McD. ET. AL HAY RIVER

No. 1 I-41

Drilling Authority No. 264
Date Issued 14-2-67

WELL NAME McD et al Hay River #1 I-41
FIELD WILDCAT Area:
LOCATION: Unit I Section 41 Grid 61-10; 115-30
Latitude 61-00-37 Longitude 115-37-58
From Established Reference Marker

U.W.I.R. 61 01028 — 115 63278
U.W.I. No. 300I416110115300

Rig Release Date: 30-3-67
Status D&A
Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
14-2-67	Application for a Drilling Authority.
3-10-67	~~Well Completion Data.~~
8-11-67	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
31-5-67	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
	Well History Supplement.
	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells — Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells — Vitter's Method.
	M.P.R. — Oil — Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale ..... Small scale .....

NANR 52-90 (7-65)

Drilling Authority No. 264
Date Issued February 2/67

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT 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 McD et al Hay River #1 I-41

Permit No. 4522 Lease No.

J. Ray McDermott & Co., Inc. (Permittee, Licensee, Lessee) Exploratory Licence No. 1018

J. Ray McDermott & Co., Inc. (Operator) Exploratory Licence No. 1018

Location: Unit I Section 41 Grid 61°10' - 115°30'

Latitude 61°00'37" North Longitude 115°37'58" West

From Established Reference Marker Midway between SP 534 & 535 Line 10 of McD. Shooting

Universal Well Location Reference 61.01028° N. Lat. 115.63278° W. Long.

	DATE	DEPTH
Spudded	March 3/67	
Suspended		
Resumed Operations		
Finished Drilling	Mar. 26/67	837'
Deepened		
Complete (gas/oil)		
Abandoned	Mar. 30/67	837'
Rig released	Mar. 30/67	

Pool(s)

Interval(s) open to production

Elevation: Gr. 513 K.B. 517

Rig No. #1 (Failing 1500')

Drilling Contractor Roy Murray Drilling Co.

Contractor's Business Licence No. 18138

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at —	Sacks of Cement and Additives
1. 7" Conductor			114	114	Pulled
2. 4-1/2" "					
3. 3-1/2" "			6 Jts. ~~(176.9')~~	180	19 sx + 32 $CaCl_2$
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION Depths	ELEVATION Sub-Sea
Lake Bottom	80	+ 437
Slave Pt. Ls.	126'	+ 391
Sulphur Pt.	226'	+ 291
Buffalo Shale	562'	- 45
Bituminous Ls.	742'	- 225
Keg River Platform	819'	- 320
Lost Circulation @ 354'		

CORE RECORD

From	To	Rec.	From	To	Rec.
Cores #1-#81 185 (1-7/16" Core)	837 incl.	629.6			

LOG RECORD

Run No.	Type of Log	From	To
1	~~E. Vol.~~ Structure, Test Hole Survey	179	574
2	"	179	837

IAND 52-90(2) (3-67)

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
Mar. 9/67	150	250	22sx + 3% $CaCl_2$ Squeezed w/375# (water flow)
Mar. ~~16~~ 15/67	235	370	16sx + 3% $CaCl_2$ Squeezed w/270# (Ice shift-realig csg.)
Mar. ~~27~~ 28/67	837	Felt Plug @ 563'	14sx Neat 16sx + 3% $CaCl_2$ 6sx + 3% $CaCl_2$ Mud slug @ 280' unable to clean hole.
Mar. ~~30~~ 29/67	280	Felt Plug @130'	25 sx + 2% $CaCl_2$

PERFORATING RECORD (Bullet, Jet)

Date	From	To	Remarks

SERVICING RECORD (Acidizing, Fracing, etc.)

Date	From	To	Remarks

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
		No Drill Stem Tests Taken												

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
CBH-2-1486	Water	180 Flow suspected from 126'	255	Flowing well	H_2S Absent 8 gal/min)
"	#1 Water	384	Surf.	"	H_2S Absent
"	#2 "	795	Surf.	"	H_2S Present (2bbls/mi
"	#3 "	701 Believed originating from 653	Surf.	"	H_2S Present

PRESENT STATUS OF WELL

Oil			(Interval.)
Gas			(Interval.)
L.			
Dry	X		837' T.D.
Susp.			

Company: J. Ray McDermott & Co., Inc.

Signed by: [illegible]

Title: Manager

Date: October 3, 1967

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

File No.
Drilling Authority No. 264

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT 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 McD et al Hay River #1 I-41

Location: Unit 2 Section 41 Grid 61° 10' - 115° -30'

Latitude 61° 00' 37" North Longitude 115° 37' 58" West

From Established Reference Marker Midway between S.P. 534 & 535, Line 10 of McD's shooting.

Universal Well Location Reference

Permit No. 4522 Lease No.

(Permission, Licence, Lease)

Date of commencement of proposed program March 3, 1967

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at

Gas at

Water at

Total Depth 837' Date of last operations March 30, 1967

Present condition of well Abandoned

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 7" (Conductor)		114'			114'
2. 4-1/2"		109'	109'		
3. 3-1/2"		71'	180'	19 sx + 3% CaCl2	
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
	Cement to mud line and shoot off.			

MAY 31 1967
CALGARY, ALBERTA
Oil Conservation Engineer
Northwest Territories & Yukon Territory

The following logs have been run E-Log and Velocity

Other operations proposed

Operations to be carried out by Roy Murray Drilling Co. Contractor Licence No. 18138

Address P.O. Box 34, ST. ALBERT, Alberta Address

Responsible Agent in field F.W. Halkow

Dated at Calgary, Alberta, this 26 Day of May 1967

Signed by K. Kirchner Company

Title Exploration Manager Operator's Exploratory Licence No. 1018

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

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

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

Confirming oral approval to abandon by complete plugging from bottom to mud line

Dated 31st May, 1967

Oil Conservation Engineer

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

IAND 52-90 (5) (3-67)

File No.

Drilling Authority No. 264

Department of Indian Affairs and Northern Development
Resource & Economic Development Group

Application for a Drilling Authority

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

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

Name and number of well McD et al Hay River #1 I-41

Location: Unit I Section 41 Grid 61°10' - 115°30'

Latitude 61°00'37" North Longitude 115°37'58" West

From Established Reference Marker Midway between Shot Points 534 and 535, Line 10 of McDermott shooting.

Elevation: Ground 513' est. K.B. 520' est. feet above sea-level.

Well is expected to ~~produce from~~ drill to Chinchaga formation at a depth of about 1050 feet.

Area assigned to well

(for Oil Conservation Engineer's use only)

Permit No. 4522 Lease No. Acreage 61,920

Permittee, licensee, or lessee J. Ray McDermott & Co., Inc., General Crude Oil Company, Teck Corporation Limited

Exploratory Licence No. 1018

Surface owned by Crown or Crown

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

Petroleum and natural-gas rights owned by Crown

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	Brand	New or Used	Estimated Depth	Sacks of Cement
1. 5-1/2"	14	H40	-	New	85	-
2. 3-1/2"	7.70	J55	-	New	125	10
3.						
4.						
5.						

Expected water, gas, and oil horizons and type of control equipment conductor casing to avoid contamination of lake. Surface casing set at least 50' into Slave Point carbonate. Blow out preventers to control excessive formation pressures.

Well will be drilled with (Rotary) Rig No. 1 by Roy Murray Drilling Co.
(~~Cable~~) (Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Business Licence No. APPLIED FOR

At well F.W. Halkow At registered office 217 Royalite Building

Address Hay River, N.W.T. Address Calgary, Alberta

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

Dated at Calgary, Alberta, this 8 day of February 19 67

Signed by [signature] Company J. Ray McDermott & Co., Inc.

Title Division Manager Operator's Licence No. 1018

(For Resource Management Division use only)

APPROVED

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

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

Dated 14th February 19 67 [signature] Oil Conservation Engineer

Forms to be submitted to Oil Conservation Engineer, Calgary, Alberta.

NANR 52-90-1 (7-65)

UNIVERSAL WELL LOCATION REFERENCE: 61.01028° N. 115.63278° N.

REPORT ON

McD et al HAY RIVER No. 1 1-41

Lat 61°00'37" N & Long 115°37'58" W

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In Envelope

Structure Test Hole Survey Log

GEOLOGICAL & EVALUATION
Resource Management Division
NOV 8 1967
OTTAWA, CANADA
Dept. of Indian Affairs & Northern Development

REPORT ON McD et al HAY RIVER No. 1 1-41

located on

Unit 1, Section 41, Grid 61° 10' - 115° 30'

Latitude 61° 00' 37" North and Longitude 115° 37' 58" West

in the Northwest Territories

Submitted by:

Fred J. Halkes

INTRODUCTION

McD et al Hay River No. 1 I-41 is a stratigraphic test hole located on Latitude 61° 00' 37" North and Longitude 115° 37' 58" West and is the first well to be drilled off-shore on Great Slave Lake in the Northwest Territories. It is some 11 miles NNE from the town of Hay River and was drilled in March of 1967. Ice at that time was found to be 40" thick and lake bottom at the location is 80 ft. deep, consisting of 46 ft. of soft clays and silts.

Some unique operational problems were encountered. For one ice shift had caused excessive binding and wear on the drill rods. The rig had to be moved off, a slot cut in the ice sufficient to re-align the casing to a vertical position and the rig then moved back on. High water flows were encountered in the fractured formations necessitating a number of cement and gel plugs. However, to a large extent it was possible to cope with the flow and continue coring ahead.

The well was cored continuously from 185 to 837 ft. utilizing BQ mining rods and a BQ wire-line diamond core barrel; and although core jamming was common in the fractured formation recovery was good. It was found that optimum penetration was attained when pump pressure was in the 50-80# range and r.p.m. at 200 or better.

The Keg River Reef was not encountered in this well and apart from some traces of dead oil-staining no shows of oil or gas were indicated. As the ultimate objective, the Chinchaga Fm., was not reached due to mechanical difficulties the well was abandoned in the Keg River Platform at a depth of 837 ft.

SUMMARY OF WELL DATA

Well Name:	McD et al Hay River No. 1 I-41
Permittee:	J. Ray McDermott & Co., Inc.
Name of Operator:	J. Ray McDermott & Co., Inc.
Location:	I-41-61-10-115-30 Latitude 61°00'37", Longitude 115°37'58"
Permit No.:	4522
Drilling Contractor:	Ray Murray Drilling Co. Rig No. 1, Failing 1500.
Drilling Authority:	No. 264, February 14, 1967
Classification:	Wildcat.
Elevation:	Ground - 513' (est.) K.B. - 517'.
Technical Supervision:	Fred J. Halkow, Calgary, Alberta.
Date Spudded:	March 3, 1967.
Date Completed Drilling:	March 26, 1967.
Total Depth:	837'.
Well Status:	Plugged and abandoned.
Date Rig Released:	March 30, 1967.
Hole Size:	6" - Surface to 173'. 4-3/4" - 173' to 181' 2-15/16" - 181' to 185' 2- 7/16" - 185' to 837'
Casing:	7" Conductor @ 114' (Pulled same) 3-1/2" and 4-1/2" Surface @ 180' with 19 sx cement + 3% $CaCl_2$ (Shot and pulled casing at 90', 10' below mud line.)

Universal Well Location Reference - Lat. 61.01028° N., Long. 115.63278° W.

TABLE OF GEOLOGICAL FORMATIONS

K.B. Elevation - 517'

FORMATION	Sample Depth	E-log Depth	E-log Elevation
Lake-bottom	80		+ 437
Slave Point Limestone	126		+ 391
Sulphur Point	225	226	+ 291
Buffalo Shale	564	562	- 45
Bituminous Limestone	743	742	- 225
Keg River Platform	818	819	- 302
TOTAL DEPTH	837	837	- 320

SUMMARY OF CORED INTERVALS

Core No.'s	Interval	Feet Cored	Feet Recovered	% Recovered	Size
1 to 81	185-837	652	629.6	96.5%	2 7/16 x 1 7/16

McD et al HAY RIVER #1 I-41

Sample Descriptions

Lake bottom indicated at 80 ft. although conductor pipe did not hang up till 110 ft.

110 - 120		Soft unconsolidated grey clay, loose quartz silt and sand grains and feldspathic pebbles.
120 - 140	Limestone	light grey brown, cryptograined to micrograined, in part finely crystalline with fine pin-point porosity exhibiting patchy dead oil-staining. Prominent feldspathic angular to sub-rounded pebbles, minor sub-rounded to rounded pebbles of limestone as above.
140 - 150	Limestone	light grey brown, calcarenitic, in part bioclastic, shell and coral fragments, trace pin-point porosity, rare pyrobitumen infilling, minor light grey calcilutitic limestone, minor bituminous laminae.
150-160	Limestone	medium brown, calcarenitic as above to earthy, subordinate speckled off-white ordinary and tripolitic chert.
160 - 180	Limestone	dark brown, micrograined, dense, in part finely bioclastic, bituminous, scattered small thin-shelled Brachiopods at 170

Slave Point ------- 126

CORE DESCRIPTIONS

Core No. 1 185-195 Recovered: 9.8 ft.

(Times 35, 95, 75, 45, 45, 40, 40, 40, 40, 45)

5.0'	Limestone -	medium grey-brown, calcarenite, (oolitic-textured to bioclastic), tight, some bituminous thin layering, few stylolites, faint trace spotty dead oil-staining.
0.5'	Limestone -	as above, agundant Brachiopods, and thin bituminous layering.
1.9'	Limestone -	light brown calcilutite to very fine calcarenite, thin fine bituminous stratification, dense, tight.
2.4'	Limestone -	medium grey-brown, calcarenite (bioclastic?) in part fine crystalline, slight scattered pin-point porosity w/slight spotty dead oil-staining, local paper-thin bituminous laminae.

Core No. 2 195-205 Recovered: 10.0 ft.

