Shell Arctic Red River

O - 27.

Drilling Authority No. 476

Date Issued 17 December 1970

WELL NAME Shell Arctic Red River O-27

FIELD ..... Area: .....

LOCATION: Unit 0 Section 27 Grid 66-50-132-45

Latitude 66-46-56.032 Longitude 132-49-35.881

U.W.L.R. 66.78223 --- 132.82663

U.W.I. 300027665013245 0

Rig Release Date: .....

Status .....

Information Release Date .....

CHANGE OF NAME:

DATE RECEIVED	INDEX
17-12-70	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
27-1-71	Application to Abandon a Well ~~or Suspend Drilling.~~
	Application to Alter Condition of a Well.
	Well History Supplement.
18-2-71	Well Completion Data.
	Work-over Report No. .....
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells – Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells – Vitter's Method.
	M.P.R. – Oil – Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale ..... Small scale .....

IAND 52-90 (3-69)

Drilling Authority No. 476
Date Issued Dec. 17, 1970

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

DEPT. OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT OIL & MINERAL DIVISION FEB 22 1971 CALGARY Northwest Territories & Yukon Territory OPERATION ENGINEER

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 River O-27

Permit No. 6478 Lease No.

Shell Canada Ltd. & Shell Explorer Ltd. (Permittee, Licensee, Lessee) Exploratory Licence No. 108 and 116

Shell Canada Limited (Operator) Exploratory Licence No. 108

Location: Unit 0 Section 27 Grid 66°50'N., 132°45'W.

Latitude 66°46' 56.032"N. Longitude 132°49' 35.881"W.

From Established Reference Marker

Universal Well Location Reference Lat. 66.78223°N. Long. 132.82663°W.

	DATE	DEPTH
Spudded	Dec.26/70	
Suspended		
Resumed Operations		
Finished Drilling	Jan.18/71	7067
Deepened		
Complete (gas/oil)		
Abandoned	Jan.23/71	7067
Rig released	Jan.23/71	7067

Pool(s)

Interval(s) open to production

Elevation: Gr. 432 K.B. 448

Rig No. 11

Drilling Contractor Gustavson Drilling (1964) Ltd.

Contractor's Business Licence No. 0832

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at –	Sacks of Cement and Additives
1. 9 5/8"	K-55	36#	25 jts.	812	150 sacks of permeafrost
2.					280 sacks of portland cement.
3.					
4.					
5.					
6. Cond. Pipe: 20"		53#	60'	60'	

GEOLOGICAL TOPS	ELEVATION Depths	ELEVATION Sub-Sea
Imperial	400	+48
Carol	3246	-2798
Hume	3518	-3070
Bear Rock	3852	-3404
Delorme	5358	-4910
Mt. Kindle	6292	-5844

CORE RECORD

From	To	Rec.	From	To	Rec.
5188	5217	28.6			

LOG RECORD

Run No.	Type of Log	From	To
1	Dual Induction Laterolog	813	7058
1	Borehole-Sonic	813	7062
1	Microlog-Caliper	813	7063
1	Sidewall Neutron Porosity	813	7063
1	Seismic Reference Survey	813	7062

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

CEMENTING RECORD (Plug, Squeeze, etc.)			
Date	From	To	Remarks
1/22/71	6200	7067	470 sacks of cement
1/22/71	5300	5500	200 sacks of cement Felt at 5280'
1/23/71	740	900	150 sacks of cement Felt at 681'
1/22/71	Surface		10 sacks of Portland cement. A 1/2" plate was welded on top of the casing and a riser with identification marker was installed.

PERFORATING RECORD (Bullet, Jet)			
Date	From	To	Remarks

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

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.I. Mins.	F.S.I. Mins.	I.S.I.B.H.P.	F.S.I.B.H.P.	I.F.B.H.P.	F.F.B.H.P.	I.H.P.	F.H.P.	REMARKS
1	1/21/71	Bear Rock	5120	5250	60	60	60	2239	2101	434	1344	2431	2420	Recorder located at 5125' Recovered 2900' of mud cut salt water

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
20	mud cut salt water	5120	5250	Sample chamber D.S.T. #1	
	Core #1	5188	5217		Recovered 28.6 ft.

PRESENT STATUS OF WELL

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

Company Shell Canada Limited

Signed by P. J. Benn (P.V. Benn) for

Title D.S. Fleming, Manager, Edmonton Division Production

Date February 18, 1971

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

File No.
Drilling Authority No. 476

CANADA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well [redacted]

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

Name and number of well Shell Arctic Red River 0-27

Location: Unit 0 Section 27 Grid (66°50'N. 132°45'W)

Latitude 66° 46' 56.032"N. Longitude 132° 49' 35.881"W.

From Established Reference Marker

Universal Well Location Reference Lat. 66.78223°N. Long. 132.82663°W.

Permit No. 6478 Lease No.

Shell Canada Limited (Permittee, Licensee, Lessee)
Shell Explorer Ltd.

Date of commencement of proposed program

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at
Gas at
Water at 5120-5250
Total Depth 7067 Date of last operations January 23, 1971
Present condition of well

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 9 5/8"	36#	25 jts.	812'	150 sacks of permafrost cement	
2.				280 sacks of common cement	
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	6200-7067	Mt. Kindle	470	
2	5300-5500	Delorme	200	
3	740-900	Imperial	150	
4	Surface		5	Permanently marked pipe.

The following logs have been run SNP, BHCS-GR-C, MLC, DILL
Other operations proposed

Operations to be carried out by Gustavson Contractor Licence No. 0832
Address 9825-60th Ave. Edmonton, Alberta Address Box 186, Edmonton, Alta
Responsible Agent in field D. Brown
Dated at Edmonton, Alberta, this 26th Day of January 1971
Signed by [signature] Company Shell Canada Limited
Title Manager, Edmonton Div. Prod. Operator's Exploratory Licence No. 108

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.H.J. Thom on the 22nd January 1971.

Dated 27th January, 19 71

[signature]
Oil Conservation Engineer

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

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

Drilling Authority No. 476

Project No.

File No.

CANADA

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 River 0-27

Location: Unit: 0 Section: 27 Grid: (66°50'N, 132°45'W)

Latitude: 66° 46' 56.032"N. Longitude: 132° 49' 35.881"W.

Unique Well Identifier: 300027665013245 0

Universal Well Location Reference: Lat. 66.78223°N. Long. 132.82663°W.

Elevation: Ground: 432.4 K.B.: 449 (Est.) feet above sea-level.

Well is expected to produce from: Bear Rock formation at a depth of about: 5,000 feet. Expected total final depth: 7,000

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

Permit No.: 6478 Lease No.: Acreage: 50,604 acres

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

Exploratory Licence No.: 108 116

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

Petroleum and natural-gas rights owned by: Crown

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Sacks of Cement
1. 9 5/8"	36#	K-55	New	800	500 sxs.
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)

Contractor's Business Licence No. 0832

Responsible agent of applicant:—

At well: D. Brown At registered office: D.S. Fleming

Address: Box 186, Edmonton 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 11th day of December 19 70

Signed by: [signature] (P. J. Dennis) for Company: Shell Canada Limited

Title: Manager, Edmtn. 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:—

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

Please see over page

Dated 17th December 19 70 Oil Conservation Engineer

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

IAND 52-90-1 (3-69)

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. Any 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

DEPT. OF INDIAN AFFAIRS & NORTHERN DEVELOPMENT
OIL & MINERAL DIVISION
DEC 17 1970
CALGARY 21, ALBERTA
Oil Conservation Engineer
Northwest Territories

WELL: Shell Arctic Red River 0-27

LOCATION: Lat. 66° 46' 56.03" N.
Long. 132" 49' 35.881" W.

ELEVATION: G.L. + 432' (Act.)
K.B. + 448' (Est.)

TOTAL DEPTH: 7,000'

A. Summary of Drilling Program

(Refer to Drilling Operations Program for details)

(i) Hole and Casing Program:

(a) Auger drill 24" conductor hole to 60'

(b) Set 60' of 20" 53# conductor pipe

(c) Install 10" casing bowl and 10" Series 900 Hydril

(d) Drill 8 3/4" hole to 800', 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 accomodate "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)

Formation Tops	Symbol	Lithology	Depth
Imperial	Dim	Shale, silt and sand	150'
Canol	Dca	Chert and shale	3350'
Hume	Dh	Limestone and shale	3600'
Bear Rock	Dbr	Upper Limestone-, and basal dolomite interval	4000'
Delorme	D/S	Upper-, and basal shale sand member Middle dolomite member	5500'
Mount Kindle	S-Ok	Dolomite and chert	6500'
T.D.			7000'

(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) 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:

Tool	Interval	Remarks
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 to top of carbonate 40-60-80 sensitivity below top of carbonate
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:

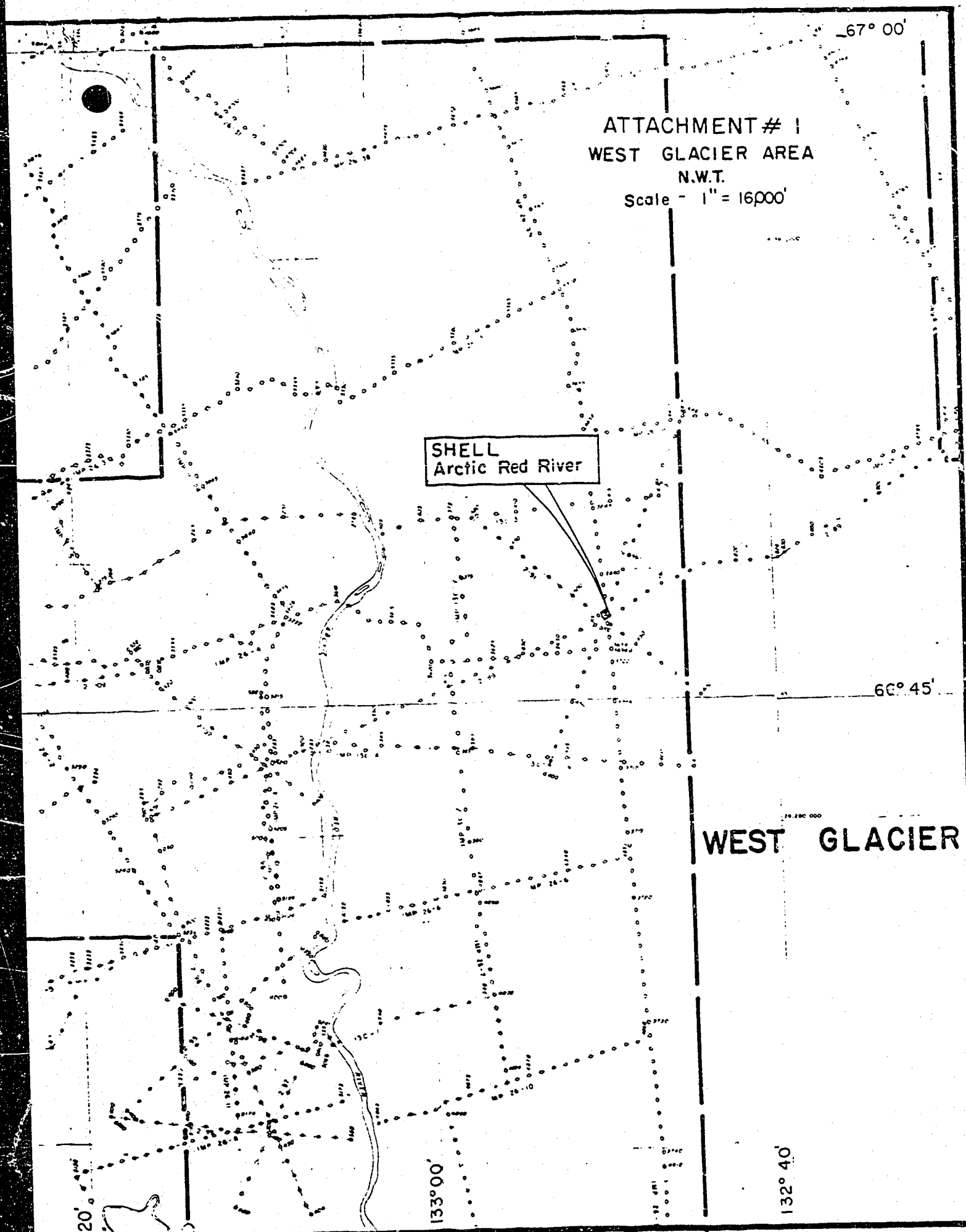
Obtain 6 field prints of each log and have them flown to Edmonton as soon as possible.

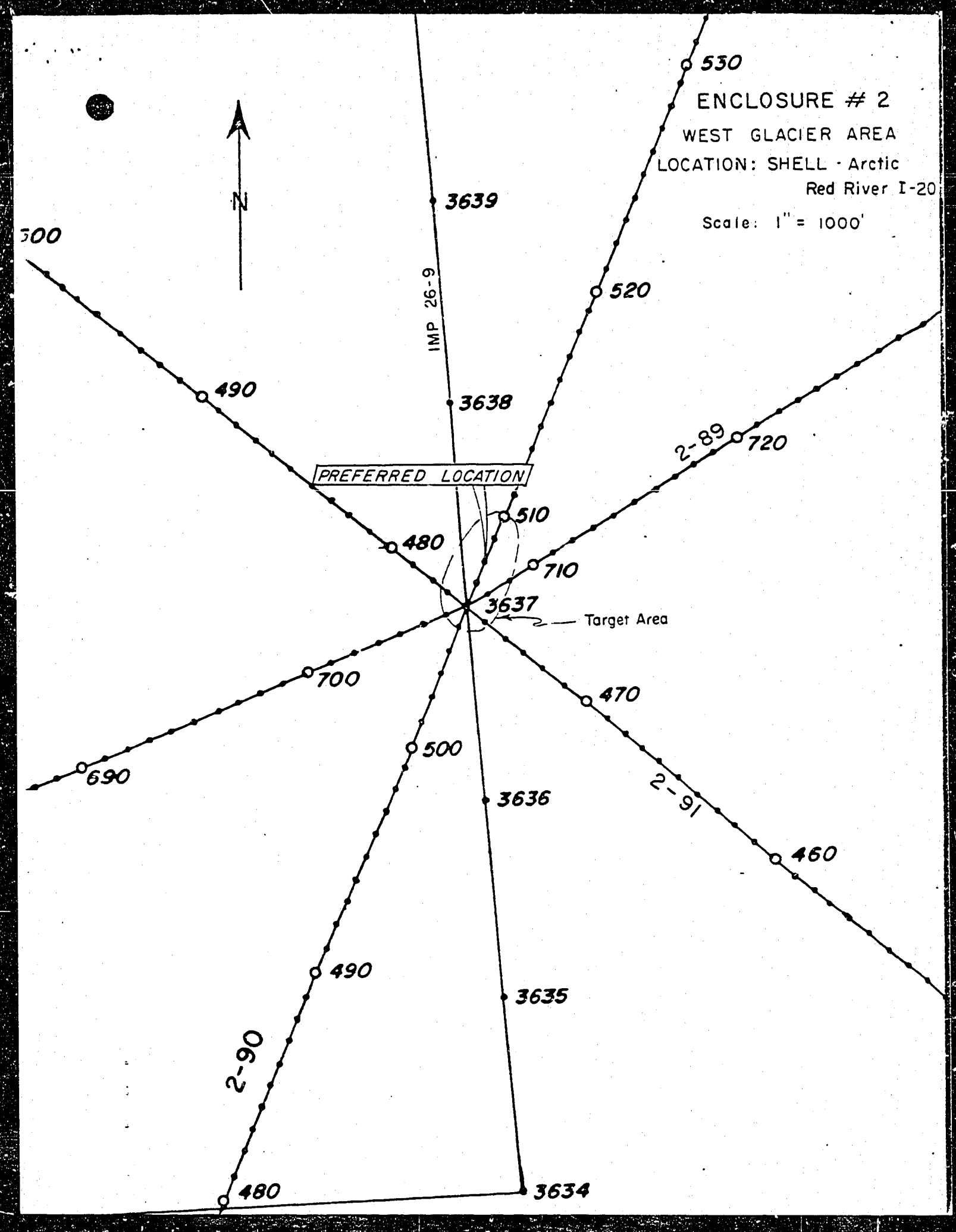
RECOMMENDED P.G. Reyn 10 Dec/70 APPROVED [illegible]

RECOMMENDED [illegible] Dec 10/70 DATE Dec 4, 1970.

RECOMMENDED [illegible] Dec 11/70 APPROVED P.O. Grady for: RSM

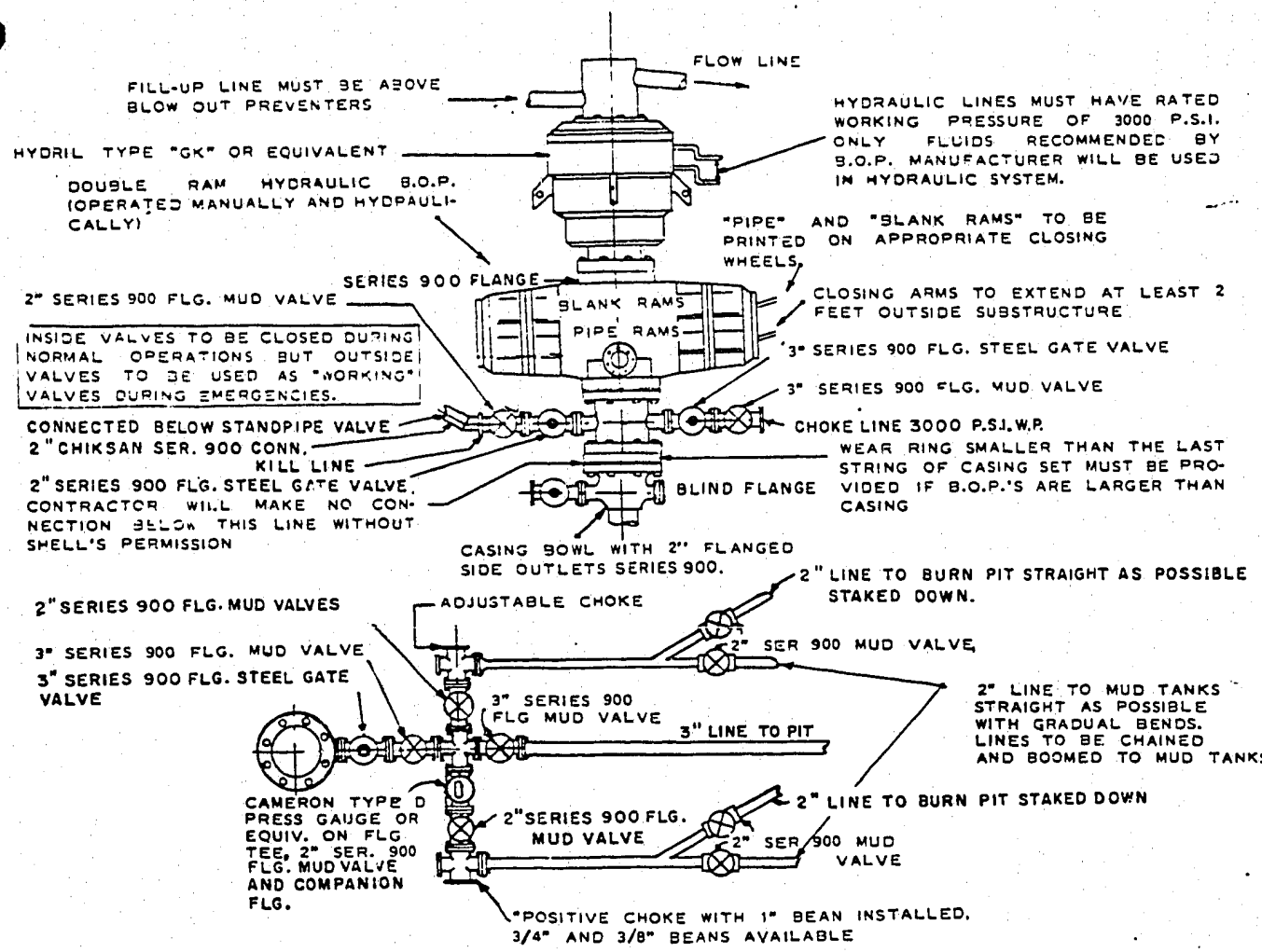
RECOMMENDED P.O. Grady. Dec. 15/70 DATE Dec. 15/70


ATTACHMENT # 1
WEST GLACIER AREA
N.W.T.
Scale - 1" = 16,000'
67° 00'
SHELL
Arctic Red River
66° 45'
WEST GLACIER
133° 00'
132° 40'
20'


ENCLOSURE # 2
WEST GLACIER AREA
LOCATION: SHELL - Arctic
Red River I-20
Scale: 1" = 1000'
N
530
520
3639
IMP 26-9
3638
490
2-89
720
PREFERRED LOCATION
510
480
710
3637
Target Area
700
470
500
690
3636
2-91
460
490
3635
2-90
480
3634

SHELL ARCTIC

WELL RED RIVER 0-27 DATE Dec. 15/70 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 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 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. -	DATE - 10/63
APPR		A-XX-D15-3642

E-XX-D15-3291

File No.....
Drilling Authority No.....476.....

CANADA

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 RIVER O-27 66-50-132-45

Location: 66.78223°N., 132.82663°W. Status: D&A 1971

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

The location is in satisfactory/unsatisfactory condition. TD 7067'

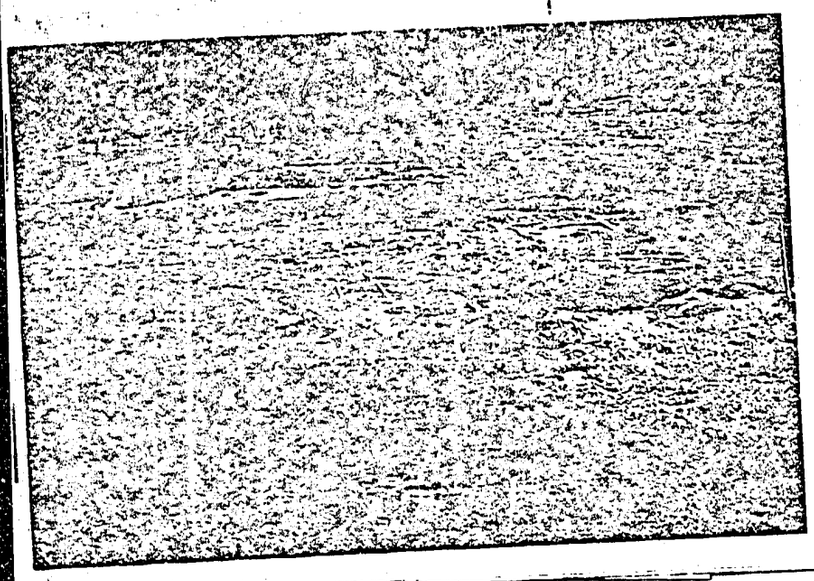
The following items require attention:

1. Remove lumber around cellar and backfill.
2. Bury plastic sheeting.
3. Paint identifier pipe and plate fluorescent orange.
4.
5.
6.

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

Good cleanup but polyethylene sheeting left lying around.

Lease level but very soft and muddy.



Inspected by M. D. Thomas
District 2

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

WELL HISTORY REPORT

SHELL ARCTIC RED RIVER 0-27

37-11-6-104

37-11-6-104

OIL & GAS OPERATIONS UNIT
Oil and Mineral Division
MAR 22 1971
OTTAWA, CANADA
Dept. of Indian Affairs & Northern Development

WELL HISTORY REPORT

SHELL ARCTIC RED RIVER 0-27

SHELL CANADA LIMITED

WELL HISTORY REPORT

SHELL ARCTIC RED RIVER 0-27

TABLE OF CONTENTS

		Page
SECTION I	SUMMARY OF WELL DATA	1
SECTION II	GEOLOGICAL SUMMARY	3
	(a) Formation Tops	
	(b) Core Intervals	
	(c) Core Description	
	(d) Sample Description	
	(e) Paleontological Determinations	
SECTION III	ENGINEERING SUMMARY	6
	(a) Drill Stem Tests	
	(b) Casing Record	
	(c) Bit Record	
	(d) Mud Report	
	(e) Deviation Record	
	(f) Abandonment Plugs	
	(g) Lost Circulation Zones	
	(h) Blowouts	
SECTION IV	LOGS	8
SECTION V	ANALYSIS	9
	(a) Core	
	(b) Water	
	(c) Gas	
	(d) Oil	
SECTION VI	COMPLETION SUMMARY	10
	(a) Tubing Record	
	(b) Perforation Record	
	(c) Cementation	
	(d) Acidization and Fracturing	
	(e) Back Pressure and Production	
APPENDIX "A"		11
APPENDIX "B"		12

SECTION I - SUMMARY OF WELL DATA

(a) Well Name and Number

Shell Arctic Red River 0-27

(b) Permittee

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

(c) Name of Operator

Shell Canada Limited

(d) Location

Unit 0, Section 27, Grid 66°50'N., 132°45'W.
Latitude: 66° 46' 56.032" N.
Longitude: 132° 49' 35.881" W.
Universal Well Location Reference:
Lat. 66.78223°N.
Long. 132.82663°W.
Unique Well Identifier: 3000276650132450

(e) Permit Number

6478

(f) Drilling Contractor

Gustavson Drilling (1964) Ltd. No. 11

(g) Drilling Authority Number

Drilling Authority No. 476
Issued December 17, 1970

(h) Classification

Wildcat

(i) Elevation

Ground Level 432'
Kelly Bushing 448'

(j) Date Spudded

December 26, 1970, 12:01 A.M.

(k) Date Completed Drilling

January 18, 1971

(l) Total Depth

F.T.D. 7067'

(m) Well Status

Abandoned

(n) Rig Released

January 23,1971, 11:59 P.M.

