Drilling Authority No. 441

Date Issued 12 June 1970

WELL NAME McD Can GCO Haida Ck. F-57

FIELD Wildcat Area:

LOCATION: Unit F Section 57 Grid 65-40 128-00

Latitude 65-36-17 Longitude 128-10-35

U.W.L.R. 65.60472 ---- 128.17667

U.W.I. 300F576540128000

Rig Release Date:

Status

Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
12-6-70	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
28/8/70	Application to Abandon a Well ~~or Suspend Drilling.~~
	Application to Alter Condition of a Well.
	Well History Supplement.
10/9/70	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells – Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells – Vitter's Method.
	M.P.R. – Oil – Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale Small scale

IAND 52-90 (3-69)

441

Drilling Authority No. ..... June 12, 1970

Date Issued .....

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

WELL COMPLETION DATA

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

Well name and number: McU Can GCO Haida Ck F-57

Permit No. 4382 — Lease No. J. Ray McD 1666, GCO 1398

(Permittee, Licensee, Lessee): J. Ray McDermott Canada, Ltd. — Exploratory Licence No. 1666

(Operator) — Exploratory Licence No. .....

Location: Unit F — Section 57 — Grid 65°40'128°00'

Latitude 65°36'17" — Longitude 128°10'36"

From Established Reference Marker 300F5765 43128.00

Universal Well Location Reference 65.604720N, Long 128.17667°W

	DATE	DEPTH
Spudded 4:46 PM	July 10/70	0
Suspended		
Resumed Operations		
Finished Drilling 1:15 AM	Aug. 9/70	4863
Deepened		
Complete (gas/oil)	Aug 11/70	4863
Abandoned		
Rig released 12 PM	Aug. 12/70	

Pool(s) .....

Interval(s) open to production .....

Elevation: Gr. 382 K.B. 395

Rig No. IE

Drilling Contractor S&T (Western)

Contractor's Business Licence No. 798

CASING RECORD

	Casing Size (Inches)	Grade	Weight	Amount	Set at ~	Sacks of Cement and Additives
1.	13 3/8	J-55	99.4#	3JTS	90'	67 + 8% Calseal w/ last 30 SXS
2.	9 5/8	J-55	24#	23JTS	860'	460 + 3% CaCl
3.						
4.						
5.						
6.						

GEOLOGICAL TOPS	ELEVATION Depths	ELEVATION Sub-Sea
Spud in Cret. Ss		
Imperial Fmt.	925	-530
Canol Fmt.	1490	-1095
Kee Scarp	1518	-1123
Kee Scarp Platform	1840	-1445
Hare Indian	1930	-1535
Hume Lsd.	2431	-2036
Bear Rock Lst.	2706	-2311
Bear Rock Dol.	2752	-2357
Ronning Fmt.	3542	-3147

CORE RECORD

From	To	Rec.	From	To	Rec.
1523	1577	54			
1577	1631	54			

LOG RECORD

Run No.	Type of Log	From	To
1	IES	860	4861
1	Microlog/Caliper	"	4862
1	BHCS/Gamma Ray	"	4860
1	SNP-SNP	"	4861
1	Formation Density	"	4861
1	Dipmeter	"	4862
1	Velocity Survey	"	4863

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

CEMENTING RECORD (Plug, Squeeze, etc.)			
Date	From	To	Remarks
8/11/70	3899	4000	Cmt. w/ 36 sxs + 3% CaCl2 Felt Plg. @ 3885 Aug.
8/12/70	3400	3500	Cmt. 2/ 38 sxs + 3% CaCl2 Felt Plg. @ 3390 Aug.
8/12/70	2600	2700	Cmt. w/ 40 sxs + 3% CaCl2 Felt Plg. @ 2580 Aug.
8/12/70	800	900	Cmt. w/ 50 sxs + 3% CaCl2 Felt Plg. @ 790' Aug.
8/12/70	Surface - 10 sacks cement. Plate welded on top, and identificationmarker was installed.		

PERFORATING RECORD (Bullet, Jet)			
Date	From	To	Remarks

SERVICING RECORD (Acidizing, Fracing, etc.)			
Date	From	To	Remarks

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.B.H.P.	F.S.I.B.H.P.	I.F.B.H.P.	F.F.B.H.P.	I.H.P.	F.H.P.	REMARKS
1	July 23/70	Kee Scarp	1560	1925	60	60	60	318	88	53	59	750		Rec. 30' mud
2	July 27/70	Bear Rock	2748	2825	60	30	60	1180	1160	50	370	1310	1310	Rec. 30' mud, 180' mud cut slightly salty water, 520' slightly salty water
3	Aug 10/70	Ronning	3559	3876	60	60	60	1587	1587	1230	1587	1758	1752	Rec. 450' salty mud, 500' muddy salt water, 2440' clean salt water

Figures reported are field figures.

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
	NIL				

PRESENT STATUS OF WELL

Oil		(Interval)
Gas		(Interval)
Dry	D&A	
Susp.		

Company: TransOcean Oil, Inc.

Signed by: [signature]

Title: Canadian Area Manager

Date: September 10, 1970

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

File No.
Drilling Authority No. 441

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

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

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

Name and number of well McD Can GCO Maida Ck F-57
Location: Unit F Section 57 Grid 65°40' 128°00'
Latitude 65°36'17" Longitude 128°10'36"
From Established Reference Marker SP 7223 Line 70-3
Universal Well Location Reference 65.60472°N 128.17667°W
Permit No. 4382 Lease No.

(Permittee, Licensee, Lessee) J. Ray McDermott Canada Ltd. and General Crude Oil Company Alberta Ltd.

Date of commencement of proposed program August 12, 1970

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at
Gas at
Water at 2748-2825 3560-3876
Total Depth 4863 Date of last operations August 9, 1970
Present condition of well D&A

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At	Sacks of Cement and Additives	Amount Pulled
1. 13 3/8"	94.4# J-55	3JTS	90'	67sxs - last 30 w/8% Calseal	
2. 8 5/8"	24# J-55	23JTS	860'	460 sxs with 3% CaCl	
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	3900'-4000'	Ronning	30 sxs w/ 3% CaCl	Plug down 7:30 PM Aug 11 Felt @ 3885 @ 1:30 AM Aug 12
2	3400-3500'	Bear Rock	38 sxs w/ 3% CaCl	Plg. down 2:30 AM Aug. 12. Felt @ 3390 @ 8 AM Aug. 12
3	2600'-2700'	Bear Rock	40 sxs w/ 3% CaCl	Plg. down 9:15 AM Aug. 12 Felt @ 2580 @ 3:15 PM Aug. 12
4	800'-900'	Imperial	50 xsx w/ 3% CaCl	Plg. down @ 3:45 PM Aug. 12. Felt @ 790' @ 9:45 PM Aug. 12

The following logs have been run IES, SNP, FDC, Microlog, BHCS, Gamma Ray (Integrated), Vel. Survey Dipmeter
Other operations proposed Set surface plug with 5' stand pipe & name plate

Operations to be carried out by S&T Drilling Contractor Licence No. 798
Address 5825 - 98th St. Address Edmonton, Alta.
Responsible Agent in field J.R. Wyman (V.H. Hunter & Assoc.)
Dated at Calgary, this 24 Day of August 19 70
Signed by [signature] Company J. Ray McDermott Canada
Title Canadian Division Manager Operator's Exploratory Licence No. 1666

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.H.J. Thoms on the 11th August 1970.

Dated August 28th, 19 70 [signature] Oil Conservation Engineer

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

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

Drilling Authority No. 441

Project No.

File No.

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION
OIL AND MINERAL DIVISION

Application for a Drilling Authority

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

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

Name and number of well: McD Can GCO Maida Ck F-57

Location: Unit: F Section: 57 Grid: 65°40 128° 00

Latitude: 65°36'17" Longitude: 128°10'36"

From Established Reference Marker: Shot Point 223 Line 70-3 622.2'S & 11,109'E of BM 73 128°15' 65°36.5'

Universal Well Location Reference: Lat. 65.60472° N. Long. 128.17667° W.

Elevation: Ground: 382 K.B. 395 feet above sea-level.

Well is expected to produce from: Kee Scarp formation at a depth of about 1960 feet. Expected total final depth: 8000'

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

Permit No. 4382 Lease No. Acreage: 26,449

Permittee, licensee, or lessee: J. Ray McDermott Canada Ltd., General Crude Oil Alberta Ltd.

Exploratory Licence No. 1666 1398

Surface owned by Crown or: Crown (If other, submit name and address of owner and occupant.)

Petroleum and natural-gas rights owned by: Crown

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

	Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1.	13 3/8"	48#	H40	New	120'	125 Gyp Seal 125 Portland
2.	8 5/8"	36#	J55	New	800'	280 Fondu 170 Portland
3.	7"	23#	J55	New	2500'	200 Sacks Portland
4.						
5.						

Expected water, gas, and oil horizons and type of control equipment: Kee Scarp 1960'
Case Off Bear Rock 3250' - Control Drill
Ronning 4500' - Control Drill
10" 900 Series GK Hydril & 10" 900 Series Shaffer hydraulic

Well will be drilled with Rotary Rig No. IE by S&T Drilling Co. (Western) Ltd. (Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Business Licence No. 798

At well: J. Wyman At registered office: [illegible] & Assoc.

Address: C/O Norman Wells Address: P.O. Box [illegible] Edmonton, Alta.

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

Dated at Calgary, this 11 day of June 19 70

Signed by: [signature] Company: J. Ray McDermott Canada Ltd.

Title: Exploration Manager Operator's Licence No. 1666

(For Resource Management Division use only)

APPROVED

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

1. The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.
2. During well drilling and testing operations every effort shall be made to ensure

Dated 12th June 19 70 Please see over page
Oil Conservation Engineer

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

IAND 32-90-1 (3-67)

UNIQUE WELL IDENTIFIER - 300F576540128000

that drilling fluids, chemicals and wastes shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.

3. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.

4. Production casing is to be approved by the Oil Conservation Engineer before it is run.

B.H.J. Thomas, Oil Conservation Engineer

MONUMENT RECORD

FILE CODE 65 - 128 NE

TOPOGRAPHICAL SURVEY

SURVEYS AND MAPPING BRANCH

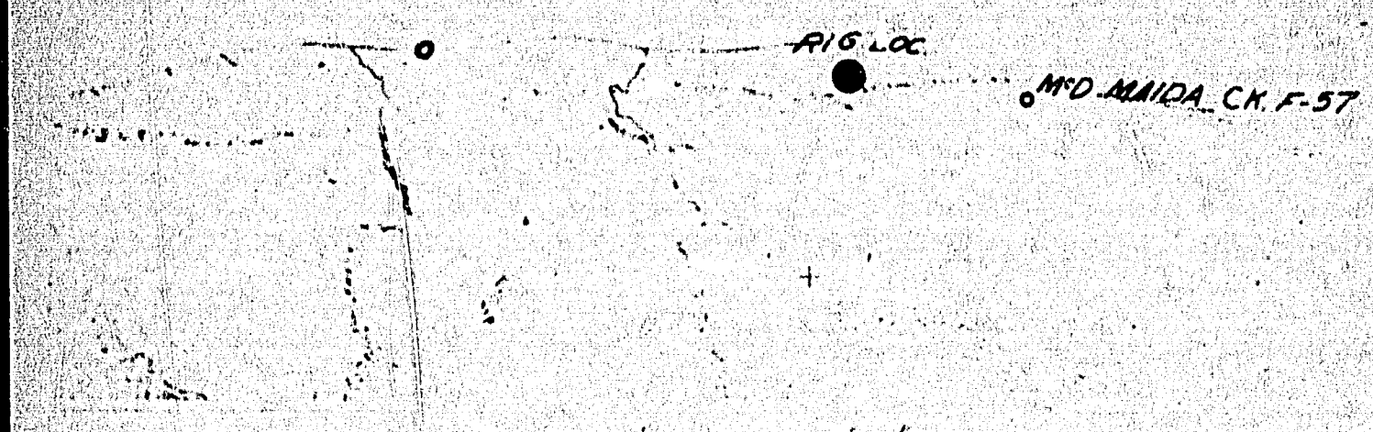
VERTICAL CONTROL ONLY DEPARTMENT OF MINES AND TECHNICAL SURVEYS

MONUMENT B.M. 73

MAP SHEET	106-N-9		LOCALITY: MACKENZIE RIVER		
PROVINCE	N.W.T.	DATE	Aug., 1951		
FIELD OFFICER	W.G.G. Blainey	LATITUDE			
TYPE OF SURVEY	Spirit Level	LONGITUDE			
SOURCE	Corps. Hi	DATUM	GEODETIC		
MONUMENT TYPE	Spike in tree	UTM NORTHINGS			
DATE PLANTED	1953	UTM EASTINGS			
FIELD BOOK NO.	52123	ZONE			
AIR PHOTO NO.	A-12590-372	ELEVATIONS	144.7'		
THEODOLITE		LEVELLING METHOD	Spirit		

(FOR ADDITIONAL INFORMATION TURN OVER)

BM #73
EL ~~142.98~~ 144.7
W.L. 140.7 112.4
HWL-152
8/8/53



B.M. 73 128°15' 00" 61°56' 30"

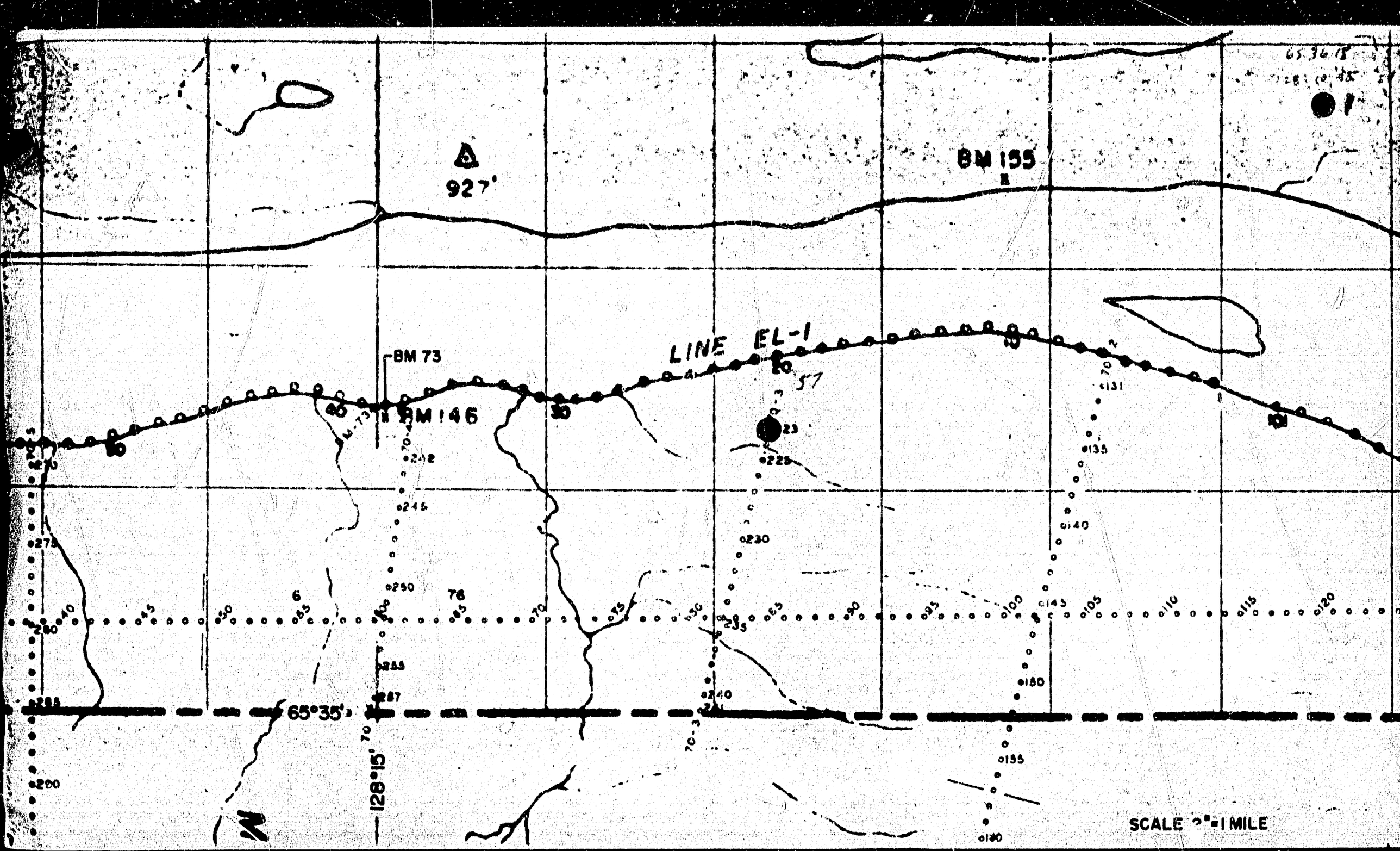
DESCRIPTION: Spike in base of blazed 5" Spruce opposite a point 600 feet south of rock bluff on east shore of Mackenzie. The B.M. is above a bay south of a point and drainage.

W.L. 112.4'

Elevation: 144.7'.

Photo No.: A-12590-372.

Microfilmed by
A.M. Cubill, 1984


927'
BM 135
BM 73
BM 146
LINE EL-1
65°35'
128°15'
SCALE 2"=1 MILE

File No. .....
Drilling Authority No. ...441.....

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

WELL-SITE INSPECTION REPORT

FROM: Field Office or Area: Norman Wells Date: 11th July 1971

TO: The Oil Conservation Engineer

RE: McD Can GCO Maida Ck F-57

Location: 65.60472°N., 128.17667°W. Status: D & A August 1970

This location was inspected by the undersigned on 11th July 1971

T.D. 4863'

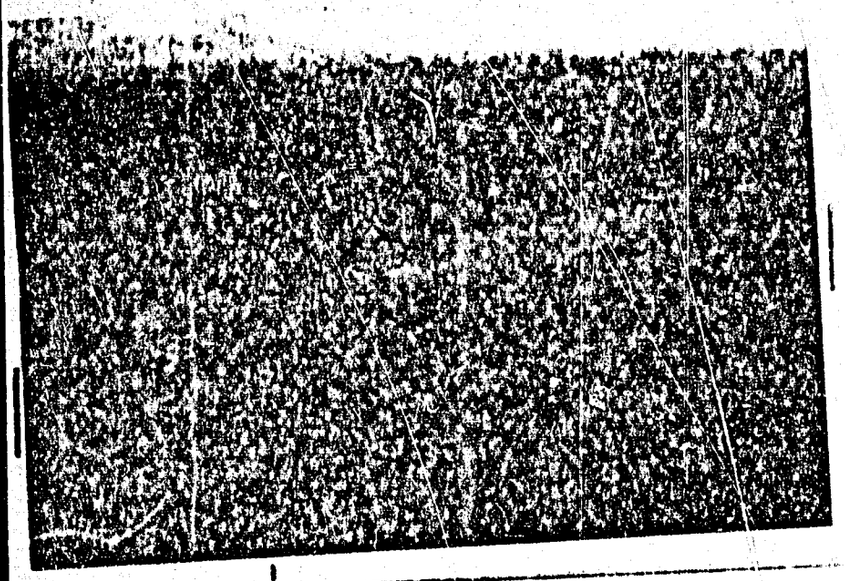
The location is in ~~unsatisfactory~~ satisfactory condition.

The following items require attention:

1.
2.
3.
4.
5.
6.

Other comments and recommendations: (Include Map, if necessary for clarity)

Good cleanup.



Inspected by M. D. Thomas
District 2

Original to Oil Conservation Engineer, Dept of IA & ND, Duplicate to Field Office or Inspecting Engineer.
IAND 52-90-14 (9-69)

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TABLE OF CONTENTS

SECTION I - SUMMARY OF WELL DATA

(a) WELL NAME: McD Can GCO Maida Ck F-57

(b) LICENCEE: J. Ray McDermott Canada, Ltd.
General Crude Oil Alberta Ltd.

(c) OPERATOR: J. Ray McDermott Canada Ltd.
217 Royalite Building
Calgary 2, Alberta

(d) LOCATION: Unit F, Section 57, Grid 65°40' & 128°00'
Latitude 65°36'17"N, Longitude 128°10'36"W
Universal Well Location Reference No:
Lat. 65.60572°N, Long. 128.17667°W
Unique Well Identifier 300 F 576540128000
Reference Marker: Shot Point #223 McD
Seismic Line 70-3

(e) CO-ORDINATES: 6222.2'S & 11.109'E of BM 73, 128°15',
65°36'30"

(f) PERMIT NO: 4382

(g) DRILLING CONTRACTOR: S&T Drilling Rig IE

Drawworks - National 50A

Mast - Lee C. Moore 131'

Pumps - 2 National K-380

Motors - 750 HP GE
2 Cat D 379 (550 HP)

Blow-out Preventors - 10" 900 series
G.K. Hydril

10" 900 series,
Schaeffer hydraulic Rams

(h) DRILLING AUTHORITY: 441 granted June 12, 1970

(i) CLASSIFICATION: New Field Wildcat

(j) ELEVATIONS: Ground 382'
KB 395'

(k) SPUDDED: 4:46 PM, July 10, 1970

(l) COMPLETED DRILLING: 1:15 AM, August 9, 1970

(m) TOTAL DEPTH: 4863 (Driller) 4863 (Log - Dipmeter)

(n) WELL STATUS: D&A

(o) RIG RELEASED DATE: 12 PM August 12, 1970

(p) HOLE SIZES TO TOTAL DEPTH: 17½" @ 0-90', 12¼" @ 90-860, 7 7/8" @ 860-4863

(q) CASING:

Conductor: Ran 3 joints, 13 3/8" 94.4#, J-55 casing and cemented with 67 sacks Portland cement + 8% Calseal with last 30 sacks. Plug down @ 6:00 PM, July 12, 1970. Set @ 90'.

Surface: Ran 23 joints, 8 5/8", 24#, J-55 casing and cemented with 460 sacks Portland cement + 3% CaCl. Plug down @ 6:30 PM, July 16, 1970. Set @ 860'.

SECTION II - GEOLOGICAL SUMMARY

(a) TABLE OF GEOLOGICAL FORMATIONS:

KB Elevation 395'

FORMATION	PROGNOSED DEPTH	SAMPLE DEPTH	E-LOG DEPTH	SUBSEA ELEVATION
Spud In Cret. Sandstone & Shale	0			+382
UPPER DEVONIAN				
Imperial Form.	1126	970	925	-530
Canol Form.	1822	1490	1490	-1095
MIDDLE DEVONIAN				
Kee Scarp Reef	1922	1515	1518	-1123
Kee Scarp "Platform"	2342	1820	1840	-1445
Hare Indian Shale	2486	1930	1930	-1535
Hume Limestone	2928	2428	2431	-2036
LOWER DEVONIAN				
Bear Rock Lst.			2706	-2311
Bear Rock Dolomite	3242	2740	2752	-2357
SILURIAN-ORDOVICIAN				
Ronning Form.	4493	3510	3542	-3147

(b) CORED INTERVALS:

Core No.	Interval	Formation	Recovery
1	1523-1577	Kee Scarp	Full
2	1577-1631	Kee Scarp	Full

(c) CORE DESCRIPTION:

1523-1568: Calcirudite; brown to dark brown, composed of fine grained calcarenite matrix with interstitial black bituminous material; dendroid stromatoporoids 25%, tabular stromatoporoids 10%, bulbous stromatoporoids 5% of rock; corals (Thamnapora, Coenites) rare to common; brachiopods, medium shelled rare. Poor intergranular porosity in matrix. Very poor permeability.

1568-1585: Calcarenite; brown, composed of skeletal debris - elongated poorly sorted, unoriented and rounded fragments probably of dendroid stromatoporoids (no pellets or coalescent pellets). Middle portion of interval 1572-1580 is finer grained (to calcisiltite) with low-amplitude stylolites. Poor intergranular porosity in siltsize matrix. Very poor permeability.

1585-1590: Calcarenite; brown, composed of skeletal debris and bulbous stromatoporoids 30% of rock. Dense, tight.

1590-1593: Calcirudite; brown, composed of fine grained calcarenite matrix and dendroid stromatoporoids 70% of rock. Dense, tight.

1593-1602: Calcarenite; brown, fine grained, composed of fine grained fossil debris, bulbous stromatoporoids 20% of rock and interspersed among vague boudins. Dense, tight.

1602-1607: Calcirudite; brown to light brown, composed of abraded dendroid stromatoporoids 70% of rock in a sparry calcite matrix.

1607-1631: Alternating beds of highly fragmented dendroid stromatoporoids 5%, bulbous stromatoporoids 5% of rock and vague large irregular boudins outlined by short black bituminous partings - contents of boudins grade from buff calcilutite (rare) to pelletoid calcarentie with abraded fragments of amphipora.

CORING TIMES:

Core #1: Bit No. 65740, Size 6 1/8, Drill Pipe 4", Collars 6¼, ID 2 5/8, Mud Wt. 9.0, Viscosity 43, WL 6.4, Hole Size 7 7/8", Csg. 8 5/8, Cut J4

Depth	Time	Min/Ft.	Wt. on Bit	Rotary RPM
1524	5:00	15	10	75
1525	5:15	15	10	75
1529	5:25	10	15	100
1527	5:35	10	15	100
1528	5:45	10	15	100
1529	5:55	10	15	100
1530	6:08	13	15	100
1531	6:20	12	15	100
1532	6:33	13	15	100
1533	6:46	13	15	100
1534	7:01	15	15	100
1535	7:15	14	15	100
1536	7:29	14	15	100
1537	7:43	14	15	100
1538	7:57	14	15	100

Depth	Time	Min/Ft.	Wt. on Bit	Rotary RPM
1539	8:08	11	15	100
1540	8:18	10	15	100
1541	8:31	13	15	100
1542	8:44	13	15	100
1543	8:58	14	15	100
1544	9:13	15	15	100
1545	9:27	14	11	100
1546	9:56	16	15	100
1547	10:14	18	15	100
1548	10:33	19	15	100
1549	10:49	16	15	100
1550	11:04	15	15	100
1551	11:19	15	15	100
1552	11:36	17	15	100
1553	11:52	16	15	100
1554	12:06	14	15	100
1555	12:24	18	15	100
1556	12:42	18	15	100
1557	1:00	18	15	100
1558	1:17	17	15	100
1559	1:36	19	15	100
1560	1:54	18	15	100
1561	2:13	19	15	100
1562	2:33	20	15	100
1563	2:55	22	15	100
1564	3:14	19	15	100
1565	3:35	21	15	100
1566	3:53	18	15	100
1567	4:12	19	15	100
1568	4:28	16	15	100
1569	4:47	19	15	100

Depth	Time	Min/Ft.	Wt. on Bit	Rotary RPM
1570	5:05	18	15	100
1571	5:30	25	15	100
1572	5:50	20	15	100
1573	6:10	20	15	100
1574	6:34	24	15	100
1575	6:52	18	15	100
1576	7:08	16	15	100
1577	7:23	15	15	100

Core #2: Bit No. 65740, Type 6 1/8, Cut 54, Rec. 54, Drill Pipe 4, Collars 6¼, ID 2 7/8, Mud Wt 9.0, Vis 43, WL 6.4, Hole Size 7 7/8, Csg. 8 5/8

Depth	Time	Min/Ft.	Wt. on Bit	Rotary RPM
1578	7:55	10	8	100
1579	8:05	10	8	100
1580	8:15	10	10	100
1581	8:25	10	10	100
1582	8:37	12	10	100
1583	8:48	11	12	100
1584	9:02	14	12	100
1585	9:18	16	12	100
1586	9:34	14	12	100
1587	9:55	19	12	100
1588	10:15	20	12	100
1589	10:30	15	12	100
1590	10:45	15	12	100
1591	11:00	15	12	100
1592	11:17	17	12	100
1593	11:33	16	12	100

Depth	Time	Min/Ft.	Wt. on Bit	Rotary RPM
1594	11:50	17	12	100
1595	12:07	17	12	100
1596	12:24	17	12	100
1597	12:42	18	12	100
1598	1:00	18	12	100
1599	1:22	22	12	100
1600	1:47	25	12	100
1601	2:11	24	12	100
1602	2:32	21	12	100
1603	2:55	23	12	100
1604	3:15	20	12	100
1605	3:34	19	12	100
1606	3:55	21	12	100
1607	4:20	25	12	100
1608	4:42	22	12	100
1609	5:20	17	12	100
1610	5:37	17	12	100
1611	5:55	18	12	100
1612	6:13	18	12	100
1613	6:34	21	12	100
1614	6:53	19	12	100
1615	7:14	21	12	100
1616	7:35	21	12	100
1617	7:55	20	12	100
1618	8:10	15	12	100
1619	8:82	22	12	100
1620	8:53	21	12	100
1621	9:14	21	12	100
1622	9:35	21	12	100
1623	9:58	23	12	100
1624	10:22	24	12	100

Depth	Time	Min/Ft.	Wt. on Bit	Rotary RPM
1625	10:45	23	12	100
1626	11:07	22	12	100
1627	11:30	23	12	100
1628	11:51	21	15	120
1629	12:13	22	15	120
1630	12:33	23	15	120
1631	12:58	25	15	120

(d) SAMPLE DESCRIPTION:

0-10	Sandstone, light-medium grey, very fine-fine grained, angular, silty, quartzitic, glauconitic, tight. Sandstone, buff, fine grained, subangular, quartzitic with trace glauconite in part with fair intergranular porosity, minor red to red brown, fine grained silty limonitic stained, sandstone grading to sandy siltstone.
10-20	Sandstone, aa
20-30	Sandstone, light-medium grey, silty, glauconitic, fine grained, angular. Sandstone, buff, fine grained, sub-angular, porous, grading to brown very fine-fine grained, silty with clay matrix. Minor red ironstone.
30-40	aa.
40-50	Sandstone, light-medium grey, very fine grained, very silty, slightly argillaceous, glauconitic. Sandstone buff-light brown, very fine-fine grained, slightly silty, quartzitic in part with poor porosity. Minor ironstone, dark red, silty.
50-60	Sandstone, light-medium grey aa grading to argillaceous, slightly sandy siltstone and silty shale with minor glauconitic sandstone, buff to light brown aa. Trace red iron oxide staining on sandstone.
60-70	Sandstone and shale, light-medium grey aa, glauconitic minor buff and light brown sandstone aa. Minor buff-light brown sandstone. Trace coarse quartz pebbles. Minor platy slightly silty maroon shale.

70-80	Sandstone, light grey, fine grained, angular, glauconitic, tight. Shale, medium grey, chunky, micromicaceous, in part silty, in part slightly sandy, with trace pyrite. Trace vitreous, maroon siltstone with minor glauconite.
80-90	Shale, medium grey, chunky, in part very silty, slightly sandy, in part micromicaceous. Sandstone, light grey to buff, very fine-fine grained, angular, silty, glauconitic, tight. Minor siltstone, maroon, vitreous, hard, glauconitic.
90-100	Shale, medium grey to grey brown, chunky, slightly silty, glauconitic, slightly micromicaceous, in part slightly sandy. Minor ironstone.
100-110	Shale and ironstone, aa. Siltstone, light grey, quartzitic with trace glauconite, trace pyrite.
110-120	Shale, medium grey, dense, brittle, smooth, chunky in part with clusters of pyrite crystals. Minor ironstone. Siltstone, light grey, glauconitic aa. Minor medium grey, silty, glauconitic shale, aa.
120-130	Shale, medium grey, chunky with trace carbonaceous specks, mica. Abundant pyrite crystals in sample.
130-140	Shale, aa with abundant clusters of pyrite, in part with silty sandy streaks and minor glauconite. Minor siltstone, light grey, slightly sandy, glauconitic, tight.

140-150	Shale, medium grey, soft, platy, fissile.
150-160	Shale, aa, slightly waxy in appearance.
160-170	Shale, aa with minor ironstone. Clear to light brown loose clusters of calcite crystals, probably forming in fractures.
170-180	Shale, light to medium grey, platy fissile, soft.
180-190	Shale, aa with minor brown ironstone.
190-200	Shale, light medium grey, aa with minor ironstone.
200-210	Shale, aa.
210-220	Shale, light to medium grey, silty micromiaceous, glauconitic, chunky-platy with minor hard vitreous maroon, siltstone.
220-230	Shale, light-medium grey, chunky, silty, micromicaceous, with minor glauconite, trace pyrite. Sandstone, light grey-buff, [illegible] vitreous hard, glauconitic tight. Trace ironstone.
230-240	Shale, light-medium grey aa, brittle.
240-250	Shale aa, minor sandstone, light grey-buff, fine grained, silty, trace porosity, in part glauconitic hard.
250-260	Shale, light-medium grey, silty, platy, fissile, micromicaceous, with trace glauconite. Minor sandstone, aa.

260-270	Shale, aa but glauconitic, in part soft.
270-280	Shale, aa
280-290	Shale, light-medium grey, platy, fissile, soft, micromicaceous in part silty, pyritic, hard. Minor ironstone
290-300	Shale, light-medium grey, chunky, very silty, in part slightly sandy, glauconitic pyritic with inoceramus prisms.
300-310	Shale, light-medium grey, silty, micromicaceous, chunky-platy with minor calcite in fractures. Trace inoceramus prisms. Minor ironstone.
310-320	Shale, light-medium grey, chunky-platy, silty, micromicaceous, glauconitic. Trace shale dark grey, fissile, platy, soft.
320-330	Shale, light-medium grey, silty aa. Shale, dark grey, platy, fissile, soft aa. Minor ironstone.
330-340	Shale, light-medium grey, silty, micromicaceous, chunky. Minor ironstone with siderite in fractures
340-350	Shale, aa
350-360	Shale, aa
360-370	Shale, aa
370-380	Shale, light-medium grey,chunky, silty, in part sandy, glauconitic, micromicaceous.
380-390	Shale, light-medium grey, chunky-platy, silty, micromicaceous, slightly glauconitic.

390-400	Shale, light-medium grey, platy, fissile, micromicaceous, in part soft.
400-410	Shale, aa but only slightly silty.
410-420	Shale, aa in part shale, light-medium grey, silty to sandy, glauconitic, chunky, hard
420-430	Shale, light-medium grey, chunky-platy, micromicaceous, in part silty with minor glauconite. Trace ironstone.
430-440	Shale, light-medium grey chunky-platy, micromicaceous. Trace ironstone and light grey siltstone.
440-450	Shale, aa
450-460	Shale, aa
460-470	Shale, aa predominantly platy, brittle.
470-480	Shale, aa
480-490	Shale, light-medium grey, chunky-platy, brittle, slightly micromicaceous, trace pyrite. Minor ironstone.
490-500	Shale, light-medium grey, chunky-platy, micromicaceous, in part silty. Siltstone, light grey, argillaceous, slightly sandy, glauconitic, chunky. Minor ironstone.
500-510	Shale, light-medium grey, chunky, silty, micromicaceous with trace pyrite, in part slightly sandy.

510-520	Shale, aa with trace ironstone.
520-530	Shale, light-medium grey, chunky, in part silty, micromicaceous in part, slightly sandy, with minor pyrite.
530-540	Shale, medium grey, micromicaceous, chunky, slightly silty.
540-550	Shale, light-medium grey chunky, platy, micromicaceous.
550-560	Shale, aa with trace pyrite. Minor ironstone with trace siderite in fractures.
560-570	Shale, medium grey, platy, fissile, micromicaceous. Minor ironstone.
570-580	Shale, light-medium grey, aa with trace pyrite.
580-590	Shale, light-medium grey, chunky, silty in part, slightly sandy, micromicaceous. Minor ironstone.
590-600	Shale, aa trace coarse calcite crystals.
600-610	Shale, light-medium grey, chunky-platy, micromicaceous, in part slightly silty with trace pyrite.
610-620	Shale, light-medium grey, chunky, in part silty, micromicaceous with trace pyrite. Trace ironstone.
620-630	Shale, aa in part slightly silty with trace sand. Trace dark green, hard, dense silty shale.

630-640	Shale, light-medium grey, chunky, platy, micromicaceous. Trace dark greenish grey shale, dense.
640-650	Shale, light-medium grey, platy, dense, slightly waxy in appearance, slightly micromicaceous. Minor ironstone with trace calcite in fractures.
650-660	Shale, light-medium grey, chunky-platy, micromicaceous. Abundant brown ironstone, in part calcareous.
660-670	Shale and ironstone aa.
670-680	Shale, light-medium grey aa. Shale, dark grey, chunky, platy, brittle.
680-690	Shale, light-medium grey, chunky-platy, micromicaceous, with trace of pyrite, slightly waxy. Trace buff, slightly calcareous, glassy siltstone.
690-700	Shale, light-medium grey, chunky-platy, slightly micromicaceous. Minor sandstone, light grey, very fine-fine grained, silty glauconitic.
700-710	aa.
710-720	Shale, light-medium grey, platy. Minor ironstone, abundant inoceramus prisms, trace fossils. Trace pyrite clusters.
720-730	Shale, aa, in part waxy. Minor ironstone, trace pyrite and inoceramus prisms.
730-740	Shale, light-medium grey, chunky-platy, brittle in part, slightly waxy with trace siltstone. Trace grey argillaceous lime mud with calcareous specks.

740-750	Shale, light-medium grey, chunky, very slightly micromicaceous, brittle in part with trace calcareous material. Trace inoceramus prisms.
750-760	Shale, light-medium grey, chunky-platy, micromicaceous in part with fine grained glauconite and floating medium grained quartz grains. Sands tone, light grey, very fine grained, silty quartzitic, dirty, glauconitic, tight.
760-770	Shale, light-medium grey, chunky, silty in part, slightly sandy, micromicaceous, in part slightly glauconitic.
770-780	Shale, aa with minor pyrite.
780-790	Shale, aa with minor pyrite. Minor sandstone, light grey, very fine grained, glauconitic, silty with slight salt and pepper aspect, micromicaceous in part with shale partings. Trace pyritized wood fragment.
790-800	Shale and sandstone aa with trace ironstone.
800-810	Shale, light-medium grey, chunky-platy, micromicaceous, slightly silty, in part glauconitic with trace pyrite.
810-820	Shale, medium grey chunky, micromicaceous, very silty in part, slightly sandy. Siltstone, brown-grey brown, sandy, micromicaceous, calcareous with shale partings.
820-830	Shale, light-medium grey, chunky, silty with sandy streaks, micromicaceous, with minor pyrite and glauconite.
830-840	Shale, aa

840-850 Shale, light-medium grey, silty aa with trace brown, soft fissile, dense shale. Minor pyrite and ironstone.

850-860 Shale, light-medium grey, chunky-platy, slightly silty, micromicaceous with trace glauconite and pyrite.

1st sample below casing

860-870 Shale, aa but no glauconite.

870-880 Shale, medium-dark grey, platy, slightly silty, micromicaceous.

880-890 Shale, aa with sandstone, light grey, fine grained quartzitic, 30% cement in sample.

890-900 Shale, aa sandstone, light-medium grey, very fine-fine grained, silty, in part salt and pepper, in part glauconitic. Abundant cement.

900-910 Aa. Poor sample abundant cement.

910-920 Shale and sandstone aa, poor sample abundant cement.

920-930 Shale, medium-dark grey, platy, in part slightly silty, micromicaceous. Sandstone, buff very fine grained, silty chalky, soft, with slightly salt and pepper aspect.

930-940 Shale, light-medium grey, chunky-platy, very silty, in part slightly waxy,micromicaceous. Minor dark grey, platy, fissile brittle shale. Sandstone, buff-very fine grained, silty, argillaceous, brittle with salt and pepper aspect.

940-950	Sandstone, light grey, very fine-fine grained, very silty brittle, with slight salt and pepper aspect, trace glauconite, micromicaceous, very slightly calcareous, tight.
950-960	Sandstone, light grey, very fine-fine grained, angular, salt and pepper, poorly sorted very silty, very slightly calcareous, brittle, tight. Interbedded medium grey, silty in part, sandy, micromicaceous, shale.
960-970	Sandstone, light grey-buff, very fine-fine grained, angular with slight salt and pepper aspect, micromicaceous, tight, with clay matrix tight. Shale, medium grey, chunky-platy, fissile, micromicaceous with black carbonaceous partings.
	UPPER DEVONIAN-Imperial Formation - 970' (Log 925')
970-980	Sandstone and shale aa, sand has minor black carbonaceous specks.
980-990	Sandstone, aa, but very fine grained. Shale, aa, in part silty. Minor brown platy, silty shale. Trace ironstone.
990-1000	Shale, aa but very silty with minor sandstone, aa.
1000-1010	Shale, medium grey, chunky-platy, in part silty micromicaceous. Trace brown siltstone.
1010-1020	Shale, medium grey, chunky-platy, micaceous, silty aa, with minor interbeds of sandstone, light grey, very fine-fine grained, micaceous with clay cement.
1020-1030	Shale, aa, but less silty, in part slightly silty with interbedded light grey, micaceous siltstone with slight salt and pepper aspect.

1030-1040	Shale, light-medium grey, micromicaceous, silty, chunky-platy, in part with sandy streaks. Minor ironstone.
1040-1050	Shale, aa with minor sandstone - light grey, very fine-fine grained, silty micaceous with minor bituminous partings. Minor brown ironstone.
1050-1060	Shale and sandstone, aa, very micaceous. Sandstone varies from light grey-buff. Minor ironstone.
1060-1070	Shale and sandstone, aa, with minor light grey brown argillaceous in part, slightly sandy, siltstone.
1070-1080	Shale, medium grey, chunky-platy, silty-sandy, micromicaceous with minor sandstone streaks, light grey salt and pepper, very fine silty.
1080-1090	Shale and sandstone aa.
1090-1100	Shale, medium grey, chunky-platy, micromicaceous, silty with minor sandy streaks aa. Trace brown silty shale.
1100-1110	Shale, aa with minor brown argillaceous siltstone.
1110-1120	Shale and brown siltstone aa.
1120-1130	Shale, light-medium grey, chunky, micromicaceous, silty with minor brown siltstone.
1130-1140	Shale, aa with sandy streaks. Trace brown siltstone.

1140-1150	Shale, medium grey, chunky, micromicaceous.
1150-1160	Shale, light-medium grey, chunky-platy, silty, micromicaceous. Minor brown, very slightly calcareous siltstone.
1160-1170	Shale, aa with trace brown siltstone.
1170-1180	Shale, aa, but only slightly silty.
1180-1190	Shale, light-medium grey, chunky-platy, micromicaceous, in part silty, with trace carbonaceous partings, in part slightly waxy in appearance.
1190-1200	Shale, aa with minor siltstone, light grey, micromicaceous.
1200-1210	Shale, and siltstone aa, trace ironstone.
1210-1220	Shale, light-medium grey chunky-platy, in part slightly waxy. Minor sandstone, lgith grey micromicaceous, very fine grained. Trace ironstone.
1220-1230	Shale, aa.
1230-1240	Shale, aa with minor light grey, very fine-fine grained sandstone aa. Minor brown siltstone.
1240-1250	Shale, aa, in part waxy.
1250-1260	Shale, light-medium grey, micromicaceous, chunky, platy, silty. Minor grey brown, argillaceous siltstone with very fine grained sandy streaks.

1260-1270	Shale, light grey-grey brown and medium grey aa with minor brown siltstone.
1270-1280	Siltstone, light grey-grey brown, sandy, micromicaceous. Shale, light grey-grey brown, silty, micromicaceous, platy, fissile.
1280-1290	Siltstone, light grey brown, sandy, micromicaceous, with slight salt and pepper aspect. Shale, light grey brown-medium grey, silty, micromicaceous. Minor dark grey, dense, fissile, platy, shale.
1290-1300	Siltstone, aa, fissile. Shale, medium grey-grey brown, fissile, slightly micromicaceous, chunky, in part platy. Trace brown ironstone.
1300-1310	Siltstone and shale aa
1310-1320	Siltstone and shale aa, light-medium grey to grey brown, in part buff with minor dark grey, dense, platy, fissile shale. Trace brown ironstone.
1320-1330	Shale, medium-dark grey, chunky-platy, silty, micromicaceous. Trace brown siltstone, ironstone.
1330-1340	Shale, aa with minor brown siltstone. Trace ironstone.
1340-1350	Siltstone, light-medium grey, sandy with trace glauconite. Shale partings, micromicaceous. Interbedded light-medium grey silty, micromicaceous, silty shale with minor carbonaceous specks.

1350-1360	Shale, light-medium grey, chunky-platy, silty, micromicaceous. Shale, light brown, dense, fissile, very silty.
1360-1370	Sandstone, light grey, very fine-fine grained, very silty, tight with slight salt and pepper aspect, micaceous with carbonaceous partings. Minor coal, black brittle with pyrite clusters and white calcite crystals. Coal interbedded with dark grey, pyritic, brittle, siltstone.
1370-1380	Sandstone, light grey-grey brown aa with carbonaceous partings. Shale, light-medium grey, platy, in part silty, slightly micromicaceous. Trace brown ironstone.
1380-1390	Shale, medium grey, micromicaceous, chunky, platy, fissile with carbonaceous partings. Minor sandstone light grey, very fine grained angular, quartzitic, very silty, micaceous with clay cement, carbonaceous specks and partings. Minor brown silty shale grading to argillaceous siltstone.
1390-1400	Carbonaceous shale and sandstone aa with minor brown ironstone.
1400-1410	Shale, light-medium grey, chunky-platy, micromicaceous, slightly silty. Minor brown chunky dense siltstone.
1410-1420	Shale, medium grey-brownish grey, platy, slightly micromicaceous, slightly silty, in part waxy in appearance.
1420-1430	Shale and light brown siltstone aa.

1430-1440	Shale, light brown-medium grey, silty, micromicaceous, chunky-platy. Siltstone, light brown, fissile, argillaceous.
1440-1450	Shale, aa with trace light brown siltstone.
1450-1460	Shale and siltstone aa with trace calcite in fractures.
1460-1470	Silty shale and siltstone aa.
1470-1480	Silty shale and light brown siltstone aa.
	CANOL FORMATION - 1480' (Log 1470')
1480-1490	Shale, medium-dark grey, fissile, chunky-platy, slightly bituminous.
1490-1500	Shale, dark grey, chunky-platy, bituminous.
1500-1510	Shale, aa.
	MIDDLE DEVONIAN - Kee Scarp Formation - 1515' (Log 1518).
1510-1520	Shale, aa and limestone at 1515 buff, chalky calcisiltite with scattered very fine-fine skeeletal grains. Abundant white crystalline strom fragments. Poor chalky porosity in calcisiltite. No visible effective porosity. Trace live oil stain. Poor fluorescence in clorothene. Drilling break from 1 minute/foot to 3 to 4 minutes/foot at top of reef.
	Cored 1523-1631 - See Core Description

1631-1640	Limestone, buff-white chalky, in part crystalline, glassy bioclastic, consisting of large broken stromatoporoid fragments in a silty, medium grained skeletal ground mass cemented with spar calcite. Poor chalky porosity. In part brown-medium grey-brown, dense lime mud with silty-very fine grains. Trace solitary corals. Trace of live oil stain.
1640-1650	Limestone, buff-white, chalky aa. Minor medium grey-grey brown bioclastic calcisiltite. Poor chalky porosity.
1650-1660	Limestone, buff-white, chalky stromatoporoid fragments in a brown, silt-fine grained ground mass cemented with spar calcite and minor amount of lime mud. Minor black bituminous infill of original porosity.
1660-1670	Limestone, light brown-grey brown, dense, microcrystalline in part, buff-white, chalky, fine crystalline (Strom fragments?). Limestone, dark grey to brown, dense, slightly argillaceous, trace black bituminous residue.
1670-1680	Limestone, buff, chalky, dense, grading to medium grey to grey brown, dense, micromcrystalline, slightly bituminous in part with trace crinoids and very fine grains.
1680-1690	Limestone, dark grey to grey brown, argillaceous with trace bituminous material, in part with buff chalky patches. Limestone, buff-white, chalky-fine crystalline.
1690-1700	Limestone, buff-white, chalky-fine crystalline, dense, aa. Limestone, medium grey to grey brown, dense, microcrystalline.

1700-1710	Limestone, buff-white chalky-fine crystalline, dense aa. Trace stroms. Trace bituminous residue. Limestone dark brownish grey, slightly argillaceous with silt size grains and trace of strom fragments. Poor chalky porosity.
1710-1720	Limestone, medium grey to grey brown, dense microcrystalline, very slightly argillaceous grading to buff to tan chalky-fine crystalline.
1720-1730	Limestone aa with black bituminous (?) residue in chalky fraction.
1730-1740	Limestone, brown chalky calcisilitite with abundant buff-white coarse translucent stromatoporoid fragments. Limestone, buff-white dense chalky-crystalline (Stroms?) Minor limestone, brown, dense microcrystalline.
1740-1750	Limestone, medium grey brown-dark brown, dense, calcisilitite with buff-white chalky-translucent stromatoporoid fragments. Minor black bituminous patches.
1750-1760	Limestone, dark brown-brown dense micro-very fine crystalline, with black bituminous (?) patches and minor brown translucent strom fragments. Abundant buff-white chalky-fine crystalline limestone. Trace clear calcite in fractures.
1760-1770	Shale, black chunky, very calcareous. Limestone, light grey-brownish grey, argillaceous with chalky white mottling. Limestone, buff-white chalky-crystalline aa with strom frags. (Cavings ?).

1770-1780	Shale, black, calcareous aa. Limestone, dark brown, dense, microcrystalline with white chalky patches.
1780-1790	Limestone, light grey-grey brown, calcisilitite with white chalky patches with skeletal (Stroms ?) fragments, in part argillaceous.
1790-1800	Limestone, brown-grey brown aa, with abundant skeletal grains and buff-white amph or strom fragments. Abundant separate buff-white chalky-crystalline fragments, probably stroms or amphipora.
1800-1810	Limestone, light grey-brownish grey, calcisilitite in part, slightly argillaceous with abundant amphipora fragments and scattered skeletal grains. Minor black calcareous shale.
1810-1820	Limestone, grey brown, very fine crystalline, slightly argillaceous with chalky white patches and traces of amph strom fragments. Abundant white chalky-buff crystalline, discrete strom fragments aa (May be cavings). Minor black bituminous stylolites.
1820-1830	Limestone, dark grey brown, argillaceous, slightly dolomitic with white skeletal fragments. Minor dark grey, calcareous shale. Minor limestone, brown, dense, microcrystalline. Abundant discrete, white chalky strom fragments aa (Cavings?). Live oil stain.

1830-1840 Limestone, dark brown-grey brown, dense, slightly dolomitic, slightly argillaceous lime mud with scattered fine grains. Trace amph or stroms, trace crinoids. Limestone, dark grey-brownish grey, argillaceous, dense, dolomitic with scattered white chalky angular grains. Abundant coarse buff-white strom or amph fragments in dark argillaceous limestone matrix aa. Minor black slightly dolomitic, calcareous shale. Live oil stain.

1840-1850 Limestone, brown-dark grey brown, slightly dolomitic, very fine crystalline-microcrystalline dense, in part slightly argillaceous with chalky patches, traces of strom or amph fragments. Trace black bituminous residue on strom fragments. Limestone, brownish grey-medium grey, argillaceous dense, dolomitic in part with skeletal grains, slightly bituminous. Trace live oil stain.

1850-1860 Limestone, dark brownish grey-dark grey with white chalky mottling, very argillaceous, slightly dolomitic with scattered grains, bituminous. Minor brown dense microcrystalline limestone. Heavy petroliferous odour. Good live oil stain. Poor porosity. Abundant strom fragments.

1860-1870 Limestone, light brown in part chalky, slightly dolomitic, slightly argillaceous fine grained bioclastic lime mud with tan-white crystalline strom or amph fragments. Limestone, dark grey-grey brown dolomitic argillaceous, bituminous with skeletal grains and amph or strom fragments. Poor chalky porosity with faint oil cut.

1870-1880 Limestone, light brown-brownish grey, slightly argillaceous, slightly dolomitic, calcisilitite with scattered grains and white amph or strom fragments, in part with black bituminous residue. Faint oil cut.

1880-1890 Limestone, light brown to light grey, dense, microcrystalline. In part light brown-brownish grey, slightly argillaceous, slightly dolomitic with scattered grains and amph or strom fragments aa.

1890-1900 Limestone, light brown-brownish grey, very slightly dolomitic, microcrystalline lime mud with scattered coral and strom (?) fragments. Limestone, dark grey, argillaceous calcisilitite, slightly dolomitic with black patchy bituminous residue, trace stroms (?) in part with chalky silty-fine grains. Faint oil cut.

