

Drilling Authority No. 133

Date Issued

WELL NAME Calstan Tathlina Lake 2-39

FIELD

Area:

LOCATION: Unit

U

Section

39

Grid 60° 40'; 117° 15'

Latitude 60° 38' 01"

Longitude

117° 22' 00"

From Established Reference Marker

With Base Line

Rig Release Date:

Status

Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
	Application for a Drilling Authority. Well Completion Data. Well History Report. Application to Amend a Drilling Authority. Application to change a Well Name. Application to Abandon a Well or Suspend Drilling. Application to Alter Condition of a Well. Well History Supplement. Well Completion Data. Work-over Report No. Application to Commingle Production before Measurement. Approval to Commingle Production before Measurement. Application to Amend Approval No. to Commingle Production before Measurement. Application for M.P.R.—Oil. New Oil Well Report. New Gas Well Report. Well Inspection Report. Rig Inspection Report. Battery Inspection Report. Field Abandonment Programme and Approval. Well Cord. Well Visit. Daily Drilling Reports.



Drilling Authority No. 133
Date Issued January 30, 1964

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

WELL COMPLETION DATA

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

Well name and number **Calistan Tathlina Lake 1-39**
Permit No. **3185** Lease No. **870**
The California Standard Co. Exploratory Licence No.
(Permitter, Licensee, Lessee)
The California Standard Co. Exploratory Licence No. **870**
(Operator)
Location: Unit **D** Section **39** Grid **60°40'00"W 117°15'00"W**
Latitude **60°38'01"N** Longitude **117°22'20"**
From Established Reference Marker **3rd base line**

	DATE	DEPTH	Pool (s)
			Interval(s) open to production
Spudded	Feb 7/64		
Suspended	Feb 23/64	3216	
Resumed			
Finished Drilling	Feb 22/64	3216	
Deepened			Elevation: Gr. 944
Complete (gas/oil)			K.B. 956
Abandoned	Feb 23/64	3216	Drilling Contractor & Rig No. Big Horn Rig #2
Rig released	Feb 24/64	3216	Contractor's Licence No. 111388

CASING RECORD

Casing Size (Inches)	Weight	Amount	Set at	Sacks of Cement	Method
1. 7" Harnesman	204	196.71	212	110	Howco
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth	Sub-Sec	From	To	Rec.	From	To	Rec.
Devonian	50	+ 906	2135	2185	50.3			
Twin Falls	807	+ 119						
Hay River Shale	1284	- 308						
Slave Point	2419	- 1463						
Watt Mountain	2621	- 1665						
Sulphur Point	2625	- 1669						
Presqu'ile	2727	- 1771						
Chinchaga	3112	- 2156						
Basal Devonian Sand	3176	- 2220						
Precambrian	3200	- 2244						

LOG RECORD

Run No.	Type of Log	From	To
1	Induction Electrical	212	3215
2	Sonic Gamma Ray Caliper	212	3212



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to Abandon a Well or Suspend Drilling

In compliance with the "Canada Oil and Gas Land Regulations", application is made hereby for approval to abandon, to suspend drilling: **Calston Tathlina Lake D-39**

Name and number of well
Location: Unit **D** Section **39** Grid **60°40' 117° 15'**
Latitude **60°38' 01" N** Longitude **117°22' 20" W**
From Established Reference Marker **3rd base line**

Permit No. **1485** Lease No.

The California Standard Company
(Permitter, Licensee, Lessee)

Date of commencement of proposed programme **February 23, 1964**

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at
Gas at
Water at
Total Depth **3216** Date of last operations **February 24, 1964**
Present condition of well **Abandoned**

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At	Sack of Cement	Method	Amount Pulled
1. 7"	20#	19671	212	110	Howco	
2.						
3.						
4.						
5.						

PROPOSED ABANDONMENT PROGRAMME

No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	2216 - 3216	Slave Pt, Sulphur Pt, Presquile	200	
2	900 - surface	Across surface casing	200	

The following logs have been run... Induction Electrical, Sonic Gamma Ray Caliper
Other operations proposed

Operations to be carried out by **Howco** Contractor Licence No.
Address **G. Cansgrove** Address **14605-118 Ave., Edmonton**
Responsible Agent in field **G. Cansgrove**
Dated at **Edmonton**, this **24th** Day of **April**, 19 **64**
Signed by **[Signature]** Company **870**
Title **Assistant Superintendent** Exploratory Licence No.

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

(For RESOURCES DIVISION use only)

APPROVAL

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

Confirming oral approval given 21st February 1964

Dated **29th April**, 19 **64**

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



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application to Change a Well Name

Application is made hereby to change the name of the well, recorded in the Well-names Register as—

Calstan Tathline Lake C-39
(Old name)

to Calstan Tathline Lake D-39
(Proposed new name)

Well Location

Location: Unit D Section 39 Grid Lat. 60° 40' N Long. 117° 15' W
Latitude 60° 35' 01" N Longitude 117° 22' 20" W
From Established Reference Marker 34th Base Line

Reason for Changing Well Name

The surveyed wellsite was 20" west of the declared wellsite which
brings the well into Unit 'D' instead of Unit 'C'.

Dated at Edmonton this 1st day of May 19 64

Signed by [Signature]

Title District Superintendent

Company THE CALIFORNIA STANDARD COMPANY

(For Resources Division use only)

APPROVED

This application has been examined and approved:.....

Date 4th May, 19 64

[Signature]

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



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCES DIVISION

Application for a Drilling Authority

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

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

Name and number of well **CALSTAN TATHLEBA LAKE C-39**
Location: Unit **C** Section **39** Grid **60° 40' N 117° 15' W**
Latitude **60° 38' 01" N** Longitude **117° 22' 00" W**
From Established Reference Marker **34th Base Line**

Elevation: Ground **925 EST.** K.B. **935 EST.** feet above sea-level.
Well is expected to produce from **SLAVE POINT** formation at a depth
of about **2600** feet.

Area assigned to well

(For Oil Conservation Engineer's use only)

Permit No. **3485** Lease No. **THE CALIFORNIA STANDARD COMPANY** Acreage **62890**

Permittee, licensee, or lessee

Exploratory Licence No. **870**

Surface owned by Crown or **CROWN**

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

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

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

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	Brand	New or Used	Estimated Depth	Sacks of Cement
1. 7"	20#	J55	SMLS.	NEW	250'	150
2.						
3.						
4.						
5.						

Expected water, gas, and oil horizons and type of control equipment: **900 Series Shaffer and Hydril Blow out preventors while drilling. A 600 series Gray tree on the well.**

Well will be drilled with (Rotary) Rig No. **2** by **Big Horn Drilling Ltd., Edmonton, Alta.**
(Drilling Contractor or company)

Responsible agent of applicant:—

At well **R.C. Richardson**

Contractor's Licence No.

At registered office **A.B. Bristow, Jr.**

Address **14605 - 118th Avenue, Edmonton**

Address **Medical Arts Building, Calgary**

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

Dated at **CALGARY, Alberta**, this **29th** day of **JANUARY** 19 **64**

Signed by **[Signature]** Company **THE CALIFORNIA STANDARD COMPANY**

Title **LANDMAN** Licence No.

(For Resources Division use only)