(o) Hole Sizes

24" to 60' K.B.
13 3/4" to 813' K.B.
8 3/4" to 7067' K.B.

(p) Casing

20" 53# set at 60'
9 5/8", New K-55, 36#
Surface casing landed at 812' K.B.
Cemented with 150 sacks of permeafrost cement and 280 sacks of portland cement.

SECTION II - GEOLOGICAL SUMMARY

(a) Formation Tops

Formation	Sample Tops	Log Top
Imperial	-	400'
Canol	3240'	3246'
Hume	3546'	3518'
Bear Rock	3880'	3852'
Delorme	5420'	5358'
Mt. Kindle	6310'	6292'

(b) Cored Intervals

Core No. 1:
5188-5217, Basal Bear Rock, Rec. 28.6'

(c) Core Description

Core No. 1: Dolomite, fine to medium, microfractures closed with calcite.

Coring Times

Depth	Min./Ft.
5188	
89	17
90	5
91	3
92	4
93	5
94	5
95	4
96	4
97	5
98	5
99	7
5200	7
1	5
2	7
3	6
4	7
5	6
6	5
7	5
8	3
9	5
5210	5

Coring Times

Depth	Min./Ft.
5211	4
12	5
13	5
14	5
15	7
16	6
5217	7

(d) Sample Description

0'-100'	Glacial Till	Shale with sandstone stringers
100'-3540'	Shale-Sandstone-Siltstone	Traces of pyrite calcite, dolomite and chert
3540'-3940'	Shale-Limestone	Traces of pyrite with calcareous siltstone
3940'-4140'	Limestone	Clean limestone with minor amounts of slightly argillaceous limestone. Interbedded shale.
4140'-4590'	Limestone	Clean to slightly argillaceous limestone.
4590'-4690'	Limestone-Dolomite	Clear to slightly argillaceous limestone and dolomite with interbedded shale
4690'-4900'	Dolomite	Clean dolomite with minor amounts of limestone and shale, traces of calcite
4900'-5000'	Dolomite	Clean dolomite with minor amounts of clean limestone
5000'-5020'	Dolomite	Minor amounts of slightly argillaceous limestone
5020'-5120'	Dolomite	Clean dolomite and minor amounts of clean limestone, trace of calcite.
5120'-5250'	Dolomite	Clean dolomite with calcite infilling

5250'-5400'	Dolomite	Slight to moderately argillaceous dolomite. Minor amounts of shale, calcite infilling and siltstone
5400'-5600'	Dolomite	Clean limey dolomite with traces of siltstone, calcite and pyrite minor amount of shale
5600'-5950'	Dolomite	Clean dolomite with traces of calcite and pyrite
5950'-6350'	Dolomite	Clean to slightly argillaceous dolomite. Traces of calcite
6350'-6520'	Dolomite	Slightly argillaceous dolomite. Traces of pyrite, calcite and chert
6520'-6970'	Dolomite	Slight to moderately argillaceous dolomite. Traces of calcite, pyrite
6970'-7067'	Dolomite	Clean to slightly argillaceous dolomite. Traces of calcite, pyrite and chert

(e) Paleontological Determinations

Nil

SECTION III - ENGINEERING SUMMARY

(a) Drill Stem Tests

No.	Interval	Flow Rate & Recovery	IFP	FFP/ Time	ISIP/ Time	FSIP/ Time
1	5120-5250	2900' mud cut salt water	434	1244/ 60 min.	2239/ 60 min.	2101/ 60 min.

IHP: 2431. FHP: 2420.

(b) Casing Record

Date	Size	Grade	Weight	Amount	Set At
Dec. 26	20"		53#		60'
Dec. 30	9 5/8	K-55	36#	25 jts.	812'

Cemented with 150 sacks of permafrost cement and 280 sacks of portland cement

(c) Bit Record

No.	Size	Type	Depth Out	Footage	Time/Hours on Bottom
1A	8 3/4	DTJ	678'	678	15 3/4
2A	8 3/4	DTJ	816'	138	3 1/4
1B	13 3/4	Reamer	369'	369	14
2B	13 3/4	Reamer	647'	278	13 1/4
3B	13 3/4	Reamer	813'	170	13
1	8 3/4	DTJ	1919'	1106	18 1/4
2	8 3/4	XIG	3009'	1090	19 1/2
3	8 3/4	XIG	3358'	352	11 1/4
4	8 3/4	XDU	3687'	329	19
5	8 3/4	M88	4412'	725	44 3/4
6	8 3/4	X55R	5188'	776	48 1/2
6A	6 7/32	Diamond	5217'	29	3
7	8 3/4	X55R	5679'	462	33 1/2
8	8 3/4	X55R	6050'	371	35
9	8 3/4	M88	6405'	355	35
10	8 3/4	M88	6825'	420	34
11	8 3/4	SCM5	7067'	242	22 1/4

(d) Mud Record

	Pounds
Gel	82,500
Benex	284
Caustic	2,100
CMC	1,750
Peltex	200
Bicarb	100

(e) Deviation Record

Depth	Deviation	Depth	Deviation
100'	1/8°	2606'	1 1/2°
224'	1/4°	2822'	1 1/4°
		3006'	1°
317'	1/2°	3254'	1 1/8°
415	1/2°	3358'	3/4°
480'	3/4°	3687'	0°
570'	1/4°	3934'	1/4°
678'	1 1/2°	4194'	1/4°
755'	1 1/4°	4420'	1/4°
1051'	1°	4678'	1/2°
1290'	1°	5160'	3/4°
1535'	1°	5679'	1 1/8°
1794'	1 3/4°	6050'	1 1/4°
1919'	1 1/2°	6405'	2°
2160'	1°	6800'	2 7/8°
2420'	2 3/4°	7067'	3°

(f) Abandonment Plugs

Plug Number	Interval	Sacks of Cement
1.	6200±7067'	470
2	5300±5500'	200
3	740±900'	150
4	Surface	10

Plug #2 was felt at 5280'. Plug #3 was felt at 681'. A 1/2" plate was welded on top of the casing and a riser with identification marker was installed.

(g) Lost Circulation Zones

Depth when Circulation Lost	Fluid Lost
5170'	20 bbls. of mud.

(h) Blowouts

Nil

SECTION IV - Logs

Type	Interval	Date
DILL	813'-7058'	January 19, 1971
BHCS-GR-C	813'-7062'	January 19, 1971
MLC	813'-7063'	January 19, 1971
SNP	813'-7063'	January 19, 1971
SRS	813'-7062'	January 20, 1971

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 SUMMARY

(a) Tubing Record

Nil

(b) Perforation Record

Nil

(c) Cementation

Plug no.	Date	Plug Interval	Porous Interval	Sacks of Cement	Depth Felt
1	1/22/71	6200-7067	6250-6700	470	-
2	1/22/71	5300-5500	5450-6100 4485-5350	200	5280
3	1/23/71	740-900		150	681
4	1/23/71	Surface		10	

A 1/2" plate was welded on top of the casing and a riser with identification marker was installed.

(d) Acidization and Fracturing

Nil

(e) Back Pressure and Production

Nil

D.S. Fleming, Manager
Edmonton Division Production

APPENDIX "A"

CORE ANALYSES

SHELL CANADA LIMITED PRODUCTION LABORATORY
CORE ANALYSIS REPORT

Page ____ of ____
Date: January, 1971.

WELL Shell Arctic Red River O-27 KB 449 FIELD Wildcat CORED INTERVAL 5188.0 - 5217 RECOVERY 28.6 FORMATION ~~Bear Rock~~

Lab. No. SMALL CORE SAMPLES 'S' Suffix	SECTION REPRESENTED Interval	Ft.	Lithological Description	ORIENTATION	Whole Core Samples - G.D. calc. / Small Core Samples - G.D. measured: Poro %	Kmax md	K90 md	Kvert md	G.D. gm/cc	Oil Sat'n % P.V.	Water Sat'n % P.V.	Fluor Cut	Remarks
Core #1	5188.0 - 5217.0	28.6' Recovery											
A-1	5188.0-5217.0	1.0	DO, CA, III/I, F, B, C		13.7	271. f*	14.7		2.850			N	
A-2	89.0 - 90.0	1.0	DO, CA, III/I, F, B, C		12.7	14.1 f*	12.4 f		2.856			N	
A-3	90.0 - 90.7	0.7	DO, CA, III/I, F, B, C		11.3	6.13 f	6.08f*		2.838			N	
A-4	90.7 - 92.0	1.3	DO, CA, III/I, F, B,		9.5	3.92f*	3.81f		2.838			N	Badly broken
	92.0 - 93.0	1.0	Similar to A-4									N	
A-5	93.0 - 93.8	0.8	DO, CA, III/I, F, B		8.8	3.20f*	2.43		2.853			N	
A-6	93.8 - 94.5	0.7	DO, CA, III/I, F, B-D		12.8	17.3 f	15.9 f*		2.849			N	
A-7	94.5 - 95.5	1.0	DO, CA, III/I, F, B-D		13.4	18.6 f	17.6 f*		2.856			N	
A-8	95.5 - 96.5	1.0	DO, CA, AN, III/I, F, B-D		10.9	7.73 f	7.61f*		2.844			N	
A-9	96.5 - 98.0	1.5	DO, CA, AN I/III, F, B		7.9	2.20f*	.84		2.843			N	
A-10	98.0 - 99.0	1.0	DO, CA, AN, tr PY, I/III F, B		6.9	.77	.72 *		2.815			N	
A-11	99.0-5200.0	1.0	DO, CA, AN, I/III, F, A		4.6	1.24f*	.42		2.796			N	
A-12	5200.0-5201.0	1.0	DO, CA, AN, I/III, F, A		9.3	1.33 *	1.13		2.855			N	
A-13	01.0 - 02.0	1.0	DO, CA, AN, III/I, F, A tr B		10.7	2.4_ *	2.45		2.849			N	
A-14	02.0 - 03.0	1.0	DO, CA, AN, III/I, F, B-D		11.4	5.78 f	4.66f*		2.853			N	
A-15	03.0 - 04.0	1.0	DO, AN, III/I, F, B-D		12.0	5.91f*	5.37f		2.857			N	
A-16	04.0 - 05.0	1.0	DO, AN, III/I, F, B,		12.0	11.4 f*	10. f		2.859			N	
A-17	05.0 - 06.0	1.0	DO, AN, III/I, F, B-D		12.8	7.17 *	7.09		2.862			N	
A-18	06.0 - 07.0	1.0	DO, AN, III/I, F, B-D		15.8	33.7 f*	32.7 f		2.851			N	
A-19	07.0 - 07.8	0.8	DO, AN, III/I, FM, B-D		15.6	29.5 f	29. f*		2.852			N	
A-20	07.8 - 08.5	0.7	DO, AN, III/I, FM, B-D		15.1	33.2 f	32.8 f*		2.863			N	
A-21	08.5 - 09.0	0.5	DO, AN, I/III, FM, B-D		10.6	13.9 f*	6.83f		2.827			N	
A-22	09.0 - 09.7	0.7	DO, AN, III/I, FM, B-D		11.3	10.7 f*	6.73f		2.848			N	
A-23	09.7 - 10.4	0.7	DO, AN, III/I, FM, B-D		16.5	49.2 f*	38.6 f		2.853			N	
A-24	10.4 - 10.8	0.4	DO, AN, I/III, FM, CD		16.8	50.9 f	44.0 f*		2.854			N	
A-25	10.8 - 11.3	0.5	DO, AN, I/III, FM, C-D		18.1	74.8 f	50.4 f*		2.842			N	

SHELL CANADA LIMITED - PRODUCTION LABORATORY
CORE ANALYSIS REPORT

Date: January, 1971.

WELL Shell Arctic Red River O-27 KB 449 FIELD Wildcat CORED INTERVAL 5188.0 - 5217.0 RECOVERY 28.6 FORMATION Bear Rock

Lab. No. SMALL CORE SAMPLES 'S' Suffix	SECTION REPRESENTED Interval	Ft.	Lithological Description	ORIENTATION	Whole Core Samples - G.D. calc. / Small Core Samples - G.D. measured: Poro %	Kmax md	K90 md	Kvert md	G.D. gm/cc	Oil Sat'n % P.V.	Water Sat'n % P.V.	Fluor Cut	Remarks
Core #1 Continued													
A-26	11.3 - 12.0	0.7	DO, AN, I/III, FM, CD		16.6	87.3 f	43.8 f*		2.844			N	
A-27	12.0 - 13.0	1.0	DO, AN, I/III, F, C, D		11.5	4.98f*	4.67 f		2.843			N	
A-28	13.0 - 14.0	1.0	DO, AN, I tr III, F, C, D		8.3	1.58f*	1.25 f		2.826			N	
A-29	14.0 - 15.0	1.0	DO, AN, I/III, F, A		8.1	1.42	1.30 *		2.835			N	
A-30	15.0 - 16.0	1.0	DO, AN, I/III, F, A		7.3	.44 *	.40		2.834			N	
A-31	16.0 - 16.6	0.6	DO, AN, I/III, F, A		5.9	.17 *	.13		2.829			N	Missing
	5216.6-5217.0	0.4											

* Permeability measured along plan through orientation lines.

APPENDIX "B"
WATER ANALYSIS

R-160

SHELL CANADA LIMITED

PRODUCTION LABORATORY ANALYSIS REPORT

CALGARY, ALBERTA

Laboratory Number 20
WATER

Sample Received FEBRUARY 2, 1971
Sample Analyzed FEBRUARY 4, 1971
Results Reported FEBRUARY 5, 1971

Well SHELL ARCTIC RED RIVER O-27 66° 40' 56.032" N 132° 49' 35.881" W WEST GLACIER BLK.
Lsd ____ Sec ____ Twp ____ Rge ____ W ____ Formation ____
Method of production DST #1 5120-5250'
DST Recovery MUD CUT SALT WATER
Sample obtained from SAMPLE CHAMBER FIELD #5

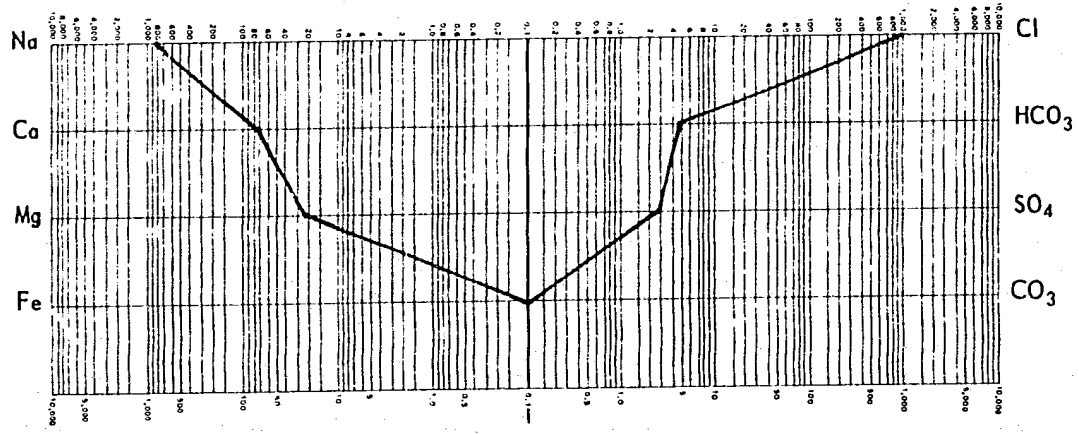
Well K.B. 448.25' G.L. 432'
T.D. ____ P.B.T.D. ____
~~Perfo. or~~ O.H.
Sampled by F. BUDDA
Date JAN. 21, 1971 Tim ____

Specific Gravity at 60°F 1.0455 pH 6.5 Resistivity 0.161 ohm-m at 60°F H_2S NONE Calculated Total Solids 53,972 Mg/L

	Calc. Na + K	Ca	Mg	Fe				CO_3	HCO_3	SO_4	Cl	
Mg./L	19,145	1490	264	MUCH				0	275	126	32,672	
MEQ./L	832.42	74.35	21.71					0	4.51	2.62	921.35	
MEQ. %	44.83	4.00	1.17					.0	0.24	0.14	49.62	

Remarks: SO_4 POSSIBLY HIGH

Milliequivalents per Litre



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

Chemist N.L. Johnson

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_f	=	reservoir temperature, ° Rankine
m	=	slope of final SIP buildup plot, psig/cycle (psig²/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
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 5125 ft. Subsea depth -4677 ft. Ticket No. 1537 Hour Recorder No. 4379

t_o = 5 Mins. Initial Shut-In Pressure				Second Flow Pressure		t_o = 65 Mins. Final Shut-In Pressure			
Time, Min. Ø	$\frac{t_o + Ø}{Ø}$	PSIG	PSIG² ÷10⁶ (Gas)	Time Defl. .000"	PSIG	Time, Min. Ø	$\frac{t_o + Ø}{Ø}$	PSIG	PSIG² ÷10⁶ (Gas)
0	----	506				0	----	1341	
5	2.000	2151				5	14.000	1932	
10	1.500	2177				10	7.500	1976	
15	1.333	2194				15	5.333	2004	
20	1.250	2205				20	4.250	2022	
25	1.200	2212				25	3.600	2038	
30	1.167	2218				30	3.167	2054	
35	1.143	2223				35	2.857	2065	
40	1.125	2229.				40	2.625	2076	
45	1.111	2232				45	2.444	2085	
50	1.100	2235				50	2.300	2094	
55	1.091	2237				55	2.182	2100	
60	1.083	2239				60	2.083	2106	

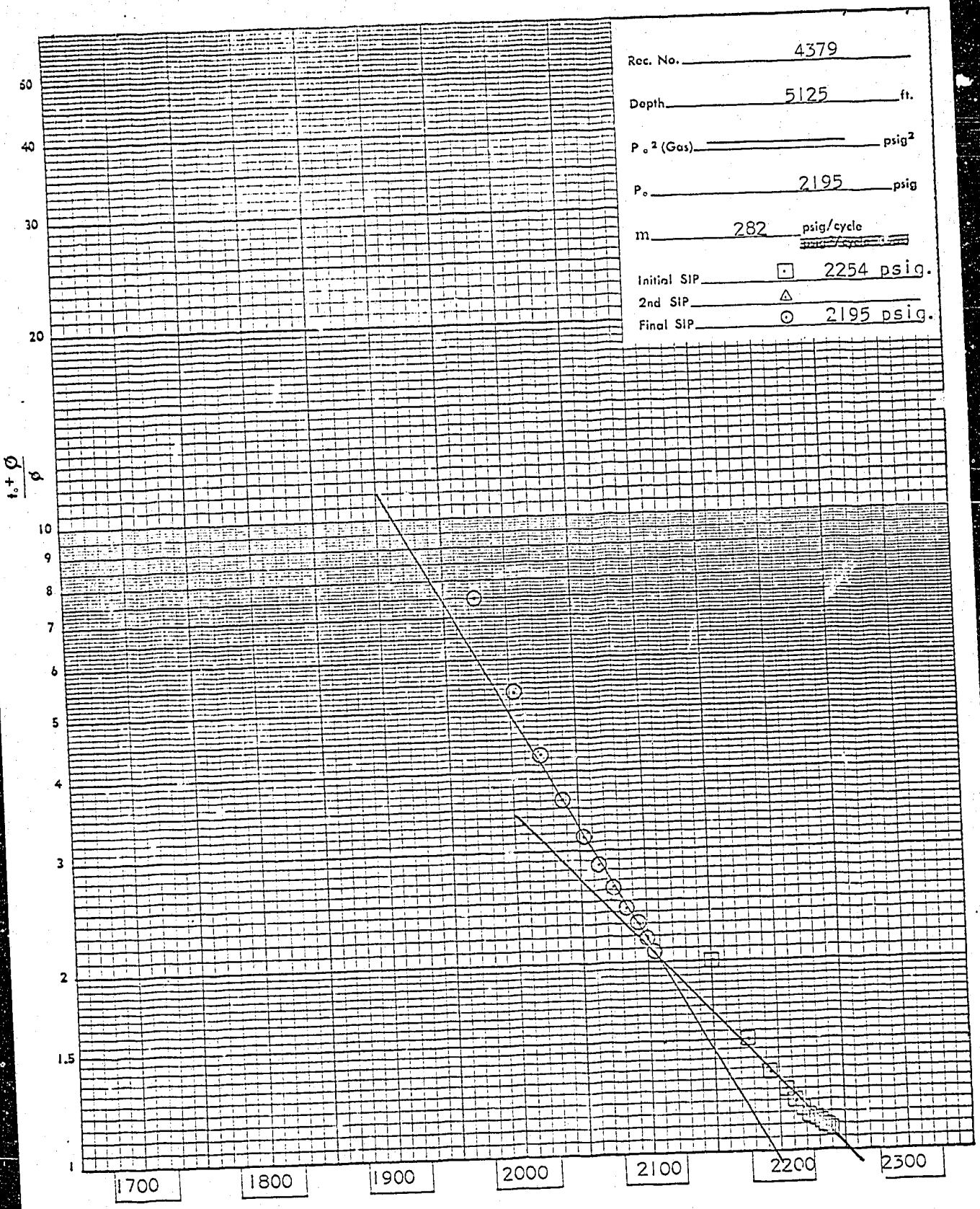
Recorder Depth ..... ft. Subsea depth ..... ft. Ticket No. ..... Hour Recorder No. .....

t_o = Mins. Initial Shut-In Pressure				Second Flow Pressure		t_o = Mins. Final Shut-In Pressure			
Time, Min. Ø	$\frac{t_o + Ø}{Ø}$	PSIG	PSIG² ÷10⁶ Ø	Time Defl. .000"	PSIG	Time, Min. Ø	$\frac{t_o + Ø}{Ø}$	PSIG	PSIG² ÷10⁶ (Gas)

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

Remarks: DST # 1

PRESSURE DATA



DST # 1

PRESSURE EXTRAPOLATION PLOT

LYNES UNITED SERVICES LTD.

TEST DATA — Test No. | Lynes Test |

Formation: Bear Rock — T.D. 7067 Ft.
Interval Tested: 5120 Ft. to 5250 Ft.
Feet of Net Pay Tested: 130 Ft.
Type of Test: Inflatable Straddle
Cushion: nil — Amount — Ft.
Started in Hole at: 1300 Hrs. — Tool Open at: 1655 Hrs.
Pre-Flow: 5 Mins. — Initial Shut-in: 60 Mins.
2nd Flow: Mins. — Second Shut-in: Mins.
Final Flow: 60 Mins. — Final Shut-in: 60 Mins.
Remarks:

Blow: Fair air blow on preflow. Fair air blow on final flow.

GENERAL INFORMATION

Company: Shell Oil Canada Ltd.
Address: Box 186, Edmonton, Alberta
Well Name: Shell Arctic Red River 0-27
Well Number: 66° 46'56.03 132° 49' 35.88
K.B. Elevation: 448 — Sub-Sea Elevation
Area: West GlacierBlock — Province: N.W.T.
Company Rep.: F. Budda
Tester: R. Michalski
Contractor: Gustavson — Rig No. 11
Ticket No.: 1537 — Date: January 21/71
Service Reports To: 5 - above address

GAS BLOW MEASUREMENTS

Measured with

Time	Surface Choke	Reading Inches	Cubic Feet/Day

MUD AND HOLE DATA

Mud Type: Gel Chem
Weight: 9.1 — Viscosity: 75 — Water Loss: 7.6
Filter Cake: 2/32" — Bottom Hole Temperature: 139°
Drill Pipe Size: 4" FH — Weight: 15.50
Drill Collars: 5"H90 — I.D. 2 7/8" — Feet Run: 283
Main Hole or Casing Size: 8 3/4"
Rathole or Liner Size — No. of Feet
Bottom Hole Choke Size: 1/2"
Surface Choke Size
Packer Rubber Size: (2) - 7 5/8 x 66"

REMARKS: Shut-in pressures suggest high permeability within the interval tested with 59psi drawdown also present.

RECOVERY

TOTAL FLUID RECOVERED: 2900 Ft. Consisting of:
2900 Ft. of slightly mud cut salt water
Ft. of
Ft. of
Ft. of
Test was/was not Reverse Circulated
Oil Recovery A.P.I. — Water Specific Gravity
Salinity

Recorder # 6482
capacity 70 - 275°
depth 5090'
(2) = 139°(temp)

PRESSURE READINGS

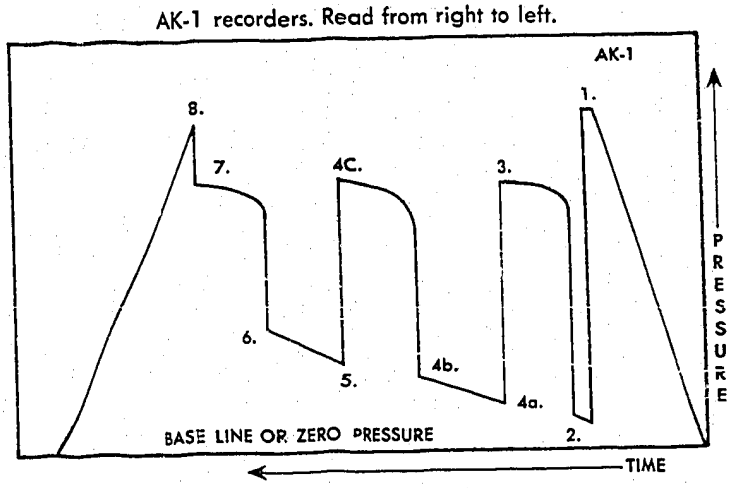
	Inside ___ Outside X	Inside ___ Outside X	Inside X Outside X	Inside X Outside ___
Recorder No.	5578	4379	5725	7928
Capacity	2950	3000	6000	6150
Depth	5125	5125	5090	5090
NUMBER KEY:				
1 - INITIAL HYDROSTATIC	2431	2431	2451	recorder
2 - PRE-FLOW	507	506	399	malfunctioned
3 - INITIAL SHUT-IN	2239	2239	2236	
4a - 2nd INITIAL FLOW				
4b - 2nd FINAL FLOW				
4c - 2nd SHUT-IN				
5 - 3rd INITIAL FLOW	434	431	437	
6 - FINAL FLOW	1344	1341	1327	
7 - FINAL SHUT-IN	2101	2106	2100	
8 - FINAL HYDROSTATIC	2420	2427	2446	

Company: Shell Canada Ltd.
Well Name and Description: Shell Arctic Red River 0-27 66° 46' 132° 49'
Test No.: #1
Date of Test: January 21/71

LYNES

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

AK-1 recorders. Read from right to left.