1900-1910 Limestone, aa with heavy black, dead oil, bituminous residue.

1910-1920 Limestone, minor brown, slightly dolomitic, bioclastic, chalky lime mud. Shale, dark grey-black, calcareous, bituminous, silty in part with trace bioclastic material.

1920-1930 Shale, medium grey-black, chunky, in part silty, micromicaceous, slightly calcareous. Trace pyrite. Limestone, tan-light brown, chalky, in part dense microcrystalline.

HARE INDIAN FORMATION - 1930' (Log 1930')

1930-1940 Shale, dark grey-brownish grey, slightly calcareous, platy, silty, micromicaceous, bituminous. Siltstone, light-medium grey, calcareous, micromicaceous.

1940-1950	Shale, dark brown-grey brown, chunky fissile, very silty, calcareous, argillaceous, micromicaceous.
1950-1960	Shale, aa. Siltstone, light grey, calcareous, micromicaceous, pyritic. Minor dark brown, argillaceous lime mud with scattered fine grains.
1960-1970	Limestone, light-medium brown, dense, dolomitic with scattered chalky white fine-medium grains. Minor black bituminous micromicaceous silty shale.
1970-1980	Shale, brown-brownish grey, silty dolomite, calcareous, slightly micromicaceous. Limestone, light grey brownish grey, dense microcrystalline with minor pyrite.
1980-1990	Limestone, light grey-grey brown microcrystalline, dense aa. Shale, dark brown, dolomitic, micromicaceous, chunky. Slightly silty, in part bituminous.
1990-2000	Limestone, light grey, microcrystalline, dense grading to cream chalky. Minor shale, medium to dark brownish grey, dolomitic, silty, micromicaceous.
2000-2010	Limestone, light grey-grey brown, dense very dolomitic, slightly silty, in part dark brown, slightly argillaceous, brittle.
2010-2020	Shale, medium grey-grey brown, silty, slightly dolomitic, slightly calcareous with interbeds of platy cream-light grey, chalky-dense microcrystalline limestone with trace mica. (Grades from a shaly carbonate to limy dolomitic shale).

2020-2030	Shale, light grey-brownish grey, micaceous, dolomitic, calcareous, chunky, hard.
2030-2040	Shale, aa with light grey, silty pyritic shale.
2040-2050	Shale, medium grey-brownish grey, chunky with fair poor fissility, micromicaceous, calcareous. In part light grey, dense, micromicaceous, calcareous, dolomitic.
2050-2060	Shale, medium grey, brownish grey, micromicaceous with trace pyrite, calcareous, dolomitic, in part light grey, dense, platy, hard, silty.
2060-2070	Shale, aa.
2070-2080	Shale, medium grey-brownish grey, slightly silty, calcareous, micromicaceous with ostracods. Minor light grey brown, dense, microcrystalline limestone.
2080-2090	Limestone, light grey, dense, microcrystalline, dolomitic, argillaceous with black specks, trace ostracods. Minor shale, dark brownish grey, chunky, dolomitic, slightly bituminous, very calcareous, with trace mica.
2090-2100	Limestone, light grey, argillaceous with ostracods aa. Shale, dark brownish grey aa.
2100-2110	Limestone, light grey, dolomitic shaly aa.
2110-2120	Shale, medium grey, chunky-platy, brittle, calcareous, slightly dolomitic with trace ostracods and black spheres (ostracods).

2120-2130	Limestone, light-medium brownish grey, dense, chunky-platy, shaly,, microcrystalline with ostracods.
2130-2140	Shale, medium brownish grey-dark grey, very calcareous, chunky-platy, hard, brittle with ostracods, trace of pyrite.
2140-2150	Shale, aa with abundant dark brown spheres (Ostracods ?).
2150-2160	Shale, aa with ostracods and tiny black bituminous ? Specks.
2160-2170	Shale, aa, but darker brownish grey, dolomitic.
2170-2180	Shale, medium-dark brownish grey, calcareous, chunky-platy, slightly micromicaceous, in part bituminous.
2180-2190	Shale, medium-dark brownish grey, dense, platy, calcareous, with ostracods, slightly dolomitic.
2190-2200	Shale, aa, chunky-platy, slightly bituminous with ostracods.
2200-2210	Shale, aa with minor white chalky limestone streaks with iron oxide coated micro-fossils.
2210-2220	Shale, medium grey-brownish grey, calcareous, platy in part, cream chalky with black carbonaceous (?) spheres.

2220-2230	Shale, aa with black carbonaceous ? spheres and trace of ostracods.
2230-2240	Shale, aa grading to dark grey, bituminous with trace ostracods, slightly calcareous.
2240-2250	Shale, medium brownish grey-dark grey aa.
2250-2260	Shale, medium grey-dark grey, chunky-platy, fissile, in part bituminous. Darker fraction less calcareous, bituminous.
2260-2270	Shale, medium-dark grey aa, bituminous. Trace pyrite.
2270-2280	Shale, medium brownish grey, calcareous, soft-brittle fissile. Shale, dark grey, very fissile platy, bituminous, very slightly calcareous.
2280-2290	Shale, medium grey and dark grey shale aa with minor black spherical micro-fossils (?).
2290-2300	Shale, aa with abundant black spherical micro-fossils (?).
2300-2310	Shale, predominantly light brownish grey to medium grey, platy, slightly calcareous, with round flat black carbonaceous plates, ranging to medium grained in size.
2310-2320	Shale, light-medium grey, dense, platy, waxy, non-calcareous with black round "plates" aa.
2320-2330	Shale, aa.

2330-2340	Shale, light-medium brownish grey aa, but calcareous in part.
2340-2350	Shale, aa with minor microcrystalline, shaly limestone streaks with trace black round plates aa.
2350-2360	Shale, aa. Shale, medium brown-grey brown, bituminous, calcareous with black round plates, very fissile, chunky-platy.
2360-2370	Light-medium grey, platy, fissile, calcareous, with black round "plates". Minor shale, dark grey, bituminous, very slightly calcareous, dense, fissile.
2370-2380	Shale, light-medium brownish grey, fissile, very calcareous.
2380-2390	Shale, aa with trace limestone, light grey, dense in part tan chalky, shaly.
2390-2400	Shale, medium-dark grey, in part black, platy, very slightly calcareous, bituminous, very fissile.
2400-2410	Shale, aa in part light grey with black carbonaceous plates, slightly calcareous.
2410-2420	Shale, dark grey-brownish grey, platy bituminous, slightly waxy with black round "plates" aa, in part with chalky white calcareous blebs.

HUME FORMATION - 2428' (Log 2431').

2420-2430	Shale, aa grading to black. Limestone, light grey, dense, microcrystalline with minor black plates aa, trace ostracods, trace pyrite. Minor white calcite in fractures.
2430-2440	Limestone, light brown-light grey in part cream, chalky, microcrystalline lime mud, dense.
2440-2450	Limestone, light brown-light grey dense, in part bioclastic with fine grains in lime mud matrix, in part cream, chalky with trace grains. Trace brachiopods.
2450-2460	Limestone, medium brown, dense, microcrystalline, in part slightly argillaceous grading to light grey to cream chalky with minor ostracods. Minor shale, light grey, dense. waxy with black, round, fine-grained "plates".
2460-2470	Limestone, light brown-light grey, dense, microcrystalline with darker coloured shaly intercalations.
2470-2480	Limestone, light-medium brown, dense, microcrystalline with trace pyrite, scattered ostracods, in part chalky, cream with minor pyrite. Interbedded light grey and minor dark brown, dense, platy, limy shale.
2480-2490	Limestone, tan-medium brown, microcrystalline, dense, slightly dolomitic with trace pyrite, trace ostracods, calcite in fractures with dark brown, shaly, intercalations. Interbedded light grey, dense, microcrystalline limestone, pyritic with cream, chalky patches, in part shaly, with ostracods.

2490-2500	Limestone, medium brown to brownish grey, dense, microcrystalline lime mud with trace pyrite, slightly argillaceous with trace calcispheres, minor shaly streaks.
2500-2510	Limestone, light grey brown-medium brown, dense lime mud, slightly argillaceous, very slightly dolomitic with trace grains, trace ostracods.
2510-2520	Limestone, aa in part chalky with dark grey shale partings.
2520-2530	Limestone, aa with trace brachiopods, ostracods.
2530-2540	Limestone, light-medium brown, in part cream chalky, microcrystalline, dense with ostracods, calcite in fractures.
2540-2550	Limestone, light-medium brown, in part cream chalky, dense aa with dark brown-black, bituminous shale intercalations.
2550-2560	Limestone, aa
2560-2570	Limestone, dense, brown lime mud aa, with dark brown-black shale intercolations. Trace brachiopod fragments.
2570-2580	Limestone, medium brown-brownish grey, argillaceous, slightly dolomitic, with interbedded light grey, in part cream chalky, microcrystalline, slightly dolomitic limestone.
2580-2590	Limestone, light-medium brown, slightly dolomitic in part shaly lime mud.

2590-2600	Limestone, aa grading to brownish grey with shale streaks.
2600-2610	Limestone, medium brown-brownish grey, in part cream chalky, dense, lime mud with trace ostracods.
2610-2620	Limestone, aa with dark grey-black shale intercalations.
2620-2630	Limestone and shale aa.
2630-2640	Limestone, medium brown-light grey, dense, lime mud in part with trace grains and shell fragments, slightly argillaceous.
2640-2650	Limestone, light brown to light grey, dense, lime mud, argillaceous in part, with minor bioclastic material, calcispheres, trace pyrite.
2650-2660	Limestone, brown-brownish grey, slightly dolomitic, slightly argillaceous, dense, with minor bioclastic material, trace ostracods, pyrite.
2660-2670	Limestone, minor limestone aa grading to a light grey, dense somewhat waxy, platy limestone, shaly, with trace pyrite, trace ostracods.
2670-2680	Limestone, light brown-brownish grey lime mud with calcispheres, ostracods in part, pyritic, trace conodonts (?). Calcite in fractures.
2680-2690	Limestone, aa grading downward to tan very fine crystalline, chalky dolomitic.

2690-2700 Limestone, brownish grey, dense lime mud with interbedded light grey, calcareous shale with disseminated pyrite.

LOWER DEVONIAN BEAR ROCK FORMATION -(Log 2706')

2700-2710 Limestone, brown, dense, very hard lime mud with pyrite with trace micro-fossils (?), in part with brown shale intercalations, in part cream chalky, interbedded light grey, very fine-mircocrystalline limestone, with rare grains, pyritic.

2710-2720 Limestone, brown-brownish grey, in part cream chalky, dense to crystalline in part, pelleted, with trace ostracods, trace pyrite, very hard.

2720-2730 Limestone, dark brown, fine-medium grained, pelleted (?), and ostracod lime sand in chalky, crystalline-dense lime mud matrix, with interbedded, dense, dark brown, very argillaceous, slightly bituminous.

2730-2740 Limestone, medium-dark brown-brownish grey, argillaceous, dense, microcrystalline, slightly dolomitic, very hard.

2740-2750 Dolomite, medium brown-dark brown-brownish grey, somewhat platy, limy, very fine crystalline.

BEAR ROCK DOLOMITE - 2740' (Log 2752').

2750-2760 Dolomite, dark-medium brown, very fine-fine crystalline with trace scattered, pin-point porosity. (Drilling break 3 to 4 minutes/foot). Very faint questionable oil stain. Slightly calcareous.

2760-2770	Dolomite, medium to dark brown, fine-medium crystalline, rhombic, slightly calcareous with fair scattered intercrystalline and pin-point porosity. Faint questionable oil stain.
2770-2780	Dolomite, light-medium brown, very fine crystalline, dense, with trace poor pin-point porosity. No cut. In part with black dead oil residue with pin-point vugs.
2780-2790	Dolomite, light brown, fine-medium crystalline appears granular, generally dense interlocking with scattered patches of very poor pin-point porosity. Vugs have black bituminous residue, and do not for the most part appear to be connected. Water will stay on surface of most grains, even where pin-point vugs are visible. The odd grain will exhibit a faint questionable stain.
2799-2800	Dolomite, medium brown-greyish brown, very fine crystalline, dense, slightly, calcareous with poor scattered vuggy porosity. Trace bituminous residue lining vugs. Minor fine-medium crystalline "granular" looking dolomite aa, with trace intercrystalline porosity. No stain.
2800-2810	Dolomite, medium brown, very fine crystalline with patches of fine crystalline heavily oil stained dolomite with good live cut. Fair scattered, pin-point, vuggy porosity with indications of larger vugs.
2810-2820	Dolomite, medium-dark brown, microcrystalline-very fine crystalline, with streaks of fine crystalline, rhombic dolomite with poor to fair intercrystalline porosity and scattered vuggy porosity. Good oil stain with milky live cut.

2820-2830	Dolomite, brown, fine crystalline, interlocking with trace pin-point porosity, fair oil stain.
2830-2840	Dolomite, light brown-light grey, dense, micro-very fine crystalline, slightly argillaceous, very calcareous.
2840-2850	Dolomite, light brown-grey brown, very fine crystalline, argillaceous, calcareous, with trace grains, trace chalky porosity.
2850-2860	Dolomite, medium brown, resinous, glassy, with poor scattered pin-point and vuggy porosity, very fine-fine crystalline.
2860-2870	Dolomite, aa with trace pyrite, poor porosity. Dolomite, light-medium grey, dense, microcrystalline with fine crystalline patches, slightly calcareous with white calcite in fractures.
2970-2880	Dolomite, light brown-grey brown, dense, microcrystalline, fractured with fine-medium crystalline patches, traces vuggy porosity.
2880-2890	Medium brownish grey-medium brown, dense, micro-very fine crystalline, slightly calcareous.
2890-2900	Dolomite, aa with interbedded cream chalky microcrystalline, slightly limy dolomite with patchy grey mottling.
2900-2910	Dolomite, medium brownish grey-brown, dense, microcrystalline, argillaceous with patchy white anhydritic mottling. Minor dolomite aa with white anhydritic patches.

2910-2920	Dolomite, medium grey-brownish grey, shaly pyritic, dense. Minor grey green pyritic shale. Minor tan, translucent anhydrite.
2920-2930	Anhydrite, tan, translucent, in part chalky cream, dense and dolomite, tan, dense, microcrystalline, anhydritic.
2930-2940	Dolomite, medium grey-brown, medium grey, dense, very fine-fine crystalline, with white anhydrite blebs.
2940-2950	Dolomite, medium-dark brown, dense, micro-very fine crystalline, argillaceous, platy with trace grains.
2950-2960	Dolomite, dark grey-grey brown, dense, brecciated with trace glassy,tan, anhydrite.
2960-2970	Dolomite, aa. Dolomite, tan-grey brown, dense, very fine crystalline with minor pin-point vugs.
2970-2980	Dolomite, tan, dense, translucent with minor chalky, white anhydrite.
2980-2990	Annydrite, tan-light grey in part white, dense, translucent.
2990-3000	Anhydrite, aa.
3000-3010	Tan-light grey, dense, anhydrite aa, in part dolomitic. Minor grey anhydritic, pyritic shale.
3010-3020	Dolomite, tan-brownish grey, very fine-fine crystalline with scattered, poor intercrystalline "blind" porosity, very small vugs with black bit[illegible]ous.

3020-3030	Dolomite, medium-dark brown, very fine-fine crystalline, dense, slightly argillaceous with trace pin-point vugs, black with bitumen lined stylolites with faint stain. Trace greenish grey shale.
3030-3040	Dolomite, brown-very fine-fine crystalline, dense, with trace pin-point vugs, slightly calcareous. Minor tan and grey dense, glassy anhydrite (Cavings ?).
3040-3050	Dolomite, tan-medium brown, dense, microcrystalline, in part silic, stylolitic with interbedded dolomite, dark brown-brownish grey, very fine crystalline, dense, argillaceous with faint bituminous residue.
3050-3060	Anhydrite, tan and light grey, translucent, dense, in part dolomitic. Minor medium grey, chunky, brittle shale (cavings ?).
3060-3070	Anhydrite, tan and light grey, dolomitic aa. Minor medium grey, pyritic shale.
3070-3080	Anhydrite, in part tan, glassy, in part white chalky, dolomitic.
3080-3090	Anhydrite, aa with minor interbedded, medium grey, dense, brittle shale.
3090-3100	Dolomite, tan, very fine crystalline, dense, brittle, with anhydrite aa and dense, blue grey anhydritic shale.
3100-3110	Dolomite and anhydrite, with grey shale intercalations aa.

3110-3120	Anhydrite, tan, dolomitic. Anhydrite, light grey, slightly argillaceous.
3120-3130	Anhydrite, aa with stringers of buff, fine crystalline, dense, dolomite.
3130-3140	Anhydrite, aa.
3140-3150	Dolomite, tan-buff, very fine crystalline, chalky with brown anhydrite, dense, grading to light grey with cream mottling, slightly shaly, anhydritic. Minor anhydrite aa.
3150-3160	Anhydrite, tan, dense, glassy, in part dolomitic, with light grey anhydrite with medium grey shale intercalations.
3160-3170	Dolomite, cream-medium brown, very fine crystalline, dense, with white blebs of anhydrite.
3170-3180	Anhydrite, tan-cream, glassy in part chalky. Anhydrite, light grey, in part shaly.
3180-3190	Anhydrite, aa with minor dolomite tan, very fine-fine crystalline, dense, hard.
3190-3200	Dolomite, tan, fine crystalline, dense with minor anhydrite aa.
3200-3210	Anhydrite, tan, translucent, dense. Anhydrite, light grey, clear in part, shaly with medium-dark grey shale intercalations. Minor tan fine crystalline dolomite.
3210-3220	Anhydrite, dark brown, glassy and medium grey, anhydritic, platy shale.

3220-3230	Anhydrite, tan-white, dense, slightly dolomitic, in part with trace medium grey shale.
3230-3240	Anhydrite, medium brown, dolomitic. Anhydrite, light grey, shaly.
3240-3250	Anhydrite, dark brown, glassy, slightly dolomitic.
3250-3260	Anhydrite, tan-dark brown, platy, dense, glassy.
3260-3270	Anhydrite, tan, dolomitic, glassy, and light grey, dense, in part argillaceous.
3270-3280	Dolomite, tan, very fine-fine crystalline, dense, with interbedded anhydrite aa.
3280-3290	Dolomite, tan, very fine-fine crystalline, anhydritic with interbedded tan-white chalky-crystalline anhydrite.
3290-3300	Dolomite, tan, very fine crystalline, dense with dark grey shale streaks.
3300-3310	Anhydrite, white crystalline.
3310-3320	Dolomite, medium brown, very fine-fine crystalline, argillaceous, with trace grains, dense, slightly calcareous.
3320-3330	Dolomite, tan, micro-very fine crystalline, in part medium grey brown, dense.
3330-3340	Dolomite, tan, very fine-fine crystalline, dense with white anhydrite blebs. Interbedded dolomite, medium brown, very fine crystalline, anhydritic with medium grey shale intercalations.

3340-3350	Dolomite, tan, very fine-fine crystalline, dense, in part with black bituminous mottling, slightly calcareous, slightly argillaceous, slightly silty.
3350-3360	Dolomite, light brown, very fine crystalline, dense with black stylolites, minor dark grey, argillaceous streaks, slightly calcareous, argillaceous, slightly silty.
3360-3370	Dolomite, light grey brown, very fine crystalline, dense, platy, argillaceous, slightly silty, calcareous, in part slightly shale.
3370-3380	Dolomite, aa, in part fine crystalline, clastic looking, with trace pin-point vugs.
3380-3390	Anhydrite, tan, glassy, in part light grey, argillaceous, shaly.
3390-3400	Anhydrite, aa with medium brown, very fine crystalline, argillaceous dolomite.
3400-3410	Dolomite, light brown, very fine crystalline, dense, slightly argillaceous, stylolitic, limy.
3410-3420	Dolomite, light grey brown, very fine-fine crystalline, argillaceous, platy, with dark grey shale intercalations.
3420-3430	Anhydrite, tan to light grey, dense, glassy, in part shaly.
3430-3440	Dolomite, tan-cream, very fine crystalline with grey, clastic, calcareous grains, fine-medium grained, slightly argillaceous.
3440-3450	Anhydrite, tan, dense, dolomitic in part, medium grey, shaly.

3450-3460	Dolomite, tan-medium brown, very fine-fine crystalline in part with fine-medium grains, calcareous, slightly argillaceous.
3460-3470	Anhydrite, tan to light grey, dense, resinous, in part shaly.
3470-3480	Anhydrite, aa.
3480-3490	Anhydrite, aa.
3490-3500	Anhydrite, tan and light grey, in part dolomitic.
3500-3510	Dolomite, tan, very fine-fine crystalline, dense with minor anhydrite, aa, in part shaly, slightly silty.
	SILURIAN-ORDOVICIAN RONNING FORMATION - 3510' (Log 3542')
3510-3520	Dolomite, tan-cream, very fine-fine crystalline, brittle, dense, with trace grains, trace white-clear anhydrite blebs, slightly calcareous.
3520-3530	Dolomite, tan-cream, very fine-fine crystalline, somewhat soft with poor intercrystalline porosity.
3530-3540	Dolomite, aa grading to light grey, argillaceous.
3540-3550	Dolomite, light brown, dense, platy, micro-very fine crystalline, slightly argillaceous. Trace light steel grey, soft, silty, platy shale.
3550-3560	Dolomite, light brown, dense, micro-very fine crystalline, argillaceous in part, very hard silic with trace blue grey shale aa.

3560-3570	Dolomite, tan-cream, platy, dense, very fine crystalline, slightly calcareous, slightly argillaceous.
3570-3580	Dolomite, tan to cream, platy, aa, trace greenish grey shale.
3580-3590	Dolomite, aa with trace quartz crystals.
3590-3600	Dolomite, tan-medium brown, dense, fine crystalline with quartz silt and minor quartz crystals, very hard, trace pin-point porosity.
3600-3610	Dolomite, tan-cream, fine crystalline in part dense, with poor to fair intercrystalline and pin-point vuggy porosity, no cut. Minor medium grey, dense, shale.
3610-3620	Dolomite, tan-medium brown, very fine-fine crystalline, in part with clear medium crystalline patches, sucrosic. Trace of poor pin-point porosity with fair to good intercrystalline porosity in sucrosic streaks. No cut.
3620-3630	Dolomite, tan-medium brown, very fine crystalline,dense, silic.
3630-3640	Dolomite, tan-cream, very fine-fine crystalline, dense, with trace of pin-point porosity.
3640-3650	Dolomite, aa with trace black bituminous residue.
3650-3660	Dolomite, tan-cream, very fine-fine crystalline, in part slightly sucrosic, dense, slightly silty with trace of poor vuggy "blind" porosity.
3660-3670	Dolomite, aa, grading to medium brown. Trace scattered pin-point vuggy porosity, with very hard silic streaks.

3670-3680	Dolomite, cream, dense, very fine crystalline, with minor stylolites, pyrite crystals, calcareous, very brittle.
3680-3690	Dolomite, tan-cream aa with trace of white milky quartz in fractures, minor pyrite.
3690-3700	Dolomite, tan-cream, very fine crystalline-fine crystalline, dense in part silic, with streaks fine crystalline, slightly sucrosic dolomite, with trace intercrystalline porosity. Minor discrete clusters of clear quartz crystals - fracture infilling?
3700-3710	Dolomite, aa.
3710-3720	Dolomite, tan-cream, very fine-fine crystalline, very hard dense, silic with trace of milky quartz and pyrite.
3720-3730	Dolomite, aa with streaks of fine crystalline, slightly sucrosic, dolomite with scattered poor to fair vuggy and minor intercrystalline porosity.
3730-3740	Dolomite, tan-cream, very fine-fine crystalline with streaks of fine-medium crystalline, sucrosic dolomite with fair to good intercrystalline porosity. No cut.
3740-3750	Dolomite, tan, very fine crystalline, dense, very hard, in part silic, trace fractures, trace pin-point "blind" vugs.
3750-3760	Dolomite, tan aa, with fair-good streaks of vuggy and intercrystalline porosity. Much of porosity appears to be blind.
3760-3770	Dolomite, tan, very fine-fine crystalline, dense, in part siliceous, hard.

3770-3780	Dolomite, tan-cream, dense, very fine-fine crystalline, pyritic, with trace intercrystalline porosity.
3780-3790	Dolomite, tan-cream, very fine crystalline with streaks of fine crystalline, dolomitic scattered blind, pin-point vugs. Very little effective porosity.
3790-3800	Dolomite, tan-cream, fine crystalline, dense, with streaks of poor to fair intercrystalline porosity and scattered "blind" vugs.
3800-3810	Dolomite, tan-cream, very fine-fine crystalline, dense, in part silic.
3810-3820	Dolomite, aa, in part silic with trace pyrite.
3820-3830	Dolomite, tan, fine crystalline, generally dense with trace intercrystalline porosity. Trace light brown dense chert. Trace of open fractures and fractures with white coarse crystalline dolomite infill.
3830-3840	Dolomite, tan-light grey brown, very fine-fine crystalline, dense with streaks of fine-medium crystalline rhombic dolomite with fair to good intercrystalline and vuggy porosity, in part siliceous. Minor discrete clusters of white coarse dolomite crystals. Trace of one silic tabulate coral.
3840-3850	Dolomite, light brown-brownish grey, dense, fine crystalline, platy, slightly argillaceous with streaks of fine-medium crystalline, tan-white rhombic dolomite with good intercrystalline porosity. No stain. Trace of pyrite. Trace of white dense, quartz in fractures. Trace of white chert.

3850-3860 Dolomite, medium grey brown, dense, very fine-fine crystalline, platy, slightly argillaceous with streaks of tan, fine-medium crystalline rhombic dolomite with fair to good intercrystalline porosity. No staining. Traces of silicified and chertified coral fragments.

3860-3870 Dolomite, light grey to grey brown, silic, dense, very fine crystalline with streaks of fine crystalline, tan thombic dolomite with poor to fair intercrystalline porosity. No stain.

3870-3880 Dolomite, light brown-brownish grey, very fine crystalline-fine crystalline, dense with fine crystalline rhombic streaks, in part with floating fine quartz grains. Minor interbedded white-light grey, fine crystalline, dolomitic with floating quartz grains and pyrite and trace of green shale inclusions. Trace white, dense chert.

3880-3890 Dolomite, tan-light grey, dense, platy, very fine crystalline, with trace pyrite. Sandstone, white-light grey, fine-medium grained, subangular to subrounded, dolomitic, quartzitic grading to medium grey, shaly. Minor red dolomitic siltstone.

3890-3900 Dolomite, tan to light grey, platy, very fine crystalline, slightly argillaceous in part, with fragments of dense, cream to white chert. Minor sandstone aa. Trace of green shale.

3900-3910 Dolomite, light-medium grey, fine-very fine crystalline, argillaceous in part siliceous with trace greenish colour. Minor interbeds of red-maroon dolomitic siltstone. Dolomite, tan-medium brown, fine crystalline, dense.

3910-3920 Dolomite, light-medium grey, aa grading to shale, in part pyritic silic, very hard. Abundant red silty, dolomitic shale and shaly siltstone. Streaks of tan fine crystalline, dense, dolomite.

3920-3930 Dolomite, light-medium grey, shaly, argillaceous grading to dolomitic shale with interbedded red dolomitic siltstone, aa. Dolomite, tan-cream, fine crystalline, dense, in part silic pyritic.

3930-3940 Dolomite, white to cream, fine-coarse crystalline, dense, welded, rhombic (dolomitized corals ?), silic. Dolomite, light grey, fine-medium crystalline, rhombic, argillaceous with intercalations of medium grey, slightly dolomitic shale, siliceous. Minor red dolomitic, slightly silic shale.

3940-3950 Dolomite, cream, fine-medium crystalline, glassy, dense, with minor intercalations of grey argillaceous dolomite and dolomitic shale. Minor red sandy dolomitic shale.

3950-3960 Dolomite, light grey, dense, very fine crystalline, siliceous. Dolomite, tan, very fine-fine crystalline, dense, in part fine-medium crystalline with redish tinge, minor pyrite.

3960-3970 Dolomite, tan-white, fine-medium crystalline, glassy with abundant milky chert. Minor medium grey, dolomitic siliceous shale.

3970-3980	Dolomite, white-fine-coarse crystalline, coralline fragments in part silicified, in part chalky, in a light grey dense, welded, medium-coarse crystalline, slightly argillaceous matrix. Abundant milky, white chert fragments and pyrite clusters. Poor vuggy intercoralline porosity. Trace medium grey shale.
3980-3990	Shale, light grey, very soft, pyritic. Dolomite, tan-cream, fine-medium crystalline, rhombic, dense with abundant tabulate coral fragments. Dolomite, light grey-brown, very fine crystalline, argillaceous, pyritic, dense, with white coral fragments. Minor milky white chert.
3990-4000	Dolomite, white-tan, medium-coarse crystalline, dolomitized corals ?, in light grey dolomite ground mass. Coral fragments appear to be chertified in part. Minor pyrite and porcellanous shale aa. Trace intercrystalline porosity.
4000-4010	Dolomite, white-light tan, fine-medium crystalline, resinous, with minor light grey, dense, cloudy chert.
4010-4020	Dolomite, white-light grey, very fine crystalline, dense, slightly siliceous, with trace light grey, aphanitic chert, trace of pyrite. Trace of maroon, fine crystalline dolomite.
4020-4030	Dolomite, aa. Dolomite, medium grey, fine crystalline, slightly argillaceous, pyritic with minor dense, light grey chert.

4030-4040	Dolomite, cream-white, fine crystalline, dense, siliceous with minor pyrite.
4040-4050	Dolomite, white-tan, fine crystalline, dense in part light grey, very fine crystalline, dense, silic, with interbeds of red, fine crystalline, dense, slightly argillaceous dolomite. Trace stranatolites.
4050-4060	Dolomite, white-light grey, fine-medium crystalline rhombic, in part siliceous. Minor brown-red, very fine-fine crystalline, very argillaceous, shaly dolomite, minor pyrite.
4060-4070	Dolomite, white-tan with tinges of red, fine-medium to coarse crystalline, with patches of light grey, cloudy chert. Tight.
4070-4080	Dolomite, white tan, very fine crystalline, dense, with trace pyrite.
4080-4090	Dolomite, tan-cream, very fine-fine crystalline, in part medium crystalline, dense with quartz lined fractures, in part grading to light grey, platy, siliceous.
4090-4100	Dolomite, cream to tan, very fine-fine crystalline, dense with quartz lined fractures aa., with light brown chert. Dolomite, light-medium grey, dense, argillaceous. Trace buff and green shale (Cavings ?).
4100-4110	Dolomite, tan-cream, medium crystalline, rhombic with trace intercrystalline porosity, patches of coarse crystalline, clear quartz crystals.

4110-4120	Dolomite, tan-cream, very fine-fine crystalline, with trace intercrystalline porosity. Interbedded light grey, dense, glassy dolomite, in part siliceous. Trace green shale.
4120-4130	Dolomite, tan-cream, fine-medium crystalline, cherty in part with reddish tinge. Some grains exhibit dolomite rhombs in a chalky ground mass - suggests replacement of reefal material.
4130-4140	Dolomite, tan-cream, fine crystalline, in part coralline, with siliceous cement. Abundant light tan, dense, chert. Trace intercrystalline porosity. Trace light green shale.
4140-4150	Dolomite, white-tan-light grey, fine-medium crystalline, chertified coral fragments, in part rhombic with poor intercrystalline porosity. Abundant tan, dense chert, trace pyrite.
4150-4160	Chert, white, dense, milky with conchoidal fracture. Dolomite, light grey-tan, fine crystalline, glassy, in part medium crystalline rhombic with trace intercrystalline porosity.
4160-4170	Dolomite, cream-buff chalky in part, buff fine crystalline, sucrosic with poor to fair intercrystalline porosity, grading to tan, glassy, fine-medium crystalline, rhombic. Dolomite, medium grey, fine crystalline, argillaceous, with chert and clear quartz crystals.

4170-4180	Dolomite, tan-medium grey, fine-medium crystalline, rhombic, dense, with light tan, chert fragments, open fractures, trace pyrite, trace crinoids. Tight, no visible porosity.
4180-4190	Dolomite, tan, in part with reddish tinge, medium-coarse crystalline, cherty, with trace green shale inclusion grading to medium grey, argillaceous, tight. * Trace of bright green amorphous mineral in added grain.
4190-4200	Dolomite, cream, very fine-fine crystalline, dense, with tan-cream chert, trace of quartz crystals. Interbedded medium grey, fine-medium crystalline argillaceous dolomite.
4200-4210	Dolomite, tan, very fine crystalline, dense, siliceous.
4210-4220	Dolomite, tan,medium crystalline, interlocking, rhombic, tight, with minor, tan, dense chert. Minor grey green shale intercalations. Intermittent reddish tinge to dolomite.
4220-4230	Dolomite, tan-cream, in part red, fine-medium crystalline, with minor chert, tight. Minor light grey, porcellaneous shale.
4230-4240	Dolomite, aa with trace green shale.
4240-4250	Dolomite,tan, very fine crystalline, dense, in part with reddish tinge with white-buff chert fragments.

4250-4260 Dolomite, tan, fine crystalline, in part medium crystalline, rhombic, interlocking, dense, in part with reddish tinge. Minor chert.

4260-4270 Dolomite, light grey brown-medium brown, very fine crystalline, platy, slightly argillaceous, with minor silic coral (?) fragments. Minor light green shale.

4270-4280 Dolomite, cream-tan, fine-medium crystalline interlocking, in part with white chalky ground mass, with white, milky chert in fractures and as discrete fragments in part light-medium grey, argillaceous, pyritic, with trace medium green shale.

4280-4290 Dolomite, buff-tan, very fine crystalline, platy, in part light grey with trace apple green shale.

4290-4300 Dolomite, light grey, very fine crystalline, platy with trace pyrite. Dolomite, buff-tan, very fine-fine crystalline in part with light green shale inclusions, trace of light grey, dense chert.

4300-4310 Dolomite, white, fine crystalline (organic ?) and tan, fine-medium crystalline, with minor light grey chert. Minor medium brown to reddish brown, platy, argillaceous dolomite.

4310-4320 Dolomite, light grey, very fine crystalline, dense, in part siliceous, grading to white, very fine-fine crystalline, chalky, trace light grey chert.

4320-4330	Dolomite, tan, very fine crystalline, dense. Dolomite, white fine crystalline, in part siliceous, dense. Minor light grey chert.
4330-4340	Dolomite, buff-light grey, fine crystalline, dnese in part light grey, argillaceous, platy, very fine crystalline with minor light grey, dense chert.
4340-4350	Dolomite, light grey-buff miroc-very fine crystalline, platy, dense, in part slightly argillaceous.
4350-4360	Dolomite, light brownish grey, micro-fine crystalline, very fine crystalline, slightly argillaceous dolomite, dense with trace pyrite. Trace light grey porcellaneous shale.
4360-4370	Dolomite, aa with white milky chert. Minor light grey, porcellaneous shale aa.
4370-4380	Dolomite, light brownish grey to light grey, micro-very fine crystalline, dense, platy, in part slightly argillaceous.
4380-4390	Dolomite, aa with trace light greenish grey porcellaneous shale.
4390-4400	Dolomite, light grey brown, light grey, micro-very fine crystalline, dense, pyritic, in part with reddish hue, argillaceous in part, cream chalky, fine crystalline with trace chalky porosity.

4400-4410	Dolomite, cream-tan, fine crystalline, rhombic, tight. Dolomite, light grey, microcrystalline, siliceous, slightly argillaceous, very hard with trace pyrite.
4410-4420	Dolomite, light grey, platy, micro-very fine crystalline, with dark grey, argillaceous patches, with pyrite, tight.
4420-4430	Dolomite, tan-light grey, micro-very fine crystalline, platy, slightly argillaceous, dense, in part maroon.
4430-4440	Dolomite, aa
4440-4450	Dolomite, tan-cream, micro-very fine crystalline, dense. Minor light grey, porcellaneous shale and greenish grey shale. Minor tan, dense chert.
4450-4460	Dolomite, aa in part with maroon tinge. Interbedded light-medium grey, very fine crystalline, argillaceous dolomite, in part siliceous.
4460-4470	Chert, white milky, very dense. Dolomite, tan to buff, very fine-fine crystalline, dense. Minor maroon and medium grey fine crystalline, argillaceous dolomite with intercalations of bright green shale.
4470-4480	Dolomite, cream, very fine crystalline, dense with streaks of fine crystalline rhombic, siliceous, dense dolomite. Minor white chert. Trace green shale and pyrite. Trace of fine to medium floating sand grains in cream dolomites.
4480-4490	Dolomite, tan-light grey, very fine-fine crystalline, dense with white milky chert fragments.

4490-4500	Dolomite, tan, cherty aa, in part medium grey, dense, very fine-fine crystalline, argillaceous, pyritic.
4500-4510	Dolomite, tan, very fine crystalline, microcrystalline, platy.
4510-4520	Dolomite, medium brownish grey, slightly argillaceous. Dolomite, tan, fine crystalline, rhombic with abundant white milky chert.
4520-4530	Dolomite, tan, fine crystalline, rhombic, interlocking, dense with true white chert.
4530-4540	Dolomite, cream-light brownish grey, very fine-fine crystalline, somewhat platy with minor cherty streaks.
4540-4550	Dolomite, aa.
4550-4560	Dolomite, tan-medium brownish grey, micro-very fine crystalline, platy, argillaceous in part.
4560-4570	Dolomite, tan-cream, micro-very fine crystalline, dense, platy, in part light grey, slightly argillaceous.
4570-4580	Dolomite, aa.
4580-4590	Dolomite, aa with minor white chert, trace light grained grey shale.

4590-4600	Dolomite, tan-light grey, micro-very fine crystalline, slightly argillaceous, dense.
4600-4610	Dolomite, aa.
4610-4620	Dolomite, tan, very fine crystalline, argillaceous, tight.
4620-4630	Dolomite, cream, fine crystalline, rhombic, interlocking, dense.
4630-4640	Dolomite, cream, fine-medium crystalline, rhombic with trace intercrystalline porosity. Dolomite, tan-light grey, very fine-fine crystalline, dense, in part with red tinge, trace green shale inclusions.
4640-4650	Dolomite, cream, very fine crystalline with streaks of maroon dolomite. Minor, soft, bright green shale.
4650-4660	Dolomite, cream to tan, fine-medium crystalline, welded, dense with trace red tinge, trace green waxy shale inclusions, in part slightly argillaceous.
4660-4670	Dolomite, light grey, microcrystalline, platy, argillaceous, with dark grey fine mottling. Minor dark grey shale interbeds.
4670-4680	Dolomite, light-medium brownish grey, very fine crystalline, argillaceous, platy, in part with medium grey mottling.

4680-4690	Dolomite, cream to tan, very fine-fine crystalline, dense, in part light grey, very fine crystalline, slightly argillaceous. Minor medium grey, very argillaceous dolomite with dark green inclusions.
4690-4700	Dolomite, light to medium grey, argillaceous, shaly, very fine crystalline. Interbedded medium to dark brown, very fine crystalline, platy, argillaceous dolomite. Minor dark brown dolomitic shale with black bituminous specks. Trace of pyrite.
4700-4710	Dolomite, cream, platy, very fine crystalline. Interbedded light greenish grey shale, in part dolomitic, pyritic. Minor dark brown, very fine-fine crystalline dolomite.
4710-4720	Dolomite, light grey-tan, very fine-fine crystalline, dense, slightly argillaceous in part, slightly siliceous. Trace green shale.
4720-4730	Dolomite, tan-light grey, very fine crystalline, slightly argillaceous, platy with trace maroon, siliceous dolomite.
4730-4740	Dolomite, cream-light grey, dense, siliceous in part, micro-very fine crystalline.
4740-4750	Dolomite, cream aa, very hard siliceous.
4750-4760	Dolomite, cream-light grey, in part tan, very fine-fine crystalline, dense with trace pyrite, siliceous with quartz crystals lining fractures.

4760-4770	Dolomite, aa grading to medium grey, trace of chert.
4770-4780	Dolomite, light-medium grey, very fine crystalline, argillaceous.
4780-4790	Dolomite, aa, trip sample, very poor.
4790-4800	Dolomite, medium brown to brownish grey, very fine crystalline, dense, argillaceous, platy.
4800-4810	Dolomite, light brownish grey, very fine crystalline, dense, slightly argillaceous.
4810-4820	Dolomite, cream-light grey, very fine crystalline, in part slightly argillaceous.
4820-4830	Dolomite, aa.
4830-4840	Dolomite, aa with minor dark grey shale streaks.
4840-4850	Dolomite, medium grey, fine crystalline, platy, argillaceous.
4850-4860	Dolomite, light-medium grey, platy, in part argillaceous, very fine-fine crystalline.
4860-4863	(Bottom Sample). Dolomite, aa.

SECTION III - ENGINEERING SUMMARY

(a) SUMMARY OF DRILL STEM TESTS:

No.	Interval	Formation	Valve Open	Blow	Recovery
1	1560-1925	Kee Scarp	60	GIP	Mud
2	2748-2825	Bear Rock	60	Air	30' Mud + 700' slightly salty water
3	3559-3876	Ronning	60	Air	450' mud + 2980' salt water

	ISI	FSI	ISIP	FSIP	IFP	FFP	IHP	FHP
1	60	60	297	89	57	59	747	747
2	28	58	1248	1228	120	426	1367	1367
3	60	61	1599	1598	1228	1593	1767	1763

- testing by V.H. Hunter & Assoc. Personnel

(b) CASING RECORD:

Conductor: Ran 3 joints 13 3/8" 94.4# J-55 casing and cemented with 67 sacks, Portland cement + 8% Calseal with last 30 sacks. Plug down at 6:00 PM, July 12, 1970. Set @ 90'

Surface: Ran 23 joints 8 5/8" 24# J-55 casing and cemented with 460 sacks Portland cement + 3% CaCl. Plug down at 6:30 PM, July 16, 1970. Set @ 860'.

District: Canada, N.W.T. Field: Carcajou Ridge

Lease: Maida Creek Well No: F-57

Drill Pipe: 860'

Size Hole: at TD 12¼"

Datum Point: Rotary Bushing

Datum Point Elevation: 12.25

Casing: Size - 8 5/8"
Wt. - 24#
Grade - J-55

Coupling L/S T&C - ST&C THD. 8nd
Make - Mann

On Hand - No. Jts. - 33
Footage - 1232.58

Run in Well - No. Jts. - 23
Footage - 845.19

Remainder - No. Jts. - 10
Footage - 387.39

Total Casing in Well: 845.19

Casing Shoe: Make & Type - Wotco Guide
Length - 1.00

Float Collars: No., Make & Type Wotco
Length - 1.53
Depth - 832.08

Total Casing, Shoe and Float Collars: 847.72

Top of Casing (Above) or (Below) Datum Point: 12.25

Casing Point: 859.97

Cementing Record: Work Done By - B.J.
Time Running Casing - 2 hours
Cement-Brand - Iuland
Type - Construction
% Gels -
No. Sacks - 460
Mixed Wt./Gal - 14.5±
No. Sacks Treated - 460
Chemical Used - $CaCl_2$
Amt. Chemical - 3%

Cementing Time: Mixing - 1¼ hours
Displacing - 20 Min.
Total - 1 hour, 35 mins.
Plug Down - 6:30 PM

Pump Pressures: Circulating - 0
To Place Cement - 200
After Plug Hit - 1,000

Top of Cement in Annulus: Calculated - Surface
Measured - Surface

WESTERN ROCE BIT COMPANY LIMITED — Form S-77

BIT RECORD

PAGE OF

Province	Field	Canada	LSD	Section	Township	Range	Operator	Elev
N.W.T.	Maida Creek		F-57			W	McDermott Can.	

Location: 65o36'17"N,128o10'36"

Contractor: S&T Drilling Co. Ltd.

Rig No: IE

Rig Make & Type: Nat 50A

Tool Pusher: L. Webber, V. Galenza

Mud Type: From 0 To 900-Gel; From 900 To 4863 Polymer

Special Additives: C.M.C.

Drill Collars	No	O.D	W.T.D
1	18	6 1/4	2 7/8
2			

Tool Joints	Make	Size	Type	O.D.
1	Hughes	4	1F	5"
2				

Date	Month/Day/Year	Time
Spudded	July /10/70	5:00 XXX/P.M.
Cond.	July /12/70	6:00 XXX/P.M.
Cond.	July /13/70	9:15 A.M. XXX
Set Surf.	July /16/70	6:30 XXX/P.M.
Under Surf.	July 18/70	7:45 AM
Completion	Aug. /9/70	1:15 A.M. XXX
Release	Aug. /12/70	12:00 XXX/P.M.

Pump No. 1	Type
Nat	K380
Pump No. 2	Type
Nat	K380

Approved: S&T Drilling

Foreman: L. Webber, V. Galenza

Approved: V.H. Hunter & Assoc.

Fieldman: J.R. Wyman

Lost Circulation Depths | Key Seat Depths | Other Remarks - Reaming, Re-Drilling, Etc.

No.	Size	Make	Type	Jet Size	Serial	Depth Out	Feet	Hours	Accum. Hours	Dull Cond. T	B	G	No. of DC	Wt 1000 Lbs.	R.P.M.	Vert. Dev.	Pump Pres.	No. 1 Spm	No. 1 Liner	No. 2 Spm	No. 2 Liner	Mud Wt	Vis	pH	Wl	Date
1A	12 1/4	H.W.	OSC3	2-16 2-18	RETIP	90'	90'	10 1/4	10 1/4	3	4	I		100	100	3/4°	250									
2A	12 1/2	Smith	Hole Opener		8563	90	90	11 1/2	21 3/4	GOOD																
3A	12 1/4	H.W	OSCIG	2-16 2-18	T.L. 130	499	409	19 1/4	41	3	2	I	12	8-12	60-90	1°	550									
4A	12 1/4	H.W	CSC-3	Con	12102	586	87	5 3/4	46 3/4	3	2	I	12	8-17	60-90	1°	300									
5A	7/8	Smith	DTJ	2-13 2-13	DD138	839	253	16 1/4	63	3	2	I	12	3-87	90-150	7/8°	100									
6A	12 1/4	Smith	Hole Opener		8504	839	253	10 1/2	73 1/2	GOOD			12	16	70-90	7/8°	550									
RR 4A	12 1/4	H.W	CSC-3	Con	12102	860	21	3/4	74 1/4	3	2	I	12	16	70-90	7/8°	550									
1	7 7/8	Smith	DTJ	2-13 2-13	DD138	935	75	3 3/4	3 3/4	6	8	0	18	16	60	1°	700									
2	7 7/8	H.W	GDV	2-10 2-13	18205	1382	447	15 1/2	19 1/4	3	5	I	18	14	60	7/8°	1000									
3	7 7/8	Sec	M4NG	3-15	91154	1523	141	4	23 1/4	1	1	I	Pulled to Core				900									
1C	6 3/16	Chris			65740	1577	54	15	38 1/4	Fair			15	15	100		800									
RR#4	7 7/8	Sec	M4NG	3-10	91154	1577	Reamed 54	4 3/4	43	3	2	I	15	8	100	1°	1000									
2C	6 3/16	Chris			65740	1631	54	17 1/4	60 1/4	Fair			15	15	100		800									
4	7 7/8	Sec	M4NG	3-11	911423	1774	197	19	79 1/4	3	3	I	18	25	75	1°	1075									
5	7 7/8	Smith	4JS	3-11	CN7865	1925	151	11 3/4	91	1	1	I	Pulled to Test													
5	7 7/8	Smith	4JS	3-11	CN7865	2724	799	51 1/4	142 1/4	1	6	I	18	35	45	1/4°	1175									
6	7 7/8	Smith	4JS	3-11	EA189	2825	101	8	150 1/4	1	1	I	Pulled to Test													
RR#5	7 7/8	Smith	4JS	3-11	EA189	3406	581	59 1/4	209 3/4	6	2	I	18	35	45	3/4°	1300									
7	7/8	Reed	SCM5	2-12 2-12	863007	3786	380	46 1/4	256	6	2	I	18	35	45	1 1/4°	1050									

LOCATION | CONTRACTOR | RIG No. | TOOL PUSHER | PAGE OF

No.	Size	Make	Type	Jet Size	Serial	Depth Out	Feet	Hours	Accum. Hours	Dull Grad. T	B	G	No. of DC	Wt 1000 Lbs	R.P.M.	Vert Dev	Pump Pres	No. 1 Size	Liner	No. 2 Size	Liner	Mud Wt	Vis	pH	WL	Date
8	7 7/8	H-W	X-55R	2-11 1-12	14533	4235	449	52 3/4	300 3/4	6	2	I	18	35	45	1 1/2°	1075									
9	7 7/8	H-W	X55R	2-11 1-12	9093	4456	215	34 3/4	343 1/2	3	2	I	-	-	-	1 3/4	91125									
10	7 7/8	Smith	4JS	2-11 1-12	CN5998	4681	231	34 1/2	378	7	2	I	-	-	-	2°	1100									
11	7 7/8	Reed	SCM5	2-11 1-12	863070	4792	111	20	398	1	1	I	-	-	-	1 3/4	1125									
12	7 7/8	H-W	OWC	2-11 1-12	92406	4863	71	17 1/4	415 1/4	8	3	I	-	-	-	1 1/4°										

(d) MUD REPORT:

Date	Depth	Wt. #/Gal	Vis. Sec.	WL 15 Min. CC	Filter Cake 32Nds	PH	Remarks & Additives
1970	Mud Additives & Properties are every 24 hours 12 PM to 12 PM						
July 11	45						3000 # Gel Caustic 100#
July 12	90						1000# Gel
July 13	315		39				4500# Gel,50# Caustic
July 14	736	9.1	38				3000# Gel, 100# Bicarbonate of Soda
July 15	717	9.6	60				2500# Gel, 25# Lime
July 16	860	9.5	88				1000# Gel
July 17	860						Nil - W.O.C.
July 18	1100	8.6	35			8.5	150# Caustic, 300# Plaster, 60# Dowcide B, 2000# Gel, 400# Kelzan, 300# Bicarbonate of Soda
July 19	1523	9.0	36	16	2	9.5	100# Kelzan, 100# Plaster, 400# CMC
July 20	1577	9.0	49	5.8	2	9.0	150# CMC
July 21	1628	9.0	57	5.9	2	9.0	150# CMC, 500# Gel, 100# Kelzan, 50# Plaster, 10# Dowcide B, 50# Caustic
July 22	1738	9.0	43	6.8	2	9.5	100# CMC, 50# Plaster
July 23	1925	9.2	59	5.8	2	9.0	100# Kelzan, 100# Plaster, 100# CMC, 100# Dowcide B, 500# Gel, 25# Caustic
July 24	2183	9.1	45	6.9	2	9.0	100# Kelzan, 50# CMC, 50# Caustic
July 25	2580	9.1	46	6.2	2	9.0	50# Caustic, 500# Gel, 100# Plaster, 150# Kelzan, 100# Dowcide B.
July 26	2808	9.2	41	5.6	2	9.0	100# Kelzan, 50# Caustic, 50# Dowcide B, 50# CMC
July 27	2937	9.3	42	5.8	2	9.5	20# Dowcide B, 25# Caustic, 250# Plaster
July 28	3156	9.2	45	7.8	2	9.5	100# Caustic, 1500# Gel, 200# Kelzan, 100# CMC, 30# Dowcide B.

