

SHELL HB GRUMBLER L-05

Drilling Authority No. 342
Date Issued 8 January 1969

WELL NAME Shell HB Grumbler I-05
FIELD Wildcat Area:
LOCATION: Unit L Section 5 Grid 60-20 116-00
Latitude 60-14-41.26 Longitude 116-01-32.29
From Established Reference Marker N.E. 36-131-10-5

U.W.L.N. 60.24479 — 116.02564
U.W.I. 3001056020116000

Rig Release Date:
Status
Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
8/1/69	Application for a Drilling Authority. Well Completion Data. Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
24/3/69	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well. Well History Supplement.
8/4/69	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.
	Barter Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale Small scale



Drilling Authority No. 342
Date Issued January 8, 1969

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 or production of a well.

Well name and number SHELL H.B. GRUMBLER L-05
Permit No. 4147 Lease No. _____
Hudson's Bay Oil & Gas Company Ltd. Exploratory Licence No. 1096
(Permitter, Licensee, Lessee)
Shell Canada Limited Exploratory Licence No. 1881
(Operator)

Location: Unit L Section 05 Grid 60° 20' 116° 00'
Latitude 60° 14' 41.26" Longitude 116° 01' 32.29"
From Established Reference Marker N.E. 36-131-10-5
Universal Well Location Reference 60.24479 N. Lat. 116.02564 W. Long.

	DATE	DEPTH	Pool(s)	Interval(s) open to production
Spudded	28/2/69	Surface	N11	N11
Suspended	—	—		
Resumed Operations	—	—		
Finished Drilling	13/3/69	2472		
Deepened	—	—		
Complete (gas/oil)	—	—		
Abandoned	18/3/69	2472		
Rig released	18/3/69	2472		

Elevation: Gr. 932 K.B. 942
Rig No. Sedco #94
Drilling Contractor Sedco Exploration Ltd.
Contractor's Business Licence No. A-11203

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at -	Notes of Cement and Additives
1. 7"	J-55	20#	334.49	345' K.B.	130 Sacks + 3% CaCl ₂
2.					+ 1 Sack Celloseal
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth	Sub-Sea	From	To	Rec.	From	To	Rec.
Slave Point	1388	(- 443)	NIL					
Pt. Vermilion	1510	(- 565)						
Watt Mountain	1586	(- 641)						
Steen River	1600	(- 655)						
Muskeg	1708	(- 763)						
Keg River	2012	(-1067)						
Bear Rock	2295	(-1350)	LOG RECORD					
PreCambrian	2456	(-1511)	Run No.	Type of Log		From	To	
			1	Induction Electrical Log		2468	345	
			1	Borehole Compensated Sonic		2467	345	
			1	Formation Density Log		2467	345	
			1	Continuous Dipmeter		2462	345	
			1	Seismic Reference Survey		2467	345	

CEMENTING RECORD (Plug, Squeeze, etc.)				PERFORATING RECORD (Bullet Jet)				SERVICING RECORD (Acidizing, Fracing, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
17/3/69	2472	1950	Plug #1 125 Sx. Const. Plug down 7:30 P.M.				N11				N11
17/3/69	1710	1330	Plug #2 148 Sx. Const. + 2% CaCl ₂ . Plug down 8:45 P.M. Felt plug at 1308'.								
18/3/69	400	Surface	Plug #3 87 Sx. Const. Plug down 7:15 A.M. Casing cut 3' below G.L. Welded on plate & erected 4' riser and name plate.								

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.L. Mins.	F.S.L. Mins.	I.S.L.B.H.P.	F.S.L.B.H.P.	L.F.B.H.P.	F.F.B.H.P.	I.H.P.	F.H.P.	REMARKS
1	15/3/69	Steen River	1600	1730										Misrun - Packer failed to seat.
1A	17/3/69	Steen River	1615	1715	90	60	90	637	638	334	637	754	754	Recovered 60' water cushion and 1245' muddy salt water.

ANALYSIS

ANALYSIS				PRESENT STATUS OF WELL			
Lab. No.	Sample	From	To	Source	Remarks	Oil	(Interval)
72	Water Dnt No. 1A	1615	1715	Steen River	Salinity 15,191 Cl ⁻		
						Gas	(Interval)
						Dry	Abandoned
						Susp.	

Company **SHELL CANADA LIMITED**
 Signed by *P. H. H. (P. H. H.)*
 Title **MANAGER - EDMONTON DIVISION PRODUCTION**
 Date **APRIL 8, 1969**

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



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

Application to Abandon a Well or Suspend Drilling

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

Name and number of well **WELL H.B. CRUMBLER L-05**

Location: Unit **L** Section **05** Grid **60° 20' 116° 00'**
Latitude **60° 14' 41.26"** Longitude **116° 01' 12.29"**

From Established Reference Marker **N.E. 36-151-10-5**

Universal Well Location Reference **60.24479 N. Lat. 116.02364 W. Long.**

Permit No. **4147** Lease No.

Hudson's Bay Oil & Gas Company Ltd.
(Permitter, Lessee, Lessee)

Date of commencement of proposed program **March 17, 1969**

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at **Nil**
Gas at **Nil**
Water at **1615-1715 (DST No. 1A) Steen River. Rec. 1285' muddy salt water (21,000 ppm NaCl)**
Total Depth **2472** Date of last operations **March 18, 1969**
Present condition of well **ABANDONED**

CASING RECORD

Casing Size - O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
7" - J-55	201	334.49'	345' K.B.	130 Sx. + 3% CaCl ₂ + 1 sack Cellocal	—
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	2472-1950	Pre-Cambrian, Bear Rock, Methy	125 Sx.	Plug down 7:30 P.M. March 17
2	1710-1330	Steen River, Watt Mountain Pt. Vermilion, Slave Pt.	148 Sx. + 2% CaCl ₂	Plug Down 8:45 P.M. March 17 Felt at 1204'
3	400-Surface		87 Sx.	Completed at 7:15 A.M. March 18, casing cut 3' below C.L. Steel Riser 4' above C.L. with well name welded on riser

The following logs have been run **BESE-C, IEL, FDC, CDM, and Velocity Survey**
Other operations proposed **Nil**

Operations to be carried out by **Sedco Explorations Ltd.** Contractor Licence No. **A-11203**
Address **530-6th Ave. S.W., Calgary** Address **530-6th Ave. S.W., Calgary**
Responsible Agent in field **Roy Kilaly**
Dated at **Edmonton, Alberta** this **19th** Day of **March** 19 **69**
Signed by **P. J. Benn (P.J. Benn)** for **SEAL CANADA LIMITED**
Title **RESEAR-EXPLORATION DIV. PROD.** Operator's Exploratory Licence No. **1881**

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

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. G. E. Blue on
the 17th March 1969.

Dated **24th March**, 19 **69**

B. H. Thomas
Oil Conservation Engineer

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

Drilling Authority No. 342

Project No.

File No.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
Oil & Mineral ~~REGULATIONS~~ 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 **SHELL H.B. CRUMBLER L-05**

Location: Unit **L**

Section **05**

Latitude **60° 14' 41.25"**

Grid **60° 20' 116° 00'**
Longitude **116° 01' 32.29"**

From Established Reference Marker

N.E. 36-131-10-5

Universal Well Location Reference

60.24479 N. Lat. 116.02564 W. Long.

Elevation: Ground **Not Available**

K.B. Not Available

feet above sea-level.

Well is expected to produce from

the Keg River

formation at a depth

of about **1400**

feet.

Expected total final depth

2000

Area assigned to well

(For Oil Conservation Engineer's use only)

Permit No. **4147**

Lease No.

Acres **63534**

Permittee, licensee, or lessee **Hudson's Bay Oil and Gas Company Limited**

Exploratory Licence No. **1096**

Surface owned by Crown or

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

Petroleum and natural gas rights owned by **CROWN**

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Scale of Cement
1. 7"	204	J-55	New	200 +	90 Sx.
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment

Slave Point, Keg River

10" Series 900 Mechanical Double Shaeffer

10" Series 600 G.K. Hydril

Well will be drilled with Rotary Rig No. **93**

by **Sedco Exploration Ltd.**

(Drilling Contractor or company)

Responsible agent of applicant:—

Contractor's business Licence No. **A-11203**

At well **R. W. Miller**

At registered office **A. M. McLachlin**

Address **Box 186, Edmonton, Alberta**

Address **Box 186, Edmonton, Alberta.**

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

Dated at **Edmonton, Alberta**

this **3rd**

day of

January

19 69

Signed by

Company

SHELL CANADA LIMITED

Title **MANAGER - EDMONTON DIV. PROD.**

Operator's Licence No.

1881

(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 **6th January**

1969

Oil Conservation Engineer

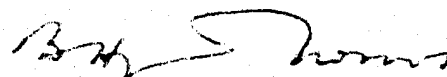
Forms to be submitted to Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.

LAND 52-90-1 (3-67)

UNIQUE WELL IDENTIFIER - 3001056020116000

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 subsurface waters.

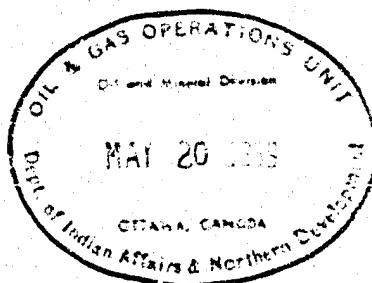
3. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.



B.H.J. Jones
Oil Conservation Engineer

CHINA WORKING DAY BRIDGE 1-05

60° 14' 41.75" 116° 01' 32.29"



WELL HISTORY REPORT
SHELL H.B. GRUMBLER L-05
SHELL CANADA LIMITED
APRIL 10, 1969

WELL HISTORY REPORT
SHELL H.B. CRUMBLER L-05

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SECTION I - SUMMARY OF WELL DATA

(a) Well Name and Number

Shell H.B. Crumbler L-05

(b) Permittee

Hudson's Bay Oil and Gas Company Limited

(c) Operator

Shell Canada Limited
P. O. Box 186
Edmonton, Alberta.

(d) Location

Unit L, Section 05, Grid 60° 20' 116° 00'
Latitude: 60° 14' 41.26"
Longitude: 116° 01' 32.29"

(e) Permit Number

4147

(f) Drilling Contractor

Sedco Exploration Rig No. 94
Rotary

(g) Drilling Authority

Drilling Authority No. 342 issued January 8, 1969

(h) Classification

Wildcat

(i) Elevations

G.L. 932.5'
K.B. 942.5'

(j) Spudded

February 28, 1969 at 1:45 A.M.

(k) Completed Drilling

March 13, 1969

*Universal Well Location Reference - Lat. 60.24479° N.,
Long. 116.02564° W.

Unique Well Identifier - 300L056020116000

(l) Total Depth and Plugged Back Total Depth

T.D. 2472' K.B.

P.B.T.D. Surface

(m) Well Status

Dry and Abandoned

(n) Rig Released

12:00 Noon March 18, 1969

(o) Hole Size

9 7/8" 0 - 118'

8 3/4" 118 - 350'

6 1/4" 350 - 2472'

(p) Casing

7" 20# J-55 new casing

set at 345.02' K.B. with 130 sacks + 3 CaCl_2 + 1 sack Celloseal

SECTION II - GEOLOGICAL SUMMARY(a) Formation Tops

<u>Formation</u>	<u>E-log</u>	<u>Sample</u>
Slave Point	1388	1360
Watt Mountain	1586	1585
Steen River	1600	1600
Muskeg	1708	1750
Methy	2012	1975
Bear Pock	2295	2290
Pre-Cambrian	2456	2461

(b) Cored Intervals

No Cores Cut

(c) Sample Description

See Appendix 'A'

SECTION III - ENGINEERING SUMMARY(a) Drill Stem Tests

<u>No.</u>	<u>Interval (Formation)</u>	<u>Type</u>	<u>Remarks</u>
1	1600-1730	Dual Straddle	Misrun.
1A	1615-1715	Dual Straddle	Positive Test
PF 2 Min. = 334 PSI		FSI 90 Min. = 638 PSI	Recovered
ISI 60 Min. = 637 PSI		IHMP 754 PSI	1345' salt
FF 90 Min. = 637 PSI		FHMP 754 PSI	water

For detailed description, see Appendix 'B'.

(b) Casing Record

7" 20# J-55 new casing set at 345.02' K.B. and cemented with 130 sacks Construction cement + 3% CaCl₂ and 1 sack Celloseal. Plug down at 9:45 P.M., March 4, 1969.

(c) Bit Record

<u>No.</u>	<u>Size</u>	<u>Type</u>	<u>Depth Out</u>	<u>Hrs. Run</u>
1A	9-7/8	OSC2	23	5-1/2
2A	9-7/8	----	--	-
3A	9-7/8	----	54	8-1/2
4A	9-7/8	OSC1G	--	-
5A	9-7/8	----	104	5-3/4
6A	9-7/8	OSC-3	---	-
7A	8-3/4	OWV	213	19-3/4
8A	8-3/4	OWV	350	6-1/2
1	6-1/4	OSC3-J	1432	16-1/4
2	6-1/4	OSC1G	1648	14-1/4
3	6-1/4	OWV-J	1805	16-1/4
4	6-1/4	OWV-J	1971	17-3/4
5	6-1/4	OWV-J	2177	21-1/4
6	6-1/4	OWV-J	2324	18
7	6-1/4	OWV-J	2447	14
8	6-1/4	W7	2471	5-3/4

(d) Mud Report

Gel	272 sacks
CMC	4 sacks
Soda Ash	2 sacks
Sawdust	37 sacks
Lime	3-1/2 sacks
Cello-seal	1 sack
Caustic	24 sacks
Speresene	1200 pounds

(e) Deviation Record

<u>Depth</u>	<u>Degrees</u>	<u>Depth</u>	<u>Degrees</u>
98	1/2	1308	1/4
213	1/2	1540	1/2
299	3/4	1789	3/4
630	1/2	1999	1
832	1/2	2075	3/4
1072	1/2	2324	3/4

(f) Abandonment Plugs

<u>Plug No.</u>	<u>Date</u>	<u>Interval</u>	<u>Cement and Additives</u>
1	March 17, 1969	2472-1950	125 sacks cement
2	March 17, 1969	1710-1330	148 sacks cement + 2% CaCl ₂
3	March 18, 1969	400-Surface	87 sacks cement
Cut off casing 3' below ground level. Welded on plate & erected 4' riser and name plate.			