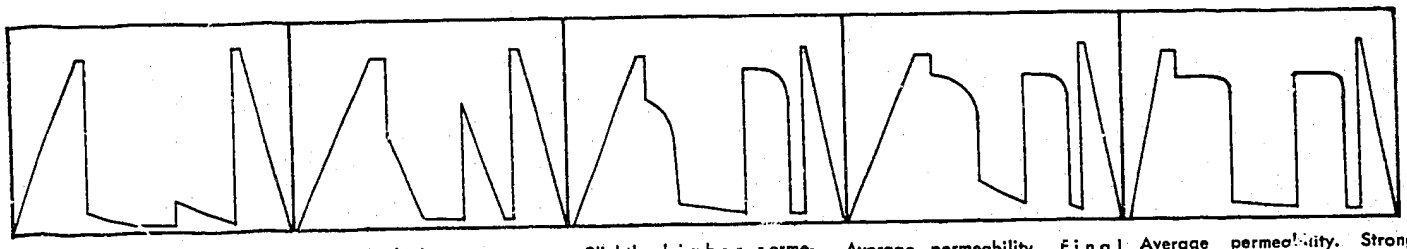


K-3 recorders. Read from left to right.

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.

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



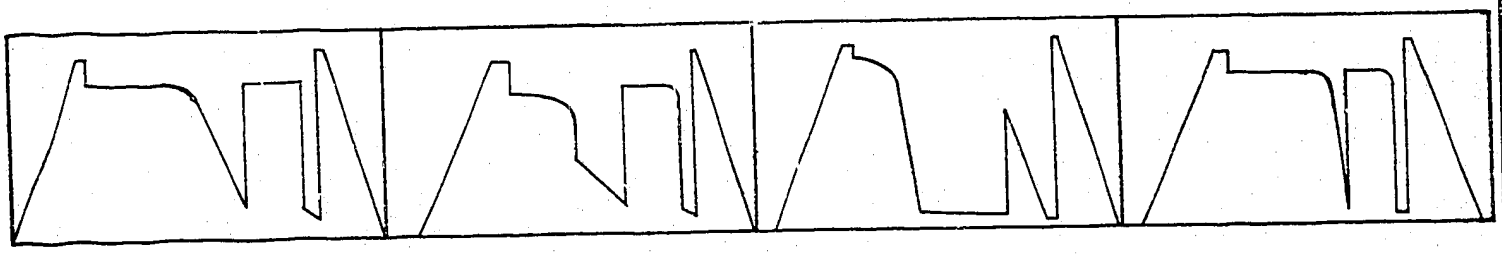
Very low permeability. Usually only mud recovered from interval tested. Virtually no permeability.

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.

CF-38 (10-69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: D-27

PROVINCE: N. W. T

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. Brown

CONTRACTOR: GUSTAVSON

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Paul McLeod

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
7067				29	1	23	71

DP./DC. SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	14	E	2 7/8	5 1/4	4 F.H.	1	NATIONAL	8P80	8 1/2
						2	NATIONAL	8P80	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

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS				
7	RIG SERVICE				
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.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON	8	8	8	24
70	STANDBY				
	TOTALS				
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIP RENTAL	BOILER				
	Code 267				

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO	CODE		ID	OD	FT
		BIT			FT.
			X		FT.
			X		FT.
			X

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: O-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. Brown

CONTRACTOR: GUSTAUSON DRILLING

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Jack M. Lee

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
				28	1	22	1971

DP./DC. SIZE	WT./FT.	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	14#	E	2 13/16	5 1/4	F.H.	1	NAT.	8-P-80	8 1/2
6 3/4	101#		2 7/8		5-H-90	2	NAT.	8-P80	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
	9 5/8	35# K55	25	813		813	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS	2 1/2			
7	RIG SERVICE				
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.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS	3			
21	CONDITION MUD				
22	LOST CIRCULATION				
23	LAY DOWN COLLAR	2 1/2			
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8			
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIPMENT	BOILER	8	8	8	24

3 Hrs Code 251

21 Hrs Code 267

HOLE CONDITION

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

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
		BIT			FT.
		X			FT.
		X			FT.
		X

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER.

LOCATION: O-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D. Brown

CONTRACTOR: GUSTAVSON DRILLING

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Jack McLeod

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
				27	1	21	1971

DP./DC. SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	14#	E	2 13/16	5 1/4	F.H	1	NAT.	8-P-80	8 1/2
6 3/4	101#		2 2/8		5-H90	2	NAT.	8-P-80	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
	9 5/8	35# K55	25	813		813	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS	4	4	3 1/4	
7	RIG SERVICE	1/2			
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.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS		4		
21	CONDITION MUD	3 1/2			
22	LOST CIRCULATION				
23	Lay Down Packer			3/4	
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING			4	
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIPMENT	BOILER	8	8	8	24

Code 251

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		ID	OD	FT.
		BIT			FT.
1	BS		X		3.96 FT.
1	DC		X		2.10 FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
21	DC		2 1/8	6 3/4	650.10 FT.
68	DP	STANDS			FT
2	DP	SINGLES			63.87.89 FT.
KELLY DOWN					23.00 FT.
TOTAL					7067.05 FT.
WT. OF DC IN AIR					65M LBS.
WT. OF STRING					145M LBS

BIT RECORD

BIT NO.	R.R 11
SIZE	8 3/4
MFG.	REED
TYPE	3CM5
JETS 1/32"	11 11 11
SERIAL NO.	615985
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME			
WEIGHT	9.1		
VIS.-SEC	75		
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.	7.6		
PH	9.5		
% SOLIDS			
% SAND			
MUD MATERIALS ADDED			
TYPE	AMOUNT	TYPE	AMOUNT
CAUSTIC	100#		

FOOTAGE

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
T.D	7067							1425		6	120			

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	12.30	1/2		RIG SERV. & MISC.
12.30	3.00	2 1/2		TRIPPING IN.
3.00	6.30	3 1/2		CIRC. COND MUD FOR D.S.T. No 1.
6.30	8.00	1 1/2		TRIP OUT.

DRILLER: A. Kwasniuk

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		ID	OD	FT.
		BIT			FT.
1	BS		2 1/8	6 3/4	3.96 FT.
1	DC		2 1/8		2.10 FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
12	DC		2 1/8	6 3/4	FT.
	DP	STANDS			FT.
	DP	SINGLES			FT.
KELLY DOWN					FT.
TOTAL					FT.
WT. OF DC IN AIR					LBS.
WT. OF STRING					LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SERIAL NO	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH			
% SOLIDS			
% SAND			
MUD MATERIALS ADDED			
TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN

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	9.30	1 1/2		FINISH PULL OUT
9.30	1.30	4		MAKE UP TEST TOOLS
1.30	4.00	2 1/2		RUN IN SLOW MEASURE PIPE
				CHECKED BLIND RAMS

DRILLER: J. Housil

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		ID	OD	FT.
		BIT			FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
	DP	STANDS			FT.
	DP	SINGLES			FT.
KELLY DOWN					FT.
TOTAL					FT.
WT. OF DC IN AIR					LBS.
WT. OF STRING					LBS.

BIT RECORD

BIT NO.	
SIZE	
MFG.	
TYPE	
JETS 1/32"	
SERIAL NO.	
DEPTH OUT	
DEPTH IN	
TOTAL FTG.	
TOTAL HRS. RUN	
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH			
% SOLIDS			
% SAND			
MUD MATERIALS ADDED			
TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7067	TD													

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	4.45	3/4		Head up & seat packer
4.45	8.00	3 1/4		D.S.T #1
8.00	11.15	3 1/4		Hoist Packer (Chain out)
11.15	12.00	3/4		Broke & Laying Down packer.
		8		DST No.1 5120-5250 (BASAL BEAR ROCK) T.O. 5/60 MIN S.I. 60/60
				REC. 2900' SLT. M.C. S.W. (SAL. 57,000 ppm NaCl)
				H.M.P. 2451/2438 FP 441/1357 SIP 2252/2140

DRILLER: C. Johnson

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: O-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L Brown

CONTRACTOR: GUSTAUSON DRILLING

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
				26	1	20	1971

DP / DC. SIZE	WT. / FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	14#	E	2 13/16	5 1/4	F.H.	1	NAT.	8-P80	8 1/2
6 3/4	101#		2 7/8		5H.90	2	NAT.	8-P80	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
	9 5/8	35# K55	25	813		813	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS			1/4	
7	RIG SERVICE				
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY				
11	WIRE LINE LOG	8	8	7 3/4	
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIP. RENTAL	BOILER	8	8	8	24
	Code		250		

HOLE CONDITION

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

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		ID	OD	LENGTH
		BIT			FT
			X		FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
		DP	STANDS		FT
		DP	SINGLES		FT.
		KELLY DOWN			FT.
		TOTAL			FT.
		WT. OF DC IN AIR			LBS.
		WT. OF STRING			LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
JETS 1/32"		
SERIAL NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HRS. RUN		
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC			
PV/YP			
GELS			
W.L.-C.C.			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

MORNING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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	8.00	8		LOGGING

DRILLER: A. Ewosiuk

DAY TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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	4.00			LOGGING
				RAN OIL 7064 - 813 2" & 5" SCALES
				BHC-GR 7064 - 813 2" & 5" SCALES
				MLC 7064 - 813 2" & 5" SCALES
				SNP 7064 - 813 2" & 5" SCALES
				HAD TOOL PROBLEMS WITH FDC JKB.
				COULD NOT OBTAIN A RUN.

DRILLER: J. Homiel

EVENING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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	11.15	7 1/4		Logging
11.15	11.45	1/2		Rig out Logging Tools
11.45	12.00	1/4		Made up Bit & Running in D.C.

DRILLER: E. Johnson

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER.

LOCATION: O-27 | PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited | CONTRACTOR: GUSTAUSON DRILLING | RIG NO. 11

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D. Brown | SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
				25	1	19	1971

DP./DC SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	14#	E	2 13/16	5 1/4	F.H.	1	NAT.	8-P-80	8 1/2
6 3/4	101#		2 3/8		5-H-90	2	NAT.	8-P-80	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
	9 5/8	35# K55	25	813		813	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS	3			
7	RIG SERVICE	1/4			
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY	1/4			
11	WIRE LINE LOG	4 1/2	8	8	
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIPMENTAL	BOILER #1	8	8	8	24
	" #2	8	8	8	24

24 Hrs Code 250

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		ID	OD	FT.
		BIT			FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
		DP	STANDS		FT
		DP	SINGLES		FT.
		KELLY DOWN			FT.
		TOTAL			FT.
		WT. OF DC IN AIR			LBS.
		WT. OF STRING			LBS

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SERIAL NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
BIT CONDITION 1/8" T/B/GAGE			
REAMER CUTTER NO.			
REAMER TYPE			

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
~~12.00~~														

DEVIATION RECORD	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
	7067	3°							

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
1200	1230	1/2		FINISH CIRC. DROP SURVEY. RIG SERV.
12.30	3.30	3		PULL OUT TO LOG
3.30	8.00	4 1/2		LOGGING
				STRAPPED OUT
				STEEL LINE MEASURE 7071.3
				PIPE TALLY 6067.2
				NO CORR: MADE FRB. 4.1

DRILLER: A. Russell

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		ID	OD	FT.
		BIT			FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
		DP	STANDS		FT.
		DP	SINGLES		FT.
		KELLY DOWN			FT.
		TOTAL			FT.
		WT. OF DC IN AIR			LBS.
		WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SERIAL NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
BIT CONDITION 1/8" T/B/GAGE			
REAMER CUTTER NO.			
REAMER TYPE			

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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	4.00	8		LOGGING

DRILLER: J. Horwich

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		ID	OD	FT.
		BIT			FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
			X		FT.
		DP	STANDS		FT.
		DP	SINGLES		FT.
		KELLY DOWN			FT.
		TOTAL			FT.
		WT. OF DC IN AIR			LBS.
		WT. OF STRING			LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SERIAL NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
BIT CONDITION 1/8" T/B/GAGE			
REAMER CUTTER NO.			
REAMER TYPE			

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
					VITREA #41									

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
400	1200	8		Logging

DRILLER: E. Johnston

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: O-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D. Brown

CONTRACTOR: GUSTAVSON DRILLING

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
6872'	7067'	195'		24	1	18	1971

DP / DC SIZE	WT. / FT.	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	14#	E	2 13/16	5 1/4	F.H	1	NAT.	8-P-80	8 1/2
6 3/4	101#		2 7/8		5-H-90	2	NAT.	8-P-80	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
	9 5/8	35# K55	25	813		813	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	7 3/4	7 3/4	2 1/2	18
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS			1	1
7	RIG SERVICE	1/4			1/4
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.				
15	TEST B.O.P.		1/4		1/4
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23	Circ To Log			4 1/2	4 1/2
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIPMENT	BOILER #1	8	8	8	
	Boiler #2	8	8	8	
	18 7/8 Hrs	Code	232		
	5 1/2 Hrs	"	250		

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS	2 7/8 x 6 3/4			3.96
1	SS	2" x 6 3/4			8.50
1	S1	2 7/8 x 6 3/4			4.50
1	CO	2 13/16 x 5 1/4			2.10
		X	I.D.	O.D.	
		X	I.D.	O.D.	
21	DC	2 7/8 x 6 3/4			650.10
67	DP	STANDS			
1	DP	SINGLES			6956.44
		KELLY DOWN			26
		TOTAL			6958.44
		WT. OF DC IN AIR			65M. LBS.
		WT. OF STRING			147M LBS

BIT RECORD

BIT NO.	11
SIZE	8 3/4
MFG.	REED
TYPE	SCM5
JETS 1/32"	11 11 12
SERIAL NO.	685585
DEPTH OUT	
DEPTH IN	6825
TOTAL FTG.	133
TOTAL HRS. RUN	12 1/2
BIT CONDITION 1/8" T/B/GAGE	DRLG
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12.30	4:00	7:30
WEIGHT	9.1	9.1	9.1
VIS -SEC	56	54	53
PV / YP	28/29	/	/
GELS	6/9	/	/
W L -C C	7.2	7.2	7.2
PH	9.5	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	900#		
BEN-EX	2#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD PUMPS RUN
6872	6958	7 3/4	86			50	50	2100		6"	120			
								625		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	12.15	1/4		RIG SERV. CHECK HYDRIL
12.15	8.00	7 3/4		DRLG
		8		

DRILLER: A. Lwosiuk

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS	2 7/8 x 6 3/4			3.96
1	SS	2 x 6 3/4			8.50
1	S	1 2 7/8 x 6 3/4			4.50
1	CO	2 13/16 x 5 1/4			2.10
		X	I.D.	O.D.	1
		X	I.D.	O.D.	2
21	DC	2 7/8 x 6 3/4			650.10
68	DP	STANDS			
5	DP	SINGLES			6356.74
		KELLY DOWN			12
		TOTAL			7037.90
		WT. OF DC IN AIR			65M LBS.
		WT. OF STRING			148M LBS.

BIT RECORD

BIT NO.	11
SIZE	8 3/4
MFG.	REED
TYPE	SCM5
JETS 1/32"	11 11 12
SERIAL NO.	685585
DEPTH OUT	
DEPTH IN	6825
TOTAL FTG.	212
TOTAL HRS. RUN	19 3/4
BIT CONDITION 1/8" T/B/GAGE	11 11 12
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	~~8.00~~	12.00	3.00
WEIGHT	9.1	9.1	9.1
VIS -SEC	55	65	68
PV / YP	28/21	/	/
GELS	/	/	/
W L -C C	7.4	7.4	
PH	9.5	9.5	
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	3100#		
BENEX	12#		
CAUSTIC	50#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD PUMPS RUN
6958	7037	7 3/4	79			50	50	2150		6	120	6		
								725		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
8.00	9.00	1		DRILL
9.15	9.30	1/4		CHECK B.O.P. SER. RIG
9.30	4.00	6 3/4		DRILL
				HELD BLOWOUT DRILL

DRILLER: J. Hovil

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS	2 7/8 x 6 3/4			3.96
1	SS	2" x 6 3/4			8.50
1	S	1 2 7/8 x 6 3/4			4.50
1	CO	2 13/16 x 5 1/4			2.10
		X	I.D.	O.D.	
		X	I.D.	O.D.	
21	DC	2 7/8 x 6 3/4			650.10
68	DP	STANDS			
1	DP	SINGLES			6356.74
		KELLY DOWN			41.20
		TOTAL			7067.10
		WT. OF DC IN AIR			65M LBS.
		WT. OF STRING			148M LBS.

BIT RECORD

BIT NO.	11
SIZE	8 3/4
MFG.	Reed
TYPE	SCM5
JETS 1/32"	11 11 12
SERIAL NO.	685985
DEPTH OUT	7067
DEPTH IN	6825
TOTAL FTG.	242'
TOTAL HRS. RUN	22 1/4
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	4.00	8.00	10.00
WEIGHT	9.1	9.1	9.1
VIS -SEC	78	7.6	7.5
PV / YP	/	/	/
GELS	/	/	/
W L -C C	6.8		
PH	9.5		
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD PUMPS RUN
7037	7067	2 1/2	30'		1 BBL. Rimula #30	50	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	6.30	2 1/2		Drlg
6.30	7.30	1		10 Std. Dummy Trip
7.30	12.00	4 1/2		Circ To Log

DRILLER: [illegible] Johnson

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: O-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

CONTRACTOR: GUSTAVSON DRILLING

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
6670	6872'	202'		23	1	17	71

DP / DC SIZE	WT. / FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	14#	E	2 13/16	5 1/4	F.H.	1	NAT.	8-P-80	8 1/2
6 3/4	101#		2 7/8		5H90	2	NAT.	8-P-80	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
	9 5/8	35# K55	25	813		813	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	7 3/4	4 1/2	4 3/4	
3	REAMING			1	
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS		3	1 3/4	
7	RIG SERVICE	1/4	1/4	1/4	
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE			1/4	
10	DEVIATION SURVEY				
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.		1/4		
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	
	HOURS FOR SHELL ACCOUNT				24

CONTRACTOR EQUIPMENT				
BOILER #1	8	8	8	
Boiler #2	8	8	8	
Code 232				

HOLE CONDITION

1.	HOLE DRAG (1000#)	5
2	TORQUE ON BOTTOM (DP TURNS)	
3	FILL ON BOTTOM (FEET)	Nil

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO	CODE	BIT	FT
1	BS	2 2/8 x 6 3/4	3.96
1	SS	2 x 6 3/4	8.50
1	ST	2 2/8 x 6 3/4	4.50
1	CO	2 3/16 x 5 1/4	2.10
		I.D. O.D. X	
		I.D. O.D. X	
21	DC	2 2/8 x 6 3/4	650.10
65	DP	STANDS	
1	DP	SINGLES	607.26
		KELLY DOWN	22.
		TOTAL	6765.17
		WT OF DC IN AIR	65 M. LBS.
		WT. OF STRING	143M LBS.

BIT RECORD

BIT NO.	10	
SIZE	8 3/4	
MFG.	SEC	
TYPE	M88	
JETS 1/32"	11 11 11	
SERIAL NO.	236823	
DEPTH OUT		
DEPTH IN	6405	
TOTAL FTG.	360	
TOTAL HRS. RUN	29 1/2	
BIT CONDITION 1/8" T/B/GAGE	DRLG	
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	12.30	4:00	7.30
WEIGHT	9.0	9.0	9.0
VIS.-SEC	47	54	53
PV/YP	19/18	/	/
GELS	4/8	/	/
W.L.-C.C	7.4	7.4	7.2
PH	9.5	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
CAUSTIC	50#		
CMC	50#		
GEL	1500#		
BEN-EX	6#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
6670	6765	7 3/4	95			50	50	2150		6"	120			

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	1.45	1 3/4		DRLG
1.45	2.00	1/4		RIG SERV & HYDRIL.
2.00	8.00	6		DRLG.
		8		
				(HELD BLOW OUT DRILL & USE OF AIR PACKS)
				OPERATION & SPEED OF APPLYING SAME)

DRILLER: A. Cwasiuk

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO	CODE	BIT	FT
1	BS	2 2/8 x 6 3/4	3.96
1	SS	2 x 6 3/4	8.50
1	ST	2 2/8 x 6 3/4	4.50
1	CO	2 3/16 x 5 1/4	2.10
		I.D. O.D. X	
		I.D. O.D. X	
21	R.C.	2 2/8 x 6 3/4	650.10
66	DP	STANDS	6138.67
	DP	SINGLES	
		KELLY DOWN	18.00
		TOTAL	6825.83
		WT. OF DC IN AIR	65M LBS.
		WT. OF STRING	146M LBS

BIT RECORD

BIT NO.	10	11
SIZE	8 3/4	8 3/4
MFG.	SEC.	REED
TYPE	M88	SCM5
JETS 1/32"	11 11 11	11 11 12
SERIAL NO.	236823	685985
DEPTH OUT	6825	
DEPTH IN	6405	
TOTAL FTG.	420	
TOTAL HRS. RUN	34	
BIT CONDITION 1/8" T/B/GAGE	8 7 OC	
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	8.00	
WEIGHT	9.0	
VIS.-SEC	54	
PV/YP	20/16	/
GELS	/	/
W.L.-C.C	7.4	
PH	9.5	
% SOLIDS		
% SAND		

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
6765	6725	4 1/2	60			50	50	2150		6	120	6		
								750		6	60			

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
6800	2 7/8							

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
8.00	9.30	1 1/2		DRILL
9.30	9.45	1/4		CHECK B.O.P SER. RIG.
9.45	12.45	3		DRILL
12.45	3.00	2 1/4		DROP SURVEY PULL OUT
3.00	3.15	1/4		CHECK BLIND RAMS CHANGE BIT
3.15	4.00	3/4		RUN IN D.C.S

DRILLER: J. Hamil

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	FT
1	BS	2 2/8 x 6 3/4	3.96
1	SS	2" x 6 3/4	8.50
1	ST	2 2/8 x 6 3/4	4.60
1	C/O	2 3/16 x 5 1/4	2.10
		I.D. O.D. X	
		I.D. O.D. X	
21	DC	2 2/8 x 6 3/4	650.10
66	DP	STANDS	
1	DP	SINGLES	6169.78
		KELLY DOWN	33.30
		TOTAL	6872.24
		WT. OF DC IN AIR	65M LBS.
		WT. OF STRING	146M LBS.

BIT RECORD

BIT NO.	11	
SIZE	8 3/4	
MFG.	Reed	
TYPE	SCM5	
JETS 1/32"	11 11 12	
SERIAL NO.	685985	
DEPTH OUT		
DEPTH IN	6825	
TOTAL FTG.		
TOTAL HRS. RUN	4 3/4	
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	8.30	11.00
WEIGHT	9.1	9.1
VIS.-SEC	48	47
PV/YP	29/16	/
GELS.	4/6	/
W.L.-C.C	7.9	
PH	9.5	
% SOLIDS		
% SAND		

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	2400#		
BENEX	10#		
CMC	50#		

FOOTAGE

FROM	TO	ROT HOURS	DR-D / RM-R / CORE-C	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT ON BIT (1000#)	PUMP PRESS.	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD PUMPS RUN
6825'	6872'	4 3/4	47'			50	50	2100		6"	120	6"	120	

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		Serv Rig — Held Blow out Drlg while —
4.15	4.30	1/4		Slip Drlg Line — Tripping.
4.30	6.15	1 3/4		Run in
6.15	7.15	1		Ream To Bottom 27'
7.15	12.00	4 3/4		Drlg

DRILLER: B. Johnson

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: O-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

CONTRACTOR: GUSTAVSON DRILLING

SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
6405	6670	265'		22	1	16	71

DRILL PIPE SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	14#	E	2 13/16	5 1/4	F.H.	1	NAT.	8-P-80	8 1/2
6 3/4	10#		2 7/8		5 H90	2	NAT	8-P-80	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
	9 5/8	35# K55	25	813		813		

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	7 3/4	6 1/4	7 3/4	
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS				
7	RIG SERVICE	1/4		1/4	
8	RIG REPAIR		1 3/4		
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.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	
	HOURS FOR SHELL ACCOUNT				24
CONTRACTOR EQUIP. RENTAL	BOILER #1	8	8	8	24
	Boiler #2	8	8	8	24
	CWO 28320				
	CODE 232-B				

HOLE CONDITION

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

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	FT
1	B.S	2 3/8 x 6 3/4	3.96 FT.
1	S.S	2 x 6 3/4	8.50 FT.
1	S.I	2 3/8 x 6 3/4	4.50 FT.
1	C.O	2 3/8 x 5 3/4	2.10 FT.
		X	FT.
		X	FT.
21	DC	2 3/8 x 6 3/4	650.10 FT.
62	DP	STANDS	FT
1	DP	SINGLES	5796.79 FT.
KELLY DOWN			27.05 FT
TOTAL			6493.00 FT.
WT. OF DC IN AIR			65M LBS.
WT. OF STRING			139 LBS.

