

Shell Practice
Red West
2-55-

WELL NAME Shell Arctic Red West #55
 FIELD Area:
 LOCATION: Unit ± G Section 55 Grid 66-50-133-00
 Latitude 66-44-35.317 28.139 Longitude 133-09-52.117 58-203
 U.W.L.R. 667311 --- 133-1656 06.7415 --- 133-1667
 U.W.I. 3007556650133000

Rig Release Date:
 Status:
 Information Release Date:

CHANGE OF NAME:

DATE RECEIVED	INDEX
21-1-71	Application for a Drilling Authority.
27-8-71	Well Completion Data.
	Well History Report.
22-2-71	Application to Amend a Drilling Authority.
	Application to change a Well Name.
	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
	Well History Supplement.
	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	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.....



Drilling Authority No. 494
Date Issued Jan. 21, 1971

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

WELL COMPLETION DATA

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

Well name and number SHELL ARCTIC RED WEST G-55
Permit No. 6479 Lease No. NTR - 735
Shell Canada Ltd. & Shell Explorer Ltd. Exploratory Licence No. 108 & 116
(Permittee, Licensee, Lessee)
Shell Canada Ltd. Exploratory Licence No. 108
(Operator)

Location: Unit G Section 55 Grid 66°50'N, 133°00'W
Latitude 66°44'28.139" Longitude 133°09'58.203"
From Established Reference Marker Geodetic Station "Thunder"
Universal Well Location Reference Lat. 66.74115°N, Long. 133.16617°W

	DATE	DEPTH	Pool(s)	Interval(s) open to production
Spudded	Mar. 31/71	-		
Suspended				
Resumed Operations				
Finished Drilling	May 18/71	10,900	Driller	
Deepened		10,901'	Loggers	Elevation: Gr. 129.1 K.B. 146.35
Complete (gas/oil)			Rig No. 11	
Abandoned	May 22/71	10,900	Drilling Contractor Gustavson Drilling (1964) Ltd.	
Rig released	May 22/71	10,900	Contractor's Business Licence No. 0832	

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at -	Sacks of Cement and Additives
1. 20"		53#	52'	52'	85 Sxs Permafrost Cement
2. 9 5/8"	K-55	36#	38JTS.	1201'	267 Sxs Permafrost Cement +
3.					619 Sxs Construction cement
4.					886 Sxs total
5.					
6.					

* GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth	Sub-Sea	From	To	Rec.	From	To	Rec.
Imperial	Spud	+ 129	8706	8736	28			
Canol	3580	-3434						
Hume	3826	-3680						
Bear Rock	4166	-4020						
Dolorme	5746	-5600						
Mount Kindle	6735	-6589						
O-E Dolomite	8214	-8068						
E-PE	10778	-10632						
* All tops taken from logs.			LOG RECORD					
			Run No.	Type of Log		From	To	
			1	DILL		1200	10897	
			1	BHCS-GR-C		1200	10899	
			1	FDC-GR-C		1200	10900	
			1	SNP		3600	10900	
			1	MLC		3600	10898	
			1	SRS		1200	10899	

CEMENTING RECORD

CEMENTING RECORD (Plug, Squeeze, etc.)			SERVICING RECORD (Acidizing, Fracing, etc.)				
Date	From	To	Remarks	Date	From	To	Remarks
May 71	10700	10900	110 Sxs Cement + .04% HF4	May 71	4100	4230	90 Sxs Cement Felt at 4089'
May 71	8150	8280	110 Sxs Cement + .04% HF4	May 71	1140	1260	110 Sxs Cement Felt at 1048'
May 71	6670	6800	Felt at 8127'	May 71	Surface		10 Sxs Cement Permanent marker installed
May 71	5680	5810	90 Sxs Cement Felt at 6613'				
			90 Sxs Cement + 2% CaCl2 Felt at 5655'				

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	May 10/71	0-ε Dolomite	8671	8819	5/90	60	90	4077	4077	418	1441	4152	4127	Rec. 3270' fluid, including Field Readings. 550' water cushion.
1	May 20/71	Bear Rock	5420	5568	5/90	60	90	2555	2503	694	1618	2764	2712	2880' salt water.

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
D.S.T. #1	Core #1	8706	8736	0-ε Dolomite	Recovered 28'
147	Water	8671	8819	845' above tool	Routine salinity
148	Water	8671	8819	285' above tool	Complete analysis
149	Water	8671	8819	100' above tool	Routine salinity
D.S.T. #2	Water	5420	5568	757' above tool	Routine salinity
168	Water	5420	5568	292' above tool	Complete analysis
169	Water				

PRESENT STATUS OF WELL

Oil	(Interval)
Gas	(Interval)
Dry	Plugged & Abandoned
Susp.	

SHELL CANADA LIMITED

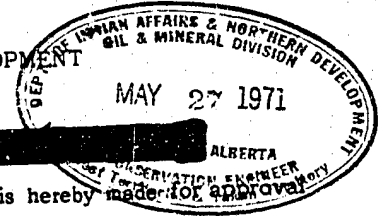
Company *
 Signed by: *[Signature]*
 Title: MANAGER, FRONTIER DIVISION PRODUCTION
 Date:

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



File No.
Drilling Authority No. 499

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION



Application to Abandon a Well

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

Name and number of well SHELL ARCTIC RED WEST G-55
Location: Unit 6 Section 55 Grid 66°50'N, 133°00'W
Latitude 66°44'23.139" Longitude 133°03'58.203"
From Established Reference Marker Geodetic Station "Thunder"
Universal Well Location Reference Lat. 66.74115°N, Long. 133.16617°W
Permit No. 6479 Lease No. NTR-735

SHELL CANADA LIMITED, S. SHELL EXPLORER LTD.

Date of commencement of proposed program.....
OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at.....
Gas at.....
Water at 6671-8819' (DST #1); 5420-5568' (DST #2)
Total Depth 10,909 K.B. Date of last operations May, 1971
Present condition of well Plugged and Abandoned

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 20"	53#	52'	52'	85 Sxs Permafrost Cement	
2.					
3. 9-5/8"	36#	38 Jts. 1201'		267 Sxs. Permafrost + 619 Sxs Construction Cement	
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	10700-10900	O-E / E - PE	110	20% Excess
2	8150 - 8280	Mount Kindle/O-E	110	20% Excess Feel
3	6670 - 6800	Delorme/Mount Kindle	90	20% Excess Feel
4	5680 - 5810	Bear Rock/Delorme	90	20% Excess Feel
5	4100 - 4230	Hume/Bear Rock	110	20% Excess Feel
6	1140 - 1260	Imperial	115	20% Excess Feel
7	Surface		10	Permanently marked Pipe

The following logs have been run DILL, BHCS - GR - C, FDC - GR - C, SNP, NLC, SRS
Other operations proposed.....

Operations to be carried out by GUSTAVSCH Contractor Licence No. 0832
Address 9825 - 60 Ave., Edmonton, Alta. Address Box 880, Calgary, Alta.
Responsible Agent in field D. Brown & R. Schaffrick
Dated at Calgary, Alta. this 26 Day of May 19 71
Signed by [Signature] Company SHELL CANADA LIMITED
Title Manager, Frontier Div. Prod. Operator's Exploratory Licence No. 108 & 119

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. A. G. Anderson
on the 22nd May 1971.

Dated May 27, 19 71 Oil Conservation Engineer [Signature]



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

Application to Amend a Drilling Authority

This application, in triplicate, must be submitted and approved before commencing operations. If the well location is changed, this application must be accompanied where required, with a plan of survey approved by the Surveyor General.

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made to amend Drilling Authority No. 494, concerning SHELL ARCTIC RED WEST G-55.

(Name and Number of Well)

The following amendments are required: ESTIMATED ELEVATION CHANGES:

FROM G.L. 150' To G.L. 129.1'
K.B. 165' K.B. 146.35'

TOTAL DEPTH CHANGE: FROM 8,000 to 11,500'

Reasons for the amendments:

FINAL SURVEY COMPLETED
INCREASED STRATIGRAPHIC CONTROL

Dated at CALGARY, this 6 day of APRIL, 1971

Signed by W. B. McCann for J.E. (321)

Title MANAGER, FRONTIER DIV. PROD.

Company SHELL CANADA LIMITED

(For Resource Management Division use only)

APPROVED

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

1. Run 1200 feet of 9 5/8-inch surface casing.
2. All other conditions of approval for Drilling Authority No. 494 apply.

Date April 20, 1971

Oil Conservation Engineer

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

WELL PROGNOSIS

TIGHT HOLE

EXPLORATION PROGRAM-WEST GLACIER BLOCK N.W.T., WINTER 1971

WELL: Shell Arctic Red West G-55

LOCATION: Lat. 66° 44' 28.139" N.
Long. 133° 09' 56.203" W.

ELEVATION: G.L. + 129 (Est.)
K.B. + 145 (Est.)

TOTAL DEPTH: 11,500'

A. Summary of Drilling Program

(Refer to Drilling Operations Program for details)

(i) Hole and Casing Program

- (a) Auger drill 24" conductor hole to 55'
- (b) Set 55' of 20" 53# conductor pipe
- (c) Install 12" casing Flange and 12" Series 900 Hydril
- (d) Drill 12 1/4" hole to 1200'
- (e) Set 9 5/8" 36# K-55 casing
- (f) Install 10" Series 900 casing bowl and 10" Series 900 BOP stack (Series 900 BOP Equipment restricts total depth to 12,000' under new drilling regulations).
- (g) Drill 8 3/4" hole to T.D.

(ii) Deviation:

- (a) Target area for all objective zones (see attachment)
- (b) Surveys must be taken at least every 500'

(iii) Mud Properties:

Ensure that mud properties are such that the following criteria are satisfied.

- (a) Mud is capable of forming good quality mud cake for definition of permeable zones.
- (b) Representative and good quality samples are obtained.
- (c) Hole conditions are maintained such that there is negligible fill to accommodate " behind the bit" evaluation procedures (i.e. coring, testing and logging)
- (d) Below 3000' maintain a maximum 8.0 cc water loss to eliminate excessive invasion which is detrimental to good reservoir evaluation by electric logs.
- (e) Report Salinity of mud system daily with morning report.

B.

Evaluation Program

(i)	<u>Formation Tops</u>	<u>Symbol</u>	<u>Lithology</u>	<u>Depth</u>
	Imperial	Dim	Shale, silt and sand	Probably spud in Imperial
	Carol	Dca	Chert and shale	3700'
	Hume	Dh	Limestone and shale	3900'
	Bear Rock	Dbr	Upper limestone-, and basal dolomite interval	4240'
	Delorme	D/S	Upper-, and basal shale sand member Middle dolomite member	5900'
	Mount Kindle	S-OK	Dolomite and chert	6850'
	Dolomite	O-E	Dolomite and Chert	8200'
	Cambro-Precambrian	E-PE	Undifferentiated	10900'
	T.D.			11500'

(ii) Samples:

- (a) One large (8" x 12") unwashed, Plastic Lined bag every 10' from surface to T.D.
- (b) One small (4" x 6") semi-washed, Non Lined bag every 10' from surface to T.D.
- (c) Two washed and dried plastic vial cuts every 10' from surface to T.D.
- (d) One semi-washed canned sample every 30' from surface to T.D. for the Geological Survey of Canada.

(iii) Cores:

- (a) Cut one 30' core whenever reservoir quality rock is encountered.
- (b) Be prepared to cut approximately 100' of core at unspecified intervals for paleontological and/or lithological purposes. Instructions will be obtained from Frontier Division Production General or Petro-physical Section.

(iv) Drill Stem Tests:

- (a) After encountering reservoir quality rock in any of the above objectives, a conventional off-bottom drill stem test may be run before drilling ahead. (Contact Frontier Division Office)
- (b) Additional tests will be carried out where warranted after reaching final total depth and logs have been run.

NOTE:

Lynes United will provide testing tools and personnel from their base at Kaps Transport's camp in Inuvik.

(v) Logs:

<u>Tool</u>	<u>Interval</u>	<u>Remarks</u>
DILL	T.D. to surface casing	2" and 5" scales
BHCS-GR-C (integrated)	T.D. to surface casing	2" and 5" scales 40-70-100 sensitivity
FDC-GR	T.D. to surface casing	2" and 5" scales
SNP	T.D. to surface casing	2" and 5" scales
MLC	T.D. to surface casing	2" and 5" scales

A seismic reference survey will be shot at T.D. after the above logs have been run.

- NOTE:
1. An intermediate logging run may be required approximately 30 days after spud.
 2. Obtain 5 field prints for each log and have them flown to Calgary as soon as possible.

W.B.C.
K.R.M.
HR

RECOMMENDED

W. B. Chapman 3/26/71

APPROVED

W. B. Chapman T.E.C.

RECOMMENDED

W. B. Chapman 3/26/71

DATE

March 26/71

RECOMMENDED

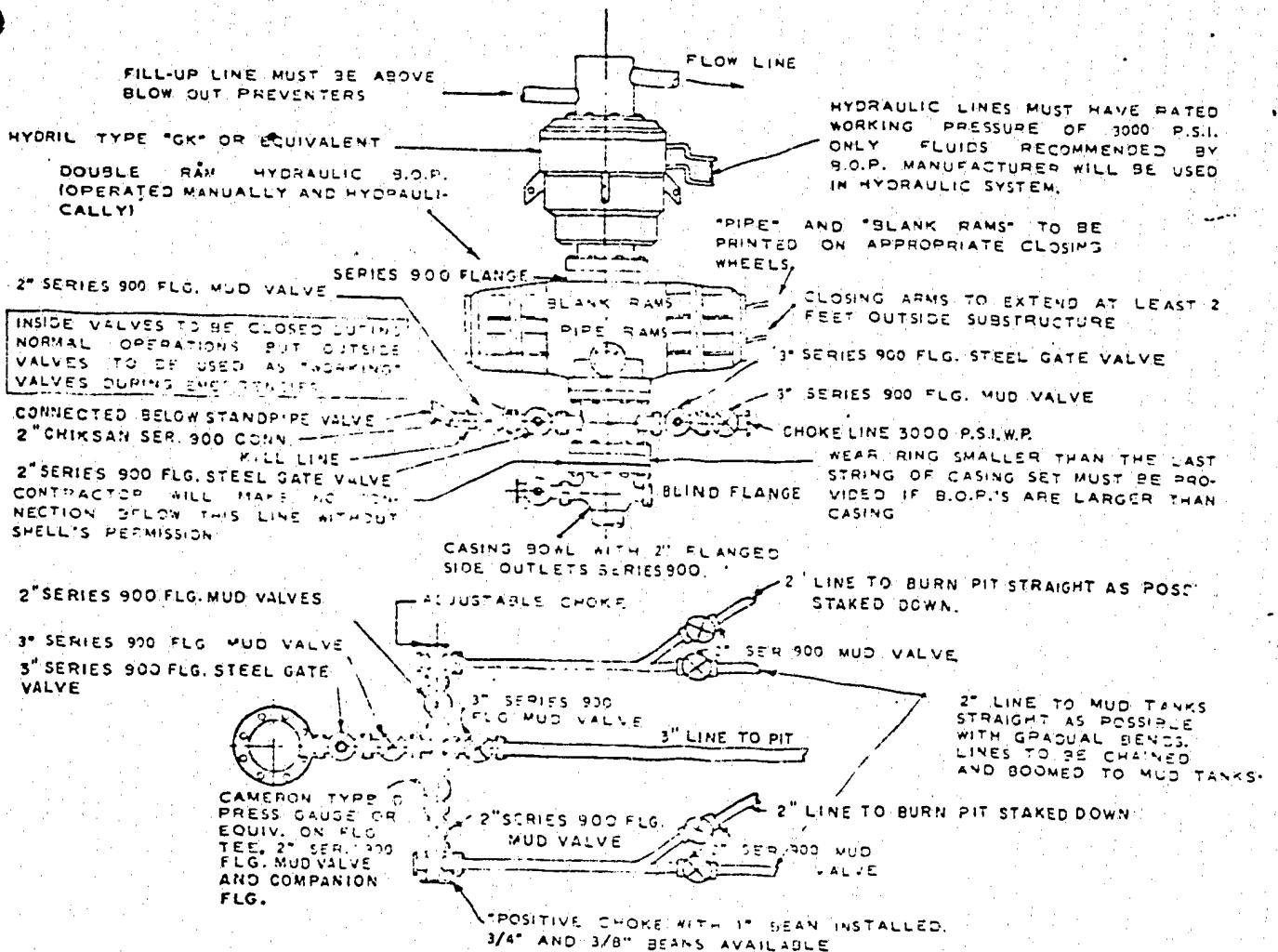
P. A. G. 3/26/71

APPROVED

W. B. Chapman 3/26/71

RECOMMENDED

DATE



THESE CHOKE DETAILS ARE INTENDED TO OUTLINE THE BASIC CHOKE MANIFOLD REQUIREMENTS, NOT THE EXACT MANNER OF HOOK-UP

NOTES:

1. KELLY COCK MUST BE USED - MIN. W.P. 3000 PSI.
2. SELF SEALING RING GASKETS MUST BE USED.
3. IF BOP HAS FLANGED SIDE OUTLET IT MUST BE EQUIPPED WITH A SERIES 900 STEEL GATE VALVE OR COMPANION BLIND FLANGE. BOP'S WITH SCREWED SIDE OUTLETS NOT ACCEPTABLE.
4. PRESSURE ACCUMULATOR UNIT AND TWO NITROGEN CYLINDERS FOR EMERGENCY TO BE LOCATED 100 FEET FROM WELL IN HEATED HOUSE. PRESSURE IN NITROGEN CYLINDERS SHALL BE MAINTAINED AT 1500 PSI OR MORE.
5. BOP CONTROLS MUST BE PROVIDED ON THE FLOOR AND AT THE ACCUMULATOR.
6. CHOKE MANIFOLD VALVES MUST BE EASILY ACCESSIBLE.
7. NO THREADED OR WELDED CONNECTIONS TO BE USED FROM DRILLING SPOOL OUT TO CHOKES.
8. A SINGLE CHOKE MANIFOLD IS ACCEPTABLE FOR COMPLETION BOP'S.
9. BOP'S AND ASSOCIATED EQUIPMENT MUST BE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURES PRIOR TO DRILLING OUT CASING. PRESSURE TEST ALL BLOWOUT CONTROL EQUIPMENT INCLUDING KELLY COCK WITH WATER TO 275% OF RATED BURST RESISTANCE OF CASING STRING 2400 PSI MAX. DAILY TESTS. CHECK CLOSING AND OPENING OF BOP'S WITH ACCUMULATOR AND WORK KELLY COCK. 15 DAY TESTS. PRESSURE TEST KELLY COCK FROM FLOW WITH WATER TO 2400 PSI.
 - CLOSE HYDRIL WITHOUT HIRE IN HOLE.
 - RETIGHTEN ALL FLANGES IN BOP STACK AND CHOKE MANIFOLD.
 SUBSEQUENT TESTS. APPROXIMATELY EVERY 45 DAYS, AND AS DIRECTED BY SHELL. PRESSURE TEST CASING AND ALL BLOWOUT EQUIPMENT WITH WATER TO 67 PER CENT OF RATED BURST RESISTANCE OF CASING STRING (MAX. 2400 PSI) FOR A MINIMUM OF 15 MINUTES USING A DEMCO TESTER OR OTHER PACKER ABOVE THE SHOE.

SHELL CANADA LIMITED CALGARY E. & P. PRODUCTION DEPT. MECHANICAL ENG. SECT.	
B.O.P. CLASSIFICATION NO.3 SERIES 900 DRILLING TO 15,000 FT. COMPLETION TO 12,000 FT.	
DESIGNED -	SCALE - N.T.C.
DRAWN	CHKD - [Signature] DATE -
APPR [Signature]	A-XX-D15-3642

ENCLOSURE # 2

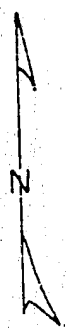
WEST GLACIER AREA

LOCATION = SHELL *Arctic Red West*

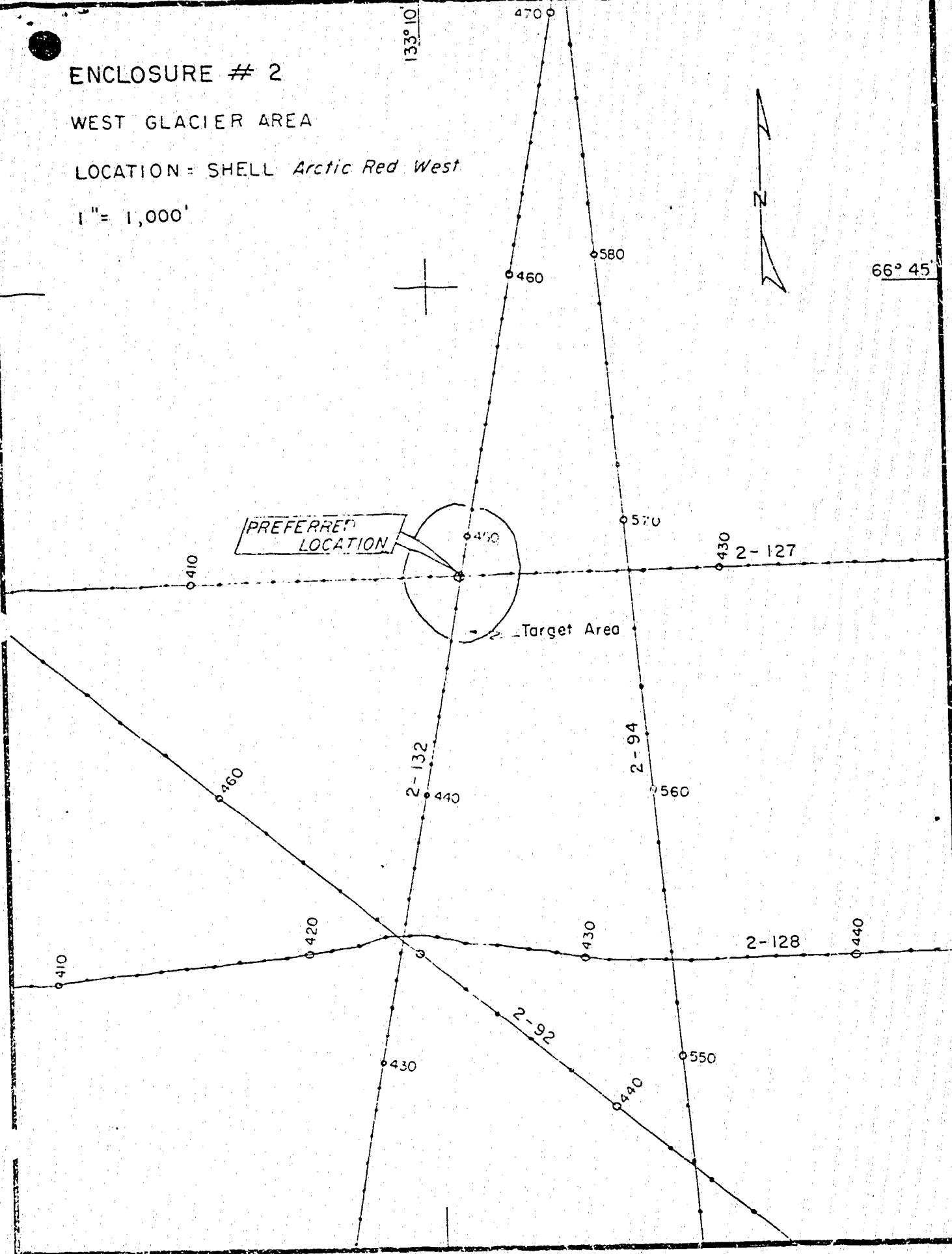
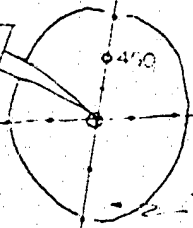
1" = 1,000'

133° 10'

66° 45'



PREFERRED LOCATION



POOR COPY

File No.
Drilling Authority No. 494



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

Application to Amend a Drilling Authority

This application, in triplicate, must be submitted and approved before commencing operations. If the well location is changed, this application must be accompanied where required, with a plan of survey approved by the Surveyor General.

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made to amend Drilling Authority No. 494 concerning Shell Arctic Red West J-55
(Name and Number of Well)

The following amendments are required:

Change of location from: Lat. 66°44'35.317" N
Long. 133°09'52.417" W
to: Lat. 66°44'28.139" N
Long. 133°09'58.283" W

Change of universal well location reference: From: Lat. 66.74314°N
Long. 133.16456°W to: Lat. 66.74115°N, Long. 133.16617°W

Reasons for the amendments:

Final survey for this well has been completed.

Dated at Edmonton, Alberta, this day of February, 1971.

Signed by P. S. Benn (P. S. Benn) for
Title Manager, Edmonton Division Production
Company Shell Canada Limited

(For Resource Management Division use only)

APPROVED

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

CHANGE OF UNIT: From Unit 'J' to Unit 'G'

CHANGE OF UNIQUE WELL IDENTIFIER: From 300J556650133000 to 300G556650133000

CHANGE OF WELL NUMBER: From J-55 to G-55.

Date 22nd February, 19 71

B. H. Shores
Oil Conservation Engineer

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

SHELL CANADA LIMITED

PLAN SHOWING SURVEY
OF

SHELL Arctic Red West G-55

IN

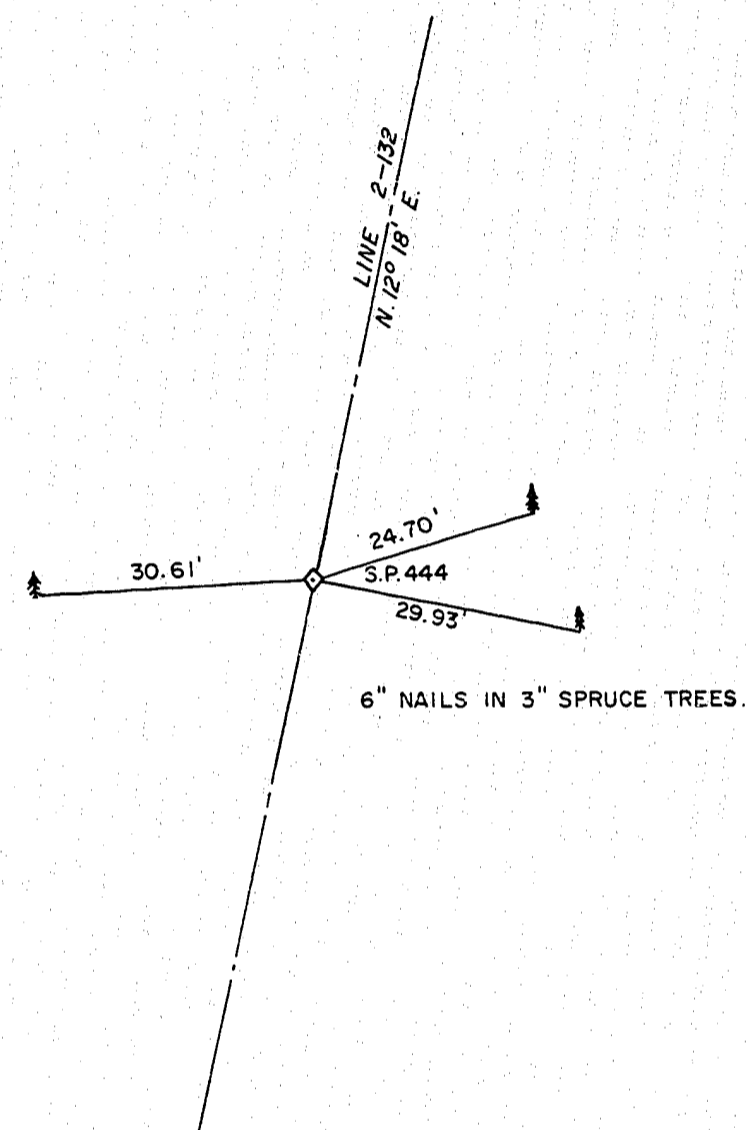
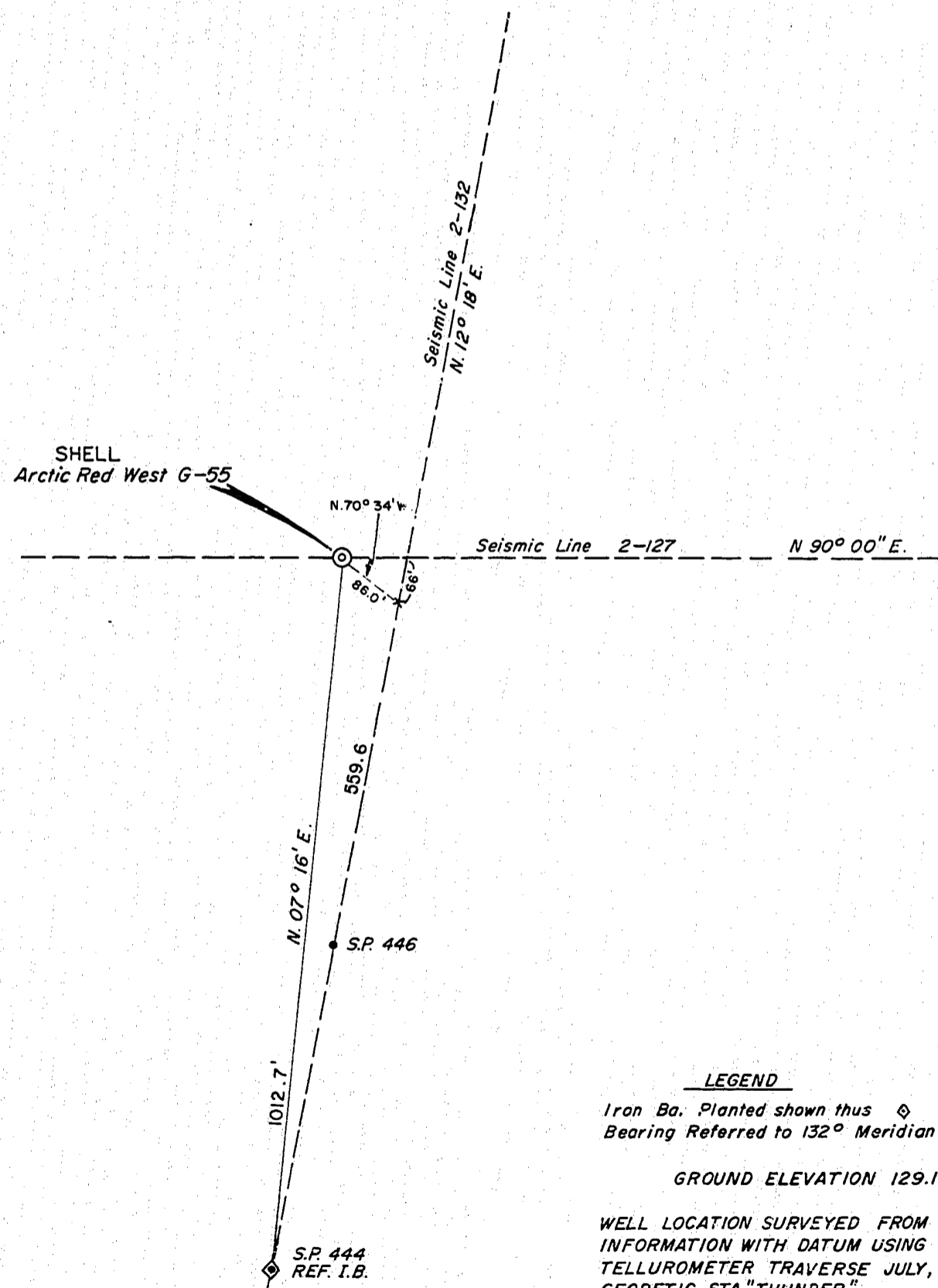
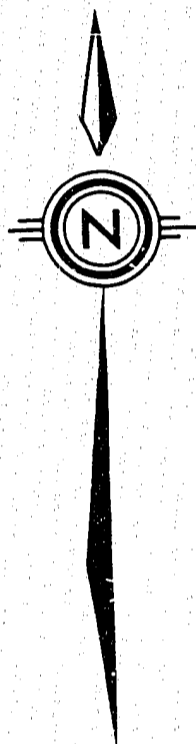
UNIT G SECTION 55 GRID AREA 66°50', 133°00'

LATITUDE 66° 44' 28.139" LONGITUDE 133°09' 58.203"

FEB. 1971.

