HORN RIVER ET AL

BIG ISLAND

O-78

Drilling Authority No. 171

Date Issued 8 January 1971

WELL NAME Horn River et al Big Island O-78

FIELD

LOCATION: Unit O Area:

Section 78

Latitude 61-37-47 Longitude 116-28-38 Grid 61-10-116-15

U.W.L.R. 61.12972 — 116.47722

U.W.I. 300078611011615O

Rig Release Date:

Status

Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
8-1-71	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
29-1-71	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

IAND 52-90 (3-69)

Drilling Authority No. 481

Date Issued Jan 8/71

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 Big Island O-78

Permit No. 4507

~~J. Ray Hemmett~~, General Crude, Teck Ridgefield, Horpet (Permittee, Licensee, Lessee) Lease No.

Exploratory Licence No. 1666, 1398, 1775, 1746, 1679

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

Location: Unit O Section 78 Grid 61°10', 116°15'

Latitude 61°07'47" Longitude 116°28'38"

From Established Reference Marker

Universal Well Location Reference Lat. 61.12972 N., Long. 116.47722°W

	DATE	DEPTH
Spudded	Jan 13/71	
Suspended		
Resumed Operations		
Finished Drilling	Jan 20/71	1803 (Logger) 1801 (Driller)
Deepened		
Complete (gas/oil)		
Abandoned	Jan 23/71	
Rig released	Jan 23/71	

Pool(s) N/A

Interval(s) open to production None

Elevation: Gr. 530 K.B. 540

Rig No. m 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#	409.8'	418 (K.B.)	175 sacs plus 3% Ca Cl2
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION	
	Depths (Log)	Sub-Sea
Slave Point	432	+109
Watt Mountain		
Sulphur Point	660	-119
Pine Point	826	-285
Keg River	1150	-609
Chinchaga	1360	-819
Mirage Point	1570	-1029
Old Fort Island	1718	-1177

CORE RECORD

From	To	Rec.	From	To	Rec.
No cores cut					

LOG RECORD

Run No.	Type of Log	From	To
1	Induction - Electrical	1802	417
1	Formation Density - Gamma Ray Caliper	1802	417

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

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
Jan 22/71	1803'	1603	35 sax plus 4% Gel
Jan 22/71	1250	Surface	225 sax plus 4% Gel

A plate was welded to the surface with a riser and identification marker attached.

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 21/71	Mirage Point	1655	1692										Misrun - unable to get to bottom due to bridge at 1401
2	Jan 22/71	Mirage Point	1655	1692	60	30	60	799	800	31	113	913	912	Recorded 90' drilling mud, 42' salt water (196,000 ppm) Small air blow throughout test

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
					Nil

PRESENT STATUS OF WELL

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

Company Horn River Resources

Signed by [signature]

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. 481

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well or ~~Suspend Drilling~~

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

Name and number of well Horn River et al Big Island O-78
Location: Unit O Section 78 Grid 61°10' M Lat., 116°15' W
Latitude 61°07'47" North Longitude 116°28'38" West
From Established Reference Marker
Universal Well Location Reference Lat. 61.12971° N Long. 116.47722° W
Permit No. 4507 Lease No.

J. Ray McDermott Canada Ltd., General Crude, Teck Corp., Ridgefield and Norpet (Permittee, Licensee, Lessee)
Date of commencement of proposed program Jan. 13, 1971 6:00 AM

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at
Gas at
Water at 1655 - 1692 (DST #1)
Total Depth 1803 Date of last operations Jan. 23, 1971 8:00 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	418	418 KB	175 sacks cement plus 3% CaCl2	NIL
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	1603 - 1803	Dolomite, Salt, Fort Island Sandstone	35 plus 4% Gel	
2	1250 to surface	Slave Point, Watt Mtn., Sulphur Point, Pine Point Lime Reef, Bituimous Shale, and Limestone, Keg River Limestone	225 plus 4% Gel	

The following logs have been run IES and Formation Density Logs
Other operations proposed NIL

Operations to be carried out by Big Indian Drilling Co. Contractor Licence No. 791
Address Ft. Providence, N.W.T. Address
Responsible Agent in field Al Whitteron
Dated at Calgary, this 25 Day of January 19 71
Signed by [signature]
Title President Company Horn River Resources Ltd.
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:

Dated Jan 29, 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.

Drilling Authority No. 491

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: Horn River et al Big Island O-78

Location: Unit O Section 78

Latitude 61°07'47" Longitude 116°22'30" Grid 61°10' N.Lat., 116°15' W.Long.

Unique Well Identifier 300078611611615O

Universal Well Location Reference Lat. 61.12972° N., Long. 116.47722° W.

Elevation: Ground 530 est. K.B. est. 538 feet above sea-level.

Well is expected to produce from Middle Devonian Carbonates formation at a depth of about 850 feet. Expected total final depth 1750

Area assigned to well

(for Oil Conservation Engineer's use only)

Permit No. 4507 Lease No. Acreage 61,920

Permittee, licensee, or lessee J.Ray McDermott Canada Ltd., General Crude, Tack Corp., Ridgefield, and Norpet

Exploratory Licence No. 1666, 1390, 1775, 1746, 3679

Surface owned by Crown or Crown

Petroleum and natural-gas rights owned by Crown (If alienated submit name and address of owner and occupant.)

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.						See Condition 5.
4.						
5.						

Expected water, gas, and oil horizons and type of control equipment Middle Devonian Carbonates:
Control with: 8" - 900 Series Ram type B.O.P.
8" - 900 Series Hagen Dorris 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 Whitecross 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 16 day of December 19 70

Signed by F.L. Woolley 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:—

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

Dated 5th January 19 71

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)

POOR COPY

received by radio on the progress of the well.

3. During all drilling and testing operations, every effort shall be made to ensure that drilling fluids, chemicals and cuttings shall be disposed of or controlled in a manner that will prevent the contamination of [illegible] or subsurface strata.

4. We draw your attention to Sections 99 and 98 of the Canada Oil and Gas Land Regulations.

5. Surface casing must be set [illegible] feet into a consolidated formation.

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

D.M.S. Dana, Oil Conservation Engineer

GEOLOGICAL PROGNOSIS

Hess River et al Big Island F-78

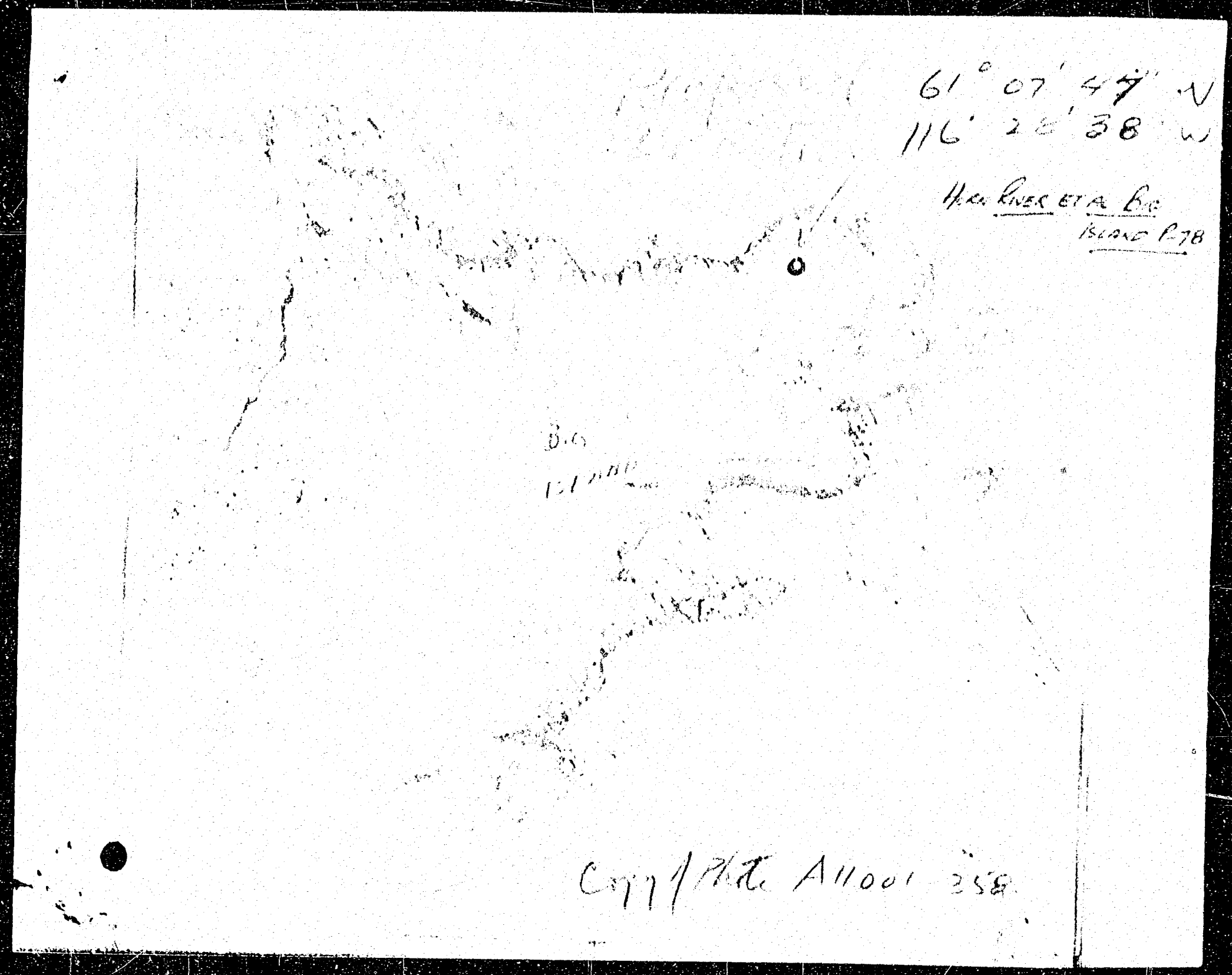
61°07'47" N. Lat., 116°28'38" W. Long.