(g) Lost Circulation Zones

Lost 100 barrels mud to formation 1685-1698.
Mixed 1 sack Cello-seal and 25 sacks sawdust.

(h) Blowouts

None

SECTION IV - LOGS

<u>Type</u>	<u>Interval</u>	<u>Date</u>
IES	2468-345	March 15, 1969
BHCSGR-C	2467-345	March 15, 1969
FDL-C	2467-345	March 15, 1969
CDM	2462-345	March 16, 1969
SRS	2467-345	March 15, 1969

SECTION V - ANALYSIS

(a) Core Analysis

None

(b) Water Analysis

See Appendix 'C' - Lab Report No. 72

(c) Gas Analysis

None

(d) Oil Analysis

None

SECTION VI - COMPLETION SUMMARY(a) Tubing Record

None

(b) Perforation Record

None

(c) Cementation Record

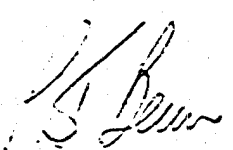
<u>Plug No.</u>	<u>Date</u>	<u>Interval</u>	<u>Cement and Additives</u>	<u>Remarks</u>
1	3/17/69	2472-1950	125 sacks neat cement	
2	3/17/69	1710-1330	148 sacks cement + 2% CaCl ₂	Felt at 1308'
3	3/18/69	400-Surface	87 sacks cement	

(d) Acidization and Fracturing Record

None

(e) Back Pressure and Production Tests

None


A. M. McLachlin, Manager
Edmonton Division Production

APPENDIX 'A'

SMITH RIVER'S DAY CRATER 1-5

V.D. 942.5'

T.D. 2471'

LATITUDE: 40° 10' 41.26"

LONGITUDE: 116° 01' 38.28"

0' -1000'

SAMPLES MISSING.

1000' -1010'

Shale

Shale.

1010' -1020'

Shale

Shale.

1020' -1030'

Shale

Shale.

1030' -1040'

Shale

Shale.

1040' -1050'

Shale

Shale.

1050' -1060'

Shale

Shale.

1060' -1070'

Shale

Shale.

1070' -1080'

Shale

Shale.

1080' -1090'

Shale

Shale.

1090' -1100'

Shale

Shale.

1100' -1110'

Shale

Shale.

1110' -1120'

Shale

Shale.

1120' -1130'

Shale

Shale.

1130' -1140'

Shale

Shale.

1140' -1150'

Shale

Shale.

1150' -1160'

Shale

Shale.

1160' -1170'

Shale

Shale.

1170' -1180'	Shale	Shale, with traces of limestone.
1180' -1190'	Shale	Shale, with minor limestone.
1190' -1200'	Limestone -Shale	Limestone and shale, with traces of pyrite.
1200' -1210'	Limestone	Limestone, with minor shale.
1210' -1220'	Limestone	Limestone, with minor shale.
1220' -1230'	Shale	Shale, with traces of limestone.
1230' -1240'	Shale	Shale, with traces of limestone.
1240' -1250'	Shale	Shale, with traces of limestone.
1250' -1260'	Shale	Shale, with traces of limestone.
1260' -1270'	Shale	Shale, with traces of limestone.
1270' -1280'	Shale	Shale, with traces of pyrite.
1280' -1290'	Shale	Shale, with traces of pyrite.
1290' -1300'	Shale	Shale, with traces of pyrite.
1300' -1310'	Shale	Shale, with traces of pyrite.
1310' -1320'	Shale	Shale, with traces of pyrite.
1320' -1330'	Shale	Shale, with traces of pyrite.
1330' -1340'	Shale	Shale, with traces of pyrite.
1340' -1350'	Shale	Shale, with traces of limestone.
1350' -1360'	Shale	Shale, with traces of limestone.
1360' -1370'	Limestone	Limestone, with argillaceous content.
1370' -1380'	Limestone	Limestone.
1380' -1390'	Limestone	Limestone.
1390' -1400'	Limestone	Limestone.

1400' -1410'	Limestone	Limestone.
1410' -1420'	Limestone	Limestone.
1420' -1430'	Limestone	Limestone.
1430' -1440'	Limestone	Limestone.
1440' -1450'	Limestone	Limestone.
1450' -1460'	Limestone	Limestone.
1460' -1470'	Limestone	Limestone.
1470' -1480'	Limestone	Limestone.
1480' -1490'	Limestone	Limestone.
1490' -1500'	Limestone	Limestone.
1500' -1510'	Limestone	Limestone.
1510' -1520'	Limestone	Limestone.
1520' -1530'	Limestone -Anhydrite	Limestone and anhydrite.
1530' -1540'	Anhydrite	Anhydrite and minor limestone.
1540' -1550'	Anhydrite	Anhydrite and minor limestone.
1550' -1560'	Shale	Shale, with minor limestone and anhydrite.
1560' -1570'	Shale	Shale, with minor limestone and anhydrite.
1570' -1580'	Shale	Shale, with minor limestone and anhydrite.
1580' -1590'	Shale	Shale, with minor limestone and anhydrite.
1590' -1600'	Shale	Shale, with minor limestone and anhydrite.

1600' -1610'	Dolomite	Dolomite.
1610' -1620'	Dolomite	Dolomite.
1620' -1630'	Dolomite	Dolomite.
1630' -1640'	Dolomite	Dolomite.
1640' -1650'	Dolomite	Dolomite.
1650' -1660'	Dolomite	Dolomite.
1660' -1670'	Dolomite	Dolomite.
1670' -1680'	Dolomite	Dolomite.
1680' -1690'	Dolomite	Dolomite.
1690' -1700'	Dolomite	Dolomite.
1700' -1710'	Dolomite	Dolomite, with traces of sandstones.
1710' -1720'	Dolomite	Dolomite, with traces of sandstones.
1720' -1730'	Dolomite	Dolomite, with traces of sandstones.
1730' -1740'	Dolomite	Dolomite, with traces of anhydrite.
1740' -1750'	Dolomite	Dolomite, with traces of anhydrite.
1750' -1760'	Anhydrite	Anhydrite, with traces of dolomite.
1760' -1770'	Anhydrite	Anhydrite, with traces of dolomite.
1770' -1780'	Anhydrite	Anhydrite, with traces of dolomite.
1780' -1790'	Dolomite	Dolomite, with traces of anhydrite.
1790' -1800'	Dolomite	Dolomite.
1800' -1810'	Dolomite	Dolomite.
1810' -1820'	Dolomite	Dolomite.
1820' -1830'	Dolomite	Dolomite.

1830' -1840'	Dolomite	Dolomite, with traces of anhydrite.
1840' -1850'	Dolomite	Dolomite, with traces of anhydrite.
1850' -1860'	Dolomite	Dolomite, with traces of anhydrite.
1860' -1870'	Dolomite	Dolomite, with traces of anhydrite.
1870' -1880'	Dolomite	Dolomite, with traces of anhydrite.
1880' -1890'	Dolomite	Dolomite, with traces of anhydrite.
1890' -1900'	Dolomite	Dolomite, with traces of anhydrite.
1900' -1910'	Dolomite	Dolomite, with traces of argillaceous cavings.
1910' -1920'	Dolomite	Dolomite, with traces of argillaceous cavings.
1920' -1930'	Dolomite	Dolomite, with traces of argillaceous cavings.
1930' -1940'	Dolomite	Dolomite, with traces of argillaceous cavings.
1940' -1950'	Dolomite	Dolomite, with traces of argillaceous cavings.
1950' -1960'	Dolomite	Dolomite, with traces of argillaceous cavings.
1960' -1970'	Dolomite	Dolomite.
1970' -1980'	Dolomite	Dolomite, with anhydrite band.
1980' -1990'	Dolomite	Dolomite.
1990' -2000'	Dolomite	Dolomite.
2000' -2010'	Dolomite	Dolomite, with minor anhydrite.
2010' -2020'	Dolomite	Dolomite, with minor anhydrite.
2020' -2030'	Dolomite	Dolomite, with minor anhydrite.

2030' -2040'	Dolomite	Dolomite, with minor anhydrite.
2040' -2050'	Dolomite	Dolomite.
2050' -2060'	Dolomite	Dolomite.
2060' -2070'	Dolomite	Dolomite.
2070' -2080'	Dolomite	Dolomite.
2080' -2090'	Dolomite	Dolomite.
2090' -2100'	Dolomite	Dolomite.
2100' -2110'	Dolomite	Dolomite.
2110' -2120'	Dolomite	Dolomite.
2120' -2130'	Dolomite	Dolomite.
2130' -2140'	Dolomite	Dolomite.
2140' -2150'	Dolomite	Dolomite.
2150' -2160'	Dolomite	Dolomite.
2160' -2170'	Dolomite	Dolomite.
2170' -2180'	Dolomite	Dolomite and shale.
2180' -2190'	Dolomite	Dolomite and shale.
2190' -2200'	Dolomite -Shale	Dolomite and Shale.
2200' -2210'	Dolomite	Dolomite, with minor shale.
2210' -2220'	Dolomite	Dolomite, with minor shale.
2220' -2230'	Dolomite	Dolomite, with minor shale.
2230' -2240'	Dolomite	Dolomite, with minor shale.
2240' -2250'	Dolomite	Dolomite, with minor shale and traces of anhydrite.

2250' -2260'	Dolomite -Shale	Dolomite and shale; with traces of anhydrite.
2260' -2270'	Anhydrite	Anhydrite, with minor shale and dolomite.
2270' -2280'	Anhydrite	Anhydrite, with minor shale and dolomite.
2280' -2290'	Anhydrite	Anhydrite, with minor shale and dolomite.
2290' -2300'	Anhydrite	Anhydrite, with minor shale and dolomite.
2300' -2310'	Anhydrite -Dolomite	Anhydrite and Dolomite.
2310' -2320'	Anhydrite	Anhydrite, with minor shale.
2320' -2330'	Anhydrite	Anhydrite and shale, with traces of dolomite.
2330' -2340'	Anhydrite -Shale	Anhydrite and shale, with traces of dolomite.
2340' -2350'	Anhydrite -Shale	Anhydrite and shale, with traces of dolomite.
2350' -2360'	Anhydrite	Anhydrite, with minor shale.
2360' -2370'	Anhydrite	Anhydrite, with minor shale.
2370' -2380'	Anhydrite	Anhydrite, with minor shale.
2380' -2390'	Anhydrite	Anhydrite, with minor shale and traces of dolomite.
2390' -2400'	Anhydrite	Anhydrite, with traces of shale and dolomite.
2400' -2410'	Anhydrite	Anhydrite, with traces of shale.
2410' -2420'	Anhydrite	Anhydrite, with traces of shale.

2420' -2430'	Anhydrite	Anhydrite, with minor shale and traces of dolomite.
2430' -2440'	Anhydrite	Anhydrite, with minor shale and traces of dolomite.
2440' -2450'	Anhydrite	Anhydrite, with minor shale and traces of dolomite.
2450' -2460'	Anhydrite	Anhydrite, with minor shale and red, micaceous quartz.
2460' -2471'	Anhydrite -Quartz	Anhydrite and pink, white, fresh, micaceous quartz; and minor shale.

APPENDIX 'B'

[illegible]

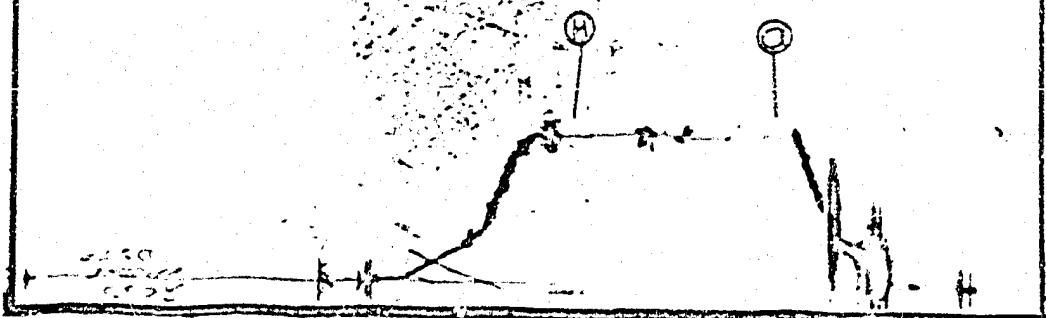
PRESSURE DATA

INSTRUMENT NO.					FIELD REPORT NO.	
CAPACITY (MM)					D 01802	
INSTRUMENT DEPTH						
INSTRUMENT OPENING						
PRESSURE GRADIENT (PSI/FT)						
WELL TEMP. °F						
					TIME DATA	
INITIAL HYDROSTATIC					TIME GIVEN	TIME COMPUTED
FIRST FLOW					MIN	MIN
INITIAL SHUT IN					MIN	MIN
SECOND FLOW					MIN	MIN
SECOND SHUT IN					MIN	MIN
THIRD FLOW					MIN	MIN
FINAL SHUT IN					MIN	MIN
FINAL HYDROSTATIC					CLOCK TRAVEL	IN/MIN
REMARKS:						

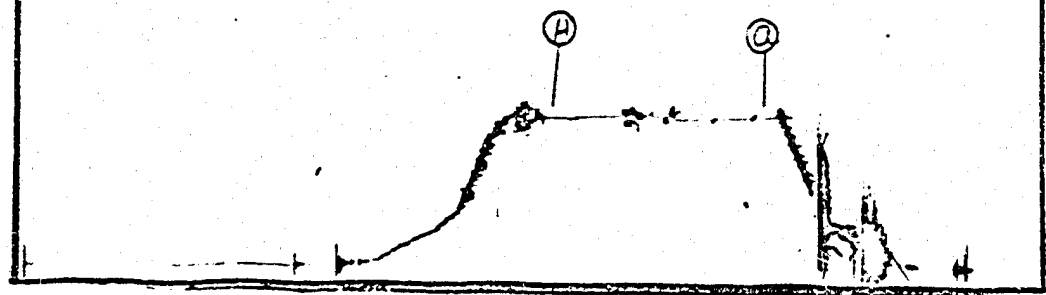
PRESSURE INCREMENTS

[illegible]

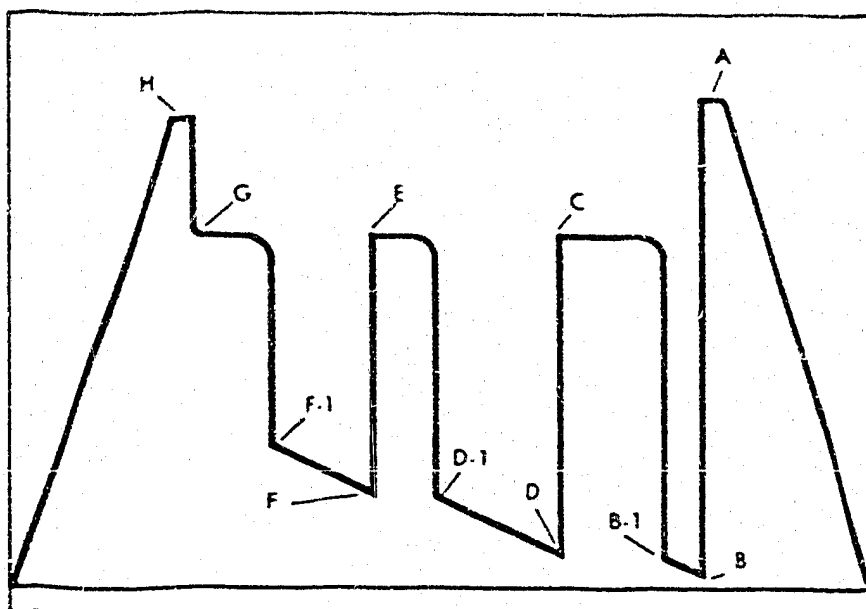
Q01802 Cini-2092



Q01802 Cini-2094



GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures
- B, B-1, Initial Flow Pressures
- C, Initial Shut-in
- D-1, D-2, D-3, etc. Second Flow Pressures
- E, Second Shut-In
- F, F-1, F-2. Third Flow Pressures
- G, Final Shut-In
- H, Final Hyd. Pressures
- Z — Special pressure points such as pumping pressures recorded for formation breakdown.