Scale : 1" = 200'

REF. I.B. Scale: 1" = 20'



LEGEND

Iron Ba. Planted shown thus \diamond
Bearing Referred to 132° Meridian of Longitude.

GROUND ELEVATION 129.1'

WELL LOCATION SURVEYED FROM SEISMIC
INFORMATION WITH DATUM USING SHELL
TELLUROMETER TRAVERSE JULY, 1969 AND
GEODETIC STA. "THUNDER".

I certify that the survey represented by this plan
is correct and true to the best of my knowledge and
was completed on the 23rd day of January, 1971.

C. Little

A.L.S.

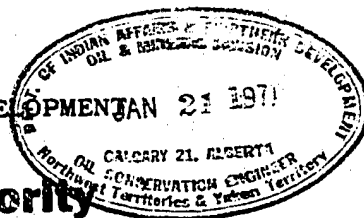
Drilling Authority No. 496

Project No.

File No.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION



Application for a Drilling Authority

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

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

Name and number of well **Shell Arctic Red West J-5S**
 Location: Unit **J** Section **55** Grid **(66°50'N. 133°00'W)**
 Latitude **66°44' 35.317"N.** Longitude **133°09' 52.417"W.**
 Unique Well Identifier **300155005013000**
 Universal Well Location Reference **Lat. 66.74314°N. Long. 133.16456°W.**
 Elevation: Ground **150° (Est.)** **K.B.** **165° (Est.)** feet above sea-level.
 Well is expected to produce from **Bear Rock** formation at a depth
 of about **5150'** feet. Expected total final depth **8,000**
 Area assigned to well.
(for Oil Conservation Engineer's use only)

Permit No. **6479** Lease No. Acreage **50,604**

Permittee, licensee, or lessee **Shell Canada Limited & Shell Explorer Ltd.**

Exploratory Licence No. **108** **116**

Surface owned by Crown or
(If allocated 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
20" Cond. Pipe	53			40'	Cement to Surface.
1. 9 5/8"	36	J-5S	NEW	900'	Cement to Surface (approx. 600 sacks)
2. ....	....	....	....	....	....
3. ....	....	....	....	....	....
4. ....	....	....	....	....	....
5. ....	....	....	....	....	....

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

10" Hydril, Double Ram (10") BOP's

Well will be drilled with Rotary Rig No. **11** by **Gustavson**
(Drilling Contractor or company)

Responsible agent of applicant:— Contractor's Business Licence No. **0832**

At well **D. Brown** At registered office **D.S. Fleming**
 Address **Box 186, Edmonton, Alta.** 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 **19**th day of **January** 19 **71**

Signed by **P. J. Benn** for Company **Shell Canada Limited**

Title **Manager, Edmonton Div. Prod.** Operator's Licence No. **108**

(For Oil and Mineral Division use only)

APPROVED

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

- Copies of this Drilling Authority shall be exhibited at the Drilling Rig in both the Doghouse and the Drilling Foreman's Office between spud and rig release dates.
- The Company will submit to this office, on Tuesday of each week, the latest reports
Please see over page

Dated **21st January** 19 **71** Oil Conservation Engineer

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

received by radio on the progress of the well.

3. During well drilling and testing operations, every effort shall be made to ensure 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.
4. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.
5. Additional strings of casing are to receive the approval of the Oil Conservation Engineer prior to running.


B.H.J. Thoms, Oil Conservation Engineer

WELL PROGNOSIS

TIGHT HOLE

EXPLORATION PROGRAM - WEST GLACIER BLOCK N.W.T., WINTER 1971

WELL: Shell Arctic Red West J-55

LOCATION: Lat. 66° 44' 35.317" N.
Long. 133° 09' 52.417" W.

ELEVATION: G.L. + 150 (Est.)
K.B. + 165 (Est.)

TOTAL DEPTH: 8,000'

A. Summary of Drilling Program

(Refer to Drilling Operations Program for details)

(i) Hole and Casing Program:

- (a) Auger drill 24" conductor hole to 40'
- (b) Set 40' of 20" 53# conductor pipe
- (c) Install 10" casing bowl and 10" Series 900 Hydril
- (d) Drill 8 3/4" hole to 900', ream to 13 3/4"
- (e) Set 9 5/8" 36# K-55 casing
- (f) Install 10" Series 900 casing bowl and 10" Series 900 BOP stack
- (g) Drill 8 3/4" hole to T.D.

(ii) Deviation:

- (a) Target area for all objective zones (see attachment)
- (b) Surveys must be taken at least every 250'



(iii) Mud Properties:

Ensure that mud properties are such that the following criteria are satisfied.

- (a) Mud is capable of forming good quality mud cake for definition of permeable zones.
- (b) Representative and good quality samples are obtained.
- (c) Hole conditions are maintained such that there is negligible fill to accommodate "behind the bit" evaluation procedures (i.e. coring, testing and logging)
- (d) Below 3000' maintain a maximum 8.0 cc water loss to eliminate excessive invasion which is detrimental to good reservoir evaluation by electric logs.

B.

Evaluation Program

(i)	<u>Formation Tops</u>	<u>Symbol</u>	<u>Lithology</u>	<u>Depth</u>
	Imperial	Dim	Shale, silt and sand	Probably spud in Imperial
	Canol	Dca	Chert and shale	3600'
	Hume	Dh	Limestone and shale	3900'
	Bear Rock	Dbr	Upper Limestone-, and basal dolomite interval	4240'
	Delorme	D/S	Upper-, and basal shale sand member	
			Middle dolomite member	5900'
	Mount Kindle	S-Ok	Dolomite and chert	6900'
	T.D.			8000'

(ii) Samples:

- (a) One large (3" x 12") unwashed, Plastic Lined bag every 10' from surface to T.D.
- (b) One small (4" x 6") semi-washed, Non Lined bag every 10' from surface to T.D.
- (c) Two washed and dried plastic vial cuts every 10' from surface to T.D.
- (d) One semi-washed canned sample every 30' from surface to T.D. for the Geological Survey of Canada.

(iii) Cores:

- (a) A 30' core will be cut whenever reservoir quality rock is encountered.
- (b) Be prepared to cut approximately 100' of core at unspecified intervals for paleontological and/or lithological purposes. Instructions will be obtained from General Section.

(iv) Drill Stem Tests:

- (a) After obtaining a core containing reservoir quality rock a conventional off-bottom drill stem test will be run before drilling ahead.
- (b) Additional tests will be carried out where warranted after reaching final total depth and logs have been run.

NOTE:

Lynes United will provide testing tools and personnel from their base at Kaps Transport's camp in Inuvik.

(v) Logs:

<u>Tool</u>	<u>Interval</u>	<u>Remarks</u>
DILL	T.D. to surface casing	2" and 5" scales
BHCS-GR-C (integrated)	T.D. to surface casing	2" and 5" scales 40-70-100 sensitivity
FDC-GR	T.D. to surface casing	2" and 5" scales
SNP	T.D. to surface casing	2" and 5" scales
MLC	T.D. to surface casing	2" and 5" scales

A seismic reference survey will be shot at T.D. after the above logs have been run.

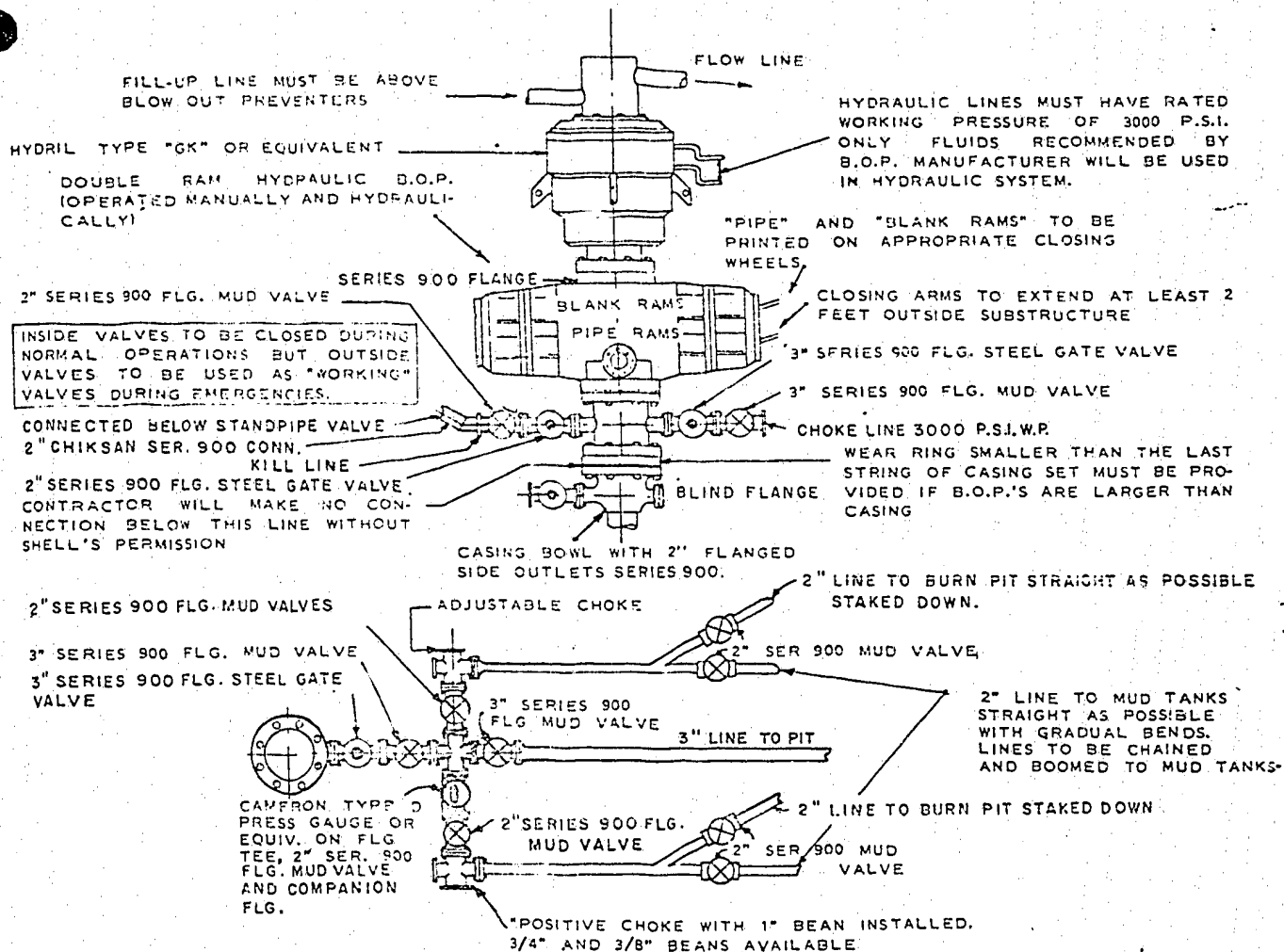
NOTE:

Obtain 6 field prints of each log and have them flown to Edmonton as soon as possible.

20
KRM
AC
1

RECOMMENDED B. J. Dill 19 Jan 71 APPROVED [Signature]
RECOMMENDED [Signature] Jan 19 1971 DATE Jan. 19 1971
RECOMMENDED [Signature] Jan 19 1971 APPROVED A. S. Malanaka
RECOMMENDED F. D. Sady Jan. 19/71 DATE Jan. 19, 1971

SHELL ARCTIC
 WELL RED WEST J-55 DATE JAN. 19/71 CONTRACTOR GUSTAVSON



THESE CHOKE DETAILS ARE INTENDED TO OUTLINE THE BASIC CHOKE MANIFOLD REQUIREMENTS. NOT THE EXACT MANNER OF HOOK-UP

NOTES:

1. KELLY COCK MUST BE USED - MIN. W.P. 3000 PSI.
2. SELF SEALING RING GASKETS MUST BE USED.
3. IF BOP HAS FLANGED SIDE OUTLET, IT MUST BE EQUIPPED WITH A SERIES 900 STEEL GATE VALVE OR COMPANION BLIND FLANGE. BOP'S WITH SCREWED SIDE OUTLETS NOT ACCEPTABLE.
4. PRESSURE ACCUMULATOR UNIT AND TWO NITROGEN CYLINDERS FOR EMERGENCY TO BE LOCATED 100 FEET FROM WELL IN UNOCCUPIED HOUSE. PRESSURE IN NITROGEN CYLINDERS SHALL BE MAINTAINED AT 1500 PSI OR MORE.
5. BOP CONTROLS MUST BE PROVIDED ON THE FLOOR AND AT THE ACCUMULATOR.
6. CHOKE MANIFOLD VALVES MUST BE EASILY ACCESSIBLE.
7. NO THREADED OR NPT CONNECTIONS TO BE USED FROM DRILLING SPONGER TO CHOKES.
8. A SINGLE CHOKE MANIFOLD IS ACCEPTABLE FOR COMPLETION WORK.
9. BOP'S AND ASSOCIATED EQUIPMENT MUST BE TESTED IN ACCORDANCE WITH THE FOLLOWING PROCEDURES:
 - PRIOR TO DRILLING OUT CASING - PRESSURE TEST ALL BLOWOUT CONTROL EQUIPMENT (INCLUDING KELLY COCK) WITH WATER TO 77% OF RATED BURST RESISTANCE OF CASING STRING (2400 PSI MAX.).
 - DAILY TESTS - CHECK CLOSING AND OPENING OF BOP'S WITH ACCUMULATOR AND WORK KELLY COCK.
 - 15 DAY TESTS - PRESSURE TEST KELLY COCK FROM BELOW WITH WATER TO 2400 PSI.
 - CLOSE HYDRIL WITHOUT PIPE IN HOLE.
 - RETIGHTEN ALL FLANGES IN BOP STACK AND CHOKE MANIFOLD.
 - SUBSEQUENT TESTS - APPROXIMATELY EVERY 45 DAYS, AND AS DIRECTED BY SHELL, PRESSURE TEST CASING AND ALL BLOWOUT EQUIPMENT WITH WATER TO 67 PER CENT OF RATED BURST RESISTANCE OF CASING STRING (MAX. 2400 PSI) FOR A MINIMUM OF 15 MINUTES USING A DEMCO TESTER OR OTHER PACKER ABOVE THE SHOE.

SHELL CANADA LIMITED CALGARY E. & P. PRODUCTION DEPT-MECHANICAL ENG. SECTION		
B.O.P. CLASSIFICATION NO.3. SERIES 900 DRILLING TO 15,000 FT. COMPLETION TO 12,000 FT.		
DESIGNED -		SCALE - N.T.S.
DRAWN	CHKD. - <i>WBS</i>	DATE - 10/63
APPR <i>[Signature]</i>		A-XX-DI5-3642

ENCLOSURE # 2

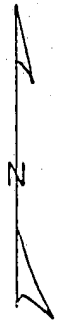
WEST GLACIER AREA

LOCATION: SHELL *Arctic Red West*

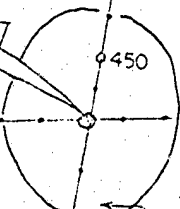
SCALE: 1" = 1,000'

131°10'

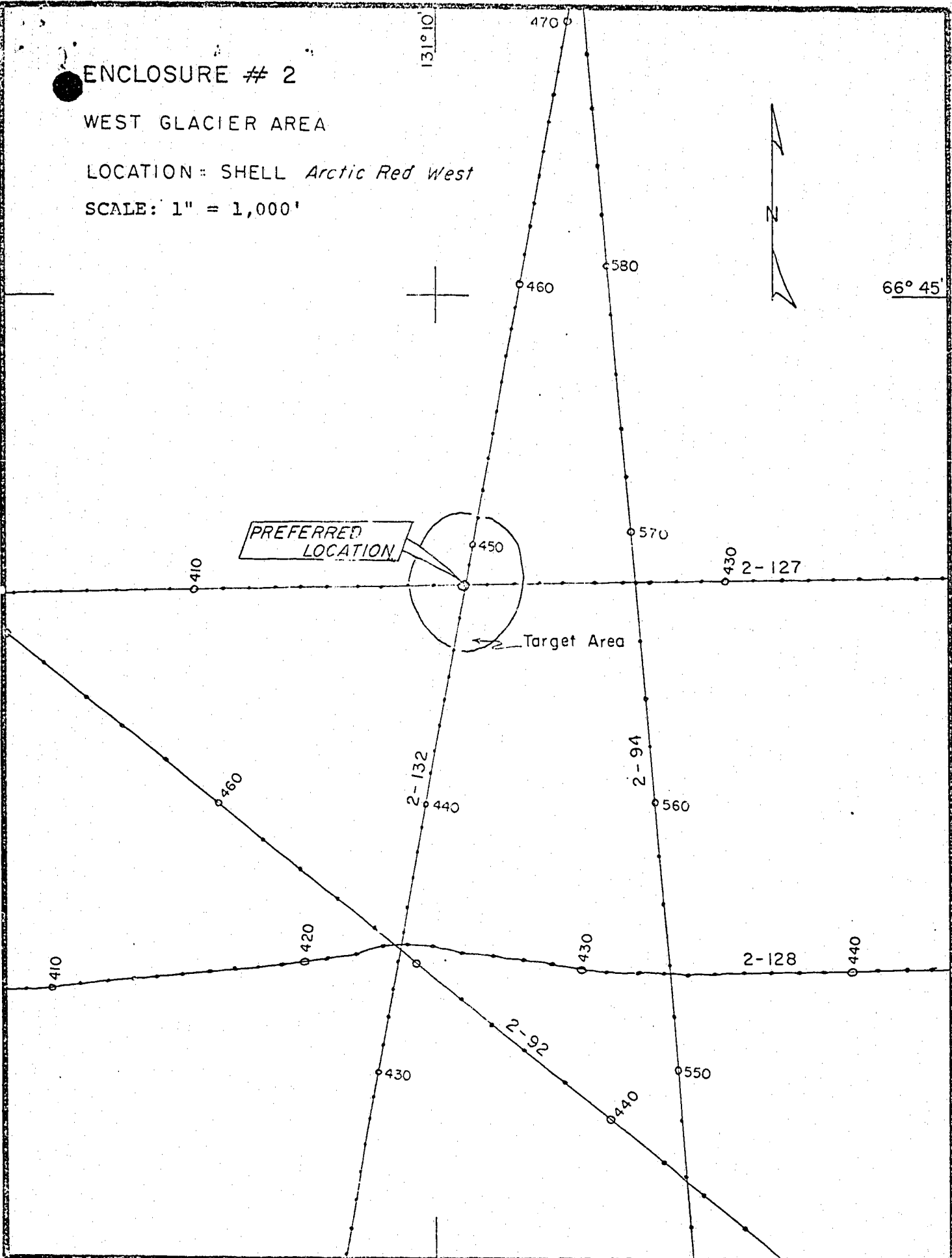
66° 45'



PREFERRED LOCATION



Target Area





File No.
Drilling Authority No. ... 194

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

WELL-SITE INSPECTION REPORT

FROM: Field Office or Area: INUVIK Date: 10th July 1971

TO: The Oil Conservation Engineer:

RE: SHELL ARCTIC RED WEST G-55 66-50-137-00

Location: 66.74115°N., 133.16617°W. Status: D&A 1971

This location was inspected by the undersigned on 10th July 1971

The location is in satisfactory/unsatisfactory condition. TD 10,900'

The following items require attention:

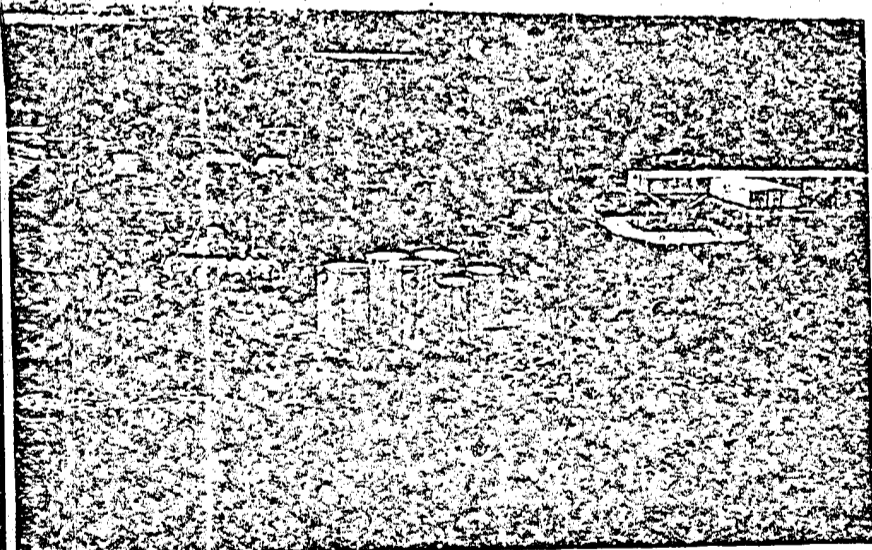
1. Remove timbers from around cellar and backfill.
2. Identifier plate must be minimum of 4' above ground level.
3. Backfill sump
4. Bury all steel drums, scrap iron, plastic sheeting and other junk.
5. Use welded bead for identifier not paint.
6. Paint identifier pipe and plate fluorescent orange.

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

No cleanup done

Rig and equipment still on lease.

Cat on lease.



Inspected by *M. D. Thomas*

M. D. Thomas
District 2

WELL HISTORY REPORT
SHELL ARCTIC RED WEST G-55



SHELL CANADA LIMITED

WELL HISTORY REPORT

SHELL ARCTIC RED WEST G-55

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SECTION I - SUMMARY OF WELL DATA(a) Well Name and Number

Shell Arctic Red West G-55

(b) PermitteeShell Canada Limited
P.O. Box 880
Calgary, Alberta
and
Shell Explorer Limited(c) Name Of OperatorShell Canada Limited
P.O. Box 880
Calgary, Alberta(d) LocationUnit G, Section 55, Grid 66°50'N, 133°00'W
Latitude: 66°44'28.139"N
Longitude: 133°09'58.203"W
Universal Well Location Reference:
Lat. 66.74115°N
Long. 133.16617°W
Unique Well Identifier: 300G556650133000(e) Permit Number

6479

(f) Drilling Contractor

Gustavson Drilling (1964) Ltd. Rig No. 11-Rotary

(g) Drilling Authority NumberDrilling Authority No. 494
Date Issued: Jan. 21, 1971(h) Classification

Wildcat

(i) ElevationGround Level: 129.1'
Kelly Bushing: 146.35'(j) Date Spudded

10:00 P.M. March 31, 1971

(k) Date Completed Drilling

1:15 A.M. May 18, 1971

(l) Total Depth

10,900' K.B. - Driller

10,901' K.B. - Logger

(m) Well Status

Dry & Abandoned

(n) Rig Released

12:00 (Midnight) May 22, 1971

(o) Hole Sizes

24" to 52' G.L.

12 1/4" to 1201' K.B.

8 3/4" to 10,900' K.B.

(p) Casing

20" 53# Conductor pipe run to 52' G.L.

Cemented with 85 sacks of permafrost cement.

9 5/8", New K-55, 36#

Surface casing landed at 1201' K.B.

Cement with 267 sacks of permafrost

cement and 619 sacks of construction cement.

SECTION II - GEOLOGICAL SUMMARYa) Formation Tops

<u>Formation</u>	<u>Sample Tops</u>	<u>Log Tops</u>
Imperial	Surface	Surface
Canol	3640	3580
Hume	3870	3826
Bear Rock	4260	4166
Delorme	5810	5746
Mount Kindle	6730	6735
O - E Dolomite	8200	8214
E - P E	10785	10778

b) Cored Intervals

Core #1: 8706'-8736' (O - E Dolomite Fm.) Rec. 28'

c) Core Description

Core #1: Dolomite, light to medium Grey, coarse grained, microfractures infilled with Calcite, good porosity.

Coring Times

<u>Depth</u>	<u>Min./Ft.</u>
8706	3
07	3
08	6
09	6
10	7
11	6
12	6
13	6
14	5
15	7
16	6
17	6
18	7
19	8
20	8
21	8
22	7
23	8
24	6
25	7

Coring Times ... con't.

<u>Depth</u>	<u>Min./Ft.</u>
8726	6
27	6
28	7
29	7
30	7
31	8
32	7
33	7
34	8
35	7
36	9

(d) <u>Sample Description</u>		
0 - 570	Shale - Siltstone	Interbeds of siliceous sandstone and traces of pyrite and glauconite.
570 - 780	Sandstone	Silty, argillaceous, siliceous to calcareous, unconsolidated to hard, pyritic. Minor shale and siltstone interbeds.
780 - 1620	Shale - Siltstone	Pyritic in part. Rare interbeds of silty sandstone.
1620 - 3570	Shale - Sandstone	Interbedded silty shale and siliceous to calcareous, silty sandstone.
3570 - 3870	Shale	Silty, pyritic, trace of black chert. Minor dolomite in basal 100 feet.
3870 - 4280	Shale - Limestone	Interbedded silty shale and argillaceous, microcrystalline to chalky limestone. Traces of pyrite and calcite.
4280 - 4980	Limestone	Medium to dark brown, microcrystalline, slightly argillaceous. Minor calcite interbeds of microcrystalline to sucrosic dolomite.
4980 - 5140	Limestone - Dolomite	Interbeds of limestone and dolomite as above. Traces of calcite and pyrite.
5140 - 5450	Limestone	Buff to black, microcrystalline, slightly argillaceous. Trace of calcite.
5350 - 5450	Limestone	Microcrystalline and microcrystalline to chalky, buff to black, slightly argillaceous.
5450 - 5820	Limestone	Buff to dark brown microcrystalline and buff microcrystalline to sucrosic. Clean to moderately argillaceous, pyritic in part.

5820 - 6050	Limestone - Dolomite	White to dark brown microcrystalline to sucrosic, and microcrystalline to chalky, slightly argillaceous limestone. Light grey microcrystalline dolomite. Trace of pale green shale.
6050 - 6850	Dolomite	Microcrystalline, clean to slightly argillaceous dolomite with thin limestone interbeds throughout last 500 feet of the interval. Trace of calcite over entire interval.
6850 - 7900	Dolomite	Light grey to black, microcrystalline, moderately argillaceous, very hard. Traces of calcite and chert with calcite content increasing toward basal portion of the interval.
7900 - 8250	Dolomite - Limestone	Microcrystalline dolomite with interbeds of microcrystalline to chalky limestone. Moderately argillaceous grading to clean in basal 100 feet. Traces of calcite and chert.
8250 - 10770	Dolomite	Microcrystalline, slightly argillaceous. Vuggy porosity throughout interval.
10770 - 10900	Shale - Siltstone	Pale green, grey, and brick red shales, brick red siltstone. Bands of pale green and clear to pink quartzite. Trace siliceous, brick red sandstone. Trace muscovite.

