

CDR CPOG CHEVRON

MILLS LAKE I-57

Drilling Authority No. 243
Date Issued Dec 16, 1966

WELL NAME CDR CPOG Chevron Mills Lake I-57

FIELD

LOCATION: Unit I Area: Section 57 Grid 61-20: 117-30
Latitude 61-16-37.5 Longitude 117-39-36.6
From Established Reference Marker

U. W. L. R. 61.27709 - 117.66167

U. W. I. No. 3001576120 117-300

Rig Release Date: 22-2-67

Status New Field Incident

Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
16-12-66	Application for a Drilling Authority.
31-8-67	Well Completion Data.
	Well History Report.
12-10-67	Application to Amend a Drilling Authority.
31-3-67	Application to change a Well Name.
12-10-67	Application to Abandon a Well or Suspend Drilling.
8-3-67	Application to Alter Condition of a Well.
	Well History Supplement.
	Well Completion Data.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells — Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells — Vitter's Method.
	M.P.R. — Oil — Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs. Large scale Small scale

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

WELL COMPLETION DATA

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

Well name and number **COR CPOG Chevron Mills Lake I-57 (2)**

Permit No. **3873** Lease No. _____

Chevron Standard Limited Exploratory Licence No. **1023**
(Permitter, Licensee, Lessee)

Central-Del Rio Oils Limited Exploratory Licence No. **1036**
(Operator)

Location: Unit **I** Section **57** Grid **61° 20', 117° 30'**

Latitude **61° 16' 37.18" N** Longitude **117° 38' 35.85" W**

From Established Reference Marker **Bench Mark NE 32 T 141 R 31 W5**

Universal Well Location Reference **61.27700N; 117.65998 W**

	DATE	DEPTH	Pool(s)	Wildcat
			Interval(s) open to production	
Spudded	Jan. 24/67			
Suspended				
Resumed Operations				
Finished Drilling	Feb. 20/67	1932		
Deepened			Elevation: Gr. 515	K.B. 525
Complete (gas/oil)			Rig No. 17	
Abandoned	Feb. 22/67	1932	Drilling Contractor Big Indian Drilling Co., Ltd.	
Rig released	Feb. 23/67		Contractor's Business Licence No. 24358	

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at -	Sacks of Cement and Additives
7"	J-55	20#/ft.	336.94	346.24	120 sacks cement +
					2% CaCl ₂ Ban 90 sex
					+ 2% CaCl ₂ outside casing

[illegible]



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

Application to Abandon a Well or Suspend Drilling

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

Name and number of well **COR CPOU Chevron Hills Lake 1-57 (52)**
Location: Unit **I** Section **87** Grid **61° 20', 117° 30'**
Latitude **61° 18' 37.15"** Longitude **117° 39' 33.35"**
From Established Reference Marker **Search Mark 111 33 T 141 R 21 W5**
Universal Well Location Reference **61.27700N 117.65996W**
Permit No. **3878** Lease No.

Chevron Standard Limited
(Permitter, Licensee, Lessee)

Date of commencement of proposed program **January 18, 1967**

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at
Gas at
Water at
Total Depth **1833** Date of last operations **February 20, 1967**
Present condition of well **Dry hole.**

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At--	Sacks of Cement and Additives	Amount Pulled
1. 7"	200	336.94	346.24	120 sax Portland cement plus 2% CaCl₂	None.
2.					
3.				Ran 90 sax outside casing + 2% CaCl₂	
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
	T.D. to 1340			Feet.
	50' ± 348			Feet.

The following logs have been run **None**
Other operations proposed **Plug**
Operations to be carried out by **Central-Del Rio Oils/ Limited**
Address **136-6th Avenue S.W., Calgary, Alberta** Contractor Licence No. **24358**
Responsible Agent in field **E. J. Burger** Address **Calgary, Alberta**
Dated at **Calgary, Alberta**, this **31st** Day of **August** 19 **67**
Signed by **[Signature]** Company **Central-Del Rio Oils Limited**
Title **Staff Engineer** Operator's Exploratory Licence No. **1036**
Note:—The Oil Conservation Engineer's office must be notified before work is commenced.

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

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

Confirming oral approval given by **Mr. B.E.J. Thoms** on the **20th** of **February, 1967**

Dated **12th October**, 19 **67** **[Signature]**
Oil Conservation Engineer

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

File No.

Drilling Authority No. 243



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

Application to Amend a Drilling Authority

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

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made to amend
Drilling Authority No. 243, concerning CDR CPOG Chevron Mills Lake I-57

(Name and Number of Well)

The following amendments are required: The cement job on the surface pipe failed. Permission is requested to move the location 29.6' East and 29.6' South to re-drill the well.

The second hole to be known as
CDR CPOG Chevron Mills Lake I-57 (#2)

Reasons for the amendments: Cement job failed on surface pipe.

Dated at Calgary, this 31st day of August, 19 67

Signed by *Hebert*

Title Staff Engineer

Company CENTRAL-DEL RIO OILS LIMITED

(For Resource Management Division use only)

APPROVED

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

Universal Well Location Reference: Lat. 61.27700° N. Long. 117.65996° W.

Date 12th October, 19 67

B. H. Thomas
Oil Conservation Engineer

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

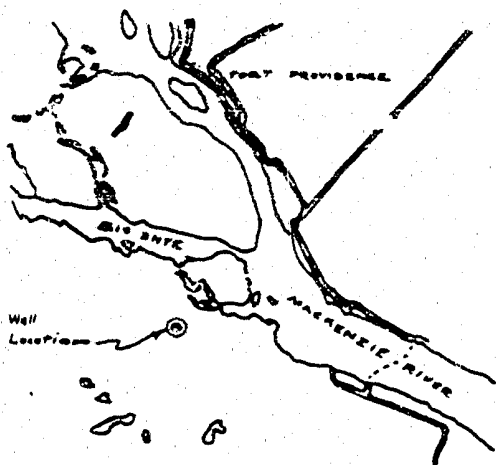
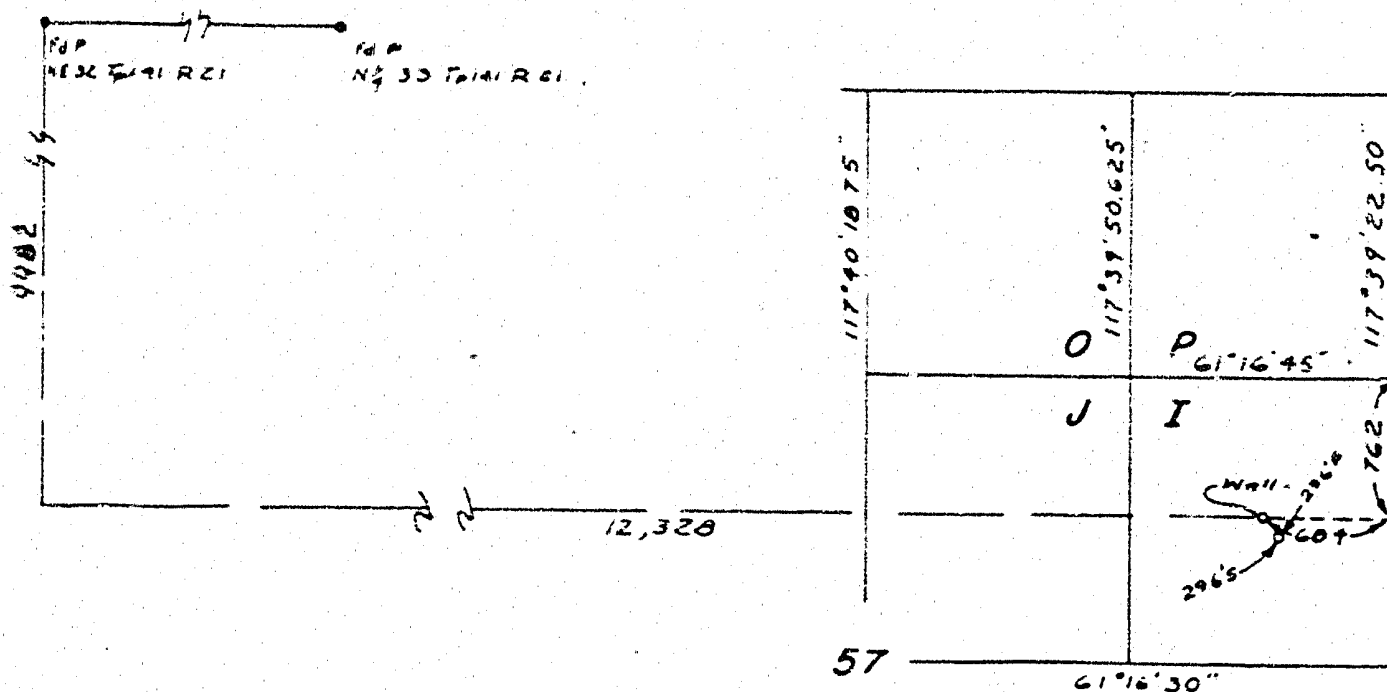
C.D.R. CPOG CHEVRON MILLS LAKE I-57

Unit I Section 57 Grid Area $61^{\circ}20'$; $117^{\circ}30'$

Latitude $61^{\circ} 16' 37.5$

Longitude 117° 39' 36.5

~~FA~~ LAISE LAKE - DISTRICT OF MACKENZIE - NORTH WEST TERRITORIES



~ Location Plan ~
Scale 1:250,000

Universal Well Location

Reference 61.27700N (#2)
117.65996 W

61.27009N (#1)
117.66017W

Bearings are referred to meridian through 117°

I certify that the survey represented by this plan is correct to the best of my knowledge and was completed on the 23 day of December 1966

J. W. P. Matthews
Dominion Land Surveyor

Donald L. ...
Witness

MIDWEST SURVEYS (ALBERTA) LIMITED

ELEVATION: 515 Ground

CO-ORDS. Well is located 684 Ft. W.
762 Ft. S. from the
N.E. cor. UNIT I SECTION 57

TOTAL CO-ORDS.

N 101.895 } 61° LAT.
W 116.168 } 117° LONG.

AREAS:

Scale 1000 feet to 1 inch

Triangulation Station:

Well Location :

Survey monuments found shown thus:
 " " planted " "

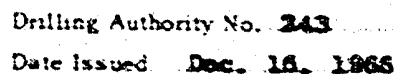
Portions referred to outlined

Distances are in feet and decimals.

DATUM: Ground at
NE. 32 T. 141 R. 21 W. 5
ELEV. 502



C661-66



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

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

Location: Unit I Section 57 Grid 61° 20'; 117° 30'
 Latitude 61° 16' 37.5" Longitude 117° 39' 38.6"
 From Established Reference Marker Beach Mark NE 32 T 141 R 21 W5
 Universal Well Location Reference 61.27709 N 117.66017 W

Pool(s) Wildcat
Interval(s) open to production
Elevation: Gr. 515 K.B. 525
Rig No. 17
Drilling Contractor Big Indian Drilling Co.
Contractor's Business Licence No. 24358

Casing Size (Inches)	Grade	Weight	Amount	Set at -	Sacks of Cement and Additives
7"	J-55	20#	252.61	261.51	100 sack Portland
					Cement plus 2 1/8% CaCl ₂

SERVICING RECORD (ACIDLINE, PRESS, ETC.)

Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
Jan. 28, 1967	376	0	36 sacks of cement 3 " at surface								
Cut casing and welded on cap.											

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.	L.F.B.H.P.	F.F.B.H.P.	I.H.P.	P.H.P.	REMARKS

SEP 13 1987

NORTHERN DEVELOPMENT
MANAGEMENT DIVISION

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
					Oil
					(Interval.)
					Gas
					(Interval.)
					Dry
					Susp.

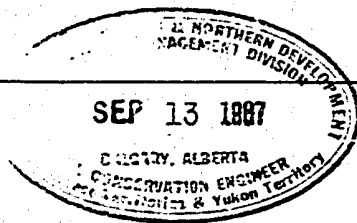
CENTRAL OILS LIMITED

Signed by Charles L. ...

Staff Engineer

Date: Aug 31 / 76

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





File No.
Drilling Authority No. 343

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION

Application to Abandon a Well or Suspend Drilling

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

Name and number of well COR. CPOG Cheyenne Hills Lake 1-57 (2)
Location: Unit 1 Section 87 Grid 61° 30', 117° 30'
Latitude 61° 10' 37.8" Longitude 117° 39' 30.8"
From Established Reference Marker Beach Mark NE 22, T 141, R 21 W
Universal Well Location Reference 61.87009 N 117.66017 W
Permit No. 2873 Lease No. _____

Chevron Standard Limited
(Permitter, Lessee, Lessor)

Date of commencement of proposed program January 24, 1967

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at _____
Gas at _____
Water at _____
Total Depth 378 Date of last operations January 23, 1967
Present condition of well Dry hole.

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. <u>7"</u>	<u>206</u>	<u>233.61</u>	<u>281.81</u>	<u>100 sack Portland cement plus 2 1/2% CaCl₂</u>	<u>None</u>
2. _____	_____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____	_____
5. _____	_____	_____	_____	_____	_____

PROPOSED ABANDONMENT PROGRAM

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
<u>1</u>	<u>Surface to T.B.</u>	<u>Bay River Shale</u>	<u>35 sacks</u>	<u>Fill hole with cement, cut off casing and weld on plate.</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

The following logs have been run None
Other operations proposed None

Operations to be carried out by Central-Del Rio Oils Limited Contractor Licence No. 24358
Address 736-8th Avenue S.W., Calgary, Alberta Address 1318 - 9th Ave. S.E.
Responsible Agent in field R. J. Berger
Dated at Calgary, Alberta, this 31st Day of August 19 67
Signed by Sheela K. R. Company Central-Del Rio Oils Limited
Title Staff Engineer Operator's Exploratory Licence No. 1056

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

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.H.J. Thoms on the 27th January 1967

Dated 12th October, 19 67 B.H.J. Thoms
Oil Conservation Engineer

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

File No.

Drilling Authority No. 243

Department of Indian Affairs and Northern Development
Resource & Economic Development Group



~~DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES~~
~~RESOURCE MANAGEMENT DIVISION~~

Application to Amend a Drilling Authority

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

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made to amend
Drilling Authority No. 243, concerning CDR CPOG Chevron Mills Lake I-57

(Name and Number of Well)

The following amendments are required: To move location 30 feet south & 30 feet east of
presently approved location.

Reasons for the amendments: After drilling out the shoe joint and drilling to 349' it
became apparent that the surface pipe was not properly bonded to the ground. The
hole had to be abandoned and the rig skidded to the new location.

Dated at CALGARY, Alberta, this 23rd day of MARCH, 1967.

Signed by ORIGINAL SIGNED BY J. M. GIBSON

Title Staff Engineer.

Company Central-Del Rio Oils Limited

(For Resource Management Division use only)

APPROVED

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

Date 31st March, 1967

(for) Oil Conservation Engineer

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



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCE MANAGEMENT DIVISION

Application for a Drilling Authority

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

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

Name and number of well CDR CPOG Chevron Mills Lake I-57
Location: Unit I 37.5" Section 57 Grid 117° 36' 39" W. 61° 16' 23" N.
Latitude 61° 16' 23" N. Longitude 117° 36' 39" W.
From Established Reference Marker

Elevation: Ground K.B. feet above sea-level.
Well is expected to produce from The Lonely Lane formation at a depth of about 2700 feet.

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

Permit No. 3875 Lease No. Acreage 61596

Permittee, licensee, or lessee Chevron Standard Limited

Exploratory Licence No. 1023 1023

Surface owned by Crown or Crown

Petroleum and natural-gas rights owned by Crown (If alienated submit name and address of owner and occupant.)

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	Feet of Cement
1. 7"	20#	J-55	Seamless	New	250	110
2. 4½"	9.5#	J-55	Seamless	New	2700	75*
3.						
4. *If required for well completion.						
5.						

Expected water, gas, and oil horizons and type of control equipment Lonely Lane, Middle Devonian.
To be controlled by adequately weighted drilling mud and blowout preventers until production casing is set or the well abandoned.

Well will be drilled with (Rotary) Rig No. 17 by Big Indian Drilling Co. Ltd.
(Cable) (Drilling Contractor or company)

1318 - 9th Avenue S.E., Calgary, Alberta

Responsible agent of applicant:— Contractor's Business Licence No. 24358

At well J. M. Gibson At registered office J. M. Gibson

Address 736-8th Ave. S.W., Calgary Address 736-8th Ave. S.W., Calgary, Alberta

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

Dated at Calgary, Alberta this 13 day of December 19 66

Signed by J. M. Gibson Company Central Petroleum Ltd.

Title Staff Engineer Operator's Licence No. 1036

(For Resource Management 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 16th December 19 66

Oil Conservation Engineer

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

NANR 52-90-1 (7-65)

UNIVERSAL WELL LOCATION REFERENCE: 61.27709 N. 117.66167 W.

CENTRAL-DEL RIO OILS LIMITED

26-11-4-3

WELL HISTORY REPORT



CDR CPOG CHEVRON MILLS LAKE I-57

(#1) & (#2)

"Developing Canada's Resources"

APPROVED

OCT 17 1967

RESOURCE MANAGEMENT DIVISION

I N D E X

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Compiled by: R. J. Burger and J. M. Gibson

Approved by:

J. M. Gibson

XXXX

WELL HISTORY REPORT

CDR CPOG CHEVRON MILLS LAKE I-57 (#1) & (#2)

XXXX

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SECTION I

SUMMARY OF WELL DATA

PAGES 1-4

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WELL HISTORY REPORT

CDR CPOG CHEVRON MILLS LAKE I-57 (#1) + (#2)

Section I - Summary of Well Data

- (a) Well name and number - CDR CPOG Chevron Mills Lake I-57 (#1) + (#2)
- (b) Permitte, Licencee or Lessee - Chevron Standard Limited
- (c) Name of Operator - Central-Del Rio Oils Limited
- (d) Location - I-57-61-20-117-30
- (e) Co-ordinates - Not applicable
- (f) Permit or Lease Number - Permit No. 3875
- (g) Drilling Contractor - Big Indian Drilling Co. Ltd. Rig No. 17
- (h) Drilling Authority - 243 issued December 16, 1966
- (i) Classification - Wildcat
- (j) Elevation - Ground - 515' K. B. - 525'
- (k) Date spudded - January 22, 1967
- (m) Total depth - 1932 feet (driller)
- (n) Well Status - Abandoned
- (o) Rig Released - February 22, 1967.
- (p) Hole Size - $9\frac{1}{2}"$ & $6\frac{1}{4}"$
- (q) Casing - 7" - 20" J-55, ST&C surface casing set at 346'.