Date	Depth	Wt. #/Gal	Vis. Sec.	WL 15 Min. CC	Filter Cake 32Nds.	PH	Remarks & Additives
July 29	3367	9.3	41	7.6	2	9.0	2000# Gel, 150# CMC, 100# Caustic, 100# Kelzan
July 30	3515	9.3	39	9.0	2	9.5	1000# Gel, 100# Caustic, 100# Kelzan, 50# CMC, 20# Dowcide B.
July 31	3720	9.2	40	6.4	2	9.0	1800# Gel, 250# Kelzan, 100# Caustic, 100# CMC, 20# Dowcide B.
Aug. 1	3896	9.3	45	7.0	2	10.0	1500# Gel, 200# Kelzan, 100# Caustic, 10# Dowcide B, 50# CMC
Aug. 2	4080	9.3	40	7.4	2	9.5	100# CMC, 1000# Gel, 50# Caustic, 100# Kelzan, 10# Dowcide B.
Aug. 3	4245	9.3	42	7.6	2	9.0	1000# Gel, 150# Kelzan, 50# Caustic, 50# CMC, 10# Dowcide B.
Aug. 4	4390	9.3	39	7.6	2	9.5	1000# Gel, 100# Kelzan, 50# Caustic 10# Dowcide B.
Aug. 5	4516	9.3	40	7.2	2	9.5	700# Gel, 150# Kelzan, 50# CMC, 50# Caustic, 10# Dowcide B.
Aug. 6	4666	9.3	42	7.2	2	10	500# Gel, 100# Kelzan, 50# CMC, 50# Caustic, 10# Dowcide B.
Aug. 7	4779	9.3	42	7.6	2	9.5	700# Gel, 50# Caustic, 50# CMC, 150# Kelzan, 10# Dowcide B.
Aug. 8	4859	9.4	42	7.4	2	9.0	500# Gel, 100# Kelzan, 50# CMC, 50# Caustic, 10# Dowcide B.
Aug. 9	4863	9.4	50	6.2	2	9.5	Nil
Aug. 10	4863						10# Dowcide B

NOTE: Above properties and Additives compiled from McDermott's Daily Drilling Reports

(e) SUMMARY OF DEVIATION SURVEYS:

Depth (Ft.)		Degrees Off
70		¼
90		¼
130		¼
190		¼
247		¼
305		½
390		¼
485		1
515		1
546		3/4
604		1
634		7/8
665		1 1/8
757		1
788		7/8
820		3/4
840		7/8
639	Reaming 7 7/8" to 12¼"	7/8
700		7/8
762		7/8
839		7/8
860		7/8
904		1
935		1
1043		1 1/8
1138		1
1232		7/8
1327		7/8
1453		3/4

(Summary of Deviation Surveys Cont'd)

Depth (Ft.)	Degrees Off
1639	1
1754	1
1888	3/4
2015	3/4
2160	1
2285	½
2453	½
2595	
2860	½
2956	3/4
3030	3/4
3145	7/8
325[illegible]	3/4
3365	3/4
3493	1
3660	1¼
3745	1 1/8
3820	1½
3970	1½
4235	1½
4371	1 3/4
4528	2
4654	2
4792	1 3/4
4863	1 3/4

(f) SUMMARY OF ABANDONMENT PLUGS:

Plug No.	Depth	Remarks
1	3900-4000'	Cement with 36 sacks Portland cement + 3% CaCl. Plug down 7:30 PM, August 11, 1970. Ran in and felt plug at 3885' at 1:30 AM, August 12.
2	3400-3500'	Cement with 38 sacks Portland cement + 3% CaCl. Plug down at 2:30 AM, August 12, 1970. Ran in and Felt plug at 3390, at 8 AM, August 12, 1970.
3	2600-2700	Cement with 40 sacks Portland cement + 3% CaCl. Plug down at 9:15 AM, August 12, 1970. Ran in and Felt plug at 2580' at 3:15 PM, August 12, 1970.
4	800-900'	Cement with 50 sacks Portland cement + 3% CaCl. Plug down at 3:45 PM, August 12, 1970. Ran in and felt plug at 790' at 10 PM, August 12, 1970.
		Cemented casing at surface with 10 sacks of cement. Welded plate on top, and riser with identification marker installed.

(g) SUMMARY OF LOST CIRCULATION ZONES:

None.

(h) REPORT OF BLOWOUTS:

None.

SECTION IV - LOGS

Date	Interval	Type of Log
Aug. 9/70	860-4861	Schlumberger Induction Electrical
Aug. 9/70	860-4860	Schlumberger Borehole Compensated Sonic with Gamma Ray
Aug. 9/70	860-4862	Schlumberger Microlog Caliper
Aug. 9/70	860-4861	Schlumberger Sidewall Neutron Porosity
Aug. 9/70	860-4861	Schlumberger Formation Density
Aug. 9/70 to Aug. 10/70	860-4862	Schlumberger Continuous Dipmeter
Aug. 10/70	860-4863	Ran Velocity Survey with Schlumberger and Electronic Logging.

SECTION V - ANALYSIS

(a) CORE ANALYSIS:

See Attached

(b) WATER ANALYSIS:

None Run

(c) GAS ANALYSIS:

None Run

(d) OIL ANALYSIS:

None Run

SECTION VI - COMPLETION SUMMARY

D&A No tubing operations, perforating or treatment carried out.

9FD-A

CORE LABORATORIES - CANADA, LTD.
Petroleum Reservoir Engineering
CALGARY, ALBERTA

Company J. Ray McDermott Canada Ltd. Formation Kee Scarp Page 1 of 3

Well McD Can GCO Maida Ck F-57 Date Report File

Field, Province N.W.T. D. Fluid Analysts

Location 65°36'17", 128°10'36" Analysis Remarks

CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

Sample Number	Depth Feet	Ft. Rep.	Permeability Millidarcys K Max	K 90°	KV	Perm. Ft.	Porosity Percent	Porosity Feet	Density Bulk	Grain	Residual Saturation Oil % Pore	Total Water % Pore	Visual Examination
			Core #1 1523-1577 Rec. 54'										
1	0.0 - 1.2	1.2	0.56	0.52	0.01	0.672	5.8	6.96	2.51	2.67	9.2	38.5	1, Limy, A
2	1.2 - 2.2	1.0	0.63	0.63	0.01	0.630	8.8	8.80	2.44	2.67	6.7	29.2	1, Limy, A
3	2.2 - 3.3	1.1	0.72	0.67	0.01	0.792	8.5	9.35	2.46	2.69	5.2	39.0	1, Limy, A
4	3.3 - 4.4	1.1	0.55	0.44	0.01	0.605	7.6	8.36	2.46	2.66	5.3	32.5	1, Limy, A
5	4.4 - 5.6	1.2	0.36	0.33	0.01	0.432	7.0	8.40	2.50	2.69	11.0	24.7	1, Limy, A
6	5.6 - 6.7	1.1	0.25	0.25	0.01	0.275	5.7	6.27	2.53	2.69	4.3	25.8	1, Limy, A
7	6.7 - 7.8	1.1	0.38	0.36	0.01	0.418	6.4	7.04	2.52	2.69	5.0	33.8	1, Limy, A
8	7.8 - 9.1	1.3	1.4	1.3	0.01	1.82	7.9	10.27	2.48	2.69	8.6	32.9	1, Limy, A
9	9.1 - 10.2	1.1	0.26	0.19	0.01	0.286	6.3	6.93	2.52	2.68	6.4	41.5	1, Limy, A
10	10.2 - 11.3	1.1	0.37	0.35	0.01	0.407	6.1	6.71	2.52	2.69	9.3	38.4	1, Limy, A
11	11.3 - 12.6	1.3	0.22	0.19	0.01	0.286	6.6	8.58	2.51	2.69	8.3	37.5	1, Limy, A
12	12.6 - 13.8	1.2	0.58	0.42	0.01	0.696	7.4	8.88	2.49	2.69	8.2	39.8	1, Limy, A
13	13.8 - 15.1	1.3	0.19	0.16	0.01	0.247	4.3	5.59	2.60	2.72	7.1	37.6	1, Limy, A
14	15.1 - 16.2	1.1	0.43	0.43	0.01	0.473	7.7	8.47	2.50	2.71	6.1	29.6	1, Limy, A
15	16.2 - 17.4	1.2	0.36	0.36	0.01	0.432	7.1	8.52	2.52	2.71	6.7	28.1	1, Limy, A
16	17.4 - 18.5	1.1	0.64	0.59	0.01	0.704	8.2	9.02	2.47	2.69	6.9	31.0	1, Limy, A
17	18.5 - 19.5	1.0	0.37	0.35	0.01	0.370	6.5	6.50	2.51	2.68	4.1	36.1	1, Limy, A
18	19.5 - 20.5	1.0	0.38	0.38	0.01	0.380	6.5	6.50	2.54	2.71	5.4	30.4	1, Limy, A

9FD-A

CORE LABORATORIES - CANADA, LTD.
Petroleum Reservoir Engineering
CALGARY, ALBERTA

Company J. Ray McDermott Canada Ltd. Formation Kee Scarp Page 2 of 3

Well McD Can GCO Maida Ck F-57 Date Report File

Field, Province N.W.T. D. Fluid Analysts

Location 65°36'17", 128°10'36" Analysis Remarks

CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

Sample Number	Depth Feet	Ft. Rep.	Permeability Millidarcys K Max	K 90°	KV	Perm. Ft.	Porosity Percent	Porosity Feet	Density Bulk	Density Grain	Residual Saturation Oil % Pore	Residual Saturation Total water % Pore	Visual Examination
-	20.5 - 38.0	17.5	------	------	------	------	------	------	------	------	------	------	Dense
19	38.0 - 39.3	1.3	0.18	0.13	0.01	0.234	4.7	6.11	2.56	2.68	9.5	36.5	1, Limy, A
20	39.3 - 40.3	1.0	0.25	0.16	0.01	0.250	5.4	5.40	2.55	2.70	11.1	22.2	1, Limy, A
-	40.3 - 41.3	1.0	------	------	------	------	------	------	------	------	------	------	Dense
21	41.3 - 42.3	1.0	0.14	0.10	0.01	0.140	4.3	4.30	2.60	2.71	6.6	36.1	1, Limy, A
22	42.3 - 43.5	1.2	0.15	0.11	0.01	0.180	6.8	8.16	2.50	2.69	15.6	30.2	1, Limy, A
23	43.5 - 44.6	1.1	0.90	0.57	0.01	0.990	7.2	7.92	2.52	2.71	16.4	50.8	1, Limy, A
24	44.6 - 45.8	1.2	0.28	0.22	0.01	0.336	5.8	6.96	2.52	2.67	25.5	29.8	1, Limy, A
25	45.8 - 47.0	1.2	0.20	0.20	0.01	0.240	6.5	7.80	2.46	2.64	45.0	30.0	1, Limy, A
26	47.0 - 48.1	1.1	0.01	0.01	0.01	0.01	5.2	5.72	2.54	2.54	51.2	27.9	1, Limy, A
27	48.1 - 49.3	1.2	0.27	0.25	0.01	0.324	8.3	9.96	2.45	2.67	28.2	12.8	1, Limy, A
28	49.3 - 50.5	1.2	0.03	0.03	0.01	0.036	5.1	6.12	2.53	2.67	28.6	15.9	1, Limy, A Stylolite
29	50.5 - 51.6	1.1	0.01	0.07	0.01	0.110	5.5	6.05	2.59	2.74	42.5	20.0	1, Limy, A
30	51.6 - 53.0	1.4	0.09	0.07	0.01	0.126	7.4	10.36	2.49	2.69	33.8	19.7	1, Limy, A, Stylolite
			Core #2 1577-1631										
31	0.0 - 1.1	1.1	0.28	0.23	0.01	0.308	7.7	8.47	2.45	2.66	30.1	12.0	1, Limy, A, Stylolite
32	1.1 - 2.2	1.1	0.71	0.68	0.09	0.781	8.3	9.13	2.43	2.65	24.6	12.3	1, Limy, A,
33	2.2 - 3.2	1.0	0.61	0.56	0.01	0.610	9.4	9.40	2.42	2.67	24.8	8.6	1, Limy, A

9FD-A

CORE LABORATORIES CANADA, LTD.

Petroleum Reservoir Engineering

CALGARY, ALBERTA

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Company J. Ray McDermott Canada Ltd. Formation Kee Scarp Page 3 of 3

Well McD Can GCO Maida Ck F-57 Date Report ..... File .....

Field, Province N.W.T. D. Fluid ..... Analysts .....

Location 65°36'17", 128°10'36" Analysis ..... Remarks .....

CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

Sample Number	Depth Feet	Ft. Rec.	Permeability Millidarcys K Max	K 90°	KV	Form. Ft.	Porosity Percent	Porosity Feet	Density Bulk	Grain	Residual Saturation Oil % Pore	Total water % Pore	Visual Examination
34	3.2 - 4.3	1.1	0.46	0.44	0.01	0.506	6.4	7.04	2.49	2.66	33.3	15.1	1, Limy, A
35	4.3 - 5.4	1.1	0.41	0.41	0.01	0.451	7.8	8.58	2.48	2.69	23.8	12.4	1, Limy, A
36	5.4 - 6.6	1.2	0.33	0.27	0.01	0.396	6.4	7.68	2.50	2.67	19.0	23.8	1, Limy, A
-	6.6 - 25.8	19.2	------	------	------	------	------	------	------	------	------	------	Dense
37	25.8 - 27.1	1.3	0.09	0.09	0.01	0.117	3.2	4.16	2.62	2.71	25.8	25.8	1, Limy A
-	27.1 - 53.0	25.9	------	------	------	------	------	------	------	------	------	------	Dense

BJ

TESTING REPORT

DRILL-STEM TEST DATA

Well Name J Ray McIlhenny Haida Creek #F57		Test No One
Well Number F-57		Zone Tested Kea Scarp
Company Transocean Oil Inc.		Interval 1560 - 1925
Comp. Rep.	Tester W. McKay	Date July 23, 1970

Type of Test Bottom Hole R F S Tool No

Preflow 5 mins ISI 6 mins Flow 60 mins FSI 60 mins

Specify Inside or Outside	INS REC No 5040	OUT REC No 5041	REC No
	3600 RANGE 12 HR CLOCK	3600 RANGE 12 HR CLOCK	RANGE HR CLOCK
DEPTH	1565	1580	
Initial Hydro Mud Press	737	747	
Initial Shut-in Press	299	297	
Initial Flow Press	39	57	
Final Flow Press	46	59	
Final Shut In Press	71	89	
Final Hydro Mud Press	737	747	

Mud Drop Nil Fluid Loss 6.8 Mud Weight 9.2
Viscosity 59 Temperature °F Net Pay Tested
Top Packer Depth 1560 Bottom Packer Depth Total Depth 1925
Drill Pipe Size 4" Wt 14.0 Drill Collar I D 2 7/8 Ft Run 439
Surface Choke Size Bottom Choke Size 1 Main Hole Size 7 7/8"
Anchor Size 4" Flex - 4' Rat Hole Size Feet of Rat Hole
Cushion Amount Type Rubber Size

Fluid Recovery Total Feet 30'
Recovered 30 Feet of Mud
Recovered Feet of
Recovered Feet of
Recovered Feet of
Recovered Feet of

Gas Recovery How Measured Riser size

mins Temp. °F Press Rdg psi Orifice Size = MCF/Day
mins Temp. °F Press Rdg psi Orifice Size = MCF/Day
mins Temp. °F Press Rdg psi Orifice Size = MCF/Day
mins Temp. °F Press Rdg psi Orifice Size = MCF/Day
mins Temp. °F Press Rdg psi Orifice Size = MCF/Day
mins Temp. °F Press Rdg psi Orifice Size = MCF/Day

Bleed Off Time for Drill Pipe

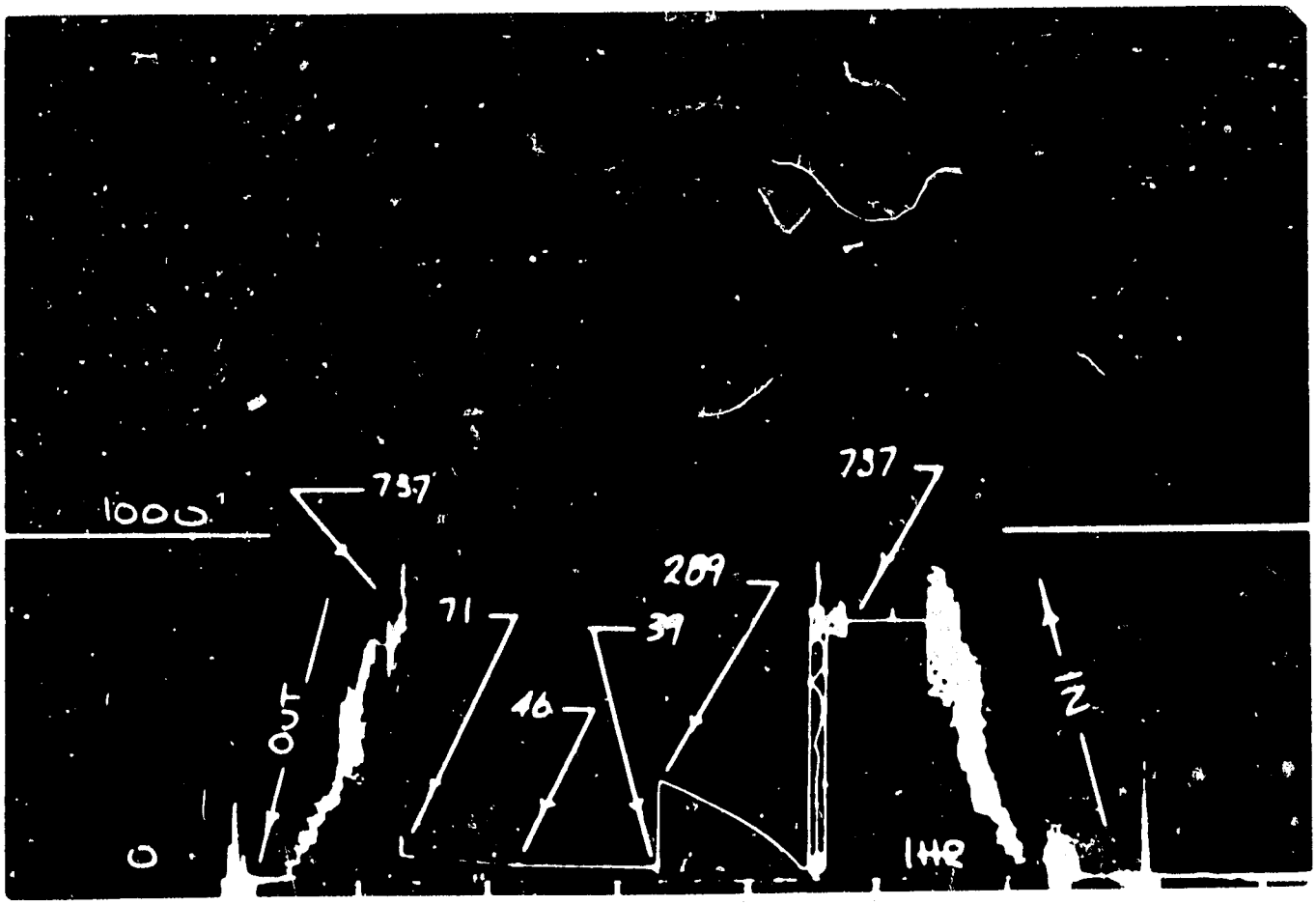
REMARKS Good initial puff, dead in 1 min. Reset, dead in 1 min I.S.I. 60 min. Open on flow good puff, dead in 1 min. dead through out rest of 60 min flow. F.S.I. 60 min.

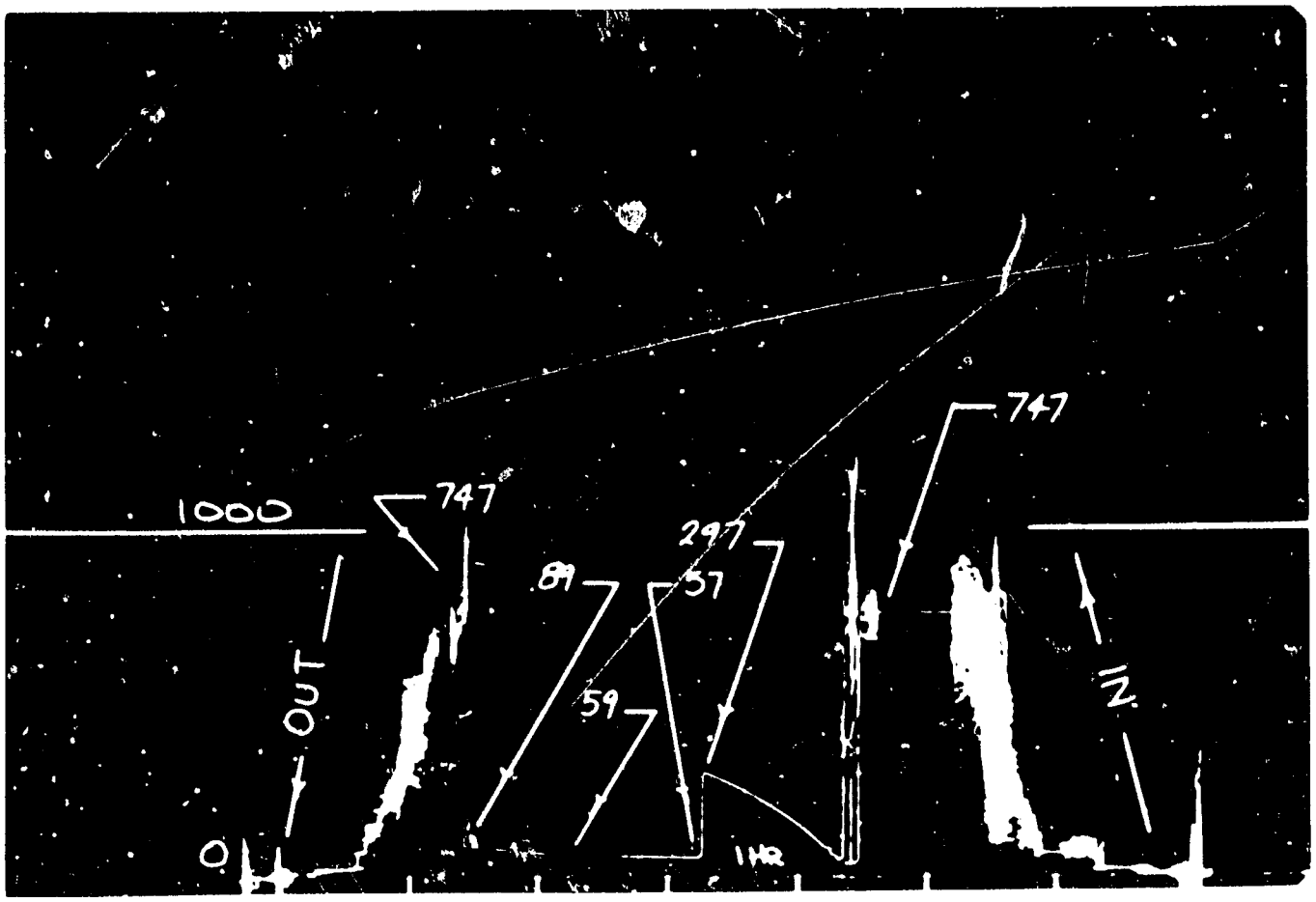
A Core Lab Gas Cont. No Chem - Geo. Lab Gas Cont. No

DST PRESSURE INCREMENTS

Recorder No 5040 Depth 1565

Points	INITIAL CIP				FINAL CIP			
	Time Built	T + θ	(T + θ)/θ	PSIG	Time Built	T + θ	(T + θ)/θ	PSIG
1	0			31	0			45
2	5			67	5			46
3	10			93	10			48
4	15			117	15			50
5	20			139	20			53
6	25			160	25			55
7	30			178	30			58
8	35			196	35			62
9	40			211	40			64
10	45			227	45			67
11	50			242	50			69
12	55			258	55			71
13	60			272	60			74
14	65			284				
15	66			289				
16								
17								
18								
19								
20								
21								
22								
23								
24								


1000
737
737
71
209
39
46
OUT
0
1HR
Z


1000
747
747
297
89
57
59
OUT
0
1HR
Z

DRILL-STEM TEST DATA

Well Name	J. RAY McDERMOTT MAIDA CREEK	Test No	2
Well Number	F 57	Zone Tested	BEAR ROCK
Company	TRANSOCEAN OIL INC.	Interval	2748-2825
Comp Rep	Tester W. McKAY	Date	JULY 27/70

Type of Test BOTTOM HOLE R F S Tool No

Preflow 5 mins ISI 28 mins Flow 60 mins FSI 58 mins

Specify Inside or Outside	INS	OUT	
	REC No 5040	REC No 5041	REC No
	3600 RANGE 12 HR CLOCK	3600 RANGE 12 HR CLOCK	RANGE HR CLOCK
DEPTH	2734	2821	
Initial Hydro Mud Press	1322	1367	
Initial Shut-In Press	1199	1248	
Initial Flow Press	62	120	
Final Flow Press	374	426	
Final Shut-In Press	1181	1228	
Final Hydro Mud Press	1319	1367	

Mud Drop NIL Fluid Loss Mud Weight 9.2
Viscosity 42 Temperature °F 95° Net Pay Tested
Top Packer Depth 2748 Bottom Packer Depth Total Depth 2825
Drill Pipe Size 4" Wt. 14.0 Drill Collar I.D. 2 7/8 Ft Run 433
Surface Choke Size Bottom Choke Size ½ Main Hole Size 7 7/8
Anchor Size 4" Flex 4 3/4 Rat Hole Size Feet of Rat Hole
Cushion Amount Type Rubber Size

Fluid Recovery Total Feet 730'
Recovered 30' Feet of MUD
Recovered 180' Feet of MUD CUT SLIGHTLY SALTY WATER
Recovered 520 Feet of SLIGHTLY SALTY WATER
Recovered Feet of
Recovered Feet of

Gas Recovery How Measured Riser size

mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS GOOD INITIAL PUFF. SHUT IN FOR 30MIN. GOOD PUFF ON OPENING. BEAR AIR BLOW THROUGH OUT 60 MIN. FLOW. F.S.I. 60 MIN.

A Core Lab Gas Cont. No. Chem - Geo. Lab Gas Cont. No

DST PRESSURE INCREMENTS

Recorder No. 5041 Depth 2821

Points	INITIAL CIP				FINAL CIP			
	Time Defl.	T + θ	$\frac{T+\theta}{\theta}$	PSIG	Time Defl.	T + θ	$\frac{T+\theta}{\theta}$	PSIG
1	0			89	0			426
2	5			1226	5			1155
3	10			1235	10			1178
4	15			1242	15			1192
5	20			1246	20			1199
6	25			1247	25			1206
7	28			1248	30			1210
8					35			1215
9					40			1219
10					45			1222
11					50			1225
12					55			1227
13					58			1228
14								
15								
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22								
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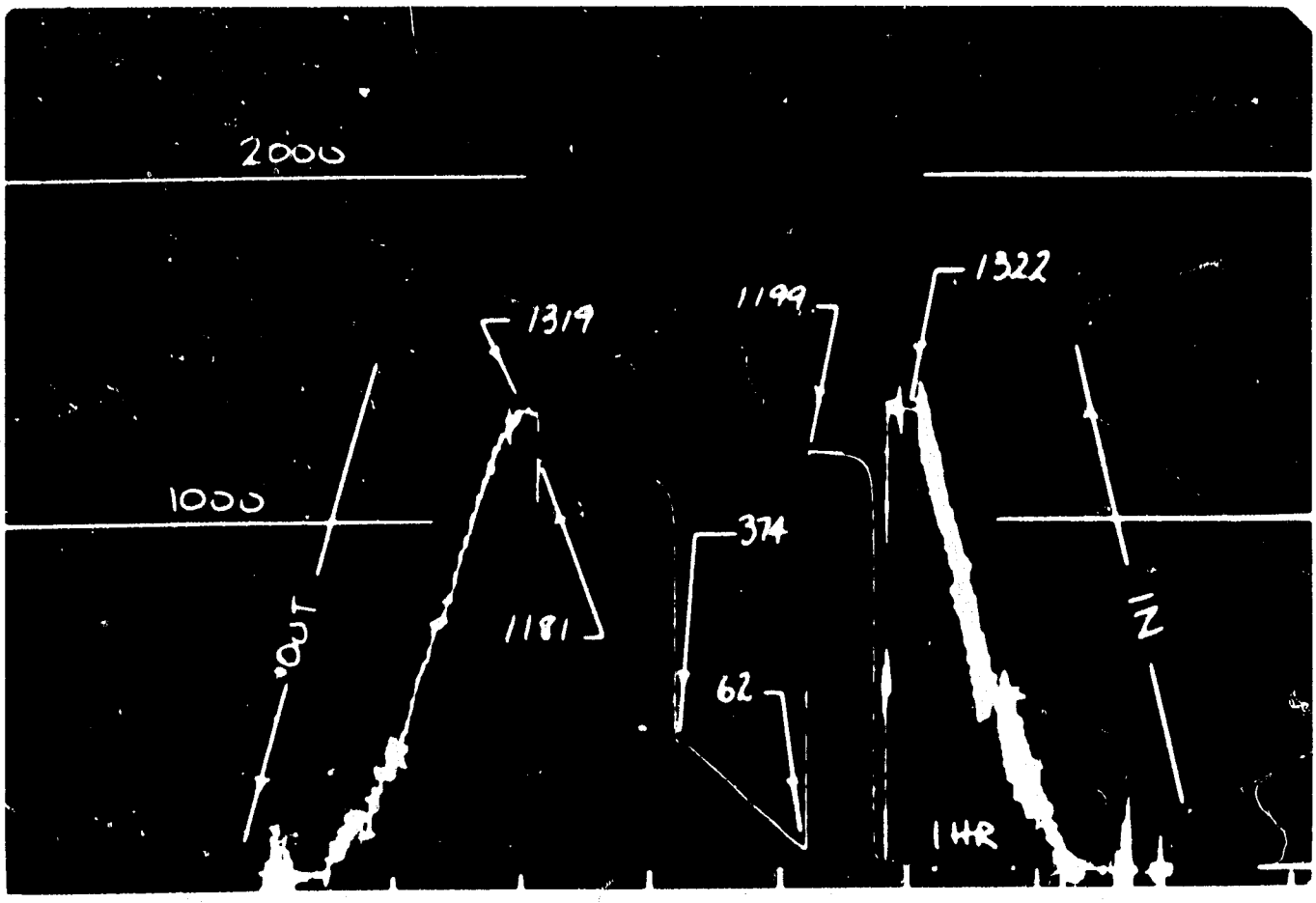
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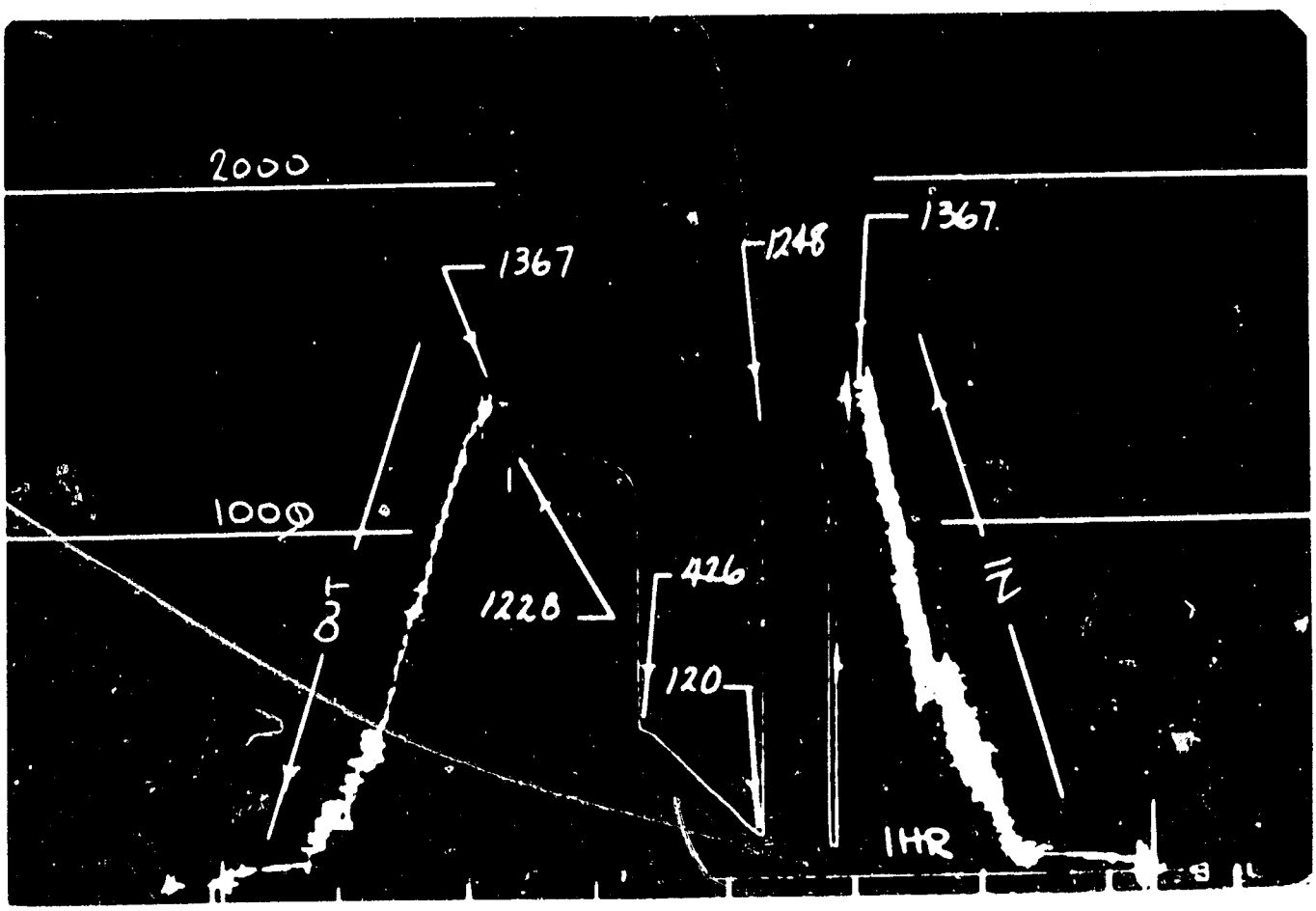
1000
1319
1199
1322
374
1181
62
OUT
Z
1HR


2000
1000
1367
1248
1367
1228
426
120
OUT
Z
1HR

BJ

TESTING REPORT

DRILL-STEM TEST DATA

Well Name	J Ray McDermott Haida Creek		Test No Three
Well Number	F-57		Zone Tested 3559 - 3876
Company	Transocean Oil Inc.		Interval Near Rock
Comp Rep	D. Syke S. Wyman	Tester J. Johnston	Date August 10, 1970

Type of Test Dual Straddle Hy-Pass R F S Tool No

Preflow 5 mins ISI 60 mins Flow 60 mins FSI 61 mins

Specify Inside or Outside	INS REC No 5040	OUT REC No 5041	REC No
	3600 RANGE 12 HR CLOCK	3600 RANGE 12 HR CLOCK	RANGE HR CLOCK
DEPTH	3530	3575	
Initial Hydro Mud Press	1734	1767	
Initial Shut In Press	1576	1599	
Initial Flow Press	1000	1228	
Final Flow Press	1570	1593	
Final Shut In Press	1574	1598	
Final Hydro Mud Press	1729	1763	

Mud Drop NIL Fluid Loss Mud Weight 9.4
Viscosity 48 Temperature °F 108 Net Pay Tested
Top Packer Depth 3559 Bottom Packer Depth 3876 Total Depth 4863
Drill Pipe Size 4" Wt 14.0 Drill Collar I D 2 7/8 Ft Run 528
Surface Choke Size Variable Bottom Choke Size 1" Main Hole Size 7 7/8
Anchor Size 42 Rat Hole Size Feet of Rat Hole
Cushion Amount Type Rubber Size 6 3/4

Fluid Recovery Total Feet 3430'
Recovered 450 Feet of Salty Drilling Mud
Recovered 500 Feet of Muddy Salt Water
Recovered 2480 Feet of Clean Salt Water
Recovered Feet of
Recovered Feet of

Gas Recovery How Measured Riser size

mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg. psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS Strong Initial Puff
Strong air blow decreasing to dead in 50 mins.

A Core Lab Gas Cont. No. Chem - Geo. Lab Gas Cont. No

DST PRESSURE INCREMENTS

Recorder No 5040 Depth 3530

Point	INITIAL CIP				FINAL CIP			
	Time Defl. "	T + θ	$\frac{T+\theta}{\theta}$	PSIG	Time Defl. "	T + θ	$\frac{T+\theta}{\theta}$	PSIG
1	0			1190	0			1594
2	5			1594	5			1594
3	10			1596	10			1595
4	15			1597	15			1595
5	20			1597	20			1595
6	25			1597	25			1595
7	30			1598	30			1596
8	35			1598	35			1596
9	40			1598	40			1596
10	45			1598	45			1596
11	50			1598	50			1597
12	55			1599	55			1597
13	60			1599	60			1598
14					61			1598
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								

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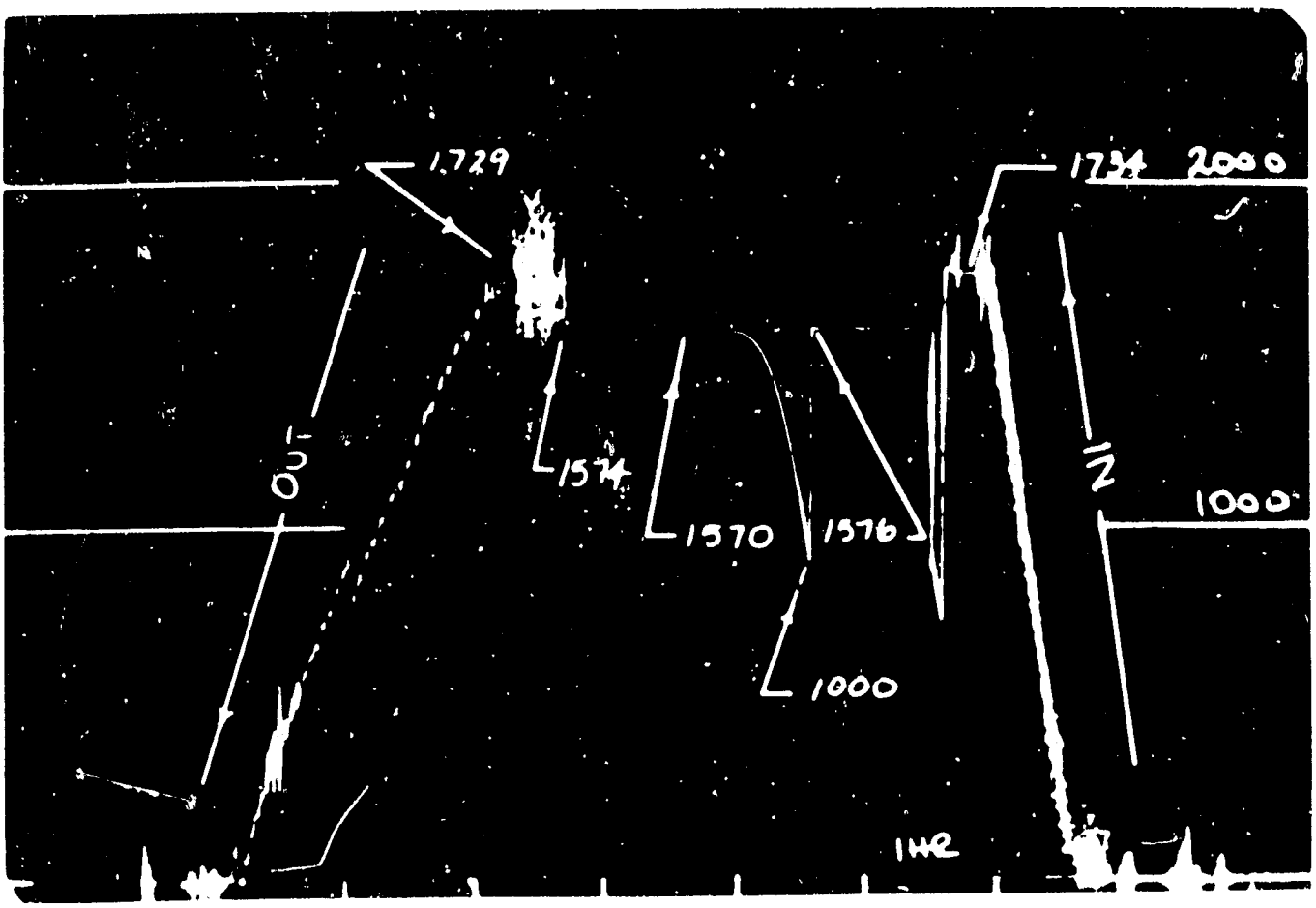
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1734
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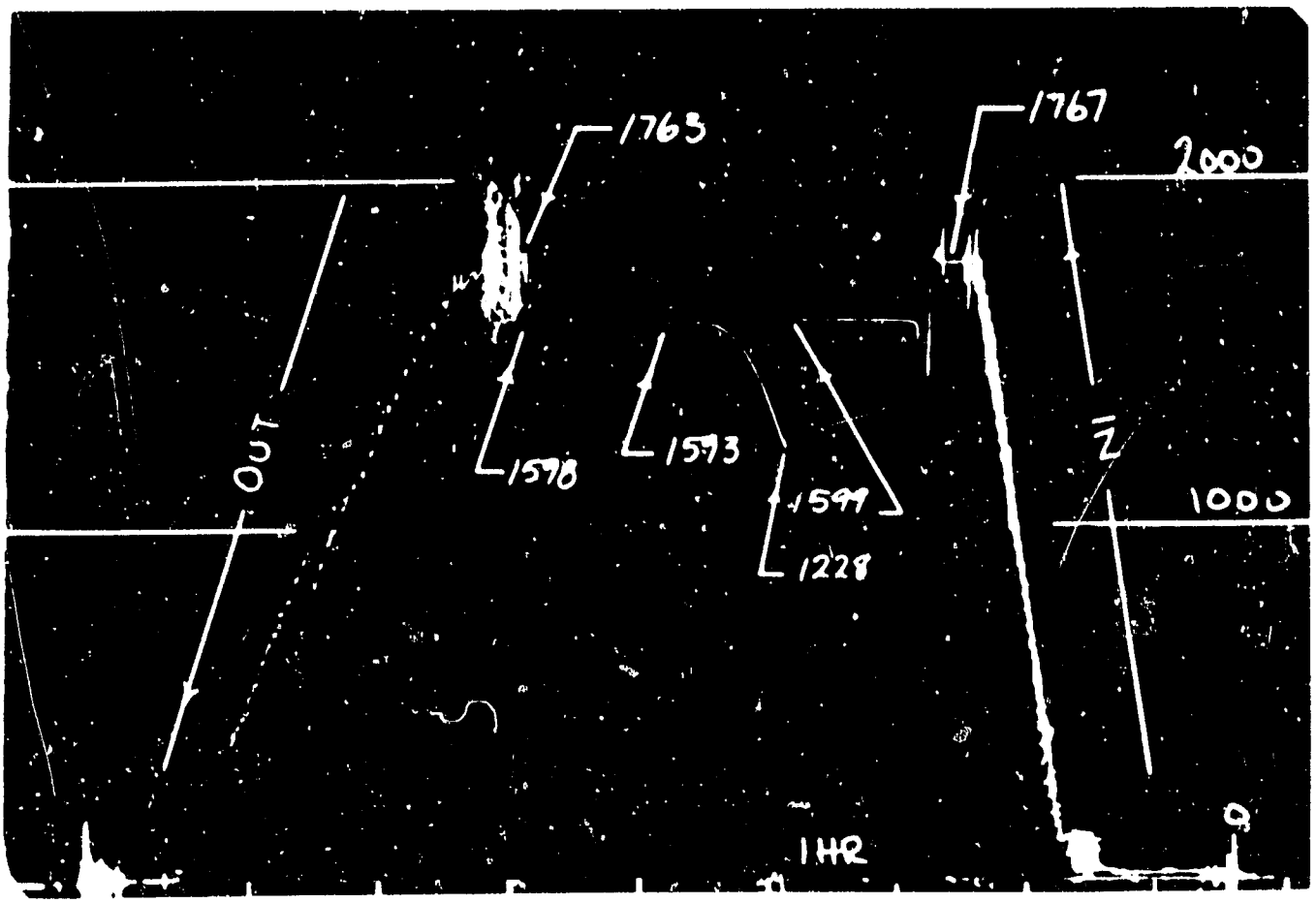
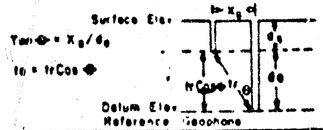
OUT
1574
1570
1576
1000
1000
1HR


1763
1767
2000
OUT
1578
1573
1599
1228
1000
1HR

SP	Elev	Distance	Shot Elevation
1	364'	464'	364'

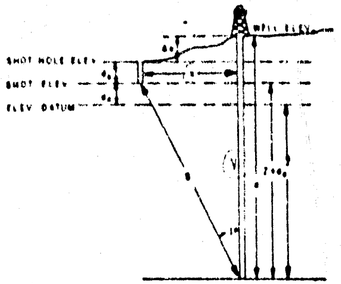
DATUM ELEV = SEA LEVEL

WELL: Elev @ KB = 395 FT.
Elev @ GL = 382 FT.



J. Ray McDermott Can. Ltd, et al
MAIDA CREEK # F-57
NORTHWEST TERRITORIES, CANADA.

FORMATION	RECORD NUMBER	SHOT HOLE	d (XR)	d_s	t_{uh}	SHOT HOLE ELEVATION	SHOT ELEVATION	Δe	$\Delta e + d_s$	X_g	d_e	Cos Φ	t_r	t_0	T	Z + d_e	K	Cos I	$\bar{T}$	$\bar{T}_c$	Z	V_a	ΔZ	ΔT_c	V_i
Imperial Sd.	1	1	885	5	–	–	364	–	81	–	364	–	–	.037	.098	854	464	.8786	.086	.049	-490	10,000	633	.057	11,105
T/ Key Scarp Reef	2	1	1518	5	–	–	364	–	31	–	364	–	–	.037	.150	1487	464	.9544	.143	.106	-1123	10594	322	.018	17,889
" " " "	2R	1	1518	5	–	–	364	–	31	–	364	–	–	.037	.150	1487	464	.9544	.143	.106	-1123	10694	322	.018	17,889
T/ Platform ?	3	1	1840	5	–	–	364	–	31	–	364	–	–	.037	.166	1809	464	.9687	.161	.124	-1445	11653	90	.006	15,000
T/ HARE Indian ?	4	1	1930	5	–	–	364	–	31	–	364	–	–	.037	.172	1899	464	.9716	.167	.130	-1535	11808	92	.005	18,400
T/ HARE Indian Sh.	5	1	2022	5	–	–	364	–	31	–	364	–	–	.037	.177	1991	464	.9739	.172	.135	-1627	12052	409	.031	13,194
" " " "	5-R	1	2022	5	–	–	364	–	31	–	364	–	–	.037	.176	1991	464	.9739	.171	.134	-1627	12142	409	.032	12,781
T/ HUME	6	1	2431	5	–	–	364	–	31	–	364	–	–	.037	.207	2400	464	.9818	.203	.166	-2036	12265	275	.019	14,474
T/ BEAR ROCK	7	1	2706	5	–	–	364	–	31	–	364	–	–	.037	.225	2675	464	.9853	.222	.185	-2311	12492	46	.004	11,500
T/ BEAR Rock Dolomite?	8	1	2752	5	–	–	364	–	31	–	364	–	–	.037	.229	2721	464	.9858	.226	.189	-2357	12471	754	.037	20,378
" " " "	8-R	1	2752	5	–	–	364	–	31	–	364	–	–	.037	.228?	2721	464	.9858	.225?	.188?	-2357	12537 ?	754	.038	19,842
T/ Lower Bear Rock	9	1	3506	5	–	–	364	–	31	–	364	–	–	.037	.265	3475	464	.9912	.263	.226	-3111	13765	376	.018	20,889
T/ Running	10	1	3882	5	–	–	364	–	31	–	364	–	–	.037	.283	3851	464	.9928	.281	.244	-3487	14291	978	.046	21,261
TOTAL DEPTH	11	1	4860	5	–	–	364	–	31	–	364	–	–	.037	?	4829	464	.9954	?	?	-4465	?	-	-	
" "	11-R	1	4860	5	–	–	364	–	31	–	364	–	–	.037	.329	4829	464	.9954	.327	.290	-4465	15397	-	-	



X = Horizontal distance from well to shot point.
d = Well geophone depth measured from well elevation
d_s = Depth of shot
d_e = Difference in elevation between shot and elevation datum
Δe = Difference in elevation between well and shot point
Z = Well geophone depth measured from elevation datum
(e.g. if B. elevation = elevation datum)
Z + d_e = Well geophone depth measured from shot elevation
$d = d_g - \Delta e$
S = Straight line travel path from shot to well geophone
T = Observed time from shot to well geophone
t_0 = Uphole time at shot or other surface reference time

$\text{Cos I} = Z + d_e / \sqrt{X^2 + (Z + d_e)^2}$

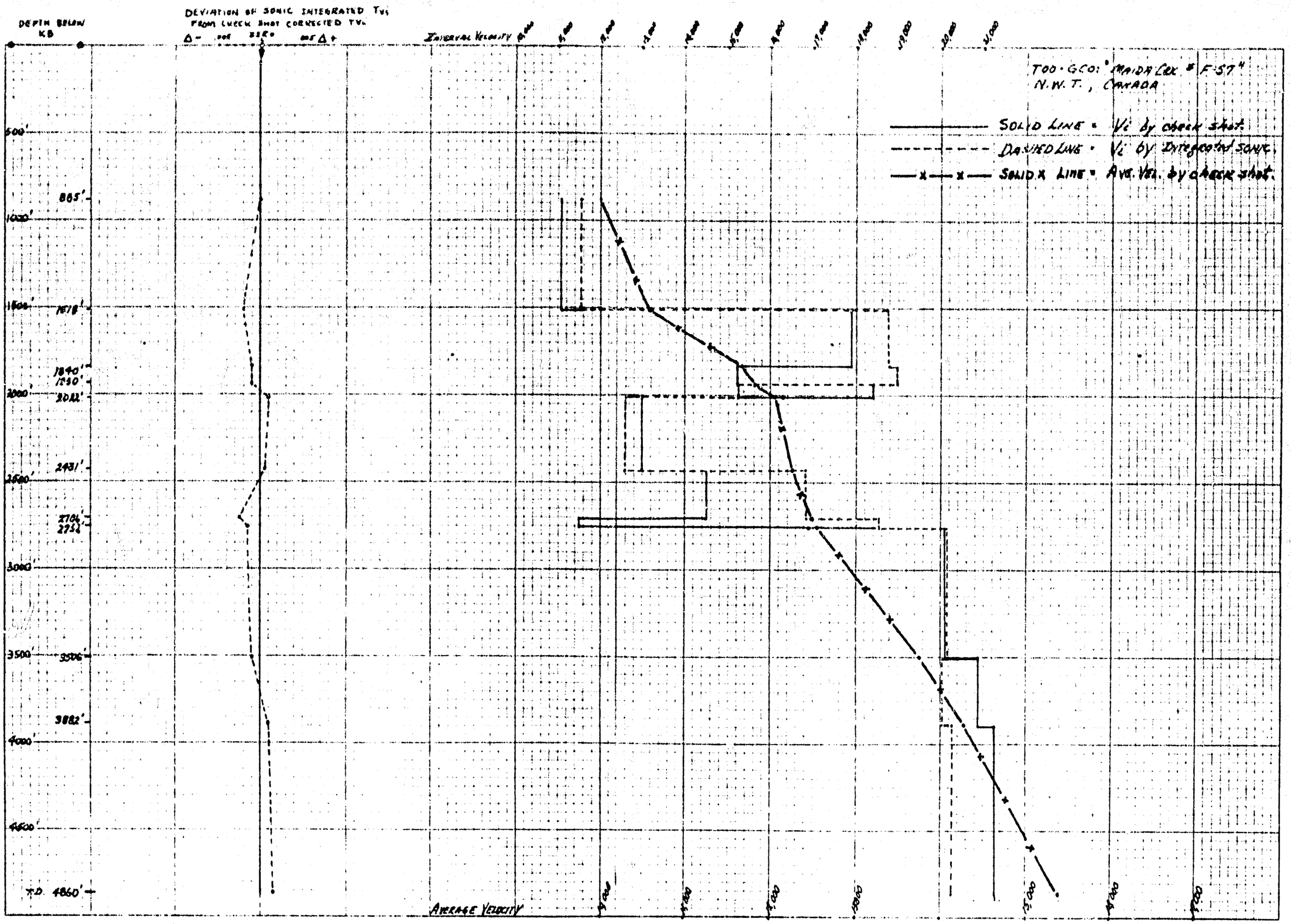
$\bar{T}$ = Vertical travel time from shot elevation to well geophone
= Cos I T

$\bar{T}_c$ = Vertical travel time from elevation datum to well geophone
= $\bar{T} - t_0$

V_a = Topmost velocity in consolidated layer

V_a = $\frac{Z}{\bar{T}_c}$ = Average velocity

V_i = $\frac{\Delta Z}{\Delta \bar{T}_c}$ = Interval velocity


DEPTH BELOW KB
DEVIATION OF SONIC INTEGRATED Tvs FROM CHECK SHOT CORRECTED TVs
Δ- .001 .002 .003 Δ+
INTERVAL VELOCITY
TOO·GCO: "MAIDA CRK # F-57"
N.W.T., CANADA
SOLID LINE = Vi by check shot
DASHED LINE = Vi by Integrated sonic
SOLID X LINE = Avg. Vel. by check shot
500'
865'
1000'
1500'
1618'
1840'
1850'
2000'
2012'
2431'
2500'
2704'
2752'
3000'
3500'
3506'
3882'
4000'
4500'
T.D. 4860'
AVERAGE VELOCITY

SCHLUMBERGER INDUCTION-ELECTRICAL LOG

PROVINCE N.W.T.
FIELD WILDCAT
WELL McD CAN GCO MAIDA CK F-57
COMPANY J. RAY McDERMOTT CANADA LTD.