(Times: 20, 15, 10, 7, 8, 10, 11, 10, 9, 10)

2.5'	Limestone -	light buff grey microcrystalline nodular patches in medium brown calcarenitic to micritic matrix (organic?) prominent healed vertical fractures, minor patchy dead oil staining, tight.
1.9'	Limestone -	medium brown fine calcarenite, bioclastic (?), tight.
0.1'	Shale -	black, compact.
5.5'	Limestone -	medium brown fine calcarenite, bioclastic, tight, minor thin bituminous shale partings.

Core No. 3 205-215 **Recovered: 10.0 ft.**

(Times: 12, 13, 14, 11, 13, 10, 15, 12, 10, 12)

10.0'	Limestone -	grey to brown-grey, fine calcarenite to micrite, in part a lime mud towards base of section, scattered minor fossil fragments, minor black bituminous shale laminae, few stylolites, tight, some faint dead spotty oil staining.

Core No. 4 215-225 **Recovered: 10.0 ft.**

(Times: 12, 9, 9, 10, 12, 7, 8, 5, 8, 10)

8.5'	Limestone -	grey-brown to brown-grey fine calcarenite in a lime mud matrix, (biomicrite?), dense, tight, few black stylolitic shale partings, faint slight spotty dead oil staining near top.
1.5'	Limestone -	as above but light grey, separated from above by 1/4" black shale lens.

Core No. 5 225-235 **Recovered: 9.5 ft.**

(Times: 8, 8, 5, 5, 4, 4, 4, 4, 12, 10)

9.5'	Limestone -	medium grey brown, micrograined, dense, tight, faint thin stratification and lamination, few stylolites. Few prominent nodular (algal?) inclusions and coral (?) at 227 1/2.

Core No. 6 235-245 **Recovered: 10.0 ft.**

(Times: 10, 6, 7, 6, 8, 7, 7, 9, 8, 9)

4.5'	Limestone -	grey, calcilutite (lime mud), abundant dark grey shale laminae and thin lenses, few stylolites, dense, tight
5.5'	Limestone -	grey, faintly brownish, calcilutite as above, random stylolites, faint healed fractures, dense, tight.

Core No. 7 245-255 **Recovered: 9.7 ft.**

(Times: 10, 12, 11, 12, 13, 12, 12, 11, 12, 10)

9.7'	Limestone -	as basal part of core #6, in part micrograined and w/sparse fossil fragments

Core No. 8 255-265 **Recovered: 10.3 ft.**

(Times: 13, 12, 13, 13, 17, 13, 10, 12, 11, 10)

10.3'	Limestone -	grey, slightly brownish, calcilutite, in part a sparse calcarenite, dense, tight, few stylolites near top, vertical fractures common

Core No. 9 265-275 **Recovered: 10.0 ft.**

(Times: 16, 14, 13, 10, 11, 13, 15, 13, 11, 11)

3.0'	Limestone -	calcilutite as above, in part a calcarenite (bioclastic?)
2.5'	Limestone -	grey, slightly brownish, bioclastic, dense, tight, black shale laminae common.
4.5'	Limestone -	brown to brown-grey, bioclastic (medium fragmental), scattered fine calcite crystal inclusions, few Brachiopods, trace poor scattered pin-point porosity w/patchy oil staining minor irregular black shale laminae.

Core No. 10 274-284 (Corrected) **Recovered: 10.0 ft.**

(Times: 11, 9, 8, 8, 7, 8, 9, 8, 8, 10)

10.0'	Limestone -	grey, slightly brownish, calcilutite, dense, tight, calcarenitic band (fossil debris?) at 282, few thin black shale laminae, few stylolites

Core No. 11 284-294 **Recovered: 9.9 ft.**

(Times: 9, 8, 8, 7, 6, 8, 8, 8, 7, 10)

10.0' Limestone - grey, slightly brownish, calcilutite in part slightly calcarenitic, dense, tight, thin fine black shale lamination common, few stylolites.

Core No. 12 294-304 **Recovered: 10.0 ft.**

(Times: 12, 10, 11, 10, 9, 8, 10, 9, 9, 11)

10.0' Limestone - grey to pale buff grey, fine calcarenite in lime mud matrix, fossil debris, few Brachiopods, dense, tight, some faint healed vertical hairline fractures, shale lamination as above, less common.

Core No. 13 304-314 **Recovered 10.1 ft.**

(Times: 15, 11, 24, 18, 45, 34, 16, 14, 16, 18)

10.1' Limestone - pale grey to grey with slightly brownish tinge, calcarenitic to sparsely calcarenitic in lime mud matrix, variable fine fossil debris, minor fine shale laminations and few thin streaks black hard shale.

Core No. 14 314-324 **Recovered: 10.0 ft.**

(Times: 16, 17, 17, 20, 23, 13, 16, 24, 15, 16)

5.8' Limestone - grey, faintly brownish, sparsely calcarenitic in a lime mud matrix to medium calcarenite (fossil debris), dense, tight, few stylolites, minor faint shaly lamination.

3.1' Limestone - buff to buff-grey, bioclastic w/fine calcite crystals, some prominent calcite inclusions, some bedding and stratification, dense, tight.

1.1' Limestone - buff grey to grey, micro to cryptograined, sparse fossil debris, dense, tight, few stylolites.

Core No. 15 **324-334** **Recovered: 10 ft.**

(Times: 20, 11, 9, 8, 9, 7, 7, 11, 10, 8)

0.9'	Limestone -	brown-grey, microcrystalline, tight, laminated w/paper-thin shale laminae.
1.5'	Limestone -	grey-buff, microcrystalline, exhibits bluish grey faintly pyritized mottling, dense, tight, no semblance of bedding.
2.5'	Limestone -	pale grey, calcarenite, some pelletoid texture, dense, tight, minor scattered nodular algal (?) inclusions, stylolites.
3.6	Limestone -	dark brown-grey, microcrystalline, slightly shaly, tight, prominent algal (?) patches, large (4") (Stromatoporoid?) inclusion, scattered Brachiopods,
1.5	Limestone -	pale buff-grey, calcilutite, dense, minor thin shale lamination.

Core No. 16 **334-344** **Recovered: 10.0 ft.**

(Times: 7, 5, 7, 6, 5, 6, 5, 5, 7, 7,)

4.8'	Limestone -	buff-grey, micrograined calcarenite, few stylolites, fractured in part, tight
1.7'	Limestone -	buff, calcarenite, bioclastic, few small vugs, bitumin infilled or lined, and w/calcite crystal inclusions
3.5'	Limestone -	reefoid, highly Stromatoporoidal, Amphipora grey brown to buff grey, in part calcarenite (fine fossil debris), scattered small vugs in part bitumen lined and with calcite crystal inclusions - no shows of gas or oil - well flows water. Core in part badly broken.

Core No. 17 **344-354** **Recovered: 10.0 ft.**

(Times: 7, 7, 5, 5, 4, 5, 5, 6, 5, 5)

2.2'	Limestone -	highly Stromatoporoidal as in bottom part of Core #16, much Amphipora
7.8'	Limestone -	brown-grey to grey, calcarenite, (fossil debris)? in part shaly, scattered small shell fragments, few isolated small corals, some prominent Stromatopora patches, tight, in part broken and fractured.

Core No. 18 354-364 Recovered: 10.0 ft.

(Times: 18, 5, 4, 4, 4, 7, 6, 5, 5, 6)

1.0'	Limestone -	buff, fine calcarenite, scattered fine fossil fragments, prominent stylolite, few bituminous laminae, tight.
9.0'	Limestone -	buff-grey, reefoid, abundant Amphipora, Stromatopora, shell fragments Crinoid fragments, etc., in a lime mud matrix, minor scattered vuggy porosity with some heavy tarry oil.

Core No. 19 364-374 Recovered: 9.7 ft.

(Times: 5, 5, 4, 4, 7, 4, 5, 6, 6, 7)

9.7'	Limestone -	reefoid as in Core No. 18, in a brown grey microcrystalline slightly shaly and fossil debris matrix. Slight intercrystalline and poor vuggy porosity, trace scattered bituminous inclusions, slight patchy oil staining. Core indicates to be sulphurous water bearing.

Core No. 20 374-384 Recovered: 10.0 ft.

(Times: 7, 6, 7, 9, 9, 14, 12, 14, 20, 31)

10.0'	Limestone -	reefoid as above, abundant Stromatopora, scattered small corals, few Brachiopods, trace porosity as above, no staining noted.

Core No. 21 384-394 Recovered: 10.0 ft.

(Times: 25, 23, 15, 17, 21, 32, 20, 31, 19)

2.4'	Limestone -	brownish grey, cryptogranular, bioclastic at base, scattered irregular grey limestone nodules (organic?) minor thin black shale partings, dense, tight.
7.6'	Limestone -	grey, cryptograined, dense, tight, nodular to irregularly bedded with dark grey limy shale and shaly limestone.

Core No. 22 394-404 Recovered 10.0 ft.

(Times: 19, 26, 13, 19, 18, 15, 11, 11, 11, 15)

10.0'	Limestone -	as basal part of Core No. 21, few streaks organic detritus and some Echinoderms at 1 1/2 ft. above base.

Core No. 23 404-414 **Recovered: 10.3 ft.**

(Times: 10, 11, 12, 12, 14, 13, 13, 11, 10, 16)

10.3' Limestone - grey cryptograined calcilutite irregularly bedded and banded with dark grey limy shale and shaly limestone as above.

Core No. 24 414-422 **Recovered: 7.8 ft.**

(Times: 11, 13, 16, 15, 32, 32, 28)

7.8 ft. Limestone - grey dense calcilutite in beds up to 4" and banded or bedded with dark grey shaly limestone, trace fine fossil debris, dense, tight, exhibits much oblique fracturing.

Core No. 25 422-423 **Recovered: 1.2'**

(Time: 30)

1.2' Limestone - as in Core #24 above

Core No. 26 423-424 **Recovered: 1.5 ft.**

(Time: 24)

1.5' Limestone - grey to brownish grey, calcilutite, dense, shaly, banded as above.

Core No. 27 424-434 **Recovered: 9.9 ft.**

(Times: 15, 13, 12, 13, 11, 13, 11, 13, 11, 12)

9.9' Limestone - grey, calcilutite, banded as above to irregularly streaked with dark grey shaly limestone, dense, tight.

Core No. 28 434-444 **Recovered: 9.8 ft.**

(Times: 12, 10, 12, 12, 11, 10, 12, 11, 10, 12)

9.8' Limestone - grey calcilutite, shaly, streaked and irregularly bedded with dark grey shale as above, trace fossil fragments.

Core No. 29 444-454 **Recovered: 10.0 ft.**

(Times: 15, 11, 12, 12, 11, 12, 11, 12, 13, 13)

10.0' Limestone - grey, calcilutite, slightly shaly, banded, bedded and streaked with dark grey shaly limestone, dense, tight.

Core No. 30 454-464 **Recovered: 9.9 ft.**

(Times: 19, 15, 7, 14, 15, 19, 20, 20, 23, 22)

9.9' Limestone - as in Core #29 above, more argillaceous and with dark grey shaly limestone more prevalent, some long faint healed vertical hair-line fractures, few scattered Brachiopods and with layer of Brachiopods at 458 1/2.

Core No. 31 464-474 **Recovered: 10.0 ft.**

(Times: 21, 17, 18, 17, 16, 17, 23, 21, 38, 22)

10.0' Limestone - grey and dark grey faintly brownish banded calcilutite, shaly, dense, tight, no fossils noted.

Core No. 32 474-484 **Recovered 10.1 ft.**

(Times: 21, 19, 18, 19, 18, 19, 20, 17, 16, 16)

10.1' Limestone - dark grey, banded with grey calcilutite, shaly, dense, tight, barren.

Core No. 33 484-490 **Recovered: 6.2 ft.**

(Times: 20, 17, 16, 18, 21, 20)

6.2' Limestone - as in Core 32 above.

Core No. 34 490-494 **Recovered: 4.0 ft.**

(Times: 12, 14, 12, 12)

4.0 ft. Limestone - as in Core above.

Core No. 35 494-504 **Recovered: 10.0 ft.**

(Times: 12, 10, 10, 10, 11, 15, 17, 10, 10, 8)

10.0' Limestone - grey and dark grey banded and shaly as above.

Core No. 36 504-514 Recovered: 10.0 ft.

(Times: 11, 11, 12, 13, 10, 11, 10, 10, 10, 11)

10.0' Limestone - grey and dark grey banded as above, shaly, calcilutite, dense, barren, tight.

Core No. 37 514-524 Recovered: 10.0 ft.

(Times: 9, 10, 12, 11, 11, 11, 11, 11, 10, 9)

10.0' Limestone - banded and shaly as above, few nodular and thin lenses of white crystalline gypsum inclusions

Core No. 38 524-534 Recovered: 10.0 ft.

(Times: 15, 11, 16, 14, 12, 13, 10, 12, 12, 12)

10.0' Limestone - banded and shaly as above, few gypsum inclusions, rare Brachiopod.

Core No. 39 534-544 Recovered: 10.0 ft.

(Times: 13, 9, 11, 13, 12, 12, 12, 12, 10, 10)

8.5' Limestone - grey and dark brown grey banded calcilutite, shaly, dense.

1.5' Limestone - brownish-grey and dark grey banded, shaly calcilutite in part micrograined (fossil debris?) brecciated at top, scattered Brachiopods and Brachiopod fragments, some pyritic inclusions, dense, tight.

Core No. 40 544-554 Recovered: 10.3 ft.

(Times: 12, 12, 16, 14, 15, 16, 15, 15, 18, 19)

10.3' Limestone banded brownish grey and dark brownish grey shaly calcilutite, few Brachiopods, some open oblique and vertical fractures.

Core No. 41 554-559 1/2 Recovered: 5.3 ft.

(Times: 18, 14, 12, 12, 15, 20 +)

5.3' Limestone - dark grey brown, slightly banded shaly calcilutite, dense, tight, scattered Brachiopods, few open oblique and vertical fractures.

Core No. 42 559 1/2-564 Recovered: 4.2 ft.

