Drilling Authority No. 132

Date Issued

WELL NAME HB Pan Am S Island A F-41

FIELD

LOCATION: Unit M Area:

Section 41 Grid 60° 10'; 121° 00'

Latitude 60° 00' 55" Longitude 121° 09'

From Established Reference Marker Pan Am Shot Point No. 6-69 at 60° 00' 55'; 121° 09'

Rig Release Date:

Status

Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
	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.
	Approval to Commingle Production before Measurement.
	Application to Amend Approval No to Commingle Production before Measurement.
	Application for M.P.R.—Oil.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Field Abandonment Programme and Approval.
	Well Card.
	Well Visit.
	Daily Drilling Reports.

Drilling Authority No. 132

Date Issued

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCE MANAGEMENT DIVISION

WELL COMPLETION DATA REVISED

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

Well name and number: KB Pan Am S Ireland R M-41

Permit No. 2709 Lease No.

Pan American Petroleum Corp. (Permittee, Licensee, Lessee) Exploratory Licence No. 650

Hudson's Bay Oil and Gas Company (Operator) Limited Exploratory Licence No. (644) 722

Location: Unit M Section 41 Grid 60° 10' N, 121° 00' W

Latitude 60° 00' 55" N Longitude 121° 09' W

From Established Reference Marker Pan Am Shot Point N° 6-69 at 60° 00' 55", 121° 09'

	DATE	DEPTH
Spudded	2/3/64	
Suspended	4/13/64	
Resumed	2/26/66	
Finished Drilling	3/20/64	8185
Deepened	PBD	8160
Completed (gas/oil)	3/4/66	
Abandoned		
Rig released	3/4/66	

Pool (s) Slave Point

Interval(s) open to production 6938-6944 feet KB

Elevation: Gr. 2198 feet

K.B. 2212.5 feet

Drilling Contractor & Rig No. Beta Well Service Ltd. Rig No. 18

Contractor's Business Licence No.

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at—	Sacks of Cement and Additives
1. 10-3/4	J-55	40.5	815.35	828' KB	700 of construction
2. 5-1/2	N-80	20.0	589.09	603	cement plus 2 percent
3. 5-1/2	J-55	15.5	4376.25	4980	$CaCl_2$
4. 5-1/2	J-55	17.0	1938.34	6918	
5. 5-1/2	N-80	17.0	1269.57	8185	600 cubic feet of
6. 2-7/8	J-55	6.5	6867.55	6873-set	Pozmix 1:1 plus
					2 percent gel, plus 0.4

c/o Lone Wells BCCF-9 Packer @ 6860' percent HR 12

GEOLOGICAL TOPS	ELEVATION Depths	ELEVATION Sub-Sea
Sikanni Sandstone	1167	+1045
Buckinghorse Shale	1325	+ 887
Mississippian	1998	+ 214
Devonian (Kotcho)	3527	-1315
Tetcho Limestone	4157	-1945
Jean Marie	5063	-2851
Slave Point	6872	-4660
Watt Mountain	7305	-5093
Chinchaga	7857	-5625
Chinchaga Sandstone	8032	-5820
Red Beds (Pre-Devonian)	8135	-5983

CORE RECORD

From	To	Rec.	From	To	Rec.
7020	7019	8.5			
7019	7032	9.75			

LOG RECORD

Run No.	Type of Log	From	To
1	Induction Electric Log	829	8154
2	Gamma Sonic Caliper	829	8150
3	Gamma Ray Neutron Log	8151	6800
4	Completion Record	7000	6780

DEPT. OF NORTHERN AFFAIRS & NATIONAL RESOURCES CALGARY, ALBERTA MAY 3 1966 Oil CONSERVATION ENGINEER Northwest Territories & Yukon Territory

NANR 82-0012 (7-65)

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks

PERFORATING RECORD (Bullet, Jet)

Date	From	To	Remarks
3/3/66	6938	6944	4 jets/foot 2-1/8" Crack Jets

SERVICING RECORD (Acidizing, Fracing, etc.)

Date	From	To	Remarks
3/3/66	6938	6944	Displace 110 bbls. of 0.5 percent Cerban 502 around into annulus with packer (6860' KB). Acidized with 1000 gallons of 25% HCL. Formation broke down with water at 1200 psi. Squeezed to formation at 5 BPM at 1800 psi.

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.B.H.P.	F.S.I.B.H.P.	I.F.B.H.P.	F.F.B.H.P.	I.H.P.	F.H.P.	REMARKS
1	2/9/64	Mississippian	2159	2219	60	30	35	518	89	54	63	1062	1062	GIP - weak air blow rec. 50' mud
2	2/29/64	Slave Point	6930	7010	118	60	60	2854	2602	2417	2352	3671	3609	GIP- Fluid to surface rec. 100' mud
3	3/2/64	Slave Pt	7007	7032	115	52	45	2610	2619	479	2590	3630	3497	GIP- Dead after 90 mins. rec.1060' salty mud
4	3/6/64	Slave Pt	7230	7300	118	30	30	2746	2746	-	-	3659	3510	GIP- Dead in 5 mins. rec. 330' mud 400' salty mud
5	3/10/64	Elkton	7300	7535	114	45	45	2772	2772	126	2772	3640	3507	GIP-dead in 90 mins. rec. 300' mud 5600' salty water
6	3/15/64	Chinchaga	7830	7916	120	30	54	2975	3019	2022	2946	3797	3461	FIP-rec. 6200' salt water.

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
F 1854	core	7010	7032		Slave Point
E23278-3	water	6930	7010	DST-2	Bottom sample
E23278-4	water	6987	7012	DST-3	Bottom sample
E23279-2	water	7230	7300	DST-4	Bottom sample
E23280-2	water	7300	7535	DST-5	Bottom sample
E23281-1	water	7830	7916	DST-6	Bottom sample
E23282	gas	6930	7010	DST-2	G.T.S. in 1 1/2 hrs. @ 3/7 MCFD
F66-6	water	6938	6944	Tank sample	End of 4 point AOF test
F2800	water	6938	6944	tank sample	After 25 hours flowing
E66-529	gas	6938	6944	tubing	End of AOF test

PRESENT STATUS OF WELL

Oil		(Interval)
Gas	X	6938-6944 (Interval)
Dry		
Susp.	X	

Hudson's Bay Oil and Gas Company Limited

Company

Signed by E. J. Chaput

Title District Superintendent

Date April 28, 1966

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

File No.
Drilling Authority No. 132

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to Alter Condition of a Well

NOTICE OF INTENTION TO

~~Suspend Operations~~—Resume Operations—~~Recondition~~—~~Deepen~~
—~~Recomplete~~—~~Reopen a Suspended Well~~
(Strike out words that are not applicable.)

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

Type of operation: Completion
Name and number of well: BP Pan Am S Island H No-41
Location: Unit M Section 41 Grid 60° 10' N, 121° 00' W
Latitude 60° 00' 55" N Longitude 121° 09' W
From Established Reference Marker Pan Am Shot Point No. 6-69 at 60° 00' 55" 121° 09'

Permit No. 2709 Lease No.
Permittee, Licensee, Lessee: Pan American Petroleum Corporation

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at
Gas at 6930' - 7010'
Water at 7005', 7200' - 7300', 7300' - 7500', 7830' - 7916'
Total depth 8185 feet Date of last operation March 23, 1964
Present condition of well: Cased but not perforated.

CASING RECORD

	Casing Size O.D. (Inches)	Weight	Amount	Set at—	Sacks of Cement	Method	Amount Pulled
1.	10-3/4	40.5	815.35'	828'KB	700 & 2% $CaCl_2$		
2.	5-1/2	17.0	3207.91'				
3.	5-1/2	15.5	4376.25'				
4.	5-1/2	20.0	589.09'	8185'KB	600 Pozmix & 0.4% HR12		
5.							
6.							

OPERATION PROPOSED
(If more space is required, attach additional sheet)

Programme of operations—(Plugs, perforations, rework, etc.) (1) Move on service rig install BOP's. (2) Run Gamma Ray Neutron log (3) Run 2-7/8 inch OD 6.5# tubing with packer (4) perforate w/4JPF the selected slave point interval (5) Acidize the selected interval w/1000 gal. 15% HCl (6) Swab the well in and conduct four point back pressure test (7) Release the rig. (8) Fill tubing w/ inhibited water and set tubing plug.

Operations to be carried out by Hudson's Bay Oil & Gas Contractor Licence No.
Address 10244 - 103 St. Edmonton, Alta./Co.Ltd.
Responsible agent in field H. Deane Address 10244 - 103 St. Edmonton, Alta
Dated at Edmonton, this 18th day of February 19 65
Signed by E. J. CHAPUT Company Hudson's Bay Oil & Gas Co. Ltd.
Title District Superintendent Exploratory Licence No. 722

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

(For RESOURCES DIVISION use only)

APPROVAL

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

(1) The top 100' of the tubing shall be filled with diesel oil to prevent freezing.
(2) This office is to be given notice of when the well is to be tested in sufficient time to be able to send an observer.
(3) Reports received by radio on the progress of your work at the well are to be submitted to this office each Tuesday and the Daily Tour Reports forwarded as soon as possible.

Dated 22nd February, 19 66

Forms to be submitted in triplicate to Oil Conservation Engineer, Calgary, Alta.

NANRS2 90 (6) (1-61)
DEPT. OF NA & NR (3) DGS EJC GCS Pan Am (2)

Drilling Authority No. 1

Date Issued January 1, 64

CANADA

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES 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 HB Pan Am S Island R M-41

Permit No. 2709 Lease No.

Pan American Petroleum Corp. (Permittee, Licensee, Lessee) Exploratory Licence No. ~~Dist~~ 650

Hudson's Bay Oil & Gas Co. Ltd. (Operator) Exploratory Licence No. ~~665~~ 644

Location: Unit M Section 41 Grid 60°10'N, 121°00'W

Latitude 60°00'55"N Longitude 121°09'W

From Established Reference Marker Pan Am Shot Point No. 6-69 at 60°00'55", 121°09'

	DATE	DEPTH
Spudded	Feb. 3/64	
Suspended	Apr. 13/64	
Resumed		
Finished Drilling	March 20/64	8185
Deepened		
Complete (gas/oil)		
Abandoned		
Rig released	March 23/64	

Pool (s)

Interval(s) open to production Cased but not perforated

Elevation: Gr. 2198 feet

K.B. 2212.3 feet

Drilling Contractor & Rig No. Cascade Drilling Co., Ltd., Rig No. 1A

Contractor's Licence No. 11320

CASING RECORD

	Casing Size (Inches)	Weight	Amount	Set at—	Sacks of Cement	Method
1.	10-3/4	40.5	815.35	828'KB	700 + 2%	$CaCl_2$
2.	5-1/2	17.0	3207.91			
3.	5-1/2	15.5	4376.25			
4.	5-1/2	20.0	589.09	8185'KB	600 cu. ft. Pozmix + 1% HR12	
5.						
6.						

GEOLOGICAL TOPS	ELEVATION	
	Depths	Sub-Sea
Slikanni Sandstone	1167	+1045
Muskinchorse Shale	1325	+ 887
Mississippian	1998	+ 214
Devonian (Kotcho)	3527	-1315
Tetcho Limestone	4157	-1945
Jean Marie	5063	-2851
Slave Point	6872	-4660
Watt Mountain	7305	-5093
Chinchaga	7837	-5625
Chinchaga Sandstone	8032	-5820
Red Beds (Pre-Devonian)	8135	-5923

CORE RECORD

From	To	Rec.	From	To	Rec.
7010	7019	8.5			
7019	7032	9.75			

LOG RECORD

Run No.	Type of Log	From	To
1	Induction Electric Log	829	8155 4
2	Gamma Sonic Caliper	829	8150
1	Seismic Reference Survey	829	8150'

NANR 52-90(2) (11-61)

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
March 22/64	8185'	8142'	As per casing cement job - cement has not been drilled out

PERFORATING RECORD (Bullet, Jet)

Date	From	To	Remarks
			Cased but not perforated

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
1	2/9/64	Mississipian	2159	2219	60	30	35	518	89	54	63	1062	1062	GIP-weak Air blow. Rec 50' mud
2	2/29/64	Slave Pt	6930	7010	118	60	60	2584	2602	2417	2352	3671	3609	GIP-Fluid to surface. Rec 100' mud and 60' salt water
3	3/2/64	Slave Pt Basal	7007	7032	115	52	45	2610	2619	479	2590	3630	3497	GIP-Dead after 90 min. Rec 1060 ft salty mud
4	3/6/64	Slave Pt	7230	7300	118	30	30	2746	2746	-	-	3659	3510	GIP-Dead in 5 min. Rec. 330' mud, 400' salty mud
5	3/10/64	Elk Point Upper	7300	7535	114	45	45	2772	2772	126	2772	3640	3507	GIP-Dead in 90 min. Rec. 300 feet mud, 5600' salty water
6	3/15/64	Chinchaga	7830	7916	120	30	54	2975	3019	2022	2946	3797	3461	FIP- Rec. 6200 feet salt water

Lab. No.	Sample	From	To	Source	Remarks
F1854	Core	7010'	7032'		Slave Point Bottom sample
E23278-2	Water	6930'	7010'	DST #2	" "
E23278-4	"	6987'	7012'	DST #3	" "
E23279-2	"	7230'	7300'	DST #4	" "
E23280-2	"	7300'	7535'	DST #5	" "
E23281-2	"	7830'	7916'	DST #6	" "
E23282	Gas	6930'	7010'	DST #2	GTS in 1/2 min (CL) 5.7 MMcf/day

PRESENT STATUS OF WELL

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

Company: HUDSON'S BAY OIL AND GAS CO. LTD.

Signed by: [signature]

Title: District Superintendent

Date: April 30, 1964

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

File No.
Drilling Authority No. 132

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

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

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

Name and number of well **HB Pan Am S Island K M-41**

Location: Unit **M** Section **41** Grid **60° 10' N, 121° 00' W**

Latitude **60° 00' 55" N** Longitude **121° 09' W**

From Established Reference Marker **Pan Am Shot Point No. 6-60 at 60° 00' 55", 121° 09'**

Permit No. **2709** Lease No.

Pan American Petroleum Corporation
(Permittee, Licensee, Lessee)

~~Date of commencement of proposed programme~~ **March 23, 1964**

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at

Gas at **6930'-7010'**

Water at **7005', 7260'-7300', 7300'-7500', 7830'-7916'.**

Total Depth **8185 Feet** Date of last operations **March 23, 1964**

Present condition of well **Cased but not perforated.**

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement	Method	Amount Pulled
1. 10¾	40.5	815.35'	828' KB	700+2% $CaCl_2$		
2. 5½	17.0	3207.91'				
3. 5½	15.5	4376.25'				
4. 5½	20.0	589.09'	8185' KB	600 Pozmix w/¾ HR12		
5.						

PROPOSED ABANDONMENT PROGRAMME

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

The following logs have been run **Induction Electrical, Sonic Gamma Ray Caliper & Velocity Logs**

Other operations proposed **Completion proposed during winter 1964-65**

Operations to be carried out by Contractor Licence No.

Address Address

Responsible Agent in field **H. J. Mould**

Dated at **Edmonton, Alberta**, this **9th** Day of **April** 19 **64**

Signed by **O. E. SIRCOME** Company **Hudson's Bay Oil and Gas Company Ltd.**

Title **District Superintendent** Exploratory Licence No. **644**

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

Dept. of NANR(3), DCJ, DGS, GCS, JLW, PanAm(2)

(For RESOURCES DIVISION use only)

APPROVAL

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

Well Completion Data Forms and the Well History Report are to be submitted up to the date of Suspension.

Form NANR 52-90(6)(1-61) for approval to reopen the well is to be submitted 15 days prior to the reopening and testing of the well and thereafter an addendum to the Well History Report as well as updated Well Completion Data Forms and New Gas Well Report.

Dated **13th April**, 19 **64**

Forms to be submitted in triplicate to Oil Conservation Engineer, Calgary, Alberta

NANR 52-90 (5) (1-61)

File No. .....

Drilling Authority No. 132

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application for a Drilling Authority

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

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

Name and number of well HB Pan Am S Island K No-41

Location: Unit N Section 41 Grid 60° 10'W, 121° 00'W

Latitude 60° 00' 55" N Longitude 121° 09' W

From Established Reference Marker Pan Am Shot Point No. 6-69 at 60° 00' 55", 121° 09'

Elevation: Ground 2198' K.B. feet above sea-level.

Well is expected to produce from Elk Point formation at a depth of about 6800 feet.

Area assigned to well ..... (for Oil Conservation Engineer's use only)

Permit No. 2709 Lease No. ..... Acreage .....

Permittee, licensee, or lessee Pan American Petroleum Corporation

Exploratory Licence No. 644

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. 10¾	40.5	J-55	ST&C	New	500	Sufficient cement plus 2% $CaCl_2$ to return to surface
2.						
3.						
4.						
5.						

Expected water, gas, and oil horizons and type of control equipment Anticipated production horizon will be from the Slave Point. Control equipment will consist of proper drilling fluid and adequate blowout prevention equipment.

Well will be drilled with (Rotary) (~~Cable~~) Rig No. 18 by Cascade Drilling Co. Ltd. (Drilling Contractor or company)

Noted GGS

Responsible agent of applicant:— Contractor's Licence No. All220

At well H. J. Mould At registered office D. G. Strople

Address 10244 - 103 St, Edmonton Address 10244 - 103 St, Edmonton, Alberta

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

Dated at Edmonton, Alberta, this 15th day of January 19 64

Signed by ORIGINAL SIGNED D. G. STROPLE Company Hudson's Bay Oil and Gas Company Limited

Title District Superintendent Licence No. .....

Dept. of NA&NR(3), DCJ, DGS, (For Resources Division use only)
GCS, JLW, PanAm(2)

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 17th January 19 64 B. H. Snow

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

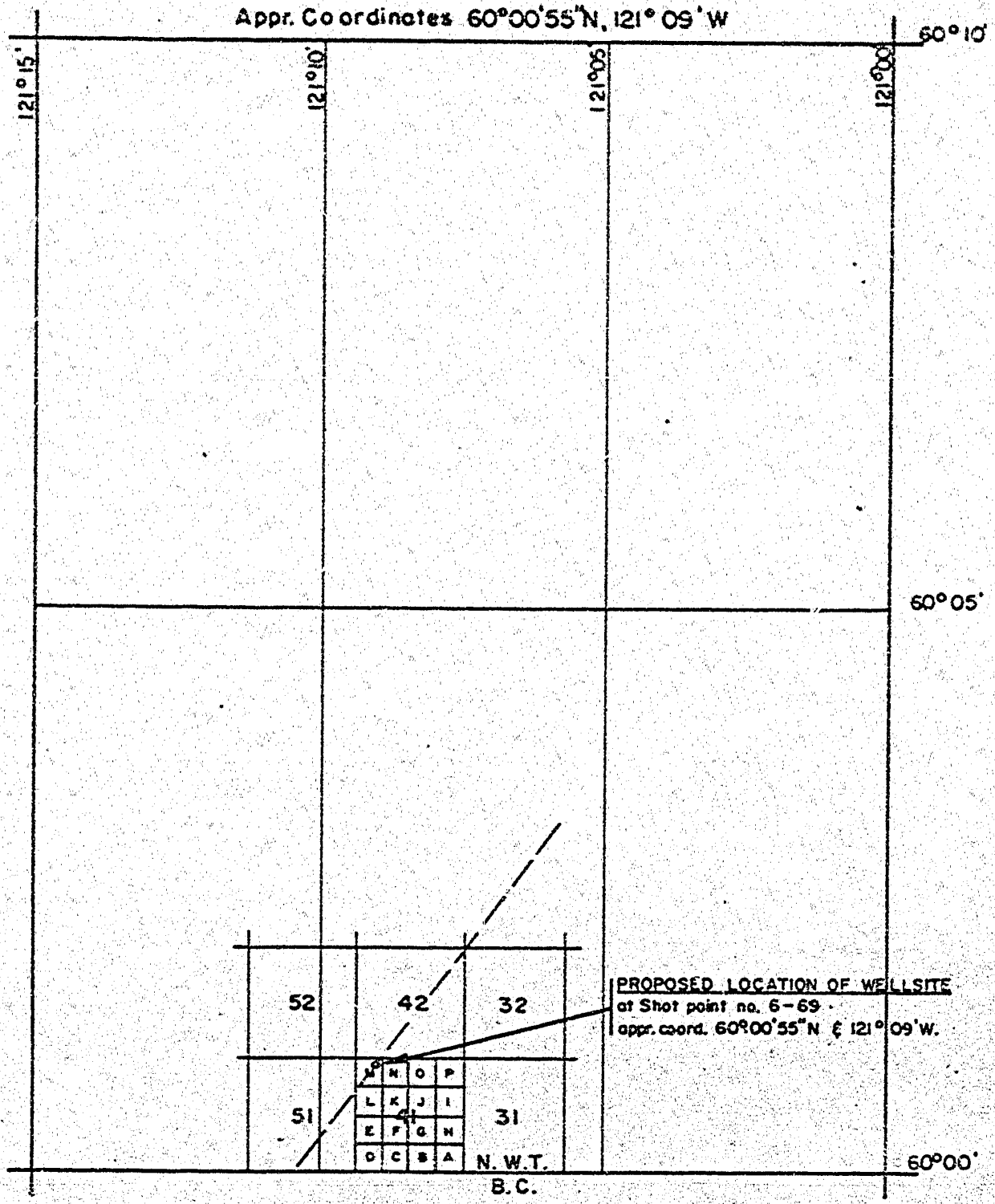
NANR 52-90(1) (1-61)

Proposed Location

HB Pan Am W.S. Island R. M-41

Location NE Ref. Coc 60°10'N. & 121°W

Appr. Coordinates 60°00'55"N, 121°09'W



HUDSON'S BAY OIL AND GAS COMPANY LIMITED

Production Dept. Edmonton District

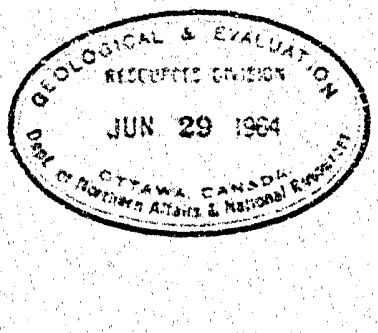
Approx. Scale 1" = 8000'

HUDSON'S BAY OIL AND GAS CO. LTD.

WELL HISTORY REPORT

HB PAN AM S ISLAND R M-41

HUDSON'S BAY OIL AND GAS COMPANY LIMITED



WELL HISTORY REPORT

HB PAN AM S ISLAND R M-41

SIGNED: _____

DISTRICT SUPERINTENDENT

DATE: APRIL 30, 1964

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Well name

Permittee, Licencee or Lessee

Name of Operator

Location

Coordinates

Permit No.

Drilling Contractor

Drilling Authority

Classification

Elevations

Date Spudded

Date Drilling Completed

Depths

Well Status

Date Rig Released

Hole Size

Casing

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WELL HISTORY REPORT

SUMMARY OF WELL DATA

Well Name: HB Pan Am S Island R M-41

Permittee, Licencee or Lessee: Pan American Petroleum Corporation

Name of Operator: Hudson's Bay Oil and Gas Company Limited

Location: Unit M, Section 41, Grid 60° 10' N, 131° 00' W
Latitude 60° 00' 55" N, Longitude 121° 09' W.

Coordinates: From Established Reference Marker Pan Am Shot Point No. 6-69 at 60° 00' 55", 121° 09'

Permit No: 2709

Drilling Contractor: Cascade Drilling Company Limited
Rig no. 18, Type 7-11 Ideco

Drilling Authority: No. 132, issued January 17, 1964.

Classification: Exploratory

Elevations: - Ground: 2198 feet

Kelly Bushing: 2212.3 feet

Spudded: February 3, 1964

Completed Drilling: March 20, 1964

Total Depth: 8185 feet KB

Plugged Back To: 8142 feet KB

Well Status: Suspended

Rig Released: March 23, 1964

Hole Size: 9 inches - 15" to 828' 828'-8185'

Casing: 5 1/2 inch 20 lb., 15.5 lb., 17 lb.
10 3/4" 40 lb., J-55.

GEOLOGICAL SUMMARY

Formation Tops:

Formation Marker	E-LOG		SAMPLE TOPS	
	(ft. KB)	(ft. sub sea)	(ft. KB)	(sub sea)
Sikanni Sandstone	1167	+ 1045	1140	+1074
Buckinghorse Shale	1325	+ 887	-	-
Mississippian	1998	+ 214	1997	+ 215
Devonian (Kotcho)	3527	- 1315	-	-
Tetcho Limestone	4157	- 1945	4045	- 1833
Jean Marie	5063	- 2851	5055	- 2843
Slave Point	6872	- 4660	6870	- 4658
Watt Mountain	7305	- 5093	-	-
Chinchaga	7837	- 5625	7835	- 5623
Chinchaga Sandstone	8032	- 5820	8030	- 5818
Red Beds (Pre-Devonian)	8135	- 5923	8137	- 5925

Summary Of Cores:

Number	Formation	Interval (ft- KB)	Recovered (ft)
1	Slave Point	7010-7019	8.5
2	Slave Point	7019-7032	9.75

Frobisher's Bay Oil and Gas Company Limited
GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET No. (11)
DATE 1-1-1-1-6-

FROM	TO	CORE OR DRILL	NO. OF FT. RECOVERED	NO. OF FT. REMAINING	SHOWINGS OIL ● GAS ○	REMARKS
						Core #1 ① 7010 - 19 Jammed Rec'd
						Core Times:- 16, 20, 15, 16, 6, 9, 11, 13, 10.
7010	7019	C	9			9'. Dolomite, white m.t.e.x.l. f.i.f. comp. w/ abdt patches of i/x.l. pyrobit stain permeated by abdt fine irregular fracture. Abdt vugs lined with large white dolomite x.l.s, ranging from thin to several inches in width. Generally fine vugs in top 4' Largest vugs in bottom 5'
						N.B. Porosity mainly of fracture & vug type. very limited and negligable i/x.l. pore.
						Core #(2). 7019 - 32 Jammed Rec 9 3/4'
						Times:- 10, 20, 13, 12, 15, 14, 17, 12, 14, 10, 10, 14, 11.
7019	7022¼	C	3¼			Dol. white compact, w/ scatt black patches i/x.l. stain. Abdt fine irregular fractures, occ abdt vugs upto several inches & lined w/ coarse white dol x.l.s. Slight salt water taste
7022¼	7026½	C	4¼			Dol. becoming lt brn gy s/dkgy. f.t.e.x.l. gen faith compact w/ i/x.l. pyrobit stain Abdt thin horizontal streaking of wh. t.e.x.l. dolomite. Abdt fine & coarse vugs. Large calcite x.l.s & heavy black bit material 2½' from base

GEOLOGIST R.S. Simmonds

WELL NAME H.B. PAN. AM. S. IS. R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SAMPLE No. (12)

DATE Hold. 2 "d/5/

REMARKS

FROM	TO	CODE NO. OF SAMPLE	NO. OF PT. REMOVED	NO. OF PT. SUPERVISED	REMARKS OIL & GAS
7026½	7028½ AC	2½			

Del. gen. good bbc exh. to surf. cup w/ heavy blk oil & pyrite shale - sandstone and bbl vugs from above.

D.S.T. #(2) 6987-7012.

Good Initial Puff - Light air blow decreasing to nil in 25 mins. - Reset tool three times and each time blow died in few mins. Tool partially plugging throughout test - Tool unable to get to bottom due to fill in rat hole.

ISI 60 mins	ISI 2652	IH 3740
V.O 2 hrs	FSI 2652	FH 3672
FSI 45 mins.	Temp 250+	

Flow pressures not readable due to plugging throughout test.

Rec 1060' sl sulphurous salt contaminated mud.

GEOLOGIST L. S. Simmonds

WELL NAME H.B. PAN. AM. S. IS. R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO. 1

DATE Feb. 7/64

From	To	Sample Type	No. of Ft. Recovered	No. of Ft. Represented	Sample Bag No.	Remarks
850	1030	D		180		Shale, medium to dark grey, some slightly micromicaceous, some slightly silty in part, sub-fissile to chunky. Occasional sandy lenses, very fine grained calcite, very argillaceous tight.
1030	1050	D		20		Siltstone to silty shale, medium grey, trace micaceous, chunky.
1050	1100	D		50		Silty shale, medium grey, slightly micaceous, chunky with abundant shale, medium grey tinge.
1100	1120	D		20		Shale and silty shale as above with siltstone breaks, medium grey, slightly sandy, trace micromicaceous, slightly kaolinitic, chunky.
1120	1140	D		20		Siltstone, medium grey, some grading to very fine grained sandstone, calcareous, slightly kaolinitic, trace micromicaceous, chunky.
1140	1180	D		40		Sandstone, very fine-grained grading to siltstone, light to medium grey, calcareous, slightly kaolinitic, trace micro micaceous, fairly tight with some brown-grey siltstone to very fine-grained sandstone.
						TOP OF SIKANNI SANDSTONE 1140'
1180	1190	D		10		Siltstone and silty shale, some medium grey, some dark grey, slightly micaceous, chunky, with very fine grained light grey sandstone as above.
1190	1210	D		20		Sandstone, light to medium grey, some brown-grey, very fine-grained quartzose, some calcareous, very slightly kaolinitic, fairly tight.
1210	1220	D	2?	8		Sandstone, grey-brown, very fine-grained quartzose, slight porosity, with light to medium grey sandstone, calcareous, tight.
1220	1230	D		10		Sandstone, light to medium grey, very fine-grained, calcareous, slightly kaolinitic, generally fairly tight.

GEOLOGIST B. Simmonds

WELL NAME H.B.-Pan Am. S. Island R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO. 2

DATE Feb. 7/64

FROM	TO	SAMPLE OR CORE #	NO. OF FT. PENETRATED	NO. OF FT. RECOVERABLE	REMARKS Oil, Gas, Water	REMARKS
1230	1250	D	8?	2		Sandstone as above becoming less calcareous and kaolinitic, scattered slight porosity.
1250	1310	D		60		Siltstone, medium grey, some inbedded sandstone grading to siltstone, some calcareous, slightly kaolinitic, tight, occasional brown sideritic siltstone, fairly hard.
						Feb. 8/64
1310	1330	D		20		Siltstone, medium grey, slightly calcareous, slightly micaceous in part, chunky.
1330	1390	D		60		Shale, medium to dark grey, slightly micromicaceous, sub-fissile to chunky, some silty-shale, medium to dark grey.
						BUCKINGHORSE SHALE 1310'
1390	1470	D		80		Shale as above, with silty shale, medium to dark grey, calcareous, micaceous, chunky with minor siltstone medium to dark grey, slightly micaceous.
1470	1860	D		390		Shale, dark grey, some slightly silty, some slightly micaceous, sub-fissile to chunky, occasional lenses of silty shale.
1860	2000	D		140		Shale, dark grey, generally sub-fissile, occasionally slightly silty, slightly micro-micaceous.
						MISSISSIPPIAN 1997'
2000	2050	D		50		Limestone, buff to light grey, some recrystallized fragments with crinoid and bryozoan fragments, (some recrystallized,)some micro-granular and argillaceous, tight with occasional black shale partings, fissile.
2050	2150	D		100		Shale, slightly mottled, green-grey to medium grey, some limy, sub-fissile with minor limestone interbedded as above.

GEOLOGIST B. Simmonds

WELL NAME H.B.-Pan Am. S. Island R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO. 3

DATE Feb. 8/64

FROM	TO	CHIPS OR CUTTINGS	NO. OF FT. REPRESENTED	NO. OF FT. SAMPLED	SAMPLE NO. OR INTERVAL	REMARKS
2150	2180	D		30		Limestone, slightly mottled, light grey, light brown, medium to coarse recrystallized fragments, some slightly chalky, slightly pyritic tight with interbedded black bituminous shale partings, soft.
2180	2205	D	25			Sandstone, brown some very dark brown, very fine-grained, sub-angular quartz, slightly calcareous, some bituminous, poor to fair intergranular porosity fair CAR, apparent oil stain? (25' drilling break from 3 mins. to 1 min/ft.)
						SANDSTONE MARKER 2166'
2205	2220	D		15		Shale, medium grey some grey to medium grey, fissile, some limy, with minor limestone, recrystallized fragments, slightly chalky, tight
						DST #1 2159-2219
						ISI 30 VO 60 FSI 30 IFP 50 FFP 70 ISIP 500 FSIP 80 IHP 1200 FHP 1200 BHT 86° Good initial puff, light air blow decreasing throughout test, died in 45 mins. Rec. 50' drilling fluid.
2220	2250	D		30		Limey sandstone some grading to sandy limestone, light grey, very fine to fine-grained, trace argillaceous, tight.
2250	2260	D		10		Shale, medium grey, platy, occasional limestone breaks as above.
2260	2270	D		10		Limestone recrystallized fragments, grey-white, slightly chalky tight
2270	2310	D		40		Limestone as above with much interbedded limy sandstone, some grading to siltstone, medium grey, tight and inbedded green-grey shale, some calcareous, sub-fissile, some chunky.
						Feb. 10/64
2310	2340	D		30		Shale, green-grey, medium grey some slightly calcareous, fissile, with interbedded recrystallized fragmental limestone, grey-white, buff, slightly chalky, tight.

GEOLOGIST B. Simmonds WELL NAME H.B.-Pan Am. S. Island R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO. 4

DATE Feb. 10/64

FROM	TO	CHIPS OR CUTTINGS	% OF FT. REMARKABLE	% OF FT. UNREMARKABLE	SHOWING OIL OR GAS	REMARKS
2340	2350	D		10		Limestone, recrystallized fragments, fossil fragments as above with shale as above.
2350	2380	D		30		Shale, green-grey to medium grey as above with limestone interbedded as above, crinoid fragments.
2380	2420	D		40		Shale, as above with siltstone, medium grey, some slightly sandy, light to medium grey, calcareous, chunky.
2420	2430	D		10		Siltstone, medium grey, some slightly green-grey, limy, some slightly sandy, chunky.
2430	2450	D		20		Shale, green-grey to medium grey, calcareous with siltstone as above; minor limestone recrystallized fragments.
2450	2480	D		30		Limestone, buff, light grey, recrystallized micro fragments, bryozoal slightly chalky, tight scattered crinoid fragments.
2480	2500	D		20		Shale, medium grey, green-grey, calcareous, sub-fissile, with some limy siltstone, medium grey, chunky.
2500	2550	D		50		Limestone, light grey, buff, recrystallized fossil fragments, fine to micro fragments, tight with minor shale, green-grey, medium grey, calcareous, some silty.
2550	2570	D		20		Siltstone, medium grey, very limy grading to silty limestone with shale as above.
2570	2590	D		20		Limestone, recrystallized fragments: with siltstone, limy and shale.
2590	2640	D		50		Siltstone, silty shale and shale interbedded, medium grey, limy, chunky, with interbedded recrystallized fragments limestone buff-light grey, fossil fragments tight.

GEOLOGIST B. Simmonds

WELL NAME H.B.-Pan Am. S. Island R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO 5

DATE Feb. 10/64

FROM	TO	SAMPLE OR DITCH	NO. OF FT. RECOVERED	SHOWINGS OIL GAS	REMARKS
2640	2700	D	60		Siltstone, silty shale, shale, medium grey, limy, sub-fissile to chunky.
2700	2770	D	70		Shale, some slightly silty, medium grey, green tinge, limy, sub-fissile.
2770	2790	D	20		Shale as above, with minor interbedded limestone, buff-grey, re-crystallized micro fragments to micro granular - crinoid stems
					Feb. 11/64
2790	2850	D	60		Siltstone, light grey, medium grey, limy, tight, fairly hard, compact, some trace disseminated pyrite.
2850	2920	D	70		Silty shale, minor siltstone, medium grey, calcareous, chunky.
2920	2940	D	20		Siltstone, medium grey, buff-grey, calcareous, hard, compact, tight.
2940	2960	D	20		Silty shale with minor siltstone as above.
2960	2990	D	30		Shale, medium to dark grey, slightly calcareous, some slightly silty, trace micro-micaceous, sub-fissile with scattered green-grey shale-platy.
2990	3050	D	60		Shale, medium to dark grey becoming very slightly calcareous grading to non-calcareous towards base, fissile, some green-grey shale.
3050	3120	D	70		Shale, non-calcareous as above, with minor interbedded silty shale, calcareous medium to dark grey.
3120	3210	D	90		Silty-shale, minor siltstone, medium to dark grey, calcareous, micromicaceous in part, sub-fissile.

GEOLOGIST B. Simmonds

WELL NAME H.B.-Pan Am. S. Island R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO. 6

DATE Feb. 11/64

FROM	TO	CODE & DETAIL	NO. OF FT. PERCENTAGE	NO. OF FT. THICKNESS	SHOWINGS OIL GAS	REMARKS
3210	3310	D		100		Shale, dark grey, fissile, very slightly calcareous, some trace silty, fissile.
3310	3510	D		200		Shale, medium to dark grey, generally non-calcareous, fissile.
3510	3520	D		10		Shale, brown to dark olive-grey, hard, ferruginous?
						BLACK SHALE 3510'
3520	3570	D		50		Minor shale as above with black silicified, slightly calcareous shale, very hard and traces black bituminous shale with abundant dark grey and green-grey, slightly calcareous shale some slightly silty, abundant crinoid stems and pyrite blebs
						Feb. 13/64
3570	3590	D		20		Shale, green-grey, slightly calcareous, sub-fissile, with abundant crinoid fragments.
3590	3630	D		40		Limestone, buff to light grey, fine recrystallized fragments, tight, with minor micro-granular chalky limestone, grey-white.
3630	3660	D		30		Limestone, mottled brown-grey to light grey, fossil fragments, crinoidal, occasional brachiopod, tight.
						WABAMUN LIMESTONE 3590'
3660	3710	D		50		Shale, green-grey, some calcareous, some limy, sub-fissile, firm with very minor limestone stringers as above, some microcrystalline tight.
3710	3750	D		40		Shale, green-grey becoming very limy, sub-fissile to chunky, hard with minor limestone stringers, some as above some light green-grey.
3750	3810	D		60		Shale as above, with scattered pieces of limestone only.

GEOLOGIST B. Simmonds

WELL NAME H.B.-Pan Am. Island R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO. 7

DATE Feb. 13/64

FROM	TO	SAMPLE TYPE & NUMBER	NO. OF FT. RECOVERED	NO. OF FT. REPRESENTED	SHOWINGS OIL ● GAS ▲	REMARKS
3810	3820	D	10			Limestone, buff-grey, microcrystalline to very fine recrystalline fragments, scattered brachiopods, tight with shale as above.
3820	3890	D	70			Shale, green-grey, calcareous, sub-fissile, some chunky, hard, some slightly silty with scattered stringers limestone as above, scattered brachiopods.
3890	4030	D	140			Shale green-grey, slightly calcareous, platy; some limy, chunky, slightly silty with scattered pieces of limestone as above.
4030	4050	D	20			Shale, green-grey, platy, some non-calcareous, some very slightly calcareous.
4050	4060	D	10			Shale as above with incoming limestone, buff to light brown-grey, fairly dense, tight.
4060	4150	D	90			Limestone, buff to m brown-grey, fairly dense, some slightly recrystallized fragments in part, tight with limestone, very light grey, microcrystalline, chalky, fairly tight, scattered fossil fragments in top 20 ft. TOP OF TETCHO AT 4045'
4150	4190	D	40			Limestone, as above becoming in part fine recrystallized fragments, some buff white, chalky tight scattered brachiopod shell fragments.
4190	4300	D	110			Limestone, some as above, with much grey-white chalky limestone, very fine to micro-granular, occasional slight fragment, occasional trace bitumen, tight.
4300	4330	D	30			As above; some becoming very slightly silty, some very slightly bituminous in part, light grey to brown-grey.
4330	4350	D	20			As above with scattered stringers, limy to siltstone, buff-grey to medium grey.

GEOLOGIST R.B. Simmonds

WELL NAME H.B.-Pan Am. S. Is. River #N-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET No. 8

DATE Feb. 15/64

FROM	TO	CORE OR DITCH	NO. OF FT. PERMEABLE	NO. OF FT. IMPERMEABLE	SHOW-GAS OIL OR SALT WATER	REMARKS
4350	4390	D		40		Limestone, grey-white, some/brown-grey as above with stringers limy to siltstone and green-grey shale, slightly calcareous, platy.
4390	4400	D		10		Shale, green-grey, platy, slightly calcareous with limestone and some limy siltstone as above.
4400	4420	D		20		Limestone, grey-white, chalky; some brown-grey, fairly dense, silty as above with shale green-grey, some silty, limy.
4420	4430	D		10		Limestone, slightly mottled, buff-grey, fairly dense, slightly fragmental in part, some slightly tight, some microgranular, grey-white chalky limestone.
4430	4470	D		40		Limestone as above with buff-grey limy-siltstone, fairly hard, tight
4470	4520	D		50		Silty limestone grading to siltstone, light to buff-grey, limy, some slightly mottled hard tight.
4520	4610	D		90		Siltstone as above limy grading to calcareous.
						Feb. 17/64
4610	4630	D		20		Siltstone, as above with minor limestone medium brown-grey, fairly dense, slightly fragmental, tight.
4630	4730	D		100		Siltstone and minor limestone breaks as above with shale, some dark olive-grey, some green-grey to medium grey, calcareous some silty in part, sub-fissile.
4730	4790	D		60		Shale, medium to green-grey, slightly silty, sub-fissile, slightly calcareous; with minor silty limestone lenses buff to medium grey as above.
4790	4910	D		120		Shale medium to dark grey, some very slightly silty and slightly calcareous, some non-calcareous, and non-silty, sub-fissile, some chunky with occasional pieces limestone and siltstone, occasional stringers.

GEOLOGIST R.B. Simmonds

WELL NAME H.B.-Pan Am. S. Is. R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO. 9

DATE Feb. 17/64

FROM	TO	CORE OR CUTTINGS	NO. OF CUTTINGS REQUIRED	NO. OF FT. REPRESENTED	SAMPLES SENT TO O.G.D.	REMARKS
4910	5040	D		130		Shale, medium to dark grey, platy
5040	5060	D		20		Shale, as above; with limestone breaks, medium to dark brown-grey, fairly dense, slightly argillaceous to slightly silty, tight.
5060	5070	D	?	10		Limestone light to buff-grey, some chalky, some slightly bituminous in part, slightly recrystallized fragments in part, some dirty, slightly detrital, soft limestone with traces pin-point porosity.
						TOP OF JEAN MARIE AT 5055
5070	5100	D		30		Limestone as above with limestone medium to dark brown-grey, fairly dense, some slightly fragmental in part, tight.
5100	5120	D		20		Limestone as above become slightly tight with silty limestone, medium grey fine-grained argillaceous tight.
5120	5390	D		270		Shale, medium to dark grey, platy to fissile.
						TOP OF SIMPSON SHALE AT 5110'
						Feb. 20/64
5390	5560	D		170		Siltstone, salt and pepper, slightly sandy in part, quartzose, some slightly siliceous, calcareous, hard, tight with minor shale and silty shale, siltstone generally spreading from calcareous to very slightly calcareous some possibly very slightly dolomitic.
5560	5710	D		150		Silty shale grading to siltstone medium grey some dark grey, some slightly siliceous in part, very slightly micaceous, slightly calcareous, hard tight, occasional limey siltstone stringers, light grey.
5710	5800	D		90		Siltstone grading to silty shale, medium grey, argillaceous, slightly calcareous, slightly micaceous, chunky, with shale medium to dark grey, sub-fissile.

GEOLOGIST R.B. Simmonds

WELL NAME H.B.-Pan Am. S. Is. R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO. 10

DATE Feb. 20/64

FROM	TO	CODE & DITCH #	NO. OF FT. REPRESENTED	NO. OF FT. COMPOSITED	SAMPLED FOR OIL & GAS TESTS	REMARKS
5800	5900	D		100		Shale medium to dark grey, fissile as above; with minor silty shale, calcareous, slightly micaceous, chunky.
5900	6220	D		820		Shale, medium to dark grey, some platy, some fissile; (with occasional silty shale stringers, slightly calcareous, chunky in top 30-40') occasional breaks of olive grey shale, splintery.
6220	6830	D		110		Shale, dark grey fissile, soft as above with scattered shale, very slightly calcareous, some very slightly silty medium to dark grey, minor olive-grey splintery shale.
6830	6850	D		20		Shale as above, with minor shale, grey-black bituminous to sub-bituminous shale, soft.
6850	6880	D		30		Shale, grey-black, brown-black, bituminous to sub-bituminous, very finely micromicaceous, some very slightly silty, fine to medium sub-fissile, scattered pyrite blebs.
						Feb. 28/64
6880	6910	D		30		Limestone some mottled brown-grey to light grey, slightly bituminous in part, some dense, recrystallized fragments, some microcrystalline in part, tight with limestone, mottled dark grey-white, bituminous in part, some chalky in part, fairly soft, microcrystalline in part, some slightly recrystallized fragments in part.
6910	6940	D		30		Limestone, generally as above with some grey-white chalky limestone some bituminous in part with some brown-grey limestone, fairly dense, recrystallized fragments in part with limestone dark grey becoming heavily bituminous microcrystalline, tight.
6940	6960	D	?	20		Limestone, mottled dark grey to white as above becoming fine to medium crystalline, some microcrystalline, bituminous in part, slightly dolomitic grading to dolomitic with abundant medium to coarse white dolomite crystal clusters, some with slight bitumen infilling.

OLOGIST R.B. Simmonds

WELL NAME H.B.-Pan Am. S. Is. R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO. 11

DATE Feb. 28/64

FROM	TO	CORE OR CUTTINGS	NO. OF FT. RECOVERED	NO. OF FT. REPRESENTED	DRILLING TIME OR GAS	REMARKS
						TOP SLAVE POINT 6870'
6960	7010	D	25?	25	*/M	Dolostone, light to medium grey, medium to coarse crystalline, generally microcrystalline, pyrobitumen in part, generally fairly compact and appears fairly tight slight crystalline porosity (scattered traces microvugular porosity)-abundant white coarse crystalline clusters, dolomitic, indicative of fracture porosity
						TOP OF DOLOMITE 6935'
						D.S.T. #2, 6930-7010
						Strong air blow GTS in ½ min. @ 5.7 MMcf/d steady throughout test
						Large salt water spray to surface in 19 min. remaining steady
						Recovered 80' salt water, 100' gas-cut drlg. mud. Temp 240°
						ISI 60 FSI 60 VO 2 hrs. IHP 3870 FHP 3770; IFP 2470; FFP 2510
						ISIP 2770; FSIP 2770
						Mar. 1/64
						Core #1 7010 - 7019 Jammed Rec. 9' Core Times: 45, 20, 18, 16, 6, 9, 4, 13, 10
7010	7019	C	9			Dolomite, white medium to coarse crystalline, fairly compact with abundant patches of intercrystalline pyrobitumen stain. Permeated by abundant fine irregular fractured abundant vugs, lined with large white dolomite crystals, ranging from fine to several inches in width. Generally fine vugs in top 4'. Largest vugs in bottom 5'.
						N.B. Porosity mainly of fracture and vug type. Very limited and negligible intercrystalline porosity.
						Core #2 7019-7032 Jammed Rec. 9.75' Times 10, 20, 13, 12, 15, 14, 13, 12, 14, 10, 10, 14, 11
7019	7022½	C	3½			Dolomite, white compact, with scattered black patches intercrystalli stain, abundant fine irregular fractures, and abundant vugs up to several inches at lined with coarse white dolomite crystals, slight salt water taste.

GEOLOGIST R.B. Simmonds

WELL NAME H.B. Pan Am. S. Is. R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET No. 12

DATE Mar. 1/64

FROM	TO	SCAT & BITS	NO. OF FT. REMAINING	NO. OF FT. REMAINING	DISPOSED OF	REMARKS
7022½	7026½	C	4½			Dolomite becoming light to medium grey, some dark grey, fine to coarse crystalline, generally fairly compact with intercrystalline pyrobitumen stain. Abundant thin horizontal streaking of white crystalline dolomite. Abundant fine to coarse vugs. Large calcite crystals and heavy black bitumen material 2½' from base
7026½	7028½	C	2½			Dolomite, generally as above becoming coarse crystalline, fairly compact with heavy black intercrystalline pyrobitumen stain - smaller and less vugs than above.
						March 2/64
						D.S.T. #3 6987-7012
						Good initial puff, light air blow decreasing to nil in 35 min.
						Reset tool three times and each time blow died in 10 mins. Tool
						partially plugging thru'out test. Tool unable to get to bottom
						due to fill in rat hole.
						ISI 60 min. VO 2 hrs. FIS 45 min.
						ISI 2652 IHP 3740 FSI 2652 FHP 3672 Temp. 250°
						Flow pressures not readable due to plugging and resetting of tool.
						Rec. 1060' slightly sulfurous salt contaminated mud.
						March 6/64
7030	7190	D?		160?		Very poor sample, lost circulation at 7080
						N.B. 50' samples missing due to reaming error. When circulating 280'
						fill to get to bottom plus reaming rat hole, driller probably
						drilled 50' without knowing it.
						Samples show same as core.
						Dolomite, light to medium grey, medium crystalline, slightly
						pyrobituminous, intercrystalline flecks, with white dolomite
						coarse crystalline, probable vugs and fractures.
7190	7240	D		50?		Dolomite as above with scattered pieces limestone, white, chalky, soft, some microcrystalline, tight.

GEOLOGIST R.B. Simmonds

WELL NAME H.B.-Pan Am. S. Island R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO. 13

DATE March 6/64

FROM	TO	CODE & DATE	NO. OF FT. RECOVERABLE	NO. OF FT. UNRECOVERABLE	SHOW CODE & AMT.	REMARKS
7240	7260	D		20 ?		Dolostone, some as above with increasing amount of dolomite light to medium buff-grey some becoming light-brown-grey, some very slightly calcareous, generally medium crystalline, some becoming slig recrystallized fragments in part, generally fairly compact.
7260	7270	D		10		Dolostone, light to medium buff, some brown-grey, medium crystalline some grading to slightly recrystallized fragments, fairly tight, some very slightly calcareous as above.
7270	7290	D		20?		Dolostone medium brown-grey some becoming dark brown-grey fine to medium crystalline, trace intercrystalline pyrobitumen, some fairly compact, some with good intercrystalline porosity, scattered fine microvugular porosity, some coarse, brown-grey, dolomite crystal clusters, vuggy porosity (45' drilling break from 7240-7285 breaking from 6-7 mins./ft. down to 2,3,4, mins/ft.
7290	7300	D		10		Limestone, medium to dark buff-grey, earthy, slightly argillaceous, slightly fragmental, some bitumen and finely crystalline, tight some slightly dolomitic, with minor black calcareous bituminous shale.
						TOP OF ELK POINT 7285'
						March 8/64
						D.S.T. No. 4 7230-7300 (Basal Slave Point)
						ISI 30 min. VO 120 mins. FSI 30 mins.
						ISIP 2856; FSIP 2856; IHP 3820; FHP 3770 Temp. 230°
						Strong initial puff, lost 15' mud in annulus while skidding to bottom (15') Light air blow on ½" choke, died in 5 mins. Tool opened on ¼" choke, light air blow decreasing to nil in 15 mins. Rec. 420' black sulfurous, salty mud, 330' drilling fluid. charts indicate tool plugged after several minutes.
7300	7320	D	?	20		Dolostone some medium to dark brown-grey, some medium brown, generally microcrystalline, black intercrystalline pyrobituminous flecks, fairly hard, compact, fairly tight with medium grey to green-grey shale breaks.

GEOLOGIST R.B. Simmonds WELL NAME H.B.-Pan Am. S. Island R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO 14

DATE March 8/64

FROM	TO	CAVE OR CUTS	NO. OF FT. RECOVERED	NO. OF FT. REPRESENTED	SHOWING OIL GAS OR	REMARKS
7320	7420	D	?	100		Dolostone some light brown, some medium to dark brown-grey, some medium, some coarse crystalline, some becoming recrystallized fragments in part, fine grained, some with black pyrobitumen, some slightly argillaceous, fairly hard, compact and fairly tight some slightly calcareous, scattered trace slightly intercrystalline porosity, vuggy porosity, (scattered white dolomite thru'out interval).
7420	7470	D	?	50		Dolostone, generally as above with much white dolomite crystals, probably indicates vugs, generally becoming slightly more recrystallized fragments.
						March 10/64
						D.S.T. #5, 7300-7535 (Elk Point)
						Fair initial puff, strong air blow decreasing to slight in 60 min decreasing to nil in 90 mins.
						ISI 45 min. VO 2 hrs. FSI 45 min. ISIP 2926; FSIP 2926; IHP 3774, FHP 3590 IFP 200; FFP 2926 Temp. 222°
						Rec. 300' slightly salty drilling fluid, 5600' black salt water.
7470	7540	D	?	70		Dolostone, dark brown-grey, medium crystalline becoming in part recrystallized fragments, fairly compact, some intercrystalline porosity, with minor shale, some green-grey, sub-fissile some limy shale, medium to green-grey, chunky (generally poor samples)
7540	7660	D	?	120		Dolostone, generally as above with white dolomite crystals indicating fair to good vugular porosity. Last 10' increasing of limestone (described below)
7660	7700	D		40		Limestone, medium to dark brown-grey, cryptocrystalline, some earthy argillaceous, scattered white specks, some shale fragments in part, some fairly hard, some fairly soft, tight.
						TOP LOWER KEG LIMESTONE 7650

GEOLOGIST R.B. Simmonds WELL NAME H.B.-Pan Am. S. Island R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET No. 15

DATE March 13/64

FROM	TO	TYPE & CUTS	% OF FT. REMOVED	NO. OF FT. REPRESENTED	LITHOLOGIC CODE	REMARKS
7700	7790	D		90		Limestone some dark brown-grey, cryptocrystalline, some becoming slightly recrystallized fragments in part, some argillaceous, some slightly bituminous in part, generally as above tight, fairly hard with light to medium buff-grey, cryptocrystalline, slightly argillaceous, some slight fragments in part, fairly soft, tight occasional recrystallized fossil fragments occasional crinoid stem.
7790	7840	D		50		Limestone some medium buff-grey, some dark brown-grey, generally as above, generally becoming slightly mottled and more recrystallized fragments some less argillaceous tight.
7840	7860	D	?	20?		Dolostone, medium to dark brown-grey, generally medium crystalline, some fine grained generally tight with scattered slightly inter crystalline porosity, some interstitial bitumen and pyrobitumen. N.B. Drilling indicated fractures and possible vugs)
						TOP OF UPPER CHINCHAGA 7835
7860	7880	D	?	20?		Dolostone some medium, some medium and dark brown-grey, slightly mottled, fine to medium crystalline, some becoming fine granular, some sucrosic, generally fairly compact, some minor vug porosity scattered white and light brown dolomite crystals-indicating minor fracturing and vugs.
7880	7890	D	?	10?		Dolostone as above with some light to medium buff-grey fine crystalline, some slightly sucrosic, slight intercrystalline porosity some trace pyrobitumen.
7890	7930	D		40		Dolostone as above, some very fine-grained, tight with minor limeston slightly mottled recrystallized fragments, tight with dolomite buff, grading to limestone, very fine-grained, slightly argillaceous, tight.

GEOLOGIST R.B. Simmonds

WELL NAME H.B.-Pan Am. S. Island R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET No. 16

DATE March 15/64

FROM	TO	CORE OR CUTS	No. OF FT. RECOVERED	No. OF FT. UNRECOVERED	SAMPLES OIL STAIN	REMARKS
						DST #6 (Upper Chinchaga) 7830-7916
						ISI 20 min. VO 120 min. FSI 45 min. ISIP 3060; FSIP 3060; IFP 2040
						FFP 2958; IHP 3978; FHP 3672 Temp. 235°
						Strong initial puff, strong air blow decreasing to slight at end of test. Recovered 6200' black salt water.
7930	7950	D	?	20?		Very poor sample. Dolostone, some dark brown-grey as above (some very fine-grained, some sucrosic, some fine to medium crystalline, compact, tight) with some light to medium brown-grey, fine to medium crystalline, with fair interxrystalline porosity with minor limestone breaks as above some dense, some mottled slightly recrystallized fragments tight.
7950	7980	D		30		Dolostone some medium to dark brown-grey, slightly mottled, very fine-grained, slightly sucrosic, some very slightly silty, compact, hard, tight with light grey to buff dolostone, very fine grained, compact, tight scattered pieces limestone as above.
7980	8000	D		20		Very poor sample, dolostone generally as above with much medium to dark brown-grey dolostone fairly dense, hard, tight.
						March 18/64
8000	8030	D		30		Dolostone as above, with minor to trace dolostone, medium grey, brown tinge, sub-lithographic, occasional floating fine quartz grains, traces fine pyrite blebs.
8030	8050	D		20		(8030-8040 sample trip sample 1% sandstone only) sandstone white, fine-grained quartzose, occasionally into coarse sub-rounded quartz grains, slightly quartzitic in part, tight.
						TOP MIDDLE CHINCHAGA 8030'
8050	8080	D		30		Sandstone some fine-grained as above some becoming medium to coarse grained, quartzose, some slightly quartzitic in part, hard tight.

LOGIST R.B. Simmonds

WELL NAME H.B.-Pan Am. S. Island R. #M-41

Hudson's Bay Oil and Gas Company Limited

GEOLOGICAL SAMPLE DESCRIPTION AND TESTS

SHEET NO. 17

DATE March 18/64

FROM	TO	CORE & DITCH	No. OF FT. PERMEABLE	No. OF FT. IMPERMEABLE	SHOWINGS OIL ● GAS ⊗	REMARKS
8080	8140	D		60		Dolostone, light to medium buff-grey cryptocrystalline some sub-lithographic, hard, compact, tight with some dolostone medium to dark brown-grey, crypto to microcrystalline tight.
						TOP LOWER CHINCHAGA 8080
8140	8185	D		45		Siltstone becoming silty shale, pale red-brown, some becoming brick red, argillaceous to fine silt, very dolomitic, traces anhydrite, hard, compact, tight. (N.B. very poor sample, mud changing over to gyp base)
						TOP PRE-DEVONIAN RED BEDS 8137

GEOLOGIST R.B. Simmonds

WELL NAME H.B.-Pan American S. Island R. #M-41

ENGINEERING SUMMARY

T.G. EASTLAND — testers ltd.

R.R. NO. 6 NORTH • EDMONTON, ALBERTA

TEST No. One
Date Feb. 9/64
Ticket No. 6547

SERVICE REPORT

Well Name: H.B. PAN AM. ISLAND RIVER M-41 L.S.D. 121-09' 00" W.L.
Formation Tested: Mississippian
TYPE OF TEST: ☐ Standard ☒ Dual ☐ Straddle ☐ Casing
From: 2159' To: 2219' Tail Pipe: 60'
Main Hole Depth: 2219' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10¾" Weight:
Type of Drill Pipe: 4½" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7½" and 7¾"
REMARKS: Good initial puff for 3 minutes. Open on ½" choke throughout test. Weak air blow, dead in 45 minutes.

PRESENT DURING TEST

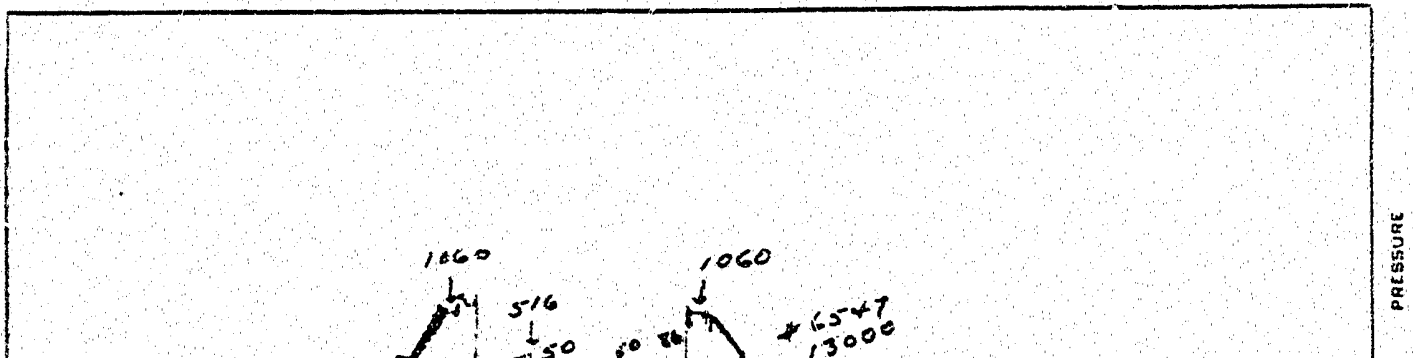
Your Representative C. A. Stuart
Our Operator G. Podmeroff
Toolpusher F. Kostyk
Drlg. Contractor Cascade Rig #18

TEST RESULT DATA

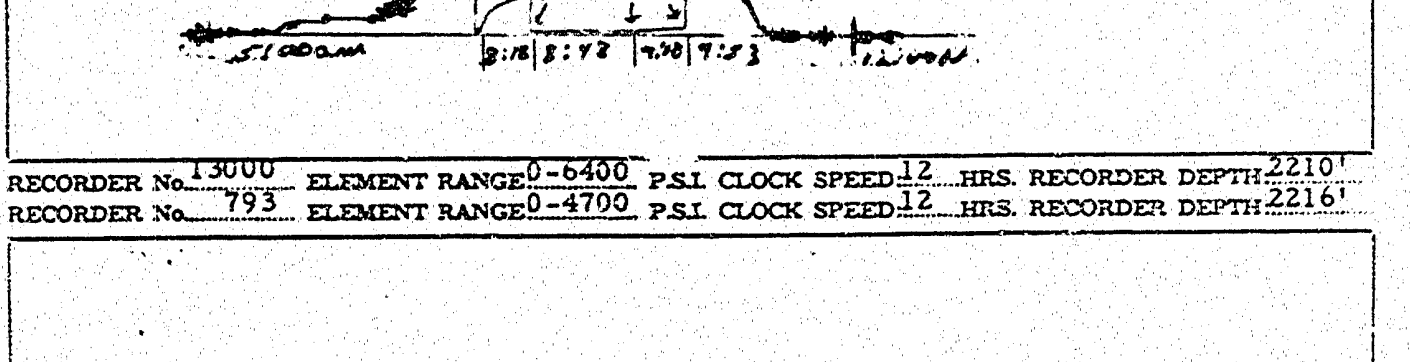
Started in Hole: 5:30 am. Tool Opened: 8:48 am
Initial Shut-in: 30 Min. Flow Period: 60 Min
Final Shut-in: 35 Min. Out of Hole: 12 Noon
Choke Bottom:
Choke Surface:
Flow Rate Mcf/day Flare Line Riser:
Mcf/day measured by:
Fluid Cushion: Max. Well Temp.: 86 °F
DRLG. FLUID: Viscosity: 40 Weight: 9.4 W.L. 6

FIELD (est.)		CORRECTED
1200	Initial Hydrostatic Pressure psig	1062
500	Shut-In Press. #1 After 30 Min. psig	518
50	Initial Flowing Pressure psig	54
70	Max. Flowing Pressure psig	63
80	Shut-In Press. #2 After 35 Min. psig	69

FLUID RECOVERY: 50 ft drilling mud (Ran 22 drill collars above tool, 6¾" OD, 2-7/8" ID)



RECORDER No. 13000 ELEMENT RANGE 0-6400 P.S.I. CLOCK SPEED 12 HRS. RECORDER DEPTH 2210'
RECORDER No. 793 ELEMENT RANGE 0-4700 P.S.I. CLOCK SPEED 12 HRS. RECORDER DEPTH 2216'



TIME

Form No T 20

T.G. EASTLAND —— testers ltd.

R.R. No. 6 NORTH • EDMONTON, ALBERTA

TEST No. FW1
Date Feb. 29/84
Ticket No. 6548

SERVICE REPORT

Well Name: H.B. FAN AM S. ISLAND RIVER M-41 L.S.D. M-41
Formation Tested: Slave Point
TYPE OF TEST: ☐ Standard ☒ Duals ☐ Straddle ☐ Casing
From: 6930' To: 7010' Tail Pipe: 80'
Main Hole Depth: 7010' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 822' Size: 10¾" Weight:
Type of Drill Pipe: 4½"FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7¾" - 7¾"
REMARKS: Strong initial puff for 2 minutes. Open on ¼" choke. Gas to surface in ½ min. Fluid to surface in 19 minutes. Flowed salt water approximately 50 bbl/hr.

PRESENT DURING TEST

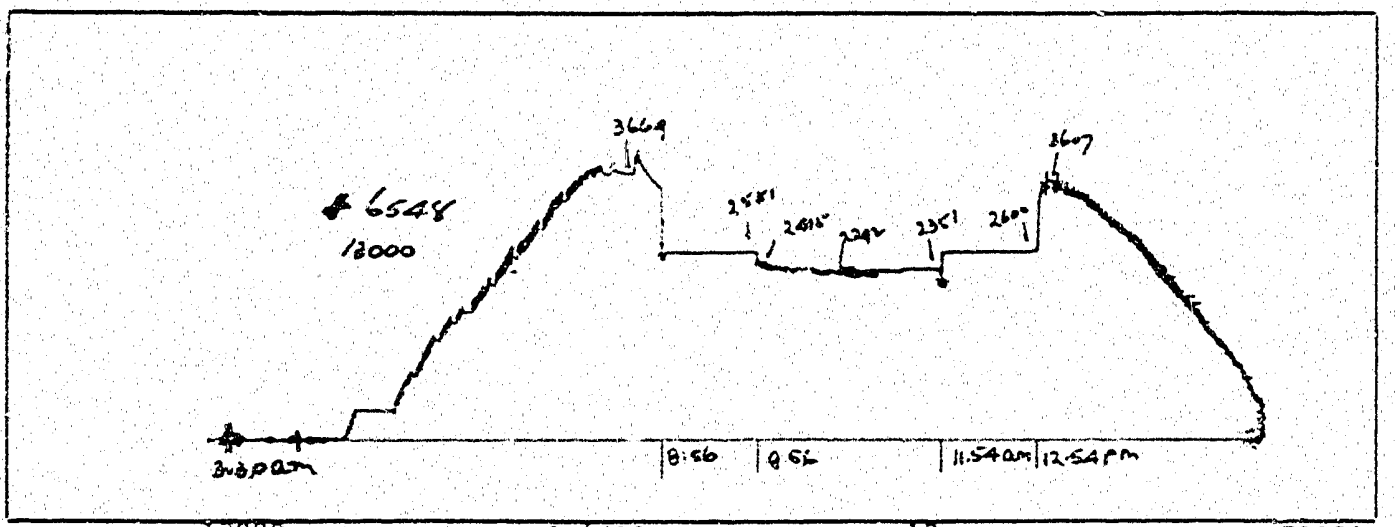
Your Representative C. A. Stuart
Our Operator G. Podmeroff
Toolpusher F. Kostyk
Drlg. Contractor Cascade Rig #18

TEST RESULT DATA

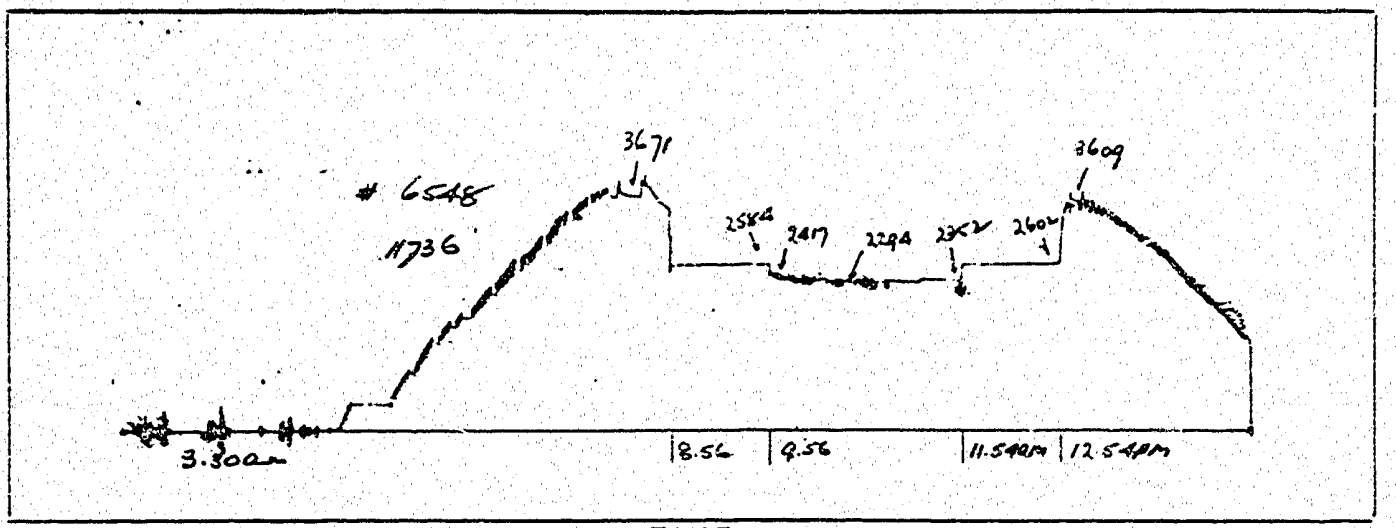
Started in Hole: 3:30 am Tool Opened: 9:56 am
Initial Shut-in: 60 Min. Flow Period: 118 Min.
Final Shut-in: 60 Min. Out of Hole: -
Choke Bottom: ¼"
Choke Surface: ½"
Flow Rate 5700 Mcf/day Flare Line Riser: 2"
Mcf/day measured by: Side static gauge 20-30psig
Fluid Cushion: Max. Well Temp.: 240 °F
DRLG. FLUID: Viscosity: 210 Weight: 9.8 W.L. 4.8

FIELD (est.)		CORRECTED
3870	Initial Hydrostatic Pressure psig	3671
2770	Shut-In Press. #1 After 60 Min. psig	2563
2470	Initial Flowing Pressure psig	2417
2510	Max. Flowing Pressure psig	2352
2770	Shut-In Press. #2 After 60 Min. psig	2602

FLUID RECOVERY: 100 ft black salty mud; 80 ft salt water
(Ran 17 drill collars 6¾" OD 2 7/8" ID)



RECORDER No. 13000 ELEMENT RANGE: 0-6400 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7002'
RECORDER No. 11736 ELEMENT RANGE: 0-7100 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7008'



Form No T.20

T.G. EASTLAND — testers ltd.