FIELD
REPORT NO.

D 01802

RECORDER NO.

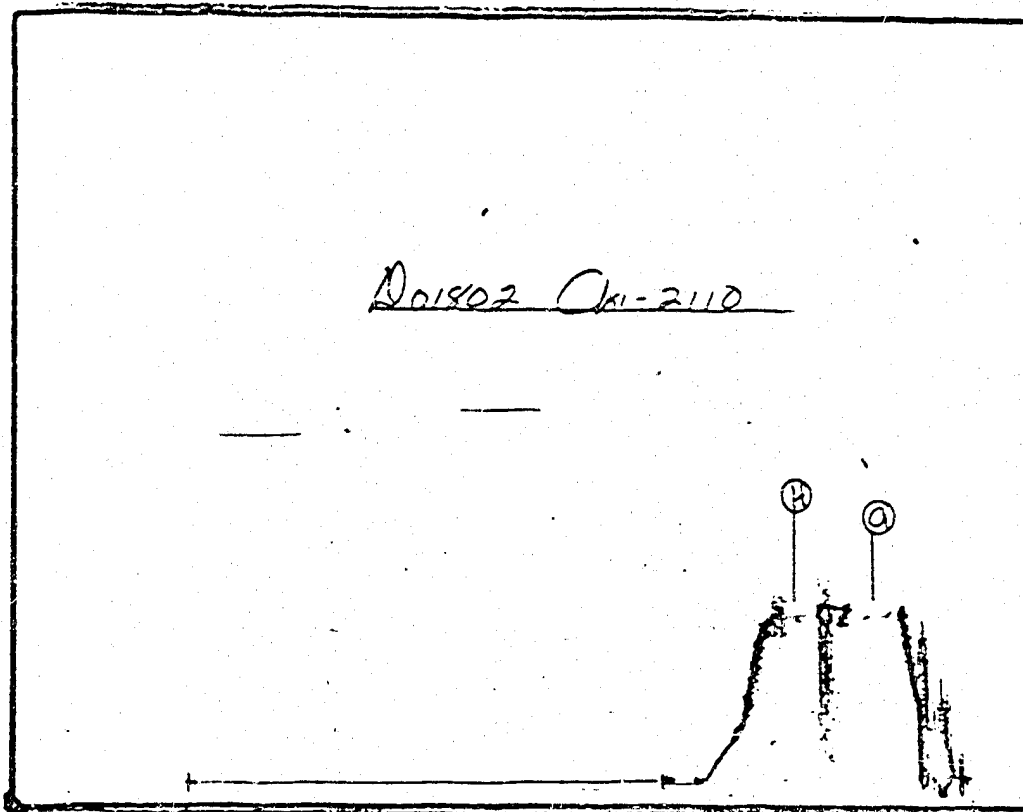
AK1-2110

CAPACITY

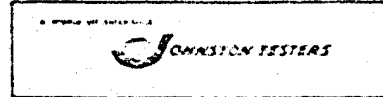
4000

REPORTS
REQUESTED

5



SHELL HB GRUMBLER L-5



TEST DATA						TOOL SEQUENCE		
Formation	Zone Thickness		Fr	Tool	Length	OD		
Interval	1615 To	1715	TD 2471	Fr	P. O. SUB.	.50		
Type of Test	OPEN HOLE, STRADDLE, BYPASS.				D. P. SUB.	.50		
Time Started in Hole	0230	Hrs.	Tool Opened	0443	Hrs.	MFE TOOL	10.00	
First Flow	2	Min	Initial Shut In	60	Min	BYPASS TOOL	3.00	
Second Flow	90	Min	Second Shut In		Min	JARS	6.95	
Third Flow		Min	Final Shut In	90	Min	RECORDER	4.40	
Pulled Loose At	0845	Hrs.	Out of Hole	1200	Hrs.	H. SUB.	.50	
Wt Set on Packers	30,000	#	Pulled Loose Wt	38,000	#	SAFETY JOINT	1.75	
Description of Blow During Test						S. S. & PACKER	8.00	
GOOD BLOW.						T. C. & PACKER	5.50	
DEAD IN 20 MINS.						TOTAL	41.10	
FLUID RECOVERY Was Test Reverse Circulated Yes ☐ No ☒						STUB.	1.00	
Total Fluid Recovered 1345						PERF.	5.00	
Description of Fluid Recovered						R. SUB.	.50	
1345' SALT WATER.						RECORDER	4.40	
						RECORDER	4.40	
						SUB.	.50	
						DRILL COLLAR	81.55	
						SUB.	.50	
						T. C. & SUB.	3.00	
						TOTAL INTERVAL	100.85	
GAS BLOW MEASUREMENT								
Measured With I.D. Riser						PACKER	3.50	
Type of Instrument						T. C. & PACKER	6.50	
Time	Size Choke	Reading per inch	M	Cubic Feet Day		SUB.	.50	
						DRILL PIPE	743.00	
						SUB.	.50	
						B. N. & PERF.	1.50	
						TOTAL BELOW INTV.	755.50	
						TOTAL LENGTH	897.45	
						Elevation	NOT REPORTED.	
						Bottom Hole Choke Size	1/2"	
REMARKS TEST SATISFACTORY.						Fluid Cushion Type	WATER Amt 100'	
						MUD AND HOLE DATA		
						Mud Type	W.L.	8.6
						Filter Cake 2/32	Visc. 38	Wt. 9.4
						Time Taken		
						Contractor	SEDCO DRLG	Rig No. 94
						Drill Pipe Size	3 1/2 IF	
						Drill Collar Size	2 ID	Length 334'
						Main Hole Size	6 1/4"	
						Rat Hole Size		
RESISTIVITY CHLORIDE CONTENT								
Recovery Water	Gr	°F.	ppm.					
Mud Pit sample filtrate	Gr	°F.	ppm.					
District	HIGH LEVEL	Ticket No.	D 01803	Date	MARCH 17, 1969	Test No.	1A	J.T. No. 1A
Company	SHELL CANADA LIMITED			Address	Box 196			
Well Name	SHELL HB GRUMBLER #L-05				EDMONTON, ALBERTA			
Number	60 14'41.26			Field	GRUMBLER		Province	N.W.T.
	116 01'32.29			Co. Rep.	R. MILLER			
and Interval	1615 - 1715 DST#1A			Technician	L. STEINBACK			
Distribution of Reports								
5 - EDMONTON.								

FB 975

JOHNSTON TESTERS

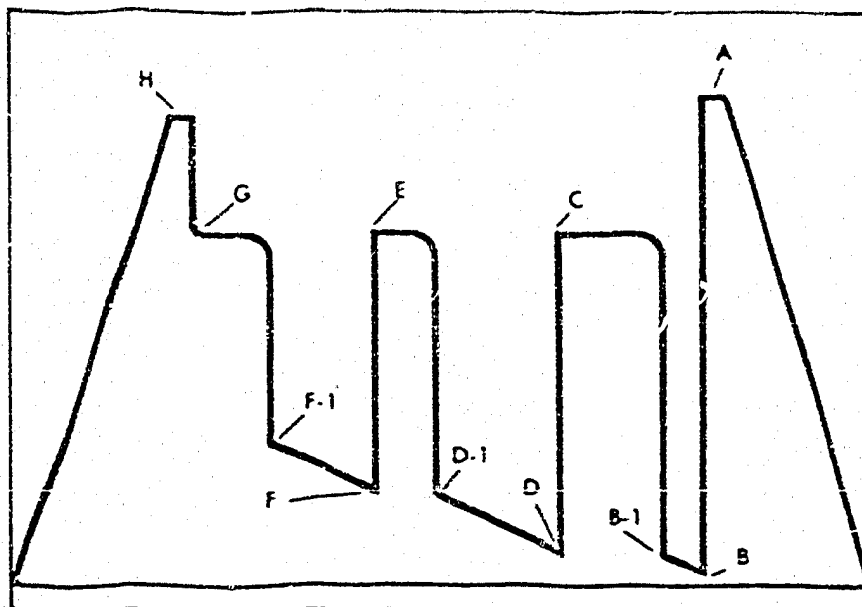
PRESSURE DATA

[illegible]

PRESSURE INCREMENTS

[illegible]

GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures
- B, B-1, Initial Flow Pressures
- C, Initial Shut-In
- D-1, D-2, D-3, etc. Second Flow Pressures
- E, Second Shut-In
- F, F-1, F-2, Third Flow Pressures
- G, Final Shut-In
- H, Final Hyd. Pressures
- Z — Special pressure points such as pumping pressures recorded for formation breakdown.

JOHNSTON TESTERS

FIELD
REPORT NO.

D 01803

RECORDER NO.

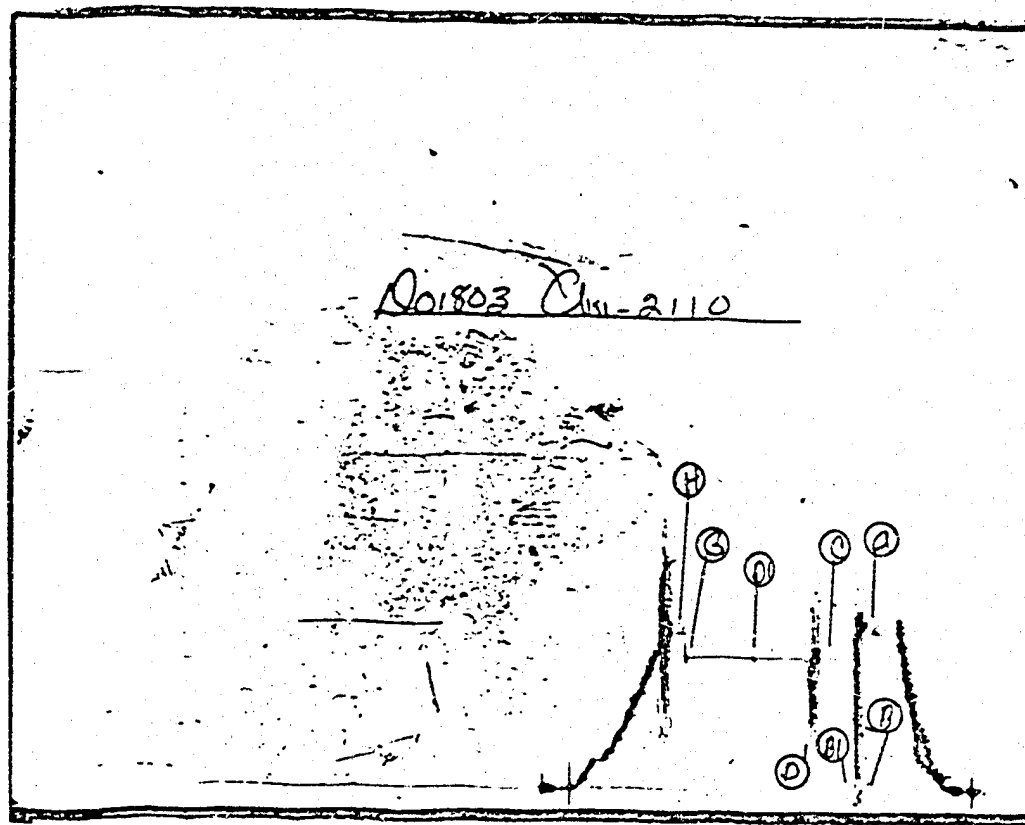
AK1-2110

CAPACITY

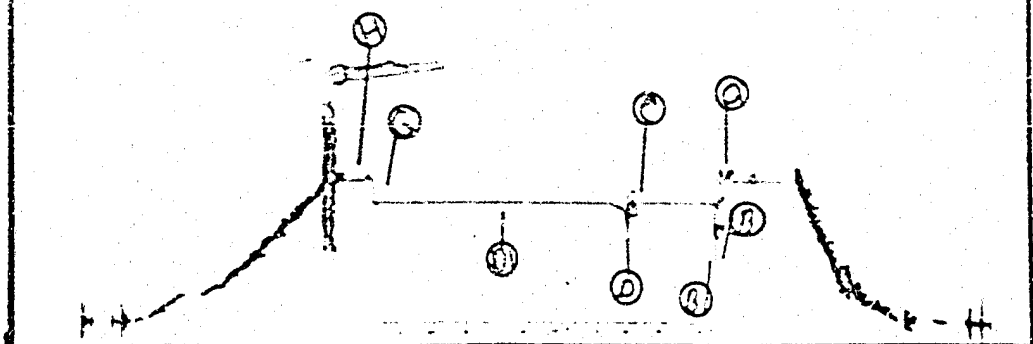
4000

REPORTS
REQUESTED

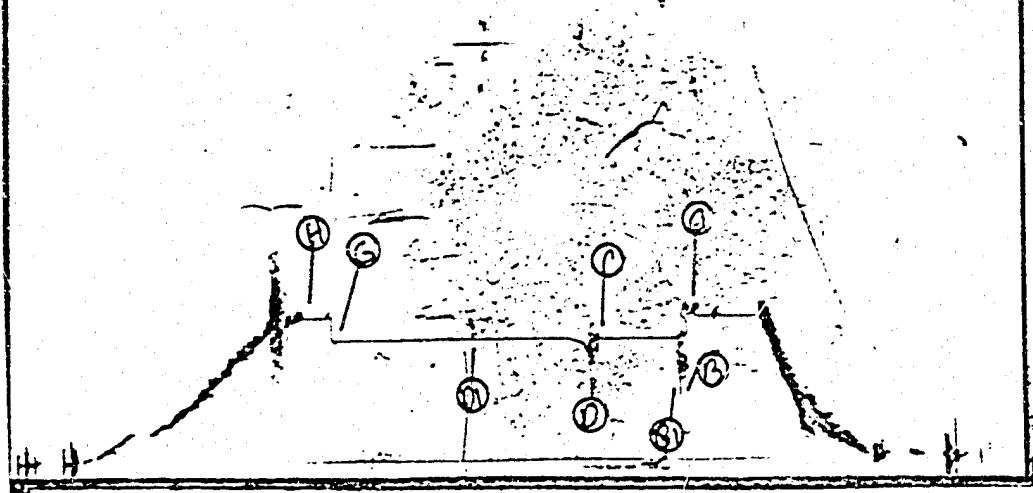
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D01903 Q₁-2084