BIT RECORD

BIT NO.	10
SIZE	8 3/4
MFG.	SEC
TYPE	M88
JETS 1/32"	11 11 11
SERIAL NO.	236823
DEPTH OUT	
DEPTH IN	6405
TOTAL FTG.	88
TOTAL HRS. RUN	7 3/4
BIT CONDITION 1/8" T/B/GAGE	DRLG
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	1:00	4:30	7:30
WEIGHT	9.1	9.1	9.1
VIS-SEC	53	56	54
PV/YP	31/33	/	/
GELS	6/10	/	/
W.L.-C.C.	7.2	7.2	7.4
PH	9.5	9.5	9
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

MORNING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
6405	6493	7 3/4	88			50	50	2150		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
12.00	12.15	1/4		RIG SERV. ✓ B.O.P.S.
12.15	8.00	7 3/4		DRLG.
		8		

DRILLER: A. Pivosiuk

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	FT
1	B.S	2 3/8 x 6 3/4	3.96 FT.
1	S.S	2 x 6 3/4	8.50 FT.
1	S.I	2 3/8 x 6 3/4	4.50 FT.
1	C.O	2 3/8 x 5 3/4	2.10 FT.
		X	FT.
		X	FT.
21	DC	2 3/8 x 6 3/4	650.10 FT.
63	DP	STANDS	FT
1	DP	SINGLES	5890.56 FT
KELLY DOWN			11 FT
TOTAL			6570.72
WT. OF DC IN AIR			65M LBS.
WT. OF STRING			142M LBS

BIT RECORD

BIT NO.	10
SIZE	8 3/4
MFG.	SEC
TYPE	M88
JETS 1/32"	11 11 11
SERIAL NO.	236823
DEPTH OUT	
DEPTH IN	6405
TOTAL FTG.	165
TOTAL HRS. RUN	14
BIT CONDITION 1/8" T/B/GAGE	1N
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	8:00	12:00	
WEIGHT	9.1	9.1	
VIS-SEC	55	52.	
PV/YP	17/16	19/15	/
GELS	/	/	/
W.L.-C.C.	7.6	7.8	
PH	9.0	9.0	
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
CAUSTIC	— 100 lbs		
GEL	— 1500 lbs.		
BEN-EX	— 6 lbs.		
C.M.C.	— 100 lbs.		

DAY TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
6493	6570	6 1/4	77			50	50	2150		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	9.00	1		DRILL
9.00	10.45	1 3/4		PULL 3 STDS. CHANGE SWIVEL PACKING
10.45	4.00	5 1/4		DRILL

DRILLER: J. Homiak

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	FT
1	B.S	2 3/8 x 6 3/4	3.96 FT.
1	S.S	2" x 6 3/4	8.50 FT.
1	S.I	2 3/8 x 6 3/4	4.50 FT.
1	C.O	2 3/8 x 5 3/4	2.10 FT.
		X	FT.
		X	FT.
21	DC	X	650.10 FT.
64	DP	STANDS	FT.
1	DP	SINGLES	5984.15 FT.
KELLY DOWN			17.00 FT.
TOTAL			6670.31 FT.
WT. OF DC IN AIR			65M LBS.
WT. OF STRING			142M LBS

BIT RECORD

BIT NO.	10
SIZE	8 3/4"
MFG.	Sec
TYPE	M88
JETS 1/32"	
SERIAL NO.	236823
DEPTH OUT	
DEPTH IN	6405
TOTAL FTG.	265'
TOTAL HRS. RUN	21 3/4
BIT CONDITION 1/8" T/B/GAGE	1N
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	4.00	9.00	11.00
WEIGHT	9.1	9.1	9.1
VIS-SEC	49	49	49
PV/YP	22/21	/	/
GELS	5/10	/	/
W.L.-C.C.	7.6	7.0	7.0
PH	9.5	9.5	9.0
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1400#		
BENEX	6 #		
CMC	100#		
CAUSTIC	— 100#		

EVENING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6570'	6670'	7 3/4	100'			50	50	2150		6"	120	6"	120	

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		Serv Rig & Swivel
4.15	12.00	7 3/4		Drlg.

DRILLER: [illegible]

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: Shell Artic Red River

LOCATION: 0-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Les Lawson

CONTRACTOR: Lus Lawson Drlg

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Paul M Link

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
6249	6465	156	15	21	1	15	70

DP / DC SIZE	WT. / FT.	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	14#	E	2 3/16	5 1/4	FH	1	Nat	8-P-80	8 1/2
6 3/4	101#		2 7/8		5 H90	2	Nat	8-P-80	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
	9 7/8	35# K55	25	813.		813		

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	7 3/4	7 1/4		
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS			4 1/4	
7	RIG SERVICE	1/4	1/4		
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY		1/2		
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.			1/4	
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23	CHECK D.C.'S			3 1/2	
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	
	HOURS FOR SHELL ACCOUNT				24
CONTRACTOR EQUIP. REMARKS	BOILER #1	8	8	8	
	Boiler #2	8	8	8	
	CODE 232 B				

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	ID	OD	FT.
1	BS		2 3/8	6 3/4	3.96 FT.
1	SS		2	6 3/4	8.50 FT.
1	S1		2 3/8	6 3/4	4.50 FT.
1	C.O.		2 7/8	5 1/4	2.10 FT.
			ID	OD X	FT.
			ID	OD X	FT.
21	DC		2 7/8	6 3/4	650.10 FT.
60	DP	STANDS			FT.
D	DP	SINGLES			5641.71 FT.
KELLY DOWN					34.00 FT.
TOTAL					6344.71 FT.
WT. OF DC IN AIR					65M LBS.
WT. OF STRING					138M LBS.

BIT RECORD

BIT NO.	9
SIZE	8 3/4
MFG.	SEC
TYPE	M88
JETS 1/32"	11 11 11
SERIAL NO.	911905
DEPTH OUT	IN
DEPTH IN	6050
TOTAL FTG.	294
TOTAL HRS. RUN	27 3/4
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12:00	4:00	7:00
WEIGHT	9.1	9.1	9.1
VIS.-SEC	66	56	53
PV/YP	25/33	20/25	20/18
GELS	7/11	5/8	5/8
W.L.-C.C	7.2	7.4	7.4
PH	9.5	9.5	9.5
% SOLIDS	5%	5%	5%
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
6249	6344	7 3/4	95			50	50	2150		6	120	6	120	
						# 1 Pump - 650					60 strokes			

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	12:15	1/4		Rig Serv ✓ BOPs.
12:15	8:00	7 3/4		Drlg 8 3/4 Hole

DRILLER: D. Lindall

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	ID	OD	FT.
1	BS		2 3/8	6 3/4	3.96 FT.
1	SS		2	6 3/4	8.50 FT.
1	S1		2 3/8	6 3/4	4.50 FT.
1	C.O.		2 7/8	5 1/4	2.10 FT.
			ID	OD X	FT.
			ID	OD X	FT.
21	DC		2 7/8	6 3/4	650.10 FT.
61	DP	STANDS			FT.
1	DP	SINGLES			5704.19 FT.
KELLY DOWN					31.00 FT.
TOTAL					6405.35 FT.
WT. OF DC IN AIR					65M LBS.
WT. OF STRING					LBS

BIT RECORD

BIT NO.	9
SIZE	8 3/4
MFG.	SEC
TYPE	M88
JETS 1/32"	11 11 11
SERIAL NO.	911905
DEPTH OUT	6405
DEPTH IN	6050
TOTAL FTG.	355
TOTAL HRS. RUN	35
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	8:00	12:00	3:30
WEIGHT	9.1	9.1	9.1
VIS.-SEC	50	54	54
PV/YP	20/20	/	/
GELS	4/7	/	/
W.L.-C.C	7.8	7.2	7.2
PH	9.5	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
~~[illegible]~~	#		
CMC	50#		
GEL	2000#		
BENEX	8#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
6344	6405	7 1/4	61		Vitrea 41#	50	50	2100		6"	120			

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
6405	2°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
~~6344~~				
8.00	8.15	1/4		RIG. SERV. ✓ B.O.P.S.
8.15	3.30	7 1/4		DRLG
3.30	4.00	1/2		DROP SURVEY START OUT OF HOLE.

DRILLER: A. Cwosiak

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	ID	OD	FT.
1	BS		2 3/8	6 3/4	3.96 FT.
1	SS		2	6 3/4	8.50 FT.
1	S1		2 3/8	6 3/4	4.50 FT.
1	C.O.		2 7/8	5 1/4	2.10 FT.
			ID	OD X	FT.
			ID	OD X	FT.
21	DC		2 7/8	6 3/4	650.10 FT.
61	DP	STANDS			FT.
1	DP	SINGLES			5704.19 FT.
KELLY DOWN					31. FT.
TOTAL					6405.35
WT. OF DC IN AIR					65M LBS.
WT. OF STRING					138 LBS.

BIT RECORD

BIT NO.	10
SIZE	8 3/4
MFG.	SEC
TYPE	M88
JETS 1/32"	11 11 11
SERIAL NO.	336803
DEPTH OUT	
DEPTH IN	6405
TOTAL FTG.	
TOTAL HRS. RUN	
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO. 1 S.P.M	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M	METHOD PUMPS RUN
6405								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	6.15	2 1/4		PULL OUT
6.15	6.30	1/4		CHECK BLIND RAMS
6.30	10.00	3 1/2		BREAK + CHECK ALL D.C.'S + SUBS. OK
10.00	12.00	2		RUN IN BREAK CIRC NO FILL

DRILLER: J. Hovind

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARTIC RED RIVER

LOCATION: D-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

CONTRACTOR: Gustavson Drlg

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M. Lowrie

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
6050	6249	199	20	20	1	14	71

DP / DC SIZE	WT./FT.	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD
4"	14#	E	2 13/16	5 1/4	FH
6 3/4	101#		2 1/8		5 1/90

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	NAT.	8-P-80	8 1/2
2	NAT	8-P-80	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
	9 5/8	35# K	25			813		

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	4 1/2	7 3/4	7 1/4	20
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING	1/4			1/4
6	TRIPS	2 1/2			2 1/2
7	RIG SERVICE	1/4	1/4		1/2
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE	1/2			1/2
10	DEVIATION SURVEY				
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.			1/4	1/4
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT				24
CONTRACTOR EQUIP. RENTAL	BOILER	8	8	8	24
	Cwo 2F320 232 B				

HOLE CONDITION

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

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 1/8	6 3/4	3.96
1	SS		2	6 3/4	9.50
1	SI		2 1/8	6 3/4	4.50
1	CO		2 1/8	5 3/4	2.10
			I.D.	O.D. X	FT.
			I.D.	O.D. X	FT.
21	DC		2 1/8	6 3/4	650.10
58	DP	STANDS			FT
	DP	SINGLES			5393.08
KELLY DOWN					28.00
TOTAL					6090.08
WT. OF DC IN AIR					65m LBS.
WT. OF STRING					134 LBS

BIT RECORD

BIT NO.	9
SIZE	8 3/4
MFG.	SEC
TYPE	M88
JETS 1/32"	11 11 11
SERIAL NO.	911905
DEPTH OUT	
DEPTH IN	6050
TOTAL FTG.	40
TOTAL HRS. RUN	4 1/2
BIT CONDITION 1/8" T/B/GAGE	CMC 50
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	4:30	7:00	
WEIGHT	9.1	9.1	
VIS-SEC	53	51	
PV/YP	25/22	20/20	
GELS	8/10	6/9	
W L-C C	8	7.8	
PH	9.5	9.5	
% SOLIDS	57	57	
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

MORNING TOUR — FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S P M	PUMP NO 2 LINER SIZE	PUMP NO 2 S P M	METHOD PUMPS RUN
6050	6090	4 1/2	40			50	50	2000		6	120			

DEVIATION RECORD	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
	6030	1 1/4							

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
12:00	12:30	1/2		Pull out Bit #8
12:30	12:45	1/4		Rig Ser. ✓ Blind Rams.
12:45	1:15	1/2		Run in DCs.
1:15	1:45	1/2		Slip 33' of Drlg Line.
1:45	3:15	1 1/2		Run in w/ Bit #9.
3:15	3:30	1/4		Break Cir & Clean 15 feet to Bottom.
3:30	8:00	4 1/2		Drlg 8 3/4 Hole

DRILLER: D. Lindell

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 1/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	SI		2 1/8	6 3/4	4.50
1	CO		2 1/8	5 3/4	2.10
			I.D.	O.D. X	FT.
			I.D.	O.D. X	FT.
21	DC		2 1/8	6 3/4	650.10
59	DP	STANDS			FT
	DP	SINGLES			5486.51
KELLY DOWN					5
TOTAL					6170.21
WT. OF DC IN AIR					65M LBS.
WT. OF STRING					135M LBS.

BIT RECORD

BIT NO.	9
SIZE	8 3/4
MFG.	SEC
TYPE	M88
JETS 1/32"	11 11 11
SERIAL NO.	911905
DEPTH OUT	
DEPTH IN	6050
TOTAL FTG.	120
TOTAL HRS. RUN	12 1/4
BIT CONDITION 1/8" T/B/GAGE	Drlg
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	8:00	12:00	3:30
WEIGHT	9.1	9.1	9.1
VIS-SEC	50	58	58
PV/YP	21/23	/	/
GELS	3/7	/	/
W L-C C	7.6	7.6	7.6
PH	9.5	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	2000#		
BEN-EX	8#		

DAY TOUR — FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S P M	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S P M	METHOD PUMPS RUN
6090	6170	7 3/4	80			50	50	2000		6"	120			
								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
8.00	8.15	1/4		RIG SERV. ✓ B.O.P.S.
8.15	4.00	7 3/4		DRLG.
		8		
	RTC			

DRILLER: A. Lowrie

EVENING TOUR — FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6170	6249	7 3/4	79			52	50	2050		6	120	6		
								725		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
4.00	6.15	2 1/4		DRILL
6.15	6.30	1/4		CHECK B.O.P SER. RIG
6.30	12.00	5 1/2		DRILL

DRILLER: [illegible]

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1500 lbs.		
CMC	100 lbs.		
CAUSTIC	- 100 lbs.		
BEN-EX	- 6 lbs.		

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARTIC RED RIVER

LOCATION: 0-27.

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

CONTRACTOR: Gustavson Drlg

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M. Lovrich

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
5844	6050	206		19	1	13	71

DRILL PIPE SIZE	WT. / FT.	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD
4	14#	E	2 13/16	5 1/4	FH
6 5/8	10.1#		2 7/8		5 1/2 FH

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	NSCO	8-7-80	8 1/2
2	NSCO	8-7-80	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
	9 5/8	35#	25	813		813		

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	6	7 3/4	5 1/4	19 1/2
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING Sample	1 3/4			1 3/4
6	TRIPS			2	2
7	RIG SERVICE	1/4	1/4		1/2
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.				
15	TEST B.O.P.			1/4	1/4
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT				
CONTRACTOR EQUIP. RENTAL	BOILER	8	8	8	

CWO 28320
CWO 2332 B

HOLE CONDITION

1	HOLE DRAG (1000#)	5m
2	TORQUE ON BOTTOM (DP TURNS)	
3	FILL ON BOTTOM (FEET)	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	BS	BIT	2 7/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	S1		2 7/8	6 3/4	4.50
1	CO		2 3/16	5 1/4	2.10
		X	I.D.	O.D.	FT.
		X	I.D.	O.D.	FT.
21	DC		2 7/8	6 3/4	650.10
56	DP	STANDS			5206.73
	DP	SINGLES			FT.
		KELLY DOWN			43.00 FT.
		TOTAL			5918.89 FT.
		WT. OF DC IN AIR			65 LBS.
		WT. OF STRING			132 LBS.

BIT RECORD

BIT NO.	8
SIZE	8 3/4
MFG.	H.W
TYPE	X55R
JETS 1/32"	11 11 11
SERIAL NO.	23647
DEPTH OUT	
DEPTH IN	5679
TOTAL FTG.	239
TOTAL HRS. RUN	21 1/2
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12:00	4:00	8:00
WEIGHT	9.1	9.1	9.1
VIS.-SEC	57	57	58
PV/YP	20/16	19/14	19/14
GELS	4/7	4/7	4/7
W.L.-C.C	7.4	7.4	7.6
PH	9.0	9.5	9.5
% SOLIDS	5.7	5.7	5.7
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
5844	5918	6	74			55	50	2000		6	120			
								600		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	12:15	1/4		Rig Serv / BOPs.
12:15	1:15	1		Drlg 8 3/4 Hole
1:15	2:00	3/4		Cir Sample @ 5860.
2:00	2:15	1/4		Drlg 8 3/4" Hole.
2:15	3:15	1		Cir Sample @ 5865
3:15	8:00	4 3/4		Drlg 8 3/4 Hole

DRILLER: D. Jendall

DAYTOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	BS	BIT	2 7/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	S1		2 7/8	6 3/4	4.50
1	CO		2 3/16	5 1/4	2.10
		X	I.D.	O.D.	FT.
		X	I.D.	O.D.	FT.
21	DC		2 7/8	6 3/4	650.10
57	DP	STANDS			FT.
	DP	SINGLES			5299.99 FT.
		KELLY DOWN			31 FT.
		TOTAL			6000. FT.
		WT. OF DC IN AIR			65 M. LBS.
		WT. OF STRING			133 LBS.

BIT RECORD

BIT NO.	8
SIZE	8 3/4
MFG.	H.W
TYPE	X55R
JETS 1/32"	11 11 11
SERIAL NO.	23647
DEPTH OUT	
DEPTH IN	5679
TOTAL FTG.	321
TOTAL HRS. RUN	29 1/4
BIT CONDITION 1/8" T/B/GAGE	Drlg.
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	8:00	12:00	3:30
WEIGHT	9.0	9.1	9.1
VIS.-SEC	56	52	58
PV/YP	18/14	/	/
GELS	3/5	/	/
W.L.-C.C	7.2	7.2	7.4
PH	9.5	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	2000#		
BEN-EX	8#		
CAUSTIC	50#		

FOOTAGE

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 2 LINER SIZE	PUMP NO 2 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
5918	6000	7 3/4	82		Dynax T6	55	50	2000		6"	120			
					Formula 3#30			600		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
8.00	10.15	2 1/4		Drlg
10.15	10.30	1/4		RIG SERV - CHECK B.O.P.S.
10.30	4.00	5 1/2		DRLG.
		8		

DRILLER: A. Lurosinski

EVENINGTOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	BS	BIT	2 7/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	S1		2 7/8	6 3/4	4.50
1	CO		2 3/16	5 1/4	2.10
		X	I.D.	O.D.	FT.
		X	I.D.	O.D.	FT.
21	DC		2 7/8	6 3/4	650.10
57	DP	STANDS			5361.91
2	DP	SINGLES			FT.
		KELLY DOWN			19.00
		TOTAL			6050.01
		WT. OF DC IN AIR			65 LBS.
		WT. OF STRING			134 M LBS.

BIT RECORD

BIT NO.	8
SIZE	8 3/4
MFG.	H.W.
TYPE	X55R
JETS 1/32"	11 11 11
SERIAL NO.	23647
DEPTH OUT	6050
DEPTH IN	5679
TOTAL FTG.	371
TOTAL HRS. RUN	35
BIT CONDITION 1/8" T/B/GAGE	1/1
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	4:00	8:00	
WEIGHT	9.1	9.1	
VIS.-SEC	70	52	
PV/YP	23/24	20/18	/
GELS	/	/	/
W.L.-C.C	9.4	7.8	
PH	9.0	9.0	
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
Caustic	50lbs		
GEL	1800#		
BEN-EX	8#		

FOOTAGE

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6000	6050	5 3/4	50			55	50	2000		6	120	6		
								600		6"	60			

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
6050	1 1/4°							

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
4.00	4.45	3/4		DRILL
4.45	5.00	1/4		CHECK B.O.P. SER. RIG
5.00	10.00	5		DRILL
10.00	12.00	2		DROP SURVEY PULL OUT

DRILLER: L. Hunish

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: Shell Artic Red River

LOCATION: 0-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

CONTRACTOR: Gustavson Drlg.

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: W. Sawatzky

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
5628	5844	216		18	1	12	71

DP./DC SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD
4	14#	E	2 3/16	5 1/4	FH
6 3/4	101#		2 7/8	6 3/4	5" H90

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	NSCO	8-P-80	8 1/2
2	NSCO	8-P-80	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
	9 5/8	35#	25	813		813	450	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	3 3/4	7 3/4	7 1/4	19 1/4
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING	1/4			1/4
6	TRIPS	3 1/2			3 1/2
7	RIG SERVICE	1/4	1/4		1/2
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				1/4
10	DEVIATION SURVEY	1/4			
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.			1/4	1/4
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT				24

EQUIPMENT CONTRACTOR: BOILER #1 8 8; Boiler #2; 232B

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	BS	BIT	2 7/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	SI		2 7/8	6 3/4	4.50
1	4O		2 7/16	5 1/4	2.10
		X			
		X			
21	DC		2 7/8	6 3/4	650.10
		X			
53	DP	STANDS			
2	DP	SINGLES			4989.40
		KELLY DOWN			21.00
		TOTAL			5679.56
		WT. OF DC IN AIR			65m LBS.
		WT. OF STRING			128m LBS.

BIT RECORD

	1	2
BIT NO.	7	8
SIZE	8 3/4	8 3/4
MFG.	H.W	H.W
TYPE	X55R	X55R
JETS 1/32"	11 11 11	11 11 11
SERIAL NO.	23412	23647
DEPTH OUT	5679	
DEPTH IN	5217	
TOTAL FTG.	462	
TOTAL HRS. RUN	33 1/2	
BIT CONDITION 1/8" T/B/GAGE	6 8 1	
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	12:00		
WEIGHT	9.1		
VIS.-SEC.	51		
PV/YP	13/10	/	/
GELS	3/5	/	/
W.L.-C.C.	8.8		
PH	9.5		
% SOLIDS	5.7		
% SAND	5.7		

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1000#		
BENEX	4#		
CAUSTIC	50#		
CMC	100#		

FOOTAGE

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	PUMP NO. 1 S.P.M	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M	METHOD PUMPS RUN
5628	5679	3 3/4	51			55	50	2000		6	120			
								600		6	60			

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
5679	1 1/8°							

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
12:00	12:15	1/4		Rig Ser ✓ BOPs.
12:15	4:00	3 3/4		Drlg 8 3/4 Hole.
4:00	4:15	1/4		Survey
4:15	7:45	3 1/2		Trip for Bit.
7:45	8:00	1/4		Break Circ & Clean 30' of fill

DRILLER: D. Lindell

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	BS	BIT	2 7/8	6 3/4	3.96
1	SS		2"	6 3/4	8.50
1	SI		2 7/8	6 3/4	4.50
1	4O		2 7/16	5 1/4	2.10
		X			
		X			
21	DC		2 7/8	6 3/4	650.10
54	DP	STANDS			
1	DP	SINGLES			5051.46
		KELLY DOWN			36.00
		TOTAL			5756.62
		WT. OF DC IN AIR			65M LBS.
		WT. OF STRING			LBS.

BIT RECORD

	8		
BIT NO.	8		
SIZE	8 3/4		
MFG.	H.W.		
TYPE	X55R		
JETS 1/32"	11 11 11		
SERIAL NO.	23647		
DEPTH OUT			
DEPTH IN	5679		
TOTAL FTG.	77		
TOTAL HRS. RUN	7 3/4		
BIT CONDITION 1/8" T/B/GAGE	Dlg		
REAMER CUTTER NO.	1431		
REAMER TYPE	2X		

MUD RECORD

TIME	8:00	12:00	3:30
WEIGHT	9.1	9.1	9.1
VIS.-SEC	52	56	50
PV/YP	18/14	18/15	/
GELS	3/5	4/7	/
W.L.-C.C.	8.0	7.6	7.6
PH	9	9	9.
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
CAUSTIC	50#		
CMC	50#		
GEL	2000#		
BEN-EX	8#		

FOOTAGE

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	PUMP NO. 1 S.P.M	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M	METHOD PUMPS RUN
5679	5756	7 3/4	77		1 VITREA #41	55	50	2000		6"	120			
								600		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
8.00	10.30	2 1/2		DRLG.
10.30	10.45	1/4		RIG SERV. CHECK HYDRIL = OKAY & KELLY COCK ✓
10.45	4.00	5 1/4		DRLG.
		8		

DRILLER: A. Swasick

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	BS	BIT	2 7/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	SI		2 7/8	6 3/4	4.50
1	4O		2 7/16	6 3/4	2.10
		X			
		X			
21	DC		2 7/8	6 3/4	650.10
55	DP	STANDS			514440
1	DP	SINGLES			
		KELLY DOWN			31.00
		TOTAL			5844.56
		WT. OF DC IN AIR			65m LBS.
		WT. OF STRING			132m LBS.

BIT RECORD

	8		
BIT NO.	8		
SIZE	8 3/4		
MFG.	H.W.		
TYPE	X55R		
JETS 1/32"	11 11 11		
SERIAL NO.	23647		
DEPTH OUT			
DEPTH IN	5679		
TOTAL FTG.	165		
TOTAL HRS. RUN	15 1/2		
BIT CONDITION 1/8" T/B/GAGE	1N		
REAMER CUTTER NO.			
REAMER TYPE			

MUD RECORD

TIME	4.00	8.00	
WEIGHT	9.1	9.1	
VIS.-SEC	55	55	
PV/YP	18/16	14/14	/
GELS	/	/	/
W.L.-C.C.	7.	7.4	
PH	9.5	9.5	
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5756	5844	7 1/4	88			55	50	2000		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	4.30	1/2		DRILL
4.30	4.45	1/4		CHECK B. O. P.'s SER. RIG
4.45	12.00	7 1/4		DRILL

DRILLER: J. Hovish

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: Shell Artic Red River O-27

LOCATION: O-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D. Brown

CONTRACTOR: Gustavson Drilling

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: A. Lomuto

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
5329	5628	299		17	1	11	71

DP./DC. SIZE	WT./FT.	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	14#	E	2 13/16	5 1/4	F.H	1	NSCO	8-P-80	8 1/2
6 3/4	101#		2 7/8		5" H90	2	NSCO	8-P-80	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
	9 5/8		25			813		

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	7 3/4	7 1/2	7 1/2	22 3/4
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS				
7	RIG SERVICE	1/4	1/4	1/4	3/4
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.				
15	TEST B.O.P.		1/4	1/4	1/2
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIPMENT	BOILER #1	8	8	8	24
	Boiler #2	8	8	8	24
	Code 232				

HOLE CONDITION

1	HOLE DRAG (1000#)	10
2	TORQUE ON BOTTOM (DP TURNS)	
3	FILL ON BOTTOM (FEET)	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	BS	BIT	2 7/8	6 3/4	3.96
1	SS		2 7/8	6 3/4	8.50
1	S1		2 7/8	6 3/4	4.50
1	S0		2 7/16	5 3/4	2.10
		I.D. X	O.D.		FT.
		I.D. X	O.D.		FT.
21	DC		2 7/8	6 3/4	650.10
51	DP	STANDS			4743.17
	DP	SINGLES			FT.
KELLY DOWN					17.00
TOTAL					5429.33
WT. OF DC IN AIR					65M LBS.
WT. OF STRING					125M LBS.