R.R. No. 6 NORTH • EDMONTON, ALBERTA

TEST No. Three
Date March 2/64
Ticket No. 6549

SERVICE REPORT

Well Name: H.B. PAN AM ISLAND RIVER M-41 — L.S.D. M-41
Formation Tested: Slave Point
TYPE OF TEST ☐ Standard ☒ Dual ☐ Straddle ☐ Casing
From: 7007' To: 7032' Tail Pipe: 25'
Main Hole Depth: 7032' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10¾" Weight:
Type of Drill Pipe: 4½" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7½" & 7¼"

REMARKS: Good initial puff. ¼" choke. Blow died after 35 minutes. Re-set tool. Dead after 90 minutes. Lost 9 ft of mud in annulus. Tool opened 18 ft off bottom. Skidded 12 ft while flowing.

PRESENT DURING TEST

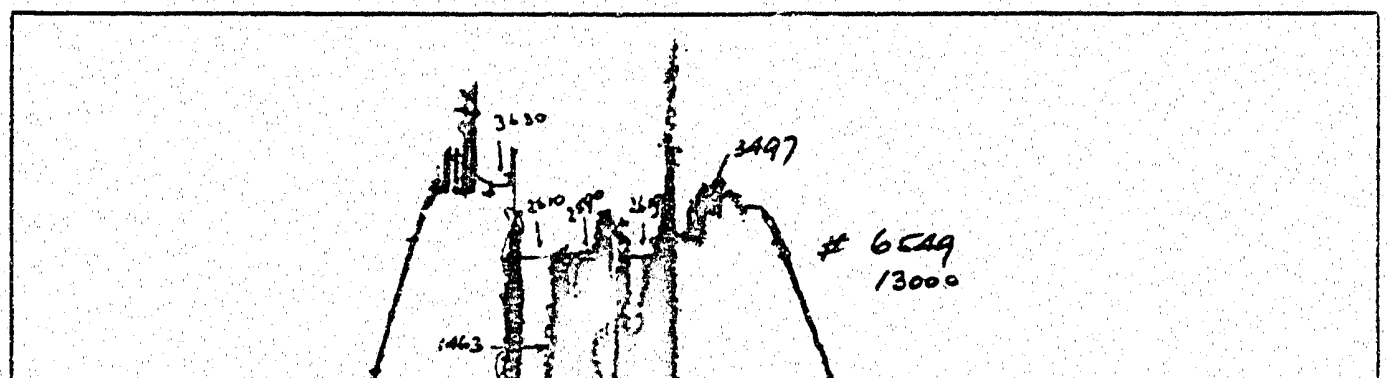
Your Representative C. A. Stuart
Our Operator G. C. Podmeroff
Toolpusher F. Kostyk
Drlg. Contractor Cascade Rig #18

TEST RESULT DATA

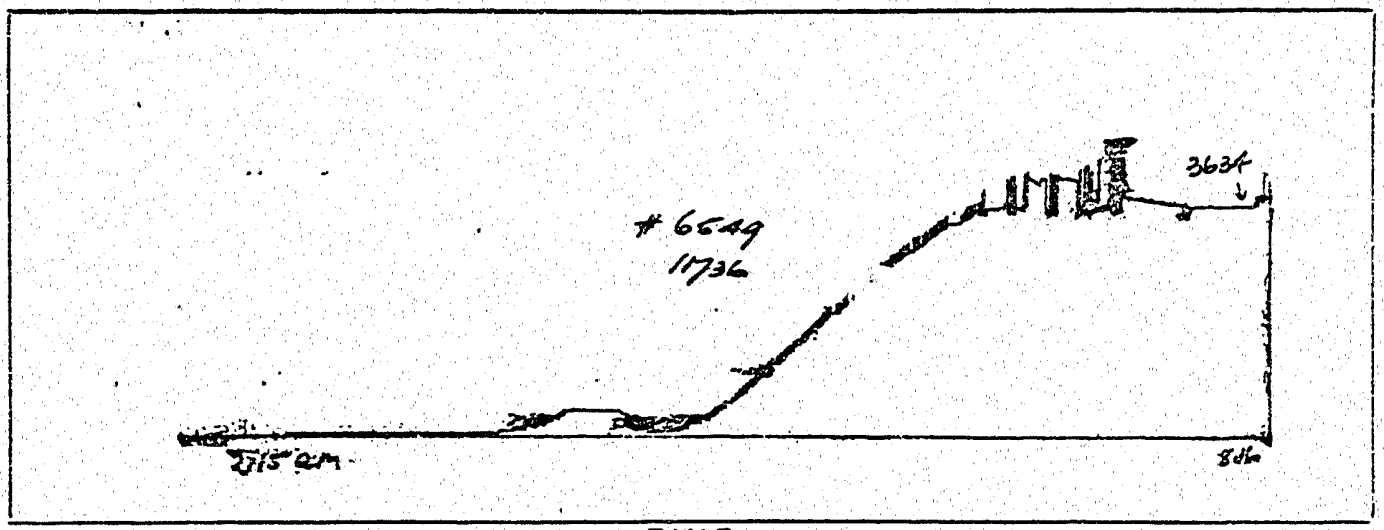
Started in Hole: 2:15 am Tool Opened: 9:10 am
Initial Shut-in: 52 Min. Flow Period: 115 Min
Final Shut-in: 45 Min. Out of Hole: 5:00 pm
Choke Bottom: ½" - ¼"
Choke Surface:
Flow Rate Mcf/day Flare Line Riser:
Mcf/day measured by:
Fluid Cushion: Max. Well Temp.: 250 F
DRLG. FLUID: Viscosity: 230 Weight: 9.8 W.L. 4.6

FIELD (est.)		CORRECTED
3740	Initial Hydrostatic Pressure psig	3630
2652	Shut-In Press. #1 After 52 Min. psig	2610
	Initial Flowing Pressure psig	479
	Max. Flowing Pressure psig	2590
2652	Shut-In Press. #2 After 45 Min. psig	2619

FLUID RECOVERY: 1060 ft salt-contaminated mud, slightly sulphurous
(Ran 20 drill collars, 6¼" OD, 2 7/8" ID)



RECORDER No. 13000 ELEMENT RANGE: 0-6400 P.S.I. CLOCK SPEED: 24 HRS. RECORDER DEPTH: 7024'
RECORDER No. 11736 ELEMENT RANGE: 0-7100 P.S.I. CLOCK SPEED: 0 HRS. RECORDER DEPTH: 7030'



Form No T.20

T.G. EASTLAND — testers ltd.

R.R. No. 6 NORTH • EDMONTON, ALBERTA

TEST No. Four
Date March 6/64
Ticket No. 6550

SERVICE REPORT

Well Name: H.B. FAN AM S. ISLAND RIVER M-41 L.S.D. M-41
Formation Tested: Basal Slave Point
TYPE OF TEST: ☐ Standard ☒ Duals ☐ Straddle ☐ Casing
From: 7230' To: 7300' Tail Pipe: 70'
Main Hole Depth: 7300' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10¾" Weight:
Type of Drill Pipe: 4½" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7¾"

REMARKS: Good initial puff for 5 minutes. On ½" choke 5 mins. Weak air blow, dead in 5 minutes. On ¼" choke - weak air blow, dead in 15 minutes. Skidded 15 ft to bottom, Lost 15 ft mud in annulus.

PRESENT DURING TEST

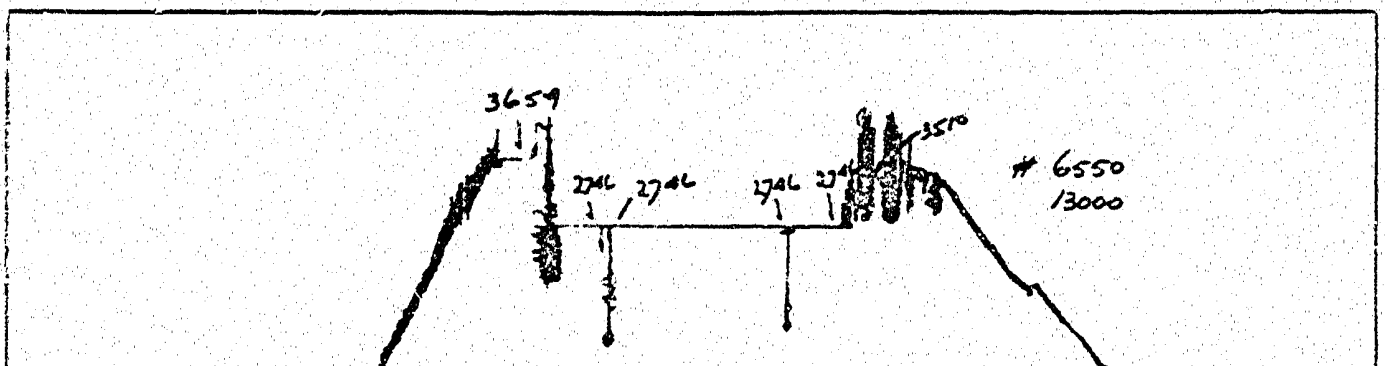
Your Representative C. A. Stuart
Our Operator G. C. Pozmeroff
Toolpusher F. Kozyk
Drlg. Contractor Cascade Rig # 18

TEST RESULT DATA

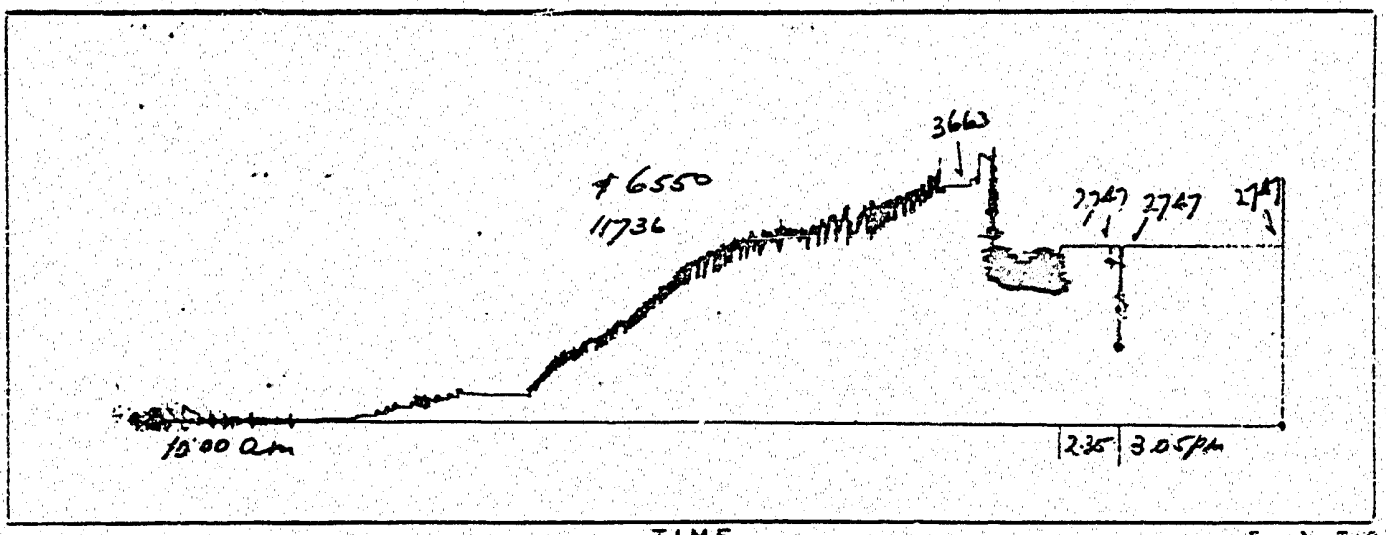
Started in Hole: 10 am Tool Opened: 3:05 p.m.
Initial Shut-in: 30 Min. Flow Period: 118 Min.
Final Shut-in: 30 Min. Out of Hole: 10:00 p.m.
Choke Bottom: ½" - ¼"
Choke Surface: ¾"
Flow Rate Mcf / day Flare Line Riser:
Mcf / day measured by:
Fluid Cushion: Max. Well Temp.: 230 °F
DRLG. FLUID: Viscosity: 280 Weight: 9.5 W.L. 4.5

FIELD (est.)		CORRECTED
3820	Initial Hydrostatic Pressure psig	3659
2856	Shut-In Press. #1 After 30 Min. psig	2746
	Initial Flowing Pressure psig	
	Max. Flowing Pressure psig	
2856	Shut-In Press. #2 After 30 Min. psig	2746

FLUID RECOVERY: 330 ft drilling mud; 400 ft black salty mud
(Ran 26 drill collars 6¼" OD, 2 7/8" ID)



RECORDER No. 13000 ELEMENT RANGE: 0-6400 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7269'
RECORDER No. 11736 ELEMENT RANGE: 0-7100 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7275'



T.G. EASTLAND — testers ltd.

11111 - 146 ST. NORTH • EDMONTON, ALBERTA

TEST No. 2[illegible]
Date March 15/64
Ticket No. 6252

SERVICE REPORT

Well Name: H.B. PAN AM S. ISLAND RIVER M-41 L.S.D. M-41
Formation Tested: Upper Chinchuga
TYPE OF TEST: ☐ Standard ☐ Duals ☐ Straddle ☐ Casing
From: 7830' To: 7916' Tail Pipe: 86'
Main Hole Depth: 7916' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10 3/4" Weight:
Type of Drill Pipe: 4 1/2" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7 1/4" - 7 1/2"

REMARKS: Worked packer 20 feet to bottom. Fair initial puff for 35 minutes. Open on 1/4" choke. Good air blow, dying down after 75 minutes. Light air blow at end of test.

PRESENT DURING TEST

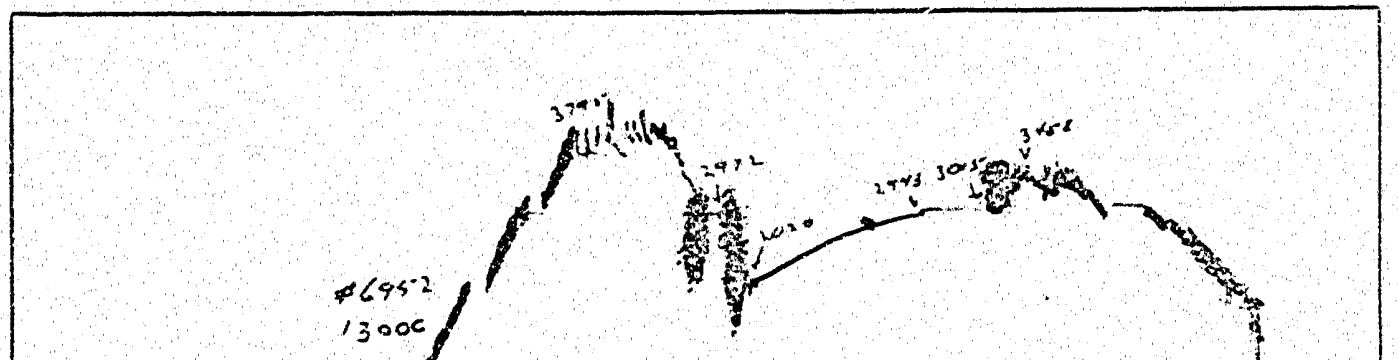
Your Representative C. A. Stuart
Our Operator G. C. Podmeroff
Toolpusher F. Kostyk
Drlg. Contractor Cascade Rig # 18

TEST RESULT DATA

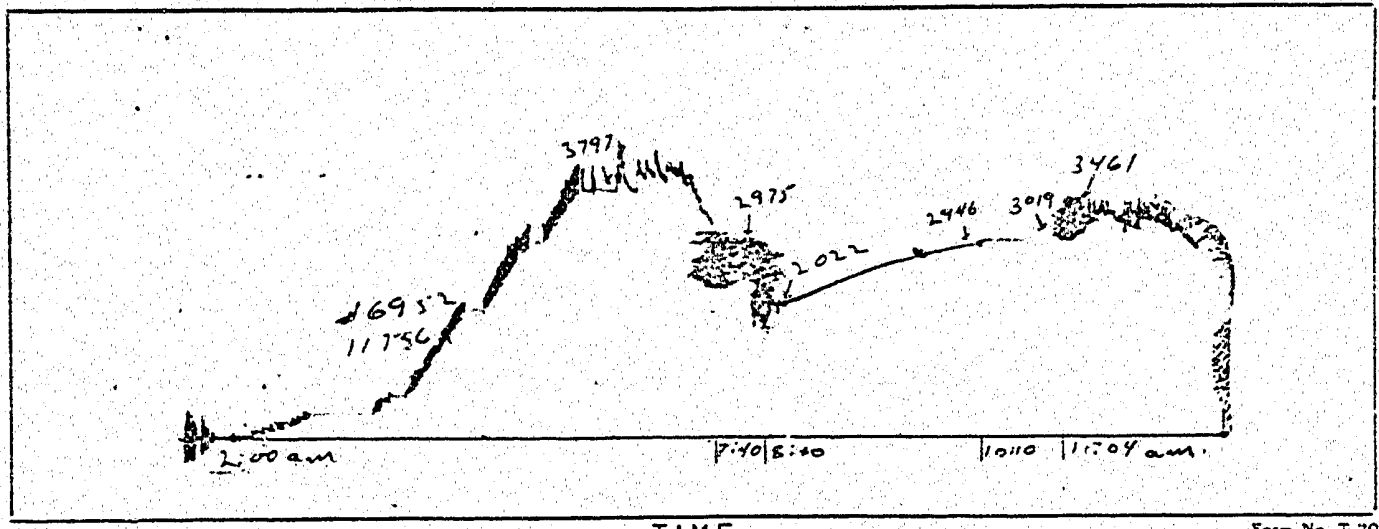
Started in Hole: 2:00 am Tool Opened: 5:10 [illegible]
Initial Shut-in: 30 Min. Flow Period: 120 Min
Final Shut-in: 54 Min. Out of Hole: 8:00 pm
Choke Bottom: 1/4"
Choke Surface: 1/4"
Flow Rate Mcf/day Flare Line Riser:
Mcf/day measured by:
Fluid Cushion: Max. Well Temp.: 235 °F
DRLG. FLUID: Viscosity 290 Weight 9.4 W.L. 3.4

FIELD (est.)		CORRECTED
3978	Initial Hydrostatic Pressure psig	3797
3060	Shut-In Press. #1 After 30 Min. psig	2975
2040	Initial Flowing Pressure psig	2022
2958	Max. Flowing Pressure psig	2946
3060	Shut-In Press. #2 After 54 Min. psig	3019

FLUID RECOVERY: 6200 ft black salt water
(Ran 24 drill collars above tool, 6 1/4" OD, 2 7/8" ID)



RECORDER No. 13000 ELEMENT RANGE 0-6400 P.S.I. CLOCK SPEED 12 HRS. RECORDER DEPTH: 7838'
RECORDER No. 11736 ELEMENT RANGE 0-7100 P.S.I. CLOCK SPEED 12 HRS. RECORDER DEPTH: 7842'



Form No. T 20

T.G. EASTLAND —— testers ltd.

R.R. NO. 6 NORTH • EDMONTON, ALBERTA

TEST No. [illegible]
Date March 19/64
Ticket No. 0952

SERVICE REPORT

Well Name: H.B. PAN AM S. ISLAND RIVER M-41 L.S.D. M-41
Formation Tested: Upper Chinchuga
TYPE OF TEST: ☐ Standard ☐ Duals ☐ Straddle ☐ Casing
From: 7838' To: 7916' Tail Pipe: 86'
Main Hole Depth: 7916' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10¾" Weight:
Type of Drill Pipe: 4½" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7¼" - 7¼"
REMARKS: Worked packer 20 feet to bottom. Fair initial puff for 35 minutes. Open on ½" choke. Good air blow, dying down after 75 minutes. Light air blow at end of test.

PRESENT DURING TEST

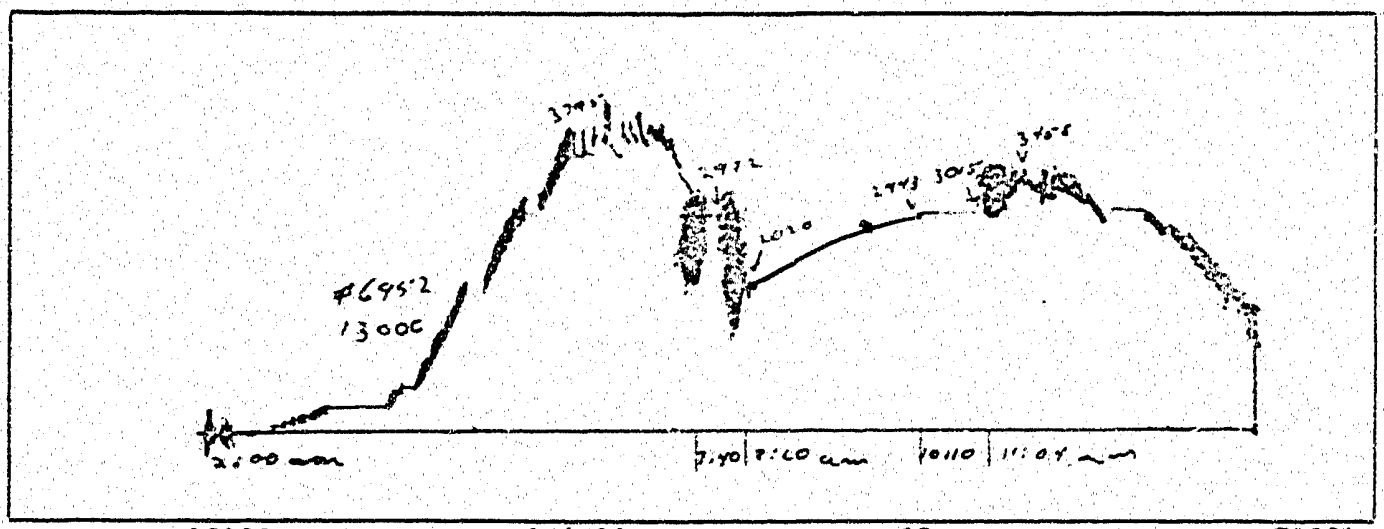
Your Representative: C. A. Stuart
Our Operator: G. C. Podmeroff
Toolpusher: F. Kostyk
Drlg. Contractor: Cascade Rig #18

TEST RESULT DATA

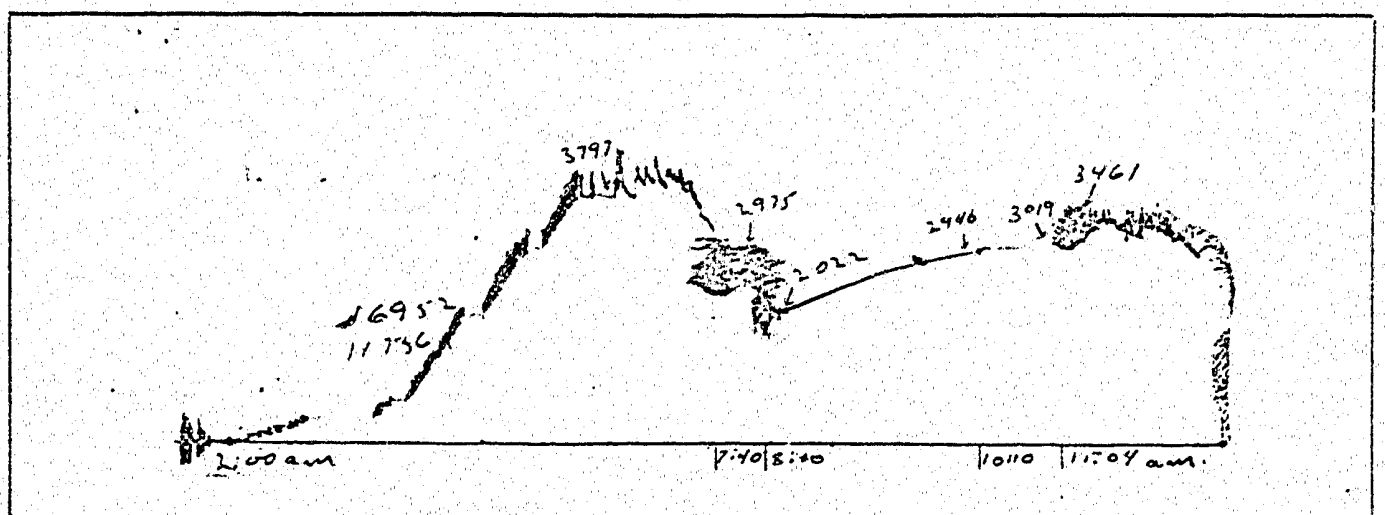
Started in Hole: 2:00 am. Tool Opened: 5:10 am.
Initial Shut-in: 30 Min. Flow Period: 120 Min.
Final Shut-in: 54 Min. Out of Hole: 5:00 pm.
Choke Bottom: ½"
Choke Surface: ¾"
Flow Rate Mcf/day Flare Line Riser:
Mcf/day measured by:
Fluid Cushion: Max. Well Temp.: 235 °F
DRLG. FLUID: Viscosity 290 Weight 9.4 W.L. 3.4

FIELD (est.)		CORRECTED
3978	Initial Hydrostatic Pressure psig	3797
3060	Shut-In Press. #1 After 30 Min. psig	2975
2040	Initial Flowing Pressure psig	2022
2958	Max. Flowing Pressure psig	2946
3060	Shut-In Press. #2 After 54 Min. psig	3019

FLUID RECOVERY: 6200 ft black salt water
(Ran 24 drill collars above tool, 6½" OD, 2 7/8" ID)



RECORDER No. 13000 ELEMENT RANGE 0-6400 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7838'
RECORDER No. 11736 ELEMENT RANGE 0-7100 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7842'



TIME

Form No T 20

Casing Record:

Surface Casing

Size OD (inches)	Weight and Grade	Length	Depth KB
10 3/4	40 lb., J-55	812.65	828.28

Cemented with 700 cubic feet of construction cement plus 2% calcium chloride.

Size OD (inches)	Weight and Grade	Length	Depth KB
Top 5 1/2	20 lb., N-80	589.09	603.30
5 1/2	15.5 lb., J-55	4376.25	4979.64
5 1/2	17 lb., J-55	1938.34	6917.98
5 1/2	17 lb., N-80	1234.49	8152.47
Legrand Float collar		1.50	8153.97
5 1/2	17 lb., N-80	31.92	8185.89
Legrand Float Shoe		1.66	8187.55

Cemented with 600 cubic feet of Pozmix 1.1 plus 2% gel, plus 0.4% HR12

Bit Record:

No:	Type	Size(inches)	Footage Drilled From (ft.-KB)	To	Hours run
1A	YT3A	15"	0	682	34 1/4
2A	OSC-3	15"	682	828	9
1	OSC-3	9"	828	1958	20
2	OSC-3	9"	1958	2219	11 1/2
3	YTIA	9"	2219	2575	15 3/4
4	OSCIG	9"	2575	2875	14 1/2
5	OSC	9"	2875	3310	20
6	OSC	9"	3310	3598	16 1/2
7	YSI	9"	3598	3930	22 3/4
8	OSC	9"	3930	4203	18 1/8
9	YTIA	9"	4203	4396	18 3/4
10	OSC	9"	4396	4596	19 1/4
11	OSCIG	9"	4596	4803	20 3/4
12	OSCIG	9"	4803	5120	21 3/4
13	OSCIG	9"	5120	5481	21 3/4
14	OSCIG	9"	5481	5564	9
15	YSI-R	9"	5564	5884	26 1/4
16	S4	9"	5884	6255	21 3/4
17	YT3	9"	6255	6650	25 3/4
18	OSCIG	9"	6650	6870	19 1/2
19	OWV	9"	6870	7010	14 1/2
20	Diamond	6 1/2	7010	7032	5 1/4
20	OWC	9"	7010	7221	21 1/4
21	OWC	9"	7221	7300	3 1/2

No.	Type	Size	Footage From	To	Hours run
22	W7	9"	7300	7466	16 1/2
23	YHWG	9"	7466	7537	8 3/4
24	YH WG	9"	7537	7670	14 3/4
25	W7	9"	7670	7750	12 1/4
26	W7	9"	7750	7733	12 3/4
27	YH	9"	7733	7916	14 1/4
28	W7R2	9"	7916	7978	15
29	W7R2	9"	7978	8029	15
30	RG7J	9"	8029	8150	36
31	YHWG	9"	8150	8185	5

Mud Report:

The well was drilled using a gel mud with the following additives:

Gel	-	92,060 lbs.
Carbonox	-	6,250 lbs.
Dextrid	-	5,000 lbs.
Caustic	-	5,950 lbs.
Quebroxin	-	8,700 lbs.
cc-16	-	200 lbs.
Cellex	-	1,600 lbs.
Fibretex	-	18 sacks
Sawdust	-	220 sacks
Diesel Fuel	-	4,200 gallons

Deviation Record

Depth - ft. KB	Deviation - Degrees
560	1/2
610	1/2
635	3/4
820	1
895	3/4
2180	3/4
2365	1/4
2595	1/2
2875	1 1/2
3130	1
3200	1

Depth - ft. KB	Deviation - Degrees
3295	7/8
3440	1
3530	7/8
3598	7/8
3925	7/8
4010	1/2
4130	3/4
4200	3/4
4315	1
4395	1 1/4
4500	1
4595	1
4750	7/8
4985	4 1/4
5035	5 1/4
5045	5 1/4
5075	4 3/4
5120	4 1/2
5155	4
5195	5
5225	4 1/4
5255	4
5285	4
5375	3 3/4
5440	3 1/2
5480	3 1/2

Depth - ft KB	Deviation - Degrees
5530	3
5620	1 3/4
5730	1 1/2
5870	1
5980	1 3/4
6090	1
6240	1 1/2
6400	1
6495	1/2
6795	1 1/4
6960	1 1/2
6950	2 1/4
7300	1
7537	2
7987	2 1/2
8025	2 1/2
8140	2 1/2

Lost Circulation Zones:

Lost Circulation was encountered from 6725 to 8000 feet KB, during which time 1600 lbs. of cellex and 220 sacks of sawdust were added. The amount of mud lost was not recorded.

SUMMARY OF LOGS AND SURVEYS:

Company and Date	Type	Interval(ft.-KB)
Schlumberger of Canada (March 20, 1964)	Induction Electric Log	2 inch scale 8155 to 829 ft. KB 5 inch scale 8155 to 829 ft. KB
Schlumberger of Canada (March 20, 1964)	Gamma Sonic Caliper	2 inch scale 8150 to 829 ft. KB 5 inch scale 8150 to 829 ft. KB 25 inch scale 7310 to 6800 ft. KB
Schlumberger of Canada (March 20, 1964)	Geophysical	529' - 7150'

ANALYSIS

CGL 51

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Operator Hudson's Bay Oil & Gas Company Limited Interval Cored 7010' To 7032'

Well No. H.B. Pan Am. S. Island R. #141 Coring Fluid ---

Lab. No. F1054 Elevation 2213' KB. Formation Slave Point

Comments Prior to analysis the samples were dried at 210°F. for 24 hours.

Permeability measurements could not be made on sample numbers 5 and 9 due to open fractures. Sample number 19 contained large vugs on which the horizontal permeability was too high to measure. The fracture network contained in the rock increases the permeability values above those that would be obtained from the interconnected pore channels only.

The interpretation herein is based on information obtained from analysis of cores and/or material supplied by customer. Chemical & Geological Laboratories Ltd. assumes no responsibility and makes no guarantee as to what type of production this well may yield. The opinion herein represents the best judgement of Chemical & Geological Laboratories Ltd.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114 St. EDMONTON, ALBERTA FILES: 25624 42562

FULL DIAMETER CORE STUDY

OPERATOR Hudson's Bay Oil & Gas Company Limited FIELD (Wildcat) WELL NO. H.B. Pan Am. S. [illegible] F1051

LOCATION ..... FORMATION Slave Point DEPTHS 7010' - 7032' DATE Received: March 5, 1964

Footage of Slave Point formation cored	22.0'	No. of representative samples selected for analysis	31.
FEET OF CORE:			
Received at laboratory for analysis	18.4'	Compared (to tested samples)	---
Not accounted for	3.6'	Dense sections not represented	---
Represented by samples	17.6'	Badly fractured sections not represented	0.8'

SUMMARY OF REPRESENTED SECTIONS: (1) $\frac{\text{represented}}{\text{received}} = \frac{17.6'}{18.4'}$ (2) $\frac{\text{represented}}{\text{cored}} = \frac{17.6'}{22.0'}$

Weighted average porosity	6.1 %	Maximum porosity	11.7 %
Weighted average K_H permeability on 14.9 feet	117. md.	Minimum porosity	0.9 %
Weighted average K' permeability on 14.2 feet	0.9 md.	Maximum K_H permeability	1532. md.
Weighted average vertical permeability on 16.2 feet	0.28 md.	Minimum K_H permeability	0.09 md.
Weighted average maximum permeability	110. md.	Maximum vertical permeability	3.2 md.
Porosity Feet	106.95	Minimum vertical permeability	0.02 md.

CORE WITH MAXIMUM PERMEABILITY:	10.0 md. or greater	between 1.0 and 9.9 md. inclusive	less than 1.0 md.	(a)
Footage	5.5'	4.3'	6.4'	1.4'
Weighted average porosity	7.7 %	6.5 %	4.2 %	6.7 %
Weighted average K_H permeability	315. md.	3.6 md.	(on 5.1' 0.19 md.)	--- md.
Weighted average vertical permeability	0.06 md.	0.09 md.	0.07 md.	--- md.
Porosity feet	42.51	28.15	26.91	9.38

CGL 30

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Operator Hudson's Bay Oil & Gas Company Limited Well No. H.B. Pan Am. S. Island R. #361 Lab. No. F1054 Date Received March 5, 1971

Sample Number	Midpoint of Sample in Ft.	Representative of Feet	Footage Rep.	Permeability md. Vertical	K_H	K'	% Porosity	Porosity Feet	Description
Core Number 1		7010' - 7019'	Cored 9.0 Feet		Received in lab. 9.0 Feet		Slave Point Formation		
1	7010.3	7010.0-7010.6	0.6	0.10	27.	1.6	4.4	2.64	Dol A X R1 X OccV OccPPV RC
2	7010.8	7010.6-7011.1	0.5	0.04	0.50	0.12	4.1	2.05	Dol A X R1 OccV OccPPV RC
3	7011.7	7011.1-7012.0	0.9	0.07	0.24	0.07	1.5	1.35	Dol A X R1 OccV RC
4	7012.3	7012.0-7012.8	0.8	0.07	0.17	0.12	3.3	2.64	Dol A X R1 OccV RC
5	7013.2	7012.8-7013.5	0.7	(a)	(a)	(a)	6.1	4.27	Dol A X R1 OccV OccPPV O/F
6	7014.2	7013.5-7014.5	1.0	0.07	0.18	0.17	2.2	2.20	Dol A X R1 OccV RC
7	7015.4	7014.5-7015.6	1.1	3.2	1.1	1.1	4.6	5.06	Dol A X R1 OccV RC
8	7016.2	7015.6-7016.5	0.9	0.07	5.2	3.9	5.2	4.68	Dol A X R1 OccV OccPPV RC
9	7016.9	7016.5-7017.2	0.7	(a)	(a)	(a)	7.3	5.11	Dol A X R1 V OccPPV O/F
10	7017.8	7017.2-7018.2	1.0	0.10	0.11	0.07	3.3	3.30	Dol A X R1 OccV
No Sample		7018.2-7019.0	0.8	---	---	---	---	---	Rubble
Core Number 2		7019' - 7032'	Cored 13.0 Feet		Received in lab. 9.4 Feet		Slave Point Formation		
11	7019.6	7019.0-7020.0	1.0	0.08	1.7	1.1	3.9	3.90	Dol A X R1 OccV OccPPV RC
12	7020.4	7020.0-7020.7	0.7	0.10	37.	2.6	8.0	5.60	Dol A X R1 V RC
13	7021.0	7020.7-7021.5	0.8	0.02	1532.	1.4	6.3	5.04	Dol A X R1 V RC
14	7021.9	7021.5-7022.2	0.7	0.04	24.	(a)	8.2	5.74	Dol A X R1 V RC
15	7022.7	7022.2-7023.0	0.8	0.05	8.3	3.7	11.7	9.36	Dol A X R1 V RC
16	7023.3	7023.0-7023.7	0.7	0.07	113.	62.	9.1	6.37	Dol A X R1 V RC
17	7024.0	7023.7-7024.2	0.5	0.23	2.1	0.65	10.3	5.15	Dol A R1 I PPV RC
18	7025.0	7024.2-7025.4	1.2	0.06	258.	17.	8.4	10.08	Dol A X R1 V
19	7026.3	7025.4-7026.7	1.3	0.08	(a)	(a)	11.2	14.56	Dol A X R1-V
20	7027.2	7026.7-7027.6	0.9	0.05	0.09	0.07	0.9	0.81	Dol A X OccV
21	7027.9	7027.6-7028.4	0.8	0.04	75.	61.	8.8	7.04	Dol A X V

CORE DESCRIPTION SYMBOLS

Ls	Limestone
R2	Reactive to cold 15% HCl
R1	Slightly reactive to cold 15% HCl
NR	Not reactive to cold 15% HCl
Dol	Dolomite
Ch	Chert
ds	Dense Siderite
Cg	Conglomerate
fSS	Fine Sandstone
MSS	Medium Sandstone
CSS	Coarse Sandstone
Sd	Sand
Sdy	Sandy
SL	Sand Lenses
fSL	Fine Sand Lenses
Sil	Siltstone
Sh	Shale
Shy	Shaly
ShL	Shale Lenses
PTSL	Paper Thin Shale Laminations
A	Anhydrite
Ca	Calcite
D	Dense
VSI	Very Slightly Intergranular
SI	Slightly Intergranular
I	Intergranular
Fg	Fragmental
Co	Coralline Fragments
ool	oolitic
X	Crystals
InB	Interbedded
U	Unconsolidated
mudst	Mudstone
BlSh	Black Shale
Bit	Bitumen

LV	Large Vugs
V	Vuggy
SV	Slightly Vuggy
OccV	Occasional Vugs
PPV	Pin Point Vugs
Br	Brecciated
HF	Horizontal Fracture
VF	Vertical Fracture
RF	Random Fractures
HC	Horizontal Crack
VC	Vertical Crack
RC	Random Cracks
O	Open
St	Stylolite
Py	Pyrites
Pyb	Pyrobitumen
Gl	Glauconitic
S	Stained
Bt	Buttoned
(a)	Unsuitable for test
(b)	Fractured during test
K_H	Maximum Horizontal Permeability measured
K'	Taken 90° to K_H
TR	Trace
SP	Small Plug
FD	Full Diameter
NB.	K_H and K' are transverse permeability measurements on full diameter samples

CCL-6

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT

Field North West Territories Well No. H.B. Pan Am S. Island R. M-41

Operator Hudson's Bay Oil And Gas Company Limited Date Received March 26, 1964

Formation Slave Point Depths 6930' - 7010'

Other pertinent data D.S.T. #2. Samples obtained by C.A. Stuart. Recovered 80' salt water; 100' gas cut mud. Bottom sample. Strong initial puff gas to surface in 1/2 minute at 5.7 m.m.c.f.. Elevation: 2212' KB.; 2198' Grd..

Date Sampled: March 1, 1964 Lab. No. E23278-2

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
43053	12192	1203	Present	319	91100		270		

MILLIGRAM EQUIVALENTS

1872.82	608.38	98.89		6.64	2569.02		4.43		

MILLIGRAM EQUIVALENTS IN PERCENT

36.29	11.79	1.92		0.13	49.78		0.09		

Total Solids in Parts per Million

By evaporation	169,580
After ignition	144,360
Calculated	148,000
Specific Gravity	1.100
Observed pH	6.6
Resistivity	0.067 ohm meters @ 68° F.

Properties of Reaction in Percent

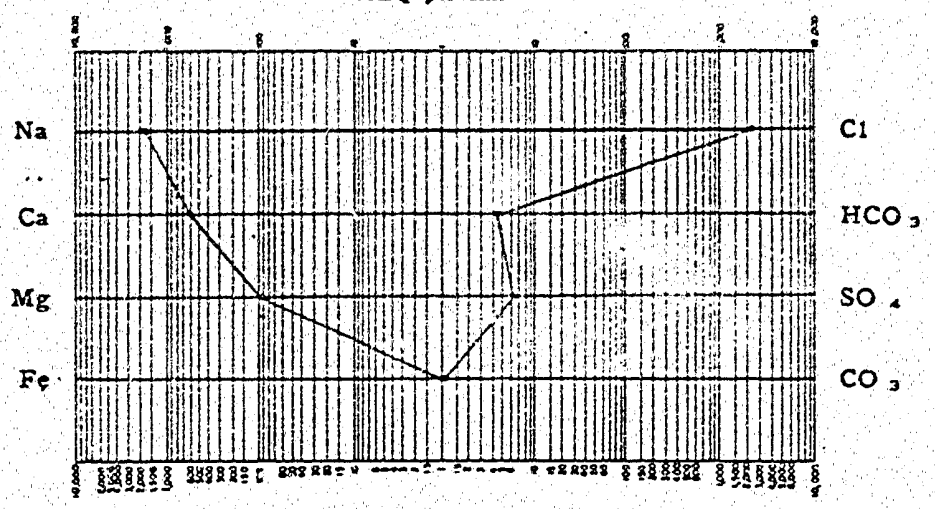
Primary salinity	72.58
Secondary salinity	27.24
Primary alkalinity	---
Secondary alkalinity	0.18
Chloride salinity	99.74
Sulfate salinity	0.26

Remarks and conclusions The total solids contained organic matter.

E23278-1: Top sample, pH:6.5; Chloride Content: 87,900 ppm..

Resistivity: 0.068 Ohm-Meters at 68°F..

LOGARITHMIC PATTERN
MEQ per unit



CC-6

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT

Field North West Territories Well No H.B. Pan Am S. Island R. M-41

Operator Hudson's Bay Oil And Gas Company Limited Date Received March 26, 1964

Formation Slave Point Depths 6987' - 7012'

Other pertinent data D.S.T. #3. Samples obtained by C.A. Stuart. Recovered 1060' sulphurous salty mud. Bottom sample. Light initial puff decreasing to nil in 35 minutes. Elevation: 2212' KB.; 2198' Grd..

Date Sampled: March 3, 1964 Lab. No. E23278-4

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
20807	5005	433	Present	602	41300		810		

MILLIGRAM EQUIVALENTS

905.12	249.75	35.59		12.52	1164.66		13.28		

MILLIGRAM EQUIVALENTS IN PERCENT

38.02	10.49	1.49		0.53	48.91		0.56		

Total Solids in Parts per Million

By evaporation 79,780

After ignition 65,560

Calculated 68,546

Specific Gravity 1.046

Observed pH 7.2

Resistivity 0.126 ohm meters @ 68° F.

Properties of Reaction in Percent

Primary salinity 76.04

Secondary salinity 22.84

Primary alkalinity ---

Secondary alkalinity 1.12

Chloride salinity 98.93

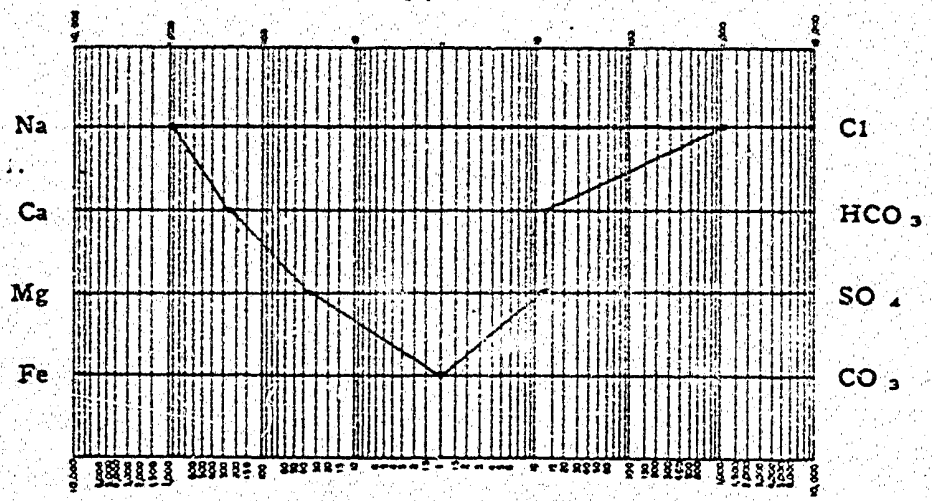
Sulfate salinity 1.07

Remarks and conclusions The total solids contained organic matter.

E23278-3: Top sample. pH: 6.9; Chloride Content: 38,950 ppm..

Resistivity: 0.128 Ohm-Meters at 68°F..

LOGARITHMIC PATTERN
MEQ per unit



CL-4

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT

Field North West Territories Well No. H.B. Pan Am S. Island R. 6M-41

Operator Hudson's Bay Oil And Gas Company Limited Date Received March 26, 1964

Formation Basal Slave Point Depths 7230' - 7300'

Other pertinent data D.S.T. #4. Samples taken by C.A. Stuart. Recovered 420' black sulphurous salty mud; 330' drilling fluid. Bottom sample. Strong initial puff, decreasing to nil in 15 minutes.

Date Sampled: March 7, 1964 Lab. No. E23279-2

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
22577	5798	598	Present	476	46100		650		

MILLIGRAM EQUIVALENTS

982.10	289.32	49.16		9.90	1300.02		10.66		

MILLIGRAM EQUIVALENTS IN PERCENT

37.19	10.95	1.86		0.38	49.22		0.40		

Total Solids in Parts per Million

By evaporation	87,240
After ignition	71,400
Calculated	75,869
Specific Gravity	1.053
Observed pH	6.4
Resistivity	0.120 ohm meters @ 68° F.

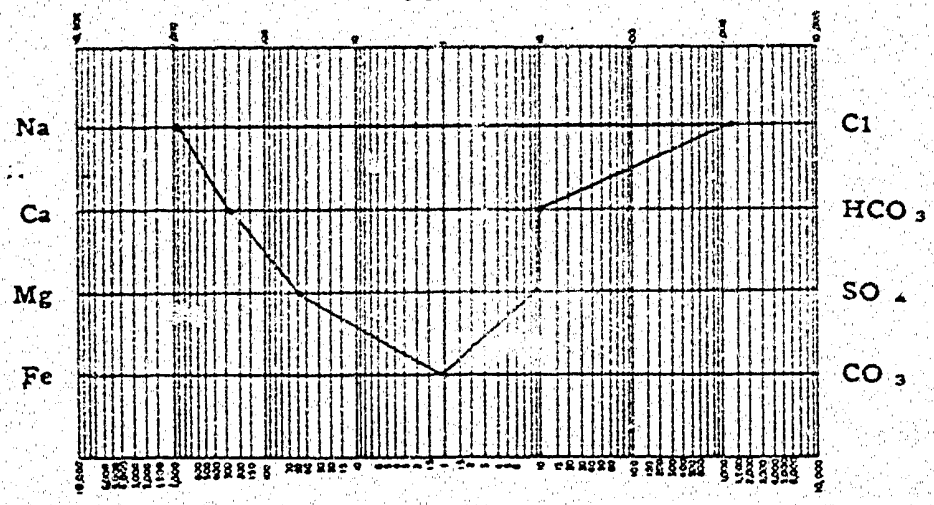
Properties of Reaction in Percent

Primary salinity	74.38
Secondary salinity	24.82
Primary alkalinity	---
Secondary alkalinity	0.80
Chloride salinity	99.23
Sulfate salinity	0.77

Remarks and conclusions The total solids contained organic matter.

E23279-1: Top sample. pH: 7.6; Chloride Content: 19,660 ppm.. Resistivity: 0.226 Ohm-Meters at 68°F..

LOGARITHMIC PATTERN
MEQ per unit



CCL-4

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT

Field North West Territories Well No. H.B. Pan Am. S. Island K. M-41

Operator Hudson's Bay Oil And Gas Company Limited Date Received March 26, 1964

Formation Elk Point Depths 7300' - 7535'

Other pertinent data D.S.T. #5. Sampled by C.A. Stuart. Recovered 5900' black salt water. Bottom sample. Strong initial puff, strong air blow; decreasing to nil in 90 minutes. Elevation: 2212' KB.; 2193' Grd,.

Date Sampled: March 11, 1964 Lab. No. E23280-2

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
44466	12633	1288	Present	253	94200		540		Present

MILLIGRAM EQUIVALENTS

1934.30	630.39	105.87		5.26	2656.44		8.86		

MILLIGRAM EQUIVALENTS IN PERCENT

36.22	11.80	1.98		0.10	49.73		0.17		

Total Solids in Parts per Million

By evaporation	175,860
After ignition	144,600
Calculated	153,106
Specific Gravity	1.102
Observed pH	6.2
Resistivity	0.066 ohm meters @ 68° F.

Properties of Reaction in Percent

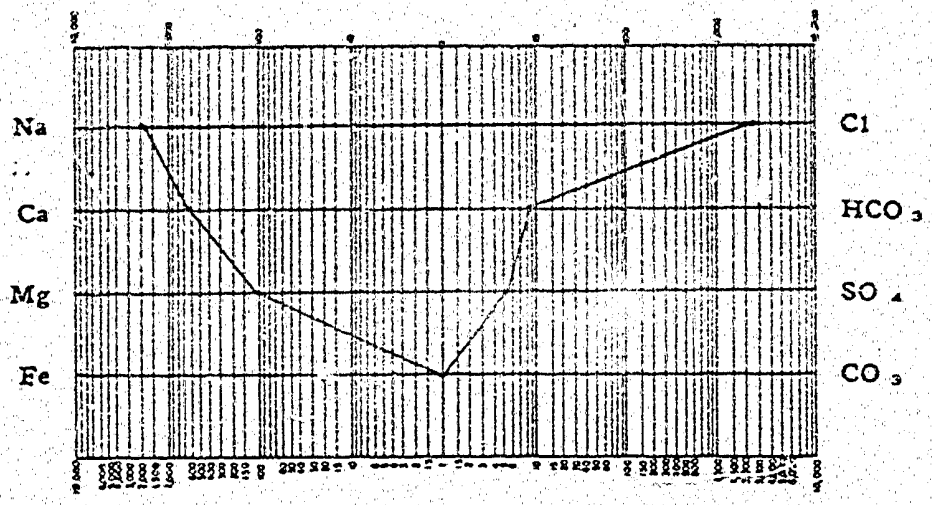
Primary salinity	72.44
Secondary salinity	27.22
Primary alkalinity	---
Secondary alkalinity	0.34
Chloride salinity	99.80
Sulfate salinity	0.20

Remarks and conclusions The total solids contained organic matter.

E23280-1: Top sample. pH: 8.5; Chloride Content: 6,420 ppm..

Resistivity: 0.603 Ohm-Meters at 68°F..

LOGARITHMIC PATTERN
MEQ per unit



CGLS

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT

Field North West Territories W.[illegible] No. H.B. Pan Am S. Island R. (M-41

Operator Hudson's Bay Oil And Gas Company Li[illegible] Date Received March 26, 1964

Formation Upper Chinchaga Depths 7830'-7916'

Other pertinent data D.S.T. #6. Sampled by C.A. Stuart. Recovered 6200' black salt water. Bottom sample. Strong initial puff, strong air blow decreasing to light at end of test. Elevation: 2212' KB.; 2198' Grd..

Date Sampled: March 16, 1964 Lab. No. E23281-2

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
45583	13794	1227	Present	252	97800		540		Present

MILLIGRAM EQUIVALENTS

1982.88	688.32	100.86		5.24	2757.96		8.86		

MILLIGRAM EQUIVALENTS IN PERCENT

35.77	12.41	1.82		0.09	49.75		0.16		

Total Solids in Parts per Million

By evaporation	183,220
After ignition	149,640
Calculated	159,102
Specific Gravity	1.104
Observed pH	6.0
Resistivity	0.064 ohm meters @ 68° F.

Properties of Reaction in Percent

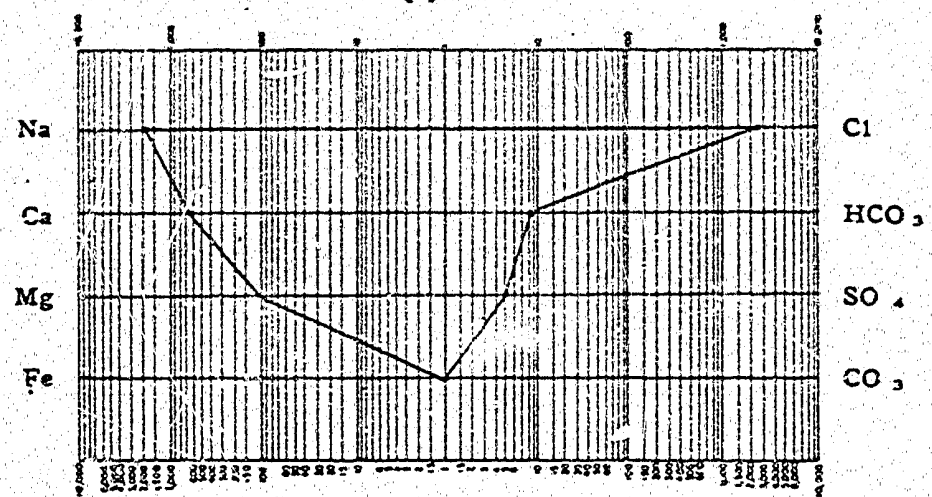
Primary salinity	71.54
Secondary salinity	28.14
Primary alkalinity	---
Secondary alkalinity	0.32
Chloride salinity	99.82
Sulfate salinity	0.18

Remarks and conclusions The total solids contained organic matter.

E23281-1: Top sample. pH: 6.6; Chloride Content: 35,900 ppm..

Resistivity: 0.136 Ohm-Meters at 68°F..

LOGARITHMIC PATTERN
MEQ per unit



CDL-4

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114th Street, Edmonton, Alberta — Phones: GA 2-5624 - GA 4-2562
428 - 35 Ave. N.E. Calgary, Alberta — Phones: CR 7-6149 - CR 7-0305

GAS ANALYSIS REPORT

FIELD _____ WELL NO. H.B. Pan Am. S. Island R. M-41
OPERATOR Hudson's Bay Oil And Gas Company LOCATION _____
FORMATION Limited Slave Point DEPTHS 6930' - 7010' LAB. NO. K23202
DATE SAMPLED March 1, 1964 REPORTED April 13, 1964
REMARKS D.S.T. #2. Conditions at source 60 psig. and 90°F.. Bottom hole temperature 250°F.. Strong initial puff. Gas to surface in 1/2 minute at 5.7 mcf/d.. Recovery 80' salt water; 100' gas cut mud. Elevation: 2212' KB.; 2198' Grd..

ORSAT ANALYSIS

	% by Volume
Oxygen	
Nitrogen	
Carbon dioxide	
Hydrogen sulfide	
Total hydrocarbons	
Average "n"	

HYDROGEN SULFIDE
(by Tutwiler Method)

Grains of hydrogen sulfide per 100 cu. ft. of gas at 60° F. and

14.7 lbs. per sq. in.	471
14.65 lbs. per sq. in.	470
Percentage of Hydrogen sulfide	0.75

GROSS B.T.U.

60°F. and 14.7 p.s.i.a.	881
60°F. and 14.65 p.s.i.a.	879

CHROMATOGRAPH

	% by Volume	G.P.M. in U.S. Gal. @ 60° F. & 14.696 PSI	G.P.M. in Imp. Gal. @ 60° F. & 14.65 PSI
Oxygen	0		
Nitrogen	2.42		
Carbon dioxide	10.13		
Hydrogen sulfide	0.75		
Methane	86.62		
Ethane	0.07		
Propane +	0.01	0.003	0.002
Isobutane			
N-butane			
Isopentane			
N-pentane			
Hexanes			
TOTAL	100.00	0.003	0.002

G.P.M.

Actual pentanes +		
Calculated at 12 lbs.		
Calculated at 15 lbs.		
Calculated at 22 lbs.		
Calculated at 26 lbs.		

Vapor pressure (calculated) of actual pentanes + _____

Specific Gravity Calculated	0.667
Specific Gravity by Weight	0.669

Remarks and Conclusions: Sample container arrived with 34 psig. with no indication of liquids. This sample contains 0.13% helium and 0.05% hydrogen, acid gas free. This percentage not used in complete analysis calculations.

T.G. EASTLAND — testers ltd.

R.R. No. 4 NORTH • EDMONTON, ALBERTA

TEST No. One
Date Feb. 9/64
Ticket No. 6547

SERVICE REPORT

Well Name: H.B. PAN AM ISLAND RIVER M-41 LSD 121-09' 00" W.L.
Formation Tested: Mississippian
TYPE OF TEST: ☐ Standard ☒ Dual ☐ Straddle ☐ Casing
From: 2159' To: 2219' Tail Pipe: 60'
Main Hole Depth: 2219' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10¾" Weight:
Type of Drill Pipe: 4½" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7½" and 7¾"
REMARKS: Good initial puff for 3 minutes. Open on ¼" choke throughout test. Weak air blow, dead in 45 minutes.

PRESENT DURING TEST

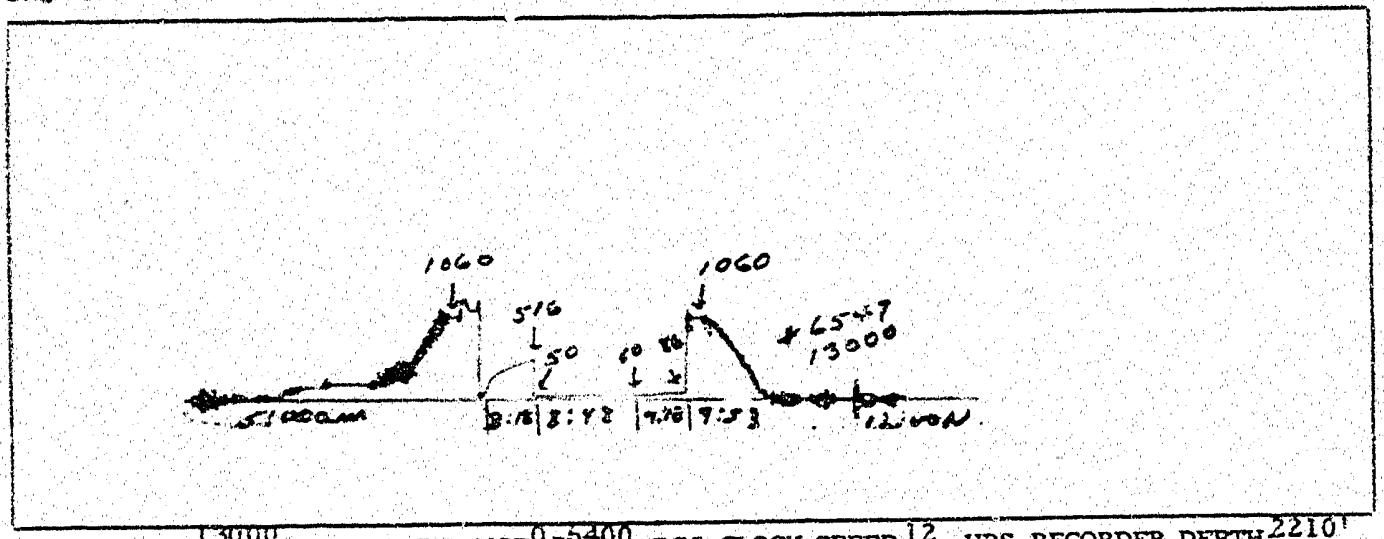
Your Representative C. A. Stuart
Our Operator G. Podmeroff
Toolpusher F. Kostyk
Drlg. Contractor Cascade Rig #18

TEST RESULT DATA

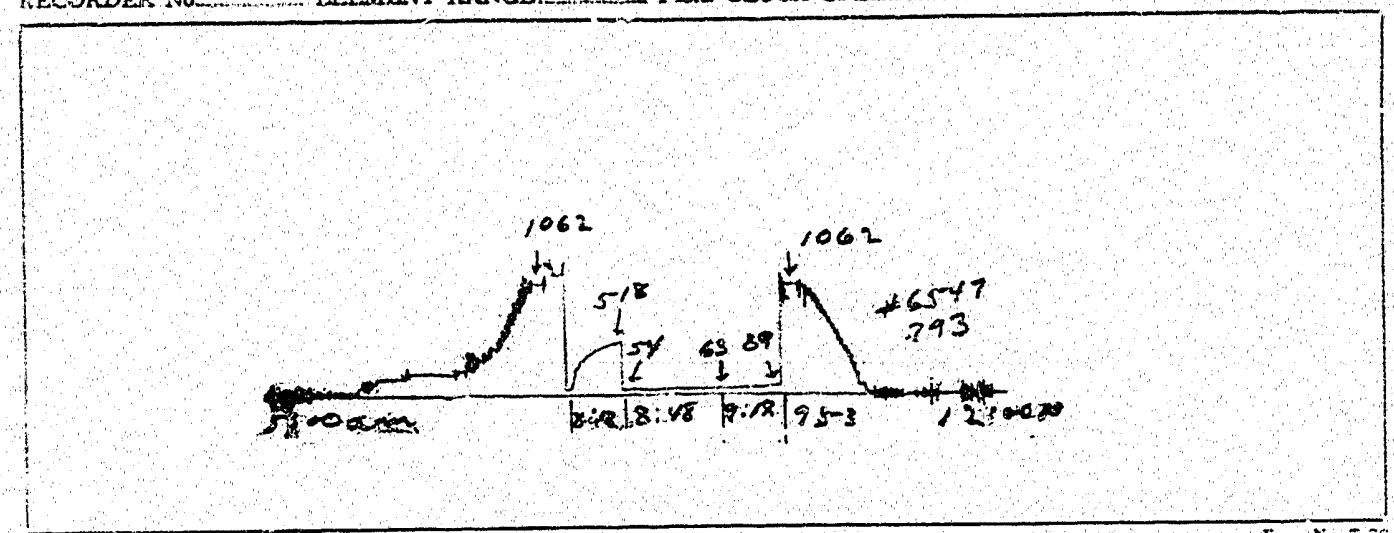
Started in Hole: 5:30 am. Tool Opened: 8:48 am
Initial Shut-in: 30 Min. Flow Period: 60 Min.
Final Shut-in: 35 Min. Out of Hole: 12 Noon
Choke Bottom:
Choke Surface:
Flow Rate Mcf/day Flare Line Riser:
Mcf/day measured by:
Fluid Cushion: Max. Well Temp. 86 °F
DRLG. FLUID: Viscosity: 40 Weight: 9.4 W.L. 6

FIELD (est.)		CORRECTED
1200	Initial Hydrostatic Pressure psig	1062
500	Shut-In Press. #1 After 30 Min. psig	518
50	Initial Flowing Pressure psig	54
70	Max. Flowing Pressure psig	63
80	Shut-In Press. #2 After 35 Min. psig	89

FLUID RECOVERY: 50 ft drilling mud (Ran 22 drill collars above tool, 6¼" OD, 2-7/8" ID)



RECORDER No. 13000 ELEMENT RANGE 0-5400 P.S.I. CLOCK SPEED 12 HRS. RECORDER DEPTH 2210'
RECORDER No. 793 ELEMENT RANGE 0-4700 P.S.I. CLOCK SPEED 12 HRS. RECORDER DEPTH 2216'



Form No. T 20

T.G. EASTLAND testers ltd.

DRILL STEM TEST PRESSURE REPORT

Well Name: H.B. PAN AM ISLAND RIVER M-41

Date: February 9, 1964 Test No. One Ticket # 6547

Interval: 2159' to 2219' KB Formation: Mississippian

Gauge No. 793 Depth of Element: 2216' KB B.H. Temp. 86°F

Cal. Equation P_a = 2332.89 + 0.51

	Time	T	Press. psig
Initial Hydro-static			1062
Initial Shut-in	8:18 am	0	47
	8:24	6	297
	8:30	12	308
	8:36	18	448
	8:42	24	483
	8:48	30	518
Flowing Pressure			54
			63
Final Shut-in	9:18 am	0	63
	9:24	6	61
	9:30	12	68
	9:36	18	73
	9:42	24	80
	9:48	30	84
	9:53	35	89
Final Hydro-static			1062

T.G. EASTLAND — testers ltd.

R.R. NO. 5 NORTH • EDMONTON, ALBERTA

TEST No. Two
Date Feb. 23/64
Ticket No. 6548

SERVICE REPORT

Well Name: H.B. FAN AM S. ISLAND RIVER M-41 L.S.D. M-41
Formation Tested: Slave Point
TYPE OF TEST: ☐ Standard ☑ Duals ☐ Straddle ☐ Casing
From: 6930' To: 7010' Tail Pipe: 80'
Main Hole Depth: 7010' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10¾" Weight:
Type of Drill Pipe: 4½" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7¼" - 7½"
REMARKS: Strong initial puff for 2 minutes. Open on ½" choke. Gas to surface in ¼ min. Fluid to surface in 19 minutes. Flowed salt water approximately 50 bbl/hr.

PRESENT DURING TEST

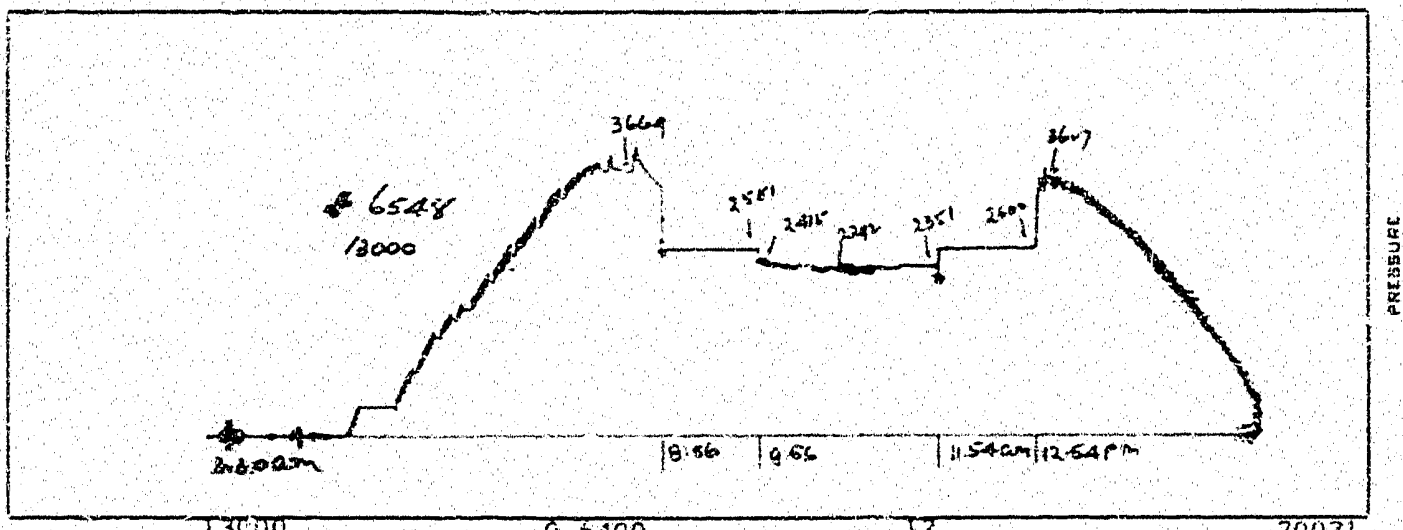
Your Representative C. A. Stuart
Our Operator G. Podmeroff
Toolpusher F. Kostyk
Drlg. Contractor Cascade Rig #18

TEST RESULT DATA

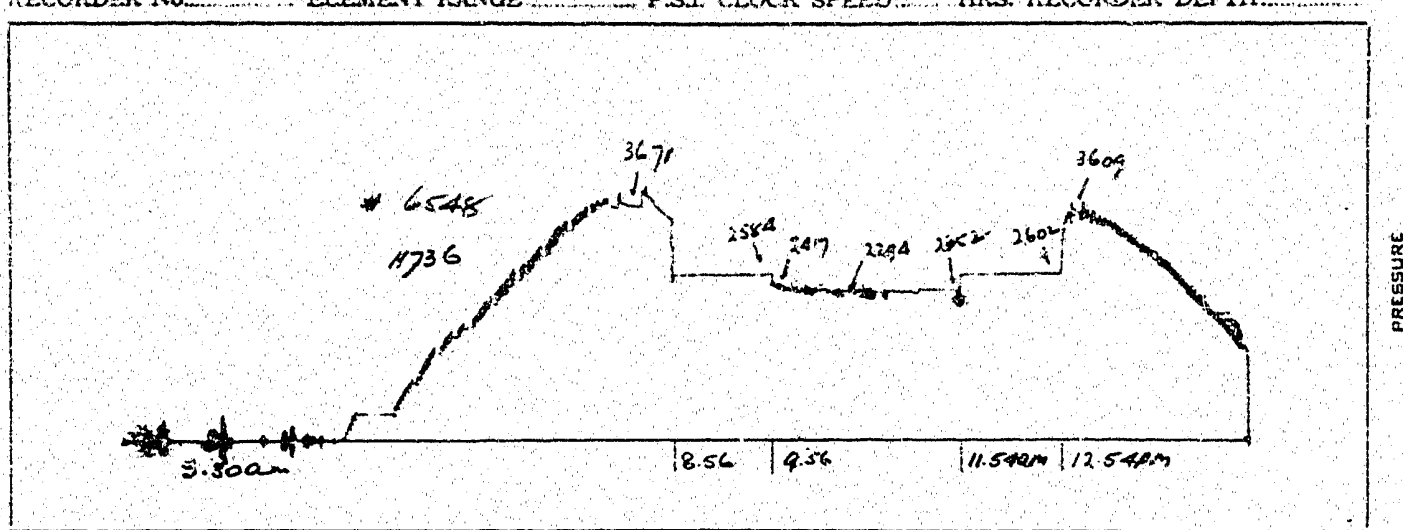
Started in Hole: 3:30 am Tool Opened: 9:56 am
Initial Shut-in: 60 Min. Flow Period: 118 Min
Final Shut-in: 60 Min. Out of Hole: "
Choke Bottom: ⅛"
Choke Surface: ¼"
Flow Rate 5700 Mcf/day Flare Line Riser: 2"
Mcf/day measured by: Side static gauge 20-30psig
Fluid Cushion: Max. Well Temp.: 240 °F
DRLG. FLUID: Viscosity: 210 Weight: 9.8 W.L. 4.8

FIELD (est.)		CORRECTED
3870	Initial Hydrostatic Pressure psig	3671
2770	Shut-In Press. #1 After 60 Min. psig	2584
2470	Initial Flowing Pressure psig	2417
2510	Max. Flowing Pressure psig	2352
2770	Shut-In Press. #2 After 60 Min. psig	2602

FLUID RECOVERY: 100 ft black salty mud,
80 ft salt water
(Ran 17 drill collars 6¼" OD, 2 7/8" ID)



RECORDER No. 13000 ELEMENT RANGE: 0-6400 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7002'
RECORDER No. 11736 ELEMENT RANGE: 0-7100 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7008'



TIME

Form No T 20

T.G. EASTLAND testers ltd.