(Times: 3, 6, 6, 7, 11)

4.2' Limestone - grey and dark brown-grey banded calcilutite shaly, in part a fine biomicrite, locally bioclastic with fair to good leached skeletal porosity, trace light yellowish-green sulphur crystal inclusions, trace very fine micro-crystalline pyrite? pyrrhotite? crystals, no oil staining.

Core No. 43 564-574 Recovered: 10.0 ft.

(Times: 15, 15, 12, 13, 12, 13, 13, 13, 26, 30)

10.0' Shale - dark brownish grey, very limy, in part a shaly limestone, faint thin stratification, dense, barren.

Core No. 44 574-584 Recovered: 9.5 ft.

(Times: 37, 35, 37, 37, 37, 35, 36, 35, 32, 31)

9.5' Limestone - dark brownish grey, very shaly, almost a limy shale, hard, dense, tight, barren.

Buffalo River Shale - 564

Core No. 45 584-594 Recovered: 9.8 ft.

(Times: 20, 15, 9, 9, 14, 11, 10, 10, 12, 13)

9.8' Shale - dark brownish grey, very limy, compact, hard, massive, in part broken.

Core No. 46 594-604 Recovered: 10.0 ft.

(Times: 11, 11, 9, 11, 10, 11, 10, 9, 11, 13)

10.0' Shale - as in core above, some oblique fractures show light greenish-yellow sulphur precipitation.

Core No. 47 604-614 Recovered 10.0 ft.

(Times: 12, 12, 12, 12, 10, 10, 11, 13, 11, 11)

10.0' Shale - dark brownish grey as above, very limy, in part a shaly limestone.

Core No. 48 614-620 **Recovered: 6.0 ft.**

(Times:

6.0' Shale - dark grey, slightly brownish, very limy, badly fractured and broken in part - oblique fractures common.

Core No. 49 620-622 **Recovered: nil**

(Times:

Core No. 50 622-624 **Recovered: 2.0 ft.**

(Times:

2.0' Shale - as above, badly broken and fractured.

Core No. 51 624-634 **Recovered: 10.0 ft.**

(Times:

10.0' Shale - dark brownish grey, very limy, hard, compact, in part fractured and broken

Core No. 52 634-644 **Recovered: 10.0 ft.**

(Times: 26,23,22,21,25,24,26,24,23,20)

10.0' Shale - as in core above.

Core No. 53 644-654 **Recovered: 10.0 ft.**

(Times: 23,21,21,21,25,23,23,21,22,18)

8.0' Shale - as in core above.

1.0' Limestone - dark brown grey very shaly calcilutite, dense, tight.

1.0' Limestone - grey brown calcarenite, bioclastic, cryptocrystalline matrix, scattered Brachiopods, tight, few faint incipient fractures exhibiting dead oil staining.

Core No. 54 654-664 **Recovered: 10.0 ft.**

(Times: 8, 7, 14, 11, 10, 7, 6, 13, 11, 13)

1.7'	Limestone -	brown-grey, calcarenite, bioclastic (fine fossil debris), dense, tight, few thin shale laminae and contains 2 thin gypsum streaks.
3.5'	Limestone -	grey and dark brownish grey, banded, calcilutite, shaly, dense, tight, few Brachiopods, in part obliquely fractured.
1.9'	Limestone -	grey brown, bioclastic (coarse fossil debris - Crinoids, Brachiopod fragments, etc.) fair to good interfragmental porosity - no oil staining, scattered lemon yellow sulphur crystal inclusions and prominent sulphur crystallization and lining few fractures at top of section.
2.9'	Limestone -	brownish grey to dark grey brown, calcilutite, very shaly, in part a limy shale, dense, tight, locally calcarenitic.

Core No. 55 664-672 1/2 **Recovered: 7.3 ft.**

(Times: 18, 16, 14, 15, 25, 24, 21, 25, 14)

0.5'	Shale -	dark brown grey, very limy, compact
0.8'	Shale -	dark brown black, moderately limy, compact to fissile, fossil debris and abundant Brachiopods
2.0'	Shale -	as in top part of core, in part a shaly limestone, faint tight vertical hair-line fracture.
4.0'	Shale -	brown black to dark brown, micro-micaceous, moderately limy, scattered Brachiopods, in part broken and fractured.

Core No. 56 672 1/2 - 674 **Recovered: 1.4 ft.**

(Times: 14, 22)

1.4'	Shale-	brown black, micromicaceous, moderately limy, in part broken

Core No. 57 674-678 1/2 **Recovered: 2.4 ft.**

(Times: 22, 20, 21, 28, 12)

2.4'	Shale -	brown black, micromicaceous, limy, scattered Brachiopods, in part fissile, in part broken and fractured.

Core No. 58		678 1/2 - 680	Recovered: 1.5 ft.
	(Times: 10, 26)		
1.5'	Shale -	as in core above.	
Core No. 59		680-684	Recovered: 3.5 ft.
3.5'	Shale -	as above.	
Core No. 60		684-690	Recovered: 5.0 ft.
	(Times: 30, 15, 22, 26, 23, 24)		
5.0'	Shale -	dark grey to black, micromicaceous, moderately limy, fissile to crumbly, badly broken.	
Core No. 61		690-694	Recovered: nil
	(Times: 26, 20, 36, 27)		
Core No. 62		694-700	Recovered 4.0 ft.
	(Times: 30, 28, 31, 29, 32, 31)		
4.0'	Shale -	brownish-black, faintly micromicaceous, limy, few Brachiopods, fissile to crumbly, in part fractured and broken.	
Core No. 63		700-701	Recovered: nil
	(Time: 47)		
Core No. 64		701-704	Recovered: 2 1/2 ft.
	(Times: 17, 21, 22)		
2.5'	Shale -	as in core above	
Core No. 65		704-711	Recovered: 6.3 ft.
	(Times: 20, 15, 27, 23, 19, 21, 50)		
6.3'	Shale -	brownish-black, limy, scattered Brachiopods, rare Ostracods, few streaks fine fossil debris, fissile, crumbly, broken.	

Core No. 66 711-721 **Recovered: 10.0 ft.**

(Times: 15, 19, 18, 23, 15, 27, 23, 25, 20, 30)

10.0' Shale - brownish-black and limy as above, no Brachiopods noted, sparse fine fossil debris, crumbly, fissile.

Core No. 67 721-724 **Recovered: 2.0 ft.**

(Times: 28, 27, 22)

2.0' Shale - as in core above.

Core No. 68 724-733 **Recovered: 10.0 ft.**

(Times: 27, 28, 28, 28, 30, 30, 29, 30)

10.0' Shale - black, fissile to blocky, crumbly, non-limy, barren, trace pyrite.

Core No. 69 733-743 **Recovered: 10.3 ft.**

(Times: 21, 19, 18, 17, 15, 16, 15, 15, 13, 20)

10.3' Shale - black, fissile to blocky, crumbly, slightly bituminous, limy, minor Brachiopods, scattered pyrites, few streaks fossil debris toward base of section.

Core No. 70 743-746 **Recovered: 2.5 ft.**

(Times: 16, 16, 38)

2.5' Limestone - brown black, very argillaceous, bituminous, pyritic, scattered Ostracods, dense, fractured, broken.

Core No. 71 746-754 **Recovered: 7.5 ft.**

(Times: 16, 19, 10, 10, 10, 13, 10, 11)

7.5' Shale - black to brown-black, very limy, in part a shaly limestone, highly bituminous, fossiliferous (Tentaculites?) few layers small Brachiopods, fossil and fossil debris shows distinct layering, few faint weakly healed and open oblique fractures.

Core No. 72 754-764 **Recovered: 10.0 ft.**

(Times: 11, 20, 21, 16, 10, 9, 8, 11, 11, 11)

10.0' Shale - as above, highly bituminous, distinct layering of Tentaculites (?) locally a shaly limestone, fractured as above.

Core No. 73 764-774 **Recovered: 10.0 ft.**

(Times: 33, 10, 12, 12, 9, 10, 10, 14, 10, 9)

10.0' Limestone - black to brown-black, highly bituminous, dense, in part a limy shale, prominent fossiliferous (Tentaculites) stratification in upper 3 ft. of core, open to weakly cemented vertical to oblique fractures.

Core No. 74 774-784 **Recovered: 10.0 ft.**

(Times: 11, 11, 8, 9, 9, 8, 7, 8, 7, 8)

10.0' Limestone - black, highly bituminous, dense, brittle, abundant long vertical open fractures. Section at 774 1/2 - 775 1/2 is dark brown microcrystalline bioclastic.

Core No. 75 784-793 **Recovered: 3.5 ft.**

(Times: 15, 12, 8, 6, 7, 11, 11, 15, 50)

3.5' Shale - black, highly bituminous, limy, in part a shaly limestone, brittle, some prominent fossiliferous layering, prominent open and healed vertical to oblique fractures.

Core No. 76 793-795 1/2 **Recovered: 2.3 ft.**

(Times:

1.3' Shale - as above with prominent calcite healed vertical fracture.

1.0' Limestone - dark brown, microcrystalline, dense, bituminous.

Core No. 77 795 1/2 -804 **Recovered: 8.0 ft.**

(Times: 39, 16, 16, 13, 11, 13, 18, 16, 14)

8.0' Limestone - black, highly bituminous and shaly, prominent beds of brown-grey cryptocrystalline bituminous limestone, some layering of

Core No. 77 (continued) organic (?) debris (bioclastic ?), dense, tight.

Core No. 78 **804-814** **Recovered: 9.8 ft.**

(Times: 11, 10, 6, 10, 7, 10, 7, 8, 5, 5)

0.4'	Limestone -	dark brown, cryptocrystalline, bituminous, large fracture infilled with hydrocarbon residue
0.6'	Shale -	black, bituminous, limy, compact.
0.4'	Limestone -	dark brown grey, microcrystalline, dense, bituminous, finely bioclastic, exhibits oblique (20°) bedding.
0.4'	Shale -	brown-black to black, highly bituminous, limy, compact, few streaks of limestone as above at 20° bedding.
0.7'	Limestone -	as above.
2.8'	Interbedded -	Limestone, dark brown grey to black bituminous and shale as above, scattered pyrites, fine fossil debris, few recemented fine vertical fractures.
2.5'	Limestone -	black, bituminous, shaly, minor pyrites, scattered Tentaculties, faint fracture infilled with hydrocarbon residue.

Core No. 79 **814-824** **Recovered: 10.0 ft.**

(Times: 7, 8, 7, 11, 13, 14, 13)

3.8'	Shale -	black to brownish-black, highly bituminous, very limy, in part a microcrystalline or bioclastic limestone with prominent Brachiopods.
6.2'	Limestone -	dark brown to brown black, bituminous, highly fossiliferous (Brachiopods - almost coquinoid), minor isolated pin-point porosity with dark brown patchy dead oil-staining.

Core No. 80 824-834 **Recovered: 10.0 ft.**

(Times: 7, 6, 6, 8, 5, 8, 8, 6, 5, 7)

10.0' Limestone - brown-grey to grey brown calcilutite, highly fossiliferous (Brachiopods) in part slightly bituminous, minor bituminous shaly laminae and bedding, dense, tight, long open fracture in upper 2 1/2", trace small patchy dead oil staining along fracture plane.

Core No. 81 834-837 **Recovered: 30 ft.**

(Times: 6, 7, 7)

3.0' Limestone - brown-grey to grey-brown as above, locally bioclastic, fossils less abundant than above, few irregular laminae, some faint healed fractures.

TOTAL DEPTH DRILLER 837 ft.

TOTAL DEPTH E-LOG 837 ft.

DAILY PROGRESS REPORT

DATE	DEPTH From	DEPTH To	Footage	Hours on Bottom	BIT NOS.	REMARKS
						Progress every 24 hours from 8:00 a.m. to 8:00 a.m.
Feb. 28/67						Bull-dozed road on Great Slave Lake from Hay River townsite to well-site. Built bridge over pressure ridge.
Mar. 1/67						Blizzard - could not move rig to location. Visibility zero - waiting out storm.
Mar. 2/67						Pressure ridge moved - rebuilt ice bridge. Plowed out road to location and moved in rig and all materials.
Mar. 3/67	0	166	86			Rigged up. Drilled through ice at 1:30 p.m. March 2/67. (Ice 40" thick), Lake bottom at 80 ft. Soft sediments - set 7" conductor pipe at 114 ft. K.B. Spudded in lake bottom at 3:30 p.m. March 3/67. Drilled 6" hole 0 - 166 Tripped at 145ft. for new bit Drilling ahead at 8:00 a.m.
Mar. 4/67	166	181	15			Drilled 6" hole 166 - 173 Tripped at 173 for bit Drilled 4 3/4" hole 173 - 181 Hole flowed water at est. 10 gal/hr. - lost circulation at 173 - regain circulation with 15 sks. gel + 3 sks. weighting material Ran 6 jts., 176.9' of 3 1/2" and 4 1/2" surface casing with Texas shoe set at 180' K.B. Rigging up to cement at 8:00 a.m.
Mar. 5/67	181					Cemented casing with ~~20~~ 19 sks cement + 3% $CaCl_2$. Casing cemented at 9:15 a.m. March 4/67. Pulled conductor pipe 15ft. up. W.O.C. At 3:00 a.m. slacked off casing, retrieved conductor pipe and commenced heading up.

