6	8.6	8.6	8.6
VISC.	30	30	29	29
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____
2. _____
3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	180		
W. TRUCK	240		
MOB. PUMP	40		

GENERAL: 250

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	0	-5
WIND VELOCITY:	10	15
RAIN, SNOW, FOG: ETC.	—	Snow

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER G. Jacobson						8
HELPER L. Bourassa						8
HELPER L. Parenteau						8
G. Campbell						8
TOTAL						

INJURIES AND REMARKS: Check Bop's while out of hole

STRATIGRAPHIC LOG FROM FT. / TIME	TO FT.	RATE IN 16 PM	DESCRIPTION	PUMP TEST DEPTH TO WATER IN FT.

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Service	12:00	12:15	.25
	Drilling	12:15	4.30	4.25
	Trip for bit	4 30	6 00	1.30
	Drilling	6 00	8 00	2.00

DRILLER G Jacobson

COMPANY TIME _____ CONT'R TIME _____ 8

TOUR 2 — 8 A.M. TO 4 P.M.

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:		1080								

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			3	6 1/4	V2J	DW882	20,000	70	175		9			

MUD	8 A.M.	10 A.M.	12 N'n.	2 P.M.
WT.	8.6	8.4	8.4	8.5
VISC.	29	28	28	28
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER WATER GALS.

1. _____
2. _____
3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH
300	50	1050				1080	3/4°	

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	188		250
W. TRUCK	248		
MOB. PUMP	48		

GENERAL: 258

WEATHER	8 A.M.	NOON
TEMPERATURE:	-5	-5
WIND VELOCITY:	15	15
RAIN, SNOW, FOG: ETC.	Snow	Cloudy

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER Bob LaBoucane						8
HELPER W. FREROUX						8
HELPER HESTER PARENTEAU						8
R. THERIAULT						8
TOTAL						

INJURIES AND REMARKS: None

Survey AT 1080 3/4°

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Ser.	800	815	1/4
	Drill 6 1/4 Hole	815	830	1/4
	Ream Sentrifical	830	845	1/4
	Drill 6 1/4 Hole	845	1030	1 3/4
	Survey	1030	1045	1/4
	Drill 6 1/4 Hole	1045	245	2
	Clean Shale Tank	245	300	1/4
	Drill 6 1/4 Hole	300	400	1

DRILLER Bob LaBoucane

COMPANY TIME _____ CONT'R TIME _____

TOUR 3 — 4 P.M. TO MIDN.

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:		1195	1310						3 HRS	

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			3	6 1/4	V5J	DW882	90 000	95	290		16 1/4			

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WT.	8.6	8.6	8.6	8.5
VISC.	29	28	28	28
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. 6 GEL WATER
2. 6 GEL 9 SAX
3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH
300	50	1233	300	60	1300			

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	196		
W. TRUCK	256		
MOB. PUMP	56		

GENERAL: 266

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	-5	-10
WIND VELOCITY:	5 mph	
RAIN, SNOW, FOG: ETC.	Cloudy	

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER BL Wheeldon						8
HELPER J. Ottenbreit						8
H. Higgins						8
V. Higgins						8
TOTAL						

INJURIES AND REMARKS: Safety Talk - H2S

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Drill 6 1/4" Hole	4 00	4 30	30
	Rig Ser	4 30	4 45	15
	Drill 6 1/4" Hole	4 45	8 30	3 45
	Work on Pump	8 30	9 00	30
	Drill 6 1/4 Hole	9 00	12 00	3
				8

DRILLER _____

COMPANY TIME _____ CONT'R TIME _____

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

RIG. NO. 57 LOCATION Horn Resources Ltd Joe Deep Bay C-01 DATE Jan 6/71

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

LOCATION Horn Resources DATE Jan 6/71

TOUR 1 — TO 8 A.M. — MIDN.