COMPANY J. RAY McDERMOTT CANADA LTD.

WELL McD CAN GCO MAIDA CK F-57

FIELD WILDCAT

PROVINCE N. W. T.

LOCATION LAT 68° 36' 17"
LONG 128° 10' 36"

Other Services:
BHC, FDC, SNP
ML, HDT, CS

Permanent Datum ______ Elev. ______
Log Measured From ______, ______ Ft. Above Perm. Datum

Elev.: KB 999
GL 382
DF

Date	Aug. 9, 1970		
Run No.	ONE		
Depth-Driller	4861		
Depth-Logger	860		
Btm. Log Interval	4001		
Top Log Interval	4862		
Casing-Driller	4863		
Casing-Logger	860		
Bit Size	850		
Type Fluid in Hole	GEL		
Dens. Visc.	9.4 | 50		
pH	7.5		
Fluid Loss	6.2		
Rm	1.23 @ 55 °F	@ °F	@ °F
Rm @ BHT	0.41 @ 130 °F	@ °F	@ °F
Rmf	1.03 @ 60 °F	@ °F	@ °F
Rmc	1.60 @ 40 °F	@ °F	@ °F
Bit Size	7 7/8		
Spacing - AM	16"	16"	16"
MN	34'-6"	34'-6"	34'-6"
Ind. Type	6FF40	6FF40	6FF40
Opr. Rig Time	3.0 Hrs.		
Truck No.	A 17		
Recorded By	ROUTH		
Witnessed	SYKES		

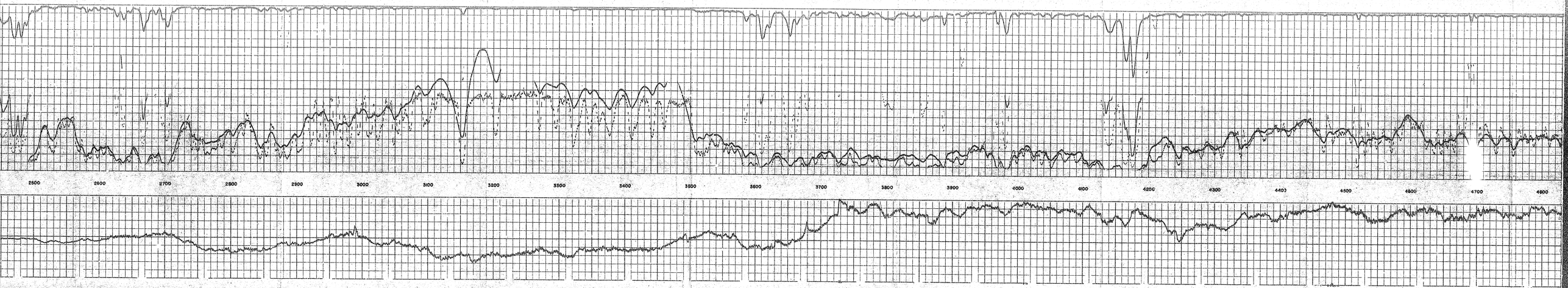
OCT 7 1970

Service Order # 2934
SMT. 110

Tool on Bottom 07:00/9
Circulation Stopped 03:30/9
Drilling Stopped 23:00/8

REMARKS

Sonde SB - Index 1.5"
Cartridge No. D 533
Panel No. N 553
Sonde No. N 732
LAP-D No. B 269
SMR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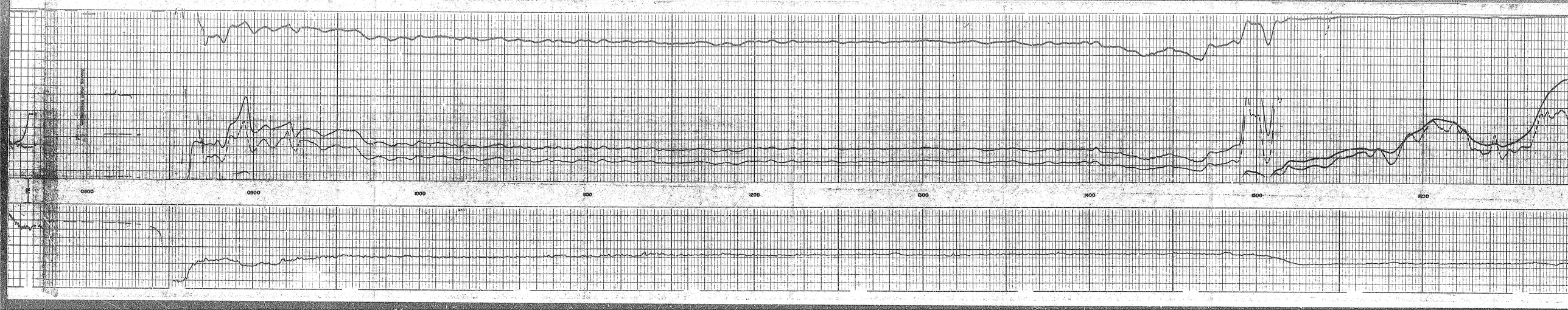
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800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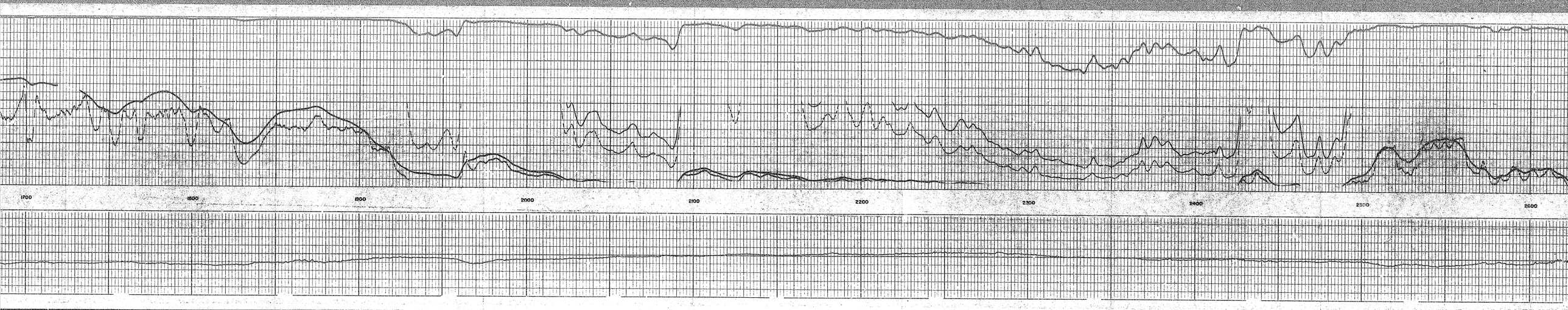
0900
1000
1200
1300
1400
1500
1600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1800
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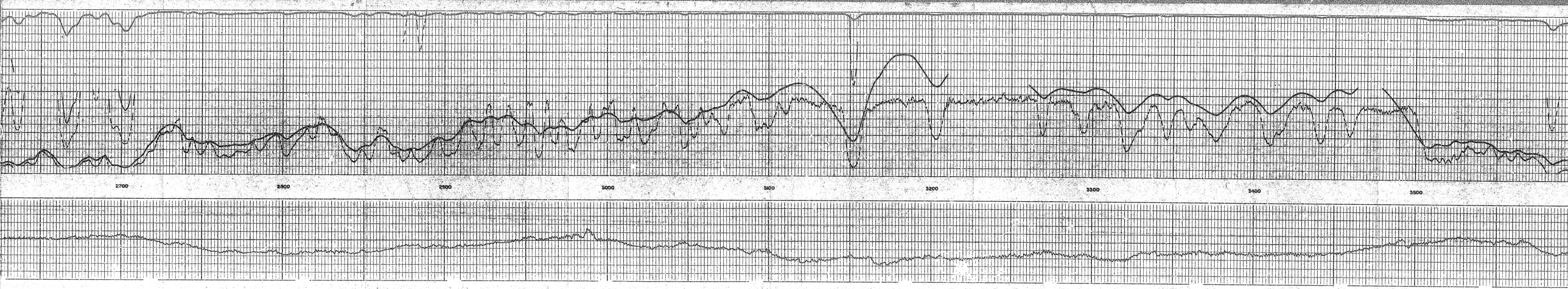
2100
2200
2300
2400
2500
2600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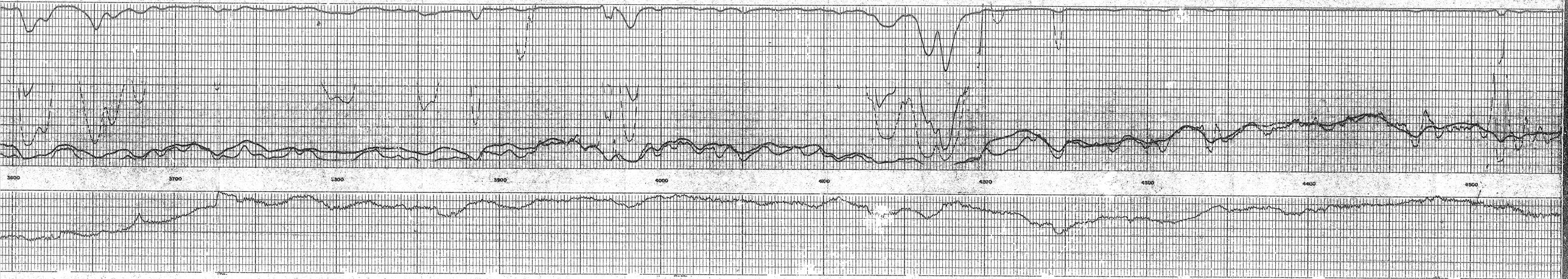
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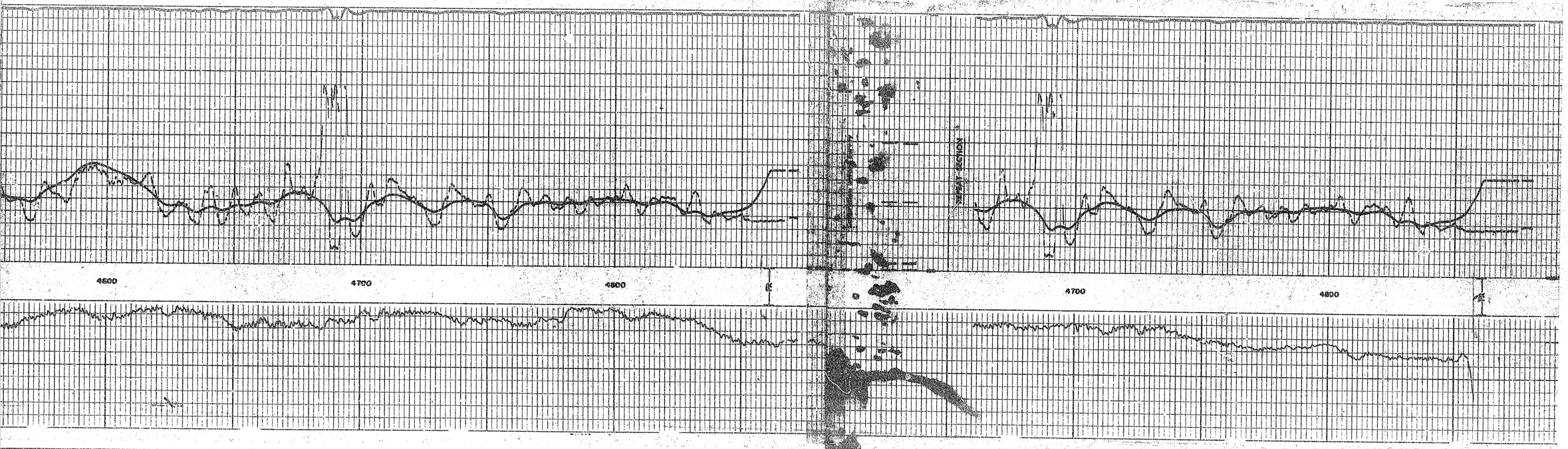

4600
4700
4800
4700
4800

SCHLUMBERGER MICROLOG CALIPER

PROVINCE N.W.T.
FIELD WILDCAT
WELL McD CAN GCO MAIDA CK F-57
COMPANY J. RAY McDERMOTT CANADA LTD.

COMPANY J. RAY McDERMOTT CANADA LTD.

WELL McD CAN GCO MAIDA CK F-57

FIELD WILDCAT

PROVINCE N. W. T.

LOCATION LAT 65° 36' 17"
LONG 128° 10' 36"

Other Services: I-ES, FDC, BHC-G-12, SNP, CIS

Permanent Datum GL Elev. 382
Log Measured From KB, 13 Ft. Above Perm. Datum

ELEV: KB 395
GL 382
CBF

Date	Aug. 10, 1970		
Run No.	ONE		
First Reading	4862		
Last Reading	860		
Feet Measured	4002		
Depth Reached	4863		
Bottom Driller	4863		
Csg. Schl.	860		
Csg. Driller	860		
Mud Nature	GEL		
Dens. | Visc.	9.4 | 50	|	|
Mud pH	8.5		
" Water Loss	6.2		
" Res.	1.23 @ 55 °F	@ °F	@ °F
" " @ BHT	0.61 @ 112 °F	@ °F	@ °F
" Rmf	1.03 @ 60 °F	@ °F	@ °F
" Rmc	1.60 @ 60 °F	@ °F	@ °F
Bit Size	7 7/8		
Mud Log:			
Rm	0.9		
Unit	UPPER		
Depth	2337		
Opr. Rig Time	3.0 Hrs.		
Truck No.	A17		
Recorded By	PORTH		
Witness	SYKES		

OCT 7 1970
CALGARY 21, ALBERTA

1st Run Service Order # 2234
Tool on Bottom 01:00 / 10 ; B.H.T. 112 °F
Circulation Stopped 03:00 /9
REMARKS
Drilling Stopped 23:00 /8
MCP # A15
FMS # 819
Pad Type - Hydraulic

MICROLOG
resistivity in ohms m²/m

Micro Inv. 1" x 1" 0 20 40

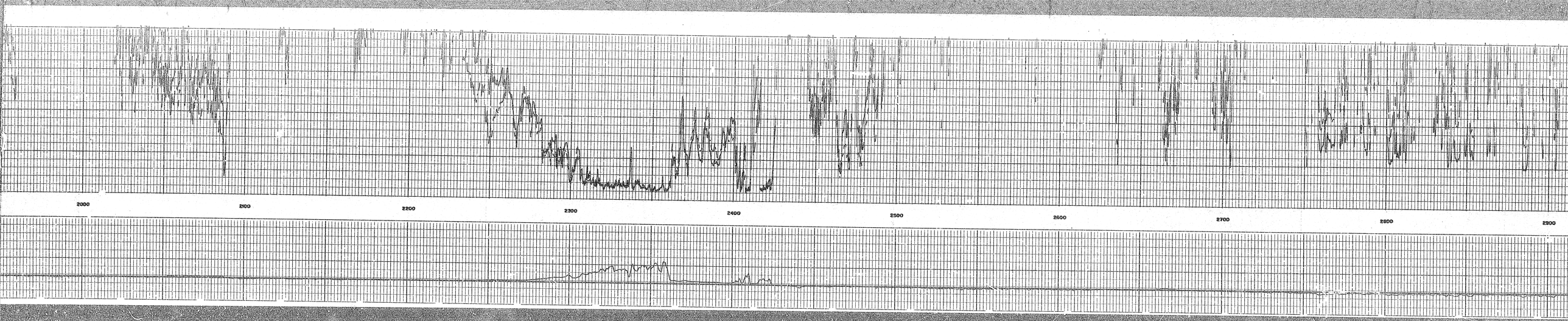
Micro Normal 2" 0 20 40

DEPTHS

CALIPER
hole diameter in inches

6 7 8 9 10 11 12 13 14

Speed in FPM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2100
2200
2300
2400
2500
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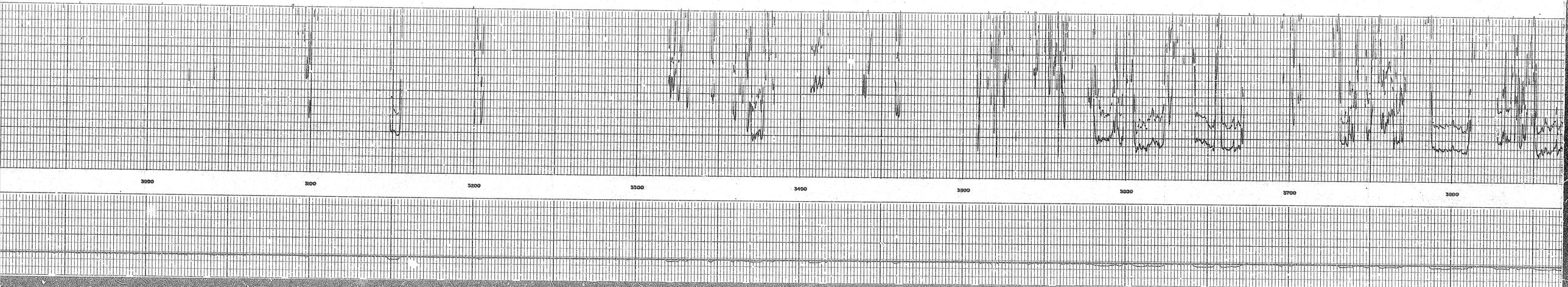
2800
2900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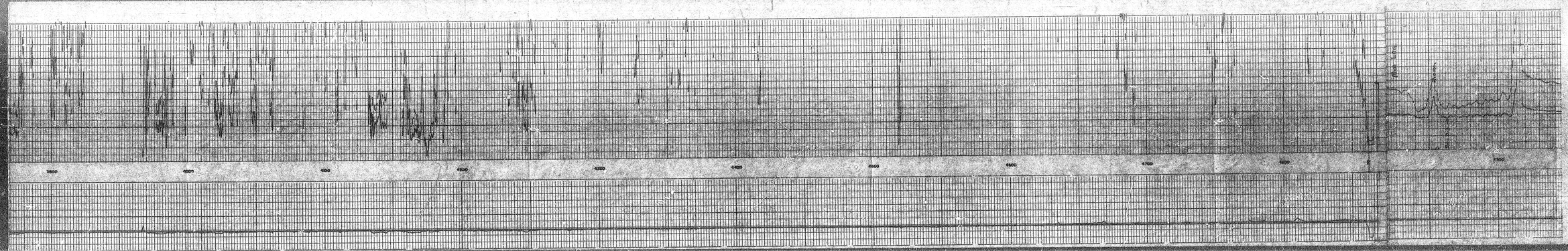
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
5100

SCHLUMBERGER

BOREHOLE COMPENSATED SONIC LOG

COMPANY: J. RAY McDERMOTT CANADA LTD.

WELL: McD CAN GCO MAIDA CK F-57

FIELD: WILDCAT

COORDINATES: LAT 49° 34' 27" LONGITUDE 93° 30' 00"

Other Services: BHC, GR, CAL

Elev. RT: 1327

Permanent Datum: GL

Log Measured From: KB

Drilling Measured From: KB

Elev. GL: 1302

Elev. DF: 1322

Elev. KB: 1327

Date: 4-5-70

Run No.: ONE

Depth Driller: 4800

Depth Logger: 4800

Bottom Log Interval: 4800

Top Log Interval: 4000

Casing - Driller: 860

Casing - Logger: 860

Bit Size: 7 7/8

Type Fluid in Hole: Gel

Dens.: 9.4

Visc.: 50

pH: 9.5

Fluid Loss: 6.2

Source of Sample: Pit

Rm @ Meas. Temp.: 1.23 @ 55 °F

Rmf @ Meas. Temp.: 0.61 @ 110 °F

Rmc @ Meas. Temp.: 1.00 @ 50 °F

Source: Rmf: Rmc: Measured: Measured: Measured

Rm @ BHT: 1.40 @ 60 °F

Time Since Circ.: 7.7 hr

Max. Rec. Temp.: 110 °F

Equip. Location: 1-3-4-5-7-8-9-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63-64-65-66-67-68-69-70-71-72-73-74-75-76-77-78-79-80-81-82-83-84-85-86-87-88-89-90-91-92-93-94-95-96-97-98-99-100-101-102-103-104-105-106-107-108-109-110-111-112-113-114-115-116-117-118-119-120-121-122-123-124-125-126-127-128-129-130-131-132-133-134-135-136-137-138-139-140-141-142-143-144-145-146-147-148-149-150-151-152-153-154-155-156-157-158-159-160-161-162-163-164-165-166-167-168-169-170-171-172-173-174-175-176-177-178-179-180-181-182-183-184-185-186-187-188-189-190-191-192-193-194-195-196-197-198-199-200-201-202-203-204-205-206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-221-222-223-224-225-226-227-228-229-230-231-232-233-234-235-236-237-238-239-240-241-242-243-244-245-246-247-248-249-250-251-252-253-254-255-256-257-258-259-260-261-262-263-264-265-266-267-268-269-270-271-272-273-274-275-276-277-278-279-280-281-282-283-284-285-286-287-288-289-290-291-292-293-294-295-296-297-298-299-300-301-302-303-304-305-306-307-308-309-310-311-312-313-314-315-316-317-318-319-320-321-322-323-324-325-326-327-328-329-330-331-332-333-334-335-336-337-338-339-340-341-342-343-344-345-346-347-348-349-350-351-352-353-354-355-356-357-358-359-360-361-362-363-364-365-366-367-368-369-370-371-372-373-374-375-376-377-378-379-380-381-382-383-384-385-386-387-388-389-390-391-392-393-394-395-396-397-398-399-400-401-402-403-404-405-406-407-408-409-410-411-412-413-414-415-416-417-418-419-420-421-422-423-424-425-426-427-428-429-430-431-432-433-434-435-436-437-438-439-440-441-442-443-444-445-446-447-448-449-450-451-452-453-454-455-456-457-458-459-460-461-462-463-464-465-466-467-468-469-470-471-472-473-474-475-476-477-478-479-480-481-482-483-484-485-486-487-488-489-490-491-492-493-494-495-496-497-498-499-500-501-502-503-504-505-506-507-508-509-510-511-512-513-514-515-516-517-518-519-520-521-522-523-524-525-526-527-528-529-530-531-532-533-534-535-536-537-538-539-540-541-542-543-544-545-546-547-548-549-550-551-552-553-554-555-556-557-558-559-560-561-562-563-564-565-566-567-568-569-570-571-572-573-574-575-576-577-578-579-580-581-582-583-584-585-586-587-588-589-590-591-592-593-594-595-596-597-598-599-600-601-602-603-604-605-606-607-608-609-610-611-612-613-614-615-616-617-618-619-620-621-622-623-624-625-626-627-628-629-630-631-632-633-634-635-636-637-638-639-640-641-642-643-644-645-646-647-648-649-650-651-652-653-654-655-656-657-658-659-660-661-662-663-664-665-666-667-668-669-670-671-672-673-674-675-676-677-678-679-680-681-682-683-684-685-686-687-688-689-690-691-692-693-694-695-696-697-698-699-700-701-702-703-704-705-706-707-708-709-710-711-712-713-714-715-716-717-718-719-720-721-722-723-724-725-726-727-728-729-730-731-732-733-734-735-736-737-738-739-740-741-742-743-744-745-746-747-748-749-750-751-752-753-754-755-756-757-758-759-760-761-762-763-764-765-766-767-768-769-770-771-772-773-774-775-776-777-778-779-780-781-782-783-784-785-786-787-788-789-790-791-792-793-794-795-796-797-798-799-800-801-802-803-804-805-806-807-808-809-810-811-812-813-814-815-816-817-818-819-820-821-822-823-824-825-826-827-828-829-830-831-832-833-834-835-836-837-838-839-840-841-842-843-844-845-846-847-848-849-850-851-852-853-854-855-856-857-858-859-860-861-862-863-864-865-866-867-868-869-870-871-872-873-874-875-876-877-878-879-880-881-882-883-884-885-886-887-888-889-890-891-892-893-894-895-896-897-898-899-900-901-902-903-904-905-906-907-908-909-910-911-912-913-914-915-916-917-918-919-920-921-922-923-924-925-926-927-928-929-930-931-932-933-934-935-936-937-938-939-940-941-942-943-944-945-946-947-948-949-950-951-952-953-954-955-956-957-958-959-960-961-962-963-964-965-966-967-968-969-970-971-972-973-974-975-976-977-978-979-980-981-982-983-984-985-986-987-988-989-990-991-992-993-994-995-996-997-998-999-1000-1001-1002-1003-1004-1005-1006-1007-1008-1009-1010-1011-1012-1013-1014-1015-1016-1017-1018-1019-1020-1021-1022-1023-1024-1025-1026-1027-1028-1029-1030-1031-1032-1033-1034-1035-1036-1037-1038-1039-1040-1041-1042-1043-1044-1045-1046-1047-1048-1049-1050-1051-1052-1053-1054-1055-1056-1057-1058-1059-1060-1061-1062-1063-1064-1065-1066-1067-1068-1069-1070-1071-1072-1073-1074-1075-1076-1077-1078-1079-1080-1081-1082-1083-1084-1085-1086-1087-1088-1089-1090-1091-1092-1093-1094-1095-1096-1097-1098-1099-1100-1101-1102-1103-1104-1105-1106-1107-1108-1109-1110-1111-1112-1113-1114-1115-1116-1117-1118-1119-1120-1121-1122-1123-1124-1125-1126-1127-1128-1129-1130-1131-1132-1133-1134-1135-1136-1137-1138-1139-1140-1141-1142-1143-1144-1145-1146-1147-1148-1149-1150-1151-1152-1153-1154-1155-1156-1157-1158-1159-1160-1161-1162-1163-1164-1165-1166-1167-1168-1169-1170-1171-1172-1173-1174-1175-1176-1177-1178-1179-1180-1181-1182-1183-1184-1185-1186-1187-1188-1189-1190-1191-1192-1193-1194-1195-1196-1197-1198-1199-1200-1201-1202-1203-1204-1205-1206-1207-1208-1209-1210-1211-1212-1213-1214-1215-1216-1217-1218-1219-1220-1221-1222-1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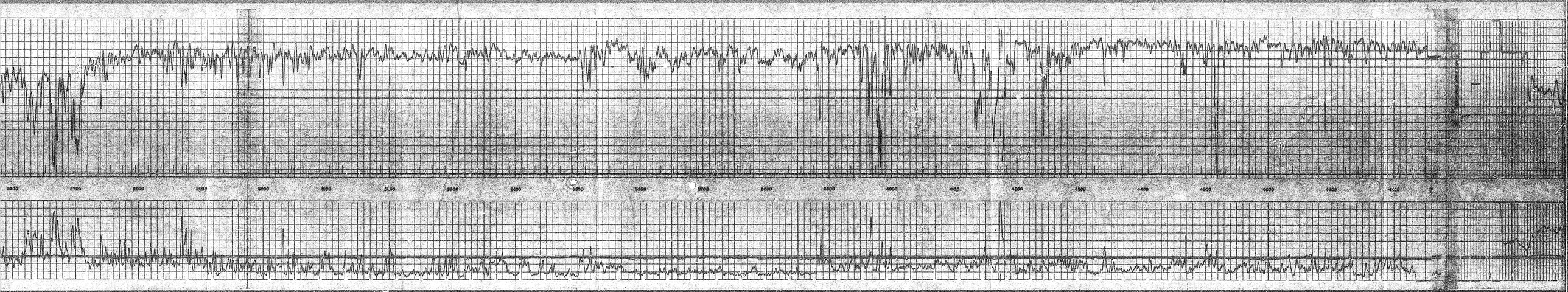
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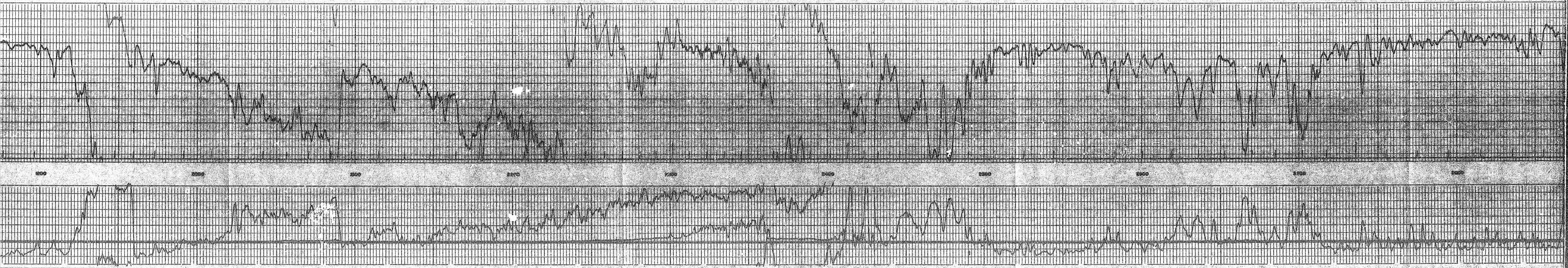


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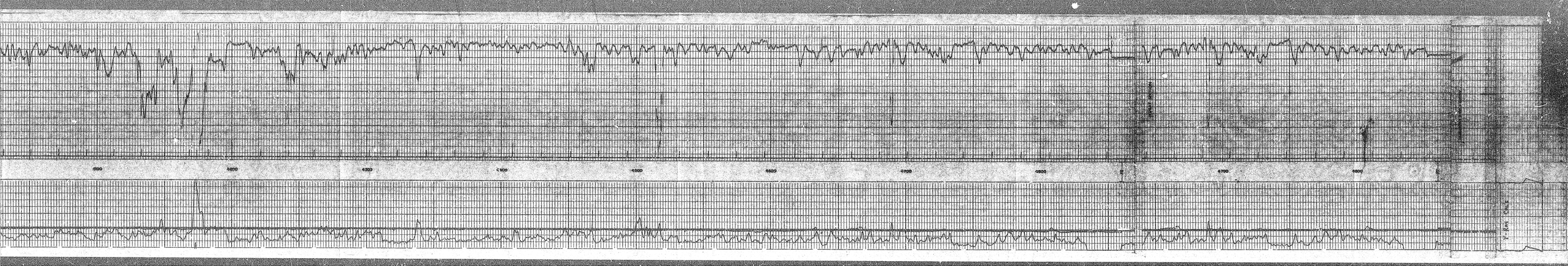
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Y-Axis Only

SCHLUMBERGER

SIDEWALL NEUTRON POROSITY LOG

PROVINCE N. W. T.
FIELD WILDCAT
WELL McD CAN CCO MAIDA CK F-57
COMPANY J. RAY McDERMOTT CANADA LTD.

COMPANY J. RAY McDERMOTT CANADA LTD.

WELL McD CAN CCO MAIDA CK F-57

FIELD WILDCAT

PROVINCE N. W. T.

LOCATION LAT 65° 36' 17" LONG 1287 10' 36"

Other Services: I-ES, BHC, FDC, HDT, MLC, CIS

Permanent Datum GL Elev. 382

Log Measured From KB 13 Ft. Above Perm. Datum

ELEV: KB 395
GL 382
CBF

Date	Aug. 9, 1970		
Run No.	ONE		
First Reading	4561		
Last Reading	860		
Feet Measured	4001		
Depth Reached	4862		
Bottom Driller	4863		
Csg. SOC	860		
Csg. Driller	860		
Mud Nature	GEL		
Dens. | Visc.	9.4 | 50	|	|
Mud pH	9.5		
" Water Loss	6.2		
" Res.	1.23 @ 55 °F	@ °F	@ °F
" Rmf	1.03 @ 60 °F	@ °F	@ °F
" " @ BHT	0.53 @ 112 °F	@ °F	@ °F
" Rmc	1.60 @ 60 °F	@ °F	@ °F
" ppm-Cl.	--		
Bit Size	7 7/8		
Equipment Type	PNT-A		
Opr. Rig Time			
Truck No.	A-17		
Recorded By	PORTH		
Witness	SYKES		

DEPT. OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT
OIL & MINERAL DIVISION
OCT 7 1970

REMARKS

1st Run Service Order # 2934

Drilling Stopped 23:00 / 8 : Circulation Stopped 03:00 / 9 : Tool on Bottom 22:00 / 9 : B.H.T. 112 °F

Panel No. DR 275
Cartridge No. HG 52
Sonde No. E 310
Detector No.
SFT-116 No.

CALIBRATION: Gamma Ray

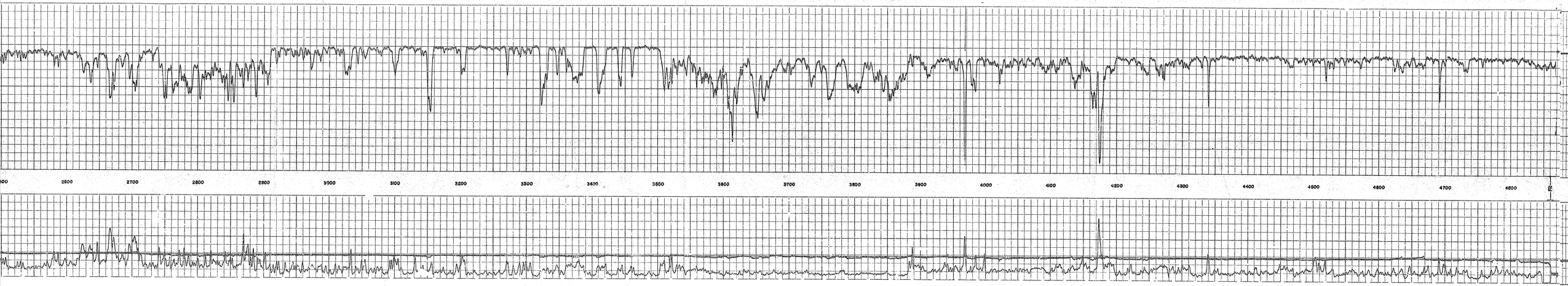
Background CPS 50 Test Source CPS 450 Galv. Deflection 10 Sens. Tap CAL

Neutron Environmental Cal.	Drawer In-CPS	Drawer Out-CPS
Before	380	240
After	380	245

Panel Settings: Function Former	Temp. Comp. Setting	T.C.	Mud Wt./Salinity Comp. set as per recorded value
LIME	112	2	from 9.5 to
			from to
			from to

Neutron Auxiliary Cal.-CPS
Before
After

This interpretation represents our best judgment. Nevertheless since all interpretations are opinions based solely on inferences from electrical or other measurements, we cannot and do not guarantee the accuracy or correctness of any interpretation and shall not be liable or responsible for any loss, cost, damages, or expenses that may be incurred or sustained resulting from this or any other interpretation.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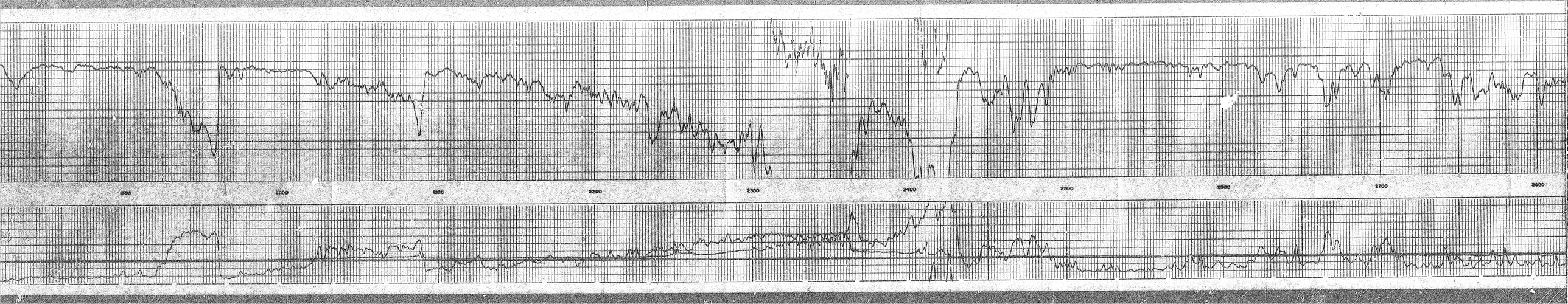
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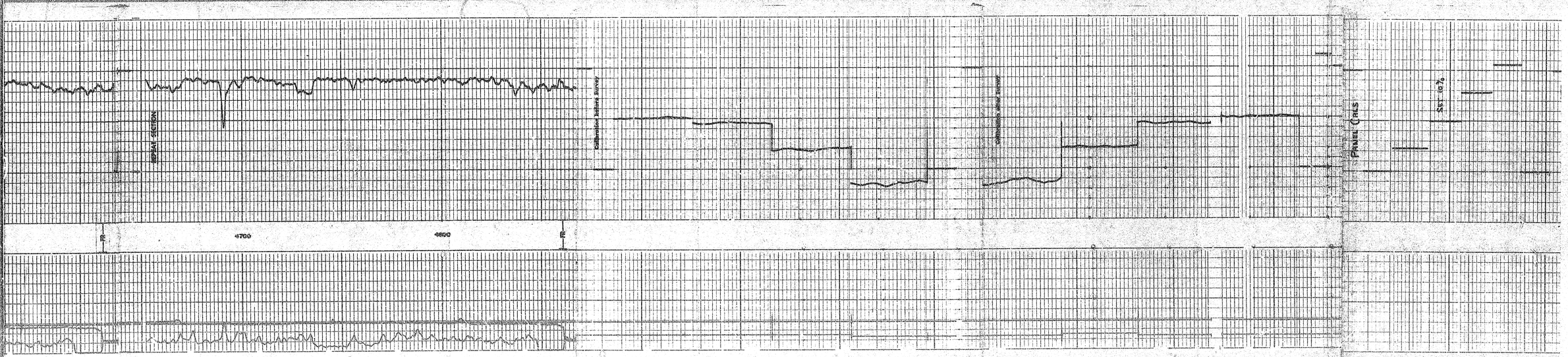

REPEAT SECTION
4700
4600
Calibration before Survey
Calibration after Survey
PROBE CONS
SET 10%

SCHLUMBERGER FORMATION DENSITY LOG

PROVINCE N. W. T.
FIELD WILDCAT
WELL McD CAN GCO MAIDA CK F-57
COMPANY J. RAY McDERMOTT CANADA LTD.

COMPANY J. RAY McDERMOTT CANADA LTD.

WELL McD CAN GCO MAIDA CK F-57

FIELD WILDCAT

PROVINCE N. W. T.

LOCATION LAT 65° 36' 17"
LONG 128° 10' 36"

Other Services: FES, BHC-GR, CIS, SNP, HDT, MLC

Permanent Datum GL Elev. 382
Log Measured From KB 13 Ft. Above Perm. Datum

Elev.: KB 395
GL 382
DF

Date	Aug. 9, 1970		
Run No.	ONE		
First Reading	4861		
Last Reading	860		
Feet Measured	4001		
Depth Reached	4862		
Bottom Driller	4853		
Csg. Schl.	860		
Csg. Driller	860		
Mud Nature	GEL		
Dens. | Visc.	9.4 | 50	|	|
Mud pH	9.5		
" Water Loss	6.2		
" Rm	1.23 @ 53 °F	@ °F	@ °F
" Rmf	1.03 @ 60 °F	@ °F	@ °F
" " @ BHT	0.52 @ 112 °F	@ °F	@ °F
" Rmc	1.60 @ 60 °F	@ °F	@ °F
" ppm Cl	"		
Bit Size	7 7/8		
Source to Detector Spacing	16.0"		
Equipment Type	FGT-D		
Opr. Rig Time	4 1/2 Hrs.		
Truck No.	A17		
Recorded By	PORTH		
Witness	SYKES		

OCT 7 1970

1st Run Service Order # 2934 B.H.T. 112 °F

Tool on Bottom 17:30 / 9

Circulation Stopped 03:00 / 9

Drilling Stopped 23:00 / 8

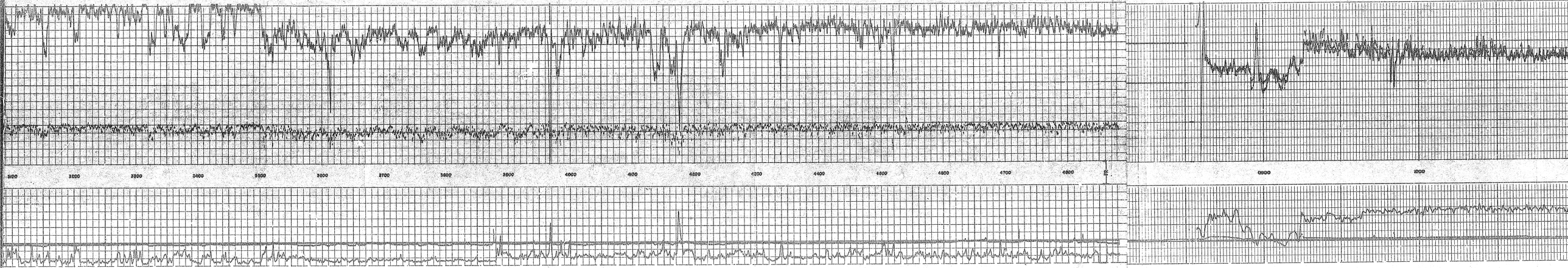
Panel No. DX 275

Cartridge No. HG 52

Sonde No. PGSE 310

Detector No. D 399

	Background CPS	Test Source CPS	Galvanometer Deflection Div.	Stand. Sens. Ran for Cal.
CALIBRATIONS Gamma Ray	50	450	10	CAL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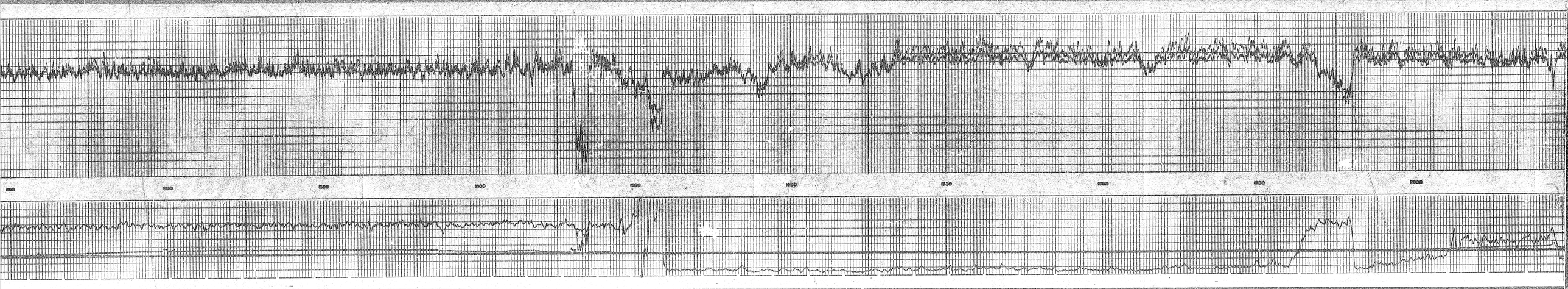
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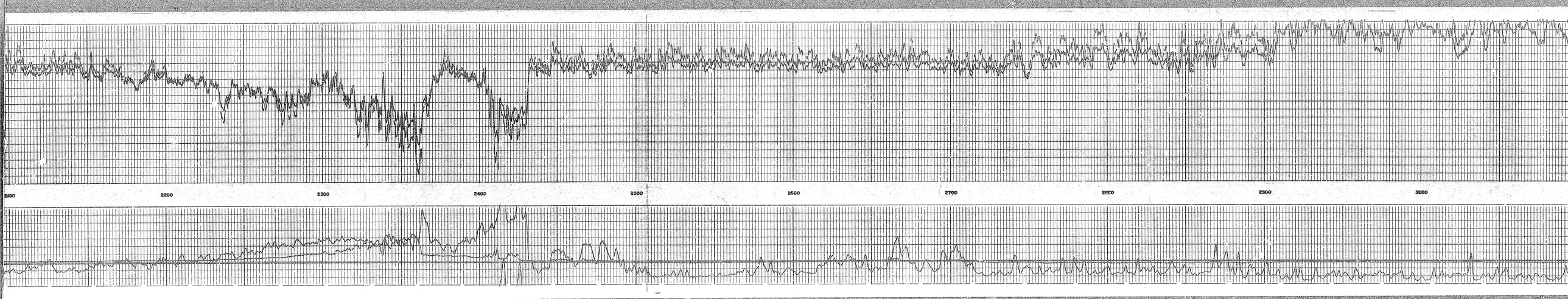
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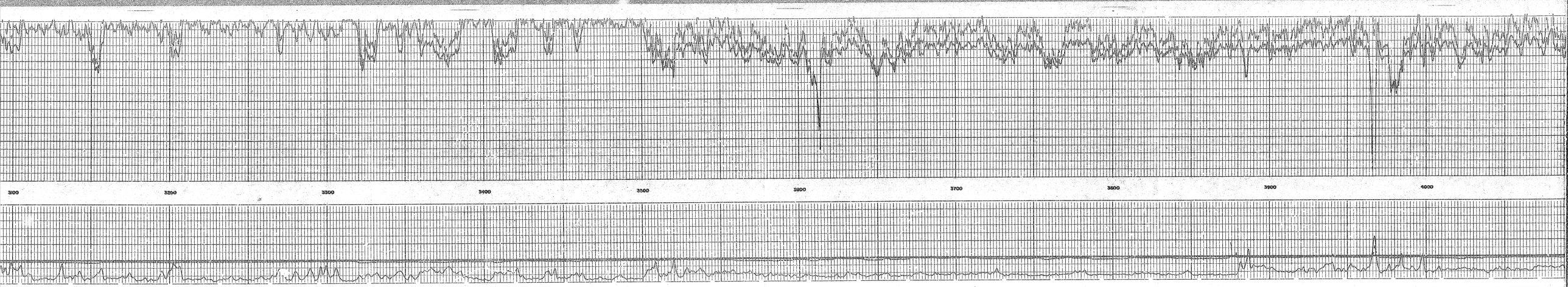
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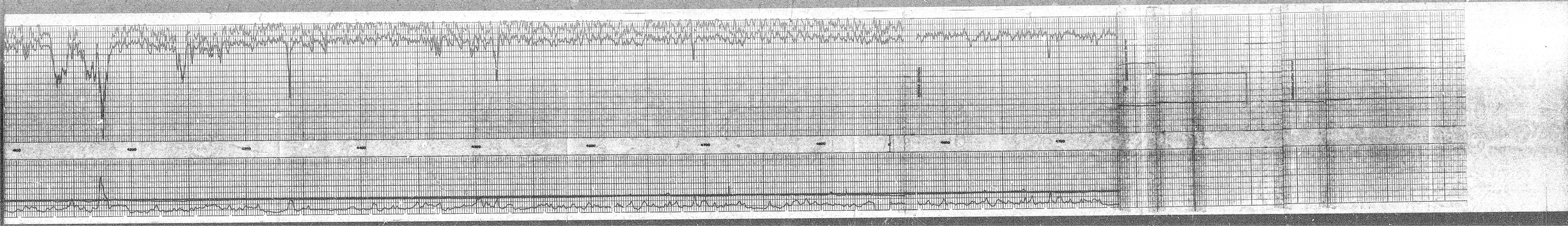
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SCHLUMBERGER CONTINUOUS DIPMETER

COMPANY J. RAY MCDERMOTT CANADA LTD.

WELL MCD CAN GCO MAIDA CK F-57

FIELD WILDCAT

COUNTY BNT STATE CANADA

LOCATION LAT 68° 36'17"
LONG 128° 10'36"

Sec. Twp. Rge.

Other Services:

Permanent Datum, Elev.
Log Measured From Ft. Above Perm. Datum
Drilling Measured From

Elev.: K.B. 395
D.F.
G.L. 382

Date	21-9-70				
Run No.	ONE				
Depth-Driller	4863				
Depth-Logger	4863				
Bot. Log Interval	4862				
Top Log Interval	800				
Bit Size	7 7/8				
Type Fluid in Hole	GEL				
Dens. / Visc.	9.4 / 50				
pH / Fluid Loss	9.5 / 6.2 ml	ml	ml	ml	
Source of Sample					
Rm @ Meas. Temp.	1.23@ 55°F	@ °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F	@ °F
Source Rmf / Rmc					
Rm @ BHT	0.516 110°F	@ °F	@ °F	@ °F	@ °F
Time Since Circ.					
Max. Rec. Temp.	110°F	°F	°F	°F	°F
Equip. Location	A-17				
Recorded By	PORTH				
Witnessed By	SYKES				

SEP 16 1970

Focus mess

The well name, location and borehole reference data were furnished by the customer.

Changes in Mud or Additional Samples

	1	2	3	4
Date				
Sample No.				
Depth				
Type Fluid in Hole				
Dens. / Visc.				
pH / Fluid Loss				
Source of Sample				
Rm @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	@ °F	@ °F	@ °F	@ °F
Source Rmf / Rmc				
Rm @ BHT	@ °F	@ °F	@ °F	@ °F

Run No. ONE
Tool Type HDTC
Hole Size 7 7/8
Hole Deviation 1°
Analog Panel No. 752
Digital Tape No. C7482
Computed by CHRISTIAN
Correlated by CHRISTIAN
Correlation Interval — Step Length — Search Angle QUALITIES
Digital Computation No. D-6163
Remarks FOUR ARM HIGH RESOLUTION DIGITAL DIPMETER

"INDEX OF VERTICAL DISPLACEMENT IN FEET CORRESPONDING TO VARIOUS HORIZONTAL DISTANCES AND ANGLES OF DIP"

VERTICAL DISPLACEMENT FOR HORIZONTAL DISTANCES OF

DIP ANGLE (degrees)	100' (30m)	1000' (300m)	1 mile (1610')
1	1.75	17.5	28.1
2	3.5	35.0	56.3
3	5.2	52.4	84.2
4	7.0	70.0	112.6
5	8.8	87.5	140.7
6	10.5	105.1	169.0
7	12.3	122.8	197.4
8	14.1	140.7	226.2
9	15.9	158.6	255.0
10	17.6	176.4	283.8
11	19.4	194.4	312.8
12	21.3	212.4	341.9
13	23.1	231.0	371.3
14	24.9	249.6	400.8
15	26.8	268.2	430.5
16	28.7	287.0	460.4
17	30.6	305.8	490.5
18	32.5	325.0	520.8

DIP ANGLE (degrees)	100' (30m)	1000' (300m)	1 mile (1610')
19	34.4	344.2	551.4
20	36.4	363.6	582.2
21	38.4	383.4	613.4
22	40.4	403.4	645.2
23	42.5	423.6	677.4
24	44.5	444.2	710.1
25	46.6	465.2	743.2
26	48.8	486.4	776.8
27	51.0	508.0	810.8
28	53.2	529.8	845.2
29	55.4	552.0	880.0
30	57.7	574.6	915.3
31	60.0	597.6	951.0
32	62.3	620.8	987.2
33	64.7	644.4	1023.8
34	67.1	668.4	1060.8
35	69.5	692.8	1098.3
36	72.0	717.6	1136.3
37	74.5	742.8	1174.7
38	77.0	768.4	1213.6
39	79.6	794.4	1253.0
40	82.2	820.8	1292.8
41	84.8	847.6	1333.1
42	87.5	874.8	1373.8
43	90.2	902.4	1415.0
44	93.0	930.4	1456.7
45	95.8	958.8	1498.8
46	98.7	987.6	1541.4
47	101.6	1016.8	1584.5
48	104.5	1046.4	1628.0
49	107.5	1076.4	1671.9
50	110.6	1107.0	1716.3

To obtain vertical displacements corresponding to lengths of hundreds feet, thousands of feet or miles, multiply the number found in the table by the number of hundreds, thousands or miles.