BIT RECORD

BIT NO.	7
SIZE	8 3/4
MFG.	H.W.
TYPE	X55R
JETS 1/32"	11 11 11
SERIAL NO.	23412
DEPTH OUT	
DEPTH IN	5217
TOTAL FTG.	212.
TOTAL HRS. RUN	14 3/4
BIT CONDITION 1/8" T/B/GAGE	Drlg.
REAMED	29' in 1 1/4 hrs.
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12:00	4:00	9:00
WEIGHT	9.1	9.1	9.1
VIS-SEC	58	51	50
PV/YP	17/15	17/16	16/13
GELS	4/7	4/7	3/5
W.L.-C.C.	8.2	7.2	7.8
PH	9.5	9.5	9.5
% SOLIDS	5%	5%	5%
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	2100#		
BENEX	8#		
CMC	75#		
CAUSTIC	50#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD PUMPS RUN
5329	5429	7 3/4	100			55	50	2000		6	120			
					60 SPM — 700 P.S.I.			Run #2 (2 hrs)		6	120			

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.		Drlg 8 3/4 Hole.
2:00	2:15	1/4		Rig Ser / BOPs.
2:15	8:00	5 3/4		Drlg 8 3/4 Hole

DRILLER: D. Lindall

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	BS	BIT	2 7/8	6 3/4	3.96
1	SS		2 7/8	6 3/4	8.50
1	S1		2 7/8	6 3/4	4.50
1	S0		2 7/16	5 3/4	2.10
		I.D. X	O.D.		FT.
		I.D. X	O.D.		FT.
21	DC		2 7/8	6 3/4	650.10
52	DP	STANDS			
	DP	SINGLES			4834.60
KELLY DOWN					36.00
TOTAL					5539.70
WT. OF DC IN AIR					65M LBS.
WT. OF STRING					126M LBS.

BIT RECORD

BIT NO.	7
SIZE	8 3/4
MFG.	H.W.
TYPE	X55R
JETS 1/32"	11 11 11
SERIAL NO.	23412
DEPTH OUT	
DEPTH IN	5217
TOTAL FTG.	322
TOTAL HRS. RUN	22 1/4
BIT CONDITION 1/8" T/B/GAGE	1 N
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	8:00	12:00	3:00
WEIGHT	9.1	9.1	9.1
VIS-SEC	54	52	52
PV/YP	20/20	20/20	20/20
GELS	3/5	3/5	4/6
W.L.-C.C.	7.8	7.7	7.8
PH	9.5	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
CAUSTIC	50#		
CMC	50#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD PUMPS RUN
5429	5539	7 1/2	110			55	50	2000		6	120			

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	9.45	1 3/4		Drlg.
9.45	10.00	1/4		RIG SERV. CHECK BOPS.
10.00	3.00	5		Drlg.
3.00	3.15	1/4		B.O.P. DRILL.
3.15	4.00	3/4		Drlg.
		8		

DRILLER: A. Lomuto

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	BS	BIT	2 7/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	S1		2 7/8	6 3/4	4.50
1	S0		2 7/16	5 3/4	2.10
		I.D. X	O.D.		FT.
		I.D. X	O.D.		FT.
21	DC		2 7/8	6 3/4	650.10
53	DP	STANDS			4926.86
	DP	SINGLES			FT.
KELLY DOWN					FT.
TOTAL					5628.02
WT. OF DC IN AIR					LBS.
WT. OF STRING					LBS.

BIT RECORD

BIT NO.	7
SIZE	8 3/4
MFG.	H.W.
TYPE	X55R
JETS 1/32"	11 11 11
SERIAL NO.	23412
DEPTH OUT	
DEPTH IN	5217
TOTAL FTG.	411
TOTAL HRS. RUN	29 3/4
BIT CONDITION 1/8" T/B/GAGE	1N
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	5:00	8:00	
WEIGHT	9.1	9.1	
VIS-SEC	54	60	
PV/YP	13/14	19/19	/
GELS	/	/	/
W.L.-C.C.	8	7.6	
PH	9.5	9.5	
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1600 lbs.		
BEN-EX	5 sacks		
C-M-C	100 lbs.		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD PUMPS RUN
5539	5628	7 2	89			55	50	2000		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		DRILL
4.15	4.30	1/4		CHECK B.O.P. SER. RIG.
4.30	9.15	4 3/4		DRILL
9.15	9.30	1/4		B.O.P. DRILL
9.30	12.00	2 1/2		DRILL
				60 S.P.M = 700 P.S.I

DRILLER: F. Hamel

CP-36 (10/69)

DAILY DRILLING REPORT

WELL NAME: Shell Artic Red River

LOCATION: 0-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. Brown

CONTRACTOR: Gustavson Drlg

RIG NO.: 11

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M. Sonnato

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
5188	5329	141		16	1	10	71

DP / DC SIZE	WT. / FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD
4	14.00	E	3 1/4	5 1/4	FH
6 3/4	90.1		2 7/8		5" H90

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	N.S. CO.	8-P-80	8 1/2
2	NSCO	8-P-80	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
	9 5/8	36# K55	25		16.25	813	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL			7	7
3	REAMING		1/2	3/4	1 1/4
4	CORING	3			3
5	CLEAN TO BOTTOM AND CIRCULATING	3/4			3/4
6	TRIPS	3 3/4	5		8 3/4
7	RIG SERVICE				
8	RIG REPAIR		1 1/2		1 1/2
9	CUT AND/OR SLIP LINE	1/2			1/2
10	DEVIATION SURVEY				
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.			1/4	1/4
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23	RECOVER CORE		1		1
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
TOTALS		8	8	8	24
HOURS FOR SHELL ACCOUNT		8	8	8	24
CONTRACTOR EQUIP RENTAL	BOILER #1	8	8	8	24
	Boiler #2	8	8	8	24
	17 HRS Code 252				
	7 HRS Code 232				

HOLE CONDITION

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

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	FT.
1	CB	ID x 3 7/8 OD 3 7/8	35.17 FT.
1	C/O	ID 2 1/4 x OD 3 3/4	1.19 FT.
1	BS	ID 2 7/8 x OD 2 3/4	3.96 FT.
1	SH	ID 2 1/2 x OD 2 3/4	7.33 FT.
1	SI	ID 2 1/2 x OD 2 3/4	4.10 FT.
1	KV	ID 2 1/2 x OD 2 3/4	2.14 FT.
21	DCs	ID 2 1/2 x OD 6 3/4	650.10 FT.
		30 Stands Break	2.15
2	DP STANDS		430 FT.
48	DP	SINGLES	4466.61 FT.
	KELLY DOWN		42.00 FT.
	TOTAL		5216.75
	WT. OF DC IN AIR		56 LBS.
	WT. OF STRING		124 LBS.

BIT RECORD

BIT NO.	01 CORE #1
SIZE	6 7/32
MFG.	CHRIST
TYPE	◇
JETS 1/32"	- - -
SERIAL NO	EC4016
DEPTH OUT	5217
DEPTH IN	5188
TOTAL FTG.	29
TOTAL HRS. RUN	3
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	5:30
WEIGHT	9.2
VIS.-SEC	58
PV/YP	25 / 23
GELS	4 / 8
W.L.-C.C	8.0
PH	9.5
% SOLIDS	6.7
% SAND	

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

MORNING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
5188	5217	3	29	1		55	12	900		6	65			

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	12:30	1/2		Slip 33' of Drlg Line
12:30	3:00	2 1/2		Pick up Core Bbl & Run in
3:00	3:45	3/4		Cir & Dropped Ball.
3:45	6:45	3.		Cut ◇ Core #1 - 5188-5217 - Full Recovery. 28.5'
6:45	8:00	1 1/4		Break off Core & Pull out Core.
		8		

DRILLER: D. Dendall

DAY TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
5188	5198	1/2	10											

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	10.00	2.		Finish out of Hole
10.00	11.00	1		Recover Core #1. Lay Down Core Barrel.
11.00	12.30	1 1/2		Run in Collars. Rig Serv. + Motor Shut Offs
12.30	2.00	1 1/2		Run in Hole
2.00	3.30	1 1/2		Work on Plugged Kelly.
3.30	4.00	1/2		Break Circ. + Start Reaming.

DRILLER: A. Evosiuk

EVENING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M	METHOD PUMPS RUN
5198	5329	7 3/4	141			55	50	2000		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		Ream Rat Hole to 8 3/4
4.15	4.30	1/4		Check B.O.P. Ser. Rig
4.30	5.00	1/2		Ream
5.00	12.00	7		Drill 8 3/4 Hole

DRILLER: K. Howard

BIT RECORD

BIT NO.	8
SIZE	8 3/4
MFG.	H-W
TYPE	X55R
JETS 1/32"	
SERIAL NO.	23412
DEPTH OUT	
DEPTH IN	5190
TOTAL FTG.	
TOTAL HRS. RUN	7
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	4:00 8:00
WEIGHT	9.1 9.1
VIS.-SEC.	67 58
PV/YP	
GELS	
W.L.-C.C.	8.
PH	9.10
% SOLIDS	
% SAND	

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
Caustic	100 lbs.		
C.M.C.	75 lbs.		
Gel	1700#		
Benex			

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: Shell Artic Red River

LOCATION: 0-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. Brown

CONTRACTOR: Gustavson Drlg

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Al Smith

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
4922	5183	238		15	1	9	71

DP./DC SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	14	E	3¼	5¼	FH	1	NSCO	8-P-80	8½
6¾	101		2⅞		5"H90	2	NSCO	8-P-80	8½

LAST CASING TUBING OR LINER	SIZE	WT. AND GR.	NO. OF JOINTS	FEET	KB. TO CSG. HEAD	SET AT	CEMENT USED (SACKS)	REMARKS
	9⅝	36# K55	25		16.25	913	430.	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	7¾	6½	1½	15½
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING			3½	3½
6	TRIPS			3	3
7	RIG SERVICE	¼	¼		½
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.				
15	TEST B.O.P.			¼	¼
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23	CIRC SAMPLES		1¼		1¼
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIP RENTAL	BOILER #1	8	8	8	24
	BOILER #2	8	8	8	24
	Code 232				

HOLE CONDITION

1	HOLE DRAG (1000#)	5
2	TORQUE ON BOTTOM (DP TURNS)	
3	FILL ON BOTTOM (FEET)	

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT
1	BS		2¼	6¾	3.96
1	SS		2	6¾	8.50
1	9/0		2⅞	6¾	2.10
1	C		2 1/16	5¾	2.20
1	KV		2¼	5¾	2.14
1	S1		2¼	6¾	4.50
21	DCS		2¼	6¾	649.36
46	DP	STANDS			
2	DP	SINGLES			43.39.06
		KELLY DOWN			19.00
		TOTAL			5030.82
		WT. OF DC IN AIR			65m LBS.
		WT. OF STRING			120m LBS

BIT RECORD

BIT NO.	6
SIZE	8¾
MFG.	H.W.
TYPE	X55R
JETS 1/32"	10 10 11
SERIAL NO.	15188
DEPTH OUT	
DEPTH IN	4412.
TOTAL FTG.	618
TOTAL HRS. RUN	40¾
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12.30	4.30	7.00
WEIGHT	9.1	9.1	9.1
VIS-SEC.	57	53	55
PV/YP	21/13	15/15	18/19
GELS	4/7	4/6	4/7
W L-C C	7.8	7.6	8.0
PH	9.0	9.5	9.5
% SOLIDS	5%	5%	5%
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1000#		
BENEX	4#		
CAUSTIC	50#		
CMC			50#

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
4922	5030	7¾	106			55	50	2150		6	120			
					Pump Sts. @ 60 = 650PSI									

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	12.15	¼		Rig Ser ✓ BOPs.
12.15	8.00	7¾		Drlg 8¾ Hole w/B.t #6.

DRILLER: D. Lendall

DAYTOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT
1	BS		2¼	6¾	3.96
1	SS		2	6¾	8.50
1	9/0		2⅞	6¾	2.10
1	C		2 1/16	5¾	2.20
1	KV		2¼	6¾	~~2.14~~
1	S1		2¼	6¾	4.50
21	DC		2¼	6¾	649.36
48	DP	STANDS			
	DP	SINGLES			446348
		KELLY DOWN			1076
		TOTAL			5147.00
		WT. OF DC IN AIR			65M LBS.
		WT. OF STRING			121 LBS

BIT RECORD

BIT NO.	6
SIZE	8¾
MFG.	H.W
TYPE	X55R
JETS 1/32"	10 10 11
SERIAL NO.	15188
DEPTH OUT	
DEPTH IN	4412.
TOTAL FTG.	735
TOTAL HRS. RUN	47¼
BIT CONDITION 1/8" T/B/GAGE	1N
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	8:00	12:00	3:30
WEIGHT	9.1	9.1	9.1
VIS-SEC	50	52	55
PV/YP	16/13	18/14	18/14
GELS	3/6	4/7	4/6
W L-C C	8.0	7.8	7.9
PH	9	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
CAUSTIC	50#		
CMC	50#		
GEL	1800#		
BEN-EX	7#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
5030	5147	6½	117			55	50	2150		6"	120			

DEVIATION RECORD: ~~5160~~ ¾

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
~~5030~~ 8.00	9.15	1¼		Drlg.
9.15	9.30	¼		Rig Serv. Swivel + BOPS.
9.30	10.30	2		Drlg.
10.30	12.15	¾		CIRC — SAMPLE
12.15	3.15	3		DRLG
3.15	3.45	½		CIRC SAMPLE
3.45	4.00	¼		DRLG

DRILLER: A. Dworzak

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT
1	BS		2⅛	6¾	3.96
1	SS		2	6¾	8.50
1	S1		2⅛	6¾	4.50
1	9/0		2⅞	6¾	2.10
1	C		2 1/16	5¾	2.20
			I.D. X	O.D.	FT.
21	DC		I.D. X	O.D.	650.23
48	DP	STANDS			
1	DP	SINGLES			4497.67
		KELLY DOWN			19.00
		TOTAL			5188.18
		WT. OF DC IN AIR			LBS.
		WT. OF STRING			124 LBS.

BIT RECORD

BIT NO.	6
SIZE	8¾
MFG.	H.W.
TYPE	X55R
JETS 1/32"	10 10 11
SERIAL NO.	15188
DEPTH OUT	5188
DEPTH IN	4412
TOTAL FTG.	~~776~~ 776
TOTAL HRS. RUN	48½
BIT CONDITION 1/8" T/B/GAGE	6 B O
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	4.00	8.00	8.45
WEIGHT	9.1	9.1	9.1
VIS-SEC	55	51	58
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C	7.3	7.8	
PH	9.5	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	2000#		
CAUSTIC	50lbs.		
BEN-EX	10#		

FOOTAGE

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5147	5188	1¼				55	50	2150		6	120	6		
					MADE 4 FT CORR.									

DEVIATION RECORD: 5160 / ¾

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
				LOST 20 BBL MUD AT 5170
4.00	4.45	¾		CIR. SAMPLE 9.00 - 12.00 MEASURE OUT
4.45	5.30	¾		DRILL
5.30	6.00	½		CIR. SAMPLE STRAP 5188.26
6.00	6.15	¼		B.O.P.S SER. RIG BOARD 5184.26
6.15	6.45	½		DRILL DIFF 4.
6.45	7.30	¾		CIR. SAMPLE CORR. MADE.
7.30	9.00	1½		CIR. CON. MUD

DRILLER: L. Hound

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red River

LOCATION: O-27

PROVINCE: N.W.T

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. Brown

CONTRACTOR: Gustavson Drlg

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: M. Lomuto

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
4565	4922	357	146	14	1	8	71

DP / DC. SIZE	WT. / FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD
4 1/2"	14#	E	3 1/4"	5 1/4"	FH
6 3/4"	101#		2 7/8"		5"H90

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	National	8-80	8 1/2"
2	National	8-80	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
	9 5/8"	36# K55	25		16.25	813'	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	7 1/4	7 3/4	7 1/4	22 1/4
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS				3 1/4
7	RIG SERVICE	1/4	1/4	1/4	
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY	1/2			1/2
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23	CIRC SAMPLE			1/2	1/2
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT	8	8	8	24
NON-ACCOUNT	BOILER #1	8	8	8	24
	Boiler #2	8	8	8	24

Code 232

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS	2 7/8	x	6 3/4	3.96
1	SS	2"	x	6 3/4	8.50
1	C/O	2 7/8	x	6 3/4	2.10
1	C/O	2 7/8	x	5 3/4	2.20
1	KV	2 7/8	x	5 3/4	2.14
1	ST	2 7/8	x	6 3/4	4.50
21	DC	2 7/8	x	6 3/4	649.36
43	DP	STANDS			3996.91
	DP	SINGLES			
	KELLY DOWN				13.33
	TOTAL				4683.33
	WT. OF DC IN AIR				65M LBS.
	WT. OF STRING				116m LBS.

BIT RECORD

BIT NO.	6
SIZE	8 3/4
MFG.	H.W.
TYPE	X55R
JETS 1/32"	10 10 11
SERIAL NO	15188
DEPTH OUT	
DEPTH IN	4412
TOTAL FTG.	271
TOTAL HRS. RUN	18
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12:00	4:00	6:00
WEIGHT	9.2	9.2	9.1
VIS.-SEC.	47	55	52
PV / YP	18/14	/	/
GELS.	4/8	/	/
W.L.-C.C	7.8	7.4	7.6
PH	9.5	9.5	9.0
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	2000#		
BENEX	9#		
CMC	50#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
4565'	4683'	7 1/4	118			55	50	2150		6"	120	6"		

DEVIATION RECORD: DEPTH 4678' DEVIATION° 1/4 0 | 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		Serv Rig & swivel Checked B.O.P
12:15	7:15	7 1/4		Drlg
7:15	7:45	1/2		Survey
7:45	8:00	1/4		Drlg.

DRILLER: G. Gustavson

DAYTOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS	2 7/8	x	6 3/4	3.96
1	SS	2"	x	6 3/4	8.50
1	C/O	2 7/8	x	6 3/4	2.10
1	C/O	2 7/8	x	5 3/4	2.20
1	KV	2 7/8	x	5 3/4	2.14
1	ST	2 7/8	x	6 3/4	4.50
21	DC	2 7/8	x	6 3/4	649.36
44	DP	STANDS			
1	DP	SINGLES			4121.06
	KELLY DOWN				10.00
	TOTAL				4803.82
	WT. OF DC IN AIR				65m LBS.
	WT. OF STRING				119m LBS.

BIT RECORD

BIT NO.	6
SIZE	8 3/4
MFG.	H.W.
TYPE	X55R
JETS 1/32"	10 10 11
SERIAL NO.	15188
DEPTH OUT	
DEPTH IN	4412
TOTAL FTG.	391
TOTAL HRS. RUN	25 3/4
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	8:00	12:00	3:00
WEIGHT	9.2	9.1	9.1
VIS.-SEC	47	60	50
PV / YP	20/17	25/34	20/18
GELS	4/7	7/11	4/7
W.L.-C.C	7.4	7.2	7.8
PH	9.5	9.5	9.0
% SOLIDS	6%	5%	5%
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	3000#		
BENEX	12#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
4683	4803	7 3/4	120			55	50	2150		6	120			

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	9:45	1 3/4		Drlg 8 3/4 Hole.
9:45	10:00	1/4		Rig Serv / BOP's
10:00	4:00	6		Drlg 8 3/4 Hole.
		8		

DRILLER: D. Lindall

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS	2 7/8	x	6 3/4	3.96
1	SS	2	x	6 3/4	8.50
1	C/O	2 7/8	x	6 3/4	2.10
1	C/O	2 7/8	x	5 3/4	2.20
1	K.V.	2 7/8	x	5 3/4	2.14
1	S.T.	2 7/8	x	6 3/4	4.50
21	DC	2 7/8	x	6 3/4	649.36
45	DP	STANDS			
1	DP	SINGLES			4214.84
	KELLY DOWN				34.40
	TOTAL				4922.00
	WT. OF DC IN AIR				65M LBS.
	WT. OF STRING				119 M. LBS.

BIT RECORD

BIT NO.	6
SIZE	8 3/4
MFG.	H.W.
TYPE	X55R
JETS 1/32"	10 10 11
SERIAL NO.	15188
DEPTH OUT	
DEPTH IN	4412
TOTAL FTG.	510
TOTAL HRS. RUN	33
BIT CONDITION 1/8" T/B/GAGE	1 N
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	4:00	8:00	11:00
WEIGHT	9.1	9.1	9.1
VIS.-SEC	54	51	50
PV / YP	22/19	23/20	23/20
GELS	5/9	4/9	4/9
W.L.-C.C	7.8	7.9	7.9
PH	9.0	9.0	9.0
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
CAUSTIC	50#		
CMC	50#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD PUMPS RUN
4803	4922	7 1/4	119		1 DRUM. OMALA #33.	55	50	2150		6'	120			

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	5:45	1 3/4		DRILLING. 8 3/4 HOLE
5:45	6:00	1/4		RIG SERV - CHECK B.O.P.S.
6:00	8:30	2 1/2		DRILLING. AHEAD
8:30	9:00	1/2		CIRC. SAMPLE.
9:00	12:00	3.		DRLG.

DRILLER: A. Lwowski

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red River
LOCATION: O-27
PROVINCE: N.W.T

OPERATOR: Shell Canada Limited
SIGNATURE OF OPERATOR'S REPRESENTATIVE: J. Brown
CONTRACTOR: Gustavson Drlg
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Jack M. Lind
RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
4268'	4565	297		13	1	7	71

DP./DC. SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	14#	E	3 1/4"	5 1/4"	FH	1	Nat.	8P80	8 1/2"
6 3/4"	101#		2 7/8"	—	5H90	2	Nat.	8P80	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
	9 5/8"	36# K55	25		16.25	813'	430	

MORNING TOUR

TIME DISTRIBUTION – HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	8	4 1/4	7 3/4	20
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS		3 1/4		3 1/4
7	RIG SERVICE		1/4	1/4	1/2
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY		1/4		1/4
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT	8	8	8	24
NON-REVENUE	Boiler #1	8	8	8	24
NON-REVENUE	Boiler #2	8	8	8	24

Code 232

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6 3/4	3.96 FT.
1	SS		2"	6 3/4	8.50 FT.
1	C/O		2 7/8	6 3/4	2.10 FT.
1	C/O		2 1/4	5 3/4	2.20 FT.
1	KU		2 7/8	5 3/4	2.14 FT.
1	S.I		2 7/8	6 3/4	4.50 FT.
21	D.C		2 7/8	6 3/4	649.36 FT.
39	DP	STANDS			FT.
2	DP	SINGLES			3684.93 FT.
	KELLY DOWN				30.00 FT.
	TOTAL				4387.69 FT.
	WT. OF DC IN AIR				65M LBS.
	WT. OF STRING				112M LBS.

BIT RECORD

BIT NO.	5	
SIZE	8 3/4	
MFG.	Sec	
TYPE	M88	
JETS 1/32"	10 10 11	
SERIAL NO	911903	
DEPTH OUT		
DEPTH IN	3687	
TOTAL FTG.	700'	
TOTAL HRS. RUN	43 1/2	
BIT CONDITION 1/8" T/B/GAGE	IN	
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	12:00	4:00	6:00
WEIGHT	9.2	9.1	9.1
VIS.-SEC	48	42	44
PV/YP	22/5	/	/
GELS	4/8	/	/
W.L.-C.C	7.6	8.	7.8
PH	9.0	9.0	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1000#		
CMC	50#		
BIEN-EX 4	#		
CAUSTIC-50	#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD PUMPS RUN
4268'	4387'	8	119'			50	50	2150		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
12:00	8:00	8		Drlg

DRILLER: G. Johnson

DAYTOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6 3/4	3.96 FT.
1	SS		2	6 3/4	8.50 FT.
1	C/O		2 7/8	6 3/4	2.10 FT.
1	C/O		2 1/4	5 3/4	2.20 FT.
1	KU		2 7/8	5 3/4	2.14 FT.
1	S.I		2 7/8	6 3/4	4.50 FT.
21	DCs		2 7/8	6 3/4	649.36 FT.
40	DP	STANDS			FT.
1	DP	SINGLES			37 47.34 FT.
	KELLY DOWN				26.00 FT.
	TOTAL				4446.90 FT.
	WT. OF DC IN AIR				65m LBS.
	WT. OF STRING				114m LBS.