Total Depth = 10,900'

(e) Paleontological Determinations

Nil

SECTION III
ENGINEERING SUMMARY

NOMENCLATURE (Definition of Symbols)

Q	= average production rate during test, bbls./day
Q_g	= measured gas production rate during test, MCF/day
k	= permeability, md
h	= net pay thickness, ft. (when unknown, test interval is chosen)
μ	= fluid viscosity, centipoise
Z	= compressibility factor
T_r	= reservoir temperature, ° Rankine
m	= slope of final SIP buildup plot, psig/cycle (psig ² /cycle for gas)
b	= approximate radius of investigation, feet
r_w	= wellbore radius, feet
t_o	= total flowing time, minutes
P_o	= Extrapolated maximum reservoir pressure, psig
P_r	= final flowing pressure, psig
$P.I.$	= productivity index, bbls./day/psi
$P.I._t$	= theoretical productivity index with damage removed, bbl./day/psi
$D.R.$	= damage ratio
$E.D.R.$	= estimated damage ratio
AOF	= absolute open flow potential, MCF/D
AOF_t	= theoretical absolute open flow if damage were removed
Z	= subsea depth
W	= water gradient based on salinity
H_w	= potentiometric surface

In making any interpretation, our employees will give Customer the benefit of their best judgment as to the correct interpretation. Nevertheless, since all interpretations are opinions based on inferences from electrical, mechanical or other measurements, we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not be liable or responsible, except in the case of gross or wilful negligence on our part, for any loss, costs, damages or expenses incurred or sustained by Customer resulting from any interpretation made by any of our agents or employees.

DEFINITION OF SYMBOLS

Recorder Depth 8681 ft. Subsea depth ft. Ticket No. 2934 Hour Recorder No. 5811

$t_0 = 5$ Mins. Initial Shut-In Pressure				Second Flow Pressure		$t_0 = 95$ Mins. Final Shut-In Pressure			
Time, Min. ϕ	$\frac{t_0 + \phi}{\phi}$	PSIG	PSIG ² +10 ⁶ (Gas)	Time Defl. .000"	PSIG	Time, Min. ϕ	$\frac{t_0 + \phi}{\phi}$	PSIG	PSIG ² +10 ⁶ (Gas)
0	-----	642				0	-----	1464	
5	2.000	3611				9	1.556	3538	
10	1.500	3919				18	6.278	3838	
15	1.333	4003				27	4.518	3932	
20	1.250	4035				36	3.638	3977	
25	1.200	4051				45	3.111	4008	
30	1.167	4061				54	2.759	4025	
35	1.143	4068				63	2.508	4038	
40	1.125	4071				72	2.319	4045	
45	1.111	4073				81	2.172	4056	
50	1.100	4076				90	2.056	4058	
55	1.091	4078							
60	1.083	4081							

Recorder Depth ft. Subsea depth ft. Ticket No. Hour Recorder No.

$t_0 =$ Mins. Initial Shut-In Pressure				Second Flow Pressure		$t_0 =$ Mins. Final Shut-In Pressure			
Time, Min. ϕ	$\frac{t_0 + \phi}{\phi}$	PSIG	PSIG ² +10 ⁶ ϕ	Time Defl. .000"	PSIG	Time, Min. ϕ	$\frac{t_0 + \phi}{\phi}$	PSIG	PSIG ² +10 ⁶ (Gas)

Interval of Pressure Readings (Mins.) ISIP 5 2nd Flow Press. FSIP 9

Remarks: DST # 1

PRESSURE DATA

Rec. No. 5811

Depth 8681 ft.

P_o^2 (Gas) _____ psig²

P_o 4141 psig

m 265 psig/cycle

Initial SIP \square 4105 psig.

2nd SIP \triangle _____

Final SIP \circ 4141 psig.

$\frac{h_o + \phi}{\beta}$

40

30

20

10

9

8

6

5

4

3

2

1.5

1

3600

3700

3800

3900

4000

4100

4200

PSIG (OIL OR WATER)

PRESSURE EXTRAPOLATION PLOT

DST # 1



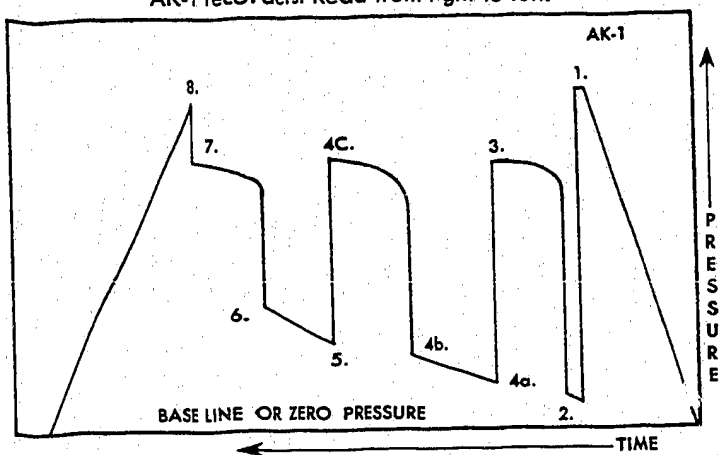
LYNES UNITED SERVICES LTD.

TEST DATA		Lynes Test		GENERAL INFORMATION		
Formation		T.D.		Company	Shell Canada Limited	
Interval Tested	8671	Ft. to	8819	Address	639 - Fifth Avenue S.W.,	
Ft. of Net Pay Tested	148				Calgary, Alberta	
Type of Test	Inflatable Straddle					
Cushion	water	Amount	550	Ft.	Well Name Shell Arctic: Red West G-55	
Started in Hole at	4:00	Hrs.	Tool Open at	8:49	Hrs.	Well Number 66° 44' 28.13 133° 09' 58.20
Pre-Flow	5	Mins.	Initial Shut-in	60	Mins.	K.B. Elevation 146.35 Sub-Sea Elevation
2nd Flow		Mins.	Second Shut-in		Mins.	Area West Glacier Province N.W.T.
Final Flow	90	Mins.	Final Shut-in	90	Mins.	Company Rep. F. Budda
Remarks:						
	Tester D. Bailie					
	Contractor Gustavson Rig No. 11					
	Ticket No. 2934 Date May 10/71					
Blow:	Service Reports To:					
	6 - above address					
	Prewell - fair blow.					
	Final flow - fair steady throughout the test.					
GAS BLOW MEASUREMENTS			MUD AND HOLE DATA			
Measured with			Mud Type Gel Chem			
			Weight 9.2 Viscosity 45 Water Loss 8.2			
			Filter Cake 2/32 Bottom Hole Temperature 158°			
Time	Surface Choke	Reading Inches	Cubic Feet/Day	Drill Pipe Size 4" FH	Weight	
				Drill Collars 6 3/4"	I.D. 2 7/8" Feet Run 277.0	
				Main Hole or Casing Size 8 3/4"		
				Rathole or Liner Size	No. of Feet	
				Bottom Hole Choke Size 1"		
				Surface Choke Size none		
				Packer Rubber Size 7 7/8" elements.		
				REMARKS	Shut-in pressures suggest relatively high permeability within the interval tested.	
RECOVERY						
TOTAL FLUID RECOVERED 3270 Ft. Consisting of:						
3270 Ft. of formation fluid including						
Ft. of water cushion. (550' w.c. used)						
Ft. of						
Ft. of						
Test was/was not Reverse Circulated						
Oil Recovery A.P.I. Water Specific Gravity						
Salinity						
PRESSURE READINGS						
	Inside _____ Outside _____ X	Inside _____ Outside _____ X	Inside _____ Outside _____ X	Inside _____ Outside _____ X		
	Recorder No. 5118	Recorder No. 5811	Recorder No. 6482	Recorder No. 5812		
	Capacity 6000	Capacity 6000	Capacity 70-2750	Capacity 8200		
	Depth 8681	Depth 8681	Depth 8681	Depth 8626		
NUMBER KEY:						
1 - INITIAL HYDROSTATIC	4190	4205		1492		
2 - PRE-FLOW	645	647	158°			
3 - INITIAL SHUT-IN	4102	4081				
4 - 2nd INITIAL FLOW						
4b - 2nd FINAL FLOW						
4c - 2nd SHUT-IN						
5 - 3rd INITIAL FLOW	473	462				
6 - FINAL FLOW	1470	1464				
7 - FINAL SHUT-IN	4070	4058				
8 - FINAL HYDROSTATIC	4190	4205				
					This recorder was run to check hydrostatic above tool	
					1492	

Shell Oil Canada Limited Company
 Shell Arctic Red West G-55 66° 44' 133° 09'
 Well Name and Description
 #1
 May 10/71
 Date of Test

**GUIDE TO INTERPRETATION AND IDENTIFICATION OF
LYNES DRILL STEM TEST PRESSURE CHARTS**

AK-1 recorders. Read from right to left.

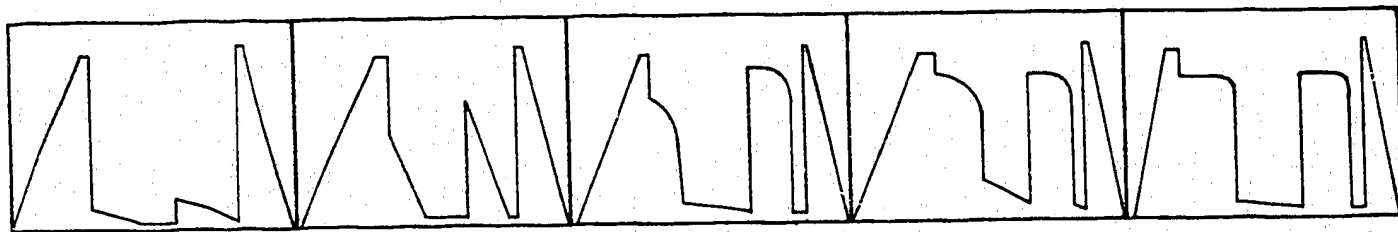


1. INITIAL HYDROSTATIC MUD PRESSURE
2. PRE-FLOW
3. INITIAL SHUT-IN
- 4a. 2nd INITIAL FLOW
- 4b. 2nd FINAL FLOW
- 4c. 2nd SHUT-IN
5. 3rd INITIAL FLOW
6. FINAL FLOW
7. FINAL SHUT-IN
8. FINAL HYDROSTATIC MUD PRESSURE

N.B. When only two shut-in and flow periods are run, 4a, 4b and 4c are omitted.

K-3 recorders. Read from left to right.

Typical charts for visual field analysis ranging from very low to high permeability.



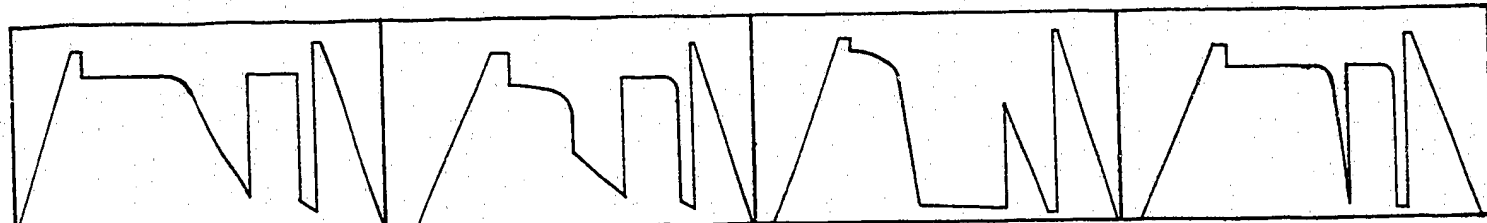
Very low permeability. Usually only mud recovered from interval tested. Virtually no permeability.

Slightly higher permeability. Again mud recovered. Usually.

Slightly higher permeability. Small recovery, less than 200' ft).

Average permeability. Final and initial shut-ins differ by 50 psi.

Average permeability. Strong damage effect. High shut-in pressure, low flow pressure.



Excellent permeability where final flow final shut-in pressure.

High permeability where ISIP and FSIP are within 10 psi.

Deep well bore invasion or damage. Final shut-in higher than the initial shut-in.

Tight hole chamber tester. Permeability very difficult to interpret unless the recovery is less than chamber length. Flow pressure builds up rapidly if recovery is large, similar to a shut-in.

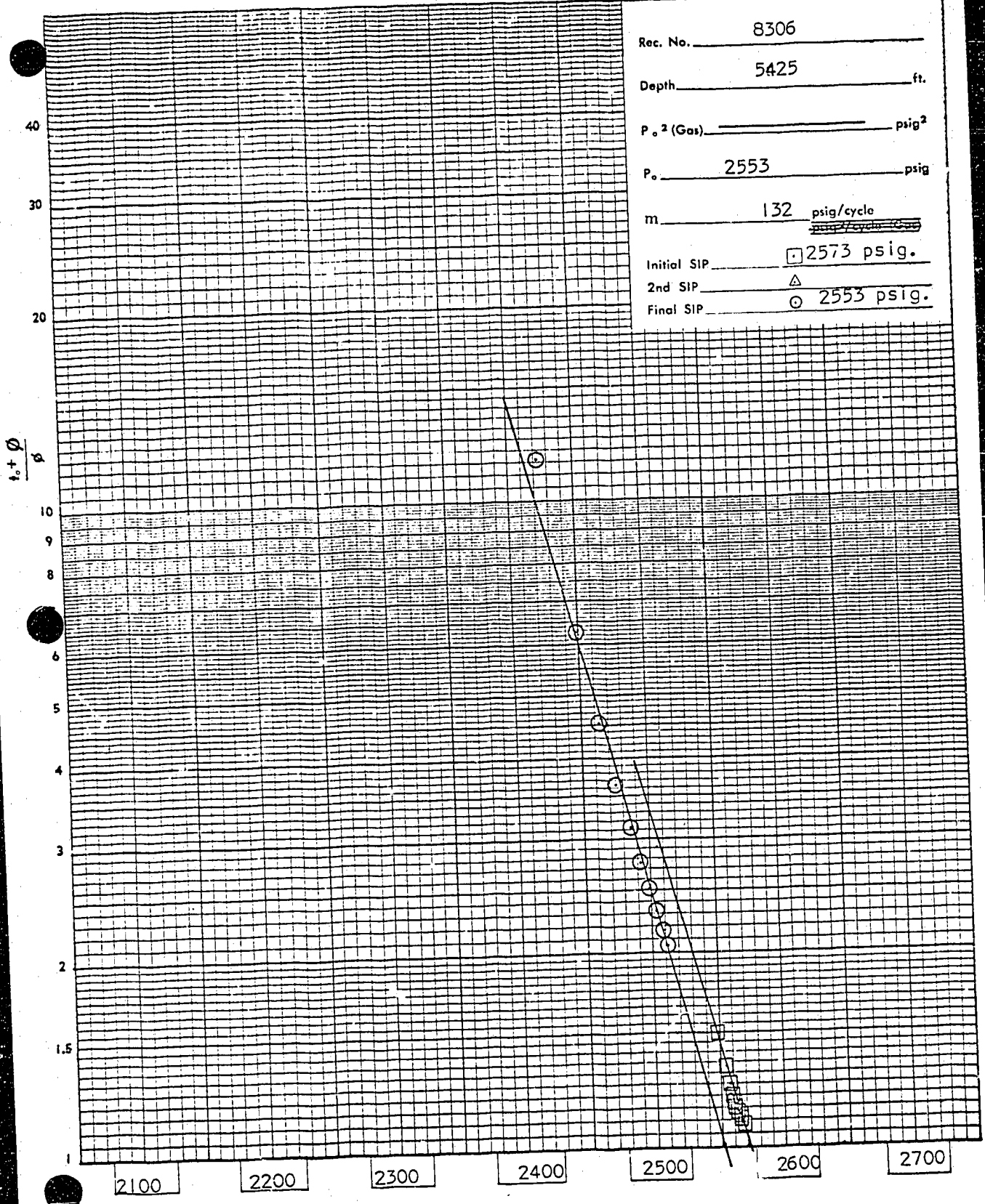
Shell Canada Ltd.
Shell Arctic Red West G-55 DST # 2
NOMENCLATURE (Definition of Symbols)

Q	= average production rate during test, bbls./day
Q_g	= measured gas production rate during test, MCF/day
k	= permeability, md
h	= net pay thickness, ft. (when unknown, test interval is chosen)
μ	= fluid viscosity, centipoise
Z	= compressibility factor
T_r	= reservoir temperature, ° Rankine
m	= slope of final SIP buildup plot, psig/cycle (psig ² /cycle for gas)
b	= approximate radius of investigation, feet
r_w	= wellbore radius, feet
t_o	= total flowing time, minutes
P_o	= Extrapolated maximum reservoir pressure, psig
P_f	= final flowing pressure, psig
$P.I.$	= productivity index, bbls./day/psi
$P.I._t$	= theoretical productivity index with damage removed, bbl./day/psi
$D.R.$	= damage ratio
$E.D.R.$	= estimated damage ratio
AOF	= absolute open flow potential, MCF/D
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DEFINITION OF SYMBOLS

Rec. No. 8306
 Depth 5425 ft.
 P_o² (Gas) _____ psig²
 P_o 2553 psig
 m 132 psig/cycle
 Initial SIP 2573 psig.
 2nd SIP Δ
 Final SIP ○ 2553 psig.



PSIG (OIL OR WATER) DST # 2
PRESSURE EXTRAPOLATION PLOT

LYNES UNITED SERVICES LTD.

TEST DATA		Test No. 2		Lynes Test 2		GENERAL INFORMATION	
Formation		Bear Rock		T.D. 10,900 Ft.		Company Shell Canada Ltd.	
Interval Tested		5420 Ft. to		5568 Ft.		Address 639 - Fifth Avenue S.W.	
of Net Pay Tested		148				Calgary, Alberta	
Type of Test		Inflatable Straddle					
Cushion		Amount		Ft.		Well Name Shell Arctic Red West	
Started in Hole at		11:45 Hrs.		Tool Open at 2:34 Hrs.		Well Number G-55	
Pre-Flow		5 Mins.		Initial Shut-in 60 Mins.		K.B. Elevation Sub-Sea Elevation	
2nd Flow				Second Shut-in		Area Glacier Province N.W.T.	
Final Flow		90 Mins.		Final Shut-in 90 Mins.		Company Rep. K. Dow	
Remarks:				Tester D. Bailie		Contractor Gustavson Riga No. 11	
				Ticket No. 2938		Date May 20/71	
Blow:		Prelow - fair to good.		Final flow - fair blow throughout the test.		Service Reports To: 6 - above address	
GAS BLOW MEASUREMENTS				MUD AND HOLE DATA			
Measured with				Mud Type Gel Chem			
No gas to surface.				Weight 9.3 Viscosity 50 Water Loss 8.6			
				Filter Cake 2/32" Bottom Hole Temperature 1520			
				Drill Pipe Size 4" Weight			
				Drill Collars 6 3/4" I.D. 2 7/8" Feet Run 279.84			
				Main Hole or Casing Size 8 3/4"			
				Rathole or Liner Size No. of Feet			
				Bottom Hole Choke Size 1"			
				Surface Choke Size adjustable			
				Packer Rubber Size 7 5/8 x Elements.			
				REMARKS			
				Shut-in pressures suggest high permeability within the interval tested.			
RECOVERY							
TOTAL FLUID RECOVERED 3080 Ft. Consisting of:				Recorder 8193			
200 Ft. of drilling mud				capacity 3000			
2880 Ft. of salt water.				depth 5380			
Test was/was not Reverse Circulated				1) 1472 psi - used to check			
Oil Recovery A.P.I. Water Specific Gravity				8) 1472 psi hydrostatic head above the tool.			
Salinity							
PRESSURE READINGS							
Inside _____ Outside _____		X Inside _____ Outside _____ X		Inside _____ Outside _____ X		Inside _____ Outside _____ X	
Recorder No. 8307		Recorder No. 8306		Recorder No. 6482		Recorder No. 8191	
Capacity 3100		Capacity 3100		Capacity 70 - 2750		Capacity 3000	
Depth 5425		Depth 5425		Depth 5425		Depth 5578	
NUMBER KEY:							
1 - INITIAL HYDROSTATIC		_____ 2744 _____		_____ 2734 _____		_____ 2827 _____	
2 - PRE-FLOW		_____ 605 _____		_____ 625 _____		_____ 1520 _____	
3 - INITIAL SHUT-IN		_____ 2542 _____		_____ 2568 _____		_____ below _____	
4 - 2nd INITIAL FLOW		_____ _____		_____ _____		_____ straddle _____	
4b - 2nd FINAL FLOW		_____ _____		_____ _____		_____ _____	
4c - 2nd SHUT-IN		_____ _____		_____ _____		_____ _____	
5 - 3rd INITIAL FLOW		_____ clock _____		_____ 680 _____		_____ _____	
6 - FINAL FLOW		_____ stopped _____		_____ 1616 _____		_____ _____	
7 - FINAL SHUT-IN		_____ _____		_____ 2512 _____		_____ _____	
8 - FINAL HYDROSTATIC		_____ 2744 _____		_____ 2764 _____		_____ 2827 _____	

Shell Canada Ltd. Company

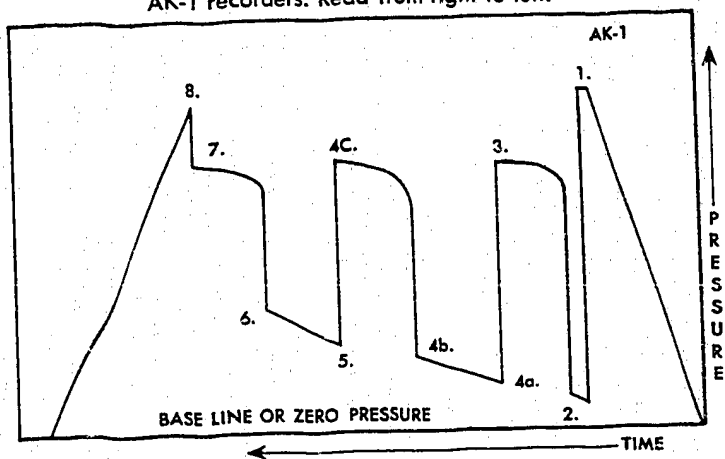
Shell Arctic Red West G-55 Well Name and Description

#2 Test No.

Date of Test May 20/71

GUIDE TO INTERPRETATION AND IDENTIFICATION OF LYNES DRILL STEM TEST PRESSURE CHARTS

AK-1 recorders. Read from right to left.

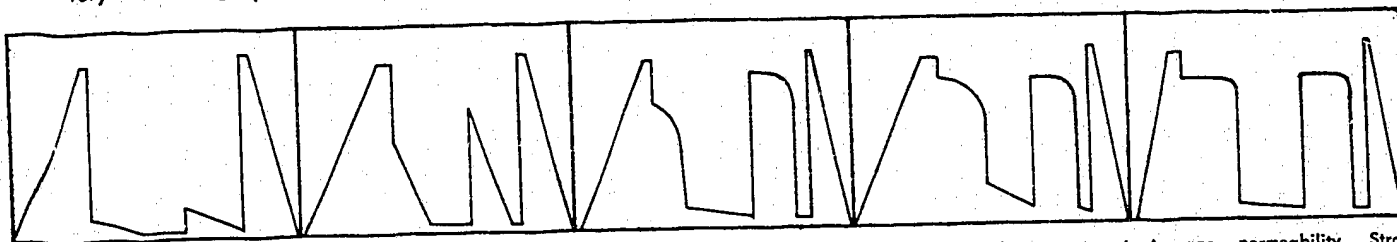


1. INITIAL HYDROSTATIC MUD PRESSURE
2. PRE-FLOW
3. INITIAL SHUT-IN
- 4a. 2nd INITIAL FLOW
- 4b. 2nd FINAL FLOW
- 4c. 2nd SHUT-IN
5. 3rd INITIAL FLOW
6. FINAL FLOW
7. FINAL SHUT-IN
8. FINAL HYDROSTATIC MUD PRESSURE

N.B. When only two shut-in and flow periods are run, 4a, 4b and 4c are omitted.

K-3 recorders. Read from left to right.

Typical charts for visual field analysis ranging from very low to high permeability.



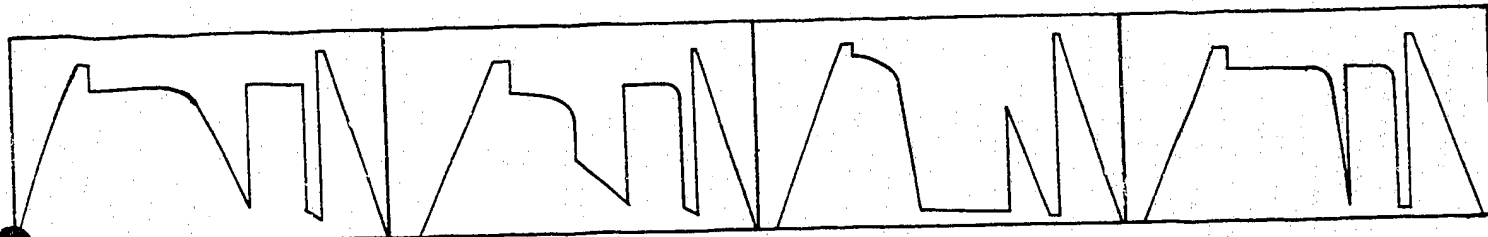
Very low permeability. Usually only mud recovered from interval tested. Virtually no permeability.

Slightly higher permeability. Again usually mud recovered.

Slightly higher permeability. Small recovery, less than 200' ft).

Average permeability. Final and initial shut-ins differ by 50 psi.

Average permeability. Strong damage effect. High shut-in pressure, low flow pressure.



Excellent permeability where final flow final shut-in pressure.

High permeability where ISIP and FSIP are within 10 psi.

Deep well bore invasion or damage. Final shut-in higher than the initial shut-in.

Tight hole chamber tester. Permeability very difficult to interpret unless the recovery is less than chamber length. Flow pressure builds up rapidly if recovery is large, similar to a shut-in.