Example: The dip angle dip is 14 degrees. The related displacement occurring at a gain 600 feet away from the well is desired. The table shows 28.7 feet per 100 feet for 14° dip. Therefore 28.7 x 6 = 172.2 ft. or 172 feet.

GRAPHIC PRESENTATION

1500
1600
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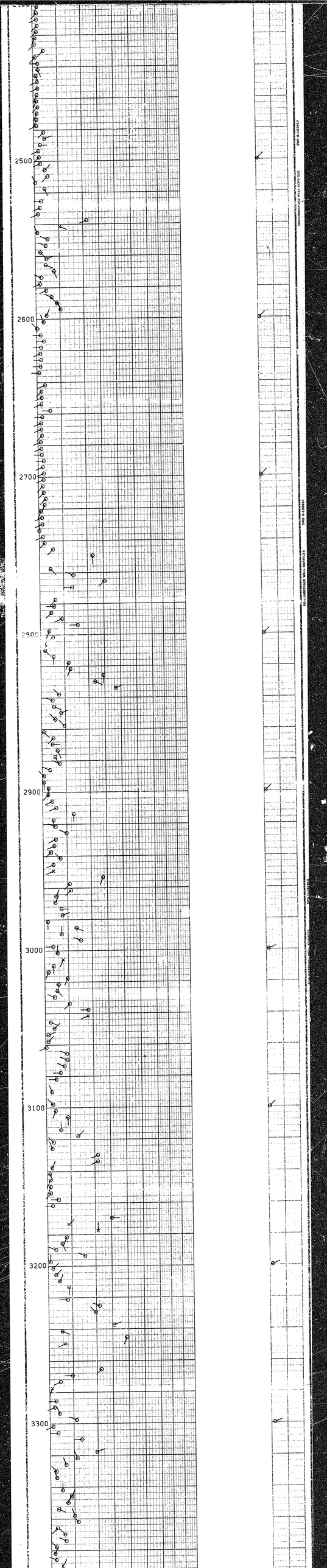
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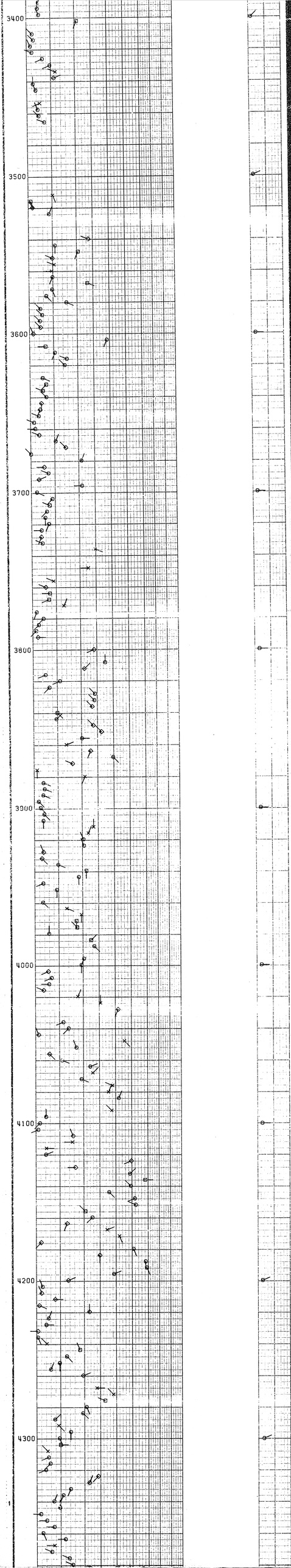
DATE 11-3-2003
SCHLUMBERGER WELL SERVICES
DATE 11-3-2003
SCHLUMBERGER WELL SERVICES
DATE 11-3-2003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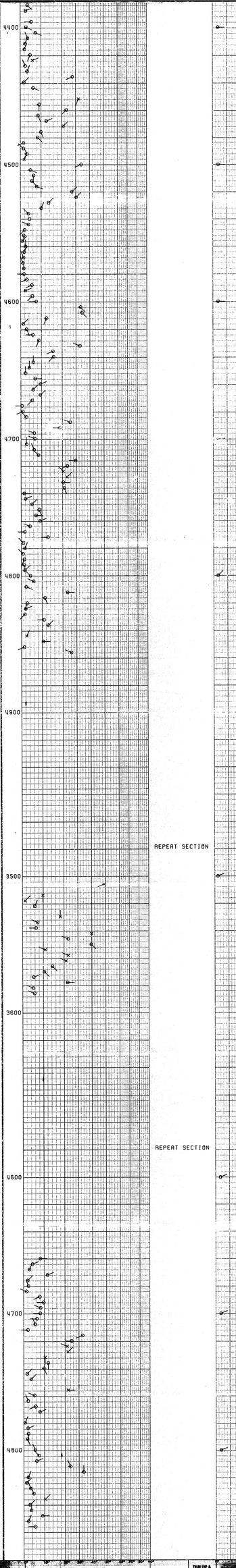


DEPTHS	TRUE DIP ANGLE	DEPTH INTERVAL	TRUE DIP & TRUE DIP DIRECTION	TRUE DIP DIRECTION OF FORCE

COMPANY J. RAY MCDERMOTT CANADA LTD

WELL MCD CAN GCO MAIDO CK F-57

FIELD WILDCAT

COUNTY RWT STATE CANADA

SCHL PB 4862
SCHL TD 4863
DRLR TD 4863
Elev.
KB 395
DF
GL 382

SCHLUMBERGER

HIGH RESOLUTION CONTINUOUS DIPMETER

COUNTY	N. W. T.
FIELD	WILDCAT
LOCATION	CK F-57
WELL	McD CAN CCO MAIDA
COMPANY	J. RAY McDERMOTT CANADA LTD.

COMPANY J. RAY McDERMOTT CANADA LTD.

WELL McD CAN CCO MAIDA CK F-57

FIELD WILDCAT

LOCATION LAT 65° 36' 17" LONG 128° 10' 36"

COUNTY N. W. T.

STATE

OTHER SERVICES

LOCATION OF WELL

OIL & GAS & MINERAL RESOURCES DIV. OCT 7 1970 CALGARY 21, ALBERTA

ELEVATION: KB. 395 DF GL 382

ROLL NO.

RUN No.	ONE	Mud Nature	GEL	
Date	Aug. 9, 1970	Mud Density	9.4	
Depth Datum		Mud Viscosity	50	
First Reading	4862	Mud Resist.	1.23 @ 55	°F.
Last Reading	860	Mud Res. BHT	0.51 @ 110	°F.
Feet Measured	4002	Mud pH	9.5 @	°F.
Csg. Schlum.	860	Mud Wtr. Loss	6.2 CC 30 min.	
Csg. Driller	860	Log Speed	3000	FPM
Depth Reached	4863	Bit Size	7 7/8	
Bottom Driller	4863	Mag. Declin.		
Truck No. / Cable Length	A 17 / -	HDM / HDS	D7596	D 7587
		HDE / DPI-D	C744	-
Recorded By	PORTH	HDP / DDR	C752	C742
Witness	SYKES	Opr. Rig Time	4 Hrs.	

The well name, location and borehole reference data were furnished by the customer.

CHECK IF USED: UNI ☐ CCL ☐ SGR ☐ 3" PLAN ☐ 10" PLAN ☐ 20" RECORD ☐ ANALOG ☐ DIGITAL ☐

REMARKS

ROLL NO.	INTERVAL

TOOL AZIMUTH AND HOLE DIRECTION CALCULATION

DEFINITIONS

(DHS) HIGH SIDE OF TOOL = Direction from center of tool to upper side of tool.
(N) NORTH = Direction from center of tool to Magnetic North.
(HDS) HIGH SIDE OF ELECTRODE = Direction from center of tool to #1 electrode.
(AZI) AZIMUTH OF REFERENCE ELECTRODE = Clockwise angle from N to REF.
(RBR) RELATIVE BEARING = Clockwise angle from DHS to REF.
(AND) AZIMUTH OF HOLE DEVIATION = Clockwise angle from N to DHD.

HDM-C

HDM-D

EXAMPLE
HDM-D – Low Angle Unit (0-36°)
AZI = 330° (solid curve)
AND = 230° (dashed curve)
RBR = 100° (dashed curve)
AZI – RBR = 330° – 230° = AND

EXAMPLE
HDM-C – High Angle Unit (0-77°)
AZI = 100° (solid curve)
AND = 230° (dashed curve)
RBR = 130° (dashed curve)
AND + RBR = 100° + 230° = 330°

CORRELATION CURVES
CONDUCTIVITY

NO. 1 NO. 2 NO. 3 NO. 4

NOTE: DIGITAL DIPMETERS
END OF RECORD GAP IS ON
DEVIATION CURVE.
CORRELATE ON STRONG MARK IS ON
CALIPER 2-4.

4 ARM CALIPER 1-3 CALIPER

2-4 CALIPER

18" 16" 14" 12" 10" 8" 6"

3 ARM CALIPER 16"

DEPTHS

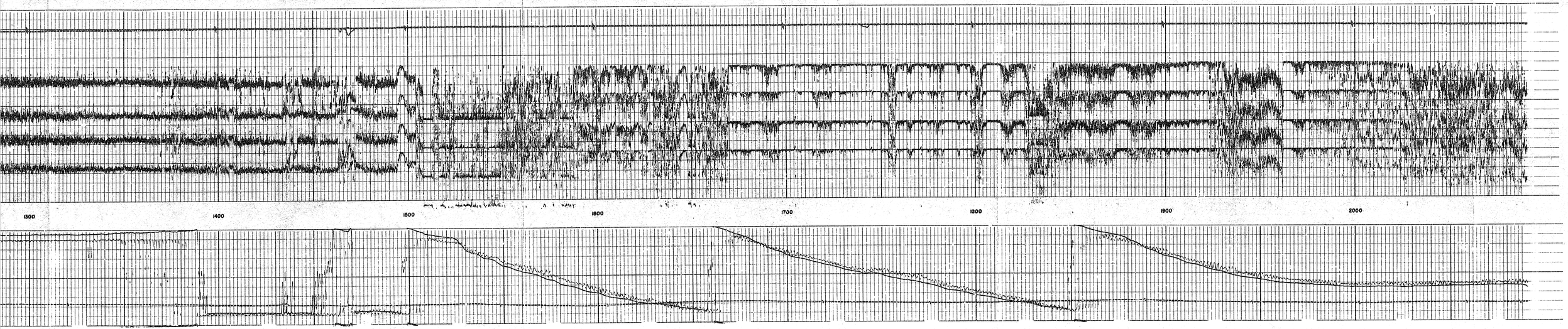
0900 1000 1100 1200

ORIENTATION

AZIMUTH AZI FROM HDM-D (NORTH TRIANGLE) 0° 120° 240°

RELATIVE BEARING 0° 120° 240°

DEVIATION 0° °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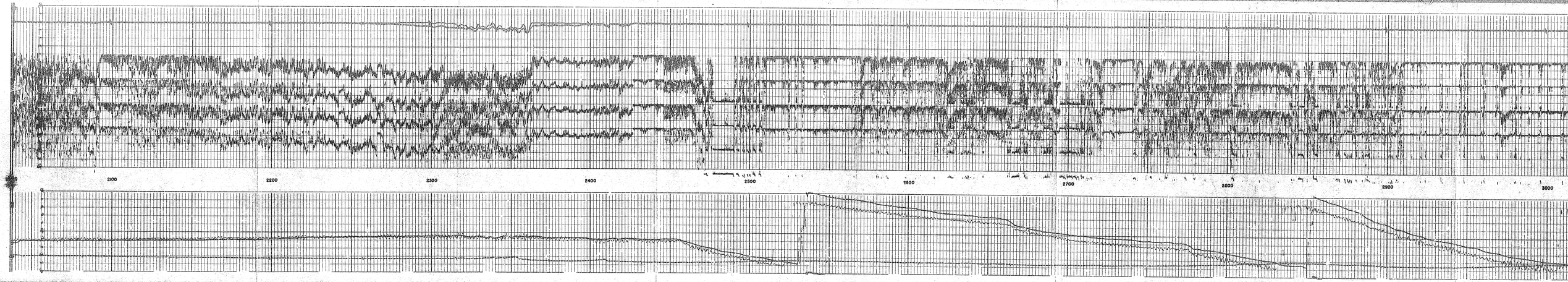
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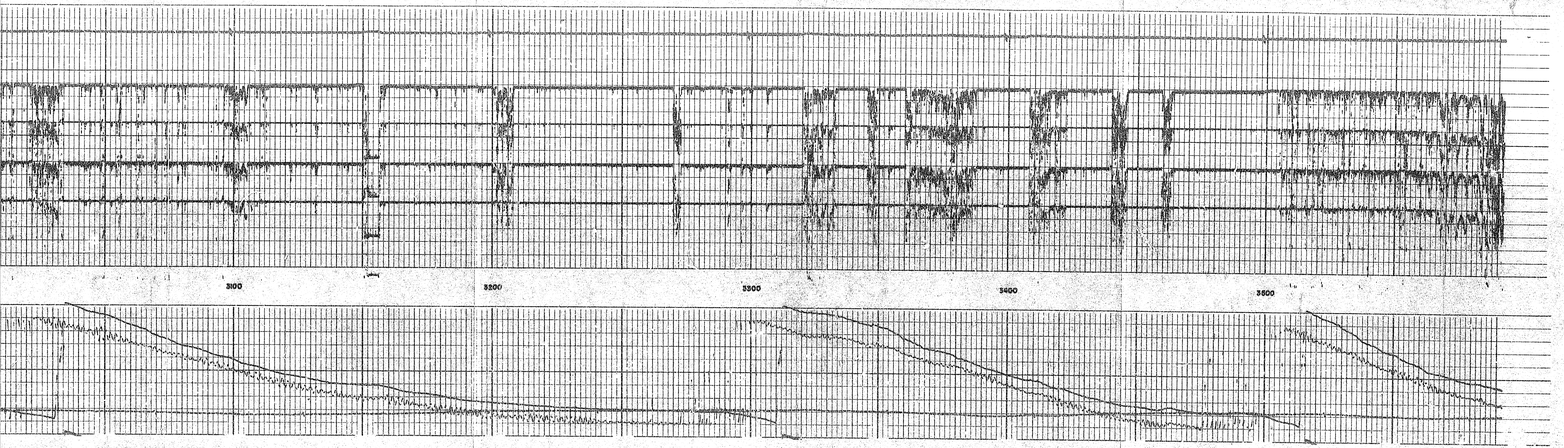
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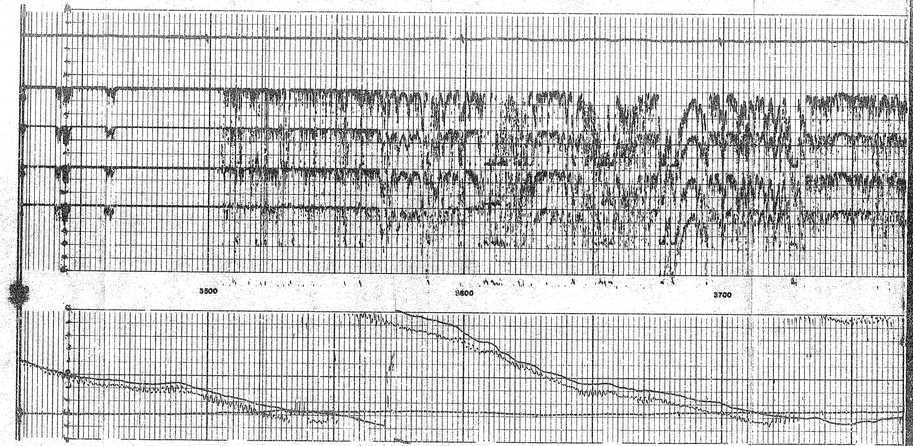
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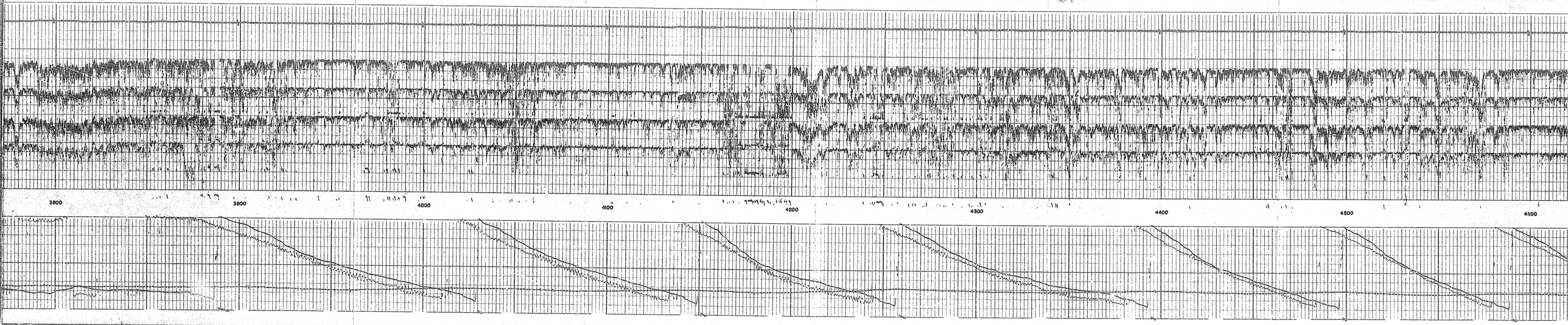
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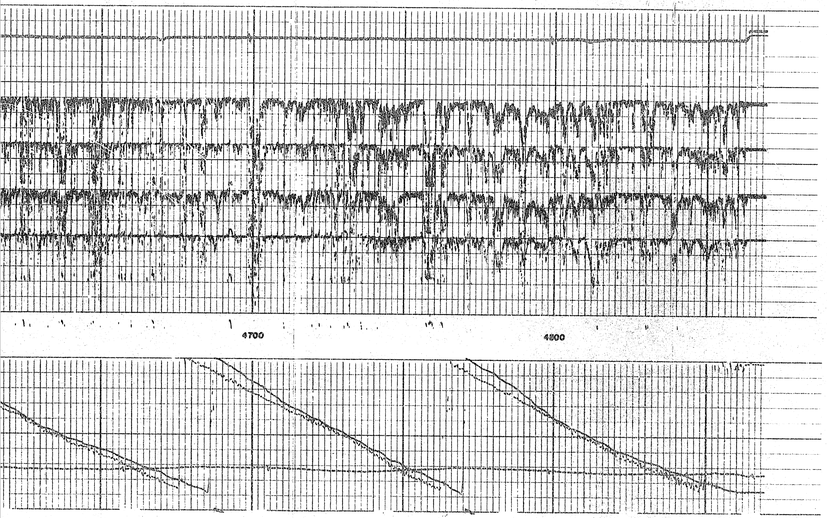
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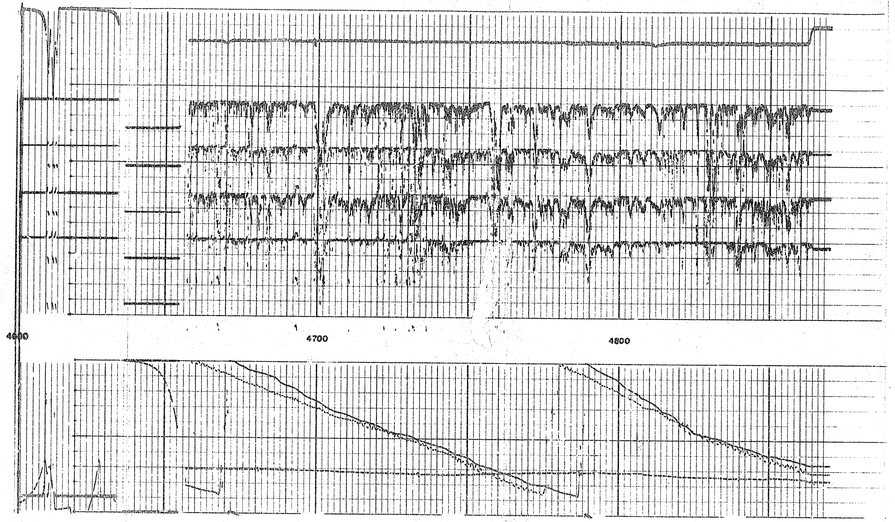
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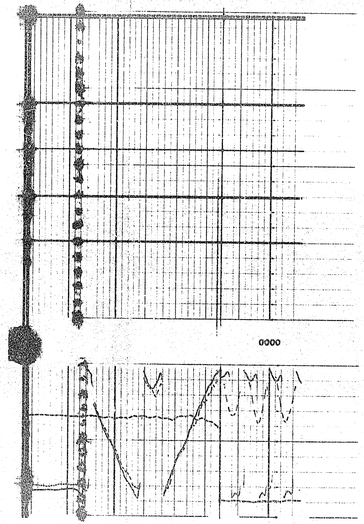
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DAILY DRILLING REPORT

REPORT NO. 35 DATE AUG 13 1970

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDermott.	M'D G&O MAIDA. CREEK.	F32	MAIDA. CREEK.	N.W.T.	CANADA.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	1	4"	5" O.D.	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	N-380	14
2.	NATIONAL	N-380	14
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13⅜	IAP	48# J55	3	94.67		90	67 SX CEMENT
TUBING OR LINER	8⅝	MAW	24# J55	24	876.42		860	500 SX CEM + 3% CACL.

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL			
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG			
DEVIATION SURVEY			
TEST B.O.P.			
CUT OFF DRILLING LINE			
SERVICE RIG			
CASING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
FISHING			
PERFORATION A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTAL			

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. IN/DP			
HRS. OO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD	
	STANDS D.P.	FT.	BIT NO.		TIME	
	SINGLES D.P.	FT.	SIZE		WEIGHT	
	D.C. I.D. O.D.	FT.	MFG.		VISC.-SEC	
			TYPE		W.L.-C.C.	
	D.C. I.D. O.D.	FT.	NOZZLE NO.		FLTR. CK.	
			NOZZLE SIZE		PH	
	STB. BODY O.D.	FT.	SER. NO.		SD. CONT. %	
	STB. BODY O.D.	FT.	DEPTH OUT		PRESSURE GRADIENT	
	RMR. BODY O.D.	FT.	DEPTH IN			
	SUBS O.D.	FT.	TOTAL FTG.		MUD & CHEMICALS ADDED	
	BIT OR C.B.	FT.	TOTAL HR. RUN		TYPE / AMT. / TYPE / AMT.	
		FT.	COND. OF BIT			
	KELLY DOWN	FT.	REAMER NO.			
	TOTAL	FT.	REAMER TYPE		DRILLER	
WT. OF STRING		LBS.				

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL-S PAR'EL-P COM'D-C
F.T.D.	486.3.											

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:00	2.	CEMENT CSG @ SURFACE & WELD ON PLATE.
2:00	8:00	6	TEARING OUT.

R.G RELEASED FROM DAYWORK. 12 PM MIDNITE AUG-12-1970 [signature]

DRILLER [signature]

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD	
	STANDS D.P.	FT.	BIT NO.		TIME	
	SINGLES D.P.	FT.	SIZE		WEIGHT	
	D.C. I.D. O.D.	FT.	MFG.		VISC.-SEC	
			TYPE		W.L.-C.C.	
	D.C. I.D. O.D.	FT.	NOZZLE NO.		FLTR. CK.	
			NOZZLE SIZE		PH	
	STB. BODY O.D.	FT.	SER. NO.		SD. CONT. %	
	STB. BODY O.D.	FT.	DEPTH OUT		PRESSURE GRADIENT	
	RMR. BODY O.D.	FT.	DEPTH IN			
	SUBS O.D.	FT.	TOTAL FTG.		MUD & CHEMICALS ADDED	
	BIT OR C.B.	FT.	TOTAL HR. RUN		TYPE / AMT. / TYPE / AMT.	
		FT.	COND. OF BIT			
	KELLY DOWN	FT.	REAMER NO.			
	TOTAL	FT.	REAMER TYPE		DRILLER	
WT. OF STRING		LBS.				

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL-S PAR'EL-P COM'D-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	8:00	8	Lunch

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD	
	STANDS D.P.	FT.	BIT NO.		TIME	
	SINGLES D.P.	FT.	SIZE		WEIGHT	
	D.C. I.D. O.D.	FT.	MFG.		VISC.-SEC	
			TYPE		W.L.-C.C.	
	D.C. I.D. O.D.	FT.	NOZZLE NO.		FLTR. CK	
			NOZZLE SIZE		PH	
	STB. BODY O.D.	FT.	SER. NO.		SD. CONT. %	
	STB. BODY O.D.	FT.	DEPTH OUT		PRESSURE GRADIENT	
	RMR. BODY O.D.	FT.	DEPTH IN			
	SUBS O.D.	FT.	TOTAL FTG.		MUD & CHEMICALS ADDED	
	BIT OR C.B.	FT.	TOTAL HR. RUN		TYPE / AMT. / TYPE / AMT.	
		FT.	COND. OF BIT			
	KELLY DOWN	FT.	REAMER NO.			
	TOTAL	FT.	REAMER TYPE		DRILLER	
WT. OF STRING		LBS.				

FROM	TO	DR'D RM'R CORE'C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL-S PAR'EL-P COM'D-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	8:00	4	Lay out & prepare to move

DAILY DRILLING REPORT

REPORT NO. 34 DATE AUG 12 19

OPERATOR	LEASE	FILE NO.	FIELD OR DIST.	COUNTY	STATE
J. RAY McDERMOTT.	McD. GCO MAIDA. CREEK.	F89.	MAIDA. CREEK.	N.W.T.	CANADA.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	16	1	4"	5" O.D.	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	K-380	14
2.	NATIONAL	K-380	14
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13⅜	JAP.	48# J55	3	94.67		90'	67 SX Cement.
TUBING OR LINER	8⅝	MANN	24# N55	24	876.42		860'	500 SX CEMENT 3% CaCl

TIME DISTRIBUTION-HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL			
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG			
DEVIATION SURVEY			
TEST B.O.P.			
CUT OFF DRILLING LINE			
[illegible] RIG			
[illegible]			
WIRELINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
FISHING			
PERFORATION HOURS: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTAL			

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD		
TIME		
WEIGHT		
VISC.-SEC		
W.L.-C.C.		
FLTR. CK.		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [signature]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
FTD.	4863.			RAN PLUG #2 3500 - 3400 CEMENTER								
				W/ 38 SX PORTLAND CEMENT + 3% CaCl.								
				PLUG DOWN @ 230 AM. AUG 12/70								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:30	1½	RAN IN + FELT PLUG #1 @ 3885' @ 1:30 AM.
1:30	2:30	1	PULL up + RUN PLUG #2 3500 - 3400 @ 2:30 AM.
2:30	3:30	1	LAID DOWN 4/3 SGLES
3:30	8:00	4½	W.O.C.

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD		
TIME		
WEIGHT		
VISC.-SEC		
W.L.-C.C.		
FLTR. CK.		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [signature]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
Ran plug #3 2600-2790 Cemented w/40 sx [illegible]												
Ran plug #4 900-900' Cemented w/38 sx [illegible]												
				Plug down @ 3:45 [illegible]								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00			Run in with plug #2 @ 3390
	8:00	1/4	Pull out [illegible]
8:00	9:15	1¼	Rig to Run plug #3 @ 2600-2790 down @ 9:15 AM
9:15	3:15	6	W.O. Cement
3:15			Run in with plug #3 @ 2580
	3:45	½	Pull out + Run plug #4 @ 900' to 900' down @ 3:45 PM
3:45	4:00	¼	Cleanup

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD		
TIME		
WEIGHT		
VISC.-SEC		
W.L.-C.C.		
FLTR. CK		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [signature]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	9:45	5¾	W.O.C.
9:45	10:00	¼	Run in FELT PLUG #4 @ 790'
10:00	11:00	1	LAY DOWN DRILL PIPE + BREAK KELLY
11:00	12:00	1	TEAR OUT B.O.P.

DAILY DRILLING REPORT

REPORT NO. 33 DATE August 11-

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDERMOTT	McD. G.C.O. MAIDA CREEK.	F67	MAIDA CREEK	N.W.T	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	O.D.
S & T DRILLING (WESTERN) CO. LTD.	1E	1	4"	TYPE THD 3½ IF	5"

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	K-380	14"
2.	NAT.	K 380	14"
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13¾	Tag	48 J55	3	94.67		90	Cemented w/ 67 sax
TUBING OR LINER	8⅝	MAAW	24-J55	24	876.42		860'	500 sax 32 Cal.

TIME DISTRIBUTION-HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL			
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS	2		
LUBRICATE RIG			
DEVIATION SURVEY			
TEST B.O.P.			
CUT OFF DRILLING LINE			
SERVICE RIG			
[illegible]			
WIRELINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT & BOP [illegible]			3
DRILL STEM TEST			2½
OTHER Tools [illegible]			
FISHING			
PERFORATING: A. PERFORATING			
B. TUBING TRIPS			
C. STRAPPING			
D. TESTING			
E. ADDITIONAL			
TIME SUMMARY (OFFICE USE ONLY)			
DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE	NO.	
	SIZE	
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME			
WEIGHT			
VISC.-SEC			
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ron Smith

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P CONT'G
TD.												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1	Laydown Testing Tools & 4 Rhino Rams
1:00	3:30	2½	Run in Drill Collars & Laydown.
3:30	5:30	2	Run in w/ Drill pipe open end. & Pick up 12 singles
5:30	8:00	2½	Circulate & wait on orders

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE	NO.	
	SIZE	
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME			
WEIGHT			
VISC.-SEC			
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P CONT'G
4863	- FTD											

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
3:00	4:00	1	Circulate Under

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE	NO.	
	SIZE	
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME			
WEIGHT			
VISC.-SEC			
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ray Ost

FOOTAGE

FROM	TO	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P CONT'G
				Rad Plug #1 4000 - 3800 CEMENTED w/ 36 sax Portland cement Plus 2% Ca Cl. Plug Down @ 730 PM Aug 4/20								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	7:00	3	Circ. w/ U. Rodeo
7:00	7:30	½	Set Bridge plug #1 4000' - 3800' w/ 36 sx Portland Cement + 2% Cal Chloride
7:30	12:00	4½	W.O. Cement

DAILY DRILLING REPORT

REPORT NO. 32 DATE August 18-1

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDERMOTT	McD. G.C.O. MAIDA CREEK.	E57	MAIDA CREEK.	N.W.T	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	1	4½"	5" O.D.	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: J. R. Wilman

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	K-380	14"
2.	NAT.	K. 380	14"
3.			

LAST CASING TUBING OR LINER

SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
13⅜	IAD	48 J55	3	94.67		90'	Cemented w/ 67 sxs Cmt
8⅝	MANNESM	N55	24	876.42		860'	w/ 500 sxs 30% Cl.

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL			
REAMING			
CONDITIONING MUD & CIRCULATING		2½	
TRIPS		3½	4½
LUBRICATE RIG			
DEVIATION SURVEY			
TEST B.O.P.		4	
CUT OFF DRILLING LINE			
SERVICE RIG			
LOGGING			
WIRE LINE LOGGING	7½		
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			4½
DRILL STEM TEST		3	3
FISHING	5½	2½	1
WELL TEST A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTAL	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
48	D.C. I.D. O.D.	528.52	FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME		
WEIGHT	10	
VISC.-SEC	9	
W.L.-C.C.	9	
FLTR. CK.	1	
PH	7	
SD. CONT. %	9	
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ron Grill

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
4863				T.D.								

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	7:45	7¾	Logging
7:45	8:00	¼	Tear out Schlumberger

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	6:00	
WEIGHT	9.4	
VISC.-SEC	48	
W.L.-C.C.	6.4	
FLTR. CK.	3/32	
PH	9.0	
SD. CONT. %	6	
PRESSURE GRADIENT	4P 39 psi/ft	
	Calc. ∇ 360	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Quebracho	12#		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
4863	FTD											

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
6:00	8:00	2	Log down Core Hole
8:00	10:00	2	Pulled 2nd to Cond. hole
10:00	12:00	2	Circ. Cond hole & Cond
12:00	2:30	2½	[illegible] & S.T.S.
2:30	2:45	¼	[illegible] & Safety Stuff
2:45	4:00	1¼	Handle test tools & make up packer

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME		
WEIGHT		
VISC.-SEC		
W.L.-C.C.		
FLTR. CK		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1	Handle test tools
5:00	6:15	1¼	Run Jewel DST #3 & load up Sampler
6:15	9:15	3	Drill out DST #3
9:15	12:00	2¾	Hoist DST #3.

DAILY DRILLING REPORT — REPORT NO. 31 — DATE August 4-70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDERMOTT	McD. G.C.O MAIDA CREEK.	F 57	MAIDA CREEK.	N.W.T	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	TYPE THD
S & T DRILLING (WESTERN) CO. LTD.	1E	1	4"	5" O.D.	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	K. 380	14"
2.	NAT.	K. 380	14"
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13⅜	J&L	48 J-55	3	94.67		90'	Cemented w/ 62 sax
TUBING OR LINER	9⅝	MAN'S	24. & 55	24	878.42		860'	500 sax 37% Cal.

TIME DISTRIBUTION HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	13½		
REAMING			
CONDITIONING MUD & CIRCULATING	1		
TRIPS	2½		
LUBRICATE RIG			
DEVIATION SURVEY	½		
TEST B.O.P.			
CUT OFF DRILLING LINE			
SERVICING RIG			
WIRE LINE LOGGING	2	8	8
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
TESTING	½		
A. PERFORATING			
B. SURVEY TRIPS			
C. SHARPING			
D. TESTING			
E. ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
45	STANDS D.P.	FT.
2	SINGLES D.P.	41289.66 FT.
	D.C. I.D. O.D.	
18	D.C. I.D. O.D.	528.58 FT.
	D.C. I.D. O.D.	FT.
1	STB. BODY O.D.	3.67 FT.
1	STB. BODY O.D.	4.99 FT.
1	RMR. BODY O.D.	3.56 FT.
1	SUBS O.D.	1.65 FT.
1	BIT OR C.B.	8.70 FT.
		FT.
	KELLY DOWN	22.87 FT.
	TOTAL	4863.00 FT.
WT. ON STRING	110 M	LBS.

BIT RECORD		
BIT NO.	12	
SIZE	7⅞	
MFG.	H-W	
TYPE	OWC	
NOZZLE NO.	2-11	
NOZZLE SIZE	1-12	
SER. NO.	924006	
DEPTH OUT	4863	
DEPTH IN	4792	
TOTAL FTG.	71'	
TOTAL HR. RUN	17½	
COND. OF BIT	[illegible]	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	2⁰⁰	3⁰⁰	
WEIGHT	9.4	9.4	
VISC.-SEC	50	50	
W.L.-C.C.	6.2	6.2	
FL.TR. CK.	4/32	3/32	
PH	9.5	9.5	
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ron Smith

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
4858	4863'	D			90	35	425	5½	54			
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4863	8¾							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1ⁱ⁵	1¼	Drlg.
1¹⁵	1⁴⁵	½	4 Stand wiper trip
1⁴⁵	2⁴⁵	1	Circulate Condition Mud to Logg.
2⁴⁵	3⁰⁰	¼	Drop Survey
3⁰⁰	5¹⁵	2¼	Repair to Logg
5¹⁵	5³⁰	¼	Laydown Stab. & Shock Sub. c/ BHA
5³⁰	1⁰⁰	½	Trip to Logg
1⁰⁰	8⁰⁰	7	Logging w/ Schlumberger

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. ON STRING		LBS.

BIT RECORD	
BIT NO.	
SIZE	
MFG.	
TYPE	
NOZZLE NO.	
NOZZLE SIZE	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HR. RUN	
COND. OF BIT	
REAMER NO.	
REAMER TYPE	

MUD RECORD	
TIME	
WEIGHT	
VISC.-SEC	
W.L.-C.C.	
FL.TR. CK.	
PH	
SD. CONT. %	
PRESSURE GRADIENT	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [illegible]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
4863												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	4⁰⁰	8	Logging w/ Schlumberger

Closed oil in Altura gas 329' (fair flow) Aug 9/70

Closed Rotary Valve & Check Both Pumps

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. ON STRING		LBS.

BIT RECORD	
BIT NO.	
SIZE	
MFG.	
TYPE	
NOZZLE NO.	
NOZZLE SIZE	
SER. NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HR. RUN	
COND. OF BIT	
REAMER NO.	
REAMER TYPE	

MUD RECORD	
TIME	
WEIGHT	
VISC.-SEC	
W.L.-C.C.	
FL.TR. CK	
PH	
SD. CONT. %	
PRESSURE GRADIENT	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ron Smith

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	12⁰⁰	8	Logging

DAILY DRILLING REPORT

REPORT NO. 30 DATE August 8-70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDERMOTT	McD. G.C.O. MAIDA CREEK.	F-37	MAIDA CREEK.	N.W.T	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1-F	1	4½	5" O.D.	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	K-380	14"
2.	NAT	K-380	14"
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13⅜	JAP	48 J55	3	94.67		90'	CEMENTED TO SURFACE 67 sacks
	8⅝	MANNS	24# J55	24	876.42		860'	500 sacks 3% Cal.

TIME DISTRIBUTION-HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	3¼	8½	7¼
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS	3¼		
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY	¼		
TEST B.O.P.	¼	¼	¼
CUT OFF DRILLING LINE	½		
[illegible] RIG			
[illegible]			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
HRS.	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK	
HRS. W/DP	
HRS. WO/DP	
HRS. STANDBY	
TOTAL DAY WORK	

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
45	STANDS D.P.	4226.72	FT.
	SINGLES D.P.		FT.
18	D.C. I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Shock Sub BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	18.81	FT.
	TOTAL	4796.00	FT.
WT. OF STRING	110 M		LBS.

BIT RECORD		
BIT NO.	11	12
SIZE	7⅞	7⅞
MFG.	REED	H-W
TYPE	S5J55	OWC
NOZZLE NO.	2-11	2-11
NOZZLE SIZE	1-12	1-12
SER. NO.	868010	924006
DEPTH OUT	4792	
DEPTH IN	4681	4792
TOTAL FTG.	181'	4
TOTAL HR. RUN	20	½
COND. OF BIT	4-1-1	RUN
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	15⁰⁰		
WEIGHT	9.3		
VISC.-SEC	42		
W.L.-C.C.	6.8		
FLTR. CK.	3/32		
PH	9.5		
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
C.M.C	50#		

DRILLER: Ron Savill

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
4779	4796	D			45	35⁰⁰	1125	5½	54			
					60	15						
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4790	1¾°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
			Tally 4792.40
			Strap 4792.33
			No Change.
12⁰⁰	2⁴⁵	2¾	DRLG.
2⁴⁵	3⁰⁰	¼	Drop Survey
3⁰⁰	4⁴⁵	1¾	Pull out Strap Pipe
4⁴⁵	5⁰⁰	¼	R Rhino Reme change Bits Rig Sea.
5⁰⁰	5³⁰	½	Run in Drill Collars Lay down 1 Flex wt.
5³⁰	6⁰⁰	½	Slip 25' drill line
6⁰⁰	7³⁰	1½	Run in w/ Bit # 12 OWC.
7³⁰	8⁰⁰	½	DRLG.

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
45	STANDS D.P.	4226.72	FT.
1	SINGLES D.P.	28.90	FT.
18	D.C. I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock Sub	8.70	FT.
	KELLY DOWN	18.85	FT.
	TOTAL	4827.00	FT.
WT. OF STRING	110 M		LBS.

BIT RECORD		
BIT NO.	12	
SIZE	7⅞	
MFG.	H-W	
TYPE	OWC	
NOZZLE NO.	2/11	
NOZZLE SIZE	1/12	
SER. NO.	924006	
DEPTH OUT		
DEPTH IN	4792	
TOTAL FTG.	35	
TOTAL HR. RUN	4¼	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	9⁰⁰	12⁰⁰	3⁰⁰
WEIGHT	9.3	9.3	9.3
VISC.-SEC	44	42	40
W.L.-C.C.	6.6	6.4	6.2
FLTR. CK.	3/32	3/32	3/32
PH	9.6		9.0
SD. CONT. %	.4		
PRESSURE GRADIENT	3.5	80	14
[illegible]	360	41	23

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50#	Quebracho	100#
Mud	100#		
Kilsyn	100		

DRILLER: [signature]

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
4796	4827	D			70	20	1125	5½	54			
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8¹⁵	¼	Rig Service Lay Pipe & Kelly down
8¹⁵	9⁰⁰	7¾	Dilly 28' Line

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
45	STANDS D.P.		FT.
2	SINGLES D.P.	4289.16	FT.
18	D.C. I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	18.87	FT.
	TOTAL	4859.00	FT.
WT. OF STRING	110 M		LBS.

BIT RECORD		
BIT NO.	12	
SIZE	7⅞	
MFG.	H.W	
TYPE	OWC	
NOZZLE NO.	2/11	
NOZZLE SIZE	1/12	
SER. NO.	924006	
DEPTH OUT		
DEPTH IN	4792	
TOTAL FTG.	67	
TOTAL HR. RUN	16	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	5⁰⁰	8⁰⁰	10⁳⁰
WEIGHT	9.3	9.4	9.4
VISC.-SEC	44	42	42
W.L.-C.C.		2.4	
FLTR. CK		3/32	
PH		9.0	9.0
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	100#	Quebracho	50#
Kilsyn	100#	CMC	100#
Mud	50#		

DRILLER: [signature]

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
4827	4859	D			70	25	1125	5½	54			S
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9⁰⁰	9¹⁵	¼	Rig Service & Lay Pipe
9¹⁵	12⁰⁰	7¾	Dilly 28' Line

DAILY DRILLING REPORT

REPORT NO. 27 DATE August 7-70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDERMOTT	McD. G.C.O. MAJOR CREEK.	F59	MAJOR CREEK.	N.W.T	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	TYPE THD
S & T DRILLING (WESTERN) CO. LTD.	1E	7	4"	5" O.D.	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	DIAT	K-380	14"
2.	DIAT	K-380	14"
3.			

CASING / TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
CASING	13⅜	Tap	48. H55	3	94.67		90'	Grouted w/ 65 sx.
CASING	8⅝	mans	24 N55	24	374.42		860	500 sx 3% Cal.

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	8¾	8¾	7¼
REAMING	¼		
CONDITIONING MUD & CIRCULATING			
TRIPS	2¾		
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY			
TEST B.O.P.	¾	¼	¾
CUT OFF DRILLING LINE			
SLIP & CUT DRILLING LINE			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
TOTAL			
A. PERFORATOR			
B. TUBING TAPS			
C. SWABBING			
D. TESTING			
E. ARTIFICIAL			
F.	✓	✓	✓

TIME SUMMARY (OFFICE USE ONLY)

	MORN	DAY	EVE
DAY WORK			
HRS. W/DP			
HRS. W/O DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET RUNNED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
43	STANDS D.P.		FT.
2	SINGLES D.P.	4101.59	FT.
18	D.C. I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	37.94	FT.
	TOTAL	4690.00	FT.
WT. OF STRING	110M		LBS.

BIT RECORD		
BIT NO.	10	11
SIZE	7⅞	7⅞
MFG.	Smith	Reed
TYPE	HTS	SC05
NOZZLE NO.	2-11	2-11
NOZZLE SIZE	1-12	1-12
SER. NO.	CN5998	863019
DEPTH OUT	4681	
DEPTH IN	4450	4681
TOTAL FTG.	231	9
TOTAL HR. RUN	34½	1¾
COND. OF BIT	7-2-1	Run
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	8⁰⁰		7⁰⁰
WEIGHT	9.2		9.3
VISC.-SEC	40		42
W.L.-C.C.			7.0
FLTR. CK.			2/32
PH	10.0		10.0
SD. CONT. %	.8		12
PRESSURE GRADIENT			13

Sodios 7.5% Cal. Run

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [illegible]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL.-P CON'D.-C
4666	4681	D			45	35		5½	54			
4681	4690							14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1215	¼	Set Rig w BOP + bulky Valve.
1215	215	2	DRIG.
215	415	2	Trip out
415	600	1¾	Run in w/BIT # 11 Reed SC05
600	615	¼	Reaming To Bottom
615	800	1¾	DRIG.

Fell 7½ feet. changed liner in the 1 pump lubricate

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
44	STANDS D.P.	4143	FT.
1	SINGLES D.P.	31.43	FT.
18	D.C. I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Bit & C.B.	8.70	FT.
	KELLY DOWN	40.00	FT.
	TOTAL	4723.00	FT.
WT. OF STRING	112m		LBS.

BIT RECORD		
BIT NO.	11	
SIZE	7⅞	
MFG.	Reed	
TYPE	SC05	
NOZZLE NO.	4/.	
NOZZLE SIZE	1/32	
SER. NO.	863019	
DEPTH OUT		
DEPTH IN	4681	
TOTAL FTG.	42	
TOTAL HR. RUN	9½	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	9⁰⁰	12⁰⁰	9⁰⁰
WEIGHT	9.3	9.3	9.3
VISC.-SEC	40	44	46
W.L.-C.C.	8.0		7.4
FLTR. CK.	2/32		2/32
PH	8.5	8.0	10.0
SD. CONT. %	.8		
PRESSURE GRADIENT	.560		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	200#	Dextrid	50#
Caustic	50#	Polymed	100#
C.M.C.	50#		

DRILLER: [illegible]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL.-P CON'D.-C
4690	4723	D			45	35	125	5½	99			S
								K				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼	Rig Service + Lubr.
815	400	7¾	Drilling Ahead

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
44	STANDS D.P.		FT.
2	SINGLES D.P.	4125.78	FT.
18	D.C. I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	32.75	FT.
	TOTAL	4779.00	FT.
WT. OF STRING	112M		LBS.

BIT RECORD		
BIT NO.	11	
SIZE	7⅞	
MFG.	Reed	
TYPE	SC05	
NOZZLE NO.	4/.	
NOZZLE SIZE	1/32	
SER. NO.	863019	
DEPTH OUT		
DEPTH IN	4681	
TOTAL FTG.	98'	
TOTAL HR. RUN	17¼	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	8⁰⁰	8⁰⁰	4⁰⁰
WEIGHT	9.3	9.3	9.3
VISC.-SEC	44	42	42
W.L.-C.C.	7.2	7.6	
FLTR. CK	2/32	2/32	
PH	8.5	8.0	9.5
SD. CONT. %	.8	Nil	Nil
PRESSURE GRADIENT	.560	Y.P	22

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50#		

DRILLER: [illegible]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL.-P CON'D.-C
4723	4779	D			45	35	125	5½	54			S
								K				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	415	¼	Rig Service + Lubr.
415	1200	7¾	Drilling Ahead

DAILY DRILLING REPORT — REPORT NO. [illegible] — DATE August 6-70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDERMOTT	McD. G.C.O. MAIDA CREEK.	E67	MAIDA CREEK	NULT	ALBERTA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	DRILL PIPE STRING SIZE	TOOL JOINT	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	1	4½"	6" O.D.	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	K-380	14"
2.	NAT.	K-380	14"
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13⅜	Jap.	48# J55	3	94.67		90'	CEMENTED w/ 167 SAC.
	8⅝	MANNES	24 #/ft	24	896.42		960'	400 SX 3% Cal.

TIME DISTRIBUTION-HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	7½	7½	7½
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY	¼		¼
TEST B.O.P.	¼	¼	¼
CUT OFF DRILLING LINE			
SLIP & CUT DRILLING LINE			
LAKE TO RIG			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
FISHING			
A. PERFORATING			
B. TUBING TRIPS			
C. STRAPPING			
D. TESTING			
E. ADDITIONAL			
TOTAL	24	24	24

TIME SUMMARY (OFFICE USE ONLY)

	MORN	DAY	EVE
DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MILES OR TRIPS SINCE LAST CUT

CUMULATIVE TON MILES OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
42	STANDS D.P.		FT.
1	SINGLES D.P.	3976.28	FT.
18	D.C. 8¼ 6¼ RD. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.27	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	37.27	FT.
	TOTAL	4475.00	FT.

WT. OF STRING 107M LBS.

BIT RECORD

BIT NO.	10	
SIZE	7⅞	
MFG.	SMITH	
TYPE	4J5	
NOZZLE NO.	2-11	
NOZZLE SIZE	1-12	
SER. NO.	CN 5998	
DEPTH OUT		
DEPTH IN	4450	
TOTAL FTG.	115'	
TOTAL HR. RUN	17¼	
COND. OF BIT	RUN	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	2:00	4:15	6:00
WEIGHT	9.3	9.2	9.3
VISC.-SEC	40	39	42
W.L.-C.C.	7.4		6.6
FLTR. CK.	2/32		2/32
PH	9.5	9.5	9.5
SD. CONT. %			.8
PRESSURE GRADIENT		4.8	.24
		8.0	.13

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Kelzan	100#		
CMC	50#		
Oil	10#		

DRILLER: Ron Smith

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COND-C
4516	4565	D			45	35M	1100	5½	54			
								"				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4528	2°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
			Changed Rod speed & Packing #1 Pump on Left side
12:00	3:15	3¼	DRLG.
3:15	3:30	¼	Survey
3:30	3:45	¼	Ser. Rig & BOP. & Kelly Valve
3:45	8:00	4¼	DRLG.

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
43	STANDS D.P.	4089.00	FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.	3.67	FT.
	STB. BODY O.D.	4.27	FT.
	RMR. BODY O.D.	3.56	FT.
	SUBS O.D.	1.65	FT.
	BIT OR C.B.	8.70	FT.
1	Stabilizer	6.70	FT.
	KELLY DOWN	34.51	FT.
	TOTAL	4610.00	FT.

WT. OF STRING 108M LBS.

BIT RECORD

BIT NO.	10	
SIZE	7⅞	
MFG.	Smith	
TYPE	4J5	
NOZZLE NO.	2/11	
NOZZLE SIZE	1/12	
SER. NO.	CN5998	
DEPTH OUT		
DEPTH IN	4450	
TOTAL FTG.	160	
TOTAL HR. RUN	23	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	9:00	12:00	2:00
WEIGHT	9.3	9.3	9.3
VISC.-SEC	41	43	42
W.L.-C.C.	7.4		7.0
FLTR. CK.	2/32		2/32
PH	9.0		9.5
SD. CONT. %	.8		
PRESSURE GRADIENT	4.3	4.4+.200	
	8.0	7.5	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	200#		
Quebracho	50#		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAR'EL-P COND-C
4510	4610	D			45	35	1100	5½	54			S
					45	35	1100	"	54			
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼	Ser. Rig & Bops & Kelly cock
8:15	9:00	¾	Drlg 2⅞" hole

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
43	STANDS D.P.		FT.
2	SINGLES D.P.	4101.59	FT.
	D.C. I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.27	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	13.94	FT.
	TOTAL	4666.00	FT.

WT. OF STRING 109M LBS.

BIT RECORD

BIT NO.	10	
SIZE	7⅞	
MFG.	Smith	
TYPE	4J5	
NOZZLE NO.	2/11	
NOZZLE SIZE	1/12	
SER. NO.	CN5998	
DEPTH OUT		
DEPTH IN	4450	
TOTAL FTG.	216'	
TOTAL HR. RUN	32½	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	3:00	9:00	11:00
WEIGHT	9.3	9.3	9.3
VISC.-SEC	40	40	42
W.L.-C.C.	8.0	7.8	7.2
FLTR. CK.	2/32	2/32	2/32
PH	9.0	10.5	10.0
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Core	50#		

DRILLER: Ron Smith

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COND-C
4610	4666	D			45	35	1100	5½	54			
								"				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4654	2							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9:00	9:15	¼	Ser. Rig & Bops
9:15	11:15	2	Drlg 2⅞" hole
11:15	11:30	¼	Survey
11:30	12:00	½	DRLG.

DAILY DRILLING REPORT — REPORT NO. 27 — DATE August 5-70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDERMOTT	McD. G.C.O. MAIDA CREEK	F59	MAIDA CREEK	N.W.T	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	6	4"	5" O.D.	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	K-380	14"
2.	NAT.	K-380	14"
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13⅜	[illegible]	[illegible]	3	94.67		90'	62 sx Cement
	8⅝	MANS	24 H-55	24	876.42		860'	500 sx 32 Cal.