D01903 Q₁-2085



APPENDIX 'C'

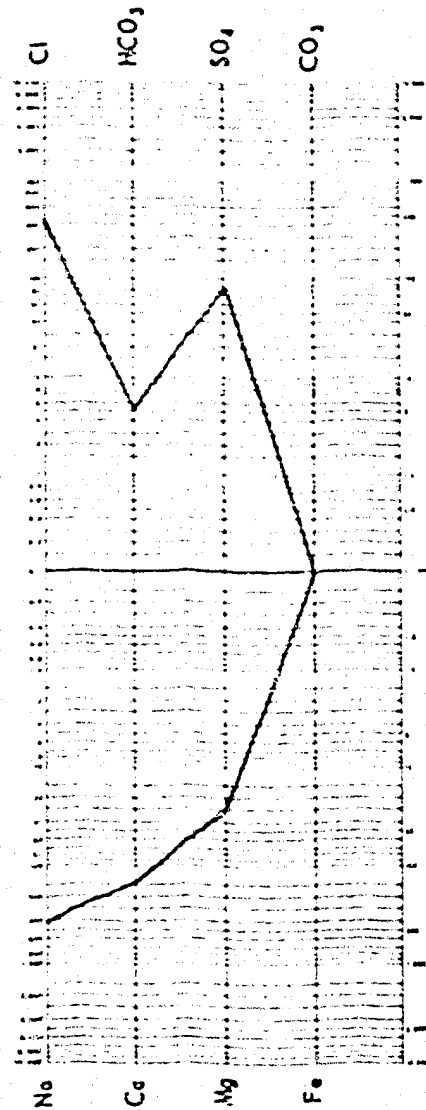
PRODUCTION LABORATORY ANALYSIS REPORT
CALGARY, ALBERTALaboratory Number 72
WATERSample Received MARCH 26, 1968
Sample Analyzed MARCH 27, 1968
Results Reported MARCH 28, 1968Well SHELL-H.B. GRUMBLER L-5, N.W.T. LAT. 60° 14' 41.26"
Lsd. Sec. Twp. 16A Rge. W Form. DEVONIAN STEEN RIVER
Method of production DST & 1A 1615-1715
DST Recovery 60' WATER CUSHION, 340' WATERY MUD, 945' SALT WATER
Sample obtained from TOP OF TOOL FIELD # 6 CODE NO. 4203Well K.B. 942' G.L. 932'
T.D. 9471' P.B.T.D. SURFACE
Perls. or O.H. _____
Sampled by R. MILLER
Date MAR 12, 1968 Time _____Specific Gravity at 60°F 1.0295 pH 7.1 Resistivity 0.280 ohm-m at 60°F H_2S TRACE Calculated Total Solids 30,043 Mg/L

	Calc. Na + K	Ca	Mg	Fe	CO ₂	HCO ₃	SO ₄	Cl
Mg/L	9244	1462	373	TRACE	0	317	3456	15,191

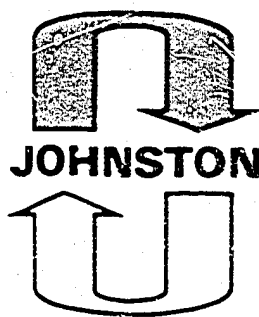
MEQ/L	401.95	72.95	30.68		0	5.20	71.99	428.39
-------	--------	-------	-------	--	---	------	-------	--------

MEQ. %	39.76	7.21	3.03		0	0.51	2.12	42.37
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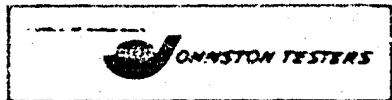
Milliequivalents per Litre

Remarks: FILTRATE CLEAR AMBERSO4 PROBABLY HIGHFile Code No. 15-1100
Production Department, Calgary Area 1
Division Office EXPORT. EDM. 5
Production Laboratory, Calgary Area 2Chemist N.L. Johnson

TECHNICAL REPORT



TEST DATA				TOOL SEQUENCE	
Interval	1615	1715	10	2471	P. O. SUB. .50
Time of Test	OPEN HOLE, STRADDLE, BYPASS.				D. P. SUB. .50
Time Started	0230			0445	MFE TOOL 10.00
Flow	2	M. H. (Mud)	60		BYPASS TOOL 5.00
Second Flow	90	M. H. (Mud)			JARS 6.95
Third Flow		M. H. (Mud)	90		RECORDER 4.40
Fourth Flow	0445	M. H. (Mud)	1200		H. SUB. .50
Weight of Mud	30,000			38,000	SAFETY JOINT 1.75
Description of Mud	2000 BLU.				S. S. & PACKER 8.00
	DEAD IN 20 MINS.				T. C. & PACKER 5.50
					TOTAL 41.10
FLUID RECOVERY					
Total Fluid Recovered	1345				STUB. 1.00
Description of Fluid Recovered	1345' SALT WATER.				PERF. 5.00
					R. SUB. .50
					RECORDER 4.40
					RECORDER 4.40
					SUB. .50
					DRILL COLLAR 81.55
					SUB. .50
					T. C. & SUB. 3.00
					TOTAL INTERVAL 100.85
GAS BLOW MEASUREMENT					
Measured With	10" Pipe				PACKER 3.50
Type of Instrument					T. C. & PACKER 6.50
Time	Start	Check	Reading	M. Cubic Feet Day	SUB. .50
					DRILL PIPE 743.00
					SUB. .50
					P. N. & PERF. 1.50
					TOTAL BELOW INTV. 755.50
				TOTAL LENGTH 897.45	
				Elevation NOT REPORTED.	
				Bottom Hole Choke Size 1/2"	
REMARKS: TEST SATISFACTORY.				Fluid Cushion Type WATER Amt 100'	
				MUD AND HOLE DATA	
				Mud Type WL 8.6	
				Filter Cake 2/32 Visc 38 Wt 9.4	
				Time Taken	
				Contractor SEDCO DRLG Rig No. 94	
				Drill Pipe Size 3 1/2 IF	
				Drill Collar Size 2 ID Length 334'	
RESISTIVITY				CHLORIDE CONTENT	
Recovery Water	FF	ppm		Main Hole Size 6 1/4"	
Mud Fil sample filtrate	FF	ppm		Rat Hole Size	
District	HIGH LEVEL	Ticket No.	D 01803	Date	MARCH 17, 1969 Test No. 1A J.T. No. 1A
Company	SHELL CANADA LIMITED			Address	Box 186
Well Name	SHELL HB GRUMBLER #L-05			EDMONTON, ALBERTA	
Number	60 14'41.26	Field	GRUMBLER	Province	N.W.T.
	116 01'32.29	Co. Rep	R. MILLER		
and Interval	1615 - 1715	Technician	L. STEINBACK		
Distribution of Reports					
5 - EDMONTON.					



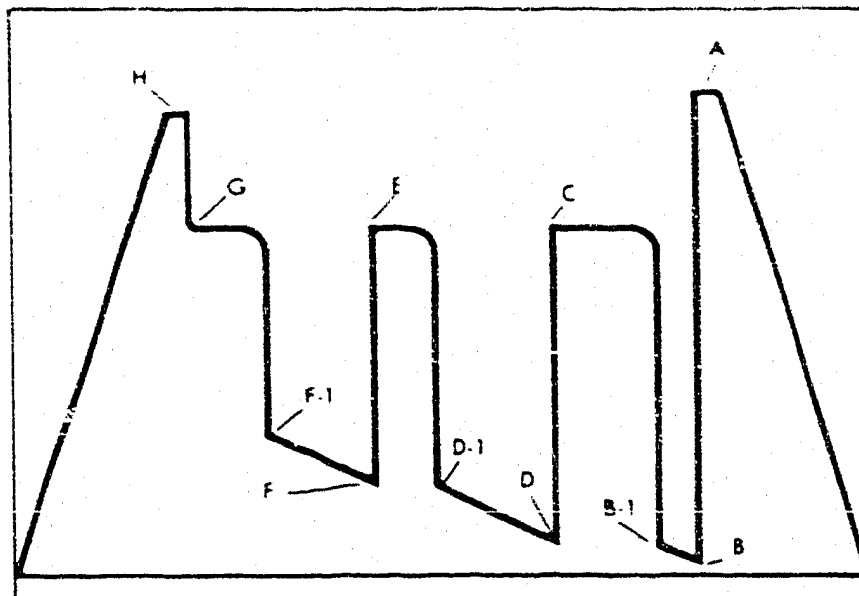
PRESSURE DATA

INSTRUMENT NO.				FIELD REPORT NO.	
AK1-2110				0-01203	
AK1-2054					
AK1-2055					
4300					
4400					
1595					
1621					
1625					
INSIDE					
OUTSIDE					
OUTSIDE					
PRESSURE GRADIENT POINT					
WELL TEMP °F				TIME DATA	
62°					
62°					
62°					
INITIAL HYDROSTATIC				TIME GIVEN	TIME COMPUTED
A	140#	754#	753#		
B	52#	334#	338#	MIN	MIN
C	52#	334#	334#		
D	625#	637#	640#	MIN	MIN
E	341#	467#	468#	MIN	MIN
F	625#	637#	639#		
G					
H					
I					
J					
K					
L					
M					
N					
O					
P					
Q					
R					
S					
T					
U					
V					
W					
X					
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CK					

PRESSURE INCREMENTS

[illegible]

GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures
- B, B-1, Initial Flow Pressures
- C, Initial Shut-in
- D-1, D-2, D-3, etc. Second Flow Pressures
- E, Second Shut-in
- F, F-1, F-2 Third Flow Pressures
- G, Final Shut-In
- H, Final Hyd. Pressures
- Z — Special pressure points such as pumping pressures recorded for formation breakdown.



FIELD
REPORT NO.

D 01803

RECORDER NO.