Ground Elevation: 530'

K.B. 540'

MARKERS	DEPTH	ELEVATION (K.B.)
Spud in Ft. Simpson Shale		
Slave Point (if present)	540'	
Pine Point (shaly limestone)	985'	- 445'
Kag River Limestone	1190'	- 650'
Kag River Dolomite	1330'	- 790'
Chinchaga Anhydrite	1395'	- 855'
Basal Red Beds	1620'	-1080'
Pre-Cambrian	1640'	-1100'

F. L. WOOLLEY


61° 07' 47" N
116° 28' 38" W
HWY KINGS ET A B.C
ISLAND P.78
B.C

930-11-4-1

OPERATION REEF
NORTHWEST TERRITORIES
CANADA

Geological and Engineering
REPORT
Horn River et al BIG ISLAND 0-78

PREPARED FOR

HORN RIVER RESOURCES LTD.

PREPARED BY

JAMES A. LEWIS ENGINEERING CO. LTD.

Petroleum Reservoir Analysts

CALGARY - ALBERTA

930-11-4-1

INTRODUCTION

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

Horn River et al Big Island O-78

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.

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INTRODUCTION

Horn River et al Big Island O-78 was drilled in January, 1971 on the northeast tip of Big Island which is situated in the west arm of Great Slave Lake. It was drilled to test the Middle Devonian and older formations overlying the Precambrian basement. Three other tests had previously been drilled on the island, the most recent being Calstan Big Island G-56 drilled into the Precambrian and abandoned in 1965. The location was based mainly on geomorphological and stratigraphic considerations and seismic control is lacking in the immediate vicinity of the location.

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

WELL: Horn River et al Big Island O-78

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

LEGAL DESCRIPTION: Unit O, Section 78, Grid 61° 10' N., 116° 15' W.

LOCATION: LATITUDE: 61° 07' 47" LONGITUDE: 116° 28' 38"

UNIVERSAL WELL LOCATION REFERENCE: Lat. 61.12972° N., Long. 116.47722° W.

UNIQUE WELL IDENTIFIER: 3000786110116150

CO-ORDINATES:

PERMIT OR LEASE: 4507 (Permit)

PERMITTEE, LICENCEE, LESSEE: J. Ray McDermott Can. Ltd., General Crude, Teck, Ridgefield and Norpet

DRILLING AUTHORITY: 481 DATE: January 8, 1971

CLASSIFICATION: Exploratory Wildcat

ELEVATION: GROUND: 530' (Est.) K.B. 540'(Est.)

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

WELLSITE GEOLOGIST: Norman Soul P. Geol.

SURFACE CASING: 7" - 20 lb. set @ 418' K.B. c/w 175 sax + 3% $CaCl_2$

HOLE SIZE: 9-7/8" Surface to 420', 6-1/4" 420 to 1801'

MUD SYSTEM: Gel Chemical

CORES: None Taken

FORMATION TESTS: DST No. 1: 1,655 - 1,692' (Misrun)
DST No. 2: 1,655 - 1,692' Mirage Point

ABANDONMENT PLUGS: No. 1: 1,801 - 1,600' 35 sax + 4% gel
No. 2: 1,250 - Surface, 225 sacks

LOST CIRCULATION: Nil

LOGS: Induction Electric 1802 - 417'
Formation Density
Gamma Ray Caliper 1802' - 417'

WELL SPUDDED: January 13, 1971

FINISHED DRILLING: January 20, 1971

RIG RELEASED: January 23, 1971

TOTAL DEPTH: 1801' Driller; 1803' Logger

STATUS: Dry and Abandoned

SECTION II

GEOLOGICAL SUMMARY

Formation Tops	Samples Feet	E-Log Feet
Slave Point	450	432
Watt Mountain - Sulphur Point	670	660
Pine Point	830	826
Keg River	1150	1150
Chinchaga	1360	1360
Mirage Point	1570	1570
Old Fort Island	1720	1718
Total Depth	1801	1803

SAMPLE DESCRIPTION

Depth Feet	Description
UPPER DEVONIAN	
Fort Simpson Formation	
240-420	Shale, dark green, non-calcareous to slightly calcareous.
420-450	Shale, dark brownish grey, non-calcareous, pyritic.
MIDDLE DEVONIAN	
Slave Point Formation - 432' Logs	
450-470	Limestone, buff to brown, fragmental, reefoidal, stromatoporoids, corals.
470-480	Limestone, light brown, dense to microcrystalline.
480-490	Limestone, brown, dense to microcrystalline.

Depth Feet	Description
490-510	Limestone, light brown, dense.
510-520	Limestone, brown, dense to microcrystalline; traces of shale, bright green.
520-550	Limestone, buff to light brown, dense to microcrystalline; traces of shale, bright green.
550-570	Limestone, buff to light brown, dense to microcrystalline, vugs with calcite crystals.
570-580	Limestone, buff to dark brown, dense to microcrystalline; shale, green.
580-590	Limestone, cream to buff, dense to microcrystalline.
590-615	Limestone, greyish white to buff, dense to microcrystalline.
615-635	Limestone, buff to brown, dense to microcrystalline.
635-645	Limestone, greyish white to light brown, dense to microcrystalline.
645-650	Limestone, buff to dark brown, dense to microcrystalline.
650-660	Limestone, buff to brown, dense; minor shale, green.
660-670	Limestone, buff to light brown, dense.

Watt Mountain-Sulphur Point 660' Logs

670-680	Shale, bright green; Limestone, as above.
680-690	Limestone, brown, microgranular, brecciated with shale, bright green.
690-700	Limestone, brown, fine grained, dolomitic in part; shale, bright green.
700-710	Limestone, light brown, dense to microgranular.
710-720	Limestone, light brown, dense to microcrystalline.
720-740	Shale, bright green; Limestone, brown, dense
740-750	Limestone, light brown, dense to microcrystalline.
750-770	Shale, bright green; Limestone, light brown, dense.

Depth Feet	Description
770-780	Limestone, brown, dense.
780-830	Shale, bright green; Limestone, brown, dense.
Pine Point Formation 826' Logs	
830-860	Shale, dark greyish brown, calcareous; Limestone, dark greyish brown, shaly.
860-880	As above, with interbedded limestone, light brown, dense.
880-950	Limestone, dark brownish grey, shaly.
950-960	Limestone, buff to light brown, dense to microcrystalline.
960-990	Limestone, light brown, fossiliferous fragmental, reefoidal, stromatoperoids, poor porosity; minor shale, green.
990-1015	Dolomite, light brown, finely crystalline, poor porosity.
1015-1040	Limestone, buff, dense to microcrystalline; Limestone, cream to buff, dense to fragmental; minor Shale, black, bituminous.
1040-1050	Limestone, buff to brown, dense to fragmental.
1050-1060	Limestone, buff to light brown, microcrystalline.
1060-1070	Dolomite, buff, microcrystalline.
1070-1080	Limestone, greyish buff to brown, finely crystalline, dolomitic in part.
1080-1090	Dolomite, greyish buff to brown, finely crystalline, reefoidal, poor porosity.
1090-1150	Limestone, medium to dark brown, dense to microcrystalline and microgranular to granular, fossiliferous, with partings of black, bituminous shale; slickensided surfaces.
Keg River Formation 1150' Logs	
1150-1160	Limestone, light brown, dense to microgranular.
1160-1180	Limestone, light brown, dense to microgranular, stromatoporoids.
1180-1190	Limestone, buff to brown, microgranular, stromatoporoids; minor green shale.

