

BRIGGS Trout River
No. 3

Drilling Authority No.
Date Issued

WELL NAME Briggs Trout River No. 3

FIELD Wildcat

Area: Trout Lake

LOCATION: Unit

Section

Grid

Latitude 63°58'14" N.

Longitude 123°01'55" W.

From Established Reference Marker

Rig Release Date: 3-2-60

Status D & A

Information Release Date 3-3-62

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 Card.
	Well Visit.
	Daily Drilling Reports.

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
NORTHERN ADMINISTRATION BRANCH
RESOURCES DIVISION

#63

For the period from . Feb. 12/60 .
to . Mar. 3/60 .

REPORT of ~~CONSTRUCTION~~
~~REPAIR~~
~~RECONSTRUCTION~~
~~REPAIR~~
ABANDONMENT of a Well

Permit No. 904

Name of well Briggs Trout River No. 3 Lease No.

Registered owner D. Todd Briggs Drilling Company Guthrie MacLaren

Location 60° 58' 44" N. Lat. 120° 01' 55" W. Long.

Survey description, if available

Elevation: Ground 981 Last previous depth 3534

Kelly bushing 993 Present depth 0

Spudded February 12, 1960 Finished drilling Mar. 2 . Rig Released
. Mar. 3, 1960

Deviations from vertical 110' - 1/2°, 190' - 1/4°, 275' - 3/4°, 358' - 1/2°,
960' - 1°, 1185' - 0°, 1642' - 4 1/2°, 1810' - 8°, 2010' - 7°, 2480' - 5 3/4°,
2950' - 6°, 3459' - 3°

CASING RECORD

Date	Size	D.	Weight lbs/ft	Grade	Set at feet	Sacks Cement	Top of Cement
1 Feb. 14/60	8 5/8"		24.0	J-55	349	200	Surface
2							
3							
4							

TUBING RECORD

Size	Wt. Lbs/foot	Grade	Amount	Landed Depth	Remarks
Wellhead		(Manufacturer)		(Size)	(Series)

Producing Zone and formation

.....

R-log 20-3474

Velocity log

DRILL STEM TESTS

[illegible]

Perforations Bullet.

Initial production data

Pumping or Flowing
Plug back
Other
.
.
.
.

CEMENT PLUGS SET

<u>Date</u>	<u>Plug set at</u>	<u>Sacks cement</u>	<u>Method</u>	<u>Top found at</u>
.				
.	3300-3534	. . . 75 . . .	Halliburton	
.	2900-3200	. . . 110 . . .	"	2880 . . .
.	300-400	. . . 65 . . .	"	282 292 . . .
.	Surface	. . . 5 . . .		

Washed well samples have been sent to Geological Survey of Canada, Calgary
~~Will be~~

Cores will be stored at Hay River, N.W.T.

Core analysis (was made) of the Intervals
(to be made)

Oil analysis (was made) of the Intervals
(to be made)

Gas analysis (was made) of the Intervals
(to be made)

Water analysis (was made) of the Intervals
(to be made)

The above analyses (are)
(will be) submitted in accordance with Section 70(2) of
the Regulations.

ADDITIONAL DETAILS AND COMMENTS

.
.
.
.
.
.

Signed. . . J.C. Sproule Address . . . 1009 - 4th Ave. S.W. . . .
For J.C. Sproule & Associates
Date . . May 12, 1960

(To be submitted in triplicate in accordance with Sections
68, 69, 70 and 71, of the Territorial Oil and Gas Regulations
to the Oil Conservation Engineer at Calgary, Alberta.)

CANADA

NORTHERN ADMINISTRATION BRANCH

ABANDON

or

a Well

SUGREND DRILLING

(Strike out operation which does not apply)

In accordance with Sections 48 & 49 of the Territorial Oil and Gas Regulations, notice is hereby given of our intention to

... **ABANDON** ... the well named **BRIDGE TROUT RIVER, NO. 3** ... on Oil

Permit No. 904 . .
and Gas

Registered in the name of
 . D. TODD BRIGGS, Nominee Account

Depth 3.54 . . feet. Elevation above sea level:

Ground surface . .	<u>981</u> . . . ft.
Kelly bushing . .	<u>993</u> . . . ft.

Location 60° 58' 44" N. Lat. 120° 01' 57" W. Long.

1 1/2 miles	(N. of S. boundary)	(Permit No. 904)
	(S. of N. boundary)	(Permit No. 904)
1 mile	(W. of E. boundary)	(Permit No. 904)
	(E. of W. boundary)	(Permit No. 904)

Survey description, if available

<u>Size O.D.</u> <u>inches</u>	<u>Weight</u> <u>lbs/ft</u>	<u>Grade</u>	<u>Amount</u> <u>feet</u>	<u>Set at</u> <u>feet</u>	<u>Sacks</u> <u>cement</u>	<u>Method</u>	<u>to be</u> <u>withdrawn</u>
1 8 5/8"	.24	J-55	-	352	200	Halliburton	NIL
2	.	.	.	.	.	.	.
3	.	.	.	.	.	.	.
4	.	.	.	.	.	.	.