DAILY PROGRESS REPORT

DATE	DEPTH From	DEPTH To	Footage	Hours on Bottom	BIT NOS.	REMARKS
Mar. 6/67	181					Completed heading up. Wait on bit - bit had to be machined down to adapt to sub. Found cement at 80 ft. - drilled out cement.
Mar. 7/67	181	193	12			Drilled 2 15/16" hole 181-185 Pressured up b. o. p. - pressure held O. K. Rigged up to core and worked on pump. Commenced coring at 1:00 p. m. March 6. Diamond cored 2 7/16" hole 185-193 Hole started making water at 190' Coring ahead at 8:00 a. m.
Mar. 8/67	193	255	62			Cored 2 7/16" hole 193-195 Core No. 1 185-195 Rec. 9.8ft. Tripped at 195 and changed bits - changed to step-type for faster penetration Cored 2 7/16" hole 195-255 Core No. 2 195-205 Rec. 10.0ft. Core No. 3 205-215 Rec. 10.0ft. Core No. 4 215-225 Rec. 10.0ft. Core No. 5 225-235 Rec. 9.5ft. Core No. 6 235-245 Rec. 10.0ft. Coring ahead at 8:00 a. m.
Mar. 9/67	255	275	20			Cored 2 7/16" hole 255-275 Core No. 7 245-255 Rec. 9.7ft. Core No. 8 255-265 Rec. 10.3ft. Core No. 9 265-275 Rec. 10.0ft. Hole flowing water @ est. 8 gal/min. Laid down core bbl. and ran in open end to 180ft. Squeezed 22 sks. cement + 3% $CaCl_2$ at up to 375#. Cement squeezed by 8:30 p. m. W. O. C.

DAILY PROGRESS REPORT

DATE	DEPTH From	DEPTH To	Footage	Hours on Bottom	BIT NOS.	REMARKS
Mar. 10/67	275					W. O. C. Worked on flare line and b. o. p. Completed winterizing rig. Commenced drilling cement at 12:00 midnight Cement from 150-250 Worked on space heater Preparing to core ahead at 8:00 a. m.
Mar. 11/67	274	314	40			Corrected depth from 275 to 274 Cored 2 7/16" hole 274-314 Core No. 10 274-284 Rec. 10.0 ft. Core No. 11 284-294 Rec. 9.9 ft. Core No. 12 294-304 Rec. 10.0 ft. Core No. 13 304-314 Rec. 10.1 ft. Water commenced flowing soon after coring was resumed, increasing from 1 gal./min. to 10 + gal./min. Pulled to 180 ft. and squeezed diesel gal plug (2 bbl. diesel fluid + 600# gel) in @ up to 450# - pressure bled off to 75#. Plug in at 10:30 p.m. Worked on frozen pump and lines
Mar. 12/67	314	354	40			Worked on frozen pump and lines Cleaned out hole to bottom 1:00 p.m. to 7:00 p.m. Water commenced flowing again - mixed mud -- was able to control flow. Cored 2 7/16" hole 314-354 Core No. 14 314-324 Rec. 10.0 ft. Core No. 15 324-334 Rec. 10.0 ft. Core No. 16 334-344 Rec. 10.0 ft. Core No. 17 344-354 Rec. 10.0 ft. Lost circulation @ 354 followed by water flow. Mixed 3 bbl. mud and pumped same in - no returns Mixing mud at 8:00 a. m.

DAILY PROGRESS REPORT

DATE	DEPTH From	DEPTH To	Footage	Hours on Bottom	BIT NOS.	REMARKS
Mar. 13/67	354	400	46			Dumped in 3 bbls. mud - no returns Cored ahead 2 7/16" hole w/water - well commenced flowing water again after few feet. Able to core ahead - well takes water gradually while coring but flows when core is being recovered Core No. 18 354-364 Rec. 10.0 ft. Core No. 19 364-374 Rec. 9.7 ft. Core No. 20 374-384 Rec. 10.0 ft. Core No. 21 384-394 Rec. 10.0 ft. Ice shift has gradually caused drill stem to bind excessively against casing. Mixed mud, killed well and tripped at 394 - bit O.K. Tripped in and continued coring. Coring ahead at 8:00 a.m. at 400'
Mar. 14/67	400	422	22			Cored 2 7/16" hole 400-422 Core No. 22 394-404 Rec. 10.0 ft. Kelly drillpipe sub twised off - recovered pipe, replaced sub and continued coring Core No. 23 404-414 Rec. 10.3 ft. Core No. 24 414-422 Rec. 7.8 ft. Drill pipe binding excessively against casing and b. o. p. Ran deviation surveys Survey @ 60' - off 4°, @ 120' - 0° Tripped out, recovered stuck core bbl. and ran back in to 400. Killed water flow with 600# gel + 400# weighting material. Pulled pipe to 180 ft., worked on b. o. p. and prepared to run cement plug.
Mar. 15/67	422					Squeezed 16 sks. cement + 3% $CaCl_2$ at 180 ft. at pressures up to 270# - pressure bled down. Cement in @ 9:30 a.m. Laid pipe down and moved rig off by 2:00 p.m. Ran deviation surveys: 5 1/2° off @ 30', 4° off @ 60', 1° off @ 90', 0° off @ 120' Waiting on power ice-auger to cut slot in ice to realign casing.
Mar. 16/67	422					Ice-auger arrived at 9:00 a.m. March 15, cut 5 18" holes in ice, moved well-head 4 1/2' to the east to realign casing to the vertical position.

DAILY PROGRESS REPORT

DATE	DEPTH From	DEPTH To	Footage	Hours on Bottom	BIT NOS.	REMARKS
Mar. 16/67 (continued)	422					Survey at 30' - off 1/2° Ran in and cleaned out hole - cement from 235-370, no water flow Preparing to core ahead at 8:00 a.m.
Mar. 17/67	422	490	67			Cored 2 7/16" hole 422-490 Core No. 25 422-423 (jammed) Rec. 1.2' Core No. 26 423-424 (jammed) Rec. 1.5' Core No. 27 424-434 Rec. 9.9' Core No. 28 434-444 Rec. 9.8' Core No. 29 444-454 Rec. 10.0' Core No. 30 454-464 Rec. 9.9' Core No. 31 464-474 Rec. 10.0' Core No. 32 474-484 Rec. 10.1' Coring ahead at 8:00 a.m.
Mar. 18/67	490	555	65			Cored 2 7/16" hole 490-555 Core No. 33 484-490 (jammed) Rec. 6.2' Core No. 34 490-494 Rec. 4.0' Core No. 35 494-504 Rec. 10.0' Core No. 36 504-514 Rec. 10.0' Core No. 37 514-524 Rec. 10.0' Worked on b.o.p. 5:15 to 8:00 p.m. - unable to pressure up, rams worn out - continued coring ahead. Core No. 38 524-534 Rec. 10.0' Core No. 39 534-544 Rec. 10.0' Core No. 40 544-554 Rec. 10.3'
Mar. 19/67	555	574	19			Cored 2 7/16" hole 555-574 Core No. 41 554-559 1/2 Rec. 5.3ft. Core No. 42 559 1/2 -564 Rec. 4.2ft. Core No. 43 564-574 Rec. 10.0ft. Tripped at 574 and found reamer shell twisted off above bit. Wait on tap to fish bit out - ran Structure Test Hole Survey Log. Interval 179-574

DAILY PROGRESS REPORT

DATE	DEPTH From	DEPTH To	Footage	Hours on Bottom	BIT NOS.	REMARKS
Mar.19/67 (cont'd)						Ran in with tap and recovered fish. Worked on pump and core barrel. Tripped in hole, thinned mud down and prepared to core ahead.
Mar.20/67	574	622	48			Cored 2 7/16" hole 574-622 Core No. 44 574-584 Rec. 9.5' Worked on pump. Tripped out at 584 and changed to step-type bit for faster penetration. Tripped in and cored ahead. Core No. 45 584-594 Rec. 9.8ft. Core No. 46 594-604 Rec. 10.0ft. Core No. 47 604-614 Rec. 10.0ft. Core No. 48 614-620 Rec. 6.0ft. (jammed) Core No. 49 620-622 No recovery, no core catcher Tripping out at 8:00 a.m.
Mar.21/67	622	667	45			Completed trip out and recovered core catcher. Ran deviation survey - off 1 1/2° @ 30' Tripped in and cored ahead Core No. 50 622-624 Rec. 2.0 ft. Core No. 51 624-634 Rec. 10.0 ft. Worked on b.o.p. - installed new rams (3 hrs.) Core No. 52 634-644 Rec. 10.0 ft. Core No. 53 644-654 Rec. 10.0 ft. Core No. 54 654-664 Rec. 10.0 ft. Coring ahead at 8:00 a.m. at 667
Mar.22/67	667	701	34			Cored 2 7/16" hole 667-701 Core No. 55 664-672 1/2 Rec. 7.3' Core No. 56 672 1/2-674 Rec. 1.4' Core No. 57 674-678 1/2 Rec. 2.4' Core No. 58 6781/2-680 Rec. 1.5'

DAILY PROGRESS REPORT

DATE	DEPTH From	DEPTH To	Footage	Hours on Bottom	BIT NOS.	REMARKS
Mar.22/67 (cont'd)						Core No. 59 680-684 Rec. 3.5' Core No. 60 684-690 Rec. 5.0' Core No. 61 690-694 Rec. nil Core No. 62 694-700 Rec. 4.0' Core No. 63 700-701 Rec. nil Formation badly fractured - cores jamming. Tripping out at 8:00 a.m. to check core barrel
Mar.23/67	701	733	32			Serviced core barrel and ran in with new bit. Cored 2 7/16" hole 701-733 Core No. 64 701-704 Rec. 2.5' Core No. 65 704-711 Rec. 6.3' Core No. 66 711-721 Rec. 10.0' Core No. 67 721-724 Rec. 2.0' Core No. 68 724-733 - circulating off bottom from 2:30 a.m. waiting out storm - winds estimated at ± 50 m.p.h. with snow, derrick swaying. Waiting out storm at 8:00 a.m.
Mar.24/67	733	733				Waited out storm to 8:00 p.m. Attempted to recover core - inner barrel stuck - pulled wire-line loose and tripped out. Storm still high and derrick unstable to rack pipe, had to lay pipe down. Recovered Core No. 68 724-733 10.0 ft., worked on core barrel and tripped in to core.
Mar.25/67	733	784	51			Cored 2 7/16" hole Core No. 69 733-743 Rec. 10.3' Core No. 70 743-746 Rec. 2.5' (jammed) Ice clowly sagging and rig table hanging up on b.o.p. - jacked up rig and continued coring Core No. 71 746-754 Rec. 7.5' Core No. 72 754-764 Rec. 10.0' Water flow increasing - coming from fractured section Core No. 73 764-774 Rec. 10.0' Core No. 74 774-784 Rec. 10.0' Worked on light plant Coring ahead at 8:00 a.m.

DAILY PROGRESS REPORT

DATE	DEPTH From	DEPTH To	Footage	Hours on Bottom	BIT NOS.	REMARKS
Mar. 26/67	784	802	18			Cored 2 7/16" hole 784-802 Core No. 75 784-793 Rec. 3.5' Inner core and barrel stuck - had to trip out w/Core No. 75. Lost 6.5' of core and found bit twisted off or worn off at the crown. Ran in with re-run bit, milled on junk and cored to 795.5'. Tripped out and recovered Core No. 76, 793-795 1/2, Rec. 2.3' Ran in w/new bit and reamer shell and cored ahead. Water flow increased to estimated 2 bbl/min. while tripping. Coring ahead at 8:00 a.m. at 802.
Mar. 27/67	802	837	35			Cored 2 7/16" hole 802-837 Inner barrel stuck attempting to recover core at 804. Tripped out and found junk iron jammed between inner and outer barrels. Serviced barrels and tripped in w/new bit. Core No. 77 795 1/2 - 804 Rec. 8.0' Core No. 78 804 - 814 Rec. 9.8' Core No. 79 814 - 824 Rec. 10.0' Core No. 80 824 -834 Rec. 10.0' Core No. 81 834 -837 Rec. 3.0' Tripped out at 837 and found reamer shell above bit twisted off. Water flow very heavy with high H_2S content. Closed b.o.p's and prepare to kill well with heavy mud prior to fishing.
Mar. 28/67	837					Ran in to 200' and killed well w/10 bbls. mud. Ran Structure Test Hole Survey E-log 179 to 837' Ran in with tap, made on to fish and worked on fish - unable to work fish loose and unable to back tap off fish - pipe backed off uphole. Made back on to pipe and shot 1/4# charge on top of fish - unsuccessful. Shot 3/4# charge on top off fish - still unsuccessful in parting pipe. Pulled on pipe - pipe parted and recovered 820' pipe. Well started to flow water after trip out. Shut well in and prepared to kill flow prior to velocity survey and abandonment.
Mar. 29/67	837					Killed well with 600# gel (12 bbl.)

DAILY PROGRESS REPORT

DATE	DEPTH From	DEPTH To	Footage	Hours on Bottom	BIT NOS.	REMARKS
Mar. 29/67 (cont'd)	837					Ran Velocity Survey - 12:00 noon to 5:00 p.m. Ran in to 600, closed b.o.p. and pumped in 14 sks. (3 1/2 bbl) neat cement. Plug in at 10:20 p.m. March 28, interval 600-837 Pulled to 240 - well started to flow - closed b.o.p. and pumped 16 sks. (4 bbl.) cement + 3% $CaCl_2$. Plug in at 1:10 a.m. March 29, Pulled to 120; shut b.o.p. and pumped in 6 sks. cement + 3% $CaCl_2$. Plug in at 2:00 a.m. March 29. Pulled to 40' and shut well in. W.O.C.
Mar. 30/67	837					W.O.C. Felt for and found plug with wireline at 10:30 a.m. March 29 at 563'. Ran in open end and found mud slug at 280'. Circulated with difficulty below 300 and could not clean hole without bit. Ran cement plug 280-120 with 25 sks. cement + 2% $CaCl_2$. Plug down at 6:30 p.m. March 29. W.O.C. Felt for and found plug at 130 at 2:30 p.m. Rigged down and prepared to shoot casing off.
Mar. 31/67	837					Shot casing at 120' - unable to pull loose Shot casing at 90' - pulled loose and recovered 90' of 4 1/2" pipe. Completed rigging down and released rig at 12:00 noon March 30, 1967.