Depth Feet	Description
1190-1200	Limestone, buff, dense to fragmental; minor dolomite, brown, fine grained, and shale, green.
1200-1230	Limestone and dolomite, buff to brown, fine grained, pyritic; Shale, bright green.
1230-1265	Limestone, buff to brown, fine grained to microgranular.
1265-1290	Limestone, dark brown, dense; Limestone, buff to light brown, dense to microgranular; minor Shale, bright green.
1290-1300	Limestone, buff to brown, dense to finely crystalline.
1300-1310	Limestone, buff to brown, dense to microgranular.
1310-1330	Dolomite, brown, microcrystalline to finely crystalline, poor porosity, stained with heavy oil.
1330-1360	Dolomite, as above; minor shale, bright green.
Chinchaga Formation 1360' Logs	
1360-1370	Dolomite, dark brown, dense, evaporitic type; Anhydrite, buff, dense.
1370-1380	Dolomite, dark brown, dense to microcrystalline; Anhydrite, buff, dense; Limestone, buff, dense.
1380-1390	Dolomite, brown, dense, evaporitic; Limestone, buff, dense; Anhydrite, greyish white to buff, dense.
1390-1400	Dolomite, brown, finely crystalline; Anhydrite, as above.
1400-1410	Anhydrite, buff to brown, dense.
1410-1420	Anhydrite and Dolomite, buff to brown, dense.
1420-1430	Limestone, grey and dark brown, dense; Anhydrite, as above.
1430-1440	Limestone, as above; Shale, green; minor Anhydrite.
1440-1450	Limestone, buff to brown, dense; Dolomite, brown, microcrystalline to finely crystalline; minor Shale, green.
1450-1460	Dolomite, brown, microcrystalline to finely crystalline.
1460-1470	Limestone, grey to buff, dense; Anhydrite, buff to brown, dense; Shale, brownish grey.

Depth Feet	Description
1470-1480	Anhydrite, buff to brown, dense.
1480-1505	Interbedded Anhydrite, Dolomite, Limestone, Shale, as above.
1505-1510	Dolomite, brown, dense to finely crystalline, oil stained, poor porosity.
1510-1540	Shale, bright green, non-calcareous; Anydrite, buff to light brown, dense.
1540-1550	Anhydrite, grey, dense; Dolomite, buff to brown, anhydritic.
1550-1560	Anhydrite, grey to buff; Shale, green; Dolomite, brown, microcrystalline.
1560-1570	Shale, green; Anhydrite, as above, minor Dolomite, buff, dense, anhydritic.

ORDOVICIAN AND ?OLDER

Mirage Point Formation 1570' Logs

1570-1590	Shale, reddish brown, dolomitic; Anhydrite, light buff, greasy lustre; Shale, green.
1590-1620	Anhydrite, buff to reddish brown, dense.
1620-1630	Dolomite, reddish brown, shaly.
1630-1640	Dolomite, as above, and Shale, red, dolomitic.
1640-1650	Dolomite, brown, dense to cryptocrystalline, hard, tight.
1650-1660	Dolomite, buff to brown, mottled, silty, dense to microcrystalline. Shale; brick red, dolomitic.
1660-1670	Dolomite, buff to light brown, dense to microcrystalline, poor apparent porosity.
1670-1680	Dolomite, buff to brown, anhydritic.
1680-1695	Anhydrite, greyish white to buff.
1695-1710	Salt, not recovered in samples.
1710-1720	Shale, brick red.

Depth Feet	Description
Old Fort Island Formation 1718' Logs	
1720-1800	Sandstone, reddish brown, very fine grained, hard, tight.
Total Depth	1801' Driller
	1803' Logs

SECTION III

ENGINEERING SUMMARY

(a) Report of Drill Stem Tests

Drill Stem Test No. 1

Interval:	1,655'-1,692'
Formation:	Mirage Point
Type of Test:	Straddle
Date:	January 21, 1971
Results:	Misrun. Unable to get to bottom due to bridge at 1,401'.

Drill Stem Test No. 2

Interval:	1,655'-1,692'
Formation:	Mirage Point
Type of Test:	Straddle
Date:	January 22, 1971
Preflow:	5 minutes
Initial Shut-In:	30 minutes
Flow Period	60 minutes
Final Shut-In:	60 minutes
Results:	Slight air blow on preflow. Small air blow throughout flow period. No gas to surface. Recovered 132' of salt water-cut mud and salt water. Salinity 196,000 ppm.

Field Pressures

Initial Hydrostatic	951 psi
Preflow	10 psi
Initial Shut-In	796 psi
Initial Flow	25 psi
Final Flow	102 psi
Final Shut-In	796 psi
Final Hydrostatic:	925 psi

(b) Casing Record

14 joints (409.81') x 7" x 20-lb., J-55, Rge 2, ST&C casing landed at 418' K.B. Cemented with 175 sacks and 3% calcium chloride by B.J. Service. Plug down at noon, January 15, 1971.

(c) Bit Record

No.	Size Inches	Make	Type	Depth In Feet	Depth Out Feet	Footage	Hours
1A	9 7/8	H.W.	RT	11	420	409	26.50
1	6 1/4	Smith	DTJ	420	777	357	20.75
2	6 1/4	Smith	DTJ	777	1099	322	20.75
3	6 1/4	Smith	OGJ	1099	1313	214	11.00
4	6 1/4	Smith	V2J	1313	1414	101	9.75
5	6 1/4	Smith	V2J	1414	1554	140	8.25
6	6 1/4	H.W.	OWVJ	1554	1652	98	8.00
7	6 1/4	Smith	W4HJ	1652	1737	85	6.00
8	6 1/4	H.W.	OWVJ	1737	1801	64	4.25

(d) Mud Record

Date 1971	Depth Feet	Weight Lb./Gal.	Viscosity Sec.	Additives
Jan. 13	300			
14	420			
15	420			
16	777	8.4	30	
17	1,099			
18	1,411			
19	1,652			
20	1,801	9.3	80	Bicarb 1; Soda ash 3; Salt gel 62; Caustic 5.
21	1,801	11.4	50	Barite 265; Spersene 1.
22	1,801	11.5	50	Gel 4; Barite 20.

(e) Deviation Record

Depth Feet	Deviation Degrees	Depth Feet	Deviation Degrees	Depth Feet	Deviation Degrees
159	1	420	1 1/4	1,297	1
205	1	777	3/4	1,737	1/2
297	1	1,099	3/4		

(f) Abandonment Plugs

Plug No. 1 - 1,801'-1,600' 35 sacks + 4% gel.

Plug No. 2 - 1,250'-Surface 225 sacks

A plate was welded to the surface with a riser and identification marker attached.

SECTION IV

LOGS

Company	Date 1971	Name	Interval Feet	Scale
Schlumberger	Jan. 21	Induction-Electrical	1,802-417	2" and 5" to 100'
Schlumberger	Jan. 21	Formation Density and Gamma Ray-Caliper	1,802-417	2" and 5" to 100'

GEOLOGICAL AND ENGINEERING SUMMARY

Horn River et al Big Island O-78 was spudded on January 13, 1971, and completed drilling at a total depth of 1,601 feet on January 20, 1971.

The top of the Middle Devonian Slave Point Formation was picked at 432 feet, and the top of the Ordovician Mirage Point Formation was placed at a depth of 1,570 feet. The well was drilled 81 feet into the Old Fort Island Formation immediately overlying the Precambrian basement.

No cores were taken or drill stem tests run while drilling the well. Induction Electrical Survey and Formation Density and Gamma Ray-Caliper logs were run at total depth, following which a drill stem test was run of an indicated porous zone in the Mirage Point Formation. The test yielded a small volume of salt water. Analysis of the logs indicated several relatively thin salt water saturated zones in the Middle Devonian section which corroborated information obtained from sample examination.