Oil fromfeet tofeet	Fromfeet tofeet withsacks cement
Oil fromfeet tofeet	Fromfeet tofeet withsacks cement

Gas from feet to feet From feet to feet with
sacks of cement.

Gas from feet to feet From feet to feet with
sacks of cement.

Water from 3,534 .feet to 3,457feet From 3534 .feet to 3,300 .feet with 70. . .
sacks cement.

Water from feet to feet From feet to feet with
sacks cement.

Surface and bottom plugs:

1. from 3534 .feet to .3300 .feet with . .70 .sacks cement.
2. from 3300 .feet to .2900 .feet with . .110 .sacks cement.
3. from .400 .feet to . .300 .feet with . .65 .sacks cement.

SURFACE FLUID

5 sacks cement.

Date of last operation MARCH 3, 1960. . . . Total depth . 3534. . . .

Nature of liquid left in well Level from surface . surface
on suspension or abandonment

The following logs ~~WILLIAM~~ run . **DEFLECTION** - electrical log, microlog.
have been

..... ~~gamma ray and sonic logs~~

Produced from zone and
on abandonment of a well which has been on production.

Present condition of well in addition to above

.....
.....

On abandonment or suspension of drilling we shall comply with Sections 68, 69 and
70 of the Regulations.

Program of operation not included above

.....
.....
.....

Responsible agents of permittee or lessee in charge of operation:

At well . **ART WHITING** Postal address **HAY RIVER, N.W.T.**

At registered office . **A.M. LLOYD** Postal address **1117 First National Bank Bldg.
Dallas, 3, Texas, U.S.A.**

It is understood that if changes in this Notice of Intention become
necessary we will promptly notify you.

dated at **CALGARY** this **4th** day of **MARCH** 19. **60.**

Signed by

S.R.L. Harding
S.R.L. HARDING, P. Eng.
J. C. SPROULE & ASSOCIATES

This program is approved subject to the following provisions

... confirming oral approval from Bill Marvel

.....
.....
.....

15th March 1960
Date

Bill Shoms
Oil Conservation Engineer

(To be submitted in triplicate to the Oil Conservation
Engineer at Calgary, Alberta.)

FORM "A"

C A N A D A

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION BRANCH

RESOURCES DIVISION

NOTICE OF INTENTION TO BEGIN DRILLING OPERATIONS

95

TO CARRY OUT A STRUCTURE TEST PROGRAM

In accordance with Section 58 of the Territorial Oil and Gas Regulations, notice is hereby given of our intention to begin drilling a well on Oil and Gas Permit No. 904 registered in the name of

~~Lease No.~~

D. Todd Briggs Nominee Account

TYPE OF WELL:

Wildcat

Development

Expected total depth 3,500 feet, in the Watt Mountain formation of Devonian age.

The well will be located at 60° 58' 44" N. Lat 120° 01' 55" W. Long.

1 1/2 miles (N. of S. boundary) of (Permit No. 904)
(S. of N. boundary) of (Lease No. 904)
1 mile (W. of E. boundary) of (Permit No. 904)
(E. of W. boundary) of (Lease No. 904)

Survey description of Location, if known

Approximate surface elevation of 1050 feet above sea level.

Name of well Briggs Trout River No. 3

Type of drilling rig Rotary

Expected date of commencement February 9, 1960

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

Size O.D. Inches	Weight lbs/ft	Grade	Brand	New or Used	Estimated Depth	Sacks of Cement
1. <u>8 5/8</u>	<u>24</u>	<u>3-55</u>	<u>Matheson</u>	<u>New</u>	<u>225</u>	<u>175</u>
2.						
3.						

Expected depth of water, gas and oil horizons and method of control:

. 3,200. controlled by mud program and blowout prevention equipment .

.....
.....
.....

will		will	
An electric log	be run	Other logs	be run
will not		will not	

STRUCTURE TEST PROGRAM

Proposed number of holes Maximum well depth
enclosed within an area bounded by

. N. Latitudes

. W. Longitudes

	will		will
An electric log	be run	Other logs	be run
will not		will not	

Name and address of drilling contractor . Cathie McLaren Drilling Limited .

. Edmonton, Alberta

.

.

Responsible agents of permittee or lessee in charge of operation:

At well . . Art Whiting Postal address Hay River, M. W. T. . .

At registered 1117 First National Bank
office A. M. Lloyd Postal address Dallas 2, Texas.