DRILL STEM TEST PRESSURE REPORT

Well Name: H.B. PAN AM S. ISLAND RIVER M-41

Date: February 29, 1964 Test No. Two Ticket # 6548

Interval: 6930' to 7010' KB Formation: Slave Point

Gauge No. 11736 Depth of Element: 7008' KB B.E. Temp. 240°F

Cal. Equation P_g = 3622.56 - 13.49

	Time	T	Press. psig
Initial Hydro-static	----------		3671
Initial Shut-in	8:56 a.m.	0	2446
	9:02	6	2580
	9:08	12	2580
	9:14	18	2580
	9:20	24	2580
	9:26	30	2584
	9:32	36	2584
	9:38	42	2584
	9:44	48	2584
	9:50	54	2584
	9:56	60	2584
Flowing Pressure	----------		2294
			2352
Final Shut-in	11:54 a.m.	0	2251
	12:00 Nn	6	2595
	12:06	12	2595
	12:12	18	2595
	12:18	24	2598
	12:24	30	2598
	12:30	36	2598
	12:36	42	2598
	12:42	48	2602
	12:48	54	2602
	12:54	60	2602
Final Hydro-static	----------		3609

T.G. EASTLAND —— testers ltd.

R.R. No. 5 NORTH • EDMONTON, ALBERTA

SERVICE REPORT

TEST No. Three
Date March 2/64
Ticket No. 6549

Well Name: H.B. PAN AM ISLAND RIVER M-41 LSD M-41
Formation Tested: Slave Point
TYPE OF TEST: ☐ Standard ☒ Dual ☐ Straddle ☐ Casing
From: 7007' To 7032' Tail Pipe: 25'
Main Hole Depth: 7032' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10¾" Weight:
Type of Drill Pipe: 4½" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7¼" & 7¼"

REMARKS: Good initial puff. ¾" choke. Blow died after 35 minutes. Re-set tool. Dead after 90 minutes. Lost 9 ft of mud in annulus. Tool opened 18 ft off bottom. Skidded 12 ft while flowing.

PRESENT DURING TEST

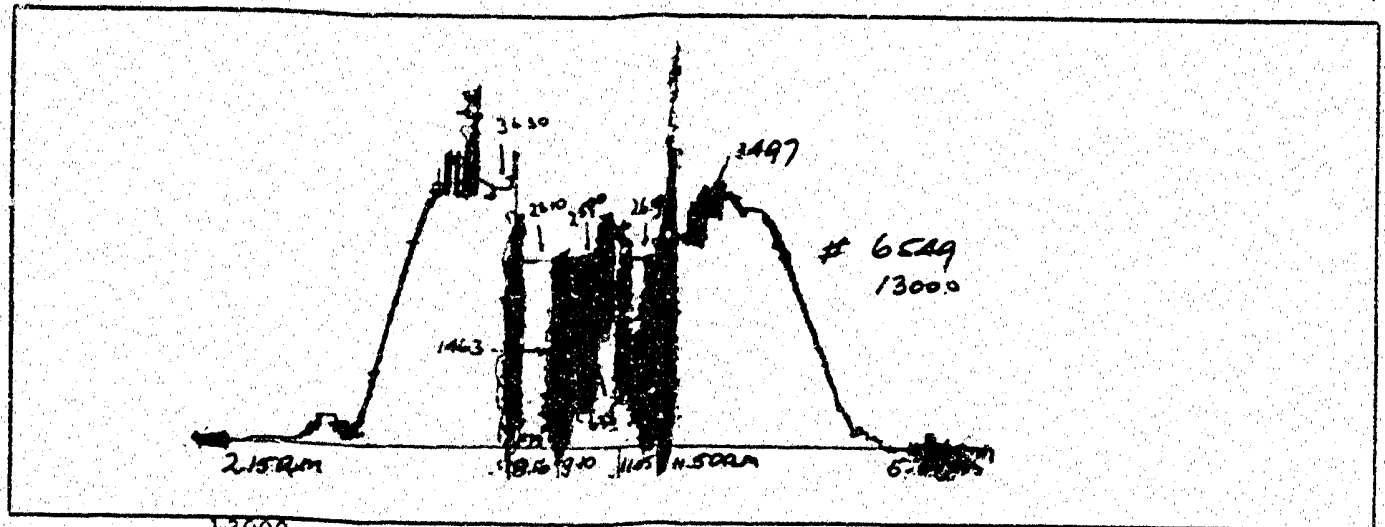
Your Representative: C. A. Stuart
Our Operator: G. C. Podmeroff
Toolpusher: F. Kostyk
Drlg. Contractor: Cascade Rig #18

TEST RESULT DATA

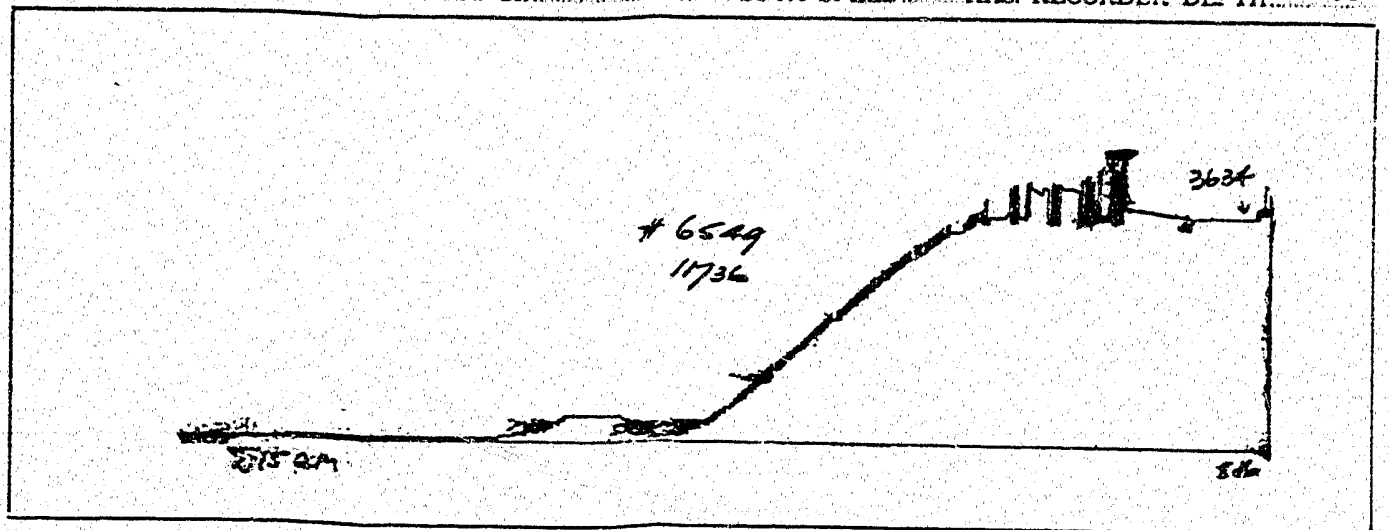
Started in Hole: 2:15 am Tool Opened: 9:10 am
Initial Shut-in: 52 Min. Flow Period: 115 Min
Final Shut-in: 45 Min. Out of Hole: 5:00 pm
Choke Bottom: ½" - ¾"
Choke Surface:
Flow Rate: Mcf/day Flare Line Riser:
Mcf/day measured by:
Fluid Cushion: Max. Well Temp. 250+ °F
DRLG. FLUID: Viscosity: 230 Weight: 9.8 W.L. 4.6

FIELD (psig)		CORRECTED (psig)
3740	Initial Hydrostatic Pressure	3630
2652	Shut-In Press. #1 After 52 Min.	2610
	Initial Flowing Pressure	479
	Max. Flowing Pressure	2590
2652	Shut-In Press #2 After 45 Min.	2619

FLUID RECOVERY 1060 ft salt-contaminated mud, slightly sulphurous
(Ran 20 drill collars, 6¼" OD, 2 7/8" ID)



RECORDER No. 13000 ELEMENT RANGE: 0-6400 P.S.I. CLOCK SPEED: 24 HRS. RECORDER DEPTH: 7024'
RECORDER No. 11736 ELEMENT RANGE: 0-7100 P.S.I. CLOCK SPEED: 6 HRS. RECORDER DEPTH: 7030'



Form No T 20

T.G. EASTLAND —— testers ltd.

R.R. NO. 6 NORTH • EDMONTON, ALBERTA

TEST No. Three
Date March 2/64
Ticket No. 6549

SERVICE REPORT

Well Name: H.B. PAN AM ISLAND RIVER M-41
Formation Tested: Slave Point
TYPE OF TEST: ☐ Standard ☒ Drill ☐ Straddle ☐ Casing
From: 7007' To: 7032' Tail Pipe: 25'
Main Hole Depth: 7032' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10¾" Weight:
Type of Drill Pipe: 4½" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7½" & 7¾"
REMARKS: Good initial puff. ¼" choke. Blow died after 35 minutes. Re-set tool. Dead after 90 minutes. Lost 9 ft of mud in annulus. Tool opened 18 ft off bottom. Skidded 12 ft while flowing.

L.S.D. M-41

TEST RESULT DATA

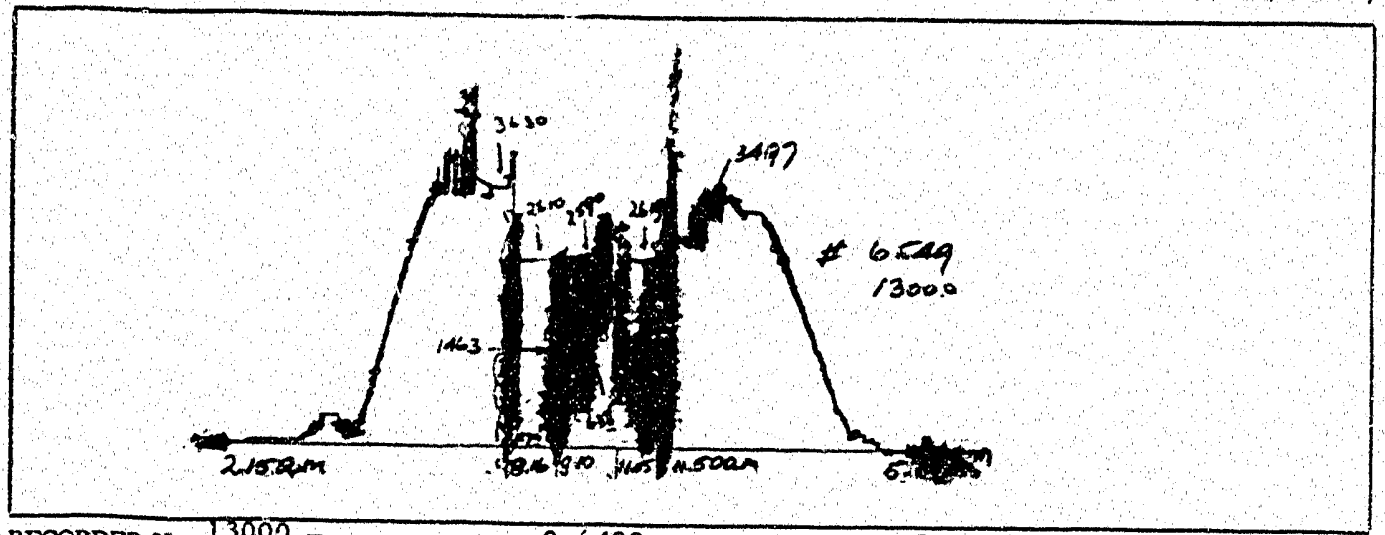
Started in Hole: 2:15 am Tool Opened: 9:10 am
Initial Shut-in: 52 Min. Flow Period: 115 Min
Final Shut-in: 45 Min. Out of Hole: 5:00 pm
Choke Bottom: ½" - ¼"
Choke Surface:
Flow Rate Mcf/day Flare Line Riser:
Mcf/day measured by:
Fluid Cushion Max. Well Temp. 250+ °F
DRLG. FLUID: Viscosity 230 Weight: 9.8 W.L. 4.6

FIELD (est.)		CORRECTED
3740	Initial Hydrostatic Pressure psig	3630
2652	Shut-In Press. #1 After 52 Min. psig	2610
	Initial Flowing Pressure psig	479
	Max. Flowing Pressure psig	2590
2652	Shut-In Press. #2 After 45 Min. psig	2619

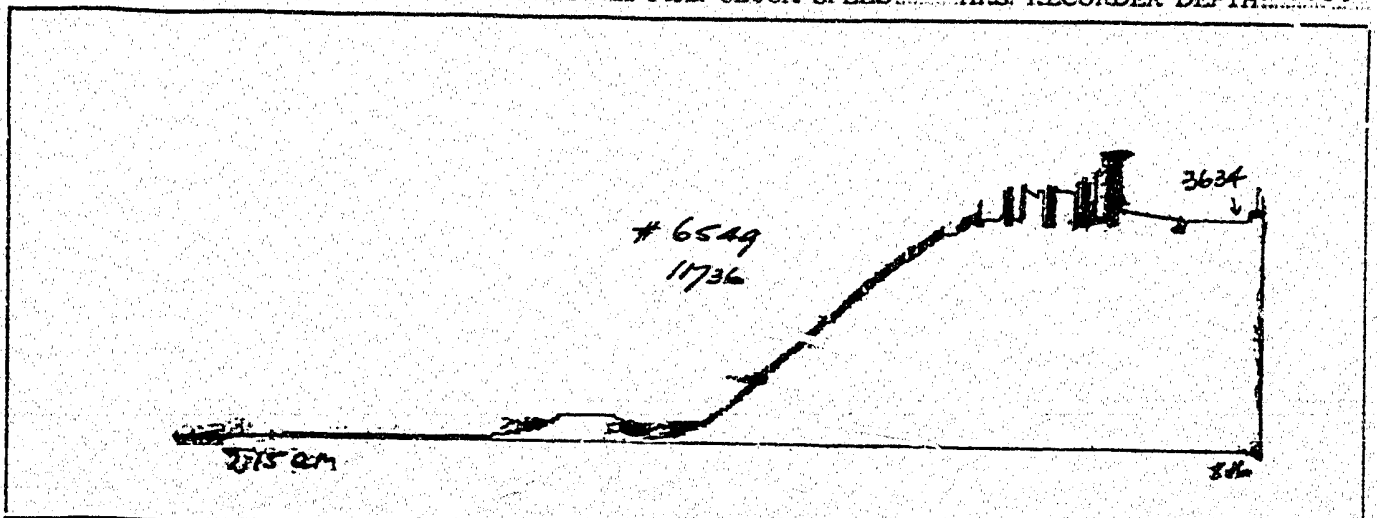
FLUID RECOVERY: 1060 ft salt-contaminated mud, slightly sulphurous
(Ran 20 drill collars, 6¼" OD, 2 7/8" ID)

PRESENT DURING TEST

Your Representative C. A. Stuart
Our Operator G. C. Podmeroff
Toolpusher F. Kostyk
Drlg. Contractor Cascade Rig #18



RECORDER No. 13000 ELEMENT RANGE: 0-6400 P.S.I. CLOCK SPEED: 24 HRS. RECORDER DEPTH: 7024'
RECORDER No. 11736 ELEMENT RANGE: 0-7100 P.S.I. CLOCK SPEED: 6 HRS. RECORDER DEPTH: 7030'



TIME

Form No T.20

T.G. EASTLAND testers ltd.

DRILL STEM TEST PRESSURE REPORT

Well Name: H.B. PAN AM S. ISLAND RIVER M-41

Date: March 2, 1964 Test No. Three Ticket # 6549

Interval: 7007' to 7032'KB Formation: Slave Point

Gauge No. 13000 Depth of Element: 7024'KB B.H. Temp. 250+°F

Cal. Equation P_c = 3238.31 - 19.76

	Time	T	Press. psig
Initial Hydro-static	----------		3630
Initial Shut-in	8:16 a.m.	0	356
	8:22	6	2603
	8:28	12	2607
	~~8:34~~	~~18~~	~~2607~~
	8:40	24	2607
	8:46	30	2607
	8:52	36	2610
	8:58	42	2610
	9:04	48	2610
	9:10	54	2610
Flowing Pressure	----------		1463
			638
Final Shut-in			2590
	11:05 a.m.	0	618
	11:11	6	2619
	11:17	12	2619
	11:23	18	2619
	11:29	24	2619
	11:35	30	2619
	11:41	42	2619
	11:50	45	2619
Final Hydro-static	----------		3497

T.G. EASTLAND —— testers ltd.

R.R. NO. 6 NORTH • EDMONTON, ALBERTA

TEST No. Four
Date March 6/64
Ticket No. 6550

SERVICE REPORT

Well Name: H.B. FAN AM S. ISLAND RIVER M-41 L.S.D. M-41
Formation Tested: Basal Slave Point
TYPE OF TEST: ☐ Standard ☒ Duals ☐ Straddle ☐ Casing
From: 7230' To: 7300' Tail Pipe: 70'
Main Hole Depth: 7300' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10¾" Weight:
Type of Drill Pipe: 4½" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7¾"

REMARKS: Good initial puff for 5 minutes. On ½" choke 5 mins. Weak air blow, dead in 5 minutes. On ¼" choke - weak air blow, dead in 15 minutes. Skidded 15 ft to bottom, Lost 15 ft mud in annulus.

PERSONNEL DURING TEST

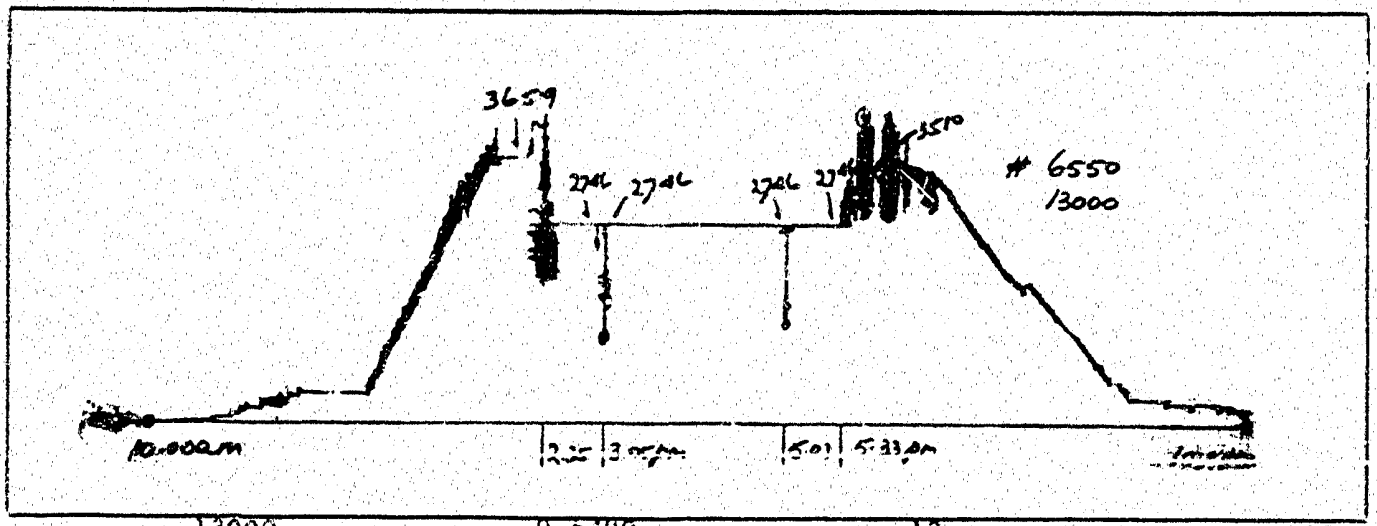
Your Representative C. A. Stuart
Our Operator G. C. Podmeroff
Toolpusher F. Kostyk
Drlg. Contractor Cascade Rig # 18

TEST RESULT DATA

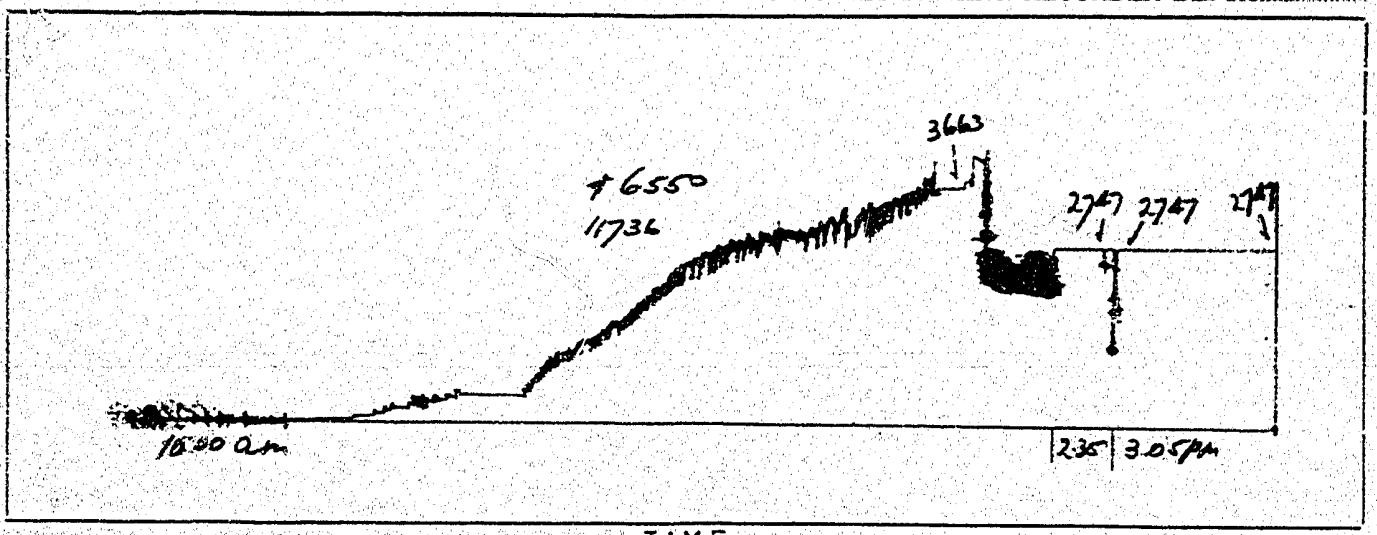
Started in Hole: 10 am Tool Opened: 3:05 p.m.
Initial Shut-in: 30 Min. Flow Period: 118 Min
Final Shut-in: 30 Min. Out of Hole: 10:00 p.m.
Choke Bottom: ½" - ¼"
Choke Surface: ¼"
Flow Rate Mcf/day Flare Line Riser:
Mcf/day measured by:
Fluid Cushion: Max. Well Temp.: 230 °F
DRLG. FLUID: Viscosity: 280 Weight: 9.5 W.L. 4.5

FIELD (est.)		CORRECTED
3820	Initial Hydrostatic Pressure psig	3659
2856	Shut-In Press. #1 After 30 Min. psig	2746
	Initial Flowing Pressure psig	
	Max. Flowing Pressure psig	
2856	Shut-In Press. #2 After 30 Min. psig	2746

FLUID RECOVERY: 330 ft drilling mud; 400 ft black salty mud
(Ran 26 drill collars 6¼" OD, 2 7/8" ID)



RECORDER No. 13000 ELEMENT RANGE: 0-6400 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7269'
RECORDER No. 11736 ELEMENT RANGE: 0-7100 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7275'



TIME

Form No T 20

T.G. EASTLAND testers ltd.

DRILL STEM TEST PRESSURE REPORT

Well Name: H.B. PAN AM S. ISLAND RIVER M-41

Date: March 6, 1964 Test No. Four Ticket # 6550

Interval: 7230' to 7300' KB Formation: Basal Slave Point

Gauge No. 13000 Depth of Element: 7269'KB B.H. Temp. 230°F

Cal. Equation P_c = 3238.31 - 19.76

	Time	T	Press. psig
Initial Hydro-static	----------		3659
Initial Shut-in	2:35 p.m.	0	1985
	2:41	6	2746
	2:47	12	2746
	2:53	18	2746
	2:59	24	2746
	3:05	30	2746
Flowing Pressure	----------		2746
	----------		2746
Final Shut-in	5:03 p.m.	0	1282
	5:09	6	2746
	5:15	12	2746
	5:27	18	2746
	5:33	30	2746
Final Hydro-static	----------		3510

F.G. EASTLAND — testers ltd.

R.R. NO. 6 NORTH • EDMONTON, ALBERTA

SERVICE REPORT

TEST No. Five
Date March 10/64
Ticket No. 6951

Well Name: H.B. PAN AM S. ISLAND RIVER M-41 L.S.D. M-41
Formation Tested: Elk Point
TYPE OF TEST: ☐ Standard ☒ Duals ☐ Straddle ☐ Casing
From: 7300' To: 7535' Tail Pipe: 235'
Main Hole Depth: 7537' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10¾" Weight:
Type of Drill Pipe: 4½" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7¼" - 7¼"
REMARKS: Good initial puff for 3 minutes. Open on ¼" choke. Good air blow, decreasing after 35 minutes. Dead in 90 minutes.

PRESENT DURING TEST

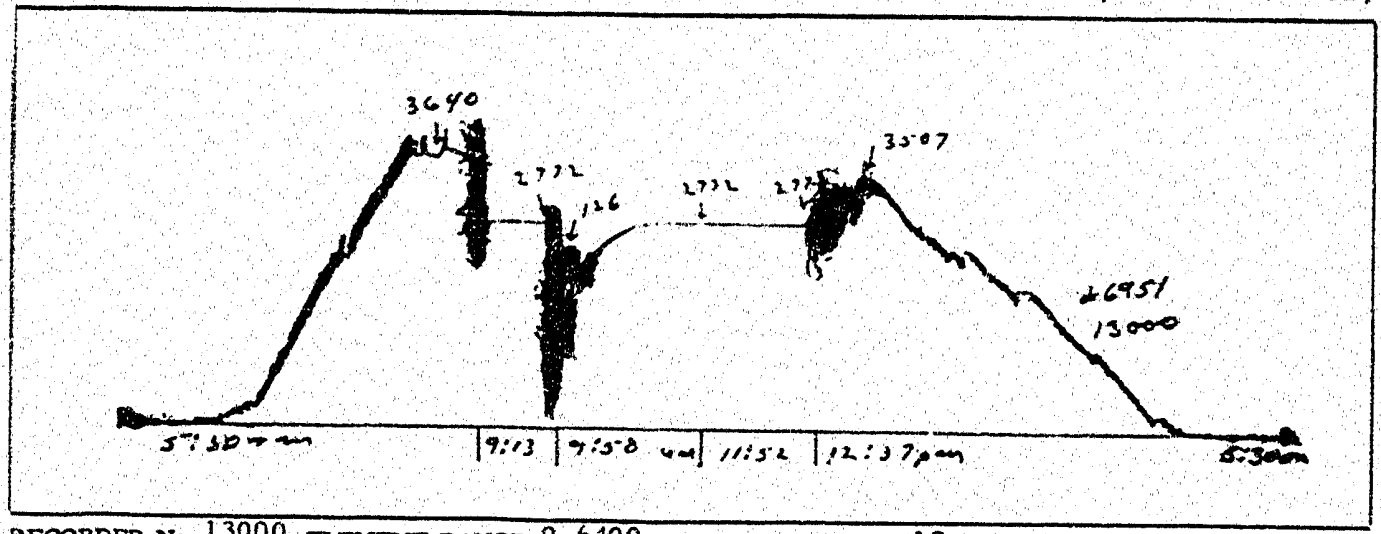
Your Representative C. A. Stuart
Our Operator C. C. Podmeroff
Toolpusher E. Kostyk
Drlg. Contractor Cascade Rig #18

TEST RESULT DATA

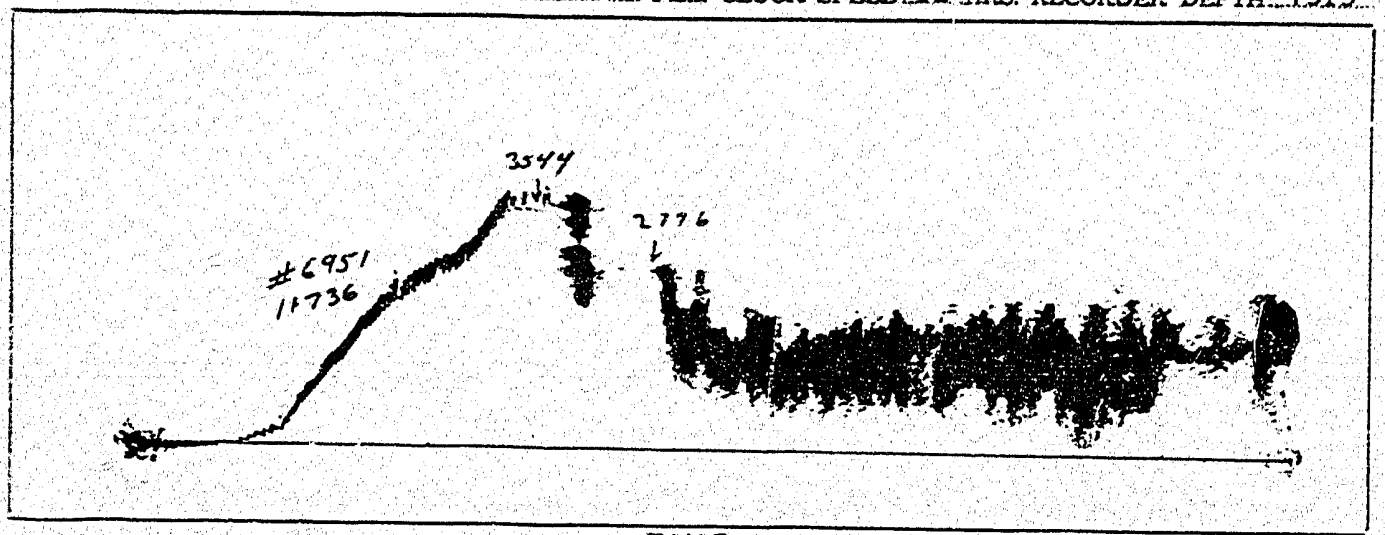
Started in Hole: 5:30 am. Tool Opened: 9:58 am
Initial Shut-in: 45 Min. Flow Period: 114 Min
Final Shut-in: 45 Min. Out of Hole: 5:30 pm
Choke Bottom: ¼"
Choke Surface: ¼"
Flow Rate Mcf/day Flare Line Riser:
Mcf/day measured by:
Fluid Cushion: Max. Well Temp.: 222 °F
DRLG. FLUID: Viscosity: 300 Weight: 9.3 W.L. 4.2

FIELD (est.)		CORRECTED
3774	Initial Hydrostatic Pressure psig	3640
2926	Shut-In Press. #1 After 45Min. psig	2772
200	Initial Flowing Pressure psig	126
2926	Max. Flowing Pressure psig	2772
2926	Shut-In Press. #2 After 45Min. psig	2772

FLUID RECOVERY: 300 ft contaminated mud, 5600 ft black salty water
(Ran 18 drill collars, 6¼" OD, 2 7/8" ID)



RECORDER No. 13000 ELEMENT RANGE: 0-6400 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7307'
RECORDER No. 11736 ELEMENT RANGE: 0-7100 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7313'



Form No. T 20

T.G. EASTLAND testers ltd.

DRILL STEM TEST PRESSURE REPORT

Well Name: H.B. PAN AM S. ISLAND RIVER M-41

Date: March 10, 1964 **Test No.** Five **Ticket #** 6951

Interval: 7300' to 7535' KB **Formation:** Elk Point

Gauge No. 13000 **Depth of Element:** 7307' KB **B.H. Temp.** 222°F

Cal. Equation P_c = 3238.31 - 19.76

	Time	T	Press. psig
Initial Hydro-static	----------		3640
Initial Shut-in	9:13 a.m.	0	2108
	9:19	6	2762
	9:25	12	2768
	9:31	18	2772
	9:37	24	2772
	9:48	30	2772
	9:49	36	2772
	9:55	42	2772
	9:58	45	2772
			126
Flowing Pressure	----------		2772
Final Shut-in	11:52 a.m.	0	2772
	11:58	6	2772
	12:04	12	2772
	|	|	|
	12:37 p.m.	45	2772
Final Hydro-static	----------		3507

T.G. EASTLAND — testers ltd.

R.R. No. 5 NORTH • EDMONTON, ALBERTA

TEST No. Six
Date March 15/64
Ticket No. 6952

SERVICE REPORT

Well Name: H.B. PAN AM S. ISLAND RIVER M-41 L.S.D. M-41
Formation Tested: Upper Chinchugs
TYPE OF TEST: ☐ Standard ☒ Duals ☐ Straddle ☐ Casing
From: 7830' To: 7916' Tail Pipe: 86'
Main Hole Depth: 7916' Rat Hole Depth:
Hole Size Tested: 9" Main Hole Rat Hole
Casing Depth: 828' Size: 10¾" Weight:
Type of Drill Pipe: 4½" FH Tubing:
Type of Packer(s): Conventional & Bobtail
Size of Rubber Element(s): 7½" - 7¼"

REMARKS: Worked packer 20 feet to bottom. Fair initial puff for 35 minutes. Open on ½" choke. Good air blow, dying down after 75 minutes. Light air blow at end of test.

PRESENT DURING TEST

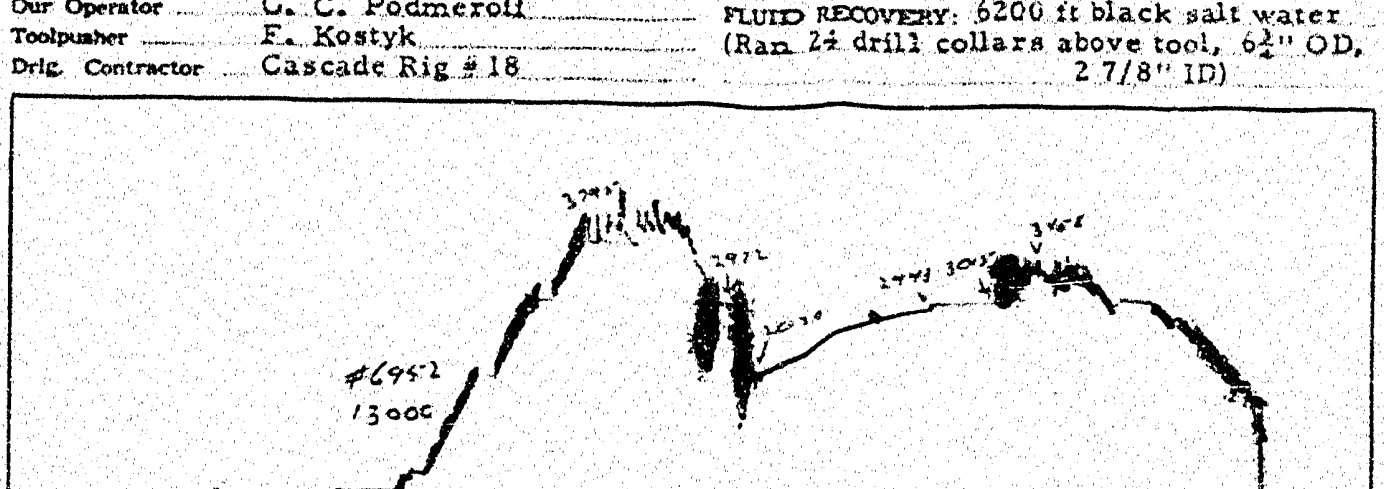
Your Representative C. A. Stuart
Our Operator C. C. Podmeroff
Toolpusher E. Kostyk
Drlg. Contractor Cascade Rig #18

TEST RESULT DATA

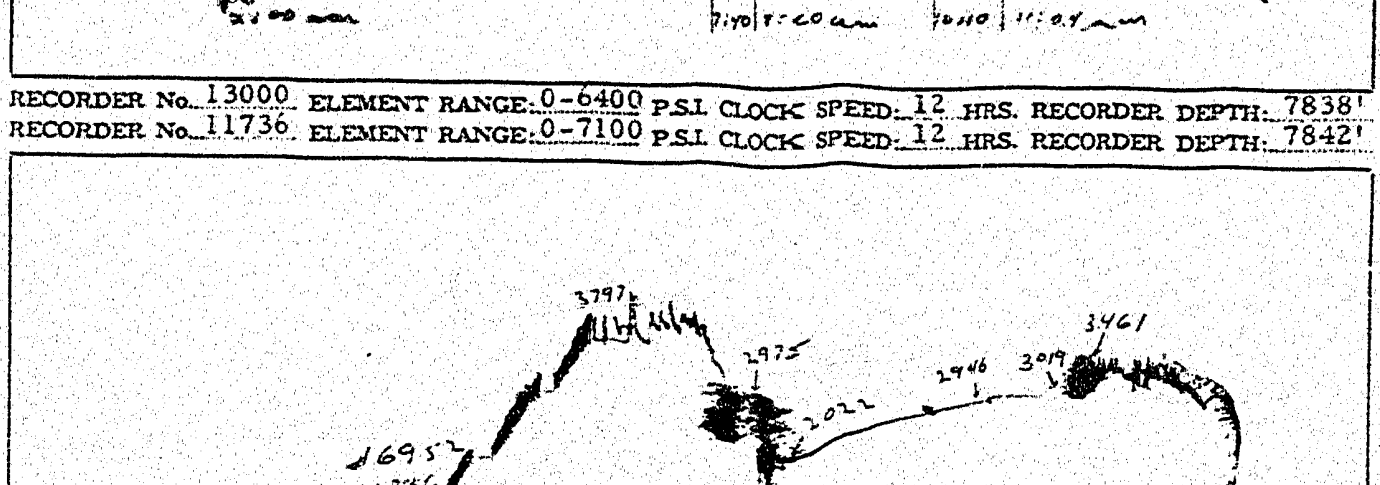
Started in Hole: 2:00 am Tool Opened: 8:10 am
Initial Shut-in: 30 Min. Flow Period: 120 Min
Final Shut-in: 5½ Min. Out of Hole: 5:00 pm
Choke Bottom: ½"
Choke Surface: ¼"
Flow Rate Mcf/day Flare Line Riser:
Mcf/day measured by:
Fluid Cushion: Max. Well Temp.: 235 °F
DRLG. FLUID: Viscosity: 290 Weight: 9.4 W.L. 3.4

FIELD (est.)		CORRECTED
3978	Initial Hydrostatic Pressure psig	3797
3060	Shut-In Press. #1 After 30 Min. psig	2975
2040	Initial Flowing Pressure psig	2022
2958	Max. Flowing Pressure psig	2946
3060	Shut-In Press. #2 After 5½ Min. psig	3019

FLUID RECOVERY: 6200 ft black salt water (Ran 2½ drill collars above tool, 6½" OD, 2 7/8" ID)



RECORDER No. 13000 ELEMENT RANGE: 0-6400 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7838'
RECORDER No. 11736 ELEMENT RANGE: 0-7100 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 7842'



T.G. EASTLAND testers ltd.

DRILL STEM TEST PRESSURE REPORT

Well Name: H.B. PAN AM S. ISLAND RIVER M-41

Date: March 15, 1964 Test No. Six Ticket

Interval: 7830' to 7916' KB Formation: Upper Chinchuga

Gauge No. 11736 Depth of Element: 7842'KB B.H. Temp. 235° F

Cal. Equation P_c = 3622_ 56 - 13_ 49

	Time	T	Press. psig
Initial Hydro-static			3797
Initial Shut-in	7:40 a.m.	0	2309
	7:46	6	2975
	7:52	12	2971
	7:58	18	2979
	8:04	24	2975
	8:10	30	2975
Flowing Pressure			2022
			2946
Final Shut-in	10:10 a.m.	0	2946
	10:16	6	3004
	10:22	12	3008
	10:28	18	3011
	10:34	24	3011
	10:40	30	3011
	10:46	36	3011
	10:52	42	3019
	10:58	48	3019
	11:04	54	3019
Final Hydro-static			3461

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

EDMONTON — CALGARY — FORT ST. JOHN

March 11, 1964

Laboratory Report Number F1854

H.B. Pan Am S. Island R. #41

Slave Point (7010.0' - 7032.0')

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Operator Hudson's Bay Oil & Gas Company Limited
Interval Cored 7010' To 7032'
Well No. H.B. - Pan Am. S. Island R. #441
Coring Fluid ---
Lab. No. F1054
Elevation 2213' KB. Formation Slave Point

Comments Prior to analysis the samples were dried at 210°F. for 24 hours.

Permeability measurements could not be made on sample numbers 5 and 9 due to open fractures. Sample number 19 contained large vugs on which the horizontal permeability was too high to measure. The fracture network contained in the rock increases the permeability values above those that would be obtained from the interconnected pore channels only.

The interpretation herein is based on information obtained from analysis of cores and/or material supplied by customer. Chemical & Geological Laboratories Ltd. assumes no responsibility nor makes any guarantee as to the type of production this well may yield. The opinion herein represents the best judgment of Chemical & Geological Laboratories Ltd.

CGL 19

10568 - 114 St.

CHEMICAL & GEOLOGICAL LABORATORIES LTD

EDMONTON, ALBERTA

FULL DIAMETER CORE STUDY

OPERATOR Hudson's Bay Oil & Gas Company Limited — (Wildcat) — W.D.A. Pan Am. S. Island B. #M1

LOCATION — FORMATION Slave Point — DEPTHS 7010' - 7032' — Received March 5, 1964 — LAB NO F1854

Footage of Slave Point formation cored	22.0'	No. of representative samples selected for analysis	21.
FEET OF CORE			
Received at laboratory for analysis	18.4'	Compared (to tested samples)	---
Not accounted for	3.6'	Broken sections not represented	---
Represented by samples	17.6'	Badly fractured sections not represented	0.8'

SUMMARY OF REPRESENTED SECTIONS — (represented / received) 17.6' / 18.4' — (represented / cored) 17.6' / 22.0'

Weighted average porosity	6.1 %	Maximum porosity	11.7 %
Weighted average K_H permeability on 14.9 feet	117. md.	Minimum porosity	0.9 %
Weighted average K permeability on 14.2 feet	8.9 md.	Maximum K_H permeability	1532. md.
Weighted average vertical permeability on 16.2 feet	0.28 md.	Minimum K_H permeability	0.09 md.
Weighted average maximum permeability	118. md	Maximum vertical permeability	3.2 md.
Porosity Feet	106.95	Minimum vertical permeability	0.02 md.

CORE WITH MAXIMUM PERMEABILITY

	100 md. or greater	between 1.0 and 9. md. inclusive	less than 1.0 md	(a)
Footage	5.5'	4.3'	6.4'	1.4'
Weighted average porosity	7.7 %	6.5 %	4.2 %	6.7 %
Weighted average K_H permeability	315. md.	3.6 md.	(on 5.1' 0.19 md.)	--- md.
Weighted average vertical permeability	0.06 md.	0.09 md.	0.07 md.	--- md.
Porosity feet	42.51	28.15	26.91	9.38

Col. 30

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Operator Hudson's Bay Oil & Gas Company Limited Well No. H.B. Pan Am. S. Island R. #41 Lab. No. F1854 Date Received: March 5, 1964

Sample Number	Mid-point of Sample in ft	Representative of Feet	Footage Rep.	Permeability md Vertical	Permeability md K M	Permeability md K'	% Porosity	Porosity Feet	Description
Core Number 1		7010° - 7019°	Cored 9.0 Feet		Received in lab. 9.0 Feet		Slave Point Formation		
1	7010.3	7010.0-7010.6	0.6	0.10	27.	1.6	4.4	2.64	Dol A NR X OccV OccPPV RC
2	7010.8	7010.6-7011.1	0.5	0.04	0.50	0.12	4.1	2.05	Dol A X RI OccV OccPPV RC
3	7011.7	7011.1-7012.0	0.9	0.07	0.24	0.07	1.5	1.35	Dol A X RI OccV RC
4	7012.3	7012.0-7012.8	0.8	0.07	0.17	0.12	3.3	2.64	Dol A X RI OccV RC
5	7013.2	7012.8-7013.5	0.7	(a)	(a)	(a)	6.1	4.27	Dol A X RI OccV OccPPV OVF
6	7014.2	7013.5-7014.5	1.0	0.07	0.18	0.17	2.2	2.20	Dol A X RI OccV RC
7	7015.4	7014.5-7015.6	1.1	3.2	1.1	1.1	4.6	5.06	Dol A X RI OccV RC
8	7016.2	7015.6-7016.5	0.9	0.07	5.2	3.9	5.2	4.68	Dol A X RI OccV OccPPV RC
9	7016.9	7016.5-7017.2	0.7	(a)	(a)	(a)	7.3	5.11	Dol A X RI V OccPPV OVF
10	7017.8	7017.2-7018.2	1.0	0.10	0.11	0.07	3.3	3.30	Dol A X RI OccV
No Sample		7018.2-7019.0	0.8	---	---	---	---	---	Rubble
Core Number 2		7019° - 7032°	Cored 13.0 Feet		Received in lab. 9.4 Feet		Slave Point Formation		
11	7019.6	7019.0-7020.0	1.0	0.08	1.7	1.1	3.9	3.90	Dol A X RI OccV OccPPV RC
12	7020.4	7020.0-7020.7	0.7	0.10	37.	2.6	8.0	5.60	Dol A X RI V RC
13	7021.0	7020.7-7021.5	0.8	0.02	1532.	1.4	6.3	5.04	Dol A X RI V RC
14	7021.9	7021.5-7022.2	0.7	0.04	24.	(a)	8.2	5.74	Dol A X RI V RC
15	7022.7	7022.2-7023.0	0.8	0.05	8.3	3.7	11.7	9.36	Dol A X RI V RC
16	7023.3	7023.0-7023.7	0.7	0.07	113.	62.	9.1	6.37	Dol A X RI V RC
17	7024.0	7023.7-7024.2	0.5	0.23	2.1	0.65	10.3	5.15	Dol A RI I PPV RC
18	7025.0	7024.2-7025.4	1.2	0.06	258.	17.	8.4	10.08	Dol A X RI V
19	7026.3	7025.4-7026.7	1.3	0.08	(a)	(a)	11.2	14.56	Dol A X RI V
20	7027.2	7026.7-7027.6	0.9	0.05	0.09	0.07	0.9	0.81	Dol A X OccV
21	7027.9	7027.6-7028.4	0.8	0.04	75.	61.	8.8	7.04	Dol A X V

CORE DESCRIPTION SYMBOLS

Ls	Limestone
R2	Reactive to cold 15% HCl
R1	Slightly reactive to cold 15% HCl
NR	Not reactive to cold 15% HCl
Dol	Dolomite
Ch	Chert
ds	Dense Siderite
Cg	Conglomerate
fSS	Fine Sandstone
MSS	Medium Sandstone
CSS	Coarse Sandstone
Sd	Sand
Sdy	Sandy
SL	Sand Lenses
fSL	Fine Sand Lenses
Sil	Siltstone
Sh	Shale
Shy	Shaly
ShL	Shale Lenses
PTSL	Paper Thin Shale Laminations
A	Anhydrite
Ca	Calcite
D	Dense
VSI	Very Slightly Intergranular
SI	Slightly Intergranular
I	Intergranular
Fg	Fragmental
Co	Corralline Fragments
ool	colitic
X	Crystals
InB	Interbedded
U	Unconsolidated
mudst	Mudstone
BlSh	Black Shale
Bit	Bitumen

LV	Large Vugs
V	Vuggy
SV	Slightly Vuggy
OccV	Occasional Vugs
PPV	Pin Point Vugs
Br	Brecciated
HF	Horizontal Fracture
VF	Vertical Fracture
RF	Random Fractures
HC	Horizontal Crack
VC	Vertical Crack
RC	Random Cracks
O	Open
St	Stylolite
Py	Pyrites
Pyb	Pyrobitumen
Gl	Glauconitic
S	Stained
Bt	Buttoned
(a)	Unsuitable for test
(b)	Fractured during test
K_H	Maximum Horizontal Permeability measured
K'	Taken 90° to K_H
TR	Trace
SP	Small Plug
FD	Full Diameter
NB.	K_H and K' are transverse permeability measurements on full diameter samples

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton – Fort St. John – Calgary

WATER ANALYSIS REPORT

Field North West Territories Well No. K.B. Pan Am S. Island R. M-41

Operator Hudson's Bay Oil And Gas Company Limited Date Received March 26, 1964

Formation Slave Point Depths 6930' - 7010'

Other pertinent data D.S.T. #2. Samples obtained by C.A. Stuart. Recovered 80' salt water; 100' gas cut mud. Bottom sample. Strong initial puff gas to surface in 1/2 minute at 5.7 m.m.c.f.. Elevation: 2212' KB.; 2198' Grd..

Date Sampled: March 1, 1964 Lab. No. E23278-2

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
43033	12192	1203	Present	319	91100		270		

MILLIGRAM EQUIVALENTS

1872.82	608.38	98.89		6.64	2569.02		4.43		

MILLIGRAM EQUIVALENTS IN PERCENT

36.29	11.79	1.92		0.13	49.78		0.09		

Total Solids in Parts per Million

By evaporation	169,580
After ignition	144,360
Calculated	148,900
Specific Gravity	1.100
Observed pH	6.6
Resistivity 0.067	ohm meters @ 68° F.

Properties of Reaction in Percent

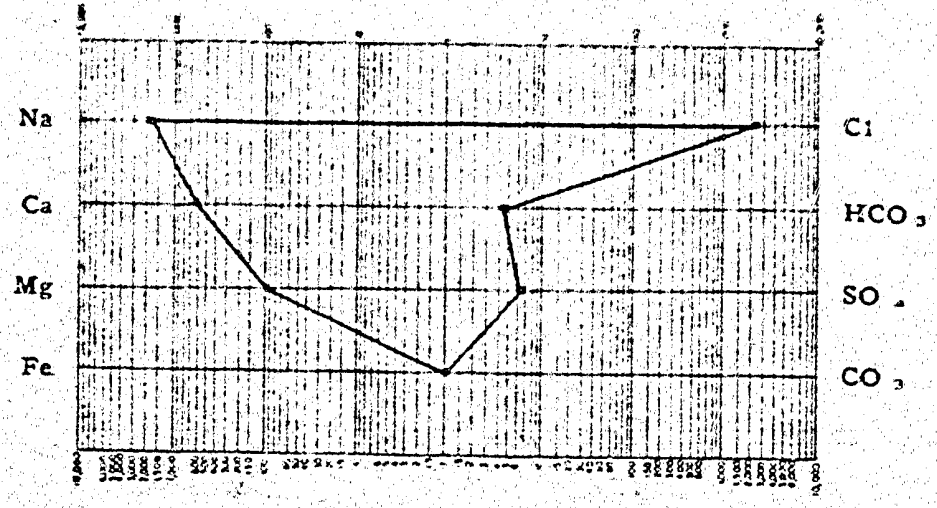
Primary salinity	72.58
Secondary salinity	27.24
Primary alkalinity	---
Secondary alkalinity	0.18
Chloride salinity	99.74
Sulfate salinity	0.26

Remarks and conclusions The total solids contained organic matter.

E23278-1: Top sample. pH:6.5; Chloride Content: 87,900 ppm..

Resistivity: 0.068 Ohm-Meters at 68°F..

LOGARITHMIC PATTERN
MEQ per unit



D.S.T. #2

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water oil or gas): Mud. & Water

Marks on sample container: Depth Formation footage & Recovery Top.

Sample obtained by: CA Stuart **Date:** March 1st 1964

Operator: Hudson's Bay oil & Gas

Mailing address for results: Hudson's Bay oil & Gas 10244 103 St Edmonton

Well name and No HB. pan Am S Island River H-41 **Field or Area:** N.W. T

Located in: L.S.D. **Sec.** **Twp.** **Rge** **W** **Mer.** **Elev:** K.B. 2212.30 Grd. 2198

Sample obtained from (line, tubing, separator, etc.): D.S.T

Pressure: (a) at point of sampling psig. **(b) Gas Bomb pressure** psig.

Temperature: (a) at point of sampling °F **(b) Separator** °F

Name of Zone and Formation: Slave point

Method of Production: D.S.T., Pump, Flowing, Swabbing,

Other (specify) Strong initial puff Gas to Surface in 1/2 min @ 5.7 MMcf.

If D.S.T. sample, D.S.T. results: Interval 6930' - 7010

Recovery 80' salt water 100' Gas Cut Muc.

Well production at sampling time: Oil Bpd; **Gas** 5.7 MMCFD; **Water** Bpd.

Perforations or open hole interval: 6930' - 7010'

Pressures: Reservoir , Tubing , Casing , Separator

REMARKS:

CA Stuart
(Signed)

Hudson's Bay oil & Gas
(Company)

DST #2

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water, oil or gas): Mud & water

Marks on sample container: Depth Formation footage Rec Bottom

Sample obtained by: CA Stuart Date: March 1st 1964

Operator: Hudson's Bay oil & Gas Co Ltd.

Mailing address for results: 10244 103 St Edmonton.

Well name and No. H.B. pan am S Island K M-41 Field or Area:

Located in: L.S.D. Sec. Twp. Rge W Mer. Elev: K.B. 2212 Grd. 2193

Sample obtained from (line, tubing, separator, etc.): D.S.T

Pressure: (a) at point of sampling psig. (b) Gas Bomb pressure psig.

Temperature: (a) at point of sampling °F (b) Separator °F

Name of Zone and Formation: Slave point

Method of Production: D.S.T., Pump, Flowing, Swabbing,

Other (specify) 6930' To 7010' Strong initial puff Gas To surface in 1/2 min @ 5.7 MMCF

If D.S.T. sample, D.S.T. results: Interval

Recovery 80' salt water 100' Gas cut mud

Well production at sampling time: Oil Bpd; Gas MCFD; Water Bpd.

Perforations or open hole interval: 6930' To 7010

Pressures: Reservoir , Tubing , Casing , Separator

REMARKS:

CA Stuart
(Signed)

Hudson's Bay oil & Gas Co.
(Company)

CCL-6

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT

Field North West Territories Well No. M.B. Fan Am S. Island R. M-41

Operator Hudson's Bay Oil And Gas Company Limited Date Received March 26, 1964

Formation Slave Point Depths 6987' - 7012'

Other pertinent data D.S.T. #3. Samples obtained by C.A. Stuart. Recovered 1060' sulphurous salty mud. Bottom sample. Light initial puff decreasing to nil in 35 minutes. Elevation: 2212' KB.; 2198' Grd..

Date Sampled: March 3, 1964 Lab. No. E23278-4

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO4	Cl	CO3	HCO3	OH	H2S
20807	3005	433	Present	602	41300		810		

MILLIGRAM EQUIVALENTS

905.12	249.75	35.59		12.52	1164.66		13.28		

MILLIGRAM EQUIVALENTS IN PERCENT

38.02	10.49	1.49		0.53	48.91		0.56		

Total Solids in Parts per Million

By evaporation	79,780
After ignition	65,560
Calculated	68,546
Specific Gravity	1.046
Observed pH	7.2
Resistivity	0.126 ohm meters @ 68° F.

Properties of Reaction in Percent

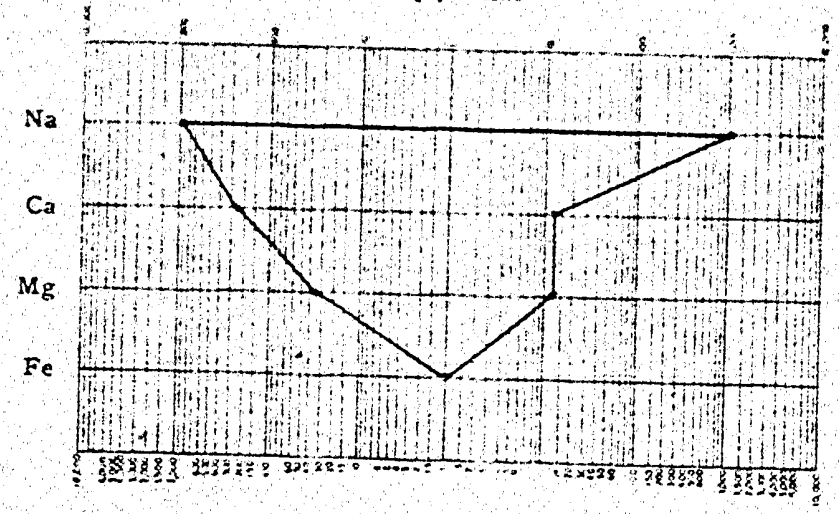
Primary salinity	76.04
Secondary salinity	22.84
Primary alkalinity	---
Secondary alkalinity	1.12
Chloride salinity	98.93
Sulfate salinity	1.07

Remarks and conclusions The total solids contained organic matter.

E23278-3: Top sample. pH: 6.9; Chloride Content: 38,950 ppm..

Resistivity: 0.128 Ohm-Meters at 68°F..

LOGARITHMIC PATTERN
MEQ per unit



DST #3

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water, oil or gas): Mud

Marks on sample container: DST #3 6987' To 7012' Slave Point Rec. Bottom

Sample obtained by: CA Stuart **Date:** March 3/64

Operator: Hudsons Bay oil & Gas Co. Ltd

Mailing address for results: 10244 103 St Edmonton Alta

Well name and No. HB. pen Am S Island River #4-41 **Field or Area:** N.W.T

Located in: L.S.D. **Sec.** **Twp.** **Rge** **W** **Mer.** **Elev:** K.B. 2212 Grd. 2198

Sample obtained from (line, tubing, seperator, etc.): DST

Pressure: (a) at point of sampling psig **(b) Gas Bomb pressure** psig.

Temperature: (a) at point of sampling Bottom Hole 250 °F **(b) Separator** °F

Name of Zone and Formation: slave point

Method of Production: D.S.T., Pump, Flowing, Swabbing,

Other (specify)

If D.S.T. sample, D.S.T. results: Interval 6987 - 7012
Light initial puff Decreasing
Recovery To Nil in 35 min
1060' sulphurs Salty mud.

Well production at sampling time: Oil Bpd; **Gas** MCFD; **Water** Bpd.

Perforations or open hole interval:

Pressures: Reservoir , Tubing , Casing , Separator

REMARKS:

CA Stuart
(Signed)

Hudson's Bay oil & Gas Co.
(Company)

DST #3

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water, oil or gas): Mud.

Marks on sample container: DST #3 Depth Formation Interval Rec
Top

Sample obtained by: CA Stuart Date: March 3/64

Operator: Hudson's Bay oil & Gas Co Ltd

Mailing address for results: 10244 103 St Edmonton

Well name and No. HB. pan Am S Island River # M-41 Field or Area: N.W.T

Located in: L.S.D. Sec. Twp. Rge W Mer. Elev: K.B. 2212
Grd. 2198

Sample obtained from (line, tubing, separator, etc.): D.S.T

Pressure: (a) at point of sampling psig. (b) Gas Bomb pressure psig.

Temperature: (a) at point of sampling Bottom Hole 250 °F (b) Separator °F

Name of Zone and Formation: slave point

Method of Production: D.S.T.. Pump, Flowing, Swabbing,

Other (specify) 6987' To 7012'

If D.S.T. sample, D.S.T. results: Interval Light initial Puff Decreasing To Nil in 35 Min

Recovery Rec. 1060' sulphurus. Salty Mud.

Well production at sampling time: Oil Bpd; Gas MCFD; Water Bpd.

Perforations or open hole interval:

Pressures: Reservoir , Tubing , Casing , Separator

REMARKS:

CA Stuart
(Signed)

Hudson's Bay oil & Gas Co Ltd.
(Company)

CCL-6

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Port St. John — Calgary

WATER ANALYSIS REPORT

Field North West Territories Well No. H.B. Pan Am S. Island R. #1-41

Operator Hudson's Bay Oil And Gas Company Limited Date Received March 26, 1964

Formation Basal Slave Point Depths 7230' - 7300'

Other pertinent data D.S.T. #4. Samples taken by C.A. Stuart. Recovered 420' black sulphurous salty mud; 330' drilling fluid. Bottom sample. Strong initial puff, decreasing to nil in 15 minutes.

Date Sampled: March 7, 1964 Lab. No. E23279-2

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
22577	5798	598	Present	476	46100		650		

MILLIGRAM EQUIVALENTS

982.10	289.32	49.16		9.90	1300.02		10.66		

MILLIGRAM EQUIVALENTS IN PERCENT

37.19	10.95	1.86		0.38	49.22		0.40		

Total Solids in Parts per Million

By evaporation	87,240
After ignition	71,400
Calculated	75,869
Specific Gravity	1.053
Observed pH	6.4
Resistivity 0.120	ohm meters @ 68° F.

Properties of Reaction in Percent

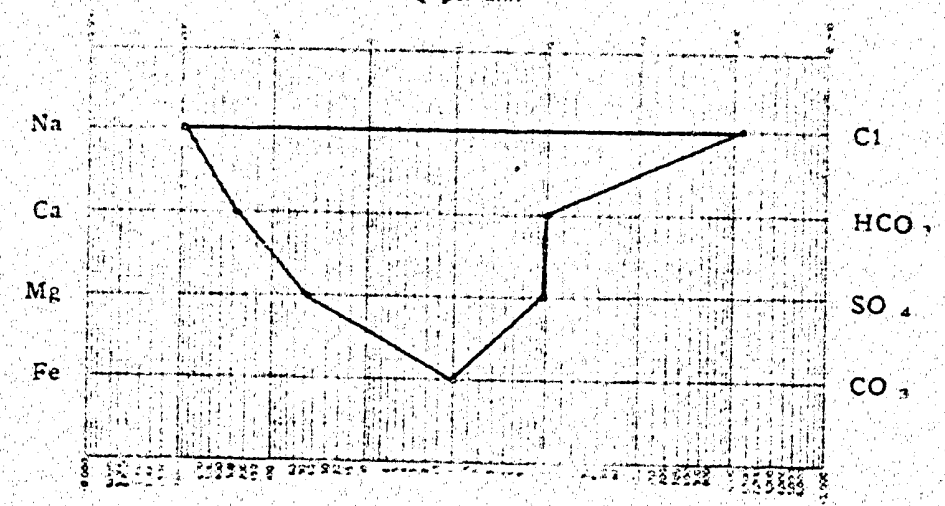
Primary salinity	74.38
Secondary salinity	24.82
Primary alkalinity	---
Secondary alkalinity	0.80
Chloride salinity	99.23
Sulfate salinity	0.77

Remarks and conclusions The total solids contained organic matter.

E23279-1: Top sample. pH: 7.6; Chloride Content: 19,660 ppm..

Resistivity: 0.226 Ohm-Meters at 68°F..

LOGARITHMIC PATTERN
MEQ per unit



DST #4

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water, oil or gas): mud & Salt Water

Marks on sample container: Depth interval Formation Rec Top

Sample obtained by: CA Stuart Date: March 7/64

Operator: Hudson's Bay oil & Gas Co Ltd.

Mailing address for results: 10244 103 St Edmonton

Well name and No. HB Pan Am S Island River # M-41 Field or Area:

Located in: L.S.D. Sec. Twp. Rge. W Mer. Elev: K.B. 2212 Grd. 2198

Sample obtained from (line, tubing, separator, etc.): D.S.T

Pressure: (a) at point of sampling psig. (b) Gas Bomb pressure psig.

Temperature: (a) at point of sampling Bottom Hole 230 °F (b) Separator °F

Name of Zone and Formation: Basal Slave point

Method of Production: D.S.T., Pump, Flowing, Swabbing,

Other (specify)

If D.S.T. sample, D.S.T. results: 7230 - 7300 Strong initial Puff Decreasing To Nil in Interval 15 min.

Recovery 420' Black sulphury salty mud
330' Drilling Fluid.

Well production at sampling time: Oil Bpd; Gas MCFD; Water Bpd.

Perforations or open hole interval:

Pressures: Reservoir , Tubing , Casing , Separator

REMARKS:

CA Stuart
(Signed)

Hudson's Bay oil & Gas Co Ltd.
(Company)

DST #4

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water, oil or gas): mud & water salty

Marks on sample container: Depth DST #4 Interval Rec Etc.

Sample obtained by: CA Stuart Date: March 7/64

Operator: Hudson's Bay oil & Gas Co. Ltd.

Mailing address for results: 10244 103 St Edmonton

Well name and No. H.B. pan Am S Island River # M-41 Field or Area: N.W.T.

Located in: L.S.D. Sec. Twp. Rge. W Mer. Elev: K.B. 2212 Grd. 2198

Sample obtained from (line, tubing, separator, etc.): DST

Pressure: (a) at point of sampling , psig. (b) Gas Bomb pressure psig.

Temperature: (a) ~~at point of sampling~~ Bottom Hole 230 °F (b) Separator °F

Name of Zone and Formation: Basal Slave point.

Method of Production: D.S.T., Pump, Flowing, Swabbing,

Other (specify) 7230' To 7300'

If D.S.T. sample, D.S.T. results: Interval Strong initial puff Decreasing To Nil in 15 Min.

Recovery 420' Black sulphury salty mud
330' Drilling Fluid

Well production at sampling time: Oil Bpd; Gas MCFD; Water Bpd.

Perforations or open hole interval:

Pressures: Reservoir , Tubing , Casing , Separator

REMARKS:

CA Stuart
(Signed)

Hudson's Bay oil & Gas Co.
(Company)

CCL-4

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Port St. John — Calgary

WATER ANALYSIS REPORT

Field North West Territories Well No. H.B. Pan Am. S. Island R. M-41

Operator Hudson's Bay Oil And Gas Company Limited Date Received March 26, 1964

Formation Elk Point Depths 7300' - 7535'

Other pertinent data D.S.T. #5. Sampled by C.A. Stuart. Recovered 5900' black salt water. Bottom sample. Strong initial puff, strong air blow; decreasing to nil in 90 minutes. Elevation: 2212' KB.; 2198' Grd..

Date Sampled: March 11, 1964 Lab. No. E23280-2

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
44466	12633	1288	Present	253	94200		540		Present

MILLIGRAM EQUIVALENTS

1934.30	630.39	105.87		5.26	2656.44		8.86		

MILLIGRAM EQUIVALENTS IN PERCENT

36.22	11.80	1.98		0.10	49.73		0.17		

Total Solids in Parts per Million

By evaporation	175,860
After ignition	144,600
Calculated	153,106
Specific Gravity	1.102
Observed pH	6.2
Resistivity 0.066	ohm meters @ 68° F.

Properties of Reaction in Percent

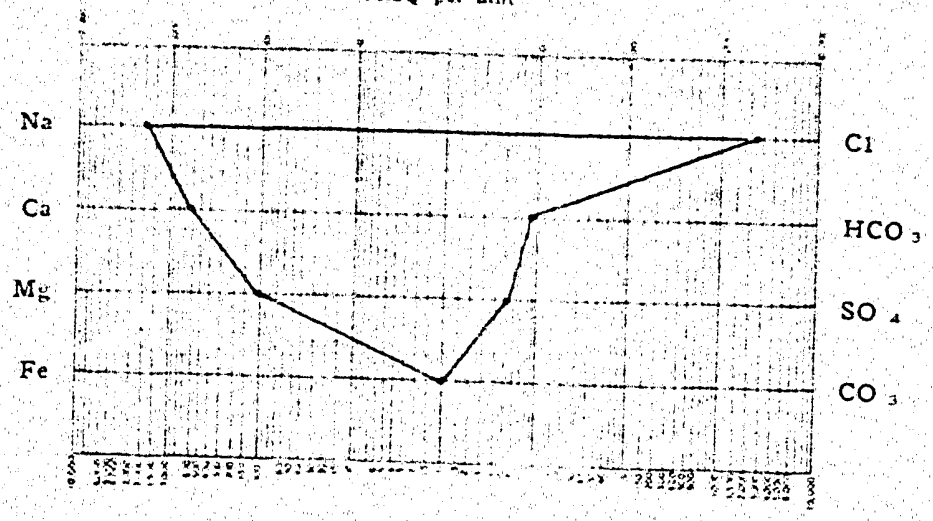
Primary salinity	72.44
Secondary salinity	27.22
Primary alkalinity	---
Secondary alkalinity	0.34
Chloride salinity	99.80
Sulfate salinity	0.20

Remarks and conclusions The total solids contained organic matter.

