SHELL KEELE

RL-4

Drilling Authority No. 142
Date Issued

WELL NAME Shell Loole A L-4
FIELD Area:
LOCATION: Unit L Section 4 Grid 64-30: 125-00
Latitude 64-23-37 Longitude 125-01-43.4
From Established Reference Marker

Rig Release Date:
Status
Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
	Well History Supplement.
	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	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.
30/5/71	Well Inspection Report. file
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	Well Visit.
	Daily Drilling Reports.
	Logs. Large scale ..... Small scale .....

File No. .....
Drawing No. .....

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

WELL-SITE INSPECTION REPORT

FROM: Field Office or Area NORMAN WELLS Date: 26th May 1972

TO: The Oil Conservation Engineer

RE: Shell Eagle River I-A

Location: 64°32'32" N., 125°02'43" W. Status: Abandoned

This location was inspected by the undersigned on May 19, 1972

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

The following items require attention:

1. 2" Identification pipe broken off at weld.
2. Surface casing above ground level.
3. Debris all over lease.
4. Sump not backfilled.
5.
6.

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

Appears lease River cleaned up.

Spudded: 12th October 1964

Rig Released: 1st January 1965

Inspected by [signature]

Original to Oil Conservation Engineer, Dept of IA & ND, Duplicate to Field Office or Inspecting Engineer.

FORM 52-OCL-1-60.com

Drilling Authority No. 141
Date Issued September 24, 1964

CANADA

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

WELL COMPLETION DATA

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

Well name and number SHELL KEELE RIVER I-A

Permit No. 515 Lease No. -

Shell Canada Limited (Permittee, Licensee, Lessee) Exploratory Licence No. 667

Shell Canada Limited (Operator) Exploratory Licence No. 667

Location: Unit L Section 4 Grid 64° 30' 125°00'

Latitude 64° 23' 57" Longitude 125° 01' 43"

From Established Reference Marker

	DATE	DEPTH
Spudded	12/10/64	
Suspended		
Resumed		
Finished Drilling	1/3/65	4242
Deepened	-	
Complete (gas/oil)	-	
Abandoned	1/13/65	
Rig released	1/23/65	

Pool (s)

Interval(s) open to production

Elevation: Gr. 848

K.B. 860'

Drilling Contractor & Rig No. Regent Rig #21

Contractor's Licence No. A11792

CASING RECORD

Casing Size (inches)	Weight	Amount	Set at—	Sacks of Cement	Method
1. 24"	Conductor Pipe		26	50	
2. 9-5/8"	36	748	748	550 + 2% $CaCl_2$	
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION Depths	ELEVATION Sub-Sea
Cretaceous	160	+ 702
Cambrian	2290	-1428

CORE RECORD

From	To	Rec.	From	To	Rec.
3233	3255	22			

LOG RECORD

Run No.	Type of Log	From	To
1	Sonic Gamma Ray	4042	surface
1	Induction Electric	4041	746
1	Microlog Caliper	4043	746
1	Velocity Survey 4 shots	4050,	3500, 2289, 1100
1	Dipmeter	4000 none	3800
		3650	3400
		2400	1400

NAB# 32-90(2) (11-61)

CEMENTING RECORD (Plug, Squeeze, etc.)

Date	From	To	Remarks
12/9/64	0	26	Conductor Pipe
12/13/64	0	748	Surface Casing
	4030	3830	140 sacks cement
	2340	2200	60 sacks cement Tested Zone
	795	600	70 sacks cement + 2% $CaCl_2$ Tail ~ 790'

Pan 20 sacks cement in top of 9-5/8" casing.
Cut casing off at ground level and welded on steel plate with name.

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
1A	12/20/64		1451	1539										Misrun. No packer seats.
1B	12/20/64		1451 1431	1539										Misrun. No packer seats.
1C	12/21/64		1426	1539		14		1496	1131	153	1126			Misrun. No packer seats.
1D	12/21/64		1481	1539	60	17	60	430	430	258	430	714	713	Recovered 560' (6.2 bbls.) fresh water.

Lab. No.	Sample	From	To	Source	Remarks
383	Water				

PRESENT STATUS OF WELL

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

Company: Shell Canada Limited

Signed by: "C.F. Watts"

Title: Manager - Edmonton Division Production

Date: March 18, 1965

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

File No.
Drilling Authority No. 141

4

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
Resources Division

Application to Abandon a Well or Suspend Drilling

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

Name and number of well Shell Keele River L-4

Location: Unit L Section 4 Grid 64° 30' 125° 0'

Latitude 64° 23' 57" Longitude 125° 01' 45.6"

From Established Reference Marker

Permit No. 3-18 Lease No

Shell Canada Limited
(Permittee, Licensee, Lessee)

Date of commencement of proposed programme

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at -
Gas at -
Water at
Total Depth 9242 feet Date of last operations January 13, 1965
Present condition of well Plugged and abandoned

CASING RECORD

	Casing Size O.D. Inches	Weight	Amount	Set At	Sacks of Cement	Method	Amount Pulled
1.	24"	Conductor Pipe		26	50		nil
2.	9-5/8	36	748	748	550 + 2% $CaCl_2$		nil
3.							
4.							
5.							

PROPOSED ABANDONMENT PROGRAMME

Plug No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	4030-3830		140	
2	2340-2200		60	
3	795- 600		70	
	Surface			

The following logs have been run Induction Electric, Sonic Gamma Ray, Microlog, Caliper, Dipmeter and Velocity Survey

Other operations proposed

Operations to be carried out by Regent Drilling Contractor Licence No. A11792
Address Edmonton, Alberta Address Edmonton, Alberta
Responsible Agent in field R. W. Cumbers
Dated at Edmonton, Alberta, this 8 Day of March 1965
Signed by [signature] Company Shell Canada Limited
Title Manager-Edmonton Div. Production Exploratory Licence No. - 667

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

(For RESOURCES DIVISION use only)

APPROVAL

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

Confirming oral approval given the 9th January 1965

Dated 11th March, 1965 [signature]

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

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

File No.

Drilling Authority No. 342

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application for a Drilling Authority

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

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

Name and number of well Shell Sybil B La

Location: Unit L Sections 4 Grid 64° 30'; 129° 00'

Latitude 64° 29' 57.6" N Longitude 129° 03' 43.4" W

From Established Reference Marker

Elevation: Ground 848.0 K.B. 860 feet above sea-level.

Projected T.D. in Cambrian-Precambrian Clastics of 1750' or shallower

Area assigned to well

(for Oil Conservation Engineer's use only)

Permit No. 3418 Lease No. Acreage 5334

Permittee, licensee, or lessee Shell Canada, Limited

Exploratory Licence No. 667

Surface owned by Crown Crown

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

Petroleum and natural-gas rights owned by Shell Canada Limited

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	Brand	New or Used	Estimated Depth	Sacks of Cement
1. 20"	Conductor Pipe		Domestic	New	40	30 sx Portland + ¼ CaCl2
2. 9-5/8"	36.0	J-55	Domestic	New	700	450 sx Portland + 2% CaCl2
3.						
4.						
5.						

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

Control Equipment - Hydril - 6" Series 900 G.K.
- Cameron 6" Series 900 B.O.P.

Well will be drilled with (Rotary) Rig No. 21 by Regent Drilling Company
(Drilling Contractor or company)

Responsible agent of applicant:

At well R. W. Cambers

Address P. O. Box 186, Edmonton

Contractor's Licence No. A11792

At registered office A. M. McLachlin

Address P.O. Box 186, Edmonton, Alberta

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

Dated at Edmonton, Alberta this 23rd day of September 19 64

Signed by ORIGINAL SIGNED BY C. F. WATTS

Company Shell Canada Limited

Title Manager - Edmonton Division Producing

Licence No.

(For Resources Division use only)

APPROVED

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

The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.

Dated 28th September 19 64

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

NANR 52-40(1) (5-61)

SHELL KEELE R L-4

WELL HISTORY REPORT

SHELL KEELE R 1-4

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SECTION I - SUMMARY OF WELL DATA

(a) WELL NAME AND NUMBER

Shell Keele R L-4

(b) PERMITTEE

Shell Canada Limited

(c) NAME OF OPERATOR

Shell Canada Limited

(d) LOCATION

Unit L Section 4 Grid 64° 30' 125° 0'
Latitude 64° 23' 37" Longitude 125° 01' 43"

(e) PERMIT NO.

3418

(f) DRILLING CONTRACTOR

Regent Drilling Company Rig No. 21 (Rotary)

(g) DRILLING AUTHORITY

No. 141 Date Issued September 24, 1964

(h) CLASSIFICATION

Wildcat

(i) ELEVATION

Ground Elevation 848 K.B. Elevation 868

(j) DATE SPUDDED

11:00 A.M. December 10, 1964

(k) DATE COMPLETED DRILLING

January 3, 1965

(l) TOTAL DEPTH AND PLUGGED BACK TOTAL DEPTH

T.D. 4242 PBTD Surface

(m) WELL STATUS

Plugged and Abandoned

(n) DATE RIG RELEASED

8:00 A.M. January 13, 1965

(o) HOLE SIZE

Surface 13-3/4" from Surface to 748'
6-3/4" from 748' to 4242'

(p) CASING

24" Conductor Pipe Set at 26' with 50 Sacks Cement
9-5/8" 36# Casing Set at 748' with 550 Sacks Cement + 2% $CaCl_2$

SECTION II - GEOLOGICAL SUMMARY

(a) FORMATION TOPS

FORMATION	E LOG DEPTH
Cretaceous	160 (+ 702)
Cambrian	2290 (-1428)

(b) CORED INTERVALS

Core No.	Interval	Formation	Feet Cut	Recovery
1	3233-3255	Middle Cambrian	22'	22

(c) CORE DESCRIPTION

Refer to Sample Description

SHELL, KEELE RIVER L-4

K.B. 862'

T.D. 4235'

Latitude: 64° 23' 39" N.

Longitude: 125° 01' 42" W.

0-20'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
20'-40'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
40'-60'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
60'-80'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
80'-100'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
100'-130'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
130'-190'		Very Poor Samples.

190'-220'	Shale	Medium grey, 20% silty, very fine to fine grained sandstone. Plant remains.
220'-250'	Shale	Medium grey, 20% silty, very fine to fine grained sandstone.
250-280'	Shale	Medium grey, 20% silty, very fine to fine grained sandstone.
280'-300'	Shale	Medium grey, 20% silt content.
300'-330'	Shale	Medium grey, 20% silt content.
330'-350'	Shale	Medium grey, 20% silty, very fine grained sandstone.
350-360'	Shale	Medium grey, 20% silty, very fine grained sandstone.
360'-370'	Sandstone	Medium grey, lithic, silty, very fine grained; 20% argillaceous content and 10% calcareous content.
370'-380'	Shale	Bentonitic, light green.
380'-390'	Shale	Light green grey.
390'-400'	Shale	Light green grey.
400'-410'		Very poor samples.
410'-420'		Very poor samples.
420'-430'	Shale	Medium brown grey, 10% Silty content.
430'-440'	Sandstone	Light brown grey, lithic, silty, very fine grained;20% argillaceous content and 10% calcareous content.
440'-450'	Sandstone	Light brown grey, lithic, silty, 40% argillaceous content and 10% calcareous content.
		450'-470' Bentonitic shale swell in water.

450'-460'	Shale	Medium brown grey.
460'-470'	Shale	Medium brown grey.
470'-480'	Shale	Medium brown grey.
0'-480'		Sample quality very poor
480'-490'	Shale	Medium brown grey.
490'-500'	Shale	Medium brown grey.
500'-510'	Shale	Medium brown grey, trace silty content.
510'-520'	Shale	Medium brown grey, trace silty content.
520'-530'	Shale	Medium brown grey, trace silty content.
530'-540'	Shale	Medium brown grey, trace silty content.
540'-550'		No sample.
550'-560'		No sample.
560'-570'		No sample.
570'-580'	Shale	Medium brown grey, trace silty content.
580'-590'	Shale	Medium brown grey, trace silty content.
590'-600'	Shale	Medium brown grey, trace silty content.
600'-610'	Shale	Medium brown grey, 10% silty, very fine grained sandstone; soft flakey band green shale.
610'-620'	Shale	Medium brown grey.
620'-630'	Shale	Medium brown grey, trace silty content.

630'-640'	Shale	Medium brown grey, 10% silty content.
640'-650'	Shale	Medium brown grey, 10% silty content.
650'-660'	Shale	Medium brown grey, 10% silty content.
660'-670'	Shale	Medium brown grey, 20% silty, very fine grained sandstone.
670'-680'	Sandstone	Medium light grey, lithic, sandstone, fine to very fine, trace argillaceous content, glauconite; chert pebbles up to 5 m.m.
680'-690'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, trace- 10% argillaceous content, glauconite and pyrite.
690'-700'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, trace- 10% argillaceous content, glauconite.
700'-710'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, 10% argillaceous content, glauconite.
710'-720'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, trace- 10% argillaceous content, glauconite; band of calcareous sandstone.
720'-730'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, trace - 10% argillaceous content, pyrite.
730'-740'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, trace argillaceous content.
720'-740'		Quartz sandstone, black and white chert, good sorting.
740'-750'		No sample.

750'-790'	Sandstone	Light grey, lithic, medium to very fine sandstone, trace argillaceous content.
790'-810'	Sandstone	Light grey, lithic, fine to very fine sandstone, trace argillaceous content.
810'-830'	Sandstone	Light grey, lithic fine to very fine sandstone, trace argillaceous content.
830'-850'	Sandstone	Light grey, lithic, fine to very fine sandstone, trace argillaceous content.
850'-870'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, trace argellaceouc content and trace dolomite.
870'-880'	Sandstone	Light grey, lithic, fine to very fine grained sandstone, silty, trace argillaceous content, trace dolomite, pyrite.
880'-890'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, trace argillaceous content, trace dolomite.
890'-900'	Sandstone	Light grey, lithic, medium to very fine grained sandstone, trace argillaceous content, trace
900'-910'	Siltstone	Medium Grey, 40% shale.
910'-920'	Sandstone	Light grey, lithic, silty, very fine grained sandstone, 20% argillaceous content.
920'-930'	Shale	Medium grey, silty,20% siltstone.
930'-940'	Sandstone	Light grey, lithic, silty, extremely fine to fine grained sandstone, 10% argillaceous content.
940'-950'	Shale	Medium grey, silty, 20% very fine grained sandstone.

950'-960'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, 10% argillaceous content.
960'-970'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, trace argillaceous content, glauconite, sandstone fairly soft, soaks water.
970'-980'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, 10% argillaceous content, sandstone fairly soft, soaks water.
980'-990'	Sandstone	Medium grey, silty, very fine grained sandstone, 40% argillaceous content.
990'-1000'	Shale	Medium grey, 40% silty, very fine grained sandstone.
1000'-1010'	Shale	Medium grey, 40% silty, very fine grained sandstone.
1010'-1020'	Shale	Medium grey, 40% silty content.
1020'-1040'	Shale	Medium grey, 30% silty content.
1040'-1060'	Shale	Medium grey, 30% silty content.
1060'-1080'	Shale & Sandstone	Medium light grey, 50% shale, 50% lithic, silty, very fine grained sandstone.
1080'-1100'	Shale & Siltstone	Medium grey, 50% shale, 50% lithic siltstone.
1100'-1120'	Sandstone	Light grey, 10% shale, 90% lithic, silty, medium to very fine sandstone, angular, poor sorting
1120'-1140'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 20% argillaceous content, trace of calcareous content.
1140'-1160'	Shale	Medium light grey, 40% lithic, silty content.

1160'-1180'	Sandstone	Medium light grey, lithic, silty, fine to very fine grained sandstone, 20% argillaceous content, trace calcareous content and glauconite.
1180'-1200'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 30% shale(argillaceous content).
1200'-1220'	Sandstone.	Medium light grey, lithic, silty, very fine grained sandstone, 20% argillaceous content, trace of calcareous content.
1220'-1240'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 30% argillaceous content, trace of calcareous content.
1240'-1260'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 40% argillaceous content, inoccramus, carbonaceous, pland remains and ostracods.
1260'-1280'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 20% argillaceous content and a streak of waxy green shale.
1280'-1300'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 20% argillaceous content.
1300'-1320'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 30% argillaceous content, 10% calcareous content.
1320'-1340'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 20% argillaceous content.
13401 1360'	Sandstone	Light grey, lithic, silty, fine, to very fine grained sandstone, trace argillaceous content, trace ironstone; sub-angular, fair sorting, black and white chert and quartz.

1360'-1380'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, trace argillaceous content.
1380'-1400'	Sandstone	Medium grey, lithic, silty, very fine grained sandstone, 30% argillaceous content.
1400'-1420'	Sandstone	Medium grey, lithic, silty, very gine grained sandstone, 40% argillaceous content, trace calcareous content.
1420'-1440'	Shale	Medium grey, 40% lithic, silty, very fine grained sandstone.
1440'-1460'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 40% argillaceous content, interbedded with lithic, silty, fine to very fine grained sandstone, trace argillaceous content.
1460'-1480'	Sandstone	Light grey, lithic, medium to very fine grained silty sandstone, trace argillaceous content.
1480'-1500'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone, trace argillaceous content; ironstone bands, angular-sub angular, fair sorting, poorly cemented, black and white chert and quartz.
1500'-1520'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone.
1520'-1530'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone, plant remains, band ironstone.
1530'-1540'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone, pyrite. Band argillaceous sandstone, and very fine silt.
1540'-1550'	Sandstone	Light grey, lithic, fine to very fine silty sandstone.
1550'-1560'	Sandstone	Light grey, lithic, fine to very fine silty sandstone, very poorly consolidated.

1560'-1570'	Sandstone	Light grey, lithic, fine to very fine silty sandstone.
1570'-1580'	Sandstone	Light medium grey, lithic, fine to very fine silty sandstone, 10% argillaceous content, pyrite, shaley bands.
1580'-1590'	Sandstone	Light grey, lithic, fine to very fine silty sandstone, band of shale; unconsolidated loose sand grains in sample.
1590'-1600'	Siltstone	Medium grey, lithic, siltstone, 30% argillaceous content.
1600'-1610'	Shale	Medium grey, 20% lithic, fine to very fine silty sandstone, bands of lithic siltstone.
1610'-1620'	Shale	Medium grey, 20% lithic, fine to very fine silty sandstone, bands of lithic siltstone.
1620'-1630'	Shale	Medium grey, 20% lithic, fine to very fine silty sandstone.
1625'-1630'	Sandstone	Light grey, lithic, fine to very fine silty sandstone, 10% argillaceous content, 10% ironstone.
1630'-1640'	Siltstone	Medium grey, 40% argillaceous content.
1640'-1650'	Siltstone	Light grey, 10% argillaceous content.
1650'-1660'	Sandstone & Shale	Medium grey, 50% lithic, very fine grained silty sandstone, 50% argillaceous content.
1660'-1670'	Shale	Medium grey, 20% siltstone.
1670'-1680'	Sandstone	Light grey, lithic, fine to very fine grained silty sandstone, 20% argillaceous content.
1680'-1690'	Shale	Medium grey, argillaceous.
1690'-1700'	Shale	Medium grey, 10% siltstone.

1700'-1710'	Sandstone	Light grey, lithic, very fine to fine silty sandstone, 10% argillaceous content.
1710'-1720'	Shale	Medium grey, argillaceous.
1720'-1730'	Shale	Medium grey, argillaceous.
1730'-1740'	Shale	Medium grey, argillaceous.
1740'-1750'	Shale	Medium grey, 10% siltstone.
1750'-1760'	Shale	Medium grey, argillaceous.
1760'-1770'	Shale	Medium grey, trace siltstone.
1770'-1780'	Shale	Medium grey, 10% siltstone.
1780'-1790'	Shale	Medium grey, 10% siltstone.
1790'-1800'	Sandstone	Medium grey, lithic, very fine to fine silty sandstone, 10% shale(argillaceous content).
1800'-1810'	Shale	Medium grey, 20% siltstone.
1810'-1820'	Shale	Medium grey, 10% siltstone.
1820'-1830'	Shale	Medium grey, 10% siltstone.
1830'-1840'	Shale	Medium grey, 10% siltstone.
1840'-1850'	Shale	Medium grey, 20% lithic, very fine silty sandstone.
1850'-1860'	Shale	Medium grey, 10% siltstone.
1860'-1870'	Shale	Medium grey, 10% siltstone.
1870'-1880'	Shale	Medium grey, argillaceous.
1880'-1890'	Shale	Medium grey, argillaceous.
1890'-1900'	Shale	Medium grey, argillaceous.
1900'-1910'	Shale	Medium grey, 10% siltstone.
1910'-1920'	Shale	Medium grey, 10% siltstone.
1920'-1930'	Shale	Medium grey, argillaceous.
1930'-1940'	Shale	Medium grey, trace siltstone.

1940'-1950'	Shale	Medium grey, trace siltstone.
1950'-1960'	Shale	Medium grey, argillaceous.
1960'-1970'	Shale	Medium grey, trace siltstone.
1970'-1980'	Shale	Medium grey, 10% siltstone, ostracoda and inoceramus.
1980'-1990'	Shale	Medium grey, argillaceous.
1990'-2000'	Sandstone	Medium grey, lithic, very fine to silty sandstone, 30% argillaceous content.
2000'-2010'	Shale	Medium grey, argillaceous.
2010'-2020'	Shale	Medium grey, argillaceous.
2020'-2030'	Sandstone	Medium grey, lithic, very fine silty sandstone, 40% argillaceous content.
2030'-2040'	Shale & Sandstone	Medium grey, 50% very fine silty sandstone, 50% argillaceous content, pyrite.
2040'-2050'	Siltstone	Medium grey, lithic, siltstone, 40% argillaceous content.
2050'-2060'	Shale	Medium grey, trace silty content.
2060'-2070'	Siltstone	Medium grey, lithic, siltstone, 40% argillaceous content.
2070'-2080'	Shale	Medium grey, 30% silty content.
2080'-2090'	Shale	Medium dark grey.
2090'-2100'	Shale	Medium dark grey, trace silty content.
2100'-2110'	Sandstone	Light grey, lithic, very fine, silty sandstone, 10% argillaceous content; fairly hard, well compacted.
2110'-2120'	Shale	Medium grey, 20% silty content.
2120'-2130'	Sandstone	Medium grey, lithic, very fine silty sandstone, 20% argillaceous content.

2130'-2140'	Siltstone	Medium grey, lithic, siltstone, 40% argillaceous content.
2140'-2150'	Shale	Medium grey, 30% lithic siltstone.
2150'-2160'	Shale	Medium grey, 20% silt content.
2160'-2170'	Shale	Medium dark grey.; shale harder more brittle in 2170-2160'.
2170'-2180'	Shale	Medium dark grey, inoceramus and fish, band bentonite.
2180'-2190'	Shale	Medium dark grey, inoceramus and fish remains, trace dolomite.
2190'-2200'	Shale	Medium dark grey, fish remains, resinous, band bentonite.
2200'-2210'	Shale	Medium dark grey.
2210'-2220'	Shale	Medium dark grey, trace dolomite.
2220'-2230'	Sandstone	Medium grey, lithic, pebbles to coarse sandstone, 10% calcareous content, glauconite, pyrite; pebble conglomerate chert, quartz.
2230'-2240'	Shale & Sandstone	Medium dark grey, 40% argillaceous content, 40% fine to very fine, silty sandstone, 20% dolomite.
2240'-2250'	Sandstone	Light grey, very fine grained silty sandstone, trace argillaceous content, 10% calcareous content, glauconite; poor cut fluor.
2250'-2260'	Sandstone	Light grey, very fine grained sandstone, glauconite, band shale, good cut fluor.
2260'-2270'	Sandstone	Light grey, very fine grained sandstone, 10% calcareous content, glauconite, and band of shale. Poor cut fluor.
2270'-2280'	Siltstone	Medium grey, 10% calcareous content, 30% argillaceous content.
2280'-2290'	Shale	Dark grey, argillaceous.

2290'-2300'	Dolomite	Light brown grey, 50% extremely fine to microgranular dolomite, 10% argillaceous content, 40% chert, pyrite; light brown dol. fractured and silicified.
2300'-2310'	Dolomite	Medium brown, 50% extremely fine to microgranular dolomite, 20% argillaceous content, 30% silty content; interbedded with very dark brown grey hard shale.
2310'-2320'	Shale	Medium light grey, 10% micro-granular dolomite.
2320'-2330'	Shale	Medium light grey, 10% micro-granular dolomite, interbedded with dark grey shale.
2330'-2340'	Shale	Light grey -green grey.
2340'-2350'		No sample.
2350'-2355'	Dolomite	Medium dark brown, 20% argillaceous content, extremely fine dolomite.
2355'-2360'	Shale	Medium grey, trace dolomite; shales have slight greenish cast, waxy scum.
2360'-2365'	Shale	Medium grey, trace dolomite.
2365'-2370'	Dolomite	Dark brown, extremely fine dolomite, 30% argillaceous content.
2370'-2375'	Shale	Medium grey, trace dolomite.
2375'-2380'	Dolomite	Dark brown, extremely fine to microgranular dolomite, 30% argillaceous content, 20% chert.
2380'-2385'	Shale	Medium green grey shale.
2385'-2390'	Shale	Medium green grey, brachiopod?
2390'-2395'	Dolomite	Dark brown, extremely fine to microgranular dolomite, 30% argillaceous content, 10% chert.
2395'-2400'	Shale	Medium green grey, trace dolo...

2400'-2405'	Shale	Medium green grey, 10% dolomite.
2405'-2410'	Shale	Medium green grey.
2410'-2415'	Shale	Medium grey.
2415'-2420'	Shale	Medium grey.
2420'-2425'	Dolomite,	Medium brown, 10% argillaceous content, 40% chert, extremely fine to microgranular dolomite.
2425'-2430'	Shale	Medium green grey, pyrite.
2430'-2435'	Shale	Medium green grey.
2434'-2440'	Shale	Medium green grey; soft shale, no silt content.
2440'-2445'	Shale	Medium green grey.
2445'-2450'	Shale	Medium green grey.
2450'-2455'	Dolomite	Dark brown, extremely fine to microgranular dolomite, 10% argillaceous content, 30% chert.
2455'-2460'	Dolomite	Dark brown, extremely fine to microgranular dolomite, 20% argillaceous content, 30% chert, stylolite.
2460'-2465'	Shale	Medium brown, 10% dolomite, pyrite, few crinoid dolomite rhombs.
2465'-2470'	Dolomite	Dark brown, 10% argillaceous content, 30% chert, medium to fine and extremely fine to microgranular dolomite.
2470'-2475'	Shale	Medium grey, 20% dolomite.
2475'-2480'	Shale	Medium green grey.
2480'-2485'	Dolomite	Very light brown, extremely fine to microgranular grained dolomite, 40% chert.
2485'-2490'	Dolomite & Chert	Very light brown, very fine to extremely fine dolomite, 50% chert; few chips with considerable glauconite and siliceous.

2490'-2495'	Dolomite & Chert	Very light brown, very fine to extremely fine dolomite, 50% chert, glauconite, siliceous.
2495'-2500'	Shale	Light medium green grey, pyrite; few chips with considerable glauconite siliceous content could possibly be very fine silt.
2500'-2505'	Shale	Light medium green grey.
2505'-2510'	Shale	Light medium green grey.
2510'-2515'	Shale	Light medium green grey.
2515'-2520'	Shale	Light medium green grey.
2520'-2525'	Shale	Light medium green grey.
2525'-2530'	Shale	Light medium green grey.
2530& 2535'	Shale	Light medium green grey.
2535'-2540'	Shale	Light medium green grey, brachiopod.
2540'-2545'	Shale	Light medium green grey.
2545'-2550'	Dolomite	Very light brown, very fine to extremely fine grained dolomite, 40% chert, glauconite.
2550'-2555'	Dolomite	Very light brown, very fine to extremely fine grained dolomite, 30% chert.
2555'-2560'	Shale	Light green grey; greenish color of the shale becomes more distinct.
2560'-2565'	Shale	Light green grey, green color of the shale becomes more distinct.
2565'-2570'	Shale	Light green grey, green shale becomes more distinct.
2570'-2575'	Shale	Light green grey, shale soft, flakey to splintery.
2575'-2580'	Shale	Light green grey.
2580'-2585'	Shale	Light green grey.

2585'-2590'	Shale	Light green grey.
2590'-2595'	Shale	Light green grey.
2595'-2600'	Shale	Light green grey.
2600'-2610'	Shale	Light green grey.
2610'-2615'	Shale	Light green grey.
2615'-2620'	Shale	Light green grey, minor amounts of brown grey shale.
2620'-2625'	Shale	Light green grey, trace dolomite.
2625'-2630'	Shale	Light green grey, trace dolomite.
2630'-2635'	Shale	Light green grey, trace dolomite, few dolomite rhombs, floating.
2635'-2640'	Shale	Light green grey, 20% dolomite.
2640'-2645'	Shale	Light green grey, trace dolomite.
2645'-2650'	Dolomite	Light green grey, extremely fine to microgranular grained dolomite, 30% argillaceous content, 20% chert, trilobites?
2650'-2655'	Shale	Light green grey; minor green dolomite with glauconite.
2655'-2660'	Shale	Light green grey, trace dolomite.
2660'-2665'	Shale	Light green grey, trace dolomite.
2665'-2670'	Shale	Light green grey.
2670'-2675'	Shale	Light green grey.
2675'-2680'	Shale	Light green grey.
2680'-2685'	Shale	Pale green, trace dolomite.
2686'-2690'	Shale	Pale green.
2690'-2695'	Shale	Pale green, glauconite, band of extremely fine to microgranular dolomite.
2695'-2700'	Shale	Pale green.

2700'-2705'	Shale	Pale green, pyrite; shale has slightly waxy appearance.
2705'-2710'	Shale	Pale green.
2710'-2715'	Shale	Pale green; band dolomite.
2715'-2720'	Shale	Pale green; few bands argillaceous light green dolomite.
2720'-2725'	Shale	Pale green.
2725'-2730'	Shale	Pale green; band of dolomite.
2730'-2735'	Shale	Pale green.
2735'-2740'	Shale	Pale green.
2740'-2745'	Dolomite	Very light brown, very fine to extremely fine grained dolomite, 40% chert.
2745'-2750'	Shale	Pale green.
2750'-2755'	Shale	Medium brown grey.
2755'-2760'	Shale	Light green grey, trace of dolomite.
2760'-2765'	Shale	Light green grey.
2765'-2770'	Shale	Light green grey.
2770'-2775'	Shale	Light green grey.
2775'-2780'	Shale	Light green grey, trace of dolomite, glauconite.
2780'-2785'	Shale	Medium grey.
2785'-2790'	Shale	Light green grey.
2790'-2795'	Shale	Light green grey.
2795'-2800'	Shale	Light green grey.
2800'-2805'	Shale	Light green grey.
2805'-2810'	Shale	Light green grey.
2810'-2815'	Shale	Light green grey.
2815'-2820'	Shale	Light green grey, brachiopod.
2820'-2825'	Shale	Light green grey.

2825'-2830'	Shale	Light green grey.
2830'-2835'	Shale	Light green grey.
2835'-2840'	Shale	Pale green.
2840'-2845'	Shale	Pale green, trilobites.
2845'-2850'	Shale	Pale green.
2850'-2855'	Shale	Pale green, pyrite.
2855'-2860'	Shale	Pale green.
2860'-2865'	Dolomite,	Very light green, extremely fine to microgranular grained dolomite, 10% argillaceous shale, 30% chert.
2865'-2870'	Shale	Pale green.
2870'-2875'	Shale	Pale green, fossils. Shale fairly hard, splintery, brittle.
2875'-2880'	Dolomite	Very light brown, very fine to extremely fine grained dolomite, 40% chert, pyrite, glauconite; glauconite grains medium to coarse up to 20% of rock.
2880'-2885'	Dolomite	Very light brown, very fine to extremely fine dolomite, 40% chert, glauconite medium to coarse up to 20% of rock.
2885'-2890'	Shale	Pale green.
2890'-2895'	Shale	Pale green.
2895'-2900'	Shale	Pale green, trace dolomite.
2900'-2905'	Shale	Pale green.
2905'-2910'	Shale	Pale green.
2910'-2915'	Shale	Pale green, trace dolomite.
2915'-2920'	Shale	Pale green.
2920'-2925'	Shale	Pale green.
2925'-2930'	Shale	Pale green.
2930'-2935'	Shale	Pale green.

2935'-2940'	Shale	Pale green.
2940'-2945'	Shale	Pale green.
2945'-2950'	Shale	Pale green.
2950'-2955'	Shale	Pale green.
2955'-2960'	Shale	Pale green, fossils.
2960'-2965'	Shale & Chert	Very light brown, 50% chert, 50% argillaceous content.
2965'-2970'	Shale	Pale green.
2970'-2975'	Shale	Medium brown grey.
2975'-2980'	Shale	Pale green.
2980'-2985'	Shale	Pale green.
2985'-2990'	Shale	Pale green.
2990'-2995'	Shale	Pale green.
2995'-3000'	Shale	Pale green.
3000'-3005'	Shale	Pale green, band of medium brown extremely fine to micro-granular dolomite.
3005'-3010'	Shale	Pale green.
3010'-3015'	Shale	Pale green.
3015'-3020'	Shale	Pale green.
3020'-3025'	Shale	Pale green, few dolomite rhombs, floating.
3025'-3030'	Shale	Pale green.
3030'-3035'	Shale	Pale green.
3035'-3040'	Shale	Pale green.
3040'-3045'	Shale	Pale green.
3045'-3050'	Shale	Pale green.
3050'-3055'	Shale	Pale green.
3055'-3060'	Shale	Pale green.

3060'-3065'	Shale	Pale green.
3065'-3070'	Shale	Pale green.
3070'-3075'	Shale	Pale green.
3075'-3080'	Shale	Pale green.
3080'-3085'	Shale	Pale green.
3085'-3090'	Shale	Pale green.
3090'-3095'	Shale	Pale green, fine dolomite rhombs, floating in shale.
3095'-3100'	Shale	Pale green.
3100'-3105'	Shale	Pale green.
3105'-3110'	Shale	Pale green.
3110'-3115'	Shale	Pale green.
3115'-3120'	Shale	Pale green.
3120'-3125'	Shale	Pale green.
3125'-3130'	Shale	Pale green.
3130'-3135'	Shale	Pale green.
3135'-3140'	Shale	Pale green.
3140'-3145'	Shale	Pale green.
3145'-3150'	Shale	Pale green, trilobites.
3150'-3155'	Shale	Pale green, few dolomite rhombs.
3155'-3160'	Shale	Pale green.
3160'-3165'	Shale	Pale green.
3165'-3170'	Shale	Pale green.
3170'-3175'	Shale	Pale green.
3175'-3180'	Shale	Pale green.
3180'-3185'	Shale	Pale green, fossils, trilobite?
3185'-3190'	Shale	Pale green, brachiopods.
3190'-3195'	Shale	Pale green.

3195'-3200'	Shale	Pale green.
3200'-3205'	Shale	Pale green, trilobite check.
3205'-3210'	Shale	Pale green, few small fossil fragments scattered thru samples mostly trilobite.
3210'-3215'	Shale	Pale green, trilobites.
3215'-3220'	Shale	Pale green, trilobite.
3220'-3225'	Shale	Light brown green, 20% dolomite, trilobite.
3225'-3230'	Shale	Light green-light brown, 40% dolomite, trilobite.
3230'-3255'	Shale	Pale green, trilobites; core-green shale with good trilobites.
3255'-3260'	Shale	Pale green.
3260'-3265'	Shale	Light green grey, trilobites
3265'-3270'	Shale	Pale green.
3270'-3275'	Shale	Light green-light brown, shale slightly micaceous in part.
3275'-3280'	Shale	Light green-light brown; band argillaceous dolomite.
3280'-3285'	Shale	Light green-light brown.
3285'-3290'	Shale	Light green grey.
3290'-3295'	Shale	Light green grey.
3295'-3300'	Shale	Light brown grey.
3300'-3305'	Shale	Light green grey.
3305'-3310'	Shale	Light green grey.
3310'-3315'	Shale	Light green grey.
3315'-3320'	Shale	Light green grey, very small brachiopods.
3320'-3325'	Shale	Light green grey, trilobites.

3325'-3330'	Shale	Light grey.
3330'-3335'	Shale	Light green-light brown.
3335'-3340'	Shale	Light green-light brown.
3340'-3345'	Shale	Pale green.
3345'-3350'	Shale	Pale green.
3350'-3355'-	Shale	Light grey.
3355'-3360'	Shale	Light grey, trace dolomite
3360'-3365'	Shale	Light grey, 10% dolomite; band of dolomite.
3365'-3370'	Shale	Pale green, trace dolomite.
3370'-3375'	Shale	Pale green, trace dolomite.
3375'-3380'	Shale	Light broen-light green, trace dolomite.
3380'-3385'	Shale	Light brown-light green, trace dolomite.
3385'-3390'	Shale	Light brown-light green, trace dolomite.
3390'-3395'	Shale	Light brown grey.
3395'-3400'	Shale	Light brown grey, trace dolomite, mica.
3400'-3405'	Shale	Light brown grey, mica.
3405'-3410'	Shale	Light green.
3410'-3415'	Shale	Light grey, trace dolomite.
3415'-3420'	Shale	Light green.
3420'-3425'	Shale	Light green.
3425'-3430'	Shale	Light brown grey.
3430'-3435'	Shale	Light green.
3435'-3440'	Shale	Light brown grey.
3440'-3445'	Shale	Light brown grey, trace dolomite.

3445'-3450'	Shale	Light brown grey, 10% siltstone, trace dolomite.
3450'-3455'	Shale	Light green, mica.
3455'-3460'	Shale	Light brown grey, 10% siltstone.
3460'-3465'	Shale	Light brown grey, 10% siltstone, trace dolomite, mica.
3465'-3470'	Shale	Light brown grey, 10% silty content.
3470'-3475'	Shale	Light green.
3475'-3480'	Shale	Light brown, 40% siltstone, 10% dolomite, mica.
3480'-3485'	Shale	Light brown, 40% siltstone, 10% dolomite, mica.
3485'-3490'	Shale	Light brown-light green.
3490'-3495'	Shale	Light brown.
3495'-3500'	Shale	Light brown.
3500'-3505'	Shale	Light green, tilobites.
3505'-3510'	Shale	Light green.
3510'-3515'	Shale	Light green.
3515'-3520'	Shale	Light brown, 20% siltstone, trace dolomite.
3520'-3525'	Shale	Light brown, 20% siltstone, trace dolomite; few chips anhydrite.
3525'-3530'	Shale	Light green.
3530'-3535'	Shale	Light green.
3535'-3540'	Shale	Light brown.
3540'-3545'	Shale	Light green grey.
3545'-3550'	Shale	Light green grey.
3550'-3555'	Shale	Light brown, 40% siltstone, 10% dolomite, mica.