SUMMARY OF WELL DATA

Well Name: CDR CPOG CHEVRON Mills Lake I-57 (#1)

Location: Unit I Section 57, Grid 61° 21' N., 117° 30' W.

Ground Elevation: 515' K.B. 525'

Final Total Depth: 376'

Classification: Wildcat.

Drilling Contractor: Big Indian Drilling Co. Ltd. Rig #17.

Tool Push: Wilfred Neerie

Equipment: Drawworks: Gardner Denver #2000 Truck Mounted; Power
off Cummins. 220 PH truck motor.
Pump: Gardner Denver F X D power off Cummins
220 H.P. truck motor.
Derrick: Gardner Denver 60' Mast.
Substructure: 6' high made from LOW-BOY.

Operator: Central Del Rio Oils Ltd.

Spudded: 7:30 A. M. January 22, 1967.

Rig Released: Skidded Rig 42' South East.

Status: Junked and abandoned.
(Surface casing cement failed)

Logs: Not Run.

Surface Casing: Ran 6 joints 7" J 55 8 rd St. & C. Rge. 3 new
Japanese casing. Tallied 252.61' set @ 261.51' K.B.
with/100 sax Portland cement plus 2 1/2% CaCl₂.
Ran Weatherford guide shoe, insert flat and two
centralizers. Thread LOC bottom two joints. Plug
down @ 5:20 P.M. Jan. 24/67; with 1,000 p.s.i. Good
cement returns, flat held. Float @ 219.87' K.B.;
K.B. to ground 9.6'; K.B. to drilling flange 8'.1

Plugs: Plug #1 376' - 21' 25 sax cement
Plug down @ 12:15 A.M.

Plug #2 3 sax cement @ surface cut off casing 3'
below ground welded on steel plate.

SUMMARY OF WELL DATA

Well Name: CDR CPOG CHEVRON MILLS LAKE I-57 (#2)

Location: Unit 1 Section 57, Grid 61° 31' N., 117° 30' W.

Co-ordinates: Rig skidded 42' south east of #1 hole.

Elevation: Ground: 515' K.B. 525'

Final Total Depth: Driller: 1932' Schlumberger: 1934'

Classification: Wildcat.

Drilling Contractor: Big Indian Drilling Co. Ltd. (Rig #17)

Tool push: Wilfred Neerie

Drilling Supervisor: Ted Mulligan

Equipment: Drawworks: Gardner Denver #2000 truck mounted; power off Cummins 220 H.P. truck motor.
Pump: Gardner Denver F X D power off Cummins 220 H.P. Truck motor.
Derrick: Gardner Denver 60' mast.
Substructure: 6' high made from low boy.

Operator: Central Del Rio Oils Ltd.

Spudded: 10:30 P.M. Jan. 28, 1967.

Rig Released: 4:00 A.M. Feb. 22/67.

Status: Dry and abandoned.

Logs: Schlumberger Induction Electrical Log 350-1933'
Schlumberger Borehole Compensated Sonic Log 348-1933'

Surface Casing: Ran 8 joints 7" 20# J 55 Rge. 3 Japanese casing tallied at 336.94 and set at 346.24' K.B. with 120 sacks normal Portland Canadian cement plus 2% CaCl₂. Ran 9 bbls. pipe sweep ahead of cement. Plug down @ 1:52 A.M. cemented by B.J. Ran 10 scratchers on bottom 120' with 2 centralizers. No cement returns. Ran 1 1/4" pipe along side casing cement @ 135' Ran 90 sacks cement and 2% CaCl₂. Returns to surface 2:45 P.M. Feb. 2/67. Dug out cellar and mixed 16 sacks in cellar.

Analyses: Water - CBH-2-1286
Core - CNP-4-3595

SUMMARY OF WELL DATA (CONT'D)

DRILL STEM TESTS:

Test #1

1611' to 1641' (Lonely Bay)

Pre-flow 32 minutes, reset, pre-flow 63 minutes.

Shut-in 19 minutes, then valve open 30 minutes.

No initial puff, no air blow to surface.

I.H.P. 510 F.H.P. 630

I.S.I.P. 50 F.S.I.P. - (Field Figures)

I.F.P. 50 F.F.P. 140

Temperature: 800 F. at bottom hole.

Recovery: 30' drilling mud.

Test successful but incomplete pressure data.

Test #2

1612 to 1672' (Keg River Dolomite)

Pre-flow 10 minutes; I.S.I. 60 minutes; valve open 120 minutes; F.S.I. 120 minutes. Faint initial puff. Died in 20 seconds. Same results on initial flow period.

I.H.P. 820 F.H.P. 830

I.S.I.P. 770 F.S.I.P. 750 (Field Figures)

I.F.P. 30 F.F.P. 60

Temperature: 680 F., at bottom hole.

Recovery: 110' drilling mud.

Test mechanically satisfactory.

Core Record:

Diamond Core #1

1580-1610' Cut 30' Recovered 30'

Diamond Core #2

1610-1641' Cut 31' Recovered 31'

Diamond Core #3

1641-1672' Cut 31' Recovered 31'

ABANDONMENT PLUGS:

Plug #1

1932'-1550' 90 sacks (No feel)

Plug #2

400' - 300' 35 sacks (felt at 285')

Plug #3

Top of surface casing 5 sacks.

Surface casing cut off 3' below ground and plate welded on.

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SECTION II

GEOLOGICAL SUMMARY

PAGES 3-10

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FORMATION TOPS

CDR CPOG CHEVRON MILLS LAKE I-57 (82)
Unit 1 Sec. 37, Grid 61° 20' N., 117° 30' W.

Ground: 515'
 K.B.: 525'

Electric Log Top

Depth

Subsea

DEVONIAN

Hay River Shale	250	(275')
Mills Lake Member	1204'	(-679')
Horn River Shale	1333'	(-803')
Bituminous Limestone	1464'	(-939')
Lonely Bay	1494'	(-969')
Basal Keg River (Dolomite Platform)	1640'	(-1115')
Chinchaga	1664'	(-1139')
Green Shale	1725'	(-1200')
Red Beds	1790'	(-1265')
Granite Wash	1880'	(-1355')
Pre-Cambrian	1906'	(-1381')

Final Total Depth

Driller

Schlumberger

1932'

1935'

(-1407')

(-1410')

SAMPLE DESCRIPTIONS

CDR CPOG CHEVRON 1-57 (W2)
Unit 1, Section 57, Grid 61° 20' N., 117° 30' W.

K.D. 515'
 Ground: 525'

- 0-50' CLAY & SAND; clay light brown. Sand loose unconsolidated fine to medium grained poorly sorted some pebbles quartzite, granite, hornblende.
- 50-70' PEBBLES & FRAGMENTS. LIMESTONE light grey dense, GRANITE pink hornblende black.
- 70-180' CLAY light brown and light grey abundant pebbles and fragments. LIMESTONE GRANITE as above, unconsolidated.
- 180-250' PEBBLES & FRAGMENTS; LIMESTONE light grey, dense. GRANITE pink hornblende and feldspar pink, unconsolidated.
- TOP HAY RIVER SHALE 250' (275')
- 250-300' SHALE light grey slightly greenish slightly micro-micaceous soft calcareous.
- 300-370' SHALE light grey and grey green micro-micaceous calcareous.
- 370-470' SHALE light grey green slightly calcareous slightly micro-micaceous.
- 470-600' SHALE light grey green slightly micro-micaceous calcareous.
- 600-690' SHALE light grey green slightly calcareous slightly micro-micaceous some silty in part, some light grey soft shale.
- 690-830' SHALE light grey slightly greenish micro-micaceous, calcareous.
- 830-900' SHALE as above.
- 900-980' SHALE grey green micro-micaceous calcareous some SHALE black and grey black bituminous flecked slightly calcareous. Trace PYRITE.
- 980-1010 SHALE grey green and light grey micro-micaceous minor SHALE grey black and dark grey.
- 1010-1060 SHALE light grey some slightly brownish some grey black bituminous.
- 1060-1070 SHALE grey green micro-micaceous minor SHALE grey black bituminous micro-micaceous.
- 1070-1130 SHALE grey green micro-micaceous. Some coaly and bituminous flecked.

1130-1180 SHALE (40%) dark grey non-calcareous much SHALE (60%) light grey and grey green SHALE calcareous micro-micaceous.

1180-1200 SHALE light grey and grey green micro-micaceous. Some SHALE dark grey.

TOP MILLS LAKE MEMBER 1204' (-679')

1200-1220 LIMESTONE light grey argillaceous micro-crystalline in part, dense. Much SHALE light grey and grey green.

1220-1260 SHALE dark grey and grey black a slightly calcareous micro-micaceous. Minor LIMESTONE light grey micro-crystalline dense.

1260-1310 SHALE dark grey and grey black, calcareous micro-micaceous.

TOP HORN RIVER SHALE 1333' (-808')

1310-1350' SHALE dark grey and grey black bituminous some slightly brownish.

1350-1400 SHALE grey black bituminous some slightly brownish; much light grey and grey green SHALE micro-micaceous.

1400-1450 SHALE black bituminous some dark brown bituminous micro-micaceous.

1450-1460 SHALE as above some LIMESTONE dark brown bituminous.

TOP BITUMINOUS LIMESTONE 1464' (-939')

1460-1490 LIMESTONE dark brown bituminous micro-crystalline slightly granular in part dense argillaceous slightly fossiliferous (fish teeth?)

TOP LONELY BAY 1494' (-969')

1490-1510' LIMESTONE dark grey and slightly brownish slightly chalky in part, micro-micaceous argillaceous fossiliferous (crinoid fragments and fish fragments) much Calcite infilling and replacement. Tight. (Skeletal Micrite)

1510-1530 LIMESTONE light brownish to dark brown micro-crystalline dense hard sparingly fossiliferous.

1530-1540 LIMESTONE light brownish some dark brown micro-crystalline dense hard slightly fossiliferous.

1540-1560 LIMESTONE light brown micro-crystalline dense some buff, slightly chalky dense, slightly fossiliferous fragmental.

1560-1580 LIMESTONE medium brown micro-crystalline dense hard, some slightly fine fossiliferous and fine fragmental.

Diamond Core #1 1580-1610' Cut 30' Recovered 30'

Penetration Rate: 31, 19, 20, 30, 18, 17, 15, 20, 14, 20, 50, 22, 31, 42, 46, 34, 27, 28, 49, 49, 38, 37, 37, 34, 32, 37, 40, 40, 38, 40.

30.0' LIMESTONE light grey and grey brownish micro-crystalline to some fine crystalline dense; occasional stylolites through out core. Some scattered mottled brownish solution breccia. Core is slightly fossiliferous. Core has horizontal bedding and banding. No apparent porosity or staining present.

Diamond Core #2 1610-1641' Cut 31' Recovered 31'

Penetration Rate: 35, 17, 23, 25, 23, 20, 10, 17, 18, 28, 25, 25, 23, 25, 34, 30, 28, 24, 18, 8, 8, 12, 11, 9, 10, 10, 6, 4, 5, 5.

5.5' LIMESTONE light grey and light brownish micro-crystalline dense. Core has mottled dark brown solution breccia appearance.

8.0' LIMESTONE light grey fine crystalline fair to some good pin point and fine vuggy porosity light brown oil stained and oil saturated bright yellow saturated.

13.0' LIMESTONE light grey and dark grey micro-crystalline to crypto crystalline dense hard brittle.

4.5' LIMESTONE light brown and light greyish fine crystalline scattered poor to fair fine vuggy and pin point porosity. Oil stained and oil saturated, dull yellow fluorescence.

Diamond Core #3 1641-1672' Cut 31' Recovered 31'

Penetration Rate: 12, 12, 13, 18, 25, 15, 15, 15, 10, 31, 9, 14, 12, 12, 8, 5, 9, 11, 10, 11, 13, 13, 10, 14, 11, 24, 15, 16, 7, 22, 24.

TOP BASAL KEG RIVER PLATFORM DOLOMITE 1640' (-1115')

6.0' DOLOMITE brown micro-crystalline, scattered poor pin porosity, brown oil saturated dull yellow fluorescence.

1.0' DOLOMITE grey micro-crystalline dense.

1.8' DOLOMITE brown micro-crystalline scattered poor pin point porosity brown oil saturated dull yellow fluorescence.

0.6' DOLOMITE grey micro-crystalline dense.

2.0' DOLOMITE brown micro-crystalline scattered poor pin point porosity brown oil saturated dull yellow fluorescence.

1.8' DOLOMITE light grey micro-crystalline dense.

1.0' DOLOMITE brown micro-crystalline scattered poor pin point porosity brown oil saturated dull yellow fluorescence.

0.8' DOLOMITE light grey micro-crystalline dense.

- 8.6' DOLOMITE brown and dark brown micro-crystalline scattered poor porosity tight, dull yellow fluorescence.
- 5.7' ANHYDRITE & DOLOMITE light grey micro-crystalline to fine crystalline dense. DOLOMITE has scattered poor pin point porosity.
- 2.4' ANHYDRITE light grey micro-crystalline to fine crystalline slightly vitreous.
- Core has 20' poor pin point porosity.

TOP CHINCHAGA 1664' (-1139')

- 1672'1690' ANHYDRITE grey white and light brown micro-crystalline to crypto-crystalline dense.
- 1690-1700 DOLOMITE & ANHYDRITE
DOLOMITE dense light brown and grey crypto-crystalline argillaceous.
ANHYDRITE white micro-crystalline, chalky in part.
- 1700-1720' ANHYDRITE white crypto-crystalline dense slightly vitreous.
- 1720-1730' Sample missing.

TOP GREEN SHALE 1725' (-1200')

- 1730-1750' DOLOMITE light grey and light brown micro-crystalline argillaceous dense, some ANHYDRITE white micro-crystalline dense.
- 1750-1760' ANHYDRITE grey and white micro-crystalline to crypto-crystalline dense, some light green SHALE (40%).
- 1760-1780' SHALE light grey and grey greenish dolomitic some ANHYDRITE grey white micro-crystalline dense.

TOP RED BEDS 1790' (-1265')

- 1780-1790' SANDSTONE white and rust red, medium to coarse grained quartz grains sub-angular to rounded frosted, tight cemented non-calcareous some pink feldspar grains and fragments.
- 1790-1830 ANHYDRITE & SHALE rust red some white anhydrite crypto-crystalline dense. Some grey green SHALE.
- 1830-1870' SHALE rust red non calcareous minor SHALE grey green. Trace ANHYDRITE white crypto-crystalline, dense.
- 1870-1880' SHALE rust red soft.

TOP GRANITE WASH 1880' (-1355')

GRANITE WASH (40%) quartz biotite hornblende and feldspar fragments and coarse chips. No staining no apparent porosity.

1880-1890 GRANITE WASH quartz white coarse grained angular feldspar pink, biotite, black fragment and chips; tight.

1890-1900' GRANITE WASH as above tight.

TOP PRE-CAMBRIAN 1906' (-1381')

1900-1920' GRANITE(WASH ?) quartz white clear coarse angular fragments, abundant biotite and mica flakes, some feldspar pink, tight; no staining.

1920-1932' GRANITE fragments and chips quartz clear angular, abundant black biotite and mica flakes. Minor pink feldspar and black hornblende.

Final total depth

Driller	1932' (-1407')
Schlumberger	1934' (-1410')

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SECTION III

ENGINEERING SUMMARY

PAGES 11-17

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DRILL STEM TEST REPORT

Test No. 1

Date: Feb. 14/67.

Well Name: CDR CPOG CHEVRON MILLS LAKE I-57

Testing Co. B.J.

Operator: Henry Blanchette

O.D. Packer Rubber: 5 1/2" Hole Size: 6 1/4" Choke Size: 1/2"

Length of Tail Pipe: 30' Drill Pipe Size: 3 1/2" Perforations: 16'

Interval Tested: 1611'1641' Formation: Lonely Bay

Mud: Weight 9.5 Viscosity 60 Water Loss 7.5 P.M. 8

Time: Tool started in hole 11 A.M. Tool on Bottom: 1:00 P.M.

Tool opened 1:32 P.M. Tool closed 3:09 P.M.

Tool pulled loose 4 P.M. Tool out of Hole 7:30 P.M.

Pressures: I.H.P. 510 F.H.P. 630

I.S.I.P. 50 F. .I.P. -

I.F.P. 50 F.F.P. 140

Pre-flow 32 minutes, reset, pre-flow 63 minutes. Shut-in 19 min.
then valve opened 30 minutes.

Remarks: No initial puff, no air blow, reset after 32 minutes with same
result (no blow) tool open 63 minutes. Pre-flow total 95 mins.
Shutin 19 minutes. Then valve opened 30 minutes for flow period.
No air blow or surface indication. Tool pulled loose because
did not know if sufficient weight to open tool or if tool plugged.

Recovery: 30' drilling mud.

Test successful but incomplete pressure data.

Temperature: 80° F.