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:		480	620							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			1	6 1/4	DGJ	DH886	20000	85	387		15			
			2	6 1/4	DGJ	EZ860	20000	85	87 54		2 1/2			

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WT.	8.7	8.6	8.6	8.6
VISC.	28	28	28	28
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____
2. _____
3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH
300	60	500			516	7/2°		

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	164		
W. TRUCK	224		
MOB. PUMP	24		

GENERAL: 234

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	0	6
WIND VELOCITY:	—	—
RAIN, SNOW, FOG, ETC.	—	—

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER G. Jacobson						8
HELPER L. Bparassa						8
HELPER L. ParanTeau						8
G. Campbell						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Service	12:00	12:15	.25
	Drilling	12:15	4:15	4.00
	Trip for bit	4:15	5:30	1.25
	Drilling	5:30	7:00	1.50

DRILLER G Jacobson

COMPANY TIME _____ CONT'R TIME _____ 8

STRATIGRAPHIC LOG / PUMP TEST

FROM FT. / TIME	TO FT. / RATE IN 16PM	DESCRIPTION / DEPTH TO WATER IN FT.

TOUR 2 — TO 4 P.M. — 8 A.M.

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:		620	790							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			2	6 1/4	DEJ	EZ860	20000	65	216 224		10			

MUD	8 A.M.	10 A.M.	12 N'n.	2 P.M.
WT.	8.4	8.4	8.4	8.5
VISC.	29	28	28	28
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER WATER _____ GALS.

1. _____
2. _____
3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH
350	60	620	375	60	770	—	—	

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	164		250
W. TRUCK	224		
MOB. PUMP	24		

GENERAL: 234

WEATHER	8 A.M.	NOON
TEMPERATURE:	-8	0
WIND VELOCITY:	—	—
RAIN, SNOW, FOG, ETC.	Clear	Clear

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER Bob LABOUCANE						8
HELPER W. FREREAR						8
HELPER CHESTER PARANTEAU						8
L. THERIAULT						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Ser	8:00	8:15	1/4
	Drill 6 1/4 Hole	8:15	12:45	4 1/2
	Clean Shale Tank	12:45	1:00	1/4
	Drill 6 1/4 Hole	1:00	4:00	3

DRILLER Bob Labousane

COMPANY TIME _____ CONT'R TIME _____

TOUR 3 — TO MIDN. — 4 P.M.

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:		790	960							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			2	6 1/4	DGJ	EZ8690		70	384		17 3/4			

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WT.	9.6	9.4	9.4	8.8
VISC.	29	28	29	28
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____
2. _____
3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH
350	60	800						

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	172		
W. TRUCK	233		
MOB. PUMP	32		

GENERAL: 242

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	5	
WIND VELOCITY:	9 mph	
RAIN, SNOW, FOG, ETC.	Clear	

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER AL WHEELDON						8
HELPER J. OTTENBREIT						8
H. HIGGINS						8
V. HIGGINS						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Drill 6 1/4" Hole	4:00	4:45	3/4
	Rig Ser	4:45	5:00	1/4
	Drill 6 1/4" Hole	5:00	12:00	7
				8

DRILLER Al Wheeldon

COMPANY TIME _____ CONT'R TIME _____

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

BIG INDIAN DRILLING CO. LTD. PROJECT NO. 9

RIG. NO. 57 LOCATION Horn Resources FHB/ IOE Peep Bay C-01 DATE Jan 5/71

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

LOCATION Horn Resources DATE Jan 6/71

TOUR 1

MIDN. ____ TO 8 A.M. ____

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF M.	LOST DRILL TIME WAIT ON WATER
AF:	AT:	311									

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
		1	6 1/4	DGJ	DH886	ALL	100	132		3 3/4			

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WT.				
VISC.		35	35	35
GEL.				

W.L. ____ F.C. ____ P.H. ____

ADDITIVES: WATER ____ GALS.

1. ____

2. ____

3. ____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	℄ LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL			
W. TRUCK			
MOB. PUMP			

WEATHER	MIDN.	4 A.M.
TEMPERATURE:		
WIND VELOCITY:		
RAIN, SNOW, FOG, ETC.		

GENERAL:

CREW TIME SUMMARY

	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER C. Jacobson						8
HELPER L. Loiuressa						8
HELPER L. Laranfeau						
S. Campbell						
TOTAL						

INJURIES AND REMARKS:

STRATIGRAPHIC LOG / PUMP TEST

FROM FT. / TIME	TO FT. / RATE IN 76PM	DESCRIPTION / DEPTH TO WATER IN FT.