DAILY MUD RECORD

Date	Depth	Weight #/ Gal.	Viscosity Seconds	Water Loss 15 min. C.C.	Filter Cake 32nds	Ph.	Remarks and Additives
March 3/67	175						1500# gel, 900# barytes (kill water flow)
10/67	314						600# gel (for diesel gel plug)
11/67	354						500# gel
12/67	400						100# gel
13/67	422						600# gel (to kill water flow) 400# barytes
27/67	837						800# gel, 800# barytes (kill well)
28/67	837						800# gel (kill well)

CORE LABORATORIES-CANADA LTD

PETROLEUM RESERVOIR ENGINEERING

EDMONTON CALGARY REGINA

WATER ANALYSIS

File CBH-2-1486

Company J. Ray McDermott & Co. Inc.

Well Name McD et al Hay River No. 1 1-41 Sample No.

Formation Depth 180' - 255'

Location 61° 10' NL - 115° 30'WL Field Hay River Area Province Northwest Territories

Date Sampled March 8, 1967 Date Analyzed May 19, 1967 Analyst L.A.V.

Sampled From Flowing Well By

Recovery Flow suspected from around casing shoe and originating probably from 126'

Constituents:

1. Total Solids 11,201 mg/liter 2. pH 7.35 3. Sp.Gr. 1.0088 @60°F.

4. Resistivity 0.614 Ohm-meters @ 72 °F 5. H_2S Absent

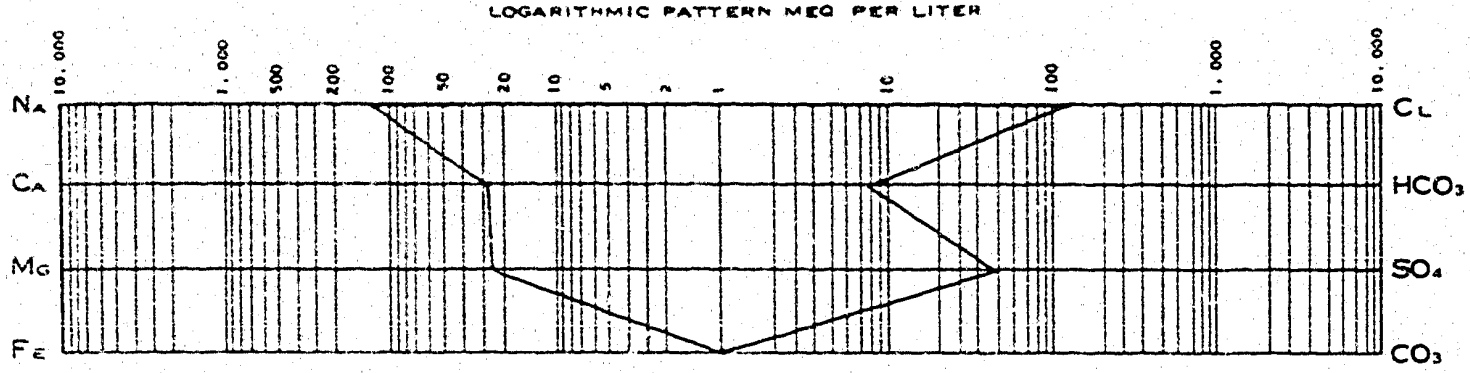
MILLIGRAMS PER LITER

Na & K	Ca	Mg	Fe	Ba		Cl	HCO_3	SO_4	CO_3	OH	
2,999	546	318	Absent	Absent		4,478	472	2,388	-	-	

MEQ PER LITER

130.4	27.2	26.1	Absent	Absent		126.3	7.7	49.7	-	-	

LOGARITHMIC PATTERN MEQ PER LITER



CORE LABORATORIES-CANADA LTD

PETROLEUM RESERVOIR ENGINEERING

EDMONTON CALGARY REGINA

WATER ANALYSIS

File CBH-2-1486

Company J. Ray McDermott & Co., Inc. Page 1 of 3

Well Name McD et al Hay River #1-1-41 Sample No. 1

Formation Depth Hole Depth 384'

Location 61° 10' NL-115° 30' WL Field Hay River Area Province Northwest Territories

Date Sampled Mar. 12/67 Date Analyzed May 16/67 Analyst LAV

Sampled From Flowing Well By

Recovery Elevation

Constituents:

1. Total Solids 8,437 mg/liter 2. pH 7.03 3. Sp.Gr. 1.0064 @60°F.

4. Resistivity .857 Ohm-meters @ 70 °F 5. H_2S Absent

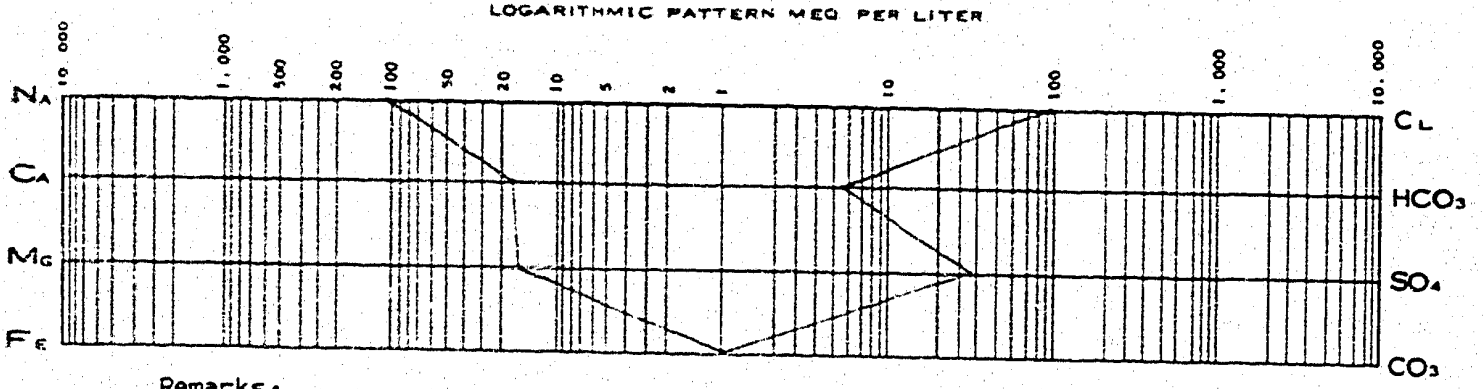
MILLIGRAMS PER LITER

Na & K	Ca	Mg	Fe	Ba		Cl	HCO_3	SO_4	CO_3	OH	
2358	373	206	Abs.	Abs.		3396	344	1760	-	-	

MEQ PER LITER

102.5	18.6	16.9	-	-		95.8	5.6	36.6	-	-	

LOGARITHMIC PATTERN MEQ PER LITER



Remarks:

Note - Strat test drilled from ice on lake.

CORE LABORATORIES-CANADA LTD.

PETROLEUM RESERVOIR ENGINEERING

EDMONTON CALGARY REGINA

WATER ANALYSIS

File CBH-2-1486

Company J. Ray McDermott & Co., Inc. Page 2 of 3

Well Name McD et al Hay River #1-1-41 Sample No. 2

Formation Depth 795'

Location 61° 10' NL-115° 30' WL Field Hay River Area Province Northwest Territories

Date Sampled Mar.26/67 Date Analyzed May 16/67 Analyst L.A.V.

Sampled From Flowing Well By

Recovery Elevation

Constituents:

1. Total Solids 15,219 mg/liter 2. pH 6.90 3. Sp.Gr. 1.0126 @60°F.

4. Resistivity 0.427 Ohm-meters @ 70 °F 5. H_2S Present

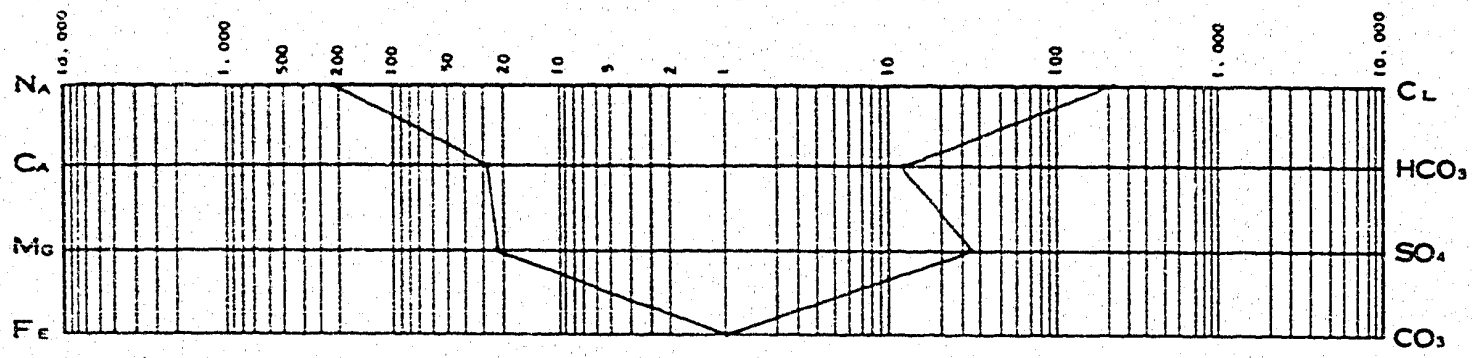
MILLIGRAMS PER LITER

Na & K	Ca	Mg	Fe	Ba		Cl	HCO_3	SO_4	CO_3	OH	
4950	560	286	Abs.	Abs.		7693	880	1696	-	-	

MEQ PER LITER

215.2	27.9	23.5	-	-		216.9	14.4	35.3	-	-	

LOGARITHMIC PATTERN MEQ PER LITER



Remarks:

Strat test drilled from ice on lake

CORE LABORATORIES-CANADA LTD

PETROLEUM RESERVOIR ENGINEERING

EDMONTON CALGARY REGINA

WATER ANALYSIS

File CDH-2-1486

Company J. Ray McDermott & Co., Inc. Page 3 of 3

Well Name McD et al Hay River #1-1-41 Sample No. 3

Formation Depth 701' (believe originating @ 653')

Location 61° 10' NL-115° 30' WL Field Hay River Area Province Northwest Territories

Date Sampled Mar. 22/67 Date Analyzed May 16/67 Analyst L.A.V.

Sampled From Flwoing Well Flowing Well By

Recovery Elevation

Constituents:

1. Total Solids 16,789 mg/liter 2. pH 7.40 3. Sp.Gr. 1.0126 @60°F.

4. Resistivity 0.406 Ohm-meters @ 70 °F 5. H_2S Present

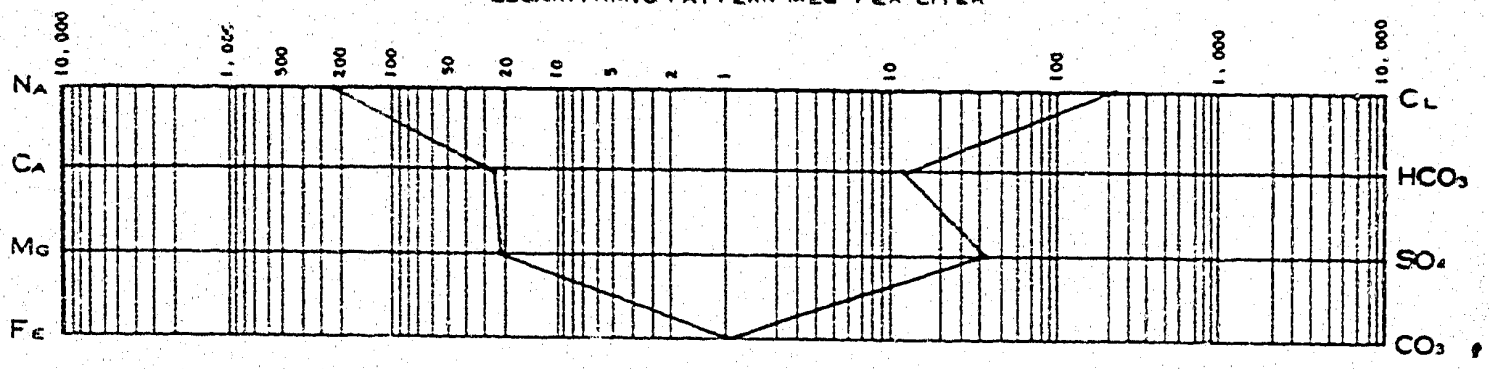
MILLIGRAMS PER LITER

Na & K	Ca	Mg	Fe	Ba		Cl	HCO_3	SO_4	CO_3	OH	
5,267	507	298	Abs.	Abs.		7,976	741	2,000	-	-	

MEQ PER LITER

229.0	25.3	24.4	-	-		224.9	12.2	41.6	-	-	

LOGARITHMIC PATTERN MEQ PER LITER



Remarks:

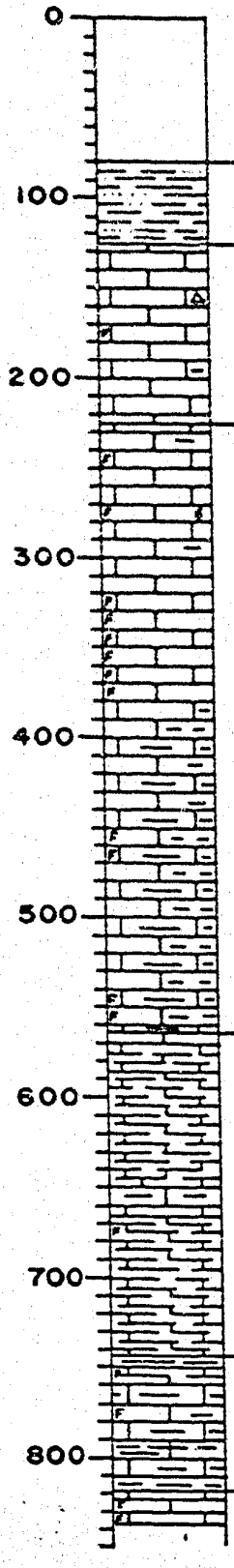
Strat test drilled from ice on lake.

McD et al Hay River No.1 1-41

LAT. 61° 00'37" N. & LONG. 115° 37' 58" W.