E23280-1: Top sample. pH: 8.5; Chloride Content: 6,420 ppm..

Resistivity: 0.603 Ohm-Meters at 68°F..

LOGARITHMIC PATTERN
MEQ per unit



D.S.T. #5

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water, oil or gas): salt water

Marks on sample container: Test # Well Name & Number. Interval Bottom Formation Rec

Sample obtained by: CA Stuart **Date:** March 11/64

Operator: Hudson's Bay oil & Gas Co Ltd.

Mailing address for results: 10244 103 St Edmonton Alta.

Well name and No. HB. Pen Am S Island River **Field or Area.**

Located in: L.S.D. M-41 **Sec.** **Twp.** **Rge** **W** **Mer** **Elev:** K.B. 2212 Grd. 2198

Sample obtained from (line, tubing, separator, etc.): D.S.T

Pressure: (a) at point of sampling psig. (b) Gas Bomb pressure psig.

Temperature: (a) at point of sampling Bottom Hole 222 °F (b) Separator °F

Name of Zone and Formation: Elk point

Method of Production: D.S.T., Pump, Flowing, Swabbing,

Other (specify)

If D.S.T. sample, D.S.T. results: Interval 7300 - 7535
Strong initial puff strong Air Blow
Recovery Decreasing to Nil in 90 min.
Rec 5900' Black Salt Water.

Well production at sampling time: Oil Bpd; Gas MCFD; Water Bpd.

Perforations or open hole interval: 7300 - 7535

Pressures: Reservoir , Tubing , Casing , Separator

REMARKS:

C A Stuart
(Signed)

Hudson's Bay oil & Gas
(Company)

D.S.T. #5

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water, oil or gas): Salt Water

Marks on sample container: Test # Interval Rec Well Formation Top.

Sample obtained by: C A Stuart Date: March 11/64

Operator: Hudson's Bay oil & Gas Co Ltd

Mailing address for results: 10244 103 St Edmonton

Well name and No. HB. Pan Am S Island R M-41 Field or Area:

Located in: L.S.D. Sec. Twp Rge W Mer. Elev: K.B. 2212 Grd. 2198

Sample obtained from (line, tubing, ~~separator~~, etc.): D.S.T.

Pressure: (a) at point of sampling psig. (b) Gas Bomb pressure psig.

Temperature: (a) at point of sampling Bottom Hole 222 °F (b) Separator °F

Name of Zone and Formation: Elk Point

Method of Production: D.S.T., Pump, Flowing, Swabbing,

Other (specify)

If D.S.T. sample, D.S.T. results: Interval 7300 - 7535
Strong Initial puff Strong Air Blow
Recovery Decreasing to Nil in 90 min
Rec 5900' Black Salt Water.

Well production at sampling time: Oil Bpd; Gas MCFD; Water Bpd.

Perforations or open hole interval: 7300' - 7535'

Pressures: Reservoir , Tubing , Casing , Separator

REMARKS:

C A Stuart
(Signed)

Hudson's Bay oil & Gas Co.
(Company)

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT

Field North West Territories — Well No. H.B. Pan Am S. Island R. #1-41

Operator Hudson's Bay Oil And Gas Company Limited — Date Received March 26, 1964

Formation Upper Chinchaga — Depths 7830'-7916'

Other pertinent data D.S.T. #6. Sampled by C.A. Stuart. Recovered 6200' black salt water. Bottom sample. Strong initial puff, strong air blow decreasing to light at end of test. Elevation: 2212' KB.; 2198' Grd..

Date Sampled: March 16, 1964 — Lab. No. E23281-2

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
45583	13794	1227	Present	252	97800		540		Present

MILLIGRAM EQUIVALENTS

1982.88	688.32	100.86		5.24	2757.96		8.86		

MILLIGRAM EQUIVALENTS IN PERCENT

35.77	12.41	1.82		0.09	49.75		0.16		

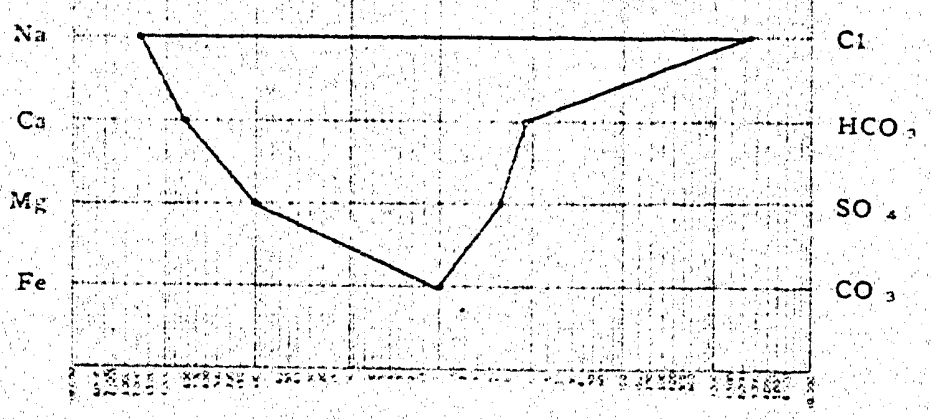
Total Solids in Parts per Million		Properties of Reaction in Percent	
By evaporation	183,220	Primary salinity	71.54
After ignition	149,640	Secondary salinity	28.14
Calculated	159,102	Primary alkalinity	---
Specific Gravity	1.104	Secondary alkalinity	0.32
Observed pH	6.0	Chloride salinity	99.82
Resistivity	0.064 ohm meters @ 68° F.	Sulfate salinity	0.18

Remarks and conclusions The total solids contained organic matter.

E23281-1: Top sample. pH: 6.6; Chloride Content: 35,900 ppm..

Resistivity: 0.136 Ohm-Meters at 68°F..

LOGARITHMIC PATTERN
MEQ per unit



DST # 6

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water, oil or gas): Salt Water

Marks on sample container: Bottom

Sample obtained by: CA Stuart Date: March 16/64

Operator: Hudson's Bay oil & Gas Co. Ltd.

Mailing address for results: 10244 103 St Edmonton

Well name and No. HB pan Am S island River # M-41 Field or Area:

Located in: L.S.D Sec. Twp. Rge W Mer. Elev: K.B. 2212 Grd. 2198

Sample obtained from (line, tubing, separator, etc.): DST

Pressure: (a) at point of sampling psig. (b) Gas Bomb pressure psig.

Temperature: (a) at point of sampling Bottom Hole 235 °F (b) Separator °F

Name of Zone and Formation: upper Chinchaga

Method of Production: D.S.T., Pump, Flowing, Swabbing,

Other (specify)

If D.S.T. sample, D.S.T. results: Interval 7830 - 7916. Good initial puff. Strong Air Blow Decreasing to light Air Blow at end of test

Recovery Rec 6200' Black salt water

Well production at sampling time: Oil Bpd; Gas MCFD; Water Bpd.

Perforations or open hole interval: 7830 - 7916

Pressures: Reservoir , Tubing , Casing , Separator

REMARKS:

CA Stuart
(Signed)

Hudson's Bay oil & Gas Co.
(Company)

D.S.T. # 6

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water, oil or gas): salt water

Marks on sample container: Well Name & Number Interval Formation Rec. Top

Sample obtained by: CA Stuart Date: March 16/64

Operator: Hudson's Bay oil & Gas Co Ltd.

Mailing address for results: 10244 103 St Edmonton Alta.

Well name and No. HB pan Am S Island River # M-41 Field or Area:

Located in: L.S.D. Sec. Twp. Rge W Mer. Elev: K.B. 2212 Grd. 2198

Sample obtained from (line, tubing, separator, etc.): D.ST

Pressure: (a) at point of sampling psig (b) Gas Bomb pressure psig.

Temperature: (a) at point of sampling Bottom Hole 235 °F (b) Separator °F

Name of Zone and Formation: Upper Chinchaga

Method of Production: D.S.T., Pump, Flowing, Swabbing,

Other (specify) 7830 - 7916

If D.S.T. sample, D.S.T. results: Interval Strong initial puff Strong Air Blow Decreasing To Light At End Recovery of Test Rec 6200' Black Salt Water

Well production at sampling time: Oil Bpd; Gas MCFD; Water Bpd.

Perforations or open hole interval: 7830 - 7916

Pressures: Reservoir , Tubing , Casing , Separator

REMARKS:

CA Stuart
(Signed)

Hudson's Bay oil & Gas Co.
(Company)

COL-4

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

10568 - 114th Street, Edmonton, Alberta — Phones: GA 2-5624 - GA 4-2562
428 - 35 Ave. N.E., Calgary, Alberta — Phones: CR 7-6149 - CR 7-0305

GAS ANALYSIS REPORT

FIELD ____ WELL NO. H.B. Pan Am. S. Island R. M-41

OPERATOR Hudson's Bay Oil And Gas Company LOCATION

FORMATION Limited Slave Point DEPTHS 6930' - 7010' LAB. NO. E23282

DATE SAMPLED March 1, 1964 REPORTED April 13, 1964

REMARKS D.S.T. #2. Conditions at source 60 psig. and 90°F.. Bottom hole temperature 250°F.. Strong initial puff. Gas to surface in 1/2 minute at 5.7 mmcf/d.. Recovery 80' salt water; 100' gas cut mud. Elevation: 2212' KB.; 2198' Grd..

ORSAT ANALYSIS

	% by Volume
Oxygen	
Nitrogen	
Carbon dioxide	
Hydrogen sulfide	
Total hydrocarbons	
Average "n"	

HYDROGEN SULFIDE
(by Tutwiler Method)

Grains of hydrogen sulfide per 100 cu. ft. of gas at 60° F. and	
14.7 lbs. per sq. in.	471
14.65 lbs. per sq. in.	470
Percentage of Hydrogen sulfide	0.75

GROSS B.T.U.

60°F. and 14.7 p.s.i.a.	881
60°F. and 14.65 p.s.i.a.	879

CHROMATOGRAPH

	% by Volume	G.P.M. in U.S. Gal. @ 60° F. & 14.696 PSI	G.P.M. in Imp. Gal. @ 60° F. & 14.65 PSI
Oxygen	0		
Nitrogen	2.42		
Carbon dioxide	10.13		
Hydrogen sulfide	0.75		
Methane	86.62		
Ethane	0.07		
Propane +	0.01	0.003	0.002
Isobutane			
N-butane			
Isopentane			
N-pentane			
Hexanes			
TOTAL	100.00	0.003	0.002

G.P.M.

Actual pentanes +		
Calculated at 12 lbs.		
Calculated at 15 lbs.		
Calculated at 22 lbs.		
Calculated at 26 lbs.		

Vapor pressure (calculated) of actual pentanes + ____

Specific Gravity Calculated	0.667
Specific Gravity by Weight	0.669

Remarks and Conclusions: Sample container arrived with 34 psig. with no indication of liquids. This sample contains 0.13% helium and 0.05% hydrogen, acid gas free. This percentage not used in complete analysis calculations.

D.S.T. #2 Gas Bottle Lab. No. E23282

OIL AND GAS CONSERVATION BOARD (PROVINCE OF ALBERTA)

STANDARD SAMPLE INFORMATION SHEET

INFORMATION TO BE FORWARDED WITH EACH SAMPLE OF WATER, OIL OR GAS (Please supply as much of the following information as possible. Please Print Clearly.)

Kind of sample (water, oil or gas): Gas.

Marks on sample container: Chemical & Geological container #351

Sample obtained by: CA Stuart Date: March 1st 1964

Operator: Hudson's Bay oil & Gas Co Ltd

Mailing address for results: 10244 103 St Edmonton

Well name and No. HB pan Am ⌄ Island R. M-41 Field or Area:

Located in: L.S.D. Sec. Twp. Rge. W Mer. Elev: K.B. 2212 Grd. 2198

Sample obtained from (line, tubing, separator, etc.): D.S.T

Pressure: (a) at point of sampling 60 psig. (b) Gas Bomb pressure 60 psig.

Temperature: (a) at point of sampling 90 °F (b) Separator °F
Bottom Hole 250 °F

Name of Zone and Formation: Slave Point

Method of Production: D.S.T., Pump, Flowing, Swabbing,

Other (specify) Strong initial puff Gas To Surface in 1/2 Min @ 5.7 MMcF Per Day

If D.S.T. sample, D.S.T. results: Interval 6930' To 7010'

Recovery 80' Salt Water 100' Gas Cut Mud.

Well production at sampling time: Oil Bpd; Gas °MCFD; Water Bpd.

Perforations or open hole interval: 6930 ' 7010

Pressures: Reservoir , Tubing , Casing , Separator

REMARKS:

CA Stuart
(Signed)

Hudson's Bay oil & Gas Co.
(Company)

Hudson's Bay Oil and Gas Co. Ltd.

Supplementary Well History Report

HB Pan Am S Island R M-41

HUDSON'S BAY OIL AND GAS COMPANY LIMITED

SUPPLEMENTARY WELL HISTORY REPORT

HB PAN AM S ISLAND R M-41

Signed: _____
District Superintendent

Date: April 28/66

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Section I - Summary of Well Data PAGE 1

Section IV - Logs PAGE 1

Section V - Analysis PAGE 2

Section VI - Completion Summary PAGE 2

APPENDIX

Well Schematic Diagram
Analysis gas Lab. No. E 66-529
water Lab. No. F 2800
water Lab. No. F 56-6

WELL HISTORY REPORT (as per request, April 15, 1966)

Section I - Summary of Well Data

(a) Well Name - HB Pan Am S Island R M-41

(b) Permittee, licensee, Lessee - Pan American Petroleum Corporation

(c) Name of Operator - Hudson's Bay Oil and Gas Company Limited

(d) Location - Unit M, Section 41, Grid 60° 10' N, 121° 00' W
Latitude 60° 00' 55" N
Longitude 121° 09' W

(g) Service Rig Contractor - Beta Well Service Limited
Rig No. 18
Type: Cooper Model AP-32-32 Double Drum

(h) Drilling Authority: No. 132 issued: January 17, 1964
Exploratory Licence No. 722 issued: February 22, 1966

(j) Elevations: Ground 2198 feet
KB 2212.3 feet

(m) Total Depth: 8185 feet KB
Plug Back Depth 8160.5 feet KB (GRN log measurement)

(n) Suspended shut in Slave Point Gas Well - March 4, 1966
(o) Service Rig Released: March 4, 1966.

Section IV - Logs

	Logs	Date Run	Interval From	To
Open Hole	Induction Electric Log	Mar.20/64	8154	829' KB
	Sonic, Gamma Ray Caliper	Mar.20/64	8150	829' KB
	(Received at NANR on April 30/64)			
Casing				
	Gamma Ray Neutron	Feb.27/66	8151	6800' KB
	Completion Record	Mar.3/66	7000	6780' KB
	(Forwarded from HBOG Exploration Dept. Calgary on April 4/66)			

Section V - Analysis

Drilling Operations

Lab No	Sample	from	to	sources	Remarks
F 1854	core	7010	7032	-	Slave Point
E23278-2	water	6930	7010	DST-2	Bottom sample
E23278-4	water	6987	7012	DST-3	Bottom sample
E23279-2	water	7230	7300	DST-4	Bottom sample
E23280-2	water	7300	7535	DST-5	Bottom sample
E23281-1	water	7830	7916	DST-6	Bottom sample
E23282	gas	6930	7010	DST-2	G.T.S. in 1-1/2 mins. @ 5.7 MMCFD

Completing and Testing Operations (February and March 1966)

F 66-6	water	6938	6944	Tank sample	End of 4 point AOF test
F 2800	water	6938	6944	tank sample	After 25 hours flowing
E 66-529	gas	6938	6944	tubing sample	End of AOF test.

NOTE: Last three analysis attached.

Section VI - Completion Summary

(a) Tubing Record

The tubing was run on March 2, 1966 as following (bottom to top)

1 - 4 foot 2-7/8 inch OD pup joint
1 - 2-7/8 inch Otis "N" Landing nipple (ID-2.255 inch)
1 - 4 foot 2-7/8 inch perforated pup joint
1 - 2-7/8 inch x 5-1/2 inch Lane Wells BOCF-9 packer (17 lb. to 20 lb.) ID - 2.437 inch
1 - 32 foot joints of 2-7/8 inch OD, 6.5 lb., J-55 EUE tubing with teflon ring modified coupling
1 - 2-7/8 inch Otis S-1 landing nipple (2.313 inch) with teflon ring modified coupling
then 219 joints of 2-7/8 inch OD, 6.5 lb., J-55 EUE tubing with teflon ring modified couplings to surface.

The bottom of the tubing is at 6873 feet KB with mid packer rubbers at 6860 feet KB. The packer was set in 18000 pound compression with a stripper rubber in the tubing spool and the tubing hung on the 6 inch series 900 x 2-7/8 inch EUE hanger flange (hanger threads modified with teflon ring).

(b) Perforation Record

The casing was perforated on March 3, 1966 by Schlumberger of Canada. The interval was 6938 to 6944 feet KB with 4 jets per foot. The charges used were 2-1/8 inch "Crack Jets" with a total of 25 shots used.

(d) Acidization Record

The Slave Point perforated interval was acidized with 1000 gallons of Dowell XFMW acid on March 3, 1966. The acid was squeezed to the formation at 1800 psi at 5 BPM and gradually dropped to 900 psi at 5 BPM. The immediate shut in pressure was zero.

(e) Back Pressure Test

See Canadian Well Services and Tank Co. report.

Tubular goods inhibiting and shut in Record
Prior to setting the packer the annulus was filled with inhibited water (0.5 percent Corban 302) topped with 3 barrels of diesel fuel. Following the back pressure test, an Otis PS-1 plug was set in the Otis S-1 landing nipple at 6825 feet KB. The tubing was filled with inhibited water (0.5 percent Corban 302) topped with 2 barrels of diesel fuel. The master valve and casing valves were then chained and padlocked.

DRK/pr
April 28/66

APPENDIX

Well Schematic Diagram

Analysis gas Lab. No. E 66-529
water Lab. No. F 2800
water Lab. No. F 66-6

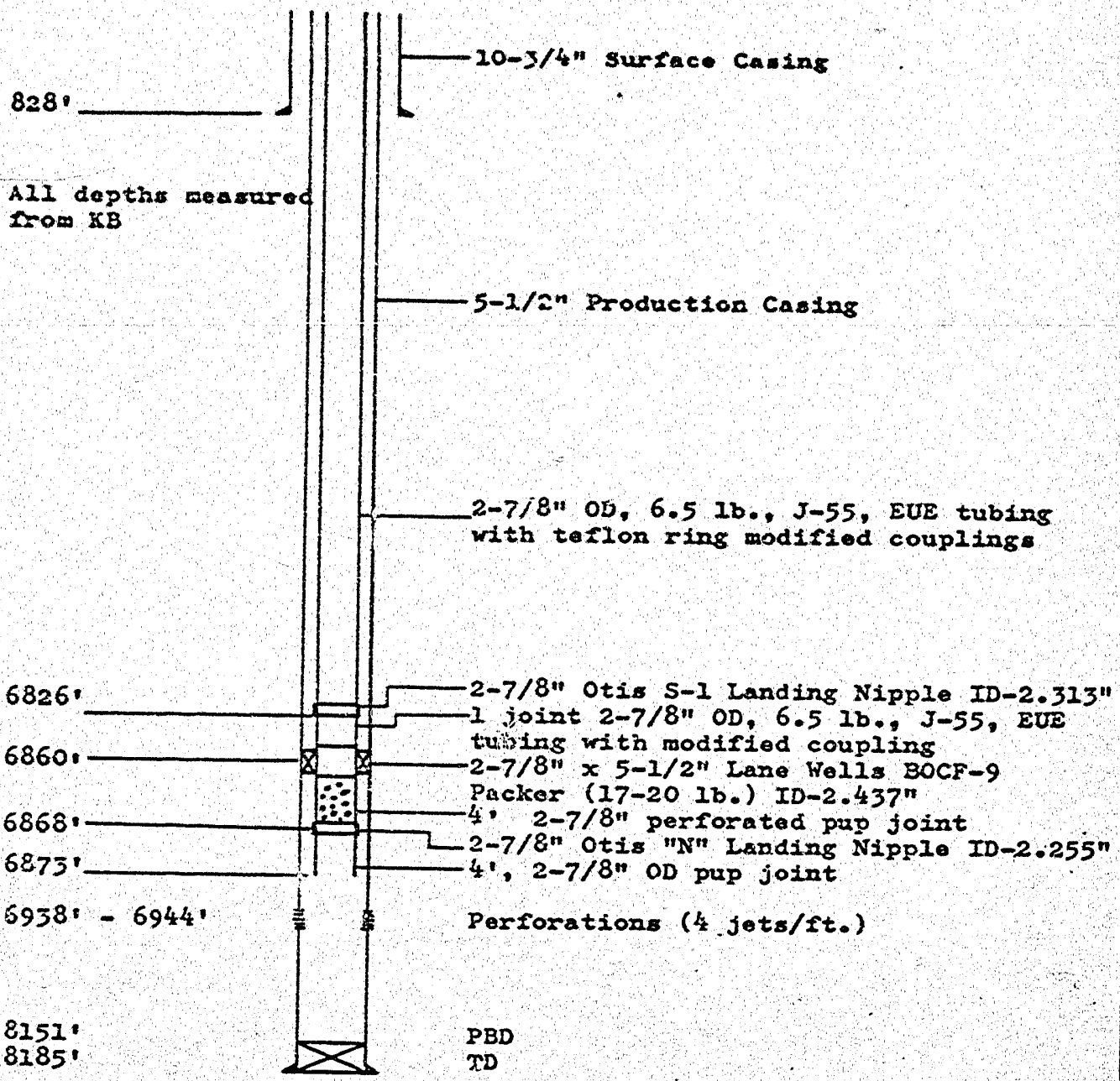
M-1366

KB Elevation 2212.3'
KB To Surface Casing Flange:
GR Elevation 2198'

Hudson's Bay Oil and Gas Company Limited

PRODUCTION DEPARTMENT

Schematic Diagram of Downhole Equipment



Well Name: HB Pan Am S Island R M-41
Date: April 27, 1966

CCL-6

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

3)

GAS ANALYSIS REPORT: Lab. No. K66-529 Received: March 14, 1966 Reported: March 17, 1966

Well: H.B. Pan Am. S. Island K-M-41 Operator: Canadian Well Services And Tank Co. Ltd.

Field or Area: South Island River, N.W.T. Location: _____ Elev.: K.B. _____ Grd. _____

Zone and Formation: Slave Point Sample Interval: ~~6931~~ 6938 - 6944 Ft.

Well production at sampling time: Oil _____ bpd; Gas _____ MCFD; Water _____ bpd.

Sampled from _____ Sampled by: _____ Date: March 8, 1966

Pressure: (a) at point of sampling 1137 psig (b) Gas Bomb pressure 1137 psig

Temperature: (a) at point of sampling 120 °F (b) Separator _____ °F

Pressures: Reservoir _____ Tubing _____ Casing _____ Separator _____

OTHER PERTINENT DATA Sampled at 4:30 A.M., March 8, 1966. (Run 4)

(Signed)

COMPOSITION	% by Volume	G.P.M. in Imp. Gal. @ 60°F. & 14.65 PSIA
Helium		
Hydrogen sulfide	1.67	
Carbon dioxide	10.04	
Oxygen	.00	
Nitrogen	1.70	
Methane	85.23	
Ethane	1.34	
Propane	.02	.005
Isobutane	.00	.000
N-butane	.00	.000
Isopentane	.00	.000
N-pentane	.00	.000
Hexanes	.00	.000
Heptanes +	.00	.000
TOTAL	100.00	.005

G.P.M. (Calculated)

pentanes +	.000
at 12 lbs.	.000
at 15 lbs.	.000
at 22 lbs.	.000
at 26 lbs.	.000

SPECIFIC GRAVITY

Calculated	.675
by Weight	.680

CRITICALS (Calculated)

Pc	721.2
Tc	370.1

VAPOR PRESSURE (Calc.) of pentanes + .00

H_2S Grains per 100 cu. ft. @ 60°F. & 14.65 p.s.i.a. 1047

GROSS B.T.U. (Calc.) @ 60°F. & 14.65 p.s.i.a. 893.7

DEW POINT (Calc.) p.s.i.	950	1050	1200
F A H	-48	-46	-43

REMARKS

The C_4 to C_{7+} components were present in trace amounts and may have totaled to 0.01% by volume. There were four containers received with identical information. In two of the containers there were no liquids and in the other two a small amount of water was present. The reported analysis was made on the samples with no water being present. A check on the samples with the water yielded identical hydrocarbon composition.

CHEMICAL & GEOLOGICAL LABORATORIES LTD. WATER ANALYSIS Lab No. 12800

Received: March 9, 1966 Reported: March 14, 1966 Well: Location: H.B. Pan Am. South Island R-M-41

Operator: Hudson's Bay Oil And Gas Company Limited Field or Area: South Island River, N.W.T.

Elev.: K.B. 2212.3' Grd. 2198' Zone/Formation: Slave Point Sample Interval: 6938' - 6944'

Method of Production: Sampled from: Tank Sampled by: C.W.S. Date: March 4, 1966

OTHER PERTINENT DATA Sampled at 7:00 P.M.

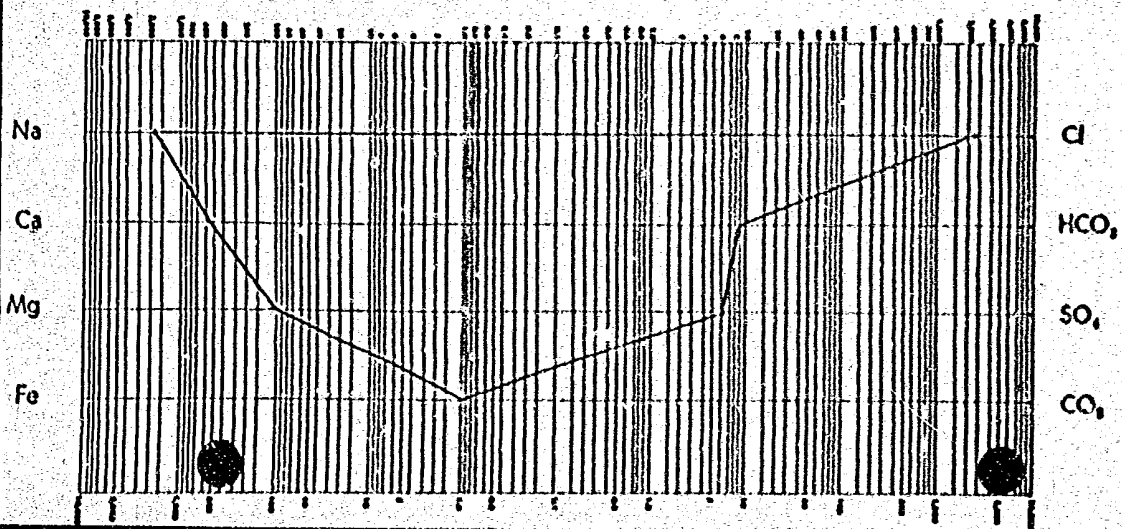
(Signed)

	Na&K		Ca	Mg					SO_4	Cl			CO_3	HCO_3		
Mg./L	39,951		11,935	1,361					300	86,172				550		
Meq./L	1737.88		595.56	111.87					6.24	2430.05				9.02		
Meq. %	35.53		12.18	2.29					0.13	49.69				0.18		

Total Solids Mg/L: By Evaporation 150,670 Fe Specific Gravity 1.096 @ 69°F. Observed pH 6.4 @ 69 °F

Calculated 140,269 After Ignition 137,460 H_2S Present Refractive Index 1.3590 @25°C Resistivity 0.064 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

This sample has the characteristics of a Slave Point formation water.

(1)

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS Lab No. F66-6

Received: March 11, 1966 Reported: March 15, 1966 Well: Location: H.B. Pan Am. S. Island #R-M-41

Operator: Hudson's Bay Oil And Gas Company Limited Field or Area: South Island River, N.W.T.

Elev.: K.B. Grd. Zone/Formation: Slave Point

Method of Production: Sampled from: ~~6823'~~ 6938-6944' KB → Sample Interval

OTHER PERTINENT DATA Stock tank sample. Sample taken at 4:30 A.M. Sampled by: Canadian Well Services and Tank Co. Ltd. Date: March 8, 1966

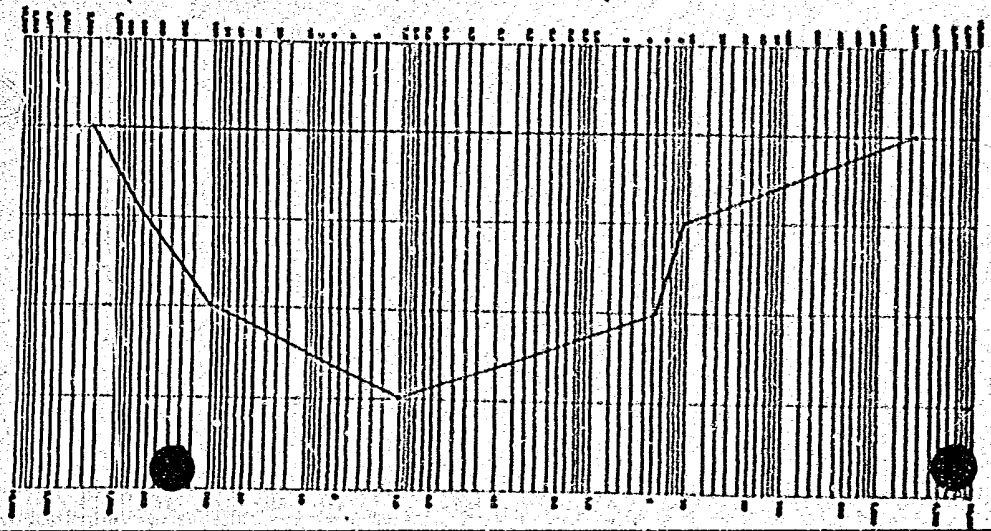
(Signed)

	Na		Ca	Mg					SO_4	Cl			CO_3	HCO_3		
Mg./L	40,765		11,935	1,264					260	87,174				550		
Meq./L	1773.28		595.50	103.90					5.41	2458.31				9.02		
Meq. %	35.86		12.04	2.10					0.11	49.71				0.18		

Total Solids Mg/L: By Evaporation 167,540 Fe Specific Gravity 1.096 @ 75°F. Observed pH 6.0 @ 76 °F

Calculated 141,948 After Ignition 138,510 H_2S Present Refractive Index 1.3573 @ 76°F. Resistivity 0.065 ohm meters @ 68 °F

Pattern Unit Meq./L

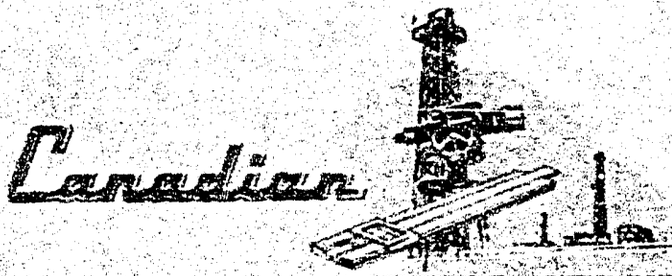


Remarks and Conclusions:

This sample has the characteristics of a Slave Point formation water.

FIELD OFFICE

Gas Test Department



WELL SERVICES AND TANK CO. LTD.

940 - 8th AVENUE S.W.

PHONE 263-4970

CALGARY, ALBERTA

HUDSON'S BAY OIL & GAS COMPANY LTD.

HB PAN AM SOUTH ISLAND RIVER Mbl

FORMATION: SLAVE POINT

Canadian

WELL SERVICES AND TANK CO. LTD.

HB PAN AM SOUTH ISLAND RIVER M-1

1. FIELD NOTES

2. GAS CALCULATIONS

3. WESTERN PRESSURE CONTROL

4. GAS ANALYSIS

5. A. O. F. GRAPH

6. DELIVERABILITY GRAPH

Canadian

WELL SERVICES AND TANK CO. LTD.

FIELD NOTES

C.W.S. TANK. CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELL H.B. Pan Am S. Island R M41 CHOKE SIZE 64/64 inches RATE OF FLOW _____ SHEET NO. 1 DATE March 3, 1966

HIGH STAGE FLOW RECORDER — ORIFICE SIZE _____ x METER RUN SIZE _____

LOW STAGE FLOW RECORDER — ORIFICE SIZE _____ x METER RUN SIZE _____

DESCRIPTION OF TEST: Clean up Well

TIME	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS				REMARKS
	TUBING PRESS PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H_2O	M.R. TEMP. °F	STAT. PRESS. PSIG	DIFF PRESS. "H_2O	M.R. TEMP °F	TANK #1 OIL FT.INS.	TANK #2 OIL FT.INS.	TANK TEMP. °F	BARRELS PRODU-CED	
6:00 PM	450		64°			OPEN	WELL TO FLAIR		BYPASS	UNIT @ 4:GO PM				Pre acid clean-up
7:00	450		72											
8:00	450		78											
9:00	450		82											
10:00	450		86											
11:00	450		88											
12:00MID	475		92											
1:00AM	475		96											
2:00am	475		102											- March. 4
3:00	475		106											
4:00	475		109											
5:00	475		111											
6:00	475		113											
7:00	480		115											
8:00	480		116											
														Acidized: 1000 U.S. Gal. 15% XFHW HCl @ 8:30 A.M. 4 March, 1966

— ark

C.W.S. TANK. CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELL H.B. Pan Am S. Island R M-1 CHOKE SIZE 64-64 Inch. RATE OF FLOW _____ SHEET NO. 2 DATE March 4, 1966

HIGH STAGE FLOW RECORDER
ORIFICE SIZE x METER RUN SIZE

LOW STAGE FLOW RECORDER
ORIFICE SIZE x METER RUN SIZE

DESCRIPTION OF TEST
Clean up

TIME	WELLHEAD TUBING PRESS PSIG	WELLHEAD CASING PRESS. PSIG	WELLHEAD TEMP. °F	HIGH STAGE FLOW RECORDER STAT. PRESS. PSIG	HIGH STAGE FLOW RECORDER DIFF. PRESS. "H_2O	HIGH STAGE FLOW RECORDER M.R. TEMP. °F	LOW STAGE FLOW RECORDER STAT. PRESS PSIG	LOW STAGE FLOW RECORDER DIFF PRESS. "H_2O	LOW STAGE FLOW RECORDER M.R. TEMP °F	TEST TANKS TANK #1 OIL FT.INS.	TEST TANKS TANK #2 OIL FT.INS.	TEST TANKS TANK TEMP. °F	BARRELS PRODUCED	REMARKS
9:00AM	Shut in Well at 8:30 AM to lower service rig. Opened at 10:00									A.M.				After and clean-up Test
10:00AM	Open up well to pit													
11:00AM	485		106°											
12:00NOON	490		110											
1:00PM	490		116											
2:00	Put well on test at 2:00PM													
3:00														
4:00														
5:00														
6:00														
7:00														
8:00														
9:00														
10:00														
11:00														
12:00MID														

C.W.S. TANK. CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELL H.B. Pan Am S. Island R M. CHOKE SIZE 47/64 RATE OF FLOW _____ SHEET NO. 3 DATE March 4, 1966

HIGH STAGE FLOW RECORDER — LOW STAGE FLOW RECORDER — DESCRIPTION OF TEST

ORIFICE SIZE 2.500 x 4.026 METER RUN SIZE — ORIFICE SIZE _____ x _____ METER RUN SIZE — Trial Test - high flow rate

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS				
TIME	TUBING PRESS PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H_2O	M.R. TEMP. °F	STAT. PRESS. PSIG	DIFF PRESS. "H_2O	M.R. TEMP °F	TANK #1 Water	TANK #2 Water	TANK TEMP. °F	BARRELS PRODUCED	REMARKS
2:30PM	1440		110	900	68	100				1' 1"			7.42	Dry Gas - No gas Condensate
3:00	1330		117	900	68	110				1' 10"			5.13	9700 MMCF/D
3:30	1300		117	880	69	110				2' 10"			6.85	
4:00	1300		118	880	69	110				3' 10"			6.85	
4:30	1300		118	880	69	110				4' 10"			6.85	
5:00	1300		119	880	69	110				5' 7"			5.99	
5:30	1300		119	880	69	110				6' 7"			6.85	9.800 MMCF/D
6:00	1300		119	880	68	110				7' 8"			7.42	
6:30	1300		119	880	68	110				0' 2"	1' 2"		6.85	Drain #1 Tank - All Water
7:00	1300		119	880	68	110					2' 2"		6.85	
7:30	1300		119	880	68	110					3' 2"		6.85	
8:00	1300		119	880	68	117					4' 2"		6.85	
8:30	1300		119	880	68	116					5' 2"		6.85	
9:00	1300		119	880	68	116					6' 2"		6.85	
9:30	1300		119	880	68	116					7' 2"		6.85	
10:00PM	1300		120	880	68	116				1' 2"	0' 3"		6.85	
10:30	1300		120	880	68	116				2' 2"			6.85	114.16 Bbl. water

— ORL

C W S TANK CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELL HB Pan AM S. Island R. M/1 CHOKE SIZE 17/64 RATE OF FLOW SHEET NO. 4 DATE March 4, 1966

HIGH STAGE FLOW RECORDER — LOW STAGE FLOW RECORDER — DESCRIPTION OF TEST

ORIFICE SIZE 2.500 x 4.026 METER RUN SIZE — ORIFICE SIZE x METER RUN SIZE — TRIAL

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS									
TIME	TUBING PRESS. PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H 2O	M.R. TEMP. °F	STAT PRESS. PSIG	DIFF. PRESS. "H2O	M.R. TEMP. °F	TANK #1 WATER FT. INS.	BS&W	TANK #2 WATER FT. INS.	BS&W	TANK #3 OIL FT. INS.	BS&W	TANK TEMP. °F	BARRELS PRODUCED	REMARKS
11:00PM	1300		120°	880	68"	116				3' 2"		0' 3"					6.25	Bbl. each foot
11:30	1300		120	880	68	116				4' 2"								
12:00MID	1300		120	880	68	116				5' 2"								
12:30	1300		122	880	68	116				6' 2"								water rate
1:00AM	1300		122	880	68	115				7' 2"								Constant
1:30	1300		124	880	68	114				0' 2"		1' 3"						
2:00	1300		124	880	68	113						2' 3"						
2:30	1300		124	880	68	114						3' 3"						
3:00	1300		124	880	68	114						4' 3"						
3:30	1300		124	880	70	114						5' 3"						
4:00	1300		124	880	70	114						6' 3"						
4:30	1300		124	880	70	114						7' 3"						
5:00	1300		124	880	70	114				1' 2"		0' 4"						
5:30	1300		124	880	70	114				2' 2"		0' 4"						
6:00	1300		124	880	70	114				3' 2"								
8:30	1300		124	880	70	114				4' 2"								
7:00	1300		124	880	70	114				5' 2"								116.45 Bbl. water

ALS

C W S TANK CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELL HB Pan Am S. Ilsand 2 H41 CHOKE SIZE 47/64 RATE OF FLOW SHEET NO. 5 DATE March 5, 1966

HIGH STAGE FLOW RECORDER LOW STAGE FLOW RECORDER DESCRIPTION OF TEST

ORIFICE SIZE 2.500 x 4.026 METER RUN SIZE ORIFICE SIZE x METER RUN SIZE TRIAL

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS								
TIME	TUBING PRESS. PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H 2O	M.R. TEMP. °F	STAT PRESS. PSIG	DIFF. PRESS. "H2O	M.R. TEMP. °F	TANK #1 WATER FT. INS	BS&W %	TANK #2 WATER FT. INS	BS&W	TANK #3 OIL FT. INS.	BS&W	TANK TEMP. °F	BARRELS PRODUC-ED	REMARKS
7:30AM	1300		124°	880	70	114				6' 2"	6.83	0' 4"						Water rate - Constant
8:00	1300		124	880	70	114				7' 2"								
8:30	1300		124	880	70	114				0' 3"		1' 4"						
9:00	1300		124	880	70	114						2' 4"						
9:30	1300		124	880	70	114						3' 4"						
10:00	1300		124	880	70	114						4' 4"						9.900 MCF/D
10:30	1300		124	880	70	114						5' 4"						
11:00	1300		124	880	70	114						6' 4"						
11:30	1300		124	880	70	114						7' 4"						
12:00NOON	1300		124	880	70	114				1' 3"		0' 2"						
12:30	1300		124	880	70	117				2' 3"								
1:00	1300		124	880	70	116				3' 3"								
1:30	1300		124	880	70	116				4' 3"								
2:00	1300		124	880	70	116				5' 3"								
2:30	1300		124	880	70	116				6' 3"								
3:00	1300		124	880	70	116				7' 3"								
3:30	1300		124	880	70	116				0' 2"		1' 2"						116.45 Bbl. Water.

C W S TANK CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELL WB Pan Am S. Island R M/1 CHOKE SIZE 47/64 RATE OF FLOW SHEET NO. 6 DATE March 5, 1966

HIGH STAGE FLOW RECORDER | LOW STAGE FLOW RECORDER | DESCRIPTION OF TEST

ORIFICE SIZE 2.500 x 4.026 METER RUN SIZE | ORIFICE SIZE x METER RUN SIZE

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS								
TIME	TUBING PRESS. PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H 2O	M.R. TEMP. °F	STAT PRESS. PSIG	DIFF. PRESS. "H2O	M.R. TEMP. °F	TANK #1 WATER FT. INS.	BS&W	TANK #2 WATER FT. INS.	BS&W	TANK #3 OIL FT. INS.	BS&W	TANK TEMP. °F	BARRELS PRODUC-ED	REMARKS
4:00PM	1300		124	880	70	116				2' 2"		2' 3"					6.85	Bbl. water each foot
4:30PM	1300		124	880	70	117						3' 3"						
5:00	1300		126	880	70	118						4' 3"						
5:30	1300		126	880	70	118						5' 3"						
6:00	1300		126	880	70	118												- Constant water rate
6:30	1300		126	880	70	118												
7:00	1300		126	880	70	119												
7:30	1300		126	880	70	119												
8:00	1300		126	880	70	119												
8:30	1300		126	880	70	119												
9:00	1300		126	880	70	119												
9:30	1300		126	880	70	119												
10:00	1300		126	880	70	119												
10:30	1300		126	880	70	120												
11:30	1300		130	880	70	120												
11:30	1300		130	880	70	120												
12:00MID	1300		130	880	70	120											116.45	Bbl. water

edt

C W S TANK CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELLHB Pan Am S. Island R. ML1 CHOKE SIZE 47/64 RATE OF FLOW SHEET NO. 7 DATE March 6, 1966

HIGH STAGE FLOW RECORDER | LOW STAGE FLOW RECORDER | DESCRIPTION OF TEST

ORIFICE SIZE 2.500 x 4.026 METER RUN SIZE | ORIFICE SIZE x METER RUN SIZE

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS								
TIME	TUBING PRESS. PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H_2O	M.R. TEMP. °F	STAT PRESS. PSIG	DIFF. PRESS. "H_2O	M.R. TEMP. °F	TANK #1 WATER FT. INS	BS&W	TANK #2 WATER Ft. INS	BS&W	TANK #3 OIL FT. INS.	BS&W	TANK TEMP. °F	BARRELS PRODUC-ED	REMARKS
12:30AM	1300		128°	880	70	120°												constant water rate ; 13.70 Bbl each hour also constant gas flow rate
1:00	1300		128	880	70	120												
1:30	1300		128	880	70	120												
2:00	1300		128	880	70	120												
2:30	1300		128	880	70	120												
3:00	1300		128	880	70	120												
3:30	1300		128	880	70	120												
4:00	1300		128	880	70	120												
4:30	1300		128	880	70	120												
5:00	1300		128	880	70	120												
5:30	1300		128	880	70	120												
6:00	1300		128	880	70	120												
6:30	1300		128	880	70	120												
7:00	1300		128	880	70	120												
7:30	1300		128	880	70	120												
8:00	1300		128	880	70	120												
8:30	1300		128	880	70	120												116.45 Bbl. water

HERO COPY

C W S TANK CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELL HB Pan Am S. Island R M41 CHOKE SIZE 47/64" RATE OF FLOW SHEET NO. 8 DATE March 6, 1966

HIGH STAGE FLOW RECORDER | LOW STAGE FLOW RECORDER | DESCRIPTION OF TEST

ORIFICE SIZE 2.500 x 4.026 METER RUN SIZE | ORIFICE SIZE x METER RUN SIZE

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS								
TIME	TUBING PRESS. PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H 2O	M.R. TEMP. °F	STAT PRESS. PSIG	DIFF. PRESS. "H2O	M.R. TEMP. °F	TANK #1 WATER FT. INS.	BS&W	TANK #2 WATER FT. INS.	BS&W	TANK #3 OIL FT. INS.	BS&W	TANK TEMP. °F	BARRELS PRODUC-ED	REMARKS
9:00AM	1300		128	880	70	120												
9:30AM	Shut in well to run wire line in well																13.85	Bbl. water. Trial Test Production: 593.66 Bbl. water

XEROX COPY

C W S TANK CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELLHD Pa. Am S. Island R. M.l CHOKE SIZE 22/64 RATE OF FLOW SHEET NO. 9 DATE March 6, 1966

HIGH STAGE FLOW RECORDER — LOW STAGE FLOW RECORDER — DESCRIPTION OF TEST

ORIFICE SIZE 2.500 x 4.026 METER RUN SIZE — ORIFICE SIZE x METER RUN SIZE — Run #1

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS								
TIME	TUBING PRESS. PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H 2O	M.R. TEMP. °F	STAT PRESS. PSIG	DIFF. PRESS. " H_2O	M.R. TEMP. °F	TANK #1 WATER FT. INS.	BS&W	TANK #2 WATER FT. INS.	BS&W	TANK #3 OIL FT. INS.	BS&W	TANK TEMP. °F	BARRELS PRODUC-ED	REMARKS
2:00PM	2225		Shut in Press.		Open well at 2:00PM to test													
2:30	1902		99°	880	18	62				2' 6"		0' 0"						
3:00	1891		100	880	18	68						0" 4"						5.10 MCF/D
3:30	1900		102	880	18	68												
4:00	1862		102	880	18	68						1' 3"						
4:30	1863		102	880	18	68												
5:00	1864		102	880	18	68						1' 8"						
5:30	1878		102	880	18	86												
6:00	1882		102	880	18	100						2' 2"						
6:30	1885		102	880	18	100												1.10 MCF/D
7:00	1885		102	880	18	100						2' 10"						
7:30	1886		102	880	18	100												
8:00	1886		102	880	18	100						3' 4"						
8:30	1886		102	880	18	100												
9:00	1886		102	880	18	100						3' 9"						
9:30	1886		102	880	18	100												5.10 MCF/D
10:00	1886		102	880	18	100						4' 1"						29.12 BBLS Water

C W S TANK CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELLHB Pan Am. S. Island R. M. CHOKE SIZE 26/64 RATE OF FLOW SHEET NO. 10 DATE March 6, 1966

HIGH STAGE FLOW RECORDER — LOW STAGE FLOW RECORDER — DESCRIPTION OF TEST

ORIFICE SIZE 2.500 x 4.026 METER RUN SIZE — ORIFICE SIZE x METER RUN SIZE — Run #2

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS								
TIME	TUBING PRESS. PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H 2O	M.R. TEMP. °F	STAT PRESS. PSIG	DIFF. PRESS. "H2O	M.R. TEMP. °F	TANK #1 Water FT. INS	BS&W	TANK #2 Water FT. INS	BS&W	TANK #3 OIL FT. INS.	BS&W	TANK TEMP. °F	BARRELS PRODUC-ED	REMARKS
10:00PM	Change to next Point									2' 6"		4' 1"						
10:30	1805		104	890	28	100												
11:00	1775		104	880	28	100						4'10"						
11:30	1775		106	880	28	100												
12:MID	1778		108	880	28	100						5' 4"						
12:30AM	1775		108	880	28	100												
1:00	1773		108	880	28	100						5" 11"						
1:30	1765		108	880	28	100												
2:00	1761		109	880	28	100						6' 7"						
2:30	1760		109	880	28	100												
3:00	1760		109	880	28	101						7' 1"					22.71	
3:30	1760		109	880	28	101												
4:00	1760		109	880	28	101				3"								
4:30	1760		109	880	28	101												
5:00	1760		109	880	28	101				3' 8"								6.15 MCF/D
5:30	1760		109	880	28	101												
6:00	1760		109	880	28	101				4' 2½"		2' 8½"					12.85	35.56 Water

C W S TANK CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELL HB Pan Am S. Inland R M/1 CHOKE SIZE 30/64 RATE OF FLOW SHEET NO. 11 DATE March 7, 1966

HIGH STAGE FLOW RECORDER — LOW STAGE FLOW RECORDER — DESCRIPTION OF TEST

ORIFICE SIZE 2.500 x 4.026 METER RUN SIZE — ORIFICE SIZE x METER RUN SIZE — Run #3

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS								
TIME	TUBING PRESS. PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H 2O	M.R. TEMP. °F	STAT PRESS. PSIG	DIFF. PRESS. "H2O	M.R. TEMP. °F	TANK #1 WATER FT. INS.	BS&W	TANK #2 WATER FT. INS.	BS&W	TANK #3 OIL FT. INS.	BS&W	TANK TEMP. °F	BARRELS PRODUC-ED	REMARKS
6:00AM		Change	to next	point						4' 2½"		2' 8"						
6:30	1643		112	880	45	104												
7:00	1640		112	880	45	104				4' 8"								
7:30	1658		113	880	45	106												
8:00	1637		114	880	45	106				5' 6"								
8:30	1633		114	880	45	108												
9:00	1633		115	880	45	104				6' 4"								
9:30	1621		115	880	45	100												
10:00	1620		115	880	45	98				7' 1"		2' 8"					21.12	- water - Tank 1.
10:30	1620		117	880	45	96												
11:00	1603		116	880	44	96						3' 7"						
11:30	1607		118	880	44	100												
12:NOON	1592		118	880	44	108						4' 3"						
12:30	1593		118	880	44	108												
1:00	1593		118	880	44	110						5' 0"						
1:30	1593		118	880	44	118												
2:00PM	1593		118	880	44	118						5' 10"						

C W S TANK CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELL HB Pan Am S. Island R #41 CHOKE SIZE 30/64 RATE OF FLOW SHEET NO. 12 DATE March 7, 1966

HIGH STAGE FLOW RECORDER | LOW STAGE FLOW RECORDER | DESCRIPTION OF TEST

ORIFICE SIZE 7.500 x 4.026 METER RUN SIZE | ORIFICE SIZE x METER RUN SIZE | Run #3

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS								
TIME	TUBING PRESS. PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H 2O	M.R. TEMP. °F	STAT PRESS. PSIG	DIFF. PRESS. " H_2O	M.R. TEMP. °F	TANK #1 WATER FT. INS.	BS&W	TANK #2 WATER FT. INS.	BS&W	TANK #3 OIL FT. INS.	BS&W	TANK TEMP. °F	BARRELS PRODUC-ED	REMARKS
2:30PM	1592		118	880	44	118												7.95 MCF/D
3:00	1592		118	880	44	118				3' 6"		6' 8"					28.85	49.67 Bbl. water

C W S TANK CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELLHD Pan Am S. Island B M.1 CHOKE SIZE ~~46/64~~ 42/64 RATE OF FLOW SHEET NO. 13 DATE March 7, 1966

HIGH STAGE FLOW RECORDER — LOW STAGE FLOW RECORDER — DESCRIPTION OF TEST

ORIFICE SIZE 2.500 x 4.026 METER RUN SIZE — ORIFICE SIZE x METER RUN SIZE — Run #4

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS								
TIME	TUBING PRESS. PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H 2O	M.R. TEMP. °F	STAT PRESS. PSIG	DIFF. PRESS. "H2O	M.R. TEMP. °F	TANK #1 WATER FT. INS.	BS&W	TANK #2 WATER FT. INS.	BS&W	TANK #3 OIL FT. INS.	BS&W	TANK TEMP. °F	BARRELS PRODUCED	REMARKS
3:30PM	1134		118	880	68	110				3' 6"		Choke size changed to ~~46/64~~ 42/64 - not here - ark						
4:00	1129		118	880	68	118												
4:30	1128		118	880	65	118				5' 1"								
5:00	1184		120	980	42	120												
5:30	1138		120	880	64	110				6' 6"		0' 3"					20.55	
6:00	1125		120	880	64	120												
6:30	1126		120	860	68	120						1' 10"						
7:00	1129		120	880	68	120												
7:30	1125		120	880	64	120						3" 6"						
8:00	1113		120	880	68	120												
8:30	1118		120	880	68	120						5' 4"						
9:00	1114		120	880	68	120												
9:30	1137		120	900	60	120				3' 4"		7' 4"					51.88	
10:00	1110		120	840	68	120												
10:30	1111		120	840	68	120				5' 3"								
11:00	1103		120	840	68	120												
11:30	1134		120	900	60	120				7' 3"		3' 6"					26.26	98.69 - Choke size changed to 46/64" here - ark

C W S TANK CO. LTD.
FLOW POTENTIAL TEST SPOT READINGS

WELL HB Pan Am S. ISland R. M41 CHOKE SIZE 46/64" RATE OF FLOW SHEET NO. 14 DATE March 8, 1966

HIGH STAGE FLOW RECORDER — LOW STAGE FLOW RECORDER — DESCRIPTION OF TEST

ORIFICE SIZE 2.500 x 4.026 METER RUN SIZE — ORIFICE SIZE x METER RUN SIZE — Run #4

	WELLHEAD			HIGH STAGE FLOW RECORDER			LOW STAGE FLOW RECORDER			TEST TANKS								
TIME	TUBING PRESS. PSIG	CASING PRESS. PSIG	TEMP. °F	STAT. PRESS. PSIG	DIFF. PRESS. "H 2O	M.R. TEMP. °F	STAT PRESS. PSIG	DIFF. PRESS. "H2O	M.R. TEMP. °F	TANK #1 WATER FT. INS.	BS&W	TANK #2 WATER FT. INS.	BS&W	TANK #3 OIL FT. INS.	BS&W	TANK TEMP. °F	BARRELS PRODUC-ED	REMARKS
12:00	1146									3' 10"		3' 6"						
12:30AM	1158		120	920	66	120						5' 3"						
1:00	1189		126	890	62	120												
1:30	1189		126	890	62	122						7' 1"					24.55	
2:00	1189		130	890	62	122												
2:30	1189		130	890	62	122				5' 10"								
3:00	1186		130	890	62	122												
3:30	1187		130	900	60	122				7' 3"		1' 10"					23.41	
4:00	1186		130	890	62	122												
4:30	1186		130	890	62	122						3' 2"						98.64
5:00	1186		132	890	62	122						4' 1"					8.56	56.52
5:15	2218																	155.21 Water (All.) — OKC
5:30	2225																	9.15 MCF/D
5:45	2737																	
6:00	2237																	

Canadian

WELL SERVICES AND TANK CO. LTD.

GAS CALCULATIONS

CWS TANK CO. LTD.

WELL DATA

WELL HB Pan Am South Island River M-1 FIELD _____

PROVINCE Northwest Territories DATE OF TEST March 6, 1966

OPERATOR _____ FORMATION Slave Point

ELEVATIONS 2213.3 K.B. 2100.3 C.F.

TUBING SIZE 2 7/8 Wt. 6.5 GRADE J-55 SET @ 6873' K.B.

CASING SIZE 5 1/2 Wt. 17

PERFORATED INTERVAL ~~6750~~ 6938 to ~~7000~~ 6944

_____ to _____ K.B.

MEAN PERFORATED DEPTH 6941 K.B.

_____ C.F.

AVERAGE LENGTH OF PRODUCING STRING _____ FT.

BOTTOM HOLE PRESSURE _____ PSIA Bottom Temp. TEMPERATURE 235° F extrapolated to 6941. Will be about 235°

BAROMETRIC PRESSURE 13.6 PSIA

MEAN SURFACE TEMPERATURE 25° F

PRODUCING THROUGH Tubing

REMARKS.

CWS TANK CO. LTD.

RATE CALCULATIONS - ORFICE METER RUN

WELL H B Pan Am South Island R #41 DATE March 6 - 8, 1966

Meter Run Size= 4.026 F Taps pTc= 370.1

Specific Gravity= 0.675 pPc= 721.2

1

	Orfice	Differential (m.of H_2O)	Static Press (psia)	Temp. MR	Pr	Tr	Hours on Run
1.	2.500	18	893.6	100° 560	1.239	1.513	8
2.	2.500	28	893.6	101 561	1.239	1.516	8
3.	2.500	41	893.6	118 578	1.239	1.562	9
4.	2.500	62	903.6	122 582	1.253	1.573	14

Run No.	Coeff. 3 Pt. day	F.g	Ft_f	Fpv	$\sqrt{hw}$	$\sqrt{Pf}$	Q MMCFD
1.	43543.2	0.9427	0.9636	1.061	4.2426	29.893	5.322
2.	43543.2	0.9427	0.9627	1.061	5.2915	29.893	6.632
3.	43543.2	0.9427	0.9485	1.055	6.4031	29.693	7.862
4.	43543.2	0.9427	0.9452	1.053	7.8740	30.060	9.670

CWS 105 This comp. is by Texas R.R. Comm. method.

—ARL

CWS TANK CO. LTD.

PRESSURE

Well HB Pan Am South Island B No.1 Date March 6-8, 1966

Pert's 6938 - 6944 K.B. Mid pt. Pert's 6927 CF

Bomb landed at 6861 Tubing Flange Hangar

(4273 K.B.)

@ wellhead

Run No.	Tubing		Bottom Hole Recorder		P_w^2	P_d^2
	Shut in	Flow	Shut in	Flow		
1.	2238.6	1899.6			5011.3	3608.4
2.		1773.6				3145.6
3.		1605.6				2577.9
4.		1199.6				1439.0
5.						
6.		900				810.1
7.						
8.						

Wellhead Deliverability - adj

Run No.	$P_w^2 - P_d2$	Gas Rate		
		High Stage	Low Stage	Q
1.	1402.9			5.322
2.	1865.7			6.632
3.	2433.1			7.862
4.	3572.3			9.670
5.				
6.				
7.				
8.				

CWS 104

CWS TANK CO. LTD.

PRESSURE

Well HB Pan Am South Island # M41 Date March 6 - 8, 1966

Pert's 6938 - 6944 K.B. Mid pt. Pert's (6941 1KB) 6927 CF 6941 K.B.

Bomb landed at 6861 ft Tbg. hanger flange

Run No.	Tubing		Bottom Hole Recorder		P_r^2	P_s^2
	Shut in	Flow	Shut in	Flow		
1.	2238.6	1899.6	2607.6	2432.1	6708.6	6160.5
2.		1773.6		2321.8		5865.1
3.		1605.6		2343.6		5492.5
4.		1199.6		2204.1		4858.1
5.						
6.						
7.						
8.						

Run No.	$P_r^2-P_s2$	Gas Rate		
		High Stage	Low Stage	Q
1.	638.8	5.322		5.322
2.	934.5	6.632		6.632
3.	1307.1	7.862		7.862
4.	1941.5	9.670		9.670
5.				
6.				
7.				
8.				

CWS 104

CWS TANK CO. LTD.

FLUID RATE

Well H B Pan Am S. Islamm 2 W.I. Date March 4 - 8 1946

Condensate Gravity

Run No.	Hours on Run	Bbls.	Bbls/24 hrs.	Bbls/MMCF	Cu. cu. ft.
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					

Water PPM

RW 0.065 @ 68°F

Run No.	Bbls.	Gallons	Gallons /24 hrs.	Gallons/ MMCF
1.	29.21	1022	3066	576
2.	35.56	1245	3735	563
3.	49.67	1738	4634	589
4.	155.21	5432	9310	963
5.				
6.				
7.				
8.				

Canadian Spar Ltd.

WELL SERVICES AND TANK CO. LTD.

WESTERN PRESSURE CONTROL

WESTERN PRESSURE CONTROLS LTD.
Box 2710
FORT ST. JOHN, B.C.

SUB-SURFACE PRESSURE REPORT
STATIC GRADIENT

COMPANY: Hudson Bay Oil & Gas Co. Ltd. TEST DATE: March 8, 1966 NO.
WELL: H.B. Pan American M-41 LOCATION: FIELD: South Island River

AMERADA RPG GAUGE NON-TEMPERATURE SENSITIVE ELEMENT NO. 22582 N RANGE 0 — 4000 psig.
Pc = 2100.25 D -9.53 psig. CALIBRATED: March 2, 1966

ELEV. (FT.) DATUM (FT.) TEMP. (°F.) 231 AT 6848' Tubing (FT.) RUN DEPTH
SURFACE PRESSURES (PSIG.) TUBING CASING Hangar Flange
REMARKS:
Bottom Tandem Measurements taken from Tubing Hangar Flange

Date	Time hrs.	Depth Feet Tubing Hangar Flange	Deflection Inches	mD psig.	P.Pc psig.	P psig.	dP	Gradient	Datum psig.
	1242	0	1.0609	2228.2	-4.4	2214			
	1251	1500	1.1038	2318.3	-4.3	2305	91	0.016	
	1300	3000	1.1432	2401.0	-4.2	2387	82	0.018	
	1309	4500	1.1806	2479.6	-4.1	2466	79	0.019	
	1318	6000	1.2161	2554.1	-3.8	2541	75	0.020	
	1324	6348	1.2238	2570.3	-3.7	2557	16	0.021	
	1331	6748	1.2327	2589.0	-3.7	2576	19	0.021	
	1336	6848	1.2349	2593.6	-3.6	2581	5	0.020	

WESTERN PRESSURE CONTROLS LTD.
Box 2760
FORT ST. JOHN, B.C.

SUB-SURFACE PRESSURE REPORT
STATIC GRADIENT

COMPANY: Hudson Bay Oil & Gas Co. Ltd. TEST DATE: March 8, 1966 NO.

WELL H.B. Pan American M-41 LOCATION: FIELD: South Island River

AMERADA R/G GAUGE NON-TEMPERATURE SENSITIVE ELEMENT NO. 22580 N RANGE 0 — 4000 psig.

Pc = 2186.77 D-13.23 psig. CALIBRATED: March 2, 1966

ELEV. (FT.) DATUM (FT.) TEMP. (°F.) 231 AT 6848' T.H.F. (FT.) RUN DEPTH

SURFACE PRESSURES (PSIG.) TUBING 2225 CASING BY D.W.G.

REMARKS: Measurements taken from Tubing Hangar Flange K.B.- Tubing Hangar Flange = 12'
Top Tandem

Date	Time hrs.	Depth Feet	Deflection Inches	mD psig.	P.Pc psig.	P psig.	dP	Gradient	Datum psig.
		Tubing Hangar Flange							
	1242	0	1.0157	2221.1	-5.7	2202			
	1251	1500	1.0560	2309.2	-5.6	2290	88	0.017	
	1300	3000	1.0938	2391.9	-5.3	2373	83	0.018	
	1309	4500	1.1283	2467.3	-5.2	2449	76	0.020	
	1318	6000	1.1621	2541.2	-4.9	2523	74	0.020	
	1324	6348	1.1698	2558.1	-4.8	2540	17	0.020	
	1331	6748	1.1782	2576.3	-4.8	2558	18	0.022	
	1336	6848	1.1805	2581.5	-4.8	2564	6	0.017	

WESTERN PRESSURE CONTROLS LTD.

Box 2760

FORT ST. JOHN, B.C.

SUB-SURFACE PRESSURE REPORT

TYPE OF TEST: A.O.F. BUILDUP TEST DATE March 6, 1966 NO.

COMPANY: Hudson Bay Oil & Gas Co. Ltd. WELL: H.B. Pan American M-41

LOCATION: FIELD: South Island River

AMERADA RPG GAUGE. NON-TEMPERATURE SENSITIVE ELEMENT NO. 22582 N.

RANGE: 0 TO 4000 PSIG. Pc = mD + a = 2100.25 D -9.53 PSIG.

CALIBRATION DATE: March 2, 1966 CLOCK NO. 23113 RANGE 180 HOURS D.P.L.S.

ELEV. (FT.) DATUM (FT.) TEMP. (°F.) 234 AT 6861 T.H. (FT.) RUN DEPTH

SURFACE PRESSURES (PSIG.) TUBING 2225 CASING BY D.W.G.

REMARKS: Measurements taken from Tubing Hangar K.B.- Tubing Hangar Flange Flange = 12'

Choke Inches	Time Hours	Gauge Hours	Depth Feet	Deflection Inches	mD psig.	Pc psig.	P-Pc psig.	P psig.	*Datum P psig.
			T.H.P.						
Mar 6/66	1209	0	Tandem Gauges on Bottom @ 6861' C.F.						
	1230	0.30	6861	1.2405	2605.4	2595.9	-3.8	2592	
	1300	1.00	6861	1.2405	2605.4	2595.9	-3.8	2592	
	1330	1.30	6861	1.2405	2605.4	2595.9	-3.8	2592	
	1400	2.00	6861	1.2405	2605.4	2595.9	-3.8	2592	
Run #1	1400	Began Test							
	1430	2.30	6861	1.1783	2474.7	2465.2	-4.1	2461	
	1500	3.00	6861	1.1788	2475.8	2466.3	-4.1	2462	
	1530	3.30	6861	1.1777	2473.5	2463.0	-4.1	2459	
	1600	4.00	6861	1.1773	2472.6	2463.1	-4.1	2459	
	1630	4.30	6861	1.1772	2472.4	2462.9	-4.1	2459	
	1700	5.00	6861	1.1769	2471.8	2462.3	-4.1	2458	
	1730	5.30	6861	1.1783	2474.7	2465.2	-4.1	2461	
	1800	6.00	6861	1.1795	2477.2	2467.7	-4.1	2464	
	1830	6.30	6861	1.1791	2476.4	2466.9	-4.1	2463	
	1900	7.00	6861	1.1791	2476.4	2466.9	-4.1	2463	
	1930	7.30	6861	1.1792	2476.6	2467.1	-4.1	2463	
	2000	8.00	6861	1.1792	2476.6	2467.1	-4.1	2463	

WESTERN PRESSURE CONTROLS LTD.
Box 2760
FORT ST. JOHN, B.C.

SUB-SURFACE PRESSURE REPORT

TYPE OF TEST: A.O.F. BUILDUP TEST DATE March 6-8, 1966 NO.
COMPANY: Hudson Bay Oil & Gas Co. Ltd. WELL: H.B. Pan American M-41
LOCATION: FIELD: South Island River

AMERADA RPG GAUGE NON-TEMPERATURE SENSITIVE ELEMENT NO. 22582 N.
RANGE: 0 TO 4000 PSIG. Pc = mD + o = 2100.25 D -9.53 PSIG.
CALIBRATION DATE: March 2, 1966 CLOCK NO. 23113 RANGE 180 HOURS D.P.L.S.
ELEV. (FT.) DATUM (FT.) TEMP. (°F.) 234 AT 6861' T.H.F. (FT.) RUN DEPTH
SURFACE PRESSURES (PSIG.) TUBING 2225 CASING BY D.W.G.
REMARKS: Measurements taken from Tubing Hangar Flange K.B.- Tubing Hangar Flange = 12'

Choke Inches	Time Hours	Gauge Hours	Depth Feet	Deflection Inches	mD psig.	Pc psig.	P-Pc psig.	P psig.	*Datum P psig.
			T.H.F.						
Mar 6/66	2030	8.30	6861	1.1791	2476.4	2466.9	-4.1	2463	
	2100	9.00	6861	1.1791	2476.4	2466.9	-4.1	2463	
	2130	9.30	6861	1.1791	2476.4	2466.9	-4.1	2463	
	2200	10.00	6861	1.1791	2476.4	2466.9	-4.1	2463	
Run #2	2200	Changed Flow Rate							
	2230	10.30	6861	1.1643	2445.3	2435.8	-4.2	2432	
	2300	11.00	6861	1.1531	2421.8	2412.3	-4.2	2408	
	2330	11.30	6861	1.1531	2421.8	2412.3	-4.2	2408	
	2400	12.00	6861	1.1531	2421.8	2412.3	-4.2	2408	
	0030	12.30	6861	1.1528	2421.2	2411.7	-4.2	2408	
	0100	13.00	6861	1.1529	2421.4	2411.9	-4.2	2408	
	0130	13.30	6861	1.1509	2417.2	2407.7	-4.2	2404	
	0200	14.00	6861	1.1504	2416.1	2406.6	-4.2	2402	
	0230	14.30	6861	1.1503	2415.9	2406.4	-4.2	2402	
	0300	15.00	6861	1.1503	2415.9	2406.4	-4.2	2402	
	0330	15.30	6861	1.1503	2415.9	2406.4	-4.2	2402	
	0400	16.00	6861	1.1503	2415.9	2406.4	-4.2	2402	
	0430	16.30	6861	1.1504	2416.1	2406.6	-4.2	2402	

WESTERN PRESSURE CONTROLS LTD.

Box 2760

FORT ST. JOHN, B.C.

SUB-SURFACE PRESSURE REPORT

TYPE OF TEST: A.O.F. BUILDUP TEST DATE March 6-8, 1966 NO.

COMPANY: Hudson Bay Oil & Gas Co. Ltd. WELL: H.B. Pan American M-41

LOCATION: FIELD: South Island River

AMERADA RPG GAUGE NON-TEMPERATURE SENSITIVE ELEMENT NO. 22582 N.

RANGE: 0 TO 4000 PSIG. Pc = mD + a = 2100.25 D -9.53 PSIG.

CALIBRATION DATE: March 2, 1966 CLOCK NO. 23113 RANGE 180 HOURS D.P.L.S.

ELEV. (FT.) DATUM (FT.) TEMP. (°F.) 234 AT 6861' T.H.F. (FT.) RUN DEPTH

SURFACE PRESSURES (PSIG.) TUBING 2225 CASING BY D.W.G.