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	7¾	4¾	7¾
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS		3¼	
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY			
TEST B.O.P.	¼	½	¼
CUT OFF DRILLING LINE			
[illegible] RIG			
[illegible]			
[illegible] LINE [illegible]			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
TRENCH			
SUSPENSION WORK: A. PERFORATING			
B. TUBING TRIPS			
C. SPARRING			
D. TESTING			
E. ADDITIONAL			
F.	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
19	STANDS D.P.	3949.60	FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		
18	D.C. I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	[illegible] BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Shock Sub BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	33.93	FT.
	TOTAL	4434.00	FT.
WT. OF STRING	107M		LBS.

BIT RECORD

BIT NO.	9	
SIZE	7⅞	
MFG.	H-W	
TYPE	V55R	
NOZZLE NO.	2-11	
NOZZLE SIZE	1-12	
SER. NO.	9093	
DEPTH OUT		
DEPTH IN	4235	
TOTAL FTG.	199	
TOTAL HR. RUN	32	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	445	400	638
WEIGHT	9.3	9.3	9.3
VISC.-SEC	44	45	42
W.L.-C.C.	6.6	6.2	6.2
FLTR. CK.	2/32	2/32	2/32
PH	9.5	9.5	9.5
SD. CONT. %	.8		
PRESSURE GRADIENT		YP	21
		PV.	12

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Kelzan	100#		
C.M.C.	50#		
Dow. B	10#		

DRILLER: [signature]

FOOTAGE

FROM	TO	DR., D RM., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL., S PAR'EL-P CONT'D-C
4390	4434	D			45	35	1075	6¼	59			
								4				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	DETAILS
1200	400	4	DRLG.
400	415	¼	Ser. Rig w/ 500# + Kelly Valve
415			DRLG.

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
21	STANDS D.P.	3949.60	FT.
1	SINGLES D.P.	31.69	FT.
18	D.C. I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	[illegible] BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Shock Sub BIT OR C.B.	8.70	FT.
	KELLY DOWN	32.24	FT.
	TOTAL	4464.00	FT.
WT. OF STRING	108M		LBS.

BIT RECORD

BIT NO.	9	10
SIZE	7⅞	7⅞
MFG.	H-W	Smith
TYPE	V55R	455
NOZZLE NO.	2/11	3/11
NOZZLE SIZE	1/12	1/12
SER. NO.	9093	[illegible]
DEPTH OUT	4435	
DEPTH IN	4235	4400
TOTAL FTG.	215	14
TOTAL HR. RUN	34¼	2
COND. OF BIT	2-2-1	Run
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	900	1900	300
WEIGHT	9.3	[illegible]	9.4
VISC.-SEC	41	R	41
W.L.-C.C.	7.2		7.0
FLTR. CK.	2/32		2/32
PH	9.0	P	9.5
SD. CONT. %	.8		.8
PRESSURE GRADIENT	.675		.7
	YP 18		21

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50#		
Mil	100#		
Mud	50#		

DRILLER: [signature]

FOOTAGE

FROM	TO	DR., D RM., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL., S PAR'EL-P CONT'D-C
4434	4464	D			45	35	1100	6¼	59			5
					45	35	1100	4	59			
								14				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	DETAILS
300	615	3	Rig Service, Rep. Kelly cock
615	1100	4¾	Drlg. 7⅞" hole
1100	1200	1¼	Trip for bit #9
1200	1205	¼	Ream 30' to bottom
1205	300	1¾	Drlg. 7⅞" hole - 455 Smith
300	500	2	Drlg. 7⅞" hole

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
22	STANDS D.P.	3944.55	FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		
18	D.C. I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	[illegible] BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Shock Sub BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	20.98	FT.
	TOTAL	4516.00	FT.
WT. OF STRING	108M		LBS.

BIT RECORD

BIT NO.	10	
SIZE	7⅞	
MFG.	Smith	
TYPE	455	
NOZZLE NO.	3/11	
NOZZLE SIZE	1/12	
SER. NO.	[illegible]	
DEPTH OUT		
DEPTH IN	4450	
TOTAL FTG.	66	
TOTAL HR. RUN	9¾	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	500	800	1100
WEIGHT	9.3	9.3	9.3
VISC.-SEC	43	41	40
W.L.-C.C.	6.8	6.8	7.2
FLTR. CK	2/32	2/32	2/32
PH	9.5	9.5	9.5
SD. CONT. %		.8	
PRESSURE GRADIENT	.6816	.7258	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [signature]

FOOTAGE

FROM	TO	DR., D RM., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL., S PAR'EL-P CONT'D-C
4464	4516	D			45	35	1100	6¼	59			5
								4				
								14				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG — DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	DETAILS
400	415	¼	Rig Service, Rep.
415	1200	7¾	Drlg. 7⅞" hole

DAILY DRILLING REPORT — REPORT NO. 26 — DATE August 4-70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDermott	McD. G.C.D. Maida Creek	F57	Maida Creek	N.W.T.	Canada

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1-E	7	4"	5" O.D.	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	K-380	14"
2.	NAT.	K. 380	14"
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13⅜	Jap.	48# J-55	3	94.67		90'	Cemented w/ 67 sx.
	8⅝	Mannes	24# N55	24	876.42		860'	500 sx. 3% Cal.

TIME DISTRIBUTION — HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	7½	7½	7½
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			3
LUBRICATE RIG	W	✓	✓
DEVIATION SURVEY			S
TEST B.O.P.	W	X	X
CUT OFF DRILLING LINE			
REPAIR RIG			
REPAIR WELLHEAD			
WAIT ON LINE BUSTING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
FISHING			
SUPERVISION BY: A. PERFORATING			
B. TURBINE JOBS			
C. WRAPPING			
D. TESTING			
E. ADDITIONAL			
$			

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
39	STANDS D.P.		FT.
2	SINGLES D.P.	37.24, 25	FT.
18	D.C. 2⅞ I.D. 6¼ O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Shock Sub BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	14.28	FT.
	TOTAL	4289.00	FT.
WT. OF STRING	106 M		LBS.

BIT RECORD		
BIT NO.	9	
SIZE	7⅞	
MFG.	H-W	
TYPE	S55R	
NOZZLE NO.	2-11	
NOZZLE SIZE	1-12	
SER. NO.	9093	
DEPTH OUT		
DEPTH IN	4235	
TOTAL FTG.	54	
TOTAL HR. RUN	9	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	12:00	3:30	6:15
WEIGHT	9.3	9.3	9.3
VISC.-SEC	40	38	44
W.L.-C.C.	7.0		6.4
FL.TR. CK.	2/32		2/32
PH	9.5	9.5	9.5
SD. CONT. %	7.5%	Cal	15
PRESSURE GRADIENT		4.0	2.4
Sample	7.5%	Cal	High

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Bel	1000#		
Kelzan	100#		
Dow B	40#		

DRILLER: Ken Snell

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D.-C
4245	4289	D			45	35	1075	5½ x 14	54			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:30	1½	DRLG.
1:30	1:45	¼	Ser. Rig & BOP + Kelly Valve.
1:45	9:00	6¼	DRLG.

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
18	D.C. 2⅞ I.D. 6¼ O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.	3.67	FT.
	STB. BODY O.D.	4.37	FT.
	RMR. BODY O.D.	3.56	FT.
	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
Shock Sub		8.70	FT.
	KELLY DOWN	21.08	FT.
	TOTAL	4342.00	FT.
WT. OF STRING	107 M		LBS.

BIT RECORD		
BIT NO.	9	
SIZE	7⅞	
MFG.	H-W	
TYPE	S55R	
NOZZLE NO.	2-11	
NOZZLE SIZE	1-12	
SER. NO.	9093	
DEPTH OUT		
DEPTH IN	4235	
TOTAL FTG.	107	
TOTAL HR. RUN	18½	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	9:00	10:00	8:00
WEIGHT	9.3	9.3	9.3
VISC.-SEC	38	42	41
W.L.-C.C.	7.0		7.4
FL.TR. CK.	2/32		2/32
PH	9.0	9.0	9.5
SD. CONT. %	Tr. 1.4		1.2
PRESSURE GRADIENT	4.23		2.1
Q. Cal	2.0		3.0

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50#		

DRILLER: [illegible]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. 2 LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D.-C
4289	4342	D			45	35	1075	5½ x 14	54			S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼	Rig Service + Bop's + Kelly Cock
8:15	4:00	7¾	Drlg 7⅞" hole

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
40	STANDS D.P.		FT.
2	SINGLES D.P.	38.17.92	FT.
	D.C. I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Shock Sub BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	21.61	FT.
	TOTAL	4390.00	FT.
WT. OF STRING	107 M		LBS.

BIT RECORD		
BIT NO.	9	
SIZE	7⅞	
MFG.	H-W	
TYPE	S55R	
NOZZLE NO.	2-11	
NOZZLE SIZE	1-12	
SER. NO.	9093	
DEPTH OUT		
DEPTH IN	4235	
TOTAL FTG.	155	
TOTAL HR. RUN	24¼	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	5:00	8:30	11:00
WEIGHT	9.3	9.3	9.3
VISC.-SEC	40	40	39
W.L.-C.C.	7.6	7.4	7.6
FL.TR. CK	2/32	2/32	2/32
PH	9.5	9.5	9.5
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [illegible]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D.-C
4342	4390	D			45	35	1075	5½ x 14	54			S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4371	1¾°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼	Rig Service + Bops
4:15	10:15	6	Drlg 7⅞" hole
10:15	10:30	¼	Survey @ 4371
10:30	12:00	1½	DRLG.

DAILY DRILLING REPORT — REPORT NO. 23 — DATE August 3 1970

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDermott	McD. G.C.O. Maida Creek	P57	Maida Creek	N.W.T.	Canada

CONTRACTOR	RIG NO.	DRILL PIPE STRING HO.	SIZE	TOOL JOINT	O.D.	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	1	5"	5"		3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	K-300	14"
2.	NAT.	K-300	14"
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13⅜	Tex.	48# J-55	3	94.67		90'	Cement w/ 62 sxs
TUBING OR LINER	8⅝	Mannes	24-N55	84	976.42		8.60	w/ 500 sxs 3% Cal.

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	7½	7½	3¾
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			3
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY			¼
TEST B.O.P.			¼
CUT OFF DRILLING LINE			¾
SLIP DRILL LINE			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
FISHING			
A. PERFORATING			
B. TURBIN TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTAL	8	8	8

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
38	STANDS D.P.	3566.10	FT.
	SINGLES D.P.		FT.
	D.C.		
18	6¼ O.D. I.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Shock Sub BIT OR C.B.	8.70	FT.
		4116.57	FT.
	KELLY DOWN	31.43	FT.
	TOTAL	4148.00	FT.
WT. OF STRING	183 M		LBS.

BIT RECORD		
BIT NO.	8	
SIZE	7⅞	
MFG.	H-W	
TYPE	X55R	
NOZZLE NO.	2-11	
NOZZLE SIZE	1-12	
SER. NO.	H5533	
DEPTH OUT		
DEPTH IN	3786	
TOTAL FTG.	362	
TOTAL HR. RUN	32½	
COND. OF BIT	Dull	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	1¹⁵	4⁰⁰	6³⁰
WEIGHT	9.3	9.3	9.3
VISC.-SEC	40	40	44
W.L.-C.C.	7.8		7.6
FLTR. CK.	2/32		2/32
PH	9.5	9.5	9.5
SD. CONT. %	.8%	A.U	1.0
PRESSURE GRADIENT		A.U	1.7
Solids	7.5	7.5	7.5

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel.	1000#		
Kelzan	100#		
Soda Ash	10#		

DRILLER: [signature]

FOOTAGE FROM	TO	DR., D RM., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
4080	4148	D			45	35M	1075	5½ x 14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4088	1½°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
			Changed Oil in Motor 2 Lite plants August 3rd/70
12⁰⁰	1⁴⁵	1¾	DRLG.
1⁴⁵	2⁰⁰	¼	Survey
2⁰⁰	3¹⁵	1¼	Ser. Rig w/ BOP & Kelly Valve
3¹⁵			DRLG.

CHANGE HEAD LUB SINCE #1 PUMP

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
39	STANDS D.P.	3660.90	FT.
	SINGLES D.P.		FT.
	D.C.		
18	I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	33.70	FT.
	TOTAL	4245.00	FT.
WT. OF STRING	106 M		LBS.

BIT RECORD		
BIT NO.	8	9
SIZE	7⅞	7⅞
MFG.	H-W	H-W
TYPE	X55R	X55R
NOZZLE NO.	2-11	2-11
NOZZLE SIZE	1-12	1-12
SER. NO.	H5533	H5533
DEPTH OUT	4235	
DEPTH IN	3786	4235
TOTAL FTG.	449'	10
TOTAL HR. RUN	52¾	1¼
COND. OF BIT	6-2-A	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	5⁴⁵	1	
WEIGHT	9.3		
VISC.-SEC	41		
W.L.-C.C.			
FLTR. CK			
PH	9.5		
SD. CONT. %			
PRESSURE GRADIENT			

TRIP

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [signature]

FOOTAGE FROM	TO	DR., D RM., R CORE, C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. 2 LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
4218	4245	D			45	35M	1075	5½ x 14	59			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	4235	1½°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	4¹⁵	¼	Rig Service & Bop's
4¹⁵	6⁴⁵	2½	Drlg 7⅞" Hole
6⁴⁵	7⁰⁰	¼	Survey @ 4235
7⁰⁰	8³⁰	1½	Trip out for B
8³⁰	9⁰⁰	½	Change Bit & Run in Drill Collars
9⁰⁰	9⁴⁵	¾	Slip 28' & Cut 69'
9⁴⁵	10⁴⁵	1	Run in w/ Bit #9
10⁴⁵	12⁰⁰	1¼	DRLG

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	8 SIZE 1¼
FEET SLIPPED	23'
FEET CUT OFF	69'
PRESENT LENGTH	?
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK	
HRS. W/DP	
HRS. WO/DP	
HRS. STANDBY	
TOTAL DAY WORK	

DAILY DRILLING REPORT

REPORT NO. 24 DATE August 2 - 1976

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
T. RAY McDERMOTT	McD. G.C.O. MAIDA CREEK.	F-67	MAIDA CREEK.	N. W. T	CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 1-E

DRILL PIPE STRING: NO. 1 SIZE 4" TOOL JT O.D. 5" TYPE THD. IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT	K-380	14"
2.	NAT.	K-380	14"
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13 3/8	TAP	48# J-55	3	94.67		90.	67 sx Cement
	8 5/8	MANN	24# N55	24	876.42		860'	500 sxs 3% Cal

TIME DISTRIBUTION-HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	7 3/4	7 1/2	7 1/4
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY		1/2	
TEST B.O.P.	1/4	1/2	1/4
CUT OFF DRILLING LINE			
[illegible] RIG			
[illegible]			
[illegible]			
RUNNING CASING & CEMENTING			
[illegible]			
DRILL STEM TEST			
SPARE			
FISHING			
A. PERFORATING			
B. TURNING TRIPS			
C. REAMING			
D. TESTING			
E. ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK	
HRS. W/DP	
HRS. NO/DP	
HRS. STANDBY	
TOTAL DAY WORK	

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			FT.
36	STANDS D.P.	3380.37	FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
18	D.C. I.D. O.D.	528.52	FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	KNR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	BIT OR C.B.	8.70	FT.
		3930.84	FT.
	KELLY DOWN	25.16	FT.
	TOTAL	3956.00	FT.

WT. OF STRING 100 M LBS.

BIT RECORD

BIT NO.	8	
SIZE	7 7/8	
MFG.	H-61	
TYPE	XSSR.	
NOZZLE NO.	2-11	
NOZZLE SIZE	1-12	
SER. NO.	145533	
DEPTH OUT		
DEPTH IN	3786	
TOTAL FTG.	170	
TOTAL HR. RUN	19 3/4	
COND. OF BIT	Rmal.	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	2:15	4:00	6:00
WEIGHT	9.3	9.3	9.3
VISC.-SEC	40	42	40
W.L.-C.C.	7.4	7.6	6.8
FL.TR. CK.	2/32	2/32	
PH	10.0	10.0	9.5
SD. CONT. %		Nil	11
PRESSURE GRADIENT		4.8	18
		Ca Cont.	High

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
E.M.C.	50#		

DRILLER Ron Smith

FOOTAGE

FROM	TO	DR.-D RN.-R CORE.-C	CORE NO.
3896	3956	D	

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
45	35	1025	5 1/2	54			
			14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:00	2:00	DRLG.
2:00	2:15	1/4	Ser. Rig. ✓ BOPs. & Kelly Cock
2:15	8:00	5 3/4	DRLG.

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			FT.
36	STANDS D.P.	3411.13	FT.
1	SINGLES D.P.	39	FT.
	D.C. I.D. O.D.		FT.
18	D.C. I.D. O.D.		FT.
	STB. BODY O.D.	3.67	FT.
	STB. BODY O.D.	4.37	FT.
	KNR. BODY O.D.	3.56	FT.
	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Stab. S.B.	8.70	FT.
	KELLY DOWN	25.25	FT.
	TOTAL	3916.00	FT.

WT. OF STRING 100 M LBS.

BIT RECORD

BIT NO.	8	
SIZE	7 7/8	
MFG.	Hwi	
TYPE	XSSR	
NOZZLE NO.	2/11	
NOZZLE SIZE	1/12	
SER. NO.	145533	
DEPTH OUT		
DEPTH IN	3956	
TOTAL FTG.	39	
TOTAL HR. RUN	7 3/4	
COND. OF BIT	Rmal	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	9:00	12:00	3:00
WEIGHT	9.3	9.3	9.3
VISC.-SEC	40	42	42
W.L.-C.C.	7.4	7.6	7.2
FL.TR. CK.	2/32	2/32	2/32
PH	9.0	9.5	9.5
SD. CONT. %	12	11	
PRESSURE GRADIENT	16	18	
	Calcont	350	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Sal	[illegible]	Quick	50#
Caustic	25#	Polyset	100#
Cac	50#		

DRILLER [signature]

FOOTAGE

FROM	TO	DR.-D RN.-R CORE.-C	CORE NO.
3956	3996	D	

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
45	35	1025	5 1/2	54			S
			K				
			14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3944	1 1/2							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:00	2 1/2	Dly 4 3/4" Hole
10:00	10:05	1/12	Rig Service & Bops & Kelly Cock
10:05	11:00	1/12	Survey @ 3924. 1 1/2°
11:00	4:00	5	Drlg 3/4" Hole

Rough Hole from 3975 - 3984

H.L. Stewart Drlr.

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			FT.
37	STANDS D.P.		FT.
1	SINGLES D.P.	3504.30	FT.
	D.C. I.D. O.D.		FT.
18	D.C. I.D. O.D.	528.52	FT.
	STB. BODY O.D.	3.67	FT.
	STB. BODY O.D.	4.37	FT.
	KNR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	25.23	FT.
	TOTAL	4080.00	FT.

WT. OF STRING 102 M LBS.

BIT RECORD

BIT NO.	8	
SIZE	7 7/8	
MFG.	Hwi	
TYPE	XSSR	
NOZZLE NO.	2/11	
NOZZLE SIZE	1/12	
SER. NO.	145533	
DEPTH OUT		
DEPTH IN	3956	
TOTAL FTG.	394'	
TOTAL HR. RUN	35	
COND. OF BIT	Rmal	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	5:00	8:00	11:00
WEIGHT	9.3	9.3	9.3
VISC.-SEC	42	41	40
W.L.-C.C.	7.0	7.4	
FL.TR. CK	2/32	2/32	
PH	9.5	9.5	9.5
SD. CONT. %	8.8		
PRESSURE GRADIENT	7.58		
Gl Cont.	350		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER Ron Smith

FOOTAGE

FROM	TO	DR.-D RN.-R CORE.-C	CORE NO.
4016	4080	D	

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
45	35	1015	5 1/2	54			S
			K				
			14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	6:15	2 1/4	Dly 7 7/8" Hole
6:15	6:30	1/4	Rig Service & BOPs
6:30	12:00	5 1/2	DRLG

DAILY DRILLING REPORT

REPORT NO. #3 DATE August 1 19[illegible]

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDERMOTT	McD. G.C.O. - MAIDA CREEK	F57	MAIDA CK.	NWT	CANADA.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	TYPE THD.
S-&T DRILLING (WESTERN) CO. LTD.	1E	7	4½"	5" O.D.	11"

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	K-380	14"
2.	NAT.	K-380	14"
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13⅜	Jap.	48.5#	3	94.67		90	67 sx Cement
TUBING OR LINER	8⅝	Dawn	24# K55	24	876.42		860.	500 sx 3% Cal.

TIME DISTRIBUTION - HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	9½	5	7½
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS		2½	
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY			
TEST B.O.P.			
CUT OFF DRILLING LINE			
SLIP & CUT DRILL LINE			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
WELD STEM TUBE			
OTHER			
DIAMOND			
A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ACIDIZING			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

WIRE LINE RECORD

REEL NO. 3

NO. OF LINES 8 SIZE 1½

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			FT.
34	STANDS D.P.	3892.35	FT.
	SINGLES D.P.		FT.
18	D.C. I.D. O.D. 5½ 6¼	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D. 6¼	3.67	FT.
1	STB. BODY O.D. 6¼	4.37	FT.
1	RMR. BODY O.D. 6¼	3.56	FT.
1	SUBS O.D. 6¼	1.65	FT.
1	5 5/16 BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	39.19	FT.
	TOTAL	3989.00	FT.

WT. OF STRING 100M LBS.

BIT RECORD

BIT NO.	7		
SIZE	7⅞		
MFG.	REED		
TYPE	S0M5		
NOZZLE NO.	2-12		
NOZZLE SIZE	1-11		
SER. NO.	263007		
DEPTH OUT			
DEPTH IN	3406		
TOTAL FTG.	376		
TOTAL HR. RUN	45¾		
COND. OF BIT	Run		
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	9⁰⁰	3⁴⁵	6⁰⁰
WEIGHT	9.2	9.4	9.3
VISC.-SEC	38	44	42
W.L.-C.C.	6.8	6.4	6.8
FLTR. CK.	1/32	1/32	1/32
PH	9.0	9.0	9.0
SD. CONT. %			12
PRESSURE GRADIENT			.20

Calc. Cut Night.

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000#		
Kelzan	100#		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR., D, RM., R CORE, C	CORE NO.
3720	3782	D	

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
45	35	1050	5½	54			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3745	1⅛							

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	DETAILS
12⁰⁰	12³⁰	½	DRLG.
12³⁰	12⁴⁵	¼	Ser. Rig ✓ BOP + kelly Cock.
12⁴⁵	4⁴⁵	4	DRLG.
4⁴⁵	5⁰⁰	¼	Survey @ 3745
5⁰⁰	6⁰⁰	1	DRLG.

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			FT.
34	STANDS D.P.	[illegible]	FT.
2	SINGLES D.P.	[illegible]	FT.
18	D.C. I.D. O.D. 5½ 6¼	[illegible]	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D. 6¼	3.67	FT.
1	STB. BODY O.D. 6¼	4.37	FT.
1	RMR. BODY O.D. 6¼	3.56	FT.
1	SUBS O.D. 6¼	1.65	FT.
	BIT OR C.B.		FT.
1	Stab. Sub.	8.70	FT.
	KELLY DOWN	27.22	FT.
	TOTAL	[illegible]	FT.

WT. OF STRING 100M LBS.

BIT RECORD

BIT NO.	7	8	
SIZE	7⅞	7⅞	
MFG.	Reed	Hw	
TYPE	S0M5	XSSR	
NOZZLE NO.	2-12	3-11	
NOZZLE SIZE	1-11	1/32	
SER. NO.	[illegible]	10533	
DEPTH OUT	[illegible]		
DEPTH IN	[illegible]	3786	
TOTAL FTG.	[illegible]	44	
TOTAL HR. RUN	[illegible]	4½	
COND. OF BIT	[illegible]	Run	
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	9⁰⁰	11⁰⁰	2⁰⁰
WEIGHT	9.3	9.3	9.3
VISC.-SEC	41	40	42
W.L.-C.C.	6.4	6.2	7.0
FLTR. CK.	1/32	1/32	1/32
PH	8.5	8.5	9.0
SD. CONT. %	Tr.	15	
PRESSURE GRADIENT		.15	

Calc. Cut. 4000

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	20#	Lime	100#
Caustic	100#	Gel	50#
Kelzan	100#		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR., D, RM., R CORE, C	CORE NO.
3782	3820	D	

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
45	35	[illegible]	5½	54			S
			14				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3820	1½°							

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	DETAILS
6⁰⁰	8⁰⁰	2	Daly 7⅞" hole
8⁰⁰	8³⁰	½	Rig Service + Lubricate
8³⁰	10⁴⁵	2¼	Trip out for bit #8
10⁴⁵	11⁰⁰	¼	Change bit + BHA
11⁰⁰	11³⁰	½	Trip in + Ream 30' (Check fill on bottom)
11³⁰	6⁰⁰	6½	Daly 7⅞" hole

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			FT.
36	STANDS D.P.		FT.
1	SINGLES D.P.	33.18.31	FT.
18	D.C. I.D. O.D. 5½ 6¼	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D. 6¼	3.67	FT.
1	STB. BODY O.D. 6¼	4.37	FT.
1	RMR. BODY O.D. 6¼	3.56	FT.
1	SUBS O.D. 6¼	1.65	FT.
1	5 5/16 BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	27.22	FT.
	TOTAL	3896.00	FT.

WT. OF STRING 100M LBS.

BIT RECORD

BIT NO.	8		
SIZE	7⅞		
MFG.	Hw		
TYPE	XSSR		
NOZZLE NO.	2-11		
NOZZLE SIZE	1/32		
SER. NO.	10533		
DEPTH OUT			
DEPTH IN	3786		
TOTAL FTG.	110		
TOTAL HR. RUN	12		
COND. OF BIT	Run		
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	5⁰⁰	8¹⁵	11⁴⁰
WEIGHT	9.3	9.3	9.3
VISC.-SEC	43	44	45
W.L.-C.C.	7.0	6.0	7.0
FLTR. CK	1/32	1/32	2/32
PH	10.0	10.5	10.0
SD. CONT. %		0.1	13
PRESSURE GRADIENT		.22	

Calc. Cut. Night.

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR., D, RM., R CORE, C	CORE NO.
3820	3896	D	

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
45	35	[illegible]	5½	54			S
			14				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
3870	1½°							

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	DETAILS
4⁰⁰	4¹⁵	¼	Rig Service + Lubricate
4¹⁵	9⁰⁰	3¾	Daly 7⅞" hole
9⁰⁰	9¹⁵	¼	Survey @ 3870
9¹⁵	12⁰⁰	2¾	DRLG

DAILY DRILLING REPORT

REPORT NO. 22 DATE July 31 - 90

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDERMOTT	IOCD G.C.O. MAIDA CREEK	F-59	MAIDA CREEK	N.W.T	CANADA

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD.

RIG NO.

DRILL PIPE STRING: NO. 7, SIZE 5½"

TOOL JOINT: 5" O.D. TYPE THD. IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT	K 380	14"
2.	NAT	K 380	14"
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	REEY	RKB. TO CSG. HD.	SET AT	REMARKS
	13⅜	JAP	48# J-55	3	94.67		90	Cemented 67 sx Cement
	8⅝	MANNS	24# N 55	24	896.92		960	Cemented w/ 550 sx 3% CA

TIME DISTRIBUTION - HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	7½	7½	7½
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY			
TEST B.O.P.	½	½	½
CUT OFF DRILLING LINE			
SLIP & CUT DRILLING LINE			
RUNNING CASING			
RUNNING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
CORING			
FISHING			
A. PERFORATING			
B. TUBING TRIPS			
C. STRADDLE			
D. TESTING			
E. ADDITIONAL			
TOTAL	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TOH W/ OR TRIPS SINCE LAST CUT

CUMULATIVE TOH W/ OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
33	STANDS D.P.	3044.73	FT.
	SINGLES D.P.		FT.
	D.C.		
18	2⅞ 6½	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Stack Sub BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	39.80	FT.
	TOTAL	3586	FT.
WT. OF STRING	97M		LBS.

BIT RECORD

BIT NO.	7		
SIZE	7⅞		
MFG.	Reed		
TYPE	SCM5		
NOZZLE NO.	3-12		
NOZZLE SIZE	1-11		
SER. NO.	P6300		
DEPTH OUT			
DEPTH IN	3406		
TOTAL FTG.	180		
TOTAL HR. RUN	23		
COND. OF BIT	Run		
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	1⁰⁰	3⁰⁰	6⁰⁰
WEIGHT	9.3	9.3	9.3
VISC.-SEC	43	44	42
W.L.-C.C.	7.4	7.6	7.8
FLTR. CK.	32	32	
PH	9.0	9.0	9.0
SD. CONT. %	4P. 22	4P. 20	
PRESSURE GRADIENT	P.U. 13	P.U. 13	
Ca. Cont.	High		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	100		
Kalzan	100		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 7 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METH. RUN SCL. PART. CONT.
3515	3586	D			45	35	1050	5½ x 14	54			

DEVIATION RECORD: DEPTH 3066 DEV. ¼ DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	2⁰⁰	2	DRLG.
2⁰⁰	2¹⁵	¼	Ser. Rig / BOP + Kelly Cock
2¹⁵	7⁰⁰	5¾	DRLG.

AM Almost Down @ 315 AM

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
33	STANDS D.P.	3044.73	FT.
	SINGLES D.P.		FT.
	D.C.		
18	2⅞ 6½	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Stack Sub	8.70	FT.
	KELLY DOWN	39.80	FT.
	TOTAL	3629.00	FT.
WT. OF STRING	98M		LBS.

BIT RECORD

BIT NO.	7		
SIZE	7⅞		
MFG.	Reed		
TYPE	SCM5		
NOZZLE NO.	3-12		
NOZZLE SIZE	1-11		
SER. NO.	P6300		
DEPTH OUT			
DEPTH IN	3406		
TOTAL FTG.	223'		
TOTAL HR. RUN	30½		
COND. OF BIT	Run		
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	4⁰⁰	1⁰⁰	3⁰⁰
WEIGHT	9.3	9.3	9.2
VISC.-SEC	40	41	41
W.L.-C.C.	8.0		7.8
FLTR. CK.	3/32		3/32
PH	8.5		9.0
SD. CONT. %	P.U. 13		
PRESSURE GRADIENT	P.U. 12		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	800	Lime	200#
Caustic	50	Caustic	50#
Kelzan	50		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.
3586	3669	D			45	35	1050	5½ x 14	54		

DEVIATION RECORD: DEPTH 3660 DEV. 1¼ DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	8¹⁵	4¼	Rig Service / BOP + Kelly Cock
8¹⁵	3⁰⁰	6¾	Drlg 7⅞" Hole
3⁰⁰	3¹⁵	¼	Wiper Trip 3660 ft.
3¹⁵	4⁰⁰	¾	Drlg 7⅞" Hole

Had Rough Drilling Off & On from 3610 - 3665

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
33	STANDS D.P.		FT.
1	SINGLES D.P.	31.29.20	FT.
	D.C.		
18	2⅞ 6½	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Stack Sub	8.70	FT.
			FT.
	KELLY DOWN	40.33	FT.
	TOTAL	3720.00	FT.
FT. OF STRING	98M		LBS.

BIT RECORD

BIT NO.	7		
SIZE	7⅞		
MFG.	Reed		
TYPE	SCM5		
NOZZLE NO.	3-12		
NOZZLE SIZE	1-11		
SER. NO.	P6300		
DEPTH OUT			
DEPTH IN	3406		
TOTAL FTG.	314'		
TOTAL HR. RUN	38½		
COND. OF BIT	Run		
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	5⁰⁰	9:30	4:30
WEIGHT	9.2	9.2	9.2
VISC.-SEC	42	44	42
W.L.-C.C.	8.0	7.4	6.8
FLTR. CK	3/32	3/32	3/32
PH	9.0	9.0	9.0
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caus.	50#		
Caustic	50#		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METH. RUN SCL. PART. CONT.
3669	3720	D			45	35	1050	5½ x 14	54			

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	5³⁰	1½	Drlg 7⅞" Hole
5³⁰	5⁴⁵	¼	Rig Service / Caps
5⁴⁵	12⁰⁰	6¼	Drlg 7⅞" Hole

DAILY DRILLING REPORT

REPORT NO. 01 DATE May 30-74

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDermott	McD. G.C.O. Maida Creek	F57	Maida Creek	N.W.T.	Canada

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	DRILL PIPE STRING SIZE	TOOL JOINT	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	1	4½"	5" O.D.	IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NRT.	K-380	14"
2.	NRT.	K. 380	14"
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13⅜	Jap	48# J-55	3	94.46		90'	Cemented w/ 67 sx.
	8⅝	Mannes	24# N 55	24	876.42		860'	Cemented w/ 500 sx 35% Gel

TIME DISTRIBUTION (HOURS)

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	3¾	7¼	7½
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS	3½		
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY	¼		¼
TEST B.O.P.	¼	¼	¼
CUT OFF DRILLING LINE	½		
SLIP DRILL LINE			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
FISHING			
a. PERFORATING			
b. TUBING TRIPS			
c. SWABBING			
d. TESTING			
e. ADDITIONAL			
TOTAL	24	24	24

TIME SUMMARY (OFFICE USE ONLY)

	MORN	DAY	EVE
DAY WORK			
HRS. W/DP			
HRS. RD/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
30	STANDS D.P.	2814.52	FT.
	SINGLES D.P.		FT.
	D.C.		
18	7 x 2 x 6¼ O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock	8.70	FT.
	KELLY DOWN	43.80	FT.
	TOTAL	3406.00	FT.
WT. OF STRING	93M		LBS.

BIT RECORD

BIT NO.	RR	6	7
SIZE		7⅞	7⅞
MFG.		Smith	Reed
TYPE		4JS	SCR5
NOZZLE NO.		3-11	1-11
NOZZLE SIZE		"	2-12
SER. NO.		NA-189	86300
DEPTH OUT		3406	
DEPTH IN		2825	3406
TOTAL FTG.		582	
TOTAL HR. RUN		59½	
COND. OF BIT		6-2-T	
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	130	330	
WEIGHT	9.3	9.3	
VISC.-SEC	40	40	
W.L.-C.C.	6.8	7.4	
FLTR. CK.	2/32	2/32	
PH	9.0	9.0	
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ron Snell

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
3367	3408	D			45	35	1300	5½ x 14	54			
3408												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3365	¾°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
1200	1230	½	DRLG. 7⅞
1230	1245	¼	Survey @ 3365
1245	100	¼	See Rig ✓ B.O.P.
100	415	3¼	DRLG. 7⅞
415	615	2	Trip out Hole Tight @ 2800' "pumped out 2 singles"
615	645	½	Slip 28' drilling line
645	900	1¼	Run in w/Bit # 7

Rig Tally @ 3406.14
Stump out — 3408.77
Diff 2.63
Core made

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
30	STANDS D.P.	2844.74	FT.
2	SINGLES D.P.	28.44	FT.
	D.C.		
18	7 x 2 x 6¼ O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.	3.67	FT.
	STB. BODY O.D.	4.37	FT.
	RMR. BODY O.D.	3.56	FT.
	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock Sub	8.70	FT.
	KELLY DOWN	31.81	FT.
	TOTAL	3460.00	FT.
WT. OF STRING	96M		LBS.

BIT RECORD

BIT NO.		7	
SIZE		7⅞	
MFG.		Reed	
TYPE		SCR5	
NOZZLE NO.		1/11	
NOZZLE SIZE		3/32	
SER. NO.		86300	
DEPTH OUT			
DEPTH IN		3406	
TOTAL FTG.		54'	
TOTAL HR. RUN		7¼	
COND. OF BIT		[illegible]	
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	1000	130	
WEIGHT	9.4	9.3	9.3
VISC.-SEC	38	42	46
W.L.-C.C.	26		7.4
FLTR. CK.	2/32		2/32
PH	9.0		9.0
SD. CONT. %	0.15		
PRESSURE GRADIENT	0.15		
	Core [illegible]		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	100#	Caustic	0#
[illegible]	100#		
[illegible]	20#		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
3406	3460	D			45	35	[illegible]	5½ x 14	54			S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
800	815	¼	Rig Service & Check Blocks & Kelly Cock
815	400	7¾	Drlg 7⅞" hole

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
31	STANDS D.P.		FT.
1	SINGLES D.P.	29.41	FT.
	D.C.		
18	7 x 2 x 6¼ O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	[illegible] C.B.	8.70	FT.
			FT.
	KELLY DOWN	23.34	FT.
	TOTAL	3565.00	FT.
WT. OF STRING	96M		LBS.

BIT RECORD

BIT NO.		7	
SIZE		7⅞	
MFG.		Reed	
TYPE		SCR5	
NOZZLE NO.		3/11	
NOZZLE SIZE		1/11	
SER. NO.		86300	
DEPTH OUT			
DEPTH IN		3406	
TOTAL FTG.		109	
TOTAL HR. RUN		15¼	
COND. OF BIT		RUN	
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	500	900	1115
WEIGHT	9.3	9.3	9.3
VISC.-SEC	42	38	39
W.L.-C.C.	7.8	8.0	9.0
FLTR. CK	2/32	2/32	2/32
PH	9.0	8.5	9.0
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50#		
Caustic	50#		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
3460	3515	D			45	35	[illegible]	5½ x 14	54			D

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3493	¼°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
400	520	1¼	Drlg 7⅞" hole
520	545	¼	Rig Service & Check
545	1030	4¾	Drlg 7⅞" hole
1030	1045	¼	Survey 3493
1045	1200	1¼	DRLG.

DAILY DRILLING REPORT — REPORT NO. 20 — DATE July 29 70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDERMOTT	McD. CAN. G.C.O. MAIDA CREEK	F-57	MAIDA CREEK	N.W.T	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT O.D.	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	7	4"	5"	IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	5.180	14"
2.	NAT.	5.380	14"
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13 3/8	IPO	48# J-55	3	94.46		90'	67 sx CEMENT.
TUBING OR LINER	4 1/2	MANS	24# J55	24	776.42		8.60	500 sx 3% CAL.

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	7 3/4	7 1/2	3 1/4
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG	✓	✓	1/2
DEVIATION SURVEY		1/4	
TEST B.O.P.	1/4	1/4	
CUT OFF DRILLING LINE			
REPAIR RIG			
FISHING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TURING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL DETAILS	1/4	1/4	1/4

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
88	STANDS D.P.		FT.
1	SINGLES D.P.	2656.03	FT.
18	D.C. 8 1/4 I.D. 6 1/4 O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock Sub	8.70	FT.
	KELLY DOWN	21.50	FT.
	TOTAL	3228.00	FT.
WT. OF STRING	90M		LBS.

BIT RECORD		
BIT NO.	RR#6	
SIZE	7 7/8	
MFG.	Smith	
TYPE	4J5	
NOZZLE NO.	3-11	
NOZZLE SIZE		
SER. NO.	EA 189	
DEPTH OUT		
DEPTH IN	2825	
TOTAL FTG.	403	
TOTAL HR. RUN	40 1/2	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	3:00	4:30	7:00
WEIGHT	9.2	9.2	9.2
VISC.-SEC	41	45	42
W.L.-C.C.	8.0	6.4	6.8
FLTR. CK	2/32	3/32	2/32
PH	9.5	8.5	9.5
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED TYPE	AMT.	TYPE	AMT.
GEL	1000#	CAUSTIC	50#
CMC	50#		
Kelzan	100#		

DRILLER: [signature]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COND-C
3156	3228'	D			45	35	1300	5 1/2 x 14	54			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS Checked all Fire Ext. July 29/70
12:00	3:15	3 1/4	DRLG.
3:15	3:30	1/4	See Big ✓ BOP + Kelly Cock
3:30	8:00	4 1/2	DRLG.

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
89	STANDS D.P.	2718.77	FT.
	SINGLES D.P.		FT.
	D.C. 8 1/4 I.D. 6 1/4 O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.	3.67	FT.
	STB. BODY O.D.	4.37	FT.
	RMR. BODY O.D.	3.56	FT.
	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock Sub	8.70	FT.
	KELLY DOWN	34.73	FT.
	TOTAL	3288.00	FT.
WT. OF STRING	93M		LBS.

BIT RECORD		
BIT NO.	RR#6	
SIZE	7 7/8	
MFG.	Smith	
TYPE	4J5	
NOZZLE NO.	3	
NOZZLE SIZE	11	
SER. NO.	EA189	
DEPTH OUT		
DEPTH IN	2825	
TOTAL FTG.	469	
TOTAL HR. RUN	48	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	9:00	12:00	3:00
WEIGHT	9.2	9.2	9.2
VISC.-SEC	42	44	42
W.L.-C.C.	7.4	7.6	7.6
FLTR. CK.	3/32	3/32	3/32
PH	9.0	9.5	9.0
[illegible]	16		
PRESSURE GRADIENT	1.38		

MUD & CHEMICALS ADDED TYPE	AMT.	TYPE	AMT.
Bentonite	50#		

DRILLER: [signature]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COND-C
3228	3294	D			45	35	1300	5 1/2 x 14	54			S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3251	3/4°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:00	2 1/2	Drlg 7 7/8 Hole
10:00	10:30	1/2	Rig Service + Check Kelly Cock
10:30	11:00	1/2	Survey @ 3251 3/4°
11:00	4:00	5	Drlg 7 7/8 Hole

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
89	STANDS D.P.	2718.77	FT.
2	SINGLES D.P.	62.88	FT.
8	D.C. 8 1/4 I.D. 6 1/4 O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. STAB BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock Sub	8.70	FT.
	KELLY DOWN	32.95	FT.
	TOTAL	3367.00	FT.
WT. OF STRING	92 M		LBS.

BIT RECORD		
BIT NO.	RR#6	
SIZE	7 7/8	
MFG.	Smith	
TYPE	4J5	
NOZZLE NO.	3	
NOZZLE SIZE	11	
SER. NO.	EA189	
DEPTH OUT		
DEPTH IN	2825	
TOTAL FTG.	542	
TOTAL HR. RUN	55 3/4	
COND. OF BIT	RUN	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	5:00	8:30	11:00
WEIGHT	9.2	9.3	9.3
VISC.-SEC	40	37	41
W.L.-C.C.	8.0	8.2	7.6
FLTR. CK	3/32		2/32
PH	9.0	9.0	9.0
S. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED TYPE	AMT.	TYPE	AMT.
C.M.C.	100#		
GEL	1000#		

DRILLER:

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COND-C
3294	3367	D			45	35	1300	5 1/2 x 14	54			S

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9:00	6:15	2 1/4	Drlg 7 7/8 Hole
6:15	6:30	1/4	Rig Service ✓ B.O.P.'s + Kelly Cock
6:30	12:00	5 1/2	DRLG 7 7/8 HOLE

DAILY DRILLING REPORT

REPORT NO. 19 DATE July 28-10

OPERATOR	LEASE	WELL NO.	FIELD OR INST.	COUNTY	STATE
J. Ray McDermott	McD. Can. G.C.O. Maida Creek.	F57	Maida Creek.	NWT	Canada

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	1	4"	5" O.D.	IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	K-380	14"
2.	NAT.	K-380	14"
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13 3/8	Tap.	48# J-55	3	94.46		90'	67 sx Cement.
TUBING OR LINER	8 5/8	Barns	24# K55	24.	976.42		8.60	500 sx cement 3% Cal.

TIME DISTRIBUTION-HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	7½	8½	7½
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY	½	½	½
TEST B.O.P.	½	½	½
CUT OFF DRILLING LINE			
REPAIR RIG			
REPAIR OTHER			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTAL	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR		
26	STANDS D.P.	2435.48 FT.
	SINGLES D.P.	FT.
	D.C.	
18	6¼ I.D. O.D.	528.52 FT.
	D.C. I.D. O.D.	FT.
1	STB. BODY O.D.	3.67 FT.
1	STB. BODY O.D.	4.37 FT.
1	RMR. BODY O.D.	3.56 FT.
1	SUBS O.D.	1.65 FT.
	BIT OR C.B.	FT.
1	Shock Sub	8.70 FT.
	KELLY DOWN	24.05 FT.
	TOTAL	3010 FT.
WT. OF STRING	89 m.	LBS.

BIT RECORD		
BIT NO.	RR#	6
SIZE		7⅞
MFG.		Smith
TYPE		4J5
NOZZLE	NO.	3-11
	SIZE	
SER. NO.		FA 189
DEPTH OUT		
DEPTH IN		2875'
TOTAL FTG.		135'
TOTAL HR. RUN		17¾
COND. OF BIT		Runs.
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	2:30	4:30	7:00
WEIGHT	9.2	9.2	9.2
VISC.-SEC	43	43	41
W.L.-C.C.	6.0	6.4	6.6
FL.TR. CK.	2/32	2/32	2/32
PH	9.0	8.5	9.0
SD. CONT. %		4P.	1.8
PRESSURE GRADIENT		P.V.	13
		C.L.	100

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50#		

DRILLER: [signature]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN
2997	3010	D			45	35		5½	54			
								5				
								4				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2956	½°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	3:15	3¼	DRLG.
3:15	3:30	¼	Survey @ 2956
3:30	3:45	¼	Ser. Rig ✓ B.O.P.
3:45	8:00	4¼	DRLG.

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR		
96	STANDS D.P.	9145.48 FT.
2	SINGLES D.P.	62.87 FT.
	D.C.	
18	I.D. O.D.	528.52 FT.
	D.C. I.D. O.D.	FT.
1	STB. BODY O.D.	3.67 FT.
1	STB. BODY O.D.	4.37 FT.
1	RMR. BODY O.D.	3.56 FT.
1	SUBS O.D.	1.65 FT.
	BIT OR C.B.	FT.
1	Shock Sub	8.70 FT.
	KELLY DOWN	32.29 FT.
	TOTAL	3089.00 FT.
WT. OF STRING	90m	LBS.

BIT RECORD		
BIT NO.	RR#	6
SIZE		7⅞
MFG.		Smith
TYPE		4J5
NOZZLE	NO.	3
	SIZE	11
SER. NO.		FA189
DEPTH OUT		
DEPTH IN		2825
TOTAL FTG.		259
TOTAL HR. RUN		25¾
COND. OF BIT		Run
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	9:30	12:00	3:00
WEIGHT	9.3	9.2	9.2
VISC.-SEC	40	40	41
W.L.-C.C.	9.6	9.6	9.8
FL.TR. CK.	3/32	3/32	3/32
PH	9.0	9.0	9.5
SD. CONT. %		4.8	1.6
PRESSURE GRADIENT		P.V.	11

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel.	500#	KELZAN	100#
Dome 106	30#		
Caustic	50#		

DRILLER: [signature]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. 2 LINER SIZE	S.P.M.	METHOD RUN
3010	3084	D			45	35	1000	5½	54			5
							1225	×	54			
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3030	½							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	10:00	2	Drlg 7⅞ hole
10:00	10:15	¼	Survey @ 3030 ½°
10:15	10:30	¼	Rig Service, Grease Blocks & Kelly cock
10:30	4:00	5½	Drlg 7⅞ hole

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR		
97	STANDS D.P.	FT.
2	SINGLES D.P.	2593.96 FT.
	D.C.	
18	6¼ I.D. O.D.	528.52 FT.
	D.C. I.D. O.D.	FT.
1	STB. BODY O.D.	3.67 FT.
1	STB. BODY O.D.	4.37 FT.
1	RMR. BODY O.D.	3.56 FT.
1	SUBS O.D.	1.65 FT.
	BIT OR C.B.	FT.
1	Shock Sub	8.70 FT.
	KELLY DOWN	12.57 FT.
	TOTAL	3156.00 FT.
WT. OF STRING	90 M	LBS.

BIT RECORD		
BIT NO.	RR#	6
SIZE		7⅞
MFG.		Smith
TYPE		4J5
NOZZLE	NO.	3
	SIZE	11
SER. NO.		FA169
DEPTH OUT		
DEPTH IN		2825
TOTAL FTG.		331
TOTAL HR. RUN		32¾
COND. OF BIT		Run
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	5:00	8:30	11:00
WEIGHT	9.2	9.2	9.2
VISC.-SEC	42	39	45
W.L.-C.C.	9.8	9.6	9.8
FL.TR. CK	3/32	3/32	3/32
PH	9.0	9.5	9.5
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel.	[illegible]	1000#	
Caustic	100#		
KALZAN	100#		

DRILLER

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. 2 LINER SIZE	S.P.M.	METHOD RUN
3084	3156	D			45	35m	1000	5½	54			5
							1225	~	54			
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3145	⅛°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1	Drlg 7⅞ hole
5:00	5:15	¼	Rig Service, Grease Blocks & Kelly cock
5:15	11:45	6½	Drlg 7⅞ hole
11:45	12:00	¼	Survey @ 3145

DAILY DRILLING REPORT — REPORT NO. 18 — DATE July 27 1970

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDermott	McD. Can G.C.O Maida Creek.	F-37		Canada	N.W.T.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	O.D.
S & T DRILLING (WESTERN) CO. LTD.	1E.	3	4"	TYPE THD 3½ I.F.	5"

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: L.N. Webber

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL.	K380	14
2.	NATIONAL	K380	14
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13⅜	JAP.	48 J55	3.	94.46		90	675x Cem.
TUBING OR LINER	8⅝	MANN	24 N55	24	876.42		860	500sx Cem 3% CaCl.

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	1¼	3½	7½
REAMING			
CONDITIONING MUD & CIRCULATING	1		
TRIPS	2½	2¾	
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY			½
TEST B.O.P.	¼	¼	¼
CUT OFF DRILLING LINE			
REPAIR RIG			
REPAIRING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST	3	1	
OTHER	1		
FISHING			
SERVICE: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL HRS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

	MORN	DAY	EVE
DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
24	STANDS D.P.	2246.51	FT.
	SINGLES D.P.		FT.
8	D.C. 6¼ I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock Sub	8.70	FT.
	KELLY DOWN	28.02	FT.
	TOTAL	2825.	FT.
WT. OF STRING	84M.		LBS.

BIT RECORD

BIT NO.	16	
SIZE	7⅞	
MFG.	Smith	
TYPE	4J5	
NOZZLE NO.	3-11	
NOZZLE SIZE		
SER. NO.	EA189	
DEPTH OUT	2825	
DEPTH IN	2724	
TOTAL FTG.	101	
TOTAL HR. RUN	8	
COND. OF BIT	1-1-1	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	1:30		
WEIGHT	9.2		
VISC.-SEC	42.		
W.L.-C.C.			
FL.TR. CK.	2/32		
PH	9.5		
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Dew. B.	20#		
Caustic	25#		

DRILLER: [signature]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P CONV.-C
2808	2825	D.			45	35M	1175	5½ x 14	54			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:15	1¼	DRILLING
1:15	1:45	½	Circ Sample.
1:45	2:15	½	Circ + Cond. mud To Test.
2:15	2:30	¼	Rig Serv + BOP +
2:30	3:45	1¼	Pull Bit #7.
3:45	4:45	1	Make up Tester.
4:45	6:00	1¼	Run in DST #2
6:00	8:00	2	Testing.

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
24	STANDS D.P.	2246.51	FT.
1	SINGLES D.P.	22.26	FT.
8	D.C. 6¼ I.D. O.D.	528.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock Sub	8.70	FT.
	KELLY DOWN	26.67	FT.
	TOTAL	2864.60	FT.
WT. OF STRING	85M		LBS.

BIT RECORD

BIT NO.	16	
SIZE	7⅞	
MFG.	Smith	
TYPE	4J5	
NOZZLE NO.	3-11	
NOZZLE SIZE		
SER. NO.	EA189	
DEPTH OUT		
DEPTH IN	2825	
TOTAL FTG.	39	
TOTAL HR. RUN	3½	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME		1:00	3:30
WEIGHT		9.2	9.2
VISC.-SEC		44	44
W.L.-C.C.		5.6	5.6
FL.TR. CK.		2/32	2/32
PH		9.5	9.5
SD. CONT. %		1/4	1/4
PRESSURE GRADIENT		22	22
		13	13

Ca. Cont. Drill.

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Master	50#		

DRILLER: Tom Smith

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P CONV.-C
2825	2864	D			45	35	1100	5½ x 14	54			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS checked motor shutoff July 27th 70 "okay"
6:00	9:00	3	Testing
9:00	11:00	2	Pull DST #2 + Laydown
11:00	11:15	¼	Serv Rig + BOP
11:15	12:30	1¼	Run in w/Bit
12:30	4:00	3½	Drlg.