BIT RECORD

BIT NO.	5	6
SIZE	8 3/4	8 3/4
MFG.	Sec	H.W
TYPE	M88	X55R
JETS 1/32"	10 10 11	10 10 11
SERIAL NO.	911903	15188
DEPTH OUT	4412	
DEPTH IN	3687	4412
TOTAL FTG.	725	34
TOTAL HRS. RUN	44 3/4	3
BIT CONDITION 1/8" T/B/GAGE	4 2 0	
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	8:00	3:00
WEIGHT	9.2	9.2
VIS.-SEC.	44	54
PV/YP	15/15	18/21
GELS	4/6	5/7
W.L.-C.C	7.4	7.6
PH	9.5	9.5
% SOLIDS	5%	5%
% SAND		

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1500#		
BENEX	7#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD PUMPS RUN
4387	4412	1 1/4	25			50	50	2150		6	120			
4412	4446	3	34			50	50	2150		6	120	-		

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
4412	1/4°							

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
8:00	8:15	1/4		Rig Serv, ✓BOPS
8:15	9:30	1 1/4		Drlg 8 3/4" Hole w/Bit #5
9:30	9:45	1/4		Survey
9:45	1:00	3 1/4		Trip for Bit. (no fill)
1:00	4:00	3		Drlg 8 3/4 Hole.
		8		

DRILLER: D. Lindall

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6 3/4	3.96 FT.
1	SS		2"	6 3/4	8.50 FT.
1	C/O		2 7/8	6 3/4	2.10 FT.
1	C/O		2 1/4	5 3/4	2.20 FT.
1	KU		2 7/8	5 3/4	2.14 FT.
1	S.I		2 7/8	6 3/4	4.50 FT.
21	DCs		2 7/8	6 3/4	649.36 FT.
41	DP	STANDS			FT.
2	DP	SINGLES			3872.18 FT.
	KELLY DOWN				21. FT.
	TOTAL				4565.94 FT.
	WT. OF DC IN AIR				65M LBS.
	WT. OF STRING				116M LBS.

BIT RECORD

BIT NO.	6	
SIZE	8 3/4	
MFG.	~~Sec~~	H.W.
TYPE	~~M88~~	X55R
JETS 1/32"	10 10 11	
SERIAL NO.	15188	
DEPTH OUT		
DEPTH IN	4412	
TOTAL FTG.	153'	
TOTAL HRS. RUN	10 3/4	
BIT CONDITION 1/8" T/B/GAGE	1N	
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	4:00	8:00	11:00
WEIGHT	9.2	9.2	9.2
VIS.-SEC	55	48	52
PV/YP	24/21	23/21	23/21
GELS	5/7	4/7	4/8
W.L.-C.C	7.6	7.6	7.2
PH	9.5	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1000#		
CMC	50#		
CAUSTIC	50#		
BEN-EX	4#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 SPM	PUMP NO. 2 LINER SIZE	PUMP NO. 2 SPM	METHOD PUMPS RUN
4446	4565	7 3/4	1A			55	50	2150		6	120			

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 SERV. CHECK. B.O.P.S.
4:15	12:00	7 3/4		DRILLING 8 3/4 HOLE
		8		

DRILLER: A. Ewanick

HOLE CONDITION

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

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red River.

LOCATION: O-27

PROVINCE: N.W.T

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. Brown

CONTRACTOR: Gustavson Drlg

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Jack M. Lind

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
3934'	4268	334		12	1	6	71

DP./DC. SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	14#	E	3 1/4"	5 1/4	F.H.	1	Nat.	8P80	8 1/2"
6 7/8"	101#		2 7/8"	6 3/4"	5"H90	2	Nat.	8P80	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
	9 5/8	36# K55	25		16.25	813'	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	7 1/2	7 3/4	7	22 1/4
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS				
7	RIG SERVICE		1/4	1/4	1/2
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY	1/2		3/4	1 3/4
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIPMENT RENTAL	BOILER #1	8	8	8	24
	Boiler #2	8	8	8	24

Code 232

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	C/o		2 7/8	6 3/4	2.10
1	C/o		2 7/8	5 1/4	2.20
1	KV		2 7/8	5 1/4	2.14
1	S.I		2 7/8	6 3/4	4.50
21	DC		2 7/8	6 3/4	649.36
36	DP	STANDS			3344.70
—	DP	SINGLES			

KELLY DOWN	26.00
TOTAL	4048.29
WT. OF DC IN AIR	65m LBS.
WT. OF STRING	108m LBS.

BIT RECORD

BIT NO.	5
SIZE	8 3/4
MFG.	Sec
TYPE	M88
JETS 1/32"	10 10 11
SERIAL NO.	911903
DEPTH OUT	
DEPTH IN	3687
TOTAL FTG.	357
TOTAL HRS. RUN	20 3/4
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12:00	4:00	6:00
WEIGHT	9.1	9.1	9.1
VIS.-SEC.	51	53	52
PV/YP	20/25	/	/
GELS	4/9	/	/
W.L.-C.C	7.8	7.	7.
PH	9.5	9.5	9.0
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	500#		
CMC	100#		
BENEX	2#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
3934'	4044'	7 1/2	100			50	50	2,100		6"	120	6"	120	
										5 1/2	HRS	2 HRS		

DEVIATION RECORD	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
	3934'	1/4°							

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
12:00	12:30	1/2		Survey & Rig Serv
12:30	8:00	7 1/2		Drlg
		8		

DRILLER: G. Johnson

DAYTOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	C/o		2 7/8	6 3/4	2.10
1	C/o		2 7/8	5 1/4	2.20
1	KV		2 7/8	5 1/4	2.14
1	S.I		2 7/8	6 3/4	4.50
21	DCs		2 7/8	6 3/4	649.36
37	DP	STANDS			
1	DP	SINGLES			3469.57

KELLY DOWN	27.00
TOTAL	4068.27
WT. OF DC IN AIR	65m LBS.
WT. OF STRING	109m LBS.

BIT RECORD

BIT NO.	5
SIZE	8 3/4
MFG.	SEC
TYPE	M88
JETS 1/32"	10 10 11
SERIAL NO.	911903
DEPTH OUT	
DEPTH IN	3687
TOTAL FTG.	481
TOTAL HRS. RUN	28 1/2
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	8:00	12:00	3:00
WEIGHT	9.1	9.1	9.1
VIS.-SEC	50	44	47
PV/YP	21/19	17/10	16/18
GELS	4/7	4/6	4/7
W.L.-C.C	7.4	7.6	7.6
PH	9.5	9.0	9.5
% SOLIDS	5%	5%	5%
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	700#		
BENEX	3#		
CAUSTIC	50#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
4044	4168	7 3/4	124			50	50	2150		6	120			

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		Rig Ser & BOPs. / Kelly Cock.
8:15	4:00	7 3/4		Drlg 8 3/4 Hole.

DRILLER: H. Lindall

EVENINGTOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	C/o		2 7/8	6 3/4	2.10
1	C/o		2 7/8	5 1/4	2.20
1	KV		2 7/8	5 1/4	2.14
1	S.I		2 7/8	6 3/4	4.50
21	DCs		2 7/8	6 3/4	649.36
38	DP	STANDS			
1	DP	SINGLES			423.57

KELLY DOWN	34.40
TOTAL	~~4399.94~~ 4768.67
WT. OF DC IN AIR	65M LBS.
WT. OF STRING	LBS.

BIT RECORD

BIT NO.	5
SIZE	8 3/4
MFG.	SEC.
TYPE	M88
JETS 1/32"	10 10 11
SERIAL NO.	911903
DEPTH OUT	
DEPTH IN	3687
TOTAL FTG.	581
TOTAL HRS. RUN	35 1/2
BIT CONDITION 1/8" T/B/GAGE	1/N
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	4:00	8:00	11:30
WEIGHT	9.1	9.1	9.1
VIS.-SEC	46	45	45
PV/YP	19/16	20/15	19/15
GELS	4/10	4/9	4/9
W.L.-C.C	7.9	7.6	7.4
PH	9.5	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
CAUSTIC	50#		
CMC	50#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
4168	4268	7	100		1. Drum Motoroil #30	50	50	2150		6	120			
					1 Drum. Vitrea. #41									

DEVIATION RECORD	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
	4194	1/4°							

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
4:00	5:00	1		DRLG
5:00	5:30	1/2		CON-RIG SERV SURVEY. MISRUN.
5:30	6:00	1/2		Re-RUN SURVEY.
6:00	12:00	6		DRLG
		8		

DRILLER: A. Lwowski

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: Shell Artic Red River

LOCATION: 0-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. Brown

CONTRACTOR: Gustavson Drlg.

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Paul M Quick

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
3586	3934	348	13¼	11	1	5	71

DP./DC. SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4	14	E		5¼	FH	1	Nat.	8P-80	8½
6¾	101		2 7/8	6¾	5"H90	2	Nat	8P-80	8½

LAST CASING TUBING OR LINER	SIZE	WT. AND GR.	NO. OF JOINTS	FEET	KB. TO CSG. HEAD	SET AT	CEMENT USED (SACKS)	REMARKS
	9⅝	36# K55	25		16.25	813.	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	6¾	5½	7¾	20
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS	¾	2¼		3
7	RIG SERVICE	¼	¼	¼	¾
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY	¼			¼
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIPMENT	BOILER #1	8	8	8	24
	BOILER #2	8	8	8	24

Code 232

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6¾	3.96
1	SS		2"	6¾	8.50
1	S/O		2 7/8	6¾	2.10
1	S/O		2 7/16	5¾	2.20
1	KU		2 7/8	5¾	2.14
1	S1		2 7/8	6¾	4.50
18	DCS		2 7/8	6¾	556.41
33	DP	STANDS			3066.75
	DP	SINGLES			
	KELLY DOWN				40.83
	TOTAL				3687.29
	WT. OF DC IN AIR				55m LBS.
	WT. OF STRING				98 LBS.

BIT RECORD

BIT NO.	4
SIZE	8¾
MFG.	Hi.W.
TYPE	XDV
JETS 1/32"	10 10 11
SERIAL NO.	23303
DEPTH OUT	3687
DEPTH IN	3358
TOTAL FTG.	329
TOTAL HRS. RUN	19
BIT CONDITION 1/8" T/B/GAGE	6 4 1
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12:00	4:00	6:00
WEIGHT	9.1	9.1	9.1
VIS. SEC	33	36	47
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C	8.8		
PH	9.5	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
Gel	2200#		
Benex	8#		
CMC	50#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
3586	3687	6¾	101			65	40	2000		6	120			

DEVIATION RECORD: 3687 — ¼°

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	¼		Rig Serv BOPs
12:15	7:00	6¾		Drlg
7:00	7:15	¼		Survey
7:15	8:00	¾		Hoist

DRILLER: E. Johnson

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6¾	3.96
1	SS		2	6¾	8.50
1	S/O		2 7/8	6¾	2.10
1	S/O		2 7/16	5¾	2.20
1	KU		2 7/8	5¾	2.14
1	S1		2 7/8	6¾	4.50
18	DCS		2 7/8	6¾	649.36
33	DP	STANDS			
1	DP	SINGLES			3097.65
	KELLY DOWN				20.00
	TOTAL				3790.41
	WT. OF DC IN AIR				65m LBS.
	WT. OF STRING				104m LBS.

BIT RECORD

BIT NO.	5
SIZE	8¾
MFG.	SEC
TYPE	M88
JETS 1/32"	10 10 11
SERIAL NO.	911903
DEPTH OUT	
DEPTH IN	3687
TOTAL FTG.	103
TOTAL HRS. RUN	5½
BIT CONDITION 1/8" T/B/GAGE	Drlg
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12:30	3:00	
WEIGHT	9.1	9.0	
VIS.-SEC	46	46	
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C	8.6	8.0	
PH	9	10	
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
Gel	1000#		
Benex	4#		
Caustic	50#		
CMC	50#		

FOOTAGE

FROM	TO	ROT HOURS	DR-D PM-R CORE-C	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT ON BIT (1000#)	PUMP (AIR) PRESS	AIR VOL (CFM)	PUMP NO 1 LINER SIZE	PUMP NO 1 S.P.M	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
3687	3790	5½	103			50	50	2100		6	120			

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	¼		Finish Pulling Out
8:15	8:30	¼		Rig Serv / Blind Rams.
8:30	10:30	2		Run in Hole, Pick up 3 DCs (no fill)
10:30	4:00	5½		Drlg 8¾ Hole.
		8		

DRILLER: D. Lundall

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6¾	3.96
1	SS		2	6¾	8.50
1	S/O		2 7/8	6¾	2.10
1	S/O		2 7/16	5¾	2.20
1	KU		2 7/8	5¾	2.14
1	S1		2 7/8	6¾	4.50
21	DCS		2 7/8	6¾	649.36
34	DP	STANDS			3220.74
2	DP	SINGLES			
	KELLY DOWN				40.83
	TOTAL				3934.36
	WT. OF DC IN AIR				65M LBS.
	WT. OF STRING				106M LBS

BIT RECORD

BIT NO.	5
SIZE	8¾
MFG.	SEC
TYPE	M88
JETS 1/32"	10 10 11
SERIAL NO.	911903
DEPTH OUT	
DEPTH IN	3687
TOTAL FTG.	247
TOTAL HRS. RUN	13¼
BIT CONDITION 1/8" T/B/GAGE	1 N
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	4:00	8:00	11:30
WEIGHT	9	9	9.1
VIS.-SEC	45	43	45
PV/YP	26/3	/	/
GELS	3/5	/	/
W.L.-C.C	8.0	8.2	8.4
PH	9	9	9
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1000#		
BEN-EX	4#		
CAUSTIC	50#		
CMC	50#		

FOOTAGE

FROM	TO	ROT HOURS	DR-D ~~PM-R~~ ~~CORE-C~~	CORE NO	FORMATION (SHOW CORE RECOVERY)	ROTARY RPM	WT. ON BIT (1000#)	PUMP (AIR) PRESS.	AIR VOL (CFM)	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
3790	3934	7¾	144			50	50	2100		6	120			

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	¼		Rig Serv.
4:15	12:00	7¾		Drilling
		8		

DRILLER: A. Swosiuk

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red River O-27

LOCATION: O-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D. Brown

CONTRACTOR: Gustavson Drlg.

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
3192	3586	394		90	1	4	71

DP., DC. SIZE	WT./FT.	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD
4"	14#	E	2 1/4"	5 1/4"	F.H.
6 3/4"	101#		2 7/8"		5"H90

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	National	8P80	8 1/2"
2	"	8P80	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
	9 5/8"	36# K55	25		16.25	813'	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	6	4 3/4	7 3/4	18 1/2
3	REAMING		1/4		1/4
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS	1 1/2	1 3/4		3 1/4
7	RIG SERVICE		1/4	1/4	1/2
8	RIG REPAIR				
9	CUT AND ~~FOR~~ SLIP LINE		1		1
10	DEVIATION SURVEY	1/2			1/2
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIPMENT	BOILER #1	8	8	8	24
	Boiler #2	8	8	8	24

Code 232

HOLE CONDITION

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

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT / DP	I.D.	O.D.	FT.
1	BS	2 7/8	2 7/8	6 3/4	3.96
1	SS	2"	2"	6 3/4	8.50
1	C/O	2 7/8	2 7/8	6 3/4	2.10
1	C/O	2 1/4	2 1/4	5 3/4	2.20
1	KV	2 7/8	2 7/8	5 3/4	2.14
1	STI	2 7/8	2 7/8	6 3/4	4.50
18	DC	2 7/8	2 7/8	6 3/4	556.41
29	DP	STANDS			
2	DP	SINGLES			2751.37
	KELLY DOWN				21.00
	TOTAL				3358.18
	WT. OF DC IN AIR				55 M LBS.
	WT. OF STRING				94 LBS.

BIT RECORD

BIT NO.	3		
SIZE	8 3/4		
MFG.	H.W		
TYPE	X1G		
JETS 1/32"	10 10 11		
SERIAL NO.	27627		
DEPTH OUT			
DEPTH IN	3006		
TOTAL FTG.	352		
TOTAL HRS. RUN	11 1/4		
BIT CONDITION 1/8" T/B/GAGE	Locked		
	7-6-0 1/2"		
REAMER CUTTER NO.			
REAMER TYPE			

MUD RECORD

TIME	12 00	4 00	
WEIGHT	9.2	9.2	
VIS.-SEC	51	39	
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH	9.	9.5	
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	NIL		
CAUSTIC	100#		
BENEX	NIL		

MORNING TOUR

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
3192'	3358	6	166			100	40	2,000		6"	120	6"		

DEVIATION RECORD: 3254' 1 1/2°; 3358' 3/4°

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
12 00	1 45	1 3/4		Drlg
1 45	2 00	1/4		Survey
2 00	6 15	4 1/4		Drlg
6 15	6 30	1/4		Dropped Survey
6 30	8 00	1 1/2		Hoist

DRILLER: G. Johnson

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT / DP	I.D.	O.D.	FT.
1	BS	2 7/8	2 7/8	6 3/4	3.96
1	SS	2	2	6 3/4	8.50
1	C/O	2 7/8	2 7/8	6 3/4	2.10
1	C/O	2 1/4	2 1/4	5 3/4	2.20
1	KV	2 7/8	2 7/8	5 3/4	2.14
1	SI	2 7/8	2 7/8	6 3/4	4.50
18	DCs	2 7/8	2 7/8	6 3/4	556.41
30	DP	STANDS			
2	DP	SINGLES			2850.37
	KELLY DOWN				31.00
	TOTAL				3461.20
	WT. OF DC IN AIR				55 m LBS.
	WT. OF STRING				94 m LBS.

BIT RECORD

BIT NO.	4		
SIZE	8 3/4		
MFG.	H.W.		
TYPE	XDV		
JETS 1/32"	10 10 11		
SERIAL NO.	23503		
DEPTH OUT			
DEPTH IN	3358		
TOTAL FTG.	103.		
TOTAL HRS. RUN	4 3/4		
BIT CONDITION 1/8" T/B/GAGE			
REAMER CUTTER NO.			
REAMER TYPE			

MUD RECORD

TIME	12 00	1 30	3 30
WEIGHT	9.2	9.2	9.2
VIS.-SEC	32	40	45
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			9.8
PH	9.0	9.0	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	2400#		
BENEX	10#		
CMC	100#		
CAUSTIC	50#		

DAY TOUR

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
3358	3461	4 3/4	103.			65	40 m	2000		6	120			

DEVIATION RECORD:

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
8 00	8 15	1/4		Rig Ser ✓BOPS.
8 15	8 45	1/2		Run in Dcs.
8 45	9 45	1		Slip & Cut Drlg Line.
9 45	11 00	1 1/4		Run in Drlg Pipe.
11 00	11 15	1/4		Ream 8 Feet To Bottom.
11 15	4 00	4 3/4		Drlg 8 3/4 Hole.

DRILLER: D. Lindall

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT / DP	I.D.	O.D.	FT.
1	BS	2 7/8	2 7/8	6 3/4	3.96
1	SS	2	2	6 3/4	8.50
1	CO	2 7/8	2 7/8	6 3/4	2.10
1	CO	2 1/4	2 1/4	5 3/4	2.20
1	KV	2 7/8	2 7/8	5 3/4	2.14
1	SI	2 7/8	2 7/8	6 3/4	4.50
18	DC	2 7/8	2 7/8	6 3/4	556.41
32	DP	STANDS			2974.39
—	DP	SINGLES			
	KELLY DOWN				32
	TOTAL				3586.20
	WT. OF DC IN AIR				55 m LBS.
	WT. OF STRING				LBS.

BIT RECORD

BIT NO.	4		
SIZE	8 3/4		
MFG.	H.W		
TYPE	XDV		
JETS 1/32"	10 10 11		
SERIAL NO.	23303		
DEPTH OUT			
DEPTH IN	3358		
TOTAL FTG.	228		
TOTAL HRS. RUN	12 1/2		
BIT CONDITION 1/8" T/B/GAGE	1 N		
REAMER CUTTER NO.			
REAMER TYPE			

MUD RECORD

TIME	5:00	8:00	12:00
WEIGHT	9.2	9.1	9.1
VIS.-SEC	46	38	36
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C	8.4	8.4	8.4
PH	9.5	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
CMC	50#		
CAUSTIC	50#		
GEL	1000#		
BEN-EX	4#		

EVENING TOUR

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
3461	3586	7 3/4	125			65	40M	2000		6	120			

DEVIATION RECORD:

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
4.00	4.15	1/4		RIG SER. + CHECK BOPS.
4.15	12.00	7.3/4		DRILLING.

DRILLER: A. Lerosiuk

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: Shell Arctic Red River
LOCATION: O-27
PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited
SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. Brown
CONTRACTOR: Gustavson Drlg
SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Jack M Lindell
RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
2327'	3192'	865'		9	1	3	71

DP./DC. SIZE	WT./FT.	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	14#	E		5 1/2"	FH	1	National	8P80	8 1/2"
6 3/4	101		2 7/8"	6 3/4"	5"H90	2	"	8P80	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
	9 5/8"	36# K55	25		16.25	813'	430	

MORNING TOUR

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	7	5 3/4	5 1/4	18
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS		1 1/2	2 1/2	4
7	RIG SERVICE	1/4	1/4	1/4	3/4
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY	3/4	1/2		1 1/4
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
TOTALS		8	8	8	24
HOURS FOR SHELL ACCOUNT		8	8	8	24
CONTRACTOR EQUIPMENT RENTAL	BOILER #1	8	8	8	24
	Boiler #2	8	8	8	24
	Code		232		

HOLE CONDITION

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

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6 3/4	3.96
1	SS		2"	6 3/4	8.50
1	C/O		2 7/8	6 3/4	2.10
1	C/O		2 7/8	5 3/4	2.20
1	KV		2 7/8	5 3/4	2.14
1	ST		2 7/8	6 3/4	4.50
18	DCs		2 7/8	6 3/4	556.41
22	DP	STANDS			FT
2	DP	SINGLES			2108.64
KELLY DOWN					36.00
TOTAL					3715.55
WT. OF DC IN AIR					55M LBS.
WT. OF STRING					84M LBS

BIT RECORD

BIT NO.	2
SIZE	8 3/4"
MFG.	HW
TYPE	X1G
JETS 1/32"	10 10 11
SERIAL NO.	22747
DEPTH OUT	
DEPTH IN	1919
TOTAL FTG.	796
TOTAL HRS. RUN	13 3/4
BIT CONDITION 1/8" T/B/GAGE	1 N
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12:00	4:00	7:00
WEIGHT	9.1	9.2	9.2
VIS.-SEC.	35	34	37
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH	8.5	9.5	9.
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
BEL	35 00#		
CAUSTIC	100#		
BEN-EX	14#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
2327'	2715'	7	388			80	35M	2,000		6"	120	6"		

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
2420'	2 1/2		2606'	1 1/2				

TIME LOG — DETAILS OF OPERATION IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE	DETAILS
12:00	12:15	1/4		Serv Rig & Swivel. & Checked BOP
12:15	1:30	1 1/4		Drlg
1:30	1:45	1/4		Survey
1:45	5:15	3 1/2		Drlg 35m W.T 120 RPM.
5:15	5:45	1/2		Survey
5:45	8:00	2 1/4		Drlg

DRILLER: E. Johnson

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	C/O		2 7/8	6 3/4	2.10
1	C/O		2 7/8	5 3/4	2.20
1	KV		2 7/8	5 3/4	2.14
1	ST		2 7/8	6 3/4	4.50
18	DCs		2 7/8	6 3/4	556.41
25	DP	STANDS			FT.
2	DP	SINGLES			2388.70
KELLY DOWN					40.80
TOTAL					3009.31
WT. OF DC IN AIR					55M LBS.
WT. OF STRING					86M LBS.

BIT RECORD

BIT NO.	2	3
SIZE	8 3/4	8 3/4
MFG.	H.W	H.W
TYPE	X1G	X1G
JETS 1/32"	10 10 11	10 10 11
SERIAL NO.	22747	22627
DEPTH OUT	3009	
DEPTH IN	1919	3009
TOTAL FTG.	1090	
TOTAL HRS. RUN	19 1/2	
BIT CONDITION 1/8" T/B/GAGE	2 4 0	
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	8:00	12:00	2:00
WEIGHT	9.2	9.2	9.3
VIS.-SEC.	35	36	40
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH	9.0	9.0	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	2400#		
BENEX	10#		
CAUSTIC	100#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
2715	3009	5 3/4	294			100	35	2600		6	120			

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
2922	1 1/4							

TIME LOG — DETAILS OF OPERATION IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE	DETAILS
8:00	8:15	1/4		Rig Serv / BOPs.
8:15	10:00	1 3/4		Drlg 8 3/4 Hole. Tally 3009.31
10:00	10:15	1/4		Survey. Strap 3006.14
10:15	2:15	4		Drlg 8 3/4" Hole 3.17 Diff
2:15	2:30	1/4		Survey.
2:30	4:00	1 1/2		Trip out Bit #2

DRILLER: D. Lindell

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6 3/4	3.96
1	SS		2	6 3/4	8.50
1	C/O		2 7/8	6 3/4	2.10
1	C/O		2 7/8	5 3/4	2.20
1	KV		2 7/8	5 3/4	2.14
1	ST		2 7/8	6 3/4	4.50
18	DC		2 7/8	6 3/4	556.41
27	DP	STANDS			FT.
2	DP	SINGLES			2571.39
KELLY DOWN					40.98
TOTAL					3192.03
WT. OF DC IN AIR					LBS
WT. OF STRING					88M LBS

BIT RECORD

BIT NO.	3
SIZE	8 3/4
MFG.	H.W
TYPE	X1G
JETS 1/32"	10 10 11
SERIAL NO.	22627
DEPTH OUT	~~3192~~
DEPTH IN	3006
TOTAL FTG.	186
TOTAL HRS. RUN	5 1/4
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	7:00	8:00	12:00
WEIGHT	9.3	9.3	9.2
VIS.-SEC.	43	40	45
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH	9.0	9.0	9.0
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1800 lbs		
BEN-EX	7#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
3006	3192	5 1/4	183			90	40M	2000		6"	120	6"		

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
3006	1°							

TIME LOG — DETAILS OF OPERATION IN SEQUENCE AND REMARKS

FROM	TO	ELAPSED TIME	CODE	DETAILS
4:00	4:30	1/2		FINISH ~~TO~~ PULL OUT
4:30	4:45	1/4		RIG SERVICE CHECK BOPS
4:45	6:45	2		RUN BIT NO 3 + BREAK CIRC. 5FT. FILL
6:45	12:00	5 1/4		DRLG 8 3/4 HOLE

DRILLER: A. Lewowski

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER D-27

LOCATION: D-27

PROVINCE: N. W. T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: J. Brown

CONTRACTOR: GUSTAVSON

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
1250	2327	1077	25	7	1	2	71

DP / DC SIZE	WT. / FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD
4"	14	E		5 1/4	4" F.H.
6 3/4					

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	NATIONAL	8P90	8 1/2
2	NATIONAL	8P90	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
	9 5/8	36#	25			813	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	7 1/2	4 1/2	6 3/4	18 3/4
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS		2 3/4	3/4	3 1/2
7	RIG SERVICE		1/4	1/4	1/2
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY	1/2	1/2	1/4	1 1/4
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIPMENT	BOILER #1	8	8	8	24
	Boiler #2	8	8	8	24

Code 232

HOLE CONDITION

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

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	FT.
1	8 5	1D 0D 2 3/8 x 6 3/4	3.96
1	5 5	1D 0D 2 x 6 3/4	8.50
1	C 0	1D 0D 2 7/8 x 6 3/4	2.10
1	C 0	1D 0D 2 7/8 x 5 3/4	2.20
		1D 0D X	
		1D 0D X	
18	C	1D 0D 2 7/8 x 6 3/4	556.41
12	DP	STANDS	
1	DP	SINGLES	1148.14
		KELLY DOWN	10.00
		TOTAL	1731.31
		WT OF DC IN AIR	55m LBS.
		WT. OF STRING	70m LBS.