REMARKS: Measurements taken from Tubing Hangar K.B.- Tubing Hangar Flange Flange = 12'

Choke Inches	Time Hours	Gauge Hours	Depth Feet	Deflection Inches	mD psig.	Pc psig.	P-Pc psig.	P psig.	*Datum P psig.
Mar 7/66									
	0500	17.00	6861	1.1504	2416.1	2406.6	-4.2	2402	
	0530	17.30	6861	1.1504	2416.1	2406.6	-4.2	2402	
	0600	18.00	6861	1.1504	2416.1	2406.6	-4.2	2402	
Run#3	0600	Third Flow Rate							
	0630	18.30	6861	1.1192	2350.6	2341.1	-4.2	2337	
	0700	19.00	6861	1.1189	2350.0	2340.5	-4.2	2337	
	0730	19.30	6861	1.1190	2350.2	2340.7	-4.2	2337	
	0800	20.00	6861	1.1193	2350.8	2341.3	-4.2	2337	
	0830	20.30	6861	1.1179	2347.9	2338.4	-4.2	2334	
	0900	21.00	6861	1.1173	2346.6	2337.1	-4.2	2333	
	0930	21.30	6861	1.1172	2346.4	2336.9	-4.2	2333	
	1000	22.00	6861	1.1168	2345.6	2336.1	-4.3	2332	
	1030	22.30	6861	1.1166	2345.1	2335.6	-4.3	2331	
	1100	23.00	6861	1.1147	2341.1	2331.6	-4.3	2327	
	1130	23.30	6861	1.1145	2340.7	2331.2	-4.3	2327	
	1200	24.00	6861	1.1122	2335.9	2326.4	-4.3	2322	
	1230	24.30	6861	1.1120	2335.5	2326.0	-4.3	2322	
	1300	25.00	6861	1.1127	2336.9	2327.4	-4.3	2323	
	1330	25.30	6861	1.1126	2336.7	2327.2	-4.3	2323	
	1400	26.00	6861	1.1126	2336.7	2327.2	-4.3	2323	
	1430	26.30	6861	1.1126	2336.7	2327.2	-4.3	2323	
	1500	27.00	6861	Blew Bursting Plate Changed Flow Rate					
Run #4	1510	27.10	6861	1.2381	2600.3	2590.8	-3.6	2587	
	1530	27.30	6861	1.0607	2227.7	2218.2	-4.4	2214	
	1600	28.00	6861	1.0579	2221.9	2212.4	-4.4	2208	
	1630	28.30	6861	1.0583	2222.7	2213.2	-4.4	2209	
	1700	29.00	6861	1.0542	2214.1	2204.6	-4.4	2200	
	1730	29.30	6861	1.0547	2215.1	2205.6	-4.4	2201	
	1800	30.30	6861	1.0532	2212.0	2202.5	-4.4	2198	
	1830	30.30	6861	1.0521	2209.7	2200.2	-4.4	2196	
	1900	31.00	6861	1.0501	2205.4	2195.9	-4.4	2192	
	1930	31.30	6861	1.0500	2205.3	2195.8	-4.4	2191	

WESTERN PRESSURE CONTROLS LTD.
Box 2760
FORT ST. JOHN, B.C.

SUB-SURFACE PRESSURE REPORT

TYPE OF TEST: A.O.F. BUILDUP TEST DATE March 6-8, 1966 NO.
COMPANY: Hudson Bay Oil & Gas Co. Ltd. WELL: H.B. Pan American M-41
LOCATION: FIELD: South Island River

AMERADA RPG GAUGE NON-TEMPERATURE SENSITIVE ELEMENT NO. 22582 N.
RANGE: 0 TO 4000 PSIG. Pc = mD + e = 2100.25 D -9.53 PSIG.
CALIBRATION DATE: March 2, 1966 CLOCK NO. 23113 RANGE 180 HOURS D.P.L.S.
ELEV. (FT.) DATUM (FT.) TEMP. (°F) 234 AT 6861' T.H.F. (FT.) RUN DEPTH
SURFACE PRESSURES (PSIG.) TUBING 2225 CASING BY D.W.G.
REMARKS: Measurements taken from Tubing Hangar Flange K.B.- Tubing Hangar Flange = 12'

Choke Inches	Time Hours	Gauge Hours	Depth Feet	Deflection Inches	mD psig.	Pc psig.	P-Pc psig.	P psig.	*Datum P psig.
Mar 7/66			T.H.F.						
	2000	32.00	6861	1.0483	2201.7	2192.2	-4.4	2188	
	2030	32.30	6861	1.0477	2200.4	2190.9	-4.4	2187	
	2100	33.00	6861	1.0471	2199.2	2189.7	-4.4	2185	
	2130	33.30	6861	1.0461	2197.1	2187.6	-4.4	2183	
	2200	34.00	6861	1.0453	2195.4	2185.4	-4.4	2181	
	2230	34.30	6861	1.0469	2198.8	2189.3	-4.4	2185	
	2300	35.00	6861	1.0456	2196.0	2186.5	-4.4	2182	
	2330	35.30	6861	1.0482	2201.5	2192.0	-4.4	2188	
	2400	36.00	6861	1.0485	2202.1	2192.6	-4.4	2188	
Mar 8/66	0030	36.30	6861	1.0503	2205.9	2196.4	-4.4	2192	
	0100	37.00	6861	1.0481	2201.3	2191.8	-4.4	2187	
	0130	37.30	6861	1.0485	2202.1	2192.6	-4.4	2188	
	0200	38.00	6861	1.0481	2201.3	2191.8	-4.4	2187	
	0230	38.30	6861	1.0482	2201.5	2192.0	-4.4	2188	
	0300	39.00	6861	1.0488	2202.7	2193.2	-4.4	2189	
	0330	39.30	6861	1.0457	2196.2	2186.7	-4.4	2182	
	0400	40.00	6861	1.0454	2195.6	2186.1	-4.4	2182	
	0430	40.30	6861	1.0449	2194.6	2185.1	-4.4	2181	
	0500	41.00	6861	1.0450	2194.8	2185.3	-4.4	2181	
	Shut Well In								
	0515	41.15	6861	1.2371	2598.2	2588.7	-3.6	2585	
	0530	41.30	6861	1.2372	2598.4	2588.9	-3.6	2585	
	0545	41.45	6861	1.2372	2598.4	2588.9	-3.6	2585	
	0600	42.00	6861	1.2372	2598.4	2588.9	-3.6	2585	
	0630	42.30	6861	1.2372	2598.4	2588.9	-3.6	2585	
	0700	43.00	6861	1.2373	2598.6	2589.1	-3.6	2585	
	0800	44.00	6861	1.2373	2598.6	2589.1	-3.6	2585	
	0900	45.00	6861	1.2373	2598.6	2589.1	-3.6	2585	
	1000	46.00	6861	1.2373	2598.6	2589.1	-3.6	2585	
	1100	47.00	6861	1.2373	2598.6	2589.1	-3.6	2585	

WESTERN PRESSURE CONTROLS LTD.
Box 2760
FORT ST. JOHN, B.C.

SUB-SURFACE PRESSURE REPORT

TYPE OF TEST: A.O.P. BUILDUP TEST DATE March 6-8, 1965 NO.
COMPANY: Hudson Bay Oil & Gas Co. Ltd. WELL: H.B. Pan American M-41
LOCATION: FIELD: South Island River

AMERADA RPG GAUGE NON-TEMPERATURE SENSITIVE ELEMENT NO. 22580 N.
RANGE: 0 TO 4000 PSIG. Pc = mD + a = 2186.77 D -13.23 PSIG.
CALIBRATION DATE: March 2, 1966 CLOCK NO. 23114 RANGE 180 HOURS D.P.L.S.
ELEV. (FT.) DATUM (FT.) TEMP. (°F.) 234 AT 6861' T.H.F. (FT.) RUN DEPTH
SURFACE PRESSURES (PSIG.) TUBING 2225 CASING BY D.W.G.
REMARKS:
Measurements taken from Tubing Hangar K.B.- Tubing Hangar Flange = 12'

Choke Inches	Time Hours	Gauge Hours	Depth Feet	Deflection Inches	mD psig.	Pc psig.	P-Pc psig.	P psig.	*Datum P psig.
			T.H.F.						
Mar 6/66	1400	2.00	6861	1.1914	2605.3	2592.1	-4.6	2588	
Run #1	1500	3.00	6861	1.1318	2475.0	2461.8	-5.2	2457	
	1600	4.00	6861	1.1303	2471.7	2458.5	-5.2	2453	
	1700	5.00	6861	1.1303	2471.7	2458.5	-5.2	2453	
	1800	6.00	6861	1.1322	2475.9	2462.7	-5.2	2458	
	1900	7.00	6861	1.1322	2475.9	2462.7	-5.2	2458	
	2000	8.00	6861	1.1322	2475.9	2462.7	-5.2	2458	
	2100	9.00	6861	1.1322	2475.9	2462.7	-5.2	2458	
	2200	10.00	6861	1.1322	2475.9	2462.7	-5.2	2458	
Run #2	2200	Changed Flow Rate							
	2400	12.00	6861	1.1073	2421.4	2408.2	-5.4	2403	
Mar 7/66	0200	14.00	6861	1.1053	2417.0	2403.8	-5.4	2398	
	0400	16.00	6861	1.1056	2417.7	2404.5	-5.4	2399	
	0600	18.00	6861	1.1056	2417.7	2404.5	-5.4	2399	
Run #3	0600	Changed Flow Rate							
	0800	20.00	6861	1.0750	2350.8	2337.6	-5.4	2332	
	1000	22.00	6861	1.0725	2345.3	2332.1	-5.4	2327	
	1200	24.00	6861	1.0710	2342.0	2328.8	-5.4	2323	
	1400	26.00	6861	1.0688	2337.2	2324.0	-5.4	2319	
	1500	27.00	6861	Blew Bursting Plate Changed Flow Rate					
Run #4	1600	28.00	6861	1.0161	2222.0	2208.8	-5.8	2203	
	1800	30.00	6861	1.0119	2212.8	2199.6	-5.8	2194	
	2000	32.00	6861	1.0075	2203.2	2190.0	-5.8	2184	
	2200	34.00	6861	1.0043	2196.2	2183.0	-5.8	2177	
	2400	36.00	6861	1.0141	2217.6	2204.4	-5.8	2198	
Mar 8/66	0200	38.00	6861	1.0075	2203.1	2189.9	-5.8	2184	
	0400	40.00	6861	1.0055	2198.8	2185.6	-5.8	2180	
	0500	41.00	6861	1.0038	2195.1	2181.9	-5.8	2176	
	Shut Well In								
	0700	43.00	6861	1.1894	2600.9	2587.7	-4.6	2583	
	0900	45.00	6861	1.1896	2601.4	2588.2	-4.6	2584	
	1100	47.00	6861	1.1896	2601.4	2588.2	-4.6	2584	

Canadian

WELL SERVICES AND TANK CO. LTD.

GAS ANALYSIS

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

GAS ANALYSIS REPORT: Lab. No. 66-529 Received: March 14, 1966 Reported: March 17, 1966

Well: H.B. Pan Am. S. Island E-M-41 Operator: Canadian Well Services And Tank Co. Ltd.

Field or Area: South Island River, N.W.T. Location: Elev.: K.B. Grd.

Zone and Formation: Slave Point Sample Interval: ~~6875~~ 6938 - 44

Well production at sampling time: Oil bpd; Gas MCFD; Water bpd.

Sampled from: Sampled by: Date: March 8, 1966

Pressure: (a) at point of sampling 1137 psig (b) Gas Bomb pressure 1137 psig

Temperature: (a) at point of sampling 120 °F (b) Separator °F

Pressures: Reservoir Tubing Casing Separator

OTHER PERTINENT DATA Sampled at 4:30 A.M., 8 March, 1966

(Signed)

COMPOSITION	% by Volume	G.P.M. in Imp. Gal. @ 60°F. & 14.65 PSIA
Helium		
Hydrogen sulfide	1.67	
Carbon dioxide	10.04	
Oxygen	.00	
Nitrogen	1.70	
Methane	85.23	
Ethane	1.34	
Propane	.02	.005
Isobutane	.00	.000
N-butane	.00	.000
Isopentane	.00	.000
N-pentane	.00	.000
Hexanes	.00	.000
Heptanes +	.00	.000
TOTAL	100.00	.005

G.P.M. (Calculated)

pentanes +	.000
at 12 lbs.	.000
at 15 lbs.	.000
at 22 lbs.	.000
at 26 lbs.	.000

SPECIFIC GRAVITY

Calculated	.675
by Weight	.680

CRITICALS (Calculated)

Pc	721.2
Tc	370.1

VAPOR PRESSURE (Calc.) of pentanes + .00

H_2S Grains per 100 cu. ft. @ 60°F. & 14.65 p.s.i.a. 1047

GROSS B.T.U. (Calc.) @ 60°F. & 14.65 p.s.i.a. 893.7

DEW POINT (Calc.)

p.s.i.	950	1050	1200
F A H	-48	-46	-43

REMARKS

The C_4 to C_{7+} components were present in trace amounts and may have totaled to 0.01% by volume. There were four containers received with identical information. In two of the containers there were no liquids and in the other two a small amount of water was present. The reported analysis was made on the samples with no water being present. A check on the samples with the water yielded identical hydrocarbon composition.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. F65-6

Received: March 11, 1966 Reported: March 15, 1966 Well: Location: H.B. Pan Am. S. Island #R-H-41

Operator: Hudson's Bay Oil And Gas Company Limited Field or Area: South Island River, N.W.T.

Elev.: K.B. Grd. Zone/Formation: Slave Point Sample Interval:

Method of Production: Sampled from: ~~6873'~~ 6938-44'

Sampled by: Canadian Well Services and Tank Co. Ltd. Date: March 8, 1966

OTHER PERTINENT DATA Stock tank sample. Sample taken at 4:30 A.M., 8 Mar., 1966.

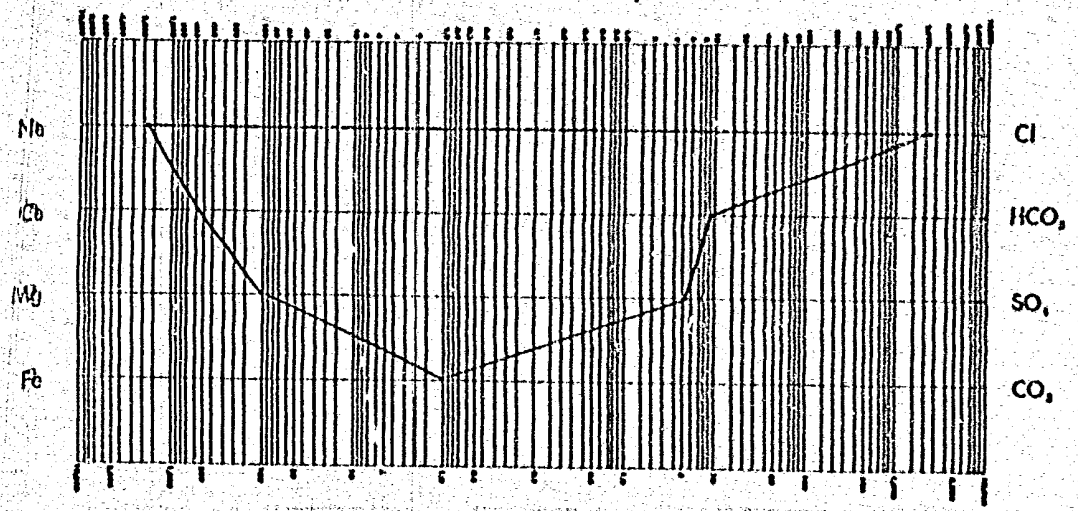
(Signed)

	Na		Ca	Mg					SO_4	Cl			CO_3	HCO_3		
Mg/L	40,765		11,935	1,264					260	87,174				550		
Meq/L	1773.28		595.56	103.90					5.41	2458.31				9.02		
Meq. %	35.86		12.04	2.10					0.11	49.71				0.18		

Total Solids Mg/L: By Evaporation 167,540 Fe Specific Gravity 1.096 @ 75°F. Observed pH 6.0 @ 76 °F

Calculated 141,948 After Ignition 138,510 H_2S Present Refractive Index 1.3573 @ 76°F. Resistivity 0.065 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

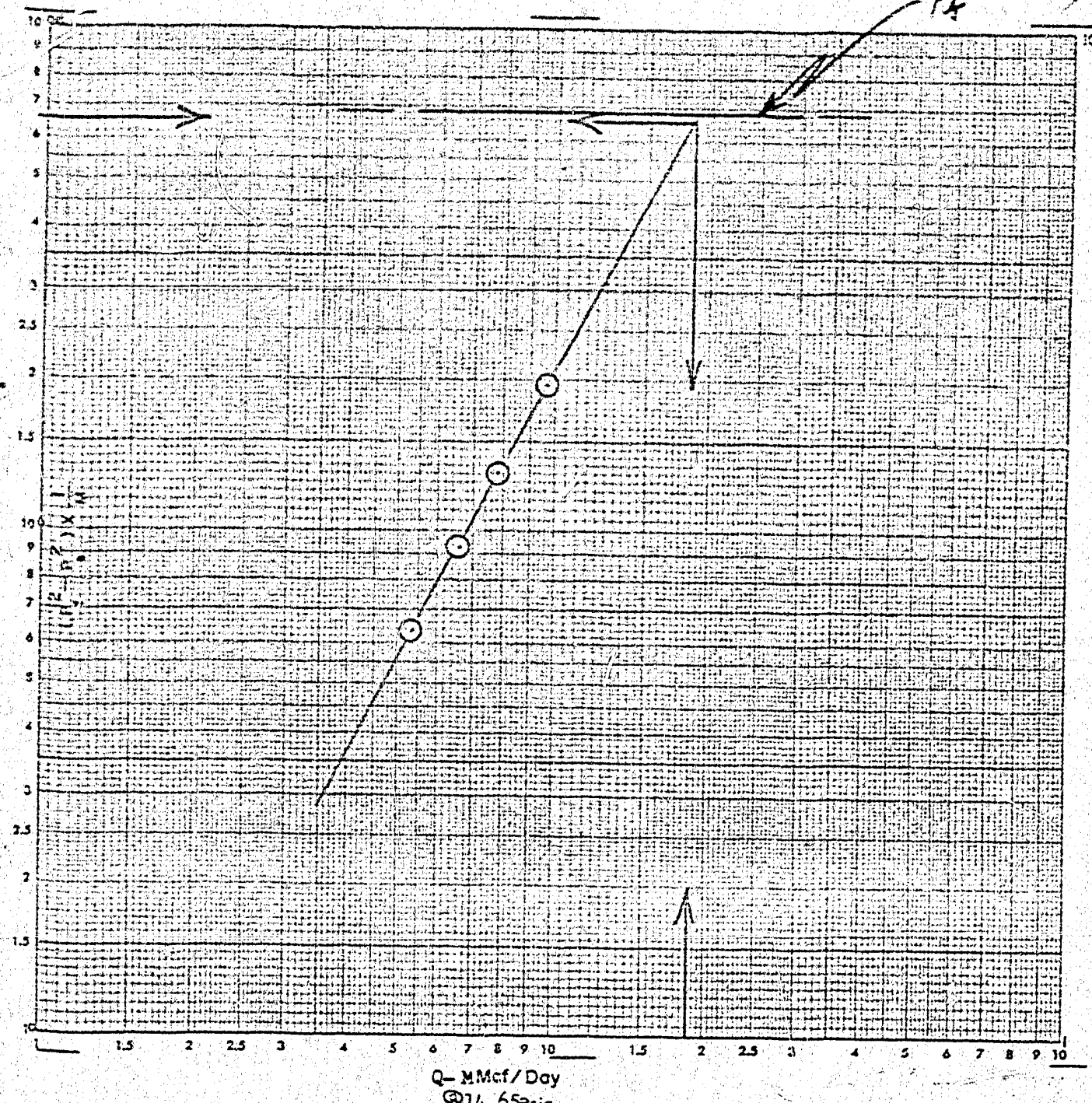
This sample has the characteristics of a Slave Point formation water.

Canadian Fracmaster Ltd.
WELL SERVICING AND TANK CO. LTD.

A. O. F. GRAPH

AOF = 18.5 Mcf/Day

n = 0.532



INST. NO. _____

COMPANY Hudson's Bay Oil & Gas Co. Ltd.

ZONE Slave Point

FIELD South Island River

WELL H B Pan Am South Island River M-1

LOCATION _____ SECTION _____

TWP _____, RGE _____

TEST DATE _____ PLOTTED BY _____

Canadian

WELL SERVICES AND TANK CO. LTD.

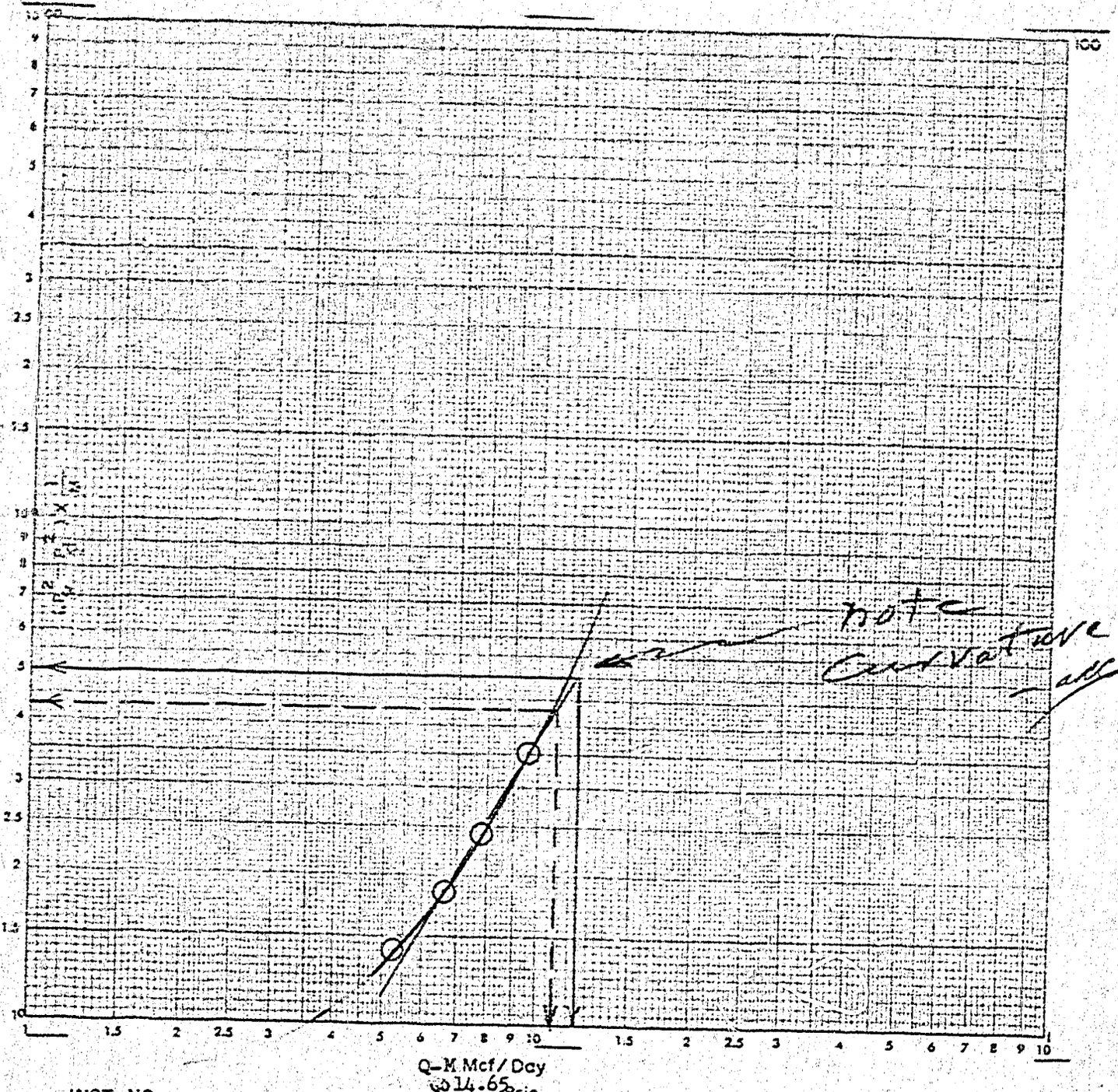
DELIVERABILITY GRAPH

AOF = _____ Mcf/Day

n = _____

Wellhead.

DELIVERABILITY GRAPH



Q-M Mcf/Day @ 14.65 psia

INST. NO. _____

COMPANY Hudson Bay Oil & Gas Co.

ZONE _____

FIELD South Island River

WELL H B Pan Am S. Island R M-1

LOCATION _____ SECTION _____

TWP _____, RGE _____

TEST DATE _____ PLOTTED BY _____

HB PAN AM S ISLAND B M-41

Reported by the Company: B.H.S.I.P. - 2607.6 psia

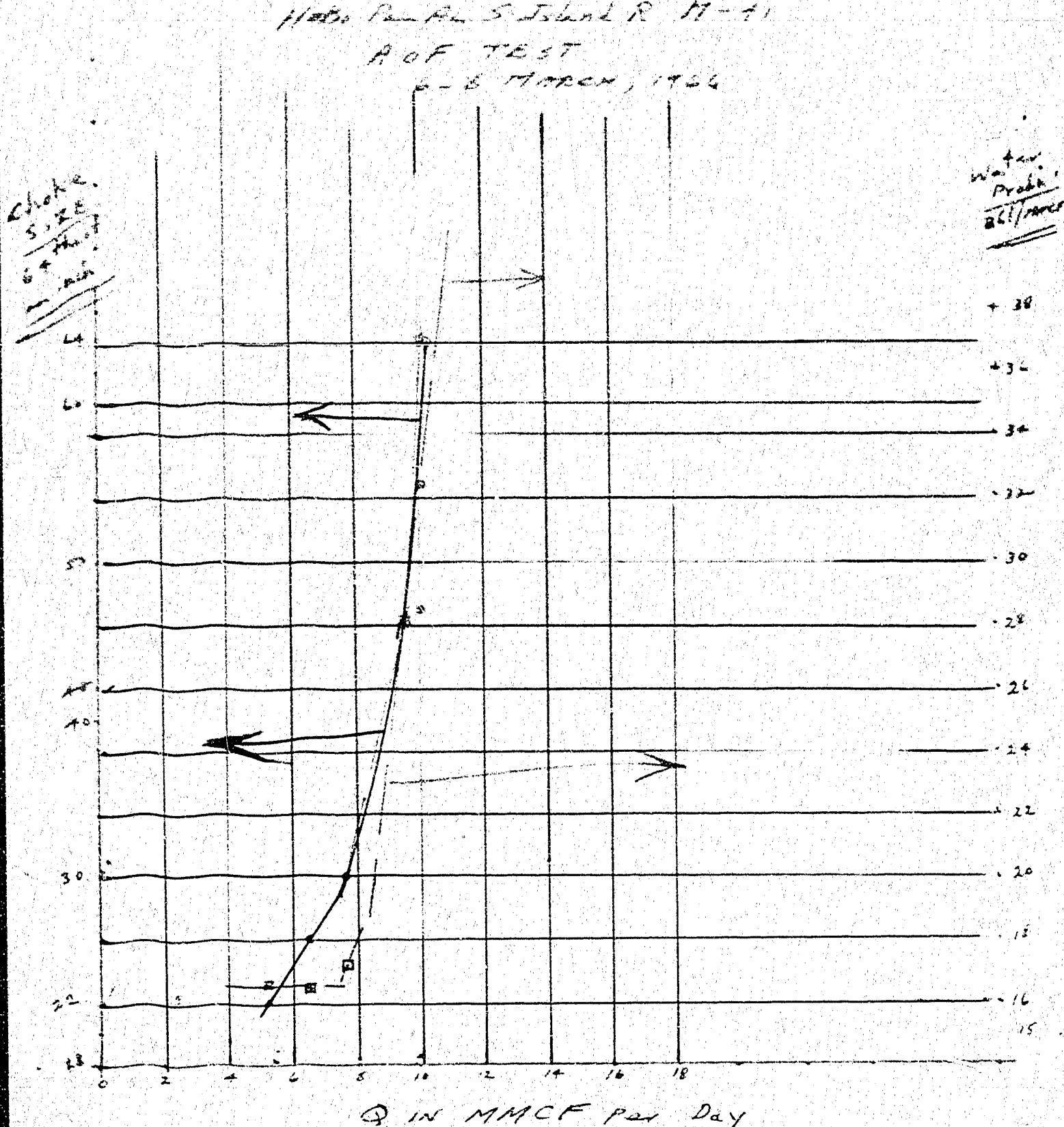
Rate	MMCF/day	B.H.P. psia
1	5.322	2482.1
2	6.632	2421.8
3	7.862	2343.6
4	9.670	2204.1

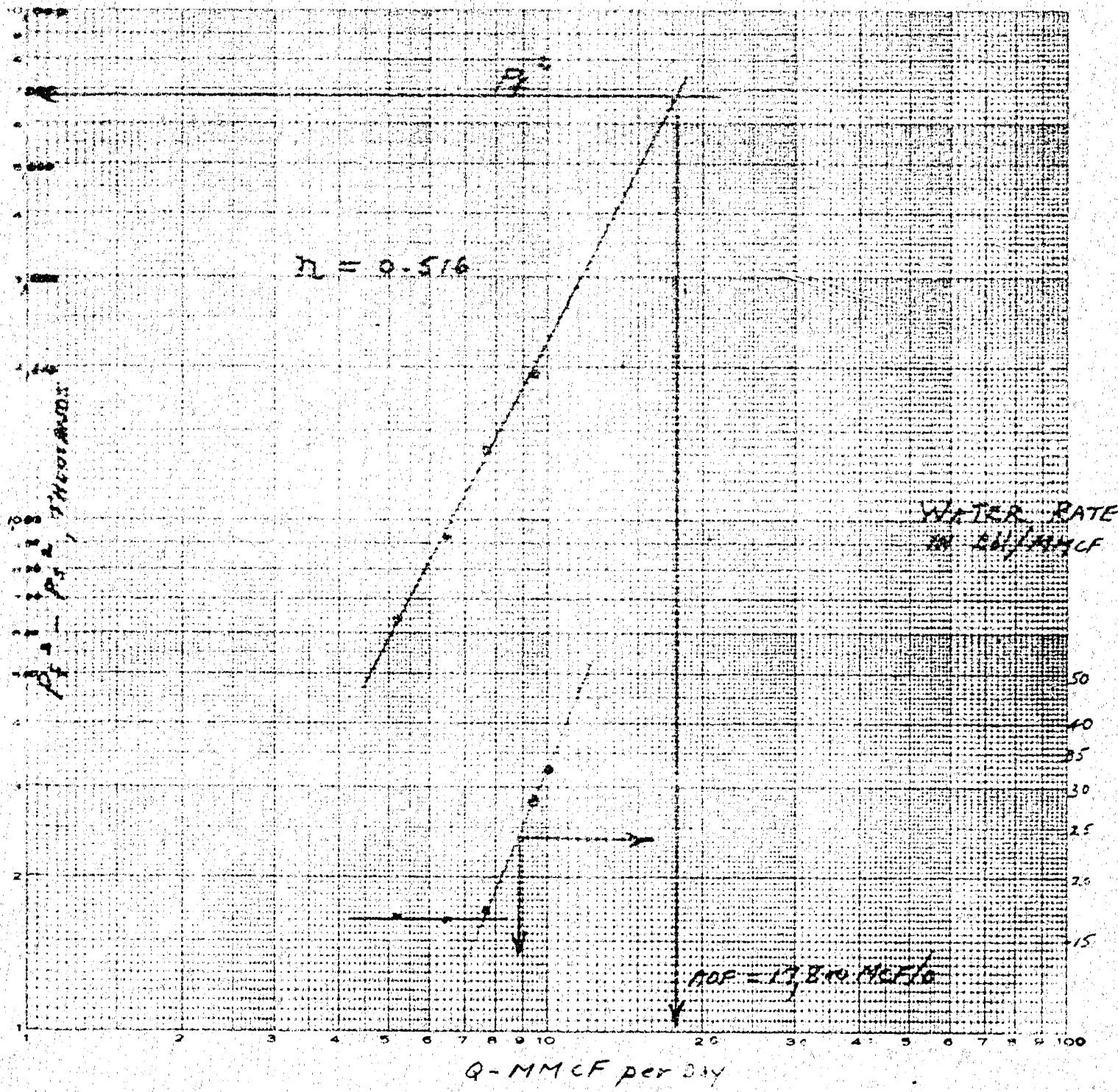
The pressures are given at the mid-perforated datum of 6,941'.

Enclosed are:
1. A.O.F. graph
2. Plot with choke size and water production vs flow rate
3. Completion and test data, all as computed in this office

The flow rates computed in this office are by the American Meter Handbook Method which differs slightly from those given by the Company, which were computed by the Texas Railroad Commission Method.

The revised A.O.F. data book has not yet been received from the Company.


Choke Size
Water Prod. Bbl/MMCF
+38
+36
34
32
30
28
26
24
22
20
18
16
15
44
40
30
22
18
0
2
4
6
8
10
12
14
16
18
Q IN MMCF per Day



H.B. Pan Am S. Island R. M-41

H.B. PAN AM S. Island R. M-41 - COMPLETION and TEST DATA.

YEAR.	Description -	CHOKE - INCHES	GAS FLOW RATE - MMCF.	HOURS IN FLOW.	TOTAL GAS PRODUCTION - MCF.	WATER PROD'N. - Bbl.	WATER RATE - Bbl/MMCF.	REMARKS
1966	6 P.M. 3 Mar - 8 A.M. 4 "	64/64	10,300E.	14	6000	210.00 E	35.0 E.	Pre acid clean up - Acidized - 1500 gals 15% HCl
	10 A.M. 4 Mar - 2 P.M. 4 Mar.	64/64	10,000Ea	4	1667	53.33 E.	32.0 E.	After acid clean up
	2 P.M. 4 Mar. - 9 A.M. 6 Mar.	47/64	10,109	43.5	18323	593.66	32.4	Trial run & clean up
	RUN 1. A.O.F. Test.	22/64	5,218	8	1739	29.12	16.65	POTENTIAL.
	" 2 " "	26/64	6.500	8	2167	35.56	16.4	TEST
	" 3 " "	30/64	7.724	9	2896	49.67	17.2	TEST
	" 4 " "	48/64 - 44/64	9.473	14	5526	155.21	28.1	TEST
	TOTAL PRODUCTION IN COMPLETION:				38318	1,126.55		

Gas Volumes @ 14.65 psia. & 60°F.

E - estimated from graph

Note: The after acid clean up flow rate has been arbitrarily reduced to 10 MMCF/D because of excess ~~water~~ spent acid water and the return of acid gases.

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS _____ DAY ON THIS WELL 25

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 1 COMPANY 13 Pole Hse LOCATION South Ledwell, Alta DATE Dec 25 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonell	8
DERRICK Neal Jacob	8
MOTOR Nick Bodi	8
FLOOR Ernest Wyatt	8
FLOOR A. J. Hayes	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS

NO. 1	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													
NO. 2	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
		1	
		2	
		3	
		4	
		5	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK P. J. Snelling	8
MOTOR Tony Pacini	8
FLOOR Mel Saunders	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS

NO. 1	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													
NO. 2	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
		1	
		2	
		3	
		4	
		5	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonell	8
DERRICK Ray Lucas	8
MOTOR Ted Wood	8
FLOOR	
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS

NO. 1	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													
NO. 2	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
		1	
		2	
		3	
		4	
		5	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Tour out			
Tour Out			
Tour Up	8:00		
1.T.G		4:00	

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS _____ DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 12 COMPANY H.B. Drlg Mgrs LOCATION 11-4-Bluesky M41 DATE Nov 24/19 44

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	12
DERRICK Noel Tarp	12
MOTOR Nick Bodn	12
FLOOR Ernest Mauth	12
FLOOR Ed Hagen	12
FLOOR	
FIREMAN	
EXTRA	
INJURIES: H.B. Overtime	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK Bob Snelling	12
MOTOR Tony Pilsner	12
FLOOR Mel Saunders	12
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES: H.B. Overtime	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McKay	12
DERRICK Roy Lewis	12
MOTOR Earl Smith	12
FLOOR Ted Cook	10
FLOOR [illegible]	10
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

MUD: 12 MN. | 2 A.M. | 4 A.M. | 6 A.M. | ADDITIVES — WEIGHT | VISCOSITY | GEL

AT SURVEYS DEGREE | MOTOR HOURS 1 2 3 4 5 | NEXT OIL CHANGE

PUMPS: NO. 1 PRESSURE | MODEL | S.P.M. | LINER SIZE — NO. 2 PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

MUD: 8 A.M. | 10 A.M. | 12 NOON | 2 P.M. | ADDITIVES — WEIGHT | VISCOSITY | GEL

AT SURVEYS DEGREE | MOTOR HOURS 1 2 3 4 5 | NEXT OIL CHANGE

PUMPS: NO. 1 PRESSURE | MODEL | S.P.M. | LINER SIZE — NO. 2 PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

MUD: 4 P.M. | 6 P.M. | 8 P.M. | 10 P.M. | ADDITIVES — WEIGHT | VISCOSITY | GEL

AT SURVEYS DEGREE | MOTOR HOURS 1 2 3 4 5 | NEXT OIL CHANGE

PUMPS: NO. 1 PRESSURE | MODEL | S.P.M. | LINER SIZE — NO. 2 PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Tour out			
Fill Rig Tanks with Alcohol + engine oil + purge lines			
Kostuck Hudson Bay mud in next Pit This is why we have Overtime for 2 men			
Tour Out			
Stack Rig Neatly with 5 planks under each unit			
Tour Out Prices $8.00 + Cost to Truck Out to Tanks			8.00

Toteo Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 52 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY A-1 Drilling LOCATION Sicily Exploratory DATE March 29 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER W. McConnell	8
DERRICK [illegible]	8
MOTOR Ray Evans	8
FLOOR J. Cahill	8
FLOOR Kid Doe	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM 8155 FOOTAGE TO T.D. HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.)

DRILL COLLARS: NO. O.D. I.D. WGT.

FUEL GALS. WATER BBLS. COAL TONS

STANDS SINGLES D. COLLARS OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL

BITS: NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION

MUD: 12 MN. 2 A.M. 4 A.M. 6 A.M. ADDITIVES

WEIGHT
VISCOSITY
GEL

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5 — NEXT OIL CHANGE

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

SIZE TRIPS NO. LINES TON MILES TOTAL MILES SLIP FEET OR CUT FEET LEFT ON SPOOL NEXT SLIP

GENERAL

W.L. F.C. pH.

REMARKS	TIME START	STOP	INTERVAL
W.O.C.	1500	800	8
PUT CASING OF 4½ INCHES ABOUT Bowl & put on Flange SWEDGED 2 WAY valve in place of Christmas Tree			
Clean out Cellar Lay Down Jts & Cut Csg	800	1700	4
	1100	PM 300	3
Tear Out	3	800	5
Rig Down			
TEAR OUT Loose mud Tanks Full of Frozen Slush on Sides 40° Below	700	900	12

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER W. McConnell	12
DERRICK Neel Jacob	12
MOTOR Nick Bedo	12
FLOOR Ernest Hall	12
FLOOR Ed Hagen	12
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.)

DRILL COLLARS: NO. O.D. I.D. WGT.

FUEL GALS. WATER BBLS. COAL TONS

STANDS SINGLES D. COLLARS OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL

BITS: NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION

MUD: 8 A.M. 10 A.M. 12 NOON 2 P.M. ADDITIVES

WEIGHT
VISCOSITY
GEL

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5 — NEXT OIL CHANGE

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

SIZE TRIPS NO. LINES TON MILES TOTAL MILES SLIP FEET OR CUT FEET LEFT ON SPOOL NEXT SLIP

GENERAL

W.L. F.C. pH.

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER K. McGaar	12
DERRICK K.R. Cahill	12
MOTOR Jerry Bennett	12
FLOOR Mel Edwards	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM FOOTAGE TO HRS. ON BOTTOM WT. DRILL STRING (1000 LBS.)

DRILL COLLARS: NO. O.D. I.D. WGT.

FUEL GALS. WATER BBLS. COAL TONS

STANDS SINGLES D. COLLARS OTHER FT. C.B. FT. SUBS. FT. FT. UP ON KELLY TOTAL

BITS: NO. SIZE TYPE SIZE JETS SERIAL NO. WEIGHT R.P.M. FT. DRLD. FT. RMD. HRS. DEPTH OUT CONDITION

MUD: 4 P.M. 6 P.M. 8 P.M. 10 P.M. ADDITIVES

Change oil filters
Fuel filters
All G.M.C Motors Night Heat

WEIGHT
VISCOSITY
GEL

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5 — NEXT OIL CHANGE

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

SIZE TRIPS NO. LINES TON MILES TOTAL MILES SLIP FEET OR CUT FEET LEFT ON SPOOL NEXT SLIP

GENERAL

Used 70 Gallon Ant. Freeze in G.M.C's Night Hours

W.L. F.C. pH.

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 51 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 13 COMPANY [illegible] LOCATION [illegible] DATE [illegible] 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER	16
DERRICK	16
MOTOR	16
FLOOR	9
FLOOR	16
FLOOR	
FIREMAN	
EXTRA	

INJURIES: Stay over To Run Csg.

FIRES: HP - Accs.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8185	T.D.										

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT							1	
VISCOSITY							2	
GEL							3	
							4	
							5	

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS / SINGLES / D. COLLARS / OTHER FT. / C.B. FT. / SUBS. FT. / FT. UP ON KELLY / TOTAL

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Tex McDonell	13
DERRICK Neal Jacob	13
MOTOR Nick Bodin	16
FLOOR Ernest Hall	13
FLOOR Ed Hagen	13
FLOOR	
FIREMAN	
EXTRA	

INJURIES: Stay over To

FIRES: Finish running casing HB

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8185	TD										

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT							1	
VISCOSITY							2	
GEL							3	
							4	
							5	

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS / SINGLES / D. COLLARS / OTHER FT. / C.B. FT. / SUBS. FT. / FT. UP ON KELLY / TOTAL

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER R. MEASOR	8
DERRICK BOB SCHILLING	8
MOTOR JERRY PASMENEY	8
FLOOR MEL SAUNDERS	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES: Csg Downtime

FIRES: N.L. Orders

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8185	T.D										

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT							1	
VISCOSITY							2	
GEL							3	
							4	
							5	

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS / SINGLES / D. COLLARS / OTHER FT. / C.B. FT. / SUBS. FT. / FT. UP ON KELLY / TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Lay Down Drill Pipe	1700	500	5
Lay Down Drill Collars	500	700	2
BREAK Kelly + Kelly Cock			
Hard Swatch Block	700	800	1
Change from 4½" to 5½" Rams in BOP Cameron	800	915	1¼
Rig up power tongs	915		
Rig up to Run Csg		1000	¾
Thread Lock Float Collar Shoe + 2 Jts	1000	1030	½
Running Csg	1030	400	5½
Temp - 45°			
Finish Running 5½" Casing	430	742	3¾
Rig To Circ	742	800	¼
Circ, + work Casing	800	930	1½
Cementing	930	1030	1
Pump Plug	1030	1100	½
W.O.C.	1100	1200	1

Ran 33 Jts 1269.57' 17# LTSC New
" 61 Jts 1938.34' 17# STSC Jts
" 129 " 4376.25' 15.5# STSC Jts
" 19 Jts 609.32' 20# LTSC New
Centralized with 600 cu ft Pozmix 4 Gel
5½ Csg set @ 8182 KB 12 Plug Down with 2100 PSI

Totco Ring on Bit No. ____ D.P. Calipered Date ____ Results ____ From Pipe Rack ____

B.O.P. Test-Operated ____ Time ____ Results ____

TOTAL CONTRACTOR TIME ____ HRS. TOOLPUSHER ____

TOTAL COMPANY TIME ____ HRS. APPROVED BY ____

DRILLING
Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 50 DAY ON THIS WELL

LOCATION S. E. [illegible] DATE Mar. 21 19 64

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
	TD										

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS: NO. 1 PRESSURE; MODEL; S.P.M.; LINER SIZE — NO. 2 PRESSURE; MODEL; S.P.M.; LINER SIZE

W.L. F.C. pH.

AT SURVEY DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	112	168
2	112	✓
3	112	✓
4	113	✓
5	112	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Lay Down 5" Drill Pipe	1:00	3:00	3
Rig Up Schlumberger Ran Logging Tools w/ Sonic Porosity Log	2:00	5:30	2½
Tear Out Schlumberger	5:30	6:00	½
Lay Down Core Bbl	6:00	7:30	1½
Load out Core & Load all Fishing Tools	7:30	8:00	½

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4485	TD										

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS: NO. 1 PRESSURE; MODEL; S.P.M.; LINER SIZE — NO. 2 PRESSURE; MODEL; S.P.M.; LINER SIZE

W.L. F.C. pH.

AT SURVEY DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	120	168
2	120	✓
3	120	✓
4	120	✓
5	120	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig in Hole	8:00	11:00	3
Clean 60' To Bottom	11	12:00	1
Circ. Wait on Orders Pipe in Hole.	12:00	4:00	
Temp - 40°			

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4485	T.D				20	7"	2¼				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS: NO. 1 PRESSURE 1000; MODEL; S.P.M.; LINER SIZE 4½ — NO. 2 PRESSURE; MODEL; S.P.M.; LINER SIZE

W.L. F.C. pH.

AT SURVEY DEGREE 8 1/4 0 2½

MOTOR HOURS		NEXT OIL CHANGE
1	128	168
2	128	✓
3	124	✓
4	124	✓
5	124	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
148		4						

GENERAL

STANDS 7433.07
SINGLES
D. COLLARS 730.67
OTHER FT.
C.B. FT.
SUBS. FT. 2.10
FT. UP ON KELLY 20.74
TOTAL 4185.00

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Circ, wait on orders P.P. in Hole	4:00	11:00	7
Laying Down P.P.	11:00	12:00	1

P.P. Calipered Date _____ Results _____ From Pipe Rack _____

Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER [signature]

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 49 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY H & P LOCATION S [illegible] DATE ~~MAR.~~ 30 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm. Ferry	8
DERRICK R. Lock	8
MOTOR R. Wood	8
FLOOR J. Cook	8
FLOOR K. Dick	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8150	35	8185	5	114 M	26	7"	2¾				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
31	9"	HWC	3-½	021357	115	80	35		5		

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

PUMPS															
NO. 1	PRESSURE														
	MODEL	S.P.M.	120	✓	✓										
		LINER SIZE	6¼	✓	✓										
NO. 2	PRESSURE		450	✓	✓										
	MODEL	S.P.M.	✓	✓	✓										
		LINER SIZE	✓	✓	✓										

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	88	0 [illegible]
2	80	2 ✓
3	88	✓
4	83	✓
5	88	✓

STANDS 82-7433.00
SINGLES
D. COLLARS 26-730.17
OTHER FT.
C.B. FT.
SUBS. FT. 7.-2.10
FT. UP ON KELLY 30.91
TOTAL 8150 (100)
NEXT SLIP

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER R Monroy	8
DERRICK Bob Snelling	8
MOTOR Jerry Pasinsky	8
FLOOR Mel Saunders	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8185	T.D.			164M	26	7"	2¼				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
31	9"	YHWC	3-½	C21357	45	80	35		5	8185	Good

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES Soda Ash
Caustic

PUMPS															
NO. 1	PRESSURE														
	MODEL	S.P.M.													
		LINER SIZE													
NO. 2	PRESSURE														
	MODEL	S.P.M.													
		LINER SIZE													

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	96	168
2	96	✓
3	96	✓
4	96	✓
5	96	✓

STANDS 82-7433.00
SINGLES
D. COLLARS 26-730.17
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 30.91
TOTAL 8185
NEXT SLIP

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonald	8
DERRICK Noel Jacob	8
MOTOR Nick Rad.	8
FLOOR Emmett Faulk	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8185	TD			114 M	26	7"	2¼				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
31	9"	YHWC	3¼	C21357			35		5	8185	

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

PUMPS															
NO. 1	PRESSURE														
	MODEL	S.P.M.													
		LINER SIZE													
NO. 2	PRESSURE														
	MODEL	S.P.M.													
		LINER SIZE													

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		7						

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	104	117
2	104	✓
3	104	✓
4	104	✓
5	104	✓

STANDS 82-7433.00
SINGLES
D. COLLARS 26-730.17
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 30.91
TOTAL 8185
NEXT SLIP

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Finish Running in	12:00	12:30	½
Ream To Bottom 30'	12:30	3:00	2½
Drlg 9" Hole	3:00	5:00	2

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 48 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 14 COMPANY H B Rod Am LOCATION South Island Turn-A DATE March 19 79

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER R. MEASOR	8
DERRICK E.R. Spelling	8
MOTOR Doug Mattis	8
FLOOR Jerry Pasmeny	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8109	18'	8127	7 3/4	162M	26	7"	2 1/4				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	30	9"	RC-T-5	3-20	30891	40	35	94		7 3/4	8127	Drill

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	9+	9+		9+
VISCOSITY				
GEL				

ADDITIVES: Caustic Soda, Soda Ash

PUMPS		
NO. 1	PRESSURE	1200
MODEL	S.P.M.	52
	LINER SIZE	6 1/2
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	64	164
2	64	✓
3	64	✓
4	64	✓
5	64	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1/4		7						

GENERAL

W.L. 11 F.C. 9.0 pH. 10

STANDS 73 73.47
SINGLES 1
D. COLLARS 730.67
OTHER FT.
C.B. FT.
SUBS. FT. 210
FT. UP ON KELLY 20.76
TOTAL 8127.00

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drilling	12:00	6:00	6
Work on Pump (Clean Strip)	6:00	6:15	1/4
Drilling	6:15	8:00	13 3/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER ~~William Pasmeny~~	8
DERRICK ~~Roy Lemmon~~	8
MOTOR ~~Ron Eastman~~	8
FLOOR ~~Jim Carroll~~	8
FLOOR ~~Ken Rook~~	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8127	23'	8150	7 1/2	162,000	26	7"	2 1/4				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	30	9"	RC-T-5	3-20	30891	40	35	~~35~~ 121		36	8150	

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9+	9+	9+	9+
VISCOSITY		50+	45	
GEL				

ADDITIVES: Caustic Soda, Caustic, Caustic, Caustic Soda

PUMPS		
NO. 1	PRESSURE	1200
MODEL	S.P.M.	52
	LINER SIZE	6 1/2
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	72	168
2	72	✓
3	72	✓
4	72	✓
5	72	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1/4		8						

GENERAL Circ Sample - Drop Survey - Trip - Circulate & Condition

W.L. 5 F.C. 7.0 pH. 9.5

STANDS 81-240448
SINGLES 2
D. COLLARS 26-730.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 36
TOTAL 9150.00

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service Rig	8:00	8:15	1/4
Dale 9" Hole	8:15	3:45	7 1/2
Circ Sample	3:45	4:00	1/4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER ~~W. McDonell~~	8
DERRICK ~~Neal Isaak~~	8
MOTOR ~~Mark Reed~~	8
FLOOR ~~Ewen Neuff~~	8
FLOOR ~~Ed Hagen~~	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
					26	7"	2 1/4				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	30	9"	RC-T-5	3-20	30891	40	35	121		36	8150	1-0-I
	31	7"	VHICA	3-12	822254							

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	9+			
VISCOSITY	45+			
GEL				

ADDITIVES:

PUMPS		
NO. 1	PRESSURE	1200
MODEL	S.P.M.	52
	LINER SIZE	6 1/2
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

AT SURVEYS DEGREE: 3/4 @ 2°

MOTOR HOURS		NEXT OIL CHANGE
1	70	167
2	70	✓
3	70	✓
4	70	✓
5	70	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1/4		9						

GENERAL

W.L. F.C. pH. 9.5

STANDS 81-240448
SINGLES 2
D. COLLARS 26-730.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY
TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Circ Sample	4:00	4:00	1
Drop Survey 3/4°	4:00	4:15	1/4
Hoist W/B.T. & D.P.	4:15		
& Stand Pipe		8:30	3 1/2
CW Rams	8:30	8:45	1/4
Slip 12' Line	8:45	9:00	1/4
Cut Line	9:00	9:30	1/2
Ring in W/B.T. & D.P.	9:30	12:00	2 1/2

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 47 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 14 COMPANY H. B. Paul Am. LOCATION South Island K-4 DATE March 11 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER R. MEASOR	4
DERRICK Bob Sweeney	4
MOTOR Doug Mills	4
FLOOR Jerry Pomeroy	4
FLOOR Mel Saunders	4
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8029	21	8050	5¼		26	7"	2¾				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
29	9"	RC7-J	3-20	30891	40	34	21		5¼		D.C.

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	9#	9#	9#	9#	Lime - 2 sacks
VISCOSITY	170	175	215	162	Caustic - 50 lbs
GEL					Caustic - 10 lbs

PUMPS															
NO. 1	PRESSURE	1200													
MODEL	S.P.M.														
	LINER SIZE	6½													
NO. 2	PRESSURE														
MODEL	S.P.M.														
	LINER SIZE														

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1"								

GENERAL

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
	1	40	168
	2	40	✓
	3	40	✓
	4	40	✓
	5	40	✓

W.L. 4# F.C. 1/32 pH. 10.0

STANDS 2345.34
SINGLES 1
D. COLLARS 26-730.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 15
TOTAL 10250.00

REMARKS	TIME START	STOP	INTERVAL
Ream Tight Spots	12⁰⁰	2⁴⁵	2¾
Drilling	2⁴⁵		

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Penney	8
DERRICK Ray Lemieux	8
MOTOR Ray Ringland	8
FLOOR Jim Cowsill	8
FLOOR K.N. Rook	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8050	35'	8085	7¾	162 M	26	7"	2⅞				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
30	9"	RC7-J	3-20	30491	40	34	56		13		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	9#	9#	9#	9#	Oil - 5 Gal
VISCOSITY	240	240	250	240	Caustic - 5 lbs
GEL					Soda Ash - 1 bag
					Caustic - 10 lbs

PUMPS															
NO. 1	PRESSURE	1200	✓	✓	✓										
MODEL	S.P.M.	52	—	—	—										
	LINER SIZE	6½	✓	✓	✓										
NO. 2	PRESSURE														
MODEL	S.P.M.														
	LINER SIZE														

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½								

GENERAL Change over to Chem-Tech, mud Clean

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
	1	48	168
	2	48	✓
	3	48	✓
	4	48	✓
	5	48	✓

W.L. 4 6 F.C. 2/32 pH. 10.0

STANDS 80 71 112 65
SINGLES 2
D. COLLARS 26 - 730.67
OTHER FT.
C.B. FT.
SUBS. FT. 1 - 2.10
FT. UP ON KELLY 1.42
TOTAL 9025.00

REMARKS	TIME START	STOP	INTERVAL
Service Trips	8⁰⁰	8¹⁵	¼
Drlg 9" Hole	8¹⁵	4⁰⁰	7¾

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER John McDonnell	7
DERRICK Neil Tuck	7
MOTOR Nick Radia	7
FLOOR Frank Hunt	7
FLOOR Ed Hunter	7
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8085	24	8109	7½	162 M	26	7"	2¾				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
30	9"	RC7J	3-20	30791	40	34	80		20		Run

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	9#	9#	9#	9#	Oil 3500
VISCOSITY	220	220	300	240	Caustic 500
GEL					Soda Ash 800
					Caustic 300
					Drispac 200

PUMPS															
NO. 1	PRESSURE	1200	✓												
MODEL	S.P.M.	52	—												
	LINER SIZE	6½	✓												
NO. 2	PRESSURE														
MODEL	S.P.M.														
	LINER SIZE														

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL Change oil & All Jic Connections

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
	1	56	168
	2	56	✓
	3	56	✓
	4	56	✓
	5	56	✓

W.L. 7 F.C. 2/32 pH. 10

STANDS 81-73-14-0.5
SINGLES
D. COLLARS 26-730.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 1.42
TOTAL

REMARKS	TIME START	STOP	INTERVAL
Service Boys	4¹⁰	4¹⁵	¼
Drlg 9" Hole	4¹⁵	12⁰⁰	7¾

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 46 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY H.B. Paulson LOCATION South Island Rig 2 NH DATE March 17 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER R. McAsor	7
DERRICK Bob Snelling	8
MOTOR Doug Mytis	8
FLOOR Jerry Pasmeny	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7978	26	8004	8		26	7"	2 7/8				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
19	9"	W7R7	3-4	10200	45	60	26'		8		D.C.

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS			
NO. 1	PRESSURE	1200	
	MODEL		
	S.P.M.	56	
	LINER SIZE	6 1/2	
NO. 2	PRESSURE		
	MODEL		
	S.P.M.		
	LINER SIZE		

W.L. F.C. pH.

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
7978	2 1/4	1 16	168
		2 16	✓
		3 16	✓
		4 16	✓
		5 16	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET	SLIP OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS 60 7883.34
SINGLES
D. COLLARS 730.67
OTHER FT.
C.B. FT.
SUBS. FT. 2.10
FT. UP ON KELLY 14.53
TOTAL 8004.60

REMARKS	TIME START	STOP	INTERVAL
Drill 9" Hole	12 00	6 00	6

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wilbur Pomeroy	8
DERRICK Ray Lemieux	8
MOTOR Ron Eisenhood	8
FLOOR Mel Jacob	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8004	25	8029	7	164M	26	7"	2 7/8				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
19	9	W7R7	3-4	10200	45	60	51		15		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	9.0	9.0	9.2	9.2	Drill Gel
VISCOSITY	50	50	52	52	Soda Ash
GEL					Caustic

PUMPS					
NO. 1	PRESSURE	1200	✓	✓	
	MODEL				
	S.P.M.	56	✓	✓	
	LINER SIZE	6 1/2	✓	✓	
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

W.L. 7.6 F.C. 1/32 pH. 10.0

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
		1 24	168
		2 24	✓
		3 24	✓
		4 24	✓
		5 24	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET	SLIP OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS 60 7883.34
SINGLES 1
D. COLLARS 26 - 730.67
OTHER FT.
C.B. FT.
SUBS. FT. 1 - 2.10
FT. UP ON KELLY 25.11
TOTAL 8029.00

REMARKS	TIME START	STOP	INTERVAL
Service Rig	5 00	8 15	1/4
Drill 9" Hole	8 15	3 15	7
Cir Sample (Geo Dobson)	3 15	4 00	3/4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	8
MOTOR Alex Bodo	8
FLOOR Ed. St. Nault	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
8029				164M	26	7"	2 7/8				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
19	9"	W7R7	3-4	10200	45	60	51		15	8029	D.11
20	9	RC7T	3-20	21491							

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	9.2				Gel - 2500 lbs
VISCOSITY	50+				Bicarb - 400 lbs
GEL	11 11				Caustic - 10 "

PUMPS					
NO. 1	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE	6 1/2			
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
		1 32	168
		2 32	✓
		3 32	✓
		4 32	
		5 32	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET	SLIP OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS 60 7883.34
SINGLES 1
D. COLLARS 26 - 730.67
OTHER FT.
C.B. FT.
SUBS. FT. 1 - 2.10
FT. UP ON KELLY 2 - 11
TOTAL 8029

REMARKS	TIME START	STOP	INTERVAL
Cir Sample (Geo Dobson)	4 00	4 30	1/2
Hoist w/ Bit # 19	4 30	7 00	2 1/2
Slip 15' Line	7 00	8 15	1 1/4
C.K. Rams	8 15	8 20	1/4
Re-Install Jets. ck Button Bit	8 30	8 45	1/4
Run 4" in w/ Bit 20	845	11 30	2 3/4
Fill pipe. Break circ. Run tight spot 16 STDS of Re-Ream	11 30	12 00	1/2

Totco Ring on Bit No. ____ D.P. Calipered Date ____ Results ____ From Pipe Rack ____

B.O.P. Test-Operated ____ Time ____ Results ____

TOTAL CONTRACTOR TIME ____ HRS. TOOLPUSHER ____

TOTAL COMPANY TIME ____ HRS. APPROVED BY ____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 45 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY H. B. Pool Am. LOCATION South Island River N-41 DATE March 6 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER R. McEasor	8
DERRICK Jim Spelling	4
MOTOR Doug Mytis	12
FLOOR Sterl Pasmeay	12
FLOOR Mel Saunders	4
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wilbur Remmy	8
DERRICK Ray Lenox	8
MOTOR Ron Ellsworth	8
FLOOR Noel Jacob	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER W. McDonell	7
DERRICK Noel Jacob	8
MOTOR Nick Soda	8
FLOOR Everett Smith	8
FLOOR Ed Hagen	7
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - Midnight - 8 a.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7916	34'	7950	7½		26	7"	2⅞				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
18	9"	W7R2	3-3-3	45176	45	60	34		7½	12	DR. H

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT		9		
VISCOSITY		44		
GEL		2		

ADDITIVES C.

PUMPS

	NO. 1	NO. 2
PRESSURE	1200	
MODEL		
S.P.M.	56	
LINER SIZE	6"	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1⅛		8						

GENERAL

W.L. 4.2 F.C. 3/32 pH.

AT SURVEYS DEGREE

MOTOR HOURS

		NEXT OIL CHANGE
1	172	No
2	172	✓
3	172	✓
4	172	✓
5	172	✓

STANDS 793.59
SINGLES
D. COLLARS 730.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 23.64
TOTAL 7950.00

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Clean To Bottom	12 45	12 30	½
Drilling 9" Hole	12 30	8 00	7½

Tour - 8 a.m. - 4 p.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7950	28'	7978	7½	165,000	26	7"	2⅞				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONCITION
29	9"	W7R2	3-3-3	45176	45	60	67		15	7978	

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9.1	9.2	9.2	9.3
VISCOSITY	44	49	50	50
GEL	2	2	2	2

ADDITIVES 12 bbl Oil
2 sacks D
2 sacks Q
2 sacks Flo-Chek

PUMPS

	NO. 1	NO. 2
PRESSURE	1200	
MODEL		
S.P.M.	56	
LINER SIZE	6½	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL Circulated Oil, Lubricate & Fuel
Fitting up and tripping pipe
Filter Paul Filter D-316

W.L. 3.4 F.C. 3/32 pH. 11.0

AT SURVEYS DEGREE

MOTOR HOURS

		NEXT OIL CHANGE
1		168
2		✓
3		✓
4		✓

STANDS 79.7711.00
SINGLES 1
D. COLLARS 26-730.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 19.77
TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Survey Bar	8 00	8 15	¼
Drlg 9" Hole	8 15	3 00	7½
Drop Survey @ 7978	3 00	4 00	¼

Tour - 4 p.m. - Midnight

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7978				165,000	26	7"	2⅞				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
29	9	W7R2	3-3-3	102.00							

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

PUMPS

	NO. 1	NO. 2
PRESSURE		
MODEL		
S.P.M.		
LINER SIZE		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE

7778 2¾

MOTOR HOURS

		NEXT OIL CHANGE
1	8	
2	8	168
3	8	
4	8	

STANDS 79.7224
SINGLES 21
D. COLLARS 26-730.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 8.77
TOTAL 7778

STAND BANKED

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Hoist in BHA #29	4 00	7 30	3½
Slip 15' Line	7 30	7 45	¼
Run in w/BHA #29	7 45	10 30	2¾
Clean 30' To Bottom	10 30	12 00	1½

Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack

B.O.P. Test-Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOOLPUSHER

TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 4th DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 16 COMPANY H.B. Rogers LOCATION South Island Rock, 4-41 DATE March 15 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER R. Measor	8
DERRICK B.B. Spelling	8
MOTOR Doug Mytis	10
FLOOR Jerry Parmenter	10
FLOOR Neil Jacob	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7916	—	—		124 M	26	7¼	2¼				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS

		NEXT OIL CHANGE
1	148	168
2	148	✓
3	148	✓
4	148	✓
5	148	✓

PUMPS

NO. 1	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	6½
NO. 2	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
								#6

GENERAL D.S.T.

W.L. F.C. pH.

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

REMARKS	TIME START	STOP	INTERVAL
Finish Hoisting	12 00	12 30	½
Make up Tester Tool	12 30	2 30	2
Run in D.C.	2 30	3 15	7/4
Ship 12' DL	3 15	3 45	½
Run in Slow w/ Pulls	3 45	6 30	2 3/4
Rig up Testing Head	6 30	7 00	½
~~Take Sheet~~ Take Sheet	7 00	7 45	3/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm. Pinney	8
DERRICK Roy Jones	8
MOTOR Mac Ross	8
FLOOR Wm. Connors	8
FLOOR Neil Connors	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7916											

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS

		NEXT OIL CHANGE
1	156	168
2	156	✓
3	156	✓
4	156	✓
5	156	✓

PUMPS

NO. 1	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

REMARKS	TIME START	STOP	INTERVAL
Install Shut in	8 00	8 15	¼
Pull Tester	8 15	10 00	1 3/4
Shut in	10 00	11 00	1
Pull Tester Tool	11 00	11 15	¼
Hoist Tester	11 15	4 00	4 3/4
Run 6600' Salt Water			

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Freels	8
MOTOR Nick Body	8
FLOOR Ernest Knuit	8
FLOOR Ed Hogan	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7916				157 M							

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
37	9"	HTC	3-¼	45176							

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS

		NEXT OIL CHANGE
1	164	168
2	164	✓
3	164	✓
4	164	✓
5	164	✓

PUMPS

NO. 1	PRESSURE	1500
	MODEL	D-5
	S.P.M.	60
	LINER SIZE	6½
NO. 2	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
16		9						

GENERAL

W.L. F.C. pH.

STANDS 79-71630

SINGLES

D. COLLARS 24-7301.7

OTHER FT.

C.B. FT.

SUBS. FT. 1-2.10

FT. UP ON KELLY 19.77

TOTAL 7916

REMARKS	TIME START	STOP	INTERVAL
Break and lay down Packer	4 00	5 30	1½
Slip 15' Line	5 30	5 45	¼
Run in w/ 13.7 #'s 28	5 45	10 00	4¼
Ream 70' To Bottom	10 00	12 00	

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS.

TOTAL COMPANY TIME _____ HRS.

TOOLPUSHER [signature]

APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 43 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 14 COMPANY H.B. Paul Ltd LOCATION South Island Rig 4 DATE March 4 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER R. Measor	8
DERRICK B.B. Swetlang	8
MOTOR Doug Mathis	8
FLOOR Jerry Pasquini	8
FLOOR Joel Jacob	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7833	46	7879	7½	160	26	7"	2¼				2

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
27	9"	YH		~~F14054~~ F14054	45	60	46		7½	7879	1/1

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	9		9+	9+
VISCOSITY	1		200	220
GEL				

ADDITIVES: 100 ☒ Bagin; 100 Cal-carbon.

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	1200	✓	✓	—
MODEL	S.P.M.	56	✓	✓	✓
	LINER SIZE	6½	✓	✓	✓
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1¼		8					

GENERAL

W.L. — F.C. — pH.

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	124	164
2	124	✓
3	124	✓
4	124	✓
5	124	✓

STANDS 71 32.60 SINGLES 2

D. COLLARS 730.67 OTHER FT.

C.B. FT.

SUBS. FT. 1 - 2.10

FT. UP ON KELLY 13.63

TOTAL 7874

REMARKS	TIME START	STOP	INTERVAL
Clean 30' To Bottom	12 00	12 30	½
Drilling 9" Hole	12 30	8 00	7½

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wallace Pomeroy	8
DERRICK Ray Hancox	8
MOTOR Nick Boon	8
FLOOR Ron Edmonstone	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7879	37'	7916	6¾	160	26	7"	2¼				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
27	9"	YH	3-11/16	F14054	45	60	83	1	10½	7916	

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9+		9+	9+
VISCOSITY	2		200	195
GEL				

ADDITIVES: 1000 ℔ C.I.; 100 ℔ Fo-Fo-4-C; 1 ℔ ☒ Bagin; 1 ℔ ☒ Quick

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	1200	✓	✓	✓
MODEL	S.P.M.	56	✓	✓	✓
	LINER SIZE	6½	✓	✓	✓
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1¼		8					

GENERAL Circ. Clean - Wt. 9+

W.L. 3 F.C. 2 pH.

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	132	168
2	132	✓
3	132	✓
4	132	✓
5	132	✓

STANDS 79. 7163.01 SINGLES

D. COLLARS 730.67 OTHER FT.

C.B. FT.

SUBS. FT. 2.10

FT. UP ON KELLY 19.78

TOTAL 7916.00

REMARKS	TIME START	STOP	INTERVAL
Rig Serv, Check BOP	8 00	8 30	¼
Drilling 9" Hole	8 30	3 00	6¾
Circ To Test	3 00	4 00	1

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm. McDonald	8
DERRICK Noel Jacob	8
MOTOR Henry Lundy	8
FLOOR Ernest Hunt	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7916				160	26	7	2¼				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
27	9"	YH	3½	F14054			83		10½	7916	

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	9+	9+	9+	
VISCOSITY				
GEL				

ADDITIVES: 100 ℔ Bagin; 100 ℔ Caltrol; 1 Comp E 1

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	1200	✓	✓	
MODEL	S.P.M.	56	✓	✓	
	LINER SIZE	6½	✓	✓	
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1¼		8					

GENERAL

W.L. 3+ F.C. 2+ pH. 11.5

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	140	164
2	140	✓
3	140	✓
4	140	✓
5	140	✓

STANDS 79. 7163.01 SINGLES

D. COLLARS 730.67 OTHER FT.

C.B. FT.