The well was plugged with cement from total depth to 1,600 feet and from 1,250 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 5, 1971
NS/cm/fc

LYNES UNITED SERVICES LTD.

TEST DATA | Test No. 2 | Lynes Test | Formation TD 1801 Ft. | Interval Tested 1355 Ft. to 1692 Ft. | Feet of Net Pay Tested 37 Ft. | Type of Test Dual Straddle Conventional | Cushion nil Amount Ft. | Started in Hole at 12:45 Hrs. | Tool Open at 2:45 Hrs. | Pre Flow 2 Mins. | Initial Shut-in 30 Mins. | 2nd Flow Mins. | Second Shut-in Mins. | Final Flow 60 Mins. | Final Shut-in 60 Mins. | Remarks:

GENERAL INFORMATION

Company: Kenting Oilwell Drilling
Address: c/o Horn River Resources
Well Name: Horn River et al Big Island O-78
Well Number: 61° 07' 47.00 116° 28' 58.00
K.B. Elevation: 550 Sub Sea Elevation
Area: Slave Lake Province: N.W.T.
Company Rep: D. Comm
Tester: W. Goodwin
Contractor: Big Indian Rig No. 57
Ticket No. 2666 Date: January 22/71
Service Reports To: S - above address

Blow: Weak steady blow during the test. Blow dying immediately on final shut-in.

GAS BLOW MEASUREMENTS

Measured with

Time	Surface Choke	Reading Inches	Cubic Feet/Day

MUD AND HOLE DATA

Mud Type: Gel Chem
Weight: 11.5 Viscosity: 55 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 3/5" Feet Run: 515
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: 5 1/2"

REMARKS: Two tight spots in hole while running in. Shut-in pressures suggest high permeability within the interval tested.

RECOVERY

TOTAL FLUID RECOVERED 132 Ft. Consisting of:

90	Ft. of	drilling mud
42	Ft. of	salt water
	Ft. of	
	Ft. of	

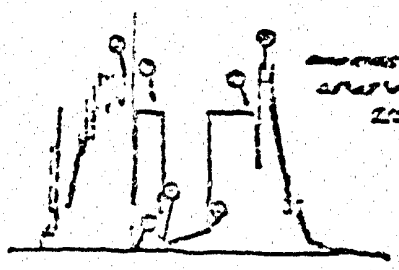
Test was/was not Reverse Circulated
Oil Recovery A.P.I. Water Specific Gravity
Salinity 196,000 PPM salt.

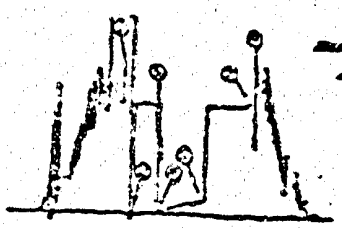
PRESSURE READINGS

	Inside ___ Outside X	Inside ___ Outside X	Inside ___ Outside ___	Inside ___ Outside ___
Recorder No.	7165	7498		
Capacity	1950	2500		
Depth	1674	1674		

NUMBER KEY:				
1 - INITIAL HYDROSTATIC	925	913		
2 - PRE-FLOW	33	17		
3 - INITIAL SHUT-IN	917	799		
4a - 2nd INITIAL FLOW				
4b - 2nd FINAL FLOW				
4c - 2nd SHUT-IN				
5 - 3rd INITIAL FLOW	39	31		
6 - FINAL FLOW	121	113		
7 - FINAL SHUT-IN	818	800		
8 - FINAL HYDROSTATIC	924	912		

Testing Oilwell Drilling — Company
61° 07' 47.00 116° 28' 58.00 Horn River et al Big Island O-78 — Well Name and Description
2 — Test No.
January 22/71 — Date of Test





NOAH RIVER ROAD BIGHAND
41°07'47.00 116°22'38.00
Straddle

LYNES UNITED SERVICES LTD.

"DST" DATA — Test No. 1 — Lynes Test

Formation — T.D. 1690 Ft.

Interval Tested 1655 Ft. to 1693 Ft.

Feet of Net Pay Tested 27 Ft.

Type of Test: Dual Straddle Conventional

Cushion nil — Amount — Ft.

Started in Hole at 10:30 Hrs. — Tool Open at — Hrs.

1st Flow — Mins. — Initial Shut-in — Mins.

2nd Flow — Mins. — Second Shut-in — Mins.

Final Flow — Mins. — Final Shut-in — Mins.

Remarks:

Blow:

GENERAL INFORMATION

Company: Kenting Oilwell Drilling

Address: c/o Horn River Resources Ltd.

Well Name: Horn River et al Big Island

Well Number: 610 071 47.00 116° 28' 38.00

K.B. Elevation: 550 — Sub Sea Elevation

Area: Slave Lake — Province: N.W.T.

Company Rep.: E. Cone

Tester: L. Goodwin

Contractor: Big Indian — Rig No. 57

Ticket No. 2596 — Date: January 21/71

Service Reports To:

S. - above address

GAS FLOW MEASUREMENTS

Measured with

Time	Surface Choke	Reading Inches	Cubic Feet/Day

MUD AND HOLE DATA

Mud Type: Gel Chem

Weight: 11.5 — Viscosity: 55 — 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 3/8" — Feet Run: 485

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: 5 1/2"

REMARKS: Hole bridged off @1401'
Unable to get in hole.
Misrun.

RECOVERY

TOTAL FLUID RECOVERED: nil Ft. Consisting of:

Ft. of

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 ___	Inside ___ Outside ___
Recorder No.	7165	7498		
Capacity	1950	2500		
Depth	1674	1674		

NUMBER KEY:

1 - INITIAL HYDROSTATIC	697	690		
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	687	690		

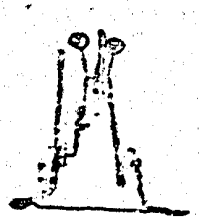
Kenting Oilwell Drilling — Company

610 071 47.00 116° 28' 38.00
Horn River et al Big Island 0-78
Well Name and Description

#1 — Test No.

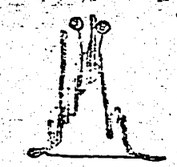
January 21/71 — Date of Test

[illegible] ISLAND
42° 27' 47.00 124° 25' 39.00
7713-1
[illegible]



[illegible] ISLAND
42° 27' 47.00 124° 25' 39.00
7713-1 [illegible]

HORN RIVER et al BIG ISLAND
61° 07' 47.00 116° 28' 38.00
78B-1
MANUAL



HORN RIVER et al BIG ISLAND
61° 07' 47.00 116° 28' 38.00
78B-1 MANUAL

LYNES UNITED SERVICES LTD.

TEST DATA	Test No.	Lynes Test		GENERAL INFORMATION
Formation		T.D. 1801 Ft.		Company Kenting Oilwell Drilling
Interval Tested	1655	Ft. to 1692 Ft.		Address c/o Horn River Resources Ltd.
Feet of Net Pay Tested	37	Ft.		
Type of Test	Dual Straddle Conventional			
Cushion	nil	Amount Ft.		Well Name Horn River et al Big Island
Started in Hole at	10:30 Hrs.	Tool Open at Hrs.		Well Number 61° 07' 47.00 116° 28' 38.00
Pre-Flow	Mins.	Initial Shut-in Mins.		K.B. Elevation 550 Sub-Sea Elevation
2nd Flow	Mins.	Second Shut-in Mins.		Area Slave Lake Province N.W.T.
Final Flow	Mins.	Final Shut-in Mins.		Company Rep. D. Comm
Remarks:				Tester W Goodwin
				Contractor Big Indian Rig No. 57
				Ticket No. 2886 Date January 21/71
Blow:				Service Reports To:
				5 - above address

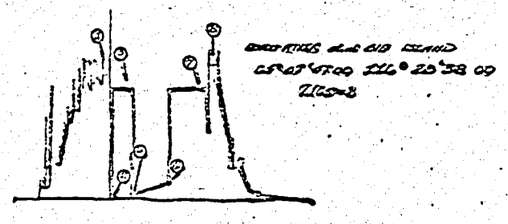
GAS BLOW MEASUREMENTS	MUD AND HOLE DATA
Measured with	Mud Type Gel Chem
	Weight 11.5 Viscosity 55 Water Loss
	Filter Cake 2/32" Bottom Hole Temperature
	Drill Pipe Size 3 1/2" IF Weight
	Drill Collars 4 3/4" I.D. 2 3/8" Feet Run 485
	Main Hole or Casing Size 6 1/4"
	Rathole or Liner Size No. of Feet
	Bottom Hole Choke Size 1/2"
	Surface Choke Size
	Packer Rubber Size 5 1/2"
	REMARKS Hole bridged off @1401' Unable to get in hole. Misrun.