STRATIGRAPHIC LOG

ELEV. —517' K.B.



Lake Bed

CLAY – SOFT, UNCONSOLIDATED, MINOR LOOSE SS GRAINS & FELD. PEB.

SLAVE POINT

LS – LT GY BRN, MICROGRN, PIN POINT POR W DD OIL STN

– MED BRN, CALCARENITIC, PT BIOCL, FOS FRAG, TR P.P. POR. CH

– DK BRN, MICROGRN, DNS, IN PT BIOCL, BIT, MNR BRACH.

– MED GY BRN, CALCAR, (BIOCL.) BIT LAM P.P. POR W DD OIL STN.

– GY BRN TO BRN GY, BIOMICRITE, TT, FOS FRAG.

SULPHUR POINT

LS – GY, CALCILUTITE, SH LAM, STYLOLITES, HEALED FRAC, TT

– BRN-GY, BIOCL, CAL XLS, BRACH, TR POR W/DD OIL STN, SH LAM.

– GY, CALCILUTITE, SH LAM, TT.

– BUFF GY, FINE CALCARENITE IN LIME MUD, FOS DEBRIS, TT, SH LAM.

– BRN GY, MIC XLN, TT, SH LAM, PT MOTTLED, STROM BRACH.

– BUFF GY, REEFOID, ABUN STROM, AMPH, SHELL FRAG, SM VUG POR, NO STN

– TR TARRY OIL

– GY, CRYPTGR, DNS, NODULAR BEDDED & BAND, W GY LMY SH.

– GY, CALCILUTITE, BED. & BAND. AA, FRAG, TT.

– SHLY, STREAKED & IRREG. BED, TR. FOS.

– DK GY SH LS MORE COM, FEW BRACH.

– BANDED BRN GY & GY BRN, LIME MUD, FEW BRACH, TT, FRAG.

– DK GY BRN, SL BANDED, LIME MUD, TR SULPH XLS.

BUFFALO RIVER SHALE

SH – DK BRN GY, LIMY, FAINT STRATIFICATION, COMPACT IN PT & LS, FRAC.

LS – GY BRN, CALCARENITE, FOS DEBRIS, PT POR, SULPH XL INCL.

SH – DK BRN TO BRN BLK, LIMY, MICMIC, BRACH, FRAC.

SH – BLK, LMY TO NON-LIMY, SCAT. BRACH., PYR.

BITUMINOUS LIMESTONE

LS – BRN BLK TO BLK, HLY BITUMINOUS, SHALY, FOS (BRACH, TENT)

INTERBEDDED – BIT LS & SH, TR PYR, SCAT TENTACULITES

KEG RIVER PLATFORM

LS – DK BRN TO BRN GY, ABUN. BRACH, SL BIT, DNS, SH LAM, TR DD OIL STN.

TOTAL DEPTH – 837'

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 30/67
Location HAY RIVER

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....
						Waited on Logger ..... to .....
						Logged Hole ..... to .....
						Rigged Down ..... to .....
						Left Hole No. ..... at .....
						Arrived Hole No. ..... at .....
						Rigged Up ..... to .....
						Spudded Hole ..... at .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....
						Waited on Logger ..... to .....
						Logged Hole ..... to .....
						Rigged Down ..... to .....
						Left Hole No. ..... at .....
						Arrived Hole No. ..... at .....
						Rigged Up ..... to .....
						Spudded Hole ..... at .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

Rig Released 12:00 noon 3-30-67

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks RIGGED DOWN, SHOT CASING OFF @ 120' UNABLE TO PULL LOOSE SHOT AGAIN @ 90', REC 90' TOOK LOAD OFF TIMBERS TO HOLE #2 WAITING FOR ICE BRIDGE + HIGH BOY

Driller F KOWALCHUK
Helper R KENT
Water Jack B FOSSHEIM
Accidents .....

Hole Finished at ..... 7:00 A.M
Circulating Hole ..... to ..... 7:00 P.M
Made Final Trip ..... to .....
Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....
						Waited on Logger ..... to .....
						Logged Hole ..... to .....
						Rigged Down ..... to .....
						Left Hole No. ..... at .....
						Arrived Hole No. ..... at .....
						Rigged Up ..... to .....
						Spudded Hole ..... at .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks LEFT LOADED FLAT DECK @ ICE BRIDGE, 3 MILES FROM NEW LOCATION, WAITING FOR TIMBERS TO FREEZE IN

Driller G SCHULTZ
Helper S ROWDEN
Water Jack R McDONALD
Accidents .....

Hole Finished at ..... 7:00 P.M
Circulating Hole ..... to ..... 7:00 A.M
Made Final Trip ..... to .....
Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DAILY DRILLING REPORT

DATE MARCH 27/61
Location HAY RIVER

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at
						Circulating Hole ..... to
						Made Final Trip ..... to
						Waited on Logger ..... to
						Logged Hole ..... to
						Rigged Down ..... to
						Left Hole No. ..... at
						Arrived Hole No. ..... at
						Rigged Up ..... to
						Spudded Hole ..... at

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	837					
					8^00 A.M – 10^40 WAITING ON CEMENT	Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....
						Waited on Logger ..... to .....
						Logged Hole ..... to .....
						Rigged Down ..... to .....
						Left Hole No. ..... at .....
						Arrived Hole No. ..... at .....
						Rigged Up ..... to .....
						Spudded Hole ..... at .....
						8:00 A.M
						8^00 P.M

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks 25 Sacks
Other Materials 10 LBS CAL

Remarks RAN IN WITH WIRE LINE TO FEEL FOR CEMENT, TOP @ 563', TRIPPED IN TO 340', TRIED TO BREAK CIRCULATION PULLED BACK TO 280', CIRCULATED MIXED 25 SKS, CEMENTED FROM 280 BACK TO 120' CIRCULATED WITH WATER. 7^30 – 8^00 W.O.C.
Driller F. KOWALCHUK
Helper R. KENT
Water Jack B. FOSSHEIM
Accidents .....

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....
						Waited on Logger ..... to .....
						Logged Hole ..... to .....
						Rigged Down ..... to .....
						Left Hole No. ..... at .....
						Arrived Hole No. ..... at .....
						Rigged Up ..... to .....
						Spudded Hole ..... at .....
						8^00 P.M
						8^00 AM

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks 8^00 – 2^00 W.O.C.
FELT FOR PLUG. TOP @ 129'
3^00 – 8^00 TEARING OUT.
Driller C. SCHULTZ
Helper S. ROWDEN
Water Jack R. McDONALD
Accidents .....

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R. D. Murray

R. D. MURRAY
DRILLING CONTRACTOR

DAILY DRILLING REPORT

DATE MARCH 21/67
Location HAY RIVER

No.

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....
						Waited on Logger ..... to .....
						Logged Hole ..... to .....
						Rigged Down ..... to .....
						Left Hole No. ..... at .....
						Arrived Hole No. ..... at .....
						Rigged Up ..... to .....
						Spudded Hole ..... at .....

LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	837					Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....
						Waited on Logger ..... to .....
						Logged Hole ..... to .....
						Rigged Down ..... to .....
						Left Hole No. ..... at .....
						Arrived Hole No. ..... at .....
						Rigged Up ..... to .....
						Spudded Hole ..... at .....

LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

Aquagel 8 Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials 20 GALS DIESEL

Remarks MIXED GEL TO KILL WELL TO SHOOT VELOCITY. LAID DOWN 300' OF PIPE. 12⁰⁰-6⁰⁰ SHOOTING VELOCITY TRIPPED IN TO CEMENT.
Driller F KOWALCHUK
Helper R KENT
Water Jack B FOSSHEIM
Accidents .....

8⁰⁰ A.M
8⁰⁰ P.M
USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1						Hole Finished at .....
					2³⁰ AM – 8⁰⁰ A.M.	Circulating Hole ..... to .....
					WAITING ON CEMENT	Made Final Trip ..... to .....
						Waited on Logger ..... to .....
						Logged Hole ..... to .....
						Rigged Down ..... to .....
						Left Hole No. ..... at .....
						Arrived Hole No. ..... at .....
						Rigged Up ..... to .....
						Spudded Hole ..... at .....

LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

Aquagel ..... Sacks Cement
Bran ..... Sacks 30 Sacks
Other Materials .....

Remarks UNABLE TO CIRCULATE TO SURFACE FROM 600', SQUEEZED IN 145 SKS & PULLED BACK TO 240, WELL STARTED TO FLOW. CEMENTED AGAIN WITH 165 SKS @ 3⁰⁰ PM, PULLED BACK TO 120'
Driller G. SCHULTZ
Helper S ROWDEN
Water Jack R McDONALD
Accidents .....

8⁰⁰ P.M
8⁰⁰ A.M
USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 27/67
Location HAY RIVER

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	827					
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel 8 Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials 8 BAROID
20 GALS DIESEL

Remarks FISHING FOR REAMER & BIT. RAN IN 200' & KILLED WELL WITH MUD, TRIPPED OUT & LOGGED. RAN IN WITH SPEAR, CAUGHT REAMER, UNABLE TO PULL IT. REAMER SPREAD OPEN.
Driller F. KOWALCHUK
Helper R. KENT
Water Jack B. FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole #1 3 P.M to 4 PM
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M
8:00 P.M

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	827					
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks UNABLE TO PULL FISH, UNABLE TO GET LOOSE FROM FISH, SHOT PIPE OFF & PULLED OUT OF HOLE WAITING TO SHOOT VELOCITY HOLE FLOWING WATER.
Driller G. SCHULTZ
Helper S. ROWDEN
Water Jack R. McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M
8:00 AM

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R. D. Murray

R. D. MURRAY
DRILLING CONTRACTOR

Rig No. .....

DATE MARCH 26/67
Location HAY RIVER

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

Remarks .....

Driller .....
Helper .....
Water Jack .....
Accidents .....

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	804	819	15'		CORING #78	
					79	Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number #4		804	819	15
	Number				

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8 A.M
8 P.M

Remarks CORE #78 STUCK IN INNER BBL BROKE WIRE LINE, TRIPPED OUT, HOLE FLOWING @ 70 GPM PUMPING WATER AWAY FROM RIG RECONDITIONED 2 INNER BBLS, RAN IN WITH NEW BIT. CUT #79.

Driller F KOWALCHUK
Helper R KENT
Water Jack B FOSSHEIM
Accidents .....

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	819	837	18		CORING #79	
					80	Hole Finished at .....
					8'	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number #4		819	837	18'
	Number				

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8 00 P.M
8 00 A.M

Remarks BIT STOPPED DIGGING @ 837 PUMP PRESSURE WENT TO 400 LB PULLED OUT, LOST REAMER SHELL + BIT, TWISTED OFF. HOLE FLOWING WATER & VERY STRONG WITH H_2S, CLOSED B.O.Ps.

Driller G SCHULTZ
Helper S ROWDEN
Water Jack R McDONALD
Accidents HAD TO TREAT WORKMENS EYES FOR GAS IRRITATION.

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 25/67
Location HAY RIVER.

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	784	793	9		CORING #75	
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks BIT STOPPED DRILLING. TRIED TO RECOVER BBL. BBL STUCK HAD TO TRIP OUT, LOST 6½' CORE THROUGH CATCHER. BIT WORE OUT. PART OF BIT LEFT ON BOTTOM. TRIPPED IN, REC 1 FT. OF CORE.
Driller F. KOWALCHUK
Helper R KENT
Water Jack B FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M
8:00 P.M.

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	793	804	11		CORING #76	
					77	Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number #4				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks CORED TO 795.5 AND TRIPPED OUT TO CHECK BIT, RAN NEW BIT + REAMER SUB. CORED #77.
Driller G. SCHULTZ
Helper S BOWDEN
Water Jack R MCDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M
8:00 A.M

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE 24/67
Location Hay River
24 Mar 67

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	733	753	20'		CORING #69	
					70	Hole Finished at .....
					71	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks STILL TROUBLED WITH JAMMED CORE. ICE MOVING LINED UP R2, TOOK DEVIATION @30' PRESSURED UP - O.K.
Driller F. KOWALCHUK
Helper R. KENT
Water Jack B FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M.
8:00 P.M.

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	753	784	31'		CORING #72	
					73	Hole Finished at .....
					74	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks CHANGED CORE CATCHER. WORKED ON LIGHT PLANT.
Driller C. SCHULTZ
Helper S. ROWGEN
Water Jack R McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8.00 P.M
8:00 A.M.

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Murray

R. D. MURRAY

DRILLING CONTRACTOR

Rig No. .....

DATE MARCH 23/67

Location HAY RIVER

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....
						Waited on Logger ..... to .....
						Logged Hole ..... to .....
						Rigged Down ..... to .....
						Left Hole No. ..... at .....
						Arrived Hole No. ..... at .....
						Rigged Up ..... to .....
						Spudded Hole ..... at .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD

Aquagel ..... Sacks Cement

Bran ..... Sacks ..... Sacks

Other Materials .....

Remarks .....

Driller .....

Helper .....

Water Jack .....

Accidents .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	733		—			
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....
						Waited on Logger ..... to .....
						Logged Hole ..... to .....
						Rigged Down ..... to .....
						Left Hole No. ..... at .....
						Arrived Hole No. ..... at .....
						Rigged Up ..... to .....
						Spudded Hole ..... at .....
						8:00 A.M
						8:00 P.M
						USE CORRECT TIMES. 12 HRS.

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD

Aquagel ..... Sacks Cement

Bran ..... Sacks ..... Sacks

Other Materials .....

Remarks WAITING OUT STORM

Driller F KOWALCHUK

Helper R KENT

Water Jack B FOSSHEIM

Accidents .....

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	733					
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....
						Waited on Logger ..... to .....
						Logged Hole ..... to .....
						Rigged Down ..... to .....
						Left Hole No. ..... at .....
						Arrived Hole No. ..... at .....
						Rigged Up ..... to .....
						Spudded Hole ..... at .....
						8:00 P.M
						8:00 A.M.
						USE CORRECT TIMES. 12 HRS

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD

Aquagel ..... Sacks Cement

Bran ..... Sacks ..... Sacks

Other Materials .....