3555'-3560'	Shale	Light grey green.
3560'-3565'	Shale	Light brown.
3565'-3570'	Shale	Light brown, 40% siltstone, 10% dolomite, mica.
3570'-3575'	Shale	Light brown, 40% siltstone, 10% dolomite, mica.
3575'-3580'	Shale	Light green grey.
3580'-3585'	Shale	Light brown grey.
3585'-3590'	Shale	Light brown grey, trace silty-shale.
3590'-3595'	Shale	Light brown, 20% silty shale, trace dolomite.
3595'-3600'	Shale	Light brown, 20% silty shale, trace dolomite.
3600'-3605'	Shale	Pale green.
3605'-3610'	Shale	Light brown.
3610'-3615'	Shale	Light green.
3615'-3620'	Shale	Olive grey, trace dolomite.
3620'-3625'	Shale	Olive grey, 20% silty shale, mica.
3625'-3630'	Shale	Olive grey.
3630'-3635'	Shale	Olive grey.
3635'-3640'	Shale	Light green.
3640'-3645'	Shale	Brown grey.
3645'-3650'	Shale	Light brown grey, 30% silty shale.
3650'-3655'	Shale	Light brown grey, 30% silty shale.
3655'-3660'	Shale	Light brown grey, 30% silty shale.
3660'-3665'	Shale	Light brown grey, 30% silty shale.
3665'-3670'	Shale	Light brown grey, 10% silty shale.

3670'-3675'	Shale	Light brown grey, 10% silty-shale.
3675'-3680'	Shale	Light green grey.
3680'-3685'	Shale	Light green grey, glauconite.
3685'-3690'	Shale	Light medium brown grey.
3690'-3695'	Shale	Light medium brown grey.
3695'-3700'	Shale	Light medium brown grey.
3700'-3705'	Shale	Light medium brown grey.
3705'-3710'	Shale	Light medium brown grey.
3710'-3715'	Shale	Light medium brown grey.
3715'-3720'	Shale	Light medium brown grey.
3720'-3725'	Shale	Light medium brown grey.
3725'-3730'	Shale	Light medium brown grey.
3730'-3735'	Shale	Light medium brown grey.
3735'-3740'	Shale	Light medium brown grey.
3740'-3745'	Shale	Light medium brown grey.
3745'-3750'	Shale	Light medium brown grey, 10% dolomite.
3750'-3755'	Shale	Light medium brown grey.
3755'-3760'	Shale	Light medium brown grey, 20% siltstone, 10% calcareous content.
3760'-3765'	Shale	Light medium brown grey, 10% siltstone, 10% dolomite.
3765'-3770'	Shale	Light medium brown grey, trace dolomite.
3770'-3775'	Shale	Light medium brown grey, trace siltstone, 10% dolomite, glauconite.
3775'-3780'	Shale	Light medium brown grey.
3780'-3785'	Shale	Light medium brown grey.

3785'-3790'	Shale	Light medium brown grey.
3790'-3795'	Shale	Light medium brown grey.
3795'-3800'	Shale	Light green.
3800'-3805'	Shale	Light brown, 10% siltstone, trace dolomite.
3805'-3810'	Shale	Light brown, trace dolomite.
3810'-3815'	Shale	Light green.
3815'-3820'	Shale	Light brown.
3820'-3825'	Shale	Medium brown.
3825'-3830'	Shale	Medium brown.
3830'-3835'	Shale	Medium brown, 10% dolomite; shale fairly hard, flakey, splintery.
3835'-3840'	Shale	Medium brown.
3840'-3845'	Shale	Medium brown.
3845'-3850'	Shale	Light green, trace dolomite.
3850'-3855'	Shale	Light brown, 20% dolomite.
3855'-3860'	Shale	Light brown, 10% dolomite.
3860'-3865'	Shale	Light brown, trace dolomite.
3865'-3870'	Shale	Light brown.
3870'-3875'	Shale	Light brown.
3875'-3880'	Shale	Light brown, 10% dolomite.
3880'-3885'	Shale	Medium brown, 20% dolomite.
3885'-3890'	Shale	Medium brown, 20% dolomite.
3890'-3895'	Shale	Olive grey.
3890'-3900'	Shale	Olive grey.
3900'-3905'	Shale	Light green.
3905'-3910'	Shale	Light medium brown, 20% dolomite.
3910'-3915'	Shale	Olive grey.

3915'-3920'	Shale	Medium brown, trace dolomite.
3920'-3925'	Shale	Medium brown, 10% dolomite.
3925'-3930'	Shale	Olive grey.
3930'-3935'	Shale	Light medium brown, 30% dolomite; very finely laminated.
3935'-3940'	Shale	Light medium brown, 30% dolomite.
3940'-3945'	Shale	Light medium brown, 30% dolomite.
3945'-3950'	Shale	Light medium brown, 30% dolomite.
3950'-3955'	Shale	Light medium brown, 40% dolomite.
3955'-3960'	Shale & Dolomite	Light medium brown, 40% dolomite, 40% argillaceous content, 20% siltstone.
3960'-3965'	Shale	Light medium brown, 20% dolomite.
3965'-3970'	Shale	Light medium brown, 10% silty-shale, 20% dolomite.
3970'-3975'	Shale	Light medium brown, 20% dolomite.
3975'-3980'	Shale	Light medium brown, 20% dolomite; finely laminated.
3980'-3985'	Shale	Light medium brown, 20 dolomite.
3985'-3990'	Shale	Light medium brown, 20% dolomite.
3990'-3995'	Shale	Light green.
3995'-4000'	Shale	Light green.
4000'-4005	Shale	Light green.
4005'-4010'	Shale	Medium olive grey.
4010'-4015'	Shale	Light medium brown, 20% dolomite.
4015'-4020'	Shale	Light medium brown, 10% dolomite.

4020'-4025'	Shale	Light brown grey.
4025'-4030'	Shale	Light brown grey.
4030'-4035'	Shale	Light brown grey, 10% dolomite.
4035'-4040'	Shale	Light brown grey.
4040'-4045'	Shale	Dark grey, 10% dolomite.
4045'-4050'	Shale	Dark grey, 10% dolomite.
4050'-4055'	Shale	Dark grey, 20% dolomite.
4055'-4060'	Shale	Very dark grey, 10% dolomite, 20% chert, 5% pyrite,; very hard silty shale.
4060'-4065'	Dolomite	Medium brown grey, 10% argillaceous content, 10% extremely fine grained chert.
4065'-4070'	Shale	Very dark grey, 10% dolomite, 20% chert.
4070'-4075'	Shale	Dark grey, 10% dolomite, pyrite.
4075'-4080'	Shale	Brown grey, 30% dolomite.
4080'-4085'	Shale	Very dark grey, 10% chert.
4085'-4090'	Dolomite	Medium brown, 10% argillaceous content,
4090'-4095'	Dolomite	Medium brown, 30% argillaceous content.
4095'-4100'	Dolomite	Medium brown, 10% argillaceous content.
4100'		At 4100' thick drilling mud suggests presence of evaporites.
4094'-4110'		Very poor samples.
4100'-4110'	Shale	Medium dark brown, 10% dolomite.
4110'-4130'	?	Sample may be all caving.
4130'-4135'	?	Sample may be all caving.

4135'-4140'	Shale	Medium dark brown, 20% dolomite.
4140'-4145'	Shale	Medium dark brown, 20% dolomite.
4145'-4150'	Shale	Medium dark brown, 20% dolomite; mud salinity of 37,000 PPM.
4150'-4235'		Chloride at 4235' indicates presence of salt. No evaporite seen in samples.

SECTION III - ENGINEERING SUMMARY

(a) DRILL STEM TESTS

1A	1451-1539	Misrun. No Packer Seats
1B	1451-1539	Misrun. No Packer Seats
1C	1426-1539	Misrun. No Packer Seats
1D	1481-1539	T.O. 60 min. Recovered 960' (6.2 Bbls) Fresh Water IFP ~~252~~ 253 FFP ~~430~~ 422 ISIP ~~430/19~~ 434/14 min. FSIP 430/60 451 min.

(b) CASING RECORD

Casing Size Inches	Weight Lbs/Ft.	Grade	Brand	New Or Used	Depth	Sacks of Cement
24	Conductor	Pipe Set at 26				50
9-5/8	36	J-55	Domestic	New	748	550 sax + 2% $CaCl_2$

(c) BIT RECORD

No.	Size	Type	Depth Out	Feet	Hours Run
1A	13-1/4	S3	540	540	20
2A	13-1/4	S3	748	208	14-1/2
1	6-3/4	S3	1015	267	13-1/2
2	6-3/4	OSC3	1447	432	13-1/2
3	6-3/4	YT3	1708	261	10-1/4
4	6-3/4	OSC1G	2093	385	16
5	6-3/4	HT	2286	193	17-1/2
6	6-3/4	S6	2377	91	5-3/4
7	6-3/4	M4N	2643	266	17
8	6-3/4	HW	2831	189	14-1/2
9	6-3/4	S4	3084	253	17
10	6-3/4	HW	3233	149	9-1/2
11A	6-3/4	Core Bit	3355	122	
11	6-3/4	YTL	3454	99	14-1/2
12	6-3/4	S4	3608	154	15-1/4
13	6-3/4	YT1	3888	280	17-1/4
14	6-3/4	YT1	4052	164	14-3/4
15	6-3/4	M4N	4242	190	12
16	6-3/4	M4N	4242	0	

(d) MUD RECORD

Gel	77900#
Caustic	1736#
Quick Vis	4 gals.
Bicarb	300#
Peltex	6100#
Super Lig	550#

Lignite	1300#
Soda Ash	300#
CMC	200#
D. Foam	10 gals.
Weight Material	170 sx.

(e) DEVIATION RECORD

Depth	Deviation	Depth	Deviation
80	1/2°	1900	4°
150	1/2°	2020	4°
240	1/2°	2140	3-3/4°
330	1/4°	2260	5°
450	3/4°	2320	5-1/2°
519	1-1/4°	2390	5-1/4°
550	1-1/4°	2515	4°
610	1-1/2°	2640	4-1/4°
630	1°	2740	8°
660	7/8°	2775	8°
690	1-1/2°	2840	9°
720	1-1/8°	2895	8°
790	3/4°	2955	7-3/4°
890	1-1/2°	3020	7-3/4°
910	2°	3084	8°
940	2°	3135	Misrun
1030	2°	3165	8°
1100	2-1/4°	3290	6°
1160	2-1/4°	3350	7-1/2°
1220	2-1/2°	3440	7°
1280	3°	3535	8°
1340	3°	3608	8°
1430	3°	3720	9°
1570	3-1/2°	3888	10-3/4°
1685	4°	3980	9-1/2°
1780	4-1/4°	4050	8°

ABANDONMENT PLUGS

Plug No. 1 4030-3830 with 140 sacks cement
Plug No. 2 2340-2200 with 60 sacks cement, felt at 2208
Plug No. 3 795 -600 with 70 sacks cement + 2% $CaCl_2$, felt at 570

Ran 20 sacks cement in top of 9-5/8" casing.
Cut casing off at ground level and welded on steel plate with well name.

LOST CIRCULATION ZONES

None

SECTION IV - LOG SUMMARY

TYPE	INTERVAL
Sonic Gamma Ray	4042 - Surface
Induction Electric	4041 - 745
Micro Log Caliper	4043 - 745
Velocity Survey	4 shots 4050, 3500, 2289, 1100
Dip Meter	4000 - 3800
	3650 - 3400
	2400 - 1400

SECTION V - ANALYSIS

(a) Core Analysis

See Example Description

(b) Water Analysis

Yes - Forwarded to Board

(c) Gas Analysis

None

(d) Oil Analysis

None

T.G. EASTLAND ——— testers ltd.

N.W. No. 4 NORTH • EDMONTON, ALBERTA

SERVICE REPORT

TEST No. DST #3
Date Dec. 20/64
Ticket No. 7084

Well Name: SHELL REEFLE RIVER L-4 L.S.D. 64°-23'-37"-N.L.

Formation Tested:

TYPE OF TEST: ☐ Standard ☐ Quala ☐ Straddle ☐ Casing

From: 1461 To: 1539 Tail Pipe:

Main Hole Depth: 1539 Rat Hole Depth:

Hole Size Tested: 6¼" Main Hole Rat Hole

Casing Depth: 1451 Size: 7 5/8" Weight:

Type of Drill Pipe: 3½ Tubing:

Type of Packer(s): Conventional

Size of Rubber Element(s): 6"

REMARKS: Packer seat failed. Mis-run.

TEST RESULT DATA

Started in Hole: 5:00 AM Tool Opened:

Initial Shut-in: Min. Flow Period: Min.

Final Shut-in: Min. Out of Hole:

Choke Bottom:

Choke Surface:

Flow Rate Mcf/day Flare Line Riser:

Mcf/day measured by:

Fluid Cushion: Max. Well Temp.: F

DRLG. FLUID: Viscosity: Weight: W.L.

FIELD (est.) CORRECTED

Initial Hydrostatic Pressure psig

Shut-In Press. #1 After Min. psig

Initial Flowing Pressure psig

Max. Flowing Pressure psig

Shut-In Press. #2 After Min. psig

FLUID RECOVERY: 430 ft mud

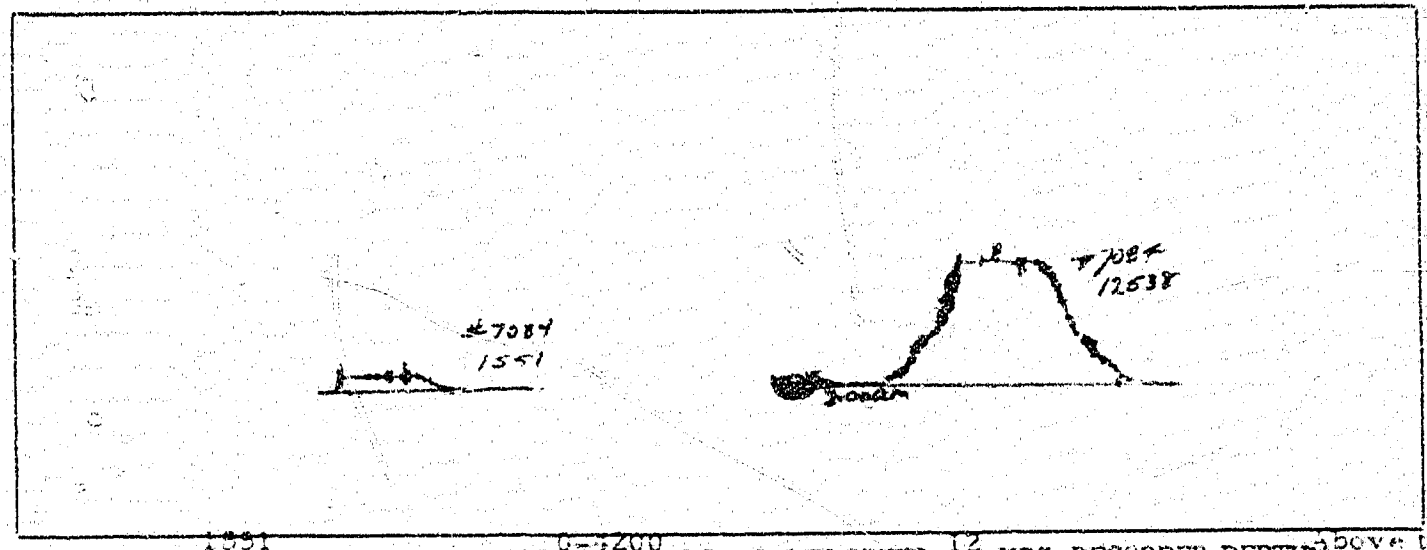
PRESENT DURING TEST

Your Representative: E. Ettinger

Our Operator: H. Buchan

Toolpusher: –

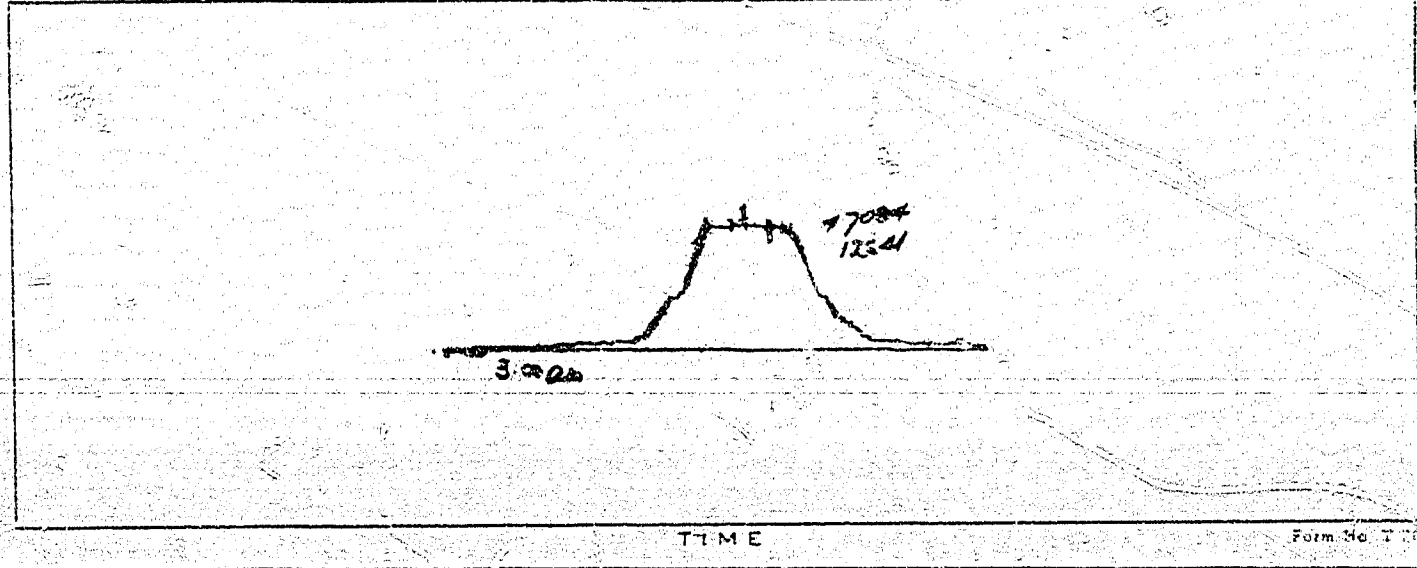
Drlg. Contractor: Regent Rig #21



RECORDER No. 1951 ELEMENT RANGE: 0-5200 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 2 above tool

RECORDER No. 12538 ELEMENT RANGE: 0-2500 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH:

RECORDER No. 12541 ELEMENT RANGE: 0-2700 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH:



Form No. T-[illegible]

T.G. EASTLAND — testers ltd.

BR. NO. 5 NORTH • EDMONTON, ALBERTA

TEST No. One (1)
Date Dec. 20/66
Ticket No. 7085

SERVICE REPORT

Well Name: SHELL KEELE RIVER I-4 L.S.D. 04-23-37-W.4.
Formation Tested
TYPE OF TEST: ☐ Standard ☒ Dual ☐ Straddle ☐ Casing
From: 1432' To: 1539' Tail Pipe: 1081'
Main Hole Depth: Rat Hole Depth:
Hole Size Tested: 5½" Main Hole Rat Hole
Casing Depth: Size: Weight:
Type of Drill Pipe: 3½ XH Tubing:
Type of Packer(s): Conventional
Size of Rubber Element(s): 5"
REMARKS: Packer seat failed. Mis-run.

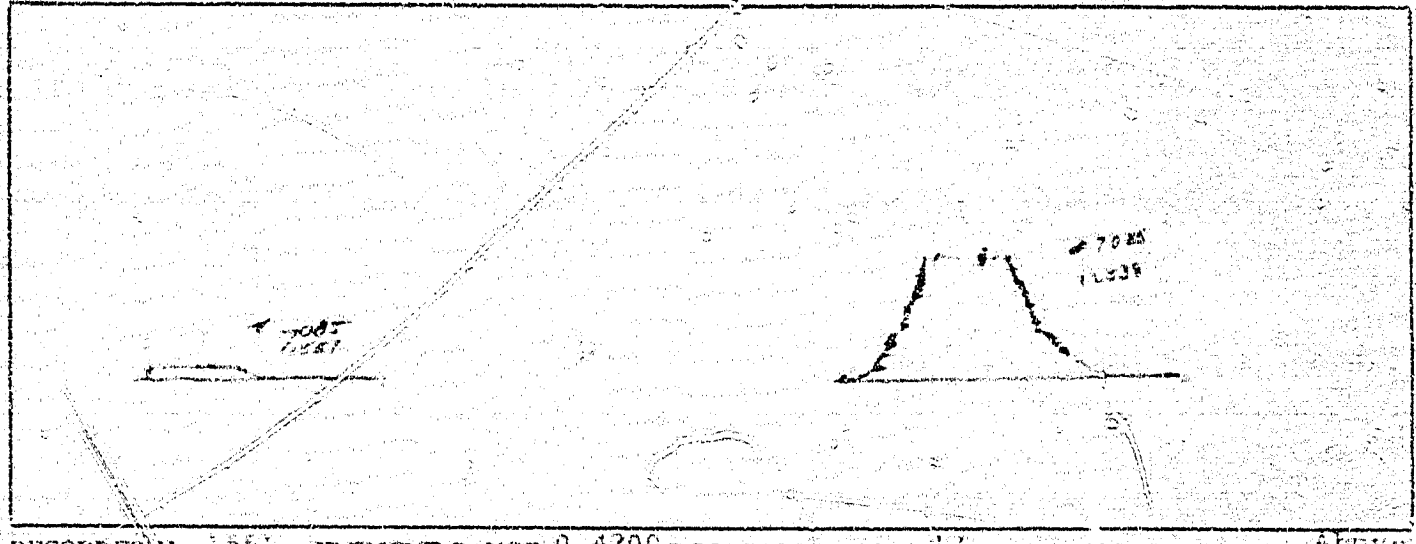
TEST RESULT DATA

Started in Hole: Test Opened
Initial Shut-in: Min. Flow Period: Min.
Final Shut-in: Min. Out of Hole
Choke Bottom:
Choke Surface:
Flow Rate: Mcf/day Flare Line Riser
Mcf/day measured by:
Fluid Cushion: Max. Well Temp: F
DRLG. FLUID: Viscosity: Weight: W.L.
FIELD (est.) CORRECTED

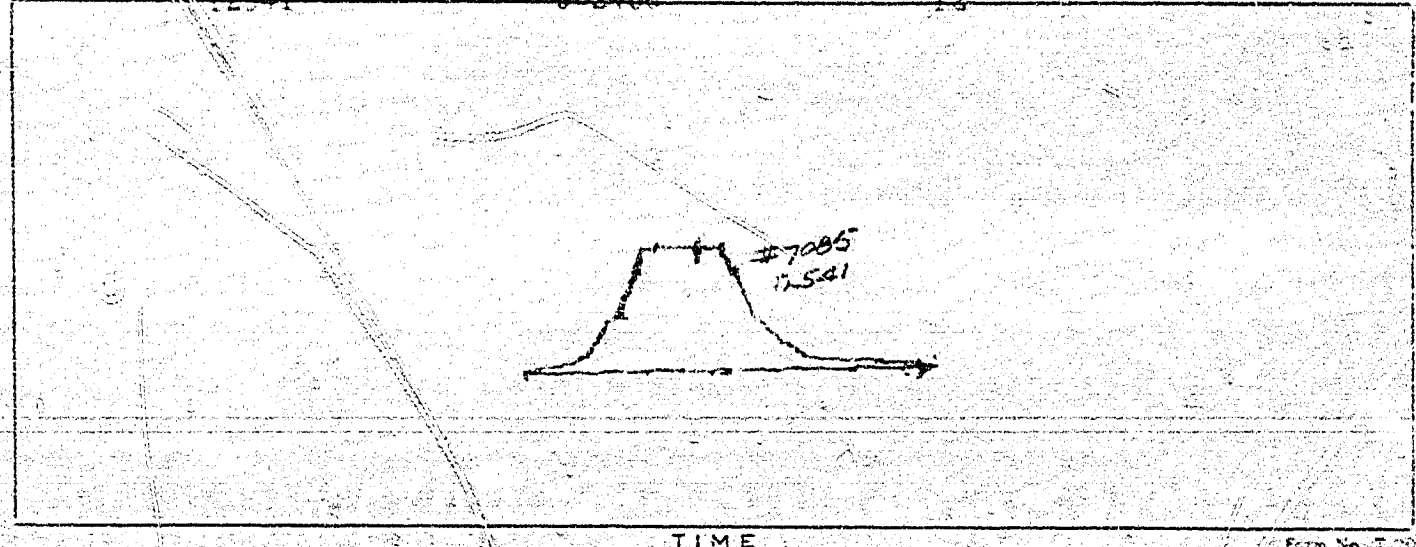
Initial Hydrostatic Pressure psig
Shut-In Press. #1 After Min. psig
Initial Flowing Pressure psig
Max. Flowing Pressure psig
Shut-In Press. #2 After Min. psig
FLUID RECOVERY 360 ft mud

PRESENT DURING TEST

Your Representative E. Ettinger
Our Operator E. Buchan
Toolpusher
Drlg. Contractor Regent Rig #21



RECORDER No. 1251 ELEMENT RANGE: 0-4200 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: Above (1081)
RECORDER No. 12538 ELEMENT RANGE: 0-2600 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH:
~~12541~~ ~~0-3760~~ ~~12~~



Form No. T-20

T.G. EASTLAND testers ltd.

EDMONTON, ALBERTA

SERVICE REPORT

TEST No. One (1)
Date Dec. 21/64
Ticket No. 7086

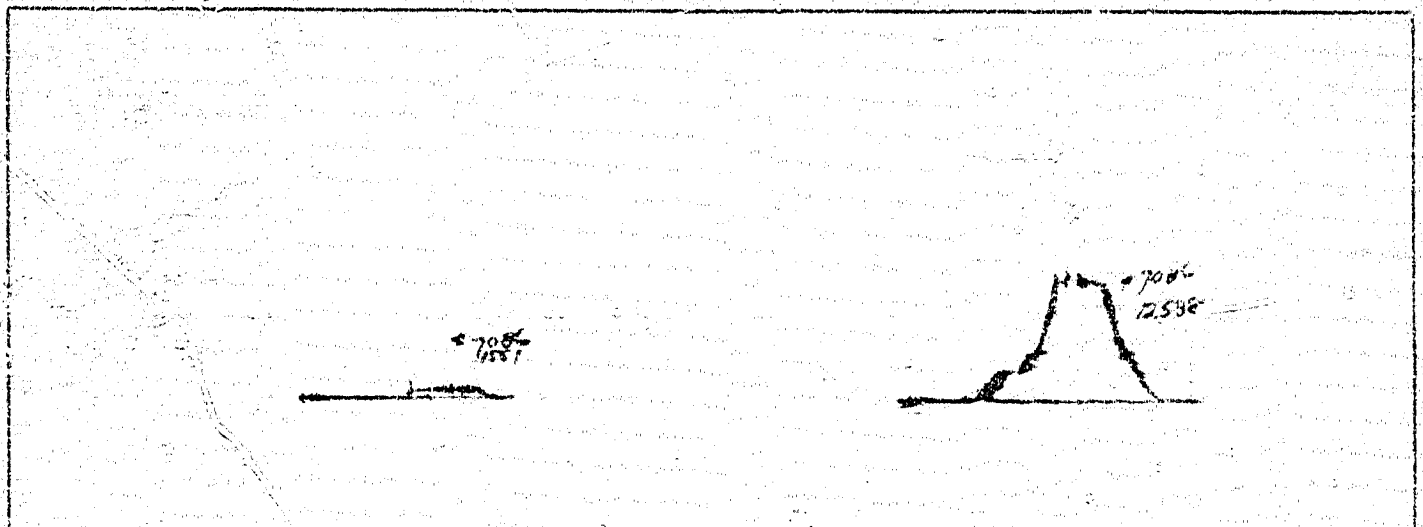
Well Name SHELL KEELE RIVER 1-4 LSD 04-23-27-W.5.
Formation Tested
TYPE OF TEST: ☐ Standard ☒ Drill ☐ Straddle ☐ Casing
From 14,261' To 15,391' Tail Pipe 113'
Main Hole Depth Rat Hole Depth
Hole Size Tested Main Hole Rat Hole
Casing Depth Size Weight
Type of Drill Pipe 3½ FH Tubing
Type of Packer(s) Conventional
Size of Rubber Element(s) 6"
REMARKS Packer seat failed. Misrun.

TEST RESULT DATA

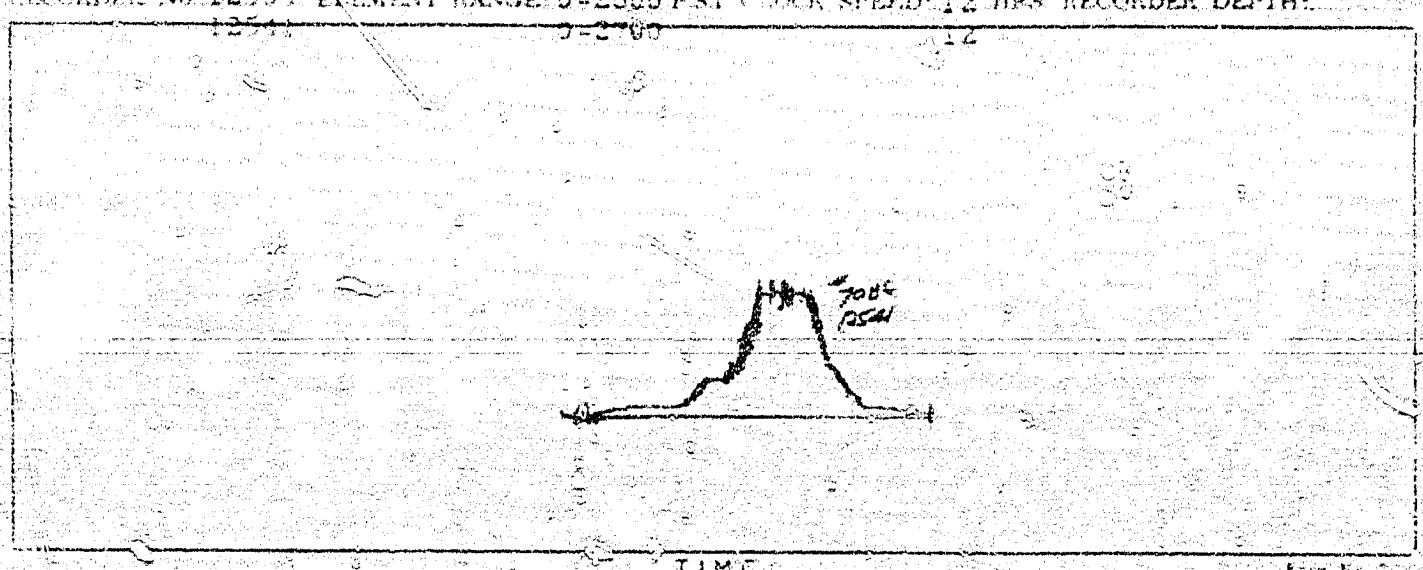
Started in Hole Tool Opened
Initial Shut-in Min. Flow Period Min.
Final Shut-in Min. Out of Hole
Choke Bottom
Choke Surface
Flow Rate Mcf/day Flare Line Riser
Mcf/day measured by
Fluid Cushion Max. Well Temp. °F
DRLG. FLUID: Viscosity Weight W.L.
FIELD (esc.) CORRECTED
Initial Hydrostatic Pressure psig
Shut-In Press. ☐ After Min. psig
Initial Flowing Pressure psig
Max. Flowing Pressure psig
Shut-In Press. ☐ After Min. psig
FLUID RECOVERY: 250 ft mud

PRESENT DURING TEST

Your Representative E. Ettinger
Our Engineer B. Buchan
Toolpusher
Drlg. Contractor Regent Rig #21



RECORDER No. 1551 ELEMENT RANGE: 0-3200 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: Above Tool
RECORDER No. 1252 ELEMENT RANGE: 0-2500 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH:



Form No. 7

T.G. EASTLAND ——— testers ltd.

EDMONTON, ALBERTA

TEST No. One (d)
Date Dec. 21/64
Ticket No. 7087

SERVICE REPORT

Well Name: SHELL KEELE RIVER L-4 LSD 64°-23'-37"-N.L.

Formation Tested:

TYPE OF TEST: ☐ Standard ☒ Drill ☐ Straddle ☐ Casing

From: 1431' To: 1539' Tail Pipe: 50'

Main Hole Depth: 1539' Rat Hole Depth:

Hole Size Tested: 6¼" Main Hole Rat Hole

Casing Depth: Size: Weight:

Type of Drill Pipe: 3½" FH Tubing:

Type of Packer(s): Conventional

Size of Rubber Element(s): 6"

REMARKS: Good initial puff. Fair steady blow. Dead in 50 minutes.

TEST RESULT DATA

Started in Hole: - Test Opened: 4:50 a.m.

Initial Shut-in: 14 Min. Flow Period: 60 Min.

Final Shut-in: 60 Min. Out of Hole: -

Choke Bottom: ¼" - 3/8" Choke Surface: ¾"

Flow Rate: Mcf/day Flare Line Riser: 2"

Mcf/day measured by:

Fluid Cushion: Max. Well Temp: 62 (est.)

DRLG. FLUID Viscosity: 45 Weight: 9.1 W.L.

FIELD (psig)		CORRECTED (psig)
774	Initial Hydrostatic Pressure	714
430	Shut-In Press. #1 After 14 Min.	496
258	Initial Flowing Pressure	253
430	Max. Flowing Pressure	426
430	Shut-In Press. #2 After 60 Min.	431

FLUID RECOVERY: 270 ft fresh water

Ran 17 drill collars above tool, 4¾" OD, 2¼" ID

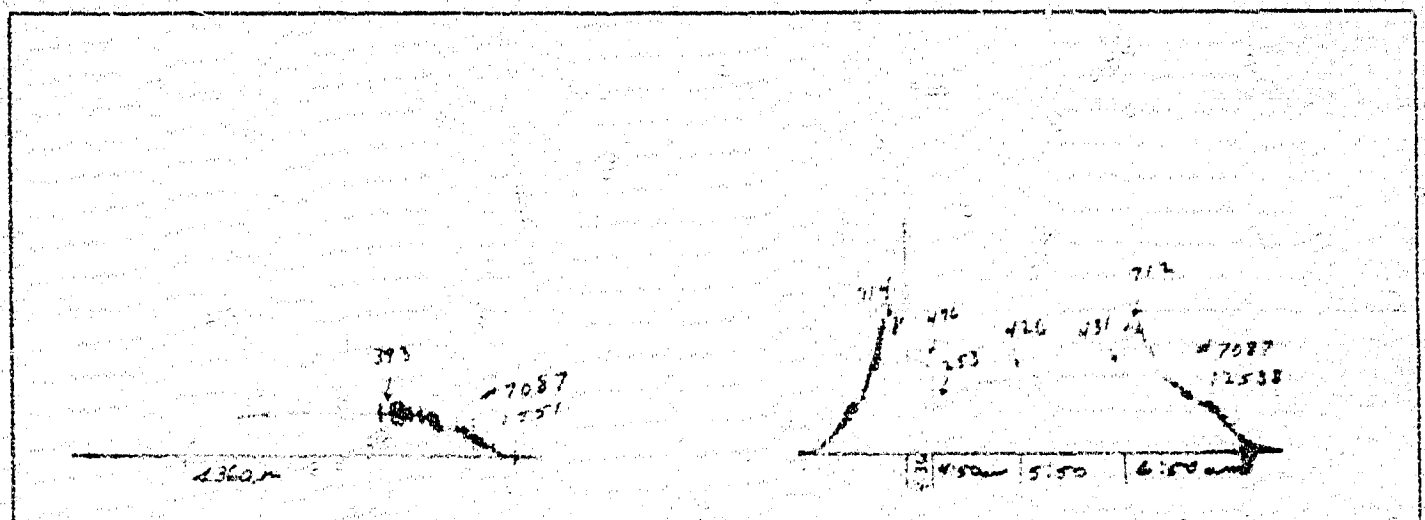
PRESENT DURING TEST

Your Representative: E. Ettinger

Our Operator: B. Buchan

Toolpusher:

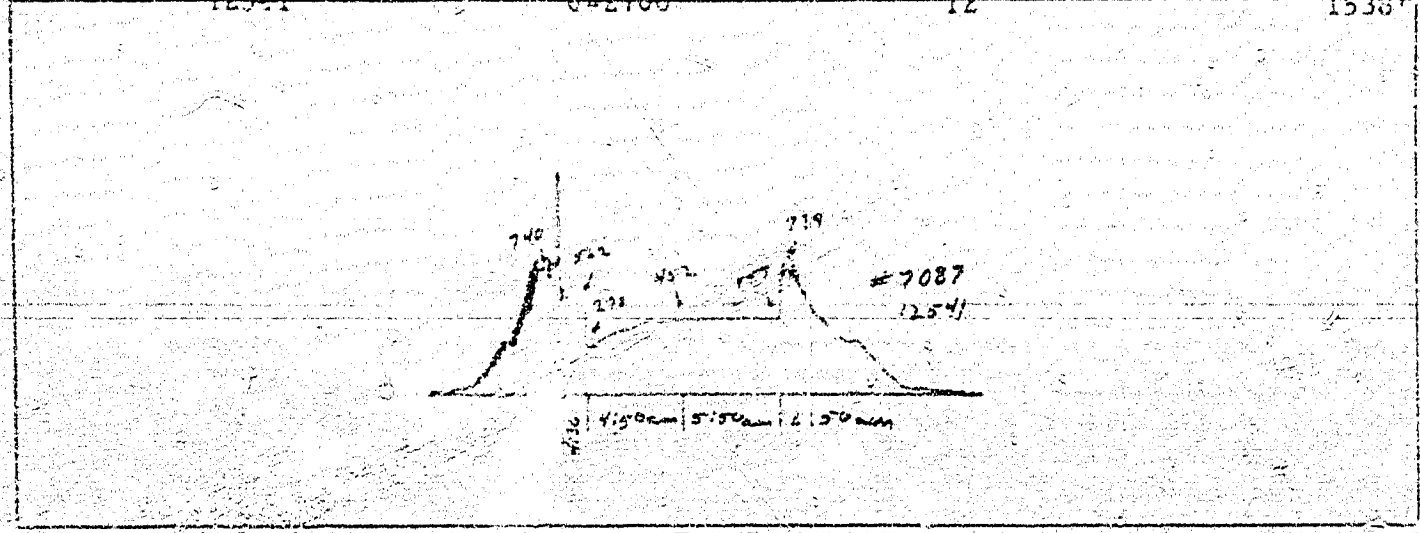
Drlg. Contractor: Regent Rig #21



RECORDER No. 1551 ELEMENT RANGE: 0-4200 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: Above tool

RECORDER No. 12538 ELEMENT RANGE: 0-2800 P.S.I. CLOCK SPEED: 12 HRS. RECORDER DEPTH: 1437'

~~12541~~ ~~0-2700~~ ~~12~~ ~~1530'~~



Form No. T.G.

T. G. EASTLAND TESTERS LTD.

DRILL STEM TEST PRESSURE REPORT

Well Name: Shell Keele River L-4 64°-23'-37"-N.L.