SUBS. FT. 1 - 3.10

FT. UP ON KELLY

TOTAL 7916.00

REMARKS	TIME START	STOP	INTERVAL
Service Rig	11 00	11 00	¼
Circ To Test	11 00	9 00	11¾
Hoist	9 00	12 00	3

Totco Ring on Bit No. ____ D.P. Calipered Date ____ Results ____ From Pipe Rack ____

B.O.P. Test-Operated ____ Time ____ Results ____

TOTAL CONTRACTOR TIME ____ HRS. TOOLPUSHER ____

TOTAL COMPANY TIME ____ HRS. APPROVED BY ____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 42 DAY ON THIS WELL

CONSERVATION BOARD

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY HBP Pan Am LOCATION Sable Island / Rig 14-4 DATE March 13 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	8
MOTOR Harry Lundy	8
FLOOR Ernie Hoult	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7750	24	7774	23½	162M	26	7¼"	2¾				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
26	9"	V7	3½	19393	45	60	24		2½		RUN

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT			9<	9<
VISCOSITY				
GEL				

ADDITIVES: CMC

AT SURVEYS DEGREE:

MOTOR HOURS: 1 100 | 2 100 | 3 100 | 4 100 | 5 100

NEXT OIL CHANGE: 168

PUMPS

	NO. 1	NO. 2
MODEL		
PRESSURE		
S.P.M.		
LINER SIZE	6½	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1¼		4					

GENERAL

W.L. F.C. 2 pH:

STANDS: 72-701450 SINGLES: 1 D. COLLARS: 26-730.67 OTHER FT.

C.B. FT. SUBS. FT. 1-2.10 FT. UP ON KELLY 9 TOTAL 2774 NEXT SLIP

REMARKS	TIME START	STOP	INTERVAL
Service Rig	1200	1300	1
Run in w/ B.I. W-26	1300	2330	2½
Ream Out	2330	2400	½
Circ. 30' To Bottom	24	430	1½
Dia Hole	430	900	4½

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER R. McLeod	4
DERRICK Bob Snelling	4
MOTOR Doug Mills	4
FLOOR J. Ray Pomeroy	4
FLOOR Roger Tanguay	4
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7774	48	7822	7½	162M	26	7⅛"	2¾				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
26	9"	V7	3½	19393	45	60	72		11	IN	

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9<		9<	9<
VISCOSITY				
GEL				

ADDITIVES: CMC

AT SURVEYS DEGREE:

MOTOR HOURS: 1 109 | 2 109 | 3 109 | 4 109 | 5 109

NEXT OIL CHANGE: 168

PUMPS

	NO. 1	NO. 2
MODEL		
PRESSURE	1200	
S.P.M.	56	
LINER SIZE	6½	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1¼		8					

GENERAL: ROGER TANGUAY RIG HAD REFUSED TO PICK TOOLS & RETURN TO THAT BOARD.

W.L. F.C. pH.

STANDS: 72-701450 SINGLES: 1 D. COLLARS: 26-730.67 OTHER FT.

C.B. FT. SUBS. FT. 1-2.10 FT. UP ON KELLY 17.73 TOTAL 7822.00 NEXT SLIP

REMARKS	TIME START	STOP	INTERVAL
Drilling 9" Hole	800	830	½
Check Bop	830	900	½
Drilling 9" Hole	900	1100	2
Change Gland Packing Pump	1100	1130	½
Drilling	1130	400	4½

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm. A Pomeroy	8
DERRICK D. J. Lirette	8
MOTOR N. K. Rich	8
FLOOR Ron Ringsmuth	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7822	11'	7833	1¾	162M	26	7"	2⅞				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
26	9"	V7	3½	14392	45	60	83		12¾	7833	

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	9.2	9.2		
VISCOSITY	40	39		
GEL				

ADDITIVES: 150 # Caustic / 100 # Soda Ash / 100 # Caustic

AT SURVEYS DEGREE: 7830 2°

MOTOR HOURS: 1 116 | 2 116 | 3 116 | 4 116 | 5 116

NEXT OIL CHANGE: 168

PUMPS

	NO. 1	NO. 2
MODEL		
PRESSURE	1200	
S.P.M.	56	
LINER SIZE	6½	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1¼		8					

GENERAL

W.L. F.C. pH.

STANDS: 72-701450 SINGLES: 1 D. COLLARS: 26-730.67 OTHER FT.

C.B. FT. SUBS. FT. 1-2.10 FT. UP ON KELLY 11.27 TOTAL 7833.00 NEXT SLIP

REMARKS	TIME START	STOP	INTERVAL
Service Rig	1100	1115	¼
Dig 9" Hole	1115	600	1¾
Drop Survey @	600	615	¼
Hoist Pt in 26	615	845	2½
Change Bits	845	900	¼
Slip 17' Drlg Line	900	915	¼
Run in w/ Pt in 27	915	1100	1¾
Break Circ	1100	1115	¼
Finish Running In	1115	1200	¾

Totco Ring on Bit No. ____ D.P. Calipered Date ____ Results ____ From Pipe Rack ____

B.O.P. Test-Operated ____ Time ____ Results ____

TOTAL CONTRACTOR TIME ____ HRS. TOOLPUSHER [signature]

TOTAL COMPANY TIME ____ HRS. APPROVED BY ____

CASCADE DRILLING
Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 41 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 17 COMPANY [illegible] LOCATION [illegible] DATE [illegible] 19 [illegible]

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonell	
DERRICK Noel Ford	
MOTOR Henry Lundy	
FLOOR Ernest Nault	
FLOOR Ed Hiscott	
FLOOR	
FIREMAN	
EXTRA	
INJURIES: None	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER R. Measel	8
DERRICK Bob Sheldon	8
MOTOR Doug Mathis	8
FLOOR Jack Pasmeny	8
FLOOR Ray Tarpley	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wilbur Pressley	8
DERRICK Ray Lepoux	8
MOTOR Nick Rossi	8
FLOOR Ron Reames	8
FLOOR Mel Simmons	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - Midnight - 8 a.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
7620				120M	26	7"	2¾	

FUEL GALS. | WATER BBLS. | COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
25	9"	HTC	3-11	35135							

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE

	MOTOR HOURS
1	76
2	76
3	76
4	76
5	76

PUMPS

NO. 1	MODEL	
	PRESSURE	1200
	S.P.M.	60
	LINER SIZE	6½
NO. 2	MODEL	
	PRESSURE	
	S.P.M.	
	LINER SIZE	

SIZE 1¼ | TRIPS | NO. LINES 4 | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

Drilled 7620.00
Daily 7668.00
Am correct.

W.L. F.C. pH.

STANDS 26-6776.41
SINGLES 1-73.41
D. COLLARS 26-720.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 22
TOTAL 7620

REMARKS

	TIME START	TIME STOP	TIME INTERVAL
Pick up Hunt type stab pipe	12:00	2:00	2
Slip 12' Line	2:00	2:15	¼
Ream Dr. 7" 21	2:15	4:45	2½
P.U. Kelly, Broke Circ. Ran 1 JT Broke Circ.	4:45	5:00	¼
	5:00	5:15	¼
	5:15	7:00	1¾

Tour - 8 a.m. - 4 p.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
7670	57'	7727	7¾	160	26	7"	2¾	

FUEL GALS. | WATER BBLS. | COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
25	9"	HTC	3-11	35135	45	60	57		7¾		

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9.1			
VISCOSITY	150			
GEL				

ADDITIVES Gel — 2500#

AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE

	MOTOR HOURS
1	84
2	84
3	84
4	84
5	84

PUMPS

NO. 1	MODEL	
	PRESSURE	1200
	S.P.M.	56
	LINER SIZE	6½
NO. 2	MODEL	
	PRESSURE	
	S.P.M.	
	LINER SIZE	

SIZE 1¼ | TRIPS | NO. LINES 4 | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL Crown + Blocks

W.L. F.C. pH.

STANDS 26-6776.41
SINGLES 1-73.41
D. COLLARS 26-720.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 16.70
TOTAL 7727.06

REMARKS

	TIME START	TIME STOP	TIME INTERVAL
Check B.O.P.	8:00	8:15	¼
Drilling 9" Hole	8:15	4:00	7¾

Tour - 4 p.m. - Midnight

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
7727	23'	7750	4½	163,000	26	7"	2¾	

FUEL GALS. | WATER BBLS. | COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
25	9"	HTC	3-11	35135	45	60	80'		12¾	7750	Dull

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	9.1	9.2	9.3	
VISCOSITY	150	140	240	
GEL				

ADDITIVES 2500# Gel
50# Collox H.V.

AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE

	MOTOR HOURS	NEXT OIL CHANGE
1	92	168
2	92	"
3	92	"
4	92	"
5	92	"

PUMPS

NO. 1	MODEL	
	PRESSURE	1200
	S.P.M.	96
	LINER SIZE	6½
NO. 2	MODEL	
	PRESSURE	
	S.P.M.	
	LINER SIZE	

SIZE 1¼ | TRIPS | NO. LINES 8 | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. 3.4 F.C. 1/2 pH. 10.5

STANDS 77-6979.58
SINGLES
D. COLLARS 26-720.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 2.30
TOTAL 7750

REMARKS

	TIME START	TIME STOP	TIME INTERVAL
Survey - Bops	4:00	4:15	¼
Drlg 9" Hole	4:15	8:45	4½
Hoist For Mud Pit	8:45	11:15	2½
Change Pits — Clean out	11:15		
Junk Sub No Runners		11:45	½
Slip 17' Drlg	11:45	12:00	¼

Totco Ring on Bit No. ____ D.P. Calipered Date ____ Results ____ From Pipe Rack ____

B.O.P. Test-Operated ____ Time ____ Results ____

TOTAL CONTRACTOR TIME ____ HRS. TOOLPUSHER ____

TOTAL COMPANY TIME ____ HRS. APPROVED BY ____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 40 DAY ON THIS WELL

NOTE-Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 12 COMPANY PCP Pan A LOCATION South Tsla [illegible] DATE MAY 11/64 19

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonell	7
DERRICK Noel Jacob	7
MOTOR Harry Landry	7
FLOOR Earnest Nault	7
FLOOR Ed Hagen	7
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7537	32	7569	3½	160M	26	6"	2¼				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
24	9	XHWR	3-¼	021704	45	60	32		3½		Run

MUD	12 MN.	4 A.M.	8 A.M.	ADDITIVES
WEIGHT			10+	Caustic 200 lb.
VISCOSITY			200	Soda Ash 200 lbs.
GEL				Gyp

PUMPS		12 MN.	4 A.M.	8 A.M.
NO. 1	PRESSURE			1000 1200
MODEL	S.P.M.			
L	LINER SIZE		14	
NO. 2	PRESSURE			
MODEL	S.P.M.			
	LINER SIZE			

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET	SLIP OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		4						

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 52	116
	2 52	"
	3 52	"
	4 52	"
	5 52	"

STANDS	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
26-1796.2 SINGLES	26-730.67			1-21.0		

REMARKS	TIME START	TIME STOP	TIME INTERVAL
2 Runs in 13.7 = 24	12[illegible]	[illegible]	[illegible]
Clean out To Bottom	[illegible]	[illegible]	1½
Drl 7" Hole	0145	0800	2¼

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Rimeasoe	8
DERRICK Bob Snelling	8
MOTOR Dud Mytiss	8
FLOOR Jerry Posmeny	8
FLOOR Roger Tousignant	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7569	74'	7643	6½	165 M	26	7"	2¾				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
24	9"	HHWR-2	3-¼	021484	45	60	106		9½		DRLG

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	9.6	9.7	9.5		"
VISCOSITY	52		52		"
GEL					"

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	1200	"	"	"
MODEL	S.P.M.	56	"	"	"
D-50	LINER SIZE	6½	"	"	"
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET	SLIP OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1¼		8						

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 60	116
	2 60	"
	3 60	"
	4 60	"
	5 60	"

STANDS	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
26-1886.91 SINGLES	26-730.67			2.10	73.32	7643.00

REMARKS	TIME START	TIME STOP	TIME INTERVAL
CHECK BOPs	800	815	1¼
Drilling 9" Hole	815	1230	4¼
Work on Air Lines on Compressors	1230	200	1½
Drilling	200	400	2

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasanen	8
DERRICK Ray Lemire	8
MOTOR Nick Ross	8
FLOOR Real Tousignant	8
FLOOR Mel Simmons	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7643	25'	7668	5¾	162,000	26	7"	2¼				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
24	9"	HHWR	3-¼	021484	45	60	131		14¾	7668	

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					Sinsk Gel
VISCOSITY					1-50# C Bruxite
GEL					1-50# Caustic
					1-50# Caustic
					2-50# Mills Dispersol

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	1200	"	"	"
MODEL	S.P.M.	56	"	"	"
D-50	LINER SIZE	6½	"	"	"
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET	SLIP OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1¼		8						

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
	1 68	168
	2 68	"
	3 68	"
	4 68	"
	5 68	"

STANDS	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
26-1886.91 SINGLES	1-30.48 / 26-730.67			1-2.10	22.00	7669.00

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Survey Bops	400	415	¼
Drlg 9" Hole	415	1000	5¾
Drop Survey @ 7660	1000	1015	¼
Hoist Set of 24	1015	1200	1¾

Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack

B.O.P. Test-Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOOLPUSHER

TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 27 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 14 COMPANY H.B. Pan Am. LOCATION South Island Rive DATE MAY 20 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonell	8
DERRICK Noel Jacob	7
MOTOR Maryland	7
FLOOR Earnest Nash	9
FLOOR Ed Hugo	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7537				10M	26	7"	2¾				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
22	9"	YHWG	3-11	E13193							

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT					
VISCOSITY		Trip			
GEL					

PUMPS												
NO. 1	PRESSURE											
MODEL	S.P.M.											
	LINER SIZE											
NO. 2	PRESSURE											
MODEL	S.P.M.											
	LINER SIZE											

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		9			15			

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5

NEXT OIL CHANGE

STANDS 74 67 61

SINGLES 2

D. COLLARS 2 - 7 3/8 17

OTHER FT.

C.B. FT.

SUBS. FT. 1-2.10

FT. UP ON KELLY 0

TOTAL 2537

NEXT SLIP

REMARKS	TIME START	STOP	INTERVAL
Hoist To Test	12⁰⁰	3³⁰	7½
Pick up, Thaw out +			
make up Packer	3³⁰	5⁰⁰	1½
~~Run in~~ Slip 15 Line	5⁰⁰	5¹⁵	¼
Run in w/ Packer	5¹⁵	8⁰⁰	2¾

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER R. McEachern	8
DERRICK Bob Swelling	8
MOTOR Doug Mifflin	8
FLOOR Jerry Pasmeau	8
FLOOR Roger Tanguay	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7537											

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS												
NO. 1	PRESSURE											
MODEL	S.P.M.											
	LINER SIZE											
NO. 2	PRESSURE											
MODEL	S.P.M.											
	LINER SIZE											

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
							111	3740

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5

NEXT OIL CHANGE

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

REMARKS	TIME START	STOP	INTERVAL
Run in w/ Packer	8⁰⁰	9⁰⁰	1
R.U. & Test. Head	9⁰⁰	9¹⁵	1¼
Initial Shut in	9¹⁵	10⁰⁰	3¼
Open Tool	10⁰⁰	12⁰⁰	2
Shut in	12⁰⁰	12⁴⁵	¾
Hoist Packer	12⁴⁵	4⁰⁰	3¼
DST #5 7300/7535 Fik point Formation			
ISI 45 min Flow - 120 Blow ESI 45 min			
ISI 2926 IF 200 FF 926 FSI 2926 FH 3590			
Fair initial puff Strong air Blow in 60 mins Decreasing to			
Dead T. light air Blow in 60 mins Decreasing to dead			
Rec 200' Drilling Fluid 3600' salt wtr. IH 90 min			

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Willie Pisquoy	8
DERRICK Roy Lavoie	8
MOTOR Nick Bosa	8
FLOOR Don Pinchin	8
FLOOR Hal Simmons	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7537					26	7"	2¾				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
24	9"	YHWG	3-11	021490							

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS												
NO. 1	PRESSURE											
MODEL	S.P.M.											
	LINER SIZE											
NO. 2	PRESSURE											
MODEL	S.P.M.											
	LINER SIZE											

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5

NEXT OIL CHANGE

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

REMARKS	TIME START	STOP	INTERVAL
Finish Hoisting Packer	4⁰⁰	6⁰⁰	2
Lay Down + Wash Same	6⁰⁰	7⁰⁰	1
Wash Down Floor Etc	7⁰⁰		
Small + Dirty		8⁰⁰	1
Service Boys	8⁰⁰	8¹⁵	¼
Slip 12' Drlg Line	8¹⁵	8³⁰	¼
Clean Mud Tanks Shale	8³⁰	10³⁰	2
Run in w/ Bit #24	10³⁰		
+ Ck All D.C		12⁰⁰	1½
Serial # Numbers			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 38 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 12 COMPANY H B Phillips LOCATION Sable Island Block M-41 DATE Mar 7 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	8
MOTOR Harry Lindsay	8
FLOOR Ernest Alwill	8
FLOOR Ed Hayes	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7413	67	1535	4	112M	26	7"	2 7/8				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
2A	9"	VHWC	3 1/16	E63191	15	60	67		7½		A.

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	96	96	91	96	Gel [illegible]
VISCOSITY	105	100	120	100	[illegible]
GEL					[illegible]

PUMPS			12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE		1200	"	"	"
	MODEL	S.P.M.	56	"	"	"
D-6		LINER SIZE	6½	"	"	"
NO. 2	PRESSURE					
	MODEL	S.P.M.				
		LINER SIZE				

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
		1	4	112
		2	4	"
		3	4	"
		4	4	"
		5		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
11		5						

GENERAL Change oil & filters, Caterpillars, 11 CMC

W.L. F.C. pH. Flare Good on Mud - 0.00

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
24 - 676.16	1	26 - 730.67			1-2.10	2	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
D/g 9" Hole	12 00	[illegible]	5

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER R. MEASOR	8
DERRICK Bob Sutherland	8
MOTOR Doug Mytis	8
FLOOR Rodie Igglehart	8
FLOOR Jerry Hasmeny	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES: TRAVELLING TIME JERRY HASMENY	
FIRES: FROM R/12 TO 18.	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7535	2	7537	¼	112M	26	7"	2 7/8				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
2B	9"	VHWC	3 1/16	E63191	40	60	91		8¾	7537	

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS			8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE		1200			
	MODEL	S.P.M.	56			
D-6		LINER SIZE	6½			
NO. 2	PRESSURE					
	MODEL	S.P.M.				
		LINER SIZE				

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
7537	2°	1	11	
		2	12	
		3	12	
		4	12	
		5	19	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
24 - 676.16	1	26 - 730.67			12.10	0	7537.00

REMARKS	TIME START	TIME STOP	TIME INTERVAL
DRILL	8 00	8 15	¼
DROP SURV, SLIP 10' DL	8 15	8 35	1½
HOIST FOR BIT	8 45	12 45	4
CHANGE BIT, CLOSE RAMS	12 03	1 00	1¼
RUN IN	1 00	4 00	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wallace Feeney	8
DERRICK Ray Leask	8
MOTOR Nick Fong	8
FLOOR Ken Eisenhut	8
FLOOR Wm Simmonds	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7539					26	7"	2 7/8				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
2B	9"	VHWC	E63200	E63191							

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT				92	[illegible]
VISCOSITY				[illegible]	[illegible]
GEL					

PUMPS			4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE		1200	"	"	"
	MODEL	S.P.M.	56	"	"	"
D-6		LINER SIZE	6½	"	"	"
NO. 2	PRESSURE					
	MODEL	S.P.M.				
		LINER SIZE				

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
		1	20	
		2	20	
		3	20	
		4	20	
		5	20	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Change oil on filters - D-515

W.L. [illegible] F.C. [illegible] pH. 10.5

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
24 - 676.16	1	26 - 730.67			1 - 2.10		7537.00

REMARKS	TIME START	TIME STOP	TIME INTERVAL
SERVICE BOPS	4 00	11 15	¼
C/O's, to 4 3/4 in.	4 15	4 00	13¼
Circulate to test	4 00	12 00	6
condition mud water			
coming in from Hole			
cutting Viscosity down			

Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack

B.O.P. Test-Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOOLPUSHER

TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 22 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 17 COMPANY H B Pan Am LOCATION South Tide 4 F.S.O.M-11 DATE May 9 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Neal Jacob	8
MOTOR Harry Lindy	8
FLOOR Everett Mank	8
FLOOR Ed Hayes	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7358	77	7435	7¾	150M	26	7"	2⅞				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
22	9"	W7	11	19279	45	60	135		13½ 13½		Fair

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT	11	95	96	96	Gel - 5000 lbs		1 212	
VISCOSITY	90	120	120	40	Q Broxin - 200 lbs Sawdust 4 bags		2 212	
GEL					Carbonox - 200 lbs		3 212	
					Caustic - 200 lbs Caliber 12-Nov		4 212	
					Bentid - 200 lbs		5 212	

PUMPS			12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE		1200			
MODEL	S.P.M.		56			
D-10	LINER SIZE		6½			
NO. 2	PRESSURE					
MODEL	S.P.M.					
	LINER SIZE					

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		9						

GENERAL

W.L. 49 F.C. 2/32 pH. 10.5

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
2m 677.16	2	24-730.67			1-2.10	14.92	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service Block Bugs	12⁰⁰	12¹⁵	¼
Dly 7" Hole	12¹⁵	8⁰⁰	7¾

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER R Measor	8
DERRICK Bob Swilley	8
MOTOR Dale Mytte	8
FLOOR Roger Taylor	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7135	31	7466		152M	26	7"	2¼				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
22	9"	W7	3-12	19392	45	60	166		16½	7466	Lost Cone Cone

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT	9	9+			Tool Joint Compound		1 220	
VISCOSITY	9+	9+					2 220	
GEL							3 220	
							4 220	
							5 220	

PUMPS			8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE		1200			
MODEL	S.P.M.		56			
D-10	LINER SIZE		6½			
NO. 2	PRESSURE					
MODEL	S.P.M.					
	LINER SIZE					

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL

W.L. 51 F.C. 2/32 pH. 10.5

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
1707.65		730.67			2.10	25.53	7466.08

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drill	8⁰⁰	10⁴⁵	2¾
Clean Foot Comp. Setting Tank	10⁴⁵	11¹⁵	½
Hoist, Work 25 Stands Tight Hole	11¹⁵	4⁰⁰	4¾

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER W. Mc Donnell	8
DERRICK Ray Lemaire	8
MOTOR Nick Boos	8
FLOOR Ron Bridewell	8
FLOOR Al Simmons	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7466	2'	7468		162,000	26	7"	2¼				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
22	9"	Hughes	3-12	F1294	15	60	2		½		

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT							1	
VISCOSITY							2	
GEL							3	
							4	
							5	

PUMPS			4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE					1200
MODEL	S.P.M.					56
D-9	LINER SIZE					6½
NO. 2	PRESSURE					
MODEL	S.P.M.					
	LINER SIZE					

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
670.65		36-730.67		1-2.10		16.00	7469.00

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service B.O.P	4⁰⁰	4¹⁵	¼
Run in Hole w/ Bit Tank 4¹⁵			
Cut D.L.	8⁰⁰		23½
Clean 70'	8⁰⁰	9³⁰	1½
Milton Cone	9³⁰	11³⁰	2
Dale 9" Hole	11³⁰	12⁰⁰	

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 36 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 17 COMPANY A.C. Pete Hug LOCATION 3-11 Trout River NW-11 DATE May 7 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	8
MOTOR Harry Landry	8
FLOOR Everett Wyatt	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS

		NEXT OIL CHANGE
1		
2		
3		
4		
5		

PUMPS

NO. 1	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

REMARKS	TIME START	STOP	INTERVAL
Service Rig, Check Bops	1700	1715	¼
~~Stop Light Line~~	~~1715~~	~~1745~~	~~½~~
Change Spring Assembly in Blocks	1715	1800	1¾

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pomeroy	8
DERRICK Ray LaBlanc	8
MOTOR Nick Bodo	8
FLOOR Don Bradshaw	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7300	—	—	—								

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
22	9	V7	7/16	19392							

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS

		NEXT OIL CHANGE
1		
2		
3		
4		
5		

PUMPS

NO. 1	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS 226597-77
SINGLES 8-1
D. COLLARS 26-73067
OTHER FT.
C.B. FT.
SUBS. FT. 1-210
FT. UP ON KELLY 2056
TOTAL 7300

REMARKS	TIME START	STOP	INTERVAL
Finish changing Spring Assembly in Blocks	8	945	1¾
Rig Service + Bops	945	1000	¼
Slip cut Line	1000	1100	1
Running in Clean out Tight Spots From 6900	1100	400	5

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER K. MEASOR	8
DERRICK Bob Snelling	8
MOTOR Doug Mytis	8
FLOOR Roger Tanguay	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7300	58	7358	6	150M	24	7"	2¾"				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
22	9"	W7	3-11	19392	40	60	58		6	1d	DRILL

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT		9.0	9.2	
VISCOSITY			50	46
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS

		NEXT OIL CHANGE
1	204	
2	204	
3	204	
4	204	
5	204	

PUMPS

NO. 1	PRESSURE	1800
	MODEL	
	S.P.M.	
	LINER SIZE	6½
NO. 2	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	

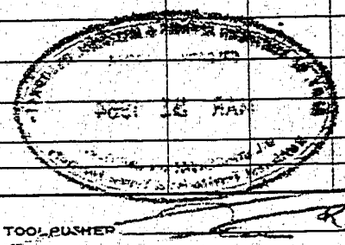
SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
		4					

GENERAL

W.L. F.C. pH.

STANDS 75 Uddeholm 79
SINGLES
D. COLLARS 24-73067
OTHER FT.
C.B. FT.
SUBS. FT. 210
FT. UP ON KELLY 39
TOTAL 7358.0

REMARKS	TIME START	STOP	INTERVAL
Clean out To Bottom	400	600	2
Drilling 9" Hole	600	1200	6



Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack

B.O.P. Test-Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOOL PUSHER

TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 35 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY H B Pan Am LOCATION South Island Rig 4 DATE May 6 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wilbur Kenney	8
DERRICK Ray Linnox	8
MOTOR Nick Penn	8
FLOOR Ron Ericson	8
FLOOR Mel Sievers	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM 7300 | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS: NO. 16, O.D. 7", I.D. 2 7/8, WGT. | FUEL GALS. | WATER BBLS. | COAL TONS

BITS: NO. 21 | SIZE 9" | TYPE OWC | SIZE JETS 3-11/16 | SERIAL NO. 19656 | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	9.7	9.1	9.5	9.5	50# Gel
VISCOSITY	155	190	250	250	2-50# Caustic
GEL					400# Q Broxin
					400# Envirotrox
					100# Cell-O-Seal 2 sacks Diesel

PUMPS: NO. 1 PRESSURE 1100 ✓ ✓ | MODEL D-10 | S.P.M. 57 ✓ ✓ | LINER SIZE 6 1/2 ✓ ✓
NO. 2 PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE 1 1/4 | TRIPS | NO. LINES 8 | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. 4.6 F.C. 2/32 pH. 10.5

AT SURVEYS DEGREE

MOTOR HOURS: 1 164 | 2 164 | 3 164 | 4 164 | 5 164 — NEXT OIL CHANGE 168 ✓ ✓ ✓ ✓ ✓

STANDS | SINGLES | D. COLLARS 26 730.67 | OTHER FT. | C.B. FT. | SUBS. FT. 1-210 | FT. UP ON KELLY | TOTAL

REMARKS	TIME START	STOP	INTERVAL
Rig Service + Cut Drill Line	12:00	12:15	1/4
Rig Up Wireline Co	12:15		
To Trip		1:15	6
Hoist To Test	1:15	8:00	13/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Wm Tibbs	8
MOTOR Harry Lundy	8
FLOOR Faucet Nault	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS: NO. | O.D. | I.D. | WGT. | FUEL GALS. | WATER BBLS. | COAL TONS

BITS: NO. 21 | SIZE 9 | TYPE OWC | SIZE JETS 3 1/2 | SERIAL NO. 17676 | WEIGHT | R.P.M. | FT. DRLD. 79 | FT. RMD. | HRS. 2 1/2 | DEPTH OUT | CONDITION Fair

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS: NO. 1 PRESSURE | MODEL | S.P.M. | LINER SIZE
NO. 2 PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE

MOTOR HOURS: 1 172 | 2 " | 3 " | 4 " | 5 " — NEXT OIL CHANGE 164 ✓ ✓ ✓ ✓ ✓

STANDS 22-1597-19 | SINGLES 1 | D. COLLARS 26-730.67 | OTHER FT. | C.B. FT. | SUBS. FT. 1-210 | FT. UP ON KELLY 30.56 | TOTAL 7300

REMARKS	TIME START	STOP	INTERVAL
Hoist To Test	4:00	10:30	2 1/2
Service Rig	10:30	10:45	1/4
Slip 15' Line	10:45	11:00	1/4
Pickup Packer + Make up	11:00	11:30	1/2
Run in w/ Packer	11:30	2:30	3
Initial Shut in	2:30	3:00	1/2
Tool open	3:00	4:00	1

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER E MEASOR	8
DERRICK Bob Snelling	8
MOTOR Doug Myers	8
FLOOR Ricky Hill	8
FLOOR Roger Tanguay	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS: NO. | O.D. | I.D. | WGT. | FUEL GALS. | WATER BBLS. | COAL TONS

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS: NO. 1 PRESSURE | MODEL | S.P.M. | LINER SIZE
NO. 2 PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

AT SURVEYS DEGREE

MOTOR HOURS: 1 | 2 | 3 | 4 | 5 — NEXT OIL CHANGE

STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

REMARKS	TIME START	STOP	INTERVAL
Tool open	4:00	5:00	1
SHUT in	5:00	5:30	1/2
Pull Packer Loose	5:30	7:00	1 1/2
Hoist Packer Clearing Out	7:00	10:30	3 1/2
Lay Down Packer	10:30	11:30	1
Rig up To Change String in Blocks	11:30	12:00	1/2

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 24 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY H.B. Rig H. LOCATION South Jenner Road 41 DATE March 6 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm. Ramey	8
DERRICK Ky Lewis	8
MOTOR Nick Koon	8
FLOOR Ray Eubanks	8
FLOOR Art Summers	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7125	81"	7321	7	148,000	26	6"	2 7/8				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	20	9"	CWC	3-11	34828	45	64	311'		11½	7321	

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	9.0			9.1	Caustic
VISCOSITY					
GEL					

PUMPS														
NO. 1	MODEL	S.P.M.	LINER SIZE	PRESSURE	NO. 2	MODEL	S.P.M.	LINER SIZE	PRESSURE					
					C-3	56	6½	✓	700	✓	✓			

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL

W.L. 0.4 F.C. 1/2 pH 11.4

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
	1	140	168
	2	140	✓
	3	140	✓
	4	140	✓
	5	140	✓

STANDS 76 SINGLES

D. COLLARS 26 - 73067 OTHER FT.

C.B. FT.

SUBS. FT. 1 - 2.10

FT. UP ON KELLY 1.72

TOTAL 7321

REMARKS	TIME START	STOP	INTERVAL
Rig Service - Check Hoist	11:00	12:15	¼
Drill 9" Hole	12:15	7:15	7
Hoist 5 Stds	7:15	8:00	¾

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER W. McDonell	8
DERRICK	
MOTOR Harry Landis	8
FLOOR Ralph White	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7321				148 000	26	6"	2 7/16				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	21	9	OWC	3 5/16	17626							

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS														
NO. 1	MODEL	S.P.M.	LINER SIZE	PRESSURE	NO. 2	MODEL	S.P.M.	LINER SIZE	PRESSURE					
					C									

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		4						

GENERAL Clean Suction Tank

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
	1	145	121
	2	145	✓
	3	144	✓
	4	144	✓
	5	145	✓

STANDS 72-65323 SINGLES 2 1

D. COLLARS 21-720-67 OTHER FT.

C.B. FT.

SUBS. FT. 1-210

FT. UP ON KELLY 1

TOTAL

REMARKS	TIME START	STOP	INTERVAL
Hoist w/ Kelly for 20	7:00	11:30	4½
Rig Service + Repair	11:30	11:45	¼
Slip 17' of Line	11:45	12:00	¼
Run in with Bit #21	12:00	4:00	4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER L. MEASOR	8
DERRICK Bob Snelling	4
MOTOR Doug Myers	4
FLOOR Rocky Hill	4
FLOOR Roger Tanguay	4
FLOOR	
FIREMAN	
EXTRA	

INJURIES: TRAVELLING TIME FOR R. MEASOR, BOB SNELLING FROM EDMONTON TO R.I.G. 16H0.

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7321	79'	7300	3½	155	26	6"	2 7/16				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	21	9"	OWC	3 5/16	17626	40	75	79'		3½		

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	9				
VISCOSITY					
GEL					

PUMPS														
NO. 1	MODEL	S.P.M.	LINER SIZE	PRESSURE	NO. 2	MODEL	S.P.M.	LINER SIZE	PRESSURE					
					C-3	56	127	6½	1200					

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		4						

GENERAL

W.L. 4.2 F.C. 2.22 pH 9.0

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
7300	1°	156	114
	2	156	✓
	3	156	✓
	4	156	✓
	5	156	✓

STANDS 1 25 7 21 SINGLES

D. COLLARS 26-73067 OTHER FT.

C.B. FT.

SUBS. FT. 1 - 2.15

FT. UP ON KELLY 9.44

TOTAL 7321

REMARKS	TIME START	STOP	INTERVAL
Clean Out 50' Fill	4:00	5:15	1¼
Rig Serv	5:15	5:30	¼
Drill 9" Hole	5:30	9:00	3½
Run Survey Line	9:00	9:30	½
Cut Sample	9:30	10:00	½
Work on Pump (Load Packing)	10:00	10:30	½
Circ Sample Out	10:30	12:00	1½

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 33 DAY ON THIS WELL

CONSERVATION BOARD **DAY WORK RECORD**

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY [illegible] LOCATION [illegible] DATE [illegible] 19[illegible]

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER	Wm [illegible] 8
DERRICK	[illegible] 8
MOTOR	Nick [illegible] 8
FLOOR	[illegible] 8
FLOOR	[illegible] 8
FLOOR		
FIREMAN		
EXTRA		

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7039					26	7"	2 7/8				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
20	9"	[illegible]	3-11/16	66[illegible]							

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES: 15 SKS [illegible] ~~100 SKS [illegible]~~ 3500# Gel 100# Cello

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	116	168
2	116	"
3	116	"
4	116	"
5	116	"

PUMPS		
NO. 1	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS 69-6-49.33
SINGLES
D. COLLARS 26-720.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 1
TOTAL 7039
NEXT OIL CHANGE

REMARKS	TIME START	STOP	INTERVAL
Lay Down Cr Ft	1:00	1:15	1/4
Mix Mud	1:15	3:30	2 1/4
Pump Mud Down + Work pipe - Loose	3:30	5:00	1 1/2
Circ Slow To Size It	5:00		
Loose Mud Last 175 BBLS		Low	
Hi Volume		6:00	1
Mix Mud	6:00	8:00	2

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER	W. McDonell 8
DERRICK	Neal Jacob 16
MOTOR	Harry Loadley 8
FLOOR	Ernest Wark 8
FLOOR	Ed Hagen 8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES: Neal Jacob for overtime Pump D-500 Repairs

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7039	34	7073	3 1/4		26	7" 6"	2 7/8				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
20	9"	OWC	3 1/16	24682			1/1	4	7 1/4		P.U.

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES: Shut Foot 20 SKS Caustic - 100 Lbs Bentonite - 100 Lbs Caustic - 100 Lbs Gel - 100 Lbs

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	124	148
2	124	"
3	124	"
4	124	"
5	124	"

PUMPS				
NO. 1	PRESSURE			
	MODEL			
	S.P.M.			
	LINER SIZE			
NO. 2	PRESSURE	900	"	"
	MODEL			
	S.P.M.	57	"	"
	LINER SIZE	12	"	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1/2		8						

GENERAL

W.L. F.C. pH.

STANDS 69-6-317.44 Rig Service and Ck Bops
SINGLES 2
D. COLLARS 26-720.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 27.21
TOTAL 7073
NEXT OIL CHANGE

REMARKS	TIME START	STOP	INTERVAL
Rig Service and Ck Bops	7:00	7:15	1/4
Circulate and cond Mud	7:15	10:30	2 1/4
Run 2 - Stand mud Ream 30 FT To Bottom	10:30	10:45	1/4
Lay 3" Hole	10:45	12:00	1 1/4
Change Head on C-250	12:00	3:15	3 1/4
	3:15	4:00	3/4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER	Les Graham 8
DERRICK	Rick Hall 8
MOTOR	[illegible] 8
FLOOR	[illegible] 8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7073	62'	7135	6 3/4	148M	26	7"	2 7/8				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
20	9"	OWC	3 1/16	24682	45	60	103		14 1/2		Run

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT		10 0	10 0	10 0
VISCOSITY		160	140	216
GEL				

ADDITIVES: Gel - 10 SKS Bar. - 100 Lbs. Caustic - 100 Lbs.

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	132	
2	132	
3	132	Hot
4	132	
5	132	

CT RY
L.F

PUMPS				
NO. 1	PRESSURE			
	MODEL			
	S.P.M.			
	LINER SIZE			
NO. 2	PRESSURE	1000	1000	1000
	MODEL C-250			
	S.P.M.	56	56	56
	LINER SIZE	6 1/2	6 1/2	6 1/2

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS 70-6-329.77
SINGLES 1
D. COLLARS 26-730.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 25.54
TOTAL 7135
NEXT OIL CHANGE

REMARKS	TIME START	STOP	INTERVAL
R.R Service + Bops	4:00	4:15	1/4
Check Valves C-250	4:15	5:00	3/4
Drill 9" H.I.E.	5:00	11:00	6
Change Gland Packing C-250 Flow Side	11:00	11:15	1/4
Drill 9" H.I.E.	11:15	12:00	3/4

Tutco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 32 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY H B Kirk Ltd. LOCATION South Island Turnpike DATE Nov 2 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm Kenny	8
DERRICK Ray Lemcke	8
MOTOR Nick Boon	8
FLOOR Red Simmons	8
FLOOR Hal Simmons	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7010				146,000	20	6"	2 1/2				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
20	9"	OWC	3-1/4	24692							

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	92	168
2	92	"
3	92	"
4	92	"
5	92	"

PUMPS														
NO. 1	MODEL	PRESSURE	S.P.M.	LINER SIZE	NO. 2	MODEL	PRESSURE	S.P.M.	LINER SIZE	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES
					C-20		1180	54	6 1/2	1"		8		

SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS 68 SINGLES | D. COLLARS 26 | OTHER FT. | C.B. FT. | SUBS. FT. 1 - 2.10 | FT. UP ON KELLY | TOTAL

REMARKS	TIME START	STOP	INTERVAL
Rig Service	12:00	12:15	1/4
Thaw out Kelly Hose	12:15	4:15	4
Kelly — Shock Hose			
Break Circ	4:15	4:30	1/4
Circ 150 ft to Btm	4:30	8:00	3 1/2

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	8
MOTOR Harry Lantz	8
FLOOR Lorne Whitt	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7010				176,000	26	7" 6"	2 1/2				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
20	9"	OWC	3/4	24772							

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	97	97	97	97
VISCOSITY	110	210	210	150
GEL				

ADDITIVES

AT SURVEYS DEGREE 5 7/8 DEG. 1 DEG.

MOTOR HOURS		NEXT OIL CHANGE
1	100	168
2	100	"
3	100	"
4	100	"
5	100	"

PUMPS														
NO. 1	MODEL	PRESSURE	S.P.M.	LINER SIZE	NO. 2	MODEL	PRESSURE	S.P.M.	LINER SIZE	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES
					C-20		1100	54	6 1/2	1"		8		

SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS 69 SINGLES | D. COLLARS 26-7206.7 | OTHER FT. | C.B. FT. | SUBS. FT. 1 - 2.10 | FT. UP ON KELLY | TOTAL

REMARKS	TIME START	STOP	INTERVAL
Cleaning To Bottom	9:00	9:00	1
Service Rig	9:00	9:15	1/4
Cleaning 90' To Bottom	9:15	2:30	5 1/4
Loosing Mud Pull up			
1 stand and condition mud	2:30	4:00	1 1/2

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	8
DERRICK Richard Hill	8
MOTOR Doug Metts	8
FLOOR Ed Hagen	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
810	274	1084	7		26	7"	2 3/8				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
3	9"	OWC	1	24772	20	90	7	22	4 1/2		2-4

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	98	99	99	99
VISCOSITY	140	150	150	150
GEL				

ADDITIVES Gel - 1500 LBS Caustic - 250 LBS Sawdust - 50 LBS

AT SURVEYS DEGREE 4 DEG.

MOTOR HOURS		NEXT OIL CHANGE
1	108	
2	108	
3	108	168
4	108	
5	108	

PUMPS														
NO. 1	MODEL	PRESSURE	S.P.M.	LINER SIZE	NO. 2	MODEL	PRESSURE	S.P.M.	LINER SIZE	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES
					C-20			54	6 1/2					

SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. 4 F.C. 5 pH. 10

STANDS 69 - 1349.33 SINGLES | D. COLLARS 26-730.67 | OTHER FT. | C.B. FT. | SUBS. FT. 1 - 2.10 | FT. UP ON KELLY 1' | TOTAL 7139

REMARKS	TIME START	STOP	INTERVAL
R.B Service Trips	4:00	4:15	1/4
Circ Cond Mud	4:15	5:00	3/4
Clean To Bot Pull Up	5:00	5:30	1/2
Ream Rotate Drop 6 1/4 to 9" w/ 15,000 Weight	5:30	9:00	3 1/2
Drill 9" Hole.	9:00	10:00	1
Hoist Tight 2 stds	10:00	11:00	1
Mix Mud No Volume	11:00	12:00	1
Lost Circulation Hole Tight			

Totco Ring on Bit No. Surf D.P. Calipered Date Results From Pipe Rack

B.O.P. Test-Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOOLPUSHER

TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 21 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 14 COMPANY Hi Cal LOCATION S 28-11-4 W4 DATE Nov 2 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm Fearnley	8
DERRICK Ray Lecoux	8
MOTOR Nick Cecco	8
FLOOR Gus Fearnley	8
FLOOR Phil Summers	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7032											

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT						
VISCOSITY						
GEL						

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

MOTOR HOURS		NEXT OIL CHANGE
1	68	168
2	68	"
3	68	"
4	68	"
5	68	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
70	1	20					

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	16
MOTOR Harry Lindley	8
FLOOR Fred Nault	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7032											

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT		T				
VISCOSITY	T	11		19		
GEL						

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

MOTOR HOURS		NEXT OIL CHANGE
1	76	168
2	76	"
3	76	"
4	76	"
5	76	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
70	1	20					

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	4
DERRICK Rick Hall	8
MOTOR Bob Metts	4
FLOOR Mik Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
					26	7"	2 3/8				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
20	9"	OWC	3 1/4	24682							

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT						
VISCOSITY						
GEL						

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

MOTOR HOURS		NEXT OIL CHANGE
1	54	168
2	54	"
3	84	"
4	84	"
5	54	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
70	1	20					

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Finish Cut	1200	100	1
Trip Cone	100	145	3/4
Strg Cut Drlg Line	145	200	1/4
Slip 100' Drlg Line	200	215	1/4
Fin Trip Cone On Bot	215	230	1/4
Pick up Packer	230	400	1 1/2
Run in Tbg Tally	400	715	
Hang on to Tbg	715	730	
Total Shutin	900	945	3/4
Tool open	945	1100	1 1/4
Final Shutin	1100	1200	1
Pull Packer loose	1200	1230	1/2
~~Hoisting Packer Slow~~	~~1230~~	~~1245~~	~~1/4~~
Rig Serviced	1230	1245	1/4
Hoisting Packer Slow	1245	400	3 1/4
Finish Nipple	4:00	4:30	1/2
Rabbit + Lay Down Packer	4:30	5:30	1
Rih Strung Pups	5:30	5:45	1/4
Strip Drill Line	5:45	6:15	1/2
Run in Tbg W/Bit	6:15	8:30	2 1/4
Tbg out Hang off Hose & Wash	8:30	12:00	3 1/2
D-500			
Rig Serv Change Head D-500			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 20th DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 14 COMPANY P.C. Contractors LOCATION South Todd 4-2-W4 DATE May 1 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pomeroy	8
DERRICK Roy Lepine	8
MOTOR Nick Rook	8
FLOOR Ron Rousseau	8
FLOOR Mel Simmons	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7010	9	7019	3½	110M	20	6"					

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	20	6⅞	0		12-63			9		3½	7019	

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				9C
VISCOSITY				
GEL				

ADDITIVES: 1 sack H Cal; 1 sack Dee; 1 sack Q-Broke

PUMPS					
NO. 1	PRESSURE	1,600	"	"	
MODEL	S.P.M.	38	"	"	
D-36	LINER SIZE	6½	"	"	
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	44	164
2	44	"
3	44	"
4	44	"
5	44	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		4					

GENERAL

W.L. 6 F.C. 1/32 pH. 10.5

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL	NEXT SLIP
70	1	20-582.56		64.53	102	30	7019	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Service - Ck Boxes	12:00	12:15	¼
Clean Up Pulling Unit	12:15	1:00	1
Cutting Core #1	1:00	4:30	3½
Ck Well Flowing Ok	4:30		
Lost 6" Line in Mud Tanks		7:00	2½
Hoist Core #1 Load	7:00	4:00	1

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonell	8
DERRICK Noel Jacob	8
MOTOR Harry Lindy	8
FLOOR Ernest Hawk	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7019	0	7019	0	110M	20	6"					

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	20	6⅞	0		12-63			9		3½	7019	

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL	1			

PUMPS					
NO. 1	PRESSURE	1,700			
MODEL	S.P.M.				
	LINER SIZE				
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	53	
2	53	
3	53	
4	53	
5	53	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8					

GENERAL

W.L. F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL	NEXT SLIP
70 C 3705	1	20-582.56		6455	1.02	30	7019	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Hoist Core BBL	8:00	10:00	2
Remove Core From bbl			
Reassemble bbl + check Bit	10	11:00	1
Service Rig + Run	11:00	11:15	¼
Slip 15' Line	11:15	11:30	¼
Run in with core bbl	11:30	2:30	3
Break circ and Clean 40' To Bottom	2:30	4:00	1½

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	8
DERRICK Burt Hill	8
MOTOR Dale Mills	8
FLOOR Ed Hagen	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
7019	13'	7032	3	140M	20	6"	2⅞				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	20	6⅞	0		12-63		80	20		3½		

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	10	9.8	9.9	
VISCOSITY	160	230	235	
GEL				

ADDITIVES: Gel - 2700 Lbs; Dee - 100 Lbs; CMC - 500 Lbs; Caustic - 200 Lbs; Soda Ash - 300 Lbs

PUMPS					
NO. 1	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE	6½	6½	6½	
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	60	
2	60	
3	60	166
4	60	
5	60	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 5 F.C. 2/32 pH 10.5

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL	NEXT SLIP
70-6370.57	1	20-582.56		6455	1.02	17'	7032	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
P.C. Service B.O.P.'s	4:00	4:00	4
Cutting Core #2	4	7:00	3
P.U. + Core Bbl.	7:00	7:30	½
Hoist Core #2	9:30	12:00	2½

Toolco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 29th DAY ON THIS WELL

CONSERVATION BOARD **DAY WORK RECORD**

NOTE-Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 16 COMPANY [illegible] LOCATION [illegible] DATE Nov 22 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm Conroy	8
DERRICK Ray Hunt	8
MOTOR Al [illegible]	8
FLOOR Ron Brown	8
FLOOR Bill Cowie	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	20	149
2	20	-
3	20	-
4	20	-
5	20	-

PUMPS			
NO. 1	PRESSURE		
	MODEL	S.P.M.	
		LINER SIZE	
NO. 2	PRESSURE		
	MODEL	S.P.M.	
		LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Change oil C-250 - D-500
Rotary table [illegible] #1 DST #2

W.L. F.C. pH.

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Cushman	8
DERRICK Rick Hill	8
MOTOR Doug Myths	8
FLOOR Ed Klazio	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
					Tested - 6920 - 7010 -							
					Rec - 60' salt 100' Black (Oil)							

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					Pressure 3870
VISCOSITY					I.H.P 3870
GEL					F.P - 2510
					ISIP 2770
					FSIP 2770

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	28	14
2	28	1
3	24	1
4	24	1
5	24	1

PUMPS			
NO. 1	PRESSURE		
	MODEL	S.P.M.	
		LINER SIZE	
NO. 2	PRESSURE		
	MODEL	S.P.M.	
		LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Just @ 6 mile. Hough cut
with slight water spray. Good.

W.L. F.C. pH.

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonell	7
DERRICK Noel Jacob	8
MOTOR Harry Landry	8
FLOOR Ernest Hoult	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	20	12¼	O		12-43							

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	36	
2	36	
3	36	
4	36	
5	36	

PUMPS			
NO. 1	PRESSURE		
	MODEL	S.P.M.	
		LINER SIZE	
NO. 2	PRESSURE		
	MODEL	S.P.M.	
		LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Slip 15" Line

W.L. F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
70	1	20			1-210		

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Finish Making T Test	1:00	1:30	3½
Test Csg	1:30		½
Rig up Circ Line	2:00	2:30	½
Circ	2:30	4:30	2
Run in with Kelly	4:30		
Kelly Down Start		5:00	3½
Finish Circ	5:00	5:15	¼
Hole to Test	8:15	8:45	½
Init Shut in	8:45	9:45	1
Pipe Tool	9:45	11:45	2
Shut in	11:45	12:45	1
Pull Tool Loose Break of Head	12:45	1:00	¼
Hoist Slow Chain tong out	1:00	4:00	3
Finish Hoisting	4:00	4:30	½
Break and Lay down Packer	4:30	5:45	1¼
Service Rig ~~and Equip 15 Hrs~~	5:45	1:00	~~¼~~
Pick up core bbl and assemble Steam Barrel of steam all times	1:00	7:30	1½
Run in w/ core bbl and Double Heap pipe	7:30	11:30	4
Pick up Kelly and Break circ	11:30	12:00	½
Pipe Strap 7017			
Board Tally 7010			
No Correction -			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 22nd DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 14 COMPANY H B Pawlan LOCATION South Island Pool 2 mi NE DATE Feb 28 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	8
DERRICK Ricky Hill	8
MOTOR Doug Myers	8
FLOOR Ed Kuzio	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER W. L. Fox	8
DERRICK Roy Lee	8
MOTOR Neal Ellis	8
FLOOR Leon Fox	8
FLOOR Bill Ellis	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	8
MOTOR Harry Lindsey	8
FLOOR Ernest White	8
FLOOR Ed Hazen	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Report 1

FROM 6470 | FOOTAGE 90' | TO 6960 | HRS. ON BOTTOM 7 3/4 | WT. DRILL STRING (1000 LBS.)

DRILL COLLARS: NO. 26 | O.D. 7" | I.D. 2 7/8 | WGT.

FUEL GALS. | WATER BBLS. | COAL TONS

STANDS 14-1220.70 | SINGLES 1

D. COLLARS 26-730.67 | OTHER FT. | C.B. FT. | SUBS. FT. 1-2.10 | FT. UP ON KELLY 2.47 | TOTAL 6960

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
19	9"	OWV	3/4	21541	45	40	90'		7 1/4		R.W.

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	9.7	9.8	9.9	9.9	Gel - 1500 Lbs
VISCOSITY	150	150	150	150	Cmtd - 100 Lbs.
GEL					

AT SURVEYS DEGREE

MOTOR HOURS: 1 | 2 | 3 | 4 | 5

NEXT OIL CHANGE

PUMPS

		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE				
MODEL	S.P.M.	54	64	54	54
	LINER SIZE	6 1/2	6 1/2	6 1/2	6 1/2
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. 52 F.C. 3 pH 10.5

REMARKS	TIME START	TIME STOP	TIME INTERVAL
R.P. Circulate Rig's	12	12	1/4
Drlg. 9" Hole	12	8:00	7 3/4

Report 2

FROM 6960 | FOOTAGE 50' - 7010 | TO | HRS. ON BOTTOM 6 3/4 | WT. DRILL STRING (1000 LBS.) 150M

DRILL COLLARS: NO. 26 | O.D. 7" | I.D. 2 7/8 | WGT.

FUEL GALS. | WATER BBLS. | COAL TONS

STANDS 69-6127.33 | SINGLES

D. COLLARS 26-730.67 | OTHER FT. | C.B. FT. | SUBS. FT. 1-2.10 | FT. UP ON KELLY 14.99 | TOTAL 7010.00

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
19	9"	OWV	3/16	21541	35	40	1110'		14 1/2	7010	

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	9.8			9.9	700# Gel
VISCOSITY	160			150	100# Caustic
GEL					100# D-Fluid
					100# Q Broxin

AT SURVEYS DEGREE 1950 - 1/4°

MOTOR HOURS: 1 4 | 2 4 | 3 4 | 4 4 | 5 4

NEXT OIL CHANGE: 168 | " | " | " | "

PUMPS

		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	1000	"	1000	"
MODEL D-10	S.P.M.	50	"	54	"
	LINER SIZE	6 1/2	"	6 1/2	"
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

SIZE 1 1/2 | TRIPS | NO. LINES 8 | TON MILES | TOTAL MILES | SLIP FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL Changed Oil Filters + Fuel Filters + Oiled Motors + Oiled Light Plant. Ran 11 Cir. Motors + Oiled Crown + Block

W.L. 46 F.C. 3/32 pH 10.5

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Service - Ck Reps	400	415	1/4
Circ To Test	415	700	2 3/4
Hi Stand Drill Collars + Bit	700	800	1
Circ To Test	800	1100	3
Hoist To Test Rig Pump	1100	1200	1

Report 3

FROM 7010 | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) 150000

DRILL COLLARS: NO. 26 | O.D. 7" | I.D. 2 7/8 | WGT.

FUEL GALS. | WATER BBLS. | COAL TONS

STANDS 19-1259.32 | SINGLES

D. COLLARS 26-730.67 | OTHER FT. | C.B. FT. | SUBS. FT. 1-2.10 | FT. UP ON KELLY 14.99 | TOTAL 7010.00

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
19	9"	OWV	3/16	21541			140		14 1/2	7010	

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	9.7	9.9	9.9	9.8	Gel - 2000 Lbs
VISCOSITY	150	150	200	225	CP Prod. 200"
GEL					Caustic 200"

AT SURVEYS DEGREE

MOTOR HOURS: 1 17 | 2 17 | 3 17 | 4 17 | 5 17

NEXT OIL CHANGE: 417 | " | " | 1 | 1

PUMPS

		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	1000	"	"	"
MODEL D-10	S.P.M.	54	"	"	"
	LINER SIZE	6 1/2	"	"	"
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

SIZE 1 1/2 | TRIPS | NO. LINES 7 | TON MILES | TOTAL MILES | SLIP FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. 47 F.C. 1/2 pH 11

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 8TH DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 19 COMPANY U.S.C. & A.M. LOCATION South Flat Pool DATE 6-7-57 19 6m

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER I.S. GRAHAM	8
DERRICK Ricky Hill	8
MOTOR Allis Chalmers	8
FLOOR Ed Cook	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
6725	45'	6810	7 1/4	129M	20	7"	2 1/2				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
14	9"	OSC 6	2 1/16	25517	35		166		13 3/4		Run

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	9.9	9.9	9.9	9.9
VISCOSITY	141	150	135	135
GEL				

ADDITIVES Gel - 1800 LBS. Quebracho - 200 LBS. Caustic - 100 LBS. Cellophane - 50 LBS.

AT SURVEYS DEGREE: 6795 1/4

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	1000	1000	1000	1000
MODEL	S.P.M.	56	56	56	56
	LINER SIZE	6 1/2	6 1/2	6 1/2	6 1/2
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

MOTOR HOURS		NEXT OIL CHANGE
1	156	
2	84	
3	156	
4	156	
5	156	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Oil - Salt

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
5-1-154.90	7.	20-592.82			1-2.10	23.	6810

W.L. 4 8 F.C. 2 pH. 10.5

REMARKS	TIME START	STOP	INTERVAL
R.C. Service BOPs	12:00	12:00	1/4
DR. 11 9" Hole	12:00	7:00	6 3/4
Surv. @ 6795'	7:00	7:30	1/2
DR. 11 9" Hole	7:30	8:00	1/2

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm. McDonnell	8
DERRICK Noel Jacob	8
MOTOR Harry Landy	8
FLOOR Edmond Hewitt	8
FLOOR Ed Hooper	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
6810	60'	6870	7 1/4	137M	20	7"	2 1/4				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
19	9"	OSC 6C	2-11/16	25517	35		220		19 3/4	6870	

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9.7			9.7
VISCOSITY	150			150
GEL				

ADDITIVES 1 Bag Caustic 1 Bag Quebracho 1 Bag Gel 1 Bag Cellophane

AT SURVEYS DEGREE:

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	1200	"	"	"
MODEL	S.P.M.	71	"	"	"
D500	LINER SIZE	6 1/2	"	"	"
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

MOTOR HOURS		NEXT OIL CHANGE
1	164	168
2	164	"
3	164	"
4	164	"
5	114	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
6 1/2		8						

GENERAL Cellophane 1 Bag

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
19-1-2.95	8.	26-772.82			1-2.10	21.00	6870.00

W.L. 5.0 F.C. pH. 10.5

REMARKS	TIME START	STOP	INTERVAL
R.C. Service & Change	6:00	6:15	1/4
D.P. & D.C.	6:15	1:00	4 3/4
Change CK Motor	1:00		
Slip - Cut DL		1:15	1/4
Drl. 9" Hole	1:15	3:45	2 1/2
Circ. Condition Mud	3:45	4:00	1/4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	7
MOTOR Harry Landy	7
FLOOR Edmond Hewitt	7
FLOOR Ed Hooper	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
6870				154000	26	7" 6"	2 1/4				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
17	9	RWU	7-16	21541							

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY		Drilling		
GEL		Mud		

ADDITIVES

AT SURVEYS DEGREE: 6795 1/4

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

MOTOR HOURS		NEXT OIL CHANGE
1		
2		
3		
4		
5		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
6 1/2		7						

GENERAL

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
67-6141.95		26-772.82			1-2.10	45	6870

W.L. F.C. pH.

REMARKS	TIME START	STOP	INTERVAL
Rig Service	4:00	4:15	1/4
Hoist w/Bit 17	4:15	4:30	1/4
Remove Survey, change Bits	4:30	4:45	1/4
Check Flows and Slm in line	4:45	7:00	1/4
Run in w/Bit No 19	7:00	9:30	2 1/2
Wash 1 Jt and Ream 10' To Bottom	9:30	12:00	2 1/2

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 26th DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY Hi-Co LOCATION Cut Bank - Pondera Area DATE 5-26 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER I.S. GRAHAM	8
DERRICK Rocky Hill	8
MOTOR Doug Mytz	8
FLOOR Ed Kozie	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
6575	75'	6650	5¼	130M	20	7"	2¾				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
17	9"	Y22	3 ⅛	C47552	75	84	395'		25¾	6650	

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	10	9.9	9.9		
VISCOSITY	145	143	150		
GEL					

PUMPS	NO. 1	NO. 2
PRESSURE	1000	1000 lows
MODEL		
S.P.M.	56	56 56
LINER SIZE	6½	6½ 6½

AT SURVEYS	DEGREE
6470	⅞°

MOTOR HOURS	NEXT OIL CHANGE
1 1..	
2 84	
3 132	
4 132	
5 132	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1⅜								

GENERAL

W.L. 5 F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
16.10 71.74	1	20 572.42			1-2.18	1.71	1650.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
R.B SERVICE & RIGS	12	12	1
DRILL 9" HOLE	12	5.30	5¼
D.P. SURVEY @ 6620.	5.30	5.45	¼
HOIST.	5.45	8.00	2¼

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm Kennedy	8
DERRICK Ray Houx	8
MOTOR Nick Eder	8
FLOOR Dave Lemmon	8
FLOOR Neil Simmons	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
6650					22	7"	2"				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
18	9"	OSC1G	3 11/16	25517							

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS	NO. 1	NO. 2
PRESSURE		
MODEL		
S.P.M.		
LINER SIZE		

AT SURVEYS	DEGREE

MOTOR HOURS	NEXT OIL CHANGE
1 146	168
2 94	"
3 140	"
4 140	"
5 140	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Core Cone - Stuck

W.L. F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Finish Hoisting	8.00	9.15	3/4
Pull Tubing Blocks	9.15		
Rig Up - Test W.P.		2.45	6
Strap Pipe	2.45	3.00	¼
Slip 111' Drlg Line	3.00	4.00	1
Pull in with Bit #18			

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm M Connell	8
DERRICK Noel Jacob	8
MOTOR Henry Landis	8
FLOOR Ernest White	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
6650	75	6725	5½	130 000	20	7"	2¾				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
17	9"	OSC1G	2½	25517	35	80	75		5½		Run

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT			9.9	10	Gel 1200
VISCOSITY			135	114	Caustic 200
GEL					Aquagel 300
					Caban 200
					Dextrid 100

PUMPS	NO. 1	NO. 2
PRESSURE	1000	
MODEL		
S.P.M.	56	
LINER SIZE	6½	6½

AT SURVEYS	DEGREE

MOTOR HOURS	NEXT OIL CHANGE
1 147	167
2 94	"
3 147	"
4 147	"
5 147	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL

W.L. 4.4 F.C. 2/32 pH. 10.5

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
17-1127.74	2	20 572.42			1-2.10	23	1722.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service Rig	4.00	4.15	¼
Running with Bit #19	4.15	5.45	1½
Clean 60' To Bottom	5.45	7.30	1¾
Drlg 9" Hole	7.30	12.00	4½

Totco Ring on Bit No. D.P. Calipered Date / Results From Pipe Rack

B.O.P. Test-Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOOLPUSHER

TOTAL COMPANY TIME HRS. APPROVED BY

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 95th DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 17 COMPANY R.A. Brown LOCATION Sec. 1, Twp. 9, R. 4 W. 4th M. DATE Dec 5 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	8
DERRICK B. McH., H. H.	8
MOTOR D.C. M.T.S.	8
FLOOR Ed Hazen	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
6255	112	6367	7	128M	20	7"	2¼				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	17	9"	Y T 3	3 ½	EM3352	35	80	112		7		RUN

MUD	12 MN.	2 A.M.	4 A.M.	8 A.M.	ADDITIVES
WEIGHT	9.8	9.9	9.9	9.9	CFI 2000 LBS
VISCOSITY	185	120	120	123	CAUSTIC —
GEL					DISPERSE —
					GELEX —

PUMPS		12 MN.	2 A.M.	4 A.M.	8 A.M.
NO. 1	PRESSURE	1000	1000	1000	1000
MODEL	S.P.M.	56	56	56	56
	LINER SIZE	6 ½	6 ½	6 ½	6 ½
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS	DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	108	
2	84	
3	104	168
4	104	
5	104	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL 5 BBLS DIESEL FUEL

W.L. 5 F.C. 3 pH 10.5

STANDS	63-5805.05
SINGLES	
D. COLLARS	20-572.42
OTHER FT.	
C.B. FT.	
SUBS. FT.	1-2.10
FT. UP ON KELLY	12.97
TOTAL	6367

REMARKS	TIME START	STOP	INTERVAL
C/U BHA TO RTM	12:00	12:45	¾
R.B. STRUCT. BOPS	12:45	1:00	¼
DRILL	1:00	8:00	7

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wilbur Fleming	8
DERRICK Ray Lucas	8
MOTOR Nick Kos	8
FLOOR Ed Hazen	8
FLOOR Mel Simons	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
6367	107	6475	7¼	128,000	20	7"	2 ¼				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	17	9"	Y T 3	3-16	EM3352	35	84	219		11¾		RUN

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	9.9			9.9	CFI 1000 LBS
VISCOSITY	120			120	CAUSTIC 100 LBS
GEL					CARBONOX 100 LBS
					DISPERSE 100 LBS

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	1000	"	"	"
MODEL	S.P.M.	84	"	"	"
	LINER SIZE	6 ½	"	"	"
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS	DEGREE
6400	1°

MOTOR HOURS		NEXT OIL CHANGE
1	116	168
2	84	"
3	116	"
4	116	"
5	116	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL Circ. Chain & Blow Kelly

W.L. 5.1 F.C. 1 pH 10.5

STANDS	66-5987.66
SINGLES	20
D. COLLARS	20-572.82
OTHER FT.	
C.B. FT.	
SUBS. FT.	1-2.10
FT. UP ON KELLY	14.18
TOTAL	

REMARKS	TIME START	STOP	INTERVAL
R.B. Service & C.O. B.P.	8:00	8:15	¼
Dale 9" H.A.	8:15	11:15	3
Survey @ 6400	11:00	11:15	½
Dale 9" Hole	11:15	4:00	4¼

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Neal Jacob	8
MOTOR Harry Land	8
FLOOR Ernest Mault	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
6475	100	6575	6¼	129,000	20	7"	2 ¼				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	17	9"	Y T 3	3-16	EM3352	35	84	320		20		RUN

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	10	10	10	10	CFI 1000 LBS
VISCOSITY	57	115	127	127	CAUSTIC 100
GEL					CARBONOX 100
					DISPERSE 100

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	1000	"	"	"
MODEL	S.P.M.	84	"	"	"
	LINER SIZE	6 ½	"	"	"
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS	DEGREE
6495	1°

MOTOR HOURS		NEXT OIL CHANGE
1	124	168
2	100	"
3	124	"
4	124	"
5	124	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL Circ. Short Trip

W.L. 5.2 F.C. 1 pH 10.5

STANDS	66-5976.51
SINGLES	
D. COLLARS	20-572.82
OTHER FT.	
C.B. FT.	
SUBS. FT.	1-2.10
FT. UP ON KELLY	16.43
TOTAL	6575

REMARKS	TIME START	STOP	INTERVAL
Drlg 9" Hole	4:00	5:15	1¼
Survey @ 6495 ½°	5:15	5:45	½
Rig Service & BOPs	5:45	6:00	¼
Drlg 9" Hole	6:00	7:00	1
Circ. & Short Trip 10 Stds	7:00	12:00	5

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD **DAY WORK RECORD**

THIS IS 24th DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 17 COMPANY H.B. PAICE LOCATION SOUTH ESI PAD A-16-P-4 DATE FEB 24 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	8
DERRICK A. King Hill	8
MOTOR Dave Myers.	8
FLOOR F. Kuzio.	8.
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasemko	8
DERRICK Ray Lincoux	8
MOTOR Nick Boon	8
FLOOR Ron Gunsolus	8
FLOOR Mel Simonsen	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	8
MOTOR Hap Lund	8
FLOOR Everett No 12	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Report 1

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
6035	135'	6170	7¼	124M	20	7"	2¾				

BITS: NO. 16 | SIZE 9" | TYPE SW | SIZE JETS 3-11/16 | SERIAL NO. L29960 | WEIGHT 45 | R.P.M. 64 | FT. DRLD. 286' | FT. RMD. | HRS. 16½ | DEPTH OUT | CONDITION B.IN

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

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	9.8	9.9	9.9	9.9
VISCOSITY	140	110	110	105
GEL				

PUMPS: NO. 1 PRESSURE | MODEL | S.P.M. 51 51 56 56 | LINER SIZE 6½ 6½ 6½ 6½ | NO. 2 PRESSURE | MODEL | S.P.M. | LINER SIZE | GENERAL

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL

W.L. 52 F.C. 3 pH. 10

AT SURVEYS DEGREE: L690 1°

MOTOR HOURS		NEXT OIL CHANGE
1	84	
2	84	
3	84	168
4	84	
5	84	

STANDS 4-5-125.32 | SINGLES 2 | D. COLLARS 20-572.82 | OTHER FT. | C.B. FT. | SUBS. FT. 1-2.10 | FT. UP ON KELLY 24.11 | TOTAL 6170 | NEXT SLIP

REMARKS	TIME START	STOP	INTERVAL
R C SERVICE BOPS	12.00	12.15	¼
DR. U	12.15	4.00	3¾
SURVEY 6090	4.00	4.30	½
DR. U 9" Hole.	4.30	8.00	3½

Report 2

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
6170	75'	6255	5¼	134	20	7"	2⅞				

BITS: NO. 16 | SIZE 9" | TYPE FV-1 | SIZE JETS 3-11 | SERIAL NO. L-29960 | WEIGHT WT | R.P.M. 64 | FT. DRLD. 361 | FT. RMD. | HRS. 21¾ | DEPTH OUT 6255 | CONDITION

MUD: 8 A.M. 10 A.M. 12 NOON 2 P.M. | ADDITIVES Quik-Gel

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9.8			9.8
VISCOSITY	140			110
GEL				

PUMPS: NO. 1 PRESSURE 1000 " " | MODEL D-50 " " | S.P.M. 56 " " | LINER SIZE 6½ " " | NO. 2 PRESSURE | MODEL | S.P.M. | LINER SIZE | GENERAL Gas Cut Drlg Fluid

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL
1"		8				

W.L. 4 F.C. 2 pH. 10

AT SURVEYS DEGREE: 6240 1½°

MOTOR HOURS		NEXT OIL CHANGE
1	92	168
2	84	"
3	92	"
4	92	"
5	92	"

STANDS 6-5-192.70 | SINGLES 1 | D. COLLARS 20-577.82 | OTHER FT. | C.B. FT. | SUBS. FT. 1-2.10 | FT. UP ON KELLY 4.52 | TOTAL 6445.00 | NEXT SLIP

REMARKS	TIME START	STOP	INTERVAL
Rig Service & Check BOPS	8.00	8.15	¼
Drlg 9" Hole	8.15	1.30	5¼
Drop Survey @ 6240	1.30	1.45	¼
Hoist W.T. in 16	1.45	4.00	2¼

Report 3

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS: NO. 17 | SIZE 9" | TYPE FV2 | SIZE JETS 3-11 | SERIAL NO. L-29960 | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

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

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY		Thin		
GEL				

PUMPS: NO. 1 PRESSURE | MODEL D-50 | S.P.M. | LINER SIZE | NO. 2 PRESSURE | MODEL | S.P.M. | LINER SIZE | GENERAL

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL
1"		9				

W.L. F.C. pH.