BIT RECORD

BIT NO.	1	
SIZE	8 3/4	
MFG.	SMITH	
TYPE	DTJ	
JETS 1/32"	10 10 10	
SERIAL NO	AQ063	
DEPTH OUT		
DEPTH IN	813	
TOTAL FTG.	918	
TOTAL HRS. RUN	13 3/4	
BIT CONDITION 1/8" T/B/GAGE	1 N	
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	12.00	5.00	
WEIGHT	8.6	8.6	8.7
VIS.-SEC	30	31	34
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH	8.5	9.	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	2500#		
CAUSTIC	150#		
BENEX	10#		

MORNING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
1250	1731	7 1/2	481			80-120	20-32	2000		6	120	6		

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
1290	1		1535	1				

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
12.00	12.30	1/2		DRILL
12.30	12.45	1/4		SURVEY RIG SER.
12.45	4.30	3 3/4		DRILL
4.30	4.45	1/4		SURVEY
4.45	8.00	3 1/4		DRILL

DRILLER: J. Howard

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	FT.
1	8 5	1D 0D 2 3/8 x 6 3/4	3.96
1	5 5	1D 0D 2 x 6 3/4	8.60
1	C/0	1D 0D 2 7/8 x 6 3/4	2.10
1	C/0	1D 0D 2 7/8 x 5 1/4	2.20
1	K V	1D 0D 2 7/8 x 5 1/4	2.14
1	S Q	1D 0D 2 7/8 x 6 3/4	4.50
18	DC	1D 0D 2 7/8 x 6 3/4	556.41
14	DP	STANDS	1303.02
—	DP	SINGLES	37.00
		KELLY DOWN	19.19.83
		TOTAL	
		WT. OF DC IN AIR	LBS.
		WT. OF STRING	72m LBS.

BIT RECORD

BIT NO.	1	2
SIZE	8 3/4	8 3/4
MFG.	Smith	HW
TYPE	DTJ	XIG
JETS 1/32"	10 10 10	10 10 11
SERIAL NO.	AQ063	22747
DEPTH OUT	1919'	
DEPTH IN	813'	1919'
TOTAL FTG.	1106'	
TOTAL HRS. RUN	18 1/4	
BIT CONDITION 1/8" T/B/GAGE	6 6	
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	8.30	12.00	
WEIGHT	8.8	9.	
VIS.-SEC	31	37	
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH	9.5	9.0	
% SOLIDS			
% SAND			

Stand

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
Gel	1900#		
Benex	3#		

DAY TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 SPM	PUMP NO 2 LINER SIZE	PUMP NO 2 SPM	METHOD PUMPS RUN
1731'	1919'	4 1/2	188'			80	30	2,000		6"	120	6"		

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
1794'	1 3/4	#	1919	1 1/2				

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
8.00	8.15	1/4		Serv Rig & Swivel
8.15	9.30	1 1/4		Drlg
9.30	9.45	1/4		Survey (Stab. @ 60')
9.45	1.00	3 1/4		Drlg
1.00	1.15	1/4		Survey
1.15	3.00	1 3/4		Hoist & Layed Down 21 Singles
3.00	4.00	1		Picked up Stab. & Running in

DRILLER: E. Johnson

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	FT.
1	8 5	1D 0D 2 3/8 x 6 3/4	3.96
1	5 5	1D 0D 2 x 6 3/4	8.50
1	C/0	1D 0D 2 7/8 x 6 3/4	2.10
1	C/0	1D 0D 2 7/8 x 5 1/4	2.20
1	K V	1D 0D 2 7/8 x 5 1/4	2.14
1	S Q	1D 0D 2 7/8 x 6 3/4	4.50
18	DC	1D 0D 2 7/8 x 6 3/4	556.41
18	DP	STANDS	
1	DP	SINGLES	170.68
		KELLY DOWN	40.80
		TOTAL	2327.44
		WT. OF DC IN AIR	55m LBS.
		WT. OF STRING	LBS.

BIT RECORD

BIT NO.	2	
SIZE	8 3/4	
MFG.	H.W.	
TYPE	XIG	
JETS 1/32"	10 10 11	
SERIAL NO.	22747	
DEPTH OUT		
DEPTH IN	1919	
TOTAL FTG.	408	
TOTAL HRS. RUN	6 3/4	
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	6.00	8.00	10.00
WEIGHT	9.1	9.1	9.0
VIS.-SEC	35	40	37
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH	9.0	9.5	9.5
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	2000#		
BENEX	8#		
CAUSTIC	50#		

EVENING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
1919	2327	6 3/4	408			80	40	2000		6	120			

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
2160	1°							

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
4.00	4.15	1/4		Rig Serv & BOPS.
4.15	5.00	3/4		Run in (no fill)
5.00	9.45	4 3/4		Drlg 8 3/4 Hole.
9.45	10.00	1/4		Survey.
10.00	12.00	2		Drlg 8 3/4 Hole

DRILLER: D. Lindall

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: 0-27

PROVINCE: N.W.T

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: D. Brown

CONTRACTOR: GUSTAUSON

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
813	1250	437	6¼	7	1	1	71

DP./DC. SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	14.00	E	3	5¼	FH	1	Nat	8-7-80	
6¾	101		2⅞	6¾	H90	1	Nat	8-7-80	

LAST CASING TUBING OR LINER	SIZE	WT. AND GR.	NO. OF JOINTS	FEET	KB TO CSG. HEAD	SET AT	CEMENT USED (SACKS)	REMARKS
	9⅝	36#	25	813	16.25	812	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL			6¼	6¼
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS (Trips O.D.)	2¼	5¼		7½
7	RIG SERVICE		¼		¼
8	RIG REPAIR	2			2
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY			¼	¼
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.	3½			3½
15	TEST B.O.P.	¼	½		¾
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD		½		½
22	LOST CIRCULATION				
23	Drlg Float & Shoe		1½	1½	3
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT	8	8	8	24
ROTARY ZONE HOURS	BOILER #1	8	8	8	
	Boiler #2	8	8	8	

Code 232 B

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT
1	BS		1.07	6¾	3.96
1	SS		2	6¾	8.50
			I.D.	O.D.	
			X		
			I.D.	O.D.	
			X		
			I.D.	O.D.	
			X		
1	D.C.		I.D.	O.D.	30.79
			I.D.	O.D.	
			X		
		DP	STANDS		FT
		DP	SINGLES		FT
		KELLY DOWN			FT
		TOTAL			FT
		WT. OF DC IN AIR			LBS.
		WT. OF STRING			LBS.

BIT RECORD

BIT NO.	1	
SIZE	8¾	
MFG.	SMITH	
TYPE	DTJ	
JETS 1/32"	10/10/10	
SERIAL NO.	AQ063	
DEPTH OUT		
DEPTH IN	813	
TOTAL FTG.		
TOTAL HRS. RUN		
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME		
WEIGHT		
VIS.-SEC.		
PV/YP	/	/
GELS	/	/
W.L.-C.C.		
PH		
% SOLIDS		
% SAND		

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN

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	3.30			NIPPLE UP B.O.P.S
3.30	5.30			REPAIR MUD LINE (4" UNION + REPLACE 2" VALVE
5.30	5.45			PRESSURE TEST BLIND RAMS TO 2000# P.S.I.
				HELD O.K.
5.45	8.00			CLEAN UP FLOOR BLOW MUD LINE PICK
				UP SHOCK SUB + 8 D.C.S

DRILLER: J. Hornil

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT
1	BS		2⅞	6¾	3.96
1	SS		2"	6¾	8.50
1	C/O		2⅞	6¾	2.10
1	C/O		2⅞	5¼	2.20
1	K.V.		2⅞	5¼	2.14
			I.D.	O.D.	
			X		
18	D.C.		2⅞	6¾	556.41
2		DP	STANDS		185.90
		DP	SINGLES		FT
		KELLY DOWN			27.00
		TOTAL			788.21
		WT. OF DC IN AIR			8 LBS.
		WT. OF STRING			62m LBS.

BIT RECORD

BIT NO.	1	
SIZE	8¾	
MFG.	Smith	
TYPE	DTJ	
JETS 1/32"	10 10 10	
SERIAL NO.	AQ063	
DEPTH OUT		
DEPTH IN	813'	
TOTAL FTG.		
TOTAL HRS. RUN		
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME		
WEIGHT		
VIS.-SEC.	120	
PV/YP	/	/
GELS	/	/
W.L.-C.C.		
PH		
% SOLIDS		
% SAND		

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
813'					Tagged Plug @ 778'									

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	¼		Serv Rig
8.15				Picked up 4 D.C. Broke & serv all D.C. Connection
	1.30	5¼		& Dressed Same Pressured Tested Kelly Cock To 2000 PSI
1.30	2.00	½		Broke Circ & By pass Cement Cut mud
2.00	2.15	¼		Pressured & Tested 4" Pipe Rams To 2000 PSI Held OK
2.15	2.30	¼		Pressured up Hy-drill To 1500 PSI Held OK
2.30	4.00	1½		Drlg out Float & Cement

DRILLER: [signature]

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT
1	BS		2⅞	6¾	3.96
1	SS		2	6¾	8.50
1	C/O		2⅞	6¾	2.10
1	C/O		2⅞	5¼	2.20
1	K.V.		2⅞	5¼	2.14
			I.D.	O.D.	
			X		
18	D.C.		2⅞	6¾	556.41
7		DP	STANDS		651.23
		DP	SINGLES		FT
		KELLY DOWN			2400
		TOTAL			1250.23
		WT. OF DC IN AIR			53m LBS.
		WT. OF STRING			64m LBS.

BIT RECORD

BIT NO.	1 →	
SIZE	8¾	
MFG.	Smith	
TYPE	DTJ	
JETS 1/32"	10 10 10	
SERIAL NO.	AQ063	
DEPTH OUT		
DEPTH "IN"	813	
TOTAL FTG.	437	
TOTAL HRS. RUN	6¼	
BIT CONDITION 1/8" T/B/GAGE	Drlg	
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	8.00	11.00
WEIGHT	8.4	8.0
VIS.-SEC.	30	32
PV/YP	/	/
GELS	/	/
W.L.-C.C.		
PH	9.5	9.5
% SOLIDS		
% SAND		

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
Bicarb	100#		
Gel	4500#		
Benex	18#		

FOOTAGE

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
813	1250	6¼	437		TEMPERATURE - 38	100	20-30	2000		6	120			

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
1051	1°							

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
4.00	5.30	1½		Drlg out Cement & Shoe.
5.30	9.30	4		Drlg 8¾ Hole.
9.30	9.45	¼		Survey @ 1051.
9.45	12.00	2¼		Drlg 8¾ Hole
		8		

DRILLER: D. Lindall

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: D-27

PROVINCE: N. W. T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. Brown

CONTRACTOR: GUSTAUSON

RIG NO.: 11

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
813				5	12	31	70

DP./DC. SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD
4"	14	E	2 7/8	5 1/4	4" F.H.

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	NATIONAL	8P80	8 1/2
2	NATIONAL	8P80	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
	9 5/8	36#	25	813		812	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS				
7	RIG SERVICE				
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	8	8		16
14	NIPPLE UP B.O.P.			8	8
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT				24
CONTRACTOR EQUIPMENT	BOILER #1	8	8	8	24
	Boiler #2	8	8	4	24
	Code	E	232		

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
		BIT			FT.
		X			FT.
		X			FT.
		X

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: D-27

PROVINCE: N. W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: L. Brown

CONTRACTOR: GUSTAVSON

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
805				4	12	30	70

DP./DC. SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	14	E	2 7/8	5 1/4	4" F.H	1	NATIONAL	8P80	8 1/2
6 3/4	101		2 7/8	6 3/4	5-A90	2	NATIONAL	8P80	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
	9 5/8	36	25	813	16.25	812	430	

TIME DISTRIBUTION — HOURS

CODE NO.	OPERATION	MORN.	DAY	EVE	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING	1/2			1/2
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING	2 1/4			2 1/4
6	TRIPS	2		1	3
7	RIG SERVICE				
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY				
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT	3 1/4		9 3/4	9 3/4
13	WAIT ON CEMENT			6 1/2	6 1/2
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD	2			2
22	LOST CIRCULATION				
23					
24					
COMPLETION	40 PERFORATE				
	41 TUBING TRIPS				
	42 TREATING				
	43 SWABBING				
	44 TESTING				
	45				
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
HOURS FOR SHELL ACCOUNT					
20-70A-120C 1-A-Zema 3-CDM	BOILER #1	8	8	8	
	Boiler #2	8	8	8	
	CODE		232		

HOLE CONDITION

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

DRILLING ASSEMBLY — AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	H	O	3	7 3/4	2.58
1	B	S	3	9 7/16	3.99
1	C	1/0	2 7/8	9	2.52
1	C	1/0	2 7/8	6 3/4	2.10
1	C	1/0	2 1/4	5 3/4	2.20
			I.D. X	O.D.	FT.
13	D.C.		2 7/8	6 3/4	402.93
4	DP	STANDS			372.78
	DP	SINGLES			
	KELLY DOWN				34
	TOTAL				813.05
	WT. OF DC IN AIR				170 M LBS.
	WT. OF STRING				52 M LBS.

BIT RECORD

BIT NO.	HOLE OPENER
SIZE	13 3/4
MFG.	SMITH
TYPE	HOLE OPENER
JETS 1/32"	11 11 11
SERIAL NO.	9923
DEPTH OUT	813
DEPTH IN	643
TOTAL FTG.	170
TOTAL HRS. RUN	13
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	J. Hamil A. Cummins B. Sperro
REAMER TYPE	Homebilla J. Magnuson

MUD RECORD

TIME	12.00	4.00
WEIGHT	10.2	
VIS.-SEC	102	195
PV/YP	/	/
GELS	/	/
W.L.-C.C		
PH	9.5	9.5
% SOLIDS		
% SAND		

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1600#		

OVERTIME 4 HRS

MORNING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
805	813	1/2	8			120	15	500		6		6	160	

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	12.30	1/2		REAM 8 3/4 TO 13 3/4
12.30	1.30	1		CIR. MIX MUD WORK PIPE
1.30	2.45	1 1/4		DUMMY TRIP
2.45	4.00	1 1/4		CIR. MIX MUD
4.00	4.45	3/4		PULL OUT
4.45	8.00	3 1/4		RIG TO RUN CSG + RUN CSG.

DRILLER: J. Hamil

DAY TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
					TEMPERATURE -28									

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	12.45	4 3/4		Run 9 5/8" Surface pipe
12.45	4.00	3 1/4		Circ & work Casing Bring Vis Down From 200 To 52
				4 HRS overtime E. Johnson A. Lundle A. Skjonsberg C. Carroll H. Haydon
				Ran 25 JTS 36# K55 - STC CASING
				SET AT 812'

DRILLER: E. Johnson

EVENING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
813														

Pumped 20 BBLS WATER AHEAD
Mixed CEMENTED 50 SAXS PERMAFROST CEMENT
Followed by 280 SAXS INLAND COMMON CEMENT
Displaced Drill Pipe w/ 80.5 BBLS WATER
Good CEMENT RETURNS TO SURFACE
Plug IN PLACE 5:00 PM 12-30-70

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	4.30	1/2		Pick up Drlg Pipe, Run in w/ Tag in Float
4.30	5.00	1/2		Rig up & Cement Csg. w/ 150 Prefrost
5.00	5.30	1/2		Pull out Tag in float. 280 Inland Cement
5.30	12.00	6 1/2		W.O.C.
		8		D. Lindell, Burwood, Lachenier, K. Bender, Dickey
				4 hours overtime Running Csg.

DRILLER: D. Lindell

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: D-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: J. Brown

CONTRACTOR: GUSTAVSON

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [illegible]

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
612				3	12	29	70

DP./DC. SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD
4	14	E		5 1/4	4 F.H.
6 3/4	101		2 7/8		5H90

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	NATIONAL	8P80	8 1/2
2	NATIONAL	8P80	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

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING	2 1/4	7	5 1/2	14 3/4
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING	2	3/4		2 3/4
6	TRIPS	2		2 1/4	4 1/4
7	RIG SERVICE	1/4	1/4	1/4	3/4
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.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS	1 1/2			1 1/2
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	24
	HOURS FOR SHELL ACCOUNT				
CONTRACTOR EQUIPMENT	BOILER #1	8	8		
	Boiler #	8	8		
	CODE	232			

HOLE CONDITION

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

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	R	BIT			
1	BS		3	7 3/4	2.50
1	BS		3	9 7/16	3.99
1	C/O	DC	2 7/8	9	2.52
1	C/O	DC	2 7/8	6 3/4	2.10
1	C/O	DC	2 7/8	5 3/4	2.20
		X			
13	DC		2 7/8	6 3/4	402.93
3	DP	STANDS			279.92
	DP	SINGLES			
		KELLY DOWN			22.00
		TOTAL			720.30
		WT. OF DC IN AIR			38m LBS.
		WT. OF STRING			50m LBS.

BIT RECORD

BIT NO.	2B	3B
SIZE	13 3/4	13 3/4
MFG.	SMITH	SMITH
TYPE	HOLE OPENER	HOLE OPENER
JETS 1/32"	11 11 11 11 11	
SERIAL NO.	9888	8923
DEPTH OUT	647	
DEPTH IN	369	647
TOTAL FTG.	278	
TOTAL HRS. RUN	13 1/4	
BIT CONDITION 1/8" T/B/GAGE	LOCK	
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	12.10		
WEIGHT	9.5		
VIS.-SEC.	72		
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH	9.5		
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

MORNING TOUR

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
612	649	2 1/2	35			180	15	400		6	160	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
12.00	12.15			SER. RIG.
12.15	2.30			REAM 8 3/4 TO 13 3/4
2.30	3.30			PULL OUT
3.30	5.00			CHANGE REAMERS + BIT. CUT + WELD BIT.
5.00	6.00			RUN IN TO 290'
6.00	8.00			REAM 290'-360 430'-570

DRILLER: J. Hamil

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	H.O.	BIT	3	7 3/4	2.50
1	B.S.		3	9 7/16	3.99
1	C/O	DC	2 7/8	9	2.52
1	C/O	DC	2 7/8	6 3/4	2.10
1	C/O	DC	2 7/8	5 3/4	2.20
		X			
13	DC		2 7/8	6 3/4	402.93
3	DP	STANDS			279.92
	DP	SINGLES			
		KELLY DOWN			22.00
		TOTAL			720.30
		WT. OF DC IN AIR			38m LBS.
		WT. OF STRING			50m LBS.

BIT RECORD

BIT NO.	3AHH		
SIZE	13 3/4		
MFG.	Smith		
TYPE	Hole Opener		
JETS 1/32"	11 11 11		
SERIAL NO.	8923		
DEPTH OUT			
DEPTH IN	647		
TOTAL FTG.	73		
TOTAL HRS. RUN	7		
BIT CONDITION 1/8" T/B/GAGE	IN		
REAMER CUTTER NO.			
REAMER TYPE	3PT.		

MUD RECORD

TIME	8.00	12.00	3.00
WEIGHT	10.3	10.4	10.1
VIS.-SEC.	83	76	56
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH	9.5	9.5	9.6
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	1400#		

DAY TOUR

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
647'	720	7	73			180	10-18	450		6"		6"	160	

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	8.45	3/4		Ream From 570' To 647'
8.45	9.00	1/4		Rig Serv. & checked survey.
9.00	4.00	7		Ream Rat Hole to 13 3/4"

DRILLER: G. Johnson

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1	H.O.	BIT	3"	7 3/4	2.50
1	B.S.		3"	9 7/16	3.99
1	C/O	DC	2 7/8	9	2.52
1	C/O	DC	2 7/8	6 3/4	2.10
1	C/O	DC	2 7/8	5 3/4	2.20
		X			
13	DC		2 7/8	6 3/4	402.93
4	DP	STANDS			372.78
	DP	SINGLES			
		KELLY DOWN			14.00
		TOTAL			805.16
		WT. OF DC IN AIR			38m LBS.
		WT. OF STRING			50m LBS.

BIT RECORD

BIT NO.	3BRR		
SIZE	13 3/4"		
MFG.	Smith		
TYPE	Hole Opener		
JETS 1/32"	11 11 11		
SERIAL NO.	8923		
DEPTH OUT			
DEPTH IN	647		
TOTAL FTG.			
TOTAL HRS. RUN			
BIT CONDITION 1/8" T/B/GAGE			
REAMER CUTTER NO.			
REAMER TYPE			

MUD RECORD

TIME	4.00	8.00	11.00
WEIGHT	10.2	10.2	10.3
VIS.-SEC.	55	190	215
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	2400#		
BENEX	10#		
CAUSTIC	50#		

EVENING TOUR

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
720'	805	5 1/2	85			180	10-18	450		6"	160			

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 Serv
4.15	7.45	3 1/2		Ream
7.45	10.00	2 1/4		Pull out of Hole & Run in.
10.00	12.00	2		Ream 786 to 805

DRILLER: D. Zendall

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: D-27

PROVINCE: N. W. T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Ben Toupy[illegible]

CONTRACTOR: GUSTAUSON

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Jack M Gus[illegible]

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
227	612			2	12	28	70

DP./DC. SIZE	WT./FT.	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD
4"	14.	E	2	5¼	4 F.H.
6 3/4"					

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	NATIONAL	8P80	8½
	NATIONAL	8P80	8½

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

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING	5¼	3¼	7¾	
4	CORING				
5	CLEAN TO BOTTOM AND ~~REAMING~~ Under Gage		3¾		
6	TRIPS	1			
7	RIG SERVICE	¼		¼	
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.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING	1½			
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23	Welding on Hole Opener		1		
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	
	HOURS FOR SHELL ACCOUNT	8	8	8	24
CONTRACTOR EQUIPMENT	BOILER #1	1	8	8	8
	Pump #2	8	8	8	
	Code 232				

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	H O	3"	7¾	2.50	
1	B S	3	9	3.99	
1	C/O	2⅞	9	2.52	
1	C/O	2⅞	6¾	2.10	
1	C/O	2 1/16	5¼	2.20	
10	D.C.	2⅞	6¾	310.27	
	DP	STANDS			FT.
1	DP	SINGLES		30.48	
	KELLY DOWN			13.00	
	TOTAL			369.30	
	WT. OF DC IN AIR			32M	LBS.
	WT. OF STRING			40M	LBS.

BIT RECORD

BIT NO.	REAMER
SIZE	13¾
MFG.	SMITH
TYPE	HOLE OPENER
JETS 1/32"	11 11 11
SERIAL NO.	8923
DEPTH OUT	369
DEPTH IN	0
TOTAL FTG.	369
TOTAL HRS. RUN	14
BIT CONDITION 1/8" T/B/GAGE	LOCKED
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12.00	4.30
WEIGHT	9.6	9.6
VIS.-SEC.	51	82
PV/YP	/	/
GELS	/	/
W.L.-C.C.		
PH	8.5	10.
% SOLIDS		
% SAND		

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	600#		
CAUSTIC	50#		

FOOTAGE

FROM	TO	ROT. HOURS	DR-D RM-R CORE-C	CORE NO.
227	369	5¼	142	

FORMATION (SHOW CORE RECOVERY)

ROTARY R.P.M.	WT. ON BIT (1000#)	PUMP (AIR) PRESS.	AIR VOL. (CFM)	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
180	10-18	200		6	160	6		

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION

DETAILS OF OPERATION IN SEQUENCE AND REMARKS

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS
12.00	12.15	¼		~~DRILL~~ REAM 8¾ TO 13¾
12.15	12.30	¼		RIG SER.
12.30	5.30	5		REAM
5.30	7.00	1½		BACKED OFF C/O SUB. AT - 43' ~~ABOVE COLLARS~~ (2⅞ Reg Thread)
				PULLED OUT RAN IN W/ ~~FLAT~~ Heavy Wight PIPE ~~SCREWED 3063'~~
				~~INTO SUB~~ Change Over Sub 2.19' on Kelly Screwed in Pipe
7.00	8.00	1		PULLED OUT.

DRILLER: J. Howick

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	H O	3"	7¾	2.50	
1	B S	3"	9"	3.99	
1	C/O	2⅞	9"	2.52	
1	C/O	2⅞	6¾	2.10	
1	C/O	2 1/16	5¼	2.20	
1	H.V.	2 1/16	5¼	2.14	
10	D.C.	2⅞	6¾	310.27	
	DP	STANDS			FT.
1	DP	SINGLES		30.48	
	KELLY DOWN			40.83	
	TOTAL			397.03	
	WT. OF DC IN AIR			32M	LBS.
	WT. OF STRING			40M	LBS.