It is understood that if changes in this Notice of Intention become necessary we will promptly notify you.

Dated at . Calgary. this . 2nd day of February . . 19 60: . . .

Signed by

[Signature]
S. R. LeHardy
S. R. LeHardy & Associates

This program is approved subject to the following provisions (if any):

.....
.....
.....
.....
.....
.....
.....

5th February 1960
Date

[Signature]
Oil Conservation Engineer.

(To be submitted in triplicate to the Oil Conservation Engineer at least 15 days prior to the commencement of drilling)

GEOLOGICAL REPORT
BRIGGS TROUT RIVER NO. 3
NORTHWEST TERRITORIES

J. C. SPROULE & ASSOCIATES
GEOLOGICAL & EXPLORATION CONSULTANTS

1009 FOURTH AVENUE WEST
CALGARY ALBERTA

TELEPHONE
AMHERST 9-7951

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Induction Electrical Log	In pocket
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Sonic Log	In pocket
Visual Well Log	In pocket

SUMMARY OF PERTINENT WELL DATA

Well Name: Briggs Trout River No. 3
Location: 60° 58' 44" N. Lat.
120° 01' 55" W. Long.
Elevation: Ground 981'
K. B. 993'
Total Depth: 3,534'
Operator: A. M. Lloyd
Technical Supervision: J. C. Sproule & Associates
D. J. B. Marshall, Engineer
Drilling Contractor: Guthrie McLaren Drilling Ltd.
Spudded: February 12, 1960
Completed: March 3, 1960
Status: Abandoned

<u>Drilling Data:</u>	<u>Hole Size</u> Inches	<u>From</u> Feet	<u>To</u> Feet
	12 1/4	Surface	352
	7 7/8	352	3505
	6 1/8	3505	3534

Deviation Surveys

110'	1/2°	1810'	8°	2710'	5°
190'	1/4°	1870'	7 1/2°	2860'	6°
275'	3/4°	1930'	7 1/2°	2950'	6°
358'	1/2°	2010'	7°	3080'	5°
770'	3/4°	2140'	7°	3249'	4°
960'	1°	2220'	6 3/4°	3459'	3°
1185'	0°	2320'	6 1/2°		
1642'	4 1/2°	2480'	5 3/4°		

Surface Casings: 11 joints, 334.71' x 8 5/8" new Mannesman 24.0 lb. casing cemented at 349' K.B. with 200 sacks plus 2% CaCl₂ by Halliburton February 14, 1960.

<u>Core Summary:</u>	<u>Core No.</u>	<u>Interval</u> Feet	<u>Recovered</u> Feet
	1	3459-3505	46.0
	2	3505-3534	29.0

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Summary of Drill Stem Tests:

Schlumberger Formation Test No. 1

Depth 3,079'

V. O. 15 minutes, 30 seconds. Recovered 50 cc. muddy water. Shut in pressure 1,490 psi.

DST No. 1 3457-3534' V.O. 30 mins. Shut in 60 mins. Good air blow. Recovered 580' muddy sulphurous salt water.

Logs:

Schlumberger Induction Electrical log 348-3410'
 Gamma Ray-Neutron Log 20'-3414'
 Sonic Log 348'-3408'

Abandonment Program:

Plug No. 1 3300'-3534' 75 sacks
 Plug No. 2 2900'-3200' 110 sacks plus 2% CaCl_2
 Plug No. 3 300'-400' 65 sacks plus 2% CaCl_2
 Plug No. 4 5 sacks at surface with steel plate welded on top.

GEOLOGICAL MARKERS

Well Name: Briggs Trout River No. 3

Location: 60° 58' 11" N. Lat.
120° 01' 55" W. Long.

<u>AGE</u>	<u>Formation</u>	<u>Depth</u> Feet	<u>Elevation</u> Feet
UPPER DEVONIAN	Wabassan	240	+753
	Trout River	590	+403
	Grumbler	755	+238
	Island River	1200	-207
	Simpson	1220	-227
MIDDLE DEVONIAN	Muskeg-Keg River	2998	-2005

4.

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Briggs Trout River No. 3

Location: 60° 58' 44" N. Lat.
120° 01' 55" W. Long.

Operation ending 12 midnight.