R. J. Burger, Geologist



DRILL-STEM TEST DATA

Well Name	C.D.R. CPOG Chevron	Test No	One
Well Number	Mills Lake 1-57	Zone Tested	Keg River
Company	Central Del Rio Oils	Interval	1611-1641
Comp Rep	T. Mulligan	Tester	H. Blanchette
		Date	February 14/67

Pretlow 33 mins ISI 19 mins Flow 30 mins FSI _____ mins

Type of Test	REC No	REC No	REC No
	1232	2065	
	1 HR CLOCK	12 HR CLOCK	HR CLOCK
DEPTH	1613	1629	
Initial Hydro Mud Press		794	
Initial Shut-In Press		30	
Initial Flow Press		30	Preflow 25
Final Flow Press		30	
Final Shut-In Press		71-143	
Final Hydro Mud Press		794	

Mud Drop Nil Fluid Loss 7.5 Mud Weight 9.5Viscosity 60 Temperature 80° F Net Pay Tested 12'Top Packer Depth 1611 Bottom Packer Depth _____ Total Depth 1641Drill Pipe Size 3 1/2" IF Wt. 13.3 Drill Collar I.D. 2" Ft. Run 148Surface Choke Size 1" Bottom Choke Size 1/2" Main Hole Size 6 1/2"Anchor Size 4 3/4" CD Rat Hole Size _____ Feet of Rat Hole _____Cushion Amount _____ Type _____ Rubber Size 5 1/2"Fluid Recovery Total Feet 30Recovered 30 Feet of Drilling Mud

Recovered _____ Feet of _____

Gas Recovery How Measured _____

_____ mins.	Press Rdg. _____	= _____	MCF/Day
_____ mins.	Press Rdg. _____	= _____	MCF/Day
_____ mins.	Press Rdg. _____	= _____	MCF/Day
_____ mins.	Press Rdg. _____	= _____	MCF/Day

REMARKS: No Air Blow on Preflow.Reset, after 33 minutes same results.Attempt was made to reverse shut-in tool into open position
after final shut-in was taken, however, the flow stagewas missed and another shut-in period took place.Due to recorder failure, the pressure of Rec #1232appears to be erroneous.

CO SUB _____

SHUT IN TOOL _____

RPS _____

HYDRAULIC TOOL _____

JARS _____

RECORDER(S) _____

SAFETY JONIT _____

BY PASS SUB _____

PACKER _____

1. PACKER DEPTH 1011

2. PACKER DEPTH _____

3. PACKER DEPTH _____

4. PACKER DEPTH _____

ANCHOR _____

BLANK OFF SUB/BY PASS SUB _____

RECORDER _____

PACKER _____

ANCHOR—SPECIFY _____

Recorder 4.75

T.P. 11.00

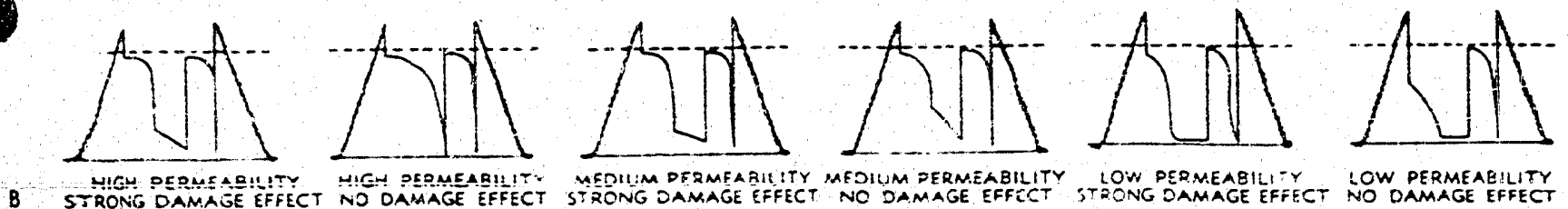
Recorder 4.75

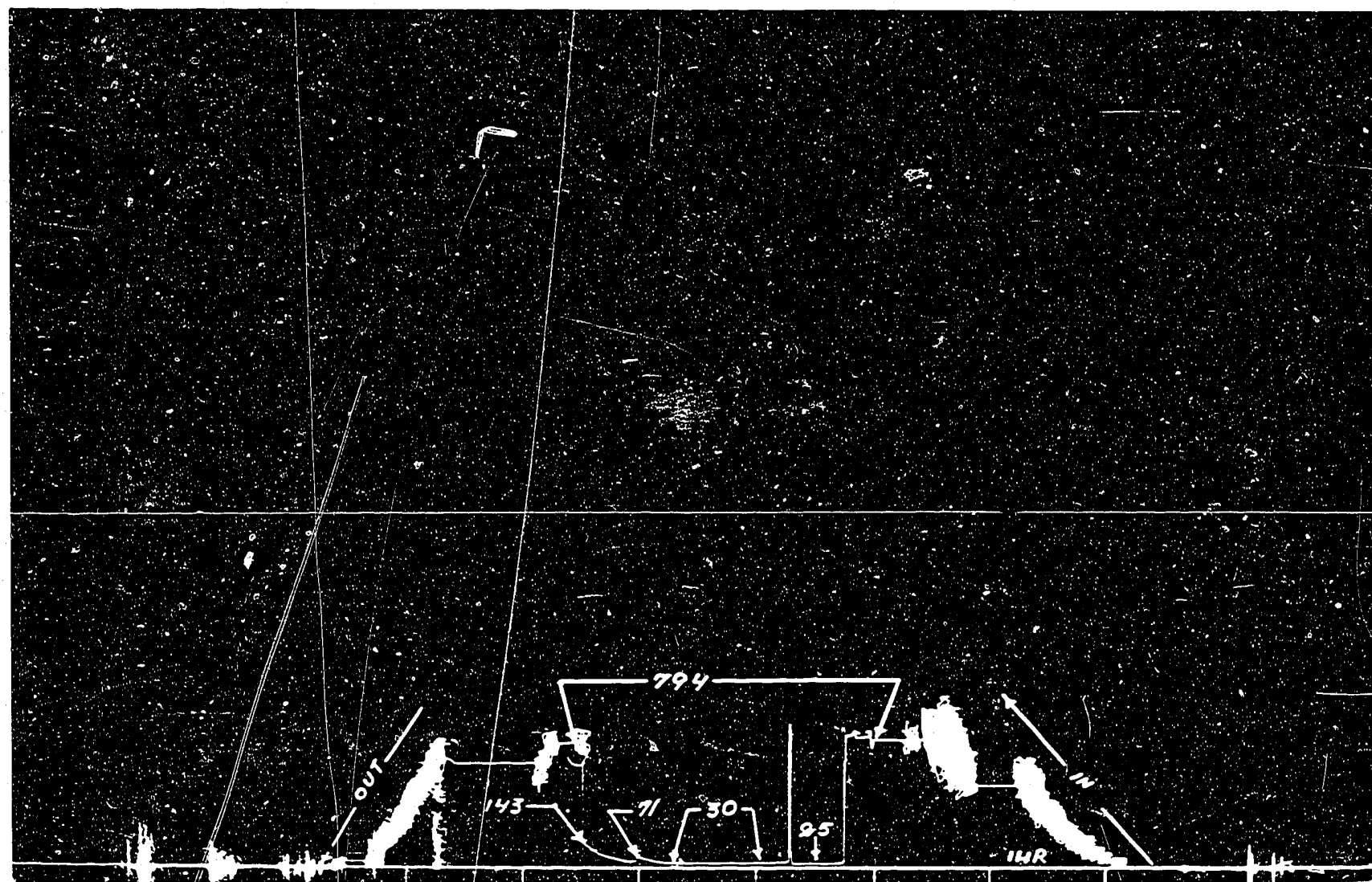
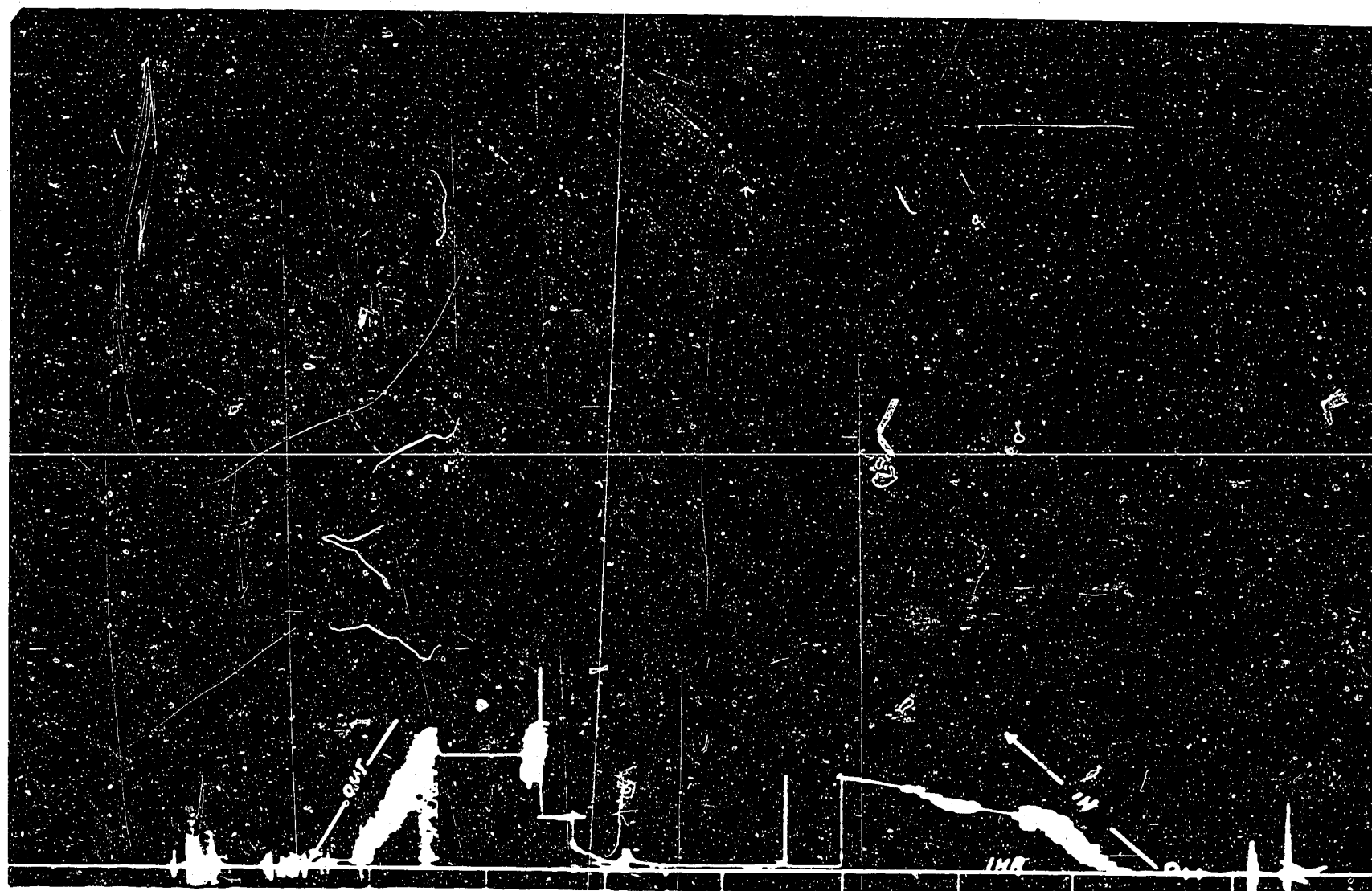
T.P. 5.00

TOTAL DEPTH 1641

BULLNOSE 3.15

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS





DRILL STEM TEST REPORT

Test No. 2
Date: Feb. 16/67.

Well Name: CDR CPOG CHEVRON MILLS LAKE 1-57

Testing Co. E.J. Service

Operator: Henry Blanchette

O.D. Packer Rubber: 5 1/2" Hole Size 6 1/4" Choke Size 1 1/2"

Length of Tail Pipe 60' Drill Pipe Size: 3 1/2" Perforations: 18'

Interval Tested: 1612'1672' Formation: Kear River Dolomite

Mud: Weight 9.3 Viscosity 70 Water Loss 7.7 P.H. 8.0

Time: Tool started in hole 5:30 A.M. Tool on Bottom: 6:30 A.M.
Tool opened: 8:51 A.M. Tool Closed: 2:01 P.M.
Tool Pulled Loose: 2:10 P.M. Tool out of hole: 4 P.M.

Pressures:	I.H.P.	820	F.H.P.	830
	I.S.I.P.	770	F.S.I.P.	750
	I.F.P.	30	F.F.P.	60

Pre-flow 10 minutes I.S.I. 60 minutes. Valve open 120 minutes.
Final shut in 120 minutes.

Remarks: Faint initial puff. Died in 20 seconds same results on initial flow.

Recovery: 110' drilling mud.

Bottom Hole Temperature: 88°

Test Mechanically satisfactory.

R. J. Burger, Geologist.



DRILL-STEM TEST DATA

Well Name	San Marcos Chevron	Test No	Two
Well Number	Mills Lake 1-57	Zone Tested	Keg River
Company	Central Del Rio Oils	Interval	1612-1672
Comp Rep	T. Mulligan	Tester	H. Blanchette
		Date	Feb. 10, 1967

Prelow 10 mins. ISI 50 mins. Flow 117 mins FSI 112 mins.

Type of Test <u>Bottom Hole</u>	REC. No. <u>1251</u> <u>12</u> HR. CLOCK	REC. No. <u>988</u> <u>12</u> HR. CLOCK	REC. No. _____ _____ HR. CLOCK
DEPTH	<u>1614</u>	<u>1632</u>	
Initial Hydro Mud Press	<u>805</u>	<u>807</u>	
Initial Shut-In Press	<u>770</u>	<u>769</u>	
Initial Flow Press	<u>36</u>	<u>44</u>	
Final Flow Press	<u>65</u>	<u>75</u>	
Final Shut-In Press	<u>724</u>	<u>721</u>	
Final Hydro Mud Press	<u>805</u>	<u>807</u>	

Mud Drop Nil Fluid Loss 7.9 Mud Weight 9.4Viscosity 70 Temperature 88° F Net Pay Tested 30'Top Packer Depth 1612 Bottom Packer Depth _____ Total Depth 1672Drill Pipe Size 3 1/2" IF Wt. 13.3 Drill Collar I.D. 2" Ft. Run 148'Surface Choke Size 1" Bottom Choke Size 1/2" Main Hole Size 6 1/4"Anchor Size 4 3/4" OD Rat Hole Size _____ Feet of Rat Hole _____Cushion Amount _____ Type _____ Rubber Size 5 1/2"Fluid Recovery Total Feet 110Recovered 110 Feet of Drilling Mud.

Recovered _____ Feet of _____

Gas Recovery	How Measured		
_____ mins.	Press Rdg. _____	=	_____ MCF/Day
_____ mins.	Press Rdg. _____	=	_____ MCF/Day
_____ mins.	Press Rdg. _____	=	_____ MCF/Day
_____ mins.	Press Rdg. _____	=	_____ MCF/Day

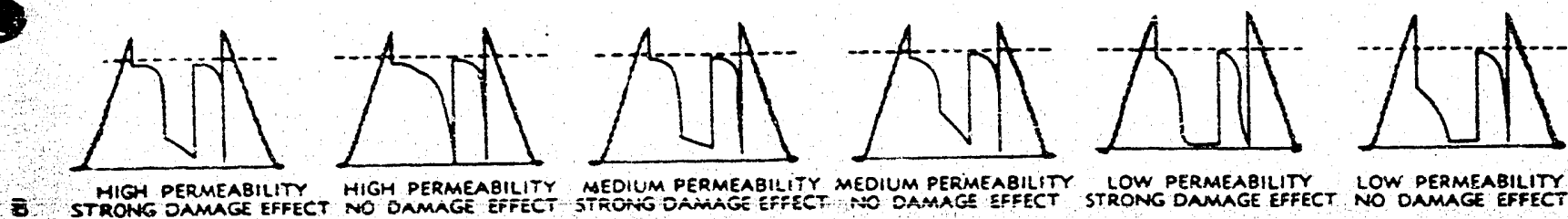
REMARKS: Faint initial puff, died in 20 seconds.
Same result on initial flow.
No damage report due to nature of recovery.