DST #1,4 Date: Dec. 21, 1964 Ticket No. 7087

Interval: 1481' to 1559' KB Gauge No. 12538 Depth: 1487' KB

B.H. Temperature: 82°F (estimated) Cal. Equation P_c = 1301.44-3.45

	Time	T mins.	Press. psig
Initial Hydrostatic			714
Initial Shut-in	4:36am	0	513
	4:39	3	535
	4:42	6	525
	4:45	9	507
	4:48	12	500
	4:50	14	496
Flowing Pressure			253
			426
Final Shut-in	5:50 am	0	426
	5:53	3	431
	5:56	6	431
	5:59	9	433
	6:02	12	432
	6:50	60	450
Final Hydrostatic			712

CP 99-A

SHELL OIL COMPANY OF CANADA, LIMITED
PRODUCTION LABORATORY WATER ANALYSIS REPORT
CALGARY, ALBERTA

Laboratory Number 383
WATER

Sample Received DECEMBER 23, 1964
Sample Analyzed DECEMBER 31, 1964
Results Reported JANUARY 4, 1964

SAMPLE DESCRIPTION

64° 23' 37" N
Company SHELL CANADA LIMITED Well HEELE RIVER L-4 125° 01' 43.0" W
Field Lsd Sec Twp Rge W
Sample obtained from (line, tubing, etc) SAMPLE # 3692
Pressure at point of sampling 430 psig
gas bomb psig
Temperature at point of sampling 56 °F
separator °F
Well K.B. 862 G. L. 848 est.
Zone
Formation CRETACEOUS
Method of production (DST, pump, flowing, etc.) DST
DST interval 1539 - 1481 Recovery 960' SLIGHTLY GAS CONTAMINATED FRESH WATER
Perforations or open hole interval 1482 - 1502 T.D. 1539
Sampled by HARVE LYON Date DECEMBER 24, 1964 Time

CHEMICAL AND PHYSICAL PROPERTIES

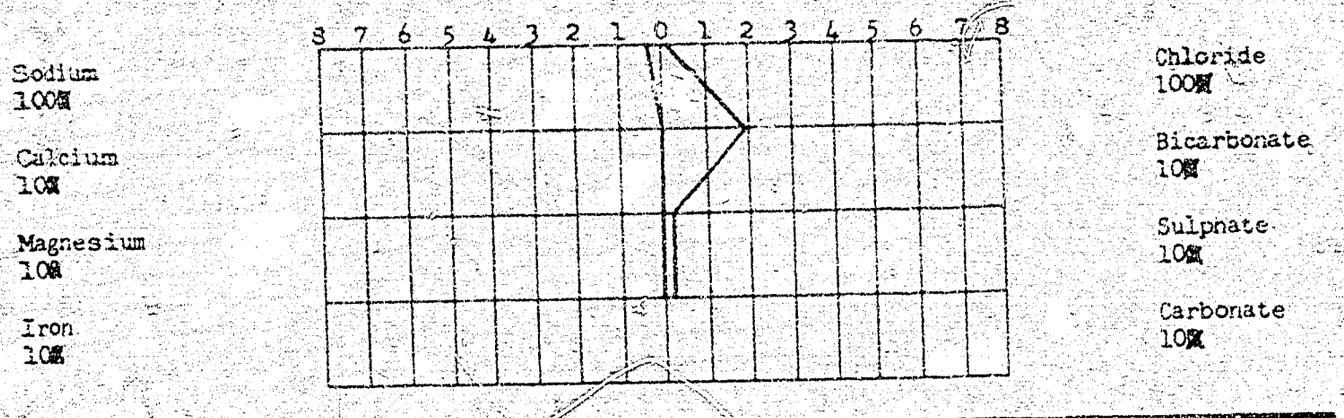
Specific Gravity at 60°F ~~20/20° C~~ 1.0025 pH 8.8 Resistivity 4.0 ohm-m at 60°F

Constituent	Milligrams per liter mg/l	Reaction Coefficient	Reaction Value
Total Iron - Fe^3 and Fe^2	0	0.03582	0
Aluminum - Al^3	0	0.11070	0
Calcium - Ca^2	= < 5	0.04990	
Magnesium - Mg^2	OR = < 3	0.08224	0
Sodium (including Potassium) - Calc.	782	0.04348	34
Positive Sub-total	≈ 786		34
Bicarbonate - HCO_3	1,152	0.01639	19
Carbonate - CO_3	60	0.03333	2
Sulfate - SO_4 POSSIBLY HIGH	74	0.02083	2
Chloride - Cl	388	0.02820	11
Sulfide - S	0	0.06237	0
Negative Sub-total	1,675		34
Grand Total	≈ 2,461		

Remarks: FILTRATE VERY DARK BROWN — SLIGHTLY "MURKY" — TREATED WITH CHARCOAL TO OBTAIN END POINTS FOR Cl, Ca AND Mg

± REACTION VALUE =

(Milliequivalents per Liter)



cc: 15-1100
Prod. Dept., Calgary Area 1
Division Office EXPLOIT. 5
Prod. Laboratory, Calgary Area 2

Chemist N.L. Johnson

REPORT OF 1964-1965 EXPLORATORY DRILLING IN THE INTERMONTANE BELT, MACKENZIE-PEDDIE AREA, NORTHWEST TERRITORIES

SHELL, ESSO H.T.P.C. L-A

SHELL CANADA LIMITED
NORTHERN DIVISION EXPLORATION
EDMONTON, ALBERTA APRIL, 1965

REPORT OF 1964-1965 EXPLORATORY DRILLING IN THE

INTERMONTANE BELT, WRIGLEY-REDSTONE AREA,

NORTHWEST TERRITORIES

SHELL, KESKIA RIVER I-L

SHELL CANADA LIMITED
NORTHERN DIVISION EXPLORATION
EDMONTON, ALBERTA APRIL, 1965

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LIST OF PLATS

Plat No. 1	Access Road and Location Plat, Intermontane Area, Scale: 1"=32 Miles	Follows Page 8

LIST OF ENCLOSURES

Mechanical Logs

Induction Electrical Log
Sonic-Gamma Ray
Microlog Caliper
Continuous Dipmeter

LIST OF PHOTOGRAPHS

Photos No. 1 & 2	Docking camp and rig from River-Between-Two-Mountains at Keele River.
Photo No. 3	Unloading barge at Keele River.
Photo No. 4	Fork lift being used for unloading casing from barge at Keele River.
Photo No. 5	General view of storage and camp area on bank of Mackenzie at Keele River.
Photo No. 6	Fuel storage tanks, Keele River.
Photo No. 7	Specially constructed sled for moving equipment and camp to drilling site.
Photo No. 8	Rigging up at Keele River.
Photo No. 9	Regent rig drilling Keele River L-4.

REPORT OF 1964-1965 EXPLORATORY DRILLING IN THE INTERMONTANE BELT, WRIGLEY-REDSTONE AREA, NORTHWEST TERRITORIES

SHELL, KEELE RIVER L-4

Permit No. 3418

The following is in partial fulfillment of Section 45 of the Canada Oil and Gas Land Regulations.

INTRODUCTION

Shell, Keele River L-4 (64°23'37"N, 125°01'43"W) was the first of three tests to be drilled by Shell Canada in the 1964-65 season as part of a major drilling program undertaken in the Intermontane belt between the Franklin and Mackenzie Mountains. The test was located, after an intensive seismic program over the 1963-64 winter, to evaluate acreage and to meet a work bonus commitment on one of the first blocks of acreage in the Territories to be sold under such terms by the Federal Government.

The test was intended as a shallow one, although it was anticipated to encounter section low in the stratigraphic column.

An immense amount of equipment and supplies was moved into the area by highway, barge and winter road to supply and support the overall drilling program, but the whole operational problem was alleviated somewhat since the 6500' rig employed in the 1963-64 Blackwater area drilling program had been stacked by the Mackenzie River at River-Between-Two-Mountains. This rig was of adequate capacity to drill the Keele River test, but rig and

equipment, however, had still to be moved downstream on the Mackenzie River by barge before the end of the barge season and stacked at the mouth of the Keele River, in preparation for move in to the location. Tying in the shipping of the shallow rig downstream and the overall move-in of supplies and equipment for each of the three locations to be drilled required some very careful operational planning and timing.

With the beginning of freeze-up in November, a start was made using wide-pad cats as well as conventional equipment on the construction of a winter trail from the mouth of the Keele River to the location, some 10 miles to the west. Since there was no pressing problem as far as the timing of the spud date of the shallow test was concerned, an experimental method of moving in the rig and associated heavy equipment was tried out. Rather than using large oil field trucks, the equipment was loaded on bob sleds and towed in by wide pad TD 15 crawler tractors. Only one 5 ton truck was used in the Keele River operation. Although slower than conventional methods, this technique proved quite successful.

Shell, Keele River L-4

The well was spudded on December 10 and abandoned at a total depth of 4235' in the Cambrian, after drilling through a section of Cretaceous clastics overlying Cambrian shales.

The Cretaceous, which is poorly exposed in the outcrop in the vicinity of the Keele River test, was found to be a sand/shale section. The interval 1470 to 1570 is a fine grained loosely consolidated sandstone with good visible porosity and no shows. A drill stem test from 1481 to 1539 in

this zone recovered 960 feet of fresh water. The remainder of the Cretaceous section is largely silty shale, but for a basal sandy zone in which a 3-foot sand with poor visible porosity is developed.

The Cretaceous gives way to greenish shales with interbeds of tight cherty dolomite in the upper part. A core from 3233-3259 taken in the green shale yielded identifiable Middle Cambrian trilobites.

The test was abandoned at 4235' in salt, after drilling shale with interbedded salt and anhydrite from 4085 feet.

Induction E-log, sonic-gamma ray, microlog caliper, and continuous dipmeter logs were run. Because of severe hole conditions, brought about by the presence of salt and anhydrite near bottom hole, the logs were not run to T.D. The test was plugged and abandoned on January 13, 1965.

The following formations were encountered:

Unconsolidated sand and gravel	0 - 160	
Cretaceous	160	(-702)
Upper(?) & Middle Cambrian	4290	(-4128)
T.D.	4235	

Drillstem Tests:

DST #1A	4451-4500	Misrun
DST #1B	4431-4500	Misrun
DST #1	4481-4539	TO 60 mins, SI 60-15, Rec. 960' fresh water.

OPERATIONS

A. Rig

As indicated above, the rig used for the Keele River test was the same as that used for the 1963-64 Blackwater area drilling program. This is a 6500' capacity rotary rig, contracted from Regent Drilling, Edmonton. Standard equipment was used throughout, with the modifications necessary for operation in the severe winter temperatures experienced in the north. Accessory equipment included a geolograph and continuous gas analyser.

The fuel supply was stored in large tanks at the site, and was hauled in by cats and sleds from the stockpile at the mouth of the Keele River. The balloon container system was again successfully put to use for transportation of fuel. Water for the rig and camp was obtained from a small lake to the east of the location, and a small heated shack was used to keep the water hole open and prevent the pump from freezing up. Some minor difficulty arose from high $CaSO_4$ content in the water. The water lines had to be heavily insulated and in some cases were heated by electric heating tapes. A heated garage was erected for repair and maintenance of equipment.

B. Camp and Personnel

The usual bush camp of aluminum trailers on skids was used, with sleeping accommodation, cookhouse and kitchen, and utility quarters. Diesel generators provided electrical power, and a centrally located gravity fed heating fuel supply was set up for stoves in the living trailers. Although convenient, this innovation was subject to failure at low temperatures, and feed pipes had to be protected by electrical heating tape.

Personnel list was as follows:

1) Two rig crews of five men working a 12 hour shift, rotating every 20 days, with 10 days off.
2) Rig mechanic.
3) Regent toolpush.
4) Shell toolpush.
5) Cook, bull cook and camp attendant.
6) Cat skinners.
7) Aircrew for supporting aircraft.
8) Shell engineer and geologist.

C. Aircraft Support

Air support is invaluable and very necessary in such remote areas. Initially a strip was constructed by the mouth of the Keele River on which the company owned DC 3 could land, and the company Otter used the same lake as that used for water supply.

Generally speaking, the DC 3 was used to transport bulky equipment, men and supplies to the strip at the mouth of the Keele River and either the Otter used as ferry aircraft to the wellsite, or vehicular transportation used on the access road.

Although there were periods of high winds which prevented flying, the prime factor restricting winter flying in the north is the few short hours of daylight. Ground fog of fine frozen ice crystals was quite common.

D. Vehicles

3 caterpillar tractors
1 5-ton truck
Bob sleds
Pole trailer
2 pick-ups

Trucks were supplied by Fleetway Trucking, Edmonton, cats and sleds and one pick-up by Staheli Construction, Edmonton. Shell had a pick-up truck on location.

As mentioned above, after the access road and the location had been prepared, the bulk of the heavy equipment was moved in by cats pulling sled trains. The 5-ton International truck with pole trailer was used to move camp and as water truck. Fuel was hauled in by caterpillar tractor. From the stockpile by the mouth of the Keele River to the location was only about ten miles and no difficulty was encountered in keeping the road in good order because of very low precipitation.

The light utility pick-ups proved their value by serving as transport for personnel and light loads between the well site and the DC 3 airstrip near the Mackenzie River.

E. Communications

Two radio systems were employed, one to provide day to day communication between the camp and headquarters in Edmonton, and the second to allow contact with the air support craft.

a) A single side bank using three frequencies available to the oil industry worked directly with the base station in Edmonton. A fourth channel on a common carrier frequency was used for contact with the Fort Nelson, B.C., and Whitehorse, Yukon Territory, network.

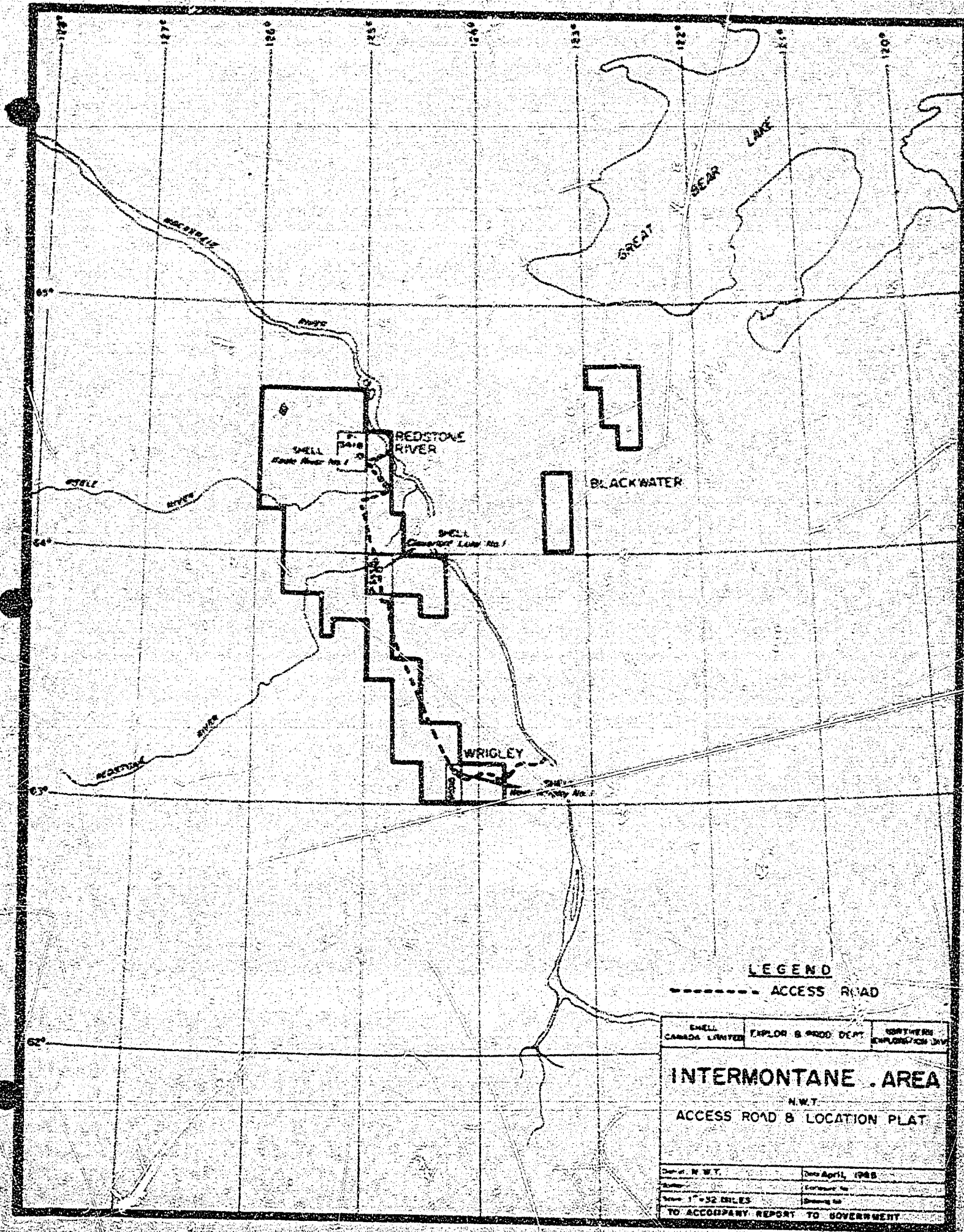
The three oil industry frequencies used for direct contact with Edmonton were 6 megs., 9 megs., and 13 megs. Of these three, the 9 meg. frequency was found to be the most reliable at the range which we were working, and even considering the variability of quality of radio communication with the far north especially in the winter months, it is estimated the system employed provided serviceable readable communication 60% to 70% of the time in use. This represents some improvement over the reliability of radio contact with the drilling camps working in the Blackwater area over the 1963-64 winter, thus justifying improvements made to the beam antenna at the base radio station in Edmonton. At the drilling camp improvements were also carried out by incorporating the beam antenna into a crank-up mast on one of the larger trailers used for office quarters. The mast folded down along the top of the trailer for moving, and this system proved very convenient in terms of ease of handling and adjustment.

The fourth frequency on the single side band was a 5 meg. common carrier working through Fort Nelson and Whitehorse. This frequency was intended as a support or "back-up" for the oil industry frequencies, and its inclusion in the radio system proved very much worth-while, since on a number of occasions when direct contact could not be made with Edmonton, we were able to get out via the common carrier.

b) The second set in use was an H.F. A.M. radio largely used for air/ground service on 4300 KC, but also provided "back-up" service through the D.O.T. stations at Wrigley and Fort Simpson, plus the common carrier at Fort Nelson. As it transpired, there was little need to put this system

into operation for "back-up" thanks to the relatively good service we enjoyed from the S.S.B. system, so its main function was to provide air/ground contact.

In summary, the radio systems used proved adequate, and it was not found necessary to resort to have aircraft fly out to the nearest station to establish contact with Edmonton.


GREAT
SLAVE
LAKE
MACKENZIE
RIVER
REDSTONE
RIVER
BLACKWATER
WRIGLEY
MACKENZIE
RIVER
LEGEND
ACCESS ROAD
SHELL CANADA LIMITED
EXPLOR & PROD DEPT
NORTHERN EXPLORATION DIV
INTERMONTANE . AREA
N.W.T.
ACCESS ROAD & LOCATION PLAT
Date April, 1968
TO ACCOMPANY REPORT TO GOVERNMENT

PHOTOS

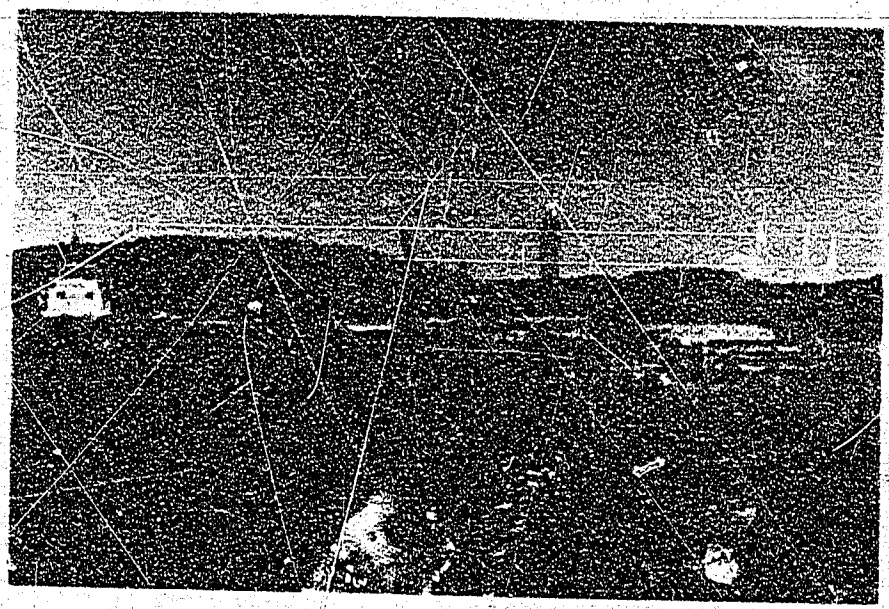


Photo No. 1.

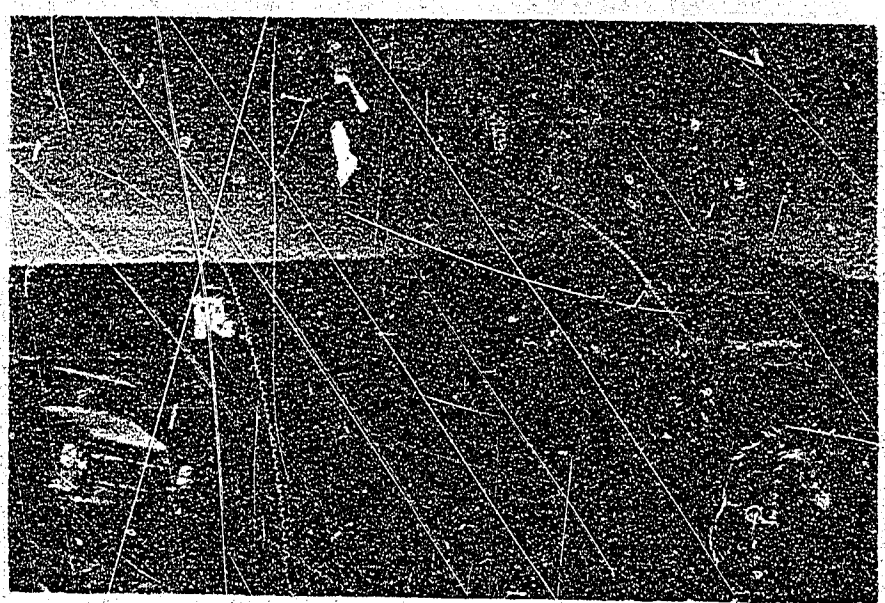
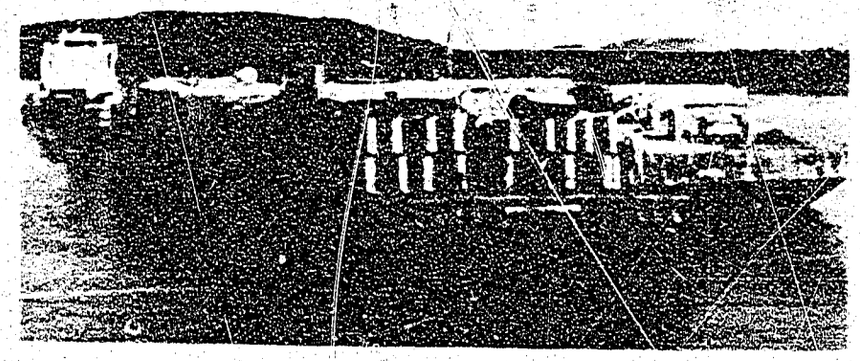
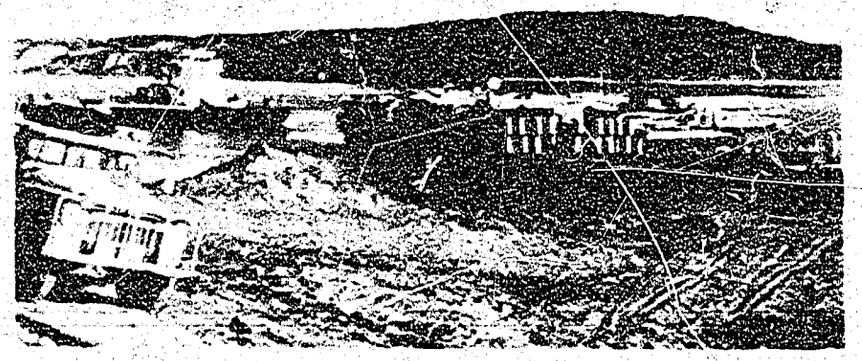


Photo No 2.

Docking camp and rig from River- Between Two Mountains at Keele River.





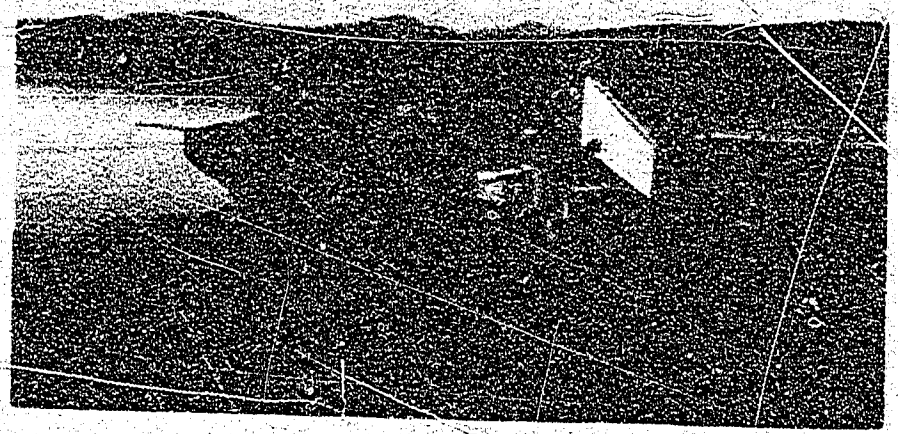


Photo No. 3

Unloading barge at Keele River.

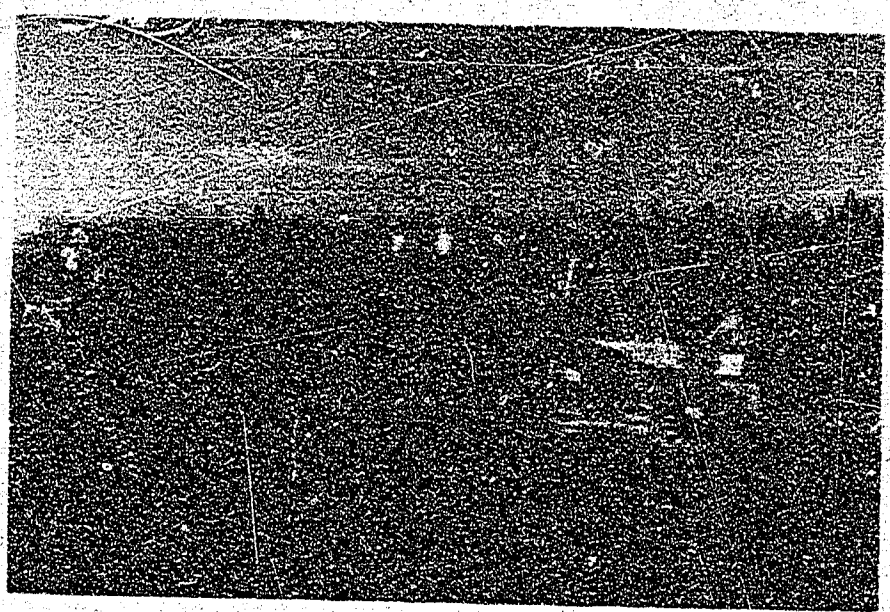
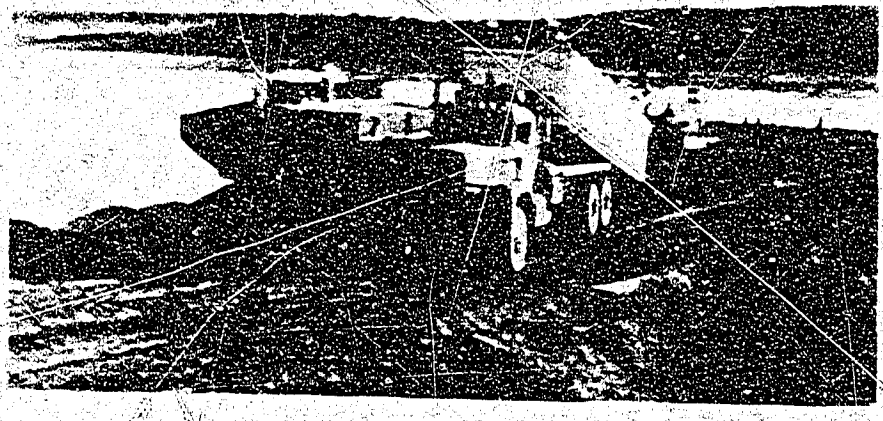
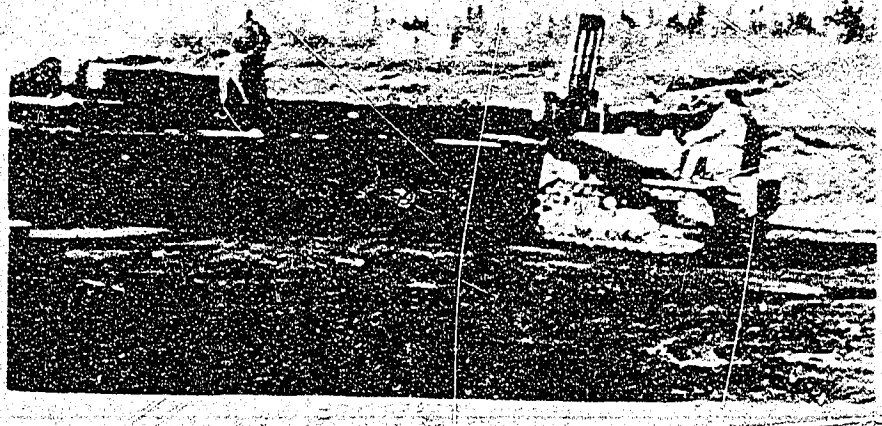


Photo No. 4

Fork lift being used for unloading casing from barge at Keele River.





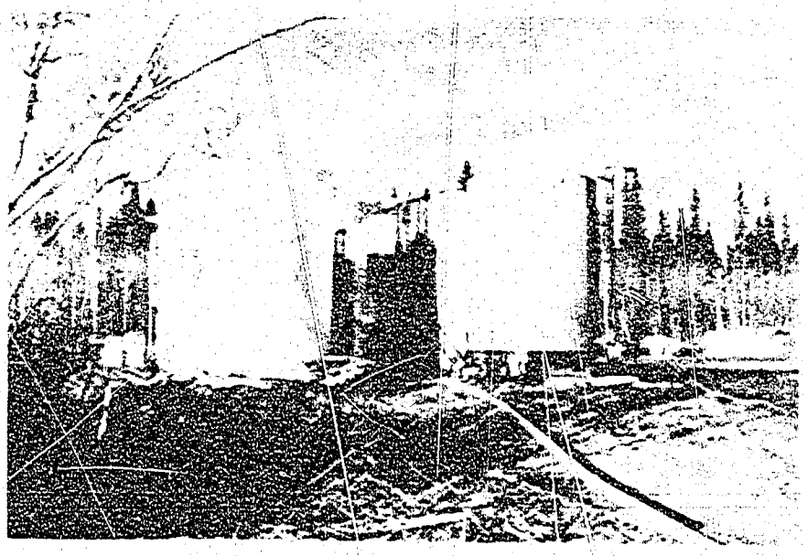


Photo No. 5

General view of storage and camp area on bank of Mackenzie at Keele River.

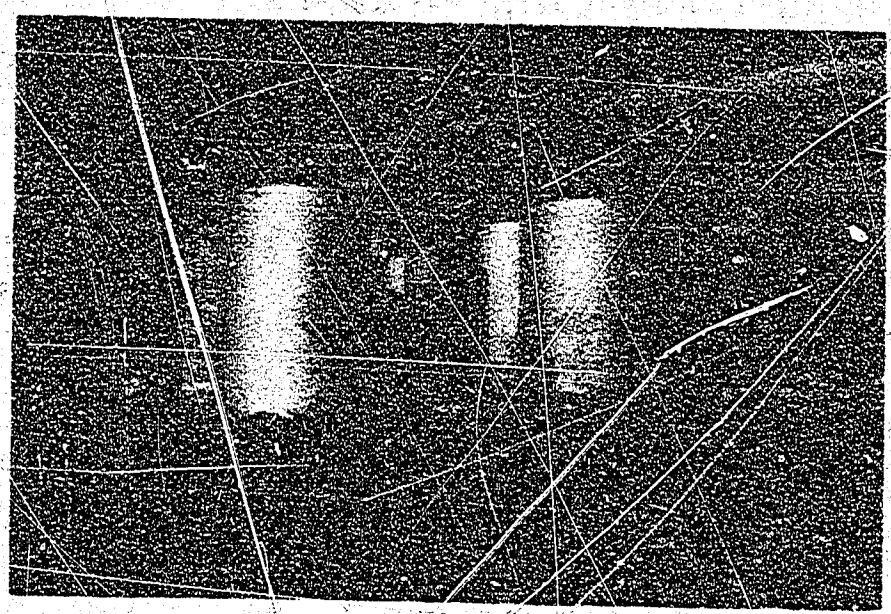


Photo No. 6

Fuel storage tanks, Keele River.

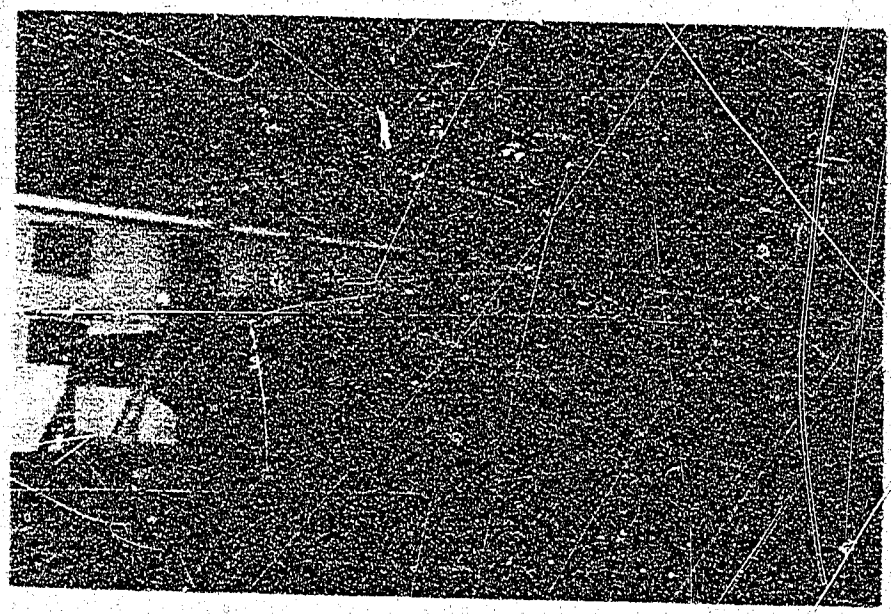


Photo No. 7

Specially constructed sled for moving equipment and camp to drilling site.

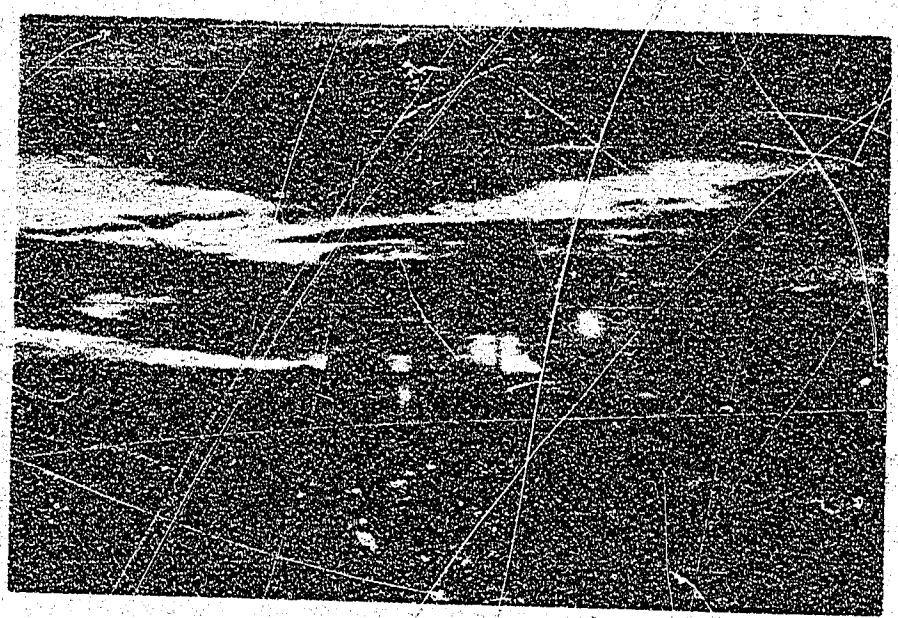
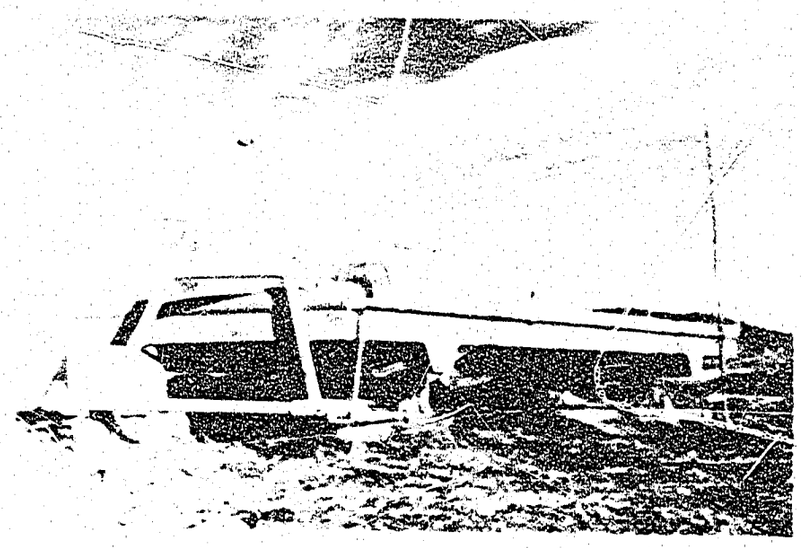


Photo No. 8

Rigging up at Keele River.