SECTION IV - LOGS

<u>Type</u>	<u>Interval</u>	<u>Date</u>
DILL	1200-10897	May 18, 1971
BHCS-GR-C	1200-10899	May 18, 1971
FDC-GR-C	1200-10900	May 18, 1971
MLC	3600-10898	May 18, 1971
SNP	3600-10900	May 18, 1971
Seismic Reference Survey		

SECTION V - ANALYSIS

a) Core Analysis

See Appendix "A"

b) Water Analysis

See Appendix "B"

c) Gas Analysis

Nil

d) Oil Analysis

Nil

SECTION VI - COMPLETION SUMMARYa) Tubing Record

Nil

b) Perforation Record

Nil

c) Cementation

<u>Plug No.</u>	<u>Date</u>	<u>Plug Interval</u>	<u>Porous Interval</u>	<u>Sxs CMT</u>	<u>Depth Felt</u>
1		10700-10900	-	110	-
2		8150-8280	8214 - 10500	110	8127'
3		6670-6800	6750 - 6770 7705 - 7730	90	6613'
4		5680-5810	5830 - 6200	90	5655'
5		4100-4230	4850 - 5746	110	4089'
6		1140-1260	-	115	1048'
7		Surface	-	10	-

(Permanent riser and well identification installed)

d) Acidization And Fracturing

Nil

e) Back Pressure and Production

Nil

 J. E. Czaja

Manager

Frontier Division Production

APPENDIX "A"
Core Analysis

SHELL CANADA LIMITED - REDUCTION LABORATORY
CORE ANALYSIS REPORT

WELL Shell Arctic Red West G-55 KB 146 FIELD Wildcat CORED INTERVAL 8706.0-8736.0 RECOVERY 28' FORMATION Dolomite Zone

Lab. No. SMALL CORE SAMPLES 'S' Suffix	SECTION REPRESENTED		Ft.	Lithological Description	ORIENTATION	Porosity %	K _{max} md	K90 md	Kvert md	G.D. gm/cc	Oil Sat'n % P.V.	Water Sat'n % P.V.	Fluor Cuts	Remarks
	Interval	Rec. 28'												
Core #1	8706.0-8736.0	Rec. 28'												
E-1	8706.0-8706.5	0.5	DO, CL, I, III, F-M, B		4.1	0.3	0.3			2.821			N	
E-2	8706.5-8707.2	0.7	DO, AN, I/III, F-M, B,C		7.1	0.4 *	0.3			2.830			N	
E-3	8707.2-8707.8	0.6	DO, AN, I/III, F-M, B,D		2.6	0.6 *	0.3			2.809			N	
E-4	8707.8-8708.4	0.6	DO, AN, I/III, F-M, B,D		8.7	0.3	0.3			2.835			N	
E-5	8708.4-8708.9	0.5	DO, AN, I, F-M, B, D		9.4	6.0	1.5 *			2.858			N	
E-6	8708.9-8709.6	0.6	DO, AN, I, F-M, B, D		3.9	0.2	0.2			2.845			N	
E-7	8709.6-8710.4	0.8	DO, AN, I, F-M, B-D		7.6	0.3 *	0.2			2.851			N	
E-8	8710.4-8710.9	0.5	DO, AN, I, F-M, B-D		5.0	0.2	0.2			2.836			N	
E-9	8710.9-8711.3	0.4	DO, AN, I, F-M, B-D		9.1	0.4	0.4			2.845			N	
E-10	8711.3-8711.7	0.4	DO, AN, I, F-M, B-D		13.7	63.0 *	4.3			2.868			N	
E-11	8711.7-8712.5	0.8	DO, AN, I, F-M, B-D		10.5	5.4 *	0.5			2.845			N	
E-12	8712.5-8712.9	0.4	DO, AN, I, F-M, B-D		9.7	7.5 *	0.5			2.840			N	
E-13	8712.9-8713.6	0.7	DO, AN, I, F-M, B-D		2.9	1.4 *	0.2			2.838			N	
E-14	8713.6-8714.6	1.0	DO, AN, I, F-M, B-D		5.1	9.8 *	2.3			2.856			N	
E-15	8714.6-8715.5	0.9	DO, AN, I, F-M, B-D		11.6	3544.0 *	22.0			2.842			N	
E-16	8715.5-8716.0	0.5	DO, AN, I, F-M, B-D		7.3	35.2 *	34.1			2.845			N	
E-17	8716.0-8717.0	1.0	DO, AN, I, F-M, B-D		2.8	0.2 *	0.1			2.833			N	
E-18	8717.0-8717.4	0.4	DO, AN, I, F-M, B-D		3.8	0.3	0.3			2.845			N	
E-19	8717.4-8718.8	0.4	DO, AN, I, F-M, B		0.7	0.1	0.1			2.828			N	
E-20	8717.8-8718.4	0.6	DO, AN, I, F-M, B		0.6	0.1	0.2 *			2.823			N	
E-21	8718.4-8719.0	0.6	DO, AN, I, F-M, B		0.9	0.1	0.1			2.834			N	
E-22	8719.0-8719.6	0.6	DO, AN, I, F-M, B		2.0	0.3	0.3			2.820			N	
E-23	8719.6-8720.3	0.7	DO, AN, I, F-M, B		2.3	1.2	0.2			2.839			N	
E-24	8720.3-8720.7	0.4	DO, AN, I, F-M, B		1.8	1.2 *	0.9			2.866			N	
X-6697	8720.7-8720.9	0.2	DO, AN, I, F-M, B		2.2	1.1				2.799			N	
X-6698	8720.9-8721.1	0.2	DO, AN, I, F-M, B		2.0	2.0				2.847			N	
X-6699	8721.1-8721.5	0.4	DO, AN, I, F-M, B		2.5	1.1				2.840			N	
X-6700	8721.5-8722.1	0.6	DO, AN, I, F-M, B		1.4	1.0				2.813			N	
X-6701	8722.1-8722.3	0.2	DO, AN, I, F-M, B		1.8	1.1				2.835			N	
E-25	8722.3-8722.9	0.6	DO, AN, I, F-M, B-D		5.6	0.3 *	0.2			2.865			N	
E-26	8722.9-8723.5	0.6	DO, AN, I, F-M, B-D		5.9	0.6	0.6			2.845			N	

APPENDIX "B"
Water Analysis

SHELL CANADA LIMITED
 PRODUCTION LABORATORY ANALYSIS REPORT
 CALGARY, ALBERTA

Laboratory Number 147 & 149
WATER

Sample Received MAY 14, 1971
 Sample Analyzed MAY 17, 1971
 Results Reported MAY 17, 1971

Well SHELL ARCTIC RED WEST G-55 WEST GLACIER WILDCAT
 Lsd _____ Sec _____ Twp _____ Rge _____ W _____ Formation O - E DOLOMITE
 Well K.B. 146.35 G.L. 129.1 T.D. _____ P.B.T.D. _____ Perfs. or O.H. _____
 Method of production DST #1 8671 - 8819'
 DST Recovery USED & RECOVERED 550' WATER CUSHION; REC. 2720' SHI MUD CUT SALT WATER
 Sample obtained from SEE BELOW
 Sampled by F. BUDDA Date MAY 11, 1971 Time _____

LAB. No.	FIELD No.	SOURCE	SALINITY	
			mg Cl/l	mg Na Cl/l
147	6	845' ABOVE TOOL	93828	154816
149	8	100' " "	87126	143758

COMPLETE ANALYSIS SAMPLE '285' ABOVE TOOL, FIELD #7,
 [LAB. No. 148], TO FOLLOW.

File Code No. 15-1300
 Production Department, Calgary Area 1
 Division Office FRONT. PET. 5
 Production Laboratory, Calgary Area 2

B. H. SCOTT
 Analyst N. L. Johnson

SHELL OIL LIMITED
 PRODUCTION LABORATORY ANALYSIS REPORT
 CALGARY, ALBERTA

Laboratory Number 148
WATER

Sample Received MAY 14, 1971
 Sample Analyzed MAY 17, 1971
 Results Reported MAY 18, 1971

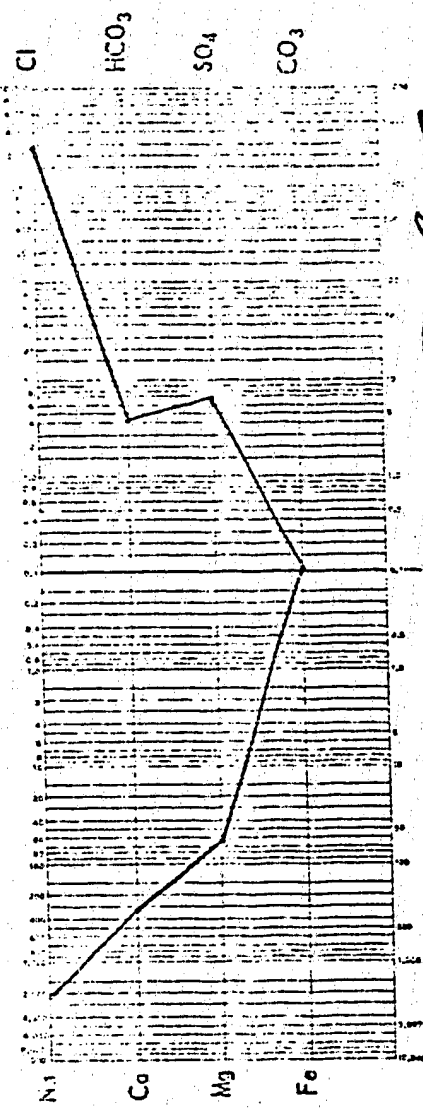
Well SHELL ARCTIC RED WEST G-55 WEST GLACIER WILDCAT
 Formation O-E DOLOMITE

Sec W Rep W Perf. or O.H. P.B.T.D.
 Typ # 8671-8819
 Method of production DST #1
 DST Recovery USED; RECOVERED 55% WATER CUSHION; REC. 2720' SUBMERCENT SALT WATER
 Sample obtained from 285' ABOVE TOOL L FIELD # 1 Date MAY 11, 1971 Time

Specific Gravity at 60°F 1.1130 pH 5.8 Resistivity 0.074 ohm-m at 60°F H₂S NONE Calculated Total Solids 1612.30 Mg/L

Mg./L	Calc. No. r K		Ca	Mg	Fe	CO ₂	HCO ₃	SO ₄	Cl
	55284	6306							
	780	MUCH				0	250	314	98296
MEQ/L	2403.77	314.67	64.15			0	4.10	6.54	2771.95
MEQ. %	43.20	5.65	1.15			0	0.07	0.12	49.81

Milliequivalents per Litre



Remarks:

File Code No. 15-1100
 Production Department, Calgary, 1
 Division Office FRONTIER 5
 Production Laboratory, Calgary Area 2

Chemist B.H. Scott
N.L. Johnson

SHELL CANADA LIMITED
 PRODUCTION LABORATORY ANALYSIS REPORT
 CALGARY, ALBERTA

Laboratory Number 168
WATER

Sample Received MAY 26 1971
 Sample Analyzed MAY 28 1971
 Results Reported MAY 28 1971

Well SHELL ARCTIC REO WEST G-55 WEST GLACIER WILDCAT
 Lsd Sec Twp Rge W Formation BEAR ROCK
 Well K.B. 146.35 G.L. 129.1' T.D. 10 900' P.B.T.D. SURFACE Perfs. or O.H. _____
 Method of production DST #2 5420-5568'
 DST Recovery 3081' SALT WATER
 Sample obtained from 757' ABOVE TOOL - FIELD #6
 Sampled by K. DOW Date MAY 20, 1971 Time _____

SALINITY 85,450 mg Cl/l [140,993 mg NaCl/l]

COMPLETE ANALYSIS SAMPLE #7, 292' ABOVE TOOL,
 [LAB. No. 169], TO FOLLOW.

File Code No. 15-1300
 Production Department, Calgary Area 1
 Division Office FRONT. PET. 5
 Production Laboratory, Calgary Area 2

Analyst N.L. Johnson

PRODUCTION LABORATORY ANALYSIS REPORT
CALGARY, ALBERTA

Laboratory Number 169
WATER

Sample Received MAY 26 1971
Sample Analyzed MAY 28 1971
Results Reported MAY 31 1971

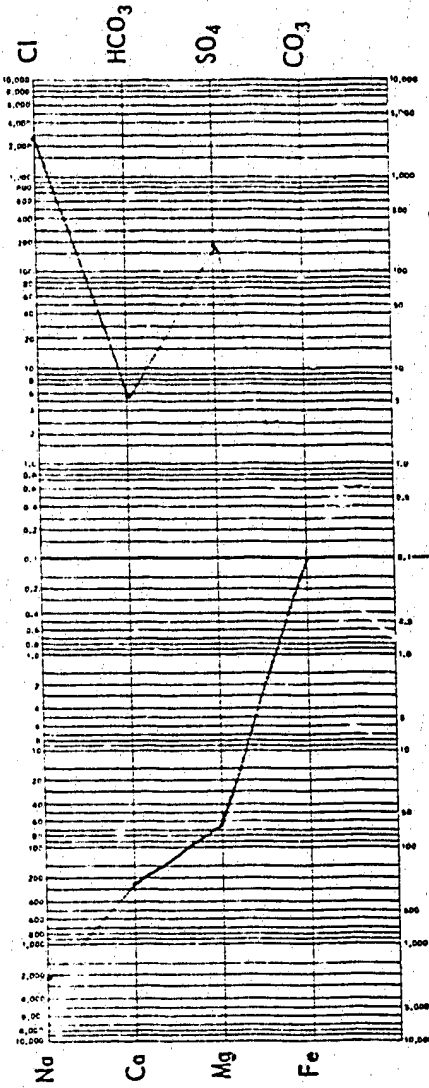
Well SHELL ARCTIC BEO WEST 0255 Formation WEST GRACIER WILCOAT
Lsd Sec Twp W Rge BERRA ROCK
Method of production DST #2 5420-5568'
DST Recovery 30.81% SALT WATER
Sample obtained from 292' ABOVE TOOL FIELD #1

Well K.B. 146-35' G.L. 129.1
T.D. 10900' P.B.T.D. SURFACE
Perfs. or O.H.
Sampled by K Dow
Date MAY 20 1971 Time

Specific Gravity at 60°F 1.1020 pH 6.1 Resistivity 0.287 ohm-m at 60°F H₂S NONE Calculated Total Solids 157563 Mg/L

	Calc. Na+K	Ca	Mg	Fe	CO ₃	HCO ₃	SO ₄	Cl
Mg./L	53711	5608	797	NONE	0	336	9598	88,523
MEQ./L	2335.36	279.74	65.55		0	5.51	178.91	2496.33
MEQ. %	43.56	5.22	1.22		0	0.10	3.34	46.56

Milliequivalents per Litre



Remarks:

File Code No. 15-1100
Production Department, Calgary Area 1
Division Office ERROLI, P. 1 5
Production Laboratory, Calgary Area 23

Chemist B.H. East
N.L. Johnson

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red West G-55
LOCATION: G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustavson Drilling (1964) Ltd.
RIG NO.: 11
DATE: 5-22-1971

Table with columns: DP/DC SIZE, WT./FT., GRADE, MIN ID, TOOL JT O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KR TO CSG. HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

Table: TIME DISTRIBUTION - HOURS. Columns: OPERATION, MORN., DAY, EVE, TOTAL. Includes rows for RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

Table: BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD. Includes columns for BIT NO., TIME, WEIGHT, VIS-SEC, PV/YP, GELS, W.L.C.C., PH, % SOLIDS, % SAND, etc.

Table: BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD. Includes columns for BIT NO., TIME, WEIGHT, VIS-SEC, PV/YP, GELS, W.L.C.C., PH, % SOLIDS, % SAND, etc.

Table: BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD. Includes columns for BIT NO., TIME, WEIGHT, VIS-SEC, PV/YP, GELS, W.L.C.C., PH, % SOLIDS, % SAND, etc.

Table: BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD. Includes columns for BIT NO., TIME, WEIGHT, VIS-SEC, PV/YP, GELS, W.L.C.C., PH, % SOLIDS, % SAND, etc.

Table: BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD. Includes columns for BIT NO., TIME, WEIGHT, VIS-SEC, PV/YP, GELS, W.L.C.C., PH, % SOLIDS, % SAND, etc.

Table: HOLE CONDITION. Columns: OPERATION, HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET).

Rig RELEASED @ 12:00 MIDNIGHT MAY 22-71

W.O.C. LAY DOWN PIPE FEEL PLUG #6 @ 1048 LAY DOWN BOP'S CUTOFF CASING BOWL. 10 SKS CEMENT PLUG. WELD ON PLATE WELD ON WELL IDENTITY PLATE ON 3' RISER.

DRILLER: A. P. ...

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST
LOCATION G-55 N.W.T.

OPERATOR Shell Canada Limited
CONTRACTOR GUSTAVSON
RIG NO. 10900
DEPTH AT START OF MORNING TOUR
DEPTH AT END OF EVENING TOUR
DAILY PROGRESS
CUMULATIVE ROTATING HOURS
DAYS FROM SPUD
MONTH 5 DAY 21 YEAR 71

DP./DC. SIZE WT./FT. GRADE MIN. I.D. TOOL JT. O.D. TYPE THREAD PUMP NO. PUMP MANUFACTURER TYPE STROKE LENGTH
LAST CASING TUBING OR LINER
SIZE WT. AND GR. NO. OF JOINTS FEET KB. TO CSG. HEAD SET AT CEMENT USED (SACKS) REMARKS

TIME DISTRIBUTION - HOURS
DRILLING ASSEMBLY AT END OF TOUR
BIT RECORD
MUD RECORD

FOOTAGE
ROT HOURS
DR-D RM-R CORE-C
CORE NO
FORMATION (SHOW CORE RECOVERY)
ROTARY R P M
WT ON BIT (1000#)
PUMP (AIR) PRESS
AIR VOL (CFM)
PUMP NO. 1 PUMP NO. 2 METHOD PUMPS RUN

DEVIATION RECORD
DEPTH DEVIATION° DIRECTION
TIME LOG
ELAPSED TIME CODE
DETAILS OF OPERATION IN SEQUENCE AND REMARKS

DEVIATION RECORD
DEPTH DEVIATION° DIRECTION
TIME LOG
ELAPSED TIME CODE
DETAILS OF OPERATION IN SEQUENCE AND REMARKS

DEVIATION RECORD
DEPTH DEVIATION° DIRECTION
TIME LOG
ELAPSED TIME CODE
DETAILS OF OPERATION IN SEQUENCE AND REMARKS

DEVIATION RECORD
DEPTH DEVIATION° DIRECTION
TIME LOG
ELAPSED TIME CODE
DETAILS OF OPERATION IN SEQUENCE AND REMARKS

HOLE CONDITION
1 HOLE DRAG (1000#)
2 TORQUE ON BOTTOM (DP TURNS)
3 FILL ON BOTTOM (FEET)

MORNING TOUR
DAY TOUR
EVENING TOUR

Code 267

J. Anderson L. Hennrichler / HR. OVERTIME - UNLOAD PLANE MAY 20/71

FINISH PULL PACKER + LOAD OUT TEST TOOLS
LAY DOWN D.C.S
RUN IN OPEN END PICK UP 13 SINGLES
BREAK CIR.
Plug # 1 - 10,900 - 10,700
110 SACKS PORTLAND CEMENT Plus .04% HR4.
PULL OUT
DRILLER J. Howell

Sexv Pig
Layed Down 52 Singles
Pig up & Run Plug #2
W.O.C. Lay Down D.P.
Plug #2 - 8280 - 8150
110 SACKS PORTLAND CEMENT Plus .04% HR4.
Plug in PLACE 10.15 AM
DRILLER J. Johnson

W.O.C.
Run in Feel Plug #2 @ 8127'
Hoist to 6800' Run Plug #3
W.O.C. Lay down drill pipe
Plug #3 - 6800 - 6670
90 SACKS PORTLAND CEMENT
Plug in PLACE 9:30 PM.
DRILLER D. Turnbull

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
 LOCATION: G-55 PROVINCE: N. W. T.

OPERATOR: Shell Canada Limited CONTRACTOR: GUSTAUSON RIG NO: 11
 SIGNATURE OF OPERATOR: [Signature] SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [Signature]
 DEPTH AT START OF MORNING TOUR: T.D. DEPTH AT END OF EVENING TOUR: T.D. DAILY PROGRESS: T.D. CUMULATIVE ROTATING HOURS: 50 DAYS FROM SPUD: 5 MONTH: 20 DAY: 71 YEAR: 71

DP / DC SIZE	WT. / FT.	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER	SIZE	WT. AND GR.	NO. OF JOINTS	FEET	KB. TO CSG. HEAD	SET AT	CEMENT USED (SACKS)	REMARKS	
4	14	E	2 7/8	5 1/4	4F.H	1	NATIONAL	8P80	8 1/2		9 7/8	36#	38	1204	16.25	1201	886		
6 1/4	101		2 7/8	6 1/4	5H90	2	NATIONAL	8P80	8 1/2										

TIME DISTRIBUTION - HOURS					DRILLING ASSEMBLY		BIT RECORD		MUD RECORD		MORNING TOUR
OPERATION	MORN.	DAY	EVE.	TOTAL	NO.	CODE	AT END OF TOUR	BIT	FT.	TIME		WEIGHT
1 RIG UP TEAR DOWN					1	S		28x69	3.98	SIZE 8 1/4	9.5
2 DRILLING ACTUAL					1	O		28x69	2.48	MFG. SEC.	93
3 REAMING										TYPE H7G	
4 CORING										JETS 1/32"	
5 CLEAN TO BOTTOM AND CIRCULATING	3 1/2			3 1/2						SERIAL NO. 908157	W.L.C.C. 7.2 8.6
6 TRIPS	3	1 3/4	3 3/4	8 1/2						DEPTH OUT	PH 8.5 9.5
7 RIG SERVICE					9	O		28x69	279.34	DEPTH IN	% SOLIDS
8 RIG REPAIR					10	DP		STANDS		TOTAL FTG.	% SAND
9 CUT AND/OR SLIP LINE	3/4			3/4		DP		SINGLES		TOTAL HRS. RUN	MUD MATERIALS ADDED
10 DEVIATION SURVEY										BIT CONDITION 1/8" T/B/GAGE	CAUSTIC - 4 SKS
11 LOG										TOTAL	
12 RUN CASING AND CEMENT										WT. OF DC IN AIR 28" LBS.	REAMER CUTTER NO.
13 WAIT ON CEMENT										WT. OF STRING 168" LBS.	REAMER TYPE
14 NIPPLE UP B.O.P.											

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN
FROM	TO									LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	

TIME DISTRIBUTION - HOURS					DRILLING ASSEMBLY		BIT RECORD		MUD RECORD		MORNING TOUR
OPERATION	MORN.	DAY	EVE.	TOTAL	NO.	CODE	AT END OF TOUR	BIT	FT.	TIME		WEIGHT
15 TEST B.O.P.											
16 DRILL STEM TEST	2 1/4	2 1/4		5	1	S		28x69	3.96	SIZE	
17 PLUG BACK					1	S		28x69	2.18	MFG.	
18 SQUEEZE CEMENT										TYPE	
19 STUCK OR FISHING										JETS 1/32"	
20 HANDLE TOOLS	2 3/4	1 1/2		4 1/4						SERIAL NO.	
21 CONDITION MUD					4	DP		STANDS	117.15	DEPTH OUT	
22 CIRCULATION					9	DP		STANDS	279.84	DEPTH IN	% SOLIDS
23 W.O.D.	3/4	1 1/4		2	55	DP		STANDS	5122.87	TOTAL FTG.	% SAND
40 PERFORATE										TOTAL HRS. RUN	MUD MATERIALS ADDED
41 TUBING TRIPS										BIT CONDITION 1/8" T/B/GAGE	
42 TREATING										TOTAL	
43 SWABBING										WT. OF DC IN AIR 30" LBS.	REAMER CUTTER NO.
44 TESTING										WT. OF STRING 84" LBS.	REAMER TYPE

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN
FROM	TO									LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	

TIME DISTRIBUTION - HOURS					DRILLING ASSEMBLY		BIT RECORD		MUD RECORD		MORNING TOUR
OPERATION	MORN.	DAY	EVE.	TOTAL	NO.	CODE	AT END OF TOUR	BIT	FT.	TIME		WEIGHT
45											
60 ABANDON											
70 STANDBY											
TOTALS	8	8	8	24							
HOURS FOR SHELL ACCOUNT	8	8	8	24							
BOILER	1	8	8	8							
Code 257											
HOLE CONDITION											
1 HOLE DRAG (1000#)											
2 TORQUE ON BOTTOM (DP TURNS)											
3 FILL ON BOTTOM (FEET)											

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN
FROM	TO									LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	

DRILLER: J. Hermal (MORNING TOUR), F. Bengtson (DAY TOUR), N. Zundall (EVENING TOUR)

DAILY DRILLING REPORT

CP-38 (10/69)

WELL NAME SHELL ARCTIC RED WEST
LOCATION G-55 PROVINCE N. W. T.

OPERATOR Shell Canada Limited CONTRACTOR GUSTAVSON RIG NO. 11
DEPTH AT START OF MORNING TOUR 10,950 DEPTH AT END OF EVENING TOUR 10,900 DAILY PROGRESS - TD
CUMULATIVE ROTATING HOURS 49 DAYS FROM SPUD 5 MONTH 19 YEAR 71

Table with columns: DP./DC. SIZE, WT./FT., GRADE, MIN. I.D., TOOL JT O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING, TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB. TO CSG. HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

TIME DISTRIBUTION - HOURS table with columns: CODE NO., OPERATION, MORN., DAY, EVE., TOTAL. Includes rows for RIG UP TEAR DOWN, DRILLING ACTUAL, REAMING, CORING, CLEAN TO BOTTOM AND CIRCULATING, TRIPS, RIG SERVICE, RIG REPAIR, CUT AND/OR SLIP LINE, DEVIATION SURVEY, LOG, RUN CASING AND CEMENT, WAIT ON CEMENT.

DRILLING ASSEMBLY AT END OF TOUR table with columns: NO., CODE, BIT, FT., BIT NO., TIME, WEIGHT, VIS.-SEC, PV/YP, GELS, W.L.-C.C., PH, % SOLIDS, % SAND, MUD MATERIALS ADDED, TYPE, AMOUNT, TYPE, AMOUNT.

DRILLING ASSEMBLY AT END OF TOUR table with columns: NO., CODE, BIT, FT., BIT NO., TIME, WEIGHT, VIS.-SEC, PV/YP, GELS, W.L.-C.C., PH, % SOLIDS, % SAND, MUD MATERIALS ADDED, TYPE, AMOUNT, TYPE, AMOUNT.

FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY R.P.M., WT. ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1 LINER SIZE S.P.M., PUMP NO. 2 LINER SIZE S.P.M., METHOD PUMPS RUN.

FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY R.P.M., WT. ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1 LINER SIZE S.P.M., PUMP NO. 2 LINER SIZE S.P.M., METHOD PUMPS RUN.

FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY R.P.M., WT. ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1 LINER SIZE S.P.M., PUMP NO. 2 LINER SIZE S.P.M., METHOD PUMPS RUN.

HOLE CONDITION table with columns: NO., OPERATION, MORN., DAY, EVE., TOTAL, BIT, FT., BIT NO., TIME, WEIGHT, VIS.-SEC, PV/YP, GELS, W.L.-C.C., PH, % SOLIDS, % SAND, MUD MATERIALS ADDED, TYPE, AMOUNT, TYPE, AMOUNT.

MORNING TOUR DAY TOUR EVENING TOUR

LOG RAN: MLC - 10898' - 3600' SEISMIC REFERENCE SURVEY

F. Beng Team has Over-time

Logging TEAR OUT Logging Tools Lay Down 10 DCS 9 MODEL Run INTO CLEAN OUT HOLE.

DRILLER J. Howard

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST
LOCATION G-55 N.W.T.

OPERATOR Shell Canada Limited
CONTRACTOR GUSTAUSON
SIGNATURE OF OPERATOR J. Brown
SIGNATURE OF CONTRACTOR'S TOOL PUSHER [Signature]

DEPTH AT START OF MORNING TOUR 10892
DEPTH AT END OF EVENING TOUR
DAILY PROGRESS
CUMULATIVE ROTATING HOURS 48
DAYS FROM SPUD 5
DATE 18 71

Table with columns: DP./DC SIZE, WT./FT., GRADE, MIN. I.D., TOOL JT O.F., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH. Includes data for pumps 1 and 2.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for R2G UP TEAR DOWN, DRILLING ACTUAL, REAMING, CORING, CLEAN TO BOTTOM AND CIRCULATING, TRIPS, RIG SERVICE, RIG REPAIR, CUT AND/OR SLIP LINE, DEVIATION SURVEY, LOG, RAIN CASING AND CEMENT, WAIT ON CEMENT, NIPPLE UP B.O.P., TEST B.O.P., DRILL STEM TEST, PLUG BACK, SQUEEZE CEMENT, STUCK OR FISHING, HANDLE TOOLS, CONDITION MUD, TEST CIRCULATION, Logging, PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, STANDBY, TOTALS, HOURS FOR SHELL ACCOUNT, BOILER, 1 1/4 HRS Code 232, 2 3/4 Code 257.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, STANDBY, TOTALS, HOURS FOR SHELL ACCOUNT, BOILER, 1 1/4 HRS Code 232, 2 3/4 Code 257.

Table with columns: HOLE CONDITION, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET).

Table with columns: LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB. TO CSG. HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY RPM, WT ON BIT (1000#), PUMP (AIR, PRESS), AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

Table with columns: DEVIATION RECORD, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION.

Table with columns: TIME LOG, ELAPSED TIME, CODE, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten notes: DRILL, CIR., DROP SURVEY MEASURE OUT, LOGGING, PIPE TALLY 10,900, MEASURE OUT 10,900.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY RPM, WT ON BIT (1000#), PUMP (AIR, PRESS), AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

Table with columns: DEVIATION RECORD, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION.

Table with columns: TIME LOG, ELAPSED TIME, CODE, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten note: Logging.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY RPM, WT ON BIT (1000#), PUMP (AIR, PRESS), AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY RPM, WT ON BIT (1000#), PUMP (AIR, PRESS), AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

Table with columns: DEVIATION RECORD, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION.

Table with columns: TIME LOG, ELAPSED TIME, CODE, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten note: Logging.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY RPM, WT ON BIT (1000#), PUMP (AIR, PRESS), AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes handwritten notes: Ran: BSGR-C - 10899'-1200', SNP - 10900'-3600', DILL - 10897'-1200', FDC - 10900'-1200'.

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST
LOCATION G-55 PROVINCE N.W.T

OPERATOR Shell Canada Limited
CONTRACTOR GUSTAVSON Drilling (1964) LTD
RIG NO. 11
DEPTH AT START OF MORNING TOUR 10772
DEPTH AT END OF EVENING TOUR 10892
DAILY PROGRESS 120
CUMULATIVE ROTATING HOURS 725 1/4
DAYS FROM SPUD 47
MONTH 5 DAY 17 YEAR 71

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG SERVICE, RIG REPAIR, CUT AND/OR SLIP LINE, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, STANDBY, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

HOLE CONDITION table with rows for HOLE DRAG, TORQUE ON BOTTOM, FILL ON BOTTOM.

DRILLER D. J. Hendall

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC REQ WEST
LOCATION G-55 PROVINCE N.W.T.

OPERATOR Shell Canada Limited CONTRACTOR GUSTAUSON RIG NO. 11
DEPTH AT START OF MORNING TOUR 10625 DEPTH AT END OF EVENING TOUR 10772 DAILY PROGRESS 147 CUMULATIVE ROTATING HOURS 707 DAYS FROM SPUD 46 MONTH 5 DAY 16 YEAR 71

Table with columns for DP./DC. SIZE, WT./FT., GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, NO. TO CSG HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

TIME DISTRIBUTION - HOURS table with columns for OPERATION, MORN., DAY, EVE., TOTAL. Includes rows for RIG UP TEAR DOWN, DRILLING ACTUAL, REAMING, CORING, etc.