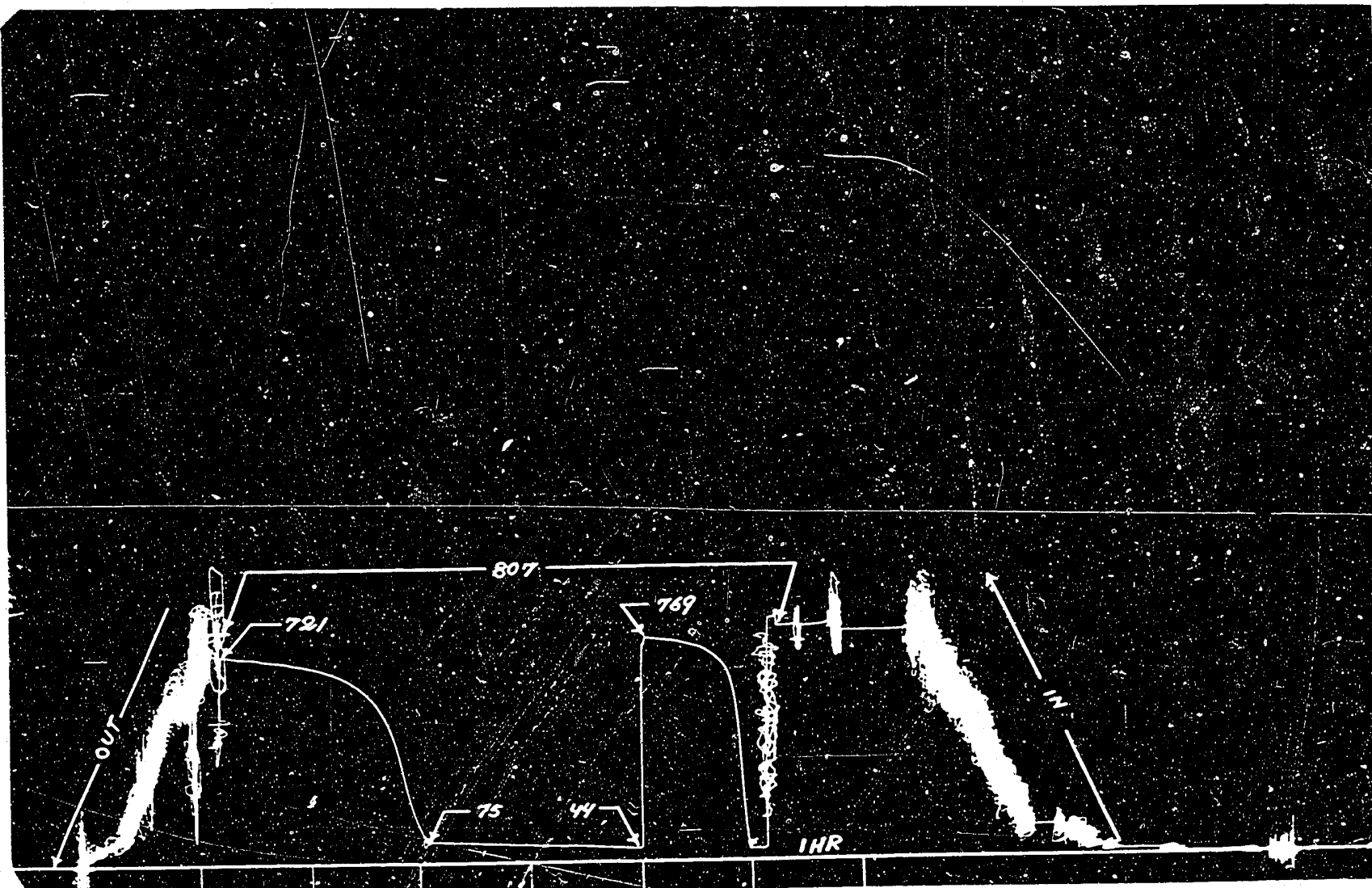
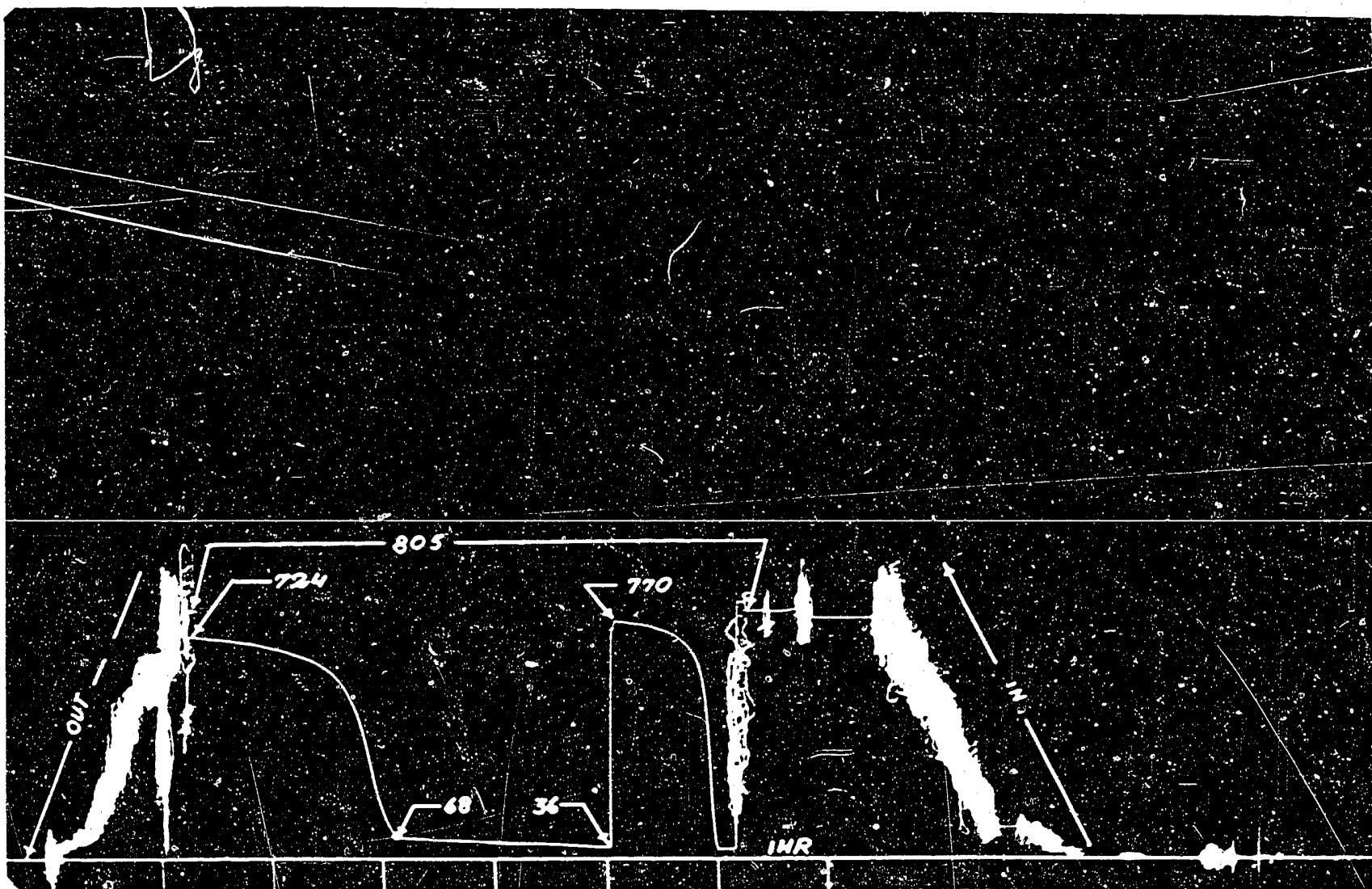


TESTING REPORT

	PCS	1.00
	CO SUB	1.00
	SHUT IN TOOL	5.34
	BFS	3.05
	HYDRAULIC TOOL	7.01
	JARS	4.20
	RECORDER(S)	
	SAFETY JONIT	1.74
	BY PASS SUB	
	PACKER	5.00
		1.00
1. PACKER DEPTH	1612	
	PACKER	
2. PACKER DEPTH		
	ANCHOR	
	BLANK OFF SUB/BY PASS SUB	
	RECORDER	
3. PACKER DEPTH		
	PACKER	
4. PACKER DEPTH		
	PACKER	
	ANCHOR—SPECIFY	
	Rec.	4.75
	Perfs.	14.00
	Rec.	4.75
	Perfs.	1.00
	D.P.	31.27
TOTAL DEPTH	1672	
	BULLNOSE	3.15

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS





SURVEY RECORD

(71)

<u>Depth</u>	<u>Deviation</u>
97'	1/2 °
130'	1/4
185'	1/2
267'	3/4
340'	1 1/4

BIT RECORD

<u>Bit</u> <u>#</u>	<u>Size</u>	<u>Make</u>	<u>Type</u>	<u>Serial</u> <u>#</u>	<u>Depth</u> <u>Out</u>	<u>Feet</u>	<u>Hours</u>	<u>Accum.</u> <u>Hours</u>
1A	9 7/8	Smith	D.T.	66896	177	177	7	7
2A	9 7/8	Smith	D.T.	66889	267	90	7 1/4	14 1/4
1	6 1/4	Smith	D.T.	38726	376	109	2	16 1/4

MUD RECORD

Caustic	250 lbs.
Sawdust	3 sax
Super Col	5000 lbs.
Mago Gel	6700 lbs.
Salt Water Gel	2000 lbs.
Plaster	200 lbs.

SURVEY RECORD

(#2)

<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>
70'	1/2 °	466'	1 °
100	3/4	560	1/4
130	1 1/4	592	1/2
130	1	654	1/2
158	1	750	1/4
190	1/2	845	1/8
220	1	1035	3/4
250	1/2	1160	1/4
280	1	1321	1/4
347	1	1511	3/4
407	1 1/4	1580	3/4
		1700	1 1/8

MUD RECORD

Gel	38 sacks
Salt Gel	50 sacks
Super Col	46 sacks
C.M.C.	225 lbs.
Bi-Carbonate of Soda	100 lbs.
Plaster	30 sacks
Starch	40 sacks
Preservative	90 sacks

BIT RECORD

(#2)

<u>Bit #</u>	<u>Size</u>	<u>Make</u>	<u>Type</u>	<u>Serial #</u>	<u>Depth Out</u>	<u>Footage</u>	<u>Hours</u>	<u>Accum. Hrs.</u>
1A	9 7/8	Smith	D.T.	66896	65	65	7.5	7.5
2A	9 7/8	Smith	D.T.	6889	130	65	5.75	13.25
3A	9 7/8	Reed	YTR	P37616	210	80	10.75	24
4A	6 1/4	Reed	YSL	E17166	283	73	4	28
5A	9 7/8	Smith	D.T.	60420	312	102	13.5	41.5
6A	9 7/8	Smith	D.T.	66899	350	38	2.5	48.5
7A	6 1/4	Smith	D.T.	38726	Pilot	150	6	46.5
1	6 1/4	Smith	D.T.	38724	1067	717	21 1/2	70.0
2	6 1/4	Smith	D.T.	38537	1511	444	22.75	92.75
3	6 1/4	Smith	D.T.	38726RR	1538	177	11 3/4	93
4	6 1/4	Reed	Y.T.L.	ED5075	1580	42	12	110
5	6 3/16	ACC	Diamond	7018C	1672	92	31	141
6	6 1/4	Smith	D.T.2G	40264	1732	60	18	159
7	6 1/4	Reed	YHR	P40235	1901	102	18 1/4	177 1/4
8	5 1/4	Reed	YHR	P40234	1932	31	13 1/4	190 1/2

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SECTION V

ANALYSES

PAGES 18-21

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CHEMICAL ANALYSIS
CENTRAL-DEL RIO OILS LIMITED
CDR CPOG CHEVRON MILLS LAKE 1-57
MILLS LAKE AREA
NORTH WEST TERRITORIES

CORE LABORATORIES - Canada Ltd.

Petroleum Reservoir Engineering

CALGARY - EDMONTON - REGINA



CORE LABORATORIES-CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
EDMONTON CALGARY REGINA
WATER ANALYSIS



File CBH-2-1286

Company Central-Del Rio Oils Limited

Well Name CDR CPOG Chevron Mills Lake 1-57

Sample No. _____

Formation Keg River

Depth 1612' - 1672'

Location Grid 61° 20' N.L.

117° 30' W.L. Field Mills Lake Area

Province Northwest Territories

Date Sampled Feb. 14/67

Date Analyzed March 20/67

Analyst VC

Sampled From DST No. 1 (Top of Tool)

By _____

Recovery 110' Fluid

Elevation _____

Constituents:

1. Total Solids 6,866 mg/liter

2. pH 7.23

3. Sp.Gr. 1.0077

@60°F.

4. Resistivity 1.607 Ohm-meters @ 75 °F

5. H₂S Absent

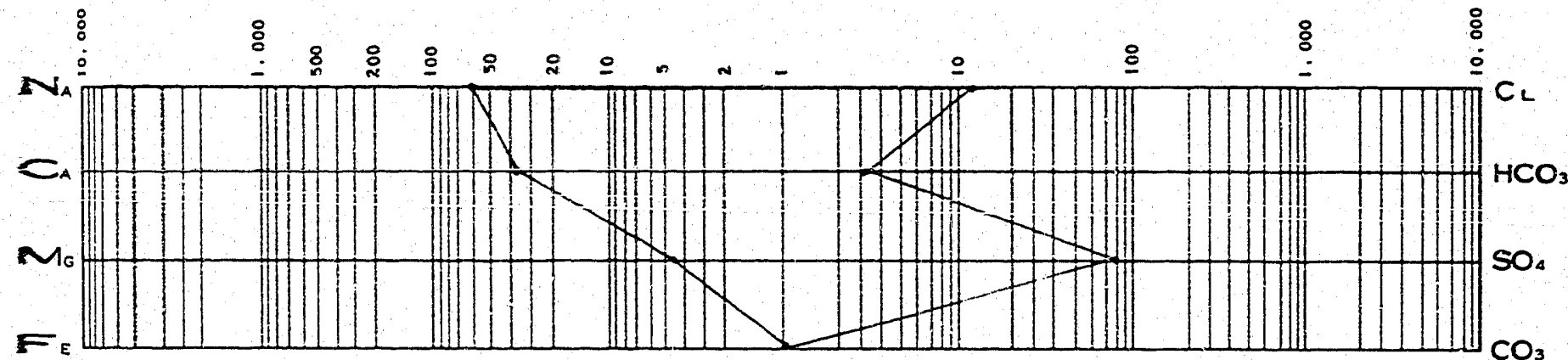
MILLIGRAMS PER LITER

Na & K	Ca	Mg	Fe	BA		CL	HCO ₃	SO ₄	CO ₃	OH	
1,387	714	56	Absent	Absent		479	210	4,020	-	-	

MEQ PER LITER

60.3	35.6	4.6	-	-		13.5	3.4	83.6	-	-	
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LOGARITHMIC PATTERN MEQ PER LITER





CORE LABORATORIES-CANADA LTD
PETROLEUM RESERVOIR ENGINEERING
EDMONTON CALGARY REGINA
WATER ANALYSIS



File CBH-2-1286

Company Central-Dei Rio Oils Limited

Well Name CDR CPOG Chevron Mills Lake 1-57

Sample No. _____

Formation Keg River

Depth 1612' - 1672'

Grid. 61° 20' N.L.

Location 117° 30' W.L.

Field Mills Lake Area

Province Northwest Territories

Date Sampled Feb. 16/67

Date Analyzed March 20/67

Analyst VC

Sampled From DST No. 2 (Bottom of Recovery)

By _____

Recovery 110'

Elevation _____

Constituents:

1. Total Solids 19,225 mg/liter

2. pH 7.30

3. Sp.Gr. 1.0171

@60°F.

4. Resistivity 0.385 Ohm-meters @ 75 °F

5. H₂S Absent

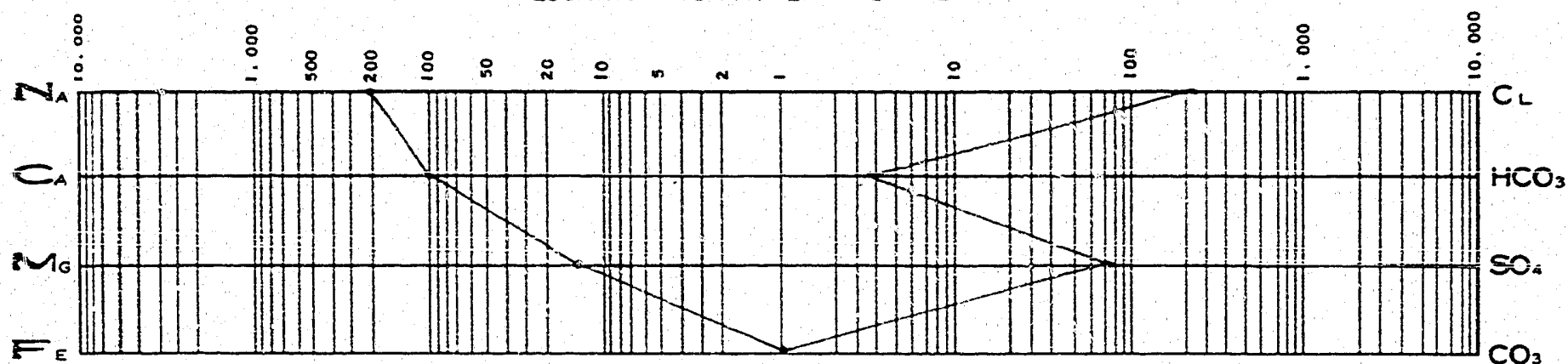
MILLIGRAMS PER LITER

Na & K	Ca	Mg	Fe	Ba		Cl	HCO ₃	SO ₄	CO ₃	OH	
4,681	2,016	182	Absent	Absent		8,547	229	3,570	-	-	

MEQ PER LITER

203.5	100.6	15.0	-	-		241.0	3.8	74.3	-	-	
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LOGARITHMIC PATTERN MEQ PER LITER



CORE LABORATORIES-CANADA LTD.
CALGARY ALBERTA

Company - CENTRAL-DEL RIO OILS LIMITED
Well - CDR CPOG CHEVRON MILLS LAKE 1-57
Field - MILLS LAKE AREA, NORTH WEST TERRITORIES
Location - UNIT 1 SEC. 57 GRID. 61° 20' N
117° 30' W

Date Report - MARCH 7, 1967
Formation -
D. Fluid - WATER BASE MUD
Analysis - FULL DIAMETER

Page - 1 of 3
File - CNP-4-3595
Analysts - NIM
Core - DIAMOND

SAMPLE NUMBER	DEPTH FOOT. REPRESENTED FEET	PERMEABILITY TO AIR HORIZONTAL K MAX	VERTICAL K 90°	PERM. X FEET	POROSITY X PER CENT	DENSITY X BULK GRAIN	RESIDUAL SATURATION		VISUAL EXAMINATION
							OIL	TOTAL WATER	

CORED INTERVAL 1580' - 1672.5'

CORE NO. 1 1580' - 1610' (REC. 30') (7 BOXES)

-	1580.0-1610.0	30.0	-	-	-	-	-	-	-	Dense
---	---------------	------	---	---	---	---	---	---	---	-------

CORE NO. 2 1610' - 1640' (Measured 31.5') (7 BOXES)

-	1610.0-1616.7	6.7	-	-	-	-	-	-	-	Dense	
A	1616.7-1618.4	1.7	0.31	0.25	0.17	0.527	6.0	10.20	2.53	2.70	1. PPV.
B	1618.4-1619.7	1.3	2.2	1.8	0.63	2.86	7.0	9.10	2.50	2.69	1. PPV. F.
C	1619.7-1620.7	1.0	0.71	0.65	0.51	0.710	5.0	5.00	2.54	2.67	1. PPV. STY.
-	1620.7-1621.5	0.8	-	-	-	-	-	-	-	-	37.2
D	1621.5-1622.1	0.6	0.92	0.31	0.16	0.552	1.8	1.08	2.63	2.68	Dense
E	1622.1-1623.3	1.2	2.1	1.2	0.26	2.52	6.3	7.56	2.48	2.65	PPV. STY.
F	1623.3-1624.4	1.1	0.08	0.08	<0.01	0.088	0.7	0.77	2.67	2.69	1. PPV. STY. F.
-	1624.4-1637.1	12.7	-	-	-	-	-	-	-	-	Fov PPV. STY.
G	1637.1-1637.7	0.6	0.42	0.06	0.15	0.252	-	-	-	-	Dense
H	1637.7-1638.7	1.0	1.1	0.56	0.13	1.10	6.0	3.60	2.63	2.80	1. Fov PPV. F.
I	1638.7-1639.5	0.8	0.60	0.39	0.36	0.480	16.5	16.50	2.36	2.83	1. A.
J	1639.5-1640.5	1.0	1.1	0.49	<0.01	1.10	13.9	11.12	2.46	2.86	1. A.
K	1640.5-1641.5	1.0	0.17	0.06	<0.01	0.170	10.3	10.30	2.48	2.77	1. A.