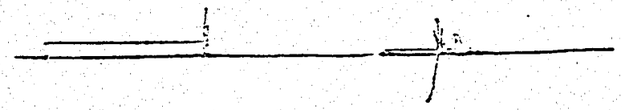
Time	Surface Choke	Reading Inches	Cubic Feet/Day

RECOVERY	
TOTAL FLUID RECOVERED	nil Ft. Consisting of:
Ft. of	
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 ___	Inside ___ Outside ___
	Recorder No. 7165	Recorder No. 7498	Recorder No.	Recorder No.
	Capacity 1950	Capacity 2500	Capacity	Capacity
	Depth 1674	Depth 1674	Depth	Depth
NUMBER KEY:				
1 - INITIAL HYDROSTATIC	687	690		
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	687	690		

Kenting Oilwell Drilling — Company
61° 07' 47.00 116° 28' 38.00 Horn River et al Big Island 0-78 — Well Name and Description
#1 — Test No.
January 21/71 — Date of Test





LYNES UNITED SERVICES LTD.

TEST DATA						GENERAL INFORMATION	
Test No.	2	Lynes Test					
Formation		T.D.	1801	Ft.	Company	Kenting OilWell Drilling	
Interval Tested	1655	Ft. to	1692	Ft.	Address	c/o Horn River Resources	
Feet of Net Pay Tested	37			Ft.			
Type of Test	Dual Straddle Conventional						
Cushion	nil	Amount		Ft.	Well Name	Horn River et al Big Island 0-78	
Started in Hole at	12:45 Hrs.	Tool Open at	2:48	Hrs.	Well Number	61° 07' 47.00 116° 28' 38.00	
Pre-Flow	2 Mins.	Initial Shut-in	30	Mins.	K.B. Elevation	550 Sub-Sea Elevation	
2nd Flow	Mins.	Second Shut-in		Mins.	Area	Slave Lake 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.	2888 Date January 22/71	
Blow:	Weak steady blow during the test. Blow dying immediately on final shut-in.				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	11.5 Viscosity 55 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 3/8" Feet Run 515
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	5 1/2"
REMARKS	Two tight spots in hole while running in. Shut-in pressures suggest high permeability within the interval tested.

RECOVERY	
TOTAL FLUID RECOVERED	132 Ft. Consisting of:
90 Ft. of	drilling mud
42 Ft. of	salt water
Ft. of	
Ft. of	
Test was/was not Reverse Circulated	
Oil Recovery A.P.I.	Water Specific Gravity
Salinity	196,000 PPM salt.

PRESSURE READINGS				
	Inside ____ Outside X	Inside ____ Outside X	Inside ____ Outside ____	Inside ____ Outside ____
	Recorder No. 7165	Recorder No. 7498	Recorder No.	Recorder No.
	Capacity 1950	Capacity 2500	Capacity	Capacity
	Depth 1674	Depth 1674	Depth	Depth
NUMBER KEY:				
1 - INITIAL HYDROSTATIC	925	913		
2 - PRE-FLOW	33	17		
3 - INITIAL SHUT-IN	817	799		
4a - 2nd INITIAL FLOW				
4b - 2nd FINAL FLOW				
4c - 2nd SHUT-IN				
5 - 3rd INITIAL FLOW	39	31		
6 - FINAL FLOW	121	113		
7 - FINAL SHUT-IN	818	800		
8 - FINAL HYDROSTATIC	924	912		

Kenting OilWell Drilling
Company

61° 07' 47.00 116° 28' 38.00
Horn River et al Big Island 0-78
Well Name and Description

2
Test No.

January 22/71
Date of Test

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

RIG. NO. 57 LOCATION Horn River ext. at Big Island 0-78 DATE Jan 17-71

TOUR 1

LT: LF: HOLE NO. FROM 777 TO 910 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.
			2	6 3/4	DTJ	EJ922	14000	60	123		1 1/4			

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.	8.3	8.3	8.3	8.3
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
400	50	740	400	50	900			

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	184		250
W. TRUCK	60		
MOB. PUMP	234		
GENERAL:	180		

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

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 Bob LeBoeuf Asst						12
HELPER J. OTTENBREIT						8
HELPER H. Higgins						8
H. Higgins						8
TOTAL						

INJURIES AND REMARKS: None

STRATIGRAPHIC LOG FROM FT. / TIME	TO FT. / RATE IN 16PM	PUMP TEST DESCRIPTION / DEPTH TO WATER IN FT.
		Water Cost 75.00

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Run in Hole	1200	1230	1/2
	BREAK CIR - Rig SER	1230	1245	1/4
	DRILL 6 1/4 HOLE.	1245	800	7 1/4

DRILLER Bob LeBoeuf

COMPANY TIME CONT'R TIME

TOUR 2

LT: LF: HOLE NO. FROM 910 TO 1010 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.
			2	6 3/4	DTJ	EJ922	20000	80	233		4			

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.	8.3	8.3	8.3	8.3
VISC.	28	28	28	28
GEL.				

W.L. F.C. P.

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	950						

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	192		250
W. TRUCK	88		
MOB. PUMP	242		
GENERAL:	188		

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

3 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						
HELPER L. Bourassa						8
HELPER L. Paranteau						8
G. Campbell						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Drill 6 1/4 HOLE	800	900	1.00
	Rig Service	900	915	.25
	Drilling	915	200	4.75
	Repack Swivel	200	300	1.00
	Drilling	300	400	1.00

DRILLER

COMPANY TIME CONT'R TIME 8

TOUR 3

LT: LF: HOLE NO. FROM 1010 TO 1099 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.
			2	6 3/4	DTJ	EJ922	20000	70	322		20 3/4			

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WT.	8.4	8.4	8.4	8.4
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
400	50	1010				1099	3/4	

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	200		250
W. TRUCK	96		
MOB. PUMP	250		
GENERAL:	196		

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	-18	-20
WIND VELOCITY:	10	10
RAIN, SNOW, FOG, ETC.	-	-

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 G. Jacobson						12
HELPER W. Fosbrenk						8
HELPER C. Parantoau						8
R. Theriault						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Drilling	400	500	1
	Rig Serv.	500	518	.25
	Drilling	518	600	.25
	Check pressure in hole	600	620	.50
	Drilling	620	1130	5.00
	Pull out	1130	1200	.50

DRILLER G. 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 River et al Big Island 1-78 DATE Jan 16-71

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:		420	590							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			2	6 1/4	DT	F2503	10,000	60	170		6			

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.	8.3	8.3	8.4	8.3
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
500	60	420						

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	160		250
W. TRUCK	56		
MOB. PUMP	210		
GENERAL:	156		

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-20	-20
WIND VELOCITY:	10	-5
RAIN, SNOW, FOG: ETC.	Clear	Clear

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 B. LaBoucane						12
HELPER W. Fredrick						9
HELPER C. Hester Garanteau						8
R. Theriault						5
TOTAL						

INJURIES AND REMARKS: None.

STRATIGRAPHIC LOG FROM FT. / TIME	TO FT. / RATE IN 16PM	PUMP TEST DESCRIPTION / DEPTH TO WATER IN FT.
		Water Cost
		102.00/13 hrs.
		Blow out
		Equip
		Press. Test
		at 500 lbs
		ASO all OK.

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Ser.	1200	1215	1/4
	Runn in Hole	1215	130	1 1/4
	Press Test at 500 lbs	130	200	1/2
	Drill out plug	200	230	1/2
	Drill 6 1/4 Hole	230	800	

DRILLER B. LaBoucane

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:		590	670							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			2	6 1/4	DT	F2503	10,000	60	250		13 3/4			

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.	8.3	8.3	8.3	8.5
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

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	168		250
W. TRUCK	64		
MOB. PUMP	218		
GENERAL:	164		

WEATHER	8 A.M.	NOON
TEMPERATURE:	-10	-20
WIND VELOCITY:	50	10
RAIN, SNOW, FOG: ETC.	Clear	Snowy.

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 ~~B. LaBoucane~~						8
HELPER J. Ottenbreit						8
HELPER H. Higgins						8
U. Higgins						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig SER	800	815	1/4
	Drill 6 1/4 Hole	815	1200	3 3/4
	Drilling	1210	1400	1.50

DRILLER

COMPANY TIME ..... CONT'R TIME .....