BIT RECORD and MUD RECORD tables for MORNING TOUR. Includes columns for BIT NO., FT., BIT NO., TIME, WEIGHT, VIS.-SEC, etc.

BIT RECORD and MUD RECORD tables for EVENING TOUR. Includes columns for BIT NO., FT., BIT NO., TIME, WEIGHT, VIS.-SEC, etc.

FOOTAGE and DEVIATION RECORD tables for MORNING TOUR. Includes columns for FROM, TO, ROT HOURS, CORE NO., FORMATION, etc.

FOOTAGE and DEVIATION RECORD tables for DAY TOUR. Includes columns for FROM, TO, ROT HOURS, CORE NO., FORMATION, etc.

FOOTAGE and DEVIATION RECORD tables for EVENING TOUR. Includes columns for FROM, TO, ROT HOURS, CORE NO., FORMATION, etc.

HOLE CONDITION table with columns for HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET).

DRILLER J. Hendall

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
 LOCATION: G-55 PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited CONTRACTOR: GUSTAUSON RIG NO: 11
 SIGNATURE OF OPERATOR'S REPRESENTATIVE: [Signature] SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [Signature]

DP / DC SIZE	WT / FT	GRADE	MIN. I.D.	TOOL JT. O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER	SIZE	WT. AND GR.	NO. OF JOINTS	FEET	KB TO CSG. HEAD	SET AT	CEMENT USED (SACKS)	REMARKS	
4	14	E	2 7/8	5 1/4	4 F.H.	1	NAT	8P80	8 1/2		9 5/8	36# K55	38	1204	16.25	10.01	886		
6 3/4	101		2 7/8	6 1/4	5 H90	2	NAT	8P80	8 1/2										

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	BIT	FT.	BIT NO.	TIME
1	RIG UP					1 NR 2 7/8 X 6 3/4	5.33	874	
2	DRILLING ACTUAL	4	A	1 DM 3 X 6 3/4	14.80			H.W.	
3	REAMING			1 SI 2 7/8 X 6 3/4	7.79			2 X J	
4	CORING			1 SI 2 7/8 X 6 3/4	4.10			JETS 1/32"	
5	CLEAN TO BOTTOM AND CIRCULATING			1 O 2 7/8 X 6 3/4	2.48			SERIAL NO. TC945	
6	TRIPS	3	2 3/4	5 1/2				DEPTH OUT 10594	
7	RIG SERVICE			19 DC 2 7/8 X 6 3/4	587.19			DEPTH IN 10499	
8	RIG REPAIR	3 1/2	1 1/4	4 3/4	106	DP STANDS	9929.99	TOTAL FTG. 95	
9	CUT AND/OR SLIP LINE	1/2		12	2	DP SINGLES		TOTAL HRS. RUN 12 1/2	
10	DEVIATION SURVEY							BIT CONDITION 1/8" T/B/GAGE	120
11	RE LOG								
12	RUN CASING AND CEMENT							WT. OF DC IN AIR	
13	WAIT ON CEMENT							WT. OF STRING	
14	NIPPLE UP B.O.P.							REAMER CUTTER NO.	
15	TEST B.O.P.	1/4		1/4				REAMER TYPE	

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S P M	PUMP NO. 2 LINER SIZE S P M	METHOD PUMPS RUN
FROM	TO											
10594												
DEVIATION RECORD		DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION		
12.00	8.00											
TIME LOG		ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS								
FROM	TO			PULL OUT CHECK D.C.S. + SUBS. Magma-Flux D @ 4 subs. F. Bengtson - 4hrs. Overtime								

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	BIT	FT.	BIT NO.	TIME
15	TEST B.O.P.	1/4		1/4				24	
16	DRILL STEM TEST			1 NR 2 7/8 X 6 3/4	5.33			874	
17	PLUG BACK			1 RM 3 X 6 3/4	14.80			H.W.	
18	SQUEEZE CEMENT			1 SI 2 7/8 X 6 3/4	4.10			AGT X J	
19	STUCK OR FISHING			1 O 2 7/8 X 6 3/4	2.48			JETS 1/32"	
20	HANDLE TOOLS							SERIAL NO. TC946	
21	CONDITION MUD							WT. OF DC IN AIR	
22	POST CIRCULATION			19 DC 2 7/8 X 6 3/4	586.77			WT. OF STRING	
23	TESTING	2 1/2		2 1/2	106	DP STANDS		REAMER CUTTER NO.	
24	Partial Inspection	5	1 1/4	6 1/4	2	DP SINGLES	9929.99	REAMER TYPE	
40	PERFORATE							TOTAL HRS. RUN	
41	TUBING TRIPS							BIT CONDITION 1/8" T/B/GAGE	
42	TREATING								
43	SWABBING								
44	TESTING								
45									

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S P M	PUMP NO. 2 LINER SIZE S P M	METHOD PUMPS RUN
FROM	TO											
10594												
DEVIATION RECORD		DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION		
8:00	8:15											
8:15	9:30											
9:30												
TIME LOG		ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS								
FROM	TO			Sexu Rig Checked ROP + Blind Rams Partical Inspection on stabl. Jars + Tang pins Made up Demco 9 5/8" casing Testex Ram in of same Pressured up on 4" Rams + Hydril Fox 15 min Intervals @ 1000 PSI Held OK. Ran in DC Charged Stabl. Blades Layed Down 100 Shipped 33' Drlg line								

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	BIT	FT.	BIT NO.	TIME
60	ABANDON			1 NR 2 7/8 X 6 3/4	5.33			24	8:30 10:30
70	STANDBY			1 DM 3 X 6 3/4	14.80			H.W.	
TOTALS		8 8 8 24		1 SI 2 7/8 X 6 3/4	4.10			AGT X J	
HOURS FOR SHELL ACCOUNT		8 8 8 24		1 O 2 7/8 X 6 3/4	2.48			JETS 1/32"	
BOILER #		8 8 8 24						SERIAL NO. TC946	
Code		932 B		19 DC 2 7/8 X 6 3/4	586.77			WT. OF DC IN AIR	
HOLE CONDITION				107 DP STANDS				WT. OF STRING	
1 HOLE DRAG (1000#)								REAMER CUTTER NO.	
2 TORQUE ON BOTTOM (DP TURNS)								REAMER TYPE	
3 FILL ON BOTTOM (FEET)									

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S P M	PUMP NO. 2 LINER SIZE S P M	METHOD PUMPS RUN
FROM	TO											
10594	10,625	4		31			42	45	1950	6	120	
DEVIATION RECORD		DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION		
4:00	5:15											
5:15	8:00											
8:00	12:00											
TIME LOG		ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS								
FROM	TO			Pick-up, Switch d change Sub. Run in w/ Bit # 24 + Break cir. (no fill) Drlg 8 3/4 Hole 6 1/4 HR Rig Down Time waiting on SWIVEL Sub From Edmonton. [Signature]								

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST. LOCATION G-55 PROVINCE N.W.T.

Header section containing OPERATOR (Shell Canada Limited), CONTRACTOR (GUSTAFSON DRILLING (1964) LTD), RIG NO. (11), and various well parameters like DEPTH AT START, DAILY PROGRESS, and DATE (MAY 14 1971).

Table with columns for TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, and MUD RECORD. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, and TRIPS.

Table with columns for FOOTAGE, ROT HOURS, CORE NO., FORMATION, and DEVIATION RECORD. Includes handwritten notes like 'Drop Survey Rig Serv-V BOP's' and 'Trip out'.

Table with columns for TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, and MUD RECORD. Includes rows for operations like TEST B.O.P., DRILL STEM TEST, PLUG BACK, and SQUEEZE CEMENT.

Table with columns for FOOTAGE, ROT HOURS, CORE NO., FORMATION, and DEVIATION RECORD. Includes handwritten notes like 'RUN IN DRILL' and 'F Bongtan - 4hr Overtime'.

Table with columns for TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, and MUD RECORD. Includes rows for operations like PERFORATE, TUBING TRIPS, TREATING, SWABBING, and TESTING.

Table with columns for FOOTAGE, ROT HOURS, CORE NO., FORMATION, and DEVIATION RECORD. Includes handwritten notes like 'Sexy Rig & checked BOP' and 'Cracked ch sub on Quill Broke'.

HOLE CONDITION table with rows for HOLE DRAG, TORQUE ON BOTTOM, and FILL ON BOTTOM.

DRILLER signature: R. Johnson

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST. LOCATION G-55 PROVINCE N.W.T.

OPERATOR Shell Canada Limited CONTRACTOR GUSTAVSON DRIG (1964) LTD RIG NO 11 DEPTH AT START OF MORNING TOUR 10-234 DEPTH AT END OF EVENING TOUR 10-481 DAILY PROGRESS 247' CUMULATIVE ROTATING HOURS 43 DAYS FROM SPUD MAY 13 1971

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG UP TEAR DOWN, DRILLING ACTUAL, REAMING, CORING, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes rows for morning and afternoon operations.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like TEST B.O.P., DRILL STEM TEST, PLUG BACK, SQUEEZE CEMENT, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes rows for afternoon operations.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like ABANDON, STANDBY, and HOLES FOR SHELL ACCOUNT.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes rows for evening operations.

Table with columns: HOLE CONDITION, KELLY DOWN, TOTAL, WT. OF DC IN AIR, REAMER CUTTER NO., WT. OF STRING, REAMER TYPE. Includes rows for hole drag, torque on bottom, and fill on bottom.

DRILLER F. Bangtson

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
LOCATION: G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: GUSTAVSON DRILLING (1964) LTD.
RIG NO.: 11
DEPTH AT START OF MORNING TOUR: 10080
DEPTH AT END OF EVENING TOUR: 10234
DAILY PROGRESS: 154'

Table with columns: DP./DC. SIZE, WT./FT, GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB TO CSG. HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

TIME DISTRIBUTION - HOURS table with columns: OPERATION, MORN., DAY, EVE., TOTAL. Includes rows for RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

BIT RECORD table with columns: BIT NO., FT., BIT NO., TIME, WEIGHT, VIS-SEC, TYPE, PV/YP, JETS 1/32", SERIAL NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE.

MUD RECORD table with columns: TIME, WEIGHT, VIS-SEC, TYPE, PV/YP, JETS 1/32", SERIAL NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE.

FOOTAGE table with columns: FROM, TO, ROT. HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY R.P.M., WT. ON BIT (1000#), PUMP (AIR) PRESS (CFM), AIR VOL (CFM), PUMP NO. 1 LINER SIZE S.P.M., PUMP NO. 2 LINER SIZE S.P.M., METHOD PUMPS RUN.

DEVIATION RECORD table with columns: DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION. Includes TIME LOG and DETAILS OF OPERATION IN SEQUENCE AND REMARKS.

DEVIATION RECORD table with columns: DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION. Includes TIME LOG and DETAILS OF OPERATION IN SEQUENCE AND REMARKS.

HOLE CONDITION table with columns: HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET).

Handwritten notes: 'Rig Serv. & B.O.P. Delg.', 'DRILL CHECK B.O.P. SER. RIG.', 'SURVEY PULL OUT F. Boughton 3hr Overtime HELD BLOW OUT DRILL', 'Holeat Sexv Rig Checked BOP & Blind Rams Ram in P.C. Slipped D&lg Line Run in Cleared out 12' Fill & Reamed 3' to Bottom D&lg'

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST
 LOCATION G-55 PROVINCE N.W.T.

OPERATOR Shell Canada Limited CONTRACTOR GUSTAVSON DRIG (1964) LTD. RIG NO. 11
 SIGNATURE OF OPERATOR'S REPRESENTATIVE R. M. Janki SIGNATURE OF CONTRACTOR'S TOOL PUSHER
 DEPTH AT START OF MORNING TOUR 10.008 DEPTH AT END OF EVENING TOUR 10,080.00 DAILY PROGRESS 72' CUMULATIVE ROTATING HOUR: 41 DAYS FROM SPUD MAY 17 1971

DP./DC. SIZE	WT./FT.	GRADE	MIN. I.D.	TOOL JT. O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	141#	E	2 7/8	5 1/4	F.H.	1	NATIONAL	8-P80	8 1/2
6 3/4"	101#		2 7/8	6 3/4	5H90	2	NATIONAL	8-P80	8 1/2

LAST CASING TUBING OR LINER	SIZE	WT. AND GR.	NO. OF JOINTS	FEET	NO. TO CSS. HEAD	SET AT	CEMENT USED (SACKS)	REMARKS
9 3/8	36#K55	38	1204	16.25	1201	886		

TIME DISTRIBUTION - HOURS					DRILLING ASSEMBLY					BIT RECORD					MUD RECORD						
OPERATION	MORN.	DAY	EVE.	TOTAL	NO.	CODE	AT END OF TOUR	BIT	FT.	BIT NO.	TIME	WEIGHT	VIS-SEC	PV/YP	GELS	W.L.-C.C.	PH	% SOLIDS	% SAND	MUD MATERIALS ADDED	
1 RIG UP TEAR DOWN								X													
2 DRILLING ACTUAL			7 3/4	7 3/4				X													
3 REAMING								X													
4 CORING								X													
5 CLEAN TO BOTTOM AND CIRCULATING								X													
6 TRIPS	7	4		11				X													
7 RIG SERVICE								X													
8 RIG REPAIR																					
9 CUT AND/OR SLIP LINE																					
10 DEVIATION SURVEY																					
11 LOG																					
12 RUN CASING AND CEMENT																					
13 WAIT ON CEMENT																					
14 NIPPLE UP B.O.P.																					

FOOTAGE					FORMATION					ROTARY					PUMP					AIR				
FROM	TO	ROT HOURS	DR-D RM-R CORE-C	CORE NO	(SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN												
10008																								

TIME LOG					ELAPSED TIME					CODE					DETAILS OF OPERATION IN SEQUENCE AND REMARKS				
FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS															
12:00	1:00	1		FINAL SHUT IN ON D.S.T. #1															
1:00	8:00	7		DEFLATE PACKERS WORK SAME LOOSE HOIST VERY TIGHT AT TIMES.															
				D.S.T. NO. 1. 8671 - 8819 (DOLOMITE) PREFLON 5 MIN. 151 60 MIN. T.O. 90 MIN. FSL 90 MIN. FIP. FAB ON T.O. REMAINING STEADY. RECOVERED 550' W.C.															
				2720' ST. M.C.S.W. (SIL. 163,300 PPM HCL) DRILLER A. Lwozink															

FOOTAGE					FORMATION					ROTARY					PUMP					AIR				
FROM	TO	ROT HOURS	DR-D RM-R CORE-C	CORE NO	(SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN												
10008																								

TIME DISTRIBUTION - HOURS					DRILLING ASSEMBLY					BIT RECORD					MUD RECORD						
OPERATION	MORN.	DAY	EVE.	TOTAL	NO.	CODE	AT END OF TOUR	BIT	FT.	BIT NO.	TIME	WEIGHT	VIS-SEC	PV/YP	GELS	W.L.-C.C.	PH	% SOLIDS	% SAND	MUD MATERIALS ADDED	
40 PERFORATE																					
41 TUBING TRIPS																					
42 TREATING																					
43 SWABBING																					
44 TESTING																					
45																					
60 ABANDON	232	8 hrs																			
70 STANDBY	257	16 hrs																			
TOTALS	8	8	8	24																	
HOURS FOR SHELL ACCOUNT																					
BOILER	8	8	8	24																	

TIME LOG					ELAPSED TIME					CODE					DETAILS OF OPERATION IN SEQUENCE AND REMARKS				
FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS															
8:00	1:00	5		FINISH OUT LAY DOWN TEST TOOLS BLIND RAMS															
1:00	4:00	3		RUN IN PICK UP JARS.															
				OVERTIME 1 HR. LAY DOWN BEACON. J. Houil J. Mykita & Henriksen D. Patylo HRS F. Benytsen - the Overtime DRILLER J. Houil															

HOLE CONDITION					DRILLING ASSEMBLY					BIT RECORD					MUD RECORD				
NO.	DESCRIPTION	NO.	CODE	AT END OF TOUR	BIT	FT.	BIT NO.	TIME	WEIGHT	VIS-SEC	PV/YP	GELS	W.L.-C.C.	PH	% SOLIDS	% SAND	MUD MATERIALS ADDED		
1	HOLE DRAG (1000#)	15H																	
2	TORQUE ON BOTTOM (DP TURNS)																		
3	FILL ON BOTTOM (FEET)	N/L																	

FOOTAGE					FORMATION					ROTARY					PUMP					AIR				
FROM	TO	ROT HOURS	DR-D RM-R CORE-C	CORE NO	(SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN												
10,008	10,080	7 3/4																						

DRILLER J. Johnson

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
 LOCATION: G-55 PROVINCE: N.W.T.

OPERATOR Shell Canada Limited		CONTRACTOR GUSTAFSON DRIG (1964) LTD		RIG NO. 11	DEPTH AT START OF MORNING TOUR 9954	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH DAY YEAR									
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>A. Swaffenk</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>Paul M. L...</i>						40	40	MAY 10 1971									
DP / DC SIZE	WT. / FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER	SIZE	WT. AND GR.	NO. OF JOINTS	FEET	KB. TO CSG HEAD	SET AT	CEMENT USED (SACKS)	REMARKS	
4" / 14"	14"	E	2 3/4"	5 3/4"	F.H.	1	NATIONAL	8-P80	8 1/2"		9 5/8"	36# K55	38	12.04	16.25	12.01	886		
6 3/4" / 1 D1"	1 D1"		2 3/4"	5 3/4"	SH-90	2	NATIONAL	8-P80	8 1/2"										

TIME DISTRIBUTION - HOURS					DRILLING ASSEMBLY					BIT RECORD					MUD RECORD						
CODE	OPERATION	MORN.	DAY	EVE.	TOTAL	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	
1	RIG UP																				
2	DRILLING ACTUAL		6 3/4		6 3/4																
3	REAMING																				
4	CORING																				
5	CLEAN TO BOTTOM AND CIRCULATING	1	1		2																
6	TRIPS		3	3	6																
7	RIG SERVICE	1/4			1/4																
8	RIG REPAIR	1/2			1/2																
9	CUT AND/OR SLIP LINE		1/2		1/2																
10	DEVIATION SURVEY		1/2		1/2																
11	WIRE LOG																				
12	RUN CASING AND CEMENT																				
13	WAIT ON CEMENT																				
14	NIPPLE UP B.O.P.																				

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000#)	PUMP (AIR) PRESS.	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	
FROM	TO												
9954	10008	6 3/4	54			40	46	2000		6	120		
DEVIATION RECORD		DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION
TIME LOG		FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS							
12:00		12:15	1/4			Rig Serv. v B.O.P.							
12:15		5:00	4 3/4			Drlg.							
5:00		5:30	1/2			Repair work out on mud line.							
5:30		7:00	1 1/2			Drlg.							
7:00		8:00	1			Circ to run D.S.T.							

TIME DISTRIBUTION - HOURS					DRILLING ASSEMBLY					BIT RECORD					MUD RECORD						
CODE	OPERATION	MORN.	DAY	EVE.	TOTAL	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	
15	TEST B.O.P.	1/4	1/4		1/2																
16	DRILL STEM TEST	3 3/4	3 3/4		7																
17	PLUG BACK																				
18	SQUEEZE CEMENT																				
19	STUCK OR FISHING																				
20	HANDLE TOOLS	1	1/2		1 1/2																
21	CONDITION MUD																				
22	LOSS CIRCULATION																				
23																					
24																					
40	PERFORATE																				
41	TUBING TRIPS																				
42	TREATING																				
43	SWABBING																				
44	TESTING																				
45																					

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000#)	PUMP (AIR) PRESS.	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	
FROM	TO												
10008							2050			6	120	6	
DEVIATION RECORD		DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION
TIME LOG		FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS							
8:00		9:00	1			C.I.R.							
9:00		12:30	3 1/2			SURVEY PULL OUT							
12:30		4:00	1 1/2			MAKE UP TEST TOOLS BLIND RAMS PICKED UP 4 5 1/4" O.C.S.							

TIME DISTRIBUTION - HOURS					DRILLING ASSEMBLY					BIT RECORD					MUD RECORD							
CODE	OPERATION	MORN.	DAY	EVE.	TOTAL	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR	NO.	CODE	AT END OF TOUR		
60	ABANDON																					
70	STANDBY																					
TOTALS					8	8	8	24														
HOURS FOR SHELL ACCOUNT					232			24														
BOILER #1					8	8	8	24														
HOLE CONDITION																						
1	HOLE DRAG (1000#)				10																	
2	TORQUE ON BOTTOM (DP TURNS)				1 1/4																	
3	FILL ON BOTTOM (FEET)																					

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000#)	PUMP (AIR) PRESS.	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	
FROM	TO												
10008	10008												
DEVIATION RECORD		DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION
TIME LOG		FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS							
4:00		4:30	1/2			Finished making up Packer.							
4:30		5:15	3/4			Slipped 33' Pdlg line Serv Rig & Checked B.O.P.							
5:15		8:15	3			Measured in w/ 550' of Water Cushion							
8:15		8:45	1/2			Head up & seat packer							
8:45		12:00	3 3/4			D.S.T #1 Interval Tested 8671' to 8819'							

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST
LOCATION G-55 PROVINCE N.W.T.

OPERATOR Shell Canada Limited
CONTRACTOR GUSTAVSON DRILLING LTD
DEPTH AT START OF MORNING TOUR 9730
DEPTH AT END OF EVENING TOUR 9934
DAILY PROGRESS 234'

Table with columns for TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, and FOOTAGE.

Table with columns for DEVIATION RECORD, showing depth, deviation degree, and direction.

Table with columns for TIME LOG, ELAPSED TIME, CODE, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS.

Table with columns for DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, and FOOTAGE.

Table with columns for DEVIATION RECORD, showing depth, deviation degree, and direction.

Table with columns for TIME LOG, ELAPSED TIME, CODE, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS.

Table with columns for DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, and FOOTAGE.

Table with columns for DEVIATION RECORD, showing depth, deviation degree, and direction.

Table with columns for TIME LOG, ELAPSED TIME, CODE, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS.

Table with columns for DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, and FOOTAGE.

Table with columns for DEVIATION RECORD, showing depth, deviation degree, and direction.

Table with columns for TIME LOG, ELAPSED TIME, CODE, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS.

Table with columns for DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, and FOOTAGE.

Table with columns for DEVIATION RECORD, showing depth, deviation degree, and direction.

Table with columns for TIME LOG, ELAPSED TIME, CODE, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS.

Table with columns for HOLE CONDITION, including HOLE DRAG, TORQUE ON BOTTOM, and FILL ON BOTTOM.

MORNING TOUR DAY EVENING TOUR

BOILER #1

(SHIPPED 6 3/4 SHOCK SUBS OUT TO INUVIK)

Held Blow out Drill.

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST
PROVINCE N.W.T.
G-55

OPERATOR Shell Canada Limited
CONTRACTOR GUSTAVSON DRILLING (1964) LTD.
RIG NO. 11
DEPTH AT START OF MORNING TOUR 9624
DEPTH AT END OF EVENING TOUR 9730
DAILY PROGRESS 106'
CUMULATIVE ROTATING HOURS 38
DAYS FROM SPUD MAY 8 1971

Table with columns: DP./DC. SIZE, WT./FT., GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB TO CSG HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

TIME DISTRIBUTION - HOURS table with columns: OPERATION, MORN., DAY, EVE., TOTAL. Includes entries for RIG UP TEAR DOWN, DRILLING ACTUAL, REAMING, CORING, CLEAN UP, TRIPS, RIG SERVICE, RIG REPAIR, CUT AND/OR SLIP LINE, DEVIATION SURVEY, WIRE LOG, RUN CASING AND CEMENT, WAIT ON CEMENT, NIPPLE UP B.O.P., TEST B.O.P., DRILL STEM TEST, PLUG BACK, SQUEEZE CEMENT, STUCK OR FISHING, HANDLE TOOLS, CONDITION MUD, MUD RECULATION, PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, STANDBY.

BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten notes: 'change fuel filter on Rig fuel Tank. DESILTER 4HRS. J.F.11.5 O.F.9.1', 'Rig Serv. V B.O.P.S + Kelly Cock. Drlg.', 'Mechanics - Overtime From April 30, 1971 To May 7th 1971 - 10hrs B. Russell, R. Muffink', 'DRILLER A. Curawick'.

Continuation of TIME DISTRIBUTION - HOURS table. Includes entries for PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, STANDBY, TOTALS, BOILER #1, BOILER #2.

Continuation of BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten notes: 'DRILL', 'SURVEY PULL OUT', 'BLIND RAMS CHECK STAB RUN IN D.C.S LAY DOWN S.S. (CRACKED) CUT + SLIP DRLG LINE RUN IN', 'F. Bengtson - 4hrs. Overtime', 'DRILLER J. Honil'.

HOLE CONDITION table with columns: HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET). Includes handwritten notes: '16M', 'N.L.', '181M'.

Continuation of BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten notes: 'Sexu Rig & checked B.O.P Finished in D&lg.', 'DRILLER J. Johnson'.

DAILY DRILLING REPORT

WELL NAME: **SHELL ARCTIC RED WEST**
 LOCATION: **G-55** PROVINCE: **N.W.2.**

OPERATOR: **Shell Canada Limited** CONTRACTOR: **Gustavson Dalg (1964) LTD** RIG NO: **11**
 SIGNATURE OF OPERATOR'S REPRESENTATIVE: *[Signature]* SIGNATURE OF CONTRACTOR'S TOOL PUSHER: *[Signature]*

DP / DC SIZE	WT. / FT.	GRADE	MIN. I.D.	TOOL JT. O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER	SIZE	WT. AND GR.	NO. OF JOINTS	FEET	RB TO CSG. HEAD	SET AT	CEMENT USED (SACKS)	REMARKS
4 1/4	140	E	27 3/8	5 1/4	FH	1	NATIONAL	8-P-80	8 1/2		9 3/8	36# H55	38	12H		1201	88L	
6 3/4	101		27 3/8	5 1/4	H90	2	NATIONAL	7-P-90	8 1/2									

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		
CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL	BIT	FT.	BIT NO.	TIME	WEIGHT
1	RIG UP TEAR DOWN					1 NB 2 3/8 x 6 3/4	5.33	19	12:00	400
2	DRILLING ACTUAL	7 1/4	7 3/4	7 1/4	23 1/2	1 DM 3 x 6 3/4	14.80	8 3/4	9.1	9.1
3	REAMING					1 SS 2 x 6 3/4	8.59	7 JS	4.4	4.2
4	CORING					1 SI 2 3/8 x 6 3/4	4.10	121211	2/7	2/6
5	CLEAN TO BOTTOM AND CIRCULATING					1 CO 2 3/8 x 6 3/4	2.48	BYS26	8.8	7.9
6	TRIPS								9.5	9.5
7	RIG SERVICE	14 1/4			1/2	19 DC 2 3/8 x 6 3/4	587.19	9453	31,680	27,985
8	RIG REPAIR									
9	CUT AND/OR SLIP LINE									
10	DEVIATION SURVEY									
11	WIRE LINE LOG									
12	RUN CASING AND CEMENT									
13	WAIT ON CEMENT									
14	NIPPLE UP B.O.P.									

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
FROM	TO											
9468	9515	7 3/4				40	48	2000		6	120	

REMARKS: **Held BOP DRLG. 800. 6 60**
DESALTER RAN 8 hrs 12.2 under flow 9.1 OVER flow

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		
CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL	BIT	FT.	BIT NO.	TIME	WEIGHT
15	TEST B.O.P.				1/4	1 NB 2 3/8 x 6 3/4	5.33	19	8:00	12:00
16	DRILL STEM TEST					1 DM 3 x 6 3/4	14.80	8 3/4	9.1	9.2
17	PLUG BACK					1 SS 2 x 6 3/4	8.59	7 JS	3.8	4.5
18	SQUEEZE CEMENT					1 SI 2 3/8 x 6 3/4	4.10	121211	3/10	/
19	STUCK OR FISHING					1 CO 2 3/8 x 6 3/4	2.48	BYS26	8.4	8.2
20	HANDLE TOOLS								9.0	10.5
21	CONDITION MUD									
22	LOST CIRCULATION					19 DC 2 3/8 x 6 3/4	587.19	9453	29,700	
23										
24										
40	PERFORATE									
41	TUBING TRIPS									
42	TREATING									
43	SWABBING									
44	TESTING									

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
FROM	TO											
9515	9571	7 3/4				40	48	2000		6	120	

REMARKS: **Donax T6 #**
DESALTER = 4 HRS. UF 10.5. OF 9.1

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		
CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL	BIT	FT.	BIT NO.	TIME	WEIGHT
45	ABANDON					1 NB 2 3/8 x 6 3/4	5.33	19	4:00	8:00
	STANDBY					1 DM 3 x 6 3/4	14.80	8 3/4	9.1	9.1
	TOTALS	8	8	8	24	1 SS 2 x 6 3/4	8.59	7 JS	4.5	4.5
	HOURS FOR SHELL ACCOUNT	2	4	23	28	1 SI 2 3/8 x 6 3/4	4.10	121211	8.4	8.6
	BOILER #1	8	8	8		1 CO 2 3/8 x 6 3/4	2.48	BYS26	10.5	10.5
	BOILER #2	8	8							
	HOLE CONDITION									
1	HOLE DRAG (1000#)									
2	TORQUE ON BOTTOM (DP TURNS)									
3	FILL ON BOTTOM (FEET)									

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
FROM	TO											
9571	9624	7 3/4				40	46	2000		6	120	6

REMARKS: **DRILL**
CHECK B.O.P. SER. RIG.
DRILL

DAILY DRILLING REPORT

WELL NAME: SHELL Arctic Red West
LOCATION: G-55
PROVINCE: N.W. 5

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustafson Drilling (1964) LTD
RIG NO: 11
DEPTH AT START OF MORNING TOUR: 9345
DEPTH AT END OF EVENING TOUR: 9468
DAILY PROGRESS: 123
CUMULATIVE ROTATING HOURS: 550 3/4
DAYS FROM SPUD: 36
DATE: MAY 6 71

Table with columns: DP / DC SIZE, WT / FT, GRADE, MIN I.D., TOOL JT O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB TO CSG HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

TIME DISTRIBUTION - HOURS table with columns: OPERATION, MORN., DAY, EVE., TOTAL. Includes rows for RIG UP TEAR DOWN, DRILLING ACTUAL, REAMING, CORING, etc.