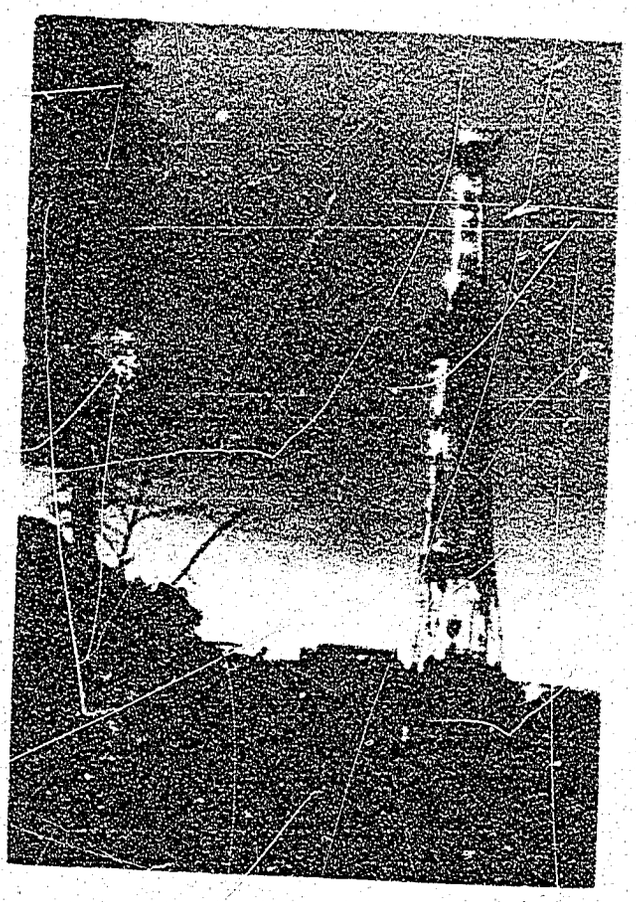


Photo No. 9

Regent rig drilling Keele River L-4.

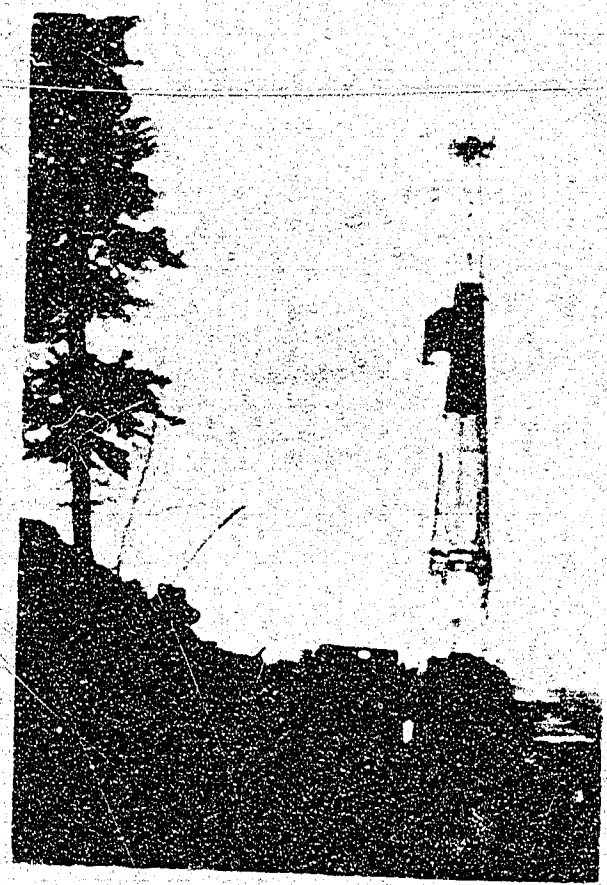


Photo No. 1

Recent Excavation Near Test Pit

DAILY WELL REPORT

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 38"

Longitude - 125° 01' 41"

Elevation of K.B.: 862

Date: December 10, 1965

	MORNING	DAY	EVENING
BIT - (1) Number -		1A	1A
(2) Size -		13¾	13¾
(3) Make -		Sec	Sec
(4) Type -		S3	S3
(5) Footage drilled -		148	161

MUD -

(1) Treatment:

MORNING - Gel. 15 sacks

DAY - Gel. 2000 #, Caustic 10#, Quick Vis. 2 Gal.

EVENING -

(2) Properties:	MORNING	DAY		EVENING	
(a) Weight -		8.5	8.8	8.9	8.9
(b) Viscosity -		50	50	52	58
(c) Water Loss -					
(d) Filter Cake -					
(e) P.H. -					

Deflection Surveys:	MORNING	DAY		EVENING	
DEPTH &		80	150	240	330
DEVIATION -		1/2	1/2	1/2	1/4

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 30.7"

Longitude - 125° 01' 41.3"

Elevation of K.B.: 862

Date: December 11, 1964

BIT -	MORNING	DAY		EVENING
(1) Number -	1A	1	2	2
(2) Size -	13¾	13¾		13¾
(3) Make -	Sec	Sec		Sec
(4) Type -	83	83		83
(5) Footage drilled -	170	65		104

MUD -

(1) Treatment:

MORNING - Caustic 50#, Quickvis 1 Gal.

DAY -

EVENING - Gel. 1200, Caustic 50#

(2) Properties:	MORNING	DAY	EVENING
(a) Weight -	8.9, 8.9, 8.9	9.5, 9.6, 9.6	9.7, 9.7, 9.7
(b) Viscosity -	48, 52, 58	50, 52, 52	48, 48, 51
(c) Water Loss -			
(d) Filter Cake -			
(e) P.H. -			

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -	450 519	589	610 630 660
DEVIATION -	¾ 1¼	1¼	1¼ 1 7/8

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 14

Location: Latitude - 64° 23' 59.37"

Longitude - 125° 01' 41.43"

Elevation of K.B.: 862

Date: December 12, 1964

	MORNING	DAY	EVENING
BIT - (1) Number -	2	2	
(2) Size -	13¾	13¾	
(3) Make -	Soc	Soc	
(4) Type -	83	83	
(5) Footage drilled -	58	2	

MUD -

(1) Treatment:

MORNING -

DAY -

EVENING -

(2) Properties:	MORNING	DAY	EVENING
(a) Weight -		9.6	
(b) Viscosity -		52	
(c) Water Loss -			
(d) Filter Cake -			
(e) P.H. -			

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -	690 730		
DEVIATION -	1¼ 1¼		

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Waiting on water. Rigging up cement unit.

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 14

Location: Latitude - 64° 23' 39"N

Longitude - 125° 01' 41"W

Elevation of K.B.: 862

Date: December 13, 1964

	MORNING	DAY	EVENING
BIT - (1) Number -			
(2) Size -			
(3) Make -			
(4) Type -			
(5) Footage drilled -			

MUD -

(1) Treatment:

MORNING -

DAY -

EVENING -

	MORNING	DAY	EVENING
(2) Properties:			
(a) Weight -			
(b) Viscosity -			
(c) Water Loss -			
(d) Filter Cake -			
(e) P.H. -			

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -			
DEVIATION -			

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Running casing. W.O.C.

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 37.59"

Longitude - 125° 01' 43.41"

Elevation of K.B.: 862

Date: December 14, 1963

	MORNING	DAY	EVENING
BIT - (1) Number -			
(2) Size -			
(3) Make -			
(4) Type -			
(5) Footage drilled -			
MUD -			
(1) Treatment:			
MORNING -			
DAY -			
EVENING -			
	MORNING	DAY	EVENING
(2) Properties:			
(a) Weight -			
(b) Viscosity -			
(c) Water Loss -			
(d) Filter Cake -			
(e) P.H. -			
	MORNING	DAY	EVENING
Deflection Surveys:			
DEPTH &			
DEVIATION -			

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: W.O.C.

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 39"

Longitude - 125° 01' 41"

Elevation of K.B.: 862

Date: December 13, 1965

BIT - (1) Number - MORNING DAY EVENING

(2) Size -

(3) Make -

(4) Type -

(5) Footage drilled -

MUD -

(1) Treatment:

MORNING -

DAY -

EVENING -

(2) Properties: MORNING DAY EVENING

(a) Weight -

(b) Viscosity -

(c) Water Loss -

(d) Filter Cake -

(e) P.H. -

Deflection Surveys: MORNING DAY EVENING

DEPTH -

DEVIATION -

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: W.O.C. DRILLING OUT CEMENT

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 39.57"N

Longitude - 125° 01' 41.43"W

Elevation of K.B.: 862

Date: December 16, 1963

BIT -	MORNING	DAY	EVENING	
(1) Number -	1	1	1	2
(2) Size -	6¾	6¾	6¾	6¾
(3) Make -	Sec	Sec	Sec	Hy
(4) Type -	S3	S3	S3	OSC3
(5) Footage drilled -	30	144	143	

MUD -

(1) Treatment:

MORNING - Gel. 3/300, BiCarb. 300, Caustic 150, Peltex 200

DAY - Gel 20 x x x, Quick vis 1 gal.

EVENING - Gel 300#, Soda Ash 50, Peltex 50

(2) Properties:	MORNING	DAY			EVENING		
(a) Weight -		8.7	8.7	8.7	8.8	8.8	8.9
(b) Viscosity -		36	40	43	42	42	40
(c) Water Loss -							
(d) Filter Cake -							
(e) P.H. -							

Deflection Surveys:	MORNING	DAY			EVENING	
DEPTH -		790	800	910	940	1030
DEVIATION -		¾	1¼	2	2	2

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 14

Location: Latitude - 64° 25' 39"

Longitude - 125° 01' 41"

Elevation of K.B.: 842

Date: December 17, 1964

	MORNING	DAY	EVENING
BIT - (1) Number -	2	2	3
(2) Size -	6¼	6¼	6¼
(3) Make -	SW	SW	HEMD
(4) Type -	OSC3	OSC3	FP3
(5) Footage drilled -	735	147	92

MUD -

(1) Treatment:

MORNING - Gel. 1600, Soda Ash 50, Peltex 50

DAY - Gel. 16 S x S, Lignite 400 LBS

EVENING -

(2) Properties:	MORNING			DAY			EVENING	
(a) Weight -	9.3	9.4	9.4	9.3	9.2	9.2	9.2	9.1
(b) Viscosity -	37	35	36	36	37	40	38	38
(c) Water Loss -								
(d) Filter Cake -								
(e) P.H. -								

Deflection Surveys:	MORNING			DAY		EVENING
DEPTH -	1100	1160	1220	1340	1430	
DEVIATION -	2¼	2¼	2½	3	3	

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 39"

Longitude - 125° 01' 41"

Elevation of K.B.: 862

Date: December 18, 1964

BIT -	MORNING	DAY	EVENING
(1) Number -		5	5
(2) Size -		6¼	6¼
(3) Make -		REED	REED
(4) Type -		YT3	YT3
(5) Footage Drilled -			

MUD -

(1) Treatment:

MORNING - Gel. 23 sacks

DAY -

EVENING -

(2) Properties:	MORNING			DAY			EVENING		
(a) Weight -	9.2	9.2	9.2	9.2	9.1	9.1	9.1	9.1	9.1
(b) Viscosity -	36	45	45	45	45	45	45	45	45
(c) Water Loss -			9.8		10				
(d) Filter Cake -					2/32				
(e) P.H. -	10				10				

Deflection Surveys: MORNING DAY EVENING

DEPTH -

DEVIATION -

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Waiting on test tools

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 32"

Longitude - 125° 01' 41"

Elevation of K.B.: 862

Date: December 19, 1968

BIT -	MORNING	DAY	EVENING
(1) Number -		3	3
(2) Size -		6¾	6¾
(3) Make -		REED	REED
(4) Type -		YT3	YT3
(5) Footage drilled -			

MUD -

(1) Treatment:

MORNING -

DAY -

EVENING -

(2) Properties:	MORNING	DAY	EVENING
(a) Weight -	9.1 9.1 9.1	9.1 9.1 9.1	
(b) Viscosity -	45 45 45	45 45 45	
(c) Water Loss -	10	10	
(d) Filter Cake -	2/32	2/32	
(e) P.H. -	9.5	9.5	

Deflection Surveys: MORNING DAY EVENING

DEPTH -

DEVIATION -

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Waiting on test tools

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 39"

Longitude - 125° 01' 42"

Elevation of K.B.: 862

Date: December 20, 1964

	MORNING	DAY	EVENING
BIT - (1) Number -	3		
(2) Size -	8¾		
(3) Make -	REED		
(4) Type -	FT3		
(5) Footage drilled -			

MUD -

(1) Treatment:

MORNING - Gel. 10 sacks

DAY -

EVENING -

(2) Properties:	MORNING			DAY		EVENING
(a) Weight -	9.0	9.0	9.1	9.1	9.1	
(b) Viscosity -	43	44	46	46	46	
(c) Water Loss -	9	9	9		9	
(d) Filter Cake -	2/32	2/32	2/32		2/32	
(e) P.H. -	9.5	9.5	9.5		9.5	

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -			
DEVIATION -			

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Testing

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keela River # 14

Location: Latitude - 64° 23' 37"N

Longitude - 125° 01' 41"W

Elevation of K.B.: 862

Date: December 21, 1964

	MORNING	DAY	EVENING
BIT - (1) Number -		5	5 6
(2) Size -		6¼	6¼ 6¼
(3) Make -		REED	REED H
(4) Type -		YT3	YT3 OSC1G
(5) Footage drilled -		116	83

MUD -

(1) Treatment:

MORNING -

DAY -

EVENING -

(2) Properties:	MORNING	DAY	EVENING
(a) Weight -		45 40 39	9.1
(b) Viscosity -		9.2 9.2 9.2	3.9
(c) Water Loss -		9	
(d) Filter Cake -		2/32	
(e) P.H. -		9.5	

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -		1570	1685
DEVIATION -		¾	4 .

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Testing in the A.M.

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 14

Location: Latitude - 64° 23' 37"

Longitude - 125° 01' 41"

Elevation of K.B.: 862

Date: December 22, 1964

	MORNING	DAY	EVENING	
BIT - (1) Number -	4	4	4	5
(2) Size -	6¼	6¼	6¼	6¼
(3) Make -	HT	HT	HT	HT
(4) Type -	OSC3J	OSC3J	OSC3J	OSC3J
(5) Footage drilled -	169	185	100	

MUD -

(1) Treatment:

MORNING - Gel 8 sacks, Caustic 25, Super Lig. 450

DAY - Gel. 10 3 x 3, Soda ash 100 lbs, Lignite 250 lbs, caustic 50lb.

EVENING -

(2) Properties:

	MORNING			DAY			EVENING
(a) Weight -	9.3	9.3	9.2	9.2	9.1	9.1	
(b) Viscosity -	38	42	38	38	40	42	
(c) Water Loss -	9.6	9.6	9.6		10.4		
(d) Filter Cake -	2/32	2/32	2/32		2/32		
(e) P.H. -	9.5	9.5	9.5		9.5		

Deflection Surveys:

	MORNING		DAY	EVENING
DEPTH -	1780	1900	2020	2140
DEVIATION -	¾	4	4	3¾

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 14

Location: Latitude - 64° 23' 39"

Longitude - 125° 01' 41"

Elevation of K.B.: 862

Date: December 23, 1964

BIT -	MORNING	DAY	EVENING
(1) Number -	5	6	7
(2) Size -	6¾	6¾	6¾
(3) Make -	Hc	SEC	SEC
(4) Type -	OSC2G	S6	M45
(5) Footage drilled -	93	91	90

MUD -

(1) Treatment:

MORNING - Gel. 1600, Super Lig. #90, Caustic 50

DAY - Soda Ash 100 lbs., Gel 15 Sxs.

EVENING - Gel 1200, Lignite #150

(2) Properties:	MORNING			DAY			EVENING		
(a) Weight -	9.6	9.6	9.6	9.5	9.5	9.5	9.3	9.5	9.5
(b) Viscosity -	46	44	45	45	45	45	40	44	42
(c) Water Loss -		9.8			8.6			8.2 8.2	8.2
(d) Filter Cake -					2/32				
(e) P.H. -					10			10	

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -	2260	2320	2390
DEVIATION -	5	5¼	5¼

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Kwale River # 14

Location: Latitude - 64° 23' 57"

Longitude - 125° 01' 43"

Elevation of K.B.: 862

Date: December 24, 1964

BIT -	MORNING	DAY	EVENING
(1) Number -	7	7	8
(2) Size -	6¾	6¾	6¾
(3) Make -	SEC	M&M HW	HW
(4) Type -	M&M	3 OSC	OSC
(5) Footage drilled -	123	72	120

MUD -

(1) Treatment:

MORNING - Gel. 10 SxS

DAY -

EVENING - Gel 4 SxS, Soda Ash 30 lbs, Caustic 25 lbs, Super Lig 50 lbs.

(2) Properties:	MORNING			DAY			EVENING		
(a) Weight -	9.6	9.5	9.3	9.5	9.5	9.5	9.6	9.6	9.5
(b) Viscosity -	44	43	40	45	45	43	40	40	40
(c) Water Loss -		8.6			8.8			8.6	
(d) Filter Cake -		2/32			2/32			2/32	
(e) P.H. -		10			10			10	

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -	2515	2640	2740
DEVIATION -	¼	¼	8

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 14

Location: Latitude - 64° 23' 39".7

Longitude - 125° 01' 51".5

Elevation of K.B.: 852

Date: December 25, 1964

		MORNING	DAY	EVENING
BIT -	(1) Number -	8	9	9
	(2) Size -	8¾	8¾	8¾
	(3) Make -	Ke	SEC	SEC
	(4) Type -	OSC	84	84
	(5) Footage drilled -	49	67	102

MUD -

(1) Treatment:

MORNING - Gel. 2000, Soda Ash 15, Caustic 25, Lignite 50.

DAY - Gel. 1000, Soda Ash 30, Caustic 50, Lignite 150.

EVENING -

(2) Properties:	MORNING			DAY			EVENING		
(a) Weight -	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
(b) Viscosity -	38	38	45	40	39	42	40	39	40
(c) Water Loss -	8.4			8.6			8.6		
(d) Filter Cake -	2/32			2/32			2/32		
(e) P.H. -	9.5			10.0			10.0		

Deflection Surveys:	MORNING		DAY		EVENING
DEPTH -	2775	2810	2840	2895	2955
DEVIATION -	8	9	9	8	7¾

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 14

Location: Latitude - 64° 23' 59"N

Longitude - 125° 01' 52"W

Elevation of K.B.: 862

Date: December 25, 1968

BIT -	MORNING		DAY	EVENING
(1) Number -	9	10	10	10
(2) Size -	6¾	6¾	6¾	6¾
(3) Make -	SEC	HA	HA	OSC
(4) Type -	84	OSC	OSC	HV
(5) Footage drilled -	64		30	94

MUD -

(1) Treatment:

MORNING - Gel 500

DAY - Gel 1500, Soda Ash 50, Caustic 50, Lignite 150.

EVENING - Gel 1800

(2) Properties:	MORNING			DAY			EVENING		
(a) Weight -	9.5	9.6	9.6	9.6	9.6	9.6	9.6	9.5	9.5
(b) Viscosity -	42	44	44	41	41	42	43	43	48
(c) Water Loss -		8.8			9.0			7.0	
(d) Filter Cake -		2/32			2/32			2/32	
(e) P.H. -		10			10			10	

Deflection Surveys:	MORNING	DAY		EVENING
DEPTH -	3020	3135	3165	
DEVIATION -	7¾	(misrun)	¾	

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY DRILLING OIL WELL REPORT

Well Name: Shell Beale River # 14

Location: Latitude - 64° 03' 37"

Longitude - 135° 01' 43"

Elevation of K.B.: 860

Date: December 7, 1961

	MORNING	DAY	EVENING
BIT - (1) Number -		IIA	IIA
(2) Size -		4.687	6¼
(3) Make -		Christensen	Christensen
(4) Type -			
(5) Footage drilled -		8	14

MUD -

(1) Treatment:

MORNING - Gel 5

DAY -

EVENING -

(2) Properties:	MORNING		DAY			EVENING		
(a) Weight -	9.6	9.6	9.6	9.6	9.6	9.5	9.5	9.5
(b) Viscosity -	50	55	53	52	52	52	52	52
(c) Water Loss -	7.8			7.8			7.8	
(d) Filter Cake -	2/32			2/32			2/32	
(e) P.H. -	10			10				

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -			
DEVIATION -			

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Coring. Can. # 1 3233 - 3255 Rec 22'.

DAILY DRILLING AND MUD REPORT

Well Name: [illegible] River # 1

Location: Latitude - 6° 25' [illegible] N

Longitude - 125° 01' [illegible] E

Elevation of K.B.: 862

Date: December 26, 1964

	MORNING	DAY	EVENING
BIT - (1) Number -	11	11	11
(2) Size -	6¾	6¾	6¾
(3) Make -	REED	REED	REED
(4) Type -	YTL	YTL	YTL
(5) Footage drilled -		105	69

MUD -

(1) Treatment:

MORNING -

DAY - Gel 25 sacks, Super Lig #100, Caustic #50

EVENING -

(2) Properties:	MORNING	DAY		EVENING		
(a) Weight -		9.7	9.6	9.5	9.6	9.5	9.5
(b) Viscosity -		42	44	44	44	44	44
(c) Water Loss -		7.8					
(d) Filter Cake -		2/32					
(e) P.H. -		58	53	58			

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -		3290	3350
DEVIATION -		6	7½

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL DRILLING REPORT

Well Name: Shell Kewle River J-14

Location: Latitude - 64° 23' [illegible]

Longitude - 135° 01' [illegible]

Elevation of K.B.: 86

Date: December 29, 1964

	MORNING	DAY	EVENING
BIT - (1) Number -	11 12	12	12
(2) Size -	6¼ 6¼	6¼	6¼
(3) Make -	REED SEC	SEC	SEC
(4) Type -	YTL 84	84	84
(5) Footage drilled -	19	78	62

MUD -

(1) Treatment:

MORNING -

DAY - Gel 1500, Super Lig. 150, Soda Ash 25

EVENING - Water

(2) Properties:	MORNING	DAY	EVENING
(a) Weight -		9.7 9.7 9.7	9.7 9.7 9.7
(b) Viscosity -		46 46 45	45 45 45
(c) Water Loss -		7.5	7.2
(d) Filter Cake -		2/32	2/32
(e) P.H. -			9.5

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -	3440	3535	3608
DEVIATION -	7	8	8

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 43' 57"

Longitude - 125° 01' 49"

Elevation of K.B.: 862

Date: December 30, 1964

BIT -	MORNING	DAY	EVENING
(1) Number -	13	13	13
(2) Size -	6¼	6¼	6¼
(3) Make -	REED	REED	REED
(4) Type -	FT1	FT1	FT1
(5) Footage drilled -	62	135	83

MUD -

(1) Treatment:

MORNING - Gel 10, Caustic 100#, Lignite 150#

DAY - Gel 50#, Super Lig 150#, Gel 208, Soda Ash 30#

EVENING -

(2) Properties:	MORNING		DAY			EVENING		
(a) Weight -	9.7	9.7	9.8	9.8	9.7	9.7	9.7	9.7
(b) Viscosity -	45	47	47	48	48	48	48	50
(c) Water Loss -	7.2		8.4			8.2		
(d) Filter Cake -	2/32		2/32			2/32		
(e) P.H. -	9.5		10.			10.5		

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -	3608	3720	3888
DEVIATION -	8	9	10¼

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keule River # 1A

Location: Latitude - 64° 23' 37"

Longitude - 135° 01' 30"

Elevation of K.B.: 863

Date: December 31, 1964

	MORNING	DAY	EVENING
BIT - (1) Number -	14	14	14
(2) Size -	6¼	6¼	6¼
(3) Make -	REED	REED	REED
(4) Type -	YT1	YT1	YT1
(5) Footage drilled -		20	82

MUD -

(1) Treatment:

MORNING -

DAY -

EVENING - Peltex 36 sacks. Gel 40 sacks. Caustic 150

(2) Properties:	MORNING	DAY	EVENING		
(a) Weight -		9.8	9.8	9.8	9.8
(b) Viscosity -		54	60	70	66
(c) Water Loss -		8.4	5.8		
(d) Filter Cake -		2/32	2/32		
(e) P.H. -		10.	10.		

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -	3888		3888 — 3980
DEVIATION -	10 7/8		10 7/8 9½

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Hole sloughing. Working tight hole.

DAILY CHRONOLOGICAL DRILL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' [illegible]"N.

Longitude - 125° 01' 04"W.

Elevation of K.B.: 862

Date: January 1, 1965

	MORNING	DAY	EVENING
BIT - (1) Number -	14	15	15
(2) Size -	6¾	6¾	6¾
(3) Make -	SEED	SEC	SEC
(4) Type -	TT1	N4M	N4M
(5) Footage drilled -	62		

MUD -

(1) Treatment:

MORNING - Gel 20 sacks. Peltex 300#

DAY -

EVENING - Gel 30.

(2) Properties:	MORNING	DAY	EVENING
(a) Weight -	9.8	9.8	9.8
(b) Viscosity -	70	68	76
(c) Water Loss -	7.2		
(d) Filter Cake -	2/32		
(e) P.H. -	10.5		

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -	4050	4050	
DEVIATION -	8	8	

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Reaming.

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 14

Location: Latitude - 64° 23' 47" N

Longitude - 125° 01' 41"

Elevation of K.B.: 862

Date: January 2, 1965

BIT -	MORNING	DAY	EVENING
(1) Number -	15	15	15
(2) Size -	6¾	6¾	6¾
(3) Make -	SEC	SEC	SEC
(4) Type -	M4N	M4N	M4N
(5) Footage drilled -	57	48	10

MUD -

(1) Treatment:

MORNING - Peltex 900#,

DAY -

EVENING - Gel 15, Peltex 300, Caustic 150

(2) Properties:	MORNING			DAY			EVENING		
(a) Weight -	9.9	9.9	9.9	9.6	9.6	9.6	9.7	9.7	9.7
(b) Viscosity -	140	140	140	200	140	120	42	42	43
(c) Water Loss -		7.4			7.2			10.2	
(d) Filter Cake -		2/32			2/32				
(e) P.H. -		10.5			8.0				

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -		4050	
DEVIATION -		8	

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 57.5"

Longitude - 125° 01' 41.5"

Elevation of K.B.: 862

Date: January 3, 1969

	MORNING	DAY	EVENING
BIT - (1) Number -	15	15	15
(2) Size -	6¼	6¼	6¼
(3) Make -	SEC	SEC	SEC
(4) Type -	M4N	M4N	M4N
(5) Footage drilled -	62	13	

MUD -

(1) Treatment:

MORNING - Gel 70 sacks, Pritex 400#, Caustic 150#

DAY - Peltex 600#, Caustic 600#, Water.

EVENING -

(2) Properties:	MORNING			DAY			EVENING
(a) Weight -	9.4	9.6	9.6	9.6	9.6	9.2	
(b) Viscosity -	46	60	130	140	300	160	
(c) Water Loss -		8.4		8.6		8.7	
(d) Filter Cake -		2/32		2/32		2/32	
(e) P.H. -		12.0		9.5		10.0	

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -		4050	
DEVIATION -		8	

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 14

Location: Latitude - 64° 23' 37"

Longitude - 129° 02' 42"

Elevation of K.B.: 862

Date: January 4, 1965

BIT - (1) Number - MORNING DAY EVENING

	MORNING	DAY		EVENING	
(1) Number -		13		13	16
(2) Size -		6¾		6¾	6¾
(3) Make -		SEC		SEC	SEC
(4) Type -		M4H		M4H	M4H
(5) Footage drilled -					

MUD -

(1) Treatment:

MORNING - Gel 80

DAY - Gel 10 sacks, C.M.P. 30#

EVENING - 5 gals D-FOAM

(2) Properties:	MORNING		DAY			EVENING		
(a) Weight -	9.4	9.4	9.4	9.5	9.5	9.5	9.5	9.5
(b) Viscosity -	54	75	135	120	95	95	95	95
(c) Water Loss -		15.4	22.					
(d) Filter Cake -			2/32					
(e) P.H. -		12.0	12.0					

Deflection Surveys: MORNING DAY EVENING

DEPTH - 4050

DEVIATION - 8°

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Conditioning hole - Circulating.

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 35"N

Longitude - 125° 01' 41"W

Elevation of K.B.: 862

Date: January 5, 1969

BIT -	MORNING	DAY	EVENING
(1) Number -	16	16	16
(2) Size -	6¾	6¾	6¾
(3) Make -	SEC	SEC	SEC
(4) Type -	M4N	M4N	M4N
(5) Footage drilled -			

MUD -

(1) Treatment:

MORNING - 5 gals D-FOAM

DAY - C.M.P. 503

EVENING -

(2) Properties:	MORNING	DAY			EVENING		
(a) Weight -	9.5	9.5	9.5	9.5	9.5	9.5	9.5
(b) Viscosity -	120	118	120	123	120	120	120	120	120	120
(c) Water Loss -		16		17			17			
(d) Filter Cake -		2/32		2/32			2/32			
(e) P.H. -		11.5		11.			11.			

Deflection Surveys: MORNING DAY EVENING

DEPTH - 4050

DEVIATION - 8

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Waiting on orders.

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 37"

Longitude - 125° 01' 41"

Elevation of K.B.: 862

Date: January 6, 1965

	MORNING	DAY	EVENING
BIT - (1) Number -			
(2) Size -			
(3) Make -			
(4) Type -			
(5) Footage drilled -			

MUD -

(1) Treatment:

MORNING -

DAY -

EVENING -

(2) Properties:	MORNING	DAY	EVENING
(a) Weight -			
(b) Viscosity -			
(c) Water Loss -			
(d) Filter Cake -			
(e) P.H. -			

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -			
DEVIATION -			

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks:

Prep. to log. Reaming O

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 14

Location: Latitude - 64° 23' 39"N

Longitude - 125° 01' 41"W

Elevation of K.B.: 862

Date: January 7, 1965

	MORNING	DAY	EVENING
BIT - (1) Number -			
(2) Size -			
(3) Make -			
(4) Type -			
(5) Footage drilled -			

MUD -

(1) Treatment:

MORNING - Gel 20 sacks, CMC 50 lbs.

DAY - Gel 18 sacks, WT. MAT. 100 sacks

EVENING -

(2) Properties:	MORNING	DAY	EVENING
(a) Weight -	9.5 9.5 9.5	9.5 10.3 10.3	
(b) Viscosity -	120 125 125	180 253 233	
(c) Water Loss -	10	10.2	
(d) Filter Cake -	2/32	2/32	
(e) P.H. -	11	11	

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH -			
DEVIATION -			

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Prep. to log. Reaming.

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Shell Keele River # 1A

Location: Latitude - 64° 23' 39"

Longitude - 125° 01' 43"

Elevation of K.B.: 862

Date: January 8, 1965

	MORNING	DAY	EVENING
BIT - (1) Number -			
(2) Size -			
(3) Make -			
(4) Type -			
(5) Footage drilled -			

MUD -

(1) Treatment:

MORNING -

DAY -

EVENING -

(2) Properties:	MORNING	DAY	EVENING
(a) Weight -			
(b) Viscosity -			
(c) Water Loss -			
(d) Filter Cake -			
(e) P.H. -			

Deflection Surveys:	MORNING	DAY	EVENING
DEPTH &			
DEVIATION -			

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Logging.

DAILY STRATIGRAPHICAL WELL REPORT

Well Name: Shell Keela River # 14

Location: Latitude - 64° 23' 38"

Longitude - 129° 01' 42"

Elevation of K.B.: 862

Date: January 9, 1965

BIT - (1) Number -

(2) Size -

(3) Make -

(4) Type -

(5) Footage drilled -

MUD -

(1) Treatment:

MORNING - Gel 20 sacks, Wt. Material 30 sacks.

DAY - Wt. Material 40 sacks, Gel. 10 sacks

EVENING -

(2) Properties:

	MORNING	DAY	EVENING
(a) Weight -	10.1	10.1	10.1
(b) Viscosity -	225	225	230
(c) Water Loss -		10.8	
(d) Filter Cake -		2/32	
(e) P.H. -		7	

Deflection Surveys: MORNING DAY EVENING

DEPTH -

DEVIATION -

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Logging.

Date January 10, 1963

Contractor Reeves Drilling

Type of Rig: Rotary

Remarks: Waiting on orders.

DAILY [illegible] REPORT

Well Name: [illegible]

Location: Latitude - [illegible]

Longitude - [illegible]

Elevation of [illegible]

Date: January 11, 1965

BIT - (1) Number -

(2) Size -

(3) Make -

(4) Type -

(5) Footage drilled -

MUD -

(1) Treatment:

[illegible] -

Gel -

[illegible] -

(2) Properties:

(a) Weight -

(b) Viscosity -

(c) Water Loss -

(d) Filter Cake -

(e) P.H. -

Deflection Surveys:

DEPTH -

DEVIATION -

Contractor: Aspent Drilling

Type of Rig: Rotary

Remarks: Running plugs.

January 12, 1949

(2) Properties:

(3) Viscosity

(4) Water Loss

(5) [illegible]

(6) P.H.

Deflection Surveys:

DEVIATED:

Contractor: Regent Drilling

Type of Rig: Rotary

Remarks: Running plugs.

January 13, 1965

(c) Properties:
(b) Weight -
(c) Viscosity -
(c) Water Loss -
(d) Filter Cake
(e) [illegible] -

Deflection Surveys: [illegible]
DEVIATION -

Contractor: Regent Drilling
Type of Rig: Rotary
Remarks: Hole abandoned

1360'-1380'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, trace argillaceous content.
1380'-1400'	Sandstone	Medium grey, lithic, silty, very fine grained sandstone, 30% argillaceous content.
1400'-1420'	Sandstone	Medium grey, lithic, silty, very fine grained sandstone, 40% argillaceous content, trace calcareous content.
1420'-1440'	Shale	Medium grey, 40% lithic, silty, very fine grained sandstone.
1440'-1460'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 40% argillaceous content, interbedded with lithic, silty, fine to very fine grained sandstone, trace argillaceous content.
1460'-1480'	Sandstone	Light grey, lithic, medium to very fine grained silty sandstone, trace argillaceous content.
1480'-1500'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone, trace argillaceous content; ironstone bands, angular-sub angular, fair sorting, poorly cemented, black and white chert and quartz.
1500'-1520'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone.
1520'-1530'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone, plant remains, band ironstone.
1530'-1540'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone, pyrite. Band argillaceous sandstone, and very fine silt.
1540'-1550'	Sandstone	Light grey, lithic, fine to very fine silty sandstone.
1550'-1560'	Sandstone	Light grey, lithic, fine to very fine silty sandstone, very poorly consolidated.

SHELL, KOKLE RIVER 1-A

K.B. 862'

T.D. 4235'

Latitude: 64° 23' 39" N.

Longitude: 135° 01' 42" W.

0-20'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
20'-40'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
40'-60'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
60'-80'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
80'-100'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
100'-130'	Sandstone	Light grey, lithic, unconsolidated sand and gravel, pebbles up to 1 cm. of limestone, dolomite, granite, red sandstone and white sandstone.
CRETACEOUS 160(+702) 130'-190'		Very Poor Samples.

190'-220'	Shale	Medium grey, 20% silty, very fine to fine grained sandstone. Plant remains.
220'-250'	Shale	Medium grey, 20% silty, very fine to fine grained sandstone.
250-280'	Shale	Medium grey, 20% silty, very fine to fine grained sandstone.
280'-300'	Shale	Medium grey, 20% silt content.
300'-330'	Shale	Medium grey, 20% silt content.
330'-350'	Shale	Medium grey, 20% silty, very fine grained sandstone.
350-360'	Shale	Medium grey, 20% silty, very fine grained sandstone.
360'-370'	Sandstone	Medium grey, lithic, silty, very fine grained; 20% argillaceous content and 10% calcareous content.
370'-380'	Shale	Bentonitic, light green.
380'-390'	Shale	Light green grey.
390'-400'	Shale	Light green grey.
400'-410'		Very poor samples.
410'-420'		Very poor samples.
420'-430'	Shale	Medium brown grey, 10% silty content.
430'-440'	Sandstone	Light brown grey, lithic, silty, very fine grained;20% argillaceous content and 10% calcareous content.
440'-450'	Sandstone	Light brown grey, lithic, silty, 40% argillaceous content and 10% calcareous content.
		450'-470' Bentonitic shale swell in water.

450'-460'	Shale	Medium brown grey.
460'-47_'	Shale	Medium brown grey.
470'-480'	Shale	Medium brown grey.
0'-460'		Sample quality very poor
480'-490'	Shale	Medium brown grey.
490'-500'	Shale	Medium brown grey.
500'-510'	Shale	Medium brown grey, trace silty content.
510'-520'	Shale	Medium brown grey, trace silty content.
520'-530'	Shale	Medium brown grey, trace silty content.
530'-540'	Shale	Medium brown grey, trace silty content.
540'-550'		No sample.
550'-560'		No sample.
560'-570'		No sample.
570'-580'	Shale	Medium brown grey, trace silty content.
580'-590'	Shale	Medium brown grey, trace silty content.
590'-600'	Shale	Medium brown grey, trace silty content.
600'-610'	Shale	Medium brown grey, 10% silty, very fine grained sandstone; soft flakey hard green shale.
610'-620'	Shale	Medium brown grey.
620'-630'	Shale	Medium brown grey, trace silty content.

630'-640'	Shale	Medium brown grey, 10% silty content.
640'-650'	Shale	Medium brown grey, 10% silty content.
650'-660'	Shale	Medium brown grey, 10% silty content.
660'-670'	Shale	Medium brown grey, 20% silty, very fine grained sandstone.
670'-680'	Sandstone	Medium light grey, lithic, sandstone, fine to very fine, trace argillaceous content, glauconite; chert pebbles up to 5 m.m.
680'-690'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, trace- 10% argillaceous content, glauconite and pyrite.
690'-700'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, trace- 10% argillaceous content, glauconite.
700'-710'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, 10% argillaceous content, glauconite.
710'-720'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, trace- 10% argillaceous content, glauconite; band of calcareous sandstone.
720'-730'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, trace - 10% argillaceous content, pyrite.
730'-740'	Sandstone	Medium light grey, lithic, fine to very fine sandstone, trace argillaceous content.
720'-740'		Quartz sandstone, black and white chert, good sorting.
740'-750'		No sample.

750'-790'	Sandstone	Light grey, lithic, medium to very fine sandstone, trace argillaceous content.
790'-810'	Sandstone	Light grey, lithic, fine to very fine sandstone, trace argillaceous content.
810'-830'	Sandstone	Light grey, lithic fine to very fine sandstone, trace argillaceous content.
830'-850'	Sandstone	Light grey, lithic, fine to very fine sandstone, trace argillaceous content.
850'-870'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, trace argillaceous content and trace dolomite.
870'-880'	Sandstone	Light grey, lithic, fine to very fine grained sandstone, silty, trace argillaceous content, trace dolomite, pyrite.
880'-890'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, trace argillaceous content, trace dolomite.
890'-900'	Sandstone	Light grey, lithic, medium to very fine grained sandstone, trace argillaceous content, trace
900'-910'	Siltstone	Medium Grey, 40% shale.
910'-920'	Sandstone	Light grey, lithic, silty, very fine grained sandstone, 20% argillaceous content.
920'-930'	Shale	Medium grey, silty, 20% [illegible] stone.
930'-940'	Sandstone	Light grey, lithic, silty, extremely fine to fine grained sandstone, 10% argillaceous content.
940'-950'	Shale	Medium grey, silty, 20% very [illegible] grained sandstone.