Remarks TRIED TO RECOVER BBL. UNABLE TO. TRIPPED OUT - RECEIVED BBL. AND CORE. SERVICED BBL, TRIPPED IN.

Driller G. SCHULTZ

Helper S. REWDEN

Water Jack R McDONALD

Accidents .....

TOOL PUSHER R D Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH
Location Hay River
22 Mar.

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	702	723	21		CORING # 64	
					65	Hole Finished at .....
					66	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number #3				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks TRIPPED IN WITH NEW BIT TO CORE, CORE STILL JAMMING IN BBL.
Driller F KOWALCHUK
Helper R KENT
Water Jack B FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M
5:00 P.M.

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	723	733	10		CORING # 67	
					68	Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number #3				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks CUT CORE # 67 + 68 VERY HIGH WINDS AND SNOWING, CIRCULATING ON BOTTOM, WAITING OUT STORM.
Driller G. SCHULTZ
Helper S. ROWDEN
Water Jack R McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M
8:00 A.M.

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R R Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 21/67
Location Hay River

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	665	687	22'		CORING - # 55	
					56	
					57	Hole Finished at .....
					58	Circulating Hole ..... to .....
					59	Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
CORE JAMMING IN BBL.
HAD TO RECOVER SHORT
CORES.

Driller F. KOWALCHUK
Helper R. KENT
Water Jack B. FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 A.M
TO
8:00 P.M.

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	687	702	15'		CORE # 60	
					61	
					62	Hole Finished at .....
					63	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
CORE STILL JAMMING IN
THE BBL. FRACTURED
FORMATION. PULLED 4 SHORT
CORES. TRIPPED OUT.

Driller G. SCHULTZ
Helper S. ROWDEN
Water Jack R. McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 P.M
TO
8:00 A.M.

USE CORRECT TIMES. 12 HRS.

TOOL PUSHER R D Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 20/67
Location HAY RIVER

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	622	635	13'		CORE # 49	
					50	Hole Finished at .....
					51	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks RAN DEVIATION IN CASING @ 30' - 1½° - RAN BACK IN HOLE TO CORE. CORED TILL 4^40 PM. WORKED ON BOP. REPLACED RAMS, PRESSURED UP. O.K. 7^00 - 8^00 CORING
Driller F. KULALCHUK
Helper R. KENT
Water Jack B. FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M
To
8:00 P.M

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	635	665	30'		CORE 52	
					53	Hole Finished at .....
					54	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks TROUBLE PICKING UP CORE CORE BBL JAMMING DUE TO FRACTURED FORMATION. TRIPPED OUT, RAN DEVIATION @ 30' (2°) ICE SHIFTED
Driller G. SCHULTZ
Helper S. PLUMDEN
Water Jack R. McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M
To
8:00 A.M

USE CORRECT TIMES. 12 HRS.

TOOL PUSHER R. D. Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 19/67
Location HAY RIVER

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	564	591	27		CORING #43	
					44	Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks BEAN PUMP WENT BAD, SWITCHED TO BIG PUMP REPAIRED BEAN PUMP PULLED OUT TO CHANGE BIT RAN BACK IN, STARTED TO CORE #44.
Driller F. KOWALCHUK
Helper R. KENT
Water Jack B. FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M TO 8:00 P.M

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	591	622	31		CORING #46	
					47	Hole Finished at .....
					48	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks CORE JAMMED IN BBL @ 622'. CORE CATCHER & LOWER SUB OF INNER BBL STAYED IN HOLE. TRIPPED OUT @ 622'
Driller G. SCHULTZ
Helper S. ROWDEN
Water Jack R. McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M TO 8:00 A.M

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R. D. Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 12/67
Location MAY RIVER

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	551	564	9		CORING #41	
					42	Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number #2		555	564	
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks REAMER SUB TWISTED OFF CORE BBL, TRIPPED OUT, LOGGED HOLE, CHECKED DRILL PIPE, WAITED FOR FISHING TOOL
Driller F KOWALCHUK
Helper R KENT
Water Jack B FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M TO 8:00 PM

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks 8:00 - 10:00 WAITING ON FISHING TOOL. 10:00 TO 1:00 RAN IN HOLE TO FISH, TRIPPED OUT, REPAIRED BEAN PUMP & CORE BBL, RAN BACK IN HOLE, THINNED MUD.
Driller C SCHULTZ
Helper S ROWDEN
Water Jack R McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M TO 8:00 A.M

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Murray

H. D. MURRAY

DRILLING CONTRACTOR

DATE MARCH 17/67

Location HAY RIVER

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement

Bran ..... Sacks ..... Sacks

Other Materials .....

Remarks .....

Driller .....

Helper .....

Water Jack .....

Accidents .....

Waited on Logger ..... to .....

Logged Hole ..... to .....

Rigged Down ..... to .....

Left Hole No. ..... at .....

Arrived Hole No. ..... at .....

Rigged Up ..... to .....

Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	489	524	35		CORING #33	
					34	Hole Finished at .....
					35	Circulating Hole ..... to .....
					36	Made Final Trip ..... to .....
					37	

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number	#2	489	524	35
	Number				

MUD: Aquagel ..... Sacks Cement

Bran ..... Sacks ..... Sacks

Other Materials .....

Remarks 5[15]-8[00] WORKED ON B.O.P. UNABLE TO PRESSURE UP. ONE BAD RAM.

Driller F KOWALCHUK

Helper R KENT

Water Jack B FOSSHEIM

Accidents .....

Waited on Logger ..... to .....

Logged Hole ..... to .....

Rigged Down ..... to .....

Left Hole No. ..... at .....

Arrived Hole No. ..... at .....

Rigged Up ..... to .....

Spudded Hole ..... at .....

8:00 A.M TO 8:00 P.M

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	524	555			CORE #38	
					39	Hole Finished at .....
					40	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number	#2			
	Number				

MUD: Aquagel ..... Sacks Cement

Bran ..... Sacks ..... Sacks

Other Materials .....

Remarks REMOVED RAMS UNABLE TO REPAIR, REPLACED THEM & SENT FOR NEW ONES. CONTINUED CORING

Driller G. SCHULTZ

Helper S ROWDEN

Water Jack R McDONALD

Accidents .....

Waited on Logger ..... to .....

Logged Hole ..... to .....

Rigged Down ..... to .....

Left Hole No. ..... at .....

Arrived Hole No. ..... at .....

Rigged Up ..... to .....

Spudded Hole ..... at .....

8:00 P.M TO 8 A.M

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R R Schuessler

R. D. MURRAY

DRILLING CONTRACTOR

DATE MARCH 16/67

Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER -1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....

Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	422	459	37		CORING - CORE #25 - 422' - 423'	
					" #26 - 423' - 424'	Hole Finished at .....
					" #27-28-29	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number	#2	422	459	37
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks CORE #25 PLUGGED OFF WITH CEMENT, HAD TO RECOVER. CORE #26 RECEIVED 1 FT.

Driller F. KOWALCHUK
Helper R. KENT
Water Jack B FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M
TO
8:00 P.M.

USE CORRECT TIMES.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	459	489	30		CORING # 30 -	
					31 -	Hole Finished at .....
					32 -	Circulating Hole ..... to .....
					33.	Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number	#2	459	489	30

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....

Driller G. SCHULTZ
Helper S. ROWDEN
Water Jack R McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 PM
TO
8:00 A.M

USE CORRECT TIMES. 12 HRS.

TOOL PUSHER R. D. Murray

R. D. MURRAY

DRILLING CONTRACTOR

DATE MARCH 15/67

Location

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

Remarks .....

Driller .....

Helper .....

Water Jack .....

Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

Remarks CUT 4-18" HOLES THROUGH ICE WITH ICE AUGER TO MOVE CASING TO VERTICAL. SET RIG, PREPAR BACK UP. CHANGED FLOW LINE. RAN BACK IN HOLE TO 150'

Driller F. KOWALCHUK

Helper R KENT

Water Jack B. FOSSHEIN

Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M
TO
8:00 P.M.

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

Remarks STARTED DRILLING OUT CEMENT @ 235' to 370'. CORED CEMENT FROM SHOE TO 370'. CIRCULATING HEAVY MUD FROM 422'. READY TO CORE.

Driller C. SCHULTZ

Helper S. ROWDEN

Water Jack R McDONALD

Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 PM
TO
8:00 AM

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Murray

DRILLING CONTRACTOR

DATE MARCH 14/67

Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 1-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks 16 Sacks
Other Materials .....

Remarks RAN CEMENT PLUG @180' 9^00-9^30 SQEEZED 16SKS 3% PULLED BACK TO 150' & CIRCULATED WITH CLEAR WATER TOP RIG OUT TO CUT ICE & MOVE CASING BACK TO VERTICAL.
Driller G SCHULTZ
Helper S ROWDEN
Water Jack ~~B FOSSHEIM~~
Accidents R McDONALD

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M TO 8:00 P.M

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
WAITING ON CEMENT
WAITING ON ICE AUGER
Driller F KOWALCHUK
Helper R KENT
Water Jack B FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M TO 8:00 A.M.

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Schuraf

R. D. MURRAY

DRILLING CONTRACTOR

DATE MARCH 13/67

Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	400	422	22		CORING	
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number	#2	400	422	22
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks CORING #2 3,4 BIT PLUGGED OFF @422, UNABLE TO RETRIEVE INNER BBL, HAD TO TRIPOUT. ICE SHIFTED @ 2 30 P.M. B.O.P RUBBING ON KELLY, RAN DEVIATION @ 140'-0° 60'-4°
Driller C SCHULTZ
Helper S ROWDEN
Water Jack R. McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
5:00 AM TO 8:00 PM.

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1			422			
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel 6 Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials 5 DIESEL 4 BAROID

Remarks TRIPPED OUT WITH CORE BBL, RAN BACK TO 400', MIXED GEL TO KILL WATER FLOW. PULLED BACK TO 80', WORKED ON B.O.P. GETTING READY TO ~~CEMENT~~ RUN CEMENT PLUG.
Driller F. KOWALCHUK
Helper R KENT
Water Jack B FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 PM TO 8:00 AM.

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R. F. Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 12/67
Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

Remarks .....

Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	354	384	30		CORE # 18	
					19	
					20	Hole Finished at .....
					~~21 STARTED~~	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number	#2	354	384	30
	Number				

Remarks HOLE FLOWING TRIED TO MIX MUD WITH SMALL PUMP SWITCHED OVER TO RIG PUMP. CUT 30' CORE, ICE MOVING, KELLY RUBBING B.O.P. TRIED TO RESET RIG + B.O.P.

Driller C. SCHULTZ
Helper S. ROWDEN
Water Jack R McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M TO 8:00 P.M.

MUD
Aquagel 1 Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	384	400	16		CORING #21	
					#22	Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number	#2	384	400	
	Number				

Remarks .....

Driller F. KOWALCHUK
Helper R KENT
Water Jack B FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M TO 8:00 A.M

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials 10 GAL DIESEL

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 11/67
Location HAY RIVER

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel 2 Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials 2 BAROID

Remarks 8:00-8:15 SERVICING RIG
8:15-1:00 CLEANING DISPLACED PLUG FROM PUMPS
1:00-7:00 WASHING BACK TO BOTTOM & MIXING MUD. GETTING READY TO CORE.
Driller G. SCHULTZ
Helper S ROWDEN
Water Jack R. McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M TO 8.00 P.M.

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	314	354	40'		CORING CORE #14	
					15	Hole Finished at .....
					16	Circulating Hole ..... to .....
					17	Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number #2		314	354	40'
	Number				

MUD: Aquagel 3 Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks TRIED TO CORE WITH RIG PUMP, USING MUD, TO MUCH PUMP PRESSURE THROUGH BBL. WENT BACK TO SMALL PUMP. HOLE MAKING WATER.
Driller F. KOWALCHUK
Helper R KENT
Water Jack B. FOSSHEIM.
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M TO 8:00 A.M

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Murray

R. D. MURRAY
DRILLING CONTRACTOR

Rig No. .....

DATE MARCH 10/67
Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	274	312	38'		HOLE MAKING WATER	
					MIXED MUD	Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number	#2	274	312	38'
	Number				

MUD: Aquagel 6 Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks CORING & PIPE CORRECTION 274-312
HAD TROUBLE WITH PUMP MOTOR FROM 12^00 - 1^35.
CORE #10
11
12 & 13
Driller C. SCHULTZ
Helper S ROWDEN
Water Jack R. McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 A.M
TO
8:00 P.M

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	312	314	2		CORING #13	
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel 10 Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials 150 GAL DIESEL

Remarks 8^00 - 8^20 CORING
8^20 - 9^00 RECOVERING CORE
HAD DIESEL PLUG, SQUEEZED 3 BBLS, DISPLACED WITH 45 GALS UNABLE TO CLEAR PUMPS, HAD TO TEAR DOWN PUMPS TO CLEAN
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8.00 P.M
TO
8:00 A.M.

USE CORRECT TIMES.

TOOL PUSHER R D Murray

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 9/67
Location HAY RIVER

DAILY DRILLING REPORT

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
WAITING ON CEMENT
WORKED ON B.O.P. AND
FLARE LINE ETC.
PUT UP PREFAB

Driller G. SCHULTZ
Helper S. ROWDEN
Water Jack ROD McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 A.M
TO
8:00 P.M.

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
8:00-10:00 PREPARING TO DRILL
OUT CEMENT.
10:00-12:00 DRILLING OUT CEMENT
FROM 150-250, PREPARING
TO RUN CORE BARREL
1 HR WORKING ON H FURNACE

Driller F. KOWALCHUK
Helper R. KENT
Water Jack B. FOSSHEIM.
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 P.M
TO
8:00 A.M.