8

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:		670	777							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			1	6 1/4	DTJ	F2603	20,000	60	357		26 3/4			

MUD	4 P.M.	6 P.M.	8 P.M.	10P.M.
WT.	8.5	8.5	8.5	8.4
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
350	50	670				777	3/4°	

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	176		280
W. TRUCK	72		
MOB. PUMP	226		
GENERAL:	172		

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	-20	-20
WIND VELOCITY:	10	5
RAIN, SNOW, FOG: ETC.	—	—

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 G. Jacobson						12
HELPER L. Bourassa						8
HELPER L. Baranteau						8
B. Campbell						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Service	400	415	20
	Drilling	415	1117	7.00
	Pull out for B.H.	1115	1200	.75

DRILLER G. 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 River et al Big Island 0-18 DATE Jan 15 - 71

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

LOCATION..... DATE Jan 15 - 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. _____

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	136		250
W. TRUCK	32		
MOB. PUMP	186		
GENERAL:	132		

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-40	-40
WIND VELOCITY:	—	—
RAIN, SNOW, FOG, ETC.	Clear	Clear

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 Bob LaBrie Ave						12
HELPER W. FRED ROUX						13
HELPER CHESTER PORRIER JR						12
R. THERIAULT						12
TOTAL						

INJURIES AND REMARKS: None.

STRATIGRAPHIC LOG FROM FT. / TIME	TO FT. / RATE IN 16PM	PUMP TEST DESCRIPTION / DEPTH TO WATER IN FT.
		Water Cost
		75.00 / 10 hrs.

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	WAIT ON CEMENTERS	1200	8 00	8

DRILLER Bob LaBrie

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:		420			7"	418				

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	144		250
W. TRUCK	40		
MOB. PUMP	194		
GENERAL:	140		

WEATHER	8 A.M.	NOON
TEMPERATURE:	-40	-35
WIND VELOCITY:	—	—
RAIN, SNOW, FOG, ETC.	—	—

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 B. WHEELDON						8
HELPER C. CREMBRET						8
HELPER H. HIGGINS						8
V. HIGGINS						8
TOTAL						

INJURIES AND REMARKS:

Ran 14 joints 7" - 20 lbs/ft J55 used Casing w/ STC 8 rnd

Total length	406.81
Dave's guide shoe	1.00
" Float Collar	1.30
	409.11

Landed @ 418. RB

1 Centralizer 2 ft up from shoe

Used 175 sax Const cmt w/ 3% CACL2

Slurry weight 15.8 lbs/gal

3 BBLs returns

Plug down @ 12 30 PM Jan 15/71

D.J.C.

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig up To Cement	8 00		
	W/ Cement		1230	4.00
	W.O.C.	1230	4:00	4.00

DRILLER Bob LaBrie

COMPANY TIME _____ CONT'R TIME _____ 8

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:		420								

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	157		250
W. TRUCK	218		
MOB. PUMP	202		
GENERAL:	148		

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	-35	-36
WIND VELOCITY:	—	5/0
RAIN, SNOW, FOG, ETC.	—	—

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 G. Jacobson						16
HELPER L. Bourassa						8
HELPER L. Parenteau						8
G. Campbell						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
15/71	W.O.C.	4:00	12:00	8.00
	Rig Service			

DRILLER G. 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 River et al Big Island 0-78 DATE Jan 14-71

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

LOCATION..... DATE Jan 14-71

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:		300	405							

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
		1	9 7/8	R-T		ALL	180	105		20			

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.				
VISC.	40	40	45	45
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
100	60	300	160	60	405	297	1°	

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	112		250
W. TRUCK	—		
MOB. PUMP	162		
GENERAL:	108		

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-30	-30
WIND VELOCITY:	5	5
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 Bob Le Bouse						10
HELPER W Prudhomme						11
HELPER Kelly Forbister						8
L Theriault						5
TOTAL						

INJURIES AND REMARKS: None

STRATIGRAPHIC LOG / PUMP TEST

FROM FT. / TIME	TO FT. / RATE IN 16PM	DESCRIPTION / DEPTH TO WATER IN FT.
		survey 297-1°
		WATER Cost
		165.00 / 20hrs

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Up - Survey	1200	1215	1/4
	Drill 9 7/8 hole	1215	245	2 1/2
	Work up Sentrifical	245	300	1/4
	Drill 9 7/8 hole	300	515	2 1/4
	Clean Suction Screen	515	545	1/2
	Drill 9 7/8 hole	545	800	2 1/4

DRILLER Bob Le Bouse

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 W.	LOST DRILL TIME WAIT ON WATER
AF:	AT:		405	420	420						

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
		1	9 7/8	RR		ALL	180	420	Re 3/4				

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.				
VISC.	40			
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
100	65	400				420	1/4	

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	120		250
W. TRUCK	16		
MOB. PUMP	170		
GENERAL:	116		

WEATHER	8 A.M.	NOON
TEMPERATURE:	-30	-25
WIND VELOCITY:	2	2
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 Al Wilson						8
HELPER Otterspit						8
HELPER J.H. Higgins						8
V Higgins						8
TOTAL						

INJURIES AND REMARKS: None

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Up	800	815	1/4
	Drill	815	900	3/4
	Cir	900	930	1/2
	Dump Trip	930	1030	1
	Cir	1030	1200	1 1/2
	Rig out for CSG	1200	1230	1/2
	Rig up - Run CSG	1230	400	3 1/2

DRILLER Al Wilson

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:		420								

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	128		250
W. TRUCK	24		
MOB. PUMP	178		
GENERAL:	124		

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	-30	-30
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 C Jacobson						8
HELPER L Gyurassa						8
HELPER L Fassenteau						8
C Campbell						8
TOTAL						

INJURIES AND REMARKS: None.

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig SER	400	415	1/4
	Work on Pump	415	600	1 3/4
	Wait on Cementing Plug	600	12.00	6

DRILLER C Jacobson

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. 5-7 LOCATION Hess River et al Big Island 0-7½ DATE Jan 13-71

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:		0	50							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			1	6¼	R.K.		ALL	180	50		½			

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.	8.3	8.3	8.3	8.3
VISC.	29	29	35	40
GEL.				

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

ADDITIVES: WATER _____ GALS.
1. 1 sk lime
2. 43 SKS. Gel
3.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	E LOG TO DEPTH
100	~~50~~ 39	30	200	60	60			

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	88		250
W. TRUCK	—		
MOB. PUMP	~~138~~		
GENERAL:	84		

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-20	-25
WIND VELOCITY:	5	5
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. Frerault						8 9
HELPER Chester Parenteau						8
R. Theriault						8
TOTAL						

INJURIES AND REMARKS: None.

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig up			
	Mix Mud	12:00	6:00	6
	Drill 6¼ Pilot Hole	6:00	8:00	2

DRILLER Bob LaBoucane

COMPANY TIME _____ CONT'R TIME _____

STRATIGRAPHIC LOG FROM FT. / TIME	TO FT. / RATE IN 16PM	PUMP TEST DESCRIPTION / DEPTH TO WATER IN FT.
		Water Cost 75.00

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:		59	136							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			1	1	6¼	RR	Total	100	108		3¾			
			1H	9⅞	RR		Total	140	28	108	5¼			

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.				
VISC.	35	38	38	
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
100	65	100				108	1°	

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	96		
W. TRUCK			
MOB. PUMP	146		
GENERAL:	92		

WEATHER	8 A.M.	NOON
TEMPERATURE:	-25	-20
WIND VELOCITY:	5 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 A. Wheeldon						8
HELPER J. Otenbreit						8
HELPER F. Higgins						8
V. Higgins						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Service	8:00	8:15	
	Drill 6¼ Pilot Hole	8:15	10:00	1 3/4
	Ream 9⅞ Hole	10:00	12:30	2 30
	Survey	12:30	12:45	
	Work Around Rig	12:45	1:15	
	Drill 9⅞	1:15	4:00	2 45

DRILLER A. Wheeldon

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:		136	300							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			1H	9⅞	RR		ALL	180	192	108	13			

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
						159	1°	205 to 300 ft

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	104		250
W. TRUCK	—		
MOB. PUMP	154		
GENERAL:	100		

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	-20	-25
WIND VELOCITY:	S-W	S
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. Beaurassa						11
HELPER L. Parenteau						11
G. Campbell						11
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Service - Survey	4:00	4:15	.25
	Drill 9⅞ hole	4:15	12:00	7.75

DRILLER G. 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. 1179

RIG NO. 57 LOCATION HOBN RIVER EL AL BIG ISLAND CAL DATE JANUARY 23 1971

BIG INDIAN DRILLING CO. LTD. PROJECT NO. 1179

LOCATION BIG ISLAND CAL DATE 23/1/71

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. _____

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:		
WIND VELOCITY:		
RAIN, SNOW, FOG, ETC.		