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	W.O. Tester.	Rig Flow	Rig Flow	Rig Flow

DRILLER S. Jackson

COMPANY TIME ____ CONT'R TIME ____

TOUR 2

8 A.M. ____ TO 4 P.M. ____

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF M.	LOST DRILL TIME WAIT ON WATER
AF:	AT:										

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
		1	6 1/4	DBS	DH886	ALL		out					

MUD	8 A.M.	10 A.M.	12 N'n.	2 P.M.
WT.				
VISC.				
GEL.				

W.L. ____ F.C. ____ P.H. ____

ADDITIVES: WATER ____ GALS.

1. ____

2. ____

3. ____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	℄ LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	148		250
W. TRUCK	208		
MOB. PUMP	[illegible]8		

WEATHER	8 A.M.	NOON
TEMPERATURE:	-10	-5
WIND VELOCITY:		
RAIN, SNOW, FOG, ETC.	Clear	

GENERAL: 218

CREW TIME SUMMARY

	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER Bob LaBoucane						8
HELPER W. Frerick						8
HELPER Chester Pasanteau						8
R. Theriault						8
TOTAL						

INJURIES AND REMARKS:

None

Changed oil in filters in Rig & pump motor

Drill Stem Test #1

Tested 266 - 311

5 min Preflow

30 min I.S.I.

60 min Flow

60 min F.S.I.

Recovered 145' drilling fluid

60' Brandish formation water - oil flecked

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Ser	8:00	10:00	2
	W.O. / Tester			
	Trip out to test	10:00	10:30	1/2
	Rig up test tool	10:30	11:00	1/2
	Run in Hole	11:00	11:30	1/2
	Rig Top End To Test	11:30	12:00	1/2
	Tool T Test	12:00	12:30	1/2
OFF BTM				
OPEN	Tool	12:30	1:30	1
	Shut in Tool	1:30	2:30	1
	Pull Test	2:30	3:30	1
	Load Test Tool out	3:30	4:00	1/2

DRILLER Bud LaBoucane

COMPANY TIME ____ CONT'R TIME ____

TOUR 3

4 P.M. ____ TO MIDN. ____

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF M.	LOST DRILL TIME WAIT ON WATER
AF:	AT:		311	488							

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
		1	6 1/4	DGJ	DH886	ALL	100	301		11			

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WT.		8.9	8.9	8.9
VISC.		32	32	34
GEL.				

W.L. ____ F.C. ____ P.H. ____

ADDITIVES: WATER ____ GALS.

1. ____

2. ____

3. ____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	℄ LOG TO DEPTH
300	50	330						

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	156		
W. TRUCK	216		
MOB. PUMP	16		

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	-50	5
WIND VELOCITY:		
RAIN, SNOW, FOG, ETC.	CLEAR	

GENERAL: 226

CREW TIME SUMMARY

	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER R. Wheeldon						8
HELPER J. Ottenbreit						8
HELPER H. Higgins						8
V. Higgins						8
TOTAL						

INJURIES AND REMARKS:

No pressure recorded Both recorders failed to function

Balance of test functioned normally.

P.J.C.

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Ser	4:00	4:15	15
	Trip In	4:15	4:45	30
	Drill	4:45	12:00	7 60 / 66

DRILLER R. Wheeldon

COMPANY TIME ____ CONT'R TIME ____

TOTAL CONTRACT TIME ____ HRS. TOOLPUSHER OR DRILLER i/c ____

TOTAL COMPANY TIME ____ HRS. APPROVED BY ____

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

RIG. NO. 57 LOCATION HORN RIVER ETAL ICE DEEP BAY C-01 DATE JANUARY 4th 1971

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

LOCATION DATE 4/1/71

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:										

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

TOUR 1 — MIDN. — TO — 8 A.M.

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.				
VISC.				
GEL.				

W.L. F.C. P.H.

ADDITIVES: WATER GALS.

1.

2.