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
25	STANDS D.P.	2343.18	FT.
1	SINGLES D.P.		FT.
8	D.C. I.D. O.D.	527.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock	8.70	FT.
	KELLY DOWN	14.24	FT.
	TOTAL	2937	FT.
WT. OF STRING	89M		LBS.

BIT RECORD

BIT NO.	16	
SIZE	7⅞	
MFG.	Smith	
TYPE	4J5	
NOZZLE NO.	3-11	
NOZZLE SIZE		
SER. NO.	EA189	
DEPTH OUT		
DEPTH IN	2825	
TOTAL FTG.		
TOTAL HR. RUN	10¼	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	6:00	9:00	11:00
WEIGHT	9.2	9.3	9.3
VISC.-SEC	44	42	40
W.L.-C.C.	5.6		5.8
FL.TR. CK	2/32		2/32
PH	9.5		9.5
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ron Mary

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART.-P CONV.-C
2864	2937	D			45	35	1200	5½ x 14	54			

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2860	½°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:45	¾	Drlg
4:45	5:00	¼	Survey @ 2860'
5:00	5:15	¼	Serv Rig + BOPs + Kelly cock
5:15	12:00	6¾	Drlg.

DAILY DRILLING REPORT — REPORT NO. 17 — DATE July 26/70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J Ray McDermott.	McD. Can GCO Maida Creek.	F38.		Canada.	N.W.T.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT O.D.	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	16	2	4"	5"	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: L N Webber

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	K380	14
2.	NATIONAL	K380	14
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13⅜	JAP	48 J55	3	94.46		90.	675x Cement
TUBING OR LINER	8⅝	MANN	24 N55	24	876.42		860	500sx Cement 3% CaCl

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	7½	3¼	6¼
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG	✓	✓	✓
DEVIATION SURVEY	¼		
TEST B.O.P.	¼	¼	¼
CUT OFF DRILLING LINE			
SERVICE RIG			
WELDING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
Shoot. Hole		2½	
Washing & Reaming		¼	
A. PERFORATING			
B. TURNING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

	MORN	DAY	EVE
DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

NIGHT TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
22	STANDS D.P.	2088.07	FT.
1	SINGLES D.P.		FT.
18	D.C. 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock Sub	8.70	FT.
	KELLY DOWN	35.08	FT.
	TOTAL	2676.	FT.
WT. OF STRING	82.07.		LBS.

BIT RECORD		
BIT NO.	6RR.	
SIZE	7⅞	
MFG.	Smith	
TYPE	HJS.	
NOZZLE NO.	3-11	
NOZZLE SIZE		
SER. NO.	CM7865	
DEPTH OUT		
DEPTH IN	1995	
TOTAL FTG.	680	
TOTAL HR. RUN	48	
COND. OF BIT	Run.	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	12⁰⁰	3⁰⁰	6⁰⁰
WEIGHT	9.1	9.1	9.1
VISC.-SEC	46	45	44
W.L.-C.C.		6.0	6.1
FL.TR. CK.		2/32	2/32
PH	9.5	9.5	9.5
SD. CONT. %			2½
PRESSURE GRADIENT		V.P.	16
Ca Cm.	90MX	VP	24

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Kelzan	50#		
Caustic	50#		

DRILLER: A.C. Hanson.

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
2580	2675	D.			45	35m	1175	5½	54			
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2595	¾							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:45	¾	DRLG.
12:45	1:00	¼	SERV RIG. BOPs
1:00	3:30	2½	DRLG.
3:30	3:45	¼	SURVEY.
3:45	8:00	4¼	DRLG.

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
23	STANDS D.P.	2151.47	FT.
	SINGLES D.P.		FT.
18	D.C. 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock Sub	8.70	FT.
	KELLY DOWN	20.68	FT.
	TOTAL	2724.00	FT.
WT. OF STRING	83M		LBS.

BIT RECORD		
BIT NO.	6RR	
SIZE	7⅞	
MFG.	SMITH	
TYPE	HJS	
NOZZLE NO.	3-11	
NOZZLE SIZE		
SER. NO.	CM7865	
DEPTH OUT	2724	
DEPTH IN	1995	
TOTAL FTG.	729	
TOTAL HR. RUN	54¼	
COND. OF BIT	2-2-I	
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	9⁰⁰		
WEIGHT	9.1		
VISC.-SEC	44		
W.L.-C.C.	6.4		
FL.TR. CK.	2/32		
PH	9.0		
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CMC	50#		
Kelzan	50#		
Bow B	10#		

DRILLER

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
2675	2724	D			45	35	1175	5½	54			
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼	DRLG
8:15	8:30	¼	Rig Serv & BOP
8:30	11:30	3	DRLG.
11:30	12:30	1	Pull out.
12:30	3:00	2½	Check all DrillCollars - Subs & Stab. by Curtis Hoover Ultrasonic
3:00	3:30	½	Pump down Mouse hole
3:30	4:00	½	Layed down one drill Collar & Picked up one.

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
24	STANDS D.P.	2214.81	FT.
	SINGLES D.P.		FT.
18	D.C. 6¼ I.D. O.D.	529.52	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
	STB. BODY O.D.	4.37	FT.
	RMR. BODY O.D.	3.56	FT.
	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock Sub	8.70	FT.
	KELLY DOWN	47.80	FT.
	TOTAL	2808	FT.
WT. OF STRING	84m.		LBS.

BIT RECORD		
BIT NO.	7	
SIZE	7⅞	
MFG.	Smith	
TYPE	HJS	
NOZZLE NO.	3-10	
NOZZLE SIZE		
SER. NO.	EP159	
DEPTH OUT		
DEPTH IN	2724	
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME	6³⁰	9⁰⁰	12.⁵⁰
WEIGHT	9.1	9.1	9.2
VISC.-SEC	46	45	41
W.L.-C.C	5.8		5.6
FL.TR. CK	2/32		2/32
PH	9.0	9.0	9.0
SD. CONT. %	41.20		
PRESSURE GRADIENT	10.16		
Ch. Soil	80		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER Ron Art.

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
2724	2808	D			45	35	1175	5½	54			
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:00	1	Run in w/Bit #7
5:00	5:15	¼	Serv Rig & BOP
5:15	12.00	6¾	DRLG.

DAILY DRILLING REPORT

REPORT NO. 16 DATE July 25/70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J Ray McDermott.	Mo. Can GCO Mar. A.Ck.	P34.		CANADA	NWT.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	O.D.
S & T DRILLING (WESTERN) CO. LTD.	1E	7	4½	TYPE END. 3½ IF	

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: R. H. Webber

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL.	N380	14"
2.	NATIONAL	N380	14"
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	SECT	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13 3/8	JAP	48 J55	3	94.46		90	675x CEMENT.
TUBING OR LINER	8 5/8	MANN	24 N55	24	876.42		860	500 sx CEMENT 3% Calc.

TIME DISTRIBUTION - HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	7¾	7½	7¾
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG	¼		¼
DEVIATION SURVEY	½	¼	
TEST B.O.P.	✓	¼	✓
CUT OFF DRILLING LINE			
SERVICE RIG			
FISHING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
COMPLETION RECORD: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTAL	8	8	9

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
19	STANDS D.P.	1773.68	FT.
	SINGLES D.P.		FT.
18	D.C. 2¾ x 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	I.D. O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	STB. BODY O.D.	3.56	FT.
1	RMR. BODY O.D.	1.65	FT.
	SUBS O.D.		FT.
	BIT OR C.B.		FT.
	Kelly Cock	8.70	FT.
	KELLY DOWN	34.47	FT.
	TOTAL	2360.	FT.
WT. OF STRING	81m		LBS.

BIT RECORD	
BIT NO.	9 RR6
SIZE	7⅞
MFG.	Smith
TYPE	4JS.
NOZZLE NO.	3-11
NOZZLE SIZE	
SER. NO.	CN7865
DEPTH OUT	
DEPTH IN	1925
TOTAL FTG.	435
TOTAL HR. RUN	26¾
COND. OF BIT	Run.
REAMER NO.	
REAMER TYPE	

MUD RECORD			
TIME	12⁰⁰	3⁰⁰	6⁰⁰
WEIGHT	9.1	9.1	9.1
VISC.-SEC	45	47	46
W.L.-C.C.	7.6	6.7	6.4
FLTR. CK.	1/16		2/32
PH	9.0	9.5	9.0
SD. CONT. %	Calc	90 Min	1%
PRESSURE GRADIENT	VP		.24
	PV		.22

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	25#		
Plas 25#	50#		
Neatran	50#		

DRILLER: [illegible]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
2183	2360	D			45	35m	1175	5½	54			
								X				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2160	1°		2285	½				

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12¹⁵		Survey.
12¹⁵	12³⁰		Rig Serv + BOPV
12³⁰	5⁴⁵		Drilling
5⁴⁵	6⁰⁰		Survey.
6⁰⁰			DRILLING

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
20	STANDS D.P.		FT.
1	SINGLES D.P.	1899.46	FT.
18	D.C. 2¾ x 6¼	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY 5¾	3.67	FT.
1	STB. BODY 5¾	4.37	FT.
1	RMR. BODY 5¾ O.D.	3.56	FT.
1	SUBS 10 O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Kelly Cock	8.70	FT.
	KELLY DOWN	42.90	FT.
	TOTAL	2495.00	FT.
WT. OF STRING	81m		LBS.

BIT RECORD	
BIT NO.	8 RR6
SIZE	7⅞
MFG.	Smith
TYPE	4JS
NOZZLE NO.	3-11
NOZZLE SIZE	
SER. NO.	CN7865
DEPTH OUT	
DEPTH IN	1925
TOTAL FTG.	570'
TOTAL HR. RUN	30¾
COND. OF BIT	Run
REAMER NO.	
REAMER TYPE	

MUD RECORD			
TIME	9⁰⁰	12⁴⁵	3⁴⁰
WEIGHT	9.0	9.0	9.0
VISC.-SEC	47	47	48
W.L.-C.C.	5.2	6.8	6.4
FLTR. CK.	2/32	2/32	2/32
PH	9.0	9.0	9.0
SD. CONT. %		91.20	
PRESSURE GRADIENT		.4.17	
		CA. Cont. 90	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Dew. 8	10#	Gel.	500#
Plasper	50#	Caustic	25#
Kelzan	100#		

DRILLER: Ron Smith

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
2360	2495	D			45	35	1175	5½	54			
								X				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2453'	½°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8⁰⁰	8¹⁵	¼	DRLG.
8¹⁵	8³⁰	¼	Rig Ser. + BOPV + Kelly Cock.
8³⁰	1⁴⁵	5¼	DRLG.
1⁴⁵	2⁰⁰	¼	Survey @ 2453
2⁰⁰	4⁰⁰	2	DRLG.

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
21	STANDS D.P.	1993.51	FT.
1	SINGLES D.P.		FT.
18	D.C. 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY 5¾ O.D.	3.67	FT.
1	STB. BODY 5¾ O.D.	4.37	FT.
1	RMR. BODY 5¾ O.D.	3.56	FT.
1	SUBS 10 O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Kelly Cock	8.70	FT.
	KELLY DOWN	34.64	FT.
	TOTAL	2580	FT.
WT. OF STRING	82m		LBS.

BIT RECORD	
BIT NO.	8 RR6
SIZE	7⅞
MFG.	Smith
TYPE	4JS
NOZZLE NO.	3-11
NOZZLE SIZE	
SER. NO.	CN7865
DEPTH OUT	
DEPTH IN	1925
TOTAL FTG.	655
TOTAL HR. RUN	40½
COND. OF BIT	Run.
REAMER NO.	
REAMER TYPE	

MUD RECORD			
TIME	7⁰⁰	9⁰⁰	11.00
WEIGHT	9.1	9.1	9.1
VISC.-SEC	46	47	46
W.L.-C.C.	6.2		6.2
FLTR. CK	2/32		
PH	9.0	9.0	9.0
SD. CONT. %	91.24		
PRESSURE GRADIENT	5.0.18		
	CA Cont 110		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ron

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
2495'	2580	D			45	35m	1175	5½	54			
								X				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	4¹⁵	¼	Ser. Rig + BOPV + Kelly Cock.
4¹⁵	12.00	7¾	Drlg.

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK	
HRS. W/DP	
HRS. W/OP	
HRS. STANDBY	
TOTAL DAY WORK	

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

DAILY DRILLING REPORT

REPORT NO. 15 DATE July 24 1970

OPERATOR: J. Ray McDermott

LEASE: McD. Can Co Maida. Creek.

WELL NO. F-34 | FIELD OR DIST. | COUNTY: Canada | STATE: N.W.T.

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E.

DRILL PIPE STRING: NO. 2 SIZE 4½ | TOOL JOINT 5" O.D. TYPE THD. 3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: L.H. Webber

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL.	H380	14
2.	NATIONAL.	H380	14
3.			

CASING / TUBING / LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	APP. TO HD.	SET AT	REMARKS
LAST CASING	13⅜	JAP	48 J55	3	94.46		90	67 sx Cement
TUBING OR LINER	8⅝	MAN	24 N55	24	876.42		860	500 sx Cement 3% Cacl.

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	8¼	7¼	9¾
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS	2¼		
LUBRICATE RIG		¼	¼
DEVIATION SURVEY		¼	
TEST B.O.P.			
CUT OFF DRILLING LINE			
SLIP DRILL LINE			
SERVICE RIG		¼	
RUNNING CASING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST	1¾		
OTHER	1		
FISHING			
A. PERFORATING			
B. TUBING TESTS			
C. SQUEEZING			
D. ACID TREAT			
E. ADDITIONAL			
TOTAL	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK	
HRS. W/DP	
HRS. WO/DP	
HRS. STANDBY	
TOTAL DAY WORK	

WIRE LINE RECORD

REEL NO.	
NO. OF LINES / SIZE	
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
15	STANDS D.P.	1374.40	FT.
	SINGLES D.P.		FT.
18	D.C. 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS 10 O.D.	1.65	FT.
	BIT OR C.B.		FT.
	Stock Sub	8.70	FT.
	KELLY DOWN	24.54	FT.
	TOTAL	1975.00	FT.
WT. OF STRING	77 m.	LBS.	

BIT RECORD

BIT NO.	PS-RR6
SIZE	7⅞
MFG.	Smith
TYPE	4JS.
NOZZLE NO.	3-11
NOZZLE SIZE	
SER. NO.	CH7865
DEPTH OUT	
DEPTH IN	1925
TOTAL FTG.	50
TOTAL HR. RUN	3¾
COND. OF BIT	Good
REAMER NO.	
REAMER TYPE	

MUD RECORD

TIME			7:00
WEIGHT			9.1
VISC.-SEC			55
W.L.-C.C.			5.1
FLTR. CK.			2/32
PH			8.5
SD. CONT. %			2%
PRESSURE GRADIENT	P.29 PV.26		
	Ca Cont.		120 PPM

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Kelzan	50#		
Caustic	50#		

DRILLER: R. Eshman

FOOTAGE

FROM	TO	DR'D RM. & CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
1925	1975	D			45	35m	1075	5½	54			
								6				
								14				

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:30	1½	Testing
1:30	2:30	1	Pull DST #1
2:30	3:30	1	Laid Down Testing Tool.
3:30	4:45	1¼	Run in w/ Bit #6 & Break Circ
4:45	8:00	3¼	Drilling 7⅞ Hole.

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
16	STANDS D.P.	1483.34	FT.
	SINGLES D.P.		FT.
18	D.C. 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS 10 O.D.	1.65	FT.
	BIT OR C.B.		FT.
	Stock Sub	8.70	FT.
	KELLY DOWN	15.63	FT.
	TOTAL	2011.00	FT.
WT. OF STRING	78 M.	LBS.	

BIT RECORD

BIT NO.	PS-6
SIZE	7⅞
MFG.	Smith
TYPE	4JS
NOZZLE NO.	3-11
NOZZLE SIZE	
SER. NO.	CH7865
DEPTH OUT	
DEPTH IN	1925
TOTAL FTG.	126
TOTAL HR. RUN	10½
COND. OF BIT	Run
REAMER NO.	
REAMER TYPE	

MUD RECORD

TIME	9:30	12:30	3:00
WEIGHT	9.1	9.1	9.1
VISC.-SEC	54	54	48
W.L.-C.C.	5.2	5.8	6.0
FLTR. CK.	3/32	2/32	2/32
PH	9.0	9.0	9.0
SD. CONT. %	1.0	1.0	1.8
PRESSURE GRADIENT	P.30	.42	.24
	Ca Cont. 120	Ca Cont 110	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CMC	50#		
Kelzan	50#		

DRILLER: Ron Snell

FOOTAGE

FROM	TO	DR'D RM. & CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
1975	2011	D			45	35	1125	5½	54			
								6				
								14				

DEVIATION RECORD: DEPTH 2015 | DEV. ¼° | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:10	¼	Drlg
8:10	10:15	2	Trip w/ BOB & Kelly Cock
10:15	11:15	1	Drlg
11:15	11:30	¼	Survey
11:30	11:45	¼	Repair Air Line on Drawworks
11:45	1:00	2¼	Drlg

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
17	STANDS D.P.	1587.31	FT.
	SINGLES D.P.		FT.
18	D.C. 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
	STB. BODY O.D.	4.37	FT.
	RMR. BODY O.D.	3.56	FT.
	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
	Stock Sub	8.70	FT.
	KELLY DOWN	43.80	FT.
	TOTAL	2183	FT.
WT. OF STRING	78 m.	LBS.	

BIT RECORD

BIT NO.	PS-6
SIZE	7⅞
MFG.	Smith
TYPE	4JS
NOZZLE NO.	3-11
NOZZLE SIZE	
SER. NO.	CH7865
DEPTH OUT	
DEPTH IN	1925
TOTAL FTG.	258
TOTAL HR. RUN	18
COND. OF BIT	Run.
REAMER NO.	
REAMER TYPE	

MUD RECORD

TIME	6:30	8:00	12:00
WEIGHT	9.1	9.1	9.1
VISC.-SEC	43	45	45
W.L.-C.C.	6.6	6.9	6.9
FLTR. CK	2/32	3/32	2/32
PH	9.0	9.0	9.0
SD. CONT. %	1.5		
PRESSURE GRADIENT	.20		
	Ca Cond 100		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CMC			
Kelzan			

DRILLER: Ron Ort.

FOOTAGE

FROM	TO	DR'D RM. & CORE	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
2011	2183	D			45	35	1125	5½	54			
								6				
								14				

DEVIATION RECORD: DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:30	1½	DRLG.
5:30	5:45	¼	Rig Service BOB
5:45	12:00	6¼	DRLG.

DAILY DRILLING REPORT

REPORT NO. 146 DATE July 23 1970

OPERATOR: J. Ray McDermott

LEASE: McD. Can. GCO Maida. Creek.

WELL NO. FP7 | FIELD OR DIST. | COUNTY: Canada | STATE: N.W.T.

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. | RIG NO. 1E

DRILL PIPE STRING: NO. 2, SIZE 4" | TOOL JOINT 5" O.D. | TYPE THD. 3½ IF

SIGNATURE OF ONGOING TOOL'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: R. H. Webber

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	8 380	14
2.	NATIONAL	8 380	14
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13 3/8	JAP	48 J55	3	94.46		90	67 SX Cement.
	8 5/8	MANN	24 N55	24	876.42		860	600 SX Cement 3% CaCl2.

9 HOUR DISTRIBUTION – HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	5¼	7½	3¼
REAMING			
CONDITIONING MUD & CIRCULATION			1¼
TRIPS	½		2¼
LUBRICATE RIG	¼		
DEVIATION SURVEY	¼	¼	
TEST B.O.P.	¼	¼	
CUT OFF DRILLING LINE	¼		
SLIP & CUT DRILLING LINE			
DOWN TIME			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			1½
OTHER			2¼
FISHING			
A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK
HRS. W/DP
HRS. WO/DP
HRS. STANDBY
TOTAL DAY WORK

WIRE LINE RECORD

REEL NO.
NO. OF LINES 8 SIZE 5/8
FEET SLIPPED 23.
FEET CUT OFF —
PRESENT LENGTH
TON MI. OR TRIPS SINCE LAST CUT
CUMULATIVE TON MI. OR TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

DAY TOUR

DRILLING ASSEMBLY (AT END OF TOUR)

NO.			FT.
13	STANDS D.P.		1210.28
1	SINGLES D.P.		30.33
18	D.C.	6¼ I.D. O.D.	529.90
	D.C.	I.D. O.D.	
1	STB. BODY	O.D.	3.67
1	STB. BODY	O.D.	4.37
1	RMR. BODY	O.D.	3.56
1	SUBS	O.D.	1.65
	BIT OR C.B.		
	SHOCK SUB		8.10
	KELLY DOWN		22.54
	TOTAL		1820.

WT. OF STRING 75M LBS.

BIT RECORD

BIT NO.	5	6
SIZE	7 7/8	7 7/8
MFG.	SEC	SMITH
TYPE	MMG.	4J5
NOZZLE NO.	3-11	3-11
NOZZLE SIZE		
SER. NO.	914423	CN7865
DEPTH OUT	1774	
DEPTH IN	1577	1774
TOTAL FTG.	197	
TOTAL HR. RUN	19	3½
COND. OF BIT	3-3-1	Run.
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	1:00		6:00
WEIGHT	9.0		9.0
VISC.-SEC	44		43
W.L.-C.C.			6.9
FLTR. CK.			2/32
PH	9.5		9.5
SD. CONT. %		LC	1.5%
PRESSURE GRADIENT		Kyp	22
P.V.	21	CaCl	20%

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Xcban	50#	Plaster	50#
GMC	50#	Dwaide	3.15#
Sel	50#		

DRILLER: A. Hamann.

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.
1858	1820	D	

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
75	25	1075	5½	54			
45	35M	1075	x	54			
			14				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1754	1°							

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	DETAILS
12:00	1:45	1¾	Drilling 7 7/8 Hole.
1:45	2:00	¼	Survey.
2:00	3:00	1	Pulled Bit #5
3:00	3:15	¼	Service Rig (BOP)
3:15	3:30	¼	Slipped 23' Line
3:30	4:30	1	Run in w/ Bit #6 + Break Circ.
4:30	8:00	3½	Drilling 7 7/8 Hole

NB Changed Liner - Rod - Head + Gland Packing on Flywheel Side of #1 Pump.

Held Blow out Drill @ 6:00 AM.

EVENING TOUR

DRILLING ASSEMBLY (AT END OF TOUR)

NO.			FT.
14	STANDS D.P.		
1	SINGLES D.P.		1335.27
18	D.C.	6¼ I.D. O.D.	529.90
	D.C.	I.D. O.D.	
1	STB. BODY	O.D.	3.67
1	STB. BODY	O.D.	4.37
1	RMR. BODY	O.D.	3.56
1	SUBS	O.D.	1.65
1	BIT OR C.B.		8.70
	KELLY DOWN		22.88
	TOTAL		1914.00

WT. OF STRING 76M LBS.

BIT RECORD

BIT NO.	6	
SIZE	7 7/8	
MFG.	SMITH	
TYPE	4J5	
NOZZLE NO.	3-11	
NOZZLE SIZE		
SER. NO.	CN7865	
DEPTH OUT		
DEPTH IN	1774	
TOTAL FTG.	140	
TOTAL HR. RUN	11	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	9:00	12:00	3:00
WEIGHT	9.2	9.2	9.2
VISC.-SEC	55	55	62
W.L.-C.C.	5.6		5.4
FLTR. CK.	2/32		2/32
PH	9.0	9.0	9.0
SD. CONT. %	9.0 1%		1.8%
PRESSURE GRADIENT	30		32.34
P.V.	24		P.V. 23

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GMC	50#	Caustic	25#
Master	50#	Dow-8	30#
Halton	50#		

DRILLER: Tom Savill

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.
1820'	1914	D	

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
45	35	1075	5½	54			
			x				
			14				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1888	¾°							

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	DETAILS
8:00	9:00	1	Drlg. 7 7/8
9:00	9:15	¼	Ser. Rig + BOP + Kelly Cock.
9:15	2:45	5½	Drlg.
2:45	3:00	¼	Survey
3:00	4:00	1	Drlg.

60

EVENING TOUR

DRILLING ASSEMBLY (AT END OF TOUR)

NO.			FT.
14	STANDS D.P.		
1	SINGLES D.P.		1335.27
18	D.C.	6¼ I.D. O.D.	529.90
	D.C.	I.D. O.D.	
1	STB. BODY	O.D.	3.67
1	STB. BODY	O.D.	4.37
1	RMR. BODY	O.D.	3.56
1	SUBS	O.D.	1.65
1	BIT OR C.B.		8.70
	KELLY DOWN		37.98
	TOTAL		1925.06

WT. OF STRING 76M LBS.

BIT RECORD

BIT NO.	6	
SIZE	7 7/8	
MFG.	SMITH	
TYPE	4J5	
NOZZLE NO.	3-10	
NOZZLE SIZE		
SER. NO.	CN7865	
DEPTH OUT	1925	
DEPTH IN	1774	
TOTAL FTG.	151	
TOTAL HR. RUN	11¾	
COND. OF BIT	1-1-1	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	5:00		
WEIGHT	9.2		
VISC.-SEC	59		
W.L.-C.C.	5.8		
FLTR. CK	2/32		
PH	9.0		
SD. CONT. %	80		
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ray

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.
1914	1925	D	

FORMATION (SHOW CORE RECOVERY)

ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
45	35M	1075	5½	54			
			x				
			14				

DEVIATION RECORD

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG / DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	DETAILS
4:00	4:45	¾	Drlg.
4:45	5:15	½	Work on Brakes + Circulate
5:15	6:00	¾	Circulate to Condition Mud. Rig Down B
6:00	7:15	1¼	Pull to Run Test
7:15	9:00	1¾	Make up Tester. + B.O.P's + Motor Shut offs OK.
9:00	10:00	1	Run in w/ Tester #1
10:00	10:30	½	Make up Testing Head
10:30	12:00		Testing

DAILY DRILLING REPORT

REPORT NO. 13 DATE July 22 1976

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J RAY McDERMOTT	McD. CAN GCO MAIDA CREEK	137		CANADA	N.W.T.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	O.D.
S & T DRILLING (WESTERN) CO. LTD.	1E	3	4½	TYPE THD. 3½ IF	5"

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	K380	14
2.	"	K380	14
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13⅜	JAP	48 J55	3	94.46		90	67 CEMENT
TUBING OR LINER	5⅝	MAW	24 N55	24	876.42		860	500 CEMENT 37 CSL

TIME DISTRIBUTION - HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL		6¾	8
REAMING	3	¾	
CONDITIONING MUD & CIRCULATING			
TRIPS	2		
LUBRICATE RIG	✓		
DEVIATION SURVEY		¼	
TEST B.O.P.	¾	¼	
CUT OFF DRILLING LINE			
TRIPPING BIG			
[illegible]	1		
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER	1¾		
FISHING			
SUBCONTRACTOR WORK: A. PERFORATING			
B. TURNING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
HOURS	8	8	8

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
11	STANDS D.P.	1024.90	FT.
	SINGLES D.P.		FT.
18	D.C. I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
1	Shock Sub	8.70	FT.
	KELLY DOWN	43.80	FT.
	TOTAL	1618.00	FT.
WT. OF STRING	72M.		LBS.

BIT RECORD		
BIT NO.	2C	5
SIZE	6¾	7⅞
MFG.	CHRS	SEC
TYPE	D	MNG.
NOZZLE NO.		3-11
NOZZLE SIZE		
SER. NO.	65744	911423
DEPTH OUT	1631	
DEPTH IN	1577	1577
TOTAL FTG.	54	
TOTAL HR. RUN	17¼	1¾
COND. OF BIT		Run.
REAMER NO.		
REAMER TYPE		

MUD RECORD			
TIME			7:00
WEIGHT			9.0
VISC.-SEC			60
W.L.-C.C.			5.6
FLTR. CK.			7/32
PH			9.5
SD. CONT. %			1.5
PRESSURE GRADIENT			80
			27

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT. — PV 23

DRILLER: [illegible]

FOOTAGE FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL-P CON'D-C
1628	1631	C	2		100	15m	750	5½	46			
1577	1618	R.			90	8m.	1800	"	54			
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1	CUTTING CORE #2
1:00	2:00	1	PULL CORE #2
2:00	3:45	1¾	RECOVER CORE + STAND BACK CORE BBL.
3:45	4:00	¼	SERVICE RIG + B.O.P. CHECK.
4:00	5:00	1	RUN IN W/ BIT #5 STABILIZERS + SHOCK SUB.
5:00	6:15	1¼	REAMING TIGHT HOLE 1523 - 1577
6:15	8:00	1¾	REAMING 6¾ TO 7⅞

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
12	STANDS D.P.	1115.20	FT.
1	SINGLES D.P.		FT.
18	D.C. 7⅞ 6¾ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
	STB. BODY O.D.	4.37	FT.
	RMR. BODY O.D.	3.56	FT.
	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
		8.70	FT.
	KELLY DOWN	23.95	FT.
	TOTAL	1691.00	FT.
WT. OF STRING	75M		LBS.

BIT RECORD	
BIT NO.	5
SIZE	7⅞
MFG.	SEC
TYPE	MNG
NOZZLE NO.	3-11
NOZZLE SIZE	
SER. NO.	911423
DEPTH OUT	
DEPTH IN	1577
TOTAL FTG.	114
TOTAL HR. RUN	9¾
COND. OF BIT	Run
REAMER NO.	
REAMER TYPE	

MUD RECORD			
TIME	9:30	11:30	3:15
WEIGHT	9.0	9.0	9.0
VISC.-SEC	60	57	53
W.L.-C.C.	5.0	4.8	6.2
FLTR. CK.	3/32	2/32	3/32
PH	10.0	10.0	9.5
SD. CONT. %	2%	2%	1½%
PRESSURE GRADIENT	1.20	1.10	1.00
	4.P. 25	4.P. 23	4.P. 17

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT. — BASTEN 50# ; C.M.C. 50#

DRILLER: [illegible]

FOOTAGE FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL-P CON'D-C
1618	1631	R.		6¾ to 7⅞"	90	8M	1200	5½	54			
1631	1691	D		7⅞"	75	7.5	1025	"				
								14"				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1639	1°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼	Reaming 6¾ to 7⅞
8:15	8:30	¼	Rig Ser. + BOP + Drill Crew. Okay
8:30	9:00	½	Reaming
9:00	11:15	2¼	Drlg 7⅞ hole
11:15	11:30	¼	Survey @ 1639'
11:30	4:00	4½	Drlg 4⅞

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
12	STANDS D.P.	1115.20	FT.
2	SINGLES D.P.	62.47	FT.
18	D.C. I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
	STB. BODY O.D.	4.37	FT.
	RMR. BODY O.D.	3.56	FT.
	SUBS O.D.	1.65	FT.
	BIT OR C.B.		FT.
		8.70	FT.
	KELLY DOWN	23.58	FT.
	TOTAL	1758	FT.
WT. OF STRING	72M		LBS.

BIT RECORD	
BIT NO.	5
SIZE	7⅞
MFG.	SEC
TYPE	MNG
NOZZLE NO.	3-11
NOZZLE SIZE	
SER. NO.	911423
DEPTH OUT	
DEPTH IN	1577
TOTAL FTG.	181
TOTAL HR. RUN	19¼
COND. OF BIT	Run
REAMER NO.	
REAMER TYPE	

MUD RECORD			
TIME	5:30	8:00	11:00
WEIGHT	9.0	9.0	9.0
VISC.-SEC	49	42	43
W.L.-C.C.	6.4	6.8	6.8
FLTR. CK	3/32	2/32	3/32
PH	9.0	9.5	9.5
SD. CONT. %	1½%		
PRESSURE GRADIENT	4.P. 15		
	C.A. Cont. 15		

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT. — CMC 50

DRILLER: [illegible]

FOOTAGE FROM	TO	DR. D RM. R CORE. C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR'EL-P CON'D-C
1691	1758	D			75	7.5	1025	5½	54			
								"				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00			Drlg

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

DAILY DRILLING REPORT

REPORT NO. 12 DATE July 21 1970

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDermott	McD. Can Geo Manda Creek	F37		Canada	N.W.T.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT O.D.	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	2	4"	5"	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	National	F380	14
2.	"	F380	14
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13⅜	JAP	48 J55	3	94.46		90	675x Cement.
TUBING OR LINER	8⅝	MAN	24 N55	24	876.42		860	500 sx Cement 3% Cacl.

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL			
REAMING	5½		
CONDITIONING MUD & CIRCULATING			
TRIPS	2		
LUBRICATE RIG	¼		
DEVIATION SURVEY			
TEST B.O.P.			
CUT OFF DRILLING LINE			
REPAIR RIG			
FISHING	4	2	8
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER	½		
FISHING			
COMPLETION JOB: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
12	STANDS D.P.	1116.64	FT.
	SINGLES D.P.		FT.
18	D.C. 2⅞ x 6¼ I.D. O.D.	438.14	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
1	RMR. BODY O.D.	1.65	FT.
1	SUBS O.D.	3.21	FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	16.31	FT.
	TOTAL	1577.	FT.
	WT. OF STRING	70M	LBS.

BIT RECORD

BIT NO.	4	
SIZE	7⅞	
MFG.	SEC	
TYPE	M4NG	
NOZZLE NO.	3-10	
NOZZLE SIZE		
SER. NO.	[illegible]21154	
DEPTH OUT	1577	
DEPTH IN	1523	
TOTAL FTG.	54	
TOTAL HR. RUN	9¾	
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	1:00	4:00	
WEIGHT	9.0	9.0	
VISC.-SEC	52	50	
W.L.-C.C.	5.8	5.9	
FL.TR. CK.	1/32	1/32	
PH	9.0	9.0	
SD. CONT. %	2%		
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [signature]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COND-C
1523	1577	R.		(50' reamed)	100	8m	850	5½	54			
1577	—	C.	2.					14			4	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	5:30	5½	Reaming 6¾ Core Hole to 7⅞
5:30	5:45	¼	Circ.
5:45	6:45	1	Pull Bit #4
6:45	6:15	½	Pick up Core Bbl + Jars.
6:15	6:30	¼	Rig Serv B.O.P. & Blind Rams.
6:30	7:30	1	Run in w/ Core Bbl #2.
7:30	7:45	¼	Break Circ + Drop Ball.
7:45	8:00	¼	Cutting Core #2

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
11	STANDS D.P.	1027.75	FT.
1	SINGLES D.P.	31.20	FT.
15	D.C. 2⅞ x 6¼ I.D. O.D.	439.14	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
1	RMR. BODY O.D.	5.63	FT.
1	SUBS O.D.	3.21	FT.
1	BIT OR C.B.	5800 .72	FT.
			FT.
	KELLY DOWN	38.64	FT.
	TOTAL	1606.00	FT.
	WT. OF STRING	70 M	LBS.

BIT RECORD

BIT NO.	2 C	
SIZE	6¾	
MFG.	Chris.	
TYPE	[illegible]	
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.	[illegible]5240	
DEPTH OUT		
DEPTH IN	1577	
TOTAL FTG.	29	
TOTAL HR. RUN	8¼	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	9:30	11:30	3:30
WEIGHT	9.0	9.0	9.0
VISC.-SEC	52	50	58
W.L.-C.C.	4.8	5.4	6.0
FL.TR. CK.	1/32	1/32	1/32
PH	9.0	9.0	8.0
SD. CONT. %	2%	2%	2%
PRESSURE GRADIENT	4.24	4.21	4.23

In Cont. 110 rpm [illegible]

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
C.M.C.	50#	Gel	500#
[illegible]	100#	Plastec	50#
[illegible]	10#	Caustic	50#

DRILLER: [signature]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COND-C
1577	1606	Core	2		100	12M	750#	5½	46			
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	4:00	8	Cutting Core #2

Changed dies + filter. Cut fuses in all lightplants

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
11	STANDS D.P.	1027.75	FT.
2	SINGLES D.P.	61.40	FT.
15	D.C. 2⅞ x 6¼ I.D. O.D.	439.14	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	.72	FT.
	STB. BODY O.D.	5.63	FT.
1	RMR. BODY O.D.	3.21	FT.
	SUBS O.D.		FT.
	BIT OR C.B.	5800	FT.
			FT.
	KELLY DOWN	38.22	FT.
	TOTAL	1628.	FT.
	WT. OF STRING	70M	LBS.

BIT RECORD

BIT NO.	2 C	
SIZE	6¾	
MFG.	Chris.	
TYPE	[illegible]	
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.	65240	
DEPTH OUT		
DEPTH IN	1577	
TOTAL FTG.	51	
TOTAL HR. RUN	16¼	
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	5:30	9:00	12:00
WEIGHT	9.0	9.0	9.0
VISC.-SEC	57	57	57
W.L.-C.C.	5.8	6.4	5.9
FL.TR. CK.	1/32	1/32	1/32
PH	9.0	9.0	9.0
SD. CONT. %	2%	2%	
PRESSURE GRADIENT	4.26		

In Cont. 110 RPM

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
C.M.C.	100#		

DRILLER: [signature]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COND-C
1606	1628	C.	2		100	12M	750	5½	46			
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	12:00	8	Cutting Core #2

DAILY DRILLING REPORT

REPORT NO. 11 DATE July 20 1970

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
Ray M. DeRoott	McD. Can GCO Major Creek	F67.	–	NWT	Canada.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT O.D.	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	3	4"	5	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL.	K380	14
2.	NATIONAL	K380	14
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13⅜	JAP	48 J55	3	94.46		90	675x Cement
TUBING OR LINER	8⅝	MANN	24 J55	24	876.42		860	500 sx Cement 3% CaCl

MORNING TOUR

TIME DISTRIBUTION (HOURS)

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL			
REAMING			14
CONDITIONING MUD & CIRCULATING	1½		
TRIPS	22		2.
LUBRICATE RIG			¼
DEVIATION SURVEY			¾
TEST B.O.P.			
CUT OFF DRILLING LINE			
REPAIR RIG			
WAITING	3½	8	3½
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER	1		
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TUBING TRIPS			
C. STABBING			
D. TESTING			
E. ADDITIONAL			
TRIPS	8	8	8

DRILLING ASSEMBLY AT END OF TOUR

NO.			
10	STANDS D.P.	921.65	FT.
2	SINGLES D.P.	63.94	FT.
12	D.C. 2⅜ I.D. 6¼ O.D.	439.14	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY 8 O.D.	1.65	FT.
	RMR. BODY 8 O.D.	.72	FT.
	SUBS O.D.	3.21	FT.
1	BIT OR C.B.	58.00	FT.
	JARS	5.63	FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING	70.95		LBS.

BIT RECORD

BIT NO.	3	1C
SIZE	7⅞	6¾
MFG.	MANG.	CHRIS.
TYPE	SEC	O
NOZZLE NO.	3-10	
NOZZLE SIZE		
SER. NO.	911154	6MM40
DEPTH OUT	1523	
DEPTH IN	1382	1523
TOTAL FTG.	141	15
TOTAL HR. RUN	4	3½
COND. OF BIT	1-1-1	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	12:00	6:00
WEIGHT	9.0	9.0
VISC.-SEC	52	46
W.L.-C.C.	5.8	5.9
FLTR. CK.	1/32	1/32
PH	9.5	9.0
SD. CONT. %	2%	
PRESSURE GRADIENT	YP 15	

Calcium 8 DPM

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CMC	20#		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.
1522		C.	1
	1538		

FORMATION (SHOW CORE RECOVERY): Rotary 100 RPM; Wt. on Bit 14M 1000#; Pump Press 800; Pump No. 1 Liner Size 5½ S.P.M. 46; Pump No. Liner Size / S.P.M.; Method Run Sgl.-S Par'el-P Com'd-C: 14

DEVIATION RECORD: DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1	Circ & Cond Mud (Rig Down water loss to Core.)
1:00	2:00	1	Pull Bit #1 - To Core.
2:00	3:00	1	Lay Down Stab & Shock Sub. Make up Core Bbl. & Scan Core Bbl.
3:00	4:15	1¼	Run in w/Core Bbl.
4:15	4:30	¼	Cut Core Bbl. - Drop Ball.
4:30	8:00	3½	Cutting Core #1

DAYSHOFT

DRILLING ASSEMBLY AT END OF TOUR

NO.			
11	STANDS D.P.	1027.75	FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
	D.C. I.D. O.D.		FT.
12	D.C. 2⅜ I.D. 6¼ O.D.	439.14	FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.	1.65	FT.
	BIT OR C.B.	.72	FT.
	Sub	3.21	FT.
	KELLY DOWN	5.63	FT.
	TOTAL	1466.00	FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE	1C	
NOZZLE NO.	6-10	
NOZZLE SIZE	4	
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.	65140	
TOTAL HR. RUN	43	
COND. OF BIT	1-2	
REAMER NO.	RUN	
REAMER TYPE		

MUD RECORD

TIME		3:00
WEIGHT		9.0
VISC.-SEC	8.0 12.0	54
W.L.-C.C.	9.9 9.0	5.4
FLTR. CK.	5.2 5.3	5.4
PH	4.8 8.2	9.5
SD. CONT. %	1/32	1/32
PRESSURE GRADIENT	1.8 9.0	1.26
	2½ 6.0	1.26

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CMC	25		

DRILLER: Ron Sewell

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.
	1566	C.	1

FORMATION (SHOW CORE RECOVERY): Rotary 100 RPM; Wt. on Bit 15M 1000#; Pump Press 800; Pump No. 1 Liner Size 6½ S.P.M. 46; Pump No. Liner Size / S.P.M.; Method Run Sgl.-S Par'el-P Com'd-C: 1038

DEVIATION RECORD: DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
	4:00	8	Mine Core #1
4:00	8:00		Cutting Core #1

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
11	STANDS D.P.	1027.75	FT.
	SINGLES D.P.	31.00	FT.
12	D.C. 2⅜ I.D. 6¼ O.D.	439.14	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.	1.65	FT.
	STB. BODY O.D.	3.21	FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL	2400	FT.
WT. OF STRING		1509	LBS.

BIT RECORD

BIT NO.	1C	4
SIZE	6¾	7⅞
MFG.	Chris	Sec
TYPE		MMG
NOZZLE NO.		3-10
NOZZLE SIZE		
SER. NO.	65140	65140
DEPTH OUT	1522	
DEPTH IN	1523	1523
TOTAL FTG.	34	
TOTAL HR. RUN	15	
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	5:30	
WEIGHT	9.0	
VISC.-SEC	49	
W.L.-C.C.	5.8	
FLTR. CK	5.4	
PH	9.0	
SD. CONT. %	1.5	
PRESSURE GRADIENT	1.22	

Calcium

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.D RM.R CORE.C	CORE NO.
1566'	1577	C.	1
1523	1527	R.	

FORMATION (SHOW CORE RECOVERY): Rotary 100 RPM; Wt. on Bit 15M 1000#; Pump Press 800; Pump No. 1 Liner Size 5½ S.P.M. 46; Pump No. Liner Size / S.P.M.; Method Run Sgl.-S Par'el-P Com'd-C: 14

11' Core Rec 54'

4' Reamer

DEVIATION RECORD: DEPTH / DEV. / DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	7:30	3½	Cutting Core #1 — Core Rec By [illegible] & Earl (Two Cores)
7:30	8:30	1	Pull out.
8:30	10:00		Rec Core — Check BOP Pressure
10:00		1½	Scan Core Bbl — Close Blind Rams
	4:00	10:30	Stand Back In Derrick - [illegible]
10:30	4:00	10:45	Scan Rig
10:45	1	11:45	Run In w/Bit #4
11:45	4:00	4:00	Reamed [illegible]

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TOH MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TOH MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK	
HRS. W/DP	
HRS. WO/DP	
HRS. STANDBY	
TOTAL DAY WORK	

DAILY DRILLING REPORT — REPORT NO. 10 — DATE JULY 19/197

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
~~S & T Drilling Co Ltd~~ Roy McDermott	McD. Can G.C.O Haida Creek.	F01		NWT	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT O.D.	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	3	4	5"	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: L H Webber

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL.	K 380	14
2.	"	K 380	14
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
LAST CASING TUBING OR LINER	13⅜	JAP	48 J55	3	94.40'		92	675x Cement.
	8⅝	MAWW	24 N55	24	876.42		860	600sx Cement 3% CaCl.

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	7½	3¼	3¾
REAMING			
CONDITIONING MUD & CIRCULATING			3¾
TRIPS		4	
LUBRICATE RIG			
DEVIATION SURVEY	½	½	¼
TEST B.O.P.		¼	¼
CUT OFF DRILLING LINE			
[illegible] RIG			
[illegible]NG			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. WO/DP

HRS. STANDBY

TOTAL DAY WORK

WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OR TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
7	STANDS D.P.	712.77	FT.
2	SINGLES D.P.		FT.
18	D.C. 2⅞ x 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
	Mud Lub BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	41.35	FT.
	TOTAL	1305	FT.
WT. OF STRING	38M		LBS.

BIT RECORD

BIT NO.	2	
SIZE	7⅞	
MFG.	HW.	
TYPE	ODV-5	
NOZZLE NO.	2-11	
NOZZLE SIZE	1-10	
SER. NO.	18200	
DEPTH OUT		
DEPTH IN	935	
TOTAL FTG.	370	
TOTAL HR. RUN	12½.	
COND. OF BIT	Run.	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	2:00	4:00	7:00
WEIGHT	8.6	8.6	8.7
VISC.-SEC	32	36	35
W.L.-C.C.	16		12
FLTR. CK.	1/32		1/32
PH	9.0	9.5	9.5
SD. CONT. %	0.2%		2.5%
PRESSURE GRADIENT	VR 3	VP	12
Ca Cont.	80 PPM	Ca Cl.	100 PPM

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Kelzan	100#		
Master	100#		
Caustic	25#		

DRILLER: L H Webber

FOOTAGE

FROM	TO	DR., D RM., R CORE., C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
1200	1305	D.			60	14M	[illegible]	5½	55			
							1000	x				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1138	1°		1232	⅞				

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:30	1½	DRILLING 7⅞ Hole
1:30	1:45	¼	SURVEY. - GREASED & CHECKED KELLY COCK. OK.
1:45	5:15	3½	DRILLING
5:15	5:30	¼	SURVEY.
5:30	8:00	2½	DRILLING

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
	STANDS D.P.		FT.
	SINGLES D.P.	867.62	FT.
18	D.C. 2⅞ x 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.39	FT.
1	RMR. STAB. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Shock Absorber	6.70	FT.
			FT.
	KELLY DOWN	30.53	FT.
	TOTAL	1390.00	FT.
WT. OF STRING	71M		LBS.

BIT RECORD

BIT NO.	2	3
SIZE	7⅞	7⅞
MFG.	HW	SEC
TYPE	ODV-5	MMD6
NOZZLE NO.	2-10	3/10
NOZZLE SIZE	1-10	
SER. NO.	18205	911154
DEPTH OUT	1382	
DEPTH IN	935	1382
TOTAL FTG.	447	8
TOTAL HR. RUN	15½	¼
COND. OF BIT	3-5 I	Run
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	10:30		
WEIGHT	9.0		
VISC.-SEC	37		
W.L.-C.C.	14.4		
FLTR. CK.	1/32		
PH	9.5		
SD. CONT. %	2.3%		
PRESSURE GRADIENT	4P. 15		
Ca Cont.	80 PPM		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ron Sewell

FOOTAGE

FROM	TO	DR., D RM., R CORE., C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
1305'	1390	D			60	7M	1000	5½	54			
								x				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1387	¾°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	9:15	1¼	DRLG.
9:15	9:30	¼	Survey @ 1387 "Missrun"
9:30	11:15	1¾	DRLG.
11:15	11:30	¼	Drop Survey Tool Stuck in Stack Sub.
11:30	2:00	2½	Pull out Hole Tight. Layed down 7 singles
2:00	2:15	¼	Rig Service & B.O.P.
2:15	3:45	1½	Run w/B.I #3 & Break Circ.
3:45	4:00	¼	Drlg.

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
19	STANDS D.P.	930.94	FT.
	SINGLES D.P.		FT.
18	D.C. 2⅞ x 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.	367	FT.
	STB. BODY O.D.	4.37	FT.
	STB. BODY O.D.	3.56	FT.
	RMR. BODY O.D.	1.65	FT.
	SUBS O.D.	8.70	FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	41.35	FT.
	TOTAL	1523	FT.
WT. OF STRING	71M		LBS.

BIT RECORD

BIT NO.	3	
SIZE	7⅞	
MFG.	SEC	
TYPE	MMD6	
NOZZLE NO.	3/10	
NOZZLE SIZE		
SER. NO.	911154	
DEPTH OUT	1523	
DEPTH IN	1382	
TOTAL FTG.	141	
TOTAL HR. RUN	4	
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	4:30	8:00	
WEIGHT	9.0	9.00	
VISC.-SEC	38	36	
W.L.-C.C.	15.6	16	
FLTR. CK.	1/32	1/32	
PH	9.5	9.5	
SD. CONT. %	3%	2%	
PRESSURE GRADIENT	Ca Cont. 90 PPM		
4. P.	13	15	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
C.M.C.	400#		

DRILLER: Ron Ort

FOOTAGE

FROM	TO	DR., D RM., R CORE., C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P COM'D-C
1390	1523	D			60	7M	1000	5½	54			
						20M		x				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1453	3¼°							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	¼	Drlg.
4:15	4:30	¼	Rig Service & Kelly cock & B.O.P. & note photo
4:30	6:15	1¾	Drlg.
6:15	6:30	¼	Survey @ 1453
6:30	8:15	1¾	Drlg.
8:15	12:00	3¾	Circ + Condition Hole for Coring

DAILY DRILLING REPORT

REPORT NO. 9 DATE July 18/70

OPERATOR: J. Ray McDermott.

LEASE: McD. Can. GCO Maida Creek.

WELL NO. F37. FIELD OR DIST. COUNTY: N.W.T. STATE: Canada.

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD. RIG NO. 12

DRILL PIPE STRING: NO. 2 SIZE 4½ TYPE THD. 3½ IF TOOL JOINT 5" O.D.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS	MANUFACTURER	TYPE	STROKE LENGTH
1.	National	K380	14"
2.	"	K380	14"
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13⅜	JAP	48 J55	3	94.40		92	675sx Cement
	8⅝	MANN	24 K55	24	876.42		860	500sx " 3% CaCl.

TIME DISTRIBUTION — HOURS

	NORM	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	3¾	14	3¾
REAMING		1¾	
CONDITIONING MUD & CIRCULATING		3¼	4
TRIPS	1	1¾	
LUBRICATE RIG		¾	
DEVIATION SURVEY	½		¼
TEST B.O.P.			
CUT OFF DRILLING LINE			
REPAIR RIG			
FISHING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER	2¾		
FISHING			
A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL WORK			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK	
HRS. W/DP	
HRS. NO/DP	
HRS. STANDBY	
TOTAL DAY WORK	

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
14	STANDS D.P.	368.94	FT.
	SINGLES D.P.		FT.
18	D.C. 7⅜ x 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
	SUBS X.O. SUB O.D.	1.65	FT.
	BIT OR C.B.	2.10	FT.
			FT.
	KELLY DOWN	31.41	FT.
	TOTAL	935.00	FT.
WT. OF STRING	68m.		LBS.

BIT RECORD		
BIT NO.	1	
SIZE	7⅞	
MFG.	Smith	
TYPE	DTJ3R.	
NOZZLE NO.	3.	
NOZZLE SIZE	2-13 / 1-12	
SER. NO.	DD138	
DEPTH OUT	935	
DEPTH IN	860	
TOTAL FTG.	75	
TOTAL HR. RUN		
COND. OF BIT	6-8-04	
REAMER NO.		
REAMER TYPE		

MUD RECORD				
TIME				
WEIGHT				
VISC.-SEC				
W.L.-C.C.				
FLTR. CK.				
PH				
SD. CONT. %				
PRESSURE GRADIENT				
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE	AMT.
DRILLER	[signature]			

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
860	935	D.			60	16m	700	5½ x 14	56			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	904	1°		935	1°				

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:45	2¾	Drilled out Plug + Float Collar - Cleaned out Cement to (Plug @ 832') Shoe + Drilled out Shoe
2:45	5:30	2¾	Drilling 7⅞ Hole.
5:30	5:45	¼	Survey 904' - 1°
5:45	6:45	1	Drilling
6:45	7:00	¼	Survey 935' -
7:00	8:00	1	Hoist Bit #1 - Strap out.