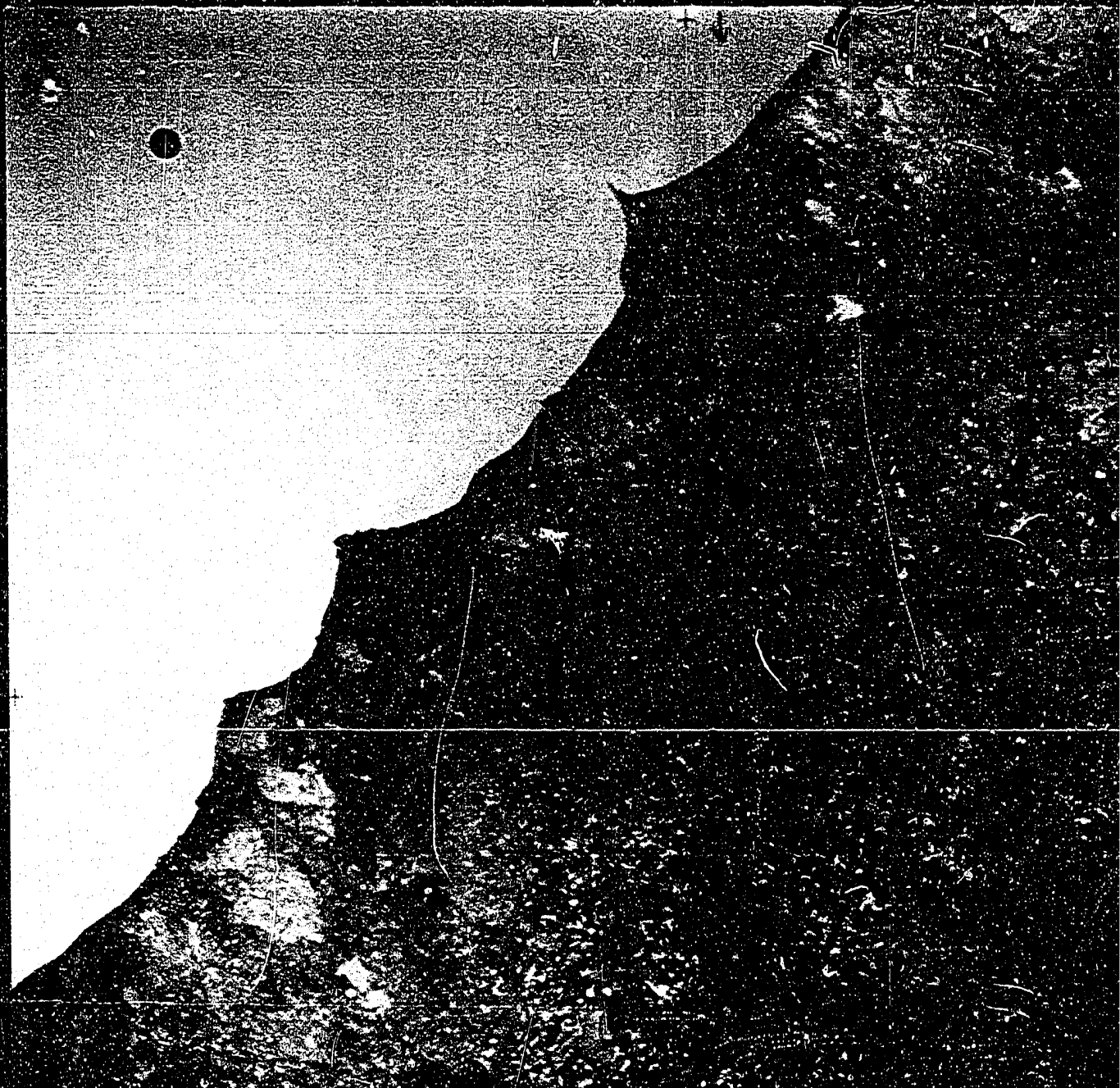
APPROVED

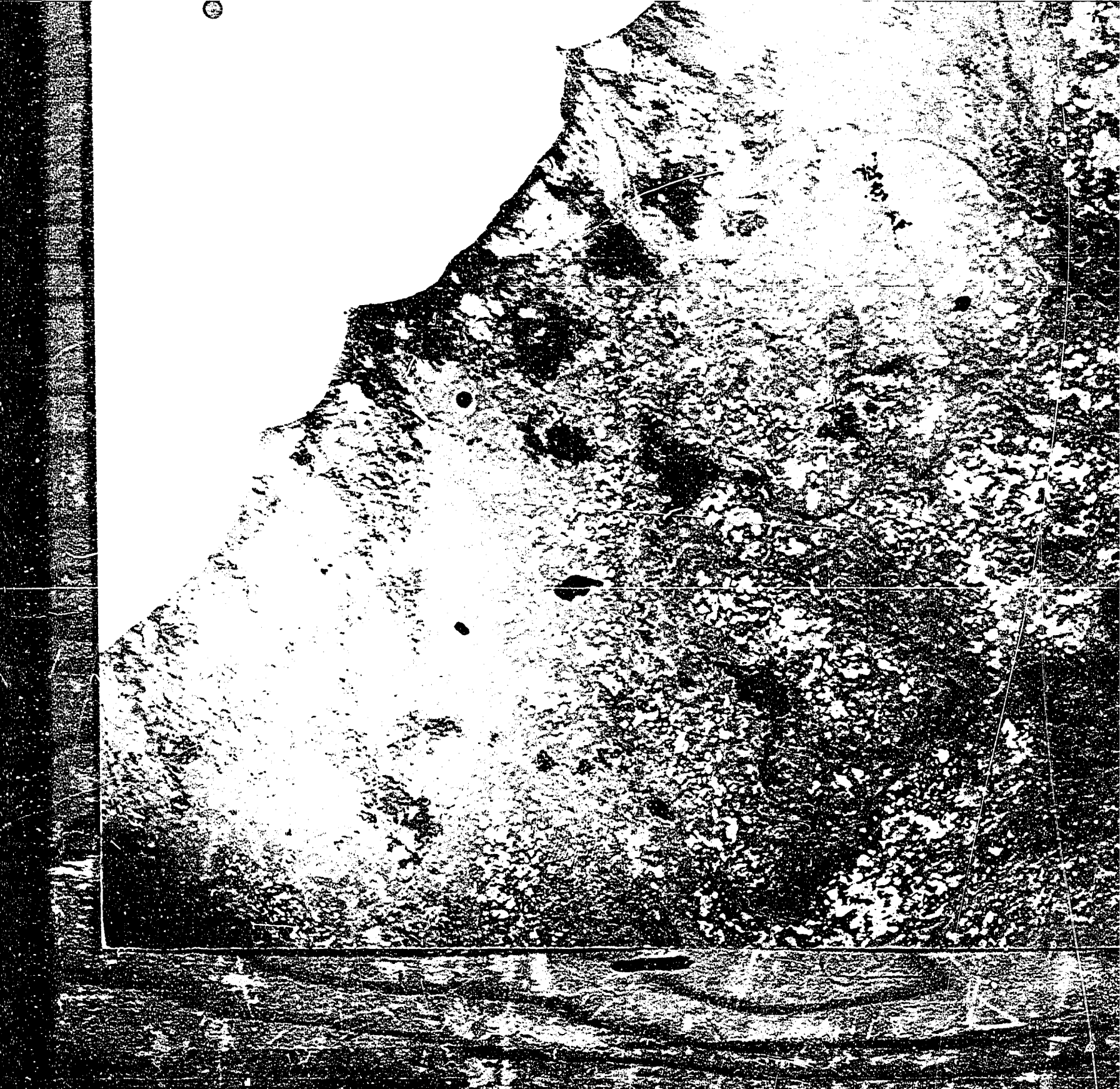
This application has been examined and approved subject to the following conditions:—

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

Dated **30th January** 19 **64**

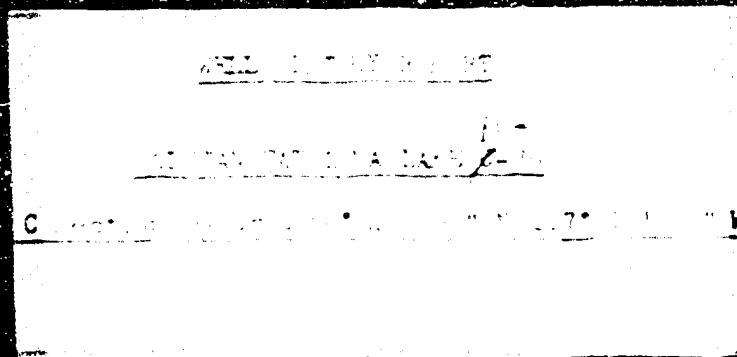
Forms to be submitted to Oil Conservation Engineer, Calgary, Alberta.





5-11-4-4

THE CALIFORNIA STANDARD COMPANY



THE CALIFORNIA STANDARD COMPANY

11605 - 118 Ave., Edmonton, Alberta.

WELL HISTORY REPORT

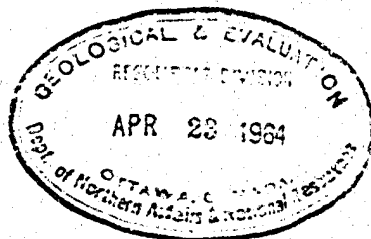
CALSTAN TATHLINA LAKE ^{D-}₂₋₃₉

Unit C Section 39 Grid 60° 40' 00" N 117° 15' 00" W

DATE: 7-15-64

SIGNED: R. C. Richardson

R. C. RICHARDSON
District Superintendent.



CONTENTS

			<u>Page</u>
Section	I	Summary of Well Data	1
Section	II	Geological Summary	2
Section	III	Engineering Summary	3
Section	IV	Logs	5
Section	V	Analysis	6
Appendix	A	Core Description	
Appendix	B	Sample Description	

WELL HISTORY REPORT

Section I - Summary of Well Data

- a) Well name - Calstan Tathlina Lake ~~8~~-39
- b) Permittee - The California Standard Company,
Medical Arts Building,
Calgary, Alberta.
- c) Licencee - The California Standard Company,
Medical Arts Building,
Calgary, Alberta.
- Operator - The California Standard Company,
Medical Arts Building,
Calgary, Alberta.
- d) Location - Unit C, Section 39, Grid 60° 40' 00" N 117° 15' 00" W
- e) Co-ordinates - Latitude 60° 38' 01" N
Longitude 117° 22' 20" W
- f) Permit number - #3485
- g) Drilling Contractor - Big Horn Drilling Rig #2, Cardwell 97' Derrick
- h) Drilling Authority - # 133 Issued January 31, 1964
- i) Classification - Wildcat
- j) Elevations - Ground 944' K.B. 956'
- k) Spudded - 4:30 p.m. February 7, 1964
- l) Completed Drilling - 12:45 a.m. February 22, 1964
- m) Total depth - 3216'
- n) Well Status - Abandoned
- o) Rig Released - 12:00 noon February 24, 1964
- p) Hole Size - 9 7/8" 0 - 216'
6 1/4" 216 - 3216'
- q) Casing -
- | <u>Size</u> | <u>Type</u> | <u>Weight</u> | <u>Set at</u> | <u>Sax of cement</u> |
|-------------|-------------|---------------|---------------|----------------------------|
| 7" | J-55 | 20# | 212' | 110 + 2% CaCl ₂ |

Section II - Geological Summary

a) Formation Tops

	Depth (Sample)	Depth IES or SGR	Elevation IES or SGR
Devonian	50	--	
Twin Falls	800	807	+ 149
Hay River Shale		1264	
Slave Point	2420	2419	- 308
Watt Mountain	2595	2621	-1665
Sulphur Point	2635	2625	-1669
Presqu'ile	2725	2727	-1771
Chinchaga	3115	3112	-2156
Basal Devonian Sand	3190	3176	-2220
Precambrian	3200	3200	-2244

b) Cored Interval

Diamond coring by Eastland Testers

Core #1 2435-2465' Rec. 50.3' Slave Point

c) Core Description

See Appendix A

d) Sample Description

See Appendix B

Section III - Engineering Summary

a) Drill Stem Tests

None run.

b) Casing Record

Only surface casing run.

Size	Type	Weight	Set at	Sack of cement
7"	J-55	20#	212'	110 + 28 CaCl ₂

c) Bit Record

Number	Size	Serial	Kind	From	To	Hours on bottom
1A	9 7/8"	730102	S-3	0	120	14 3/4
2A	9 7/8"	714480	S-6	120	216	7 3/4
1	6 1/4"	21655	OSC 10	216	591	21 1/4
2	6 1/4"	35588	Smith DT	591	986	18 1/4
3	6 1/4"	32588	Smith DT	986	1501	11 1/2
4	6 1/4"	EN3013	Reed YT3	1501	1785	13 3/4
5	6 1/4"	32601	Smith DT	1785	2230	20 3/4
6	6 1/4"	26175	OSC 10	2230	2435	7 1/4
7	5"	5 -63	OSC 10	2435	2485	
8	6 1/4"	27913	DT 20	2485	2558	9
9	6 1/4"	32535	Smith DT	2558	2661	7
10	6 1/4"	635453	Sec M/LN	2661	2722	9
11	6 1/4"	622507	Sec M/LN	2722	2824	12 1/4
12	6 1/4"	32747	Smith OT20	2824	2893	5 1/2
13	6 1/4"	635460	Sec M/LN	2893	3015	5 3/4
14	6 1/4"	635436	Sec M/LN	3015	3042	5
15	6 1/4"	494483	SEC M/L	3042	3100	6
16	6 1/4"	631481	SEC M/L	3100	3161	9 3/4
17	6 1/4"	612467	SEC M/LN	3161	3201	8
18	6 1/4"	26254	HTC WMR	3201	3216	3 3/4

d) Mud Report

Materials

Quantity (Sacks)

Magogel	360
Caustic	25
Spergene	33
Tannathin	25
Soda Ash	11
Sapp	2
Barium Carbonate	4
Sawdust	164
Fibre Seal	25
Mylogel	6

Chemical - gel mud used

e) Deviation Record

A "Sure Shot" deviation recorder used.

<u>Depth</u>	<u>Reading</u>
60'	1/4°
185'	3/4°
300'	3/4°
622'	3/4°
925'	3/4°
1136'	7/8°
1470'	1 1/4°
1750'	1/2°
2051'	1/2°
2435'	1 1/4°
2700'	1°
3008'	1°

f) Abandonment Plugs

Plug #1 in two stages Stage #1 2716 - 3216'
 Stage #2 2216 - 2716' with 200 sacks of cement.

Plug #2 900' to surface with 200 sacks of cement.

5 sacks cement on top of surface casing

g) Lost Circulation Zones

Lost circulation zones were encountered in the Presqu'ile especially from 2880' to 2920'. Throughout this formation 25 sax of fibre seal and 133 sax of sawdust were used.

h) Blowouts - None

Section IV - Logs

Run #1 at final T.D. on February 23, 1961

Induction E-log 2" - 100' 212' - 3215'
 5" - 100' 212' - 3215'

Sonic Gamma Ray Caliper 2" - 100' 212' - 3216'
 5" - 100' 212' - 3216'
 25" - 100' 2200' - 3216' 32 1/2'

Note: All logs have been forwarded previously under separate cover.

Section V - Analysis

a) Core Analysis

None made.

b) Water Analysis

None.

c) Gas Analysis

None.

APPENDIX A

CORE DESCRIPTION

Calstan Tathlina Lake C-39

Core Description

Core #1 2435-2485'

Rec. 50.3'

- 2435-2437' Limestone, medium brown, micro to very fine crystalline, few Amphipora, oil stained with slow bleeding from poor earthy to fine intercrystalline porosity.
- 2437-2440' Limestone, medium brown, algal, microcrystalline, Amphipora and small tabular stromatoporoids, occasional brachiopods, tight.
- 2440-2446' Limestone, medium brown, algal, microcrystalline with approximately 10% stromatoporoids, Amphipora and tabular corals throughout band from 2440-2442' has 50% massive stromatoporoids up to 4" in diameter, approximately 50% scattered bleeding from poor earthy porosity.
- 2446-2464' Limestone, medium brown, algal, with variably preserved algal laminated textures, traces white dolomite rhombs irregularly disseminated throughout, abundant calcispheres, fossils average < 10% of rock and include stromatoporoids, Amphipora, tabulate corals, ostracods and brachiopods, a few short vertical fractures show slow oil bleeding where not completely sealed with calcite.
- 2468-2485' Limestone, light grey brown, recrystallised probably algal, occasional traces algal lumps and bird's eye texture. Traces pyrite throughout variable traces of dolomite ranging from disseminated rhombs totalling < 5% to prominent white patches of medium crystalline dolomite 1/2" in diameter making up 10% of rock in intervals 2469-2470', 2481-2482'. Generally non-fossiliferous except for scattered calcispheres very occasional tabular corals. A few tight vertical fractures bleed brown oil.