CORE NO. 3 1641' - 1672' (REC. 30.0') (7 BOXES)

I	1641.5-1643.2	1.7	0.05	0.03	<0.01	0.085	7.1	12.07	2.62	2.82	-	1. A.
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SAMPLE	DEPTH REPRESENTED	FOOT.	PERMEABILITY TO AIR HORIZONTAL)	PERM. X	POROSITY PER CENT	DENSITY	RESIDUAL SATURATION	VISUAL
NUMBER	FEET	REPR.	K MAX K 90°)	FEET	FEET	BULK GRAIN	OIL TOTAL WATER	EXAMINATION
CORE NO. 3 (Cont'd)								
-	1643.2-1644.7	1.5	-	-	-	-	-	Dense
2	1644.7-1646.9	2.2	0.12	0.09	-	13.64	2.61	2.79
-	1646.9-1647.3	0.4	-	-	-	-	-	-
3	1647.3-1649.2	1.9	<0.01	<0.01	-	5.89	2.77	2.86
4	1649.2-1650.7	1.5	0.43	0.40	0.645	17.10	2.50	2.82
-	1650.7-1651.4	0.7	-	-	-	-	-	16.8 37.7
5	1651.4-1653.3	1.9	0.46	0.43	0.874	20.33	2.49	2.79
-	1653.3-1655.1	1.8	-	-	-	-	-	-
6	1655.1-1655.4	0.3	1.4	0.77	0.420	4.23	2.39	2.78
-	1655.4-1656.6	1.2	-	-	-	-	-	-
7	1656.6-1658.0	1.4	4.5	4.5	6.30	24.64	2.31	2.80
8	1658.0-1660.3	2.3	0.16	0.16	0.368	12.42	2.60	2.83
9	1660.3-1661.5	1.2	0.33	0.27	0.396	10.44	2.58	2.83
10	1661.5-1663.6	2.1	0.01	<0.01	0.021	2.10	2.75	2.78
11	1663.6-1664.6	1.0	2.8	2.5	2.80	10.40	2.56	2.86
-	1664.6-1671.5	6.9	-	-	-	-	-	-
-	1671.5-1672.5	1.0	-	-	-	-	-	-

I. - Intergranular: PPV. - Pin Point Vugs: F. - Fractured: STY. - Stylolite: A. - Anhydrite:

Trace 51.7

Dense

1. A.

Dense

1. A.

1. A. STY.

Dense

1. STY.

Dense

1. STY. F.

Dense

1. STY.

1. A.

1. For PPV.

1.

1.

Dense

Lost Core.

Core with Permeability 0.00 to less than 0.10 Md.

Total footage of core with permeability 0.00 to less than 0.10 millidarcys -----	6.0'	
Weighted average porosity of core with permeability 0.00 to less than 0.10 millidarcys -----	3.1%	(20.03)
Per cent of analyzed core having permeability 0.00 to less than 0.10 millidarcys -----	23.6%	
Weighted average horizontal permeability of core with permeability 0.0 to less than 0.10 md. -----	0.03md.	(0.194)

Core with Permeability 0.10 to 0.99 Millidarcys

Total footage of core with 0.10 to 0.99 millidarcys permeability -----	14.0'	
Weighted average porosity of core with 0.10 to 0.99 millidarcys permeability -----	7.6%	(112.63)
Per cent of analyzed core having 0.10 to 0.99 millidarcys permeability -----	51.4%	
Weighted average horizontal permeability of core with 0.10 to 0.99 millidarcys -----	0.35md.	(5.230)

Core with Permeability 1.0 to 9.9 Millidarcys

Total footage of core with 1.0 to 9.9 millidarcys permeability -----	7.2'	
Weighted average porosity of core with 1.0 to 9.9 millidarcys permeability -----	11.5%	(02.73)
Per cent of analyzed core having 1.0 to 9.9 millidarcys permeability -----	25.0%	
Weighted average horizontal permeability of core with 1.0 to 9.9 millidarcys -----	2.4md.	(17.10)

Core with Permeability 10 Millidarcys and Greater - Nil

Cored interval -----	1500.0' -	1672.5'
Total footage -----	92.5'	
Footage analyzed -----	28.0'	
Footage not analyzed -----	63.7'	
Weighted average porosity of core analyzed -----	7.5%	(216.19)
Weighted average horizontal permeability of core analyzed -----	0.70md.	(22.532)

Note: Figures in parentheses indicate porosity foot and permeability foot.

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SECTION VI

COMPLETION SUMMARY

PAGES 22-27

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DAILY PROGRESS REPORT

CDR CPOG CHEVRON MILLS LAKE I 57 (#1)

- Jan. 22/67 Depth (8 A.M.) 15' Progress: 15' On Bottom: 1/2 hr.
Operation: drilling.
Remarks: Spudded 7:30 A.M. Jan. 22/67.
Waiting on parts 10 hours.
Repairing drawworks motors 12 hours.
Rigging to spud 1 1/2 hours.
- Jan. 23/67 Depth (8 A.M.) 55' Progress: 40' On Bottom: 2 hrs.
Operation: drilling.
Mud Viscosity: 40. Additives
Caustic 250 lbs.
Super Col 5000 lbs.
Salt Water Gel 2000 lbs.
Mago Gel 5200 lbs.
Plaster 200 lbs.
Remarks: Shut down to repair oil filter 2 1/2 hours mud settled out, mixed all available mud and waited on new mud 8 1/4 hours. Mixing mud 10 hours; repair swivel and Rig motor 3 1/4 hours; Rig service 1 hour.
- Jan. 24/67 Depth (8 A.M.) 252' Progress: 197' On Bottom: 14 1/4 hours.
Operation: drilling.
Mud: Viscosity 38 Weight 9.5 Additives: Mago gel 700 lbs.
Remarks: Mixing Mud 1 hour
Rig service 1 1/2 hours
Survey 1/2 hour
Work on pump 2 hours
Set up Clutches 1/2 hour
Start rig motor &
Prime pump 1 1/2 hours.
- Jan. 25/67 Depth (8 A.M.) 267' Progress: 15' On Bottom: 1 1/2 hours.
Operation: Nippling up.
Mud: Viscosity 55 Weight 9.5
Additives: nil.
Remarks:
Mix Mud 2 hours
Service Rig 1 "
Run Casing 1 1/2 "
Head to Circulate 3/4 "
Circulate casing 3/4 "
Mix cement & displace 1/2 "
W.O.C. 12 "
Nippling up 3 "
- Jan. 26/67 Depth (8 A.M.) 267' Progress: 0 On Bottom: 0
Operation: Waiting on welder for kelly cock.
Remarks:
Nippling up B.O.P.'s 8 hours
Rig up mud tanks
Prime pump & finish
nippling up 8 hours
Drain pump tighten belts 8 hours
etc.

Jan. 26/67 (cont'd)

Drilled out plug.

Finished drilling out @ 8:30 A. M. Plug at 215' adapter between Kelly cock and Kelly Saivel leaking waiting on welder.

Jan. 27/67

Depth (8 A.M.) 376' Progress: 109'

On Bottom: 2 hrs.

Operation: removing casing bowl.

Mud Viscosity: water. Additives: 800 lbs. Gel

3 sax Sawdust

Remarks:

	<u>Hours</u>
Drill out shoe	$\frac{1}{4}$
Work on mud pump & Rig motor	$\frac{3}{4}$
Waiting on welder	14
Rig service & survey	$\frac{1}{2}$
Loosing mud build volume	2 $\frac{1}{4}$
Circulating	
Tear out B.O.P.	3

Losing volume in tanks. Check leak at well head, mud coming out between 7" collars and male thread of bowl. Bowl backed off to with in one or two threads.

Jan. 28/67 Depth (8 A.M.) 376'

Operation: Skidding Rig 50' S.E.

Remarks: Ran cement plugs.

Plug #1 376-211' 35 sax cement. Plug down @ 12:15 A.M.

Plug #2 3 sax cement at surface. Cut off casing 3' below ground .
Welded on steel plate.

DAILY PROGRESS REPORTS

CDR CPOG CHEVRON MILLS LAKE I-57 (#2)

Jan. 29/67 Depth (8 A.M.) 65' Progress: 65' On Bottom: 7 1/2 hours
 Operation: drilling.
 Remarks: Spudded @ 10:30 P. M. Skidded rig 42' E 16' S of #1 location.
 Rigging to spud 14 1/2 hours
 Work on pump 1 hour

Jan. 30/67 Depth (8 A.M.) 161' Progress: 96' On bottom: 11 1/4 hours.
 Operation: straightening hole. Additives: 10 sacks gel.
 Remarks: Ream 0-130' 3 3/4 hours
 Surveys 2 "
 Prime Pump & Rig Service 3 "
 Mix Mud 1 "
 Rig Repair 2 "

Jan. 31/67 Depth (8 A.M.) 283' Progress: 122' On Bottom: 7 3/4 hours
 Operation: waiting on repairs.
 Mud: Viscosity: 44. Additives: Nil.
 Remarks: Surveys 2 hours
 Swivel Repair 1 1/2 hours
 Service Rig 3/4 "
 Wait on U-Joint for
 Rotary Table 10 1/4 hours.

Feb. 1/67 Depth (8 A.M.) 312 Progress: 30' On Bottom: 3 1/4 hours.
 Operation: tripping for 6 1/4 pilot bit.
 Mud: Viscosity 54 Weight 10.2
 Additives: 23 sacks Gel.
 Remarks: Wait on repairs 6 1/2 hours
 Ream 9 7/8 - 6 1/4 210-283' 3 hours
 Fanning 120' 5 hours
 Rig service 1 hour
 Surveys 1 3/4 hours
 Mix mud 1 1/2 hours

Feb. 2/67 Depth (8 A.M.) 350' Progress: 38' On Bottom: 1 1/2 hours (3 1/4 reaming)
 Operation: Waiting on cement.
 Mud: Viscosity: 52' Weight: 10.5
 Remarks: Surveys 3/4 hr.
 Pump water 1
 Run casing 2 1/4
 Circulate casing 1 1/4
 Set Clamp in Cellar 2 1/2
 Cementing 1/4
 Nipple up to circulate
 hot water down D.P. & return
 out casing 4 1/4
 Circulating 2

Feb. 2/67 (cont'd)

Ran 3 joints 7" 20# J 55 Rge. 3 Japanese casing.
Tallied at 336.94' and set at 346.24 K.B. with 120 sacks normal
Portland Can. Cement. plus 2% CaCl_2 Ran 9 bbls. pipe sweep ahead
of cement.
Plug down @ 1:52 A.M. Via B.J. Ran 10 scratchers on bottom. 120'
worked scratchers 45 minutes.

Feb. 3/67 Depth at (8 A.M.) 350' Progress: 0 On Bottom: 0
Operation: Nippling up.

Remarks: Circulate Hot water through casing 4 1/2 hours
Nipple up and remove landing joint 1 1/2 hours
Run in 1 1/4" pipe and cement 1 hour
W.O.C. 7 1/2 hours
Nipple up head 9 1/2 hours
Ran 1 1/4" pipe alongside casing. Top of cement @ 135'.
Ran 90 sax cement plug 2% CaCl_2 . Return to surface
2:45 P.M. dug out cellar. Mix 16 sax in cellar.

Feb. 4/67 Depth (8 A.M.) 350' Progress: 0 On Bottom: 0
Operation: waiting on rig motor.
Remarks: Rig motor down 8:45 A.M. Feb. 3/67.

Feb. 5/67 Depth (8 A.M.) 350' Progress 0
Operation: shut down waiting on rig motor.

Remarks: Rig motor arrived from Calgary 10 A.M. Feb. 5/67.

Feb. 6/67 Waiting additional parts for rig motor.

Feb. 7/ 67 Still waiting on parts.

Feb. 8/67 Depth: 350'
Operation: drilling shoe at 346'

Remarks: found plug @ 306'
Pressured Blind Rams 1200 P.S.I. 30 Min.
Pressured 4 1/2 Rams 1200 P.S.I. 30 Min.
Pressured Hydril 1200 P.S.I. 30 Min.
Repairs completed, pump primed and started pressured up
at 1:30 A.M. Feb. 8/67.
Repairing motor 16 hours
Prime pump 1 1/2 hours
Pressure test B.O.P.'s 2 1/2 hours
Drilling Plug 4 hours

Feb. 9/67 Depth (8 A.M.) 968' Progress: 622' On Bottom: 18 3/4 hours
Operation: drilling.
Mud: Viscosity 42 Weight 9.2 Water Loss 7.4 PH 8.0
Additives: Super Col 23 sacks C.M.C. 100 lbs. Bi-Carb. 100 lbs.
Remarks: Check & start new motor 1 1/4 hours
Dump tanks & displace hole 1
Surveys 2 1/2
Rig service 1/4 hours

Feb. 10/67 Depth (8 A.M.) 1440' Progress: 472' On Bottom: 17 1/4 hours.
 Operation: drilling.
 Mud: Viscosity 43 Weight 9.8 Water Loss 7.7 P.H. 8.0
 Additives: Super Col 5 sacks C.M.C. 25 lbs.
 Remarks: Repair shaker cord 1 hour
 Check preventors 3/4 hours
 Service Rig & Surveys 2 1/2 hours
 Clean Mud Tanks 1 hour

Feb. 11/67 Depth (8 A.M.) 1539' Progress: 99' On Bottom: 11 1/4 hours
 Operation: drilling.
 Mud: viscosity 58 Weight 9.5 Water loss 6.0 P.H. 8.0
 Additives: Plaster 8 sacks Starch 13 sacks Preservative 30 lbs.
 Remarks: Rig Service 1 hour
 Circulate Sample 1/2 hour
 Clean 4' fill on last bit 1 1/2 hours

Feb. 12/67 Depth (8 A.M.) 1586' Progress 47' On Bottom: 14 1/4 hours.
 Operation: coring.
 Mud: viscosity 63 weight 9.4 Water loss 5.5 P.H. 8.0
 Additives: Gel 8 sacks (salt Gel) Plaster 1 sack Preservative 25 lbs.
 Remarks: Service rig and B.O.P. 1 3/4 hours
 Circulate Hole clean 1 3/4 hours
 Make up Core Barrel 2 hours
 Survey 1/2 hour

Feb. 13/67 Depth (8 A.M.) 1610' Progress: 24' On Bottom 12 3/4 hours.
 Operation: cleaning to bottom.
 Mud: Viscosity 61 Weight 9.6 water loss 9.0 P.H. 8.0
 Remarks: Rig service and repairs 4 1/2 hours
 Handle core 1 1/2 hours
 Clean to bottom 1

Feb. 14/67 Depth (8 A.M.) 1641' Progress: 31' On Bottom: 9 hours
 Operation: Making testing tool up.
 Mud: viscosity 9.3 Weight 6.5 Water Loss 7.5 P.H. 8.0
 Additives: Plaster 4 sacks Starch 4 sacks Salt Gel 22 sacks
 Preservative 25 lbs.
 Remarks: Mixing and conditioning mud 5 1/2 hours
 Service rig and check B.P. 1 1/4 hours
 Thawing out 2 3/4 hours
 Handle core 1 hour

Feb. 15/67 Depth (8 A.M.) 1641' Progress : 0
 Operation: thawing out.
 Mud: 65 Weight 9.3 Water Loss 8.0 P.H. 8.0
 Additives: Plaster 3 sacks Gel 5 sacks.
 Remarks: Thawing out 6 3/4 hours
 Making up tool 3
 Testing 2 3/4
 Make up testing head 1/2
 Break down tool 1/2
 W.O. orders 2 1/2 hours
 Bail cellars 3/4

Feb. 16/67 Depth (8 A.M.) 1672' Progress: 31' On Bottom: 7 1/4 hours.
 Operation: testing.
 Mud: Viscosity 70 Weight 9.4 Water Loss 7.7 P.H. 8.0

Feb. 16/67 (cont'd)

Additives: Starch 7 sacks
Salt Gel 14 sacks
C.M.C. 1 sack
Super Col 5 sacks
Plaster 2 sacks

Remarks: Thawing 2 hours
Circulate mud 3 3/4 hours
Circulate hole clean to core 1/2 hour
Drain Kelly hose 1/2 hour
Handle core & lay down barrel 1 1/2 hours
Rig service & B.O.P. 3/4 hours
Make up tool 2 1/4 hours

Feb. 17/67 Depth (8 A.M.) 1710' Progress: 38' On Bottom: 11 1/4 hrs.
Operation: drilling.
Mud: Viscosity 58 Weight 9.2 Water Loss 6.8 P.H. 8.0
Additives: Plaster 4 sacks
Starch 5 sacks

Feb. 18/67 Depth (8 A.M.) 1798' Progress: 88' On Bottom: 19 hours.
Operation: tripping.
Mud: viscosity 70 Weight 9.4 Water Loss 5.3 P.H. 8.0
Additives: Super Col 5 sacks
Plaster 4 sacks
Starch 5 sacks
Preservative 15 lbs.