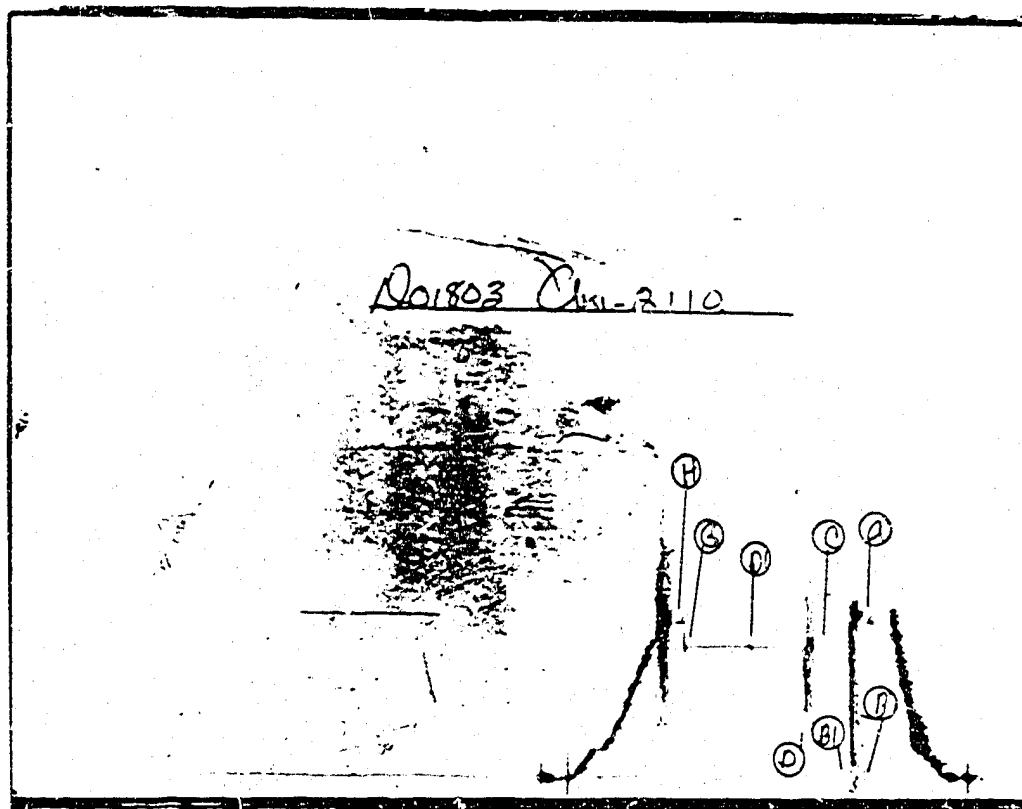
AK1-2110

CAPACITY

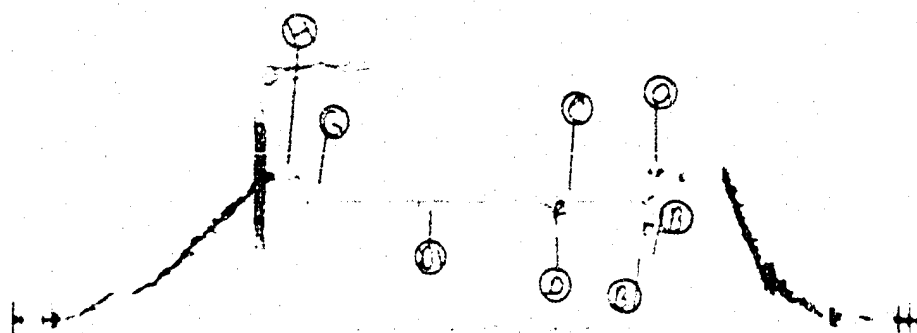
4000

REPORTS
REQUESTED

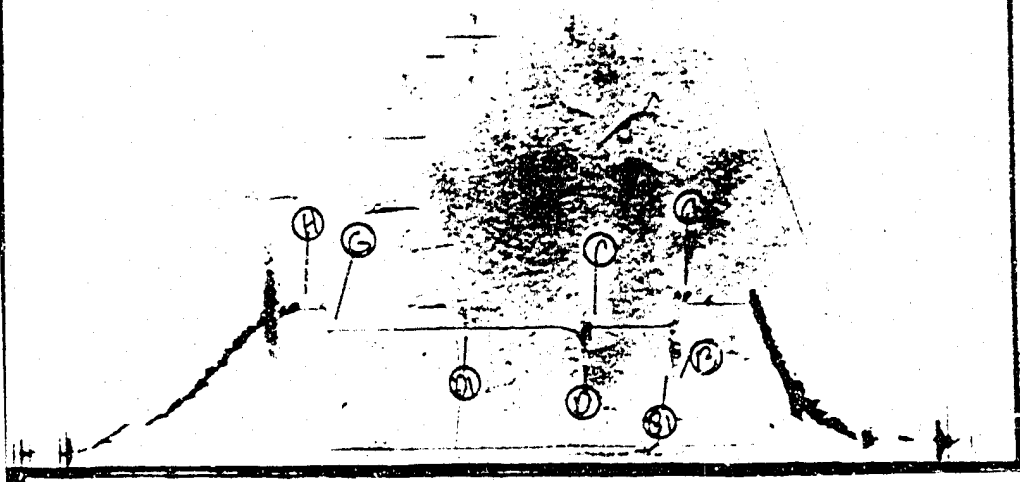
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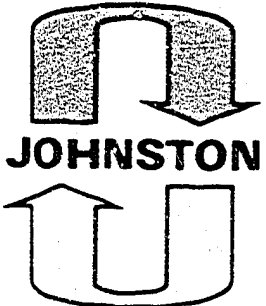
Do1903 Ori-2084



Do1903 Ori-2085



TECHNICAL REPORT

The logo for Johnston is positioned between the words 'REPORT'. It features a stylized 'J' shape formed by two arrows: one pointing downwards from the top and one pointing upwards from the bottom. The word 'JOHNSTON' is printed in a bold, sans-serif font across the middle of the 'J'.

SPECIAL DATA ANALYSIS

TEST DATA

[illegible]

FLUID RECOVERY

Y. H. Fluid Recovered	5.00
Destination 1 Fluid Recovered	.50
	RECORDER
	4.40
	RECORDER
	4.40
	DRILL COLLAR
	113.19
	T. C. & STUD.
	2.00
	TOTAL INTERVAL
	129.99

GAS FLOW MEASUREMENT

Measured With	10. River	ORILL PIPE	715.46
Type of Instrument		B. N. & PERF.	2.00
		TOTAL BELOW INTV.	740.96

TOTAL LENGTH	906.05
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Elevation NOT REPORTED.

Bottom Hole Choke Size 1/2"

Fluid Cushion Type	WATER	Amt	100'
--------------------	-------	-----	------

MUD AND HOLE DATA

Mud Type	GEL	WL	9.6
----------	-----	----	-----

Filter Cone	2/32	Visc	53	Wt	9.1
-------------	------	------	----	----	-----

Tonic Taken

Contractor SEDCO DRUG Rig No. 94

Drill Pipe Size 3 1/2 IF

Drill Collar Size	2 1/2	Length	353'
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Main Hole Size 6 1/4"

Rat Hole Size

RESISTIVITY

CHLORIDE CONTENT

Recovery Water	9	°F	ppm
----------------	---	----	-----

Mud Pit sample filtrate	of	°F.	ppm
-------------------------	----	-----	-----

District HIGH LEVEL Ticket No. D 01802

Date **MARCH 15, 1969** Test No **1** J.T. No **1**

Company **SHELL CANADA LIMITED**

Address Box 186

Well Name SHELL HB GRUMBLER #1-05

EDMONTON, ALBERTA

Number 50 14'41.26

Field **GRUMBLER** Province **N.W.T.**

116 01 '32.29

Co. Rep. R. MILLER

and interval	1600 - 1730	DST#1
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Technician **L. STEINBACK**

Distribution of Reports

5 - EDMONTON.



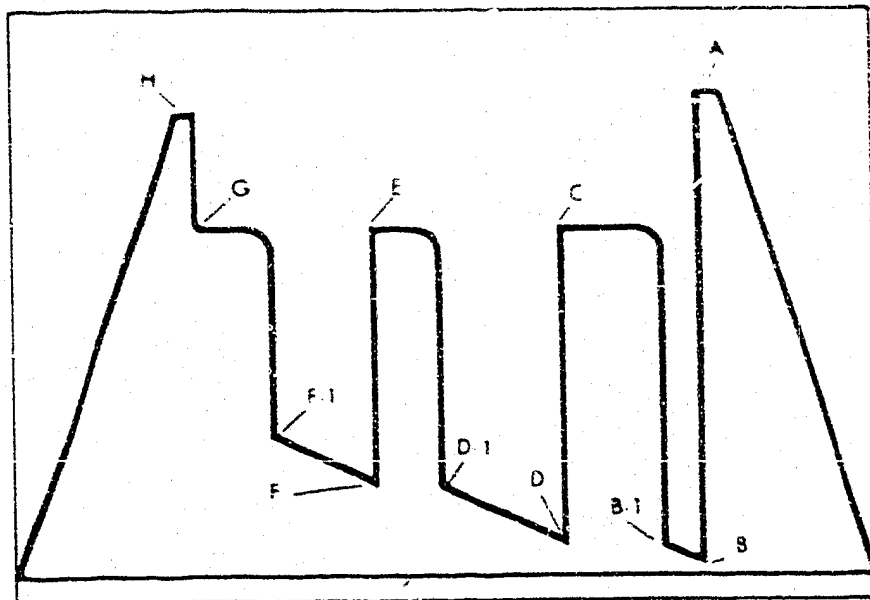
PRESSURE DATA

INSTRUMENT NO.				FIELD REPORT NO.	
AKI-2110	AKI-2085	AKI-2084	0 01402		
4000	4400	4300			
INSTRUMENT DEPTH	1588	1605			
INSTRUMENT OPENING	1451DE	OUTSIDE			
PRESSURE GRADIENT (LBS/FT)		OUTSIDE			
WELL TEMPERATURE					
			TIME DATA		
INITIAL HYDROSTATIC	A	771#	782#	787#	
FIRST FLOW	B				
INITIAL SHUT-IN	C				
SECOND FLOW	D				
SECOND SHUT-IN	E				
THIRD FLOW	F				
FINAL SHUT-IN	G				
FINAL HYDROSTATIC	H	771#	782#	787#	
			CLOCK TRAVEL	IN/FT	

PRESSURE INCREMENTS

[illegible]

GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



- A Initial Hyd. Mud
- B First Flow
- C Initial Shut-In
- D Second Flow
- E Second Shut-In
- F Third Flow
- G Final Shut-In
- H Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures
- B, B-1, Initial Flow Pressures
- C, Initial Shut-In
- D-1, D-2, D-3, etc. Second Flow Pressures
- E, Second Shut-In
- F, F-1, F-2, Third Flow Pressures
- G, Final Shut-In
- H, Final Hyd. Pressures
- Z — Special pressure points such as pumping pressures recorded for formation breakdown.

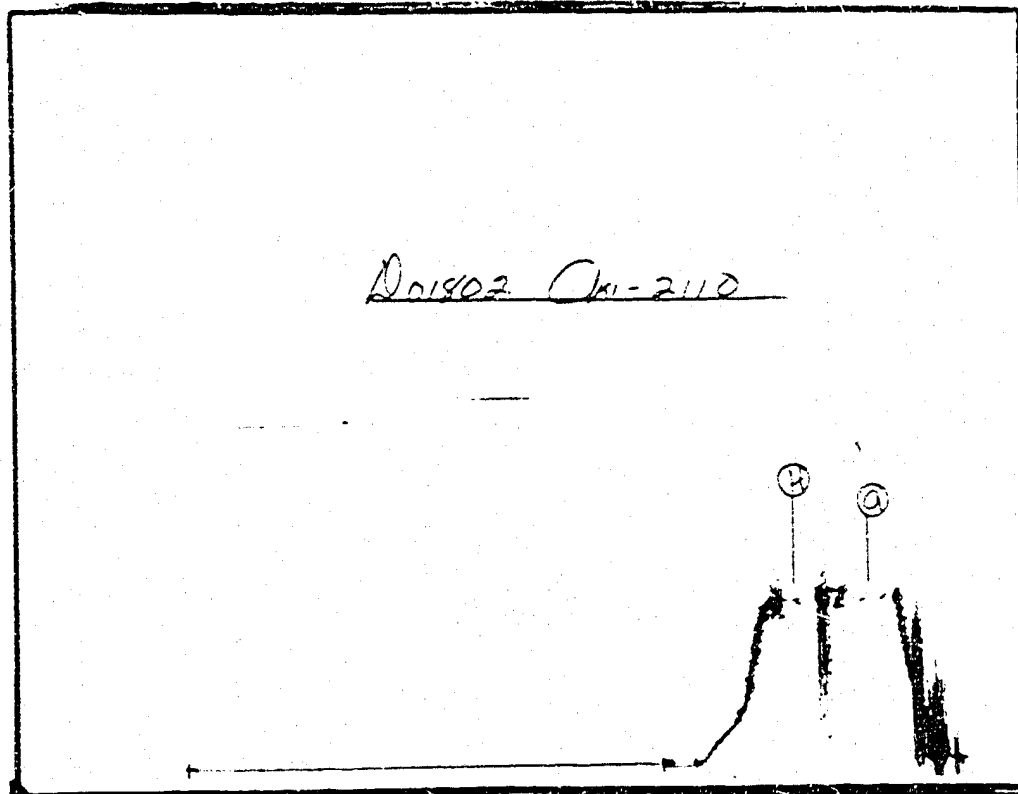


FIELD
REPORT NO
D 01502

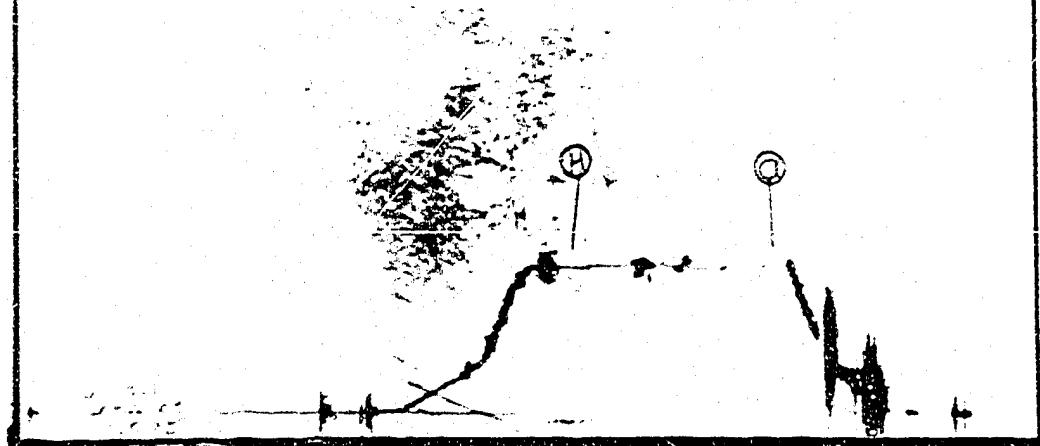
RECORDER NO
AK1-2110

CAPACITY
4000

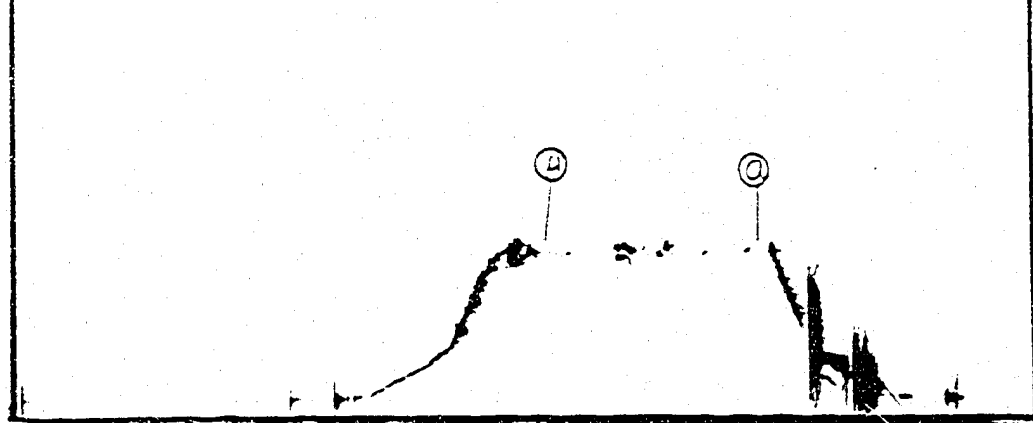
REPORTS
REQUESTED
5



001902 Ori-2092



001902 Ori-2094



[illegible]

DAILY DRILLING REPORT

REPORT NO.