APPENDIX B

SAMPLE DESCRIPTIONS

SAMPLE DESCRIPTIONS

- 200 - 210 Limestone, cream, microcrystalline, probably algal, some strom fragments. Trace calcite veining.
- 210 - 30 Cement.
- 230 - 70 Siltstone, grey brown, calcareous with minor limestone stringers, trace pyrite, occasional brachiopods.
- 270 - 320 Limestone, light grey-brown, microcrystalline, minor silt residue or pyrite.
- 320 - 390 Siltstone, light grey-brown, calcareous, tight, friable, trace pyrite.
- 390 - 490 Limestone, light grey-brown, microcrystalline, variable amount silt residue, trace pyrite throughout, occasional brachiopods, tight.
- 490 - 540 Siltstone, light grey, calcareous with occasional limestone stringers, trace pyrite, occasional brachiopods.
- 540 - 590 Limestone, light grey, silty, tight, trace pyrite, trace brachiopods.
- 590 - 610 Limestone, grey, argillaceous pyritic, tight, traces siltstone.
- 610 - 690 Shale, light grey green to grey brown, stringers silty limestone, abundant brachiopods, traces pyrite.
- 690 - 790 Shale, medium grey and grey brown, calcareous in part, minor stringers silty limestone, samples soft bailed up with mud, suspect much of shale disintegrated in washing.
- 790 - 830 Limestone, grey brown, argillaceous, silty, tight, traces pyrite, occasional brachiopods.
- 830 - 900 Limestone, light grey brown, microcrystalline, tight, slightly silty brachiopods throughout, occasional crinoid fragments, trace pyrite.
- 900 - 920 Siltstone, light grey brown slightly argillaceous with stringers silty limestone, trace pyrite and brachiopods.
- 920 - 950 Limestone, light grey brown, microcrystalline, silty, argillaceous in part, trace pyrite, occasional brachiopods, increasing traces of green shale.
- 950 - 1000 Limestone, as above interbedded with green shale and calcareous siltstone, trace pyrite, trace brachiopods.

- 1000 - 1170 Siltstone, light grey, calcareous, tight, traces pyrite, occasional brachiopods and crinoid fragments, trace ostracods.
- 1170 - 1190 Limestone, light brown, microcrystalline, trace ostracods.
- 1190 - 1490 Siltstone, light grey, micaceous, calcareous, tight, traces pyrite, traces black carbonaceous flecks 1200-1300.
- 1490 - 1500 Limestone, light grey, microcrystalline, slightly argillaceous, tight.
- 1500 - 1520 Shale, light grey, calcareous, trace black specks.
- 1520 - 1750 Siltstone, light grey, calcareous, slightly argillaceous, micaceous, occasional trace pyrite.
- 1750 - 1780 Limestone, light to medium grey-brown, microcrystalline, silty, tight.
- 1780 - 1860 Siltstone, light grey, calcareous, micaceous, tight.
- 1800 - 2000 Shale, medium grey, slightly calcareous, traces siltstone as above.
- 2000 - 2290 Shale, medium grey, slightly calcareous, traces siltstone.
- 2290 - 2320 Shale as above, traces pyrite.
- 2320 - 2360 Shale, medium to dark brown and grey brown, bituminous, pyrite, slightly calcareous.
- 2360 - 2420 Shale, medium to dark grey, silty, pyritic slightly calcareous.
- 2420 - 2440 Limestone, light brown, algal to finely fragmental, minor stromatoporoid fragments, trace calcispheres, trace pyrite, poor oil staining with positive chlorethane cut, poor finely intercrystalline to earthy porosity.
- 2440 - 2500 Limestone, light brown, algal, trace calcispheres and amphipora, trace widely disseminated fine dolomite rhombs, tight.
- 2500 - 2510 Limestone, micro to fine crystalline, trace dolomite, poor intercrystalline porosity.
- 2510 - 2590 Limestone, dark to medium brown, bituminous, algal, traces amphipora, stroms and calcispheres, trace pyrite throughout, tight.
- 2590 - 2630 Limestone, as above with minor grey-green pyritic waxy shale.

- 2630 - 2680 Limestone, cream to white, microcrystalline, trace pyrite, tight.
- 2680 - 2690 Dolomite, medium brown, finely crystalline, sucrose, poor to fair intercrystalline porosity.
- 2690 - 2720 Limestone, white, microcrystalline, tight.
- 2720 - 2750 Dolomite, white coarsely crystalline, good vuggy porosity, no show of oil.
- 2750 - 2790 Dolomite, light to medium brown, fine to medium crystalline, slightly bituminous, good vuggy and intercrystalline porosity.
- 2790 - 2850 Dolomite, medium brown, finely crystalline sucrose, bituminous, pyrite, good intercrystalline porosity.
- 2850 - 2900 Dolomite, medium to dark brown, fine to micro crystalline, bituminous, pyritic, overall good vuggy and intercrystalline porosity, mud lost to formation at 2880, trace galena.
- 2900 - 3000 Poor samples in limestone, dark brown, bituminous, slightly argillaceous, pyritic with traces brown sucrose dolomite as above, fossiliferous with frequent brachiopods and possible recrystallised stromatoporoid fragments, minor poor intercrystalline porosity.
- 3000 - 3040 Dolomite, dark brown, fine to microcrystalline bituminous, pyritic, very poor vuggy porosity.
- 3040 - 3100 Dolomite, medium brown, fine to medium crystalline, bituminous pyritic, fair to good vuggy and intercrystalline porosity.
- 3100 - 3110 Dolomite, light grey brown, microcrystalline, pyritic, tight.
- 3110 - 3150 Dolomite and anhydrite, medium grey brown microcrystalline, bituminous, pyritic, tight.
- 3150 - 3190 Anhydrite, medium grey brown, microcrystalline, tight, minor anhydritic dolomite as above, trace fine green sandstone 3180.
- 3190 - 3200 Sandstone, white, quartzose, poorly sorted fine grains, sub-angular quartz cemented, coarser grains rounded apparently loose, trace pyrite, no show.
- 3200 - T.D. Granite, white and black, prominent fresh dark mica flakes.

TOUR REPORT

CONTRACTOR *By Lane Ry #2*FIELD *Wilcox* PROPERTY *Indian Landwell No. C-37*
11 P.M.
12 M. *Feb 22* 19*64*☒ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☒ ROTARY

FOR 24 HOURS ENDING

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS " D.P.	NO. <i>14</i> <i>8</i> <i>6</i> <i>8</i> <i>9</i> <i>8</i> <i>8</i> FT.	NO. <i>1</i> <i>2</i> <i>9</i> <i>7</i> <i>9</i> FT.	NO. <i>2</i> <i>6</i> <i>8</i> <i>9</i> <i>5</i> <i>8</i> FT.
" D.P.	NO. <i>1</i> <i>2</i> <i>9</i> <i>7</i> <i>9</i> FT.	NO. <i>1</i> <i>2</i> <i>9</i> <i>7</i> <i>9</i> FT.	NO. <i>2</i> <i>6</i> <i>8</i> <i>9</i> <i>5</i> <i>8</i> FT.
DOUBLE " D.P.	FT.	FT.	FT.
SINGLE " O.D.	FT.	FT.	FT.
" O.D.	FT.	FT.	FT.
DRILL COLLAR " O.D.	NO. <i>1</i> <i>4</i> <i>6</i> <i>4</i> <i>4</i> <i>4</i> FT.	NO. <i>16</i> <i>4</i> <i>6</i> <i>4</i> <i>4</i> <i>4</i> FT.	NO. <i>16</i> <i>4</i> <i>6</i> <i>4</i> <i>4</i> <i>4</i> FT.
REAMER " O.D.	KIND FT.	KIND FT.	KIND FT.
STABILIZER " O.D.	KIND FT.	KIND FT.	KIND FT.
JARS	KIND FT.	KIND FT.	KIND FT.
BUMPER SUB.	FT.	FT.	FT.
BIT OR CORE BARREL	FT.	FT.	FT.
TOTAL D.P. & TOOLS	FT.	FT.	FT.
KELLY DOWN (BELOW R.B.)	<i>3200</i> FT.	FT.	<i>3200</i> FT.
DEPTH OF TOOLS	FT.	FT.	FT.
DEPTH END OF TOUR	<i>3216</i> FEET	FEET	<i>3216</i> FEET
DEPTH START OF TOUR	<i>3214</i> FEET	FEET	FEET
FOOTAGE DRILLED	<i>2</i> FEET	FEET	FEET

DAY-WORK	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP PRESSURE p.s.i.	<i>800</i>			<i>600</i>	<i>600</i>	<i>600</i>	<i>600</i>	<i>600</i>	<i>610</i>			
ROTARY SPEED r.p.m.	<i>65</i>											
WEIGHT ON BIT Tons	<i>11.000</i>											
p.h.	<i>9.5</i>			<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>			
MUD WEIGHT #/gal.	<i>9.2</i>			<i>9.3</i>	<i>9.2</i>	<i>9.2</i>	<i>9.3</i>	<i>9.4</i>	<i>9.2</i>			
MUD VISCOSITY Sec.	<i>50</i>			<i>51</i>	<i>52</i>	<i>52</i>	<i>53</i>	<i>53</i>	<i>54</i>			
WATER LOSS 32nds c.c.	<i>1/2</i>			<i>11.8</i>	<i>11.8</i>	<i>11.8</i>	<i>11.8</i>	<i>11.8</i>	<i>11.8</i>			
PIT VOLUME Ft.-Ins.												

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recovery	BIT CONDITION
<i>18</i>	<i>6 1/4</i>	<i>25254</i>	<i>HTC W7</i>	<i>3 3/4</i>	<i>3203</i>	<i>3216</i>	<i>13</i>		<i>in</i>

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD
DRILLER	<i>R. H. Jones</i>	<i>E. J. Zimmerman</i>	<i>W. H. Thompson</i>	Kind Depth Reading
DERRICKMAN TOOL DRSR.	<i>R. H. Jones</i>	<i>R. Murphy</i>	<i>P. R. Gentry</i>	
HELPER	<i>B. Schmidt</i>	<i>L. Hallant</i>	<i>W. Gunn</i>	
HELPER	<i>D. R. Maxwell</i>	<i>R. Barker</i>	<i>W. Thompson</i>	
HELPER				
FIREMAN	<i>R. H. Jones</i>	<i>E. J. Zimmerman</i>		
TOOL PUSHER				

MUD and CHEMICALS ADDED	From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind Amount			
TOUR 1	<i>12:00</i>	<i>12:15</i>	<i>Big Log</i>
	<i>12:15</i>	<i>12:45</i>	<i>Big Log</i>
	<i>12:45</i>	<i>2:30</i>	<i>Big Log</i>
	<i>2:30</i>	<i>3:15</i>	<i>Big Log</i>
	<i>3:15</i>	<i>8:00</i>	<i>Big Log</i>
TOUR 2	<i>8:00</i>	<i>8:30</i>	<i>Big Log</i>
	<i>8:30</i>	<i>10:00</i>	<i>Big Log</i>
	<i>10:00</i>	<i>10:45</i>	<i>Big Log</i>
	<i>10:45</i>	<i>4:00</i>	<i>Big Log</i>
TOUR 3	<i>4:00</i>	<i>7:00</i>	<i>Big Log</i>
	<i>7:00</i>	<i>8:45</i>	<i>Big Log</i>
	<i>8:45</i>	<i>10:45</i>	<i>Big Log</i>
	<i>10:45</i>	<i>12:00</i>	<i>Big Log</i>

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

*3 1/4 WOOD**3 1/4 WOOD**R. H. Jones*
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR

Big Horn Drilling

FIELD

Mud Lake

PROPERTY

Nothing Lake

WELL No. C-37

11 P.M.

12 M.

Feb 21 1944

☒ DRILLING ☐ DEEPENING ☐ CABLE TOOLS☐ REDRILLING ☐ ABANDONING ☐ ROTARY

FOR 24 HOURS ENDING

DRILLING ASSEMBLY

END OF MORNING TOUR

END OF DAYLIGHT TOUR

END OF AFTERNOON TOUR

STANDS " D.P.

NO.

2

6

8

9

8

8

FT.

NO. 44

2

6

8

9

8

FT.

NO. 44

2

6

8

9

8

FT.

DOUBLE " D.P.

NO.

SINGLE " O.D.

NO.

DRILL COLLAR " O.D.

NO.

16

4

6

4

4

4

FT.

NO. 16

4

6

4

4

4

FT.

NO. 16

4

6

4

4

4

FT.

REAMER " O.D.

KIND

STABILIZER " O.D.

KIND

JARS

KIND

BUMPER SUB.

KIND

BIT OR CORE BARREL

KIND

TOTAL D.P. & TOOLS

KIND

KELLY DOWN (BELOW R.B.)