Feb. 19/67 Depth (8 A.M.) 1887' Progress: 89' On Bottom: 15 1/4 hours
Operation: drilling.
Mud: Viscosity 63 Weight 9.2 Water Loss 6.0 P.H. 8.0
Additives: Super Col 10 sacks
Salt Gel 6 sacks
Plaster 4 sacks
Starch 6 sacks
Remarks: Work on Pump & Service rig 2 hours
Mix Mud dump truck 3 1/2 hours

Feb. 20/67 Depth (8 A.M.) 1932' Progress: 45' On bottom: 16 1/4 hours
Operation: Circulating to log.
Mud: Viscosity 68 Weight 9.8 Water Loss 6.2 P.H. 8.0
Remarks: Work on pump, wt. indicator 1 1/2 hour
Circulate hole to log 1/2 hour
Service Rig 1 hour

DATE - Feb 22/6

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER 1/1

TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

RIG NO. 17

LOCATION C.D.P.C. 109 mill lake 157

DATE Feb 21/67

LOCATION

DATE Feb 21/67

T O U R	LT:	IF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG		PUMP TEST		CLASS	REMARKS	TIME				
													FROM FT.	TO FT.	RATE IN 16 PM	DEPTH TO WATER IN FT.			START	STOP	INTERVAL		
1	AF:	AT:	2			1932												Circulate hole Circulation stopped Pressure maintained Tank & wait on orders	12:00				
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.									
	MUD												PUMP		PUMP		SURVEY						
	WT.	47	52	9.7	9.7																		
	VISC.	145	98	66	66																		
	GEL	9.8	45	8.2	8.5																		
	W.L.	F.C.	P.H.	8																			
	ADDITIVES: WATER												MOTOR HOURS		FUEL GALS.		NEXT OIL CHANGE AT		WEATHER		MIDN. 4 A.M.		
	1. 100% Water																TEMPERATURE: +1		0				
	2. 5% Sulfonate																WIND VELOCITY: nil		nil				
3. GENERAL: wait on orders after logging.																RAIN, SNOW, FOG: Clear		Clear					
CREW TIME SUMMARY												DRILLING AND OTHER RIG OPER.		PUMPTIME		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS	
DRILLER: Dennis Conn																				8			
HELPER: E. W. Ford																				8			
HELPER: H. Garner																				8			
TOTAL																				24			
INJURIES AND REMARKS:																							
2	AF:	AT:																W.O.O Prepare to Run plug	8:00	12:00	6		
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.									
	MUD												PUMP		PUMP		SURVEY						
	WT.	9.7	9.7	9.7																			
	VISC.	62	65	61																			
	GEL	7.8	3.2	8.0																			
	W.L.	F.C.	P.H.	8.0																			
	ADDITIVES: WATER												MOTOR HOURS		FUEL GALS.		NEXT OIL CHANGE AT		WEATHER		8 A.M. NOON		
	1. 100% Water																TEMPERATURE:						
	2. GENERAL: Moving to New location																WIND VELOCITY:						
3. GENERAL: Moving to New location																RAIN, SNOW, FOG: etc.							
CREW TIME SUMMARY												DRILLING AND OTHER RIG OPER.		PUMPTIME		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS	
DRILLER: Ken Brannon																				8			
HELPER: Ed Pratt																				8			
HELPER: Charles Hoshorn																				10			
TOTAL																				26			
INJURIES AND REMARKS:																							
3	AF:	AT:	2	TO														PLUG #1 1932-1550 90 SACKS CEMENT. PLUG DOWN 4:20 P.M. PLUG #2 400-300 35 SACKS CEMENT. PLUG DOWN @ 5:40 P.M. PREPARING FOR MOVE.					
	% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.									
	MUD												PUMP		PUMP		SURVEY						
	WT.	4 P.M.	6 P.M.	8 P.M.	10 P.M.																		
	VISC.																						
	GEL																						
	W.L.	F.C.	P.H.																				
	ADDITIVES: WATER												MOTOR HOURS		FUEL GALS.		NEXT OIL CHANGE AT		WEATHER:		4 P.M. 8 A.M.		
	1. 100% Water																TEMPERATURE:						
	2. GENERAL: Moving to New location																WIND VELOCITY:						
3. GENERAL: Moving to New location																RAIN, SNOW, FOG: etc.							
CREW TIME SUMMARY												DRILLING AND OTHER RIG OPER.		PUMPTIME		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS	
DRILLER: Wm Forsyth																				8			
HELPER: Ed Brummond																				8			
HELPER: Darrell Stewart																				18			
TOTAL																				34			
INJURIES AND REMARKS:																							

TOTAL CONTRACT TIME _____ HRS.

TOOLPUSHER OR DRILLER 1/c

TOTAL COMPANY TIME _____ HRS.

APPROVED BY

[illegible]

DATE 5-6-1967

TOTAL CONTRACT TIME 21 HRS. TOOLPUSHER OR DRILLER i/c [Signature]
TOTAL COMPANY TIME 3 HRS. APPROVED BY [Signature]

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c [Signature]
TOTAL COMPANY TIME _____ HRS. APPROVED BY [Signature]

LOCATION: _____ DATE: _____

TOUR 1	LT: AF: 2 1688 1710 229	LF: AT: 2 1688 1710 229	HOLE NO. FROM TO T.D. IF FIN. SIZE CASING SET TO DEPTH AMOUNT SAC CEMENT AVERAGE TIME PER LOAD OF W. LOST DRILL TIME WAIT ON WATER	CLASS	REMARKS	TIME
	WT. 9.1 9.1 9.2 9.2	WT. 9.1 9.1 9.2 9.2	WT. 9.1 9.1 9.2 9.2		DRILL 6 1/4 HOLE	START 12:00 STOP 4:00 INTERVAL 4
	VISC. 45 47 58 58	VISC. 45 47 58 58	VISC. 45 47 58 58		CONING SURVEY	START 4:00 STOP 4:30 INTERVAL 1/2
	GEL. 6.8 F.C. P.H. 7.5	GEL. 6.8 F.C. P.H. 7.5	GEL. 6.8 F.C. P.H. 7.5		WORK ON LIGHT PHANT	START 4:30 STOP 4:45 INTERVAL 1/4
	ADDITIVES: WATER 1. PLASTER 4 SHS 2. STARCH 5 SHS 3.	ADDITIVES: WATER 1. PLASTER 4 SHS 2. STARCH 5 SHS 3.	ADDITIVES: WATER 1. PLASTER 4 SHS 2. STARCH 5 SHS 3.		DRILL 6 1/4 HOLE	START 4:45 STOP 8:00 INTERVAL 3 1/4
	CREW TIME SUMMARY	CREW TIME SUMMARY	CREW TIME SUMMARY			
	DRILLER WM FORSYTH	DRILLER WM FORSYTH	DRILLER WM FORSYTH			
	HELPER ED BRUMMOND	HELPER ED BRUMMOND	HELPER ED BRUMMOND			
	HELPER DARRELL STEWART	HELPER DARRELL STEWART	HELPER DARRELL STEWART			
	ARNOLD COCHRANE	ARNOLD COCHRANE	ARNOLD COCHRANE			
	TOTAL	TOTAL	TOTAL			
	INJURIES AND REMARKS:	INJURIES AND REMARKS:	INJURIES AND REMARKS:			
TOUR 2	LT: AF: 157 1710 1732	LF: AT: 157 1710 1732	HOLE NO. FROM TO T.D. IF FIN. SIZE CASING SET TO DEPTH AMOUNT SAC CEMENT AVERAGE TIME PER LOAD OF W. LOST DRILL TIME WAIT ON WATER	CLASS	REMARKS	TIME
	WT. 9.2 9.3 9.3 9.4	WT. 9.2 9.3 9.3 9.4	WT. 9.2 9.3 9.3 9.4		Drilling 6 1/4 hole	START 8:00 STOP 2:30 INTERVAL 6 1/2
	VISC. 58 58 57 60	VISC. 58 58 57 60	VISC. 58 58 57 60		Spin out	START 2:30 STOP 3:30 INTERVAL 1
	GEL. 5.4 F.C. P.H. 8.0	GEL. 5.4 F.C. P.H. 8.0	GEL. 5.4 F.C. P.H. 8.0		Service Rig	START 3:30 STOP 4:00 INTERVAL 1/2
	ADDITIVES: WATER 1. 2. 3.	ADDITIVES: WATER 1. 2. 3.	ADDITIVES: WATER 1. 2. 3.			
	CREW TIME SUMMARY	CREW TIME SUMMARY	CREW TIME SUMMARY			
	DRILLER James Conner	DRILLER James Conner	DRILLER James Conner			
	HELPER J. Conner	HELPER J. Conner	HELPER J. Conner			
	HELPER J. Conner	HELPER J. Conner	HELPER J. Conner			
	TOTAL	TOTAL	TOTAL			
	INJURIES AND REMARKS:	INJURIES AND REMARKS:	INJURIES AND REMARKS:			
TOUR 3	LT: AF: 157 1732 1773	LF: AT: 157 1732 1773	HOLE NO. FROM TO T.D. IF FIN. SIZE CASING SET TO DEPTH AMOUNT SAC CEMENT AVERAGE TIME PER LOAD OF W. LOST DRILL TIME WAIT ON WATER	CLASS	REMARKS	TIME
	WT. 9.1 9.1 9.3	WT. 9.1 9.1 9.3	WT. 9.1 9.1 9.3		Service Rig	START 4:00 STOP 4:30 INTERVAL 1/2
	VISC. 67 64 68	VISC. 67 64 68	VISC. 67 64 68		Run in clean 6 Ft Fill	START 4:30 STOP 6:45 INTERVAL 2 1/4
	GEL. 6.2 F.C. P.H. 8.0	GEL. 6.2 F.C. P.H. 8.0	GEL. 6.2 F.C. P.H. 8.0		Drill	START 6:45 STOP 12:00 INTERVAL 5 1/4
	ADDITIVES: WATER 1. 250 mil starch 2. 250 Super-Cel 3. 200 Plaster 15 Reserve	ADDITIVES: WATER 1. 250 mil starch 2. 250 Super-Cel 3. 200 Plaster 15 Reserve	ADDITIVES: WATER 1. 250 mil starch 2. 250 Super-Cel 3. 200 Plaster 15 Reserve			
	CREW TIME SUMMARY	CREW TIME SUMMARY	CREW TIME SUMMARY			
	DRILLER KEN BRENNAN	DRILLER KEN BRENNAN	DRILLER KEN BRENNAN			
	HELPER ED PRATT	HELPER ED PRATT	HELPER ED PRATT			
	HELPER CHARLIE HOSKINS	HELPER CHARLIE HOSKINS	HELPER CHARLIE HOSKINS			
	DELOD GARGAN	DELOD GARGAN	DELOD GARGAN			
	TOTAL	TOTAL	TOTAL			
	INJURIES AND REMARKS:	INJURIES AND REMARKS:	INJURIES AND REMARKS:			

RIG NO.	LOCATION	DATE	TIME
11	277539-0100-A-51-C-2-P-1	10/1/78	

[illegible]

RIG. NO. 17 LOCATION MILLS LAKE I-57 C.D.R. N.W.T.DATE FEB 15/67LOCATION..... DATE FEB 15/67

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER
AF:	AT:	<u>2</u>	<u>1641</u>								
MUD											
PUMP											
SURVEY											
W. TRUCK											
MOB. PUMP											
GENERAL											
CREW TIME SUMMARY											
DRILLER <u>Wm. Forsyth</u>											
HELPER <u>Ed. Brummond</u>											
HELPER <u>Garbell Stewart</u>											
HELPER <u>Arnold Cockrane</u>											
TOTAL											

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER
AF:	AT:	<u>1641</u>									
MUD											
PUMP											
SURVEY											
W. TRUCK											
MOB. PUMP											
GENERAL											
CREW TIME SUMMARY											
DRILLER <u>Dennis Conn</u>											
HELPER <u>W. Brummond</u>											
HELPER <u>De Ford</u>											
HELPER <u>R. Garnier</u>											
TOTAL											

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER
AF:	AT:	<u>1.57</u>	<u>1651</u>	<u>1671</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>20</u>	<u>1</u>	<u>1</u>	<u>1</u>
MUD											
PUMP											
SURVEY											
W. TRUCK											
MOB. PUMP											
GENERAL											
CREW TIME SUMMARY											
DRILLER <u>Ken Brennan</u>											
HELPER <u>Ed. Brummond</u>											
HELPER <u>Charlie Hoskins</u>											
HELPER <u>David Gargan</u>											
TOTAL											

CLASS	REMARKS	TIME
		START STOP INTERVAL
	FINNISH INJ. CORE	12.00
	BARRELL	1.15 1.14
	STEAMING OUT MUD	1.15
	TANK. HOOK UP SUCTION	
	PRIMEING PUMP.	
	THAWING OUT FLOW LINE	
	* FLOW NIPPLE, STD PIPE	8.00 6.74
	EVERYTHING FROZE	
	UP BUT THE BOILER,	

CLASS	REMARKS	TIME
		START STOP INTERVAL
	Thawing standpipes	8.00
	and Kelly hole	10.20
	Break Circulation	10.20
	and Condition mud	12.30
	exposed for bottom	1.20
	Circulation	1.20
	Cut Core #3	3.00
	Condition mud	3.30
	(Shale stuffing)	4.00
	Coring	

CLASS	REMARKS	TIME
		START STOP INTERVAL
	Cutting Core #3	4.00 8.00 4
	Condition mud	8.00 10.15 1.14
	Cut. Core #3	10.15 10.45 3.4
	Break OFF Drain Kelly	10.45
	Hose Mud Line	11.15 11.5 1.2
	pull out w. Core #3	11.15 12.00 3.4
	Blocks coming	
	Down very Slow	

TOTAL CONTRACT TIME _____ HRS.

TOOLPUSHER OR DRILLER 1/2

TOTAL COMPANY TIME _____ HRS.

APPROVED BY

RIG. NO. 17* LOCATION MILLS LAKE I-57 N.W.T.DATE FEB 14/67

LOCATION DATE

LT:	IF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER
AF:	AT:	<u>2</u>	<u>1640</u>								
MUD 12MN. 2A.M. 5A.M. 6A.M.											
PUMP PUMP SURVEY											
WT. 9.3 9.3											
VISC. 58 65											
GEL. 58 65											
W.L. F.C. P.H.											
ADDITIVES: WATER 1. PLASTER 2.5KLS. 2. STABCEL 4.5KLS. 3. SALT GEL 2.5KLS. PRES 2.5											
CREW TIME SUMMARY											
DRILLER <u>Wm. Forsyth</u>											
HELPER <u>Ed. Brummond</u>											
HELPER <u>Darrell Stewart</u>											
HELPER <u>Arnold Cochran</u>											
TOTAL											
INJURIES AND REMARKS:											

LT:	IF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER
AF:	AT:	<u>1-57</u>	<u>1640</u>								
MUD 8 A.M. 10 A.M. 12 N.H. 2 P.M.											
PUMP PUMP SURVEY											
WT. 8 A.M. 10 A.M. 12 N.H. 2 P.M.											
VISC. 8 A.M. 10 A.M. 12 N.H. 2 P.M.											
GEL. 8 A.M. 10 A.M. 12 N.H. 2 P.M.											
W.L. F.C. P.H.											
ADDITIVES: WATER 1. PLASTER 2.5KLS. 2. STABCEL 4.5KLS. 3. SALT GEL 2.5KLS. PRES 2.5											
CREW TIME SUMMARY											
DRILLER <u>David Loman</u>											
HELPER <u>Ed. Brummond</u>											
HELPER <u>Darrell Stewart</u>											
HELPER <u>Arnold Cochran</u>											
TOTAL											
INJURIES AND REMARKS:											

LT:	IF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER
AF:	AT:										
MUD 4 P.M. 6 P.M. 8 P.M. 10 P.M.											
PUMP PUMP SURVEY											
WT. 4 P.M. 6 P.M. 8 P.M. 10 P.M.											
VISC. 4 P.M. 6 P.M. 8 P.M. 10 P.M.											
GEL. 4 P.M. 6 P.M. 8 P.M. 10 P.M.											
W.L. F.C. P.H.											
ADDITIVES: WATER 1. PLASTER 2.5KLS. 2. STABCEL 4.5KLS. 3. SALT GEL 2.5KLS. PRES 2.5											
CREW TIME SUMMARY											
DRILLER <u>Ken Brummond</u>											
HELPER <u>Ed. Brummond</u>											
HELPER <u>Charlie Harkins</u>											
HELPER <u>David GARGAY</u>											
TOTAL											
INJURIES AND REMARKS:											

CLASS	REMARKS	TIME	START	STOP	INTERVAL
	HOIST 4 D.C. INSTALL	12:50			
	FLOAT RUN IN/ BIT	1:30			1 1/2
	THAWOUT PUMPS	1:30			
	SUCTION SHAKE SHAKER	2:45			1 1/4
	CIRC. RAISE VOLUME	5:45			3
	HOIST TO TEST	7:15			1 1/2
	STEAMOUT KILL LINE	8:00			3/4
	CHECKING BOPS.				
DRILLER	<u>Wm. Forsyth</u>				
COMPANY TIME	CONTR TIME				

CLASS	REMARKS	TIME	START	STOP	INTERVAL
	Making up Testing	8:00			
	Strain	11:20			
	Scrap on hole	12:45			
	make up Washline lead	12:45			
	and get pacifier	1:15			
	Waiting for Loman	4:00			2 3/4
	and shut				
DRILLER	<u>David Loman</u>				
COMPANY TIME	CONTR TIME				

CLASS	REMARKS	TIME	START	STOP	INTERVAL
	Break Head off Test	4:00			
	STRING Pull 6 STANDS	4:30			1/2
	Clean ditch From BOP	4:30			
	To Find valves and				
	prain Thawhole Fill				
	line Clean Frozen				
	Mud off Rig Floor	5:55			3/4
	Pull out	7:00			
	Break Down Test Tools	7:30			1/2
	620 Orders	7:30			
	Pickup Core BBL	10:00			
	open log house side				
	Pipe Run Run in	12:00			2
DRILLER	<u>Ken Brummond</u>				
COMPANY TIME	CONTR TIME				

TOTAL CONTRACT TIME _____ HRS.