<u>Date</u>	<u>Total Depth Feet</u>	<u>Progress Feet</u>	<u>Days</u>	<u>Remarks</u>
February 12	162	162	1	Rigged up and dug rat hole. Spudded at 4:00 p.m. Drilling 9 7/8" hole, worked mud ring, lost circulation, mixing mud.
February 13	308	146	2	Ran in 12 1/4" bit, reamed and drilled to 308', lost circulation, mixing mud.
February 14	358	50	3	Drilled pilot hole to 358'. Reamed to 352'. Ran 11 joints 334.71' x 8 5/8" x 24.0 lb., J-55 surface casing set at 349' K.B. Cemented with 200 sacks plus 2% CaCl ₂ . Plug down 8:00 p.m. W.O.C.
February 15	358	0	4	W.O.C.
February 16	671	313	5	Tested B.O.P. Found top of cement plug at 280'. Drilled out. Drilling with Bit No. 1.
February 17	1087	416	6	Drilled to 771'. Ran in Bit No. 2. Drilling.
February 18	1642	555	7	Drilled to 1185' with Bit No. 2. Drilled to 1642' with Bit No. 3. Hoisting pipe.
February 19	1934	292	8	Found deviation 4 1/2°. Ran in Bit No. 4 eased off on weight. Deviation went to maximum of 8° at 1810'. Drilling.
February 20	2156	222	9	Drilled to 2017' with Bit No. 4. Tripped for Bit No. 5. Drilling.
February 21	2510	354	10	Drilled to 2480' with Bit No. 5. Tripped for Bit No. 6. Deviation 5 3/4° at 2480'. Drilling.
February 22	2842	332	11	Deviation 2710' - 5°. Drilling with Bit No. 6.
February 23	3029	177	12	Drilled to 2870' with Bit No. 6. Ran in Bit No. 7. Drilling.

<u>Date</u>	<u>Total Depth Feet</u>	<u>Progress Feet</u>	<u>Days</u>	<u>Remarks</u>
February 24	3165	136	13	Drilled to 3082' with Bit No. 7. Ran in Bit No. 8. Drilling.
February 25	3294	129	14	Drilled to 3249' with Bit No. 8. Deviation to 3249' - 4°. Ran in with Bit No. 9. Drilling.
February 26	3373	79	15	Drilled to 3306' with Bit No. 9. Ran in Bit No. 10 and drilled to 3364'. Ran in Bit No. 11. Drilling.
February 27	3415	42	16	Drilled to 3415' with Bit No. 11. Measured pipe, no correction. Rigged up Schlumberger. Logging.
February 28	3459	44	17	Ran Gamma-Neutron, Sonic and Induction-Electrical log. Ran Wire Line test No. 1 at 3079'. Ran in Bit No. 12 and drilled to 3459'. Hoisting pipe.
February 29	3505	46	18	Ran in magnet, pulled out and ran in core barrel to cut Core No. 1 46' 3459'-3505'. Hoisting core.
March 1	3531	26	19	Recovered Core No. 1. Reamed to 3505' and ran in to cut Core No. 2. Coring.
March 2	3534	3	20	Recovered Core No. 2 29' 3505'-3534'. Ran DST No. 1 3457'-3534'. Pulled test and ran Plug No. 1 3300' to total depth. 75 sacks. Plug down 3:15 p.m. Ran Plug No. 2 3200'-2900' 110 sacks plus 2% CaCl ₂ . Plug down at 4:15 p.m. Felt top of Plug No. 2 at 2,880' at 12:00 midnight.
March 3			21	Ran Plug No. 3 300'-400', 65 sacks plus 2% CaCl ₂ down at 4:00 a.m. Felt top at 292'. Rig released at 4:00 p.m.

BIT RECORD

Well Name:

Briggs Trout River No. 3

Location:

30° 58' 44" N. Lat.
120° 01' 55" W. Long.

<u>No.</u>	<u>Size</u> <u>Inches</u>	<u>Make</u>	<u>Type</u>	<u>Serial</u>	<u>Depth</u>		<u>Feet</u>	<u>Hours</u>
					<u>From</u>	<u>To</u>		
1A	9 7/8	HTC	OSC	Rerun	0	220	220	2 1/4
2A	12 1/4	HTC	OSC-3	Rerun	0	352	352	12 1/4
3A	7 7/8	Reed	YSI	094140	275	358	83	6 1/4
1	7 7/8	HTC	OSC	11449	358	771	413	19 3/4
2	7 7/8	HTC	OSC	94463	771	1185	414	22
3	7 7/8	HTC	OSC-3	95302	1185	1642	457	16
4	7 7/8	HTC	OSC-3	95263	1642	2017	375	29 3/4
5	7 7/8	HTC	OSC-3	80514	2017	2480	463	30 1/2
6	7 7/8	HTC	OSC-1G	86751	2480	2870	390	27 1/2
7	7 7/8	HTC	OSC	7251	2870	3082	212	26 1/2
8	7 7/8	HTC	OSC	94446	3082	3249	167	24
9	7 7/8	HTC	OSC	59027	3249	3306	57	8 1/2
10	7 7/8	HTC	OWC	6480	3306	3364	58	14
11	7 7/8	HTC	OWC	3916	3364	3415	51	9 3/4
12	7 7/8	HTC	OWC	3892	3415	3459	44	10

MUD RECORD

Well Name: Briggs Trout River No. 3

Location: 60° 58' 41" N. Lat.
120° 01' 55" W. Long.