KIND

DEPTH OF TOOLS

KIND

MORNING TOUR

KIND

DAYLIGHT TOUR

KIND

AFTERNOON TOUR

KIND

DEPTH END OF TOUR

KIND

DEPTH START OF TOUR

KIND

FOOTAGE DRILLED

KIND

DAY WORK

KIND

TOUR REPORT

CONTRACTOR *Big Horn Drilling*FIELD *Wild Cat* PROPERTY *Nathaniel Lake* WELL No. *C-32*
11 P.M. 12 M. *Feb 20* 1964☐ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☐ ROTARY

FOR 24 HOURS ENDING

DRILLING ASSEMBLY			END OF MORNING TOUR							END OF DAYLIGHT TOUR							END OF AFTERNOON TOUR									
STANDS	"	D.P.	NO. 42	2	5	6	8	1	7	FT.	NO. 42	2	6	2	9	0	5	FT.	NO. 43	2	6	2	9	0	8	FT.
"	"	D.P.	NO.							FT.	NO.							FT.	NO.						FT.	
DOUBLE	"	D.P.								FT.								FT.							FT.	
SINGLE	"	O.D.								FT.								FT.							FT.	
"	"	O.D.								FT.								FT.							FT.	
DRILL COLLAR	"	O.D.	NO. 16	4	6	4	4	4		FT.	NO. 16	4	6	4	4	4		FT.	NO.	4	6	4	4	4		FT.
REAMER	"	O.D.	KIND							FT.	KIND							FT.	KIND							FT.
STABILIZER	"	O.D.	KIND							FT.	KIND							FT.	KIND							FT.
JARS			KIND							FT.	KIND							FT.	KIND							FT.
BUMPER SUB.										FT.								FT.								FT.
BIT OR CORE BARREL										FT.								FT.								FT.
TOTAL D.P. & TOOLS										FT.								FT.								FT.
KELLY DOWN (BELOW R.B.)									2039	FT.							700	FT.								FT.
DEPTH OF TOOLS										FT.								FT.								FT.
TOUR			MORNING TOUR							DAYLIGHT TOUR							AFTERNOON TOUR									
DEPTH END OF TOUR				3	0	5	3		FEET			3	1	0	0		FEET			3	1	2	8		FEET	
DEPTH START OF TOUR				9	0	4	2		FEET			3	0	5	3		FEET			3	1	0	0		FEET	
FOOTAGE DRILLED							11		FEET						417		FEET						28		FEET	

DAY WORK	HOURS								HOURS							
	2.00 A.M.	4.00 A.M.	6.00 A.M.	8.00 A.M.	10.00 A.M.	12.00 A.M.	2.00 P.M.	4.00 P.M.	6.00 P.M.	8.00 P.M.	10.00 P.M.	12.00 P.M.	2.00 P.M.	4.00 P.M.	6.00 P.M.	8.00 P.M.
PUMP PRESSURE p.s.i.				800	700	900	900	T	T	700	900					
ROTARY SPEED r.p.m.				100	100	100	100	P	A							
WEIGHT ON BIT Tons				1600	1600	1600	1600	P	P	9.5	9.5					
p.h.				9	9	9.0	9.0	P	P	9.0	9.2					
MUD WEIGHT #/gal.				9.6	9.0	9.0	9.0			9.0	9.2					
MUD VISCOSITY Sec.				62	45	42	46			45	46					
MUD CAKE 32nds				2 1/2	10.1	10.1	10.0			10.5						
WATER LOSS c.c.																
PIT VOLUME Ft.-Ins.																

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recovery	BIT CONDITION
15	6 1/4	494483	Sec - MHL	6	3042	3100	58		Good
16	"	631491	Sec - MHL		3100				Loss

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.

SIGNATURES	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR			DEVIATION RECORD		
	DRILLER	DERRICKMAN	TOOL DRGR.	DRILLER	DERRICKMAN	TOOL DRGR.	DRILLER	DERRICKMAN	TOOL DRGR.	Kind	Depth	Read
	<i>R. Lash</i>	<i>E. Carruth</i>		<i>R. Lash</i>	<i>E. Carruth</i>		<i>LARRY THOMPSON</i>					
	<i>R. Thompson</i>	<i>D. Thompson</i>		<i>R. Thompson</i>	<i>D. Thompson</i>		<i>D. Thompson</i>					
	<i>S. Schmidt</i>	<i>S. Schmidt</i>		<i>S. Schmidt</i>	<i>S. Schmidt</i>		<i>W. Gunn</i>					
	<i>D. Maxwell</i>	<i>R. Borlee</i>		<i>D. Maxwell</i>	<i>R. Borlee</i>		<i>W. Thompson</i>					
	<i>R. Lash</i>	<i>E. Carruth</i>		<i>R. Lash</i>	<i>E. Carruth</i>							

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL	
Kind	Amount			WORK DONE	
TOUR 1		1200	1215	<i>Big Sea</i>	
		1215	130	<i>Run in w/ Magnet</i>	
		130	145	<i>Break even - Blow out Kelly</i>	
		145	215	<i>Log Magnet on Bottom</i>	
		215	230	<i>Blow out Kelly</i>	
		230	400	<i>Start Magnet</i>	
		400	430	<i>Run off Magnet & Break down</i>	
		430	515	<i>Run in w/ Bit</i>	
		515	500	<i>Blow out Kelly Break down - Run together</i>	
TOUR 2		500	800	<i>Drilling</i>	
	<i>1900</i>	800	930	<i>Drilling</i>	
	<i>100</i>	930	1017	<i>Run Serv. Check R.O.P.</i>	
	<i>100</i>	1017	917	<i>Drilling</i>	
	<i>3585</i>	917	717	<i>Give Sample</i>	
	<i>3585</i>	717	307	<i>Blow Kelly</i>	
	<i>4585</i>	307	407	<i>Pull out to Change Bit</i>	
TOUR 3		407	415	<i>HOISTING</i>	
	<i>6 SACS SHOWER</i>	415	430	<i>SER. RIG</i>	
	<i>4 " FIBERSEAL</i>	430	500	<i>SLIP 20' PILE LINE</i>	
	<i>6 SACS GEL</i>	500	630	<i>RUN IN</i>	
		630	715	<i>REEM 15'</i>	
		715	1215	<i>DRILL 6 1/4 HOLE</i>	

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

1 1/4 WOOD P
2 3/4 WOOD P

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *Big Horn Drilling*FIELD *Wild Cat* PROPERTY *Talking Horse* WELL No. *C-34*
11 P.M.
12 M. *Feb 12* 19*60*☒ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☒ ROTARY

FOR 24 HOURS ENDING

DRILLING ASSEMBLY-			END OF MORNING TOUR					END OF DAYLIGHT TOUR					END OF AFTERNOON TOUR												
STANDS	"	D.P.	NO. 41	2	5	0	8	3	5	FT.	NO.					FT.	NO. 42	2	5	6	8	1	7	FT.	
	"	D.P.	NO.							FT.	NO.					FT.	NO.							FT.	
DOUBLE	"	D.P.								FT.						FT.								FT.	
SINGLE	"	O.D.	1							30.00	FT.					FT.								FT.	
	"	O.D.									FT.					FT.								FT.	
DRILL COLLAR	"	O.D.	NO. 16							46444	FT.	NO.				FT.	NO.							46444	FT.
REAMER	"	O.D.	KIND								FT.	KIND				FT.	KIND							FT.	
STABILIZER	"	O.D.	KIND								FT.	KIND				FT.	KIND							FT.	
JARS			KIND								FT.	KIND				FT.	KIND							FT.	
BUMPER SUB.			KIND								FT.	KIND				FT.	KIND							FT.	
BIT OR CORE BARREL											FT.					FT.								FT.	
TOTAL D.P. & TOOLS											FT.					FT.								FT.	
KELLY DOWN (BELOW R.B.)										1221	FT.					FT.								939	FT.
DEPTH OF TOOLS											FT.					FT.								FT.	
MORNING TOUR			DAYLIGHT TOUR					AFTERNOON TOUR																	
DEPTH END OF TOUR			3015							FEET						FEET				3042				FEET	
DEPTH START OF TOUR										FEET						FEET				3015				FEET	
FOOTAGE DRILLED										FEET						FEET				27				FEET	

DAY WORK		HOURS				HOURS				HOURS			
		2.00 A.M.	4.00 A.M.	6.00 A.M.	8.00 A.M.	10.00 A.M.	12.00 A.M.	2.00 P.M.	4.00 P.M.	6.00 P.M.	8.00 P.M.	10.00 P.M.	12.00 P.M.
PUMP PRESSURE	p.s.i.			400	400	700	600	700	900	700			
ROTARY SPEED	r.p.m.					4	4	100	100	800			
WEIGHT ON BIT	Tons					m							
p.H.						u							
MUD WEIGHT	#/gal.					9.0	9.0	9.0	9.0	9.0			
D. VISCOSITY	Sec.			46	38	64	100	100	60				
D. CAKE	32nds					8.2	8.2	8.2	8.2				
WATER LOSS	cc.												
PIT VOLUME	Ft.-Ins.												

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recovery	BIT CONDITION
14	6 1/4	635436	Sec. man	5	3015	3042	27		PULL

CUTTER No.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.

SIGNATURES	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR			DEVIATION RECORD		
	DRILLER	DECKMAN	TOOL DRSR.	DRILLER	DECKMAN	TOOL DRSR.	DRILLER	DECKMAN	TOOL DRSR.	Kind	Depth	Reading
	<i>R. L. Lark</i>	<i>E. L. Carnahan</i>		<i>R. L. Lark</i>	<i>E. L. Carnahan</i>		<i>R. L. Lark</i>	<i>E. L. Carnahan</i>				
	<i>H. L. Lark</i>	<i>E. L. Carnahan</i>		<i>H. L. Lark</i>	<i>E. L. Carnahan</i>		<i>H. L. Lark</i>	<i>E. L. Carnahan</i>				
	<i>S. L. Lark</i>	<i>E. L. Carnahan</i>		<i>S. L. Lark</i>	<i>E. L. Carnahan</i>		<i>S. L. Lark</i>	<i>E. L. Carnahan</i>				
	<i>O. L. Lark</i>	<i>E. L. Carnahan</i>		<i>O. L. Lark</i>	<i>E. L. Carnahan</i>		<i>O. L. Lark</i>	<i>E. L. Carnahan</i>				
	<i>R. L. Lark</i>	<i>E. L. Carnahan</i>		<i>R. L. Lark</i>	<i>E. L. Carnahan</i>		<i>R. L. Lark</i>	<i>E. L. Carnahan</i>				
	<i>R. L. Lark</i>	<i>E. L. Carnahan</i>		<i>R. L. Lark</i>	<i>E. L. Carnahan</i>		<i>R. L. Lark</i>	<i>E. L. Carnahan</i>				

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1				
Water	36.00	12.00	1.30	Wait on mud
Sealant	38.50	1.30	4.30	Thinning mud
FIBERTEX	15.50	5.30	5.30	Back up Kelly + Borehole pier
			8.00	Fixed mud + pier hole to cement + (losing mud slow)
TOUR 2				
Hel-	4000	8.00	11.00	Big Serv. mix mud (losing mud slow)
Sealant	5000	11.00	11.00	Pull out 14 Stands
		11.00	1.00	Put on Kelly, Fall up Hole - Circ. mix on
		1.00	2.15	Pull out to change bits
		2.15	3.15	Change Bits Run in
		3.15	4.00	Circ hole work to Bottom Screen 14 ft.
TOUR 3				
		4.00	4.15	SPR. RIG
		4.15	4.15	RF 100 10 FT UNDER GURGE HIL
		4.15	4.30	PAID BY HOIL
		4.30	4.45	WORK ON TORQUE
		4.45	12.00	12015 FOR RIG

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

*Pulled out #14 - indications of heavy run
iron*

24 hrs W.D.P.