GENERAL:

MIDN. _____ 8 A.M. _____

TO

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	PIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER H. WHEELDON						22
HELPER J. OTTENBREIT						22
HELPER H. HIGGINS						22
V. HIGGINS						22
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
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	64		250
W. TRUCK	32		
MOB. PUMP	56		

WEATHER	8 A.M.	NOON
TEMPERATURE:	-30	-20
WIND VELOCITY:	—	—
RAIN, SNOW, FOG, ETC.	—	—

GENERAL: 64

8 A.M. _____ 4 P.M. _____

TO

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

4 P.M. _____ MIDN. _____

TO

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER Bob LaBounty						22
HELPER W. Fredpaun						22
HELPER Charles Parenteau						22
R. Thibault						22
TOTAL						

INJURIES AND REMARKS:

STRATIGRAPHIC LOG / PUMP TEST

FROM FT. / TIME	TO FT. / RATE IN 16PM	DESCRIPTION / DEPTH TO WATER IN FT.
		Water Cost 75.00
		Plug #1 - 1800-1600
		Used 35 sax Const Cement w/ 4% gel Slurry 15.4 lbs/gal Plug down @ 2 PM
		Plug #2 1250 to 1000 Used 225 sax Const Cement w/ 2% gel Slurry 15.4 lbs/gal Plug down @ 3:45 PM

Rig Released @ 8 PM 23-1

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Lay Down Collars	12	12 30	30
	Tear out BOPs + Rig up For Cement	12 30	2	1 30
	Cement	2	2 30	30
	Lay Down Pipe & Cement	2 30	3 45	1 15
	Lay Down Pipe & Tear Out	3 45	4 15	30
		4 15	8	3 45
				8

DRILLER Herb Hobbs

COMPANY TIME _____ CONTR TIME _____

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Out	8:00	11:00	3:00
	Move	11:00	4:00	5:00

DRILLER G. Jacobsen

COMPANY TIME _____ CONTR TIME _____ 8

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig out Rig	12:00	6:00	6
	Tear out Camps & move Trailers Load	6:00	18:00	18
	Rig up Camps.			

DRILLER Bob LaBounty

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 HORN RESOURCES BIG ISLAND O-7-8 DATE JANUARY 22nd 1971

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

LOCATION BIG ISLAND O-7-8 DATE 22/1/71

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:				1801						

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.			10.5	10.5
VISC.			55	50
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	32		
W. TRUCK	200		
MOB. PUMP	32		
GENERAL:	40		

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-15°	-20°
WIND VELOCITY:	3 mph	
RAIN, SNOW, FOG; ETC.	Cloudy	

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 A. L. WHEELOCK						8
HELPER J. OTTENBREIT						9
HELPER H. HIGGINS						8
V. HIGGINS						8
TOTAL						

INJURIES AND REMARKS:

STRATIGRAPHIC LOG / PUMP TEST

FROM FT. / TIME	TO FT. / RATE IN 10PM	DESCRIPTION / DEPTH TO WATER IN FT.
Water Lime		
1675		

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	WORK PACKER	12 00	12 15	15
	TRIP OUT & LAY DOWN TEST TOOL	12 15	2 15	2
	RUN IN - BEGIN BRIDGE	2 15	5 15	3
	CIRCULATE	5 00	5 45	.50
	PULL OUT	5 45	6 00	15
	WORK ON DRAWWORKS	6 00	8 00	2
				8

DRILLER A. L. Wheelock

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:				1810						

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.		11.5		
VISC.		50		
GEL.				
W.L. F.C. P.H.				

ADDITIVES: WATER # 300 gel GALS.
1. 20 sacs Baroite
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	150		250
W. TRUCK	208		
MOB. PUMP	40		
GENERAL:	48		

WEATHER	8 A.M.	NOON
TEMPERATURE:	-20	-10
WIND VELOCITY:	—	—
RAIN, SNOW, FOG; ETC.	—	—

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 G. Jacobson						8
HELPER L. Bourassa						8
HELPER L. Parenteau						8
E. Campbell						8
TOTAL ~~E. Hoffman~~ Gary Hofmann						8

INJURIES AND REMARKS:

D.S.T. #1 - 1655 - 1692
Tool open @ 2.48 P.M.
3 min Preflow
30 " I.S.I.
60 " Flow
60 " F.S.I.

Initial Hydrostatic	981	PSI.
Preflow	10	"
I.S.I.	796	"
1st Flow	25	
Final Flow	102	
F.S.I.	796	
Final Hydrostatic	925	

Recovered 132' fluid -
90' Mud
42' Salt Water
Salinity 146,000 P.P.M.

Weak steady blow dying
Last dying immediately
on F.S.I.

Test by Dyno Wireline

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Service	8 00		
	Conditioning mud & hole		10 30	2.00
	Pull out	10 30	11 30	1.00
	Make up testing Tool & Run in hole	11 30	2 45	3.25
	Testing	2 45	4 00	1.20
				8

DRILLER G. Jacobson

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:		1801								

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
Circ Hole.								

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	48		250
W. TRUCK	216		
MOB. PUMP	48		
GENERAL:	56		

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

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 Bob LABOUCANE						8
HELPER D. FREDOUK						8
HELPER CHESTER PARENTEAU						8
R. THERIAULT						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
"	~~Rig Service~~	400	415	1/4
	~~TESTING~~	415	530	1 1/4
	PULL TEST	530	630	1
	BREAK DOWN TEST	630	730	1
	~~TRIP OUT~~	~~730~~	~~1200~~	~~4 1/2~~
	RUN in Hole	730	930	2
	LAY Down D.C's	930	1200	2 1/2

DRILLER Bob LABOUCANE

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 BIG ISLAND 078 DATE JANUARY 21ST 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 W.	LOST DRILL TIME WAIT ON WATER
AF:	AT:				1801						

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.	115			
VISC.	55			
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	0		
W. TRUCK	176		
MOB. PUMP	0		

GENERAL: 16

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-20	
WIND VELOCITY:	4mph	
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 H. WHEELDON						10
HELPER J. OTTENBREIT						10½
HELPER H. HIGGINS						10½
V. HIGGINS						10½
TOTAL						

INJURIES AND REMARKS:

STRATIGRAPHIC LOG / PUMP TEST

FROM FT. / TIME	TO FT. / RATE IN 16PM	DESCRIPTION / DEPTH TO WATER IN FT.
		Water Cost
		75.00
		CHANGED OIL - FUEL FILTERS
		Rig & Pump motors
		Ran I.D. - Gamma Ray Caliper from Surface to 1803.
		Ran I.E.S. from 417 to 1803

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Trip out	12⁰⁰	12³⁰	.30
	Log	12³⁰	8⁰⁰	7.30
				8

DRILLER H. Wheeldon

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 W.	LOST DRILL TIME WAIT ON WATER
AF:	AT:				1801						

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	8		250
W. TRUCK	184		
MOB. PUMP	8		

GENERAL: 24

WEATHER	8 A.M.	NOON
TEMPERATURE:	-10	-5
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						8
HELPER L. Brantford						8
B. Campbell						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Logging	8:00	10:00	2.00
	Wait on Orders	10:00	4:00	6.00

DRILLER G. Jacobson

COMPANY TIME CONT'R TIME

8

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:		1801								

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.	11.5	11.5	11.5	
VISC.	55	55	55	
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
C.R - TANKS								

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	16		250
W. TRUCK	192		
MOB. PUMP	16		

GENERAL: 32

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	-15	
WIND VELOCITY:	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 Bob LaBOUCANE						8
HELPER W. EREMUCK						8
HELPER CHESTER BRANTEAU						8
R. THERIAULT						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	W/O orders	4⁰⁰	8⁰⁰	5
	Make test tool	8⁰⁰	10⁰⁰	1
	Run in Hole	10⁰⁰	12⁰⁰	2

DRILLER Bob LaBoucane

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 BIG ISLAND 078 DATE JANUARY 20th 1971

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:		1652	1737							

TOUR 1

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
		9	6¼		DW55	20K	65	85		6			

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.	9.5	8.5	8.5	8.5
VISC.	28	28	28	28
GEL.				