950'-960'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, 10% argillaceous content.
960'-970'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, trace argillaceous content, glauconite, sandstone fairly soft, soaks water.
970'-980'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, 10% argillaceous content, sandstone fairly soft, soaks water.
980'-990'	Sandstone	Medium grey, silty, very fine grained sandstone, 40% argillaceous content.
990'-1000'	Shale	Medium grey, 40% silty, very fine grained sandstone.
1000'-1010'	Shale	Medium grey, 40% silty, very fine grained sandstone.
1010'-1020'	Shale	Medium grey, 40% silty content.
1020'-1040'	Shale	Medium grey, 30% silty content.
1040'-1060'	Shale	Medium grey, 30% silty content.
1060'-1080'	Shale & Sandstone	Medium light grey, 50% shale, 50% lithic, silty, very fine grained sandstone.
1080'-1100'	Shale & Siltstone	Medium grey, 50% shale, 50% lithic siltstone.
1100'-1120'	Sandstone	Light grey, 10% shale, 90% lithic, silty, medium to very fine sandstone, angular, poor sorting
1120'-1140'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 20% argillaceous content, traces of calcareous content.
1140'-1160'	Shale	Medium light grey, 40% lithic, silty content.

1160'-1180'	Sandstone	Medium light grey, lithic, silty, fine to very fine grained sandstone. 20% argillaceous content, trace calcareous content and glauconite.
1180'-1200'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 30% shale(argillaceous content).
1200'-1220'	Sandstone,	Medium light grey, lithic, silty, very fine grained sandstone, 30% argillaceous content, trace of calcareous content.
1220'-1240'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 30% argillaceous content, trace of calcareous content.
1240'-1260'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 40% argillaceous content, inoceramus, carbonaceous, pland remains and ostracods.
1260'-1280'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 20% argillaceous content and a streak of waxy green shale.
1280'-1300'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 20% argillaceous content.
1300'-1320'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 30% argillaceous content, 10% calcareous content.
1320'-1340'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 20% argillaceous content.
1340-1360'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, trace argillaceous content, trace ironstone; sub-angular, fair sorting, black and white chert and quartz.

1360'-1380'	Sandstone	Light grey, lithic, silty, fine to very fine grained sandstone, trace argillaceous content.
1380'-1400'	Sandstone	Medium grey, lithic, silty, very fine grained sandstone, 30% argillaceous content.
1400'-1420'	Sandstone	Medium grey, lithic, silty, very fine grained sandstone, 40% argillaceous content, trace calcareous content.
1420'-1440'	Shale	Medium grey, 40% lithic, silty, very fine grained sandstone.
1440'-1460'	Sandstone	Medium light grey, lithic, silty, very fine grained sandstone, 40% argillaceous content, interbedded with lithic, silty, fine to very fine grained sandstone, trace argillaceous content.
1460'-1480'	Sandstone	Light grey, lithic, medium to very fine grained silty sandstone, trace argillaceous content.
1480'-1500'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone, trace argillaceous content, ironstone bands, angular-sub angular, fair sorting, poorly cemented, black and white chert and quartz.
1500'-1520'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone.
1520'-1530'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone, plant remains, band ironstone.
1530'-1540'	Sandstone	Very light grey, lithic, medium to very fine grained sandstone, pyrite. Band argillaceous sandstone, and very fine silt.
1540'-1550'	Sandstone	Light grey, lithic, fine to very fine silty sandstone.
1550'-1560'	Sandstone	Light grey, lithic, fine to very fine silty sandstone, very poorly consolidated.

1560'-1570'	Sandstone	Light grey, lithic, fine to very fine silty sandstone.
1570'-1580'	Sandstone	Light medium grey, lithic, fine to very fine silty sandstone, 10% argillaceous content, pyrite, shaley bands.
1580'-1590'	Sandstone	Light grey, lithic, fine to very fine silty sandstone, band of shale; unconsolidated loose sand grains in sample.
1590'-1600'	Siltstone	Medium grey, lithic, siltstone, 30% argillaceous content.
1600'-1610'	Shale	Medium grey, 20% lithic, fine to very fine silty sandstone, bands of lithic siltstone.
1610'-1620'	Shale	Medium grey, 20% lithic, fine to very fine silty sandstone, bands of lithic siltstone.
1620'-1630'	Shale	Medium grey, 20% lithic, fine to very fine silty sandstone.
1625'-1630'	Sandstone	Light grey, lithic, fine to very fine silty sandstone, 10% argillaceous content, 10% ironstone.
1630'-1640'	Siltstone	Medium grey, 40% argillaceous content.
1640'-1650'	Siltstone	Light grey, 10% argillaceous content.
1650'-1660'	Sandstone & Shale	Medium grey, 30% lithic, very fine grained silty sandstone, 50% argillaceous content.
1660'-1670'	Shale	Medium grey, 20% siltstone.
1670'-1680'	Sandstone	Light grey, lithic, fine to very fine grained silty sandstone, 20% argillaceous content.
1680'-1690'	Shale	Medium grey, argillaceous.
1690'-1700'	Shale	Medium grey, 10% siltstone.

1700'-1710'	Sandstone	Light grey, lithic, very fine to fine silty sandstone, 10% argillaceous content.
1710'-1720'	Shale	Medium grey, argillaceous.
1720'-1730'	Shale	Medium grey, argillaceous.
1730'-1740'	Shale	Medium grey, argillaceous.
1740'-1750'	Shale	Medium grey, 10% siltstone.
1750'-1760'	Shale	Medium grey, argillaceous.
1760'-1770'	Shale	Medium grey, trace siltstone.
1770'-1780'	Shale	Medium grey, 10% siltstone.
1780'-1790'	Shale	Medium grey, 10% siltstone.
1790'-1800'	Sandstone	Medium grey, lithic, very fine to fine silty sandstone, 10% shale(argillaceous content).
1800'-1810'	Shale	Medium grey, 20% siltstone.
1810'-1820'	Shale	Medium grey, 10% siltstone.
1820'-1830'	Shale	Medium grey, 10% siltstone.
1830'-1840'	Shale	Medium grey, 10% siltstone.
1840'-1850'	Shale	Medium grey, 20% lithic, very fine silty sandstone.
1850'-1860'	Shale	Medium grey, 20% siltstone.
1860'-1870'	Shale	Medium grey, 10% siltstone.
1870'-1880'	Shale	Medium grey, argillaceous.
1880'-1890'	Shale	Medium grey, argillaceous.
1890'-1900'	Shale	Medium grey, argillaceous.
1900'-1910'-	Shale	Medium grey, 10% siltstone.
1910'-1920'	Shale	Medium grey, 10% siltstone.
1920'-1930'	Shale	Medium grey, argillaceous.
1930'-1940'	Shale	Medium grey, trace siltstone.

1940'-1950'	Shale	Medium grey, trace siltstone.
1950'-1960'	Shale	Medium grey, argillaceous.
1960'-1970'	Shale	Medium grey, trace siltstone.
1970'-1980'	Shale	Medium grey, 10% siltstone, ostracods and inoceramus.
1980'-1990'	Shale	Medium grey, argillaceous.
1990'-2000'	Sandstone	Medium grey, lithic, very fine to silty sandstone, 30% argillaceous content.
2000'-2010'	Shale	Medium grey, argillaceous.
2010'-2020'	Shale	Medium grey, argillaceous.
2020'-2030'	Sandstone	Medium grey, lithic, very fine silty sandstone, 40% argillaceous content.
2030'-2040'	Shale & Sandstone	Medium grey, 50% very fine silty sandstone, 50% argillaceous content, pyrite.
2040'-2050'	Siltstone	Medium grey, lithic, siltstone, 40% argillaceous content.
2050'-2060'	Shale	Medium grey, trace silty content.
2060'-2070'	Siltstone	Medium grey, lithic, siltstone, 40% argillaceous content.
2070'-2080'	Shale	Medium grey, 30% silty content.
2080'-2090'	Shale	Medium dark grey.
2090'-2100'	Shale	Medium dark grey, trace silty content.
2100'-2110'	Sandstone	Light grey, lithic, very fine, silty sandstone, 10% argillaceous content; fairly hard, well compacted.
2110'-2120'	Shale	Medium grey, 20% silty content.
2120'-2130'	Sandstone	Medium grey, lithic, very fine silty sandstone, 20% argillaceous content.

2130'-2140'	Siltstone	Medium grey, lithic, siltstone, 40% argillaceous content.
2140'-2150'	Shale	Medium grey, 30% lithic siltstone.
2150'-2160'	Shale	Medium grey, 20% silt content.
2160'-2170'	Shale	Medium dark grey, shale harder more brittle in 2170-2180'.
2170'-2180'	Shale	Medium dark grey, inoceramus and fish, band bentonite.
2180'-2190'	Shale	Medium dark grey, inoceramus and fish remains, trace dolomite.
2190'-2200'	Shale	Medium dark grey, fish remains, resinous, band bentonite.
2200'-2210'	Shale	Medium dark grey.
2210'-2220'	Shale	Medium dark grey, trace dolomite.
2220'-2230'	Sandstone	Medium grey, lithic, pebbles to coarse sandstone, 10% calcareous content, glauconite, pyrite; pebble conglomerate chert, quartz.
2230'-2240'	Shale & Sandstone	Medium dark grey, 40% argillaceous content, 40% fine to very fine, silty sandstone, 20% dolomite.
2240'-2250'	Sandstone	Light grey, very fine grained silty sandstone, trace argillaceous content, 10% calcareous content, glauconite; poor cut fluor.
2250'-2260'	Sandstone	Light grey, very fine grained sandstone, glauconite, band shale, good cut fluor.
2260'-2270'	Sandstone	Light grey, very fine grained sandstone, 10% calcareous content, glauconite, and band of shale. Poor cut fluor.
2270'-2280'	Siltstone	Medium grey, 30% calcareous content, 30% argillaceous content.
2280'-2290'	Shale	Dark grey, argillaceous.

UPPER(?) & MIDDLE CAMBRIAN 2290(-1438)

2290'-2300'	Dolomite	Light brown grey, 50% extremely fine to microgranular dolomite, 10% argillaceous content, 40% chert, pyrite; light brown dol. fractured and silicified.
2300'-2310'	Dolomite	Medium brown, 30% extremely fine to microgranular dolomite, 20% argillaceous content, 30% silty content; interbedded with very dark brown grey hard shale.
2310'-2320'	Shale	Medium light grey, 10% micro-granular dolomite.
2320'-2330'	Shale	Medium light grey, 10% micro-granular dolomite, interbedded with dark grey shale.
2330'-2340'	Shale	Light grey -green grey.
2340'-2350'		No sample.
2350'-2355'	Dolomite	Medium dark brown, 20% argillaceous content, extremely fine dolomite.
2355'-2360'	Shale	Medium grey, trace dolomite; shales have slight greenish cast, waxy scum.
2360'-2365'	Shale	Medium grey, trace dolomite.
2365'-2370'	Dolomite	Dark brown, extremely fine dolomite, 30% argillaceous content.
2370'-2375'	Shale	Medium grey, trace dolomite.
2375'-2380'	Dolomite	Dark brown, extremely fine to microgranular dolomite, 30% argillaceous content, 20% chert.
2380'-2385'	Shale	Medium green grey shale.
2385'-2390'	Shale	Medium green grey, brachiopod?
2390'-2395'	Dolomite	Dark brown, extremely fine to microgranular dolomite, 30% argillaceous content, 10% chert.
2395'-2400'	Shale	Medium green grey, trace dolomite.

2400'-2405'	Shale	Medium green grey, 10% dolomite.
2405'-2410'	Shale	Medium green grey.
2410'-2415'	Shale	Medium grey.
2415'-2420'	Shale	Medium grey.
2420'-2425'	Dolomite,	Medium brown, 10% argillaceous content, 40% chert, extremely fine to microgranular dolomite.
2425'-2430'	Shale	Medium green grey, pyrite.
2430'-2435'	Shale	Medium green grey.
2434'-2440'	Shale	Medium green grey; soft shale, no silt content.
2440'-2445'	Shale	Medium green grey.
2445'-2450'	Shale	Medium green grey.
2450'-2455'	Dolomite	Dark brown, extremely fine to microgranular dolomite, 10% argillaceous content, 30% chert.
2455'-2460'	Dolomite	Dark brown, extremely fine to microgranular dolomite, 20% argillaceous content, 30% chert, stylolite.
2460'-2465'	Shale	Medium brown, 10% dolomite, pyrite, few crinoid dolomite rhombs.
2465'-2470'	Dolomite	Dark brown, 10% argillaceous content, 30% chert, medium to fine and extremely fine to microgranular dolomite.
2470'-2475'	Shale	Medium grey, 20% dolomite.
2475'-2480'	Shale	Medium green grey.
2480'-2485'	Dolomite	Very light brown, extremely fine to microgranular grained dolomite, 40% chert.
2485'-2490'	Dolomite & Chert	Very light brown, very fine to extremely fine dolomite, 30% chert; few chips with considerable glauconite and siliceous.

2490'-2495'	Dolomite & Chert	Very light brown, very fine to extremely fine dolomite, 30% chert, glauconite, siliceous.
2495'-2500'	Shale	Light medium green grey, pyrite; few chips with considerable glauconite siliceous content could possibly be very fine silt.
2500'-2505'	Shale	Light medium green grey.
2505'-2510'	Shale	Light medium green grey.
2510'-2515'	Shale	Light medium green grey.
2515'-2520'	Shale	Light medium green grey.
2520'-2525'	Shale	Light medium green grey.
2525'-2530'	Shale	Light medium green grey.
2530'-2535'	Shale	Light medium green grey.
2535'-2540'	Shale	Light medium green grey, brachiopod.
2540'-2545'	Shale	Light medium green grey.
2545'-2550'	Dolomite	Very light brown, very fine to extremely fine grained dolomite, 40% chert, glauconite.
2550'-2555'	Dolomite	Very light brown, very fine to extremely fine grained dolomite, 30% chert.
2555'-2560'	Shale	Light green grey; greenish color of the shale becomes more distinct.
2560'-2565'	Shale	Light green grey, green color of the shale becomes more distinct.
2565'-2570'	Shale	Light green grey, green shale becomes more distinct.
2570'-2575'	Shale	Light green grey, shale soft, flakey to splintery.
2575'-2580'	Shale	Light green grey.
2580'-2585'	Shale	Light green grey.

2585'-2590'	Shale	Light green grey.
2590'-2595'	Shale	Light green grey.
2595'-2600'	Shale	Light green grey.
2600'-2610'	Shale	Light green grey.
2610'-2615'	Shale	Light green grey.
2615'-2620'	Shale	Light green grey, minor amounts of brown grey shale.
2620'-2625'	Shale	Light green grey, trace dolomite.
2625'-2630'	Shale	Light green grey, trace dolomite.
2630'-2635'	Shale	Light green grey, trace dolomite, few dolomite rhombs, floating.
2635'-2640'	Shale	Light green grey, 20% dolomite.
2640'-2645'	Shale	Light green grey, trace dolomite.
2645'-2650'	Dolomite	Light green grey, extremely fine to microgranular grained dolomite, 30% argillaceous content, 20% chert, trilobites?
2650'-2655'	Shale	Light green grey; minor green dolomite with glauconite.
2655'-2660'	Shale	Light green grey, trace dolomite.
2660'-2665'	Shale	Light green grey, trace dolomite.
2665'-2670'	Shale	Light green grey.
2670'-2675'	Shale	Light green grey.
2675'-2680'	Shale	Light green grey.
2680'-2685'	Shale	Pale green, trace dolomite.
2686'-2690'	Shale	Pale green.
2690'-2695'	Shale	Pale green, glauconite, band of extremely fine to microgranular dolomite.
2695'-2700'	Shale	Pale green.

2700'-2705'	Shale	Pale green, pyrite; shale has slightly waxy appearance.
2705'-2710'	Shale	Pale green.
2710'-2715'	Shale	Pale green; band dolomite.
2715'-2720'	Shale	Pale green; few bands argillaceous light green dolomite.
2720'-2725'	Shale	Pale green.
2725'-2730'	Shale	Pale green; band of dolomite.
2730'-2735'	Shale	Pale green.
2735'-2740'	Shale	Pale green.
2740'-2745'	Dolomite	Very light brown, very fine to extremely fine grained dolomite, 40% chert.
2745'-2750'	Shale	Pale green.
2750'-2755'	Shale	Medium brown grey.
2755'-2760'	Shale	Light green grey, trace of dolomite.
2760'-2765'	Shale	Light green grey.
2765'-2770'	Shale	Light green grey.
2770'-2775'	Shale	Light green grey.
2775'-2780'	Shale	Light green grey, trace of dolomite, glauconite.
2780'-2785'	Shale	Medium grey.
2785'-2790'	Shale	Light green grey.
2790'-2795'	Shale	Light green grey.
2795'-2800'	Shale	Light green grey.
2800'-2805'	Shale	Light green grey.
2805'-2810'	Shale	Light green grey.
2810'-2815'	Shale	Light green grey.
2815'-2820'	Shale	Light green grey, brachiopod.
2820'-2825'	Shale	Light green grey.

2825'-2830'	Shale	Light green grey.
2830'-2835'	Shale	Light green grey.
2835'-2840'	Shale	Pale green.
2840'-2845'	Shale	Pale green, trilobites.
2845'-2850'	Shale	Pale green.
2850'-2855'	Shale	Pale green, pyrite.
2855'-2860'	Shale	Pale green.
2860'-2865'	Dolomite.	Very light green, extremely fine to microgranular grained dolomite, 10% argillaceous shale, 30% chert.
2865'-2870'	Shale	Pale green.
2870'-2875'	Shale	Pale green, fossils. Shale fairly hard, splintery, brittle.
2875'-2880'	Dolomite	Very light brown, very fine to extremely fine grained dolomite, 40% chert, pyrite, glauconite; glauconite grains medium to coarse up to [illegible] of rock.
2880'-2885'	Dolomite	Very light brown, very fine to extremely fine dolomite, 40% chert, glauconite medium to coarse up to 20% of rock.
2885'-2890'	Shale	Pale green.
2890'-2895'	Shale	Pale green.
2895'-2900'	Shale	Pale green, trace dolomite.
2900'-2905'	Shale	Pale green.
2905'-2910'	Shale	Pale green.
2910'-2915'	Shale	Pale green, trace dolomite.
2915'-2920'	Shale	Pale green.
2920'-2925'	Shale	Pale green.
2925'-2930'	Shale	Pale green.
2930'-2935'	Shale	Pale green.

2935'-2940'	Shale	Pale green.
2940'-2945'	Shale	Pale green.
2945'-2950'	Shale	Pale green.
2950'-2955'	Shale	Pale green.
2955'-2960'	Shale	Pale green, fossils.
2960'-2965'	Shale & Chert	Very light brown, 30% chert, 30% argillaceous content.
2965'-2970'	Shale	Pale green.
2970'-2975'	Shale	Medium brown grey.
2975'-2980'	Shale	Pale green.
2980'-2985'	Shale	Pale green.
2985'-2990'	Shale	Pale green.
2990'-2995'	Shale	Pale green.
2995'-3000'	Shale	Pale green.
3000'-3005'	Shale	Pale green, band of medium brown extremely fine to micro-granular dolomite.
3005'-3010'	Shale	Pale green.
3010'-3015'	Shale	Pale green.
3015'-3020'	Shale	Pale green.
3020'-3025'	Shale	Pale green, few dolomite rhombs, floating.
3025'-3030'	Shale	Pale green.
3030'-3035'	Shale	Pale green.
3035'-3040'	Shale	Pale green.
3040'-3045'	Shale	Pale green.
3045'-3050'	Shale	Pale green.
3050'-3055'	Shale	Pale green.
3055'-3060'	Shale	Pale green.

3060'-3065'	Shale	Pale green.
3065'-3070'	Shale	Pale green.
3070'-3075'	Shale	Pale green.
3075'-3080'	Shale	Pale green.
3080'-3085'	Shale	Pale green.
3085'-3090'	Shale	Pale green.
3090'-3095'	Shale	Pale green, fine dolomite rhombs, floating in shale.
3095'-3100'	Shale	Pale green.
3100'-3105'	Shale	Pale green.
3105'-3110'	Shale	Pale green.
3110'-3115'	Shale	Pale green.
3115'-3120'	Shale	Pale green.
3120'-3125'	Shale	Pale green.
3125'-3130'	Shale	Pale green.
3130'-3135'	Shale	Pale green.
3135'-3140'	Shale	Pale green.
3140'-3145'	Shale	Pale green.
3145'-3150'	Shale	Pale green, trilobites.
3150'-3155'	Shale	Pale green, few dolomite rhombs.
3155'-3160'	Shale	Pale green.
3160'-3165'	Shale	Pale green.
3165'-3170'	Shale	Pale green.
3170'-3175'	Shale	Pale green.
3175'-3180'	Shale	Pale green.
3180'-3185'	Shale	Pale green, fossils, trilobite?
3185'-3190'	Shale	Pale green, brachiopods.
3190'-3195'	Shale	Pale green.

3195'-3200'	Shale	Pale green.
3200'-3205'	Shale	Pale green, trilobite check.
3205'-3210'	Shale	Pale green, few small fossil fragments scattered thru samples mostly trilobite.
3210'-3215'	Shale	Pale green, trilobites.
3215'-3220'	Shale	Pale green, trilobite.
3220'-3225'	Shale	Light brown green, 20% dolomite, trilobite.
3225'-3230'	Shale	Light green-light brown, 40% dolomite, trilobite.
3230'-3255'	Shale	Pale green, trilobites; core-green shale with good trilobites.
3255'-3260'	Shale	Pale green.
3260'-3265'	Shale	Light green grey, trilobites
3265'-3270'	Shale	Pale green.
3270'-3275'	Shale	Light green-light brown, shale slightly micaceous in part.
3275'-3280'	Shale	Light green-light brown; band argillaceous dolomite.
3280'-3285'	Shale	Light green-light brown.
3285'-3290'	Shale	Light green grey.
3290'-3295'	Shale	Light green grey.
3295'-3300'	Shale	Light brown grey.
3300'-3305'	Shale	Light green grey.
3305'-3310'	Shale	Light green grey.
3310'-3315'	Shale	Light green grey.
3315'-3320'	Shale	Light green grey, very small brachiopods.
3320'-3325'	Shale	Light green grey, trilobites.

3325'-3330'	Shale	Light grey.
3330'-3335'	Shale	Light green-light brown.
3335'-3340'	Shale	Light green-light brown.
3340'-3345'	Shale	Pale green.
3345'-3350'	Shale	Pale green.
3350'-3355'-	Shale	Light grey.
3355'-3360'	Shale	Light grey, trace dolomite
3360'-3365'	Shale	Light grey, 10% dolomite; band of dolomite.
3365'-3370'	Shale	Pale green, trace dolomite.
3370'-3375'	Shale	Pale green, trace dolomite.
3375'-3380'	Shale	Light brown-light green, trace dolomite.
3380'-3385'	Shale	Light brown-light green, trace dolomite.
3385'-3390'	Shale	Light brown-light green, trace dolomite.
3390'-3395'	Shale	Light brown grey.
3395'-3400'	Shale	Light brown grey, trace dolomite, mica.
3400'-3405'	Shale	Light brown grey, mica.
3405'-3410'	Shale	Light green.
3410'-3415'	Shale	Light grey, trace dolomite.
3415'-3420'	Shale	Light green.
3420'-3425'	Shale	Light green.
3425'-3430'	Shale	Light brown grey.
3430'-3435'	Shale	Light green.
3435'-3440'	Shale	Light brown grey.
3440'-3445'	Shale	Light brown grey, trace dolomite.

3445'-3450'	Shale	Light brown grey, 10% siltstone, trace dolomite.
3450'-3455'	Shale	Light green, mica.
3455'-3460'	Shale	Light brown grey, 10% siltstone.
3460'-3465'	Shale	Light brown grey, 10% siltstone, trace dolomite, mica.
3465'-3470'	Shale	Light brown grey, 10% silty content.
3470'-3475'	Shale	Light green.
3475'-3480'	Shale	Light brown, 40% siltstone, 10% dolomite, mica.
3480'-3485'	Shale	Light brown, 40% siltstone, 10% dolomite, mica.
3485'-3490'	Shale	Light brown-light green.
3490'-3495'	Shale	Light brown.
3495'-3500'	Shale	Light brown.
3500'-3505'	Shale	Light green, siltstone.
3505'-3510'	Shale	Light green.
3510'-3515'	Shale	Light green.
3515'-3520'	Shale	Light brown, 20% siltstone, trace dolomite.
3520'-3525'	Shale	Light brown, 20% siltstone, trace dolomite; few chips anhydrite.
3525'-3530'	Shale	Light green.
3530'-3535'	Shale	Light green.
3535'-3540'	Shale	Light brown.
3540'-3545'	Shale	Light green grey.
3545'-3550'	Shale	Light green grey.
3550'-3555'	Shale	Light brown, 40% siltstone, 10% dolomite, mica.

3555'-3560'	Shale	Light grey green.
3560'-3565'	Shale	Light brown.
3565'-3570'	Shale	Light brown, 40% siltstone, 10% dolomite, mica.
3570'-3575'	Shale	Light brown, 40% siltstone, 10% dolomite, mica.
3575'-3580'	Shale	Light green grey.
3580'-3585'	Shale	Light brown grey.
3585'-3590'	Shale	Light brown grey, trace silty-shale.
3590'-3595'	Shale	Light brown, 20% silty shale, trace dolomite.
3595'-3600'	Shale	Light brown, 20% silty shale, trace dolomite.
3600'-3605'	Shale	Pale green.
3605'-3610'	Shale	Light brown.
3610'-3615'	Shale	Light green.
3615'-3620'	Shale	Olive grey, trace dolomite.
3620'-3625'	Shale	Olive grey, 20% silty shale, mica.
3625'-3630'	Shale	Olive grey.
3630'-3635'	Shale	Olive grey.
3635'-3640'	Shale	Light green.
3640'-3645'	Shale	Brown grey.
3645'-3650'	Shale	Light brown grey, 30% silty shale.
3650'-3655'	Shale	Light brown grey, 30% silty shale.
3655'-3660'	Shale	Light brown grey, 30% silty shale.
3660'-3665'	Shale	Light brown grey, 30% silty shale.
3665'-3670'	Shale	Light brown grey, 10% silty shale.

3670'-3675'	Shale	Light brown grey, 10% silty-shale.
3675'-3680'	Shale	Light green grey.
3680'-3685'	Shale	Light green grey, glauconite.
3685'-3690'	Shale	Light medium brown grey.
3690'-3695'	Shale	Light medium brown grey.
3695'-3700'	Shale	Light medium brown grey.
3700'-3705'	Shale	Light medium brown grey.
3705'-3710'	Shale	Light medium brown grey.
3710'-3715'	Shale	Light medium brown grey.
3715'-3720'	Shale	Light medium brown grey.
3720'-3725'	Shale	Light medium brown grey.
3725'-3730'	Shale	Light medium brown grey.
3730'-3735'	Shale	Light medium brown grey.
3735'-3740'	Shale	Light medium brown grey.
3740'-3745'	Shale	Light medium brown grey.
3745'-3750'	Shale	Light medium brown grey, 10% dolomite.
3750'-3755'	Shale	Light medium brown grey.
3755'-3760'	Shale	Light medium brown grey, 20% siltstone, 10% calcareous content.
3760'-3765'	Shale	Light medium brown grey, 10% siltstone, 10% dolomite.
3765'-3770'	Shale	Light medium brown grey, trace dolomite.
3770'-3775'	Shale	Light medium brown grey, trace siltstone, 10% dolomite, glauconite.
3775'-3780'	Shale	Light medium brown grey.
3780'-3785'	Shale	Light medium brown grey.

3785'-3790'	Shale	Light medium brown grey.
3790'-3795'	Shale	Light medium brown grey.
3795'-3800'	Shale	Light green.
3800'-3805'	Shale	Light brown, 10% siltstone, trace dolomite.
3805'-3810'	Shale	Light brown, trace dolomite.
3810'-3815'	Shale	Light green.
3815'-3820'	Shale	Light brown.
3820'-3825'	Shale	Medium brown.
3825'-3830'	Shale	Medium brown.
3830'-3835'	Shale	Medium brown, 10% dolomite; shale fairly hard, flaky, splintery.
3835'-3840'	Shale	Medium brown.
3840'-3845'	Shale	Medium brown.
3845'-3850'	Shale	Light green, trace dolomite.
3850'-3855'	Shale	Light brown, 20% dolomite.
3855'-3860'	Shale	Light brown, 10% dolomite.
3860'-3865'	Shale	Light brown, trace dolomite.
3865'-3870'	Shale	Light brown.
3870'-3875'	Shale	Light brown.
3875'-3880'	Shale	Light brown, 10% dolomite.
3880'-3885'	Shale	Medium brown, 20% dolomite.
3885'-3890'	Shale	Medium brown, 20% dolomite.
3890'-3895'	Shale	Olive grey.
3890'-3900'	Shale	Olive grey.
3900'-3905'	Shale	Light green.
3905'-3910'	Shale	Light medium brown, 20% dolomite.
3910'-3915'	Shale	Olive grey.

3915'-3920'	Shale	Medium brown, trace dolomite.
3920'-3925'	Shale	Medium brown, 10% dolomite.
3925'-3930'	Shale	Olive grey.
3930'-3935'	Shale	Light medium brown, 30% dolomite; very finely laminated.
3935'-3940'	Shale	Light medium brown, 30% dolomite.
3940'-3945'	Shale	Light medium brown, 30% dolomite.
3945'-3950'	Shale	Light medium brown, 30% dolomite.
3950'-3955'	Shale	Light medium brown, 40% dolomite.
3955'-3960'	Shale & Dolomite	Light medium brown, 40% dolomite, 40% argillaceous content, 20% siltstone.
3960'-3965'	Shale	Light medium brown, 20% dolomite.
3965'-3970'	Shale	Light medium brown, 10% silty-shale, 20% dolomite.
3970'-3975'	Shale	Light medium brown, 20% dolomite.
3975'-3980'	Shale	Light medium brown, 20% dolomite; finely laminated.
3980'-3985'	Shale	Light medium brown, 20 dolomite.
3985'-3990'	Shale	Light medium brown, 20% dolomite.
3990'-3995'	Shale	Light green.
3995'-4000'	Shale	Light green.
4000'-4005	Shale	Light green.
4005'-4010'	Shale	Medium olive grey.
4010'-4015'	Shale	Light medium brown, 20% dolomite.
4015'-4020'	Shale	Light medium brown, 10% dolomite.

4020'-4025'	Shale	Light brown grey.
4025'-4030'	Shale	Light brown grey.
4030'-4035'	Shale	Light brown grey, 10% dolomite.
4035'-4040'	Shale	Light brown grey.
4040'-4045'	Shale	Dark grey, 10% dolomite.
4045'-4050'	Shale	Dark grey, 10% dolomite.
4050'-4055'	Shale	Dark grey, 20% dolomite.
4055'-4060'	Shale	Very dark grey, 10% dolomite, 20% chert, 5% pyrite,; very hard silty shale.
4060'-4065'	Dolomite	Medium brown grey, 10% argillaceous content, 10% extremely fine grained chert.
4065'-4070'	Shale	Very dark grey, 10% dolomite, 20% chert.
4070'-4075'	Shale	Dark grey, 10% dolomite, pyrite.
4075'-4080'	Shale	Brown grey, 30% dolomite.
4080'-4085'	Shale	Very dark grey, 10% chert.
4085'-4090'	Dolomite	Medium brown, 10% argillaceous content.
4090'-4095'	Dolomite	Medium brown, 30% argillaceous content.
4095'-4100'	Dolomite	Medium brown, 10% argillaceous content.
4100'		At 4100' thick drilling mud suggests presence of evaporites.
4094'-4110'		Very poor samples.
4100'-4110'	Shale	Medium dark brown, 10% dolomite.
4110'-4130'	?	Sample may be all caving.
4130'-4135'	?	Sample may be all caving.

4135'-4140'	Shale	Medium dark brown, 20% dolomite.
4140'-4145'	Shale	Medium dark brown, 20% dolomite.
4145'-4150'	Shale	Medium dark brown, 20% dolomite; mud salinity of 37,000 ppm.
4150'-4235'		Chloride at 4235' indicates presence of salt. No evaporite seen in samples.

Prepared by Northern Division
Exploration - Northwest Territories
District under the supervision of
Fred A. Kidd, Manager, Northern
Division Exploration, Shell Canada
Limited, April 21, 1965.

GEOPHYSICAL REPORT
VELOCITY SURVEY
SHELL, KEELE RIVER J-4
NORTHWEST TERRITORIES

SHELL CANADA LIMITED
NORTHERN DIVISION EXPLORATION
EDMONTON, ALBERTA APRIL, 1965

VELOCITY DETERMINATION REPORT

SHELL CANADA LIMITED

SHELL, KEELE RIVER L-4

NORTHWEST TERRITORIES

SHELL CANADA LIMITED
NORTHERN DIVISION EXPLORATION
EDMONTON, ALBERTA APRIL 29, 1965

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ENCLOSURE

Geophysical Log

GENERAL INFORMATION

A velocity survey was run in the Shell, Keele River L-4 test by Schlumberger and Seismic Reference Services (Century). The well is located 64°23'37" N. latitude and 125°01'43" W. longitude, in the Northwest Territories.

K.B. is 862 feet above sea level, and T.D. is 4235; but because of hole conditions logs were run to only 4049.

Observations were made at four levels.

GEOPHYSICAL TECHNIQUE

Shots were made in four holes approximately 450 feet from the well. Depth of shot and charges are indicated in the records.

COMPUTATION

Seismic times are referred to a plane 820 feet above sea level using an elevation correction velocity of 10,000 feet per second. The computation method is described by a diagram on the log.

RESULTS

Breaks were generally of good quality. The results are shown graphically by plotting vertical time, average velocity, and interval velocity against depth below the datum plane.

For the purpose of comparison the interval velocities were converted to interval transit time in microseconds and plotted on the sonic log.

Prepared by Northern Division
Exploration - Northwest Territories
District under the supervision of
Fred A. Kidd, Manager, Northern
Division Exploration, Shell Canada
Limited, April 29, 1965.

VELOCITY DETERMINATION REPORT

SHELL CANADA LIMITED

SHELL, KEELE RIVER L-4

NORTHWEST TERRITORIES

SHELL CANADA LIMITED
NORTHERN DIVISION EXPLORATION
EDMONTON, ALBERTA APRIL 29, 1965

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Prepared by Northern Division Exploration - Northwest Territories District under the supervision of Fred A. Kidd, Manager, Northern Division Exploration, Shell Canada Limited, April 29, 1965.

C.P.—38

DAILY DRILLING REPORT

REPORT NO. 49 DATE January 14 - 62

OPERATOR	LOCATION LSD.	SEC.	TWP.	RGE.	W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited						Shell Paris Rimby	L - 4	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
Regent Drilling Ltd	21		

OPERATOR'S REPRESENTATIVE	CONTRACTOR'S TOOL PUSHER
E Ettinger	R. Mefford

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1			
2			
3			

CASING & LINER RECORD	SIZE	WT. & GR	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

MORNING TOUR

TIME DISTRIBUTION—HOURS

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

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	D.C. OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER R Pachold

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

8/ Drain and clean out D-300
Work and Repair Sub and anything
Tear out Rig
Full Crew

MUD RECORD

TIME				
WEIGHT				
VISC				
W.L.-C.C.				
FLTR. CK.				
PH				
SD. CONT.				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	D.C. OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO.	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

Tear Out
Take Down Garage.
Full Crew

MUD RECORD

TIME				
WEIGHT				
VISC				
W.L.-C.C.				
FLTR. CK.				
PH				
SD. CONT.				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:	
OPERATOR'S TIME:	
HRS. W/D.P:	
[illegible]	
HRS. WO/D.P:	
HRS. STANDBY	

WIRE LINE RECORD

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

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	D.C. OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT OF STRING	LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

8/ Tear Out Rig
Take Down Garage.
Full Crew

MUD RECORD

TIME				
WEIGHT				
VISC				
W.L.-C.C.				
FLTR. CK.				
PH				
SD. CONT.				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38

DAILY DRILLING REPORT

REPORT NO. 48 DATE Jan. 13 - 65

OPERATOR: Shell Oil Company of Canada, Limited

LOCATION LSD SEC. TWP. RGE. W.

WELL NAME: Shell Keele River No. 2 - 4 PROVINCE: N.W.T.

CONTRACTOR: Regent Drilling RIG No. 21

DRILL PIPE STRING NO. SIZE | TOOL JOINT OD | TYPE THD.

OPERATOR'S REPRESENTATIVE: R. E. Hennigh

CONTRACTOR'S TOOL PUSHER: R. Mefford

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.			
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING			
TRIPS			
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
[illegible]ER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS			

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

[illegible]

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG / TYPE	
	RMR BODY OD	FT.	NOZ. NO. / SIZE	
	STB BODY OD	FT.		
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER: L. Pacholik

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

4 Tear Out Rig
Dere Substructure and mud Tanks.
Cemented 20 sks in Top of 9 5/8 Casing
Welded Plate on Casing - Erected @ Well Marker.
RELEASED RIG @ 8 AM. - hh.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG / TYPE	
	RMR BODY OD	FT.	NOZ. NO. / SIZE	
	STB BODY OD	FT.		
	SUBS OD	FT.	SER. NO.	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

8 Tear Out Rig

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG / TYPE	
	RMR BODY OD	FT.	NOZ. NO. / SIZE	
	STB BODY OD	FT.		
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT OF STRING	LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

Tear Out Rig
Clean Mud Tanks

FULL CREWS

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR CK.	
PH	
SD. CONT	

MUD & CHEMICALS ADDED

TYPE	AMT	TYPE	AMT

C.P.—38

DAILY DRILLING REPORT

REPORT NO. 47 DATE Jan 12, 1965

OPERATOR: Shell Oil Company of Canada, Limited

LOCATION LSD. SEC. TWP. RGE. W. WELL NAME: Shell Keele River No. L-41 PROVINCE N W T

CONTRACTOR: Regent Drilling Ltd RIG No. 21

DRILL PIPE STRING NO. SIZE | TOOL JOINT OD | TYPE THD.

OPERATOR'S REPRESENTATIVE: E Ettinger

CONTRACTOR'S TOOL PUSHER: M Murdock

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D200	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

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

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS.

OPERATOR'S TIME:

HRS. W/D.P:

[illegible]

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER: D Pacholek.

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

1/2 Fuel Pump #2 @ 2208
1 1/2 Lay Down 25 std pipe
1 1/2 Rig Up To Run #3 plug & Run In
1/2 Run Plug #3
4 W.O.C.

From 795' To 600 FT - 70 SX + 2% CaCl2.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	SIZE	
	SUBS OD	FT.	SER. NO.	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER: McConney

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

4 W.O.C.
1/2 Run In Fill Plug #3
1 Laying Down Drill Pipe
2 1/2 Clear out B.O.P

Fill No 3. Plug @ 590

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C ID		MFG.	
	OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	SIZE	
	SUBS OD	FT.	SER NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT OF STRING	LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV.	DIRECTION

REMARKS

4 Tearing out B.O.P & Lines
Clean Mud Tanks

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR CK	
PH	
SD. CONT	

MUD & CHEMICALS ADDED

TYPE	AMT	TYPE	AMT.