TOOPLUSER OR DRILLER i/c _____

TOTAL COMPANY TIME _____ HRS.

APPROVED BY _____

LOCATION: _____ DATE Feb 13/67

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER 1/c *[Signature]*
TOTAL COMPANY TIME _____ HRS. APPROVED BY *[Signature]*

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c W. J. Hume
TOTAL COMPANY TIME _____ HRS. APPROVED BY W. J. Hume

RIG. NO. 17 LOCATION Mills Lake 157 DATE Feb. 11/67 LOCATION Feb. 11/67

TOUR	MIDN.	T.O.	LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	STRATIGRAPHIC LOG		PUMP TEST		CLASS	REMARKS	TIME										
															FROM	TO	DATE	TIME			DESCRIPTION	DEPTH TO WATER IN FT.	START	STOP	INTERVAL						
1		8 A.M.	AF:	AT:	1537	1539					14										Work on pump.	12:00	12:30								
			% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.															
			3	6 1/4	Beam	7A	12.7	66	27	5 1/2																					
			4	6 1/4	YTL	ED501512	95																								
			MUD	12MN.	2A.M.	4A.M.	6A.M.	PUMP		PUMP		SURVEY																			
			WT.				9.5	PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH															
			VISC.				40																								
			GEL.																												
W.L.	7.7	F.C.	332	P.H.																											
																			DRILL	8	WEATHER		MIDN.	4 A.M.							
																			W. TRUCK		TEMPERATURE			-40	-40						
																			MOB. PUMP		WIND VELOCITY			still still							
																			RAIN, SNOW, FOG, ETC.		clear clear										
																			GENERAL												
																			CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS						
																			DRILLER	Ken Brunner					8						
																			HELPER	Pratt					8						
																			HELPER	Charles Haskins					8						
																			HELPER	David Hagan					8						
																			TOTAL						32						
																			INJURIES AND REMARKS:												
2	8 A.M.		LT:	LF:	2	1539	1566				27										DRAG 6 1/4 HOLE	8:00	9:00	1							
			% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.															
			4	6 1/4	YTL	ED5075	12	130	28	7 1/4																					
			MUD	8 A.M.	10 A.M.	12 N.H.	2 P.M.	PUMP		PUMP		SURVEY																			
			WT.	9.5	9.3	9.3	9.3	PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH															
			VISC.	58	42	48	55	200	45	1550	200	45	1566																		
			GEL.																												
			W.L.	6.5	F.C.	332	P.H.	8																							
																			DRILL		WEATHER		8 A.M.	NOON							
																			W. TRUCK		WIND VELOCITY										
																			MOB. PUMP		RAIN, SNOW, FOG, ETC.										
																			GENERAL												
																			CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS						
																			DRILLER	Wm Forsyth					8						
																			HELPER	Ed Grummond					8						
																			HELPER	Darrell Stewart					8						
																			HELPER	Arnold Cochrane					8						
																			TOTAL						32						
																			INJURIES AND REMARKS:												
3	4 P.M.		LT:	LF:		1511	1522														Drilling 6 1/4 hole	4:20	8:00	4 1/2							
			% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.															
			7	6 1/4	YTL	ED5075	12	130																							
			MUD	4 P.M.	6 P.M.	8 P.M.	10 P.M.	PUMP		PUMP		SURVEY																			
			WT.	7.3	3	7.3		PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH															
			VISC.	53	55	61		200	45	1570																					
			GEL.																												
			W.L.	7.4	F.C.		P.H.	9.5																							
																			DRILL		WEATHER		4 P.M.	8 P.M.							
																			W. TRUCK		TEMPERATURE			-18	-25						
																			MOB. PUMP		WIND VELOCITY			nil	nil						
																			RAIN, SNOW, FOG, ETC.		clear clear										
																			GENERAL												
																			CREW TIME SUMMARY	DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS						
																			DRILLER	Dennis Connor					8						
																			HELPER	R. Conway					8						
																			HELPER	J. J. ...					8						
																			HELPER	A. Garner					8						
																			TOTAL						32						
																			INJURIES AND REMARKS:												
																			TOTAL CONTRACT TIME		HRS.	TOOLPUSHER OR DRILLER 1/2									
																			TOTAL COMPANY TIME		HRS.	APPROVED BY		J. McLaughlin							

RIG. NO. 17

LOCATION Crooked Lake 157DATE Feb 10/7

LOCATION

DATE

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
AF:	AT:	157	1245	1440				195					
% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
		2	6 1/4	DT	38537	12	130	37.3		16 1/4	in		
MUD		12MN.	2A.M.	4A.M.	6A.M.	PUMP		PUMP		SURVEY			
WT.	9.5	9.7	9.8	9.8	PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH
VISC.	42	44	43	43	200	18	1345	200	48	1350	1321	14	
GEL					MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER		MIDN. 4 A.M.			
W.L.	1.2	F.C.	32	P.H.	3.0	DRILL		TEMPERATURE		-35 -44			
ADDITIVES: WATER					W. TRUCK		WIND VELOCITY		20				
1.					MOB. PUMP		RAIN, SNOW, FOG, ETC.		clear				
2.					GENERAL								
3.													
CREW TIME SUMMARY					DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS			
DRILLER <u>Ken Brennan</u>										8			
HELPER <u>Ed Foster</u>										8			
HELPER <u>Charles Thompson</u>										8			
TOTAL										8			

INJURIES AND REMARKS: DAVID GORGAN S.I. No 613-282-904

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
AF:	AT:	2	1440	1511				71					
% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
		2	6 1/4	DT	38537	12	130	544		22 1/4			
MUD		8 A.M.	10 A.M.	12 N.	2 P.M.	PUMP		PUMP		SURVEY			
WT.	142	164	914	9.3	PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH
VISC.	42	42	80	100	200	48		1511	34				
GEL					MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER		8 A.M. NOON			
W.L.		F.C.		P.H.	DRILL		TEMPERATURE		-44 -20				
ADDITIVES: WATER					W. TRUCK		WIND VELOCITY		N 1/2				
1.					MOB. PUMP		RAIN, SNOW, FOG, ETC.		NIL				
2.					GENERAL								
3.													
CREW TIME SUMMARY					DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS			
DRILLER <u>Wm Forsyth</u>										8			
HELPER <u>Ed Bermiond</u>										8			
HELPER <u>Darrell Stewart</u>										8			
TOTAL										8			

INJURIES AND REMARKS:

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER			
AF:	AT:													
% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.	
		7A	6 1/4	DT	38726	12	130			24				
MUD		4 P.M.	6 P.M.	8 P.M.	10 P.M.	PUMP		PUMP		SURVEY				
WT.					9.2	PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH
VISC.					38									
GEL						MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER		4 P.M. 8 P.M.			
W.L.	6	F.C.		P.H.	DRILL		TEMPERATURE		-20 -29					
ADDITIVES: WATER	10 LBS				W. TRUCK		WIND VELOCITY		nil					
1.					MOB. PUMP		RAIN, SNOW, FOG, ETC.		clear					
2.					GENERAL									
3.														
CREW TIME SUMMARY					DRILLING AND OTHER RIG OPER.	PUMPTST	REPAIRS & MAINTENANCE	RIG UP OR TEAR DOWN	LOST TIME TRAVEL TIME	TOTAL HOURS				
DRILLER <u>Thomson</u>										8				
HELPER <u>B. Brown</u>										8				
HELPER <u>E. W. Ford</u>										8				
TOTAL										8				

INJURIES AND REMARKS:

CLASS	REMARKS	TIME		
		START	STOP	INTERVAL
	Drill	1200	200	3
	Service Big survey	300	330	1/2
	Drill	330	800	4 1/2
DRILLER	<u>Ken Brennan</u>			
COMPANY TIME	CONTR TIME			

CLASS	REMARKS	TIME		
		START	STOP	INTERVAL
	DRILL 6 1/4 HOLE.			
	BIG SERVICE, Dimple			
	DRILL MIX HOLE.			
	SURVEY			
	TRIP LARBIT @ 1511			
	RICKERLY CIRC IN			
	ON STRIP START.			
DRILLER	<u>Wm Forsyth</u>			
COMPANY TIME	CONTR TIME			

CLASS	REMARKS	TIME		
		START	STOP	INTERVAL
	Travis trip out	400	545	
	Change bit and			
	trip. Callers broken	545	630	
	Service	630	700	
	Travis	700	930	
	brief circulation	930	945	
	Drilling condition	945		
	mud			
DRILLER	<u>Thomson</u>			
COMPANY TIME	CONTR TIME			

TOTAL CONTRACT TIME _____ HRS.

TOG PUSHER OR DRILLER 1/2

TOTAL COMPANY TIME _____ HRS.

APPROVED BY

Ed M

LOCATION _____ DATE Feb. 9/67

[illegible][illegible]

CLASS	REMARKS	TIME		
		START	STOP	INTERVAL
		Drilling 6 1/2 hole Service rig, check layout and pipe ramps, set up brackets and chutes Drilling perimeter survey Drilling	4:00 4:45 5:30 7:15 7:45	4:11 5:30 7:11 7:45 12:00

DRILLER *Dennis Connor*

APPROVED BY [Signature]

LOCATION _____ DATE Feb 8

TOOLPUSHER OR DRILLER i/c
APPROVED BY [Signature]

Feb. 7. 65

COMPANY TIME _____ CONTR. TIME _____
TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER 1/c _____
TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c Bob Hume
TOTAL COMPANY TIME _____ HRS. APPROVED BY Del Mulligan

DATE Feb. 5/67

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER: 1/2 40/1000
TOTAL COMPANY TIME _____ HRS. APPROVED BY: [Signature]

TOTAL CONTRACT TIME _____ HRS. TOOL/PUSHER OR DRILLER I/C _____
TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

RIG. NO. 17 LOCATION *Little Lake 1-3-7*DATE *Feb 3/67*LOCATION DATE *Feb 3/67*

TOUR	MIDN.	T	O	HOLE NO. 1-3-7														STRATIGRAPHIC LOG		PUMP TEST		CLASS	REMARKS	TIME										
				LT:	LF:	AF:	AT:	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	FROM	TO	RATE IN 16 PM	DESCRIPTION	DEPTH TO WATER IN FT.			START	STOP	INTERVAL								
1				MUD 12MN. 2A.M. 4A.M. 6A.M.														PUMP		PUMP		SURVEY			<i>Supplies up B.O.P.S. and back up pump and bit line</i>	<i>12-00</i>								
				WT.														PRESS		RPM		DEPTH							AT		DEG.		LOG TO DEPTH	
				VISC.														MOTOR HOURS		FUEL GALS.		NEXT OIL CHANGE AT							WEATHER		MIDN. 4A.M.			
				GEL														DRILL				TEMPERATURE:												
				W.L. F.C. P.H.														W. TRUCK				WIND VELOCITY:												
				ADDITIVES: WATER														MOB. PUMP				RAIN, SNOW, FOG, ETC.												
				1.																														
				2.																														
				3.																														
				CREW TIME SUMMARY														DRILLING AND OTHER RIG OPER.		PUMPTEST		REPAIRS & MAINTENANCE							RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS	
DRILLER <i>Dennis Coman</i>																						<i>8-00</i>												
HELPER <i>D. Rangel</i>																						<i>8-00</i>												
HELPER <i>L. Garner</i>																						<i>8-00</i>												
TOTAL																						<i>8-00</i>												
INJURIES AND REMARKS:																																		
2				HOLE NO. 1-37 <i>not drilling</i>																			<i>Rigging up Flare pipe pump pump Motor Stopped Tear off Head soil pan. START To Tear down Mack To TAKE out Motor</i>	<i>8-00</i>	<i>9-00</i>	<i>1</i>								
				MUD 8A.M. 10A.M. 12N.H. 2P.M.														PUMP		PUMP							SURVEY							
				WT.														PRESS		RPM							DEPTH		AT		DEG.		LOG TO DEPTH	
				VISC.														MOTOR HOURS		FUEL GALS.							NEXT OIL CHANGE AT		WEATHER		8A.M. NOON			
				GEL														DRILL									TEMPERATURE:		<i>-22-16</i>					
				W.L. F.C. P.H.														W. TRUCK									WIND VELOCITY:		<i>11-11</i>					
				ADDITIVES: WATER														MOB. PUMP									RAIN, SNOW, FOG, ETC.		<i>Clear</i>					
				1.																														
				2.																														
				3.																														
CREW TIME SUMMARY														DRILLING AND OTHER RIG OPER.		PUMPTEST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS										
DRILLER <i>Tom Brenner</i>																						<i>8-00</i>												
HELPER <i>Ed. Barty</i>																						<i>8-00</i>												
HELPER <i>De. Ford</i>																						<i>8-00</i>												
TOTAL																						<i>8-00</i>												
INJURIES AND REMARKS:																																		
3				HOLE NO. 2 347																			<i>Working on mack to take out Cummins DIESEL</i>	<i>4-00</i>	<i>12-00</i>	<i>8</i>								
				MUD 4P.M. 6P.M. 8P.M. 10P.M.														PUMP		PUMP							SURVEY							
				WT.														PRESS		RPM							DEPTH		AT		DEG.		LOG TO DEPTH	
				VISC.														MOTOR HOURS		FUEL GALS.							NEXT OIL CHANGE AT		WEATHER:		4P.M. 8A.M.			
				GEL														DRILL									TEMPERATURE:		<i>-18-28</i>					
				W.L. F.C. P.H.														W. TRUCK									WIND VELOCITY:		<i>0A.M.</i>					
				ADDITIVES: WATER														MOB. PUMP									RAIN, SNOW, FOG, ETC.		<i>COLO</i>					
				1.																														
				2.																														
				3.																														
CREW TIME SUMMARY														DRILLING AND OTHER RIG OPER.		PUMPTEST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS										
DRILLER <i>Wor. P. Syth</i>																						<i>8-00</i>												
HELPER <i>ED. BRUMMOND</i>																						<i>8-00</i>												
HELPER <i>DARRELL STEWART</i>																						<i>8-00</i>												
TOTAL																						<i>8-00</i>												
INJURIES AND REMARKS:																																		

TOTAL CONTRACT TIME _____ HRS.

TOOLPUSHER OR DRILLER 1/2

TOTAL COMPANY TIME _____ HRS.

APPROVED BY _____

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c _____
TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

DATE Feb 1 - 67

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER FE 1000

TOTAL COMPANY TIME _____ HRS. APPROVED BY David M. Mulligan

DATE Jan 31/01

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER I.C. _____
TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

LOCATION _____ DATE Jan 30/67

COMPANY TIME _____ CONT'N TIME _____
TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER 1/c _____
TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

FIG. NO. 17

LOCATION CDR Miller Lake L-1 N.W.T.

DATE Jan 29/67

LOCATION. DATE.