Pipe Tally 935.44
Pipe Strap 935.24
No Correction.

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
14	STANDS D.P.		FT.
1	SINGLES D.P.	38.22	FT.
18	D.C. 7⅜ x 6¼	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Stand Pipe BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	22.93	FT.
	TOTAL	973.00	FT.
WT. OF STRING	67m		LBS.

BIT RECORD		
BIT NO.	2	
SIZE	7⅞	
MFG.	N-L	
TYPE	ODV-J	
NOZZLE NO.	2-11	
NOZZLE SIZE	1-10	
SER. NO.	18205	
DEPTH OUT		
DEPTH IN	935	
TOTAL FTG.	38'	
TOTAL HR. RUN	1¼	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD				
TIME	9:00			
WEIGHT	8.4			
VISC.-SEC	28			
W.L.-C.C.				
FLTR. CK.				
PH	14.0			
SD. CONT. %				
PRESSURE GRADIENT				
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE	AMT.
	Caustic	100#	Plastic	150#
	Drillaids	30#	Gel	500#
	Kelzan	150#		
DRILLER	Ron Smith			

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
935	973	D			60	16	850	5½ x 14	55			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼	Rig Serv.
8:15	9:30	1¼	Pick up Stabilizers + Short Subs + Run in To 830'
9:30	12:30	3	Displace mud System To Water + mix Polymer Mud.
12:30	2:15	1¾	Reaming Stabilizers in from 830' to 935'
2:15	3:30	1¼	Drill 7⅞ hole
3:30	4:00	½	Pull up in Casing + Displace mud system

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
8	STANDS D.P.	424.36	FT.
2	SINGLES D.P.		FT.
18	D.C. 7⅜ x 6¼ I.D. O.D.	529.90	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	3.67	FT.
1	STB. BODY O.D.	4.37	FT.
1	RMR. BODY O.D.	3.56	FT.
1	SUBS O.D.	1.65	FT.
1	Stand Pipe BIT OR C.B.	8.70	FT.
			FT.
	KELLY DOWN	23.78	FT.
	TOTAL	1100	FT.
WT. OF STRING	68m.		LBS.

BIT RECORD		
BIT NO.	2	
SIZE	7⅞	
MFG.	NW	
TYPE	ODV-J	
NOZZLE NO.	2-11	
NOZZLE SIZE	1-10	
SER. NO.	18205	
DEPTH OUT		
DEPTH IN	935	
TOTAL FTG.	165	
TOTAL HR. RUN	8.5	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD				
TIME	9:00	11:00		
WEIGHT	8.4	8.6		
VISC.-SEC	31	35		
W.L.-C.C.				
FLTR. CK				
PH	8.0	8.5		
SD. CONT. %				
PRESSURE GRADIENT				
MUD & CHEMICALS ADDED	TYPE	AMT.	TYPE	AMT.
	Caust.	50#	Plastic	150#
	Drillaids	30#	Gel	1500#
	Kelzan	250#	Picaro	200#
DRILLER	Ron Smith			

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
973	1100	D			60	16m	850	5½ x 14	55			S
					60	10m.						

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1043	1¼							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	8:00	4	Displace Complete mud system changed Bed on flow bed with Epoxy
8:00	9:45	1¾	DRILLING 7⅞ HOLE
9:45	10:00	¼	SURVEY
10:00	12.00	2.	DRILLING

DAILY DRILLING REPORT — REPORT NO. 8 — DATE July 17 197[illegible]

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. Ray McDermott	McD. CAN. GCO MAIDA CREEK	F57		N.W.T.	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING HO.	SIZE	TOOL JOINT O.D.	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	16	2	4"	5	3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: B. W. Webber

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	R380	14
2.	"	R. 380	14
3.			

	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	KB. TO CSG. HD.	SET AT	REMARKS
LAST CASING	13 3/8	JAP	48 SSS	3	92.46		90	67 sx Cement
TUBING OR LINER	8 5/8	ABN	24 HSS	23.	876.43		860	500 sx Cement 37% CaCl2

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL			
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG			
DEVIATION SURVEY			
TEST B.O.P.			5
CUT OFF DRILLING LINE			
REPAIR RIG			
[illegible]ING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT	8	8	5
DRILL STEM TEST			
OTHER			
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TUBING TRIPS			
C. STABBING			
D. TESTING			
E. ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		L.

BIT RECORD: BIT NO.; SIZE; MFG.; TYPE; NOZZLE NO.; NOZZLE SIZE; SER. NO.; DEPTH OUT; DEPTH IN; TOTAL FTG.; TOTAL HR. RUN; COND. OF BIT; REAMER NO.; REAMER TYPE

MUD RECORD: TIME; WEIGHT; VISC.-SEC; W.L.-C.C.; FL.TR. CK.; PH; SD. CONT. %; PRESSURE GRADIENT

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

DRILLER: B. Webber

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
860												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12.00	8:00		W.O.C. - CHECKED RIG SAVER'S OK RM
			SLACK OFF ON CSG & BACKED OUT LANDING JT. @ 6:00 AM.
			Shipped extra sacks To SDT Via P.W.A.

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD: BIT NO.; SIZE; MFG.; TYPE; NOZZLE NO.; NOZZLE SIZE; SER. NO.; DEPTH OUT; DEPTH IN; TOTAL FTG.; TOTAL HR. RUN; COND. OF BIT; REAMER NO.; REAMER TYPE

MUD RECORD: TIME; WEIGHT; VISC.-SEC; W.L.-C.C.; FL.TR. CK.; PH; SD. CONT. %; PRESSURE GRADIENT

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

DRILLER: Art Rom

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
860												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00			W.O.P. & Head Up Screw Hydril Bearing
	9:00	5 hr	Cut - Remove Cap of Hydril Check
9:00	9:30	½	Seal - (Upper) Reassemble. (OK)
9:30	10:00	½	Clean out mouse Hole.
10:00	10:15	¼	Pressure Build Rams - 1200# Hold 15 min
10:15	10:30	¼	Release Pressure 4" Rams 1100 Hold 15 min
10:30	12:00	1½	Again Pressure up Hydril - 1000 Hold 15 min
			Pick up 6 DC & Finish in To Plug.

DAILY DRILLING REPORT

REPORT NO. 7 DATE July 16 '70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. RAY McDERMOTT	McCAN ECO MAIDBCK	E-57	N.W.T.	CANADA	

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	O.D.
S & T DRILLING (WESTERN) CO. LTD.	1E	2	4	TYPE THD. 3½ IF	5"

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: L.H. Webber

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT	K-380	14"
2.	"	K 380	14"
3.			

LAST CASING TUBING OR LINE	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13⅜		48# J55	3	911.40		90' RKB	62 SX CEMENT
	9⅝	MANNESMANN	47# J55	24	876	12.25'	860 RKB	500 SX CEMENT + 2% GEL

TIME DISTRIBUTION--HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	3½		
REAMING			
CONDITIONING MUD & CIRCULATING	1	1¾	
TRIPS	6	1½	
LUBRICATE RIG		½	
DEVIATION SURVEY	½		
TEST B.O.P.			
CUT OFF DRILLING LINE			
REPAIR RIG			
FISHING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING		2	2½
WAITING ON CEMENT			5½
DRILL STEM TEST			
OTHER #1 BOP		2½	
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TUBING TIMES			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
5	STANDS D.P.	461.90	FT.
	SINGLES D.P.		FT.
12	D.C. I.D. O.D.	354.48	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D. (NO SWB)	1.65	FT.
	STB. BODY O.D. (BIT SUB)	3.10	FT.
	RMR. BODY O.D. (REAL RED.)	2.37	FT.
	SUBS O.D.		FT.
	BIT ~~OR C.B.~~	1.00	FT.
			FT.
	KELLY DOWN	36.50	FT.
	TOTAL	860	FT.
	WT. OF STRING	54M	LBS.

BIT RECORD		
BIT NO.	2B	5A
SIZE	12¼	12¼
MFG.	SHOW	HTC
TYPE	HOLE OPENER	OX-3
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.	8534	11432
DEPTH OUT	839	860
DEPTH IN	536	839
TOTAL FTG.	253	21
TOTAL HR. RUN	10½	3½
COND. OF BIT		
REAMER NO.		
REAMER TYPE	4.0	

MUD RECORD		
TIME	4⁰⁰	
WEIGHT	9.5	
VISC.-SEC	88	
W.L.-C.C.		
FLTR. CK.		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000		

DRILLER

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SOLS-PARTIAL-P COND-G
839	860	D			70/60	6	550	5½	20			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	839	¾	860	¾					

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12⁰⁰	12³⁰	½	CIRC TO COND HOLE
12³⁰	12⁴⁵	¼	SURVEY
12⁴⁵	5⁰⁰	4¼	PULL BIT #2B (TIGHT HOLE PUMP OUT 12 STDS)
5⁰⁰	6⁴⁵	1¾	RUN IN & CLEAN TO BOTTOM
6⁴⁵	7³⁰	¾	DRLG 12¼" HOLE
7³⁰	8⁰⁰	½	CIRC TO COND HOLE

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD		
TIME		
WEIGHT		
VISC.-SEC		
W.L.-C.C.		
FLTR. CK.		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SOLS-PARTIAL-P COND-G
860												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
9⁰⁰	9¹⁵	¼	RIG SER
9¹⁵	9⁰⁰	¾	CIRC COND HOLE
9⁰⁰	9⁴⁵	¾	DUMMY TRIP
9⁴⁵	10⁴⁵	1	CIRC
10⁴⁵	11³⁰	¾	PULL TO RUN CSG
11³⁰	2³⁰	3	RIG TO & RUN CSG
2³⁰	4³⁰	2	CIRC & MIX CALC IN WATER

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD		
TIME		
WEIGHT		
VISC.-SEC		
W.L.-C.C.		
FLTR. CK		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SOLS-PARTIAL-P COND-G

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4³⁰	6⁰⁰	1½	CEMENT
6⁰⁰	6³⁰	½	PUMP PLUG.
6³⁰	12⁰⁰	5½	W.O.C. BUMP PLUG 1450 PSI OK.

HSKS CALSEAL AT END.

RAN 24 JTS 876' 9⅝" 53.5# J55 BTC CSG
LANDED AT 860 RKB.
CEMENTED W/500 SK + 2% CaCl. GOOD RETURNS
CENTRALIZERS ON JT #1 - 2 & 5

DAILY DRILLING REPORT — REPORT NO. 5 — DATE July 15/70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J RAY McDERMOTT	CAN McD G.C.D. MAIDA CRK.	F57		NWT	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT	O.D.	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E	2	4½	5"		3½ IF

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	K380	14
2.	"	K380	14
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13⅜	J.A.P.	48 SSS	3	92		90	67 Sx CEMENT.

TIME DISTRIBUTION-HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	4¾		
REAMING		6½	7¼
CONDITIONING MUD & CIRCULATING			½
TRIPS	1½	¾	
LUBRICATE RIG		¼	
DEVIATION SURVEY	1	½	¼
TEST B.O.P.			
CUT OFF DRILLING LINE			
REPAIR RIG			
REPAIR			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER	¾		
FISHING			
COMPLETION WORK A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
W.S	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.

NO. OF LINES — SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON-M OR TRIPS SINCE LAST CUT

CUMULATIVE TON-M OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
5	STANDS D.P.	461.86	FT.
	SINGLES D.P.		FT.
12	D.C. 2⅞ I.D. 6¼ O.D.	354.48	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
1	RMR. BODY O.D.	1.65	FT.
1	SUB O.D.	3.10	FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	21.00	FT.
	TOTAL	839	FT.
	WT. OF STRING	52m.	LBS.

BIT RECORD

BIT NO.	HA.	
SIZE	7⅞	
MFG.	SMITH	
TYPE	DTJ.	
NOZZLE NO.	3	
NOZZLE SIZE	2-13 1-12	
SER. NO.	DD138	
DEPTH OUT	839.	
DEPTH IN	586	
TOTAL FTG.	253	
TOTAL HR. RUN	16¼	
COND. OF BIT	3-2-1	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	10⁰⁰	3⁰⁰	6⁰⁰
WEIGHT	9.1	9.2	9.2
VISC.-SEC	40	45	42
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	15⁰⁰		

DRILLER: [signature]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART'L-P COM'D-C
736	839.	D.		7⅞ Pilot Hole	150	3m.	1100	5½	70			
					150	5/8m	1100	"				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	757	1°		788	⅞		820	¾	840 - ⅞

TIME LOG

FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	12:30	½	DRLG 7⅞ — 5:30 - 6:15 - ¾ - DRILLING
12:30	1:15	¾	WELDING WASHOUT IN STANDPIPE — 6:15 - 6:30 - ¼ - SURVEY 840 -
1:15	2:00	¾	DRLG. — 6:30 - PULL BIT #2A
2:00	2:15	¼	SURVEY @ 757 - 1° — - LAY DOWN 9 STANDS
2:15	3:45	1½	DRLG. — 7:30 - 1 - STRAP PIPE
3:45	4:00	¼	SURVEY @ 788 - ⅞° — 7:30 - 8:00 - ½ Pick up Hole opener.
4:00	5:15	1¼	DRLG.
5:15	5:30	¼	SURVEY @ 820' - ¾

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
[illegible]	STANDS D.P.		FT.
1	SINGLES D.P.	336.98	FT.
12	D.C. 2⅞ I.D. 6¼ O.D.	354.48	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
1	SUB BODY O.D.	1.65	FT.
1	RMR. BODY O.D.	2.50	FT.
1	SUBS. O.D.	3.18	FT.
1	BIT OR C.B.	2.37	FT.
			FT.
	KELLY DOWN	16.19	FT.
	TOTAL	717	FT.
	WT. OF STRING	52m.	LBS.

BIT RECORD

BIT NO.	2B	
SIZE	12¼"	
MFG.	SMITH	
TYPE	Hole opener	
NOZZLE NO.	\	
NOZZLE SIZE		
SER. NO.	8504	
DEPTH OUT		
DEPTH IN	586'	
TOTAL FTG.	131	
TOTAL HR. RUN	6½	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	10⁰⁰	1⁰⁰	3⁴⁵
WEIGHT	9.3	9.3	9.3
VISC.-SEC	38	39	43
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Lime	25#		

DRILLER: Ron Sewell

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART'L-P COM'D-C
586'	717'	R.		RMR 7⅞ To 12¼	60/100	8/15	1100	5½	70			
								"				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	689	⅞°		700	⅞				

TIME LOG

FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS Changed Two Valve seats #1 pump
8⁰⁰	8¹⁵	¼	Ser. Rig.
8¹⁵	9⁰⁰	¾	Run in w/ 12¼" hole opener. To 586'
9⁰⁰	12³⁰	3½	Ream 7⅞ To 12¼" hole
12³⁰	12⁴⁵	¼	Survey @ 639
12⁴⁵	3³⁰	2¾	Ream 7⅞ To 12¼" hole
3³⁰	3⁴⁵	¼	Survey @ 700 ⅞°
3⁴⁵	4⁰⁰	¼	Ream 7⅞ To 12¼" hole

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
5	STANDS D.P.	461.90	FT.
	SINGLES D.P.		FT.
12	D.C. 2⅞ I.D. 6¼ O.D.	354.48	FT.
	D.C. I.D. O.D.		FT.
1	STB. BODY O.D.	1.65	FT.
1	STB. BODY O.D.	3.10	FT.
1	RMR. BODY O.D.	2.50	FT.
1	SUBS. O.D.	3.37	FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	13.00	FT.
	TOTAL	839.00	FT.
	WT. OF STRING	54m.	LBS.

BIT RECORD

BIT NO.	2B	
SIZE	12¼"	
MFG.	SMITH	
TYPE	Hole Opener	
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.	8504	
DEPTH OUT	839	
DEPTH IN	586	
TOTAL FTG.	253	
TOTAL HR. RUN	10½	
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	6⁰⁰	8⁰⁰	10⁰⁰
WEIGHT	9.4	9.4	9.5
VISC.-SEC	41	41	60
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PART'L-P COM'D-C
717		Ream		Reaming 7⅞ To 12¼	60/100	8/15	1100	5½	70			
								"				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	762	⅞							

TIME LOG

FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4⁰⁰	7¹⁵	3¼	Ream 7⅞ To 12¼" hole
7¹⁵	7³⁰	¼	Survey @ 762 - ⅞
7³⁰	11:30	4	Ream
11³⁰	12:00	½	Circ & Clean Hole.

DAILY DRILLING REPORT

REPORT NO. 4 DATE July 14 19[illegible]

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. RAY McDERMOTT.	McDERMOTT GCO MAIDA CRK.	F57		NWT.	CANADA.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	DRILL PIPE STRING SIZE	TOOL JOINT O.D. TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E			

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	R380	14
2.	NATIONAL	R380	14
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13 3/8	JAPAN	48 J55	3	92		90	675x CEMENT.

TIME DISTRIBUTION-HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	6 1/2	5 3/4	5 3/4
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS	1/2	1 1/4	1
LUBRICATE RIG	1/4	1/4	
DEVIATION SURVEY	3/4	3/4	1 1/4
TEST B.O.P.			
CUT OFF DRILLING LINE			
REPAIR RIG			
[illegible]			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK	
HRS. W/DP	
HRS. WO/DP	
HRS. STANDBY	
TOTAL DAY WORK	

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
1	STANDS D.P.	92.01	FT.
1	SINGLES D.P.	29.54	FT.
12	D.C. 2 3/4 I.D. 6 1/4 O.D.	354.48	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
1	STB. BODY Sub O.D.	1.65	FT.
1	RMR. BODY Bell O.D.	2.37	FT.
1	SUBS Bit Sub	3.10	FT.
1	BIT OR C.B.	1.00	FT.
			FT.
	KELLY DOWN	41.85	FT.
	TOTAL	499.	FT.
WT. OF STRING	64 M.	LBS.	

BIT RECORD

BIT NO.	2A		
SIZE	12 1/4		
MFG.	HTC		
TYPE	OSC1G		
NOZZLE NO.	3		
NOZZLE SIZE	2-16 2-18		
SER. NO.	TE130		
DEPTH OUT	499		
DEPTH IN	90		
TOTAL FTG.	409		
TOTAL HR. RUN	19 3/4		
COND. OF BIT	2-2-I		
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	1:00	3:00	6:00
WEIGHT	9.2	9.2	9.1
VISC.-SEC	39	39	40
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2000		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR.EL-P COM.D-C
315	499	D		ROUGH DRILLING	50/40	8/12	350	5 1/2	70			
					80	14		x				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	390	3/4		485	1°				

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	1:00	1	DRILLING 12 1/4" HOLE.
1:00	1:15	1/4	RIG SERVICE
1:15	3:30	2 1/4	DRLG 12 1/4 HOLE
3:30	3:45	1/4	SURVEY @ 390 - 3/4°
3:45	7:00	3 1/4	DRLG 12 1/4 HOLE
7:00	7:15	1/4	SURVEY @ 485
7:15	7:30	1/4	[redacted] SURVEY
7:30	8:00	1/2	HOIST BIT #2A

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
2	STANDS D.P.		FT.
1	SINGLES D.P.	210.61	FT.
12	D.C. 2 3/4 I.D. 6 1/4 O.D.	354.48	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
1	STB. BODY X O O.D.	1.65	FT.
1	RMR. BODY Bell O.D.	2.37	FT.
1	SUBS Bit Sub O.D.	3.10	FT.
1	BIT OR C.B.	1.00	FT.
			FT.
	KELLY DOWN	41.00	FT.
	TOTAL	586.00	FT.
WT. OF STRING	46 M	LBS.	

BIT RECORD

BIT NO.	RR. 3A		
SIZE	12 1/4		
MFG.	HTC		
TYPE	OSC3		
NOZZLE NO.	M Jaw		
NOZZLE SIZE	1/2		
SER. NO.	12102		
DEPTH OUT	586		
DEPTH IN	499		
TOTAL FTG.	87		
TOTAL HR. RUN	5 3/4		
COND. OF BIT	3-2-I		
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	12:00	2:00	5:00
WEIGHT	9.2	9.2	9.2
VISC.-SEC	40	40	39
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR.EL-P COM.D-C
499	586	D			60/90	8M	375	5 1/2	70			
								x				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	515	1°		546	3/4°				

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:30	1/2	Hoist BIT #2A
8:30	8:45	1/4	Rig Serv.
8:45	9:15	1/2	Run in w/BIT #3A 12 1/4"
9:15	11:00	1 3/4	DRLG 12 1/4" hole
11:00	11:15	1/4	Survey @ 515
11:15	1:15	2	DRLG 12 1/4" hole
1:15	1:30	1/4	Survey @ 546 3/4°
1:30	3:30	2	Drlg
3:30	3:45	1/4	Survey
3:45	4:00	1/4	Trip for BIT

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
3	STANDS D.P.	336.72	FT.
2	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
12	D.C. 2 3/4 I.D. 6 1/4 O.D.	354.48	FT.
	STB. BODY O.D.	1.65	FT.
	STB. BODY Sub O.D.	3.14	FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	41.00	FT.
	TOTAL	736	FT.
WT. OF STRING	48 M	LBS.	

BIT RECORD

BIT NO.	4A		
SIZE	7 7/8		
MFG.	SMITH		
TYPE	DT-5		
NOZZLE NO.	2-13		
NOZZLE SIZE	1-12		
SER. NO.	DD-158		
DEPTH OUT			
DEPTH IN	586		
TOTAL FTG.	150		
TOTAL HR. RUN	13 3/4		
COND. OF BIT			
REAMER NO.			
REAMER TYPE			

MUD RECORD

TIME	5:30	9:00	10:00
WEIGHT	9.3	9.5	9.1
VISC.-SEC	42	43	38
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT. %			
PRESSURE GRADIENT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000#		
[illegible]	[illegible]		

DRILLER: [illegible]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR.EL-P COM.D-C
586	736'	D		7 7/8 HOLE.	120	6M	1000	5 1/2	70			
					120	4M	1100	x				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	604	1°		634	3/4°		665	1 1/4	

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:30	1/2	Trip out - Lay down 12 1/4" BIT
4:30	5:00	1/2	Run in w/ 7 7/8
5:00	6:00	1	Drlg 7 7/8 hole
6:00	6:15	1/4	Survey @ 604 - 1°
6:15	7:00	3/4	Drlg
7:00	7:15	1/4	Survey @ 634 3/4°
7:15	8:30	1 1/4	Drlg
8:30	8:45	1/4	Survey @ 665 - 1 1/4

8:45 - 10:15 - 1 1/4 - DRLG.
10:15 - 10:45 1/4 - SURVEY 695 - 1°
10:45 - 11:30 1 1/4 DRLG
11:30 - 11:45 1/4 SURVEY 726 - 1°
11:45 - 12:00 - 1/4 DRILLING

DAILY DRILLING REPORT [redacted]

REPORT NO. 3 DATE July 18 197[illegible]

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. RAY McDERMOTT	McDERMOTT 680 ~~BTS Co~~ MAIDA CR.	637	MAIDA CREEK	N.W.T.	CANADA.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT O.D.	TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E				

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	K380	14
2.	"	K380	14
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS
	13 3/8	JAPAN.	J55 48#	3 "	92		90'	67 SX CEMENT.

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: L.H. Webber

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN Flowline		3/4	
DRILLING ACTUAL		6	7 1/4
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS	1/2		
LUBRICATE RIG		1/4	
DEVIATION SURVEY		1/4	3/4
TEST B.O.P.			
CUT OFF DRILLING LINE			
REPAIR RIG			
DRING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT	1 1/2		
DRILL STEM TEST			
OTHER	[redacted]	1/4	
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT. OF STRING			LBS.

BIT RECORD

BIT NO.	2A.	
SIZE	12 1/4	
MFG.	HTC	
TYPE	OSC1G	
NOZZLE NO.	2-16	
NOZZLE SIZE	1-18	
SER. NO.	KL-130	
DEPTH OUT		
DEPTH IN	90	
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME		
WEIGHT		
VISC.-SEC		
W.L.-C.C.		
FL TR. CK.		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	3000		

DRILLER: [signature]

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
90	90											

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	7:30	7 1/2	DRILLING MOUSEHOLE. & W.O.C. (HARD SANDSTONE)
7:30	8:00	1/2.	RUN IN TO TOP of CEMENT @ 80'

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
	D.C.		
5	3 1/2 O.D. 6 1/2" D.C.	149.80	FT.
	I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
1	RMR. BODY O.D.	2.37	FT.
1	SUBS O.D.	3.10	FT.
1	BIT OR C.B.	1.00	FT.
			FT.
	KELLY DOWN	41.00	FT.
	TOTAL	197	FT.
WT. OF STRING		29M	LBS.

BIT RECORD

BIT NO.	2A	
SIZE	12 1/4	
MFG.	HTC	
TYPE	OSC-1G	
NOZZLE NO.	2-16	
NOZZLE SIZE	1-18	
SER. NO.	KL-130	
DEPTH OUT		
DEPTH IN	90	
TOTAL FTG.	107	
TOTAL HR. RUN	6	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME		3rd Run
WEIGHT		
VISC.-SEC		39
W.L.-C.C.		
FL TR. CK.		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500		
Caustic	50#		

DRILLER: Ron Smith

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
80	90			Drill out Cement	50	1000	200	5 1/2	55			
90'	197	D		Drilling with Mud	50/90	1000/2000	800	"	70			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	130	1/4							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	1/4	Rig Serv.
8:15	9:00	3/4	Makeup Flowline
9:00	9:15	1/4	Drilling out Cement from 80' to 90'
9:15	9:45	1/2	Clean Tanks
9:45	2:30	4 3/4	Drilling 12 1/4" Surface hole
2:30	2:45	1/4	Survey @ 130' 1/4°
2:45	4:00	1 1/4	DRLG 12 1/4 hole

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.			
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
	D.C.		
9	3 1/2 O.D. 6 1/2 D.C.	268.48	FT.
	I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
1	RMR. BODY O.D.	2.37	FT.
1	SUBS O.D.	2.10	FT.
1	BIT OR C.B.	1.00	FT.
			FT.
	KELLY DOWN	41.00	FT.
	TOTAL	315.00	FT.
WT. OF STRING		46000	LBS.

BIT RECORD

BIT NO.	2A	
SIZE	12 1/4	
MFG.	HTC	
TYPE	OSC1G	
NOZZLE NO.	2-16	
NOZZLE SIZE	1-18	
SER. NO.	KL130	
DEPTH OUT		
DEPTH IN	90	
TOTAL FTG.	225	
TOTAL HR. RUN	13 1/4	
COND. OF BIT	Run	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	9:00	11:00
WEIGHT		
VISC.-SEC	40	39
W.L.-C.C.		
FL TR. CK		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ron Ort

FOOTAGE

FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SGL.-S PAR'EL-P COM'D-C
197	315	D		Rotary DRLG.	50/60	8M	300	5 1/2	70			
								"				
								14				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	190	1/4		247	1/4		305	1/4	

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	4:15	1/4	Survey @ 190 - 1/4
4:15	7:30	3 1/4	Drilling 12 1/4 hole
7:30	7:45	1/4	Survey @ 247'
7:45	11:45	4	Drilling
11:45	12:00	1/4	Survey 305 - 1/4°

DAILY DRILLING REPORT — REPORT NO. 2 — DATE July 12/70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. RAY McDERMOTT	McD CAN GCO MAIDA CK	F-37	MAIDA CREEK	N.W.T.	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT O.D. / TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1F			

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: L. H. Webber

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NATIONAL	K380	14
2.	"	K380	14
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS

TIME DISTRIBUTION–HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL	2½		
REAMING	4½	7	
CONDITIONING MUD & CIRCULATING		½	1¼
TRIPS	¾	1¼	
LUBRICATE RIG		¼	
DEVIATION SURVEY	¼		
TEST B.O.P.			
CUT OFF DRILLING LINE			
REPAIR RIG			
WELDING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			1¾
WAITING ON CEMENT			6
DRILL STEM TEST			
OTHER			
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK	
HRS. W/DP	
HRS. WO/DP	
HRS. STANDBY	
TOTAL DAY WORK	

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
1	D.C. I.D. O.D.	29.76	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.	4.10	FT.
	SUBS BELL O.D.	3.10	FT.
	BIT OR C.B. S-8	2.37	FT.
			FT.
	KELLY DOWN	26.00	FT.
	TOTAL	65	FT.
	WT. OF STRING		LBS.

BIT RECORD		
BIT NO.	1A	1B
SIZE	12¼	17½
MFG.	Hyc	Smith
TYPE	OSC3	Hole Opener
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.	16543	
DEPTH OUT	90	
DEPTH IN	0	0
TOTAL FTG.	90	
TOTAL HR. RUN	10¼	
COND. OF BIT		
REAMER NO.		8563
REAMER TYPE	3-Point	Smith

MUD RECORD

TIME	
WEIGHT	
VISC.-SEC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT. %	
PRESSURE GRADIENT	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	1000#		

DRILLER: A. C. Hanson

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAR'EL-P CON'D-C
70	90	D		20'	100		250	5½	70	on.	JET	
0	65	R.		65'	100			5½	70			

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	90	¼							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
12:00	2:30	2½	DRILLING 12¼ Hole.
2:30	2:45	¼	Survey @ 90' — ¼
2:45	3:30	¾	Pulled out 12¼ B.I. Laid Down D.Collars
			Picked up 17½ Hole opener.
3:30	8:00	4½	Reaming 12¼ Hole To 17½"

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
2	D.C. 8" O.D.	60.79	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
1	RMR. BODY O.D.	4.10	FT.
1	SUBS Bell O.D.	3.10	FT.
1	BIT OR C.B.	2.37	FT.
			FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD		
BIT NO.	1B	
SIZE	17½	
MFG.	Smith	
TYPE	Hole Opener	
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT	90	
DEPTH IN	0	
TOTAL FTG.	90	
TOTAL HR. RUN	11½	
COND. OF BIT	Fair	
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	
WEIGHT	
VISC.-SEC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT. %	
PRESSURE GRADIENT	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: R. Smith

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD RUN SCL.-S PAR'EL-P CON'D-C
65'	90'	R		25'	80/100	500#		5½		5½		

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼	Rig Service
8:15	3:15	7	Reaming 12¼" Hole To 17½
3:15	3:45	½	Circulate Cond. Hole To Run Conductor pipe
3:45	4:00	¼	Pull out & Laydown Hole Opener.
			LAND 90.06 K.B.
			RAN 3 JTS 133/8 J55-13# 94.40 OSG

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD

TIME	
WEIGHT	
VISC.-SEC	
W.L.-C.C.	
FLTR. CK	
PH	
SD. CONT. %	
PRESSURE GRADIENT	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: Ron Cox

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	PUMP NO. LINER SIZE	PUMP NO. S.P.M.	METHOD RUN SCL.-S PAR'EL-P CON'D-C
90'												

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:15	1¼	Rig To & Run 90' of 13⅜ Conductor pipe
5:15	5:30	¼	Circulate Conductor pip — CEMENT w/ 67 SKS
5:30	6:00	½	Cement Conductor pipe — CEMENT - Last 30 sck
6:00	12:00		W.O.C. & 20 CAL SKS.
			Changed washpipe & Packing on Swivel — Displace w/ 12 BBS
			Cut off Casing & weld 6" FPM — WATER
			on outlet for flow line
			Repaired 4" Standpipe Valve.

DAILY DRILLING REPORT

REPORT NO. 2 DATE JULY 11/70

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J. RAY McDERMOTT.		F37.	MAIDA CREEK.	N.W.T.	CANADA.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT O.D. / TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E.			

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: R. H. Webber

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT.	K380	14
2.	NAT.	K380	14
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL			6¾
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG		¼	
DEVIATION SURVEY			¼
TEST B.O.P.			
CUT OFF DRILLING LINE			
REPAIR RIG			
FISHING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER	8	7¾	1¾
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK			
HRS. W/DP			
HRS. WO/DP			
HRS. STANDBY			
TOTAL DAY WORK			

WIRE LINE RECORD

REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD		
TIME		
WEIGHT		
VISC.-SEC		
W.L.-C.C.		
FLTR. CK.		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DRILLER: [signature]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. 2 LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR.EL.-P COM.D.-C
	45.	D										

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
			Wellbore #441
12:00	8:00		DRILLING RATHOLE. (SANDSTONE).
			DRILL 7⅞ BEAN TO 12¼

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
	D.C. I.D. O.D.		FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL		FT.
	WT. OF STRING		LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD		
TIME		
WEIGHT		
VISC.-SEC		
W.L.-C.C.		
FLTR. CK.		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2500#		
Caustic	100#		

DRILLER: [signature]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. 2 LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR.EL.-P COM.D.-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:15	¼	Service Rig
8:15	MIDNIGHT	7¾	Drilling Rat hole

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR		
	STANDS D.P.		FT.
	SINGLES D.P.		FT.
1	D.C. 6¼ I.D. O.D.	29.76	FT.
	D.C. I.D. O.D.		FT.
	STB. BODY O.D.		FT.
	STB. BODY O.D.		FT.
	RMR. BODY O.D.		FT.
	SUBS O.D.	3.10	FT.
	BIT OR C.B. Sub	2.37	FT.
			FT.
	KELLY DOWN	35.00	FT.
	TOTAL	70	FT.
	WT. OF STRING	28 000	LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE	OSC3	
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.	16543	
DEPTH OUT		
DEPTH IN	0	
TOTAL FTG.	70	
TOTAL HR. RUN	7¾	
COND. OF BIT	Pod	
REAMER NO.		
REAMER TYPE		

MUD RECORD		
TIME		
WEIGHT		
VISC.-SEC		
W.L.-C.C.		
FLTR. CK		
PH		
SD. CONT. %		
PRESSURE GRADIENT		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	500#		

DRILLER: [signature]

FOOTAGE FROM	TO	DR.-D RM.-R CORE.-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. 2 LINER SIZE	S.P.M.	METHOD RUN SCL.-S PAR.EL.-P COM.D.-C
45	70	D.			100		250	14	70	on	50	

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	60	¼							

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
4:00	5:30	1½	Drill Rat hole
5:30	11:45		Drill 12¼ hole
11:45	12:00	¼	Survey @ 70' - ½°

DAILY DRILLING REPORT

REPORT NO. 1 DATE July 1970

OPERATOR	LEASE	WELL NO.	FIELD OR DIST.	COUNTY	STATE
J RAY McDERMOTT		E57	MAIDA CRK	NWT	CANADA

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO.	SIZE	TOOL JOINT O.D. / TYPE THD.
S & T DRILLING (WESTERN) CO. LTD.	1E			

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	NAT	C380	14
2.	NAT	" " "	14
3.			

LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

TIME DISTRIBUTION HOURS	MORN	DAY	EVE
RIG UP & TEAR DOWN			
DRILLING ACTUAL			
REAMING			
CONDITIONING MUD & CIRCULATING			
TRIPS			
LUBRICATE RIG			
DEVIATION SURVEY			
TEST B.O.P.			
CUT OFF DRILLING LINE			
REPAIR RIG			
FISHING			
WIRE LINE LOGGING			
RUNNING CASING & CEMENTING			
WAITING ON CEMENT			
DRILL STEM TEST			
OTHER			
FISHING			
COMPLETION WORK: A. PERFORATING			
B. TUBING TRIPS			
C. SWABBING			
D. TESTING			
E. ADDITIONAL			
TOTAL HOURS			

TIME SUMMARY (OFFICE USE ONLY)	
DAY WORK	
HRS. W/DP	
HRS. WO/DP	
HRS. STANDBY	
TOTAL DAY WORK	

WIRE LINE RECORD	
REEL NO.	
NO. OF LINES	SIZE
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. OR TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. OR TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD	
TIME	
WEIGHT	
VISC.-SEC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT. %	
PRESSURE GRADIENT	
DRILLER	[signature]

MUD & CHEMICALS ADDED TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COMB-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
18:00	8:00	8	Rig up Cellar Jet Load casing Hooked up water + Fuel lines unloaded mud & cement + Fuel

DAY TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD		
BIT NO.	Rc.P	1A
SIZE		12¼
MFG.		HTC
TYPE		OSC3
NOZZLE NO.		3
NOZZLE SIZE		2-14
SER. NO.		16343
DEPTH OUT		0
DEPTH IN		45'
TOTAL FTG.		45'
TOTAL HR. RUN		1½
COND. OF BIT		Good
REAMER NO.		
REAMER TYPE		

MUD RECORD	
TIME	
WEIGHT	
VISC.-SEC	
W.L.-C.C.	WATER
FLTR. CK.	
PH	
SD. CONT. %	
PRESSURE GRADIENT	
DRILLER	[signature]

MUD & CHEMICALS ADDED TYPE	AMT.	TYPE	AMT.

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COMB-C
0	45'				30-70	Avk	200	5½				

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
8:00	8:00		Grease all equipment & check before spud Rig. Rigging up. Install Cellar Jet - Rig + Prime Pumps. Spud in @ 5:00 PM. Work on stand pipe unit - 1½ hrs. Drilled 45' To Pick up D.C. To Drill Rat Hole.

EVENING TOUR

NO.	DRILLING ASSEMBLY AT END OF TOUR	
	STANDS D.P.	FT.
	SINGLES D.P.	FT.
	D.C. I.D. O.D.	FT.
	D.C. I.D. O.D.	FT.
	STB. BODY O.D.	FT.
	STB. BODY O.D.	FT.
	RMR. BODY O.D.	FT.
	SUBS O.D.	FT.
	BIT OR C.B.	FT.
		FT.
	KELLY DOWN	FT.
	TOTAL	FT.
WT. OF STRING		LBS.

BIT RECORD		
BIT NO.		
SIZE		
MFG.		
TYPE		
NOZZLE NO.		
NOZZLE SIZE		
SER. NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HR. RUN		
COND. OF BIT		
REAMER NO.		
REAMER TYPE		

MUD RECORD	
TIME	
WEIGHT	
VISC.-SEC	
W.L.-C.C.	
FLTR. CK	
PH	

MUD & CHEMICALS ADDED TYPE	AMT.

FOOTAGE FROM	TO	DR.D RM.R CORE.C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD RUN SGL.-S PAR'EL-P COMB-C

DEVIATION RECORD	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION

TIME LOG FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
			Spud in 4:46 PM July 10-1970

Time increase 1½ hr

Circ 500'

DA 1141

MCDERMOTT CANADA GCO MAIDA CK

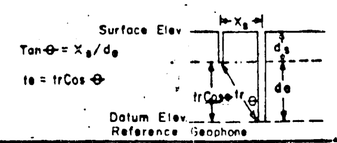
F-57

Velocity Survey

SP	Elev	Distance	Shot Elevation
1	364'	464'	364'

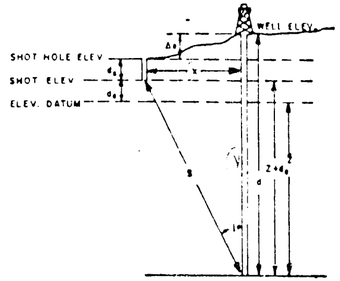
DATUM ELEV. = SEA LEVEL

WELL: Elev @ KB = 395 FT.
Elev @ GL = 382 FT.



J. Ray McDermott Can. Ltd, et al
Maida Creek #F-57
Northwest Territories, Canada.

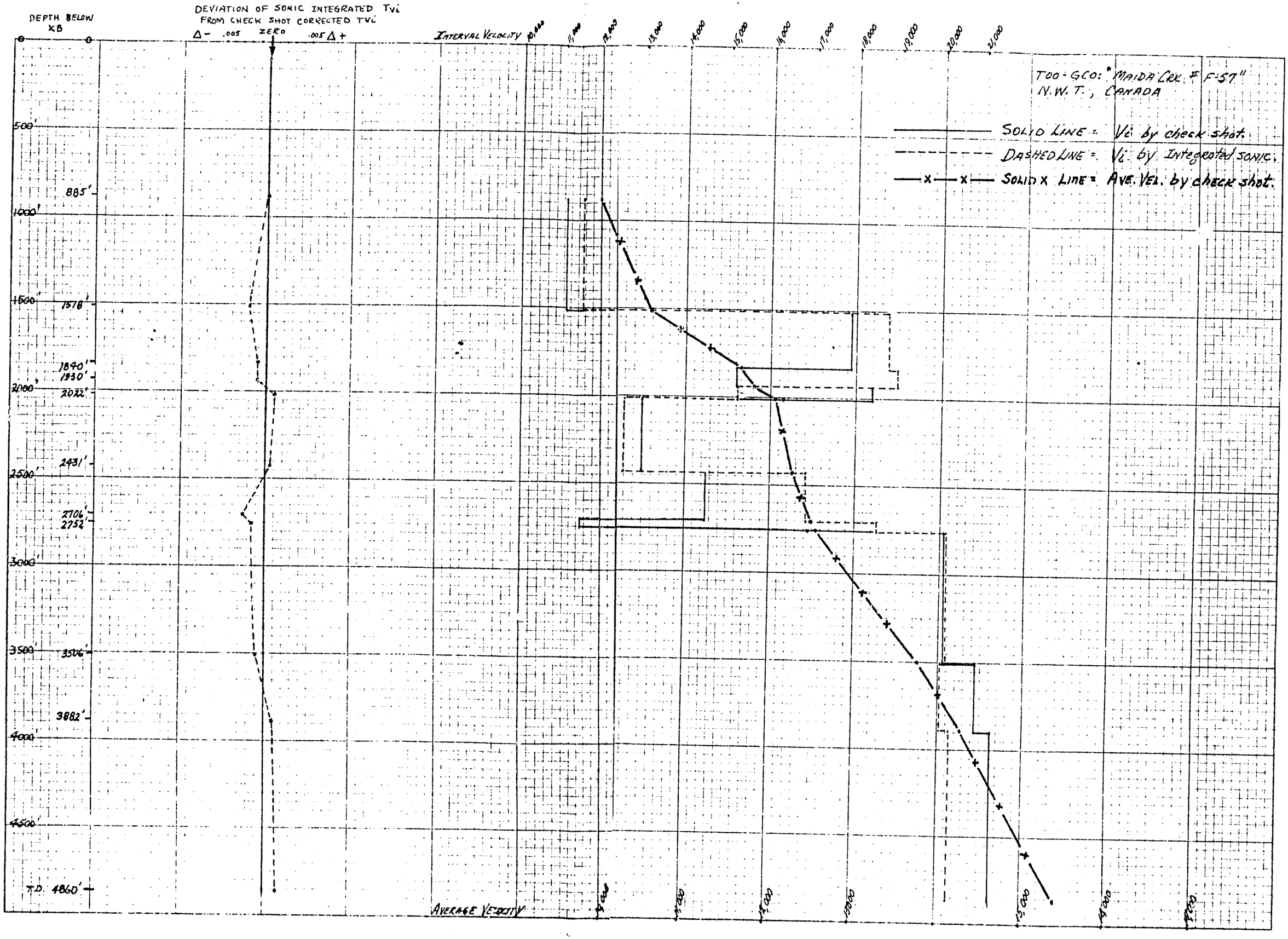
FORMATION	RECORD NUMBER	SHOT HOLE	d(KB)	d_s	tuh	SHOT HOLE ELEVATION	SHOT ELEVATION	Δe	$\Delta e + d_s$	X_s	d_e	Cos θ	t_r	t_e	T	Z+d_e	X	Cos I	$\bar{T}$	T_c	Z	Va	ΔZ	ΔT_c	Vi
Imperial Sd.	1	1	885	5	–	–	364	–	31	–	364	–	–	.037	.098	854	464	.8786	.086	.049	-490	10,000	633	.057	11,105
T/ Key Scarp Reef	2	1	1518	5	–	–	364	–	31	–	364	–	–	.037	.150	1487	464	.9544	.143	.106	-1123	10594	322	.018	17,889
" " " "	2R	1	1518	5	–	–	364	–	31	–	364	–	–	.037	.150	1487	464	.9544	.143	.106	-1123	10694	322	.018	17,889
T/ Platform ?	3	1	1840	5	–	–	364	–	31	–	364	–	–	.037	.166	1809	464	.9687	.161	.124	-1445	11653	90	.006	15,000
T/ Hare Indian ?	4	1	1930	5	–	–	364	–	31	–	364	–	–	.037	.172	1899	464	.9716	.167	.130	-1535	11808	92	.005	18,400
T/ Hare Indian Sh.	5	1	2022	5	–	–	364	–	31	–	364	–	–	.037	.177	1991	464	.9739	.172	.135	-1627	12052	409	.031	13,194
" " " "	5-R	1	2022	5	–	–	364	–	31	–	364	–	–	.037	.176	1991	464	.9739	.171	.134	-1627	12142	409	.032	12,781
T/ Hume	6	1	2431	5	–	–	364	–	31	–	364	–	–	.037	.207	2400	464	.9818	.203	.166	-2036	12265	275	.019	14,474
T/ Bear Rock	7	1	2706	5	–	–	364	–	31	–	364	–	–	.037	.225	2675	464	.9853	.222	.185	-2311	12492	46	.004	11,500
T/ Bear Rock Dolomite?	8	1	2752	5	–	–	364	–	31	–	364	–	–	.037	.229	2721	464	.9858	.226	.189	-2357	12471	754	.037	20,378
" " " "	8-R	1	2752	5	–	–	364	–	31	–	364	–	–	.037	.228?	2721	464	.9858	.225?	.188?	-2357	12537 ?	754	.038	19,842
T/ Lower Bear Rock	9	1	3506	5	–	–	364	–	31	–	364	–	–	.037	.265	3475	464	.9912	.263	.226	-3111	13765	376	.018	20,889
T/ Ronning	10	1	3882	5	–	–	364	–	31	–	364	–	–	.037	.283	3851	464	.9928	.281	.244	-3487	14291	978	.046	21,261
Total Depth	11	1	4860	5	–	–	364	–	31	–	364	–	–	.037	?	4829	464	.9954	?	?	-4465	?	-	-	
" "	11-R	1	4860	5	–	–	364	–	31	–	364	–	–	.037	.329	4829	464	.9954	.327	.290	-4465	15397	-	-	



X = Horizontal distance from well to shot point.
d = Well geophone depth measured from well elevation
d_s = Depth of shot.
d_e = Difference in elevation between shot and elevation datum
Δe = Difference in elevation between well and shot point.
Z = Well geophone depth measured from elevation datum = d − (X. B. elevation − elevation datum).
Z+d_e = Well geophone depth measured from shot elevation d − d_s − Δe
S = Straight line travel path from shot to well geophone
T = Observed time from shot to well geophone.
t = Uphole time at shot or other surface reference time

$\cos I = Z + d_e / \sqrt{X^2 + (Z + d_e)^2}$

$\bar{T}$ = Vertical travel time from shot elevation to well geophone = Cos I T
T_c = Vertical travel time from elevation datum to well geophone = $\bar{T} - t_e$
V_a = Topmost velocity in consolidated layer.
$V_a = \frac{Z}{T_c}$ = Average velocity.
$V_i = \frac{\Delta Z}{\Delta T_c}$ = Interval velocity

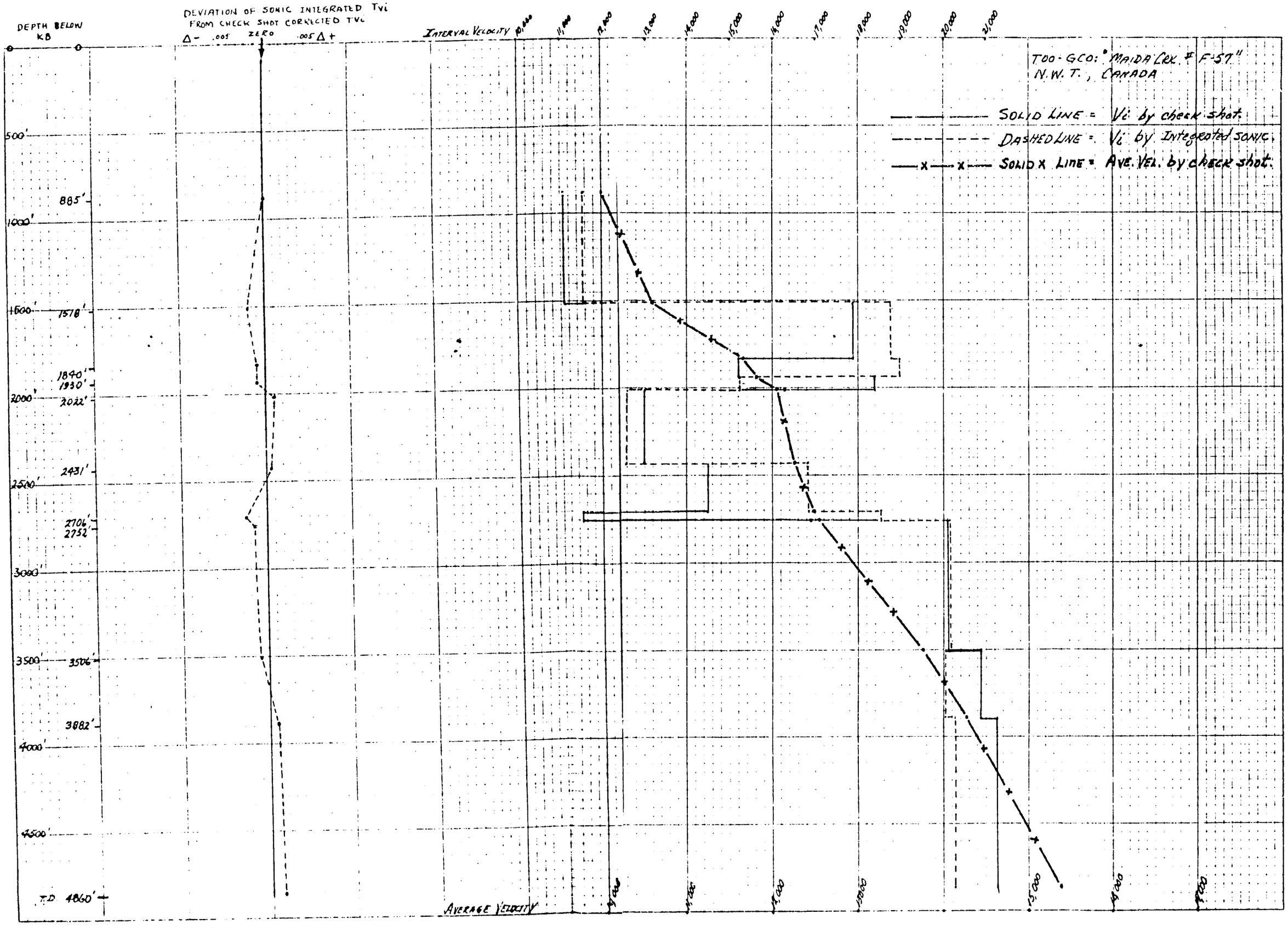


DR 441

MCDERMOTT CANADA GCO MAIDA CK

F-57

Velocity Survey



SP	Elev	Distance	Shot Elevation
1	364'	464'	364'

DATUM ELEV = SEA LEVEL

WELL: Elev @ KB = 395 FT.
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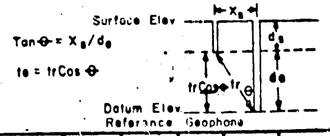

FORMATION	RECORD NUMBER	SHOT HOLE	d(KB)	d_s	t_{uh}	SHOT HOLE ELEVATION	SHOT ELEVATION	Δe	$\Delta e + d_s$	X_s	d_e	Cos θ	t_r	t_e	T	Z + d_e	X	Cos I	$\bar{T}$	(T_c)	Z	Va	ΔZ	ΔT_c	Vi
Imperial Sd.	1	1	885	5	–	–	364	–	31	–	364	–	–	.037	.098	854	464	.8786	.086	.049	-490	10,000	633	.057	11,105
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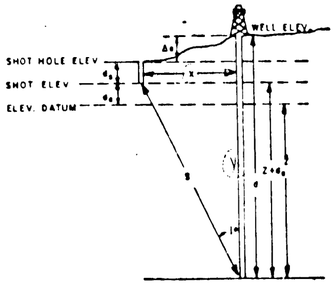
Total Depth	11	1	4860	5	–	–	364	–	31	–	364	–	–	.037	?	4829	464	.9954	?	?	-4465	?	-	-	
" "	11-R	1	4860	5	–	–	364	–	31	–	364	–	–	.037	.329	4829	464	.9954	.327	.290	-4465	15397	-	-	



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