B. L. Lark

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *Big Horn Drilling*FIELD *WILLIAM L. HILL PROPERTY*WELL No. *C-35*☒ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☒ ROTARY

FOR 24 HOURS ENDING

11 P.M.

12 M.

Feb 18 1966

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS " D.P.	NO. 40 2 4 4 6 6 5 FT.	NO. 41 2 5 0 0 2 5 FT.	NO. 41 2 5 0 0 2 5 FT.
" D.P.	NO.	NO.	NO.
DOUBLE " D.P.			
SINGLE " O.D.			
" O.D.			
DRILL COLLAR " O.D.	NO. 16 4 6 4 4 4 FT.	NO. 16 4 6 4 4 4 FT.	NO. 16 4 6 4 4 4 FT.
REAMER " O.D.	KIND	KIND	KIND
STABILIZER " O.D.	KIND	KIND	KIND
JARS	KIND	KIND	KIND
BUMPER SUB.			
BIT OR CORE BARREL			
TOTAL D.P. & TOOLS			
KELLY DOWN (BELOW R.B.)	1 6 0 0 FT.	3 6 2 0 FT.	2 1 2 0 FT.
DEPTH OF TOOLS			
DEPTH END OF TOUR	2 9 2 7 FEET	3 0 0 8 FEET	3 5 1 5 FEET
DEPTH START OF TOUR	2 8 9 3 FEET	2 9 2 7 FEET	3 0 0 8 FEET
FOOTAGE DRILLED	3 4 FEET	8 1 FEET	7 FEET

DAY WORK	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP PRESSURE p.s.i.			800	800		900	900	8	910			
ROTARY SPEED r.p.m.			100	100		160	100	2	150			
WEIGHT ON BIT Tons			16	16		16,000	16,000	2	16			
D.H.			9	9		9	9.4	2	9.0			
MUD WEIGHT #/gal.			9.5	9.5		9.2	9.2	7	9.4			
M VISCOSITY Sec.			43	43		37	39		44			
CAKE 32nds			12	12		11.5	11.5		10.2			
WATER LOSS c.c.												
PIT VOLUME Ft.-Ins.												

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recovery	BIT CONDITION
13	6 1/4	635460	Sec. - MAN	5 1/4	2893	3008	115		in
					3008	3015	7		

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD
DRILLER	<i>R. H. Hask</i>	<i>Ed. Carmichael</i>	<i>L. R. H. Thompson</i>	Kind Depth Reading
DERRICKMAN TOOL DRSR.	<i>V. Thomas</i>	<i>N. Murphy</i>	<i>P. G. GUSTINE</i>	
HELPER	<i>S. Schmitt</i>	<i>T. Hall</i>	<i>W. G. GUNN</i>	
HELPER	<i>D. Maxwell</i>	<i>R. Porter</i>	<i>W. H. HARRISON</i>	
HELPER				
FIREMAN	<i>Rich. Thomas</i>	<i>P. Timmonson</i>	<i>R. H. TRUSS</i>	
TOOL PUSHER				

DEVIATION RECORD
Kind Depth Reading
SS 3000 10

MUD and CHEMICALS ADDED	From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind Amount	12 00	12 15	
5.1 #2200	12 15	12 15	Reel Volume in mud tank to have to be
Ammonia 5.000	1 45	2 45	Working in hole
	2 45	4 15	Run in well
	4 15	8 00	Break wire & Run to bottom 35 ft
			Drilling
TOUR 2	8 00	9 00	Drilling
Hel 1500	9 00		Repair Air Line, Serv. Pump, Fuel Fe
Carate 50		11 00	Reserve Tanks to main Tanks
	11 00	3 30	Drilling
	3 30	4 00	Survey & Check Pump
TOUR 3	4 00	4 15	Reel P.D.
CAUSTIC 200	4 15	5 15	Reel
SPERGIE 200	5 15	6 15	Work on Tongue
TANNIN 100	6 15	6 45	Blow Out Kelly & Mud Lines
6 SAW DUST 600	6 45	7 00	HOISTING (HOLE TIGHT)
	7 00	8 30	INSTALL NEW AIR COMPRESSOR
	8 30	11 00	WAIT ON MUD
	11 00	12 00	MIXING MUD

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

*Pipe stuck hole**1 1/2 WOP
22 1/2 WOP*

TOUR REPORT

CONTRACTOR *R.C. HERN DRILL*FIELD *WILD CAT* PROPERTY *TATHALAKE* WELL NO. *C-34*
11 P.M.
12 M. *FEB 17* 1964☒ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REGRINDING ☐ ABANDONING ☐ ROTARY

FOR 24 HOURS ENDING

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS " D.P. NO. 38	2 3 2 3 4 9 FT.	NO. 37 2 3 8 6 0 FT.	NO. 39 2 4 1 5 6 0 FT.
" D.P. NO.			
DOUBLE " D.P.			
SINGLE " O.D.			
" O.D.			
DRILL COLLAR " O.D. NO. 16	4 6 4 4 4 FT.	NO. 16 4 6 4 4 4 FT.	NO. 16 4 6 4 4 4 FT.
REAMER " O.D. KIND			
STABILIZER " O.D. KIND			
JARS KIND			
BUMPER SUB. KIND			
BIT OR CORE BARREL			
TOTAL D.P. & TOOLS			
KELLY DOWN (BELOW R.B.)	3 6 2 0 FT.	2 2 0 0 FT.	1 2 9 6 FT.
DEPTH OF TOOLS			

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR		2 8 7 2 FEET	2 8 9 3 FEET
DEPTH START OF TOUR	2 8 2 4 FEET	2 8 2 4 FEET	2 8 7 2 FEET
FOOTAGE DRILLED		4 8 FEET	21 FEET

DAY WORK	2.00 A.M.	4.00 A.M.	6.00 A.M.	8.00 A.M.	10.00 A.M.	12.00 A.M.	2.00 P.M.	4.00 P.M.	6.00 P.M.	8.00 P.M.	10.00 P.M.	12.00 P.M.
PUMP PRESSURE p.s.i.					T	900	900	900		900		
ROTARY SPEED r.p.m.					r	100	100	100		100		
WEIGHT ON BIT Tons					i	16000	16000	16000		1600		
p.H.					P	9.0	9.0	9.0		90		
MUD WEIGHT #/gal.						10.0	10.1	10.0		10.0		
MUD VISCOSITY Sec.						41	42	44		48		
MUD CAKE 32nds						10.0	10.0	10.0		10.0		
WATER LOSS c.c.												
PIT VOLUME cu. ins.												

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recov'y	BIT CONDITION
12	6 1/4	32747	Smith - D126	5 1/4	2824	2872	48		See
11	1 1/2	"	"	2 1/4	"	2893	21		

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD
DRILLER	<i>R. H. Hark</i>	<i>Ed. Carnahan</i>	<i>LARRY THOMPSON</i>	Kind Depth Reading
DERRICKMAN TOOL DRSR.	<i>R. Thorne</i>	<i>T. Murphy</i>	<i>P. BOSTIE</i>	
HELPER	<i>S. Schmidt</i>	<i>L. Ballant</i>	<i>W. LUNN</i>	
HELPER	<i>D. Maxwell</i>	<i>R. Borki</i>	<i>W. Thompson</i>	
HELPER				
FIREMAN	<i>W. H. Hark</i>	<i>E. Zimmerman</i>	<i>R. L. Fouse</i>	
TOOL PUSHER				

MUD and CHEMICALS ADDED

Kind Amount

From To

1200 200

200 530

530 600

600 800

OTHER HOURLY OPERATING DETAIL

WORK DONE

Reg. Serv. + Wash. Torque
Wash. Torque (Torque slipping)
Run in 3 1/2" + Wash. Torque
*Lines + Load Mud + Wash. Torque**Rig Serv. Check BOP*
Run in w/ Bit
Break Circ. Clean To Bottom (Run 20' Tubing)
Drilling
Put on Shaker Screen
*Drilling**S.E.R. R.C.*
Drill
Circ. Mix Mud + Lost Circ. Material
Drill
Drilling + Work On Torque

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

24 Lbs WOP

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *Bay Area Drilling*FIELD *W. 10 Cat* PROPERTY *TATHUM LAKE WELL NO. C-39*

11 P.M.

12 M.

FEB. 16 1964

FOR 24 HOURS ENDING

☒ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☐ ROTARY

END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
DRILLING ASSEMBLY	NO.	27	226	1	FT.	NO.	38	23	23	49	FT.
STANDS	"	D.P.									
"	"	D.P.									
DOUBLE	"	D.P.									
SINGLE	"	O.D.									
"	"	O.D.									
DRILL COLLAR	"	O.D.	NO. 16	4	6	4	4	4	FT.	NO. 16	4
REAMER	"	O.D.	KIND							KIND	
STABILIZER	"	O.D.	KIND							KIND	
JARS			KIND							KIND	
BUMPER SUB.											
BIT OR CORE BARREL											
TOTAL D.P. & TOOLS											
KELLY DOWN (BELOW R.B.)				1	4	0	0	FT.			
DEPTH OF TOOLS											
T											
DEPTH END OF TOUR				2	7	3	9	FEET			
DEPTH START OF TOUR				2	7	0	0	FEET			
FOOTAGE DRILLED				3	9			FEET			

MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
2.00 A.M.	4.00 A.M.	6.00 A.M.	8.00 A.M.	10.00 A.M.	12.00 A.M.	2.00 P.M.	4.00 P.M.	6.00 P.M.	8.00 P.M.	10.00 P.M.	12.00 P.M.
PUMP PRESSURE p.s.i.	800		800	800	800	800			800		
ROTARY SPEED r.p.m.	90		90	90	100	100			100		
WEIGHT ON BIT Tons	16.00		16.00	16.00	17.00	17.00			9.2		
p.H.	9.		9.	9.	9.	9.2			10.0		
MUD WEIGHT #/gal.	10.1		10.1	10.0	10.0	10.0			42		
M VISCOSITY Sec.	45		42	38	37	41			10.2		
M CAKE 32nds	2			10.	10.2	10.2					
WATER LOSS c.c.	10										
PIT VOLUME Ft.-Ins.											

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recov'y	BIT CONDITION
10	6 1/4	635453	Sec M4N	5 1/2	2661	2722	61		locked
11	6 1/4	622507	" M4N	2 3/4	2722	2739	17		is
11	6 1/4	622507	" "	9 1/2	2722	2824	102		

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.

SIGNATURES			MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
DRILLER			<i>R. L. Truss</i>	<i>Ed. Carnahan</i>	<i>LARRY THOMPSON</i>	Kind	Depth	Reading
DERRICKMAN TOOL DRSR.			<i>R. L. Truss</i>	<i>N. Murphy</i>	<i>D. BOGSTIE</i>			
HELPER			<i>S. Schmitt</i>	<i>P. Hallant</i>	<i>W. GUNN</i>			
HELPER			<i>D. Marshall</i>	<i>R. Barker</i>	<i>W. THOMPSON</i>			
HELPER					<i>R. L. TRUSS</i>			
FIREMAN								
TOOL PUSHER								

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL	
Kind	Amount			WORK DONE	
TOUR 1		1760	18 13	<i>Rig Serv</i> <i>Drilling</i> <i>Blow out Kelly's Circ. sep sample</i> <i>Trip for 1327</i> <i>Brig. circ. + Run to Bottom</i> <i>Drilling</i>	
		17 15	2 00		
		17 00	2 30		
		2 30	5 00		
		5 00	5 15		
		5 15	8 00	<i>Rig Serv. Check Pipe Run</i> <i>Drilling</i> <i>Circ. To Trip</i> <i>Work on Motor. (Drawworks)</i>	
TOUR 2		8 00	8 15		
		1300 #	3 00		
		50 #	3 15		
		50 #	3 15		
		50 #	4 00	<i>Work on Motor (Drawworks Torque Pump)</i> <i>Trip for Bit. # 12</i> <i>INSTALL NEW TORQUE ON</i> <i>DRAW WORKS MOTOR.</i>	
TOUR 3		4 00	5 30		
		5 30	6 30		
		6 30	12 00		

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

5 1/2 WOP
18 1/2 WOP

TOUR REPORT

CONTRACTOR R.E. HORN D.E.FIELD WIND LIFT PROPERTY TIMM LAKIE WELL No. C-79
11 P.M.
12 M. FEB. 15 1964☐ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☐ ROTARY