MORNING TOUR FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

DAY TOUR BIT RECORD and MUD RECORD tables. Includes rows for TEST B.O.P., DRILL STEM TEST, PLUG BACK, SQUEEZE CEMENT, STUCK OR FISHING, HANDLE TOOLS, etc.

DAY TOUR FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

EVENING TOUR BIT RECORD and MUD RECORD tables. Includes rows for ABANDON, STANDBY, and HOLES FOR SHELL ACCOUNT.

EVENING TOUR FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

HOLE CONDITION table with columns: HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET).

DEVIATION RECORD table with columns: DEPTH, DEVIATION, DIRECTION.

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
LOCATION: G-55
PROVINCE: N.W. 2

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustafson Drilling (1964) Ltd
RIG NO.: 11
DEPTH AT START OF MORNING TOUR: 9158
DEPTH AT END OF EVENING TOUR: 9345
DAILY PROGRESS: 187
CUMULATIVE ROTATING HOURS: 535
DAYS FROM SPUD: 35
DATE: MAY 5-71

Table with columns: DP./DC. SIZE, WT./FT., GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, NO. TO CSG. HEAD, SET AT, CEMENT USED (SACKS), REMARKS

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten notes like 'Rig Ser 1 BOPs', 'Dalg 8 3/4 Hole', 'Held Blow out Drill'.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten notes like 'Rig Ser 1 BOPs + Kelly Cask', 'Dalg'.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten notes like 'DRILL', 'CHECK B.O.P. SER. RIG', 'DRILL'.

HOLE CONDITION table with columns: HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET), KELLY DOWN, TOTAL, WT. OF DC IN AIR, REAMER CUTTER NO., WT. OF STRING, REAMER TYPE.

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST
LOCATION G-55 PROVINCE N.W.J.

OPERATOR Shell Canada Limited CONTRACTOR Gustafson Drilling (1964) LTD RIG NO. 11
SIGNATURE OF OPERATOR'S REPRESENTATIVE P. Maffink SIGNATURE OF CONTRACTOR'S TOOL PUSHER M. Samisto

Table with columns: DP / DC SIZE, WT. / FT., GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, NO. TO CSG. HEAD, SET AT, CEMENT USED (SACKS), REMARKS

TIME DISTRIBUTION - HOURS table with columns: OPERATION, MORN, DAY, EVE, TOTAL

BIT RECORD table with columns: BIT NO., FT., BIT NO., TIME, WEIGHT, VIS-SEC, PV/YP, GELS, W.L.-C.C., PH, DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, MUD MATERIALS ADDED

BIT RECORD table with columns: BIT NO., FT., BIT NO., TIME, WEIGHT, VIS-SEC, PV/YP, GELS, W.L.-C.C., PH, DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, MUD MATERIALS ADDED

FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1 LINER SIZE, S.P.M., PUMP NO. 2 LINER SIZE, S.P.M., METHOD PUMPS RUN

FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1 LINER SIZE, S.P.M., PUMP NO. 2 LINER SIZE, S.P.M., METHOD PUMPS RUN

FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1 LINER SIZE, S.P.M., PUMP NO. 2 LINER SIZE, S.P.M., METHOD PUMPS RUN

HOLE CONDITION table with columns: HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET)

DRILLER W. Lindall, J. Brown, J. Howie

DAILY DRILLING REPORT

CP-38 (10/69)

WELL NAME

Shell Arctic Red West

LOCATION

G-55

PROVINCE

N.W.J.

OPERATOR Shell Canada Limited

CONTRACTOR Gustafson Dalg (1964) Ltd

RIG NO. 11

DEPTH AT START OF MORNING TOUR 8900

DEPTH AT END OF EVENING TOUR

DAILY PROGRESS

CUMULATIVE ROTATING HOURS

DAYS FROM SPUD 32

DATE MAY 2 71

SIGNATURE OF OPERATOR'S REPRESENTATIVE R. Marink

SIGNATURE OF CONTRACTOR'S TOOL PUSHER M. Sawicki

DP / DC SIZE

14" / 634

WT / FT

E.

MIN. I.D.

2 7/8

TOOL JT O.D.

5 1/4

TYPE THREAD

FH

PUMP NO.

1

PUMP MANUFACTURER

N.S.C.O.

TYPE

8-P-80

STROKE LENGTH

8 1/2

LAST CASING TUBING OR LINER

SIZE

WT. AND GR.

NO OF JOINTS

FEET

KB. TO CSG. HEAD

SET AT

CEMENT USED (SACKS)

REMARKS

TIME DISTRIBUTION - HOURS

DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

MUD RECORD

FOOTAGE

Table with columns for operation, time, and drilling details. Includes rows for rig up, drilling, reaming, coring, trips, and surveys.

MORNING TOUR

Table with columns for rotation, formation, and deviation. Includes a time log section with handwritten notes: 'BEAR Took finding FREE POINT Put TORQUE IN PIPE & shoot off. WORK PIPE, & shoot off Pull out of Hole'.

Table with columns for operation, time, and drilling details. Includes rows for testing, plug back, stuck or fishing, and mud circulation.

DAY TOUR

Table with columns for rotation, formation, and deviation. Includes a time log section with handwritten notes: 'TRIP OUT. PICK UP JARS & REAMER. RUN IN SLOW BREAK CIRC. SCREW INTO FISH. & WORK JARS. TRIP OUT'.

Table with columns for operation, time, and drilling details. Includes rows for abandon, standby, and hole condition.

EVENING TOUR

Table with columns for rotation, formation, and deviation. Includes a time log section with handwritten notes: 'PULL OUT LAY DOWN 2 D.C. (RECOVER FISH) RUN IN D.C. CUT & SKIP DRUG. LINE RUN IN'.

DAILY DRILLING REPORT

WELL NAME: **SHELL ARCTIC RED WEST**
 LOCATION: **G-55** PROVINCE: **N.W.S.**

OPERATOR: **Shell Canada Limited** CONTRACTOR: **Gustafson Drilling (1964) LTD** RIG NO.: **11**
 SIGNATURE OF OPERATOR'S REPRESENTATIVE: *[Signature]* SIGNATURE OF CONTRACTOR'S TOOL PUSHER: *[Signature]*
 DEPTH AT START OF MORNING TOUR: **8900** DEPTH AT END OF EVENING TOUR: **8900** DAILY PROGRESS: **—** CUMULATIVE ROTATING HOURS: **31** DAYS FROM S.P.D.: **May 1 71**

DP / DC SIZE	WT. / FT	GRADE	MIN I.D.	TOOL JT. O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER	SIZE	WT. AND GR.	NO. OF JOINTS	FEET	AB TO CSG. HEAD	SET AT	CEMENT USED (SACKS)	REMARKS
4	14#	E#	2 7/8	5 1/4	5H	1	NAT	8-780	8 1/2		9 1/8	35# K55	38	1204		1201	886	
6 3/4	101		2 7/8	5 1/4	5H	2	NAT	8-780	8 1/2									

TIME DISTRIBUTION - HOURS					DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)										
NO.	OPERATION	MORN.	DAY	EVE	TOTAL	NO.	CODE	BIT	FT.	BIT NO.	TIME	ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION	ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	
1	RIG UP TEAR DOWN							1 NB 2 1/4 x 8 3/4	5.33	8 3/4	4:00 6:00												
2	DRILLING ACTUAL							1 SS 2 7/8 x 6 3/4	8.59	SEC	WEIGHT 8.9 9.1												
3	REAMING							1 DM 3 x 6 3/4	14.80	H88	VIS-SEC 42 39												
4	CORING							1 SI 2 3/8 x 6 3/4	4.10	12/12	PV/YP / 12/12 /												
5	CLEAN TO BOTTOM AND CIRCULATING							1 9/16 2 3/8 x 6 3/4	2.10	303333	GELS / 3/8 /												
6	TRIPS	2 1/2			2 1/2						W.L.C.C 9.2 9.2												
7	RIG SERVICE							21 DC 2 3/8 x 6 3/4	648.54	8900	PH 9.0 9.0												
8	RIG REPAIR							88 DP STANDS	8185.85		% SAND												
9	CUT AND/OR SLIP LINE	1/2			1/2			DP SINGLES			MUD MATERIALS ADDED												
10	DEVIATION SURVEY							KELLY DOWN	31.00		TYPE AMOUNT TYPE AMOUNT												
11	LOG							TOTAL	8900.30		C.M.C. 2 BAGS												
12	IRON CASING AND CEMENT							WT OF DC IN AIR	64		CAUSTIC 2 BAGS												
13	WAIT ON CEMENT							WT OF STRING	172														
14	NIPPLE UP B.O.P.																						

DETAILS OF OPERATION IN SEQUENCE AND REMARKS:
 12:00 Pick up shock sub of stab, change blades in stab. & slip 33' of Dalg line
 12:45 300 3/4 Run in w/ bit #16. Get stuck @ 8854.
 3:00 800 5/8 WORK STUCK PIPE, & MIX FREE PIPE & DIESEL FUEL.
 DRILLER: *D. Lindall*

TIME DISTRIBUTION - HOURS					DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)										
NO.	OPERATION	MORN.	DAY	EVE	TOTAL	NO.	CODE	BIT	FT.	BIT NO.	TIME	ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION	ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	
15	TEST B.O.P.							1 NB 2 1/4 x 8 3/4	5.33	8 3/4	8:00 12:00												
16	DRILL STEM TEST							1 SS 2 7/8 x 6 3/4	8.59	SEC	WEIGHT 9.0 9.1												
17	PLUG BACK							1 DM 3 x 6 3/4	14.80	H-88	VIS-SEC 38 40												
18	SQUEEZE CEMENT							1 SI 2 3/8 x 6 3/4	4.10	12/12	PV/YP 15/19 4/4 / /												
19	STUCK OR FISHING	5	8	8	21			1 CO 2 3/8 x 6 3/4	2.10	303333	GELS 4/12 / /												
20	HANDLE TOOLS							DP SINGLES			W.L.C.C 9												
21	CONDITION MUD							DP STANDS	8185.85		PH 9.5 9.5												
22	OST CIRCULATION							21 DC 2 3/8 x 6 3/4	648.54	8900	% SAND												
23	Work stuck	5	8	8	8			88 DP STANDS	8185.85		MUD MATERIALS ADDED												
24								DP SINGLES			TYPE AMOUNT TYPE AMOUNT												
40	PERFORATE							KELLY DOWN	31.00		1 BARREL B FREE												
41	TUBING TRIPS							TOTAL	8900.31		25 BBS DIESEL FUEL												
42	TREATING							WT OF DC IN AIR	64M														
43	SWABBING							WT OF STRING	172M														
44	TESTING																						
45																							

DETAILS OF OPERATION IN SEQUENCE AND REMARKS:
 8:00 MIX & PUMP DOWN DIESEL FUEL + FREE P.E. WORK ON STUCK PIPE.
 4:00 8. 19
 DRILLER: *A. Cuzink*

TIME DISTRIBUTION - HOURS					DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)										
NO.	OPERATION	MORN.	DAY	EVE	TOTAL	NO.	CODE	BIT	FT.	BIT NO.	TIME	ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION	ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	
60	ABANDON							1 NB 2 1/4 x 8 3/4	5.33	8 3/4	4:00												
70	STANDBY							1 SS 2 7/8 x 6 3/4	8.59	SEC	WEIGHT 9.1												
TOTALS		8	8	8	24			1 DM 3 x 6 3/4	14.80	H88	VIS-SEC 45												
HOURS FOR SHELL ACCOUNT		2	32	8	24			1 SI 2 3/8 x 6 3/4	4.10	12/12	PV/YP / /												
BOILER 1	8	8						1 9/16 2 3/8 x 6 3/4	2.10	303333	GELS / /												
BOILER 2	8	8						DP STANDS	8185.85		W.L.C.C 8.4												
								21 DC 2 3/8 x 6 3/4	648.54	8900	PH 9.5												
								88 DP STANDS	8185.85		% SOLIDS												
								DP SINGLES			% SAND												
HOLE CONDITION					DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)										
1	HOLE DRAG (1000#)							KELLY DOWN															
2	TORQUE ON BOTTOM (DP TURNS)							TOTAL															
3	FILL ON BOTTOM (FEET)							WT OF DC IN AIR															
								WT OF STRING															

DETAILS OF OPERATION IN SEQUENCE AND REMARKS:
 4:00 800 19 WORK STUCK PIPE DISPLACE 1 BBL MUD EVERY 1/2 HR.
 8:00 12:00 RUN IN W/ BEAR TOOLS TO FIND FREE POINT
 OVERTIME 8 HRS. WORK ON WATER LINE B. Myhytar. IMAW
 DRILLER: *J. Houisk*

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER WEST
 LOCATION: G-55
 PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
 CONTRACTOR: GUSTAVSON DRILLING LTD (1964 LTD)
 RIG NO.: 11
 SIGNATURE OF OPERATOR'S REPRESENTATIVE: [Signature]
 SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [Signature]
 DEPTH AT START OF MORNING TOUR: 8736
 DEPTH AT END OF EVENING TOUR: 8900
 DAILY PROGRESS: 164
 CUMULATIVE ROTATING HOURS: 30
 DAYS FROM SPUD: 30
 MONTH: APRIL
 DAY: 30
 YEAR: 71

NO.	OPERATION	TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		ROT. HOURS	DR-D CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN	
		MORN.	DAY	EVE.	TOTAL	NO.	CODE	FT.	BIT NO.	TIME	WEIGHT	FROM	TO				DEPTH	DEVIATION°					DIRECTION	DEPTH	DEVIATION°	DIRECTION		LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
1	RIG UP TEAR DOWN							1	B.S. 2 3/4 x 6 3/4	3.98		8 3/4																
2	DRILLING ACTUAL	1/2	1 1/4	4	12 1/4																							
3	REAMING	1/2			1 1/2			1	DM 3 x 6 3/4	14.80		M 98																
4	CORING							1	SI 2 3/4 x 6 3/4	4.10		JETS 1/32"																
5	CLEAN TO BOTTOM AND CIRCULATING							1	CO. 2 3/4 x 6 3/4	2.10		JETS 1/32"																
6	TRIPS	1/2	2 1/2	6 3/4																								
7	RIG SERVICE	1/4	1/4	1/4	3/4			21	DC 2 3/4 x 6 3/4	648.54		8736																
8	RIG REPAIR							86	DP STANDS			11																
9	CUT AND/OR SLIP LINE							1	DP SINGLES	8030.68																		
10	DEVIATION SURVEY								KELLY DOWN	4300																		
11	WIRE LOG		1/4	1/4					TOTAL	8747.28																		
12	IRON CASING AND CEMENT								WT OF DC IN AIR	64M																		
13	WAIT ON CEMENT								WT OF STRING	172M																		
14	NIPPLE UP B.O.P.								DRILLING ASSEMBLY AT END OF TOUR																			
15	TEST B.O.P.								BIT			15																
16	DRILL STEM TEST							1	BS 2 3/4 x 6 3/4	3.98		8 3/4																
17	PLUG BACK							1	DM 3 x 6 3/4	14.80		606																
18	SQUEEZE CEMENT							1	SI 2 3/4 x 6 3/4	4.10		M 98																
19	STUCK OR FISHING							1	CO. 2 3/4 x 6 3/4	2.10		JETS 1/32"																
20	HANDLE TOOLS	1/2	1	2 1/2					WT OF DC IN AIR	64																		
21	CONDITION MUD								WT OF STRING	172M																		
22	LOSS CIRCULATION							21	DC 2 3/4 x 6 3/4	648.54		8736																
23								87	DP STANDS			120																
24								2	DP SINGLES	8154.71																		

NO.	OPERATION	TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		ROT. HOURS	DR-D CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN
		MORN.	DAY	EVE.	TOTAL	NO.	CODE	FT.	BIT NO.	TIME	WEIGHT	FROM	TO				DEPTH	DEVIATION°					DIRECTION	DEPTH	DEVIATION°	DIRECTION		LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
30	PERFORATE								KELLY DOWN	2800																	
40	TUBING TRIPS								TOTAL	8856.23																	
41	TREATING								WT OF DC IN AIR	64																	
42	SWABBING								WT OF STRING	172M																	
43	TESTING								DRILLING ASSEMBLY AT END OF TOUR																		
44									BIT			15															
45	ABANDON							1	BS 2 3/4 x 6 3/4	3.98		8 3/4															
60	STANDBY							1	DM 3 x 6 3/4	14.80		SEC															
70	TOTALS	8	8	8				1	SI 2 3/4 x 6 3/4	4.10		M 98															
80	HOURS FOR SHELL ACCOUNT	2	3	2	24			1	CO. 2 3/4 x 6 3/4	2.10		JETS 1/32"															
90	BOILER #	8	8	8					WT OF DC IN AIR	64M																	
100									WT OF STRING	172M																	

NO.	OPERATION	TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		ROT. HOURS	DR-D CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN
		MORN.	DAY	EVE.	TOTAL	NO.	CODE	FT.	BIT NO.	TIME	WEIGHT	FROM	TO				DEPTH	DEVIATION°					DIRECTION	DEPTH	DEVIATION°	DIRECTION		LINER SIZE	S.P.M.	LINER SIZE	S.P.M.
1	HOLE DRAG (1000#)								KELLY DOWN	40.00																	
2	TORQUE ON BOTTOM (DP TURNS)								TOTAL	8900.37																	
3	FILL ON BOTTOM (FEET)								WT OF DC IN AIR	64M																	
									WT OF STRING	173M																	

MORNING TOUR DAY TOUR EVENING TOUR

DETAILS OF OPERATION IN SEQUENCE AND REMARKS
 Laying 4 HRS overtime Hi-Hayden water line
 Hoist Core #1 8 HRS overtime E. Johnson for Coring Supervision
 Recd Core SERV BHL & Layed Down Same
 SERV Rig & checked BOP
 Picked up morel D.C. Bit sub Installed Stab. @ 60'
 Run in w/ Bit #15
 Ream Path Hole to 8 3/4"
 Dalg
 DRILLER: [Signature]

DETAILS OF OPERATION IN SEQUENCE AND REMARKS
 Rig SERV V BOPs.
 DAIG 8 3/4 Hole.
 DRILLER: [Signature]

DETAILS OF OPERATION IN SEQUENCE AND REMARKS
 RIG SERV V BOPs
 DRLG
 DROP SURVEY.
 TRIP OUT.
 TEAR SUBS DOWN & MAKE UP SAME.
 DRILLER: [Signature]

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red River West
LOCATION: G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustafson Dalg (1964 LTD)
RIG NO: 11
DEPTH AT START OF MORNING TOUR: 8535
DEPTH AT END OF EVENING TOUR: 8736
DAILY PROGRESS: 201'
CUMULATIVE ROTATING HOURS: 29
DAYS FROM SPUD: April 29 71

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP PRESS, AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like TEST B.O.P., DRILL STEM TEST, PLUG BACK, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP PRESS, AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like ABANDON, STANDBY, BOILER, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP PRESS, AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

HOLE CONDITION table with rows for HOLE DRAG, TORQUE ON BOTTOM, FILL ON BOTTOM.

DRILLER: D. Lindall
4 HRS OVERTIME WORK ON WATERLINE. L. SCOTT.

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red River West
LOCATION: G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustavson D&G 1964 LTD
RIG NO: 11
DEPTH AT START OF MORNING TOUR: 8228'
DEPTH AT END OF EVENING TOUR: 8535'
DAILY PROGRESS: 307'
CUMULATIVE ROTATING HOURS: 28
DAYS FROM SPUD: April 28
DATE: April 28 71

Table with columns: DP./UC SIZE, WT./FT, GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB TO CSG HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

TIME-DISTRIBUTION - HOURS table with columns: CODE NO., OPERATION, MORN., DAY, EVE, TOTAL. Includes rows for RIG UP, DRILLING ACTUAL, REAMING, CORING, CLEAN TO BOTTOM, TRIPS, RIG SERVICE, RIG REPAIR, CUT AND/OR SLIP LINE, DEVIATION SURVEY, LOG, RUN CASING AND CEMENT, WAIT ON CEMENT, NIPPLE UP B.O.P., TEST B.O.P., DRILL STEM TEST, PLUG BACK, SQUEEZE CEMENT, STUCK OR FISHING, HANDLE TOOLS, CONDITION MUD, CIRCULATION.

BIT RECORD and MUD RECORD tables for the morning tour. BIT RECORD includes columns: BIT NO., FT., SIZE, MFG., TYPE, JETS, SERIAL NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE. MUD RECORD includes columns: TIME, WEIGHT, VIS-SEC, PV/YP, GELS, W.L.-C.C., PH, % SOLIDS, % SAND, MUD MATERIALS ADDED.

BIT RECORD and MUD RECORD tables for the evening tour. Includes rows for ABANDON, STANDBY, and HOLE CONDITION (HOLE DRAG, TORQUE ON BOTTOM, FILL ON BOTTOM).

FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY R.P.M., WT. ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL. (CFM), PUMP NO. 1 LINER SIZE S.P.M., PUMP NO. 2 LINER SIZE S.P.M., METHOD PUMPS RUN.

DEVIATION RECORD table with columns: DEPTH, DEVIATION°, DIRECTION. Includes a TIME LOG table with columns: FROM, TO, ELAPSED TIME, CODE.

FOOTAGE table for the day tour. Includes a DEVIATION RECORD table and a TIME LOG table.

FOOTAGE table for the evening tour. Includes a DEVIATION RECORD table and a TIME LOG table.

HOLE CONDITION table with rows: 1 HOLE DRAG (1000#), 2 TORQUE ON BOTTOM (DP TURNS), 3 FILL ON BOTTOM (FEET). Includes handwritten notes: 2 HRS overtime Mecht. B. Russel, 4 HRS OVERTIME LAYING WATERLINE. R. BERG.

DAILY DRILLING REPORT

CP-38 (10/69)

WELL NAME: Shell Arctic Red River West
LOCATION: G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustavson Drilling 1964 Ltd.
RIG NO. 11
DEPTH AT START OF MORNING TOUR: 8071'
DEPTH AT END OF EVENING TOUR: 8228'
DAILY PROGRESS: 151'
CUMULATIVE ROTATING HOURS: 27
DAYS FROM SPUD: April 27 71

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, ELAPSED TIME, CODE, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes data for operations 1-14.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, ELAPSED TIME, CODE, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes data for operations 15-24.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, ELAPSED TIME, CODE, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes data for operations 25-30 and summary rows.

MORNING TOUR
DAY
EVENING TOUR

ROTARY PUMP

HOLE CONDITION

Summary table for Hole Condition with columns: HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET).

DRILLER: L. SCOTT

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red River West
LOCATION: G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustafson Drilling 1964 LTD.
RIG NO: 11
DEPTH AT START OF MORNING TOUR: 7908'
DEPTHS AT END OF EVENING TOUR: 8077'
DAILY PROGRESS: 169'
CUMULATIVE ROTATING HOURS: 26
DAYS FROM SPUD: 26
DATE: April 26 71

Table with columns: DP/DC SIZE, WT./FT, GRADE, MIN ID, TOOL JT O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH. Includes data for pumps 1 and 2.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like TEST B.O.P., DRILL STEM TEST, PLUG BACK, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS. Includes time logs and details of operation.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS. Includes time logs and details of operation.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS. Includes time logs and details of operation.

DAILY DRILLING REPORT

WELL NAME: *Shell Arctic Red River West*
 LOCATION: *G-55* PROVINCE: *N.W.T.*

OPERATOR: **Shell Canada Limited** CONTRACTOR: *Gustavson Dalg 1964 LTD.* RIG NO.: *11*
 SIGNATURE OF OPERATOR'S REPRESENTATIVE: *[Signature]* SIGNATURE OF CONTRACTOR'S TOOL PUSHER: *[Signature]*
 DEPTH AT START OF MORNING TOUR: *7693'* DEPTH AT END OF EVENING TOUR: *7908'* DAILY PROGRESS: *215'* CUMULATIVE ROTATING HOURS: *886'* DAYS FROM SPUD: *25* MONTH: *April* DAY: *25* YEAR: *71*

DP / DC SIZE	WT. / FT.	GRADE	MIN. I.D.	TOOL JT. O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER	SIZE	WT. AND GR.	NO. OF JOINTS	FEET	KB TO CSG. HEAD	SET AT	CEMENT USED (SACKS)	REMARKS
4"	14#	F	2 7/8"	5 1/2"	FH	1	Not	8P80	8 1/2"	9 5/8"	35# K55	38	1204	1201	886'			
6 3/4"	101#		2 7/8"	6 3/4"	5" H90	2	Not	8P80	8 1/2"									

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MCN.	DAY	EVE.	TOTAL	BIT	FT.	BIT NO.	TIME
1	RIG UP TEAR DOWN					1 R3 2 1/2" 6 3/4"	5.33 FT.	SIZE 8 3/4"	12:00 H 00 7:00
2	DRILLING ACTUAL		7 3/4	1 3/4	28 1/4	1 S5 2 1/2" 6 3/4"	8.59 FT.	MFG. SEC	9.1 9.1 9.1
3	REAMING					1 DM 3 1/2" 6 3/4"	14.80 FT.	TYPE M88	38 37 36
4	CORING					1 S1 2 1/2" 6 3/4"	4.10 FT.	JETS 1/32"	11 11 12
5	CLEAN TO BOTTOM AND CIRCULATING					1 C0 2 1/2" 6 3/4"	2.10 FT.	SERIAL NO. 340521	W.L.-C.C. 9. 8.
6	TRIPS								PH 9.5 9.5
7	RIG SERVICE	1/4	1/4	1/4	3/4	21 DC 2 7/8" 6 3/4"	648.54 FT.	DEPTH IN 7592'	% SOLIDS 13.10%
8	RIG REPAIR					76 DP STANDS	7010.85 FT.	TOTAL FTG. 178'	SALINITY 13100
9	CUT AND/OR SLIP LINE					- DP SINGLES		TOTAL HRS. RUN 19 1/2	MUD MATERIALS ADDED
10	DEVIATION SURVEY					KELLY DOWN	16.00 FT.	BIT CONDITION 1/8" T/B/GAGE IN	BENEX 145 SACKS GEL 133 SACKS
11	RE LINE LOG					TOTAL	7770.35 FT.	REAMER CUTTER NO. INVENTORY	BENEX 20 SACKS CAUSTIC 14 SACKS
12	RUN CASING AND CEMENT					WT. OF DC IN AIR	64M LBS.	REAMER TYPE APRIL 24-71	
13	WAIT ON CEMENT					WT. OF STRING	158M LBS.		
14	NIPPLE UP B.O.P.								