3.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL			
W. TRUCK			
MOB. PUMP			

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-5°	-10°
WIND VELOCITY:	9 mph	
RAIN, SNOW, FOG, ETC.	CLEAR	

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER P.L. WHEELDON						8
HELPER J. OTTENBREIT						8
HELPER H. HIGGINS						8
V. HIGGINS						8
TOTAL						

INJURIES AND REMARKS:

STRATIGRAPHIC LOG FROM FT. / TIME	TO FT. / RATE IN 15PM	DESCRIPTION / PUMP TEST DEPTH TO WATER IN FT.
		(2) HANCO HERDS & 1 LINERS FXZ TO 5"
		Ran 6 joints 7" 20 lb/ft
		Used JSS R2 Casing
		with STC - 8rd.
		landed at 179. RB.
		Used 1 Centraliger +
		1 Davis Guide Shoe
		Cmt w/120 sax Const.
		cement + 3% CACL2
		8 slurry weight 15.8 lb/gal
		3 BBLs Returns
		Plug down at 1000 hrs 4/1/71

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	CEMENT	12°		
	PLUG DOWN		1°	
	WOC	1°	5°	

DRILLER

COMPANY TIME CONTR TIME

TOUR 2 — 8 A.M. — TO — 4 P.M.

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:										

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.				
VISC.				
GEL.				

W.L. F.C. P.H.

ADDITIVES: WATER GALS.

1.

2.

3.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL			
W. TRUCK			
MOB. PUMP			

WEATHER	8 A.M.	NOON
TEMPERATURE:		
WIND VELOCITY:		
RAIN, SNOW, FOG, ETC.		

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER Bob LABOUCANE						8
HELPER W. FREROUK						8
HELPER CHESTER JORANTEAU						8
R. THERIAULT						6
TOTAL						

INJURIES AND REMARKS: None

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	NIPPLE UP	800	200	6
	PRESSURE UP.	200	230	1/2
	DRAIN + BLOW ALL LINE	230	400	1 1/2

DRILLER

COMPANY TIME CONTR TIME

TOUR 3 — 4 P.M. — TO — MIDN.

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:		179	911							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
				6 1/4	DGJ	DH55	TOTAL	100	132		3 3/4			

MUD	4 P.M.	6 P.M.	8 P.M.	10P.M.
WT.				
VISC.				
GEL.				

W.L. F.C. P.H.

ADDITIVES: WATER GALS.

1.

2.

3.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH
400	50	200						

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL			
W. TRUCK			
MOB. PUMP			

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	0°	-3°
WIND VELOCITY:	9 mph	
RAIN, SNOW, FOG, ETC.	CLEAR	

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER P.L. WHEELDON						
HELPER J. OTTENBREIT						
HELPER H. HIGGINS						
V. HIGGINS						
TOTAL						

INJURIES AND REMARKS:

Pressure Blind Rams + Choke manifold to 700 PSI Held OK for 15 min P.S.C

Pressure Pipe rams + Hydril to 700 PSI. Held OK for 15 min P.S.C

All BOP. work OK

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	RIG SERV	4°	4 15	
	TRIP IN	4 15	4 30	
	PRESSURE HYDRIL	4 30	5°	
	CHANGE RAM LINE	5°	6 30	
	SLIP & CUT HOIST LINE	6 30	7°	
	DRILL OUT 40' CMT	7°	7 30	
	DRILL 6 1/4" HOLE	7 30	11 15	
	WAIT ON TESTER	11 15	12°	

DRILLER

COMPANY TIME CONTR TIME

TOTAL CONTRACT TIME HRS. TOOLPUSHER OR DRILLER i/c

TOTAL COMPANY TIME HRS. APPROVED BY

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

RIG. NO. 57 LOCATION Hann Quirental 10 E Deep Bay C-01 DATE 3RD JANUARY 1971

BIG INDIAN DRILLING CO. LTD. PROJECT NO.

LOCATION Hole #16 DATE 3/1/71

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
AF:	AT:										

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.				
VISC.				
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.
1. CEL 8 SAX
2.
3.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL			
W. TRUCK			
MOB. PUMP			

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	0°	-5°
WIND VELOCITY:		
RAIN, SNOW, FOG; ETC.	CLEAR	

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER R.L. WHEELDON						12
HELPER J. OTTENBREIT						12
HELPER H. HIGGINS						12
V. HIGGINS						12
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	RAISE DERRICK & RIG UP	15°	20	
	MIX MUD WAIT ON WATER	2°	4°	
		4°	8°	

DRILLER R.L. Wheeldon

COMPANY TIME _____ CONT'R TIME _____

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
AF:	AT:		0	179	179						

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
				9 7/8	RT.		ALL	180	179		8½			

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.				
VISC.	46	48	42	42
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.
1.
2.
3.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH
300	68	100	350	68	179	179	¾°	

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL			
W. TRUCK			
MOB. PUMP			

WEATHER	8 A.M.	NOON
TEMPERATURE:		
WIND VELOCITY:		
RAIN, SNOW, FOG; ETC.		