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER			
AF:	AT:		65	65										
% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.	
		2A	9 7/8	DT	66876	65	75	65		7				
MUD		12MN.	2A.M.	4 A.M.	6 A.M.	PUMP		PUMP		SURVEY				
WT.						PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH
VISC.		55	65	65	70									
GEL						MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER		MIDN. 4 A.M.			
W.L.	F.C.	P.H.	DRILL		W. TRUCK		TEMPERATURE: 75-70							
ADDITIVES: WATER		GALS.		MOB. PUMP		WIND VELOCITY: nil		RAIN, SNOW, FOG, ETC. Clear						
1.				GENERAL:										
2.														
3.														
CREW TIME SUMMARY		DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS		
DRILLER Dennis Conn												8		
HELPER J. Bonner												8		
HELPER R. D. Jordan												8		
TOTAL												8		
INJURIES AND REMARKS:														

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER			
AF:	AT:		65	125				60						
% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.	
		2A	9 7/8	DT	A.A.	4	80	60					in hole	
MUD		8 A.M.	10 A.M.	12 N.M.	2 P.M.	PUMP		PUMP		SURVEY				
WT.		8.9	9.3	9.3	9.3	PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH
VISC.		47	33	3.3	33									
GEL						MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER		8 A.M. NOON			
W.L.	F.C.	P.H.	DRILL		W. TRUCK		TEMPERATURE: -15 -5							
ADDITIVES: WATER		1. 1000 - 1600 GALS.		MOB. PUMP		WIND VELOCITY: -		RAIN, SNOW, FOG, ETC. clear						
2.														
3.														
CREW TIME SUMMARY		DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS		
DRILLER Ben Brannon												8		
HELPER Ed Pratt												8		
HELPER Charlie Haskins												8		
HELPER Alvin Lacey												8		
TOTAL												8		
INJURIES AND REMARKS:														

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER			
AF:	AT:	2	125	130				5						
% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.	
		2A	9 7/8	DT	RR.	2	175	65		534				
		3A	9 7/8	REED	P37616		175		130	534				
MUD		4 P.M.	6 P.M.	8 P.M.	10 P.M.	PUMP		PUMP		SURVEY				
WT.						PRESS	RPM	DEPTH	PRESS	RPM	DEPTH	AT	DEG.	LOG TO DEPTH
VISC.		37		45										
GEL						MOTOR HOURS	FUEL GALS.	NEXT OIL CHANGE AT	WEATHER:		4 P.M. 8 A.M.			
W.L.	F.C.	P.H.	DRILL		W. TRUCK		TEMPERATURE:							
ADDITIVES: WATER		1. GEL 1000		MOB. PUMP		WIND VELOCITY:		RAIN, SNOW, FOG, ETC.						
2.														
3.														
CREW TIME SUMMARY		DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS		
DRILLER Wm Forsyth												8		
HELPER Ed Brannon												8		
HELPER DARREK STEWART												8		
HELPER RONALD CUSHMAN												8		
TOTAL												8		
INJURIES AND REMARKS:														

CLASS	REMARKS	TIME		
		START	STOP	INTERVAL
	Drilling belly	12:00		
	Downing belly		4:00	
	Drilling ground and			
	connection	4:00	4:25	
	Drilling	4:25	7:00	
	Pull out for bit	7:00	8:00	
	Change			
DRILLER	Dennis Conn			
COMPANY TIME	CONTR TIME			

CLASS	REMARKS	TIME		
		START	STOP	INTERVAL
	Drill	8:00	8:40	7/4
	Survey @ 60 ft	8:45		
	suppose pump		9:45	1
	Drill	9:45	10:40	1
	Rig down survey	10:45		
	Pyro Pump		11:15	4/2
	Drill holding back on	11:15	12:30	1 3/4
	weight	12:30	12:30	1/4
	Rig connection stopped	12:30	1:45	1 1/4
	start pump			
	Drill	2:00	3:45	1 3/4
	Install new generation	3:45	4:00	
DRILLER	Ben Brannon			
COMPANY TIME	CONTR TIME			

CLASS	REMARKS	TIME		
		START	STOP	INTERVAL
	RIG SERVICE	4:00	4:15	1/4
	DRILL 9 7/8	4:15	4:15	1
	SURVEY @ 120 FT 1 1/4	5:15	5:45	3/4
	HOLE BREAK BIT	5:45		
	INSTALL BIT ON RIG		6:45	1
	MIX MUD	6:45	7:45	1
	CHANGE SNEGGED	7:45		
	SWITCH TO RIG HOSE		8:00	1/4
	REAMING TO BOTTOM	8:00	11:45	3 3/4
	SURVEY MISS RUN	11:45	12:00	1/4
	REAMING TO STRAIGHTEN HOLE.			
DRILLER	Wm Forsyth			
COMPANY TIME	CONTR TIME			

TOTAL CONTRACT TIME _____ HRS.

TOOLPUSHER OR DRILLER I/C

TOTAL COMPANY TIME _____ HRS.

APPROVED BY

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c *[Signature]*
TOTAL COMPANY TIME *11:45* HRS. APPROVED BY *Del. Michigan*

DATE _____

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c W. J. Prime
TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

DATE

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c *W. J. Hume*
TOTAL COMPANY TIME _____ HRS. APPROVED BY *Ed. Anderson*

RIG. NO. 17 LOCATION CORR MILLS LAKE I-57 NWT DATE JAN 25/67 LOCATION DATE

TOUR	MIDN.	T	O	HOLE NO. 1 267														STRATIGRAPHIC LOG		PUMP TEST		CLASS	REMARKS	TIME									
				LT:	LF:	AF:	AT:	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER	FROM	TO	DESCRIPTION	DEPTH TO WATER IN FT.	START			STOP	INTERVAL								
1		8 A.M.		MUD 12MN. 2A.M. 4A.M. 6A.M.														PUMP		PUMP		SURVEY		W.O.C.	SLACK OFF REMOVE LONG ST. HARD TO BREAK. CLEAN UP CS9 COLLAR RINSTALL BARK NIPPLEING UP	12.00	5.00	5					
				WT. VISC. GEL. W.L. F.C. P.H. ADDITIVES: WATER 1. 2. 3.														PRESS RPM DEPTH PRESS RPM DEPTH AT DEG. LOG TO DEPTH		MOTOR HOURS FUEL GALS. NEXT OIL CHANGE AT WEATHER MIDN. 4 A.M.		TEMPERATURE: WIND VELOCITY: RAIN, SNOW, FOG, ETC.											
				DRILL W. TRUCK MOB. PUMP GENERAL														DRILL		W. TRUCK MOB. PUMP		TEMPERATURE: WIND VELOCITY: RAIN, SNOW, FOG, ETC.											
				CREW TIME SUMMARY														DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE				RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS			
				DRILLER Wm FORSYTH																								8					
				HELPER E.D. BRUMMOND																								8					
				HELPER DARRELL STEWART																								8					
				HELPER ARNOLD COCHRANE																								8					
				TOTAL																								8					
				INJURIES AND REMARKS:																													
2	8 A.M.	4 P.M.		MUD 8 A.M. 10 A.M. 12 N.H. 2 P.M.														PUMP		PUMP		SURVEY		Nippling up B.O.B. place nipple etc.	8.00	4.00							
				WT. VISC. GEL. W.L. F.C. P.H. ADDITIVES: WATER 1. 2. 3.														PRESS RPM DEPTH PRESS RPM DEPTH AT DEG. LOG TO DEPTH		MOTOR HOURS FUEL GALS. NEXT OIL CHANGE AT WEATHER 8 A.M. NOON		TEMPERATURE: WIND VELOCITY: RAIN, SNOW, FOG, ETC.											
				DRILL W. TRUCK MOB. PUMP GENERAL														DRILL		W. TRUCK MOB. PUMP		TEMPERATURE: WIND VELOCITY: RAIN, SNOW, FOG, ETC.											
				CREW TIME SUMMARY														DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE						RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS	
				DRILLER D. Brown																										4			
				HELPER P. Brown																										8			
				HELPER G. Brown																										8			
				TOTAL																										8			
				INJURIES AND REMARKS:																													
				3	4 P.M.			MUD 4 P.M. 6 P.M. 8 P.M. 10 P.M.														PUMP						PUMP		SURVEY		Rig up Hill Line Finish Nippling up Rig up Mud Tank prime pump	4.00
WT. VISC. GEL. W.L. F.C. P.H. ADDITIVES: WATER 1. 2. 3.														PRESS RPM DEPTH PRESS RPM DEPTH AT DEG. LOG TO DEPTH		MOTOR HOURS FUEL GALS. NEXT OIL CHANGE AT WEATHER 4 P.M. 8 A.M.		TEMPERATURE: WIND VELOCITY: RAIN, SNOW, FOG, ETC.															
DRILL W. TRUCK MOB. PUMP GENERAL														DRILL		W. TRUCK MOB. PUMP		TEMPERATURE: WIND VELOCITY: RAIN, SNOW, FOG, ETC.															
CREW TIME SUMMARY														DRILLING AND OTHER RIG OPER.		PUMPTST		REPAIRS & MAINTENANCE		RIG UP OR TEAR DOWN		LOST TIME TRAVEL TIME		TOTAL HOURS									
DRILLER KEN BRENNAN																						8											
HELPER L. P. B. B.																						8											
HELPER CHARLES HOSKINS																						8											
TOTAL																						8											
INJURIES AND REMARKS:																																	

TOTAL CONTRACT TIME _____ HRS.
TOTAL COMPANY TIME _____ HRS.
TOOLPUSHER OR DRILLER J. Brown
APPROVED BY J. Brown

[illegible]

[illegible]

[illegible]

RIG. NO. 11 LOCATION Mud Lake 131 DATE Jan 21 1964 LOCATION DATE 1-21-64

TOUR	TIME	CLASS	REMARKS	TIME		
				START	STOP	INTERVAL
1	8 A.M.					
2	4 P.M.					
3	MIDN.					

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
AF:	AT:												
% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
BIT RECORD													
MUD 12MN. 2A.M. 4 A.M. 6 A.M.													
PUMP PUMP SURVEY													
WT. PRESS RPM DEPTH PRESS RPM DEPTH AT DEG. LOG TO DEPTH													
VISC. MOTOR HOURS FUEL GALS. NEXT OIL CHANGE AT WEATHER MIDN. 4 A.M.													
GEL. DRILL W. TRUCK WIND VELOCITY:													
W. L. F.C. P.H. MOB. PUMP RAIN, SNOW, FOG, ETC.													
ADDITIVES: WATER GALS. GENERAL:													
1. 2. 3.													
CREW TIME SUMMARY													
DRILLER DRILLING AND OTHER RIG OPER. PUMPTST REPAIRS & MAINTENANCE RIG UP OR TEAR DOWN LOST TIME TRAVEL TIME TOTAL HOURS													
HELPER													
HELPER													
TOTAL													
INJURIES AND REMARKS:													

TOUR	TIME	CLASS	REMARKS	TIME		
				START	STOP	INTERVAL
1	8 A.M.					
2	4 P.M.					
3	MIDN.					

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
AF:	AT:												
% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
BIT RECORD													
MUD 8 A.M. 10 A.M. 12 N.H. 2 P.M.													
PUMP PUMP SURVEY													
WT. PRESS RPM DEPTH PRESS RPM DEPTH AT DEG. LOG TO DEPTH													
VISC. MOTOR HOURS FUEL GALS. NEXT OIL CHANGE AT WEATHER 8 A.M. NOON													
GEL. DRILL W. TRUCK WIND VELOCITY:													
W. L. F.C. P.H. MOB. PUMP RAIN, SNOW, FOG, ETC.													
ADDITIVES: WATER GALS. GENERAL:													
1. 2. 3.													
CREW TIME SUMMARY													
DRILLER Wm Forsyth DRILLING AND OTHER RIG OPER. PUMPTST REPAIRS & MAINTENANCE RIG UP OR TEAR DOWN LOST TIME TRAVEL TIME TOTAL HOURS													
HELPER Ed Brummund													
HELPER Russ Murray													
HELPER D. Stewart													
TOTAL													
INJURIES AND REMARKS:													

TOUR	TIME	CLASS	REMARKS	TIME		
				START	STOP	INTERVAL
1	8 A.M.					
2	4 P.M.					
3	MIDN.					

LT:	LF:	HOLE NO.	FROM	TO	T.D. IF FIN.	SIZE CASING	SET TO DEPTH	AMOUNT	SAC CEMENT	AVERAGE TIME PER LOAD OF W.	LOST DRILL TIME WAIT ON WATER		
AF:	AT:												
% LEFT	COND	NO.	SIZE	TYPE	SER. NO.	WEIGHT	RPM	FT. DRILLED	REAMED	HRS.	FORM	% LEFT	COND.
BIT RECORD													
MUD 4 P.M. 6 P.M. 8 P.M. 10 P.M.													
PUMP PUMP SURVEY													
WT. PRESS RPM DEPTH PRESS RPM DEPTH AT DEG. LOG TO DEPTH													
VISC. MOTOR HOURS FUEL GALS. NEXT OIL CHANGE AT WEATHER 4 P.M. 8 A.M.													
GEL. DRILL W. TRUCK WIND VELOCITY:													
W. L. F.C. P.H. MOB. PUMP RAIN, SNOW, FOG, ETC.													
ADDITIVES: WATER GALS. GENERAL:													
1. 2. 3.													
CREW TIME SUMMARY													
DRILLER Dan Cooper DRILLING AND OTHER RIG OPER. PUMPTST REPAIRS & MAINTENANCE RIG UP OR TEAR DOWN LOST TIME TRAVEL TIME TOTAL HOURS													
HELPER E. Ford													
HELPER B. Bomer													
HELPER L. Bomer													
TOTAL													
INJURIES AND REMARKS:													

TOUR	TIME	CLASS	REMARKS	TIME		
				START	STOP	INTERVAL
1	8 A.M.					
2	4 P.M.					
3	MIDN.					

TOUR	TIME	CLASS	REMARKS	TIME		
				START	STOP	INTERVAL
1	8 A.M.					
2	4 P.M.					
3	MIDN.					

TOUR	TIME	CLASS	REMARKS	TIME		
				START	STOP	INTERVAL
1	8 A.M.					
2	4 P.M.					
3	MIDN.					

TOUR	TIME	CLASS	REMARKS	TIME		
				START	STOP	INTERVAL
1	8 A.M.					
2	4 P.M.					
3	MIDN.					

TOUR	TIME	CLASS	REMARKS	TIME		
				START	STOP	INTERVAL
1	8 A.M.					
2	4 P.M.					
3	MIDN.					

TOUR	TIME	CLASS	REMARKS	TIME		
				START	STOP	INTERVAL
1	8 A.M.					
2	4 P.M.					
3	MIDN.					

TOUR	TIME	CLASS	REMARKS	TIME		
				START	STOP	INTERVAL
1	8 A.M.					
2	4 P.M.					
3	MIDN.					

TOUR	TIME	CLASS
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RIG. NO. 17 LOCATION mill hole 1-57 DATE Jan 20/67 LOCATION Jan 20/67

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DATE

TOTAL CONTRACT TIME _____ HRS. TO C/PUSHER OR DRILLER i.c. _____
TOTAL COMPANY TIME _____ HRS. 4. APPROVED BY _____

RIG. NO. 17 LOCATION FORT PROVIDENCE.DATE JAN 18/67

LOCATION DATE

TOUR	TIME	CLASS	REMARKS	TIME			
				START	STOP	INTERVAL	
1	8 A.M.		W.O. Repairs				
							LT: AF:
							LF: AT:
							HOLE NO. FROM TO T.D. IF FIN. SIZE CASING SET TO DEPTH AMOUNT SAC CEMENT AVERAGE TIME PER LOAD OF W. LOST DRILL TIME WAIT ON WATER
							% LEFT COND. NO. SIZE TYPE SER. NO. WEIGHT RPM FT. DRILLED REAMED HRS. FORM % LEFT COND.
							BIT RECORD
							MUD 12MN. 2A.M. 4 A.M. 6 A.M. PUMP PRESS RPM DEPTH PRESS RPM DEPTH AT DEG. LOG TO DEPTH
							WT. VISC. GEL. W.L. F.C. P.H. DRILL W. TRUCK MOB. PUMP
							ADDITIVES: WATER GALS. 1. 2. 3. GENERAL: DRILLING AND OTHER RIG OPER. PUMPTST REPAIRS & MAINTENANCE RIG UP OR TEAR DOWN LOST TIME TRAVEL TIME TOTAL HOURS
							CREW TIME SUMMARY DRILLER <u>Ken Buchanan</u> HELPER <u>Ed. PRATT</u> HELPER <u>C. Haslins</u> <u>Glen Foley</u> TOTAL
2	8 A.M.		Rigging up, waiting on repairs	8:00	4:00	8	
							LT: AF:
							LF: AT:
							HOLE NO. FROM TO T.D. IF FIN. SIZE CASING SET TO DEPTH AMOUNT SAC CEMENT AVERAGE TIME PER LOAD OF W. LOST DRILL TIME WAIT ON WATER
							% LEFT COND. NO. SIZE TYPE SER. NO. WEIGHT RPM FT. DRILLED REAMED HRS. FORM % LEFT COND.
							BIT RECORD
							MUD 8 A.M. 10 A.M. 12 N.H. 2 P.M. PUMP PRESS RPM DEPTH PRESS RPM DEPTH AT DEG. LOG TO DEPTH
							WT. VISC. GEL. W.L. F.C. P.H. DRILL W. TRUCK MOB. PUMP
							ADDITIVES: WATER GALS. 1. 2. 3. GENERAL: DRILLING AND OTHER RIG OPER. PUMPTST REPAIRS & MAINTENANCE RIG UP OR TEAR DOWN LOST TIME TRAVEL TIME TOTAL HOURS
							CREW TIME SUMMARY DRILLER <u>Wm Forsyth</u> HELPER <u>Ed. Brummond</u> HELPER <u>Russ. MURRAY</u> <u>R. STEWART</u> TOTAL
3	4 P.M.		Rigging up, waiting on repairs	8:00	4:00	8	
							LT: AF:
							LF: AT:
							HOLE NO. FROM TO T.D. IF FIN. SIZE CASING SET TO DEPTH AMOUNT SAC CEMENT AVERAGE TIME PER LOAD OF W. LOST DRILL TIME WAIT ON WATER
							% LEFT COND. NO. SIZE TYPE SER. NO. WEIGHT RPM FT. DRILLED REAMED HRS. FORM % LEFT COND.
							BIT RECORD
							MUD 4 P.M. 6 P.M. 8 P.M. 10 P.M. PUMP PRESS RPM DEPTH PRESS RPM DEPTH AT DEG. LOG TO DEPTH
							WT. VISC. GEL. W.L. F.C. P.H. DRILL W. TRUCK MOB. PUMP
							ADDITIVES: WATER GALS. 1. 2. 3. GENERAL: DRILLING AND OTHER RIG OPER. PUMPTST REPAIRS & MAINTENANCE RIG UP OR TEAR DOWN LOST TIME TRAVEL TIME TOTAL HOURS
							CREW TIME SUMMARY DRILLER <u>D. Connor</u> HELPER <u>E. D. Ford</u> HELPER <u>B. Bonner</u> <u>S. Gannish</u> TOTAL

DRILLER Ken Buchanan

COMPANY TIME CONTR. TIME

DRILLER Wm Forsyth

COMPANY TIME CONTR. TIME

DRILLER D. Connor

COMPANY TIME CONTR. TIME

TOTAL CONTRACT TIME HRS.

TOTAL COMPANY TIME HRS.

TOOLPUSHER OR DRILLER 1/c

APPROVED BY

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER i/c _____
TOTAL COMPANY TIME _____ HRS. APPROVED BY _____

TOTAL CONTRACT TIME _____ HRS. TOOLPUSHER OR DRILLER 1/
TOTAL COMPANY TIME _____ HRS. APPROVED BY _____