AT SURVEYS DEGREE:

MOTOR HOURS		NEXT OIL CHANGE
1	100	168
2	92	"
3	100	"
4	00	"
5	00	"

STANDS 6-5-192.70 | SINGLES 1 | D. COLLARS 20-577.82 | OTHER FT. | C.B. FT. | SUBS. FT. 1-2.10 | FT. UP ON KELLY 4.52 | TOTAL 1255 | NEXT SLIP

REMARKS	TIME START	STOP	INTERVAL
Change Bits & BOP	4.00	4.15	¼
Change Rams in BOP			
Install New 4½" Rams	4.15	5.30	1¼
Spring Nut Working in Ideco Hook. could not Remove bonnet Assemble	5.30	8.30	3
Clean suction Tank And No 2 Tank	7.30	9.00	½
Rig up & Drlg No. 17	9.00		
And Drlg Tight coal.		12.00	?

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 22 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 14 COMPANY [illegible] LOCATION [illegible] DATE [illegible] 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER L.C.S. GRAHAM	8
DERRICK RICE - HILL	8
MOTOR DAVE MOFFITT	8
FLOOR ED HUZIO	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER W. Mc Ronnell	8
DERRICK Rich Cronk	8
MOTOR Nick Zoda	8
FLOOR Ken Hoyer	8
FLOOR Mel Cronk	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES: Took Nick Zoda To D.R. Check

FIRES: Foot O.K. Back to Work

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER W. McDonnell	8
DERRICK Noel Jacob	8
MOTOR Hoyer Lamb	8
FLOOR Ernie Mack	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - Midnight - 8 a.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5780	90'	5870	7¾	126M.	20	7"	2¾				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
15	9"	YSI-2	3-X	N31434	45M	64	306'		25½		RUN

MUD

	12 MN.	2 A.M.	4 A.M.	8 A.M.
WEIGHT	9	9	9	9
VISCOSITY	100	98	100	100
GEL				

ADDITIVES: Bel-500 LBS. Dextrid-50 LBS.

AT SURVEYS: DEGREE 5730 1½

MOTOR HOURS: 1 60; 2 60; 3 60; 4 60; 5 60

NEXT OIL CHANGE: 104

PUMPS

	NO. 1	NO. 2
PRESSURE	1000	1000
MODEL		
S.P.M.	51	51
LINER SIZE	6½	6½

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1½							

GENERAL: MECH SHALE TANK

W.L. 5 F.C. 2/32 pH. 10.5

STANDS: 58-5728.06
SINGLES: 1
D. COLLARS: 20-572.82
OTHER FT.:
C.B. FT.:
SUBS. FT.: 102.10
FT. UP ON KELLY: 25.98
TOTAL: 5870
NEXT SLIP:

Tour - 8 a.m. - 4 p.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5870	45'	5915'	3	122,000	20	7"	2¾				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
15	9"	YSI	3-11/16	N-31434	45	64	320		26½	5914	Drill
16	9"	YSI	3-11/16	L27960	30				2		Run

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9+			9+
VISCOSITY	100			105
GEL		Trip		

ADDITIVES:

AT SURVEYS: 5870 DEGREE 1°

MOTOR HOURS: 1 68; 2 68; 3 68; 4 68; 5 68

NEXT OIL CHANGE: 168

PUMPS

	NO. 1	NO. 2
PRESSURE	1000	
MODEL	D-5½	
S.P.M.	52	
LINER SIZE	6½	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1½		8					

GENERAL

W.L. 5.0 F.C. 3/32 pH. 10.5

STANDS: 58-5728.06
SINGLES: 1
D. COLLARS: 20-572.82
OTHER FT.:
C.B. FT.:
SUBS. FT.: 1-2.10
FT. UP ON KELLY: 11.47
TOTAL: 5915.00
NEXT SLIP:

Tour - 4 p.m. - Midnight

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5915'	120	6035	7¼	124M	20	6"	2¾	45'			

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
16	9"	S4	3-11/16	L-27960	45	64	151		9¼		Run

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	9+	9+	9+	9+
VISCOSITY	100	100	100	100
GEL				

ADDITIVES: GEL 1700 LBS. CAUSTIC 200 LBS. SAPP - 300 " CMC - 300 " Dev. - 100

AT SURVEYS: 5915 DEGREE 1°

MOTOR HOURS: 1 76; 2 76; 3 76; 4 76; 5 76

NEXT OIL CHANGE: 168

PUMPS

	NO. 1	NO. 2
PRESSURE	1000	
MODEL		
S.P.M.	52	
LINER SIZE	6½	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1½		8					

GENERAL

W.L. 52 F.C. 2/32 pH. 10.5

STANDS: 60-5432.32
SINGLES:
D. COLLARS: 20-572.82
OTHER FT.:
C.B. FT.:
SUBS. FT.: 1-2.10
FT. UP ON KELLY: 12
TOTAL: 6035
NEXT SLIP:

REMARKS	TIME START	TIME STOP	TIME INTERVAL
R & S Service + Rig Up	12:00	12:15	¼
Drill 9" Hole	12:15	8:00	7¾
Rig Service + Ck Rigs	8:00	8:15	¼
Drlg 9" Hole	8:15	9:15	1
Survey @ 5870 1°	9:15	9:30	¼
Hoist Bit # 15	9:30	11:20	2
Change Pits + Ck Blind Rams	11:30	11:45	¼
Slip 10' Drlg Line	11:45	12:00	¼
Run in with # 16	12:00	1:15	1¼
Clean 180' To Bottom	1:15	2:00	¾
Drlg 9" Hole	2:00	4:00	2
R & S Service + Ck Rigs	4:00	4:15	¼
Drlg 9" Hole	4:15	5:30	3¾
Survey @ 5980 1½°	5:30	5:30	½
Drlg 9" Hole	5:30	1:00	3½

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

CONSERVATION BOARD

DAY WORK RECORD

THIS IS 22 DAY ON THIS WELL

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY [illegible] LOCATION South Island [illegible] DATE Feb 22 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	8
DERRICK Andy Hill	8
MOTOR Doug Mills	8
FLOOR Ed Kirin	8
FLOOR Frank Peet	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Rumsey	8
DERRICK Pat Lamoux	8
MOTOR Mel Boon	8
FLOOR Mel Simons	8
FLOOR Don Dawson	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER W. McConnell	8
DERRICK Mel Jacob	8
MOTOR Harry Lindsay	8
FLOOR Ernest Hunt	8
FLOOR Fo Hein	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - Midnight - 8 a.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5564	31'	5595	3¼	120M	20	6"	2¾				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
14	9"	Ysi R	3 ¼	31434	35	14	31		3¼		Run

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				9
VISCOSITY				9
GEL				

ADDITIVES Gel - 3000 LBS. Quebracho - 150 LBS. H.C.L. - 50 LBS. Caustic - 150 LBS. RR - 150 LBS. Caustic - 100 LBS

PUMPS

		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE				
MODEL	S.P.M.		P		56
	LINER SIZE				6½
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
5560	2½	1	76	
		2	76	
		3	76	168
		4	76	
		5	76	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Co. Man 2 Sets of Tools

W.L. 3 2 F.C. 3/32 pH. 10.5

STANDS 56 - 520.42
SINGLES
D. COLLARS 20 - 572.82
OTHER FT.
C.B. FT.
SUBS. FT. 1 - 2.10
FT. UP ON KELLY 0
TOTAL 5595
NEXT SLIP

Tour - 8 a.m. - 4 p.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5595	100'	5695	7	124,000	20	6"	2¾				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
15	9"	Ysi R	3-11	N31434	40	14	131		10½		Run

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9.9	9.9	10	9.7
VISCOSITY	105	105	110	102
GEL				

ADDITIVES Gel 2,000 LBS. Caustic Quebracho Soda Ash Dextrid

PUMPS

		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	1000	1000	"	"
MODEL	S.P.M.	56	"	"	"
D-360	LINER SIZE	6½	"	"	"
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
5620	1¾°	1	44	168
		2	44	"
		3	44	"
		4	44	"
		5	44	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL

W.L. 50 F.C. 1/32 pH. 11.5

STANDS 57 - 592.25
SINGLES 1 - 29.35
D. COLLARS 20 - 572.82
OTHER FT.
C.B. FT.
SUBS. FT. 1 - 2.10
FT. UP ON KELLY 19.36
TOTAL 5695
NEXT SLIP

Tour - 4 p.m. - Midnight

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5695	85'	5780	7¼	134,000	20	6"	2¾				

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
15	9"	Ysi R	3-11	N31434	40	14	216		17½		Run

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	9.7			9.6
VISCOSITY	100			100
GEL				

ADDITIVES 1100 # Gel Caustic Quebracho Soda Ash

PUMPS

		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	1000	"	"	"
MODEL	S.P.M.	56	"	"	"
D-360	LINER SIZE	6½	"	"	"
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
5730	1½°	1	52	168
		2	52	"
		3	52	"
		4	52	"
		5	52	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1¼		8						

GENERAL

W.L. 44 F.C. 1/32 pH. 11.5

STANDS 57 - 516.32
SINGLES 1 - 30.00
D. COLLARS 20 - 572.82
OTHER FT.
C.B. FT.
SUBS. FT. 1 - 2.10
FT. UP ON KELLY 35.00
TOTAL 5780
NEXT SLIP

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Finish nut of hole	12 00	1 00	1
R.B. Service - BOPS	1 00	1 15	¼
Change Bit + Ck Rams	1 15	1 30	½
Change Swivel Packing + Wash Pipe	1 30	2 30	1
Run in hole	2 30	4 15	1¾
Break Circ + Clean 30' to Btm	4 15	4 45	½
Drill	4 45	8 00	3¼
Rig Service + Ck BOP	8 00	8 15	¼
Drlg 9" Hole	8 15	10 30	2¼
Survey - [illegible]	10 30	11 15	¾
Drlg 9" Hole	11 15	4 00	4¾
Rig Service + Ck BOP	4 00	4 15	¼
Drlg 9" Hole	4 15	8 30	4¼
Survey @ 5730 1½°	8 30	9 00	½
Drlg 9" Hole	9 00	12 00	3

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS _____ DAY ON THIS WELL

OPERATOR

RIG No. 18 COMPANY H B Pan Am LOCATION South Island B-M41 DATE Feb 21 19 64

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	
DERRICK Noel Jacob	
MOTOR Harry Lundy	
FLOOR Earnest Nault	
FLOOR Ed Hagen	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5440	41	5481	5¼	122,000	20	7" 6"	2 7/8	42,000			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	13	9"	OSC1G	3-11/16	3441H	30	80	361		21¾	5441	

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT	9.9	9.9	9.9	9.9	35 bbls Diesel Fuel	5440 3½
VISCOSITY	105	105	106	105		
GEL						

PUMPS		
NO. 1	PRESSURE	1000
	MODEL	D500
	S.P.M.	60
	LINER SIZE	6½
NO. 2	PRESSURE	
	MODEL	
	S.P.M.	
	LINER SIZE	

MOTOR HOURS		NEXT OIL CHANGE
1	12	168
2	12	↓
3	11	↓
4	12	↓
5	10	↓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
3½		8						

GENERAL Clean Shale Thank Change o.i., Oil filters and fuel filters

STANDS 54-4993.69 SINGLES

D. COLLARS 20-572.82 OTHER FT.

C.B. FT.

SUBS. FT. 1-2.10

FT. UP ON KELLY 22

TOTAL 5503.61 NEXT SLIP

W.L. 56 F.C. 7/32 pH 11.5 in 3 Rank 120 gal - Pumila 30 left

REMARKS	TIME START	STOP	INTERVAL
Survey @ 5470 3½°	12.00	12.30	½
Service Rig	12.30	12.45	¼
D-lg 9" Hole	12.45	6.00	5¼
Hoist For Bit No 14	6.00	8.00	2
Run 35 bbls diesel fuel in mud 42 gal. per bbl.			

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	8
DERRICK Rickey Hill	8
MOTOR Doug Mytz	8
FLOOR Ed Kuzio	8
FLOOR Chris Opitz	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5481	30'	5511	3½	122,000	20	7" 6"	2 7/8				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	14	9"	OSC1G	3-11/16	3440S	30	80	30'		3½		RUN

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT			9.7	9.8	Gel - 2000 LBS	
VISCOSITY			105	95	Carbonox - 150 LBS	5480 3¼
GEL					Caltex - 50 LBS	
					Desfoam - 150 LBS	
					O. Brown - 100 LBS	

PUMPS					
NO. 1	PRESSURE				
	MODEL				
	S.P.M.			60	60
	LINER SIZE			6½	6½
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

MOTOR HOURS		NEXT OIL CHANGE
1	20	
2	20	
3	20	168
4	20	
5	20	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS FH 4758.86 SINGLES 17

D. COLLARS 20-572.82 OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY 22.70

TOTAL 5511 NEXT SLIP

W.L. 52 F.C. 1/32 pH 10.5

REMARKS	TIME START	STOP	INTERVAL
SERVICE & BOP.	8.00	8.15	¼
FINISH OUT HOLE.	8.15	9.15	1
CHANGE BITS & CK RAMS.	9.15	9.30	¼
SLIP 10' DRILL LINE.	9.30	9.45	¼
RUN IN HOLE	9.45	11.45	2
BREAK CIRC & CLEAN TO BTM.	11.45	12.15	½
TIGHTEN SWIVEL PACKING	12.15	12.30	¼
DRILL 9" HOLE.	12.30	4.00	3½

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasanny	8
DERRICK Ray LeRoux	8
MOTOR Nick Sloan	8
FLOOR Rodd Brakeland	8
FLOOR Mike Sanders	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	NICK SLOAN Arm Right
FIRES:	1-9-Inst'd

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5511	53'	5564	5½	124,000	20	7" 6"	2 7/8	42,000			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	14	9"	OSC-1G	3-11/16	3440S	30-35	80	83		9	5564	

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT	9.6			9.6	800 # Sel	5530 3°
VISCOSITY	100			102	100 # Caust. C	
GEL						

PUMPS					
NO. 1	PRESSURE	1000	↓	↓	
	MODEL				
	S.P.M.	56	↓	↓	
	LINER SIZE	6½	↓	↓	
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

MOTOR HOURS		NEXT OIL CHANGE
1	24	168
2	24	↓
3	24	↓
4	24	↓
5	24	↓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL

STANDS 54-4788.46 SINGLES 2

D. COLLARS 20-572.82 OTHER FT.

C.B. FT.

SUBS. FT. 1-2.10

FT. UP ON KELLY 0

TOTAL 5564 NEXT SLIP

W.L. 5.2 F.C. 1/32 pH 10.5

REMARKS	TIME START	STOP	INTERVAL
Rig Service + Ck BOP's	4.00	4.15	¼
Drlg 9" Hole	4.15	6.15	2
Survey @ 5530 - 3°	6.15	6.45	½
Drlg 9" Hole	6.45	10.15	3½
Survey @ 5560	10.15	10.30	¼
Slip Line	10.30	10.45	¼
Hoist Bit # 14	10.45	12.00	1¼

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 20 th. DAY ON THIS WELL

OPERATOR

RIG No. 14 COMPANY H.B. GRAHAM LOCATION SOUTH ISLAND R M-41 DATE FEB 20 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER W M'DONNELL	8
DERRICK Nick JACOB	8
MOTOR HARL LANDY	8
FLOOR LARENS NAULT	8
FLOOR ED HAGEN	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	8
DERRICK RICKY HILL	8
MOTOR DOUG MYERS	8
FLOOR ED KUZIO	8
FLOOR ERNIE PRATT	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Walter Rosinny	8
DERRICK Ray LEBLANC	8
MOTOR Nick Boos	8
FLOOR Ron Broussard	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5120	82	5202	4	120,000	20	7" 6"	2 3/4	42 M			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	13	9"	OSC-1G	3 1/16	34414	35	100	82		4		RUN

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT			97	97
VISCOSITY	T		110	100
GEL	A		900	900

ADDITIVES: GEL - 500 LBS. AUSTIC 100 LBS. 35 BBLS DIESEL FUEL

PUMPS		4 A.M.	6 A.M.
NO. 1	PRESSURE		
	S.P.M.		
	LINER SIZE	6 1/2	6 1/2
NO. 2	PRESSURE		
	S.P.M.		
	LINER SIZE		

AT SURVEYS	DEGREE
5155	4°
5195	5°

MOTOR HOURS	
1	160
2	160
3	160
4	
5	160

NEXT OIL CHANGE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1 1/4		8					

GENERAL

W.L. 6.6 F.C. 4/32 pH. 10.7

STANDS 50 - 4566.4
SINGLES 2
D. COLLARS 20 572.82
OTHER FT.
C.B. FT.
SUBS. FT. 1 - 2.10
FT. UP ON KELLY 0
TOTAL 5202.
NEXT SLIP

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5202	133'	5335	5 3/4	120,000	20	6 7/8 7"	2 1/4				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	13	9"	OSC1G	3 3/16	34414	30	115	215		9 3/4		RUN

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	9.7	9.7	9.7	9.7
VISCOSITY	100	100	900	100
GEL				

ADDITIVES: Gel - 2,000 LBS. Conquor - 150 LBS. Caller - 50 LBS Quartrid - 100 LBS

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE				
	S.P.M.	56	56	56	56
	LINER SIZE	6 1/2	6 1/2	6 1/2	6 1/2
NO. 2	PRESSURE				
	S.P.M.				
	LINER SIZE				

AT SURVEYS	DEGREE
5215	4 1/4
5255	4°
5285	4°
5315	3 3/4

MOTOR HOURS	
1	168
2	168
3	168
4	168
5	168

NEXT OIL CHANGE 168

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1 1/8		8					

GENERAL Clean Mud Tank

W.L. 5.1 F.C. 2/32 pH. 10.5

STANDS 50 - 4778.84
SINGLES 1
D. COLLARS 20 572.82
OTHER FT.
C.B. FT.
SUBS. FT. 1 - 2.10
FT. UP ON KELLY 18.76
TOTAL 5335
NEXT SLIP

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
5335	105'	5440	6 3/4	120,000	20	7" 6"	2 2/8	42 M			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	13	9"	OSC-1G	3-1/16	34414	30	110-80	320		16 1/2		Rund

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	9.7			9.6
VISCOSITY	9.4			9.4
GEL				

ADDITIVES: 100 # Cal 50# Carbocel 50# Q Broxin 50# Dextrid

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	900			1000
	S.P.M.	56			60
	LINER SIZE	6 1/2			6 1/2
NO. 2	PRESSURE				
	S.P.M.				
	LINER SIZE				

AT SURVEYS	DEGREE
5345	4°
5375	3 3/4

MOTOR HOURS		NEXT OIL CHANGE
1	4	168
2	4.	✓
3		✓
ST BRS	6	✓
L.P.K.S	2	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1 1/8		8					

GENERAL Change Oil + Filter + Fuel Filters IN #1+2 + Stby Motors AND 0315 - Light Plant

W.L. 5.2 F.C. 1/32 pH. 10.5

STANDS 53 - 4778.01
SINGLES 1 - 29.67
D. COLLARS 20 - 572.82
OTHER FT.
C.B. FT.
SUBS. FT. 1 - 2.10
FT. UP ON KELLY 2.50
TOTAL 5140.00
NEXT SLIP

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
CUT LINE.	12.00	12.30	1/2
RUN IN BIT #13 & LEAVE OUT 8 DC.	12.30	2.00	1 1/2
CLEAN TO BTM.	2.00	3.30	1 1/2
DR. 11 9" HOLE.	3.30	5.15	1 3/4
SURVEY @ 5155 4°	5.15	5.45	1/2
DR. 11	5.45	7.30	1 3/4
SURVEY @ 5195.5°	7.30	8.00	1/2
35 BBLs Diesel to Mud 429 gallons per BBL			
H.B. SERVICE + BOP'S	8.00	8.15	1/4
DR. 11	8.15	9.45	1 1/2
SURVEY @ 5225'	9.45	10.15	1/2
DR. 11 9" HOLE.	10.15	11.15	1
SURVEY @ 5255 4°	11.45	11.45	1/2
DR. 11.	11.45	1.00	1 1/4
SURVEY @ 5285 4°	1.00	1.30	1/2
DR. 11.	1.30	3.00	1 1/2
SURVEY @ 53	3.00	3.30	1/2
DR 11.	3.30	4.00	1/2
R.C. SERVICE + Cr BOP'S	4.00	4.15	1/4
Drlg 9" Hole	4.15	4.45	3/2
Survey @ 5245 4°	4.45	5.15	1/2
Drlg 9" Hole	5.15	7.30	1 1/4
Survey @ 5375	7.30	7.00	1/2
Drlg 9" Hole	7.00	12.00	5

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 19 DAY ON THIS WELL

OPERATOR

RIG No. 18 COMPANY H B Dan Am LOCATION South Island A-1141 DATE Feb 19 19 64

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	8
MOTOR Harry Landy	8
FLOOR Emanuel Ault	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
4910	114	5024	6 3/4	120,000	28	7" 6"	2 7/8	58

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
12	9	OSC 1G	3 3/16	34404	55 / 90	64 / 110	221		12 1/4		1, 1, WT

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	95	96	97	99
VISCOSITY	82	85	90	100
GEL				

ADDITIVES: Gel 2000 Lbs; Carbonex 100; Barox in 100; Dextrid 50; Caustic 100; 5 Bbl LP

PUMPS		PRESSURE	S.P.M.	LINER SIZE
NO. 1	MODEL D-50	900	56	6 1/2
NO. 2	MODEL			

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
14		8						

GENERAL: CLEAN SHALE TANK

W.L. 5.1 F.C. 2/32 pH. 10.5

AT SURVEYS	DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	136	168
2	136	"
3	136	"
4	136	"
5	136	"

STANDS 46-420327
SINGLES 1-29.48
D. COLLARS 28-789.67
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 0
TOTAL 5024

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drlg 9" Hole	12:00	12:45	3/4
Service Rig	12:45	1:00	1/4
Drlg 9" Hole	1:00	4:15	3 1/4
Survey @ 4985 ft	4:15	4:45	1/2
Drlg 9" Hole Hold up WT on BIT 20,000	4:45	5:15	1/2
Survey @ 5000 misrun	5:15	5:45	1/2
Drlg 9" Hole	5:45	8:00	2 1/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	0
DERRICK Rickey Hill	8
MOTOR Doug Mytts	8
FLOOR Ed Kuzio	8
FLOOR Ernie Prost	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
5024	62'	5086	6 1/4	124M.	28	7" 6"	2 7/8	

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
12	9"	OSC-1G	3 3/16	34404	90	110	283		18 1/4		RON

MUD	8 A.M.	10 A.M.	12 NOON	4 P.M.
WEIGHT	96	96	97	99
VISCOSITY	100	100	100	75
GEL				

ADDITIVES:

AT SURVEYS	DEGREE
5015	5 1/4
5045	5 1/4
5075	4 3/4

MOTOR HOURS		NEXT OIL CHANGE
1	144	
2	144	
3	144	168
4	164	
5	144	

PUMPS		PRESSURE	S.P.M.	LINER SIZE
NO. 1	MODEL	400 / 800	58	6 1/2
NO. 2	MODEL	400 / 800	54 / 58	6 1/2

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL: ELCAN SHALE TANK.

W.L. 4.1 F.C. 2/32 pH. 10

STANDS 07-432679
SINGLES 1
D. COLLARS 28-789.69
OTHER FT.
C.B. FT.
SUBS. FT. 2-2.10
FT. UP ON KELLY 30.48
TOTAL 5086

REMARKS	TIME START	TIME STOP	TIME INTERVAL
B.P. Service + BOPs	8:00	8:15	1/4
Survey @ 5075	8:15	8:45	1/2
Drill	8:45	11:00	2 1/4
Survey @ 5045.	11:00	11:30	1/2
Drill.	11:30	3:00	3 1/2
Survey @ 5075.	3:00	3:30	1/2
Drill.	3:30	4:00	1/2

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER W. [illegible]	8
DERRICK Roy [illegible]	8
MOTOR W. K. [illegible]	8
FLOOR [illegible]	8
FLOOR [illegible]	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
5086	34	5120	3 1/4	124,000	28	6" 7"	2 7/8	58

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
12"	9"	OSC1G	3 3/16	34404	90	110	317		21 3/4	5120	

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	9.1			9.1
VISCOSITY	90			93
GEL				

ADDITIVES: [illegible]

AT SURVEYS	DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	152	168
2	152	"
3	152	"
4	[illegible]	"
5	152	

PUMPS		PRESSURE	S.P.M.	LINER SIZE
NO. 1	MODEL D-50	900	56	6 1/2
NO. 2	MODEL			

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL:

W.L. [illegible] F.C. [illegible] pH. 11.5

STANDS 47-432569
SINGLES 2-61.10
D. COLLARS 28-789.69
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 26.48
TOTAL 5120.00

REMARKS	TIME START	TIME STOP	TIME INTERVAL
R.B. Service + C. Rig	4:00	4:15	1/4
Drlg 9" Hole	4:15	7:30	3 1/4
Circ Samples	7:30	8:15	3/4
Drop Survey @ 5120	8:15	8:30	1/4
Hoist Kelly + [illegible]	8:30	10:30	2
Out			
Lay Down DC Circ Nil	10:20		
DC Pad Cracks		11:45	1 1/4
Slip 20' Drlg Line	11:45	12:00	1/4

Board Tally 5146
Strap 5147
Diff
No Correction.

Totco Ring on Bit No. ____ D.P. Calipered Date ____ Results ____ From Pipe Rack ____ TOTAL CONTRACTOR TIME ____ HRS. TOOLPUSHER ____

B.O.P. Test-Operated ____ Time ____ Results ____ TOTAL COMPANY TIME ____ HRS. APPROVED BY ____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 17 DAY ON THIS WELL

OPERATOR

RIG No. 17 COMPANY H B Pan Am LOCATION South Island R-M-41 DATE Feb 8 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	
MOTOR Harry Landy	
FLOOR Ernest Hault	
FLOOR Ed Hagen	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4732	71	4803	5½	122 M	28	6"	2⅞	55			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	11	9"	OSC 1G	3½	34395	55	64	207		2⅝	4803	
	12	9"										

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	10.	✓	✓	✓	GEL 2000
VISCOSITY	95	✓	90	✓	Carbonox 100
GEL					Q Broxin 100
					Dextrid 50
					Caustic 100

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	800	✓		✓
D 500	S.P.M.	60	✓		✓
	LINER SIZE	6½	✓		✓
NO. 2	PRESSURE				
	S.P.M.				
	LINER SIZE				

AT SURVEYS DEGREE: 4750 ¾

MOTOR HOURS		NEXT OIL CHANGE
1	120	168
2	120	✓
3	120	✓
4	140	✓
5	120	✓

St By 2 P

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
½		8					

GENERAL Clean Shale Tank

W.L. 5.1 F.C. 2/32 pH. 10.5

STANDS 44-3981.62
SINGLES
D. COLLARS 28-789.69
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 10
TOTAL
NEXT SLIP

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	8
DERRICK Bickey Hill	8
MOTOR Ed Kuzio	8
FLOOR Doug Mytz	8
FLOOR Fanie Prath	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4803.	0	4803	0	?	28	6"	2¾				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	12.	9"	OSC 1G	3 7/16	34404							

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE				950
	MODEL				
	S.P.M.				
	LINER SIZE				
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

AT SURVEYS DEGREE:

MOTOR HOURS		NEXT OIL CHANGE
1	124	
2	128	
3	124	168
4	148	
5	124	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL
NEXT SLIP

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasenny	8
DERRICK Ray Kroon	8
MOTOR Nick Poor	8
FLOOR Ron Brigham	8
FLOOR M.L Saunders	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4803	107'	4910	5½	120,000	28	7" 6"	2⅞	58			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	12	9"	OSC-1G	3-7/16	34404	55	64	107'		5½		RUN

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	9.5			9.5	500 # Gel
VISCOSITY	95			82	35 barrels
GEL					Diesel

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE		900	✓	✓
D 500	MODEL				
	S.P.M.		56	✓	✓
	LINER SIZE		6½	✓	✓
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

AT SURVEYS DEGREE:

MOTOR HOURS		NEXT OIL CHANGE
1	136	169
2	136	✓
3	136	✓
4	156	✓
5	136	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1⅛		8					

GENERAL Run 35 BBLS Diesel Fuel

W.L. 50 F.C. 9/32 pH. 10.5

STANDS 45-4402.20
SINGLES 1-29.90
D. COLLARS 28-789.69
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 22.99
TOTAL 4910.00
NEXT SLIP

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service Rig	12⁰⁰	12¹⁵	¼
Drlg 9" Hole	12¹⁵	3¹⁵	3
Survey @ 4750 ¾°	3¹⁵	3⁴⁵	½
D. Lg 9" Hole	3⁴⁵	6³⁰	2¾
Hoist For Bit No 12	6³⁰	8⁰⁰	1½
Hoist.	8.00	9.15	1¼
Service Rig	9.15	9.30	¼
Change Bits + close Rams.	9.30	9.45	¼
Open SS Cameron Remove P.C. Rams	9.45		
Can not Remove Rubbers to put new			
ones on. Bolts Frozen on.		2.15	4½
Going in Hole steaming collars	2.15		
Checking for wash outs.		4.00	1¾
Rig Service + Ck Bops	4⁰⁰	4¹⁵	¼
Run in W/ Bit #12	4¹⁵	5³⁰	1¼
Ream Tight Spot @ 180'	5³⁰		
Off Btm.		6³⁰	1
Drlg 9" Hole	6³⁰	12⁰⁰	5½

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING company Limited

DAILY DRILLING REPORT

THIS IS 7 DAY ON THIS WELL

RIG No. 17 COMPANY H C Pan Am LOCATION South Island R-M-41 DATE Feb 17 19 68

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	8
MOTOR Harry Landy	8
FLOOR Everett Wault	8
FLOOR Ed Hagen	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4555	41	4596	3	115M	22	6" 7"	2 7/8	58			

STANDS 43 SINGLES 2 D. COLLARS 28 787.69 OTHER FT. C.B. FT. SUBS. FT. 1-210 FT. UP ON KELLY 0 TOTAL 4596

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	10	9"	OSC	3 1/16	82279	45	40	200		19 1/4	4596	Dull
	11	9"	OSC1G	3 1/16	34395							

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	78				
VISCOSITY	70				
GEL					

PUMPS			
NO. 1	PRESSURE	800	
MODEL D500	S.P.M.	60	
	LINER SIZE	6 1/2	
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

SURVEYS	DEGREE
4595	1

MOTOR HOURS		NEXT OIL CHANGE
1	96	168
2	96	"
3	96	"
4	116	"
5	96	"

SLIP & CUT LINE: SIZE 1 1/2 | TRIPS | NO. LINES 4 | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drlg 9" Hole	1200	1230	1/2
Service Rig	1230	1245	1/4
Drlg 9" Hole	1245	315	2 1/2
Drop Survey	315	330	1/4
Hoist for Bit No 11	330	500	1 1/2
Change Bits and Remove Sur.	500	615	1 1/4
Pickup D.C.	615	645	1
Run in with Bit No 11	645	800	1 3/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	8
DERRICK Rickey Hill	8
MOTOR Ed Kuzio	8
FLOOR Doug Mytts	8
FLOOR Ernie Pratt	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4596	60	4656	7 1/4	125M	28	6" 7"	2 7/8				

STANDS 42 3970.86 SINGLES 2 D. COLLARS 28 789.69 OTHER FT. C.B. FT. SUBS. FT. 1-2.10 FT. UP ON KELLY TOTAL 4656

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	11	9"	OSC 1G	3 1/16	34395	40	64	60		7 1/4	—	RUN

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	96	96	96	97	
VISCOSITY	95	93	80	75	
GEL					

PUMPS					
NO. 1	PRESSURE	400	400	400	800
MODEL D500	S.P.M.	60	60	60	60
	LINER SIZE	6 1/2	6 1/2	6 1/2	6 1/2
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

SURVEYS	DEGREE
4595	1°

MOTOR HOURS		NEXT OIL CHANGE
1	104	
2	104	
3	104	168
4	124	
5	104	

SLIP & CUT LINE: SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL: CHANGED PISTON PACKING BOTH SIDES C-250

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Finish in w Bit #11.	8:00	8:15	1/4
R.B. Service & BOPs	8:15	8:30	1/4
Break Circ & Clean to Btm 10'.	8:30	8:45	1/4
Drill 9" Hole	8:45	4:00	7 1/4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasmeny	8
DERRICK Ray Leroux	8
MOTOR Nick Boor	8
FLOOR Ron Bradshaw	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4656	76	4732	7 3/4	122,000	28	7" 6"	2 7/8	58			

STANDS 43 3983.51 SINGLES 2 6.50 D. COLLARS 28 789.69 OTHER FT. C.B. FT. SUBS. FT. 1 — 2.10 FT. UP ON KELLY 21.00 TOTAL 4732.00

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	11	9"	OSC-1G	3 1/16	34395	35	64	136		15		Run

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	98			98	1000# Bol
VISCOSITY	75			90	150# Barite
GEL					150# Cedarfiber
					100# Cane Fiber 50# Drilling
					50# Poly Pac

PUMPS					
NO. 1	PRESSURE	800	✓	✓	✓
MODEL D500	S.P.M.	60	✓	✓	✓
	LINER SIZE	6 1/2	✓	✓	✓
NO. 2	PRESSURE				
MODEL C1020	S.P.M.				
	LINER SIZE	6 1/2			

SURVEYS	DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	112	164
2	112	"
3	112	"
4	132	"
5	112	"

SLIP & CUT LINE: SIZE 1 1/2 | TRIPS | NO. LINES 8 | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. 60 F.C. 2/32 pH. 10.0

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Service & Chk BOPs	4:00	4:15	1/4
Drlg 9" Hole	4:15	12:00	7 3/4

TRY TO RETURN 80 R.P.M TO REACH MAX TORQUE

DC. OFF

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 11 DAY ON THIS WELL

OPERATOR

RIG No. 18 COMPANY HB Ban Arm LOCATION South Island River M-4 DATE Feb 16 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Noel Jacob	8
MOTOR Harry Landy	8
FLOOR Earnest Hoult	8
FLOOR Ed Hager	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4390	12	4402	1 3/4	115M	22	7" 6"	2 7/8	58			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	9	9"	VTIA	3 1/16	ED3251	35	84	261		18 3/4	4396	Dull
	10	9"	OSC	3 1/16	82229	35	84	26		1		

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	97			98
VISCOSITY	54			53
GEL				

ADDITIVES: Gel 1000 Lbs

AT SURVEYS: 4395 DEGREE: 1 1/4

MOTOR HOURS: 1 72; 2 72; 3 72; 4 92; 5 72

NEXT OIL CHANGE: 168; ✓; —; ✓; ✓

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	800			800
D-50	S.P.M.	60			60
	LINER SIZE	6 1/2			6 1/2
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

St By

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL: Clean Shale Tank

W.L. 5 F.C. 2/32 pH. 10

STANDS 41; SINGLES 2; D. COLLARS 22-630.38; OTHER FT.; C.B. FT.; SUBS. FT. 1-210; FT. UP ON KELLY 12; TOTAL 4402; NEXT SLIP

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	8
DERRICK Ricky Hill	8
MOTOR Ed Kuzio	8
FLOOR Doug Mytz	8
FLOOR Ernie Pratt	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4402	70'	4472	7 3/4	115M	22	7" 6"	2 1/4	58			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	10	9"	OSC	3 1/16	82229	35	80	76'		8 3/4		Run

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	97	94	95	96
VISCOSITY	83	80	83	78
GEL				

ADDITIVES: Gel-4200 Lbs. Jontfrid — 200 Lbs. Carbonox — 200 Lbs. Q Broxin — 200 Lbs. Caustic — 100 Lbs.

AT SURVEYS: DEGREE:

MOTOR HOURS: 1 80; 2 80; 3 80; 4 100; 5 80

NEXT OIL CHANGE: ✓

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	800	800	800	800
D-50	S.P.M.	60	60	60	60
	LINER SIZE				
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL:

W.L. 4 F.C. ✓ pH. 10

STANDS 42 - 3845.24; SINGLES 1; D. COLLARS 22-630.38; OTHER FT.; C.B. FT.; SUBS. FT.; FT. UP ON KELLY 3.62; TOTAL 4472

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasmore	8
DERRICK Ray Leroux	8
MOTOR Nick Boon	8
FLOOR Ron Bradshaw	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4472	83'	4555	7 1/2	115,000	22	7" 6"	2 1/4	58			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	10	9"	OSC	3 1/16	82229	35-40	80	159		16 1/4		Run

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	9.7			9.7
VISCOSITY	80			95
GEL				

ADDITIVES: 2500 # Gel; 100 # Dex; 50 # Qx; 150 Caribonox

AT SURVEYS: 4500 DEGREE: 1°

MOTOR HOURS: 1 88; 2 88; 3 88; 4 108; 5 88

NEXT OIL CHANGE: 168; ✓; ✓; ✓; ✓

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	800	✓	✓	✓
D-50	S.P.M.	60	✓	✓	✓
	LINER SIZE	6 1/2	✓	✓	✓
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/4		8						

GENERAL:

W.L. 47 F.C. 2/32 pH. 10.9

STANDS 43; SINGLES 1; D. COLLARS 2"-630.38; OTHER FT.; C.B. FT.; SUBS. FT. 1-2.10; FT. UP ON KELLY 11.55; TOTAL 4555.00; NEXT SLIP

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drlg 9" Hole	12:00	12:45	3/4
Service Rig	12:45	1:00	1/4
Survey @ 4395 1 1/4°	1:00	1:15	1/4
Hoist for Bit # 10	1:15	2:45	1 1/2
Change Bits & check Rams	2:45	3:00	1/4
Slip 10' Line	3:00	3:15	1/4
Runin with Bit No 10	3:15	4:45	1 1/2
Clean 90' To Bottom	4:45	7:00	2 1/4
Drlg 9" Hole	7:00	8:00	1
Rig Service & BOPs	8:00	8:15	1/4
Drill 9" Hole	8:15	4:00	7 3/4
Rig Service & Ck BOPs	4:00	4:15	1/4
Drlg 9" Hole	4:15	7:45	3 1/2
Survey @ 4500	7:45	8:00	1/4
Drlg 9" Hole	8:00	12:00	4

Totco Ring on Bit No. ____ D.P. Calipered Date ____ Results ____ From: Pipe Rack ____

B.O.P. Test-Operated ____ Time ____ Results ____

TOTAL CONTRACTOR TIME ____ HRS. TOOLPUSHER ____

TOTAL COMPANY TIME ____ HRS. APPROVED BY ____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 15 DAY ON THIS WELL

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY H B Pan Am LOCATION South Island R - M-41 DATE Feb 5 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Ernest Nault	8
FLOOR Noel Jacob	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4195	33	4228	4	110,000	22	7"	2 7/8	58			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	9	9"	OSC	3 1/16	26721	45	72	263		18 1/4	4203	Dull
	9	9"	YTIA	3 1/16	E03251	45 64	64	25		23		

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	97			97
VISCOSITY	54			54
GEL				

ADDITIVES

AT SURVEYS	DEGREE
4200	3/4

MOTOR HOURS		NEXT OIL CHANGE
1	48	168
2	48	"
3	48	"
4	68	"
5	48	"

PUMPS		
NO. 1	PRESSURE	800
MODEL D500	S.P.M.	
	LINER SIZE	6 1/4
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

57 Bbl LP

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
14		8						

GENERAL Slip 8' line

W.L. 6 F.C. 7/32 pH 10

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
39	1	22-630.38			1-2.10	5	4228

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Drill	12 00	12 15	1/4
Survey 4200	12 15	12 30	1/4
Service R.G	12 30	12 45	1/4
Hoist	12 45	2 00	1 1/4
Change bits, Remove Survey	2 00	2 30	1/2
Run in with Bit No 9	2 30	4 30	2
Ream 30' To Bottom	4 30	5 15	3/4
Drlg 9" Hole	5 15	8 00	2 3/4

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	8
DERRICK RICKEY HILL	8
MOTOR ED KUZIO	8
FLOOR DOUG MYTTS.	8
FLOOR ERNIE PRATT.	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4228	87'	4315	4 3/4	112,000	22	7"	2 7/8	58			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	9	9"	YTIA	3 1/16	E03251	45	64	112		16 1/2		RUN.

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT			98	98
VISCOSITY			52	52
GEL				

ADDITIVES: Gel-2,000 LBS. Dextrid-250 LBS. Barite-250 LBS. Caustic-100 LBS. Carbonox-250 LBS.

AT SURVEYS	DEGREE
4200	3/4

MOTOR HOURS		NEXT OIL CHANGE
1	56	
2	56	
3	56	168
ST BY	76	
LP	56	

PUMPS		
NO. 1	PRESSURE	
MODEL	S.P.M.	60
	LINER SIZE	
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 5 F.C. pH 9.5

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
40-3691.54	2	22-630.34			1-2.10	9.02	4315.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
R.G SERVICE & BOPS	8.00	8.15	1/4
1400 DRILL 9" HOLE.	8.15	4.00	7 3/4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER WALTER RASMENY	8
DERRICK RAY LEBOUX	8
MOTOR NICK BODA.	8
FLOOR RON BRADSHAW.	8
FLOOR MEL SAUNDERS.	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL ✓ TONS
4315	75'	4390	7 1/2	115M	22	7"	2 7/8				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	9	9"	YTIA.	3 1/16	E03251	45	84	187	NIL	18	IN.	RUN.

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	98	98	96	96
VISCOSITY	53	53	54	53
GEL	-			

ADDITIVES

AT SURVEYS	DEGREE
4315	1°

MOTOR HOURS		NEXT OIL CHANGE
1	64	
2	64	168
3	64	
4	84	
5	64	

PUMPS					
NO. 1	PRESSURE	800	800	800	800
MODEL	S.P.M.	60	60	60	60
	LINER SIZE	6 1/4	6 1/4	6 1/4	6 1/4
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. 5 F.C. pH 9.5

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
41 3782.54	2	22-630.38.				24.99	4390.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
R.G SERVICE & BOPS	4.00	4.15	1/4
SURVEY @ 4315'	4.15	4.30	1/4
DRILL 9" HOLE.	4.30	12.00	7 1/2

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 14 DAY ON THIS WELL

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY H.B. Pan Am LOCATION South Island R #2 well DATE Feb 14 1963

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pacarny	8
DERRICK Ray Lorieux	8
MOTOR Nick Boos	8
FLOOR Rod Rousseau	8
FLOOR Mil Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
3980	70'	3980	4 1/4	84,000	22	7"	2 7/8	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	7	9"	Y51	3-11	522897	40	72	332		22 3/4	3930	Dull
	8	9"	OSC	3-11	26721	40	64	50		3		Run

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	9.8			9.7	600# Gel
VISCOSITY	55			58	150# Dextrid
GEL					

PUMPS		PRESSURE	S.P.M.	LINER SIZE
NO. 1	MODEL	800	60	6 1/2
NO. 2	MODEL			

AT SURVEYS	DEGREE
3925	7/8°

MOTOR HOURS		NEXT OIL CHANGE
1	24	164
2	24	"
3	24	"
4	44	"
5	24	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1 1/4		8					

GENERAL

W.L. 44 F.C. 4/32 pH. 10.5

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL	NEXT SLIP
36	2	22 - 630.38			1 - 2.10	11.42	3980.00	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Service + Ck BOP's	12 00	12 15	1/4
Drilling 9" Hole	12 15	1 30	1 1/4
Survey @ 3925	1 30	1 45	1/4
Hoist Bit # 7	1 45	2 30	3/4
Change Bits + Ck Blinds, Pipes	2 30	2 45	1/4
Slip 10' Drlg Line	2 45	3 00	1/4
Run in w/ Bit # 8	3 00	4 00	1
Ream Tight Spot @ 3490	4 00	4 45	3/4
Finish Running In	4 45	5 00	1/4
Drlg 9" Hole	5 00	8 00	3

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonald	8
DERRICK F.D. Hagen	8
MOTOR Harry Landy	8
FLOOR Everett Vault	8
FLOOR Noel Jacob	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES: None

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
3980	125	4105	7 1/2	74000	22	7 1/8"	2 1/4	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	8	9"	OSC	3 11/16	26721	45	53	175		10 1/2		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	9.8	9.7	9.6	9.7	Gel - 200 ~~lbs~~
VISCOSITY	54	53	53	54	Carbonax 150"
GEL					Dextrid 150"
					Q Broxin 150"
					Caustic 100"

PUMPS		PRESSURE	S.P.M.	LINER SIZE
NO. 1	MODEL D50	800	60	6 1/2
NO. 2	MODEL			

AT SURVEYS	DEGREE
4040	1/2°

ST By L.P.

MOTOR HOURS		NEXT OIL CHANGE
1	22	118
2	32	"
3	32	"
4	52	"
5	32	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1 1/2		X					

GENERAL Cleaned ~~Settling~~ Tank

W.L. 5 F.C. 2/32 pH. 10

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL	NEXT SLIP
38		22 - 630.38			1 - 2.10	7	4105	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service Rig	8 00	8 15	1/4
Drlg 9" Hole	8 15	11 45	3 1/2
Survey @ 4040 1/2°	11 45	12 00	1/4
Drlg 9" Hole	12 00	4 00	4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	8
DERRICK RICKEY HILL	8
MOTOR ED KUZIO	8
FLOOR DOUG MYTTS	8
FLOOR ERNIE PROTT	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
4105	90'	4195	7 1/2	86 M	22	7"	6 1/2	2 3/8			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH CUT	CONDITION
	8	9"	OSC	3 11/16	26721	45	72	255		18		Run

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	9.7	9.7	9.7	9.8	
VISCOSITY	55	54	55	54	
GEL					

PUMPS		PRESSURE	S.P.M.	LINER SIZE
NO. 1	MODEL	900	60	6 1/2
		800	60	6 1/2
		400	58	6 1/2
		800	60	6 1/2
NO. 2	MODEL			

AT SURVEYS	DEGREE
4130	3/4°

MOTOR HOURS		NEXT OIL CHANGE
1		
2		
3		
4		
5		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
1 1/4		8					

GENERAL Cleaned Shale Tank

W.L. 5 F.C. 2/32 pH. 10

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL	NEXT SLIP
39 - 35 - 70 - 57		22 - 630.38			1 - 2.10	8.05	4195	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
~~Drlg 9" Hole~~ R.C Service BOP	4 00	4 15	1/4
Drill 9" Hole	4 15	7 00	2 3/4
Survey @ 4130 3/4°	7 00	7 15	1/4
Drl.	7 15	12 00	4 3/4

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____ TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

B.O.P. Test-Operated _____ Time _____ Results _____ TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING company Limited

DAILY DRILLING REPORT

THIS IS 16 DAY ON THIS WELL

OPERATOR

RIG No. 18 COMPANY H B Pan Am. LOCATION South Island R 2 #4 DATE Feb 13 1963

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Kasmoski	8
DERRICK Ray Lincoln	8
MOTOR Nick Costa	8
FLOOR Ron Bridgeman	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER W McDonnell	8
DERRICK F D Hagen	8
MOTOR Harry Landy	8
FLOOR Ernest Vault	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	8
DERRICK BICKEL HILL	8
MOTOR ED KUZIO	8
FLOOR DOUG MYTTS.	8
FLOOR ERNIE PRATT.	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
3598	80'	3678	6¼	80,000	22	6" 7"	2¾	115			

BITS: NO. 7 | SIZE 9" | TYPE YSI | SIZE JETS 3-11/16 | SERIAL NO. 522897 | WEIGHT 20-58 | R.P.M. | FT. DRLD. 80 | FT. RMD. | HRS. 6¼ | DEPTH OUT | CONDITION RUN

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	96			99
VISCOSITY	46			44
GEL				

ADDITIVES: 100# Caustic

PUMPS: NO. 1 MODEL D-500 | PRESSURE 750 | S.P.M. 50 | LINER SIZE 7¼ | NO. 2 | | | |

AT SURVEYS DEGREE | MOTOR HOURS: 1 | 2 | 3 | NEXT OIL CHANGE 168

ST. BY 20 LOST 122

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1¼		8					

GENERAL

W.L. 66 F.C. 72 pH. 95

STANDS 33 | SINGLES 1 | D. COLLARS 22-630.38 | OTHER FT. | C.B. FT. | SUBS. FT. 1-2.10 | FT. UP ON KELLY 10.99 | TOTAL 3678

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
3678	117	3795	7½	81,000	22	6" 7"	2¾	115			

BITS: NO. 7 | SIZE 9 | TYPE YSI | SIZE JETS 3-11/16 | SERIAL NO. 522897 | WEIGHT 45 | R.P.M. 58 | FT. DRLD. 197 | FT. RMD. | HRS. 12¾ | DEPTH OUT | CONDITION

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	97	97	96	96
VISCOSITY	44	44	42	44
GEL				

ADDITIVES: D-11 15# Bentonite 200 Tannex 150 Tank 1

PUMPS: NO. 1 MODEL D-500 | PRESSURE 750 | S.P.M. 50 | LINER SIZE 7¼ | NO. 2 | | | |

AT SURVEYS DEGREE: 3680 ¼

MOTOR HOURS: 1 8 | 2 8 | 3 8 | 4 28 | 5 7

NEXT OIL CHANGE 168

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1¼		7					

GENERAL Change oil & oil Filters and fuel filters in All Floor Motors and Light Plant. Clean Shale and settling Tanks.

W.L. 6 F.C. 33 pH. 95

SUBS. FT. 1-2.10 | FT. UP ON KELLY 16 | TOTAL 3795 | STANDS 34 | SINGLES 2 | D. COLLARS 22-630.38 | OTHER FT. | C.B. FT.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
3795	115'	3910	7¾	82,000	22	6" 7"	2¾	115			

BITS: NO. 7 | SIZE 9 | TYPE YSI | SIZE JETS 3-11/16 | SERIAL NO. 522897 | WEIGHT 46 | R.P.M. 72 | FT. DRLD. 312 | FT. RMD. | HRS. 21½ | DEPTH OUT | CONDITION RUN

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	9.8	97	97	98
VISCOSITY	40	43	47	52
GEL				

ADDITIVES: Gyp-I — 3500 LBS. DEXTRID — 300 LBS. D-BROXIN — 300 LBS. CARBONOX — 300 LBS. CAUSTIC — 300 LBS.

PUMPS: NO. 1 MODEL D-500 | PRESSURE 750 | 750 | 800 | 800 | S.P.M. 56 | 60 | 60 | LINER SIZE 7¼ | 7¼ | 6½ | 6½ | NO. 2 MODEL C-250 | PRESSURE 650 | 650 | S.P.M. 64 | 62 | LINER SIZE 6½ | 6½

AT SURVEYS DEGREE

MOTOR HOURS: 1 16 | 2 16 | 3 16 | 4 36 | 5 16

NEXT OIL CHANGE 168

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL CHANGED HEADS & LINERS D-500 FROM 7¼ TO 6½"

W.L. 5 F.C. pH. 95

SUBS. FT. 1-2.10 | FT. UP ON KELLY 1.34 | TOTAL 3910 | STANDS 111 | SINGLES 3 | D. COLLARS 22-630.38 | OTHER FT. | C.B. FT.

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Service + Ck BOPs	12 00	12 15	¼
Rig up Cut Bit	12 15	1 15	1
Circ 90' To Btm.	1 15	2 45	½
Drlg 9" Hole	2 45	8 00	5¼
Survey @ 3680 ¼	8 00	8 15	¼
Service Rig + Ck BOPs	8 15	8 30	¼
Drlg 9" Hole	8 30	4 00	7½
R.G SERVICE + BOPs.	4.00	4.15	¼
DR. IL 9" HOLE.	4.15	12.00	7¾

LOST 100 BBLS MUD TO FORMATION.

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 15 DAY ON THIS WELL

OPERATOR

RIG No. 18 COMPANY H.B Pan Am LOCATION South Island B-11-41 DATE Feb 12 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pomeroy	8
DERRICK Ray Lemoux	8
MOTOR Nick Boca	8
FLOOR Ron Beaudoin	8
FLOOR Mel Simmons	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
3240	190'	3430	5½	72,000	22	6" 7"	2⅞	48			

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
5	9"	OSC	3-11/16	26719	22	130	435		20	3310	Dull
6	9"	OSC	3-11/16	34492	10-30	130	135		3¼		

MUD	12 MN.	2 A.M.	4 A.M.	8 A.M.	ADDITIVES
WEIGHT	96			97	18 SKS Gel
VISCOSITY	42	41	41	42	2 SKS Dextrid
GEL					2 " Caustic
					2 " Carbonax
					1 " Q Broxin

PUMPS		12 MN.	2 A.M.	4 A.M.	8 A.M.
NO. 1	PRESSURE	750	✓		✓
MODEL D-500	S.P.M.	53	✓		✓
	LINER SIZE	7¼	✓		✓
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS	DEGREE
3295	⅞°

MOTOR HOURS		NEXT OIL CHANGE
1	156	168
2	156	✓
3	156	✓
ST By	186	✓
L.P	88	✓

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL

W.L. 68 F.C. 4/32 pH. 9.5

STANDS	
SINGLES	30-2776.95 2
D. COLLARS	22-630.38
OTHER FT.	
C.B. FT.	
SUBS. FT.	1-2.10
FT. UP ON KELLY	19.23
TOTAL	3430.00

REMARKS	TIME START	STOP	INTERVAL
Rig Service + Ck BOP's	12⁰⁰	12¹⁵	¼
Dalg 9" Hole	12¹⁵	2³⁰	2¼
Servicy @ 3295	2³⁰	2⁴⁵	¼
Hoist B.T # 5	2⁴⁵	3³⁰	¾
Slip 10' Dalg Lin	3³⁰	3⁴⁵	¼
Change B.Ts + Ck Blind Rams	3⁴⁵	4⁰⁰	¼
Run in w/B.T # 6	4⁰⁰	4⁴⁵	¾
Dalg 9" Hole	4⁴⁵	8⁰⁰	3¼

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Earnest Nault	8
FLOOR Noel Jacob	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
3430	115	3545	7¼	75000	22	6" 7"	2⅞	48			

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
6	9"	OSC	3-11/16	34492	30	90	250		10½		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	97	96	95	95	Gel-1000 Lbs
VISCOSITY	46	46	44	44	Dextrid 150"
GEL					Caustic 100"
					Carbonax 150"
					Q Broxin 150"

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	750			
MODEL D500	S.P.M.	50			
	LINER SIZE	7¼			
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS	DEGREE
3440	1°
3530	¾°

MOTOR HOURS		NEXT OIL CHANGE
1	164	168
2	164	✓
3	164	✓
4	4	✓
5	96	✓
ST By		
L.P		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1½		8						

GENERAL Install New Seals in Compound Change oil in Stand By Motors oil Filters Change O.I in St. By Air compressor

W.L. 5 F.C. 3/32 pH. 10

STANDS	
SINGLES	32
D. COLLARS	22-630.38
OTHER FT.	
C.B. FT.	
SUBS. FT.	1-2.10
FT. UP ON KELLY	24
TOTAL	3545

REMARKS	TIME START	STOP	INTERVAL
Survey @ 3440 1°	8⁰⁰	8¹⁵	¼
Service Rig	8¹⁵	8³⁰	¼
Dalg 9" Hole	8³⁰	2³⁰	6
Survey @ 3530 ¾°	2³⁰	2⁴⁵	¼
Dalg 9" Hole	2⁴⁵	4⁰⁰	1¼

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM.	8
DERRICK RICKEY HILL	8
MOTOR ED KUZIO	8
FLOOR DOUG MYTTS.	8
FLOOR ERNIE PRATT.	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
3545	53	3598	6	75 M	22	7" 6"	2⅞				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
6	9"	OSC	3-11/16	34492	30	90	248		11½		Dull

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	98	97	96		2 sks Gel
VISCOSITY	43	45	46		15 " Dextrid
GEL					15 " Caustic
					15 " Carbonax
					5 " Q Broxin

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	750	750		
MODEL D500	S.P.M.	52	52	52	
	LINER SIZE	7¼	7¼		
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

AT SURVEYS	DEGREE
3598	7/8

MOTOR HOURS		NEXT OIL CHANGE
1	172	
2	172	164
3	172	
4	12	
5	104	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Clean Shale Tank

W.L. 5.2 F.C. 2/32 pH. 9.5

STANDS	
SINGLES	32-2916.96 1
D. COLLARS	22-630.38
OTHER FT.	
C.B. FT.	
SUBS. FT.	1-2.10
FT. UP ON KELLY	0
TOTAL	3598.

REMARKS	TIME START	STOP	INTERVAL
B.B Service + B.P.'s	4⁰⁰	4¹⁵	¼
DR. 11 9" Hole.	4¹⁵	10¹⁵	6
Survey @ 3598 - 7/8	10¹⁵	10³⁰	¼
Hoist B.T.	10³⁰	11³⁰	1
+ B.O.P. Change B.t	11³⁰	11⁴⁵	¼
Run in	11⁴⁵	12⁰⁰	¼

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 14 DAY ON THIS WELL

OPERATOR

RIG No. 18 COMPANY H.B. Ron Ltd. LOCATION S. Island Rig-41 DATE Feb 10 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasanny	8
DERRICK Ray Leroux	8
MOTOR Nick Reda	8
FLOOR Ron Brasshow	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
2450	125'	2575	6	64000	22	6" 7"	2 7/8	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	3	9"	YTIN		ED3073	32	56	356		15 1/4	2575	Dull
	4	9"	OSC-16	3-11	34389							

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	98	98	93		10 SXS. GEL
VISCOSITY	42	41	36		3 SXS. D-FOAM
GEL					RUN 1/2" STRAW

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	750	"	"	"
	MODEL				
	S.P.M.	56	"	"	"
D-50	LINER SIZE	7 1/4	"	"	"
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

W.L. 7.1 F.C. 7/32 pH. 7.5

AT SURVEYS: 2365 DEGREE 1/4°

MOTOR HOURS		NEXT OIL CHANGE
1	109	168
2	108	"
3	108	"
4	128	"
5	42	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/4		8			40'			

GENERAL Clean Settling Tank

STANDS 21 SINGLES

D. COLLARS 22 - 630.38

OTHER FT.

C.B. FT.

SUBS. FT. 1 - 2.10

FT. UP ON KELLY 0

TOTAL 2575

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Earnest Nault	8
FLOOR Noel Jacob	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
2575	151	2726	6 3/4	64000	22	7" 6"	2 7/8	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	4	9"	OSC 16	3-11	34389	40	55	151		6 3/4		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT		96	94	95	100 Lbs - caustic
VISCOSITY		45	43	42	150 " - B.B. gum
GEL					150 " - Dextrid
					150 " Carbonate

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	750	750	"	"
	MODEL				
	S.P.M.		56	"	"
D-50	LINER SIZE		7 1/4	"	"
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

W.L. 5 F.C. 2/32 pH. 9.5

AT SURVEYS: 2575 DEGREE 1/2

MOTOR HOURS		NEXT OIL CHANGE
1	116	168
2	116	"
3	116	"
4	136	"
5	50	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/2		9						

GENERAL Clean Settling Tank

STANDS 22 SINGLES 2

D. COLLARS 22 - 630.38

OTHER FT.

C.B. FT.

SUBS. FT. 1 - 2.10

FT. UP ON KELLY 0

TOTAL 2726

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM.	8
DERRICK RICKEY HILL	8
MOTOR ED KUZIO.	8
FLOOR DOUG MYTTS.	8
FLOOR ERNIE PRATT.	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
2726	130'	2856	7	70M.	22	7" 6"	2 7/8				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	4	9"	OSC-16	CONV	34389	36	80	281		13 3/4		RUN

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	96	95	95	95	Asl 100 Pk.
VISCOSITY	45	43	43	42	
GEL					

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	750	750	750	750
	MODEL				
	S.P.M.	56	56	56	56
D-50	LINER SIZE	7 1/4	7 1/4	7 1/4	7 1/4
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS: 2755 DEGREE 1°; 2830 DEGREE 1 1/4

MOTOR HOURS		NEXT OIL CHANGE
1	124	
2	124	168
3	124	
4	144	
5	58	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS 24-22436 SINGLES 1

D. COLLARS 22-630.38.

OTHER FT.

C.B. FT.

SUBS. FT. 1 - 2.10.

FT. UP ON KELLY

TOTAL

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rig Service + Ck. Eqp't	12.00	12.15	1/4
Drlg 9" Hole	12.15	6.15	6
Hoist Bit # 3	6.15	7.00	3/4
Change Bits	7.00	7.15	1/4
Slip 40' Drlg Line	7.15	7.30	1/4
Run in w/ B.T 4	7.30	8.00	1/2
Rig Service	8.00	8.15	1/4
Finish Run in with Bit No 4	8.15	9.00	3/4
Drlg 9" Hole	9.00	11.45	2 3/4
Survey @ 2595 1/2°	11.45	12.00	1/4
Drlg 9" Hole	12.00	4.00	4
R.B. SERVICE & BOPs.	4.00	4.15	1/4
DRILL 9" HOLE.	4.15	5.30	1 1/4
SURVEY M.S.RUN	5.30	5.45	1/4
DR.11.	5.45	7.00	1 1/4
SURVEY.	7.00	7.15	1/4
DR.11.	7.15	10.45	3 1/2
SURVEY.	10.45	11.00	1/4
DR.11.	11.00	12.00	1

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 13 DAY ON THIS WELL

OPERATOR

RIG No. 18 COMPANY H.B. Pan Am. LOCATION S. Island R.M. 41 DATE Feb 9 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pacewny	8
DERRICK Ray Leroux	8
MOTOR Nick Boos	8
FLOOR Ron Broadhurst	8
FLOOR Bill Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
2219					22	6"	2 1/8	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	2	9"	OSC-3	3-1/16	26228							

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT	95	95	95	95
VISCOSITY	40	41	46	40
GEL				

ADDITIVES: 5 Sacs Cal

PUMPS			12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE			800	″	
	MODEL	S.P.M.		60	″	
D-50		LINER SIZE		7 1/4	″	
NO. 2	PRESSURE					
	MODEL	S.P.M.				
		LINER SIZE				

W.L. F.C. pH 9.5

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	84	168
2	84	″
3	84	″
ST 8 3/4	104	″
LR 7/8	18	″

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/4		8						

GENERAL

STANDS
SINGLES
D. COLLARS 22-630-30
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

REMARKS	TIME START	STOP	INTERVAL
Ric Service + Ck. Bops	12 00	12 15	1/4
Run in Hole Ream Tight	12 15		
Spot @ App. 150' off Btm		1 00	3/4
Cir. (10' Fill) To Test	1 00	2 00	1
14 Std. Trip (4ft Fill)	2 00	2 30	1/2
Cir.	2 30	3 30	1
Hoist To Test	3 30	4 15	3/4
Make Up Testing Tool	4 15	6 30	2 1/4
Run in Slow w/ Tool	6 30	8 00	1 1/2

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landi	8
FLOOR Earnest Nault	8
FLOOR Noel Jacob	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
2219	41	2260	24	58000	22	7" 6"	2 1/8	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	3	9"	XVIA		ED3093		92	41		2 1/4		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				94
VISCOSITY				40
GEL				

ADDITIVES

PUMPS			8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE					750
	MODEL	S.P.M.				56
D-50		LINER SIZE				7 1/4
NO. 2	PRESSURE					
	MODEL	S.P.M.				
		LINER SIZE				

W.L. 64 F.C. 2/32 pH 8

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	92	168
2	92	″
3	92	″
4	112	″
5	34	″

57 by 1/8

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/4		8						

GENERAL Recover 50' of Drilling Mud

STANDS 17
SINGLES 2
D. COLLARS 22 630.30
OTHER FT.
C.B. FT.
SUBS. FT. 1-2.10
FT. UP ON KELLY 15
TOTAL 2260.

REMARKS	TIME START	STOP	INTERVAL
R.T. Service + B.O.P.	~~8~~	~~8~~	~~1/4~~
Head up And set Packer	8 00	8 15	1/4
Initial Shut in	8 15	8 45	1/2
Test open	8 45	9 45	1
Final Shut in	9 45	10 15	1/2
Pull out with Packer	10 15	11 15	1
Break And Lay Down Packer	~~11 45~~		
Runin with Bit No 3	11 15	12 00	3/4
Break Circ. And ream to Bottom, 10' Fill	12 00	1 30	1 1/2
Drill 9" Hole	1 30	1 45	1/4
	1 45	4 00	2 1/4

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	8
DERRICK Ricky Hill	8
MOTOR Ed Kuzyk	8
FLOOR Doug Myers	8
FLOOR Frank Pratt	4
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
2260	190	2460	7 1/2	64M.	22	7"	2 1/4				

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	3	9"	HSIA	Conv.	ED3093	34	54	231		9 3/4		RUN.

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	95	95	95	95
VISCOSITY	40	40	43	43
GEL				

ADDITIVES: Caboosa 150 Lbs. Caborax 150 Lbs. Caustic 100 Lbs.

PUMPS			4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE		750	750	750	750
	MODEL	S.P.M.	56	56	56	56
D-50		LINER SIZE	7 1/4	7 1/4	7 1/4	7 1/4
NO. 2	PRESSURE					
	MODEL	S.P.M.				
		LINER SIZE				

W.L. F.C. pH.

AT SURVEYS DEGREE: 2365. 1/4

MOTOR HOURS		NEXT OIL CHANGE
1	100	
2	100	168
3	100	
4	120	
5	34	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS 19 1426.55
SINGLES 9 11.
D. COLLARS 22.630-30
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY 6.85
TOTAL 2450.

REMARKS	TIME START	STOP	INTERVAL
R. & Service + B.O.P.	4 00	4 15	1/4
Drill 9" Hole.	4 15	8 45	4 1/2
Survey	8 45	9 00	1/4
Drill	9 00	12 00	3

Totco Ring on Bit No. D.P. Calipered Date Results From Pipe Rack

B.O.P. Test-Operated Time Results

TOTAL CONTRACTOR TIME HRS. TOOL PUSHER

TOTAL COMPANY TIME HRS. APPROVED BY

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 12 DAY ON THIS WELL

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY H.B. Pun. Ltd. LOCATION S Island Rd -41 DATE Feb 8 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pisarchy	8
DERRICK Ray Lavoux	8
MOTOR Nick Fava	8
FLOOR Ron Baldwin	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
1734	283	2017	5¾	54,000	22	6" 7"	2⅞	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	1	9"	OSC-3	3-11/16	26572	10-25	150	1130		20	1958	Locked
	2	9"	OSC-3	3-11/16	26228	10-25	150	59		2		

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	92	92	92	93	10 Sacks Gel
VISCOSITY	40	40	40	42	
GEL					

PUMPS													
NO. 1	PRESSURE	750	"	"	"	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
MODEL D500	S.P.M.	54	"	"	"								
	LINER SIZE	7¼	"	"	"	1⅛		8					
NO. 2	PRESSURE					GENERAL							
MODEL	S.P.M.												
	LINER SIZE												

AT SURVEYS	DEGREE	MOTOR HOURS		NEXT OIL CHANGE
1980	½°	1	60	
		2	60	
		3	60	
ST By		4	88	
L.P		5		

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
15		22. 630 36			1 210	16.00	2019.00

W.L. 2.4 F.C. 1/32 pH. 9.5

REMARKS	TIME START	STOP	INTERVAL
Rig Service + Ck. Bops	1200	1215	¼
Drlg 9" Hole	1215	230	2¼
Survey @ 1980	230	245	¼
Drlg 9" Hole	245	415	1½
Trip For Bit #2	415	500	¾
Change Bits + B.O.P.	500	515	¼
Run In Tight Spots	515	600	¾
Drlg 9" Hole	600	800	2

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	8
DERRICK Floyd Miller	8
MOTOR Ed Kuzio	8
FLOOR Rick Hall II	8
FLOOR Ed Kuzio	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
2017	150	2167	7¾		22	6" 7"	2⅞	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	2	9"	OSC-3	3-11/16	26228	10-25	80-150	209		23¾	1430	

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	93	93	93	93	Gel - 1000 Lbs
VISCOSITY	42	110	42	40	Bicarb - 150 "
GEL					D-Broxin - 150 "
					Caustic - 200 "

PUMPS													
NO. 1	PRESSURE	750	"	"		SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
MODEL D500	S.P.M.	52	"	"						20			
	LINER SIZE	7¼	"	"	"	GENERAL							
NO. 2	PRESSURE												
MODEL	S.P.M.												
	LINER SIZE												

AT SURVEYS	DEGREE	MOTOR HOURS		NEXT OIL CHANGE
1980	1°	1	68	168
		2	68	"
		3	68	"
		4	96	"
ST By		5		

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
15	1	22. 630 36			1 210	22	2167

W.L. 6 F.C. 3/32 pH. 9.5

REMARKS	TIME START	STOP	INTERVAL
Rig Service + Ck. Bops	800	815	¼
Drlg. 9" Hole	815	400	7¾

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Earnest Wault	8
FLOOR Noel Jacob	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
2167	74	2241	13¾	58000	22	6¾	2⅞	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	2	9"	OSC3	3-11/16	26228	20-25	82	202		11½		In Hole

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	93	94	94	94	
VISCOSITY	40	41	40	40	
GEL					

PUMPS													
NO. 1	PRESSURE	750	"	"	"	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL
MODEL	S.P.M.	56	"	"	"								
	LINER SIZE	7¼	"	"	"	GENERAL							
NO. 2	PRESSURE												
MODEL	S.P.M.												
	LINER SIZE												

AT SURVEYS	DEGREE	MOTOR HOURS		NEXT OIL CHANGE
2170	¾	1	76	168
		2	76	"
		3	76	"
		4	96	"
ST By		5	10	
L.P				

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
17	1	22-630 36			1-2 10	22	22189

W.L. 16 F.C. 2/32 pH. 7.5

REMARKS	TIME START	STOP	INTERVAL
Rig Service + Ck BOPs	400	415	¼
1 Survey @ 2190¾	415	430	¼
Drlg 9" Hole	430	615	1¾
Circ. Samp &	615	1000	3¾
Pullout and strap pipe	1000	1200	2

Also Circulate Condition Hole to Test Geologist ORDERS.