FOR 24 HOURS ENDING

MUD and CHEMICALS ADDED

From

To

OTHER HOURLY OPERATING DETAIL
WORK DONE

DRILLING ASSEMBLY			END OF MORNING TOUR					END OF DAYLIGHT TOUR					END OF AFTERNOON TOUR				
STANDS	"	D.P.	NO. 34	26	74	53	FT.	NO. 35	21	32	02	FT.	NO. 36	22	06	01	FT.
	"	D.P.	NO.				FT.	NO. 1		51	02	FT.	NO.				FT.
DOUBLE	"	D.P.					FT.					FT.					FT.
SINGLE	"	O.D.					FT.					FT.					FT.
	"	O.D.					FT.					FT.					FT.
DRILL COLLAR	" 4 3/4	O.D.	NO.	46	44	44	FT.	NO.	46	44	41	FT.	NO. 46	46	44	44	FT.
REAMER	"	O.D.	KIND				FT.	KIND				FT.	KIND				FT.
STABILIZER	"	O.D.	KIND				FT.	KIND				FT.	KIND				FT.
JARS			KIND				FT.	KIND				FT.	KIND				FT.
BUMPER SUB.			KIND				FT.	KIND				FT.	KIND				FT.
BIT OR CORE BARREL							FT.					FT.					FT.
TOTAL D.P. & TOOLS							FT.					FT.					FT.
KELLY DOWN (BELOW R.B.)				29	01		FT.		29	00		FT.		36	20		FT.
DEPTH OF TOOLS							FT.					FT.					FT.
TOUR			MORNING TOUR					DAYLIGHT TOUR					AFTERNOON TOUR				
DEPTH END OF TOUR			2	5	5	8	FEET	2	6	6	1	FEET	2	7	0	2	FEET
DEPTH START OF TOUR			2	4	8	5	FEET	2	5	5	5	FEET	2	6	6	1	FEET
FOOTAGE DRILLED			1	1	3		FEET	1	0	5		FEET	3	9			FEET

DAY WORK		HOURS				HOURS				HOURS			
		2.00 A.M.	4.00 A.M.	6.00 A.M.	8.00 A.M.	10.00 A.M.	12.00 A.M.	2.00 P.M.	4.00 P.M.	6.00 P.M.	8.00 P.M.	10.00 P.M.	12.00 P.M.
PUMP PRESSURE	p.s.i.	800		800		800	800	800		800	800	800	
ROTARY SPEED	r.p.m.	110		100		100	100	100		100	100	100	
WEIGHT ON BIT	Tons	15		15		16	16	16		17	17	17	
p.H.		9.0				9.0	9.0	9.0		9.0	9.0	9.0	
MUD WEIGHT	#/gal.	10		10	10	10.0	10.0	10.1		10.1	10.0	10.0	
MUD VISCOSITY	Sec.	44		45	45	41	41	40		40	44	47	
MUD CAKE	32nds	2/2				3/2-10	3/2	3/2-10		3/2	10.4	10.0	
WATER LOSS	c.c.												
PIT VOLUME	Ft.-Ins.	10.4			10.4								

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recovery	BIT CONDITION
8	6 1/4	27913	SMITH - DTAC		2485				
			BEAMED FROM 2435-2485		2435	2555	5 1/4		
9	1 1/4	32535	SMITH - DT	7	2555	2661	10 1/2		
10	6 1/4	635453	Sec. M42	3 1/2	2661	2700	39		
CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.	

SIGNATURES	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR			DEVIATION RECORD		
	DRILLER	DECKMAN	TOOL DRSR.	DRILLER	DECKMAN	TOOL DRSR.	DRILLER	DECKMAN	TOOL DRSR.	Kind	Depth	Reading
	LARRY THOMPSON	D. ROOSTER		Kyle Kanti	R. Thompson		Ed. Carmichael	M. Murphy		SS	2700	1"
	W. BUNN			S. Schmidt			L. Halland					
	W. THOMPSON			R. Schmidt			R. Burke					
	BL. TRUSS			E. Thompson								

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

11 1/2 12 00 Drilling

3/4 WOODP

13 1/4 WOODP

B. H. HORN
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *B. C. L. HORN*FIELD *W. L. D. C. S.* PROPERTY *TRIMMINS LAKE* WELL No. *C-29*
☐ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☐ ROTARY

FOR 24 HOURS ENDING

11 P.M.

12 M.

Feb. 14

19

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS " D.P.	NO. <i>32</i> 1 9 5 3 6 9 FT.	NO. <i>33</i> 2 2 1 5 1 2 FT.	NO. <i>32</i> 1 9 5 3 6 9 FT.
" D.P.	NO.	NO.	NO.
DOUBLE " D.P.			
SINGLE " C.D.			
" O.D.			
DRILL COLLAR <i>43/4 D.</i>	NO. <i>16</i> 4 0 5 9 4 FT.	NO. <i>16</i> 4 0 5 9 4 FT.	NO. <i>16</i> 4 0 5 9 4 FT.
REAMER " O.D.	KIND	KIND	KIND
STABILIZER " O.D.	KIND	KIND	KIND
JARS	KIND	KIND	KIND
BUMPER SUB.			
BIT OR CORE BARREL	5 5 6 0 FT.	5 5 6 0 FT.	5 5 6 0 FT.
TOTAL D.P. & TOOLS			
KELLY DOWN (BELOW R.B.)	3 6 2 0 FT.	3 6 2 0 FT.	3 6 2 0 FT.
DEPTH OF TOOLS			
TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	2 4 5 1 FEET	2 4 5 1 FEET	2 4 5 1 FEET
DEPTH START OF TOUR	2 4 3 5 FEET	2 4 3 5 FEET	2 4 3 5 FEET
FOOTAGE DRILLED	1 1 6 FEET	1 1 6 FEET	1 1 6 FEET

DAY WORK	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP PRESSURE p.s.i.				12 00			12 00					
ROTARY SPEED r.p.m.				90			90					
WEIGHT ON BIT Tons				10 00			10 00					
p.H.				9 0			9 0					
MUD WEIGHT #/gal.				10 2			10 2					
MUD VISCOSITY Sec.				50			50					
MUD CAKE 32nds				1/2			1/2					
WATER LOSS C.C.				8 6			8 6					
PIT VOLUME Ft.-Ins.												

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recovery	BIT CONDITION
7	5"	5-63			2435	2485	50		
8	6 1/4	27913	AT 26 Smith %	3	2435	2475	40		in

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.
1	D							
2	DEE	24						

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD
DRILLER	<i>Jerry Thompson</i>	<i>K. L. Lank</i>	<i>Ed. Cannellin</i>	
DERRICKMAN TOOL DRSR.	<i>P. Boestie</i>	<i>R. Thompson</i>	<i>N. Murphy</i>	
HELPER	<i>W. Rounn</i>	<i>S. Schmidt</i>	<i>J. Hall</i>	
HELPER	<i>W. Thompson</i>	<i>W. Marshall</i>	<i>R. Barker</i>	
HELPER				
FIREMAN	<i>DL. TRUSS</i>	<i>E. J. ...</i>		
TOOL PUSHER				

MUD and CHEMICALS ADDED	From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
TOUR 1			
Kind	Amount		
CEH	500		SEP. P. E.
TENNATHIN	100		WASH MAKE UP + S. R.
			CORE BBL.
			RUN IN
			CIRC CORE BBL.
			CUT CORE #1
TOUR 2			
Kind	Amount		
300 # N. 1			High Low Check 1300
			lifting core #1
			Blow out Kelly
			Wash core
TOUR 3			
Kind	Amount		
Hel	600		Pull out D.C. Remover Core
			Wash & Box Core
			Services Core BBL. Lay down
			Rig Rev
			Run in w/ D.C.
			Blow Kelly Break Circ.
			Steam off Shaker
			Steam Hot Hot

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Drillpipe Measurement 6/6 1953-69
 New 1954-46 No correction.
 Cut core #1 2435-2485 Rec 50.3

3 1/4 WOOD
 2 1/4 WOOD

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR R. E. HORNFIELD WILKINSON PROPERTY JATHLING L&S WELL No. C-39☐ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☐ ROTARY

FOR 24 HOURS ENDING

11 P.M.

12 M. FEB. 13 1964

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS " D.P.	NO. 28	NO. 30	NO. 32
" " D.P.	NO. 1		
DOUBLE " D.P.			
SINGLE " O.D.			
" " O.D.			
DRILL COLLAR " 4 7/8 D.	NO. 16	NO. 16	NO. 16
REAMER " O.D.	KIND	KIND	KIND
STABILIZER " O.D.	KIND	KIND	KIND
JARS	KIND	KIND	KIND
BUMPER SUB.	KIND	KIND	KIND
BIT OR CORE BARREL			
TOTAL D.P. & TOOLS			
KELLY DOWN (BELOW R.B.)	2935	1900	
DEPTH OF TOOLS			

TUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	2230	2312	2435
DEPTH START OF TOUR	2051	2230	2312
FOOTAGE DRILLED	179	82	123

DAY WORK	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP PRESSURE p.s.i.	800		810	800			10.2	10.4	800	800	800	
ROTARY SPEED r.p.m.	110	100		710			100	100	100	100	100	
WEIGHT ON BIT Tons	15 ^m			15 ^m			16 ^m	16 ^m	16,000	1600	16,000	
p.H.							9.5	9.5				
MUD WEIGHT #/gal.	9.8						10.4	10.4	10.4	10.4	10.4	
MUD VISCOSITY Sec.	37						47	47	48	48	48	
MUD CAKE 32nds							10.86	10.86	10.2	10.2	10.2	
WATER LOSS cc.	18.6											
PIT VOLUME Ft.-Ins.												

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recovery	BIT CONDITION
5	6 1/4	32601	DT Smith	1 1/4	1755	2230	440		Good
6	6 1/4	26175	HTC-05C-1B	7 1/4	2230	2435	105		Good

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD
DRILLER	LARRY THOMPSON	R. Horn	Ed. Carnahan	SS 3435 1 1/4
DERRICKMAN TOOL DRSR.	D. ROGERS	R. Thomas	M. Murphy	
HELPER	W. GUNN	S. Schmitt	J. Hallant	
HELPER	W. THOMPSON	D. Maxwell	R. Barber	
HELPER				
FIREMAN	R. L. TRUSS	E. Timmerman		
PUSHER				

MUD and CHEMICALS ADDED	From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount		
TOUR 1			
500 GEL	12:00	12:12	DRILL
TENNISUM 100	12:12	12:30	INSTALL NEW FUEL PUMP ON MOTOR
TOUR 2			
	8:00	8:35	Rig up + Check BOP
	8:35	9:10	Drill pipe + Blow out Kelly
	9:10	10:30	Turn on Drums (Borehole loss)
	10:30	12:15	Start to change Bit + Run in
	12:15	12:30	Break core
	12:30	2:30	Drilling
	2:30	2:45	Run samples
	2:45	3:15	Drilling
TOUR 3			
	3:15	3:50	Work on pump
	3:50	4:00	Drilling
	4:00	5:00	Rig Serv, Check motor's Change Fuel line
	5:00	6:00	Drilling
	6:00	6:10	Work on Air Line
	6:10	9:30	Run samples Drilling
	9:30	10:10	Run samples
	10:10	10:40	Run Serv, Blow Kelly

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

10:40 12:00 Pull out (measures)

24 W.D.P.

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR RIC HORN

FIELD WILLISTON PROPERTY WELL No. C-35

☐ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☐ ROTARY

FOR 24 HOURS ENDING

11 P.M.

12 M.

FEB. 12

1961

DRILLING ASSEMBLY			END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS	"	D.P.	NO. 21	12	14	98	FT.	NO. 21	130	51	7
"	"	D.P.	NO.				FT.	NO.			
DOUBLE	"	D.P.					FT.				
SINGLE	"	O.D.					FT.				
"	"	O.D.					FT.				
DRILL COLLAR	"	D.P.	NO. 16	46	44	4	FT.	NO. 16	46	44	4
REAMER	"	O.D.	KIND				FT.	KIND			
STABILIZER	"	O.D.	KIND				FT.	KIND			
JARS			KIND				FT.	KIND			
BUMPER SUB.							FT.				
BIT OR CORE BARREL							FT.				
TOTAL D.P. & TOOLS							FT.				
KELLY DOWN (BELOW R.B.)				36	20		FT.		36	20	
DEPTH OF TOOLS							FT.				

MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR		
DEPTH END OF TOUR		1775	FEET	1790	FEET	3051	FEET	
DEPTH START OF TOUR		1592	FEET	1775	FEET	1790	FEET	
FOOTAGE DRILLED		183	FEET	15	FEET	261	FEET	

DAY WORK	HOURS				HOURS				HOURS			
	2.00 A.M.	4.00 A.M.	6.00 A.M.	8.00 A.M.	10.00 A.M.	12.00 A.M.	2.00 P.M.	4.00 P.M.	6.00 P.M.	8.00 P.M.	10.00 P.M.	12.00 P.M.
PUMP PRESSURE p.s.i.	800	800	800	800	800				700	900	800	800
ROTARY SPEED r.p.m.	100	110	120	100	100				120	120	120	120
WEIGHT ON BIT 1000 LBS	12	12	12	16	16				16	16	16	16
D.H.												
MUD WEIGHT #/gal.	10	10.5	10.7	10.4	10.4				9.6	9.6	9.6	9.6
MUD VISCOSITY Sec	38	38	42	42	42				32	38	32	32
MUD CAKE 32nds	12								10	10	10	10
WATER LOSS c.c.												
PIT VOLUME Ft.-Ins.												