C.P.—38

DAILY DRILLING REPORT

REPORT NO. 46 DATE Jan. 11, 1965

OPERATOR: Shell Oil Company of Canada, Limited

LOCATION LSD. 64 SEC. 23 TWP. 270 N - 1260' RGE. 5 W. 5.0 W

WELL NAME: Shell Kaybob K - 24 No. 2 - 4

PROVINCE: N.W.T.

CONTRACTOR: Regent Drilling Ltd. RIG No. 21

DRILL PIPE STRING NO. SIZE

TOOL JOINT OD

TYPE THD. I.F.

OPERATOR'S REPRESENTATIVE: E. Ettinger

CONTRACTOR'S TOOL PUSHER: T. MacDonald

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

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

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME: 24 hrs.

HRS. W/D.P:

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO. DRILLING ASSEMBLY

STANDS DP		FT.
SNGLS. DP		FT.
D.C. ID		
D.C. OD		FT.
RMR BODY OD		FT.
STB BODY OD		FT.
SUBS OD		FT.
BIT OR C.B.		FT.
		FT.
KELLY DOWN		FT.
TOTAL		FT.
WT. OF STRING		LBS.

DRILLER: R. Pacholek

BIT RECORD

RUN NO	
SIZE	
MFG.	
TYPE	
NOZ. NO.	
NOZ. SIZE	
SER. NO	
DEPTH OUT	
CUMULATIVE HOURS RUN	
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

6A Rig up to Run Casing & Plugs.

FINISH. LAY DOWN. DC.S. RIG UP CEMENTER

START. ENGINES. - STEAM. OUT CEMENTER

LOW - 42 HTCH - 26.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO. DRILLING ASSEMBLY

STANDS DP		FT.
SNGLS. DP		FT.
D.C. ID		
D.C. OD		FT.
RMR BODY OD		FT.
STB BODY OD		FT.
SUBS OD		FT.
BIT OR C.B.		FT.
		FT.
KELLY DOWN		FT.
TOTAL		FT.
WT. OF STRING		LBS.

DRILLER

BIT RECORD

RUN NO.	
SIZE	
MFG.	
TYPE	
NOZ. NO.	
NOZ. SIZE	
SER. NO.	
DEPTH OUT	23° - 4PM
CUMULATIVE HOURS RUN	
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
8-2PM		CIRCULATE & CONDITION HOLE						

REMARKS

23° Ran No1 Plug 4030 - 3830 - 140 SX CEMENT. -

Ran No2 Plug 2340 - 2200 - 60 SX. CEMENT.. PLUG DOWN 4PM

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO. DRILLING ASSEMBLY

STANDS DP		FT.
SNGLS. DP		FT.
D.C. ID		
D.C. OD		FT.
RMR BODY OD		FT.
STB BODY OD		FT.
SUBS OD		FT.
BIT OR C.B.		FT.
		FT.
KELLY DOWN		FT.
TOTAL		FT.
WT. OF STRING		LBS.

DRILLER

BIT RECORD

RUN NO.	
SIZE	
MFG.	
TYPE	
NOZ. NO.	
NOZ. SIZE	
SER NO	
DEPTH OUT	12 MIDNIGHT
CUMULATIVE HOURS RUN	2208 ft.
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

7. U/OC. 4PM 6 11.3 PM. - 11.3 #6 MINUTE RUN

2. top of Plug

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR CK	
PH	
SD CONT	

MUD & CHEMICALS ADDED

TYPE	AMT	TYPE	AMT.

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 45 DATE JAN. 10 1965

OPERATOR: Shell Oil Company of Canada, Limited	LOCATION: LSD 23 SEC 37.0 TWP 125 RGE 13.8 W 4 W	WELL NAME: SHELL KEELE RIVER	No. L-4	PROVINCE: N.W.T.	
CONTRACTOR: REGENT DRLG.	RIG No. 21	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.		
OPERATOR'S REPRESENTATIVE: C.B. Tingle	CONTRACTOR'S TOOL PUSHER: R. Wilson				

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D-300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
9⅝		0	798				

TIME DISTRIBUTION—HOURS

	WORK	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING			
TRIPS			
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
[illegible]KER	8		
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8		

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME: 24 hrs.

HRS. W/D.P:

HRS W/O D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. of TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
58	STANDS DP	FT.	RUN NO.	
1	SNGLS. DP	357.79 FT.	SIZE	
20	D.C. ID / OD	603.20 FT.	MFG. / TYPE	
	RMR BODY OD	FT.	NOZ. NO. / SIZE	
	STB BODY OD	FT.		
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	22.00 FT.	COND. OF BIT	
	TOTAL	4242.9 FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER R. Ran

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			4239									

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

REMARKS

8 WAIT ON ORDERS

MUD RECORD

TIME				
WEIGHT				
VISC				
W.L.-C.C.				
FLTR. CK.				
PH				
SD. CONT.				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG. / TYPE	
	RMR BODY OD	FT.	NOZ. NO. / SIZE	
	STB BODY OD	FT.		
	SUBS OD	FT.	SER. NO.	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER MC Connery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			4239									

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

REMARKS

4 WAITING ON ORDERS

2 LAY DOWN CORE BBL

2 RUN IN D. COLLARS + LAY DOWN SAME

MUD RECORD

TIME				
WEIGHT				
VISC				
W.L.-C.C.				
FLTR. CK.				
PH				
SD. CONT.				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C ID / OD	FT.	MFG. / TYPE	
	RMR BODY OD	FT.	NOZ. NO. / SIZE	
	STB BODY OD	FT.		
	SUBS OD	FT.	SER NO	
	BIT OR C.B.	FT	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT OF STRING		LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			4239									

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV / DIRECTION / DEPTH / DEV / DIRECTION

REMARKS

1½ LAYING DOWN DRILL COLLARS

2½ RUN IN HOLE W/OPEN END. PICK UP SINGLES OF PIPE RACK

4 Rig to Run Plug.

MUD RECORD

TIME				
WEIGHT				
VISC				
W.L.-C.C.				
FLTR. CK.				
PH				
SD. CONT				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

C.P.—38

DAILY DRILLING REPORT

REPORT NO. 49 DATE JAN. 9 1965

OPERATOR: Shell Oil Company of Canada, Limited

LOCATION LSD. SEC. TWP. RGE. W.

WELL NAME: SHELL KEELE RIVER No. L-4

PROVINCE: N.W.T.

CONTRACTOR: REGENT DRILLING RIG No. 21

DRILL PIPE STRING NO. SIZE | TOOL JOINT OD | TYPE THD.

OPERATOR'S REPRESENTATIVE: E. Ettinger

CONTRACTOR'S TOOL PUSHER: R. Mentzelopoulos

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	EMSCO	D-300	19"
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
9 5/8		0	798				

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING		2 1/2	
TRIPS		3 1/4	
DEVIATION SURVEY			
TEST B.O.P		1/4	
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING	3 1/2	1/2	
OTHER	1/2		
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	9		

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

HRS W/O D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD
58	STANDS DP	FT.	RUN NO.
1	SNGLS. DP	3617.79 FT.	SIZE
	D.C. ID		MFG.
20	D.C. OD	603.20 FT.	TYPE
	RMR BODY OD	FT.	NOZ. NO.
	STB BODY OD	FT.	NOZ. SIZE
	SUBS OD	FT.	SER. NO
	BIT OR C.B.	FT.	DEPTH OUT
		FT.	CUMULATIVE HOURS RUN
	KELLY DOWN	22.00 FT.	COND. OF BIT
	TOTAL	4242.99 FT.	REAMER CUTTER NO.
WT. OF STRING		LBS.	TYPE

DRILLER: Lw. Ram

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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

	REMARKS
3 1/2	SCHLUMBERGER LOGGING — Ran Schlumberger MLC log 745' to 4043' 5" scale.
1/2	TEAR OUT SCHLUMBERGER
1/2	RUN IN DRILL COLLARS
2 1/2	CIRC. MIXING GEL + WT. MATERIAL
1	RUN IN D.P.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	20 SKS		
WT. MATERIAL	30 SKS		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD
58	STANDS DP	FT.	RUN NO.
1	SNGLS. DP	3617.79 FT.	SIZE
	D.C. ID		MFG.
20	D.C. OD	603.20 FT.	TYPE
	RMR BODY OD	FT.	NOZ. NO.
	STB BODY OD	FT.	NOZ. SIZE
	SUBS OD	FT.	SER. NO.
	BIT OR C.B.	FT.	DEPTH OUT
		FT.	CUMULATIVE HOURS RUN
	KELLY DOWN	22 FT.	COND. OF BIT
	TOTAL	4242 FT.	REAMER CUTTER NO.
WT. OF STRING		LBS.	TYPE

DRILLER: Mc Conney

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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

	REMARKS
1/4	RIG SERV CHECK B.O.P
1/2	RUN IN TO 2000
1 1/2	CIRC + MIX WT MATERIAL + GEL
1/2	RUN IN TO BOTTOM
1	CIRC
2 1/4	PULL OUT TO LOG — Ran Velocity Survey 4 shots 4050, 3500
1/2	RIG-UP TO RUN LOG — 2280, 1100.
1 1/2	LOGGING

MUD RECORD

TIME	8	9	11
WEIGHT	10.1	10.1	10.1
VISC	225	225	230
W.L.-C.C.		108	
FLTR. CK.		3/32	
PH		7	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
WT MATERIAL	40 SKS		
GEL	10 SKS		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD
58	STANDS DP	FT.	RUN NO
1	SNGLS. DP	3617.79 FT.	SIZE
	D.C. ID		MFG.
20	D.C. OD	603.20 FT.	TYPE
	RMR BODY OD	FT.	NOZ. NO.
	STB BODY OD	FT.	NOZ. SIZE
	SUBS OD	FT.	SER NO
	BIT OR C.B.	FT	DEPTH OUT
		FT.	CUMULATIVE HOURS RUN
	KELLY DOWN	22.00 FT.	COND. OF BIT
	TOTAL	4242.99 FT.	REAMER CUTTER NO.
WT OF STRING		LBS.	TYPE

DRILLER: Lw. Ram

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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

	REMARKS
7 1/2	SCHLUMBERGER LOGGING
1/2	TANK OUT SCHLUMBERGER

Ran Schlumberger D.Impeation
4000 - 3500
3650 - 3400
2400 - 1400

All logs completed 6:00 P.M.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR CK.	
PH	
SD. CONT	

MUD & CHEMICALS ADDED

TYPE	AMT	TYPE	AMT

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 43 DATE JAN. 6 1965

OPERATOR: Shell Oil Company of Canada, Limited
LOCATION LSD. SEC TWP. RGE. W.
WELL NAME: SHELL KEELE RIVER No. L-4 PROVINCE N.W.T.
CONTRACTOR: REGENT DRILLING RIG No. 21
DRILL PIPE STRING NO. SIZE / TOOL JOINT OD / TYPE THD.
OPERATOR'S REPRESENTATIVE: E.E. Tanger
CONTRACTOR'S TOOL PUSHER

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	EMSCO	D-300	14"
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
9⅝		0	748				

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING			
TRIPS			
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING	8	8	8
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS			

TIME SUMMARY (OFFICE USE ONLY)
CONTRACTOR'S TIME HRS:
OPERATOR'S TIME:
HRS. W/D.P:
HRS WO/D.P:
HRS STANDBY:

WIRE LINE RECORD

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

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
58	STANDS DP	FT.	RUN NO.	
1	SNGLS. DP	3617.79 FT.	SIZE	
	D.C. ID		MFG.	
20	4½" OD	603.20 FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN 22.00	FT.	COND. OF BIT	
	TOTAL 4242.99	FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER: Ed. Ram

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH / DEV. / DIRECTION (×3)

REMARKS
8 SCHLUMBERGER LOGGING,

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO.	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER: McConnery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH / DEV. / DIRECTION (×3)

REMARKS
8 SCHLUMBERGER LOGGING
Bottom reached by Schlumberger 4042
Hole bridged off at this point.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C ID		MFG.	
	OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER NO	
	BIT OR C.B.	FT	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT OF STRING		LBS.	TYPE	

DRILLER: Pat. Ram

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH / DEV. / DIRECTION (×3)

REMARKS
8 SCHLUMBERGER LOGGING
Sonic Gamma Ray Run #1 4042 - Surface
2" = 5" scale.
Induction Electrical Log Run #1 4041 - 746
2" = 5" scale.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 4/2 DATE DEC 7/65

OPERATOR	LOCATION LSD	SEC.	TWP.	RGE.	W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited						SHELL KEEL RIVER	L-4	N.W.T

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT GD / TYPE THD.
REGENT DRLG	21		

OPERATOR'S REPRESENTATIVE: [illegible]ingier

CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.			
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL		4	
REAMING		4	
CIRCULATING		2 1/2	
TRIPS		2 1/2	
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS		8	

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P.

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD
58	STANDS DP	FT.	RUN NO.
1	SNGLS. DP	3617.79 FT.	SIZE
20	D.C. ID / OD	603.20 FT.	MFG.
	RMR BODY OD	FT.	TYPE
	STB BODY OD	FT.	NOZ. NO. / SIZE
	SUBS OD	FT.	SER. NO
	BIT OR C.B.	FT.	DEPTH OUT
		FT.	CUMULATIVE HOURS RUN
	KELLY DOWN	22 FT.	COND. OF BIT
	TOTAL	4242 FT.	REAMER CUTTER NO.
WT. OF STRING		LBS.	TYPE

DRILLER: McConnery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)
4				REAMING IN FROM 3280 TO 3650
1/2				RUN IN
1				CIRC
1 1/2				DUMMY TRIP
1				CIRC

ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

MUD RECORD

TIME	1	2	3
WEIGHT	9.5	9.5	9.5
VISC	120	125	125
W.L.-C.C.		10	
FLTR. CK.		2/32	
PH		11	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	20 SKS		
CMC	50 LBS		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD
58	STANDS DP	FT.	RUN NO.
1	SNGLS. DP	3617.79 FT.	SIZE
20	D.C. ID / OD	603.20 FT.	MFG.
	RMR BODY OD	FT.	TYPE
	STB BODY OD	FT.	NOZ. NO. / SIZE
	SUBS OD	FT.	SER. NO.
	BIT OR C.B.	FT.	DEPTH OUT
		FT.	CUMULATIVE HOURS RUN
	KELLY DOWN	22.00 FT.	COND. OF BIT
	TOTAL	4242.00 FT.	REAMER CUTTER NO.
WT. OF STRING	56000	LBS.	TYPE

DRILLER: [illegible]

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)
3/4				CIRCULATE, SER. R.°
1 1/4				DUMMY TRIP 15 STDS.
4 1/2				CIRCULATE @ 3100, MIXING GEL & WT. MATERIAL
1 1/2				RUN IN REAM BRIDGES @ 3490 & 3868

ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
		800	5 1/2	66			

DEVIATION RECORD:

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

REMARKS

MUD RECORD

TIME	10:00	12:00	2:00
WEIGHT	9.5	10.3	10.3
VISC	180	253	233
W.L.-C.C.	10.2		
FLTR. CK.	2/32		
PH	11		
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	18 SKS.		
WT. MAT.	100 SK.		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD
58	STANDS DP	FT.	RUN NO
1	SNGLS. DP	3617.79 FT.	SIZE
	D.C. ID / OD	603.20 FT.	MFG.
	RMR BODY OD	FT.	TYPE
	STB BODY OD	FT.	NOZ. NO. / SIZE
	SUBS OD	FT.	SER NO
	BIT OR C.B.	FT.	DEPTH OUT
		FT.	CUMULATIVE HOURS RUN
	KELLY DOWN	22 FT.	COND. OF BIT
	TOTAL	4242 FT.	REAMER CUTTER NO.
WT OF STRING		LBS.	TYPE

DRILLER: McConnery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)
1 1/2				REAMING FROM 3868 TO 3700 RUN IN 3 STDS TO BOTTOM
1				CIRC
1 1/2				PULL 15 STANDS WAIT 20 MINS RUN IN
1				CIRC
2 1/2				PULL OUT TO LOG
1/2				RIG UP TO LOG

ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

MUD RECORD

TIME			
WEIGHT			
VISC			
W.L.-C.C.			
FLTR CK.			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 48 DATE DEC 6/65

OPERATOR: Shell Oil Company of Canada, Limited
LOCATION LSD. SEC. TWP. RGE. W.
WELL NAME: SHELL KEEL RIVER No. L-4
PROVINCE: N.W.T.
CONTRACTOR: REGENT DRLG RIG No. 21
DRILL PIPE STRING NO. SIZE / TOOL JOINT OD / TYPE THD.
OPERATOR'S REPRESENTATIVE: B Ettinger
CONTRACTOR'S TOOL PUSHER: C Dunsick

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	EMSCO	D-300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL		1	
REAMING			
CIRCULATING			
TRIPS		5 1/4	1/2
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING		2 3/4	3/2
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS		8	

TIME SUMMARY (OFFICE USE ONLY)
CONTRACTOR'S TIME HRS:
OPERATOR'S TIME:
HRS. W/D.P:
HRS WO/D.P:
HRS STANDBY

WIRE LINE RECORD

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

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
58	STANDS DP	FT.	RUN NO.	
1	SNGLS. DP	3617.79 FT.	SIZE	
20	D.C. ID / OD	603.20 FT.	MFG.	
	RMR BODY OD	FT.	TYPE	
	STB BODY OD	FT.	NOZ. NO. / SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	22 FT.	COND. OF BIT	
	TOTAL	4242 FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER: M. Connery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			TD									
			4242									

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

REMARKS
2 Pull out TO RUN LOG
2 1/4 TRY TO LOG BRIDGE AT 3535-
3 1/4 TRIP

MUD RECORD

TIME / WEIGHT / VISC / W.L.-C.C. / FLTR. CK. / PH / SD. CONT.

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
57	STANDS DP	FT.	RUN NO.	
1	SNGLS. DP	3617.79 FT.	SIZE	
20	D.C. ID / OD	603.20 FT.	MFG.	
	RMR BODY OD	FT.	TYPE	
	STB BODY OD	FT.	NOZ. NO. / SIZE	
	SUBS OD	FT.	SER. NO.	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	22.00 FT.	COND. OF BIT	
	TOTAL	4242.99 FT.	REAMER CUTTER NO.	
	WT. OF STRING	56000 LBS.	TYPE	

DRILLER: Pat. Barr

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION / DEPTH / DEV. / DIRECTION

REMARKS
1 Rig up Schlumberger
2 Logging Via Bridge @ 3538
1/2 Tear Out Schlumberger
Run In Rerun Bridges
From 3535 To 3690
4/2 Run In To 3786, Rerun Bridge @ 3786,

MUD RECORD

TIME / WEIGHT / VISC / W.L.-C.C. / FLTR. CK. / PH / SD. CONT.

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.
Gel 50#

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
58	STANDS DP	FT.	RUN NO	
1	SNGLS. DP	3617.79 FT.	SIZE	
20	D.C ID / OD	603.20 FT.	MFG.	
	RMR BODY OD	FT.	TYPE	
	STB BODY OD	FT.	NOZ. NO. / SIZE	
	SUBS OD	FT.	SER NO	
	BIT OR C.B.	FT	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	22 FT.	COND. OF BIT	
	TOTAL	4242 FT.	REAMER CUTTER NO.	
	WT OF STRING	LBS.	TYPE	

DRILLER: M. Connery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH / DEV. / DIRECTION / DEPTH / DEV / DIRECTION / DEPTH / DEV / DIRECTION

REMARKS
4 1/2 Run In Rerun Bridges To 4050.
2 1/2 Circ Mix Mud
1/2 Dummy Trip
1/2 Run In Hit Bridge At 3337

MUD RECORD

TIME / WEIGHT / VISC / W.L.-C.C. / FLTR. CK. / PH / SD. CONT

MUD & CHEMICALS ADDED: TYPE / AMT / TYPE / AMT

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 40 DATE JAN 5/65

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited		SHELL KEEL RIVER	L-4	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD
REGENT DRLG	21		

OPERATOR'S REPRESENTATIVE	CONTRACTOR'S TOOL PUSHER
L. Lattimer	A.E. Burnside

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	EMSCO	D-300	14
2.			
3.			

CASING & LINER RECORD	SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING	8	8	
TRIPS			
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

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

MORNING TOUR

NO.	DRILLING ASSEMBLY		FT.
58	STANDS DP		FT.
1	SNGLS. DP	3617.79	FT.
	D.C. ID		
20	D.C. OD	603.20	FT.
	RMR BODY OD		FT.
	STB BODY OD		FT.
	SUBS OD		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	22	FT.
	TOTAL	4242	FT.
WT. OF STRING			LBS.

DRILLER: Mc Conney

BIT RECORD

RUN NO.	16
SIZE	6 3/4
MFG.	SEC
TYPE	M4N
NOZ. NO.	3
NOZ. SIZE	5/8
SER. NO	787563
DEPTH OUT	
CUMULATIVE HOURS RUN	
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			T.D.									
			4242				800	5½	66			

DEVIATION RECORD:

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

REMARKS

8 CIRC COND MUD
WAITING ON ORDERS

MUD RECORD

TIME	1	3	6
WEIGHT	9.5	9.5	9.5
VISC	120	118	120
W.L.-C.C.		16	
FLTR. CK.		2/32	
PH		11.5	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
5 GALS		D-FO	AM

DAY TOUR

NO.	DRILLING ASSEMBLY		FT.
5	STANDS DP		FT.
1	SNGLS. DP	3617.79	FT.
	D.C. ID		
20	D.C. OD 4½"	603.20	FT.
	RMR BODY OD		FT.
	STB BODY OD		FT.
	SUBS OD		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	22.00	FT.
	TOTAL	4247.79	FT.
WT. OF STRING	65000		LBS.

DRILLER: Rod Ramsey

BIT RECORD

RUN NO.	16
SIZE	6 3/4
MFG.	SEC
TYPE	M4N
NOZ. NO.	5/16
NOZ. SIZE	
SER. NO.	787563
DEPTH OUT	
CUMULATIVE HOURS RUN	
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			T.D.									
			4242				800	5½	66			

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
4050	8°							

REMARKS

8 (CIRCULATE, CONDITION MUD
WAIT ON ORDERS.)

MUD RECORD

TIME	8:00	10:00	12:00
WEIGHT	9.5	9.5	9.5
VISC	123	128	120
W.L.-C.C.	17		
FLTR. CK.	2/32		
PH	11.0		
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
P.A.P	50#		

EVENING TOUR

NO.	DRILLING ASSEMBLY		FT.
58	STANDS DP		FT.
1	SNGLS. DP	3617.79	FT.
	D.C. ID		
20	D.C. OD	603.20	FT.
	RMR BODY OD		FT.
	STB BODY OD		FT.
	SUBS OD		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	22	FT.
	TOTAL	4240	FT.
WT OF STRING			LBS.

DRILLER: Mc Conney

BIT RECORD

RUN NO.	16
SIZE	6 3/4
MFG.	SEC
TYPE	M4N
NOZ. NO.	5/8
NOZ. SIZE	
SER NO	787563
DEPTH OUT	
CUMULATIVE HOURS RUN	
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
							800	5½	66			

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

1 CIRCULATE
5½ REAMING FROM 3990 TO BOTTOM & CIRC
½ PULL 3 STDS
½ CIRC
½ PULL OUT TO RUN LOG

MUD RECORD

TIME	4	9	11
WEIGHT	9.5	9.5	9.5
VISC	120	120	120
W.L.-C.C.		17	
FLTR CK.		2/32	
PH		11.0	
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 39 DATE January 4, 1965

OPERATOR: Shell Oil Company of Canada, Limited
LOCATION LSD. SEC. TWP. RGE. W. WELL NAME: Shell Kaalk R. No. L-4 PROVINCE N.W.T.
CONTRACTOR: Regent Drilling Ltd RIG No. 21
DRILL PIPE STRING NO. SIZE | TOOL JOINT OD | TYPE THD.
OPERATOR'S REPRESENTATIVE: E.E. Tenger
CONTRACTOR'S TOOL PUSHER: L. Bernado

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL		7½	
REAMING		½	
CIRCULATING	4½	6	4
TRIPS	3½	11½	4
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
(A) OTHER			
FISHING			
(B) COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)
CONTRACTOR'S TIME HRS:
OPERATOR'S TIME:
HRS. W/D.P:
HRS WO/D.P:
HRS STANDBY

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

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
58	STANDS DP	FT.	RUN NO.	
1	SNGLS. DP	3617.79 FT.	SIZE	
20	D.C. ID / OD	603.24 FT.	MFG.	
	RMR BODY OD	FT.	TYPE	
	STB BODY OD	FT.	NOZ. NO. / SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	22.00 FT.	COND. OF BIT	
	TOTAL	4242.4 FT.	REAMER CUTTER NO.	
WT. OF STRING	LBS.		TYPE	

DRILLER: R. Pacholek

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			4242									

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

REMARKS
4½ Circ & Condition mud.
3½ Trip Condition Hole.

MUD RECORD

TIME	2	4	
WEIGHT	9.4	9.4	
VISC	54	75	
W.L.-C.C.		15.4	
FLTR. CK.			
PH		12.0	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	80.		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
58	STANDS DP	FT.	RUN NO.	15
1	SNGLS. DP	3617.79 FT.	SIZE	6¾
20	D.C. ID 4½ OD	603.20 FT.	MFG.	Sec.
	RM BODY OD	FT.	TYPE	MAN
	STB BODY OD	FT.	NOZ. NO.	35/
	SUBS OD	FT.	NOZ. SIZE	18
	BIT OR C.B.	FT.	SER. NO.	778216
		FT.	DEPTH OUT	
	KELLY DOWN	22.00 FT.	CUMULATIVE HOURS RUN	12
	TOTAL	4242.4 FT.	COND. OF BIT	
WT. OF STRING	56000 LBS.		REAMER CUTTER NO.	
DRILLER: D. Kan			TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			4242				800	5½	66			

DEVIATION RECORD: DEPTH 4050 | DEV. 8° | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

REMARKS
1 Run Back In
3/4 Ream Bridge @ 3526'
1/4 Finish In
Circ Condition Mud
6 Wire On Orders

MUD RECORD

TIME	10⁰⁰	12⁰⁰	2⁰⁰
WEIGHT	9.4	9.5	9.5
VISC	135	120	95
W.L.-C.C.	22.		
FLTR. CK.	3/32		
PH	12.0		
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	10 Sx.		
M.C.	50#		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
58	STANDS DP	FT.	RUN NO	15	16
1	SNGLS. DP	3617.79 FT.	SIZE	6¾	6¾
20	D.C. ID / OD	603.20 FT.	MFG.	SEC	SEC
	RMR BODY OD	FT.	TYPE	M4N	M4N
	STB BODY OD	FT.	NOZ. NO.	3	3
	SUBS OD	FT.	NOZ. SIZE	7/8	7/8
	BIT OR C.B.	FT.	SER NO	772311	787563
		FT.	DEPTH OUT	4242	
	KELLY DOWN	22 FT.	CUMULATIVE HOURS RUN	12	
	TOTAL	4240.4 FT.	COND. OF BIT		
WT OF STRING	LBS.		REAMER CUTTER NO.		
DRILLER: Mc Conney			TYPE		

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			4242				800	5½	66			

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

REMARKS
3 CIRC COND MUD
4 TRIP
1 CIRC COND MUD

MUD RECORD

TIME	4	5	6
WEIGHT	9.5	9.5	9.5
VISC	95	93	95
W.L.-C.C.			
FLTR CK			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT	TYPE	AMT.
5 GELS		D-FOAM	

C.P.—38

DAILY DRILLING REPORT

REPORT NO. _____ DATE Jan 3/65

OPERATOR: Shell Oil Company of Canada, Limited	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME: Shell Kelly Rumsey	No. 4-4	PROVINCE: Alberta
CONTRACTOR: Regent Drilling Ltd	RIG No. 21	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD	TYPE THD.
OPERATOR'S REPRESENTATIVE: W. Cook	CONTRACTOR'S TOOL PUSHER: L. Bernardo			

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D-500	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	2	1	
REAMING			
CIRCULATING	5	6½	
TRIPS			
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	10	8	8

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
34	STANDS DP	2586.18 FT.	RUN NO.	15
	SNGLS. DP	FT.	SIZE	6¾
			MFG.	Sec
20	D.C. 4½ OD	602.20 FT.	TYPE	M44N
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	3/8
	SUBS OD	FT.	SER. NO	7758H
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	40.00 FT.	COND. OF BIT	
	TOTAL	4229.38 FT.	REAMER CUTTER NO.	
	WT. OF STRING	56 LBS.	TYPE	

DRILLER: L. Pachobik

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
3		4167	4229		90	10	8000	5½	56			

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

REMARKS

¼ Circulate Condition Mud.
½ Drill
¾ Stop overflow of mud in mud tanks
2½ Drill

MUD RECORD

TIME	2	4	6
WEIGHT	9.4	9.6	9.6
VISC	46	60	130
W.L.-C.C.		8.4	
FLTR. CK.		4/32	
PH		12.0	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
CMC	100#		
Pel-Tex	400#		
Caustic	150#		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
35	STANDS DP	FT.	RUN NO.	15
1	SNGLS. DP	361.29 FT.	SIZE	6¾
			MFG.	Sec.
20	D.C. 4½ OD	603.20 FT.	TYPE	M44N
	RMR BODY OD	FT.	NOZ. NO.	3 5/8
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO.	7758H
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	12
	KELLY DOWN	22.00 FT.	COND. OF BIT	Reg.
	TOTAL	4242.49 FT.	REAMER CUTTER NO.	
	WT. OF STRING	56000 LBS.	TYPE	

DRILLER: P.W. Ram

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
1		4229	4242		90	10	1000	5½	56			

DEVIATION RECORD: DEPTH 4030' | DEV. 5 | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

REMARKS

1 Drill 6¾ Hole
½ Ser. Rig, Check BOPs.
6¾ Circulate, Condition Mud.

MUD RECORD

TIME	8:00	10:00	12:00
WEIGHT	9.6	9.6	9.2
VISC	140	300	160
W.L.-C.C.	8.6		8.7
FLTR. CK.	2/32		2/32
PH	9.5		10.0
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Pel-Tex	600#		
Caustic	600#		
Water.			

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	15
	SNGLS. DP	FT.	SIZE	6¾
			MFG.	Sec.
20	D.C. 4½ OD	603.20 FT.	TYPE	M44N
	RMR BODY OD	FT.	NOZ. NO.	3 5/8
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO	7758N
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
		4242										

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

REMARKS

Ser Rig, Check BOPs
Circulate, Condition Mud.

MUD RECORD

TIME			
WEIGHT			
VISC			
W.L.-C.C.			
FLTR CK			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38

DAILY DRILLING REPORT

REPORT NO.

DATE January 2, 1965

OPERATOR: Shell Oil Company of Canada, Limited

LOCATION LSD. SEC. TWP. RGE. W.

WELL NAME: Shell Keele River #4

No. 4

PROVINCE N.W.T.

CONTRACTOR: Regent Drilling Ltd. RIG No.

DRILL PIPE STRING NO. SIZE

TOOL JOINT OD

TYPE PHD.

OPERATOR'S REPRESENTATIVE: W B Curtis

CONTRACTOR'S TOOL PUSHER: E Kennedy

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 500	20
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	4¼	2¾	½
REAMING	1½		
CIRCULATING	1¾	5	7½
TRIPS			
DEVIATION SURVEY			
TEST B.O.P		¼	
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
50	STANDS DP	3472.78 FT.	RUN NO.	15
	SNGLS. DP	FT.	SIZE	6¾
	D.C. ID		MFG.	See
20	OD	603.20 FT.	TYPE	M4N
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	SIZE	5/8
	SUBS OD	FT.	SER. NO	77831
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	13.00 FT.	COND. OF BIT	
	TOTAL	4109.78 FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER: R. Pacholek

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
4¾		4052	4109		90	18	1000	3½	54			

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

REMARKS

1½ Ream to Btm.
4¾ Drill
1¾ Circulate - Condition mud.

MUD RECORD

TIME			
WEIGHT	9.7	9.9	9.9
VISC	140	140	140
W.L.-C.C.		7.4	
FLTR. CK.		3/32	
PH		10.5	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	50 #		
Pel Tex	200 #		
Caustic			

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
51	STANDS DP	3524.18 FT.	RUN NO.	15
	SNGLS. DP	FT.	SIZE	6¾
	D.C. 4½ ID		MFG.	Sec
20	OD	603.20 FT.	TYPE	M4N
	RMR BODY OD	FT.	NOZ. NO.	3 5/8
	STB BODY OD	FT.	SIZE	
	SUBS OD	FT.	SER. NO.	77831
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	7½
	KELLY DOWN	30.00 FT.	COND. OF BIT	Drlg.
	TOTAL	4157.38 FT.	REAMER CUTTER NO.	
WT. OF STRING		56000 LBS.	TYPE	

DRILLER: D. Rae

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZES	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
2¾		4109	4157		90	18	1000	3½	54			

DEVIATION RECORD: DEPTH 4050 | DEV. 8° | DIRECTION | DEPTH | DEV. | DIRECTION | DEPTH | DEV. | DIRECTION

REMARKS

3½ Circulate, Conduction Mud
1¾ Drlg
¼ Ser. Rig Check B.O.P's.
1½ Circulate, Conduction Mud
1 Drill

MUD RECORD

TIME	8:00	10:00	12:00
WEIGHT	9.6	9.6	9.6
VISC	200	140	120
W.L.-C.C.		7.2	
FLTR. CK.		3/32	
PH		8.0	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT	TYPE	AMT.
Pel Tex			
Caustic			

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
51	STANDS DP	3524.18 FT.	RUN NO	15
	SNGLS. DP	FT.	SIZE	6¾
	D.C. 4½ ID		MFG.	Sec.
20	OD	603.20 FT.	TYPE	M4N
	RMR BODY OD	FT.	NOZ. NO.	3 5/8
	STB BODY OD	FT.	SIZE	
	SUBS OD	FT.	SER NO	77831
	BIT OR C.B.	FT	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	40.00 FT.	COND. OF BIT	
	TOTAL	4161.5 FT.	REAMER CUTTER NO.	
WT OF STRING		LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
½		4157	4167		90	18	1600	5½	39			

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

REMARKS

½ Drill
7½ Condition mud

MUD RECORD

TIME	4	8	10
WEIGHT	9.7	9.7	9.7
VISC	42	42	43
W.L.-C.C.		10-2	
FLTR CK			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT	TYPE	AMT.
Gel	12		
Pel Tex	300		
Caustic	120		

C.P.—38

DAILY DRILLING REPORT

REPORT NO. ____ DATE January 1, 1965

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited		Fall Rock K- L-4	L-4	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
Regent Drilling LTD	21		

OPERATOR'S REPRESENTATIVE: W B Cook

CONTRACTOR'S TOOL PUSHER: L E Burnside

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	6		
REAMING			4½
CIRCULATING	½		
TRIPS		5	
DEVIATION SURVEY	½		
TEST B.O.P	¼	¼	
CUT OFF DRILL LINE		1½	
REPAIR RIG		1½	1
COPING B & BP	1		
WIRE LINE LOGGING			
Mixing Mud			2½
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

MRS. W/D.P:

MRS WO/D.P:

MRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		FT.
55	STANDS DP		
1	SNGLS. DP		3431.77
20	D.C. ID		
	D.C. OD		603.20
	RMR BODY OD		FT.
	STB BODY OD		FT.
	SUBS OD		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		17.03 FT.
	TOTAL		4052.00 FT.
WT. OF STRING		62000	LBS.

BIT RECORD: RUN NO. 14; SIZE 6¾; MFG. Reed; TYPE FT1; NOZ. NO. 3; NOZ. SIZE 9/16; SER. NO E74020; DEPTH OUT 4052; CUMULATIVE HOURS RUN 14½; COND. OF BIT 8-3-4; REAMER CUTTER NO.; TYPE

DRILLER: P. Pocholek

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6		3990	4052		90	18	1000	5½	56			

DEVIATION RECORD: DEPTH 4050 DEV. 8° DIRECTION

REMARKS

1¾	Drill
¼	Ser. & BOP
1	Work Plugged Bit
4¼	Drill
½	Circ. & Cond. Hole Clean
¼	Drop Survey

MUD RECORD

	2	4	6
TIME			
WEIGHT	9.8	9.8	9.8
VISC	70	68	72
W.L.-C.C.		12	
FLTR. CK.		432	
PH		10.5	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	200#		
Pelter	200#		

DAY TOUR

NO.	DRILLING ASSEMBLY		FT.
5	STANDS DP		
1	SNGLS. DP		3431.77
20	D.C. ID		
	D.C. OD		603.20
	RMR BODY OD		FT.
	STB BODY OD		FT.
	SUBS OD		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		17.03 FT.
	TOTAL		4052.00 FT.
WT. OF STRING		62000	LBS.

BIT RECORD: RUN NO. 15; SIZE 6¾; MFG. Sec.; TYPE M4A; NOZ. NO. 4; NOZ. SIZE 8; SER. NO. 778311; DEPTH OUT; CUMULATIVE HOURS RUN; COND. OF BIT Rerun; REAMER CUTTER NO.; TYPE

DRILLER: Ed. Rau

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			4052									

DEVIATION RECORD: DEPTH 4050 DEV. 8° DIRECTION

REMARKS

2½	Trip Out
1¼	Ser. Rig, Check Rams.
¾	Run In D.P.S
1¼	Weld On Headach Rack
1½	Slip & Cut 122' Drill Line
2¼	Run In D Bit #15, Ream Though Bridges.

MUD RECORD

TIME			
WEIGHT	T		
VISC			
W.L.-C.C.	R		
FLTR. CK.			
PH	P		
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		FT.
	STANDS DP		
	SNGLS. DP		
20	D.C ID		
	D.C OD		603.20
	RMR BODY OD		FT
	STB BODY OD		FT.
	SUBS OD		FT.
	BIT OR C.B.		FT
			FT.
	KELLY DOWN		FT.
	TOTAL		FT.
WT OF STRING			LBS.

BIT RECORD: RUN NO 15; SIZE 6¾; MFG. Sec.; TYPE M4N; NOZ. NO. 3/6; NOZ. SIZE; SER NO 778311; DEPTH OUT; CUMULATIVE HOURS RUN; COND. OF BIT; REAMER CUTTER NO; TYPE

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH DEV. DIRECTION

REMARKS

½	Ream Though Bridges.
½	Mixing Gel
1	Change Head In D-300
2	Mixing Mud Circ.
4	Ream To Btm.

MUD RECORD

TIME			
WEIGHT			
VISC			
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	50		

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. DATE Dec 31 1964

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited		SHELL KELLY RIVER	L-9	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
REGENT DRLG.	21		

OPERATOR'S REPRESENTATIVE	CONTRACTOR'S TOOL PUSHER
R B Currie	L G Bachnick

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D-500	14"
2.			
3.			