Done

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 11TH DAY ON THIS WELL

OPERATOR

RIG No. 18 COMPANY H.B. Pan Am. LOCATION S. Island R.M.-41 DATE Feb. 7 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	8
DERRICK Ricky Hill	8
MOTOR Ed Kuzio	8
FLOOR Doug Mytts	8
FLOOR Ernie Pratt	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
828	167'	995	3	54,000	22	6" 7"	2 7/8	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	1	9	OSC-3	3-11/16	26572	5-10	82	167		3		RUN

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT				8.1	Gel 600#
VISCOSITY				54	
GEL					

PUMPS															
NO. 1	PRESSURE			800	✓	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
MODEL D-500	S.P.M.			68	✓	1 1/4		8						
	LINER SIZE	7 1/4	✓	✓	✓									
NO. 2	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													

AT SURVEYS	DEGREE
895	3/4°

MOTOR HOURS		NEXT OIL CHANGE
1	36	164
2	36	✓
3	36	✓
4	72	✓
5		

ST by
LP

GENERAL Pressure Test Kelly Cock 300 psi O.K

W.L. F.C. pH.

STANDS 3
SINGLES 2
D. COLLARS 22 - 630.36
OTHER FT.
C.B. FT.
SUBS. FT. 1 - 2.80
FT. UP ON KELLY 19'
TOTAL 995
NEXT SLIP

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasmeny	8
DERRICK Ray Lebrun	8
MOTOR Nick Boda	8
FLOOR Ron Brodsmeni	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
995	320	1315	6 1/2		22	6" 7"	2 7/8	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	1	9	OSC-3	3-11	26572	5-10		487		9 1/2		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	8.6				Gel 50 Sacs.
VISCOSITY					10 Sac D Broxin
GEL					10 " Deptrid
					10 " Carbomag
					200 # Caustic

PUMPS															
NO. 1	PRESSURE	800				SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
MODEL D-500	S.P.M.	68				1 1/2		8						
	LINER SIZE	7 1/4												
NO. 2	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													

AT SURVEYS	DEGREE
1010	1/4°

MOTOR HOURS		NEXT OIL CHANGE
1	44	168
2	44	✓
3	44	✓
4	80	✓
5		

ST by
LP

GENERAL

W.L. F.C. pH.

STANDS 7
SINGLES 1
D. COLLARS 22-630-36
OTHER FT.
C.B. FT. 1 2.10
SUBS. FT.
FT. UP ON KELLY 30
TOTAL 1315
NEXT SLIP

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Ernest Mault	8
FLOOR Boyce Schmutz	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
1315	419	1734	6 3/4		22	7" 6"	2 7/8	48			

BITS	NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
	1	9	OSC-3	3 11/16	26572	5-10	150	906		16 1/4		Run

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	8.6	8.6	8.7	8.7	Gel - 1000 Lbs
VISCOSITY	95	35	36	36	O Broxin 100 Lbs
GEL					

PUMPS															
NO. 1	PRESSURE	900	800	✓	✓	SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
MODEL D-500	S.P.M.	68	54	✓	✓	1 1/2		8						
	LINER SIZE	7 1/4	7 1/4	✓	✓									
NO. 2	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													

AT SURVEYS	DEGREE
805	3/4
1425	3/4
1546	1/2

MOTOR HOURS		NEXT OIL CHANGE
1	52	168
2	52	✓
3	52	✓
4	90	✓
5		

ST by
LP

GENERAL Repair False Floor

W.L. F.C. pH.

STANDS 11
SINGLES 2
D. COLLARS 22-630-36
OTHER FT.
C.B. FT.
SUBS. FT. 1 - 2.10
FT. UP ON KELLY 0
TOTAL 1734
NEXT SLIP

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Service Rig	12:00	12:15	1/4
Pressure Blind Rams to 1000 P.S.I. O.K.	12:15	12:30	1/4
Run in Hole	12:30	1:15	3/4
Pressure Test P.P. Rams OK	1:15	1:30	1/4
Pressure Test Hydril 1000 OK	1:30	1:45	1/4
Drill out	1:45	4:45	3
Drill 9" Hole	4:45	6:00	1 1/4
Survey @ 890	6:00	6:15	1/4
Drill 9" Hole	6:15	8:00	1 3/4
Rig Service & Ck Rams	8:00	8:15	1/4
Survey @ 1010 1/4°	8:15	8:30	1/4
Drlg 9" Hole	8:30	11:30	3
Survey @ 1220 1°	11:30	11:45	1/4
Drlg 9" Hole	11:45	12:30	3/4
Circ. Sample	12:30	1:15	3/4
Drlg 9" Hole	1:15	4:00	2 3/4
S. Survey at 1305 3/4°	4:00	4:15	1/4
Service Rig & Ck BOPs	4:15	4:30	1/4
Drlg 9" Hole	4:30	6:15	1 3/4
Survey @ 1425 3/4°	6:15	6:30	1/4
Drlg 9" Hole	6:30	8:45	2 1/4
Survey @ 1546 1/2°	8:45	9:00	1/4
Drlg 9" Hole	9:00	10:45	1 3/4
Survey @ 1665 1/4°	10:45	11:00	1/4
Drill 9" Hole	11:00	12:00	1

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 10th DAY ON THIS WELL

RIG No. 18 COMPANY H.B Pan Am. LOCATION S Island Blk 41 DATE F.B. 6 1964

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Gashaw	8
DERRICK Ricky Hill	8
MOTOR Fo Kuzio	8
FLOOR Doug Mytts	8
FLOOR Ernie Pratt	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT						
VISCOSITY						
GEL						

MOTOR HOURS	
1	
2	
3	
4	
5	

PUMPS			SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
NO. 1	PRESSURE										
MODEL	S.P.M.										
	LINER SIZE										
NO. 2	PRESSURE										
MODEL	S.P.M.										
	LINER SIZE										

GENERAL

NEXT OIL CHANGE

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

W.L. F.C. pH.

REMARKS	TIME START	STOP	INTERVAL
W.O.C.	1700	800	8

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Posiadaly	8
DERRICK Ray Leroux	8
MOTOR Nick Boda	8
FLOOR Ron Bradshaw	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT						
VISCOSITY						
GEL						

MOTOR HOURS	
1	
2	
3	
4	
5	

PUMPS			SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
NO. 1	PRESSURE										
MODEL	S.P.M.										
	LINER SIZE										
NO. 2	PRESSURE										
MODEL	S.P.M.										
	LINER SIZE										

GENERAL

NEXT OIL CHANGE

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT. 6

SUBS. FT.

FT. UP ON KELLY

TOTAL

W.L. F.C. pH.

REMARKS	TIME START	STOP	INTERVAL
W.O.C. + Head Up	800	400	8

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Earnest Nault	8
FLOOR Royce Schmutz	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT						
VISCOSITY						
GEL						

MOTOR HOURS	
1	
2	
3	
4	
5	

PUMPS			SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
NO. 1	PRESSURE										
MODEL	S.P.M.										
	LINER SIZE										
NO. 2	PRESSURE										
MODEL	S.P.M.										
	LINER SIZE										

GENERAL

NEXT OIL CHANGE

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

W.L. F.C. pH.

REMARKS	TIME START	STOP	INTERVAL
W.O.C. + Head up	4	1200	8

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 9 DAY ON THIS WELL

OPERATOR

RIG No. 18 COMPANY HUDSON BAY OIL & GAS LOCATION HUDSON BAY, PENNY ISLAND RA 44 DATE FEB 5 19 64

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	8
DERRICK RICKEY HILL	8
MOTOR ED KUZIO	8
FLOOR DOUG MYTTS.	8
FLOOR ERNIE PRATT.	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
682	124'	806	6½	50M.	21	7"	2¾				

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
2A	15	OSC-3		97927		200	124		6½		RUN

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT	9.8	10.0	10.0	10.0	
VISCOSITY	40	40	40	40	
GEL					

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	600	600	600	600
MODEL D-500	S.P.M.	61	61	61	61
	LINER SIZE	7¼	7¼	7¼	7¼
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
725	1°	1 16	
806	1°	2 16	
		3 16	
		ST BY 4 58	
		L.D. 5	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
1-204.46	1	21. 602.00			3. 485	0.	806.

REMARKS	TIME START	STOP	INTERVAL
R.G SERVICE.	12.00	12.15	¼
RUN IN HOLE.	12.15	1.00	¾
DR.11 15" HOLE.	1.00	3.00	2
SURVEY @ 725 1°	3.00	3.15	¼
DR.11.	3.15	7.30	4¼
SURVEY @ 806 1°	7.30	7.45	¼
DR.11	7.45	8.00	¼

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER WALTER PASMENY	8
DERRICK RAY LEROUX	18
MOTOR NICK BODA	18
FLOOR RON BRADSHAW	13
FLOOR MEL SPLINDERS	18
FLOOR	
FIREMAN	
EXTRA	

INJURIES: COUNTING TO

FIRES: RUN 10 3/4" CSG Gouge H.B.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
806	22'	828	2½	50 M	21	6"	2⅞	50			

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
2A	15"	OSC-3		97927	15	200	146'		9		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	10.0	10.0	10.0		600# Gel
VISCOSITY	40	58	58		
GEL					

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	650			
MODEL D-500	S.P.M.	64			
	LINER SIZE	7¼			
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
		1 24	168
		2 24	
		3 24½	
		ST BY 5 6	
		L.D.	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL
1	2	21 - 602.00			23. 11.85	7.00	828.00

REMARKS	TIME START	STOP	INTERVAL
RIG SERVICE	8.00	8.15	¼
DRLG 15" HOLE	8.15	10.00	1¾
SURVEY @ 820 2°	10.00	11.00	1
TRIP	11.00	12.15	1¼
CIR TO RUN CASING	12.15	12.45	½
HOIST TO RUN CASING	12.45	1.15	½
RIG UP TO RUN CASING	1.15	2.00	¾
RUN CASING W/LD ON SHOE	2.00		
FLOAT + FLOAT COLLAR		4.00	2

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	10
DERRICK Ed Hagen	10
MOTOR Harry Landy	10
FLOOR Ernest Nault	10
FLOOR Royce Schuntz	10
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
		Landed @ 828 K.B.									

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					Ran - 20 Jts - 10 3/4 40 lbs J55 Cemented 700 Sks Cement 2% Calcium Chloride
VISCOSITY					
GEL					

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				
NO. 2	PRESSURE				
MODEL	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS DEGREE		MOTOR HOURS	NEXT OIL CHANGE
		1	
		2	
		3	
		4	
		5	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL Plug down @ 1.45 P.M. Jan 5/1964

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL

REMARKS	TIME START	STOP	INTERVAL
Rig Service	4.00	4.15	¼
Run Casing	4.15	5.45	1½
Break Circ. & Circ.	5.45	6.30	¾
Hook up Haliburton And Run Cement	6.30	7.30	1
Pump Cement Plug	7.30	7.45	¼
Clean mud Tanks and blow mud lines	7.45	9.00	1¼
Dig cellar and clean up Rig	9.00	12.00	3
W.O.C	7.45	12.00	4¼

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 8 1/2 DAY ON THIS WELL

OPERATOR

RIG No. 14 COMPANY H. SON BAY OIL & GAS LOCATION H. SON BAY FARM P. 17044 DATE 7-8-4 19 64.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	8
DERRICK RICKEY HILL	8
MOTOR ED KUZIO	8
FLOOR DOUG MYTTS	8
FLOOR ERNIE PRATT	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
270	215	485	7	40 M.	16						

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
1A	15"	F3A	CONV.	F03043	35/40	200			21 3/4		RUN

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT			94	95	
VISCOSITY			45	45	GEL 500 L 135 -
GEL					

PUMPS		12 MN.	2 A.M.	4 A.M.	6 A.M.
NO. 1	PRESSURE	460	425	450	500
	MODEL	D500			
	S.P.M.	61	61	61	61
	LINER SIZE	7 1/2	7 1/2	7 1/4	7 1/4
NO. 2	PRESSURE				
	MODEL	F250			
	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS	DEGREE	MOTOR HOURS		NEXT OIL CHANGE
268	1/4°	1	34	
358	0°	2	34	
448	1/2°	3		
		ST Bit	34	
		1 P	151	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS
SINGLES
D. COLLARS 16 - 46277
OTHER FT.
C.B. FT.
SUBS. FT. 3 - 485.
FT. UP ON KELLY 18.64
TOTAL 485.
NEXT SLIP

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Rasmuny	8
DERRICK Ray Leroux	8
MOTOR Nick Boda	8
FLOOR Ron Bradshaw	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
435	133	618	7 1/2	45,000	21	6" 7"	2 1/4	45			

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
1B	15	VT3A		E03083	10-20	200	618		29 1/4		RUN

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT	10.5	10.1	10.2	10.2	
VISCOSITY	40	42	41	40	
GEL					

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE	500	"	600	"
	MODEL	D500			
	S.P.M.	60	"	"	"
	LINER SIZE	7 1/4	"	"	"
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS	DEGREE	MOTOR HOURS		NEXT OIL CHANGE
560	1/2°	1	42	168
		2	42	"
		3		"
		ST Bit	42	"
		1 P	159	"

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/4		8						

GENERAL Clean Settling Tank

STANDS
SINGLES
D. COLLARS 21 - 60200
OTHER FT.
C.B. FT.
SUBS. FT. 3 - 4.85
FT. UP ON KELLY 18.70
TOTAL 618.00
NEXT SLIP

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Ernest Vault	8
FLOOR Royce Schmitz	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS
618	62	680	5 1/4	48000	22	7" 6 3/4"	2 1/4	48000			

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
1A	15"	VT3A		E03083	10/20	200	682		34 1/4		Dull

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT	10.5	10.5	10	10	
VISCOSITY	40	40	40	40	
GEL					

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	500	"	"	650
	MODEL	D500			
	S.P.M.	55	"	"	62
	LINER SIZE	7 1/4			
NO. 2	PRESSURE				
	MODEL				
	S.P.M.				
	LINER SIZE				

W.L. F.C. pH.

AT SURVEYS	DEGREE	MOTOR HOURS		NEXT OIL CHANGE
610	1/2°	1	8	168
		2	7	168
		3	8	168
		4	50	
		ST Bit		
		1 P	167	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP
1 1/4		8						

GENERAL Changed Oil in No 1 & No 2 Banks On Floor

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL
NEXT SLIP

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
R. C. SERVICE.	12.00	12.15	1/4
SURVEY @ 268.	12.15	12.30	1/4
DR. 11 15" HOLE.	12.30	3.45	3 1/4
SURVEY @ 358	3.45	4.00	1/4
DRILL	4.00	6.30	2 1/2
SURVEY @ 448	6.30	6.45	1/4
DR. 11.	6.45	8.00	1 1/4

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS 7 DAY ON THIS WELL

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY H.B. HUDSON BAY OIL + GAS LOCATION HUDSON BAY PAN AM R-11-41 DATE FEB 3 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	8
DERRICK RICKEY HILL	8
MOTOR ED KUZIO	8
FLOOR DOUG MYTTS.	8
FLOOR ERNIE PRATT.	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasmedy	8
DERRICK Ray LeBoux	8
MOTOR Nick Boda	8
FLOOR Ron Bradshaw	8
FLOOR Mel Saunders	8
FLOOP	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Leady	8
FLOOR Earnest Nault	8
FLOOR Royce Schmutz	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Mix Mud			
Rig to Spud			
Rig up To Spud	5:00	8:30	4½
Spud in @ 8:00 w/ 15" Bit	8:30	4:00	7½
Rocks in Spots Hard Drlg			
Survey @ 110' - ¾	4:00	4:15	¼
Service R.G	4:15	4:30	¼
Drlg 15" Hole.	4:30	8:00	3½
Survey @ 183 ½	8:00	8:15	¼
Drlg 11" Hole	8:15	12:00	3¾

Day 1

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
0	120'	120	7½	15,000	3	5"	2¼	

FUEL GALS. | WATER BBLS. | COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
1A	15	YT3A		E03083	12		120		7½		

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT	40	↙	↙	↙
VISCOSITY	58	↙	↙	↙
GEL				

ADDITIVES

PUMPS		8 A.M.	10 A.M.	12 NOON	2 P.M.
NO. 1	PRESSURE		300	↙	↙
MODEL D-500	S.P.M.		70	↙	↙
	LINER SIZE	7¼	↙	↙	↙
NO. 2	PRESSURE				
MODEL G-250	S.P.M.				
	LINER SIZE	6½			

W.L. — F.C. — pH. 9

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	18	168
2	18	↙
3		↙
ST BY 4	18	↙
5	135	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL	NEXT SLIP
		3-88.40			3-4.85	12.21	120	

Day 2

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.
120	150	270	7½	28000	8	7"	2⅞	

FUEL GALS. | WATER BBLS. | COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION
1A	15	YT3A		E03083	12	100	270		14½		RUN

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT	8.8	8.8	8.8	8.8
VISCOSITY	36	37	40	40
GEL				

ADDITIVES: Gel - 1000 Lbs

PUMPS		4 P.M.	6 P.M.	8 P.M.	10 P.M.
NO. 1	PRESSURE	300	↙	↙	↙
MODEL D-500	S.P.M.	60	↙	↙	↙
	LINER SIZE	7¼			
NO. 2	PRESSURE				
MODEL G-250	S.P.M.				
	LINER SIZE	6½			

W.L. — F.C. — pH.

AT SURVEYS DEGREE

MOTOR HOURS		NEXT OIL CHANGE
1	26	168
2	26	↙
3		↙
ST BY 4	26	↙
5	143	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL	NEXT SLIP
		8-7"-6¾-2¼			3-4.85-4.10	0	270	

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS _____ DAY ON THIS WELL

RIG No. 18 COMPANY H.B.&P.A.N.M. LOCATION ISLAND R.M.-41. DATE FEB 2 1964.

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER LES GRAHAM	8
DERRICK R.CKEY HILL	8
MOTOR ED KUZIO	8
FLOOR DUDE MYTTS.	8
FLOOR ERNIE PRATT.	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION | D. COLLARS | OTHER FT. | C.B. FT.

MUD: 12 MN. | 2 A.M. | 4 A.M. | 6 A.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE | SUBS. FT.

WEIGHT | VISCOSITY | GEL | FT. UP ON KELLY | TOTAL

PUMPS: NO. 1 / NO. 2 — PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasmeny	8
DERRICK Ray LeRoux	8
MOTOR Nick Boda	8
FLOOR Ron Bradshaw	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION | D. COLLARS | OTHER FT. | C.B. FT.

MUD: 8 A.M. | 10 A.M. | 12 NOON | 2 P.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE | SUBS. FT.

WEIGHT | VISCOSITY | GEL | FT. UP ON KELLY | TOTAL

PUMPS: NO. 1 / NO. 2 — PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Forest Nault	8
FLOOR Royce Schmutz	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION | D. COLLARS | OTHER FT. | C.B. FT.

MUD: 4 P.M. | 6 P.M. | 8 P.M. | 10 P.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE | SUBS. FT.

WEIGHT | VISCOSITY | GEL | FT. UP ON KELLY | TOTAL

ADDITIVES: Gel - 4100 Lbs; Caustic - 100 "

PUMPS: NO. 1 / NO. 2 — PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
R. GOING UP.	12.00	8.00	8.
Rig Up Jack up Drawworks To Line up Transmission Drive with Rotary	8.00	4.00	8
Lining up and install Rotary oil Bath guard	4.00	12.00	8

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS _____ DAY ON THIS WELL

RIG No. 18 COMPANY H.B & Pan Am. LOCATION Island R.M - 41 DATE FEB. 1 1964

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasmeny	15
DERRICK Ray Leroux	15
MOTOR Nick Boor	15
FLOOR Ron Brodshaw	15
FLOOR Mel Saunders	15
FLOOR	
FIREMAN	
EXTRA	

INJURIES: Over Time For Rigging Up

FIRES: Prefabs

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS 1 2 3 4 5

NEXT OIL CHANGE

PUMPS

NO. 1	MODEL	PRESSURE	
		S.P.M.	
		LINER SIZE	
NO. 2	MODEL	PRESSURE	
		S.P.M.	
		LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

W.L. F.C. pH.

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Graham.	8
DERRICK Rickey Hill	8
MOTOR Ed Kozlo	8
FLOOR Doug Myers.	8
FLOOR Jeanie Pratt.	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS 1 2 3 4 5

NEXT OIL CHANGE

PUMPS

NO. 1	MODEL	PRESSURE	
		S.P.M.	
		LINER SIZE	
NO. 2	MODEL	PRESSURE	
		S.P.M.	
		LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

W.L. F.C. pH.

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	12
DERRICK Ed Hagen	12
MOTOR Harry Landy	12
FLOOR Earenst Nault	12
FLOOR Royce Schmutz	12
FLOOR	
FIREMAN	
EXTRA	

INJURIES: Overtime for Rigging Up Prefabs

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS 1 2 3 4 5

NEXT OIL CHANGE

PUMPS

NO. 1	MODEL	PRESSURE	
		S.P.M.	
		LINER SIZE	
NO. 2	MODEL	PRESSURE	
		S.P.M.	
		LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

W.L. F.C. pH.

REMARKS	TIME START	STOP	INTERVAL
Rig Up	8 00	11 00	15
Rig Up.	8.00	4.00	8.
Rig up			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY Hudson Bay LOCATION Island River DATE Jan 31 19 64

THIS IS _____ DAY ON THIS WELL

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	10
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Ernest Nault	8
FLOOR Royce Schmutz	9
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Les Graham	9
DERRICK Richen Hill	9
MOTOR Ted Hozio	9
FLOOR Doug Mutts	9
FLOOR Earl Pratt	9
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasmony	10
DERRICK Ray Leroux	14
MOTOR Nick Boda	10
FLOOR Ron Broadhead	10
FLOOR Mel Saunders	10
FLOOR	
FIREMAN	
EXTRA	

INJURIES: Ray Leroux

FIRES: Duff Time Helping Welder

Tour - Midnight - 8 a.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD

	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5

NEXT OIL CHANGE

PUMPS

NO. 1	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

Tour - 8 a.m. - 4 p.m.

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD

	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5

NEXT OIL CHANGE

PUMPS

NO. 1	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.S. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

Tour - 4 p.m. - Midnight

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS

NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD

	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS: 1 2 3 4 5

NEXT OIL CHANGE

PUMPS

NO. 1	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	
NO. 2	PRESSURE	
MODEL	S.P.M.	
	LINER SIZE	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rigging Up	8	400	8
R.G.U.P.	4.00	4.00	
Rig Up	800	600	10
Duff Time Have Difficulty On Steam + Water Lines Returning			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS _____ DAY ON THIS WELL

OPERATOR

RIG No. 18 COMPANY Hudson Bay LOCATION Island River R-41 DATE Jan 30 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm. McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Earnest Nault	8
FLOOR Royce Schmutz	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT							1	
VISCOSITY							2	
GEL							3	
							4	
							5	

PUMPS: NO. 1 PRESSURE; MODEL; S.P.M.; LINER SIZE — NO. 2 PRESSURE; MODEL; S.P.M.; LINER SIZE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasmeny	8
DERRICK Ray Leroux	14
MOTOR Nick Boda	8
FLOOR Ron Bradshaw	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES: Over Time For Helping Welder

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT							1	
VISCOSITY							2	
GEL							3	
							4	
							5	

PUMPS: NO. 1 PRESSURE; MODEL; S.P.M.; LINER SIZE — NO. 2 PRESSURE; MODEL; S.P.M.; LINER SIZE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER LCS Graham	8
DERRICK Rickey Hill	8
MOTOR Ed Kozio	8
FLOOR G. Maccionlini	8
FLOOR Doug Mutts	8
FLOOR Ernie Pratt	8
FIREMAN	
EXTRA	

INJURIES:

FIRES: Nicolind fired JAB 1 2 3

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES	AT SURVEYS DEGREE	MOTOR HOURS	NEXT OIL CHANGE
WEIGHT							1	
VISCOSITY							2	
GEL							3	
							4	
							5	

PUMPS: NO. 1 PRESSURE; MODEL; S.P.M.; LINER SIZE — NO. 2 PRESSURE; MODEL; S.P.M.; LINER SIZE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	SINGLES	D. COLLARS	OTHER FT.	C.B. FT.	SUBS. FT.	FT. UP ON KELLY	TOTAL

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rigging Up	9	5⁰⁰	8
Rigging Up	9⁰⁰	5⁰⁰	8

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS _____ DAY ON THIS WELL

RIG No. 18 COMPANY Cascade Drilling LOCATION Fort Nelson DATE Jan 29 19 64.

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR	
FLOOR Ernie Pratt	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR	
FLOOR Ernie Pratt	16
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR	
FLOOR	
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS 1 2 3 4 5

NEXT OIL CHANGE

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS / SINGLES / D. COLLARS / OTHER FT. / C.B. FT. / SUBS. FT. / FT. UP ON KELLY / TOTAL

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS 1 2 3 4 5

NEXT OIL CHANGE

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS / SINGLES / D. COLLARS / OTHER FT. / C.B. FT. / SUBS. FT. / FT. UP ON KELLY / TOTAL

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS 1 2 3 4 5

NEXT OIL CHANGE

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS / SINGLES / D. COLLARS / OTHER FT. / C.B. FT. / SUBS. FT. / FT. UP ON KELLY / TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Jan. 27.			
Rig #18 Loading out.			
Rig #18 finished loading Left Rig			
Jan 28.			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS _____ DAY ON THIS WELL

OPERATOR

RIG No. _____ COMPANY _____ LOCATION _____ DATE _____ 19____

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK Ernest Bola.	4.
MOTOR Douglas Myatt	4
FLOOR Ricki Hill	8
FLOOR F. J. Mazilli	8
FLOOR Ron Erdsman	5
FIREMAN Chas. Filipe	
EXTRA Nocciolino	8
INJURIES:	
FIRES:	

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION | D. COLLARS | OTHER FT. | C.B. FT.

MUD: 12 MN. | 2 A.M. | 4 A.M. | 6 A.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE | SUBS. FT. | FT. UP ON KELLY | TOTAL

WEIGHT | VISCOSITY | GEL | 1 | 2 | 3 | 4 | 5

PUMPS: NO. 1 / NO. 2 — PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR	
FLOOR Douglas Myatt	16
FLOOR A. Redoute	16
FLOOR E. J. Bola	16
FIREMAN Ernie Pratt	16
EXTRA	
INJURIES:	
FIRES:	

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION | D. COLLARS | OTHER FT. | C.B. FT.

MUD: 8 A.M. | 10 A.M. | 12 NOON | 2 P.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE | SUBS. FT. | FT. UP ON KELLY | TOTAL

WEIGHT | VISCOSITY | GEL | 1 | 2 | 3 | 4 | 5

PUMPS: NO. 1 / NO. 2 — PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Douglas Myatt	9
DERRICK Ernest Nagel	9
MOTOR El Rupio	9
FLOOR Ray Leroux	9
FLOOR Ernest Bola	9
FLOOR Ernest Pratt	9
FIREMAN Roy Lalonde	8
EXTRA	
INJURIES:	
FIRES:	

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION | D. COLLARS | OTHER FT. | C.B. FT.

MUD: 4 P.M. | 6 P.M. | 8 P.M. | 10 P.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE | SUBS. FT. | FT. UP ON KELLY | TOTAL

WEIGHT | VISCOSITY | GEL | 1 | 2 | 3 | 4 | 5

PUMPS: NO. 1 / NO. 2 — PRESSURE | MODEL | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Moving Rig #18			
Jan 24 Paid.			
Rig #18			
Jan 25			
Jan. 26			
Rig #18			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING (Company Limited)

DAILY DRILLING REPORT

THIS IS _____ DAY ON THIS WELL

OPERATOR

RIG No. 18 COMPANY Hudson Bay LOCATION Island River R.M.-4 DATE Jan 29 1964

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Earnest Nault	8
FLOOR Royce Schmutz	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. | O.D. | I.D. | WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

MUD: 12 MN. | 2 A.M. | 4 A.M. | 6 A.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE

WEIGHT | VISCOSITY | GEL

PUMPS: NO. 1 / NO. 2 — MODEL | PRESSURE | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

REMARKS	TIME START	STOP	INTERVAL
~~Geo~~ Rigging Up	9.00	5.00	8

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasonay	8
DERRICK Ray Leroux	14
MOTOR Nick Boda	8
FLOOR Ron Bradshaw	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES: 6 Hrs For Ray Leroux overtime

FIRES: Helper Welder To Build Rig Up.

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. | O.D. | I.D. | WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

MUD: 8 A.M. | 10 A.M. | 12 NOON | 2 P.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE

WEIGHT | VISCOSITY | GEL

PUMPS: NO. 1 / NO. 2 — MODEL | PRESSURE | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

REMARKS	TIME START	STOP	INTERVAL
Rigging Up	9.00	5.00	8

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER Les Graham.	8
DERRICK Rick Hill	8
MOTOR Ed Kuzio	8
FLOOR G. Mocellin	8
FLOOR Doug Mills	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES: CAME FROM NELSON JAN 28 LES GRAHAM.

FIRES:

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. | O.D. | I.D. | WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

MUD: 4 P.M. | 6 P.M. | 8 P.M. | 10 P.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE

WEIGHT | VISCOSITY | GEL

PUMPS: NO. 1 / NO. 2 — MODEL | PRESSURE | S.P.M. | LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

REMARKS	TIME START	STOP	INTERVAL
Rigging Up.	9.00	5.00	8.

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

RIG No._____ COMPANY_____ LOCATION_____ THIS IS_____ DAY ON THIS WELL

DATE JAN 28 1964

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Wm McDonnell	8
DERRICK Ed Hagen	8
MOTOR Harry Landy	8
FLOOR Ernest Wault	8
FLOOR Royce Schmitz	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasmeny	8
DERRICK Ray Lebouef	8
MOTOR Nick Boda	8
FLOOR Ron Broadhead	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR Rick Hill	8
FLOOR Ed Kuzio	8
FLOOR G. Noccianlino	8
FLOOR Ernest Bolla	8
FIREMAN Doug Myers	8
EXTRA	

INJURIES: Bolla fired

FIRES:

Report 1

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS: NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

MUD: 12 MN. | 2 A.M. | 4 A.M. | 6 A.M. | ADDITIVES — WEIGHT, VISCOSITY, GEL

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

AT SURVEYS DEGREE | MOTOR HOURS 1–5 | NEXT OIL CHANGE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

Report 2

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS: NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

MUD: 8 A.M. | 10 A.M. | 12 NOON | 2 P.M. | ADDITIVES — WEIGHT, VISCOSITY, GEL

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

AT SURVEYS DEGREE | MOTOR HOURS 1–5 | NEXT OIL CHANGE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

Report 3

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS: NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION

MUD: 4 P.M. | 6 P.M. | 8 P.M. | 10 P.M. | ADDITIVES — WEIGHT, VISCOSITY, GEL

PUMPS: NO. 1 / NO. 2 — PRESSURE, MODEL, S.P.M., LINER SIZE

AT SURVEYS DEGREE | MOTOR HOURS 1–5 | NEXT OIL CHANGE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS | SINGLES | D. COLLARS | OTHER FT. | C.B. FT. | SUBS. FT. | FT. UP ON KELLY | TOTAL

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Rigging Up			
Rig Up			
Rig Up.			

Totco Ring on Bit No._____ D.P. Calipered Date_____ Results_____ From Pipe Rack_____

B.O.P. Test-Operated_____ Time_____ Results_____

TOTAL CONTRACTOR TIME_____ HRS. TOOLPUSHER

TOTAL COMPANY TIME_____ HRS. APPROVED BY_____

Burg 3 TWP 7 D

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS _____ DAY ON THIS WELL

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. _____ COMPANY _____ LOCATION _____ DATE JAN 27 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR Ed Kuzia	8
FLOOR Ernest Nault	8
FLOOR Roy Schmitz	8
FLOOR Ernest Bolla	8
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION | D. COLLARS | OTHER FT. | C.B. FT.

MUD: 12 MN. | 2 A.M. | 4 A.M. | 6 A.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE | SUBS. FT. | FT. UP ON KELLY | TOTAL

WEIGHT | VISCOSITY | GEL

PUMPS: NO. 1 / NO. 2 — MODEL — PRESSURE — S.P.M. — LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasanen	8
DERRICK Ray Leroux	8
MOTOR Nick Boda	8
FLOOR Ron Broadshaw	8
FLOOR Mel Saunders	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION | D. COLLARS | OTHER FT. | C.B. FT.

MUD: 8 A.M. | 10 A.M. | 12 NOON | 2 P.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE | SUBS. FT. | FT. UP ON KELLY | TOTAL

WEIGHT | VISCOSITY | GEL

PUMPS: NO. 1 / NO. 2 — MODEL — PRESSURE — S.P.M. — LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK Rick Hill	8
MOTOR Harry Landy	8
FLOOR [illegible]	8
FLOOR G. Nocciolino	8
FLOOR Doug Mytts	8
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM | FOOTAGE | TO | HRS. ON BOTTOM | WT. DRILL STRING (1000 LBS.) | DRILL COLLARS NO. O.D. I.D. WGT. | FUEL GALS. | WATER BBLS. | COAL TONS | STANDS | SINGLES

BITS: NO. | SIZE | TYPE | SIZE JETS | SERIAL NO. | WEIGHT | R.P.M. | FT. DRLD. | FT. RMD. | HRS. | DEPTH OUT | CONDITION | D. COLLARS | OTHER FT. | C.B. FT.

MUD: 4 P.M. | 6 P.M. | 8 P.M. | 10 P.M. | ADDITIVES | AT SURVEYS DEGREE | MOTOR HOURS | NEXT OIL CHANGE | SUBS. FT. | FT. UP ON KELLY | TOTAL

WEIGHT | VISCOSITY | GEL

PUMPS: NO. 1 / NO. 2 — MODEL — PRESSURE — S.P.M. — LINER SIZE

SIZE | TRIPS | NO. LINES | TON MILES | TOTAL MILES | SLIP | FEET OR CUT | FEET LEFT ON SPOOL | NEXT SLIP

GENERAL

W.L. F.C. pH.

REMARKS	TIME START	STOP	INTERVAL
Spot Buildings, Sub, + Pin Up Derrick			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS _____ DAY ON THIS WELL

RIG No. _____ COMPANY _____ LOCATION _____ DATE JAN 26 1964

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR	
FLOOR Ernest Nault	10
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
		1		
		2		
		3		
		4		
		5		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT
FT. UP ON KELLY
TOTAL

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasmany	10
DERRICK	
MOTOR Nick Boor	10
FLOOR Ron Broshawid	10
FLOOR Rick Hill	10
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
		1		
		2		
		3		
		4		
		5		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR Harry Lundy	10
FLOOR Mel Saunders	10
FLOOR G. Naccionlund	10
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES
WEIGHT					
VISCOSITY					
GEL					

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

AT SURVEYS DEGREE		MOTOR HOURS		NEXT OIL CHANGE
		1		
		2		
		3		
		4		
		5		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS
SINGLES
D. COLLARS
OTHER FT.
C.B. FT.
SUBS. FT.
FT. UP ON KELLY
TOTAL

REMARKS	TIME START	STOP	INTERVAL
Rig Up Camp, Pull Up Sub, Clean Out All Oil Stones ICED Up	8:00	7:00	10

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS ____ DAY ON THIS WELL

OPERATOR

RIG No. ____ COMPANY ____ LOCATION ____ DATE Jan 25 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR	
FLOOR Ernest Nault	8
FLOOR	
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS 1 2 3 4 5

NEXT OIL CHANGE

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS

SINGLES

D. COLLARS

OTHER

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Pasmeny	8
DERRICK	8
MOTOR Nick Boos	8
FLOOR Ron Broshow	8
FLOOR Rick Hill	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER GPS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS 1 2 3 4 5

NEXT OIL CHANGE

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR Harry Landy	8
FLOOR Mel Saunders	8
FLOOR G. Nocciolino	8
FLOOR	
FIREMAN	
EXTRA	

INJURIES:

FIRES:

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.
WEIGHT				
VISCOSITY				
GEL				

ADDITIVES

AT SURVEYS DEGREE

MOTOR HOURS 1 2 3 4 5

NEXT OIL CHANGE

PUMPS			
NO. 1	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		
NO. 2	PRESSURE		
MODEL	S.P.M.		
	LINER SIZE		

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS

SINGLES

D. COLLARS

OTHER FT.

C.B. FT.

SUBS. FT.

FT. UP ON KELLY

TOTAL

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Start light Plant + Pic up Camp	12⁰⁰	8⁰⁰	

Totco Ring on Bit No. ____ D.P. Calipered Date ____ Results ____ From Pipe Rack ____

B.O.P. Test-Operated ____ Time ____ Results ____

TOTAL CONTRACTOR TIME ____ HRS. TOOLPUSHER ____

TOTAL COMPANY TIME ____ HRS. APPROVED BY ____

CASCADE DRILLING Company Limited

DAILY DRILLING REPORT

THIS IS _____ DAY ON THIS WELL

OPERATOR

DAY WORK RECORD

NOTE - Please show FOOTAGE made while "Control Drilling" as well as HOURS.

RIG No. 18 COMPANY Cascade Drilling LOCATION Fort Nelson, B.C. DATE Jan 23 19 64

Tour - Midnight - 8 a.m.

Specify Actual Hours Worked	HRS.
DRILLER Walter Rooney	6
DERRICK	
MOTOR	
FLOOR K. Robinson	8
FLOOR B. Hansen	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	12 MN.	2 A.M.	4 A.M.	6 A.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT						
VISCOSITY						
GEL						

PUMPS														
NO. 1	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													
NO. 2	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													

MOTOR HOURS	NEXT OIL CHANGE
1	
2	
3	
4	
5	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	
SINGLES	
D. COLLARS	
OTHER FT.	
C.B. FT.	
SUBS. FT.	
FT. UP ON KELLY	
TOTAL	

Tour - 8 a.m. - 4 p.m.

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR	
FLOOR C. Mault	8
FLOOR J. Lamb	8
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH CUT	CONDITION

MUD	8 A.M.	10 A.M.	12 NOON	2 P.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT						
VISCOSITY						
GEL						

PUMPS														
NO. 1	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													
NO. 2	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													

MOTOR HOURS	NEXT OIL CHANGE
1	
2	
3	
4	
5	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	
SINGLES	
D. COLLARS	
OTHER FT.	
C.B. FT.	
SUBS. FT.	
FT. UP ON KELLY	
TOTAL	

Tour - 4 p.m. - Midnight

Specify Actual Hours Worked	HRS.
DRILLER	
DERRICK	
MOTOR	
FLOOR	
FLOOR	
FLOOR	
FIREMAN	
EXTRA	
INJURIES:	
FIRES:	

FROM	FOOTAGE	TO	HRS. ON BOTTOM	WT. DRILL STRING (1000 LBS.)	DRILL COLLARS NO.	O.D.	I.D.	WGT.	FUEL GALS.	WATER BBLS.	COAL TONS

BITS NO.	SIZE	TYPE	SIZE JETS	SERIAL NO.	WEIGHT	R.P.M.	FT. DRLD.	FT. RMD.	HRS.	DEPTH OUT	CONDITION

MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	ADDITIVES	AT SURVEYS DEGREE
WEIGHT						
VISCOSITY						
GEL						

PUMPS														
NO. 1	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													
NO. 2	PRESSURE													
MODEL	S.P.M.													
	LINER SIZE													

MOTOR HOURS	NEXT OIL CHANGE
1	
2	
3	
4	
5	

SIZE	TRIPS	NO. LINES	TON MILES	TOTAL MILES	SLIP	FEET OR CUT	FEET LEFT ON SPOOL	NEXT SLIP

GENERAL

W.L. F.C. pH.

STANDS	
SINGLES	
D. COLLARS	
OTHER FT.	
C.B. FT.	
SUBS. FT.	
FT. UP ON KELLY	
TOTAL	

REMARKS	TIME START	TIME STOP	TIME INTERVAL
Waiting on Pump Head from Edmonton			
Jan 23/64.			
Rig #18 Island River Location			
Jan - 24.			
Work on Pump for Rig #18.			

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____

B.O.P. Test-Operated _____ Time _____ Results _____

TOTAL CONTRACTOR TIME _____ HRS. TOOLPUSHER _____

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

RIG No.:

BETA WELL SERVICE LTD. Rig 18

OIL CO.: Hudsons Bay Pan Am REPORT No.: 1

MAIL INVOICE TO: DATE Feb 24, 1966

LOCATION: Hudsons Bay Pan Am S. Island R. M-41

TOUR 12 pm TO 12 am	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR F. Dayton	12 00			Help Load out equipment & Camps	
DERRICKMAN D Durocher	12	12 00	12 00	Move rig to Fort Nelson	12
FLOORMAN C. Villeneuve	12				
FLOORMAN C. Prato	12			12 Hrs	
FIREMAN					
FIREMAN					

ITEMS SUPPLIED

IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		

Rig Time 12 Hrs @ 33.50 414 00 ✓
Tool push day 40.00 40 00 ✓
Crew Trans 250 mile @ 20¢ 50 00 ✓
Subsistance 5 men @ 6.00 112 00 ✓
Drumm Trans 25¢ mile @ 20¢ 50 00
2 Light plants Bills attached.

Tubing String	Rod String

DEPT. OF NORTHERN AFFAIRS & NATIONAL RESOURCES CALGARY, ALBERTA MAY 3 1966 OIL AND GAS CONSERVATION ENGINEER Northwest Territories & Yukon Territory

Total Hours 12

Extra Material Used
Rentals
Moving Equipment Used

Light plant Rental one 10 KW + one 5 KW
Tompkins Contracting to Load & Haul
Equipment to Lease Charges Direct to
Hudsons Bay

TOOL PUSH: Ed Flatt APPROVED BY: John D Fenton

Form No. 7—7500-7-65

MAR 15 1966

RIG No.: 18

BETA WELL SERVICE LTD.

OIL CO.: Hudson's Bay Oil & Gas REPORT No.: 2

MAIL INVOICE TO: DATE Feb 25, 1966

LOCATION: Hudson Bay S Leland R. M-41

TOUR	12 AM to 12 PM	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR	C. Mann	12	12 AM		Move rig from Fort Nelson to	
DERRICKMAN	H. Malbeuf	12		12 PM	Lease & equipment Start to	
FLOORMAN	R. Shuler	12			Rig up Boiler	
FLOORMAN	C. Malbeuf	12				
FIREMAN	C. Wagner	6				
FIREMAN	J. Wagner	6				

ITEMS SUPPLIED

IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		

Rig Time 12 Hrs @ 34.50 414.00 ✓
Fuel push day 40.00 40.00 ✓
Crew Trans 140 mile @ 20¢ 28.00 ✓
Fireman Trans 140 mile @ 20¢ 28.00 ✓
Substance 7 men @ 6.00 day 42.00 ✓
(Light plant)
Fire Man Wagner @ 350 Hr 12 Hrs. 42.00 ✓

Tubing String	Rod String

Total Hours 12

Extra Material Used	
Rentals	Light plants one 10 KW + one 5 KW
Moving Equipment Used	

TOOL PUSH: Ed Fratt APPROVED BY: John D Fenton

Form No. 7—7500-7-65

MAR 15 1966

BETA WELL SERVICE LTD. Rig 18

OIL CO.: Hudson's Bay Oil + Gas REPORT No.: 2

MAIL INVOICE TO: DATE Feb 25, 1966

LOCATION: Hudsons Bay Por Gas S Island R. M-41

TOUR 12 PM	TO 12 AM	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR F. Dayton		12	12		Spot Rig equipment + Compr.	
DERRICKMAN D Durocher		12			set up Compr. Hook up sand	
FLOORMAN C. Prata		12		12	Light plant spot Rig	12
FLOORMAN R. Villeneuve		12			Lay steam lines Unload 2⅞ Tubing	
FIREMAN J. Wagner		12			12 Hrs	
FIREMAN						

ITEMS SUPPLIED

IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		
Extra Material Used		
Rentals		
Moving Equipment Used		

Rig Time 12 Hrs @ 3450 414 00 ✓
Compr.
Baker day 35 00 ✓
Firemans Wages @ 350 Hrs 12 Hrs 42 00 ✓
Stone Oil & Gas Sales 227.2 21 76 ✓
Compr.
Extra Labour 24 Hrs Man Hrs @ 3.75 per hr. ✓

Tubing String	Rod String

Total Hours 12

Compr.
Light plants one 5 KW + one 10 KW
Water Truck supplied by Hudsons Bay

TOOL PUSH: APPROVED BY: John D Fenton

Form No. 7—7500-7-65

BETA WELL SERVICE LTD. Rig 19

OIL CO.: Hudsons Bay Oil + Gas REPORT No.: 4

MAIL INVOICE TO: DATE Feb 26, 1966

LOCATION: Hudsons Bay Pool Sec 5 Island B. m-41

TOUR 12 00 a.m. TO 12 00 p.m.	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR A. Mora	12	12 00	1 00	Rig up Rig	1
DERRICKMAN H. Malbeuf	12	1 00	2 00	Remove Valve + flange	1
FLOORMAN R. Dekulak	12	2 00		Install tubing Hanger flange	
FLOORMAN C. Malbeuf	12		3 00	+ Bops.	1
FIREMAN A. Wagner	12	3 00		Rig pump Tanks + Lines	
FIREMAN			4 00	Poly one Row tubing	1
		4 00	5 00	thaw out Casing Head	1
ITEMS SUPPLIED		5 00		Rig to Run Tubing change	
IMPORTANT: MARK QUANTITY USED	Used	Price		Bop Rams from 2⅜ to 2⅞	
PUMP - PORTABLE				tongs + Slips from 2⅜ to 2⅞	1
PUMP - OTHER			12 00	~~change pipe rams to tbg~~	1
TANK				12 Hrs	
POWER TONGS					
POWER SWIVEL					
DRILLHEAD RUBBER					
STRIPPER PACKOFF				Rig Time 12 Hrs @ 34.50	414 00
STRIPPER PACKOFF RUBBER				Fire Mora Wages @ 3.50 Hr 12 Hrs.	42 00
BOILER				Stove Oil 80 Gals. 12 Hrs. 22.2	21-76
OVERSHOT					
BIT USED					
PIPE WIPER					
SWAB CUPS SIZE MAKE					
SWAB CUPS SIZE MAKE					
SWAB CUPS SIZE MAKE					
SAVER RUBBERS, MAKE					
PIPE DOPE, TYPE					
VARSOL, GALS.					
TRUCK, UNIT ..... HRS.					
TRUCK, UNIT ..... MILES					
EXTRA LABOUR, HRS.					
SUBSISTENCE, MAN DAYS					
TOOLPUSHER					
CREW MILEAGE					

	Tubing String	Rod String

Total Hours 12

Extra Material Used	
Rentals	
Moving Equipment Used	

TOOL PUSH: Ed Flatt APPROVED BY: John W Funk

Form No. 7—7500-7-65

MAR 15 1966

BETA WELL SERVICE LTD.

RIG No.: Rig 14

OIL CO.: Hudson's Bay Oil + Gas

REPORT No.: 5

MAIL INVOICE TO:

DATE Feb 26, 1966

LOCATION: Hudsons Bay Can Am S Island R. M-41

OUR 12 AM	TO 12 AM	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR F. Dayton		12	12		Waiting for Schlumberger	
DERRICKMAN D. Durocher		12		12	to log + perf well	12
FLOORMAN E. Prats		12				
FLOORMAN R. Villeneuve		12				12 Hrs
FIREMAN L. Wagner		12				
FIREMAN						

ITEMS SUPPLIED

IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		

Rig Time 12 Hrs @ 3450 41400
Tool push day 4000
Boiler day 3500
Stove oil 12 Hrs 80 Gals @ 22¢ 2112
Fireman Wages @ 350 Hr 4200
(2 Light plants Compr.)

Tubing String	Rod String

Total Hours 12

Extra Material Used

Rentals — Compr. Light plants (2) one 10 KW + one 5 KW

Moving Equipment Used — Water Truck supplied by Hudsons Bay

TOOL PUSH: Ed F. Cates

APPROVED BY: John D Fenton

Form No. 7—7500-7-65

RIG No.: 18

BETA WELL SERVICE LTD.

OIL CO.: Hudson Bay Oil & Gas. REPORT No.: 6

MAIL INVOICE TO: DATE Feb 27, 1966

LOCATION: Hudson's Bay Pan Am S Island R. M-41

TOUR	12 00 AM	TO	12 00 PM	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR	E. Mann			12	12		Waiting on Schlumberger	
DERRICKMAN	H. Malkeuf			12			Schlumberger got Easton	
FLOORMAN	R. Schulor			12		12	Road	
FLOORMAN	C. Malkeuf			12				12 Hrs.
FIREMAN	E. Wagner			12				
FIREMAN								

ITEMS SUPPLIED IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		
Extra Material Used		
Rentals		
Moving Equipment Used		

Rig Time 12 Hrs @ 34.50 414.00

Superland Wagon @ 35.0 Hrs 12 Hrs 42.00

Stove Oil 12 Hrs 80 Gals @ 27.2 21.76

Tubing String	Rod String

Total Hours 12

TOOL PUSH: Ed Falk APPROVED BY: John D. Foster

Form No. 7--7500-7-65

MAR 15 1966

RIG NO.: 18

BETA WELL SERVICE LTD.

OIL CO.: Hudsons Bay Oil + Gas. REPORT No.: 7

MAIL INVOICE TO: ..... DATE Feb 27, 1966

LOCATION: Hudsons Bay Pon Am S Island R. M-41

TOUR 12 oo PM TO 12 oo AM	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR F. Dayton	12	12 oo		Waiting on Schlumberger got	
DERRICKMAN P. Durocher	12		2 oo	Lost on Roads.	2
FLOORMAN L. Prata	12	2 oo		Helping rig up Schlumberger to	
FLOORMAN R. Vellemure	12		3 oo	Log	1
FIREMAN L. Wagner.	12	3 oo		Schlumberger Rotary Packer set	
FIREMAN			12 oo	Loging equipment + Log	9
					12 Hrs

ITEMS SUPPLIED

IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		

Rig Time 12 Hrs @ 34.50 414.00

Tool push day 40.00

Boiler day 35.00

Stone Oil 12 Hrs 80 Gals @ 22.2 22.76

Foremans Wages @ 3.50 Hr 12 Hrs 42.00

(2 Light plants Comp.)

Tubing String	Rod String

Total Hours 12

Extra Material Used: Comp Lightplants one 5 K.w. one 10 K.w.

Rentals: Wates Truck supply + by Hudsons Bay

Moving Equipment Used:

TOOL PUSH: Ed F. Cates APPROVED BY: [signature]

Form No. 7—7500-7-65

MAR 15 1966

BETA WELL SERVICE LTD.

Rig 18

OIL CO.: Hudsons Bay Oil & Gas REPORT No.: 8

MAIL INVOICE TO: ..... DATE Feb 28, 1966

LOCATION: Hudsons Bay Pan Am S Leland B. M-41

TOUR	12 AM to 12 PM	HOURS
OPERATOR	C. Mann	12
DERRICKMAN	H. Malbeuf	12
FLOORMAN	R. Schuler	12
FLOORMAN	L. Malbeuf	12
FIREMAN	L. Wagner	12
FIREMAN		

FROM	TO	OPERATION	HRS.
12 00	5 00	Dr Schlumberger Logging Well	5
5 00		Dr Schlumberger got Stuck in Hole	
	6 00	Try to get Log tool Loose	2
6 00		Pick up + Run 4 Std tubing	
	7 00	push Log tool Loose + cut Line	1
	8 00	off	
8 00	12 00	Waiting for fishing Tool	4

ITEMS SUPPLIED

IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		
Extra Material Used		
Rentals		
Moving Equipment Used		

Rig Time 12 Hrs @ 345.00 — 414.00

Tubomans wages 12 Hrs @ 35.0 — 42.00

Stone Oil 12 Hrs 80 Gals @ 22¢ — 21.76

Dr Schlumberger Logged T.D. 8160.5 to 6800 w Gamma Neutron Log

Tubing String	Rod String

Total Hours 12

TOOL PUSH: Ed Gladue

APPROVED BY: J. W. Fenton

Form No. 7—7500-7-65

FEB 15 1966

RIG No.: 18 1.8

BETA WELL SERVICE LTD.

OIL CO.: Hudsons Bay Oil + Gas. REPORT No.: 9

MAIL INVOICE TO: ..... DATE Feb 28, 19 66

LOCATION: Hudson's Bay Con Com S Island R. M-41

TOUR 12 oo PM	TO 12 oo Noon	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR H. Payton		12	12 oo		Service rig + equipment wait	
DERRICKMAN D. Durocher		12		3 oo	for fishing tools Made one Run w 4 Jts	3
FLOORMAN L. Prato		12	3 oo		Make up fishing Tool + Run	
FLOORMAN R. Villeneuve		12			2 Jts Driller Stepped on above	
FIREMAN J. Wagner		12		4 oo	+ Lost 2 Jts tubing Down Hole	1
FIREMAN			4 oo		Waiting for tubing + fishing	
				12 oo	equipment	8
						12 Hrs.

ITEMS SUPPLIED					
IMPORTANT: MARK QUANTITY USED	Used	Price			
P[redacted] - PORTABLE					
PUMP - OTHER					
TANK				Rig Time 12 Hrs @ 3450	414 00
POWER TONGS				Tool push Day	42 00
POWER SWIVEL				Boiler day	35 00
DRILLHEAD RUBBER				Stove oil 62 Hrs 80 Gals @ 22 2	24 76
STRIPPER PACKOFF			Temporal	Waged 12 Hrs @ 350 per Hr.	42 00
STRIPPER PACKOFF RUBBER			(2	Light plants)	
BOILER				Comp.	
OVERSHOT			Cartage for	Fuel from Fort nelson to Lease	
BIT USED				@ 8 oo Hr 16 Hrs.	128 00
PIPE WIPER					
SWAB CUPS SIZE MAKE					
SWAB CUPS SIZE MAKE					
SWAB CUPS SIZE MAKE				Tubing String	Rod String
SAVER RUBBERS, MAKE					
PIPE DOPE, TYPE					
VARSOL, GALS.					
TRUCK, UNIT ..... HRS.					
TRUCK, UNIT ..... MILES					
EXTRA LABOUR, HRS.					
SUBSISTENCE, MAN DAYS					
TOOLPUSHER					
CREW MILEAGE					Total Hours 12

Extra Material Used

Rentals — Comp. Light plants one 10 KW + one 5 KW

Moving Equipment Used — Water Truck charged Direct to Hudsons Bay

TOOL PUSH: Ed Yates APPROVED BY: John D Scott

Form No. 7—7500-7-65

BETA WELL SERVICE LTD.

Rig 18

OIL CO.: Hudsons Bay Oil & Gas. REPORT No.: 10

MAIL INVOICE TO: ..... DATE March 1, 1966

LOCATION: Hudson's Bay Pan Am S. Island R. M-41

TOUR 12:00 am	TO 12:00 Pm	HOURS	FROM	TO
OPERATOR C. Mann		12	12:00	1:00
DERRICKMAN H. Malbeuf		12	1:00	
FLOORMAN R. Scheibel		12		11:00
FLOORMAN L. Malbeuf		12	11:00	
FIREMAN E. Wagner		12		12:00
FIREMAN				

OPERATION	HRS.
Service rig & equipment	1
Waiting for Tubing & fishing equipment	10
Make up fishing tool & start in hole w/ tubing Run 20 Jts	1
12 Hrs	

ITEMS SUPPLIED

IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		
Extra Material Used		
Rentals		
Moving Equipment Used		

Rig Time 12 Hrs @ 34.50 414.00
Pusheaud Wages 12 Hrs @ 3.50 Hr 42.00
Stove Oil 12 Hrs 80 Gals @ 27.2 21.76

Tubing String	Rod String

Total Hours 12

TOOL PUSH: Ed F Dale

APPROVED BY: John Watson

Form No. 7—7500-7-65

MAR 15 1966

BETA WELL SERVICE LTD.

Rig 18

OIL CO.: Hudsons Bay Oil + Gas REPORT No.: 11

MAIL INVOICE TO: ..... DATE March 1, 19 66

LOCATION: Hudsons Bay Pool Am S Island B-M-41

TOUR	12 PM	TO	12 AM	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR	F. Dayton			12	12		Tally picks up + Run tubing + Drill pipe 2 7/8 Round thread in Hole	7½
DERRICKMAN	P. Durocher			12		730		
FLOORMAN	C. Prato			12	730	800	Set down on light pull Test	½
FLOORMAN	R. Villeneuve			12	800		pull out of hole w/ 2 7/8 tubing + Drill pipe	4
FIREMAN	L. Wagner			12		1230		
FIREMAN								12 Hrs

ITEMS SUPPLIED

IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		

Rig Time 12 Hrs @ 34.50 — 414.00
Tool push day — 40.00
Biles day — 35.00
Stove Oil 12 Hrs 80 Gals @ 22¢ — 21.76
Firemans wages @ 350 Hr 12 Hrs — 42.00
One 2 7/8 pipe wipers — 15.91
3 Gals National 450 Thread Lub @ 6.20 — 18.60
(2 Light plants Beta Camp.)

Tubing String	Rod String
Run in: 226 Jts 2 7/8 Tubing	
34 Jts 2 7/8 Drillpipe	
pulled: 34 Jts Drillpipe	
+ 110 Jts tubing	
	Total Hours 12

Extra Material Used: Beta Camp.
Rentals: Light plants one 10 KW + one 5 KW
Moving Equipment Used: Water Truck charged Direct to Hudson Bay.

TOOL PUSH: Ed Flack APPROVED BY: John D. Fa...

Form No. 7—7500-7-65

MAR 15 1966

BETA WELL SERVICE LTD.

Rig 18

OIL CO.: Hudsons Bay Oil + Gas REPORT No.: 12

MAIL INVOICE TO: DATE March 2, 19 66

LOCATION: Hudsons Bay Pan Am S. Island Rivers M-41

TOUR 12 am 6 pm TO 12 pm	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR C. Moore	12	12 00		Service rig + equipment Finish	
DERRICKMAN T. Malbeuf	12			pulling tubing + Lost out of hole	
FLOORMAN R. Skulas	12			Recovered 2 Jts tubing Bottom over	
FLOORMAN B. Malbeuf	12			shot plugged w/ stripper Rubber	
FIREMAN A. Wagner	12		3 30	from Wire Line Schlumberger	3½
FIREMAN		3 30	4 00	Make up 3 11/16 Overshot	½
		4 00		Run in Hole w/ 2⅞ Tubg + Drill	6½
			10 30	pipe	
		10 30	11 00	Set Down on fish + pull Free	½
		11 00		Start out of Hole w/ tubing + Drill	
			12 00	pipe	1
					12 Hrs.

ITEMS SUPPLIED			
IMPORTANT: MARK QUANTITY USED	Used	Price	
P[illegible] - PORTABLE			
PUMP - OTHER			
TANK			
POWER TONGS			
POWER SWIVEL			
DRILLHEAD RUBBER			
STRIPPER PACKOFF			
STRIPPER PACKOFF RUBBER			
BOILER			
OVERSHOT			
BIT USED			
PIPE WIPER			
SWAB CUPS SIZE MAKE			
S[illegible] CUPS SIZE MAKE			
SWAB CUPS SIZE MAKE			
SAVER RUBBERS, MAKE			
PIPE DOPE, TYPE			
VARSOL, GALS.			
TRUCK, UNIT ..... HRS.			
TRUCK, UNIT ..... MILES			
EXTRA LABOUR, HRS.			
SUBSISTENCE, MAN DAYS			
TOOLPUSHER			
CREW MILEAGE			
Extra Material Used			
Rentals			
Moving Equipment Used			

Rig Time 12 Hrs @ 345 0	414	00
3½ Stds National pipe Dope @ 6 20	18	60
Fireman Wages @ 3 50 Hr 12 Hrs	42	09
Stove Oil 80 Lts 12 Hrs @ 27 2	21	76

Tubing String	Rod String

RIG No.: 18

BETA WELL SERVICE LTD.

OIL CO.: Hudsons Bay Oil + Gas REPORT No.: 13 second shift

MAIL INVOICE TO: DATE March 2, 19 66

LOCATION: Hudsons Bay Pan Am S Island R. M-41

TOUR 12⁰⁰ PM TO 12⁰⁰ AM	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR F Dayton	12	12⁰⁰		Finish pulling out of hole w/	
DERRICKMAN D. Pirocker	12		5⁰⁰	Tubing + Release Fish log tool	5
FLOORMAN C. Prato	12	5⁰⁰		Break Down Log Tool & Fishing	
FLOORMAN R. Villeneuve	12		6⁰⁰	equipment	1
FIREMAN J Wagner	12	6⁰⁰		Make up Otis nipple Bo cpacker	
FIREMAN			7⁰⁰	+ SI nipple	1
		7⁰⁰	12⁰⁰	Run + Tally Tubing	5
					12 Hrs

ITEMS SUPPLIED

IMPORTANT: MARK QUANTITY USED	Used	Price
P[redacted] - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
S[redacted] CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		

Rig Time 12 Hrs @ 34.50	414	00
Rod push Day	40	00
Boiler day	35	00
Stone Oil 12 Hrs 80 Gals @ 27.2	21	76
Lineman Wages @ 3.50 Hr 12 Hrs	42	00
one 2⅞ pipe wiper	15	91
2 Light plants		
Beta Camp		

Tubing String	Rod String
	Total Hours 12

Extra Material Used: Beta Camp.

Rentals: Light plants one 10 KW + one 5 KW

Moving Equipment Used: Water Truck Charged Direct to Hudson Bay

pipe Dope supplied by Hudson Bay

TOOL PUSH: Ed Fratt

APPROVED BY: for Hudsons Bay Oil + Gas John W. Fenton

*Form No. 7—7500-7-65

MAR 15 1966

RIG NO.: 7-2 18

BETA WELL SERVICE LTD.

OIL CO.: Hudsons Bay Oil + Gas. REPORT No.: 14

MAIL INVOICE TO: ..... DATE March 3, 1966

LOCATION: Hudsons Bay Pan Am S Island R. m-41

TOUR	12^00 am	TO	12^00 PM	HOURS
OPERATOR	A. Mann			12
DERRICKMAN	H. Melbourne			12
FLOORMAN	R. Skulan			12
FLOORMAN	L. Melbourne			12
FIREMAN	R. Wagner			12
FIREMAN				

FROM	TO	OPERATION	HRS.
12^00	1^00	Finish Runing + Tallying Tubing	1
1^00		Rig out Tubing equipment + Remove	
	2^00	B.O.P.s.	1
2^00		install tubing stripper in head	
		install well head vest packer	
	4^00	BOC	2
4^00	4^30	Help rig up Schlumberger to perf.	1/2
4^30		Schlumberger Ran inst perf.	
	8^00	Rig out some	3 1/2
8^00		Remove Baker pkr well head pull packer	
	9^30	in to by pass Hook up Dowell	1 1/2
9^30		Displace well to treated water	
		w/ ~~Sea~~ F.B. Load Head install	
	12^00	Baker Acidize with 1000 gallons of	2 1/2
		XFMW 1800 psi at 5BPM decreasing to 900 psi at 5BPM. Standing pressure Open	1/2 Hr

ITEMS SUPPLIED	Used	Price
IMPORTANT: MARK QUANTITY USED		
PUMP - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		
Extra Materiai Used		
Rentals		
Moving Equipment Used		

Rig 12 Hrs @ 350 = 4200 ✓

Dirtmen 2 wages @ 350 12 Hrs = 4200 ✓

Diesel Oil 80 Gals 12 Hrs @ 27.2 = 21 76

Tubing String		Rod String
HB TO TBG HANGER	12.00	
219 Jts 6.5 EUE 2⅞	6812.43	Schlumberger perf.
OTIS "S-1" NIPPLE	1.60	Well
1 Jt 2⅜ 6.5 EUE	31.97	6838 - 44 w/ 4 shots
LANE-WELLS 3.0.C F-9	5.60	per foot 25 Shots
PRODUCER NIPPLE	4.18	
OTIS N NIPPLE	1.00	
PUP JOINT	4.52	
LANDED @	6873.15	Total Hours

TOOL PUSH: Ed Klatt APPROVED BY: John D Fenton

Form No. 7—7500-7-65

MAR 15 1966

RIG NO.: 18

BETA WELL SERVICE LTD.

OIL CO.: Hudsons Bay Oil + Gas REPORT No.: 15

MAIL INVOICE TO: DATE March 3, 1966

LOCATION: Hudsons Bay Pan Am 5 Island R. M-41

TOUR	12 PM	TO	12 AM	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR	F. Dayton			12	12	1	Service rig Rig to swab + Lay swab	1
DERRICKMAN	D. Durocher			12		1	Line to pit pay line Down.	
FLOORMAN	C. Prata			12	1		Swab Well in pulled 6	2
FLOORMAN	B. Villeneuve			12		3	swabbed from 1000 ft.	9
FIREMAN	L. Wagner			12	3	12	Flow test well	
FIREMAN								12 Hrs.

ITEMS SUPPLIED

IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		
Extra Material Used		
Rentals		
Moving Equipment Used		

Rig Time 12 Hrs @ 3450	414 00 ✓
Tool push day	40 00 ✓
2 - 2½ J swab cups @ 7.20 each	14 50 ✓
2 Type H Oil saver rubbers @ 3.72	7 44 ✓
Buggy day	35 00 ✓
Fireman Wages @ 3.50 Hr 12 Hrs	42 00 ✓
Stone Oil 80 Sal 12 Hrs @ 2.38 Bbl	21 26 ✓
(2 Light plants Beta Comp.)	

Tubing String	Rod String

Total Hours 12

Beta Comp.
2 light plants one 10 Kw + one 5 Kw
Water truck supplied by Hudsons Bay

TOOL PUSH: Ed Fladd APPROVED BY: John D Fenton

Form No. 7—7500-7-65

MAR 15 1966

RIG No.: 18

BETA WELL SERVICE LTD.

OIL CO.: Hudsons Bay Oil + Gas. REPORT No.: 16

MAIL INVOICE TO: ..... DATE March 4, 19 66

LOCATION: Hudsons Bay Pan Am S Island R. M-41

TOUR	12 am	TO	12 PM	HOURS	FROM	TO	OPERATION	HRS.
OPERATOR	A. Munn			12	12	3	Thaw Test well	3
DERRICKMAN	H. Malbeuf			12	3		Rig down Rig + equipment	
FLOORMAN	B. Skulas			12			Blow Down Boiler pack up	9
FLOORMAN	C. Malbeuf			12		12	To move	12 Hrs.
FIREMAN	A. Wagar			12				
FIREMAN								

ITEMS SUPPLIED

IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLFUSHER		
CREW MILEAGE		

Rig Time 12 Hrs @ 34.50 414.00 ✓
Bailis day 35.00 ✓
Stove Oil 40 Gals @ 27.2 10.88 ✓
Firemans wages 35 @ 12 Hrs 42.00 ✓
Road pusd day 40.00 ✓
(2 Light plants
Beta Comp.)

Tubing String	Rod String

Total Hours

Extra Material Used	Beta Comp.
Rentals	2 Light plants one 10 KW + one 5 KW
Moving Equipment Used	Water Truck supplyed by Hudsons Bay

TOOL PUSH: Ed. Lalb APPROVED BY: John D Fenton

Form No. 7—7500-7-65

RIG No.: 18

BETA WELL SERVICE LTD.

OIL CO.: Hudsons Bay Oil + Gas. REPORT No.: 17 B

MAIL INVOICE TO: ..... DATE March 4, 1966

LOCATION: Hudsons Bay Pan Am S Island R. 11E-41

TOUR	12 PM	TO	12 AM	HOURS	FROM	TO
OPERATOR	F. Boyton			12	12	7
DERRICKMAN	D. Dziroder			12	7	
FLOORMAN	E. Bates			12		12
FLOORMAN	R. Velsmans			12		
FIREMAN	J. Wagner			12		
FIREMAN						

OPERATION	HRS.
Stand by Time w/ Crew	7
Help Load out Trucks + equipment	5
To move	
Stand by Time w/ crew + load out equipment 12 Hrs @ 36.50	438.00
Boiler used 12 Hrs @ 3.50 12 Hrs.	42.00

ITEMS SUPPLIED IMPORTANT: MARK QUANTITY USED	Used	Price
PUMP - PORTABLE		
PUMP - OTHER		
TANK		
POWER TONGS		
POWER SWIVEL		
DRILLHEAD RUBBER		
STRIPPER PACKOFF		
STRIPPER PACKOFF RUBBER		
BOILER		
OVERSHOT		
BIT USED		
PIPE WIPER		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SWAB CUPS SIZE MAKE		
SAVER RUBBERS, MAKE		
PIPE DOPE, TYPE		
VARSOL, GALS.		
TRUCK, UNIT ..... HRS.		
TRUCK, UNIT ..... MILES		
EXTRA LABOUR, HRS.		
SUBSISTENCE, MAN DAYS		
TOOLPUSHER		
CREW MILEAGE		

Tubing String	Rod String

DEPT. OF NORTHERN AFFAIRS & NATIONAL RESOURCES CALGARY, ALBERTA MAY 3 1966 OIL CONSERVATION ENGINEER Northwest Territories & Yukon Territory

Total Hours 12

Extra Material Used	
Rentals	
Moving Equipment Used	Beaver Cartage to Travel from R.S.T. to Load out equipment + part mud To Nelson Alleged Direct to Hudsons Bay Pet + Gas.

TOOL PUSH: .....

APPROVED BY: John D. Fenton

MAD

Form No. 7—7500-7-65