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
7693'	7770'	7 3/4	77'			36	50	2100	6"	120	6"	
DEVIATION RECORD												
TIME LOG												
FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS								
12:00	12:15	1/4		Serv Rig & Checked B.O.P								
12:15	8:00	7 3/4		Dalg								

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MCN.	DAY	EVE.	TOTAL	BIT	FT.	BIT NO.	TIME
15	TEST B.O.P.	V				1 R3 2 1/2" 6 3/4"	5.33 FT.	SIZE 8 3/4"	8:00 12:00 3:00
16	DRILL STEM TEST					1 S5 2 1/2" 6 3/4"	8.59 FT.	MFG. SEC	9.1 9.1 9.1
17	PLUG BACK					1 DM 3 1/2" 6 3/4"	14.80 FT.	TYPE M88	33 38 37
18	SQUEEZE CEMENT					1 S1 2 1/2" 6 3/4"	4.10 FT.	JETS 1/32"	11/10
19	STUCK OR FISHING					1 S1 2 1/2" 6 3/4"	4.10 FT.	JETS 1/32"	2/5
20	HANDLE TOOLS					1 C0 2 1/2" 6 3/4"	2.10 FT.	SERIAL NO. 340521	W.L.-C.C. 9.0 10.2
21	CONDITION MUD					21 DC 2 7/8" 6 3/4"	648.54 FT.	DEPTH OUT 7592'	PH 9.5 9.5
22	POST CIRCULATION					76 DP STANDS	7010.85 FT.	TOTAL FTG. 248'	% SAND 17.65%
23						2 DP SINGLES	7132.40 FT.	TOTAL HRS. RUN 27 1/4	MUD MATERIALS ADDED
24						KELLY DOWN	2500 FT.	BIT CONDITION 1/8" T/B/GAGE Dalg	GEL 10 BAGS BENEX 2 BAGS CMC 1 BAG CORR. INH. 2 CANS
40	PERFORATE					TOTAL	7840.86 FT.		
41	TUBING TRIPS					WT. OF DC IN AIR	64M LBS.	REAMER CUTTER NO.	
42	TREATING					WT. OF STRING	158M LBS.	REAMER TYPE	
43	SWABBING								
44	TESTING								
45									

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
7770'	7840'	7 3/4	70'			35	50	2100	6"	120	6"	
DEVIATION RECORD												
TIME LOG												
FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS								
8:00	10:45	2 3/4		Dalg 8 3/4 Hole - RIG SER. 1 BOP								
10:45	11:00	1/4		Dalg 8 3/4 Hole								
11:00	4:00	5										

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MCN.	DAY	EVE.	TOTAL	BIT	FT.	BIT NO.	TIME
60	ABANDON					1 R3 2 1/2" 6 3/4"	5.33 FT.	SIZE 8 3/4"	4:00 8:00 11:30
70	STANDBY					1 S5 2 1/2" 6 3/4"	8.59 FT.	MFG. SEC	9.1 9.1 9.1
TOTALS	8	8	8	24		1 DM 3 1/2" 6 3/4"	14.80 FT.	TYPE M88	15/5
HOURS FOR SHELL ACCOUNT	8	8	8	24		1 S1 2 1/2" 6 3/4"	4.10 FT.	JETS 1/32"	5/12
BOILER #1						1 C0 2 1/2" 6 3/4"	2.10 FT.	SERIAL NO. 340521	W.L.-C.C. 9.0 9.0
Boiler #2	8	8	8	24		21 DC 2 7/8" 6 3/4"	648.54 FT.	DEPTH OUT 7592'	PH 9.5 9.5 9.5
Code 232 B						77 DP STANDS	7795.00 FT.	TOTAL FTG. 316'	SALINITY 70150
						2 DP SINGLES	7195.00 FT.	TOTAL HRS. RUN 35	MUD MATERIALS ADDED
						KELLY DOWN	30.00 FT.	BIT CONDITION 1/8" T/B/GAGE IN	GEL 10 BAGS BENEX 2 BAGS CMC 1 BAG CAUSTIC 1 BAG
						TOTAL	7908.46 FT.		
						WT. OF DC IN AIR	64M LBS.	REAMER CUTTER NO.	
						WT. OF STRING	159M LBS.	REAMER TYPE	

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
7840'	7908'	7 3/4	68'			34	50	2100	6"	120	6"	
DEVIATION RECORD												
TIME LOG												
FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS								
4:00	6:00	2		Dalg 8 3/4 Hole - RIG SER. 1 BOP								
6:00	6:15	1/4		Dalg								
6:15	12:00	5 3/4										

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
CODE NO.	OPERATION	MCN.	DAY	EVE.	TOTAL	BIT	FT.	BIT NO.	TIME
1	HOLE DRAG (1000#)	6M				KELLY DOWN	30.00 FT.	BIT CONDITION 1/8" T/B/GAGE IN	GEL 10 BAGS BENEX 2 BAGS CMC 1 BAG CAUSTIC 1 BAG
2	TORQUE ON BOTTOM (DP TURNS)					TOTAL	7908.46 FT.		
3	FILL ON BOTTOM (FEET)					WT. OF DC IN AIR	64M LBS.	REAMER CUTTER NO.	
						WT. OF STRING	159M LBS.	REAMER TYPE	

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
7908'												
DEVIATION RECORD												
TIME LOG												
FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS								
4:00	6:00	2		Dalg 8 3/4 Hole - RIG SER. 1 BOP								
6:00	6:15	1/4		Dalg								
6:15	12:00	5 3/4										

ROTARY CONTROL SYSTEM

MORNING TOUR DAY TOUR EVENING TOUR

DRILLER: *[Signature]*

B. Russell - 1 hr. Overtime
DRILLER: *[Signature]*

DRILLER: *[Signature]*

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red River West
LOCATION: G-55
PROVINCE: N.W.T

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustafson Drig 1964 LTD
RIG NO: 11
SIGNATURE OF OPERATOR'S REPRESENTATIVE: D. Brown
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [Signature]

DEPTH AT START OF MORNING TOUR: 7527'
DEPTH AT END OF EVENING TOUR: 7693'
DAILY PROGRESS: 166'
CUMULATIVE ROTATING HOURS: 24
DAYS FROM SPUD: 4
DATE: 24 71

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, CORE-C, FORMATION, PUMP NO. 1, PUMP NO. 2. Includes rows for MORNING TOUR and DAY TOUR.

Table with columns: DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for TEST B.O.P., DRILL STEM TEST, PWDG BACK, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, CORE-C, FORMATION, PUMP NO. 1, PUMP NO. 2. Includes rows for DAY TOUR and EVENING TOUR.

Table with columns: DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for ABANDON, STANDBY, and HOLES 1, 2, 3.

Table with columns: FOOTAGE, ROT HOURS, DR-D, CORE-C, FORMATION, PUMP NO. 1, PUMP NO. 2. Includes rows for EVENING TOUR.

HOLES: 1, 2, 3. Includes details like BOILER #1, BOILER #2, HOLE DR (1000#), TORQUE ON BOTTOM, FILL ON BOTTOM.

DRILLER: Lindall Johnson

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
 LOCATION: G-55 PROVINCE: N. W. T.

OPERATOR: Shell Canada Limited CONTRACTOR: GUSTAFSON RIG NO: 11
 SIGNATURE OF OPERATOR'S REPRESENTATIVE: *D. Brown* SIGNATURE OF CONTRACTOR'S TOOL PUSHER: *[Signature]*
 DEPTH AT START OF MORNING TOUR: 7300 DEPTH AT END OF EVENING TOUR: 7527 DAILY PROGRESS: 227
 CUMULATIVE ROTATING HOURS: 23 DAYS FROM SPUD: 4 MONTH: 4 DAY: 23 YEAR: 71

DP./DC SIZE	WT./FT.	GRADE	MIN. I.D.	TOOL JT. O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER	SIZE	WT. AND GR.	NO. OF JOINTS	FEET	KB TO CSG. HEAD	SET AT	CEMENT USED (SACKS)	REMARKS
4	14	E	2 3/8	5 1/4	4 F.H.	1	NAT	8P80	8 1/2		9 3/8	36 #455	38	1204		1201	886	
6 3/4	101		2 3/8	6 3/4	5 H90	2	NAT	8P80	8 1/2									

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
NO.	OPERATION	MORN.	DAY	EVE	TOTAL	NO. CODE	AT END OF TOUR	BIT NO.	TIME
1	RIG UP TEAR DOWN					1 R3	24x64	5.33	12:00
2	DRILLING ACTUAL	6 3/4	7 3/4	7	214	1 S5	2 x 64	8.59	12:00
3	REAMING					1 Pm	3 x 61/8	14.80	12:00
4	CORING					1 S1	2 x 64	4.10	12:00
5	CLEAN TOP BOTTOM AND CIRCULATING					1 C	2 x 8 x 64	2.10	12:00
6	TRIPS								12:00
7	RIG SERVICE	1/4	1/4	1/2	21	PC	28x64	648.54	12:00
8	RIG REPAIR	1/4			71	DP	STANDS	6666.71	12:00
9	CUT AND/OR SLIP LINE					2 DP	SINGLES		12:00
10	DEVIATION SURVEY		3/4	3/4				16.00	12:00
11	LOG								12:00
12	RUN CASING AND CEMENT								12:00
13	WAIT ON CEMENT								12:00
14	NIPPLE UP B.O.P.								12:00
15	TEST B.O.P.	1/4			1/4				12:00

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000 #)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
7300	7366	6 1/2	66			40	50	2100		6	120	6
								650		6	60	
DEVIATION RECORD		DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION		
TIME LOG		FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS						
		12:00	2:00	2		DRILL						
		2:00	3:15	1 1/4		CHANGE BUSHING & NIPPLE ON MUDLINE						
		3:15	4:15	1		DRILL						
		4:15	7:30	3 1/4		CHECK B.O.P. SER. RIG						
		7:30	8:00	3 1/2		DRILL						
		HELD B.O.P. DRILL DRILLER J. Hovick										

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
NO.	OPERATION	MORN.	DAY	EVE	TOTAL	NO. CODE	AT END OF TOUR	BIT NO.	TIME
15	TEST B.O.P.	1/4			1/4				8:00
16	DRILL STEM TEST					1 R3	24x64	6.33	8:00
17	PLUG BACK					1 S5	2 x 64	8.59	8:00
18	SQUEEZE CEMENT					1 Pm	3 x 61/8	14.80	8:00
19	STUCK OR FISHING					1 S1	2 x 64	4.10	8:00
20	HANDLE TOOLS					1 C	2 x 8 x 64	2.10	8:00
21	CONDITION MUD								8:00
22	CIRCULATION					21 DC	24x64	648.54	8:00
23						71 DP	STANDS		8:00
24						1 DP	SINGLES		8:00
TOTALS									
KELLY DOWN					43.00			BIT CONDITION 1/8" T/B/GAGE	IN
TOTAL					7455.50				
WT. OF DC IN AIR					64m			REAMER CUTTER NO.	
WT. OF STRING					154m			REAMER TYPE	
MUD MATERIALS ADDED								TYPE	AMOUNT
								GEL	10 BAGS
								Cm.c	1 BAG
								BENEX	2 BAGS

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000 #)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
7366	7455	7 3/4	89'			40	50	2100		6"	120	6"
DEVIATION RECORD		DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION		
TIME LOG		FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS						
		8:00	8:15	1/4		SERV RIG CHECKED HYDRIT 4" PIPE RAMIS						
		8:15	1:00	7 3/4		DRILG 8 3/4" HOLE						
		B. Russell 11 - 2hrs Overtime										

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
NO.	OPERATION	MORN.	DAY	EVE	TOTAL	NO. CODE	AT END OF TOUR	BIT NO.	TIME
40	PERFORATE								4:30
41	TUBING TRIPS					1 R3	24x64	5.33	4:30
42	TREATING					1 S5	2 x 64	8.59	4:30
43	SWABBING					1 Pm	3 x 61/8	14.80	4:30
44	TESTING					1 S1	2 x 64	4.10	4:30
45						21 DC	24x64	648.54	4:30
60	ABANDON					73 DP	STANDS		4:30
70	STANDBY					1 DP	SINGLES		4:30
TOTALS		8	8	8	24				
KELLY DOWN					22.00			BIT CONDITION 1/8" T/B/GAGE	IN
TOTAL					7527.47				
WT. OF DC IN AIR					64m			REAMER CUTTER NO.	
WT. OF STRING					154m			REAMER TYPE	
MUD MATERIALS ADDED								TYPE	AMOUNT
								GEL	10 BAGS
								CORR	1 WH. 2CM
								CMC	1 BAG
								BENEX	2 BAGS
								CAUSTIC	2 BAGS

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000 #)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
7455	7527	7	72			40	50	2100		6	120	6
DEVIATION RECORD		DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION		
TIME LOG		FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS						
		4:00	4:15	1/4		RIG SER. / BOPS.						
		4:15	10:00	5 3/4		DRILG 8 3/4" HOLE.						
		10:00	10:45	3/4		SURVEY						
		10:45	12:00	1 1/4		DRILG 8 3/4" HOLE.						

TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
NO.	OPERATION	MORN.	DAY	EVE	TOTAL	NO. CODE	AT END OF TOUR	BIT NO.	TIME
80	BOILER	8	8	8	24	1 S1	2 x 64	4.10	8:00
TOTALS		8	8	8	24				
KELLY DOWN					22.00			BIT CONDITION 1/8" T/B/GAGE	IN
TOTAL					7527.47				
WT. OF DC IN AIR					64m			REAMER CUTTER NO.	
WT. OF STRING					154m			REAMER TYPE	
MUD MATERIALS ADDED								TYPE	AMOUNT
								GEL	10 BAGS
								CORR	1 WH. 2CM
								CMC	1 BAG
								BENEX	2 BAGS
								CAUSTIC	2 BAGS

FOOTAGE		ROT HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R P M	WT ON BIT (1000 #)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
7500	7527	2	55TE									
DEVIATION RECORD		DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION		
TIME LOG		FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS						
		4:00	4:15	1/4		RIG SER. / BOPS.						
		4:15	10:00	5 3/4		DRILG 8 3/4" HOLE.						
		10:00	10:45	3/4		SURVEY						
		10:45	12:00	1 1/4		DRILG 8 3/4" HOLE.						

HOLE CONDITION
 1 HOLE DRAG (!000#)
 2 TORQUE ON BOTTOM (DP TURNS)
 3 FILL ON BOTTOM (FEET)

DRILLER: *D. Lindell*

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
LOCATION: G-55
PROVINCE: N. W. T.

OPERATOR: Shell Canada Limited
CONTRACTOR: GUSTAUSON
SIGNATURE OF OPERATOR'S REPRESENTATIVE: J. Brown
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [Signature]

RIG NO. 11
DEPTH AT START OF MORNING TOUR: 7162
DEPTH AT END OF EVENING TOUR: 7300
DAILY PROGRESS: 138
CUMULATIVE ROTATING HOURS: 22
DAYS FROM SPUD: 4
MONTH: 22
DAY: 71

Table with columns: DP / DC SIZE, WT. FT., GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH. Includes data for 4" and 6 3/4" sizes.

Table with columns: SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB. TO CSG. HEAD, SET AT, CEMENT USED (SACKS), REMARKS. Includes data for 9 7/8 size.

TIME DISTRIBUTION - HOURS table with columns: OPERATION, MORN., DAY, EVE, TOTAL. Includes rows for RIG UP TEAR DOWN, DRILLING ACTUAL, REAMING, CORING, CLEAN TO BOTTOM AND CIRCULATING, TRIPS, RIG SERVICE, RIG REPAIR, CUT AND/OR SLIP LINE, DEVIATION SURVEY, WAIT ON CEMENT, NIPPLE UP B.O.P., TEST B.O.P., DRILL STEM TEST, PLUG BACK, SQUEEZE CEMENT, STUCK OR FISHING, HANDLE TOOLS, CONDITION MUD, CIRCULATION, PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING.

MORNING TOUR FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes data for 7162 to 7225.

Table with columns: OPERATION, MORN., DAY, EVE, TOTAL. Includes rows for DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes data for 7225 to 7262.

DAY TOUR FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes data for 7225 to 7262.

Table with columns: OPERATION, MORN., DAY, EVE, TOTAL. Includes rows for ABANDON, STANDBY, TOTALS, HOURS FOR SHELL ACCOUNT, BOILER, HOLE CONDITION, HOLE DRAG, TORQUE ON BOTTOM, FILL ON BOTTOM.

EVENING TOUR FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes data for 7262 to 7300.

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST
LOCATION G-55 N.W.T.

OPERATOR Shell Canada Limited
CONTRACTOR GUST. AUSON
RIG NO. 11
DEPTH AT START OF MORNING TOUR 6998
DEPTH AT END OF EVENING TOUR 7162
DAILY PROGRESS 164
CUMULATIVE ROTATING HOURS 317 1/2
DAYS FROM SPUD 21
MCNTH 4
DAY 21
YEAR 71

Table with columns: DP / DC SIZE, WT. / FT, GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO OF JOINTS, FEET, KB TO CSG. HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

TIME DISTRIBUTION - HOURS table with columns: OPERATION, MORN., DAY, EVE, TOTAL. Includes rows for RIG UP TEAR DOWN, DRILLING ACTUAL, REAMING, CORING, CLEAN TO BOTTOM AND CIRCULATING, TRIPS, RIG SERVICE, RIG REPAIR, CUT AND/OR SLIP LINE, DEVIATION SURVEY, RUN CASING AND CEMENT, WAIT ON CEMENT, NIPPLE UP B.O.P.

BIT RECORD and MUD RECORD tables for Morning Tour. Includes columns for BIT NO., FT., BIT NO., TIME, WEIGHT, VIS-SEC, TYPE, JETS 1/32", SERIAL NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE.

BIT RECORD and MUD RECORD tables for Evening Tour. Includes columns for BIT NO., FT., BIT NO., TIME, WEIGHT, VIS-SEC, TYPE, JETS 1/32", SERIAL NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE.

FOOTAGE and DEVIATION RECORD tables for Morning Tour. Includes columns for FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R P M, WT ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

FOOTAGE and DEVIATION RECORD tables for Day Tour. Includes columns for FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R P M, WT ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

FOOTAGE and DEVIATION RECORD tables for Evening Tour. Includes columns for FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R P M, WT ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

HOLE CONDITION table with columns: HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET). Includes handwritten notes like 'Code 232B' and 'DRILLER D. J. Randall'.

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST
LOCATION G-55 PROVINCE N.W.T.

OPERATOR Shell Canada Limited CONTRACTOR GUSTAVSON RIG NO 11
DEPTH AT START OF MORNING TOUR 6809 DEPTH AT END OF EVENING TOUR 6998 DAILY F. PROGRESS 189 CUMULATIVE ROTATING HOURS 305 DAYS FROM SPUD 20 MONTH 4 DATE 20 71

Table with columns: DP / DC SIZE, WT / FT, GRADE, MIN I.D., TOOL JT O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB TO CSG. HEAD, SET AT, CEMENT USED (SACKS), REMARKS

TIME DISTRIBUTION - HOURS table with columns: CODE NO, OPERATION, MORN., DAY, EVE, TOTAL, BIT RECORD, MUD RECORD, FOOTAGE

MORNING TOUR table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN

Table with columns: CODE NO, OPERATION, MORN., DAY, EVE, TOTAL, BIT RECORD, MUD RECORD, FOOTAGE

DAY TOUR table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN

Table with columns: CODE NO, OPERATION, MORN., DAY, EVE, TOTAL, BIT RECORD, MUD RECORD, FOOTAGE

EVENING TOUR table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN

HOLE CONDITION table with columns: HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (1' FT)

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST
LOCATION 6-55 PROVINCE N. W. T

OPERATOR Shell Canada Limited CONTRACTOR GUSTAVSON RIG NO. 11
DEPTH AT START OF MORNING TOUR 6586 DEPTH AT END OF EVENING TOUR 6809 DAILY PROGRESS 223
SIGNATURE OF OPERATOR'S REPRESENTATIVE [Signature] SIGNATURE OF CONTRACTOR'S TOOL PUSHER [Signature]

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

Table with columns: FOOTAGE, ROTARY, WT ON BIT, PUMP, AIR, PUMP NO. 1, PUMP NO. 2, METHOD. Includes rows for MORNING TOUR and DAY TOUR.

Table with columns: DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like TEST B.O.P., DRILL STEM TEST, PLUG BACK, etc.

Table with columns: FOOTAGE, ROTARY, WT ON BIT, PUMP, AIR, PUMP NO. 1, PUMP NO. 2, METHOD. Includes rows for DAY TOUR and EVENING TOUR.

Table with columns: DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like PERFORATE, TUBING TRIPS, TREATING, etc.

Table with columns: FOOTAGE, ROTARY, WT ON BIT, PUMP, AIR, PUMP NO. 1, PUMP NO. 2, METHOD. Includes rows for EVENING TOUR and NIGHT TOUR.

HOLE CONDITION: 1 HOLE DRAG (1000#), 2 TORQUE ON BOTTOM (DP TURNS), 3 FILL ON BOTTOM (FEET). Includes DRILLER D. Lindall.

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC REG WEST
LOCATION G-55 PROVINCE N.W.T.

OPERATOR Shell Canada Limited
CONTRACTOR GUSTAVSON
SIGNATURE OF OPERATOR D. Brown
SIGNATURE OF CONTRACTOR'S TOOL PUSHER [Signature]

Table with columns: RIG NO. 11, DEPTH AT START OF MORNING TOUR 6400, DEPTH AT END OF EVENING TOUR 6586, DAILY PROGRESS 186, CUMULATIVE ROTATING HOURS 261 1/4, DAYS FROM SPUD 18, DATE 4 18 71.

Table with columns: DP / DC SIZE, WT. / FT, GRADE, MIN I.D., TOOL JT. O.D., TYPE / READ, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY AT END OF TOUR, BIT RECORD, MUD RECORD.

MORNING TOUR

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO 1, PUMP NO 2, METHOD PUMPS.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY AT END OF TOUR, BIT RECORD, MUD RECORD.

DAY TOUR

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO 1, PUMP NO 2, METHOD PUMPS.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY AT END OF TOUR, BIT RECORD, MUD RECORD.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY AT END OF TOUR, BIT RECORD, MUD RECORD.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY AT END OF TOUR, BIT RECORD, MUD RECORD.

EVENING TOUR

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO 1, PUMP NO 2, METHOD PUMPS.

Table with columns: HOLE CONDITION, DRILLING ASSEMBLY AT END OF TOUR, BIT RECORD, MUD RECORD.

Code 232 B

DRILLER D. Jendall

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
LOCATION: G-55 PROVINCE: N.W.T

OPERATOR: Shell Canada Limited
CONTRACTOR: GUSTAUSSON
RIG NO.: 11
DEPTH AT START OF MORNING TOUR: 6130
DEPTH AT END OF EVENING TOUR: 6400
DAILY PROGRESS: 270
CUMULATIVE ROTATING HOURS: 245
DAYS FROM SPUD: 17
MONTH: 4
DAY: 17
YEAR: 71

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, ELAPSED TIME, CODE, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes data for rig up, drilling, reaming, coring, and mud logs.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, ELAPSED TIME, CODE, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes data for testing B.O.P., drill stem test, plug back, squeeze cement, and handling tools.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, TIME LOG, ELAPSED TIME, CODE, DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes data for perforate, tubing trips, treating, swabbing, testing, and hole condition.

MORNING TOUR
DAY TOUR
EVENING TOUR

Boiler #1 8 4 =
Boiler #2 8 4 8
Code 232 B

DRILLER: D. Lindall

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST. LOCATION: G-55. PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited. CONTRACTOR: GUSTAVSON DRILLING. RIG NO.: 11. DEPTH AT START: 5979. DEPTH AT END: 6130. DAILY PROGRESS: 151. CUMULATIVE ROTATING HOURS: 182. DAYS FROM SPUD: 16. DATE: APRIL 16 1971.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like TEST B.O.P., DRILL STEM TEST, PLUG PACK, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

HOLE CONDITION table with columns: HOLE DRAG, TORQUE ON BOTTOM, FILL ON BOTTOM, KELLY DOWN, WT. OF DC IN AIR, WT. OF STRING.

DRILLER: J. Johnson

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
LOCATION: G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: GUSTAFSON DRILLING
RIG NO: 11
DEPTH AT START OF MORNING TOUR: 5800
DATE: APRIL 15 1971

Table with columns: DP / DC SIZE, WT / FT, GRADE, MIN I.D., TOOL JT O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB TO CSG. HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

TIME DISTRIBUTION - HOURS table with columns: OPERATION, MORN, DAY, EVE, TOTAL. Includes rows for RIG UP TEAR DOWN, DRILLING ACTUAL, REAMING, CORING, CLEAN TO BOTTOM AND CIRCULATING, TRIPS, RIG SERVICE, RIG REPAIR, CUT AND/OR SLIP LINE, DEVIATION SURVEY, LOG, RUN CASING AND CEMENT, WAIT ON CEMENT, NIPPLE UP B.O.P.

BIT RECORD and MUD RECORD tables for Morning Tour. Includes columns for BIT NO., FT., TIME, WEIGHT, VIS-SEC, PV/YP, GELS, WL-C-C, PH, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE.

BIT RECORD and MUD RECORD tables for Day and Evening Tours. Includes columns for BIT NO., FT., TIME, WEIGHT, VIS-SEC, PV/YP, GELS, WL-C-C, PH, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE.

FOOTAGE, DEVIATION RECORD, and TIME LOG tables. Includes columns for FROM, TO, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR), PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

DRILLER: J. Howland

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
 LOCATION: G-55 PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited CONTRACTOR: GUSTAVSON DRILLING RIG NO. 11
 SIGNATURE OF OPERATOR'S REPRESENTATIVE: [Signature] SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [Signature]
 DEPTH AT START OF MORNING TOUR: 5507 DEPTH AT END OF EVENING TOUR: 5800 DAILY PROGRESS: 293 CUMULATIVE ROTATING HOURS: 176 DAYS FROM SPUD: 14 MONTH: APRIL DAY: 14 YEAR: 1971

CODE NO.	OPERATION	TIME DISTRIBUTION - HOURS				NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD			FOOTAGE		ROT. HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT (1000#)	PUMP (AIR) PRESS.	AIR VOL. (CFM)	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN	
		MORN.	DAY	EVE.	TOTAL		BIT	FT.	BIT NO.	TIME	WEIGHT	VIS.-SEC.	PV/YP	GELS	W.L.-C.C.									PH	FROM	TO	LINEAR SIZE		S.P.M.
1	RIG UP TEAR DOWN					1	85	2 3/8 x 6 3/4	3.96	5	12:15	9.0	4.3				5507	5656	6 1/2	50	55	50	2100	6"					
2	DRILLING ACTUAL	6 3/4	7 1/2	3 1/2	17 1/2	1	55	2 x 6 3/4	8.50	9:00	8.9	37	35																
3	REAMING	1/2	1/2		1	DP	3	6 3/4	14.80	11:11																			
4	CORING					1	S1	2 3/8 x 6 3/4	4.10	11:11																			
5	CLEAN TO BOTTOM AND CIRCULATING					1	C0	2 3/8 x 6 3/4	2.10	11:11																			
6	TRIPS	3 1/2	3 1/2		3	DP	3	6 3/4	14.80	11:11																			
7	RIG SERVICE	1/4	1/4		2	DP	2	6 3/4	648.54	11:11																			
8	RIG REPAIR	1/4	1/4		53	DP	53	STANDS	4932.26	11:11																			
9	CUT AND/OR SLIP LINE	1/4	1/4			DP		SINGLES		11:11																			
10	DEVIATION SURVEY	1/2	1/2						42.00	11:11																			
11	TIME LOG								5656.26	11:11																			
12	RUN CASING AND CEMENT								64M	11:11																			
13	WAIT ON CEMENT								133M	11:11																			
14	NIPPLE UP B.O.P.									11:11																			

CODE NO.	OPERATION	TIME DISTRIBUTION - HOURS				NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD			FOOTAGE		ROT. HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT (1000#)	PUMP (AIR) PRESS.	AIR VOL. (CFM)	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN
		MORN.	DAY	EVE.	TOTAL		BIT	FT.	BIT NO.	TIME	WEIGHT	VIS.-SEC.	PV/YP	GELS	W.L.-C.C.									PH	FROM	TO	LINEAR SIZE		S.P.M.	LINEAR SIZE	S.P.M.
15	TEST B.O.P.					1	5			8:00	12:00																	
16	DRILL STEM TEST					1	S	2 3/8 x 6 3/4	3.96	8:00	8:00																	
17	PLUG BACK					1	S	2 x 6 3/4	8.50	8:00	8:00																	
18	SQUEEZE CEMENT					1	M	3 x 6 3/4	14.80	8:00	8:00																	
19	STUCK OR FISHING					1	S	2 3/8 x 6 3/4	4.10	8:00	8:00																	
20	HANDLE TOOLS					1	C	0 2 3/8 x 6 3/4	2.10	8:00	8:00																	
21	CONDITION MUD									8:00	12:00																	
22	TEST CIRCULATION					21	C	2 3/8 x 6 3/4	648.54	8:00	12:00																	
23	CIRC SAMPLES	1 1/2	1 1/2		54	DP	54	STANDS	5055.47	8:00	8:30																	
24						1	DP	SINGLES		8:30	4:00																	
40	PERFORATE								31.00	8:00	12:00																	
41	TUBING TRIPS								5768.47	8:00	12:00																	
42	TREATING								64M	8:00	12:00																	
43	SWABBING								136M	8:00	12:00																	
44	TESTING									8:00	12:00																	
45										8:00	12:00																	

CODE NO.	OPERATION	TIME DISTRIBUTION - HOURS				NO.	DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD			FOOTAGE		ROT. HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT (1000#)	PUMP (AIR) PRESS.	AIR VOL. (CFM)	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN
		MORN.	DAY	EVE.	TOTAL		BIT	FT.	BIT NO.	TIME	WEIGHT	VIS.-SEC.	PV/YP	GELS	W.L.-C.C.									PH	FROM	TO	LINEAR SIZE		S.P.M.	LINEAR SIZE	S.P.M.
60	ABANDON					1	AS	2 3/8 x 6 3/4	3.96	4:00	10:00																	
70	STANDBY					1	S	2 x 6 3/4	8.50	4:00	10:00																	
TOTALS		8	8	8	24	1	DP	3	6 3/4	14.80																		
HOURS FOR SHELL ACCOUNT		8	8	8	24	1	S1	2 3/8 x 6 3/4	4.10																			
BOILER #1		8	8	8		1	C0	2 3/8 x 6 3/4	2.10																			
BOILER #2		8	-	8																								
HOLE CONDITION						2	DP	SINGLES	5086.62																			
1	HOLE DRAG (1000#)								32.00																			
2	TORQUE ON BOTTOM (DP TURNS)								5800.62																			
3	FILL ON BOTTOM (FEET)								64M																			
TOTALS									136M																			

MORNING TOUR DAY TOUR EVENING TOUR

DEVIATION RECORD: 12.00 12.15 1/4, 12.15 1.00 3/4, 1.00 2.30 1 1/2, 2.30 3.15 3/4, 3.15 8.00 4 3/4
 DETAILS OF OPERATION IN SEQUENCE AND REMARKS: Drlg Circ Sample @ 5520 RIG SERVICE V BOP, Drlg Circ Sample @ 5560
 DRILLER: B. Brown

DEVIATION RECORD: 5610 1/2
 DETAILS OF OPERATION IN SEQUENCE AND REMARKS: SURVEY CHECK B.O.P., DRILL
 OVERTIME 4 HRS. WORK ON WATER LINE + STACK MUD
 F. Bengtson - 12 hr. J. Howish J. Magnusson R. Howish P. Fuptow. HELD B.O.P. MEETING
 DRILLER: J. Howish

DEVIATION RECORD: 400 600 2, 600 815 2 1/4, 815 845 1/2, 845 1000 1 1/4, 1000 1030 1/2, 1030 1200 1 1/2
 DETAILS OF OPERATION IN SEQUENCE AND REMARKS: Drlg S.H.M. 5787.62 No Measured out Pipe tally 5786.94 Change in tally, Slipped Drlg line 33 Closed Blind Rams + Rig Seal, Run in w/ bit #6, Reamed out tight spot from 5744 to 5750', Drlg 8 3/4" Hole
 2 HRS overtime E. Johnson H. Haxton N. Newberg (Laying water line)
 DRILLER: E. Johnson

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
LOCATION: G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: GUSTAFSON DRILLING
RIG NO.: 11
DEPTH AT START OF MORNING TOUR: 5192
DEPTH AT END OF EVENING TOUR: 5507
DAILY PROGRESS: 13
CUMULATIVE ROTATING HOURS: 13
DAYS FROM SPUD: 13
MONTH: APRIL
DATE: 13 1971

Table with columns: DP./DC. SIZE, WT./FT, GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB TO CSG. HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

TIME DISTRIBUTION - HOURS table with columns: OPERATION, MORN., DAY, EVE, TOTAL. Includes rows for RIG UP, DRILLING ACTUAL, REAMING, CORING, CLEAN TO BOTTOM, TRIPS, RIG SERVICE, RIG REPAIR, CUT AND/OR SLIF LINE, DEVIATION SURVEY, WIRE LINE LOG, RUN CASING AND CEMENT, WAIT ON CEMENT, NIPPLE UP B.O.P., TEST B.O.P., DRILL STEM TEST, PLUG BACK, SQUEEZE CEMENT, STUCK OR FISHING, HANDLE TOOLS, CONDITION MUD, LOST CIRCULATION, PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING.