CASING & LINER RECORD

	SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL		11½	7¼
REAMING	6		
CIRCULATING			
TRIPS	1¼	6½	
DEVIATION SURVEY			½
TEST B.O.P	¼		1¼
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
52	STANDS DP	FT.	RUN NO.	14
1	SNGLS. DP	32.15 FT.	SIZE	6¾
20	D.C. ID		MFG.	REED
	D.C. OD	603.20 FT.	TYPE	YT1
	RMR BODY OD	FT.	NOZ. NO.	9
	STB BODY OD	FT.	NOZ. SIZE	1/16
	SUBS OD	FT.	SER. NO	E9420
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	40.00 FT.	COND. OF BIT	
	TOTAL	3588.60 FT.	REAMER CUTTER NO.	
WT. OF STRING	63000 LBS.		TYPE	

DRILLER P W Bain

HRS. DRLD	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			3588.									

DEVIATION RECORD: DEPTH 3588 DEV. 10½ DIRECTION

REMARKS

3/4 FINISH OUT
1/4 RIGG BLIND RAMS, SER RIG
1 RUN IN D BIT #14
6 REAM LAST 10 STDS IN, PUMP BACK PRC.
HOLE SLUFFING (BAD)
WORK TIGHT HOLE.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
53	STANDS DP	3276.16 FT.	RUN NO.	14
	SNGLS. DP	FT.	SIZE	6¾
20	D.C. ID		MFG.	REED
	D.C. OD	603.20 FT.	TYPE	YT1
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	9/16
	SUBS OD	FT.	SER. NO.	E9402
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	29.00 FT.	COND. OF BIT	
	TOTAL	3908.46 FT.	REAMER CUTTER NO.	
WT. OF STRING	LBS.		TYPE	

DRILLER P Pachalek

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
1½		3588	3708		90	16	1000	5½	56			

DEVIATION RECORD: DEPTH DEV. DIRECTION

REMARKS

6½ Work Tight hole
1½ Drill

MUD RECORD

TIME	2.
WEIGHT	9.8
VISC	54
W.L.-C.C.	8.4
FLTR. CK.	4/32
PH	10.0
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
54	STANDS DP	3369.62 FT.	RUN NO.	14
1	SNGLS. DP	FT.	SIZE	6¾
20	D.C. ID		MFG.	(REED)
	D.C. OD	603.20 FT.	TYPE	YT1
	RMR BODY OD	FT	NOZ. NO.	3 9/16
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO	E9406
	BIT OR C.B.	FT	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	8¾
	KELLY DOWN	15.00 FT.	COND. OF BIT	D216
	TOTAL	5990.82 FT.	REAMER CUTTER NO.	
WT. OF STRING	62000 LBS.		TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7¼		3708	3990		90	18	1000	5½	56			

DEVIATION RECORD: DEPTH 3588 DEV. 10½ DIRECTION; DEPTH 3930 DEV 9½° DIRECTION

REMARKS

1 DRILL
¼ SER RIG, CHECK B.O.P.S.
5½ DRILL
½ RUN SURVEY
¾ DRILL

MUD RECORD

TIME	6:00	8:00	10:00
WEIGHT	9.3	9.8	9.5
VISC	60	70	66
W.L.-C.C.	5.8		
FLTR. CK.	4/32		
PH	10.0		
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT	TYPE	AMT
FELTEX	36	SKS.	
GEL	40	SKS.	
PLASTIC	150	#	

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. DATE Dec. 30 1964

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited		Shell Kelly River L-4	L-4	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
Regent Drilling	21		

OPERATOR'S REPRESENTATIVE: B. Cumb

CONTRACTOR'S TOOL PUSHER: L. Dunside

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D-500	14"
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	4	7¼	6
REAMING	1		
CIRCULATING			
TRIPS			1
DEVIATION SURVEY		½	3¼
TEST B.O.P	¼	¼	¾
CUT OFF DRILL LINE			
REPAIR RIG	¼		
CORING			
WIRE LINE LOGGING			
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8		

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF ... SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
99	STANDS DP	3027.36 FT.	RUN NO.	13
	SNGLS. DP	FT.	SIZE	6¾
	D.C. ID		MFG.	Reed
20	4½ OD	603.20 FT.	TYPE	YT1
	RMR BODY OD	FT.	NOZ. NO.	9
	STB BODY OD	FT.	NOZ. SIZE	16
	SUBS OD	FT.	SER. NO.	E-3017
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	4
	KELLY DOWN	40.00 FT.	COND. OF BIT	Dull
	TOTAL	3670.56 FT.	REAMER CUTTER NO.	
	WT. OF STRING	63,000 LBS.	TYPE	

DRILLER: P. Ram

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
4		3608	3670		90	15	1000	5½	66			

DEVIATION RECORD: DEPTH 3606 DEV. 8° DIRECTION

REMARKS

½	Finish Out
1¼	Close Blind Rams. Ser. Rig Drill R 1¾ Hrs.
1¼	Run In W Bit #13
¾	Ream Bridge @ 2290'
¼	Finish In
¼	Clean To Bottom
2¼	Drill 6¾ Hole
¾	Change Head In (D-300) + Liner.

MUD RECORD

TIME	7	4	6
WEIGHT	R	9.7	9.7
VISC	1	45	47
W.L.-C.C.	P	7.2	
FLTR. CK.		2/32	
PH		9.5	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	10		
Caustic	100#		
Lignite	150#		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
51	STANDS DP	FT.	RUN NO.	13
1	SNGLS. DP	3183.59 FT.	SIZE	6¾
	D.C. ID		MFG.	Reed
20	4½ OD	603.20 FT.	TYPE	YT1
	RMR BODY OD	FT.	NOZ. NO.	9
	STB BODY OD	FT.	NOZ. SIZE	16
	SUBS OD	FT.	SER. NO.	E9901
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	11¼
	KELLY DOWN	19.00 FT.	COND. OF BIT	Run
	TOTAL	3786.79 FT.	REAMER CUTTER NO.	
	WT. OF STRING	63,000 LBS.	TYPE	

DRILLER: D. Packard

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7¼		3670	3805		130	18	1000	6½	60			

DEVIATION RECORD: DEPTH 3720 DEV. 9° DIRECTION

REMARKS

¼	Ser Rig, Check B.O.P.
3¼	Drill
½	Survey
4	Drill

MUD RECORD

TIME	5	10	12
WEIGHT	9.8	9.8	9.7
VISC	47	48	48
W.L.-C.C.	8.4		
FLTR. CK.	3/32		
PH	10.0		
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50#		
Surfgel	6150#		
Gel	20sx		
Soda Ash	50#		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
51	STANDS DP	FT.	RUN NO.	13
1	SNGLS. DP	3245.19 FT.	SIZE	6¾
	D.C. ID		MFG.	Reed
20	4½ OD	603.20 FT.	TYPE	YT1
	RMR BODY OD	FT.	NOZ. NO.	9
	STB BODY OD	FT.	NOZ. SIZE	16
	SUBS OD	FT.	SER. NO.	E9901
	BIT OR C.B.	FT.	DEPTH OUT	3888
		FT.	CUMULATIVE HOURS RUN	17¼
	KELLY DOWN	40.00 FT.	COND. OF BIT	3-2-1
	TOTAL	3888.39 FT.	REAMER CUTTER NO.	
	WT. OF STRING	63,000 LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6		3805	3888		90	18	1000	5½	60			

DEVIATION RECORD: DEPTH 3888 DEV. 10¼° DIRECTION

REMARKS

1	Drill
¼	Check B.O.P Ser Rig
2	Drill
½	Trip
3	Drill
¼	Drop Survey
1	Trip Out First 10 Stands Very Tight

MUD RECORD

TIME	4	6	8
WEIGHT	9.7	9.7	9.7
VISC	45	46	50
W.L.-C.C.	8.2		
FLTR. CK.	3/32		
PH	10.5		
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. DATE Dec. 29 1964

OPERATOR: Shell Oil Company of Canada, Limited
LOCATION LSD. SEC. TWP. RGE. W.
WELL NAME: Shell Keele River No. L-4 PROVINCE N.T.W.
CONTRACTOR: Regent Drilling RIG No. 21
DRILL PIPE STRING NO. SIZE / TOOL JOINT OD / TYPE THD.
OPERATOR'S REPRESENTATIVE: W.R. Carle
CONTRACTOR'S TOOL PUSHER: E. Burnside

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D-300	19
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	2	7½	6½
REAMING	½		
CIRCULATING			
TRIPS	¼		1
DEVIATION SURVEY	¼	½	¼
TEST B.O.P	¼	¼	¼
CUT OFF DRILL LINE			
REPAIR RIG	¼		
CORING			
WIRE LINE LOGGING			
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	

TIME SUMMARY (OFFICE USE ONLY)
CONTRACTOR'S TIME HRS:
OPERATOR'S TIME:
HRS. W/D.P:
HRS W/O D.P:
HRS STANDBY

WIRE LINE RECORD

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

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
46	STANDS DP	2852.06	RUN NO	11	12
	SNGLS. DP	FT.	SIZE	6¾	6¾
20	D.C. ID 4½ OD	603.20 FT.	MFG.	Reed	Sec.
			TYPE	YTL	S4
	RMR BODY OD	FT.	NOZ. NO.	9	5
	STB BODY OD	FT.	NOZ. SIZE	16	16
	SUBS OD	FT.	SER. NO	E93C	716595
	BIT OR C.B.	FT.	DEPTH OUT	3454	
		FT.	CUMULATIVE HOURS RUN	14½	
	KELLY DOWN	23.60 FT.	COND. OF BIT	3-2-1	RUN
	TOTAL	3468.26	REAMER CUTTER NO.		
	WT. OF STRING	62000 LBS.	TYPE		

DRILLER: E. Brown

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
2		3449	3468		90	17	900	5½	65			

DEVIATION RECORD: DEPTH 3440 DEV. 7° DIRECTION | DEPTH DEV. DIRECTION | DEPTH DEV. DIRECTION

REMARKS
½ Drill
¼ Drop Survey, Ser. Rig
¼ Trip Out
¼ Close Blind Rams, Change Bits.
¾ Work On Light Plant
3 Run In W/ Bit #12, Ream Bridges
½ Run Survey On Sandline.
1½ Drill

MUD RECORD

TIME	X
WEIGHT	
VISC	R
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
47	STANDS DP	2703.22 FT.	RUN NO.	12	
	SNGLS. DP	FT.	SIZE	6¾	
20	D.C. ID OD	603.20 FT.	MFG.	Sec	
			TYPE	S4	
	RMR BODY OD	FT.	NOZ. NO.	3	
	STB BODY OD	FT.	NOZ. SIZE	5/8	
	SUBS OD	FT.	SER. NO.	716595	
	BIT OR C.B.	FT.	DEPTH OUT		
		FT.	CUMULATIVE HOURS RUN		
	KELLY DOWN	40.50 FT.	COND. OF BIT		
	TOTAL	3546.47 FT.	REAMER CUTTER NO.		
	WT. OF STRING	LBS.	TYPE		

DRILLER: P. Fachnie

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
¼		3468	3546		90	16	1000		60			

DEVIATION RECORD: DEPTH 3535 DEV. 8° DIRECTION | DEPTH DEV. DIRECTION | DEPTH DEV. DIRECTION

REMARKS
¼ Drill
¼ Ser Rig check BOP
6 Drill
½ Survey

MUD RECORD

	10	12	2
TIME			
WEIGHT	9.1	9.1	9.1
VISC	46	46	45
W.L.-C.C.	13		
FLTR. CK.	1/32		
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500		
Caustic	150		
Soda Ash	25		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
48	STANDS DP	2965.78	RUN NO	12	
	SNGLS. DP	FT.	SIZE	6¾	
20	D.C. ID OD	603.20 FT.	MFG.	Sec	
			TYPE	S4	
	RMR BODY OD	FT.	NOZ. NO.	3	
	STB BODY OD	FT.	NOZ. SIZE	5/8	
	SUBS OD	FT.	SER NO	716595	
	BIT OR C.B.	FT.	DEPTH OUT	3608	
		FT.	CUMULATIVE HOURS RUN	15¼	
	KELLY DOWN	40.10 FT.	COND. OF BIT	2-2-1	
	TOTAL	3608.6 FT.	REAMER CUTTER NO.		
	WT OF STRING	63000 LBS.	TYPE		

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6½		3546	3608		90	16	1000	5½	60			

DEVIATION RECORD: DEPTH 3608 DEV. 8° DIRECTION | DEPTH DEV DIRECTION | DEPTH DEV DIRECTION

REMARKS
¼ Ser. & BOP
6½ Drill
¼ Drop Survey
1 Trip Out

MUD RECORD

	7	6	5
TIME			
WEIGHT	9.7	9.1	9.7
VISC	45	45	48
W.L.-C.C.	7.2		
FLTR. CK.	1/32		
PH	9.5		
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT	TYPE	AMT
WATER			

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. DATE Dec. 28 1964

OPERATOR: Shell Oil Company of Canada, Limited
LOCATION LSD. SEC. TWP. RGE. W.
WELL NAME: Shell Kelly River No. 2-4
PROVINCE: N.W.T.
CONTRACTOR: Regent Drilling RIG No. 21
DRILL PIPE STRING NO. SIZE / TOOL JOINT OD / TYPE THD.
OPERATOR'S REPRESENTATIVE: W B Lamb
CONTRACTOR'S TOOL PUSHER: Ed Emerude

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D-300	14"
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL		6½	7
REAMING	2	½	
CIRCULATING			
TRIPS	½		
DEVIATION SURVEY		½	½
TEST B.O.P	¼	¼	½
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
BREAKER [illegible]	¼	¼	¼
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	

TIME SUMMARY (OFFICE USE ONLY)
CONTRACTOR'S TIME HRS:
OPERATOR'S TIME:
HRS. W/D.P:
HRS WO/D.P:
HRS STANDBY

WIRE LINE RECORD

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

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
42	STANDS DP	FT.	RUN NO.	11
1	SNGLS. DP	FT.	SIZE	6¾
	D.C. ID / OD		MFG.	REED
20	6 5/8 OD	603.20 FT.	TYPE	FTL
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	9/16
	SUBS OD	FT.	SER. NO	E93589
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
2					90	5						

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

REMARKS

1½	Trip Out w/ C.B.
½	Sa. & Check Rams.
1	Handle Core
¾	Sa. C.B. & Stand in Derrick
2½	Rig in Ream Rudy @ 2800 Slow to 3225
2	Ream Rat hole

Core #1 3233 - 3255 Rec 22'

MUD RECORD

TIME	T
WEIGHT	
VISC	K
W.L.-C.C.	1
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
44	STANDS DP	2717.57 FT.	RUN NO.	11
	SNGLS. DP	FT.	SIZE	6¾
	D.C. ID / OD		MFG.	REED
20	4" OD	603.20 FT.	TYPE	FTL
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	9/16
	SUBS OD	FT.	SER. NO.	E93589
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	40.00 FT.	COND. OF BIT	
	TOTAL	3360.97 FT.	REAMER CUTTER NO.	
WT. OF STRING		62 000 LBS.	TYPE	

DRILLER P Pachalek

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7		3255	3360		90	14/20	1000	5½	58			
½	Ream											

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3290	6°							

REMARKS

¼	Sa. & BOP
½	Ream Rat hole.
½	Drill
¼	Sft Comeron 7-94 w/ Indicator
2½	Drill
½	Toco
3¾	Drill

MUD RECORD

TIME	5	12	9
WEIGHT	9.1	9.6	9.5
VISC	42	44	44
W.L.-C.C.	11		
FLTR. CK.			
PH	10.5		
SD. CONT.	1		36

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	40	Mac	
Dispersing Agent	1/2		
Caustic	2		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
45	STANDS DP	FT.	RUN NO	11
1	SNGLS. DP	28.11.13 FT.	SIZE	6¾
	D.C. ID / OD		MFG.	REED
20	4 1/2 OD	603.20 FT.	TYPE	YTL
	RMR BODY OD	FT.	NOZ. NO.	9/16
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER NO	E93589
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	35.00 FT.	COND. OF BIT	
	TOTAL	3449.33 FT.	REAMER CUTTER NO.	
WT OF STRING		62000 LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7		3360	3449		90	17000	1000	5½	55			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
	3350	7½							

REMARKS

¼	Ser Rig Check B.O.P.'s.
¼	Drill
½	Toco @ 3350 7½°
7	Drill

MUD RECORD

TIME	4:00	6:00	8:00
WEIGHT	9.6	9.5	9.5
VISC	44	42	42
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. DATE Dec 27, 1964

OPERATOR: Shell Oil Company of Canada, Limited
CONTRACTOR: Ace Drilling Ltd. RIG No. 21
OPERATOR'S REPRESENTATIVE: W B Cumba
CONTRACTOR'S TOOL PUSHER: L E Burnside

LOCATION LSD. SEC. TWP. RGE. W. WELL NAME: Shell Kaybob Ranks No. 2-4 PROVINCE: N W T

DRILL PIPE STRING NO. SIZE | TOOL JOINT OD | TYPE THD.

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D-500	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING	1½	3/4	
TRIPS	3/4	1	
DEVIATION SURVEY			
TEST B.O.P	1/4	1/4	
CUT OFF DRILL LINE			
REPAIR RIG			
CORING		5½	8
WIRE LINE LOGGING			
OTHER Pick CB	1	3/4	
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:
OPERATOR'S TIME:
HRS. W/D.P:
HRS WO/D.P:
HRS STANDBY

WIRE LINE RECORD

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

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
42	STANDS DP	2574.71 FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
20	D.C. ID / OD	603.20 FT.	MFG. / TYPE	
	RMR BODY OD	FT.	NOZ. NO. / SIZE	
	STB BODY OD	FT.		
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	36.00 FT.	COND. OF BIT	
	TOTAL	3233 FT.	REAMER CUTTER NO.	
WT. OF STRING	56 M LBS.		TYPE	

DRILLER: Mc Connery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
-			3233									

DEVIATION RECORD:

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

REMARKS

1/2 Rig Srvc & BOP
3/4 Cir Cond. Trip mud
3/4 Running Trip Seam 10 BBLs.
3/4 Cir.
4½ Trip Out (measure) Run in W/ magnet pull out
1 Pick Up Core Bbls.

MUD RECORD

	12	2
TIME		
WEIGHT	76	76
VISC	50	55
W.L.-C.C.	8.8	
FLTR. CK.	2/32	
PH	10.0	
SD. CONT.		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
5H	STANDS DP	FT.	RUN NO.	11A
1	SNGLS. DP	262.98 FT.	SIZE	4.687
20	D.C. ID / OD	603.29 FT.	MFG. Christensen / TYPE	O
	RMR BODY OD	FT.	NOZ. NO. / SIZE	
	STB BODY OD	FT.		
	SUBS OD	FT.	SER. NO.	3404
	BIT OR C.B.	629 FT.	DEPTH OUT	
	Ream	.60 FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	10.00 FT.	COND. OF BIT	
	TOTAL	3241.6 FT.	REAMER CUTTER NO.	
WT. OF STRING	50 M LBS.		TYPE	

DRILLER: P Pacholek

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5/4	1	3233	3241									

DEVIATION RECORD:

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

REMARKS

1/4 Ser Rig check BOP
3/4 Make up C.B.
1 Run in w/ C.B.
3/4 Circulate hole clean.
3/4 Cut Core #1

MUD RECORD

	10	12	2
TIME			
WEIGHT	9.6	9.6	9.6
VISC	53	52	52
W.L.-C.C.		9.8	
FLTR. CK.		4/32	
PH		10.0	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
41	STANDS DP	FT.	RUN NO	11A
1	SNGLS. DP	262.98 FT.	SIZE	6¾
20	D.C ID / OD	603.29 FT.	MFG. Christensen / TYPE	O
	RMR BODY OD	FT.	NOZ. NO. / SIZE	
	STB BODY OD	FT.		
	SUBS OD	FT.	SER. NO	3804
	BIT OR C.B.	64.79 FT.	DEPTH OUT	3325
	Ream	6 FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	24.00 FT.	COND. OF BIT	6.0 D
	TOTAL	335.68 FT.	REAMER CUTTER NO.	
WT OF STRING	50 M LBS.		TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
4	1	3241	3255	Full Recovery	75	4	975	5½	28			

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

4 Out Core # 1

MUD RECORD

	6	6	10
TIME			
WEIGHT	9.6	9.6	9.6
VISC	52	52	52
W.L.-C.C.		9.8	
FLTR CK.		4/32	
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38

DAILY DRILLING REPORT

REPORT NO. DATE Dec 26 1964

OPERATOR: Shell Oil Company of Canada, Limited	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME: Shell Kaska Rainbow L-4	No. L-4	PROVINCE: N.W.T.
CONTRACTOR: Regent Drilling Ltd	RIG No. 21	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.				
OPERATOR'S REPRESENTATIVE: W B Cumba	CONTRACTOR'S TOOL PUSHER: L Burnside						

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
		82	748				

TIME DISTRIBUTION—HOURS

	MOON	DAY	EVE
DRILLING ACTUAL	4¾	6½	3
REAMING		¼	
CIRCULATING			2
TRIPS	1½		1
DEVIATION SURVEY	¼	½	
TEST B.O.P	¼	¼	¼
CUT OFF DRILL LINE			
REPAIR RIG			¼
CORING			
WIRE LINE LOGGING			
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
39	STANDS DP	FT.	RUN NO.	9	10
4	SNGLS. DP	244.73 FT.	SIZE	6¾	6¾
	D.C. ID		MFG.	SEC	HW
20	D.C. OD	603.20 FT.	TYPE	S4	OSC
	RMR BODY OD	FT.	NOZ. NO.	3	3
	STB BODY OD	FT.	NOZ. SIZE	9	8
	SUBS OD	FT.	SER. NO	633696	5370
	BIT OR C.B.	FT.	DEPTH OUT	9084	
		FT.	CUMULATIVE HOURS RUN	17	
	KELLY DOWN	40.00 FT.	COND. OF BIT		
	TOTAL	3084.04 FT.	REAMER CUTTER NO.		
	WT. OF STRING	46000 LBS.	TYPE		

DRILLER: Mc Connell

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
—		3000	3044		90	16	900	5½	64			
4¾		3000	3044									

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	3000	7¾		3044	4				

REMARKS

1¼ Drill
¼ Survey @ Rig Check BOP
2½ Drill
¼ Drop Survey
2¼ Trip & Ream.

MUD RECORD

TIME	12	2	4
WEIGHT	9.5	9.6	9.6
VISC	42	44	44
W.L.-C.C.		8.4	
FLTR. CK.		1/32	
PH		10.0	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	200		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
41	STANDS DP	2563.75 FT.	RUN NO.	10	
1	SNGLS. DP	FT.	SIZE	6¾	
	D.C. ID		MFG.	HW	
20	D.C. OD	603.20 FT.	TYPE	OSC	
	RMR BODY OD	FT.	NOZ. NO.	3	
	STB BODY OD	FT.	NOZ. SIZE	9	
	SUBS OD	FT.	SER. NO.	5370	
	BIT OR C.B.	FT.	DEPTH OUT		
		FT.	CUMULATIVE HOURS RUN		
	KELLY DOWN	13.00 FT.	COND. OF BIT		
	TOTAL	3179.95 FT.	REAMER CUTTER NO.		
	WT. OF STRING	50000 LBS.	TYPE		

DRILLER: P Pochobk

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
3		3179	3233		90	16	800	5½	64			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
	3135	MISRUN		3165	8°				

REMARKS

¾ Clean Out To Btm. & BOP
1¼ Ream
4 Drill
¼ Survey
2 Drill
¼ Survey
½ Drill

MUD RECORD

TIME	10	12	2
WEIGHT	9.6	9.6	9.6
VISC	41	41	42
W.L.-C.C.		9.0	
FLTR. CK.		1/32	
PH		10.0	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500		
Soda Ash	50		
Caustic	50		
Lignite	150		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
42	STANDS DP	2594.71 FT.	RUN NO	10	
	SNGLS. DP	FT.	SIZE	HW	
	D.C. ID		MFG.	OSC	
20	D.C. OD	603.20 FT.	TYPE	HW	
	RMR BODY OD	FT.	NOZ. NO.	3	
	STB BODY OD	FT.	NOZ. SIZE	5/4	
	SUBS OD	FT.	SER NO	5370	
	BIT OR C.B.	FT.	DEPTH OUT	3233	
		FT.	CUMULATIVE HOURS RUN	9½	
	KELLY DOWN	36.00 FT.	COND. OF BIT		
	TOTAL	3232.91 FT.	REAMER CUTTER NO.		
	WT OF STRING	50000 LBS.	TYPE		

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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

REMARKS

¼ Circ. Rig & BOP
1 Change Liner on D 300
3 Drill
½ Condition Mud
2½ Condition Hole - Trip

MUD RECORD

TIME	6	8	10
WEIGHT	9.6	9.5	9.5
VISC	43	43	48
W.L.-C.C.		7.0	
FLTR. CK.		1/32	
PH		10.0	
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1800		

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. DATE Dec 25, 1964

OPERATOR: Shell Oil Company of Canada, Limited
LOCATION LSD. SEC. TWP. RGE. W. WELL NAME: Fort Keele River L-4 No. L-4 PROVINCE N.W.T.
CONTRACTOR: Fregent Drilling Ltd RIG No. 26
DRILL PIPE STRING NO. SIZE | TOOL JOINT OD | TYPE THD.
OPERATOR'S REPRESENTATIVE: W.B. Cunningham CONTRACTOR'S TOOL PUSHER: L.L. Bernside

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 375	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
		0	708				

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	5½	5½	6¾
REAMING			
CIRCULATING			1¼
TRIPS	1¾	1½	
DEVIATION SURVEY	½	¾	½
TEST B.O.P	¼	¾	
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)
CONTRACTOR'S TIME HRS:
OPERATOR'S TIME:
HRS. W/D.P:
HRS WO/D.P:
HRS STANDBY

WIRE LINE RECORD

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

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
32	STANDS DP	1975.02 FT.	RUN NO.	8
	SNGLS. DP	FT.	SIZE	6¼
28	D.C. ID		MFG.	HW
	D.C. OD	830.71 FT.	TYPE	OSC
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	5/1
	SUBS OD	FT.	SER. NO	25947
	BIT OR C.S.	FT.	DEPTH OUT	2831
		FT.	CUMULATIVE HOURS RUN	101½
	KELLY DOWN	26. 00 FT.	COND. OF BIT	
	TOTAL	2831.73 FT.	REAMER CUTTER NO.	
WT. OF STRING	52 M LBS.		TYPE	

DRILLER: Joe Pomeroy

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5½		2762	2831		90	10	800	5½	64			

DEVIATION RECORD: DEPTH 2775 DEV. 8 DIRECTION | DEPTH 2810 DEV. 9 DIRECTION | DEPTH | DEV. | DIRECTION

REMARKS

¼	Trip
¾	Drill
¼	Survey
2½	Drill 6
¼	Survey
1¼	Trip

MUD RECORD

TIME	2 AM	6 PM	6
WEIGHT	72	9.5	9.5
VISC	58	54	45
W.L.-C.C.		8.4	
FLTR. CK.		2/32	
PH		9.5	
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	2000		
Soda Ash	15		
Caustic	25		
Lignite	50		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
36	STANDS DP	FT.	RUN NO.	9
1	SNGLS. DP	2355.28 FT.	SIZE	6¾
20	D.C. ID		MFG.	Sec
	D.C. OD	603.20 FT.	TYPE	S4
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	5/8
	SUBS OD	FT.	SER. NO.	633696
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	40.00 FT.	COND. OF BIT	
	TOTAL	2958.48 FT.	REAMER CUTTER NO.	
WT. OF STRING	47000 LBS.		TYPE	

DRILLER: A Pachek

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5½		2831	2896		90	10	800	5½	64			

DEVIATION RECORD: DEPTH 2840 DEV. 9° DIRECTION | DEPTH 2895 DEV. 8° DIRECTION | DEPTH | DEV. | DIRECTION

REMARKS

¼	Ser. Rig & Check BOP
1½	Run in & Ream @ 2620 - Pick up 7 singles.
1	Drill
½	Survey
4½	Drill
¼	Survey

MUD RECORD

TIME	10	12	2
WEIGHT	9.5	9.5	9.5
VISC	40	39	42
W.L.-C.C.		8.6	
FLTR. CK.		2/32	
PH		10.0	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500		
Soda Ash	30		
Caustic	50		
Lignite	150		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
38	STANDS DP	FT.	RUN NO	9
1	SNGLS. DP	2379.05 FT.	SIZE	6¾
20	D.C. ID		MFG.	Sec
	D.C OD	603.20 FT.	TYPE	S-4
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	5/8
	SUBS OD	FT.	SER NO	633696
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	18.00 FT.	COND. OF BIT	
	TOTAL	3000.25 FT.	REAMER CUTTER NO.	
WT OF STRING	47000 LBS.		TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
6¾		2992	3000		90	15	900	5½	64			

DEVIATION RECORD: DEPTH 2925 DEV. 7¼ DIRECTION | DEPTH | DEV | DIRECTION | DEPTH | DEV | DIRECTION

REMARKS

¼	Ser Rig Check BOP
1¾	Drill
2¼	Circulate - Circulation Samples.
2¼	Drill
¼	Survey
2¾	Drill

MUD RECORD

TIME	6	8	10 PM
WEIGHT	9.5	9.5	9.5
VISC	40	37	40
W.L.-C.C.		9.6	
FLTR. CK.		2/32	
PH		10.3	
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT	TYPE	AMT

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 28 DATE DEC 24/64

OPERATOR: Shell Oil Company of Canada, Limited
LOCATION LSD. SEC. TWP. RGE. W.
WELL NAME: SHELL STEEL RIVER No. L-4
PROVINCE: N.W.T.
CONTRACTOR: REGENT DRLG CO RIG No. 21
DRILL PIPE STRING NO. SIZE / TOOL JOINT OD / TYPE TKD.
OPERATOR'S REPRESENTATIVE: T.B. Cunard
CONTRACTOR'S TOOL PUSHER: R. MacDonald

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	EMSCO	D-300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	7¾	4¼	7½
REAMING			
CIRCULATING			
TRIPS		3	
DEVIATION SURVEY	¼	¼	¼
TEST B.O.P		¼	¼
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING Schl RIG		¼	
REAMING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	16	8

TIME SUMMARY (OFFICE USE ONLY)
CONTRACTOR'S TIME HRS:
OPERATOR'S TIME:
HRS. W/D.P:
HRS WO/D.P:
HRS STANDBY

WIRE LINE RECORD

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

MORNING TOUR

DRILLING ASSEMBLY

NO.			
32	STANDS DP	1975.02	FT.
	SNGLS. DP		FT.
	D.C. ID		
20	D.C. OD	602.20	FT.
	RMR BODY OD		FT.
	STB BODY OD		FT.
	SUBS OD		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	12	FT.
	TOTAL	2590.02	FT.
WT. OF STRING	44	LBS.	

DRILLER: McConnery

BIT RECORD

RUN NO.	7
SIZE	6¾
MFG.	SEC
TYPE	M4N
NOZ. NO.	3
NOZ. SIZE	5/8
SER. NO	78[illegible]58
DEPTH OUT	
CUMULATIVE HOURS RUN	14¼
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7¾		2467	2590		90	20	800	5½	57			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2515	4							

REMARKS
3 DRILL
¼ SURVEY RIG SERV
4¾ DRILL

MUD RECORD

TIME	1	4	7
WEIGHT	9.6	9.5	9.5
VISC	44	43	40
W.L.-C.C.		9.6	
FLTR. CK.		2/32	
PH		10	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	10 SXS		

DAY TOUR

DRILLING ASSEMBLY

NO.			
29	STANDS DP		FT.
1	SNGLS. DP	1820.75	FT.
	D.C. ID		
28	D.C. OD	880.71	FT.
	RMR BODY OD		FT.
	STB BODY OD		FT.
	SUBS OD		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	11.00	FT.
	TOTAL	2662.46	FT.
WT. OF STRING	52000	LBS.	

DRILLER: L Packalek

BIT RECORD

RUN NO.	7	8
SIZE	6¾	6¾
MFG.	M4N	[illegible]
TYPE	3	[illegible]
NOZ. NO.	3½	[illegible]
NOZ. SIZE	5/8	3/4
SER. NO	78[illegible]58	[illegible]
DEPTH OUT	17	2590
CUMULATIVE HOURS RUN	2-3-1	
COND. OF BIT		
REAMER CUTTER NO.		
TYPE		

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
4¼		2590	2662		90	20	900	5½	67			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2640	4¼	E.						

REMARKS
¼ Sa. & BOP
2¾ Drill
¼ Drop Totco
1 Pull Out
½ Chk wl BOP
2 Pick Up 4 DC + Run In
1½ Drill

MUD RECORD

TIME	9	10	11
WEIGHT	9.5	9.5	9.5
VISC	45	45	45
W.L.-C.C.		8.8	
FLTR. CK.		2/32	
PH		10	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

DRILLING ASSEMBLY

NO.			
31	STANDS DP	1913.68	FT.
	SNGLS. DP		FT.
	D.C. ID		
28	D.C. OD	830.71	FT.
	RMR BODY OD		FT.
	STB BODY OD		FT.
	SUBS OD		FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	38	FT.
	TOTAL	2782.39	FT.
WT. OF STRING	52	LBS.	

DRILLER

BIT RECORD

RUN NO.	8
SIZE	6¾
MFG.	HW
TYPE	SEC
NOZ. NO.	3
NOZ. SIZE	11/16
SER NO	25947
DEPTH OUT	
CUMULATIVE HOURS RUN	9
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7½		2662	2782		20/10	90	800	5½	65			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
	2740	¾							

REMARKS
1/4 Sa. Rig + BOP
2¾ Drill
1/4 Drop Totco
Pull D
1/4 Sa. Rig + BOP
5 Drill
1/4 RUN SURVEY
2½ DRILL

MUD RECORD

TIME	5	9	11
WEIGHT	9.6	9.6	9.5
VISC	48	40	40
W.L.-C.C.		9.6	
FLTR. CK.		2/32	
PH		10	
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL		4 SXS	
SODA ASH		30	40S
CAUSTIC		25	½
SUPER HIC		50	1

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 25 DATE Dec 23, 1964

OPERATOR: Shell Oil Company of Canada, Limited | LOCATION LSD. SEC. TWP. RGE. W. | WELL NAME: Shell Keele River L-4 | No. L-4 | PROVINCE N.W.T.

CONTRACTOR: Regent Drilling Ltd | RIG No. 26 | DRILL PIPE STRING NO. SIZE | TOOL JOINT OD TYPE THD.

OPERATOR'S REPRESENTATIVE: W B Lunde | CONTRACTOR'S TOOL PUSHER: E Beaudoin

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 300	14
2.			
3.			

CASING & LINER RECORD

	SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	5¼	5¾	
REAMING			
CIRCULATING			
TRIPS	1¼	1¾	
DEVIATION SURVEY	¼	¼	
TEST B.O.P	1	¼	
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
Clean Tanks	1		
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	4	8	

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS W/D.P:

HRS W/O D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR — DRILLING ASSEMBLY

NO.			
22	STANDS	DP	1668.15 FT.
	SNGLS.	DP	FT.
20	D.C.	ID	
		OD	603.20 FT.
	RMR BODY	OD	FT.
	STB BODY	OD	FT.
	SUBS	OD	FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL		2271.35 FT.
	WT. OF STRING		43000 LBS.

DRILLER: R Pecholak

BIT RECORD

RUN NO.	5
SIZE	6 3/4
MFG.	Hug
TYPE	OSC1G
NOZ. NO.	3
NOZ. SIZE	5/8
SER. NO	5424
DEPTH OUT	
CUMULATIVE HOURS RUN	
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5¼		2193	3286		90	22	800	5½	68			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2260	3°							

REMARKS

½	Drill
¼	Ser Rig & Check BOP
4	Drill
¼	Survey
3¼	Drill
3¼	Pull Out
1	Clean Tanks
½	Run In

MUD RECORD

TIME			
WEIGHT	2	4	6
VISC	46	46	46
W.L.-C.C.	46	44	45
FLTR. CK.		9.8	
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	160		
Sapp. Lig	120		

DAY TOUR — DRILLING ASSEMBLY

NO.			
28	STANDS	DP	FT.
1	SNGLS.	DP	46.05 FT.
20	D.C.	ID	
		OD	603.25 FT.
	RMR BODY	OD	FT.
	STB BODY	OD	FT.
	SUBS	OD	FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		14 FT.
	TOTAL		2337.25 FT.
	WT. OF STRING		LBS.

DRILLER: O'Connery

BIT RECORD

RUN NO.	6
SIZE	6 3/4
MFG.	Sec
TYPE	S16
NOZ. NO.	3
NOZ. SIZE	5/8
SER. NO	724491
DEPTH OUT	2337
CUMULATIVE HOURS RUN	5 3/4
COND. OF BIT	3-2-1
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5¾		2286	2337		90	20	800	5½	67			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	2320	5½							

REMARKS

¼	RIG SERV CHECK B.O.P
¾	FINISH RUNIN REAM BRIDGE AT 2340
3	DRILLING
¼	RUN SURVEY
2¾	DRILLING
1	PULL OUT

MUD RECORD

TIME	10	12	2
WEIGHT	9.5	9.5	9.5
VISC	45	45	45
W.L.-C.C.		9.6	
FLTR. CK.		2/32	
PH		10.	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
SODA ASH	100	LBS	
GEL		15	SXS

EVENING TOUR — DRILLING ASSEMBLY

NO.			
30	STANDS	DP	1381.75 FT.
	SNGLS.	DP	FT.
20	D.C.	ID	
		OD	603.25 FT.
	RMR BODY	OD	FT.
	STB BODY	OD	FT.
	SUBS	OD	FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		12.00 FT.
	TOTAL		2462.55 FT.
	WT. OF STRING		43000 LBS.