DATE

March 16/69

OPERATOR SHELL CANADA LIMITED		LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME Shell H.B. Grumbler		No. L-5	PROVINCE N.W.T.
CONTRACTOR Sedco	RIG No. 94	DRILL PIPE STRING NO. SIZE TOOL JOINT TYPE THD.	PUMPS NO. MANUFACTURER TYPE STROKE LENGTH		CASING & LINER RECORD	DEPTH SET FROM TO PERFORATIONS FROM TO CEMENT USED OTHER
OPERATOR'S REPRESENTATIVE R. W. Miller		CONTRACTOR'S TOOL PUSHER S. Kielley				

TIME DISTRIBUTION—HOURS				NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	MUD RECORD				
MORN	DAY	EVE		STANDS DP	FT.	RUN NO.													TIME	WEIGHT	VISC	W.L.-C.C.	
				SNGLS. DP	FT.	SIZE																	
				D.C. ID		MFG.																	
				OD	FT.	TYPE																	
				RMR BODY OD	FT.	NO. NO.																	
				STB BODY OD	FT.	NOZ. SIZE																	
				SUBS OD	FT.	SER. NO.																	
				BIT OR C.B.	FT.	DEPTH OUT																	
					FT.	CUMULATIVE HOURS RUN																	
				KELLY DOWN	FT.	COND. OF BIT																	
				TOTAL	FT.	REAMER CUTTER NO.																	
				WT. OF STRING	LBS.	TYPE																	
FISHING				DRILLER		C. G. Dejenhardt																	

TIME SUMMARY (OFFICE USE ONLY)				NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	MUD RECORD				
CONTRACTOR'S TIME HRS.	OPERATOR'S TIME	HRS. W/D.P.	HRS. WO/D.P.	STANDS DP	FT.	RUN NO.													TIME	WEIGHT	VISC	W.L.-C.C.	
1/2	23 1/2			SNGLS. DP	FT. <td>SIZE</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	SIZE																	
				D.C. ID		MFG.																	
				OD	FT. <td>TYPE</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	TYPE																	
				RMR BODY OD	FT.	NO. NO.																	
				STB BODY OD	FT.	NOZ. SIZE																	
				SUBS OD	FT.	SER. NO.																	
				BIT OR C.B.	FT.	DEPTH OUT																	
					FT.	CUMULATIVE HOURS RUN																	
				KELLY DOWN	FT.	COND. OF BIT																	
				TOTAL	FT.	REAMER CUTTER NO.																	
				WT. OF STRING	LBS.	TYPE																	
WIRE LINE RECORD				DRILLER		C. L. Dejenhardt																	

TIME SUMMARY (OFFICE USE ONLY)				NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	MUD RECORD				
CONTRACTOR'S TIME HRS.	OPERATOR'S TIME	HRS. W/D.P.	HRS. WO/D.P.	STANDS DP	FT.	RUN NO.													TIME	WEIGHT	VISC	W.L.-C.C.	
				SNGLS. DP	FT. <td>SIZE</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	SIZE																	
				D.C. ID		MFG.																	
				OD	FT. <td>TYPE</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	TYPE																	
				RMR BODY OD	FT.	NO. NO.																	
				STB BODY OD	FT.	NOZ. SIZE																	
				SUBS OD	FT.	SER. NO.																	
				BIT OR C.B.	FT.	DEPTH OUT																	
					FT.	CUMULATIVE HOURS RUN																	
				KELLY DOWN	FT.	COND. OF BIT																	
				TOTAL	FT.	REAMER CUTTER NO.																	
				WT. OF STRING	LBS.	TYPE																	
WIRE LINE RECORD				DRILLER		C. L. Dejenhardt																	

DAILY DRILLING REPORT

REPORT NO.

DATE *March 15/69*

OPERATOR		LOCATION	LSD.	SEC.	TWP.	RGE.	W.	WELL NAME	No.	PROVINCE			
SHELL CANADA LIMITED		2-5						<i>Shell H.B. Burschler 2-5</i>	<i>2-5</i>	<i>N.W.T.</i>			
CONTRACTOR		RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT	OD	PUMPS		CASING & LINER RECORD	PERFORATIONS				
<i>Sedco</i>		<i>94</i>				MANUFACTURER TYPE STROKE LENGTH		SIZE WT. & GR. DEPTH SET FROM TO	FROM TO				
OPERATOR'S REPRESENTATIVE		CONTRACTOR'S TOOL PUSHER								CEMENT USED OTHER			
<i>R. Miller</i>		<i>Skelly</i>											
TIME DISTRIBUTION—HOURS		NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD. CORE NO. FROM TO		FORMATION (SHOW CORE RECOVERY)		ROTA- RY R.P.M. WT. ON BIT 1000# PUMP PRESS. PUMP NO. 1 PUMP NO. 2 METHOD PUMPS RUN	MUD RECORD		
MORN DAY EVE		STANDS DP FT. RUN NO.										TIME	
DRILLING ACTUAL		SNGLS. DP FT. SIZE										WEIGHT	
REAMING		D.C. ID FT. MFG.										VISC	
CIRCULATING		D.C. OD FT. TYPE										W.L.-C.C.	
TRIPS		RMR BODY OD FT. NOZ. NO.										FLTR. CK.	
DEVIATION SURVEY		STB BODY OD FT. SIZE										PH	
TEST B.O.P.		SUBS OD FT. SER. NO.										SD. CONT.	
CUT OFF DRILL LINE		BIT OR C.B. FT. DEPTH OUT											
REPAIR RIG		KELLY DOWN FT. COND. OF BIT											
CORING		TOTAL FT. REAMER CUTTER NO.											
WIRE LINE LOGGING		WT. OF STRING LBS. TYPE											
OTHER		DRILLER											
FISHING		<i>L. G. Degenhardt</i>											
COMPLETING (A) PERFORATING		NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD. CORE NO. FROM TO		FORMATION (SHOW CORE RECOVERY)		ROTA- RY R.P.M. WT. ON BIT 1000# PUMP PRESS. PUMP NO. 1 PUMP NO. 2 METHOD PUMPS RUN	MUD RECORD		
(B) RUNNING TUBING		STANDS DP FT. RUN NO.										TIME	
(C) SWABBING		SNGLS. DP FT. SIZE										WEIGHT	
(D) TESTING		D.C. ID FT. MFG.										VISC	
(E) ACIDIZING		D.C. OD FT. TYPE										W.L.-C.C.	
(F) ADDITIONAL		RMR BODY OD FT. NOZ. NO.										FLTR. CK.	
TOTALS		STB BODY OD FT. SIZE										PH	
TIME SUMMARY (OFFICE USE ONLY)		SUBS OD FT. SER. NO.										SD. CONT.	
CONTRACTOR'S TIME HRS:		BIT OR C.B. FT. DEPTH OUT											
OPERATOR'S TIME:		KELLY DOWN FT. COND. OF BIT											
HRS. W/D.P.:		TOTAL FT. REAMER CUTTER NO.											
HRS. WO/D.P.:		WT. OF STRING LBS. TYPE											
HRS. STANDBY		DRILLER											
WIRE LINE RECORD		<i>Steve Scott</i>											
REEL NO		NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD. CORE NO. FROM TO		FORMATION (SHOW CORE RECOVERY)		ROTA- RY R.P.M. WT. ON BIT 1000# PUMP PRESS. PUMP NO. 1 PUMP NO. 2 METHOD PUMPS RUN	MUD RECORD		
NO OF LINES SIZE		STANDS DP FT. RUN NO.										TIME	
FEET SLIPPED		SNGLS. DP FT. SIZE										WEIGHT	
FEET CUT OFF		D.C. ID FT. MFG.										VISC	
PRESENT LENGTH		D.C. OD FT. TYPE										W.L.-C.C.	
TON MI. or TRIPS SINCE LAST CUT		RMR BODY OD FT. NOZ. NO.										FLTR. CK.	
CUMULATIVE TON MI. or TRIPS		STB BODY OD FT. SIZE										PH	
NO. OF DAYS FROM SPUD		SUBS OD FT. SER. NO.										SD. CONT.	
CUMULATIVE ROTATING HRS.		BIT OR C.B. FT. DEPTH OUT											
		KELLY DOWN FT. COND. OF BIT											
		TOTAL FT. REAMER CUTTER NO.											
		WT. OF STRING LBS. TYPE											
		DRILLER											
		<i>C. L. Pugh</i>											

REMARKS:

12:00 B. 15" Squeeze Plug + Check B.O.P.

12:15 2.00 Hoist to

2:00 3.30 Pack up Packer + Pulsion.

3:30 7.00 Steam out, flare line + hoist up to test

7:00 7.30 Setting Packer

7:30 8.00 (Pulsion) Pulsion to hoist.

REMARKS:

4:00 8:15 RIG SER.

8:15 11:00 LAY DOWN HEAD + HOIST + BREAK DOWN PACKER

12:00 1:00 WAIT ON DRILLERS

1:00 2:30 RUN IN @ BIT

2:30 3:00 BREAK CIR.

3:00 4:00 CIRC. MIXMUD

RAN DST # 1 1600-1730 DUAL STRADA BYPASS

PACKERS FAILED TO SET ON TWO ATTEMPTS - MISRUN

RWT

REMARKS:

4:00 5:15 MIX MUD - SERV. RIG

5:15 7:00 TRIP OUT

7:00 12:00 RIG UP TO LOG + LOG.

DAILY DRILLING REPORT

REPORT NO.

DATE

March 14/69

OPERATOR SHELL CANADA LIMITED	LOCATION L-5	SEC. L-5	TWP. L-5	RGE. L-5	WELL NAME Shell H.B. Brumby	No. 2-5	PROVINCE N.W.T.
CONTRACTOR Secdeo	RIG No. 94	DRILL PIPE STRING NO. SIZE 94	TOOL JOINT TYPE THD.	PUMPS NO. MANUFACTURER TYPE STROKE LENGTH	CASING & LINER RECORD SIZE WT. & GR. DEPTH SET FROM TO PERFORATIONS FROM TO CEMENT USED OTHER		
OPERATOR'S REPRESENTATIVE R.M. M.	CONTRACTOR'S TOOL PUSHER R. Kelly						

TIME DISTRIBUTION—HOURS				NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FROM		TO		FORMATION (SHOW CORE RECOVERY)		ROTA- RY R.P.M.		WT. ON BIT 1000#		PUMP PRESS.		PUMP NO. 1 LINER SIZE S.P.M.		PUMP NO. 2 LINER SIZE S.P.M.		METHOD PUMPS RUN		MUD RECORD			
MORN DAY EVE				STANDS DP	FT.	RUN NO.																											
DRILLING ACTUAL				SNGLS. DP	FT.	SIZE																							WEIGHT				
REAMING				D.C. ID	FT.	MFG.																							VISC				
CIRCULATING				RMR BODY OD	FT.	NO.																							W.L.-C.C.				
TRIPS				STB BODY OD	FT.	NOZ. SIZE																							FLTR. CK.				
DEVIATION SURVEY				SUBS OD	FT.	SER. NO.																							PH				
TEST B.O.P.				BIT OR C.B.	FT.	DEPTH OUT																							SD. CONT.				
CUT OFF DRILL LINE					FT.	CUMULATIVE HOURS RUN																											
REPAIR RIG				KELLY DOWN	FT.	COND. OF BIT																											
CORING				TOTAL	FT.	REAMER CUTTER NO.																											
WIRE LINE LOGGING				WT. OF STRING	LBS.	TYPE																											
OTHER																																	
FISHING																																	
COMPLETING (A) PERFORATING																																	
(B) RUNNING TUBING																																	
(C) SWABBING																																	
(D) TESTING																																	
(E) ACIDIZING																																	
(F) ADDITIONAL																																	
TOTALS																																	
TIME SUMMARY (OFFICE USE ONLY)																																	
CONTRACTOR'S TIME HRS:																																	
OPERATOR'S TIME:																																	
HRS. W/D.P.:																																	
HRS. WO/D.P.:																																	
HRS. STANDBY																																	
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

DRILLER: *C. G. Degerhant*

REMARKS: 12:00-6:00 wait on Tester *
6:00-8:00 work on light plant.

DAY TOUR

DRILLER: *Steve Scott*

REMARKS: 4:00 8:15 RIG 2ER
8:15 10:30 HOIST TO TEST (Don't Strap) Tally 2471.73
10:30 12:30 WAIT ON TESTER Double SLM 2471.20
12:30 2:00 MAKE UP PACKER + RUN TAIL PIPE Diff 0.73
2:00 3:15 LAY DOWN " 2 HOIST TAIL PIPE Correction made (R.M.)
3:15 4:00 WORK ON TRANS.
Do late 2nd pull packers in daylight - Drop in @ bit + since while waiting to run packers.

EVENING TOUR

DRILLER: *C. L. P.*

REMARKS: 4:00 6:30 WORK ON TORQUE DRIVE - 170 SER. THAW FROZEN AIR LINES GELL 400
6:30 8:00 TRIP IN W/ BIT
8:00 8:30 BEAM 12' to BOTTOM.
8:30 12:00 WAIT TO TEST

WELLMAN

CONTRACTOR'S TOOL PUSHER
T. Kieckhefer

TIME			
WEIGHT			
VISC			
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.