<u>Date</u>	<u>Depth</u>		<u>Average Weight</u>	<u>Average Water Loss c.c.</u>	<u>Average Viscosity</u>	<u>p.H.</u>	<u>Additives Lbs.</u>
	<u>From Feet</u>	<u>To Feet</u>					
February 12	0	162	-	-	-	-	4000 Gel
February 13	162	308	-	-	-	-	5300 Gel
February 14	308	358	-	-	-	-	5000 Gel
February 15	358	358	-	-	-	-	400 Bicarbonate
February 16	358	671	-	-	50	13.0	3600 Gel 100 Bicarbonate 200 Caustic 200 Spersene
February 17	671	1087	10.0	3.2	75	13.0	200 Spersene 800 Gel 350 Caustic 1000 Starch
February 18	1087	1642	10.2	3.4	65	12.5	100 Spersene 50 Caustic 800 Gel
February 19	1642	1934	10.7	2.2	95	12.5	1600 Gel 750 Spersene 650 Caustic 400 Starch
February 20	1934	2156	10.9	3.0	105	12.5	400 Spersene 500 Gel 100 Starch 150 Caustic
February 21	2156	2510	10.3	2.5	75	13.0	300 Caustic 300 Starch 50 Spersene

MUD RECORD

Well Name: Briggs Trout River No. 3

Location: 60° 58' 44" N. Lat.
120° 01' 55" W. Long.

Date	Depth		Average Weight	Average Water Loss c.c.	Average Viscosity	p.H.	Additives lbs.
	From Feet	To Feet					
February 12	0	162	-	-	-	-	4000 Gel
February 13	162	308	-	-	-	-	5300 Gel
February 14	308	358	-	-	-	-	5000 Gel
February 15	358	358	-	-	-	-	400 Bicarbonate
February 16	358	671	-	-	50	13.0	3600 Gel 100 Bicarbonate 200 Caustic 200 Spersene
February 17	671	1087	10.0	3.8	75	13.0	200 Spersene 800 Gel 350 Caustic 1000 Starch
February 18	1087	1642	10.2	3.4	85	12.5	100 Spersene 50 Caustic 800 Gel
February 19	1642	1934	10.7	2.2	95	12.5	1600 Gel 750 Spersene 650 Caustic 400 Starch
February 20	1934	2156	10.9	3.0	105	12.5	400 Spersene 500 Gel 100 Starch 150 Caustic
February 21	2156	2510	10.3	2.5	75	13.0	300 Caustic 300 Starch 50 Spersene

<u>Date</u>	<u>Depth</u>		<u>Average Weight</u>	<u>Average Water Loss c.c.</u>	<u>Average Viscosity</u>	<u>p.H.</u>	<u>Additives</u>
	<u>From Feet</u>	<u>To Feet</u>					
February 22	2510	2842	10.8	3.0	85	13.0	200 Caustic 300 Spersene 350 Starch 700 Gel
February 23	2842	3029	10.7	3.2	90	13.0	100 Caustic 100 Spersene
February 24	3029	3165	10.7	2.5	85	13.0	400 Caustic 200 Spersene 600 Gel 500 Starch
February 25	3165	3294	10.5	3.6	70	13.0	1500 Gel 100 Spersene 200 Caustic
February 26	3294	3373	10.7	3.4	75	13.0	500 Gel 100 Spersene 100 Caustic 100 Starch
February 27	3373	3415	11.0	3.2	85	13.0	3300 Gel 100 Starch
February 28	3415	3459	10.9	4.0	85	12.8	150 Spersene 100 Caustic
February 29	3459	3505	10.7	5.5	94	12.6	200 Caustic 100 Spersene
March 1	3505	3531	10.6	5.3	130	12.5	400 Gel 200 Caustic 200 Starch
March 2	3531	3534	10.7	-	200	-	

SURFACE CASING TALLY

Well Name: Briggs Trout River No. 3

Location: 60° 58' 44" N. Lat.
120° 01' 55" W. Long.

11 joints 8 5/8" x 24.0 lb. J-55 new Minnesman casing.

<u>No.</u>	<u>Feet</u>
1	27.65
2	27.76
3	30.60
4	31.67
5	33.03
6	30.56
7	32.06
8	29.27
9	26.55
10	29.20
11	32.46
	<u>1.90</u> Float Shoe
	<u>334.71</u>

Total depth of hole 358'
Size of hole 12 1/4"
Depth Casing set 349' K. B.
Cemented with 200 sacks plus 2% CaCl₂ by Halliburton.