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER Bob LaBOUCANE						12
HELPER W. FREDRICK						12
HELPER CHESTER PARANTEAU						12
R. THERIAULT						12
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig up Rig Ser.	800	10.00	2
	DRILL 9⅞ Hole	10-00	630	8½
	TRIP out Hole	630	700	½
	Ream TO Bottom	700	730	½
	WORK Hole	730	745	¼
	CIR Hole	745	800	¼

DRILLER Bob LaBouca

COMPANY TIME _____ CONT'R TIME _____

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
AF:	AT:										

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	4 P.M.	6 P.M.	8 P.M.	10P.M.
WT.				
VISC.				
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.
1.
2.
3.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL			
W. TRUCK			
MOB. PUMP			

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:		
WIND VELOCITY:		
RAIN, SNOW, FOG; ETC.		

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER						
HELPER L. BOURASSA						17
HELPER L. PARANTEAU						17
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Down			
	TRIP OUT	8°	9°	
	Run CASING	9°	11°	
	Circulate & Rig up CEMENT EQU	11°	12°	

DRILLER _____

COMPANY TIME _____ CONT'R TIME _____

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

BIG INDIAN DRILLING CO. LTD. PROJECT NO. 171

RIG. NO. 57 LOCATION _____ DATE 2ND JANUARY 1971

TOUR 1 — MIDN. TO 8 A.M.

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF M.	LOST DRILL TIME WAIT ON WATER
AF:	AT:										

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.				
VISC.				
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____

2. _____

3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	¢ LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER	MIDN.	4 A.M.
DRILL				TEMPERATURE:		
W. TRUCK				WIND VELOCITY:		
MOB. PUMP				RAIN, SNOW, FOG; ETC.		

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER						
HELPER L. BOURASSA						12
HELPER L. PERRAULT						12
TOTAL						

INJURIES AND REMARKS:

STRATIGRAPHIC LOG FROM FT.	TO FT.	PUMP TEST RATE IN 16PM	DESCRIPTION	DEPTH TO WATER IN FT.

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	SET UP RIG	8:00	12:00	
	DRILLER			
	COMPANY TIME _____ CONTR TIME _____			

TOUR 2 — 8 A.M. TO 4 P.M.

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF M.	LOST DRILL TIME WAIT ON WATER
AF:	AT:										

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.				
VISC.				
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____

2. _____

3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	¢ LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER	8 A.M.	NOON
DRILL				TEMPERATURE:		
W. TRUCK				WIND VELOCITY:		
MOB. PUMP				RAIN, SNOW, FOG; ETC.		

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER Bob LaBOUCANE						12
HELPER Walter FEDRUK						12
HELPER Chester PHANTEAU						12
Bob THERIAULT						12
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig up	8:00	4:00	
	DRILLER			
	COMPANY TIME _____ CONTR TIME _____			

TOUR 3 — 4 P.M. TO MIDN.

LT:	LF:	HOLE NO.	FROM.	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF M.	LOST DRILL TIME WAIT ON WATER
AF:	AT:										

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	4 P.M.	6 P.M.	8 P.M.	10P.M.
WT.				
VISC.				
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____

2. _____

3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	¢ LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER:	4 P.M.	8 A.M.
DRILL				TEMPERATURE:		
W. TRUCK				WIND VELOCITY:		
MOB. PUMP				RAIN, SNOW, FOG; ETC.		

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER H. WHEELDON						4
HELPER T. OTTENBREIT						4
HELPER H. HIGGINS						4
V. HIGGINS						4
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig up			
	DRILLER			
	COMPANY TIME _____ CONTR TIME _____			

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

BIG INDIAN DRILLING CO. LTD. PROJECT NO. 129

RIG. NO. _____ LOCATION _____ DATE _____

TOUR 1 — MIDN. TO 8 A.M.

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:										

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.				
VISC.				
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____
2. _____
3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	℄ LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER	MIDN.	4 A.M.
DRILL				TEMPERATURE:		
W. TRUCK				WIND VELOCITY:		
MOB. PUMP				RAIN, SNOW, FOG; ETC.		