MUD RECORD			
TIME	70.00	12.00	2.00
WEIGHT	9.4	9.4	9.4
VISC	41	42	
W.L.C.C.		10.4	
FLTR. CK.		2.2	
PH		9.5	
SD. CONT.			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
Ge	900		

MUD RECORD			
TIME	6.00		
WEIGHT	8.4		
VISC	53		
W.L.-C.C.			
FLTR CK.			
PH			
SD. CONT			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
Hel	500		

[illegible]

[illegible]

OPERATOR SHELL CANADA LIMITED		LOCATION LSD.		SEC.		TWP.		RGE.		W.		WELL NAME Shell HB Driller 1-05		No.		PROVINCE N.W.T.																							
CONTRACTOR Sedco Drilling		RIG No. 94		DRILL PIPE STRING NO. SIZE 3 1/2		TOOL JOINT TYPE TMD. T F		OD		PUMPS		CASING & LINER RECORD		SIZE		WT. & GR.		DEPTH SET FROM TO		PERFORATIONS FROM TO		CEMENT USED		OTHER															
OPERATOR'S REPRESENTATIVE R.W. Miller		CONTRACTOR'S TOOL/PUSHER R. K. Kelly		NO.		MANUFACTURER		TYPE		STROKE LENGTH		1.		2.		3.																							
TIME DISTRIBUTION—HOURS		MORN		DAY		EVE		NO.		DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FROM		TO		FORMATION (SHOW CORE RECOVERY)		ROTA- RY R.P.M.		WT.ON BIT 1000#		PUMP PRESS.		PUMP NO. 1 LINER SIZE S.P.M.		PUMP NO. 2 LINER SIZE S.P.M.		METHOD PUMPS RUN		MUD RECORD			
ORILLING ACTUAL		7 1/2		1 1/2		1 1/2		16		STANDS DP		FT. RUN NO. 5		7 1/2				1999		2073				100		2000		850		5				TIME 2 AM 4 AM 6 AM					
REAMING										SNGLS. DP		FT. SIZE 6 1/2																						WEIGHT 9.0 9.0 9.0					
CIRCULATING										D.C. 1 1/4 ID		FT. MFG. H.W.																						VISC 38 38 40					
TRIPS										RMR BODY OD		FT. NO. 2																						W.L.-C.C.					
DEVIATION SURVEY		4		4		4				STB BODY OD		FT. NO. 12		12 13																				FLTR. CK.					
TEST B.O.P										SUBS OD		FT. SER. NO. H.K. 924																						PH					
C. OFF D. LINE										BIT OR C.B.		FT. DEPTH OUT 1.00																						SD. CONT.					
DEPART RIG		4		4		4						FT. CUMULATIVE HOURS RUN 10 1/2																											
CORING										KELLY DOWN		FT. COND. OF BIT																											
WIRE LINE LOGGING										TOTAL		FT. REAMER CUTTER NO.																											
OTHER										WT. OF STRING		LBS. TYPE																											
FISHING										DRILLER																													
COMPLETING (A) PERFORATING										NO.		DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FROM		TO		FORMATION (SHOW CORE RECOVERY)		ROTA- RY R.P.M.		WT.ON BIT 1000#		PUMP PRESS.		PUMP NO. 1 LINER SIZE S.P.M.		PUMP NO. 2 LINER SIZE S.P.M.		METHOD PUMPS RUN		MUD RECORD	
(B) RUNNING TUBING										56		STANDS DP		FT. RUN NO. 5		7 1/2				2073		2154				100		2000		800		5		62		TIME 8:00 10:00 12:00			
(C) SWABBING										SNGLS. DP		FT. SIZE 6 1/4																								WEIGHT 9.8 9.2 9.8			
(D) TESTING										D.C. 1 1/4 ID		FT. MFG. H.W.																						VISC 38 36 38					
(E) ACIDIZING										RMR BODY OD		FT. NO. 2		2 1																				W.L.-C.C.					
(F) ADDITIONAL										STB BODY OD		FT. NO. 12		12 13																				FLTR. CK.					
TOTALS		8.6		8		8				SUBS OD		FT. SER. NO. H.K. 924																						PH 10.					
TIME SUMMARY (OFFICE USE ONLY)										BIT OR C.B.		FT. DEPTH OUT 1.00																						SD. CONT.					
CONTRACTOR'S TIME HRS:										KELLY DOWN		FT. COND																											

[illegible]

Mar 7 / 69.

38 (10/63) DAILY DRILLING REPORT REPORT NO. 7 DATE Mar 1/71

OPERATOR SHELL CANADA LIMITED LOCATION LSD. SEC. TWP. RGE. W. WELL NAME SHELL H.B. GRUBBLER No. L-5 PROVINCE N.W.T.

CONTRACTOR SEDCO RIG No. 94 DRILL PIPE STRING NO. SIZE TOOL JOINT OD NO. MANUFACTURER TYPE STROKE LENGTH CASING & LINER RECORD SIZE WT. & GR. DEPTH SET PERFORATIONS CEMENT USED OTHER

OPERATOR'S REPRESENTATIVE M. Marshall CONTRACTOR'S TOOL PUSHER R. Kusaly

TIME DISTRIBUTION—HOURS MORNING TOUR DAY TOUR EVENING TOUR

NO. DRILLING ASSEMBLY BIT RECORD HRS. DRLD. CORE NO. FROM TO FORMATION (SHOW CORE RECOVERY) ROTA- RY R.P.M. WT.ON BIT 1000# PUMP PRESS. PUMP NO. 1 PUMP NO. 2 METHOD PUMPS RUN MUD RECORD

33 STANDS DP 984.32 FT. RUN NO. 1 2 SNGLS. DP FT. SIZE 6 1/4 6 3/4 4 3/4 1423 1483 120 15 850 5 12 6 4 1200 4.00 6.00

16 D.C. 1 3/8 ID 4 3/4 OD 466.33 FT. MFG. H.W. H.W. TYPE OSC 16 3 3 11 12 12:00 DRILL 12:30 12:30 12:45 SERVICE RIG 12:45 1:15 DRILL 1:15 3:45 TRIP FOR BIT 3:45 5:00 DRILL 5:00 5:30 W.O. PUMP 5:30 8:00 DRILL

1. SUBS 4 3/4 OD 1.00 FT. SER. NO. 986 7714 12:00 DRILL 12:30 12:30 12:45 SERVICE RIG 12:45 1:15 DRILL 1:15 3:45 TRIP FOR BIT 3:45 5:00 DRILL 5:00 5:30 W.O. PUMP 5:30 8:00 DRILL

NO. DRILLING ASSEMBLY BIT RECORD HRS. DRLD. CORE NO. FROM TO FORMATION (SHOW CORE RECOVERY) ROTA- RY R.P.M. WT.ON BIT 1000# PUMP PRESS. PUMP NO. 1 PUMP NO. 2 METHOD PUMPS RUN MUD RECORD

16 STANDS DP FT. RUN NO. 2 SNGLS. DP FT. SIZE 6 1/2 6 1/2 4 1483 1540 110 18 850 5 62 8:00 AM 12:00 2:00

16 D.C. 1 3/8 ID 4 3/4 OD 466.33 FT. MFG. H.W. H.W. TYPE OSC 16 3 3 12 12:00 8:00 8:15 Drill 8:15 12:15 Survey & Work on Trans. 12:15 4:00 Drill

1. SUBS OD 1.00 FT. SER. NO. 7714 8:00 8:15 Drill 8:15 12:15 Survey & Work on Trans. 12:15 4:00 Drill

NO. DRILLING ASSEMBLY BIT RECORD HRS. DRLD. CORE NO. FROM TO FORMATION (SHOW CORE RECOVERY) ROTA- RY R.P.M. WT.ON BIT 1000# PUMP PRESS. PUMP NO. 1 PUMP NO. 2 METHOD PUMPS RUN MUD RECORD

16 STANDS DP FT. RUN NO. 2 SNGLS. DP FT. SIZE 6 1/2 6 1/2 4 1540 1648 100 18 850 5 68 4:00 6.00 8.00

16 D.C. 1 3/8 ID 4 3/4 OD 466.33 FT. MFG. H.W. H.W. TYPE Jet OSC 16 3 3 12 1540 1/2 4:00 4:30 Prev. + Check BOP + Survey 4:30 11:00 Drill 11:00 12:00 Hour for Bit

1. SUBS OD 1.00 FT. SER. NO. 7714 4:00 4:30 Prev. + Check BOP + Survey 4:30 11:00 Drill 11:00 12:00 Hour for Bit

NO. DRILLING ASSEMBLY BIT RECORD HRS. DRLD. CORE NO. FROM TO FORMATION (SHOW CORE RECOVERY) ROTA- RY R.P.M. WT.ON BIT 1000# PUMP PRESS. PUMP NO. 1 PUMP NO. 2 METHOD PUMPS RUN MUD RECORD

16 STANDS DP FT. RUN NO. 2 SNGLS. DP FT. SIZE 6 1/2 6 1/2 4 1540 1648 100 18 850 5 68 4:00 6.00 8.00

16 D.C. 1 3/8 ID 4 3/4 OD 466.33 FT. MFG. H.W. H.W. TYPE Jet OSC 16 3 3 12 1540 1/2 4:00 4:30 Prev. + Check BOP + Survey 4:30 11:00 Drill 11:00 12:00 Hour for Bit

1. SUBS OD 1.00 FT. SER. NO. 7714 4:00 4:30 Prev. + Check BOP + Survey 4:30 11:00 Drill 11:00 12:00 Hour for Bit

[illegible]

[illegible]

DAILY DRILLING REPORT

REPORT NO. 6

DATE

Mon. 4/69

OPERATOR		LOCATION		LSD.		SEC.		TWP.		RGE.		W.		WELL NAME		No.		PROVINCE													
SHELL CANADA LIMITED		Lat 60° 14' 26" N		Long 116° 01' 32.29" W										Shell H.B. Number 2-05		L-5		NW+													
CONTRACTOR		RIG No.		DRILL PIPE STRING NO. SIZE		TOOL JOINT		OD		PUMPS		CASING		SIZE		WT. & GR.		DEPTH SET		PERFORATIONS		CEMENT USED		OTHER							
SEDO		94								NO. MANUFACTURER TYPE STROKE LENGTH		2 LINER RECORD		7 20"		0 345		FROM TO		FROM TO		130		390 C.C. 1200 Cellulose							
OPERATOR'S REPRESENTATIVE		CONTRACTOR'S TOOL PUSHER																													
J.L. Marshall		R. Kichy																													
TIME DISTRIBUTION—HOURS				NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FROM		TO		FORMATION (SHOW CORE RECOVERY)		ROTA- RY R.P.M.		WT. ON BIT 1000#		PUMP PRESS.		PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN		MUD RECORD	
MORN DAY EVE				STANDS DP FT.		RUN NO. 7A																								TIME	
DRILLING ACTUAL 7 3/4 5 1/2 2				SNGLS. DP FT.		SIZE 8 3/4																								WEIGHT	
REAMING				ID		MFG. H.W.																						VISC			
CIRCULATING 1/2				D.C. OD 175		TYPE OWV																						W.L.C.C.			
TRIPS 1/2 1				RMR BODY OD		FT. NO. NO.																						FLTR. CK.			
DEVIATION SURVEY 1/2				STB BODY OD		FT. NOZ. SIZE																						PH			
TEST B.O.P.				SUSS OD		FT. SER. NO. 9206																						SD. CONT.			
CUT OFF DRILL LINE				BIT OR C.B.		FT. DEPTH OUT																									
REPAIR RIG						FT. CUMULATIVE HOURS RUN 18 1/2																									
CORING Gung 1 1/2				KELLY DOWN 38		FT. COND. OF BIT RUN																									
WIRE LINE LOGGING				TOTAL 213		FT. REAMER CUTTER NO.																									
OTHER W.O.C. 2 1/4				WT. OF STRING 12		LBS. TYPE																									
FISHING				DRILLER		C. L. Pagnotta																									
COMPLETING (A) PERFORATING				NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FROM		TO		FORMATION (SHOW CORE RECOVERY)		ROTA- RY R.P.M.		WT. ON BIT 1000#		PUMP PRESS.		PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN		MUD RECORD	
(B) RUNNING TUBING				STANDS DP FT.		RUN NO. 7A 8A																								TIME	
(C) SWABBING				SNGLS. DP FT.		SIZE 8 3/4 8 3/4						213								120		ALL		5						WEIGHT	
(D) TESTING				D.C. ID		MFG. HW HW																						VISC			
(E) ACIDIZING				OD		TYPE OWN OWN																						W.L.C.C.			
(F) ADDITIONAL				RMR BODY OD		FT. NO. NO.																						FLTR. CK.			
TOTALS 9 9 4				STB BODY OD		FT. NOZ. SIZE																						PH			
TIME SUMMARY (OFFICE USE ONLY)				SUSS OD		FT. SER. NO. 9206 9201																						SD. CONT.			
CONTRACTOR'S TIME HRS: 24				BIT OR C.B.		FT. DEPTH OUT 213																									
OPERATOR'S TIME:						FT. CUMULATIVE HOURS RUN 19 1/2																									
HRS. W/D.P:				KELLY DOWN		FT. COND. OF BIT																									
HRS. WO/D.P:				TOTAL		FT. REAMER CUTTER NO.																									
HRS. STANDBY				WT. OF STRING 14000		LBS. TYPE																									
WIRE LINE RECORD				DRILLER		Jim Ross																									
REEL NO				NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FROM		TO		FORMATION (SHOW CORE RECOVERY)		ROTA- RY R.P.M.		WT. ON BIT 1000#		PUMP PRESS.		PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN		MUD RECORD	
NO OF LINES SIZE				STANDS DP FT.		RUN NO. 8A																								TIME	
FEET SLIPPED				SNGLS. DP FT.		SIZE 8 3/4						2		325 350						120		ALL		5						WEIGHT	
FEET CUT OFF				ID		MFG. H.W.																						VISC			
PRESENT LENGTH				D.C. OD		TYPE OWV																						W.L.C.C.			
TON MI. or TRIPS SINCE LAST CUT				RMR BODY OD		FT. NO. NO. 3																						FLTR. CK.			
CUMULATIVE TON MI. or TRIPS				STB BODY OD		FT. NOZ. SIZE																						PH			
NO. OF DAYS FROM SPUD				SUSS OD		FT. SER. NO. 9201																						SD. CONT.			
CUMULATIVE ROTATING HRS. 5				BIT OR C.B.		FT. DEPTH OUT 350																									
						FT. CUMULATIVE HOURS RUN 6 1/2																									
				KELLY DOWN		FT. COND. OF BIT																									
				TOTAL 14		FT. REAMER CUTTER NO.																									
				WT. OF STRING 14000		LBS. TYPE																									
				DRILLER		C. L. Deckerhardt																									
						4.00-4.15 Rig Service																									
						4.15-6.15 Drill																									
						6.15-6.30 Condition mud																									
						6.30-7.00 Summary Trips																									
						7.00-7.15 Circulate																									
						7.15-7.45 Hoses to run casing																									
						7.45-8.45 Rig to run casing																									
						9.15-9.45 Cement and displaced plug																									

OPERATOR SHELL CANADA LIMITED	LOCATION Lat. 60° 14' 45.26" N Long 116° 01' 32.24" W	SEC. 45.26	TWP. 116	RGE. 01	W. 32.24	WELL NAME B. Summerville 2-05	No. L-5	PROVINCE N.E.T.					
CONTRACTOR SEDCO	RIG No.	DRILL PIPE STRING NO. <u>5</u>	TOOL JOINT	OD	PUMPS		CASING & LINER RECORD	SIZE	WT. & GR.	DEPTH SET FROM TO	PERFORATIONS FROM TO	CEMENT USED	OTHER
OPERATOR'S REPRESENTATIVE <i>J. Henshall</i>	CONTRACTOR'S TOOL PUSHER <i>R. Keckly</i>	TYPE THD.		NO. MANUFACTURER TYPE STROKE LENGTH		1.							
				2.									
				3.									