DRILLER

BIT RECORD

RUN NO	7
SIZE	6 3/4
MFG.	Sec
TYPE	S M 47J
NOZ. NO.	3
NOZ. SIZE	5/8
SER NO	787534
DEPTH OUT	
CUMULATIVE HOURS RUN	
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6½		2337	2467		90	20	800	5½	67			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
	2390								

REMARKS

½	Ser Rig & Check all B.O.P
1	Run in Ream to Btm.
2¼	Drill
1¼	Survey
4½	Drill

MUD RECORD

TIME			
WEIGHT			
VISC	40	44	42
W.L.-C.C.	9.5	7.5	9.5
FLTR CK.	3.2	2.8	2.8
PH			
SD. CONT	0.1	0.1	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Lignite	200		
	1150		

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 26 DATE Dec 22, 1964

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited		Shell Keele River L-4	L-4	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
Bogart Drilling Ltd	21		

OPERATOR'S REPRESENTATIVE: J.S. Lunde — CONTRACTOR'S TOOL PUSHER: R. Maffeis

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

	SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	7¼	9½	4½
REAMING			
CIRCULATING			¼
TRIPS			¾
DEVIATION SURVEY	½	¼	¼
TEST B.O.P	¼	¼	½
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
Serv. Rig			¼
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS W/D.P:

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
20	STANDS DP	FT.	RUN NO.	4
1	SNGLS. DP	264.88 FT.	SIZE	6¾
	D.C. ID		MFG.	HW
20	D.C. OD	603.20 FT.	TYPE	OSC4G
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	5/16
	SUBS OD	FT.	SER. NO.	34305
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	40.00 FT.	COND. OF BIT	
	TOTAL	1908.08 FT.	REAMER CUTTER NO.	
WT. OF STRING	38 000 LBS.		TYPE	

DRILLER R Pecholk

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
		1740	1908		90	10-30	700	5½	67			

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
1780	4¼	B	1900	4°				

REMARKS

¾	Drill
¼	Ser Rig check hydril & 5½" Pipe rams.
1	Drill
½	Jetco
5¼	Drill
½	Jetco
2½	Drill

MUD RECORD

TIME	12	4	7
WEIGHT	9.3	9.3	9.2
VISC	38	42	38
W.L.-C.C.	9.6	9.6	9.6
FLTR. CK.			
PH	9.5	9.5	9.6
SD. CONT.	68	68	68

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	8 sks		
Caustic	25 lbs		
Lignite	50 lbs		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
23	STANDS DP	FT.	RUN NO.	4
1	SNGLS. DP	1450.37 FT.	SIZE	6¾
	D.C. ID		MFG.	HT
	D.C. OD	603.20 FT.	TYPE	OSC1G
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	5/16
	SUBS OD	FT.	SER. NO.	34305
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	16
	KELLY DOWN	40 FT.	COND. OF BIT	
	TOTAL	2093.57 FT.	REAMER CUTTER NO.	
WT. OF STRING	38000 LBS.		TYPE	

DRILLER J McConnery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7½		1908	2093		90	20	700	5½	67			

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
2020	4							

REMARKS

¼	BIG SERV CHECK B.O.P
4	DRILL
¼	RUN SURVEY
3½	DRILL

MUD RECORD

TIME	9	11	1
WEIGHT	9.2	9.1	9.1
VISC	38	40	42
W.L.-C.C.		10.4	
FLTR. CK.		2/32	
PH		9.5	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	10	5 SKS	
SODA ASH	100 LBS		
LIGNITE	250 LBS		
CAUSTIC	50 LBS		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
25	STANDS DP	FT.	RUN NO.	4	5
1	SNGLS. DP	154.06 FT.	SIZE	6¾	6¾
	D.C. ID		MFG.	HT	HT
20	D.C. OD	603.20 FT.	TYPE	OSC1G	OSC1G
	RMR BODY OD	FT.	NOZ. NO.	3	3
	STB BODY OD	FT.	NOZ. SIZE	5/16	5/16
	SUBS OD	FT.	SER. NO.	34305	5824
	BIT OR C.B.	FT.	DEPTH OUT	2093	
		FT.	CUMULATIVE HOURS RUN	16	
	KELLY DOWN	16.00 FT.	COND. OF BIT	3-2-1	
	TOTAL	213.22 FT.	REAMER CUTTER NO.		
WT. OF STRING	39000 LBS.		TYPE		

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
4½		2053	2193		90	20	700	5½	68			

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2140	3¾							

REMARKS

¼	BIG SERV
2¾	TRIP REAM BRIDGE @ 1470-1950 x 20' FILL ON BOTTOM
3	DRILL
¼	Jetco
¼	Ser Swivel + Kelly Cock
1½	Drill

MUD RECORD

TIME			
WEIGHT			
VISC			
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 25 DATE Dec 21, 1964

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited		Shell Keele R-64	L-4	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
Regent Drilling LTD	21		

OPERATOR'S REPRESENTATIVE: WB Cumba

CONTRACTOR'S TOOL PUSHER: L Barnard

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D-300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MIDN	DAY	7-11
DRILLING ACTUAL		4½ 4½	3¼ 3¼
REAMING			
CIRCULATING			
TRIPS		2½ 3¼	3¼
DEVIATION SURVEY		¼ ¼	¼
TEST B.O.P		¼	
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
[illegible]			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING	8		
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS W/D.P:

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	D.C. OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER: L Pocholek

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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

REMARKS

1 Run in w/ packer
1 Setting packer — DST #1 1539-1424
½ Pull Packer — Misrun No packer seats
1¼ Lay + Brake Up tool
½ Run in w/ packer — DST 2nd 1481-1539
2½ Testing — Recovered 360' slightly contam. Fresh water
1¼ Pull D.S.T.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
10	STANDS DP	FT.	RUN NO.	3
1	SNGLS. DP	102.65 FT.	SIZE	6¾
	D.C. ID		MFG.	REED
20	D.C. OD	603.20 FT.	TYPE	Y+3
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	9/16
	SUBS OD	FT.	SER. NO.	E84238
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	8
	KELLY DOWN	22 FT.	COND. OF BIT	
	TOTAL	1665 FT.	REAMER CUTTER NO.	
WT. OF STRING		360 LBS.	TYPE	

DRILLER: McConnery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
4¾		1539	1655		90	20	650	5½	67			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1570	3½							

REMARKS

1¾ FINISH Pull out + LAY Down tool
¼ RIG SERV CHECK B.O.P
1 RUN IN w/ BIT
2½ DRILLING
¼ RUN SURVEY
2¼ DRILLING

MUD RECORD

TIME	12	1	3
WEIGHT	45	40	39
VISC	9.2	9.2	9.2
W.L.-C.C.		9	
FLTR. CK.		2/32	
PH		9.5	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
17	STANDS DP	FT.	RUN NO	3	4
1	SNGLS. DP	1113.1 FT.	SIZE	6¾	6¾
	D.C. ID		MFG.	REED	H
	D.C. OD	FT.	TYPE	Y+3	OSC1G
	RMR BODY OD	FT.	NOZ. NO.	3	3
	STB BODY OD	FT.	NOZ. SIZE	9/16	5/8
	SUBS OD	FT.	SER NO	E84238	34305
	BIT OR C.B.	FT	DEPTH OUT	1708	
		FT	CUMULATIVE HOURS RUN	10¼	
	KELLY DOWN	FT.	COND. OF BIT	3-2-1	
	TOTAL	FT.	REAMER CUTTER NO.		
WT OF STRING		LBS.	TYPE		

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
3½		1655	1740									

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
	1695	4							

REMARKS

1½ DRILL
¼ SURVEY + RIG SERV
3/4 DRILL
2 TRIP
1 Work plugged Bit
½ Pull to Csg Break Circ
3/4 Run in Ream 1400-1610.
1¼ Drill

MUD RECORD

TIME	5		
WEIGHT	9.1		
VISC	39		
W.L.-C.C.			
FLTR CK.			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38

DAILY DRILLING REPORT

REPORT NO. 24 DATE Dec 20, 1964

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited	64 20 37.0 M 125° 01' 43.0" W	Shell Kelly R. L-4	L-4	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
Regent Drlg Ltd	21		IF.

OPERATOR'S REPRESENTATIVE: A.S. Cumb

CONTRACTOR'S TOOL PUSHER: L. Brown

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
9⅝		0	744				

TIME DISTRIBUTION—HOURS

	NOON	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING	8		
TRIPS			
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS			

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS W/D.P:

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
14	STANDS DP	FT.	RUN NO.	3
1	SNGLS. DP	896.32 FT.	SIZE	6 3/4
	D.C. ID		MFG.	Reed
20	D.C. OD 4½	603.20 FT.	TYPE	FT3
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	5/16
	SUBS OD	FT.	SER. NO	GJ235
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	3¼
	KELLY DOWN	40 FT.	COND. OF BIT	
	TOTAL	1539.52 FT.	REAMER CUTTER NO.	
WT. OF STRING	35 000 LBS.		TYPE	

DRILLER: R. Frohelk

NRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

8. Circulate by Casing - Wait on Testing Tools.

MUD RECORD

TIME	9	2	8
WEIGHT	9.0	9.0	9.1
VISC	43	44	46
W.L.-C.C.	9.	9	9.
FLTR. CK.	2/32	2/32	2/32
PH	9.5	9.5	9.5
SD. CONT.	56	56	56

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	20	Lt	

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
14	STANDS DP	FT.	RUN NO.	
1	SNGLS. DP	896.32 FT.	SIZE	
	D.C. ID		MFG.	
20	D.C. OD	603.20 FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO.	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	40 FT.	COND. OF BIT	
	TOTAL	1539.52 FT.	REAMER CUTTER NO.	
WT. OF STRING	35 000 LBS.		TYPE	

DRILLER: McConnery

NRS. DRLD.	CORE NO.	FROM	+0	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			1539									

DEVIATION RECORD:

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

REMARKS

1 3/4	CIRC
1/2	RUN IN DRILL PIPE
1/2	CIRC ON BOTTOM
3 1/4	PULL OUT
1 1/2	WAIT ON TESTING TOOLS
2	MAKE UP PACKER DST #1 @ 1539-1451 Misrun. No packer seats
1	RUN IN WITH PACKER

MUD RECORD

TIME	8	9	
WEIGHT	9.1	9.1	
VISC	46	46	
W.L.-C.C.		9	
FLTR. CK.		2/32	
PH		9.5	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	D.C. OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER NO	
	BIT OR C.B.	FT	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT OF STRING		LBS.	TYPE	

DRILLER

NRS. DRLD.	CORE NO.	FROM	T:	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

1/2	TRYING TO SET PACKER
1	PULL OUT
2	SERVICE TOOL
4	Run in w/Packer DST #1 @ 1539-1431 Mis Run
1/2	Seating Packer. No packer seats
3/4	Pull Out
2 1/4	Ser Tool

MUD RECORD

TIME			
WEIGHT			
VISC			
W.L.-C.C.			
FLTR CK.			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38

DAILY DRILLING REPORT

REPORT NO. 22 DATE Dec 1964 Dec 16

OPERATOR: Shell Oil Company of Canada, Limited

LOCATION LSD. SEC. TWP. RGE. W.

WELL NAME: Shell Keele K L-4 No. L-4 PROVINCE N.W.T.

CONTRACTOR: Regent Drilling RIG No. 21

DRILL PIPE STRING NO. SIZE | TOOL JOINT OD | TYPE THD.

OPERATOR'S REPRESENTATIVE: L Eftingh CONTRACTOR'S TOOL PUSHER

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING	4	7	9
TRIPS		1	
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
[redacted]			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	9	8

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

[redacted]

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	D.C. OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER [redacted]

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
							300	5½	86			

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

REMARKS

4 Circ Wait on Test Tools

MUD RECORD

	2	4	6
TIME			
WEIGHT	9.1	9.1	9.1
VISC	45	45	45
W.L.-C.C.		10	
FLTR. CK.		2/32	
PH		9.5	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
14	STANDS DP	FT.	RUN NO.	3
1	SNGLS. DP	896.32 FT.	SIZE	6¾
	D.C. ID		MFG.	REED
20	D.C. OD	603.20 FT.	TYPE	HT3
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	9/16
	SUBS OD	FT.	SER. NO.	E84238
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	3¼
	KELLY DOWN	40 FT.	COND. OF BIT	
	TOTAL	1539 FT.	REAMER CUTTER NO.	
	WT. OF STRING	35000 LBS.	TYPE	

DRILLER McConnery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			TD 1539				300	5½	56			

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

REMARKS

5 CIRC WAIT ON TEST TOOLS
½ RUN DRILL PIPE IN HOLE
½ CIRC
½ PULL OUT TO D. COLLARS
1½ CIRC IN CASING WAITING ON test tools

MUD RECORD

	9	11	2
TIME			
WEIGHT	9.1	9.1	9.1
VISC	45	45	45
W.L.-C.C.		10	
FLTR. CK.		2/32	
PH		9.5	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
14	STANDS DP	FT.	RUN NO.	3
1	SNGLS. DP	896.32 FT.	SIZE	6¾
	D.C. ID		MFG.	REED
20	D.C. 4½ OD	603.20 FT.	TYPE	HT3
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	5/16
	SUBS OD	FT.	SER. NO	E84243
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	3½
	KELLY DOWN	40 FT.	COND. OF BIT	
	TOTAL	1539.52 FT.	REAMER CUTTER NO.	
	WT. OF STRING	35000 LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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

REMARKS

4 Circulate in Casing - Wait on Test Tools

MUD RECORD

TIME			
WEIGHT			
VISC			
W.L.-C.C.			
FLTR CK.			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 22 DATE Dec 18, 1964

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited		Shell Keele River L-4	L-4	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
Regent Drilling Ltd	21		

OPERATOR'S REPRESENTATIVE: L. Ettinger

CONTRACTOR'S TOOL PUSHER:

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING	9	5¾	9
TRIPS		3¼	
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
FISHING			
COMPLETING OR PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/O.P.:

24

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
14	STANDS DP	FT.	RUN NO.	
1	SNGLS. DP	896 35 FT.	SIZE	
20	D.C. ID		MFG.	
	D.C. OD	603.20 FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	40.00 FT.	COND. OF BIT	
	TOTAL	1539.52 FT.	REAMER CUTTER NO.	
	WT. OF STRING	35 000 LBS.	TYPE	

DRILLER: R. Pocholek

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
							300	5½	56			

DEVIATION RECORD:

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

REMARKS

9. Wait on Test Tools. (Circulate in Csg).
Checked Motor Shut off's all Work ok.

MUD RECORD

TIME			
WEIGHT	9.2	9.2	9.2
VISC	36	45	45
W.L.-C.C.			9.8
FLTR. CK.			
PH	10.		
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	25	26	

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
14	STANDS DP	FT.	RUN NO.	3
1	SNGLS. DP	946.32 FT.	SIZE	6¾
20	D.C. ID		MFG.	REED
	D.C. OD	603.20 FT.	TYPE	Y-F3
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	9/16
	SUBS OD	FT.	SER. NO.	E84238
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	3¼
	KELLY DOWN	40 FT.	COND. OF BIT	
	TOTAL	1539.52 FT.	REAMER CUTTER NO.	
	WT. OF STRING	35 000 LBS.	TYPE	

DRILLER: McConnery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			+0				300	5½	56			
			1539									

DEVIATION RECORD:

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

REMARKS

5	WAIT ON TEST TOOLS CIRC IN CASING
1/2	RUN IN DRILL PIPE
3/4	CIRC
13/4	PULL OUT CALIPER D.C. RUN D.C IN HOLE

MUD RECORD

TIME	9	12	12
WEIGHT	9.2	9.1	9.1
VISC	45	45	45
W.L.-C.C.		10	
FLTR. CK.		2/32	
PH		10	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
14	STANDS DP	FT.	RUN NO.	3
1	SNGLS. DP	896.32 FT.	SIZE	6¾
	D.C. ID		MFG.	REED
	D.C. OD	603.20 FT.	TYPE	Y-F3
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	9/16
	SUBS OD	FT.	SER. NO	E84238
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	3¼
	KELLY DOWN	40 FT.	COND. OF BIT	
	TOTAL	1539 FT.	REAMER CUTTER NO.	
	WT OF STRING	35 000 LBS.	TYPE	

DRILLER:

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			+0				300	5½	56			
			1539									

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

13/4 CIRC IN CASING WAITING ON TEST TOOLS

MUD RECORD

TIME	6	8	10
WEIGHT	91	9.1	91
VISC	45	46	45
W.L.-C.C.			
FLTR CK.			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

C.P.—38

DAILY DRILLING REPORT

REPORT NO. 21 DATE Dec 17, 1964

OPERATOR: Shell Oil Company of Canada, Limited

LOCATION LSD. 4 SEC. 20 TWP. 37.5N RGE. 12 5° W. 4 30 W

WELL NAME: Shell Kaale River L-4 No. L-4

PROVINCE: N.W.T.

CONTRACTOR: Regent Drilling Ltd RIG No. 21

DRILL PIPE STRING NO. SIZE: TOOL JOINT OD: TYPE THD. IF

OPERATOR'S REPRESENTATIVE: E. Hough

CONTRACTOR'S TOOL PUSHER: R. MacLeish

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

MORNING TOUR

	HOURS	DAY	DPT
DRILLING ACTUAL	6¾	5¾	
REAMING			1
CIRCULATING			
TRIPS		2	
DEVIATION SURVEY	1	½	
TEST B.O.P	¼	¼	
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING D.D.			3¼
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	13	8	

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

HRS W/O D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
11	STANDS DP	677.35 FT.	RUN NO.	2
	SNGLS. DP	FT.	SIZE	6¾
	D.C. ID		MFG.	HW
23	OD 4½ 6¼	604.19 FT.	TYPE	DSC3
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	SIZE	5/8
	SUBS OD	FT.	SER. NO	53132
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	6¼
	KELLY DOWN	17.00 FT.	COND. OF BIT	
	TOTAL	1300.48 FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER: R. Paddock

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6¾		1065	1300		55	10+	500	5½	68			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1100	2¼		1160	2¼		1220	2½	
							1280	3°	

REMARKS

¼ Sa Rig & Check BOP
¾ Drill
1 Survey
2 Drill
¼ Survey
1¾ Drill
¼ Survey
1¾ Drill

¼ Survey
½ Drill

MUD RECORD			
TIME	2	4	6
WEIGHT	9.3	9.4	9.4
VISC	37	35	36
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1000		
Sod Ash	50		
Redtex	50		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	2
	SNGLS. DP	FT.	SIZE	6¾
	D.C. ID		MFG.	HW
20	OD 6¼	1604 FT.	TYPE	DSC3
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	SIZE	5/8
	SUBS OD	FT.	SER. NO.	53132
	BIT OR C.B.	FT.	DEPTH OUT	1447
		40 FT.	CUMULATIVE HOURS RUN	12½
	KELLY DOWN	1447.35 FT.	COND. OF BIT	2-2-1
	TOTAL	36 FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER: M. Conway

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5¼		1300	1447		90	12	500	5½	68			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	1340	3		1430	3				

REMARKS

¼ RIG SERV
1¾ DRILL
¼ SURVEY
3½ DRILL
¼ SURVEY
2 TRIP

MUD RECORD			
TIME	9	11	1
WEIGHT	9.3	9.2	9.2
VISC	36	37	40
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	16 SXS		
LIGNITE	400 LBS		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
14	STANDS DP	896.32 FT.	RUN NO.	3
	SNGLS. DP	FT.	SIZE	6¾
	D.C. ID		MFG.	REED
28	OD	603.20 FT.	TYPE	Y-13
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	SIZE	5/8
	SUBS OD	FT.	SER. NO	54258
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	40 FT.	COND. OF BIT	
	TOTAL	1539.52	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
2¼		1447	1539		90	18	500	5½	68			

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

REMARKS

¼ REAM BRIDGE @ 1280 + CLEAN OUT
2¾ DRILLING
¾ Circ & Survey Dummy Trip to Bottom

MUD RECORD			
TIME	5	7	
WEIGHT	9.2	9.1	
VISC	38	38	
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 20 DATE DEC 16-1964

OPERATOR	LOCATION LSD. SEC. TWP. RGE. M	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited	64-23 37.0"N 125-0 45 W	Shell Kotaneelee C-4	L-4	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
Regent Drilling Ltd	21		

OPERATOR'S REPRESENTATIVE: L. Bettinger — CONTRACTOR'S TOOL PUSHER:

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

	SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL		7¼	6
REAMING			
CIRCULATING			
TRIPS			1½
DEVIATION SURVEY		¾	½
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS			

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

HRS W/O D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
2	STANDS DP	FT.	RUN NO.	1
1	SNGLS. DP	154.14 FT.	SIZE	6¾
	D.C. ID / OD 4½	604.14 FT.	MFG.	Sec
	RMR BODY OD	FT.	TYPE	S3
	STB BODY OD	FT.	NOZ. NO.	3
	SUBS OD	FT.	NOZ. SIZE	5/8
	BIT OR C.B.	FT.	SER. NO	65620
		FT.	DEPTH OUT	
	KELLY DOWN	20.00 FT.	CUMULATIVE HOURS RUN	¼
	TOTAL	778.96 FT.	COND. OF BIT	
WT. OF STRING	32000 LBS.		REAMER CUTTER NO.	
DRILLER	L. Pachalek		TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
¼		748	778		60	10	400	5½	68			

DEVIATION RECORD:

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

REMARKS

1 English hook Up BOP Control & Test house heaters
Change Shale Shaker Screens Patch Up holes
in Substructure & Cellar
3½ Wait on Water to displace Cement Cut Mater.
½ Clean tanks displace Sole Mix Bicarb of Soda
¼ Repair mud pump
Mix mud. Vis Drill.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2500		
Soda Ash	300		
Caustic	100		
Bel Tex	200		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
4	STANDS DP	FT.	RUN NO.	1
1	SNGLS. DP	278.14 FT.	SIZE	6¾
20	D.C. ID / OD	604.14 FT.	MFG.	Sec
	RMR BODY OD	FT.	TYPE	S3
	STB BODY OD	FT.	NOZ. NO.	3
	SUBS OD	FT.	NOZ. SIZE	5/8
	BIT OR C.B.	FT.	SER. NO.	65620
		FT.	DEPTH OUT	
	KELLY DOWN	40 FT.	CUMULATIVE HOURS RUN	2½
	TOTAL	922 FT.	COND. OF BIT	
WT. OF STRING	32 LBS.		REAMER CUTTER NO.	
DRILLER	M C Company		TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7¼		778	922		90	8	450	5½	68			

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
790	¾		880	1½	9	910	2	

REMARKS

½ DRILL
¼ RUN SURVEY RIG SERV
2¼ DRILL
¼ SURVEY
2 DRILL
¼ SURVEY
2½ DRILL

MUD RECORD

TIME	9	11	2
WEIGHT	8.7	8.7	8.7
VISC	36	40	45
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	20 SXS		
QUICK VIS 1 GAL			

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
7	STANDS DP	432.29 FT.	RUN NO	1	2
	SNGLS. DP	FT.	SIZE	6¾	6¾
20	D.C. ID / OD	604.14 FT.	MFG.	Sec	HW
			TYPE	S3	0333
	RMR BODY OD	FT.	NOZ. NO.	3	3
	STB BODY OD	FT.	NOZ. SIZE	5/8	5/8
	SUBS OD	FT.	SER NO	65620	53132
	BIT OR C.B.	FT.	DEPTH OUT	1045	
		FT.	CUMULATIVE HOURS RUN	12½	
	KELLY DOWN	29.00 FT.	COND. OF BIT	2-1-1	
	TOTAL	1065.43 FT.	REAMER CUTTER NO.		
WT. OF STRING	32000 LBS.		TYPE		
DRILLER					

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5		922	1065		6090	10	500	5½	68			

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
940	2		1030	2				

REMARKS

1½ DRILL
1½ RIG SERV RUN SURVEY
3 Drill
1½ Trip
¾ Drill
½ Survey
3½ Drill

MUD RECORD

TIME	6	9	10
WEIGHT	8.8	8.8	8.9
VISC	42	42	40
W.L.-C.C.			
FLTR CK			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
GEL	500		
Soda Ash	50		
PEL TEX	50		

KODAK SAFETY FILM

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. #2 DATE Dec 15-1964

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME No.	PROVINCE
Shell Oil Company of Canada, Limited	64°23' 370"N 125° of 43W	Shell Kaska River L-4 L-4	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
Regent Drilling Co.	21		

OPERATOR'S REPRESENTATIVE: L. Ettinger — CONTRACTOR'S TOOL PUSHER:

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emco	D-300	7"
2.			
3.			

CASING & LINER RECORD	SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

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

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

[illegible]

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG. / TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER: R. Pacholek

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH / DEV. / DIRECTION

REMARKS

9" W.O.C Head Up BOP & Hydrolic Controls

MUD RECORD

TIME			
WEIGHT			
VISC			
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG. / TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO.	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER: W.C. Connors

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH / DEV. / DIRECTION

REMARKS

8 NIPPLE UP B.O.P Put on Flow Line
PICK UP 3½" Kelly

MUD RECORD

TIME			
WEIGHT			
VISC			
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG. / TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER NO	
	BIT OR C.B.	FT	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT OF STRING	LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH / DEV. / DIRECTION

REMARKS

¼ Rig Serv'd
2 Pick up Bottom Hole DC Runn'd to top of Cement @ 638
2½ Drilling Cement
1½ Pressure Test Casing B.O.P. Hydril 2200 Lbs for 30 min. OK. No Leaks LL.
2 Install Steam Coils around B.O.P.

MUD RECORD

TIME			
WEIGHT			
VISC			
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE

C.P.—38

DAILY DRILLING REPORT

REPORT NO. ____ DATE DEC 14/64

OPERATOR: Shell Oil Company of Canada, Limited

LOCATION LSD. 64 SEC. 23 TWP. 57 RGE. 20 W. 5 | WELL NAME: Shell Kelly River No. 4 | No. L-4 | PROVINCE: N.W.T.

CONTRACTOR: Regent Drilling Ltd. | RIG No. 2 | DRILL PIPE STRING NO. SIZE | TOOL JOINT OD / TYPE THD.

OPERATOR'S REPRESENTATIVE: [illegible] | CONTRACTOR'S TOOL PUSHER: [illegible]

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING			
TRIPS			
DEVIATION SURVEY			
TEST B.O.P			
CUT, CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
FISHING	WOC 4		
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS			

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

HRS W/O D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	D.C. OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER: R Faholek

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

8 WOC

Overhaul Long Pulleys
Repairing Drum
Brakes & Suspension
Checked and Repaired Brake System

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	D.C. OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO.	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER: Mc Cormack

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

6 WOC
2 CUT 16" CONDUCTOR PIPE & BACK OFF LANDING JOINT

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C. ID		MFG.	
	D.C. OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT OF STRING		LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

1½ LAY DOWN KELLY
PUT ON CASING BOWL & PICK UP
6½ Nipple Up BOP B.O.P

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. DATE DEC 13/64

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited	6 #0 23'-37.0" W 125° 01' 43.0" W	SHELL KEEL RIVER	L-4	N W T

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
REGENT DRLG CO	2		

OPERATOR'S REPRESENTATIVE: L Stevens

CONTRACTOR'S TOOL PUSHER:

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.			
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

MORNING TOUR

TIME DISTRIBUTION—HOURS

	WORK	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING			
TRIPS		1/2	
DEVIATION SURVEY			
TEST B.O.P			
CUT OFF DRLG LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
[illegible]			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING Casing		7½	
(C) SWABBING		8	
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS		16	

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG.	
	RMR BODY OD	FT.	TYPE	
	STB BODY OD	FT.	NOZ. NO. / SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO	
WT. OF STRING		LBS.	TYPE	

DRILLER: P Fischer

HRS. DRLD	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

½ Trip To Condition Hole
1 Rig to Run Casing
½ Install Accessories & Centralizers Clean off
Casing Threads for Thread Lock
6 Run Casing

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG.	
	RMR BODY OD	FT.	TYPE	
	STB BODY OD	FT.	NOZ. NO / SIZE	
	SUBS OD	FT.	SER. NO.	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER: McConnery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

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

REMARKS

1 RIG UP HOSES TO WATER TANK ON SLEIGH
2 CEMENTING UNIT
1½ RUNNING CASING
1 RIGING UP CEMENT LINES
2 RUN CEMENT & PUMP PLUG DOWN
½ W.O.C RAN 22 JOINT 751.77' OF 9⅝" O.D. 36# J55 STC PLUG DOWN
CASING LANDED AT 748 K.B. CEMENTED 1-PM.
WITH 550 SACKS PORTLAND CEMENT + 2% CACL.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG.	
	RMR BODY OD	FT.	TYPE	
	STB BODY OD	FT.	NOZ. NO. / SIZE	
	SUBS OD	FT.	SER NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT OF STRING		LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

8 W.O.C. clean mud tanks
clean beds & service D 350
Install Hydromatic

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR CK.	
PH	
SD. CONT	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

WIRE LINE RECORD

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

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:	
OPERATOR'S TIME:	
HRS. W/D.P:	
[illegible] HRS WO/D.P:	
HRS STANDBY	

C.P.—38

DAILY DRILLING REPORT

REPORT NO. ____ DATE Dec 12 / 64

OPERATOR	LOCATION LSD.	SEC.	TWP.	RGE.	W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited	44° 23' 37.0" N			125° 01' 43.0" W		Shell Keele River L-4	L-4	B.C.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD.
Regent Drilling Ltd	21		

OPERATOR'S REPRESENTATIVE: L. L. Hunger

CONTRACTOR'S TOOL PUSHER:

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL		5	
REAMING			
CIRCULATING			
TRIPS		1	
DEVIATION SURVEY		1/2	
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG		1/4	
CORING			
WIRE LINE LOGGING			
Safety		1/4	
FISHING		8	
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS			

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME:

HRS. W/D.P:

HRS W/O D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	2
	SNGLS. DP	31 FT.	SIZE	13 1/4
	D.C ID		MFG.	See
	D.C OD	68 1/2 FT.	TYPE	See
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	3/4
	SUBS OD	4 5/8	SER. NO	223 14
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	23 FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT. OF STRING	35000		TYPE	

DRILLER: P Pocholok

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5		688	744		190	6/10	800	6 3/4	68			

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
690	1/2	118	720	1/8				

REMARKS

3/4 Drill
1/4 Survey
1/4 Ser Rig
3/4 Drill
1/4 Survey
1/2 Ser Swivel, Work on Air Compressor
1/2 Drill
3/4 Change liner gasket on D 500.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	2
	SNGLS. DP	FT.	SIZE	13 1/4
	D.C ID		MFG.	See
	D.C OD	717.5 FT.	TYPE	See
	RMR BODY OD	3.5/8	NOZ. NO	3
	STB BODY OD	1 5/8	NOZ. SIZE	3/4
	SUBS OD	FT.	SER. NO.	223 14
	BIT OR C.B.	FT.	DEPTH OUT	748
		FT.	CUMULATIVE HOURS RUN	14 1/2
	KELLY DOWN	25 5/8	COND. OF BIT	
	TOTAL	748 FT.	REAMER CUTTER NO.	
WT. OF STRING	39000 LBS.		TYPE	

DRILLER: McCormick

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
1/4		744	748		180	6	900	6 3/4	68			

DEVIATION RECORD:

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

REMARKS

1 FINISH PULL OUT DRAGGED BIT
1 1/2 REPACK SWIVEL
1 1/2 RUN IN - SCD @ 405' + ON BOTTOM
1/4 DRILL
1/4 CIRC
1 MEASURE OUT OF HOLE / HOLE ON LOCATE
1/2 LAY DOWN 6 1/2" D. COLLARS
2 WAITING ON WATER

HAVING TROUBLE WITH PUMP AT WATER

MUD RECORD

TIME	12
WEIGHT	9.6
VISC	52
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C ID		MFG.	
	D.C OD	FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

Waiting Water Rigging up Coming Unit.

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR CK	
PH	
SD. CONT	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 2 DATE Dec 11/64

OPERATOR	LOCATION LSD.	SEC.	TWP.	RGE.	W.	WELL NAME	No.	PROVINCE
Shell Oil Company of Canada, Limited	16	23	37.0"N	12	5°01 43.6"W	Shell Keele River	L4	N.W.T.

CONTRACTOR	RIG No.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD	TYPE THD.
Regent Drilling Ltd	21	3½		TF

OPERATOR'S REPRESENTATIVE: E Ettinger

CONTRACTOR'S TOOL PUSHER:

PUMPS

NO.	MANUFACTURES	TYPE	STROKE LENGTH
1.	Emco	D 300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

MORNING TOUR

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	6	3¼	7
REAMING			
CIRCULATING		¼	
TRIPS	1	2	
DEVIATION SURVEY	2¼	¼	3¼
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
Go Rig	¼	¾	¼
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	8

DRILLING ASSEMBLY

NO.			FT.
	STANDS DP		FT.
	SNGLS. DP		FT.
16	D.C. ID / OD	4 7/8	475.38
	RMR BODY OD		FT.
	STB BODY OD		FT.
2	SUBS OD	4.53	FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	40.00	FT.
	TOTAL	519.93	FT.
	WT. OF STRING	30	LBS.

DRILLER: L Prohaluk

BIT RECORD

RUN NO.	1A
SIZE	12¼
MFG.	Sec
TYPE	S3
NOZ. NO.	3
NOZ. SIZE	3/4
SER. NO	22321
DEPTH OUT	
CUMULATIVE HOURS RUN	
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6		349	519		140	10/12	450	6¾	68			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	450	3/4°		519	1¼°				

REMARKS

¼	Go Rig
2¼	Drill 8
¼	Survey
1	Survey Trip
¾	Drill
¼	Survey
2¼	Drill
¼	Survey
¼	Drill

MUD RECORD

	2	4	6
TIME	2	4	6
WEIGHT	8.9	8.9	8.9
VISC	48	52	58
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Caustic	50#		
Quickvis	16 gal		

DAY TOUR

DRILLING ASSEMBLY

NO.			FT.
	STANDS DP		FT.
	SNGLS. DP		FT.
17	D.C. ID / OD	4 7/8	566.37
	RMR BODY OD		FT.
	STB BODY OD		FT.
2	SUBS OD	4 7/8	45 FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN		FT.
	TOTAL	44	FT.
	WT. OF STRING	584	LBS.

DRILLER: 32 Sept L Prohaluk / Connors

BIT RECORD

RUN NO.	1	
SIZE	12¼	2
MFG.	Sec	134
TYPE	S3	Sec
NOZ. NO.	3	S3
NOZ. SIZE		3
SER. NO.	3/4	3/4
DEPTH OUT	522	523¾
CUMULATIVE HOURS RUN	5¼	
COND. OF BIT	2	
REAMER CUTTER NO.	Drill	
TYPE		

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5¼		519	584		180	6	400	6¾	68			

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION	DEPTH	DEV.	DIRECTION
	560	1¼°							

REMARKS

¼	Rig Serv
2	Drill
2	Trip Reamed Bridge @ 95'
¼	Circ
1	Drill
¼	Survey
2¼	Drill

MUD RECORD

	9	11	2
TIME	9	11	2
WEIGHT	9.5	9.6	9.6
VISC	50	52	52
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

DRILLING ASSEMBLY

NO.			FT.
	STANDS DP		FT.
	SNGLS. DP		FT.
22	D.C. ID / OD	6 5/8	656.98
	RMR BODY OD		FT.
	STB BODY OD		FT.
2	SUBS OD	4 5/8	55 FT.
	BIT OR C.B.		FT.
			FT.
	KELLY DOWN	27	FT.
	TOTAL		FT.
	WT. OF STRING	345	LBS.

DRILLER: L Prohaluk / Eric Connors

BIT RECORD

RUN NO.	2
SIZE	12¼
MFG.	Sec
TYPE	S3
NOZ. NO.	3
NOZ. SIZE	3/4
SER. NO	22314
DEPTH OUT	
CUMULATIVE HOURS RUN	
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7		584	688		140	6	800	6¾				

DEVIATION RECORD:	DEPTH	DEV.	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
	640	1½		630	1°		660	7/8	

REMARKS

¼	Rig Serv
2	Drill
¼	Survey
¾	Circ
13/4	Drill 6
¼	Survey
1¼	Drill

MUD RECORD

	6	9	10
TIME	6	9	10
WEIGHT	9.7	9.7	9.7
VISC	48	49	51
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1200		
Caustic	50#		

WIRE LINE RECORD

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

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:	
OPERATOR'S TIME:	
HRS. W/D.P:	
HRS WO/D.P:	
HRS STANDBY	

C.P.—38

DAILY DRILLING REPORT

REPORT NO. 1 DATE Dec 10/64

OPERATOR: Shell Oil Company of Canada, Limited

LOCATION LSD. 64° 23' SEC. 37.0" N TWP. 125° 01' RGE. 43.0" W

WELL NAME: Shell Keele River L4 No. L4

PROVINCE: N.W.T.

CONTRACTOR: Gant Drlg Std RIG No. 21

DRILL PIPE STRING NO. SIZE | TOOL JOINT OD | TYPE THD.

OPERATOR'S REPRESENTATIVE: S Holstein

CONTRACTOR'S TOOL PUSHER

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	
2.			
3.			

CASING & LINER RECORD

SIZE	WT. & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

TIME DISTRIBUTION—HOURS

	WORK	DAY	EVE
DRILLING ACTUAL		5	13½
REAMING			
CIRCULATING			
TRIPS			
DEVIATION SURVEY			3/4
TEST B.O.P			
CUT OFF DRILL LINE			
REPAIR RIG			1/2
CORING			
WIRE LINE LOGGING			
[illegible]	8	3	½
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	8

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS:

OPERATOR'S TIME: 24 hrs

HRS. W/D.P: Out of Days work Rabbit.

HRS WO/D.P:

HRS STANDBY

WIRE LINE RECORD

REEL NO

NO OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG.	
	RMR BODY OD	FT.	TYPE	
	STB BODY OD	FT.	NOZ. NO. / SIZE	
	SUBS OD	FT.	SER. NO	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	FT.	COND. OF BIT	
	TOTAL	FT.	REAMER CUTTER NO.	
	WT. OF STRING LBS.		TYPE	

DRILLER Pacholuk

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

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

REMARKS

1/4 Weld on Drilling Head
Cement Collar + Collars
1 Clean up Around Sub. Rig to Slug Rat Hole
Blow Lines
3/4 Dig Rat hole
1 Work on Winterization
2 Dig Rat Hole
1 Mix Spud Mud Treated Gel, Lignite, Quik Kol & Caustic

MUD RECORD

TIME | WEIGHT | VISC | W.L.-C.C. | FLTR. CK. | PH | SD. CONT.

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	15 sx		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	1A
	SNGLS. DP	FT.	SIZE	12¼
5	D.C. ID 6½ OD	144.00 FT.	MFG.	Sec
	RMR BODY OD	FT.	TYPE	S3
	STB BODY OD	FT.	NOZ. NO. / SIZE	3 / 3/4
	SUBS OD	4.55 FT.	SER. NO.	
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	40.00 FT.	COND. OF BIT	
	TOTAL	144.55 FT.	REAMER CUTTER NO.	
	WT. OF STRING	20 000 LBS.	TYPE	

DRILLER R McConnery

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS.	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5		40	184.55		140	10	250	6½	68			S

DEVIATION RECORD: 80 | 1/2 | 150 | 1/2 | | | | | |

REMARKS

3/4 Rig to Drill
5 Spud; Mix mud

Spudded in 11 AM Dec 10/64
K.B. To Ground Level 14 FT

MUD RECORD

TIME	2.30		
WEIGHT	8.5		
VISC	60		
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	2 sx		
Caustic	10 #		
Quick Kol	2 Gal		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	1A
	SNGLS. DP	FT.	SIZE	12¼
11	D.C ID / OD	324.45 FT.	MFG.	Sec
	RMR BODY OD	FT.	TYPE	S3
	STB BODY OD	FT.	NOZ. NO. / SIZE	3 / 3/4
	SUBS OD	4.55 FT.	SER NO	22321
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	20.00 FT.	COND. OF BIT	
	TOTAL	349.00 FT.	REAMER CUTTER NO.	
	WT OF STRING	30000 LBS.	TYPE	

DRILLER R McConnery & P Pacholuk

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
					140	10/15	350	6½	68			S

DEVIATION RECORD: 240 | ½ | | 330 | ¼ | | | | |

REMARKS

6¾ Drill
½ Service Rig
¼ Rig Serv
¼ Repair Compressor

MUD RECORD

TIME	6	8	10 2.30
WEIGHT	48	49	89
VISC	50	52	54
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.