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

ADDITIVES: WATER _____ GALS.

1. _____

2. _____

3. _____

MIDN.

8 A.M.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	¢ LOG TO DEPTH
450	50	1655				1737	½	

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	256		
W. TRUCK	152		
MOB. PUMP	306		

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-5° C	
WIND VELOCITY:	3 mph	
RAIN, SNOW, FOG, ETC.	Cloudy	

GENERAL: 252

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

INJURIES AND REMARKS: Changed oil in Comp Lite Plant at 4:00

STRATIGRAPHIC LOG FROM FT. / TIME	TO FT. / TIME	RATE IN 16PM	PUMP TEST DESCRIPTION	DEPTH TO WATER IN FT.
			Water Test	
			97.50	

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	TRIP IN	12°	12 55	¾
	RIG SERVICE	12 55	12 30	½
	DRILL	12 30	1 30	6
	SURVEY	6 30	6 45	¼
	TRIP	6 45	8 00	1¼

DRILLER A. 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:		1737	1801							

BIT RECORD

% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
		8	6¼	DW55	17466	20K	65	64		4¼			

MUD	8 A.M.	10 A.M.	12 N'n.	2 P.M.
WT.	8.5	8.5	8.9	
VISC.	28	28	28	
GEL.				

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

ADDITIVES: WATER _____ GALS.

1. _____

2. _____

3. _____

8 A.M.

PUMP PRESS	PUMP RPM	PUMP DEPTH	PUMP PRESS	PUMP RPM	PUMP DEPTH	SURVEY AT	SURVEY DEG.	¢ LOG TO DEPTH
500	50	1770						

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	264		
W. TRUCK	160		
MOB. PUMP	314		

WEATHER	8 A.M.	NOON
TEMPERATURE:	-20	-16
WIND VELOCITY:	10-15	10
RAIN, SNOW, FOG, ETC.	clear	cloud

GENERAL: ~~250~~ 0

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. Fraser's						8
G. Campbell						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig in hole	8 00	9:30	1 30
	Drilling	9:30	1 45	4 25
	Circulate sample	1 45	2 00	0 20
	Mix Mud	2 00	3:45	1 75
	Work tight hole	3:45	4:00	0 25

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

RIG. NO. 57 LOCATION Horn River etal Big Island 0-28 DATE Jan 19-71

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:		1411	1501							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			4	6 7/8	V23	E16671	20,000	60	101		9 3/4			
			5	6 3/4	V23	E16671	15	65	87		4 3/4			

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.	84	84	84	84
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
450	50	1411						

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	231		250
W. TRUCK	128		
MOB. PUMP	152		

GENERAL: 228

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-5	-5
WIND VELOCITY:	15	5
RAIN, SNOW, FOG: ETC	Cloudy	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 LeBoucan						8
HELPER J. OTTENBREIT						8
HELPER H. Higgins						8
V. Higgins						8
TOTAL						

INJURIES AND REMARKS:

STRATIGRAPHIC LOG FROM FT. / TIME	TO FT. / TIME	PUMP TEST RATE IN 16PM	DESCRIPTION / DEPTH TO WATER IN FT.
			Water Cost 75.00

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Rig Ser	1200	1215	1/4
	Drill 6 1/4 Hole	1215	115	1
	Trip	115	3	1 3/4
	Break Cir & Bit #6	3	315	1/4
	Drill	315	8	4 3/4
				8

DRILLER Bob LeBoucan

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 W.	LOST DRILL TIME WAIT ON WATER
AF:	AT:		1501	1593							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			5	6 1/4	F16TK	V23	20	65	140		8 1/4			
			6	6 3/4	DWH J	17850	20	70	39		2			

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.	85	85	85	85
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
450	50	1501						

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	240		250
W. TRUCK	136		
MOB. PUMP	290		

GENERAL: 226

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

CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTEST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS
DRILLER A. Wheeldon						8
HELPER C. Jacobson						8
HELPER L. Bourgeau						8
L. Turcotte						8
TOTAL C. Campbell						8

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Drilling	8:00	9:45	1.75
	Rig Ser	9:45	10:00	.25
	Drilling	10:00	11:45	1.75
	Trip for Bit	11:45	2:00	2.25
	Drilling	2:00	4:00	2.00
				8

DRILLER G. Jacobson

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:		1593	1652							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			6	6 3/4	DWH J	17850	20	70	98		8	out		
			7	6 3/4	W4HJ	DW993	~~15~~							

MUD	4 P.M.	6 P.M.	8 P.M.	10P.M.
WT.	85	85	85	85
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
450	50	1600	450	50	1650			

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	248		250
W. TRUCK	149		
MOB. PUMP	298		

GENERAL: 244

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	-5	-10
WIND VELOCITY:	10	15
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 Bob LeBoucan						8
HELPER W. Fredbrook						8
HELPER Peter Provencher						8
L. Bernault						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Drill 6 1/4 Hole	400	1000	6
	Trip out Hole	1000	1100	1
	Run in Hole	1100	1200	1

DRILLER Bob LeBoucan

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 et al Big Island O-78 DATE Jan 18-71

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:		1099	1251							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			3	6 1/4	DTC	EZ 401	20,000	80	152		6 3/4			

MUD	12MN.	2A.M.	4 A.M.	6 A.M.
WT.	9.4	84	84	84
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
400	50	1150	450	50	1250	1099	3/4°	

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	268		250
W. TRUCK	104		
MOB. PUMP	258		
GENERAL:	204		

WEATHER	MIDN.	4 A.M.
TEMPERATURE:	-20	-30
WIND VELOCITY:	10	10
RAIN, SNOW, FOG, ETC.	Clear	Clear

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 Bob LABOUCANE						12
HELPER J. OTTENBRIET						9
HELPER H. Higgins						8
V. Higgins						6
TOTAL						

INJURIES AND REMARKS: None

STRATIGRAPHIC LOG FROM FT. / TO FT. / TIME	PUMP TEST RATE IN 16PM	DESCRIPTION / DEPTH TO WATER IN FT.
		Water Cost
		75.00

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Trip out Hole	1200	030	1/2
	Trip in Hole	1230	100	1/2
	Rig SER	100	115	1/4
	DRILL 6 1/4 HOLE	115	800	6 3/4

DRILLER Bob LaBoucane

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:		1251	1326							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			3	6 1/4	DTC	EZ 401	29,000	80	214		11			
			4	6 1/4 H	U25	FW667	20,000	60	13		1			

MUD	8 A.M.	10A.M.	12 N'n.	2 P.M.
WT.	8.4	8.4	8.5	8.5
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
450	50	1250						

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	216		250
W. TRUCK	212		
MOB. PUMP	266		
GENERAL:	212		

WEATHER	8 A.M.	NOON
TEMPERATURE:	-25	-10
WIND VELOCITY:	15	18
RAIN, SNOW, FOG, ETC.	Snowing	cloud

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						
HELPER L. COUBASSA						8
HELPER [illegible]						
L. PARENTEAU						8
TOTAL C. Cambell						8

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	DRILL 6 1/4 HOLE	800	900	1
	Rig SER	900	915	1/4
	DRILL 6 1/4 HOLE	915	1300	3 3/4
	Trip for bit	1300	1500	2
	Drilling	1500	1700	1

DRILLER

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:		1326	1411							

BIT RECORD	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
			4	6 1/4	U25	FW667	20,000	60	98		8 1/4			

MUD	4 P.M.	6 P.M.	8 P.M.	10P.M.
WT.	8.8	8.8	8.5	8.5
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
450	60	1330						

	MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT
DRILL	234		250
W. TRUCK	120		
MOB. PUMP	277		
GENERAL:	220		

WEATHER:	4 P.M.	8 A.M.
TEMPERATURE:	-10	-5
WIND VELOCITY:	18	15
RAIN, SNOW, FOG, ETC.	cloudy	cloud

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 C. Jacobson						12
HELPER W. Redrouk						8
HELPER C. Paramieau						8
R. Theriault						8
TOTAL						

INJURIES AND REMARKS:

CLASS	REMARKS	TIME START	TIME STOP	TIME INTERVAL
	Drilling	400	900	5.00
	Work on pump	900	915	.25
	Drilling	915	1200	2.75

DRILLER C. Jacobson

COMPANY TIME _____ CONT'R TIME _____

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

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____