TIME DRILLING REQUIREDWell Name:

Brighton River No. 3

Location:60° 45' 30" N. Lat.
120° 01' 55" W. Long.Depth
FeetTime in Minutes

2970-3000	7, 7, 5, 6, 5, 5, 4, 5, 11, 11
3000-3010	10, 9, 10, 10, 11, 10, 10, 10, 10, 9
3010-3020	10, 8, 9, 10, 9, 10, 9, 10, 10, 10
3020-3030	9, 9, 11, 9, 10, 9, 9, 9, 8, 8
3030-3040	10, 9, 9, 8, 8, 9, 8, 8, 8, 9
3040-3050	9, 9, 9, 9, 8, 9, 9, 9, 10, 11
3050-3060	10, 10, 10, 8, 8, 10, 11, 10, 10, 10
3060-3070	12, 11, 10, 10, 10, 11, 11, 10, 10, 10
3070-3080	11, 10, 12, 9, 14, 12, 12, 11, 9, 12
3080-3090	11, 12, 11, 11, 11, 10, 9, 9, 8, 10
3090-3100	8, 9, 9, 10, 10, 10, 10, 11, 10, 10
3100-3110	10, 10, 12, 8, 7, 8, 7, 7, 7, 7
3110-3120	8, 7, 7, 7, 6, 6, 7, 7, 7, 7
3120-3130	6, 7, 7, 7, 7, 7, 7, 7, 7, 7
3130-3140	7, 7, 8, 7, 7, 8, 7, 7, 7, 7
3140-3150	6, 6, 6, 7, 8, 8, 8, 8, 7, 8
3150-3160	8, 8, 8, 8, 9, 12, 8, 8, 7, 8
3160-3170	8, 7, 7, 7, 7, 7, 8, 7, 7, 8
3170-3180	6, 6, 8, 7, 7, 7, 8, 8, 9, 8
3180-3190	9, 9, 9, 9, 9, 9, 8, 8, 9, 8
3190-3200	8, 9, 9, 9, 9, 9, 9, 9, 9, 8
3200-3210	8, 8, 9, 8, 8, 7, 8, 6, 9, 7
3210-3220	8, 8, 8, 8, 7, 9, 8, 10, 8, 8
3220-3230	8, 8, 8, 8, 8, 7, 8, 9, 10, 10
3230-3240	10, 11, 10, 9, 9, 10, 9, 11, 9, 11
3240-3250	10, 11, 11, 10, 11, 11, 11, 11, 11, 5
3250-3260	4, 5, 5, 4, 5, 5, 5, 5, 5, 5
3260-3270	4, 4, 4, 6, 6, 6, 7, 8, 8, 7
3270-3280	8, 7, 8, 8, 8, 8, 8, 8, 8, 8
3280-3290	8, 8, 7, 8, 7, 7, 7, 6, 7, 8
3290-3300	9, 11, 12, 15, 12, 12, 13, 11, 11, 15
3300-3310	13, 13, 14, 14, 14, 13, 10, 9, 11, 8
3310-3320	12, 12, 11, 11, 10, 12, 8, 12, 12, 16
3320-3330	15, 16, 14, 18, 15, 17, 14, 15, 15, 15
3330-3340	14, 16, 14, 15, 15, 14, 14, 14, 14, 14
3340-3350	14, 14, 15, 13, 19, 18, 13, 16, 15, 15
3350-3360	16, 15, 16, 13, 14, 14, 17, 14, 13, 15
3360-3370	16, 11, 11, 6, 12, 8, 9, 9, 8, 9
3370-3380	9, 9, 10, 10, 11, 10, 10, 10, 11, 11

<u>Depth</u> <u>Feet</u>	<u>Time In Minutes</u>
3350-3390	11, 11, 9, 10, 7, 11, 10, 11, 10, 10
3390-3400	8, 12, 10, 11, 11, 11, 10, 12, 11, 10
3400-3410	11, 11, 12, 11, 11, 12, 13, 12, 13, 15
3410-3420	15, 15, 13, 11, 11, 20, 20, 17, 13, 14
3420-3430	14, 16, 15, 13, 13, 11, 12, 10, 11, 11
3430-3440	12, 10, 10, 11, 11, 11, 12, 13, 10, 10
3440-3450	12, 13, 15, 15, 12, 17, 11, 10, 7, 13
3450-3459	11, 11, 8, 11, 14, 15, 13, 15, 15.