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recovery	BIT CONDITION
4	6 1/2	EM3023	REED YTB	10 3/4	1501	1785	284		#1 Locked
5	6 1/4	32601	SMITH DT	6 3/4	1785	2051	261		in

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.

SIGNATURES	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR		DEVIATION RECORD		
	DRILLER	L THOMPSON	R LARK	EL. Larnaker	SS	2051	Kind	Depth	Reading
DERRICKMAN TOOL DRSR		D BOSTIE	P. THEROU	N. Murphy					
HELPER		W. GUNN	S. Schmidt	L. Ballant					
HELPER		W. THOMPSON	D. Maxwell	R. Barber					
HELPER									
FIREMAN		K.L. TRUSS	E. Timmermann						
TOOL PUSHER									

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL	
Kind	Amount			WORK DONE	
TOUR 1		12 1/2	12 1/2	S.E.P. RIC NAIRN & SUTHER RUBY SURVEY	
66L 1000 LBS		745	85		
TOUR 2		8 00	8 30	Big Serv & Chuck Drilling Hazel, Gray, Birt Chuck Blind Pump Clean mud tank - Full mixed tank - + Mix mud - Pump feed from supply tank & rig tank Run in the bit	
1500 LBS		9 30	9 40		
		9 40	10 00		
		10 00	10 15		
		10 15			
TOUR 3		3 00	3 00	Big Serv Drilling Circ. Samples Drilling Survey	
Hel	700#	4 00	4 10		
Curia	100#	4 10	9 45		
Barium	200#	9 45	10 30		
Ammonium	200#	10 30	11 40		
		11 40	12 00		

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

4 3/4 WOP
19 1/4 WOP

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR B.C. HOBINFIELD W. L. D. CAT PROPERTY TATHLINA LAKE No. C-39

11 P.M.

12 M.

FEB. 11 1961

FOR 24 HOURS ENDING

☐ DRILLING ☐ DEEPENING ☐ CABLE TOOLS☐ REDRILLING ☐ ABANDONING ☐ ROTARY

DRILLING ASSEMBLY

END OF MORNING TOUR

END OF DAYLIGHT TOUR

END OF AFTERNOON TOUR

STANDS " D.P.

NO. 1

69736 FT.

NO.

97007 FT.

NO. 18

109222 FT.

DOUBLE " D.P.

NO.

NO.

NO.

NO.

NO.

SINGLE " O.D.

NO.

NO.

NO.

NO.

NO.

DRILL COLLAR " O.D.

NO. 16

46444 FT.

NO. 16

46444 FT.

NO. 16

46444 FT.

REAMER " O.D.

KIND

KIND

KIND

KIND

KIND

STABILIZER " O.D.

KIND

KIND

KIND

KIND

KIND

JARS

KIND

KIND

KIND

KIND

KIND

BUMPER SUB.

KIND

KIND

KIND

KIND

KIND

BIT OR CORE BARREL

KIND

KIND

KIND

KIND

KIND

TOTAL D.P. & TOOLS

KIND

KIND

KIND

KIND

KIND

KELLY DOWN (BELOW R.B.)

KIND

KIND

KIND

KIND

KIND

DEPTH OF TOOLS

KIND

KIND

KIND

KIND

KIND

TOUR

KIND

KIND

KIND

KIND

KIND

DEPTH END OF TOUR

KIND

KIND

KIND

KIND

KIND

DEPTH START OF TOUR

KIND

KIND

KIND

KIND

KIND

FOOTAGE DRILLED

KIND

KIND

KIND

KIND

KIND

DAY WORK

KIND

KIND

KIND

KIND

KIND

PUMP PRESSURE p.s.i.

KIND

KIND

KIND

KIND

KIND

ROTARY SPEED r.p.m.

KIND

KIND

KIND

KIND

KIND

WEIGHT ON BIT Tons

KIND

KIND

KIND

KIND

KIND

p.H.

KIND

KIND

KIND

KIND

KIND

MUD WEIGHT #/gal.

KIND

KIND

KIND

KIND

KIND

MUD VISCOSITY Sec.

KIND

KIND

KIND

KIND

KIND

MUD CAKE 32nds

KIND

KIND

KIND

KIND

KIND

WATER LOSS c.c.

KIND

KIND

KIND

KIND

KIND

PIT VOLUME Ft.-Ins.

KIND

KIND

KIND

KIND

KIND

NO.

KIND

KIND

KIND

KIND

KIND

SIZE

KIND

KIND

KIND

KIND

KIND

SERIAL

KIND

KIND

KIND

KIND

KIND

BIT OR CORE BARREL

KIND

KIND

KIND

KIND

KIND

KIND AND TYPE

KIND

KIND

KIND

KIND

KIND

TOTAL HOURS

KIND

KIND

KIND

KIND

KIND

FROM

KIND

KIND

KIND

KIND

KIND

TO

KIND

KIND

KIND

KIND

KIND

Total Bit Footage

KIND

KIND

KIND

KIND

KIND

Core Recovery

KIND

KIND

KIND

KIND

KIND

GIT CONDITION

KIND

KIND

KIND

KIND

KIND

CUTTER NO.

KIND

KIND

KIND

KIND

KIND

TYPE

KIND

KIND

KIND

KIND

KIND

IN AT - FT.

KIND

KIND

KIND

KIND

KIND

OUT AT - FT.

KIND

KIND

KIND

KIND

KIND

CENTRE BIT No.

KIND

KIND

KIND

KIND

KIND

CATCHER No.

KIND

KIND

KIND

KIND

KIND

TYPE

KIND

KIND

KIND

KIND

KIND

IN AT - FT.

KIND

KIND

KIND

KIND

KIND

OUT AT - FT.

KIND

KIND

KIND

KIND

KIND

SIGNATURES

KIND

KIND

KIND

KIND

KIND

MORNING TOUR

KIND

KIND

KIND

KIND

KIND

DAYLIGHT TOUR

KIND

KIND

KIND

KIND

KIND

AFTERNOON TOUR

KIND

KIND

KIND

KIND

KIND

DEVIATION RECORD

KIND

KIND

KIND

KIND

KIND

Kind

KIND

KIND

KIND

KIND

KIND

Depth

KIND

KIND

KIND

KIND

KIND

Reading

KIND

KIND

KIND

KIND

KIND

SIGNATURE COMPANY ENGINEER

KIND

KIND

KIND

KIND

KIND

SIGNATURE

KIND

KIND

KIND

KIND

KIND

SIGNATURE

KIND

KIND

KIND

KIND

KIND

SIGNATURE

KIND

KIND

KIND

KIND

KIND

SIGNATURE

KIND

KIND

KIND

KIND

KIND

SIGNATURE

KIND

KIND

KIND

KIND

KIND

SIGNATURE

KIND

KIND

KIND

KIND

KIND

SIGNATURE

KIND

KIND

KIND

KIND

KIND

TOUR REPORT

CONTRACTOR *G. E. HORN*FIELD *W. 140. C. 21* PROPERTY *11 P.M.* WELL No. *C-39*
☒ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☒ ROTARY FOR 24 HOURS ENDING *12 M. FEB-10 1964*

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	" D.P.	NO.				NO. 3				NO. 3			
	" D.P.	NO.				NO.				NO. 7			
DOUBLE	" D.P.												
SINGLE	" O.D.									1			
	" O.D.												
DRILL COLLAR	" 1 3/4 O.D.	NO. 12				NO. 16				NO. 16			
REAMER	" O.D.	KIND				KIND				KIND			
STABILIZER	" O.D.	KIND				KIND				KIND			
JARS		KIND				KIND				KIND			
BUMPER SUB.													
BIT OR CORE BARREL													
TOTAL D.P. & TOOLS													
KELLY DOWN (BELOW R.B.)													
DEPTH OF TOOLS													

TOUR		MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
DEPTH END OF TOUR													
DEPTH START OF TOUR													
FOOTAGE DRILLED													

DAY WORK	HOURS				HOURS				HOURS			
	2.00 A.M.	4.00 A.M.	6.00 A.M.	8.00 A.M.	10.00 A.M.	12.00 A.M.	2.00 P.M.	4.00 P.M.	6.00 P.M.	8.00 P.M.	10.00 P.M.	12.00 P.M.
PUMP PRESSURE p.s.i.	500	500	500		500	550	600	600	600	600	600	600
ROTARY SPEED r.p.m.	100	100	100		100	100	120	120	120	120	120	120
WEIGHT ON BIT Tons	10				12	14	16	16	16,000	16,000	16,000	16,000
p.H.												
MUD WEIGHT #/gal.	8.8	8.8	8.8		8.8	8.8	9	9.4	9.0	9.5	9.5	9.4
MUD VISCOSITY Sec.	30	30	33		32	31	30	33	37	30	30	33
MUD CAKE 32nds												
WATER LOSS c.c.												
PIT VOLUME Ft.-ins.												

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recov'y	BIT CONDITION
1	6 1/2	21655	H.T.C. - OSC 16	7 1/4	216	354	168		17 1/2
1	6 1/4	21653	H.T.C. - OSC 16	13 1/2	376	591	375		Good
2	6 1/4	32558	Smith DT	1	591	683	92		in
2	6 1/4	32558	" "	8	591	936	345		in

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.
2	DT							

SIGNATURES	TOUR			DEVIATION RECORD		
	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	Kind	Depth	Reading
DRILLER	<i>Larry Thompson</i>	<i>R. Clark</i>	<i>Ed. Carrison</i>	1	200	
DERRICKMAN	<i>D. BEESTIE</i>	<i>R. Thorsen</i>	<i>N. Murphy</i>	55	622	3/4
TOOL DRSR.						
HELPER	<i>W. GUNN</i>	<i>S. Schmidt</i>	<i>J. Hallan</i>			
HELPER	<i>W. Thompson</i>	<i>D. Maxwell</i>	<i>P. Barker</i>	55	925	3/4
HELPER						
FIREMAN	<i>R. L. TBUSS</i>	<i>E. T. J. J. J.</i>				
TOOL WHER						

MUD and CHEMICALS ADDED		From		To		OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount					
TOUR 1 WATER		12 1/2	12 1/2			<i>S.F.R. RIL</i> <i>Work 6 1/4 Hole</i> <i>RUN SURVEY</i> <i>WEAR OFF GUMMET ON</i> <i>STUFFING BOX ON Pump</i> <i>Walk</i>
<i>CEMENT</i>	<i>2000</i>	<i>12 1/2</i>	<i>3 1/2</i>			
<i>TRANSNETHINI</i>	<i>100</i>	<i>3 1/2</i>	<i>3 3/4</i>			
<i>CAUSTIC</i>	<i>180</i>	<i>3 3/4</i>	<i>4 1/4</i>			
<i>3-1/2</i>	<i>150</i>	<i>4 1/4</i>	<i>5 1/2</i>			
TOUR 2		8 1/2	8 1/2			<i>Rig Serv. + Check BOP</i> <i>Drilling</i> <i>Load the Bit + Run in</i> <i>Drilling</i> <i>Drilling</i> <i>Drilling</i>
<i>3-1/2 300</i>	<i>2000</i>	<i>8 1/2</i>	<i>9 00</i>			
		<i>9 00</i>	<i>2 45</i>			
		<i>2 45</i>	<i>3 15</i>			
		<i>3 15</i>	<i>2 30</i>			
		<i>2 30</i>	<i>4 00</i>			
TOUR 3		4 04	4 17			<i>Rig Serv.</i> <i>Drill 6 1/4 Hole</i> <i>Dump Shaker Tank</i> <i>Drill 6 1/4 Hole</i> <i>Survey</i> <i>Drill 6 1/4 Hole</i>
<i>Val-700</i>		<i>4 04</i>	<i>7 00</i>			
		<i>7 00</i>	<i>7 37</i>			
		<i>7 37</i>	<i>11 15</i>			
		<i>11 15</i>	<i>11 39</i>			
		<i>11 39</i>	<i>12 07</i>			

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

24 WOP

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR RIG BORNFIELD W. L. L. CO. PROPERTY 11 P.M. WELL No. C-39
12 M. Feb 9 1951☐ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☐ ROTARY

FOR 24 HOURS ENDING

DRILLING ASSEMBLY			END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	"	D.P.	NO.			FT.	NO.			FT.	NO.			FT.
"	"	D.P.	NO.			FT.	NO.			FT.	NO.			FT.
DOUBLE	"	D.P.	"			FT.				FT.				FT.
SINGLE	"	O.D.				FT.				FT.				FT.
"	"	O.D.				FT.				FT.				FT.
DRILL COLLAR	<u>5 1/4</u>	O.D.	NO.			FT.	NO.			FT.	NO. <u>8</u>			FT.
REAMER	"	O.D.	KIND			FT.	KIND			FT.	KIND			FT.
STABILIZER	"	O.D.	KIND			FT.	KIND			FT.	KIND			FT.
JARS			KIND			FT.	KIND			FT.	KIND			FT.
BUMPER SUB.	<u>5485</u>		KIND			FT.	KIND			FT.	KIND			FT.
BIT OR CORE BARREL						FT.				FT.				FT.
TOTAL D.P. & TOOLS						FT.				FT.				FT.
KELLY DOWN (LOW R.B.)						FT.				FT.				FT.
DEPTH OF TOOL						FT.				FT.				FT.

MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR		
DEPTH END OF	<u>216.00</u>	FEET			FEET	<u>267</u>		FEET
DEPTH START OF TOUR		FEET			FEET	<u>216</u>		FEET
FOOTAGE DRILLED		FEET			FEET	<u>51</u>		FEET

DAY WORK											
HOURS				HOURS				HOURS			
2.00 A.M.	4.00 A.M.	6.00 A.M.	8.00 A.M.	10.00 A.M.	12.00 A.M.	2.00 P.M.	4.00 P.M.	6.00 P.M.	8.00 P.M.	10.00 P.M.	12.00 P.M.
PUMP PRESSURE	p.s.i.									<u>300</u>	<u>300</u>
ROTARY SPEED	r.p.m.									<u>100</u>	<u>100</u>
WEIGHT ON BIT	Tons									<u>9,000</u>	<u>7,000</u>
p.H.											
MUD WEIGHT	#/gal.										
MUD VISCOSITY	Sec.										
MUD CAKE	32nds										
WATER LOSS	cc.										
PIT VOLUME	Ft.-Ins.										

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recov'y	BIT CONDITION
<u>1</u>	<u>1 1/4</u>	<u>21855</u>	<u>OSCIP H.T.C. 7/8</u>	<u>1 1/4</u>	<u>216</u>	<u>267</u>	<u>51</u>		<u>in</u>

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.

SIGNATURES	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR			DEVIATION RECORD		
	DRILLER	DERRICKMAN TOOL DRSR.	HELPER	DRILLER	DERRICKMAN TOOL DRSR.	HELPER	DRILLER	DERRICKMAN TOOL DRSR.	HELPER	Kind	Depth	Reading
	<u>LARRY THOMPSON</u>	<u>D. BOESTIE</u>	<u>W. GREEN</u>	<u>R. Clark</u>	<u>R. Thompson</u>	<u>S. Schmidt</u>	<u>E. Carrahan</u>	<u>W. Murphy</u>	<u>L. Hallant</u>			
	<u>W. Thompson</u>			<u>D. Mims</u>			<u>R. Burke</u>					
	<u>R.L. TRUSS</u>			<u>F. Thompson</u>								

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		<u>12:00</u>	<u>5:00</u>	<u>W.C.</u>
TOUR 2		<u>8:00</u>	<u>8:15</u>	<u>Pressure up Blind Rams</u>
		<u>8:15</u>	<u>4:00</u>	<u>String M.C. line, Run in, Lay down 64 ft.</u>
TOUR 3		<u>14:00</u>	<u>4:30</u>	<u>Pressure R.O.P.</u>
		<u>4:30</u>	<u>7:40</u>	<u>Drill out Cement & Shoe.</u>
		<u>7:40</u>	<u>8:30</u>	<u>Drill 6 1/4" Hole</u>
		<u>8:30</u>	<u>10:00</u>	
		<u>10:00</u>	<u>12:00</u>	

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Pressure tested casing & B.O.B. @ 500 psi OK

1 1/2 WOOD

7 1/2 WOOD

TOUR REPORT

CONTRACTOR

Big Horn L

FIELD

Midland

PROPERTY

Indian

WELL No.

C-381

11 P.M.

FOR 24 HOURS ENDING

12 M.

Feb 8

1964

☐ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☐ ROTARY

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	" D.P.	NO.			FT.	NO.			FT.	NO.			FT.
	" D.P.	NO.			FT.	NO.			FT.	NO.			FT.
DOUBLE	" D.P.				FT.				FT.				FT.
SINGLE	" O.D.				FT.				FT.				FT.
	" O.D.				FT.				FT.				FT.
DRILL COLLAR	4" 6 1/2" D.D.	NO. 5			FT.	NO.			FT.	NO.			FT.
REAMER	" O.D.	KIND			FT.	KIND			FT.	KIND			FT.
STABILIZER	" O.D.	KIND			FT.	KIND			FT.	KIND			FT.
JARS		KIND			FT.	KIND			FT.	KIND			FT.
BUMPER SUB.					FT.				FT.				FT.
BIT OR CORE BARREL					FT.				FT.				FT.
TOTAL D.P. & TOOLS					FT.				FT.				FT.
KELLY DOWN (BELOW R.B.)					FT.				FT.				FT.
DEPTH OF TOOLS					FT.				FT.				FT.

TOUR		MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
DEPTH END OF TOUR		163			FEET	216			FEET				FEET
DEPTH START OF TOUR		110			FEET	165			FEET				FEET
FOOTAGE DRILLED		53			FEET	53			FEET				FEET

DAY WORK		HOURS				HOURS				HOURS			
		2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP PRESSURE	psi.	200	200	200	200	250	250	250	250	250			
ROTARY SPEED	r.p.m.	90	90	90	90	140	180	110	110				
WEIGHT ON BIT	Tons	211	211	211	211	211		211					
P.H.										70			
MUD WEIGHT	#/gal.												
MUD VISCOSITY	Sec.												
MUD CAKE	32nds												
WATER LOSS	c.c.												
PIT VOLUME	Ft.-Ins.												

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recovery	BIT CONDITION
1A	9 1/4	730102	SEC, S3	7 3/4	0	120	120		Good
2A	9 1/4	519440	SEC, S6	6 1/4	120	163	43		in

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.

SIGNATURES	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR		DEVIATION RECORD		
	DRILLER		DRILLER		DRILLER		Kind	Depth	Reading
	El. Carnahan		L. Thompson		R. Clark			185	7/8
	DERRICKMAN		P. ROGERS		R. THERIAUX				
	TOOL DRSR.		W. GUNN		S. SCHMIDT				
	HELPER		W. THOMPSON		D. MAXWELL				
	HELPER								
	HELPER								
	FIREMAN								
	TOOL PULLER								

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1				
Hel	500 #	12 00	12 15	Rig Serv.
		12 15	1 00	Drill 9 1/4" Hole
		1 00	1 30	Change Bits
		1 30	2 30	Drill 9 1/4" Hole
		2 30	2 45	Survey
		2 45	2 00	Drill 9 1/4" Hole
TOUR 2				
Hel - 12 00		8 00	5 00	SER. Bit
		5 00	11 45	Drill 9 1/4" Hole
		11 45	12 00	Run Survey
		12 00	3 30	Drill
		3 30	4 00	TRIP
TOUR 3				
		4 00	4 15	Rig Serv.
		4 15	4 30	Run in Hole
		4 30	4 45	Line to pump casing
		4 45	5 30	Mount to run casing + Rig to run casing + Pumping
		5 30	6 00	Rig to run + Case
		6 00	6 15	Cement casing + pump plug down
		6 15	12 00	Wellbore

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Ran & cemented 5 jts 196.71' & 7" 20# J55 & rd thd
No cement casing with 110 lbs Canadian Portland cement + 2%
cellulose at 212'. Casing was equipped with a guide shoe and
float collar one joint apart. Overall shoe joint 41.62'. Shoe
joint had two centralizers 10' above guide shoe and 15' below
float collar. Top casing thread was loaded 12.5' below KB.

Cement was mixed to a greater than 15.5# slurry
using warm lake water. Cement was preceded by 10 bbls of
water and displaced with reflectant water to bump
plug with 1000 psi. Started mixing 6:04 PM Stopped mixing at
6:08 PM. Started displacing at 6:13 Stopped 6:16 PM.

C.I.P. 6:16 P.M. Feb 8/64

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR

BIG HORN #7

FIELD WILDCAT

PROPERTY

TATHLINA LAKE

WELL No. C-39

11 P.M.

12 M.

Jul 7

19

☒ DRILLING ☐ DEEPENING ☐ CABLE TOOLS
☐ REDRILLING ☐ ABANDONING ☐ ROTARY

FOR 24 HOURS ENDING

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS " D.P.	NO.	NO.	NO.
" D.P.	NO.	NO.	NO.
DOUBLE " D.P.	NO.	NO.	NO.
SINGLE " O.D.	NO.	NO.	NO.
" O.D.	NO.	NO.	NO.
DRILL COLLAR " O.D.	NO.	NO.	NO.
REAMER " O.D.	NO.	NO.	NO.
STABILIZER " O.D.	NO.	NO.	NO.
JARS	NO.	NO.	NO.
BUMPER SUB.	NO.	NO.	NO.
BIT OR CORE BARREL	NO.	NO.	NO.
TOTAL D.P. & TOOLS	NO.	NO.	NO.
KELLY DOWN (BELOW R.B.)	NO.	NO.	NO.
DEPTH OF TOOLS	NO.	NO.	NO.

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	FEET	FEET	FEET
DEPTH START OF TOUR	FEET	FEET	FEET
FOOTAGE DRILLED	FEET	FEET	FEET

DAY WORK	HOURS	HOURS	HOURS
	2.00 A.M.	4.00 A.M.	6.00 A.M.
	8.00 A.M.	10.00 A.M.	12.00 P.M.
	2.00 P.M.	4.00 P.M.	6.00 P.M.
	8.00 P.M.	10.00 P.M.	12.00 P.M.
PUMP PRESSURE P.S.I.			
ROTARY SPEED R.P.M.			
WEIGHT ON BIT X P.D.M.			
D.H.			
MUD WEIGHT #/gal.			
MUD VISCOSITY Sec.			
MUD CAKE 32nds c.c.			
WATER LOSS c.c.			
PIT VOLUME Ft.-Ins.			

NO.	SIZE	SERIAL	BIT OR CORE BARREL KIND AND TYPE	TOTAL HOURS	FROM	TO	Total Bit Footage	Core Recovery	BIT CONDITION
117	9 7/8	730102	SEC - S-3	7	0	110	110		in

CUTTER NO.	TYPE	IN AT - FT.	OUT AT - FT.	CENTRE BIT No.	CATCHER No.	TYPE	IN AT - FT.	OUT AT - FT.

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD
DRILLER			R. CLARK	Kind Depth Reading
DERRICKMAN			P. THERIAULT	
TOOL DRSR.			S. SCHMIDT	
HELPER			D. MAXWELL	
HELPER				
HELPER				
FIREMAN				
TOOL PUSHER				

MUD and CHEMICALS ADDED	From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind Amount			
OUR 1	12 00		weld on Rig To Riser Rig
		800	Kase Rig + start putting rig wind back
			Rig up
OUR 2	8 00	3 00	Rig up + weld on Rig Block up
			pump + Pick up Kelly
	3 00	4 00	Drill Ret hole
OUR 3	4 00	4 30	Rig To Spuds
5.0 = Lining	4 30	4 45	Spud in
100 # Packer	4 45	8 15	Drill 9 7/8" hole
200 # 12 1/2"	8 15	8 30	Spud in
	8 30	12 00	Drilling

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

WELL: CALSTAN TATHLINA LAKE C-39

LOCATION: 60° 38' 01" N 117° 22' " W

GROUND ELEVATION: 944

KB → G.L. 12

KB ELEVATION 956

CONTRACTOR: BIG HORN DRILLING RIG #3

TYPE RIG: CARDWELL L. CARDWELL DERRICK 97' PUMP

FXX GARDNER DENVER WITH 5 1/2" x 14" LINERS. POWERED BY TWIN G.M. 320 HP DRAWWORKS IS POWERED BY SINGLE G.M. MOTOR 170 H.P.

SIGNATURE COMPANY ENGINEER