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER R.L. WHEELDON						16
HELPER						
HELPER R. TREMBLAY						16
TOTAL						

INJURIES AND REMARKS:

TOUR 2 — 8 A.M. TO 4 P.M.

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:										

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.				
VISC.				
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____
2. _____
3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	℄ LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER	8 A.M.	NOON
DRILL				TEMPERATURE:		
W. TRUCK				WIND VELOCITY:		
MOB. PUMP				RAIN, SNOW, FOG; ETC.		

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER						
HELPER						
HELPER						
TOTAL						

INJURIES AND REMARKS:

TOUR 3 — 4 P.M. TO MIDN.

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:										

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

MUD	4 P.M.	6 P.M.	8 P.M.	10P.M.
WT.				
VISC.				
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____
2. _____
3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	℄ LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER:	4 P.M.	8 A.M.
DRILL				TEMPERATURE:		
W. TRUCK				WIND VELOCITY:		
MOB. PUMP				RAIN, SNOW, FOG; ETC.		

GENERAL:

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER						
HELPER						
HELPER						
TOTAL						

INJURIES AND REMARKS:

BIG INDIAN DRILLING CO. LTD. PROJECT NO. _____

DATE _____ LOCATION _____ DATE _____

STRATIGRAPHIC LOG / PUMP TEST: FROM FT. / TIME	TO FT. / RATE IN 16PM	DESCRIPTION / DEPTH TO WATER IN FT.	CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
				Move Rig			

BIG INDIAN DRILLING CO. LTD. PROJECT NO. 1171

RIG. NO. _____ LOCATION _____ DATE _____

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:										

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

TOUR 1

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.				
VISC.				
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____

2. _____

3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	± LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER	MIDN.	4 A.M.
DRILL				TEMPERATURE:		
W. TRUCK				WIND VELOCITY:		
MOB. PUMP				RAIN, SNOW, FOG; ETC.		

GENERAL:

MIDN. TO 8 A.M.

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER AL. WHEELDON						4
HELPER						
HELPER R. THERIAULT						8
TOTAL						

INJURIES AND REMARKS:

STRATIGRAPHIC LOG / PUMP TEST

FROM FT. / TIME	TO	RATE IN 16PM	DESCRIPTION / DEPTH TO WATER IN FT.

DEC 29th 1970

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	START RIG 2 PREPARE TO MOVE			

DRILLER

COMPANY TIME _____ CONT'R TIME _____

BIG INDIAN DRILLING CO. LTD. PROJECT NO. _____

LOCATION _____ DATE _____

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:										

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

TOUR 2

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.				
VISC.				
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____

2. _____

3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	± LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER	8 A.M.	NOON
DRILL				TEMPERATURE:		
W. TRUCK				WIND VELOCITY:		
MOB. PUMP				RAIN, SNOW, FOG; ETC.		

GENERAL:

8 A.M. TO 4 P.M.

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER AL. WHEELDON						9
HELPER						
HELPER R. THERIAULT						8
TOTAL						

INJURIES AND REMARKS:

DEC 30 1970

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	WORK ON TRANSMISSION			
	MOVE CAMP TO HAY RIVER			

DRILLER

COMPANY TIME _____ CONT'R TIME _____

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:										

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.

TOUR 3

MUD	4 P.M.	6 P.M.	8 P.M.	TOP.M.
WT.				
VISC.				
GEL.				

W.L. _____ F.C. _____ P.H. _____

ADDITIVES: WATER _____ GALS.

1. _____

2. _____

3. _____

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	± LOG TO DEPTH

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER:	4 P.M.	8 A.M.
DRILL				TEMPERATURE:		
W. TRUCK				WIND VELOCITY:		
MOB. PUMP				RAIN, SNOW, FOG; ETC.		

GENERAL:

4 P.M. TO MIDN.

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER AL. WHEELDON						12
HELPER						
HELPER R. THERIAULT						8
TOTAL						

INJURIES AND REMARKS:

DEC 31st 1970

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	MOVE CAMP TO FORT PROVIDENCE			

DRILLER

COMPANY TIME _____ CONT'R TIME _____

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER I/c _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____