See Time Coring Record

TIME CORING RECORDWell Name:

Briggs Trout River No. 3

Location:60° 58' 42" N. Lat.
120° 01' 35" W. Long.Depth
Core Feet
No.1Time In Minutes

3459-3460

29

3461-3470

15, 12, 1, 17, 17, 19, 15, 11, 14, 13

3471-3480

17, 16, 15, 20, 14, 18, 21, 15, 16, 19

3481-3490

10, 11, 16, 16, 20, 13, 16, 16, 13, 16

3491-3500

15, 16, 20, 14, 17, 19, 18, 16, 18, 19

3501-3505

20, 18, 21, 20, 14

Core
No.2

3506-3510

16, 20, 20, 20, 19

3511-3520

22, 18, 15, 12, 15, 11, 11, 13, 15, 14

3521-3530

16, 12, 19, 22, 23, 22, 21, 21, 27, 23

3531-3534

30, 48, 62, 40.

SAMPLE DESCRIPTION

Well Name: Briggs Trout River No. 3

Location: 60° 58' 44" N. Lat.
120° 01' 55" W. Long.

<u>Depth</u> <u>Feet</u>	<u>Description</u>
Surface-50	Glacial drift, pebbles of gravel, igneous rocks and limestone.
50-170	No samples, working mud ring.
170-190	Shale - medium to light grey, slightly calcareous; also shale, black, fissile.
190-240	No samples, working mud ring.

WABAMUN GROUP - 240'

240-270	Limestone - light grey, dense, very argillaceous.
270-350	Limestone - greyish white to buff, dense, fossiliferous, mottled in part.
350-390	Limestone - light grey, dense, argillaceous; with siltstone, brownish grey, calcareous.
390-400	Siltstone - medium brown, calcareous.
400-410	Limestone - buff, dense.
410-520	Limestone - light grey and buff, dense, argillaceous in part; minor shale partings, medium grey; and siltstone, light grey with black specks.
520-540	Siltstone - light grey with black specks, soft, slightly calcareous.
540-590	Limestone - buff, dense to microcrystalline, argillaceous in part.

TROUT RIVER FORMATION - 590'

590-610	Siltstone - light grey, speckled; and siltstone, medium brown, calcareous.
610-620	Limestone - buff, dense to microcrystalline; with siltstone, light grey, calcareous.
620-640	Limestone - buff to light grey, dense, argillaceous in part.

<u>Depth</u> <u>Feet</u>	<u>Description</u>
640-680	Interbedded limestone - as above; and siltstone, light grey, calcareous.
680-700	Shale - greyish brown, calcareous and siltstone, light grey, calcareous.
700-740	Siltstone - light grey, limy, speckled; and limestone, buff, dense, silty.
740-760	Siltstone - as above, and sandstone, light grey, very fine-grained, calcareous, tight; also limestone, buff, dense.
<u>GRUMBLER FORMATION - 755'</u>	
760-820	Limestone - buff to cream, dense.
820-830	Siltstone - grey, green, calcareous; trace of shale, green, calcareous.
830-840	Limestone - buff, dense.
840-860	Siltstone - light grey, calcareous.
860-880	Interbedded siltstone and limestone - as above.
880-900	Siltstone - light grey and greenish grey, calcareous.
900-960	Limestone - light grey, dense, silty; siltstone partings, calcareous.
960-970	Siltstone - medium to light grey, calcareous.
970-980	Limestone - buff, dense, mottled in part, very hard.
980-1010	Siltstone - greenish grey, calcareous; trace of shale, greenish grey, calcareous; also trace of sandstone, greenish grey, very fine-grained, calcareous.
1010-1050	Shale - light green and brown, calcareous; with siltstone, as above.
1050-1090	Shale - grey and green, calcareous, minor limestone, buff, dense.
1090-1130	Siltstone - light grey, calcareous; and shale, medium grey, calcareous.

<u>Depth</u> <u>Feet</u>	<u>Description</u>
1130-1150	Shale - greenish grey, calcareous; with siltstone, as above.
1150-1160	Siltstone - brown to grey, calcareous.
1160-1200	Interbedded shale - greenish grey, calcareous; and siltstone, light grey, calcareous.
<u>ISLAND RIVER LIMESTONE - 1,200'</u>	
1200-1220	Limestone - medium brownish grey, mottled in part, dense and fragmental, argillaceous, fossiliferous; also siltstone, greenish grey, fossiliferous.
<u>SIMPSON FORMATION - 1,220'</u>	
1220-1300	Shale - green, brown and medium grey, non-calcareous.
1300-1310	Shale - as above, with siltstone, greenish grey, calcareous.
1310-1420	Interbedded shale - chocolate brown and green, very slightly calcareous; with traces of siltstone, light grey, calcareous.
1420-1460	Shale - green, slightly calcareous.
1460-1480	Siltstone - light green, calcareous.
1480-1500	Shale - green and medium grey; with siltstone, light brown, calcareous.
1500-1530	Shale - brown and green, slightly calcareous; with siltstone, greenish grey, calcareous.
1530-1540	Limestone - buff, dense; with siltstone as above.
1540-1590	Interbedded shales - brown, green and grey; with siltstone, greenish grey, calcareous.
1590-1600	Shale - brown, fissile, slightly calcareous.
1600-1620	Limestone - buff, dense, argillaceous in part.
1620-1630	Siltstone - green, calcareous; with shale partings, brown and grey.
1630-1650	Limestone - buff, dense to microcrystalline, argillaceous in part, grading to siltstone, green, calcareous.
1650-1750	Interbedded shale - brown and green; and siltstone, greenish grey, calcareous; traces of limestone, buff, dense.