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R. D. Murray

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 8/61
Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 1-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
HAY RIVER #1	259				CORING	
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks
CORE #8-255-265' 10' REC. 7:55-9:00 A.M
" #9-265-275' 10' " 11:30-1:00
[illegible] MAKING 8 GALS. PER MINUTE
MAY HAVE TO CEMENT
Driller C. SCHULTZ
Helper S. ROWDEN
Water Jack R McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
TRIPPED OUT, TOOK BBL. OFF, RAN BACK IN WITH OPEN ROD TO CEMENT. STARTED TO CEMENT @7:00 P.M.
8:00 A.M - 8:00 P.M.
USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
HAY RIVER #1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks
CEMENTING FROM 8:00 PM - 9:15 P.M.
9:15 - 8:00 P.M. WAITING ON CEMENT
SQUEEZED 225KS IN 3 BBLS +
DISPLACED WITH 45 GALS WATER
+ 45 GALS DIESEL FUEL.
F. KOWALCHUK
Driller R. KENT
Helper B. FOSSHEIM
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M
8:00 AM
12 HRS
USE CORRECT TIMES.

TOOL PUSHER R D Murray

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 2/67
Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	Feet Drilled From	To	Total	Pipeset	Describe Formation Drilled	Explain Logging Time and Stand by Time

List Every Bit Used

	Drag	Name	New Used	From	To	Total
Bits						
	Rock Bit	Number				
		Number				

Mud: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Hole Finished at .....
Circulating Hole ..... to .....
Made Final Trip ..... to .....
Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	Feet Drilled From	To	Total	Pipeset	Describe Formation Drilled	Explain Logging Time and Stand by Time
HAY RIVER #1	195'	225	40'		185-195' 10' REC CORING - 195-205' 10' REC 205'-215' 10' REC 205'-225' 10' REC	

List Every Bit Used

	Drag	Name	New Used	From	To	Total
Bits						
	Rock Bit	Number	1	185	195	10
		Number	2	195	RUN	30

Mud: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks: PULLED CORE BARREL FROM 195'
TRIPPED FROM 195' TO RUN NEW STEP BIT - PUMP PRESSURE 45LB. - RPM - 240
Driller: G. SCHULTZ
Helper: S. ROWGEN
Water Jack: R. McDONALD
Accidents .....

Hole Finished at .....
Circulating Hole ..... to .....
Made Final Trip ..... to .....
Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M TO 8:00 P.M.

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	Feet Drilled From	To	Total	Pipeset	Describe Formation Drilled	Explain Logging Time and Stand by Time
HAY RIVER #1	225'	259	34'		CORING	

List Every Bit Used

	Drag	Name	New Used	From	To	Total
Bits						
	Rock Bit	Number	2			34
		Number	2			

Mud: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks:
CORE #5 - 10' REC 8:50 - 9:50 P.M
CORE #6 - 10' REC 11:50 - 12:20 P.M
HAD TROUBLE WITH CORE CATCHER JAMMED INNER BBL.
CORE #7 - 5:30 - 7:30 A.M
PUMP PRESSURE @ 50 LB RPM 240
Driller: E. KOWALCHUK
Helper: R. KENT
Water Jack: B. FOSSHEIM
Accidents .....

Hole Finished at .....
Circulating Hole ..... to .....
Made Final Trip ..... to .....
Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M TO 8:00 A.M.

USE CORRECT TIMES. 12 HRS.

TOOL PUSHER R D Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 6/67
Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
HAY RIVER #1	180	185	5'			
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
2 5/8 ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks ROLLED TO 185' + CIRCULATED
PRESSURED UP TO 500 PSI
POLLED OUT + RIGGED UP
TO CORE. SET BEAN PUMP
+ WIRELINE SPOOL.

Driller G. SCHULTZ
Helper S. ROWDEN
Water Jack R. McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M
TO
8:00 P.M

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
HAY RIVER #1	185'	195'	10'		CORING	
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks HAD TROUBLE WITH BEAN
PUMP + MOTOR
STARTED TO CORE @ 1^00 A.M.
CORED TILL 8 AM.

Driller F. KOWALCHUK
Helper R. KENT
Water Jack B. FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M
TO
8:00 A.M.

USE CORRECT TIMES. 12 HRS.

TOOL PUSHER R D Murray

...R. MURRAY
DRILLING CONTRACTOR

DATE MARCH 5/67
Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
HAY RIVER #1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks FINISHED RIGGING UP B.O.P. GETTING READY TO DRILL OUT. FOUND OUT BQ SUB WOULD NOT FIT 2 7/8 ROCK BIT. WENT TO PINE POINT TO MACHINE SHOP
Driller G. SCHULTZ
Helper S. ROWDEN
Water Jack R. McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 A.M TO 8:00 P.M.

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
	177'5	180	3		VERY HARD LIMESTONE	
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
2 7/8 ROCK BIT	Number	NEW	177	180	3
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks PICKED UP BQ RODS TO DRILL OUT, HIT CEMENT @80', DRILLED TO 180'
Driller F. KOWALCHUK
Helper R KENT
Water Jack B FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M TO 8:00 A.M

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R. D. Murray

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 4/67
Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
HAY RIVER #1			177.5			
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
RAN 20 BAGS CEMENT WITH 4 BALS SLURRY & DISPLACED WITH 95 GALS. COMPLETING @ 9^45 A.M.
9:45 AM - 8^00 PM WAITING ON CEMENT
PULLED 7" CONDUCTOR UP 15' OFF BOTTOM OF LAKE
Driller G. SCHULTZ
Helper S. ROWDEN
Water Jack R McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 A.M TO 8:00 P.M.

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
WAITED FOR CEMENT 8^00 P.M - 3^00 AM
REMOVED VALVE + PULLED OUT 7" CONDUCTOR PIPE. STARTED TO RIG UP. B.O.P.
Driller F KOWALCHUK
Helper R. KENT
Water Jack B FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 P.M TO 8:00 A.M.

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Murray

R. D. MURRAY

DRILLING CONTRACTOR

DATE MARCH 3/67

Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

Remarks .....

Driller .....

Helper .....

Water Jack .....

Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

MUD

Aquagel ..... Sacks Cement

Bran ..... Sacks ..... Sacks

Other Materials .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
~~HAY RIVER~~ #1	166	175	9'		HARD LIMESTONE	
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
BIT #	1631	ON	BOTTOM		
		14 HRS.			
4 3/4 ROCK BIT	10189 Number	NEW	173'		
	Number 7				

Remarks HOLE USING WATER @ 173' STARTED TO FLOW @ 175' MIXED MUD, TRIPPED OUT @ 173' TO RUN NEW BIT

Driller GORDON SCHULTZ

Helper STAN ROWDEN

Water Jack ROD McDONALD

Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 A.M TO 8:00 P.M.

MUD

Aquagel ..... Sacks Cement

Bran ..... Sacks ..... Sacks

Other Materials 6 - BAROID

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
#1	175'	177.5			LIMESTONE	
				66' - 3½"		Hole Finished at .....
				111' - 4½"		Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

Remarks CIRCULATED HOLE FROM 12-2³⁰. PULLED OUT & RAN CASING, LANDED SHOE @ 176' RIGGED UP & READY TO CEMENT.

Driller F. KOWALCHUK

Helper R. KENT

Water Jack R. McDONALD

Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 P.M TO 8:00 A.M

MUD

Aquagel 8 Sacks Cement

Bran ..... Sacks ..... Sacks

Other Materials 3 BAROID

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE MARCH 2/67
Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
HAY RIVER #1	0	80'	80'		WATER	
	80'	122'	42'		SOFT SILTY SEDIMENT	Hole Finished at .....
	122'	142'	20'		LIMESTONE	Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
6¼ ROCK DAKOTA BIT	2741 Number	NEW	0	142'	142'
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks FINISHED RIGGING UP STARTED TO DRILL THROUGH THE ICE @ 1:30 PM (38 INCHES) RAN 109' OF 7" WITH TEX SHOE. SPUDDED IN LAKE. BOTTOM AT 3:30 P.M.
Driller GORDON SCHULTZ
Helper STAN ROWDEN
Water Jack ROD McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole #1 ..... at 3:30 PM
8:00 A.M TO 8:00 P.M

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
HAY RIVER #1	142	166	24'		LIMESTONE, VERY HARD	
					AND ROUGH	Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
	BIT #2741	ON BOTTOM			
		10 HRS.			
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks TRIPPED TO CHANGE BITS @ 1:30 AM - 2:30 @ 145'
Driller FRANK KOWALCHUK
Helper REG KENT
Water Jack BRUCE FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
8:00 P.M TO 8:00 A.M.

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R. D. Murray

DATE MARCH 1 /67

Location HAY RIVER

DRILLING CONTRACTOR

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
HAY RIVER #1						
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks MOVED EQUIPMENT FROM HAY RIVER OUT ON THE LAKE, HAD TO MAKE BRIDGE OVER ICE HEAVE
Driller GORDON SCHULTZ
Helper STAN ROWDEN
Water Jack ROD McDONALD
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 A.M TO 8:00 P.M

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks SET UP CAMP. BUILT SUBSTRUCTURE, HAULED CASING + SUPPLIES FROM TOWN
Driller FRANK KOWALCHUK
Helper REG KENT
Water Jack BRUCE FOSSHEIM
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 P.M TO 8:00 A.M.

USE CORRECT TIMES. 12 HRS.

TOOL PUSHER R D Murray

DRILLING CONTRACTOR

DATE FEB 28/67

Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Wait on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
LOADED BUNKHOUSE + STARTED OUT, MET THE CAT RETURNING STORMING, UNABLE TO MOVE ON THE LAKE
Driller .....
Helper .....
Water Jack .....
Accidents .....

Wait on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 P.M TO 8:00 P.M

USE CORRECT TIMES. 12 HRS

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
STANDING BY FOR WEATHER
Driller .....
Helper .....
Water Jack .....
Accidents .....

Wait on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 P.M TO 8:00 A.M

USE CORRECT TIMES. 12 HRS

TOOL PUSHER R D Hurley

R. D. MURRAY

DRILLING CONTRACTOR

Rig No. .....

DATE FEB 27/67

Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks
WAITING FOR CAT TO CLEAR ROAD TO LOCATION

Driller .....
Helper .....
Water Jack .....
Accidents .....

Hole Finished at .....
Circulating Hole ..... to .....
Made Final Trip ..... to .....
Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 AM
TO
8:00 P.M.

USE CORRECT TIMES. 12 HRS

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks
NO LOCATION, WENT OUT ON LAKE TO PUT TIMBERS OVER PRESSURE RIDGE, READY TO MOVE IN THE A.M.

Driller .....
Helper .....
Water Jack .....
Accidents .....

Hole Finished at .....
Circulating Hole ..... to .....
Made Final Trip ..... to .....
Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 P.M
TO
8:00 A.M.

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD: Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....

Driller .....
Helper .....
Water Jack .....
Accidents .....

Hole Finished at .....
Circulating Hole ..... to .....
Made Final Trip ..... to .....
Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

TOOL PUSHER R.D. Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE FEB 26/67
Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
No LOCATION

Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 A.M
TO
8:00 P.M

USE CORRECT TIMES. 12 HRS.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
No LOCATION

Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

8:00 P.M.
TO
8:00 A.M.

USE CORRECT TIMES. 12 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....

Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

TOOL PUSHER R. D. Murray

Rig No. .....

R. D. MURRAY
DRILLING CONTRACTOR

DATE FEB 25/67
Location HAY RIVER

DAILY DRILLING REPORT

McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time

Hole Finished at .....
Circulating Hole ..... to .....
Made Final Trip ..... to .....
Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time

Hole Finished at .....
Circulating Hole ..... to .....
Made Final Trip ..... to .....
Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
12:00 P.M TO 8:00 P.M.

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
ARRIVED IN HAY RIVER AT NOON.
STARTED TO RIG UP CAMP & UTILITY TRAILERS.
NO LOCATION READY
Driller .....
Helper .....
Water Jack .....
Accidents .....

USE CORRECT TIMES. 8 HRS.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time

Hole Finished at .....
Circulating Hole ..... to .....
Made Final Trip ..... to .....
Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....
5:00 P.M TO 8:A.M.

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
MOUNTING LIGHT PLANT IN TRUCK VAN
RIGGING UP GAS TANKS
WAITING ON LOCATION
Driller .....
Helper .....
Water Jack .....
Accidents .....

USE CORRECT TIMES. 12 HRS.

TOOL PUSHER R D Murray

Rig No. 1

R. D. MURRAY
DRILLING CONTRACTOR

DAILY DRILLING REPORT

DATE FEB 23 - 1967

Location McD et al HAY RIVER #1 I-41
61° 10' — 115° 30'

MIDNIGHT TOUR J. RAY McDERMOTT & Co.

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

DAYLIGHT TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
LEFT ST ALBERT 2 P.M.
DROVE TO VALLEYVIEW.
VALLEYVIEW TO STEEN RIVER
TO HAY RIVER @ NOON
FEB 25.
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

EVENING TOUR

LEFT TOWN ..... LEFT RIG ..... TOTAL TIME ..... Hrs. ..... Min.

Hole No.	FEET DRILLED From	To	Total	Pipeset	DESCRIBE FORMATION DRILLED	Explain Logging Time and Stand by Time
						Hole Finished at .....
						Circulating Hole ..... to .....
						Made Final Trip ..... to .....

BITS — LIST EVERY BIT USED

Drag	Name	New Used	From	To	Total
ROCK BIT	Number				
	Number				

MUD
Aquagel ..... Sacks Cement
Bran ..... Sacks ..... Sacks
Other Materials .....

Remarks .....
Driller .....
Helper .....
Water Jack .....
Accidents .....

Waited on Logger ..... to .....
Logged Hole ..... to .....
Rigged Down ..... to .....
Left Hole No. ..... at .....
Arrived Hole No. ..... at .....
Rigged Up ..... to .....
Spudded Hole ..... at .....

USE CORRECT TIMES.

TOOL PUSHER R. D. Murray