TIME DISTRIBUTION—HOURS			NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	MUD RECORD		
DRILLING ACTUAL	MORN	DAY	EVE	STANDS DP	FT.	RUN NO.													TIME	
REAMING	7:30			SNGLS. DP	FT.	SIZE							120	10		5			WEIGHT	
CIRCULATING				D.C. ID		MFG.													VISC	
TRIPS		1/2		D.C. OD	FT.	TYPE													W.L.-C.C.	
DEVIATION SURVEY				RMR BODY OD	FT.	NO. NO.													FLTR. CK.	
TEST B.C.P.				STB BODY OD	FT.	NO. SIZE													PH	
CUT OFF DRILL LINE				SUBS OD	FT.	SER. NO.													SD. CONT.	
REPAIR RIG				BIT OR C.B.	FT.	DEPTH OUT														
CORING					FT.	CUMULATIVE HOURS RUN														
WIRE LINE LOGGING				KELLY DOWN	FT.	COND. OF BIT														
OTHER	1/4		1/4	TOTAL	104	FT. REAMER CUTTER NO.														
FISHING				WT. OF STRING	LBS.	TYPE														
COMPLETING (A) PERFORATING				DRILLER																
(B) RUNNING TUBING				<i>C. L. Paguette</i>																
(C) SWABBING																				
(D) TESTING																				
(E) ACIDIZING																				
(F) ADDITIONAL																				
TOTALS																				
TIME SUMMARY (OFFICE USE ONLY)																				
CONTRACTOR'S TIME HRS: 24																				
OPERATOR'S TIME:																				
HRS. W/D.P.:																				
HRS. WO/D.P.:																				
HRS. STANDEY																				

TIME DISTRIBUTION—HOURS			NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	MUD RECORD		
DRILLING ACTUAL	MORN	DAY	EVE	STANDS DP	FT.	RUN NO.													TIME	
REAMING				SNGLS. DP	FT.	SIZE													WEIGHT	
CIRCULATING				D.C. ID		MFG.													VISC	
TRIPS				D.C. OD	FT.	TYPE													W.L.-C.C.	
DEVIATION SURVEY				RMR BODY OD	FT.	NO. NO.													FLTR. CK.	
TEST B.C.P.				STB BODY OD	FT.	NO. SIZE													PH	
CUT OFF DRILL LINE				SUBS OD	FT.	SER. NO.													SD. CONT.	
REPAIR RIG				BIT OR C.B.	FT.	DEPTH OUT														
CORING					FT.	CUMULATIVE HOURS RUN														
WIRE LINE LOGGING				KELLY DOWN	FT.	COND. OF BIT														
OTHER				TOTAL		FT. REAMER CUTTER NO.														
FISHING				WT. OF STRING	LBS.	TYPE														
COMPLETING (A) PERFORATING				DRILLER																
(B) RUNNING TUBING				<i>Jim Ross</i>																
(C) SWABBING																				
(D) TESTING																				
(E) ACIDIZING																				
(F) ADDITIONAL																				
TOTALS																				
TIME SUMMARY (OFFICE USE ONLY)																				
CONTRACTOR'S TIME HRS: 24																				
OPERATOR'S TIME:																				
HRS. W/D.P.:																				
HRS. WO/D.P.:																				
HRS. STANDEY																				

TIME DISTRIBUTION—HOURS			NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	MUD RECORD		
DRILLING ACTUAL	MORN	DAY	EVE	STANDS DP	FT.	RUN NO.													TIME	
REAMING				SNGLS. DP	FT.	SIZE													WEIGHT	
CIRCULATING				D.C. ID		MFG.													VISC	
TRIPS				D.C. OD	FT.	TYPE													W.L.-C.C.	
DEVIATION SURVEY				RMR BODY OD	FT.	NO. NO.													FLTR. CK.	
TEST B.C.P.				STB BODY OD	FT.	NO. SIZE													PH	
CUT OFF DRILL LINE				SUBS OD	FT.	SER. NO.													SD. CONT.	
REPAIR RIG				BIT OR C.B.	FT.	DEPTH OUT														
CORING					FT.	CUMULATIVE HOURS RUN														
WIRE LINE LOGGING				KELLY DOWN	FT.	COND. OF BIT														
OTHER				TOTAL		FT. REAMER CUTTER NO.														
FISHING				WT. OF STRING	LBS.	TYPE														
COMPLETING (A) PERFORATING				DRILLER																
(B) RUNNING TUBING				<i>C. G. D. ...</i>																
(C) SWABBING																				
(D) TESTING																				
(E) ACIDIZING																				
(F) ADDITIONAL																				
TOTALS																				
TIME SUMMARY (OFFICE USE ONLY)																				
CONTRACTOR'S TIME HRS: 24																				
OPERATOR'S TIME:																				
HRS. W/D.P.:																				
HRS. WO/D.P.:																				
HRS. STANDEY																				

OPERATOR SHELL CANADA LIMITED		LOCATION Lat. 60° 14' 41.26" Long 116° 01' 32.29"		SEC. TWP. RGE. W. 14 41.26 116 01 32.29		WELL NAME Shell H.B. Drumbler L-5		No.		PROVINCE N.W.T.				
CONTRACTOR SEDLCO		RIG NO. 94	DRILL PIPE STRING NO. SIZE	TOOL JOINT	OD	PUMPS		CASING & LINER RECORD	SIZE	WT. & GR.	DEPTH SET FROM TO	PERFORATIONS FROM TO	CEMENT USED	OTHER
OPERATOR'S REPRESENTATIVE H. K. Marshall		CONTRACTOR'S TOOL PUSHER H. K. Marshall		TYPE THD.		MANUFACTURER		TYPE	STROKE LENGTH					

TIME DISTRIBUTION—HOURS			NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 2 LINER SIZE	METHOD PUMPS RUN	MUD RECORD	
DRILLING ACTUAL	MORN	DAY	EVE	STANDS DP	FT.	RUN NO.												TIME	
REAMING				SNGLS. DP	FT.	SIZE												WEIGHT	
CIRCULATING				D.C. ID		MFG.												VISC	
TRIPS				RMR BODY OD	FT.	NO.												W.L.-C.C.	
DEVIATION SURVEY				STB BODY OD	FT.	NOZ. SIZE												FLTR. CK.	
TEST B.O.P.				SUBS OD	FT.	SER. NO.												PH	
CUT OFF DRILL LINE				BIT OR C.B.	FT.	DEPTH OUT												SD. CONT.	
REPAIR RIGGER.					FT.	CUMULATIVE HOURS RUN												MUD & CHEMICALS ADDED	
CORING				KELLY DOWN	FT.	COND. OF BIT												TYPE	AMT.
WIRE LINE LOGGING				TOTAL	FT.	REAMER CUTTER NO.												TYPE	AMT.
OTHER				WT. OF STRING	LBS.	TYPE													
FISHING				DRILLER C. L. Pagneth															

TIME DISTRIBUTION—HOURS			NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 2 LINER SIZE	METHOD PUMPS RUN	MUD RECORD	
COMPLETING (A) PERFORATING				STANDS DP	FT.	RUN NO.												TIME	
(B) RUNNING TUBING				SNGLS. DP	FT.	SIZE												WEIGHT	
(C) SWABBING				D.C. ID		MFG.												VISC	
(D) TESTING				RMR BODY OD	FT.	NO.												W.L.-C.C.	
(E) ACIDIZING				STB BODY OD	FT.	NOZ. SIZE												FLTR. CK.	
(F) ADDITIONAL				SUBS OD	FT.	SER. NO.												PH	
TOTALS				BIT OR C.B.	FT.	DEPTH OUT												SD. CONT.	
TIME SUMMARY (OFFICE USE ONLY)			KELLY DOWN		FT.	COND. OF BIT												MUD & CHEMICALS ADDED	
CONTRACTOR'S TIME HRS. 24			TOTAL		FT.	REAMER CUTTER NO.												TYPE	AMT.
OPERATOR'S TIME:			WT. OF STRING		LBS.	TYPE												TYPE	AMT.
HRS. W/D.P.:			DRILLER P. Ross																
HRS. WO/D.P.:																			
HRS. STANDBY																			

TIME DISTRIBUTION—HOURS			NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 2 LINER SIZE	METHOD PUMPS RUN	MUD RECORD	
REEL NO				STANDS DP	FT.	RUN NO.												TIME	
NO OF LINES	SIZE			SNGLS. DP	FT.	SIZE												WEIGHT	
FEET SLIPPED				D.C. 270		MFG.												VISC	
FEET CUT OFF				RMR BODY OD	FT.	NO.												W.L.-C.C.	
PRESENT LENGTH				STB BODY OD	FT.	NOZ. SIZE												FLTR. CK.	
TON MI. OF TRIPS SINCE LAST CUT				SUBS OD	FT.	SER. NO.												PH	
CUMULATIVE TON MI. OF TRIPS				BIT OR C.B.	FT.	DEPTH OUT												SD. CONT.	
NO. OF DAYS FROM SPUD					FT.	CUMULATIVE HOURS RUN												MUD & CHEMICALS ADDED	
CUMULATIVE ROTATING HRS.				KELLY DOWN	FT.	COND. OF BIT												TYPE	AMT.
				TOTAL	FT.	REAMER CUTTER NO.												TYPE	AMT.
				WT. OF STRING	LBS.	TYPE													
				DRILLER C. G. Deegen															

DATE Feb 28/69

C.P.—38 (10/69) DAILY DRILLING REPORT REPORT NO. DATE Feb 28/69

OPERATOR SHELL CANADA LIMITED LOCATION LSD. SEC. TWP. RGE. W. WELL NAME SHELL HB GRUMBLER No. L-5 PROVINCE NWT.

CONTRACTOR SEDCO RIG No. 94 DRILL PIPE STRING NO. SIZE TOOL JOINT OD PUMPS MANUFACTURER TYPE STROKE LENGTH CASING & LINER RECORD SIZE WT. & GR. DEPTH SET FROM TO PERFORATIONS FROM TO CEMENT USED OTHER

OPERATOR'S REPRESENTATIVE BWMiller CONTRACTOR'S TOOL PUSHER R. K. Kelly

TIME DISTRIBUTION—HOURS MORNING DAY EVE

DRILLING ACTUAL REAMING CIRCULATING TRIPS DEVIATION SURVEY TEST B.O.P. CUT OFF DRILL LINE REPAIR RIG CORING WIRE LINE LOGGING OTHER FISHING COMPLETING (A) PERFORMING (B) RUNNING TUBING (C) SWABBING (D) TESTING (E) ACIDIZING (F) ADDITIONAL TOTALS

TIME SUMMARY (OFFICE USE ONLY) CONTRACTOR'S TIME HRS. OPERATOR'S TIME: HRS. W/D.P. HRS. WO/D.P. HRS. STANDBY WIRE LINE RECORD REEL NO NO OF LINES SIZE FEET SLIPPED FEET CUT OFF PRESENT LENGTH TON MI. OF TRIPS SINCE LAST CUT CUMULATIVE TON MI. OF TRIPS NO. OF DAYS FROM SPUD CUMULATIVE ROTATING HRS.

MORNING TOUR DAY TOUR EVENING TOUR

NO. DRILLING ASSEMBLY BIT RECORD HRS. DRLD. CORE NO. FROM TO FORMATION (SHOW CORE RECOVERY) ROTA- RY R.P.M. WT.ON BIT 1000# PUMP PRESS. PUMP NO. 1 PUMP NO. 2 METHOD PUMPS RUN MUD RECORD TIME WEIGHT VISC. W.L.C.C. FLTR. CM. PH SD. CONT. MUD & CHEMICALS ADDED TYPE AMT. TYPE AMT.

STANDS DP FT. RUN NO. SNGLS. DP FT. SIZE D.C. ID MFG. OD FT. TYPE RMR BODY OD FT. NO. NOZ. SIZE DEVIATION RECORD: DEPTH DEV. DIRECTION DEPTH DEV. DIRECTION DEPTH DEV. DIRECTION DEPTH DEV. DIRECTION

12:00 12:15 RIG SER. 12:15 1:45 RIG TO SPUD & BREAK SUBS. 1:45 4:00 DRILL

SPUDDED @ 1:45 A.M.

8:00 3:00 DRILL 3:00 4:00 RIGUP POWER SWIVEL TO DRILL RAT HOLE

4:00 12:00 Drill Rat Hole w/ Power Swivel.

FEB '27

OPERATOR		SHELL CANADA LIMITED		LOCATION		LSD.	SEC.	TWP.	RGE.	W.	WELL NAME		SHELL HB CRUMBLER		No.		L-5		PROVINCE		NNT.				
CONTRACTOR		RIG No.		DRILL PIPE STRING NO. SIZE		TOOL JOINT		OD		PUMPS		CASING & LINER RECORD		SIZE		WT. & GR.		DEPTH SET FROM TO		PERFORATIONS FROM TO		CEMENT USED		OTHER	
SEDCO										MANUFACTURER		TYPE		STROKE LENGTH											
OPERATOR'S REPRESENTATIVE		CONTRACTOR'S TOOL PUSHER								1. NAT.		C150B		12.											
R. Miller.		R. Kelly.																							
TIME DISTRIBUTION—HOURS		MORN		DAY		EVE																			
DRILLING ACTUAL																									
REAMING																									
CIRCULATING																									
TRIPS																									
DEVIATION SURVEY																									
TEST B.O.P																									
CUT OFF DRILL LINE																									
REPAIR RIG																									
CORING																									
WIRE LINE LOGGING																									
OTHER																									
FISHING																									
COMPLETING (A) PERFORATING																									
(B) RUNNING TUBING																									
(C) SWABBING																									
(D) TESTING																									
(E) ACIDIZING																									
(F) ADDITIONAL																									
TOTALS																									
TIME SUMMARY (OFFICE USE ONLY)																									
CONTRACTOR'S TIME HRS:																									
OPERATOR'S TIME:																									
HRS. W/D.P:																									
HRS. WO/D.P:																									
HRS. STANDBY																									
WIRE LINE RECORD																									
REEL NO																									
NO OF LINES																									
SIZE																									
FEET SLIPPED																									
FEET CUT OFF																									
PRESENT LENGTH																									
TON MI. OF TRIPS																									
SINCE LAST CUT																									
CUMULATIVE																									
TON MI. OF TRIPS																									
NO. OF DAYS FROM SPUD																									
CUMULATIVE ROTATING HRS.																									