BIT RECORD and MUD RECORD tables for MORNING TOUR. Includes columns for BIT NO., FT., BIT NO., TIME, WEIGHT, VIS.-SEC., TYPE, JETS, SERIAL NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE, MUD MATERIALS ADDED.

BIT RECORD and MUD RECORD tables for DAY TOUR and EVENING TOUR. Includes columns for BIT NO., FT., BIT NO., TIME, WEIGHT, VIS.-SEC., TYPE, JETS, SERIAL NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE, MUD MATERIALS ADDED.

FOOTAGE and DEVIATION RECORD tables for MORNING TOUR. Includes columns for FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR) PRESS., AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

FOOTAGE and DEVIATION RECORD tables for DAY TOUR. Includes columns for FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR) PRESS., AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

FOOTAGE and DEVIATION RECORD tables for EVENING TOUR. Includes columns for FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT. ON BIT, PUMP (AIR) PRESS., AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

HOLE CONDITION table with columns: HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET). Includes handwritten notes and values.

Handwritten notes: 2 HRS over time Strapping loss Circ mat. on pallets & Repiling. Checked & Refit All Fire Extinguishers. Safety Talks on Scott Air Packs & Refilling Bottles.

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
LOCATION: G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: GUSTAVSON-DRILLING
RIG NO.: 11
DEPTH AT START OF MORNING TOUR: 4758
DEPTH AT END OF EVENING TOUR: 5192
DAILY PROGRESS: 434'
CUMULATIVE ROTATING HOURS: 12
DAYS FROM SPUD: 12
DATE: APRIL 12 1971

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS. Includes deviation records and time logs.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like TEST B.O.P., DRILL STEM TEST, PLUG BACK, SQUEEZE CEMENT, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS. Includes deviation records and time logs.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, STANDBY, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS. Includes deviation records and time logs.

HOLE CONDITION: 1 HOLE DRAG (1000#), 2 TORQUE ON BOTTOM (DP TURNS), 3 FILL ON BOTTOM (FEET). Includes a signature at the bottom right.

DAILY DRILLING REPORT

WELL NAME SHELL ARCTIC RED WEST
LOCATION G-55
PROVINCE N.Y.T.

OPERATOR Shell Canada Limited
CONTRACTOR GUSTAFSON DRILLING
RIG NO 11
DEPTH AT START OF MORNING TOUR 4477'
DEPTH AT END OF EVENING TOUR 4758'
DAILY PROGRESS 341'
CUMULATIVE ROTATING HOURS 11
DAYS FROM SPUD 11
DATE APRIL 11 1971

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO 1, PUMP NO 2, METHOD PUMPS. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like TEST B.O.P., DRILL STEM TEST, PLUG BACK, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO 1, PUMP NO 2, METHOD PUMPS. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO 1, PUMP NO 2, METHOD PUMPS. Includes deviation and time log records.

HOLE CONDITION table with columns: HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET). Includes handwritten values like 1300, 4758, 64M.

DRILLER J. Johnson

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
LOCATION: G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: GUSTAVSON DRILLING
RIG NO.: 11

DEPTH AT START OF MORNING TOUR: 3990
DEPTH AT END OF EVENING TOUR: 4417
DAILY PROGRESS: 427
CUMULATIVE ROTATING HOURS: 1201
DAYS FROM SPUD: 10
DATE: APRIL 10 1971

Table with columns: DP / DR. SIZE, WT. / FT., GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH. Includes data for 4" and 6 3/4" pipes.

TIME DISTRIBUTION - HOURS table with columns: OPERATION, MORN., DAY, EVE, TOTAL. Includes operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

BIT RECORD table with columns: BIT NO., FT., BIT NO., TIME, WEIGHT, VIS-SEC, PV/YP, GELS, SERIAL NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE.

MUD RECORD table with columns: TIME, WEIGHT, VIS-SEC, PV/YP, GELS, TYPE, AMOUNT, TYPE, AMOUNT. Includes entries for GEL and BEN-EX.

FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN.

DEVIATION RECORD table with columns: DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION. Includes a note about a directional survey.

TIME LOG table with columns: FROM, TO, ELAPSED TIME, CODE. Includes a note about a directional survey.

Table with columns: DEVIATION RECORD, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION. Includes a note about a directional survey.

Table with columns: TIME LOG, FROM, TO, ELAPSED TIME, CODE. Includes a note about a directional survey.

Table with columns: DEVIATION RECORD, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION. Includes a note about a directional survey.

Table with columns: TIME LOG, FROM, TO, ELAPSED TIME, CODE. Includes a note about a directional survey.

Table with columns: DEVIATION RECORD, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION. Includes a note about a directional survey.

Table with columns: TIME LOG, FROM, TO, ELAPSED TIME, CODE. Includes a note about a directional survey.

Table with columns: HOLE CONDITION, HOLE DRAG, TORQUE ON BOTTOM, FILL ON BOTTOM. Includes a note about a directional survey.

MORNING TOUR DAY TOUR EVENING TOUR

DRILLER: J. Howitt

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST
LOCATION: G-55
PROVINCE: N.W.S.

OPERATOR: Shell Canada Limited
CONTRACTOR: GUSTAFSON DRILLING (1964) LTD.
RIG NO: 11
DEPTH AT START OF MORNING TOUR: 3477
DEPTH AT END OF EVENING TOUR: 3990
DAILY PROGRESS: 513
CUMULATIVE ROTATING HOURS: 20
DAYS FROM SPUD: 9
MONTH: 4
DAY: 9
YEAR: 71

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO 1, PUMP NO 2, METHOD PUMPS RUN. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like TEST B.O.P., DRILL STEM TEST, PLUG BACK, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO 1, PUMP NO 2, METHOD PUMPS RUN. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, STANDBY, and HOLES.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO 1, PUMP NO 2, METHOD PUMPS RUN. Includes deviation and time log records.

HOLE CONDITION: 1 HOLE DRAG (1000#), 2 TORQUE ON BOTTOM (DP TURNS), 3 FILL ON BOTTOM (FEET). DRILLER: J. Howish

DAILY DRILLING REPORT

WELL NAME: Shell Arctic REID WEST
LOCATION: G-55
PROVINCE:

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustafson Dalg 1968 LTD
RIG NO: 11
DEPTH AT START OF MORNING TOUR: 2772
DEPTH AT END OF EVENING TOUR: 3477
DAILY PROGRESS: 705
CUMULATIVE ROTATING HOURS: 2174
DAYS FROM SPUD: 8
MONTH: 4
DAY: 8
YEAR: 71

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes data for operations 1-14.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes data for operations 15-24.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE, DEVIATION RECORD, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes data for operations 25-30 and summary rows.

HOLE CONDITION: 1 HOLE DRAG (1000#), 2 TORQUE ON BOTTOM (DP TURNS), 3 FILL ON BOTTOM (FEET)

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red West
LOCATION: G-55
PROVINCE: N.W.S.

OPERATOR: Shell Canada Limited
CONTRACTOR: Mustajson Drilling (1964) LTD
RIG NO.: 11
DEPTH AT START OF MORNING TOUR: 2335
DEPTH AT END OF EVENING TOUR: 2772
DAILY PROGRESS: 437
CUMULATIVE ROTATING HOURS: 37 1/4
DAYS FROM SPUD: 7
MONTH: 4
DAY: 7
YEAR: 71

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE. Includes rows for operations like TEST B.O.P., DRILL STEM TEST, PLUG BACK, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, FOOTAGE. Includes rows for operations like ABANDON, STANDBY, HOLE CONDITION, etc.

Table with columns: FOOTAGE, ROT HOURS, DR-D, RM-R, CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR), AIR VOL, PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes deviation and time log records.

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Bed West. LOCATION: G-55. PROVINCE: N.W.2.

Header section containing well name, location, operator (Shell Canada Limited), contractor (Gustafson Drilling Ltd), rig number (11), and various depth and progress metrics.

Table with columns for TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, and FOOTAGE. Includes rows for operations like RIG UP, DRILLING, REAMING, CORING, etc.

Table with columns for TIME LOG, ELAPSED TIME, CODE, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten notes like 'PRESSURE TEST Kelly cock & Kelly Valve to 1500 PSI'.

Table with columns for TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, and FOOTAGE. Includes rows for operations like TEST B.O.P., DRILL STEM TEST, PLUG BACK, etc.

Table with columns for TIME LOG, ELAPSED TIME, CODE, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten notes like 'RIG SERV. + V B.O.P.' and 'DRILL'.

Table with columns for TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, and FOOTAGE. Includes rows for operations like PERFORATE, TUBING TRIPS, TREATING, etc.

Table with columns for TIME LOG, ELAPSED TIME, CODE, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten notes like 'CHECK B.O.P. SER. RIG.' and 'DRILL'.

Table with columns for HOLE CONDITION, including rows for HOLE DRAG, TORQUE ON BOTTOM, and FILL ON BOTTOM.

Table with columns for HOLE CONDITION, including rows for HOLE DRAG, TORQUE ON BOTTOM, and FILL ON BOTTOM.

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED WEST. LOCATION: G-55 PROVINCE: N.W.S.

OPERATOR: Shell Canada Limited CONTRACTOR: Gustafson RIG NO: 11 SIGNATURE OF OPERATOR'S REPRESENTATIVE: A. Brown SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M. Smith

DEPTH AT START OF MORNING TOUR: 1201 DEPTH AT END OF EVENING TOUR: DATE: 5 4 5 71

Table with columns: DP./DC. SIZE, WT./FT., GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB TO CSG HEAD, SET AT, CEMENT USED (SACKS), REMARKS

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY NO. CODE AT END OF TOUR, BIT RECORD, MUD RECORD, FOOTAGE

Table with columns: ROT. HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY R.P.M., WT. ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL. (CFM), PUMP NO. 1 LINER SIZE S.P.M., PUMP NO. 2 LINER SIZE S.P.M., METHOD PUMPS RUN

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY NO. CODE AT END OF TOUR, BIT RECORD, MUD RECORD, FOOTAGE

Table with columns: ROT. HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY R.P.M., WT. ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL. (CFM), PUMP NO. 1 LINER SIZE S.P.M., PUMP NO. 2 LINER SIZE S.P.M., METHOD PUMPS RUN

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY NO. CODE AT END OF TOUR, BIT RECORD, MUD RECORD, FOOTAGE

Table with columns: ROT. HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY R.P.M., WT. ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL. (CFM), PUMP NO. 1 LINER SIZE S.P.M., PUMP NO. 2 LINER SIZE S.P.M., METHOD PUMPS RUN

Table with columns: HOLE CONDITION, HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET)

Table with columns: DEVIATION RECORD, TIME LOG, ELAPSED TIME, CODE, DETAILS OF OPERATION IN SEQUENCE AND REMARKS

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER WEST. LOCATION: G-55. PROVINCE: N.W.S.

OPERATOR: Shell Canada Limited. CONTRACTOR: Gustafson Dalg (1964) PTA. RIG NO: 11. SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. Brown. SIGNATURE OF CONTRACTOR'S TOOL PUSHER: W. Somers.

Table with columns: DP./DC. SIZE, WT./FT., GRADE, MIN. I.D., TOOL JT. O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB TO CSG HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

TIME DISTRIBUTION - HOURS table with columns: CODE NO., OPERATION, MORN., DAY, EVE., TOTAL.

MORNING TOUR table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1 LINER SIZE, S.P.M., PUMP NO. 2 LINER SIZE, S.P.M., METHOD PUMPS RUN.

Table with columns: NO., CODE AT END OF TOUR, BIT RECORD, MUD RECORD, FOOTAGE.

DAY TOUR table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1 LINER SIZE, S.P.M., PUMP NO. 2 LINER SIZE, S.P.M., METHOD PUMPS RUN.

Table with columns: NO., CODE AT END OF TOUR, BIT RECORD, MUD RECORD, FOOTAGE.

EVENING TOUR table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1 LINER SIZE, S.P.M., PUMP NO. 2 LINER SIZE, S.P.M., METHOD PUMPS RUN.

Table with columns: NO., CODE AT END OF TOUR, BIT RECORD, MUD RECORD, FOOTAGE.

Table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION, ROTARY R.P.M., WT ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1 LINER SIZE, S.P.M., PUMP NO. 2 LINER SIZE, S.P.M., METHOD PUMPS RUN.

HOLE CONDITION table with columns: NO., HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET).

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER WEST
LOCATION: C-55
PROVINCE: N.W.2

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustafson Drilling (1964) LTD
SIGNATURE OF OPERATOR'S REPRESENTATIVE: [Signature]
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [Signature]

Table with columns: DP./DC. SIZE, WT./FT, GRADE, MIN. I.D., TOOL JT O.D., TYPE THREAD, PUMP NO., PUMP MANUFACTURER, TYPE, STROKE LENGTH, LAST-CASING TUBING OR LINER, SIZE, WT. AND GR., NO. OF JOINTS, FEET, KB TO CSG HEAD, SET AT, CEMENT USED (SACKS), REMARKS.

TIME DISTRIBUTION - HOURS table with columns: OPERATION, MORN., DAY, EVE., TOTAL.

BIT RECORD table with columns: BIT NO., FT., BIT NO., TIME, WEIGHT, VIS.-SEC, PV/YP, JETS 1/32", SERIAL NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE.

MUD RECORD table with columns: TIME, WEIGHT, VIS.-SEC, PV/YP, JETS 1/32", SERIAL NO., DEPTH OUT, DEPTH IN, TOTAL FTG., TOTAL HRS. RUN, BIT CONDITION, REAMER CUTTER NO., REAMER TYPE.

FOOTAGE table with columns: FROM, TO, ROT HOURS, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY R.P.M., WT ON BIT (1000#), PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1 LINER SIZE, S.P.M., PUMP NO. 2 LINER SIZE, S.P.M., METHOD PUMPS RUN.

DEVIATION RECORD table with columns: DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION.

DEVIATION RECORD table with columns: DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION, DEPTH, DEVIATION°, DIRECTION.

HOLE CONDITION table with columns: HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET).

DRILLER: D. Sindall, P. Ewasch

DAILY DRILLING REPORT

WELL NAME: *Shell Arctic Red River West*
 LOCATION: *G-55* PROVINCE: *N.W.T.*

OPERATOR: **Shell Canada Limited** CONTRACTOR: *Gustavson Drilling 1964 LTD* RIG NO: *11*
 SIGNATURE OF OPERATOR'S REPRESENTATIVE: *[Signature]* SIGNATURE OF CONTRACTOR'S TOOL PUSHER: *[Signature]*
 DEPTH AT START OF MORNING TOUR: *570* DEPTH AT END OF EVENING TOUR: *854* DAILY PROGRESS: *2* CUMULATIVE ROTATING HOURS: *2* DAYS FROM SPUD: *2* MONTH: *April* DAY: *2* YEAR: *1971*

DP / DC. SIZE	WT. / FT.	GRADE	MIN. I.D.	TOOL JT. O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER
<i>1 1/2"</i>	<i>1000'</i>	<i>E</i>	<i>2 7/8"</i>	<i>5 1/2"</i>	<i>FH</i>	<i>1</i>	<i>Nat</i>	<i>8P80</i>	<i>8 1/2"</i>	
<i>6 3/4"</i>	<i>1000'</i>	<i>E</i>	<i>2 7/8"</i>	<i>5 1/2"</i>	<i>5" H 90</i>	<i>2</i>	<i>Nat</i>	<i>8P80</i>	<i>8 1/2"</i>	

TIME DISTRIBUTION - HOURS

OPERATION	MORN.	DAY	EVE.	TOTAL	BIT	FT.	BIT NO.	TIME	WEIGHT	VIS.-SEC.	PV / YP	GELS	W.L.-C.C.	PH	% SOLIDS	% SAND	MUD MATERIALS ADDED	BIT CONDITION	REAMER CUTTER NO.	REAMER TYPE	
RIG UP TEAR DOWN					<i>1 85.3 x 9</i>	<i>3.97</i>	<i>3A</i>	<i>1:05</i>	<i>9.9</i>	<i>7.7</i>											
DRILLING ACTUAL	<i>6 6 3 1/2</i>	<i>15 3 1/2</i>		<i>15 3 1/2</i>	<i>1 85.3 x 9</i>	<i>2.50</i>	<i>REED</i>	<i>5:00</i>	<i>9.6</i>	<i>9.6</i>											
REAMING	<i>1 1/4</i>	<i>1 1/4</i>		<i>1 1/2</i>	<i>1 96.2 x 9</i>	<i>2.10</i>	<i>YTIAG3</i>	<i>4:10</i>	<i>115</i>	<i>120</i>											
CORING																					
CLEAN UP BOTTOM AND CIRCULATING																					
TRIPS	<i>1 1/4</i>	<i>3</i>	<i>4 1/4</i>	<i>3</i>	<i>3 DC 2 3/8 x 9</i>	<i>85.89</i>															
RIG SERVICE	<i>1 1/4</i>	<i>4</i>	<i>1 1/2</i>	<i>9</i>	<i>9 DC 2 3/8 x 9</i>	<i>279.66</i>															
RIG REPAIR		<i>1</i>	<i>1</i>	<i>3</i>	<i>DP STANDS</i>	<i>277.77</i>															
CUT AND/OR SLIP LINE					<i>DP SINGLES</i>																
DEVIATION SURVEY	<i>1 1/4</i>	<i>4</i>	<i>1 1/2</i>	<i>1</i>	<i>KELLY DOWN</i>	<i>48.00</i>															
LOG					<i>TOTAL</i>	<i>693.89</i>															
RUN CASING AND CEMENT					<i>WT. OF DC IN AIR</i>																
WAIT ON CEMENT					<i>WT. OF STRING</i>	<i>56.00</i>															
NIPPLE UP B.O.P.																					
TEST B.O.P.					<i>3A BIT</i>		<i>3A</i>	<i>9:00</i>	<i>12:00</i>	<i>3:00</i>											
DRILL STEM TEST					<i>1 85.3 x 9</i>	<i>3.97</i>	<i>12 1/4</i>	<i>9:00</i>	<i>9.6</i>	<i>9.6</i>	<i>9.6</i>										
PLUG BACK					<i>1 96.2 x 9</i>	<i>2.50</i>	<i>REED</i>	<i>11:50</i>	<i>120</i>	<i>100</i>											
SQUEEZE CEMENT					<i>1 96.2 x 9</i>	<i>2.10</i>	<i>YTIAG3</i>														
STUCK OR FISHING																					
HANDLE TOOLS																					
CONDITION MUD					<i>3 DC 2 3/8 x 9</i>	<i>85.89</i>															
CIRCULATION					<i>9 DC 2 3/8 x 9</i>	<i>279.66</i>															
					<i>4 DP STANDS</i>																
					<i>1 DP SINGLES</i>	<i>402.57</i>															
PERFORATE					<i>KELLY DOWN</i>	<i>25</i>															
TUBING TRIPS					<i>TOTAL</i>	<i>800</i>															
TREATING					<i>WT. OF DC IN AIR</i>																
SWABBING					<i>WT. OF STRING</i>	<i>58</i>															
TESTING																					
					<i>3A 4A BIT</i>		<i>3A 4A</i>	<i>4:00</i>	<i>11:30</i>												
ABANDON					<i>1 85.3 x 9</i>	<i>3.97</i>	<i>12 1/4</i>	<i>9:00</i>	<i>9.6</i>	<i>9.7</i>											
STANDBY					<i>1 96.2 x 9</i>	<i>2.50</i>	<i>REED</i>	<i>8:00</i>	<i>80</i>	<i>95</i>											
TOTALS	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>1 96.2 x 9</i>	<i>2.10</i>	<i>YTIAG3</i>														
HOURS FOR SHELL ACCOUNT	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>1 96.2 x 9</i>	<i>2.10</i>	<i>YTIAG3</i>														
BOILER #1	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>3 DC 2 3/8 x 9</i>	<i>85.89</i>															
BOILER #2	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>8 8 8 24</i>	<i>9 DC 2 3/8 x 9</i>	<i>279.66</i>															
CODE	<i>232 B</i>	<i>5</i>			<i>DP STANDS</i>	<i>464.07</i>															
HOLE CONDITION					<i>DP SINGLES</i>																
HOLE DRAG (1000#)					<i>KELLY DOWN</i>	<i>3700</i>															
TORQUE ON BOTTOM (DP TURNS)					<i>TOTAL</i>	<i>854.19</i>															
FILL ON BOTTOM (FEET)					<i>WT. OF DC IN AIR</i>	<i>59M</i>															
					<i>WT. OF STRING</i>	<i>59M</i>															

FOOTAGE	ROT. HOURS	DR-D RM-R CORE-C	CORE NO.	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT (1000#)	PUMP (AIR) PRESS.	AIR VOL. (CFM)	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN
<i>570-693</i>	<i>6 1/2</i>		<i>123</i>		<i>120</i>	<i>150</i>	<i>15-20</i>		<i>6"</i>	<i>150</i>	
<i>693-800</i>	<i>6 1/4</i>		<i>107</i>		<i>60</i>	<i>20</i>	<i>1400</i>		<i>6"</i>	<i>100</i>	<i>6 150 Comp</i>
<i>800-854</i>	<i>3</i>		<i>54</i>		<i>60</i>	<i>20</i>	<i>1400</i>		<i>6"</i>	<i>90</i>	<i>6 90 Comp</i>

DEVIATION RECORD	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION	DEPTH	DEVIATION °	DIRECTION
	<i>663</i>	<i>1/2</i>							
	<i>756</i>	<i>1°</i>							
	<i>850</i>	<i>3°</i>							

TIME LOG	FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
	<i>12:00</i>	<i>1:15</i>	<i>1 1/4</i>		<i>Finished out & worked tight spots</i>
	<i>1:15</i>	<i>1:30</i>	<i>1/4</i>		<i>Run in & cleaned to bottom 20'</i>
	<i>1:30</i>	<i>5:00</i>	<i>3 3/4</i>		<i>Set Rtg & swivel</i>
	<i>5:00</i>	<i>5:30</i>	<i>3/4</i>		<i>Drlg 12 1/4" Hole</i>
	<i>5:30</i>	<i>7:00</i>	<i>1 3/4</i>		<i>Work Tight Hole & survey</i>
	<i>7:00</i>	<i>8:00</i>	<i>1</i>		<i>Drlg 12 1/4" Hole</i>
	<i>8:00</i>	<i>8:15</i>	<i>1/4</i>		<i>Working Tight Hole on Connection</i>
	<i>8:15</i>	<i>11:30</i>	<i>3 1/4</i>		<i>OPENED 168 of Rimula #10, Rimula #20, & Rimula #30</i>
	<i>11:30</i>	<i>11:45</i>	<i>1/4</i>		<i>168 of Tubus 17, Omaha #39 UICREA #41</i>
	<i>11:45</i>	<i>12:00</i>	<i>1/4</i>		
	<i>12:00</i>	<i>1:30</i>	<i>1 1/2</i>		<i>work Tight Hole.</i>
	<i>1:30</i>	<i>2:30</i>	<i>1</i>		<i>Drlg 12 1/4" Hole.</i>
	<i>2:30</i>	<i>4:00</i>	<i>1 1/2</i>		<i>work Tight Hole.</i>
	<i>4:00</i>	<i>5:00</i>	<i>1</i>		<i>Drlg</i>
	<i>5:00</i>	<i>5:30</i>	<i>1/2</i>		
	<i>5:30</i>	<i>6:30</i>	<i>1</i>		<i>work on clutch & rig serv.</i>
	<i>6:30</i>	<i>9:30</i>	<i>3</i>		<i>DRLG</i>
	<i>9:30</i>	<i>11:00</i>	<i>1 1/2</i>		<i>TRIP OUT + IN WORK TIGHT SPOTS OUT WITH PUMP</i>
	<i>11:00</i>	<i>11:30</i>	<i>1/2</i>		<i>REAM DOWN & SINGLES.</i>
	<i>11:30</i>	<i>12:00</i>	<i>1/2</i>		<i>DRLG</i>
					<i>RUN SURVEY & WORK ON AIR LINE</i>

DRILLER: *[Signature]*

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red River West
LOCATION: G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustavson Drilling 1964 LTD
RIG NO: 11
DEPTH AT START OF MORNING TOUR: 80'
DEPTH AT END OF EVENING TOUR: 570'
DAILY PROGRESS: 490'
CUMULATIVE ROTATING HOURS: 21
DAYS FROM SPUD: 1
DATE: April 1 1971

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like RIG UP, DRILLING ACTUAL, REAMING, CORING, TRIPS, RIG SERVICE, RIG REPAIR, CUT AND/OR SLIP LINE, DEVIATION SURVEY, LOG, RUN CASING AND CEMENT, WAIT ON CEMENT, NIPPLE UP B.O.P., TEST B.O.P., DRILL STEM TEST, PLUG BACK, SQUEEZE CEMENT, STUCK OR FISHING, HANDLE TOOLS, CONDITION MUD, CIRCULATION, PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, STANDBY.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes DEVIATION RECORD and TIME LOG.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, STANDBY.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes DEVIATION RECORD and TIME LOG.

Table with columns: TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD. Includes rows for operations like PERFORATE, TUBING TRIPS, TREATING, SWABBING, TESTING, ABANDON, STANDBY.

Table with columns: FOOTAGE, ROT HOURS, DR-D RM-R CORE-C, CORE NO, FORMATION, ROTARY R.P.M., WT ON BIT, PUMP (AIR) PRESS, AIR VOL (CFM), PUMP NO. 1, PUMP NO. 2, METHOD PUMPS RUN. Includes DEVIATION RECORD and TIME LOG.

Table with columns: HOLE CONDITION, HOLE DRAG (1000#), TORQUE ON BOTTOM (DP TURNS), FILL ON BOTTOM (FEET).

Table with columns: DEVIATION RECORD, TIME LOG, DETAILS OF OPERATION IN SEQUENCE AND REMARKS.

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red River West
LOCATION: 55 G-55
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
CONTRACTOR: Gustavson Drlg 1964 LTD
RIG NO.: 11

SIGNATURE OF OPERATOR'S REPRESENTATIVE: S. Brown
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Jack M. L.
DATE: March 31 1971

Main drilling log table with columns for TIME DISTRIBUTION - HOURS, DRILLING ASSEMBLY, BIT RECORD, MUD RECORD, and HOLE CONDITION. Includes rows for operations like RIG UP, DRILLING ACTUAL, CORING, etc.

Vertical log table with columns for FOOTAGE, DEVIATION RECORD, TIME LOG, and DETAILS OF OPERATION IN SEQUENCE AND REMARKS. Includes handwritten notes and signatures.