BIT RECORD

BIT NO.	2B
SIZE	Hole Opener 13¾"
MFG.	Smith
TYPE	3 P.T.
JETS 1/32"	11 11 11
SERIAL NO.	9888
DEPTH OUT	
DEPTH IN	369'
TOTAL FTG.	28'
TOTAL HRS. RUN	3¼
BIT CONDITION 1/8" T/B/GAGE	IN
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12.00	2.30
WEIGHT	10.1	10.2
VIS.-SEC.	47	90.
PV/YP	/	/
GELS	/	/
W.L.-C.C.		
PH	10.	10.
% SOLIDS		
% SAND		

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
Gel.	900#		

FOOTAGE

FROM	TO	ROT. HOURS	DR-D RM-R CORE-C	CORE NO.
369'	397	3¼	28'	

FORMATION (SHOW CORE RECOVERY)

ROTARY R.P.M.	WT. ON BIT (1000#)	PUMP (AIR) PRESS.	AIR VOL. (CFM)	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
180	5-15	300		6"		6"	160	

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION

DETAILS OF OPERATION IN SEQUENCE AND REMARKS

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS
8.00	9.00	1		Broke & Layed Down Hole opener & welded on 8¾" Bit
9.00				Run in & Ream Tight Spots From 126' To 245'
	12.45	3¾		Ream under gage Hole From 316' To 369' - 53' (19')
12.45	4.00	3¼		Ream Rat Hole To 13¾"
				A. Shjonsberg - Pick Up Cat Operator 4 hrs.

DRILLER: B. Johnson

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	H O	3"	7¾	2.50	
1	B S	3	9	3.99	
1	C/O	2⅞	9	2.52	
1	C/O	2⅞	6¾	2.10	
1	C/O	2 1/16	5¼	2.20	
1	H.V.	2 1/16	5¼	2.14	
13	D.C.	2⅞	6¾	402.93	
1	DP	STANDS		92.14	FT.
2	DP	SINGLES		62.37	
	KELLY DOWN			39.00	
	TOTAL			613.72	
	WT. OF DC IN AIR				LBS.
	WT. OF STRING			48,000	LBS.

BIT RECORD

BIT NO.	2 B Hole Opener
SIZE	13¾
MFG.	Smith
TYPE	
JETS 1/32"	11 11 11
SERIAL NO.	9888
DEPTH OUT	
DEPTH IN	369
TOTAL FTG.	243
TOTAL HRS. RUN	11
BIT CONDITION 1/8" T/B/GAGE	
REAMER CUTTER NO.	
REAMER TYPE	Hole Opener

MUD RECORD

TIME	4.00	8.00	11.00
WEIGHT	10.3	10.4	10.4
VIS.-SEC.	44	68	73
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	500#		

FOOTAGE

FROM	TO	ROT. HOURS	DR-D RM-R CORE-C	CORE NO.
397	612	7¾	215	

FORMATION (SHOW CORE RECOVERY)

ROTARY R.P.M.	WT. ON BIT (1000#)	PUMP (AIR) PRESS.	AIR VOL. (CFM)	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
180	10-20	450		6	~~160~~	6	160	

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION

DETAILS OF OPERATION IN SEQUENCE AND REMARKS

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS
4.00	4.15	¼		R.G. SERV.
4.15	12.00	7¾		REAM RAT HOLE 8¾ TO 13¾"
				C. Lewis - Take Cat Operator To Cat 4 hrs.

DRILLER: C. Shudlo

CP-33 (10/69)

DAILY DRILLING REPORT

WELL NAME: ARCTIC RED. RIVER

LOCATION: 0-27

PROVINCE: N. W. T

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

CONTRACTOR: GUSTAVSON

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
725				1	12	27	70

DP./DC. SIZE	WT./FT	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD	PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
4"	14	E.		5 1/4	4F.H.	1	NATIONAL	8P80	
6 3/4	101		2 7/8	6 3/4	5 H90	2	NATIONAL	8P80	

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

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	2 1/4			
3	REAMING		1	8	
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING	1/4			
6	TRIPS	1 1/4			
7	RIG SERVICE		1/4		
8	RIG REPAIR				
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY	1/2			
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.	3 3/4	6 3/4		
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OP. FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS	8	8	8	
	HOURS FOR SHELL ACCOUNT				24
	BOILER #1	8	8	8	
	Boiler #2	8	8	8	
	CODE	2	3	2	B

HOLE CONDITION

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

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	BS		2 7/8	6 3/4	3.95
1	S		2 7/8	6 3/4	4.49
1	S/O		2 7/8	5 3/4	2.20
1	S/O		2 7/8	6 3/4	2.10
			X		
			X		
12	DC		2 7/8	6 3/4	371.77
4	DP	STANDS			
1	DP	SINGLES			403.95
KELLY DOWN					28.00
TOTAL					816.47
WT. OF DC IN AIR					35M LBS.
WT. OF STRING					55M LBS.

BIT RECORD

BIT NO.	2A
SIZE	8 3/4
MFG.	SMITH
TYPE	DTJ
JETS 1/32"	14 14 14
SERIAL NO.	DK428
DEPTH OUT	816
DEPTH IN	678
TOTAL FTG.	138
TOTAL HRS. RUN	3 1/4
BIT CONDITION 1/8" T/B/GAGE	2 2 I
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	12.30
WEIGHT	9.6
VIS.-SEC.	58
PV/YP	/ / /
GELS	/ / /
W.L.-C.C.	
PH	9.
% SOLIDS	
% SAND	

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

MORNING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
725	816	2 1/4	91			200	8-12	900		6	140	6		

DEVIATION RECORD	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
	755	1 1/4		810	1 1/8				

TIME LOG FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
12.00	1245	3/4		DRILL — STRAP 816.75
12.45	1.00	1/4		SURVEY — TALLY 816.47
1.00	2.30	1 1/2		DRILL — DIFF .28
2.30	2.45	1/4		CIR. WORK PIPE
2.45	3.00	1/4		DROP SURVEY
3.00	4.15	1 1/4		MEASURE OUT CON BBL.
4.15	8.00	3 3/4		LAY DOWN HYDRIL CUT OFF

DRILLER: J. Homiak

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE	BIT	I.D.	O.D.	FT.
1	H.O		3"	7 3/4	2.50
1	BS		3"	9"	3.99
1	S/O		2 7/8	9"	2.52
2	S/O		2 7/8		4.30
1	K.V		2 7/8	5 3/4	2.14
			X		
1	R.C		2 7/8	6 3/4	31.16
	DP	STANDS			
	DP	SINGLES			
KELLY DOWN					39.00
TOTAL					85.61
WT. OF DC IN AIR					LBS.
WT. OF STRING					LBS

BIT RECORD

BIT NO.	1B RR.
SIZE	13 3/4
MFG.	Smith
TYPE	Hole Opener
JETS 1/32"	# # #
SERIAL NO.	8923
DEPTH OUT	
DEPTH IN	0
TOTAL FTG.	85
TOTAL HRS. RUN	1
BIT CONDITION 1/8" T/B/GAGE	IN
REAMER CUTTER NO.	
REAMER TYPE	

MUD RECORD

TIME	
WEIGHT	
VIS.-SEC.	
PV/YP	/ / /
GELS	/ / /
W.L.-C.C.	
PH	
% SOLIDS	
% SAND	

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

DAY TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
0	85	1	Ream		1 BBL of Vitrea #41	120	2-4M	200		6"	150	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
8.15				Weld on Conductor BBl Cut & line up & Reweld
				Conductor Pipe. Install Flowline.
	3.00	6 3/4	NO. 6 HOSE TIME LOSS	Changed 8 3/4" Bits on Hole opener & weld Same
3.00	4.00	1		Ream Rat Hole

DRILLER: G. Johnson

EVENING TOUR

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
85	227	8	142			120-200	2-12	200		6	160			

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	12.00	8		REAM RAT HOLE 8 3/4 TO 13 3/4
				KCC 8 Hrs B. WOOD TAKING CAT OPERATOR TO CAMP
				KCC 8 Hrs A. SIGTONSBERG TAKING CAT OPERATOR TO WORK
				KCC 8 HRS. TAKING OPERATOR TO CAT. W. SHUDRA

DRILLER: W. Shudra KCC

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: O-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Ken L Crawford

CONTRACTOR: GUSTADSON DRILLING

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Glen Rose

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
0					12	26	70

DP/DC SIZE	WT./FT.	GRADE	MIN. I.D.	TOOL JT O.D.	TYPE THREAD
DC 6 3/4	101		2 13/16	6 3/4	5" H90

PUMP NO.	PUMP MANUFACTURER	TYPE	STROKE LENGTH
1	NATIONAL	8P80	8 1/2"
2	NATIONAL	8P80	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

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL	7 1/4	3 3/4		
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING		2	1/2	
6	TRIPS			1/4	
7	RIG SERVICE			1/4	
8	RIG REPAIR		1/4		
9	CUT AND/OR SLIP LINE				
10	DEVIATION SURVEY	3/4	3/4	1/4	
11	WIRE LINE LOG				
12	RUN CASING AND CEMENT				
13	WAIT ON CEMENT				
14	NIPPLE UP B.O.P.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING		1/4		
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
TOTALS		8	8	8	
HOURS FOR SHELL ACCOUNT					24
CONTRACTOR EQUIPMENT RENTAL	BOILER #1	8	8	8	
	BOILER #2	8	8	8	
	Code	232	B		

HOLE CONDITION

1	HOLE DRAG (1000#)	
2	TORQUE ON BOTTOM (DP TURNS)	
3	FILL ON BOTTOM (FEET)	18

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
1		BIT			FT.
1	BS		2 1/8	6 3/4	3.96 FT.
1	C/O		2 1/16	5 3/4	2.20 FT.
1	C/O		2 1/8	6 3/4	2.10 FT.
1	S/I		2 1/8	6 3/4	4.49 FT.
			I.D. X	O.D.	FT.
			I.D. X	O.D.	FT.
			I.D.	O.D.	FT.
12	DC		2 7/8	6 3/4	371.77 FT.
	DP	STANDS			FT.
	DP	SINGLES			FT.
KELLY DOWN					30.00 FT.
TOTAL					406. FT.
WT. OF DC IN AIR					LBS.
WT. OF STRING					LBS.

BIT RECORD

BIT NO.	1A	
SIZE	8 3/4	
MFG.	Smith	
TYPE	DTJ	
JETS 1/32"	14 14 14	
SERIAL NO.	DK019	
DEPTH OUT		
DEPTH IN	0	
TOTAL FTG.	406	
TOTAL HRS. RUN	7 1/4	
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	11:00	4:00	7:00
WEIGHT			
VIS.-SEC.	52	48	48
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
0	406	7 1/4	406			120	10-20	1000		6	140			

DEVIATION RECORD	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
	100	1/4		224	1/4		317	1/2	

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
1200	100	1		SPUD IN DRILL 8 3/4" HOLE SPUDDED @ 1201 AM 12-26-70 RCC
100	115	1/4		SURVEY
115	345	2 1/3		DRILL 8 3/4" HOLE
345	400	1/4		SURVEY @ 224 1/4°
400	530	1 1/2		DRILL 8 3/4" HOLE
530	545	1/4		SURVEY @ 317 1/2°
545	800	2 1/4		DRILL 8 3/4" HOLE

DRILLER: [illegible]

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
		BIT			FT.
1	BS		2 1/8	6 3/4	3.96 FT.
1	C/O		2 1/16	5 3/4	2.20 FT.
1	C/O		2 1/8	6 3/4	2.10 FT.
1	S/I		2 1/8	6 3/4	4.49 FT.
			I.D. X	O.D.	FT.
			I.D. X	O.D.	FT.
12	DC		2 7/8	6 3/4	371.77 FT.
2	DP	STANDS			186.36 FT.
	DP	SINGLES			FT.
KELLY DOWN					35 FT.
TOTAL					605 FT.
WT. OF DC IN AIR					LBS.
WT. OF STRING					48m LBS.

BIT RECORD

BIT NO.	1A	
SIZE	8 3/4	
MFG.	SMITH	
TYPE	DTJ	
JETS 1/32"	14 14 14	
SERIAL NO.	DK019	
DEPTH OUT		
DEPTH IN	0	
TOTAL FTG.	605	
TOTAL HRS. RUN	11	
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	8:00	12:30	
WEIGHT	9.7	9.2	
VIS.-SEC.	70	90	
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH		10	
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	800#		
CAUSTIC	50#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
406	605	3 3/4	199			140	15-20	900		6	140	6		

DEVIATION RECORD	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
	415	1/2		480	3/4		570	1 1/4	

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
800	8.15	1/4		DRILL 2.45-3.00 CIR. REPLACE SINKER BAR
8.15	8.30	1/4		SURVEY 3.00-3.15 SURVEY
8.30	9.30	1		DRILL 3.15-4.00 DRILL w/ 6000 WT.
9.30	9.45	1/4		SURVEY
9.45	11.00	1 1/4		WORK STUCK PIPE PULL 4 SINGLES
11.00	1.00	2		REGAIN CIR. CLEAN TO BTM. MIX MUD
1.00	2.45	1 3/4		DRILL

DRILLER: J. Howard

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE		I.D.	O.D.	FT.
		BIT			FT.
1	BS		2 1/8	6 3/4	3.96 FT.
1	C/O		2 1/16	5 3/4	2.20 FT.
1	C/O		2 1/8	6 3/4	2.10 FT.
1	S/I		2 1/8	6 3/4	4.49 FT.
			I.D. X	O.D.	FT.
			I.D. X	O.D.	FT.
12	DC		2 7/8	6 3/4	371.77 FT.
3	DP	STANDS			FT.
1	DP	SINGLES			311.10 FT.
KELLY DOWN					30.00 FT.
TOTAL					726.69 FT.
WT. OF DC IN AIR					LBS.
WT. OF STRING					49m LBS.

BIT RECORD

BIT NO.	1A	2A
SIZE	8 3/4	8 3/4
MFG.	Smith	Smith
TYPE	DTJ	DTJ
JETS 1/32"	14 14 14	14 14 14
SERIAL NO.	DK019	DK428
DEPTH OUT	678	
DEPTH IN	0	678
TOTAL FTG.	678	47'
TOTAL HRS. RUN	15 3/4	1
BIT CONDITION 1/8" T/B/GAGE	0 5 6	IN
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME	4:00	10:00	
WEIGHT	9.5	9.5	
VIS.-SEC.	45	56	
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH	9.5	9.5	
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT
GEL	480#		
BENEX	8#		

FOOTAGE

FROM	TO	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 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
605'	725	5 3/4	120'			140	6-10	900		6"	140	6"		

DEVIATION RECORD	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION
	678	1 3/4°							

TIME LOG

FROM	TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
400	415	1/4		Serv Rig & Swivel.
415	830	4 1/4		Drlg 8 3/4" Hole 6m WT & 140 RPM.
830	845	1/4		Survey @ 670'
845	915	1/2		Drlg
915	1030	1 1/4		Trip
1030	1100	1/2		Cleaned to Bottom 18' Fill
1100	1200	1		Drlg 10m WT 140 RPM.

DRILLER: E. Johnson

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: O-27

PROVINCE: N.W.T.

Merry Christmas

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

CONTRACTOR: GUSTADSON DRILLING.

SIGNATURE OF CONTRACTOR'S TOOL PUSHER:

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
					12	25	70

DP./DC. SIZE	WT./FT.	GRADE	MIN. I.D.	TOOL J 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

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS				
7	RIG SERVICE				
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.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS				
	HOURS FOR SHELL ACCOUNT				24

ENGINEERING				
BOILER	1	8	8	8
Boiler #	2	8	8	8

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO	CODE		I.D.	O.D.	FT.
		BIT			FT.
		X			FT.
		X			FT.
		X

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER

LOCATION: D-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [illegible]

CONTRACTOR: GUSTAVSON DRILLING

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Hans Klem

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
					12	24	70

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

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS				
7	RIG SERVICE				
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.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS				
	HOURS FOR SHELL ACCOUNT				24

CONTRACTOR EQUIP. RENTAL: BOILER — Code 230; CT 208

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE			
BIT				FT
		ID	OD	FT.
		ID	OD	FT.
		ID	OD	FT.

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER.

LOCATION: D-27.

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

CONTRACTOR: GUSTAVSON DRILLING.

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: [signature]

RIG NO.: 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DATE DAY	DATE YEAR
					12	25	70

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

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS				
7	RIG SERVICE				
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.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS				
	HOURS FOR SHELL ACCOUNT				24

CONTRACTOR EQUIPMENT: BOILER Code 230 OT 70 8.00

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE			
		BIT		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
	DP	STANDS		FT.
	DP	SINGLES		FT.
		KELLY DOWN		FT.
		TOTAL		FT.
		WT. OF DC IN AIR		LBS.
		WT. OF STRING		LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SERIAL NO			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
BIT CONDITION 1/8" T/B/GAGE			
REAMER CUTTER NO.			
REAMER TYPE			

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
12:00	12:00			PUT UP PREFABS. INSULATE. BUILDING.
				RIG. UP.
		4 HRS	OVER TIME	W. SHUDRA J. SCOTT R. BERG.
				R. LANGLOIS L. BRAZEL.

DRILLER: W. Shudra

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE			
		BIT		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
	DP	STANDS		FT.
	DP	SINGLES		FT.
		KELLY DOWN		FT.
		TOTAL		FT.
		WT. OF DC IN AIR		LBS.
		WT. OF STRING		LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SERIAL NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
BIT CONDITION 1/8" T/B/GAGE			
REAMER CUTTER NO.			
REAMER TYPE			

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
8.00				RIG UP
				W/O PREFABS
	8.00			PUT COLLARS + CSG ON RACKS
	OVERTIME 4 HRS.			J. Hurst A. Lunnit R. Spears
				E. Hemsbillie J. Magnuson.

DRILLER: J. Hurst

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE			
		BIT		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
	DP	STANDS		FT.
	DP	SINGLES		FT.
		KELLY DOWN		FT.
		TOTAL		FT.
		WT. OF DC IN AIR		LBS.
		WT. OF STRING		LBS.

BIT RECORD

BIT NO.			
SIZE			
MFG.			
TYPE			
JETS 1/32"			
SERIAL NO.			
DEPTH OUT			
DEPTH IN			
TOTAL FTG.			
TOTAL HRS. RUN			
BIT CONDITION 1/8" T/B/GAGE			
REAMER CUTTER NO.			
REAMER TYPE			

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD

DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION	DEPTH	DEVIATION°	DIRECTION

TIME LOG FROM	TIME LOG TO	ELAPSED TIME	CODE	DETAILS OF OPERATION IN SEQUENCE AND REMARKS
12:00				line up pumps. Hook up mud lines & Suctions
	12:00	12		Fire up #2 Boiler Put Cap on Building &
				Plug all Holes w/ Insulating
4 HRS overtime				E. Johnson A. Lundle A. Skjonsberg
				C. Greff H. Haydon

DRILLER: E. Johnson

CP-38 (10/69)

DAILY DRILLING REPORT

WELL NAME: SHELL ARCTIC RED RIVER.

LOCATION: D-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: Len Gaugan

CONTRACTOR: GUSTAVSON DRILLING.

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Floyd Gray

RIG NO. 11

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
					12	22	70

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

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS				
7	RIG SERVICE				
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.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
41	TUBING TRIPS				
42	TREATING				
43	SWABBING				
44	TESTING				
45					
60	ABANDON				
70	STANDBY				
	TOTALS				
	HOURS FOR SHELL ACCOUNT				24

EQUIPMENT CONTRACTOR

BOILER	C.O.E. 230
O.T.	2 hr

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO	CODE			
		BIT		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
	DP	STANDS		FT.
	DP	SINGLES		FT.
KELLY DOWN				FT.
TOTAL				FT.
WT. OF DC IN AIR				LBS.
WT. OF STRING				LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
JETS 1/32"		
SERIAL NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HRS. RUN		
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
					1 BBLS. VITREA #41									

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
12⁰⁰	12⁰⁰	12		PUT UP PREFABS.
				HOOK UP CHAINS ON COMPOUNDS.
				RIG UP STEAM LINES.
				FIRE BOILER.
		4HRS OVER		TIME W. SHUDRA L. SCOTT R. BERG.
				R. LANGLOIS L. BRAZEL.

DRILLER: W. Shudra

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO	CODE			
		BIT		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
	DP	STANDS		FT.
	DP	SINGLES		FT.
KELLY DOWN				FT.
TOTAL				FT.
WT. OF DC IN AIR				LBS.
WT. OF STRING				LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
JETS 1/32"		
SERIAL NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HRS. RUN		
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN

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
9.00	8.00			BOLT COMPOUNDS + DRAWWORKS
				RIG UP DERRICK + RAISE DERRICK
				W/O WATER + STEAM LINES
				W/O PRE FABS.
		OVERTIME 4 HRS.		J. Hanish A. Kwiatek B. Spears E. Hamsbiller
				J. Magnuson

DRILLER: J. Hanish

EVENING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO	CODE			
		BIT		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
		I.D. X O.D.		FT.
	DP	STANDS		FT.
	DP	SINGLES		FT.
KELLY DOWN				FT.
TOTAL				FT.
WT. OF DC IN AIR				LBS.
WT. OF STRING				LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
JETS 1/32"		
SERIAL NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HRS. RUN		
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC.			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C.			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN

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
12⁰⁰				Raise Derrick. Put up Floor PreFab's
	12⁰⁰	12		& PreFab's around Sub.
	4 Hrs	overtime		E. Johnson A. Lundle A. Skjonsberg
				C. Greff H. Hayden.

DRILLER: E. Johnson

DAILY DRILLING REPORT

(10/69)

WELL NAME: SHELL ARCTIC. RED RIVER. O-27

LOCATION: O-27

PROVINCE: N.W.T.

OPERATOR: Shell Canada Limited

SIGNATURE OF OPERATOR'S REPRESENTATIVE: [signature]

CONTRACTOR: GUSTAVSON DRILLING

RIG NO.: 11

SIGNATURE OF CONTRACTOR'S TOOL PUSHER: Norm Tibbo

DEPTH AT START OF MORNING TOUR	DEPTH AT END OF EVENING TOUR	DAILY PROGRESS	CUMULATIVE ROTATING HOURS	DAYS FROM SPUD	DATE MONTH	DAY	YEAR
				-	12	21	70

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

CODE NO.	OPERATION	MORN.	DAY	EVE.	TOTAL
1	RIG UP TEAR DOWN				
2	DRILLING ACTUAL				
3	REAMING				
4	CORING				
5	CLEAN TO BOTTOM AND CIRCULATING				
6	TRIPS				
7	RIG SERVICE				
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.				
15	TEST B.O.P.				
16	DRILL STEM TEST				
17	PLUG BACK				
18	SQUEEZE CEMENT				
19	STUCK OR FISHING				
20	HANDLE TOOLS				
21	CONDITION MUD				
22	LOST CIRCULATION				
23					
24					
COMPLETION 40	PERFORATE				
COMPLETION 41	TUBING TRIPS				
COMPLETION 42	TREATING				
COMPLETION 43	SWABBING				
COMPLETION 44	TESTING				
COMPLETION 45					
60	ABANDON				
70	STANDBY				
	TOTALS				
	HOURS FOR SHELL ACCOUNT				24

HOURS RUN TAP 10/2-EAT-02

	BOILER
	CODE 220
	12 HRS OT @ 208

HOLE CONDITION

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

MORNING TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE			
		BIT		FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
	DP	STANDS		FT.
	DP	SINGLES		FT.
		KELLY DOWN		FT.
		TOTAL		FT.
		WT. OF DC IN AIR		LBS.
		WT. OF STRING		LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
JETS 1/32"		
SERIAL NO		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HRS. RUN		
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO 1 S.P.M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN

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	12.00			PUT UP MUD TANK PREFABS.
				RIG UP.
				DRILLER DERRICK
		4 HRS	OVER TIME	RIG UP. W. SHUDRA. R. LANGLOIS.
				[redacted] L. SCOTT R. BRAZEL
				CAT HEAD FLOORMAN

DRILLER: W. Shudra

DAY TOUR

DRILLING ASSEMBLY AT END OF TOUR

NO.	CODE			
		BIT		FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
		I.D. X	O.D.	FT.
	DP	STANDS		FT.
	DP	SINGLES		FT.
		KELLY DOWN		FT.
		TOTAL		FT.
		WT. OF DC IN AIR		LBS.
		WT. OF STRING		LBS.

BIT RECORD

BIT NO.		
SIZE		
MFG.		
TYPE		
JETS 1/32"		
SERIAL NO.		
DEPTH OUT		
DEPTH IN		
TOTAL FTG.		
TOTAL HRS. RUN		
BIT CONDITION 1/8" T/B/GAGE		
REAMER CUTTER NO.		
REAMER TYPE		

MUD RECORD

TIME			
WEIGHT			
VIS.-SEC			
PV/YP	/	/	/
GELS	/	/	/
W.L.-C.C			
PH			
% SOLIDS			
% SAND			

MUD MATERIALS ADDED

TYPE	AMOUNT	TYPE	AMOUNT

FOOTAGE

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	PUMP NO 1 S.P.M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN

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
				W/O PREFABS
				PUT UP PREFABS
8.00	8.00			RIG UP
				OVERTIME 4 HRS. J. HONISH A. EWASIUK E. HENNERBICHLER
				J. MAGNUSON

DRILLER: J. Honish

EVENING TOUR

FOOTAGE

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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				Put up Prefabs
	12.00	12		Hook up Steam Water & Fuel Lines
				4 HRS Over Time E. Johnson A. Lundie A. Skjonsberg
				C Greff H. Haydon

DRILLER: E. Johnson