<u>Depth</u> Feet	<u>Description</u>
1750-1760	Siltstone - greenish grey, calcareous; with shale partings, green.
1760-1770	Shale - brown and green, slightly calcareous.
1770-1780	Limestone - buff, dense, argillaceous in part.
1780-1800	Interbedded shales - medium brown, green and grey, slightly calcareous.
1800-1840	Limestone - buff, dense in part, argillaceous; with shale partings, green and brown.
1840-1890	Shale - green and brown, slightly calcareous; with siltstone, light grey-green, calcareous.
1890-1900	Limestone - buff, dense.
1900-2020	Interbedded shale - green and brown, slightly calcareous; and siltstone, light greyish green, calcareous.
2020-2040	Shale - green, slightly calcareous; with siltstone, green, calcareous.
2040-2050	Limestone - buff, dense.
2050-2120	Shale - greyish green, very slightly calcareous.
2120-2130	Limestone - buff, dense.
2130-2510	Shale - greyish green, very slightly calcareous; minor siltstone, green, calcareous.
2510-2520	Limestone - buff, dense.
2520-2610	Shale - greyish green, very slightly calcareous; minor shale, brown; and siltstone, green.
2610-2630	Limestone - buff, dense, slightly argillaceous.
2630-2660	Shale - greyish green, very slightly calcareous; with shale, brown; and siltstone, green.
2660-2670	Limestone - buff, dense.
2670-2930	Shale - greyish green, very slightly calcareous; minor shale, brown; and siltstone, green.
2930-2998	Shale - dark brown to black, bituminous.

USKEG-KEG RIVER FORMATION - 2,998'

<u>Depth</u> <u>Feet</u>	<u>Description</u>
2998-3020	Limestone - cream to buff, dense, chalky in part.
3020-3025	Limestone - brown, dense.
3025-3080	Limestone - cream to buff, dense, chalky in part.
3080-3085	Limestone - medium brown, dense to microcrystalline.
3085-3095	Limestone - cream to buff, dense.
3095-3100	Limestone - light grey to brown, dense, slightly argillaceous in part.
3100-3105	Limestone - medium brown, mottled, dense.
3105-3140	Limestone - cream to buff, dense, powdery.
3140-3160	Limestone - medium brown, dense to microcrystalline, mottled in part.
3160-3180	Limestone - light brown and buff, dense to microcrystalline, in part argillaceous.
3180-3200	Limestone - medium brown, mottled, dense to microcrystalline.
3200-3210	Limestone - as above, with limestone, light grey, dense, powdered in part.
3210-3225	Limestone - light grey and buff, dense, very slightly argillaceous.
3225-3240	Limestone - light greyish brown, dense, argillaceous and limestone, medium brown, dense.
3240-3275	Limestone - medium brown mottled, and light grey powdered, dense, slightly argillaceous.
3275-3330	Limestone - medium brown, dense and fragmental, argillaceous in part, and in part bituminous, very hard.
3330-3335	Limestone - as above with limestone, buff, dense, argillaceous.
3335-3365	Limestone - dark brown mottled, dense, bituminous; and limestone, buff, dense, argillaceous, some slickensides.
3365-3385	Limestone - buff to brown, dense, argillaceous, some bituminous material and traces of fossil fragments.

<u>Depth</u> <u>Feet</u>	<u>Description</u>
3385-3410	Limestone - in part dolomitic limestone, medium brown to buff, microcrystalline, bituminous, very hard in part, slightly argillaceous.
3410-3430	Limestone - medium to dark brown, mottled, dense, bituminous, argillaceous.
3430-3445	Limestone - medium to dark brown, microcrystalline, silty in part, bituminous in part, traces of poor intercrystalline porosity.
3445-3459	Dolomitic limestone - light brown, dense, argillaceous, minor calcite inclusions, white.
3459-3534	See Core Description.

CORE DESCRIPTION

Well Name: Briggs Trout River No. 3

Location: 60° 58' 44" N. Lat.
120° 01' 55" W. Long.

FootageDescription

Core No. 1 3,459'-3,505' Recovered 45.6'

- | | |
|------|--|
| 9.5 | Dolomitic limestone - dark brown to black, microcrystalline; and dolomite, dark brown, minor calcite crystals, white, also some stylolites. |
| 5.3 | Dolomite - dark grey, finely crystalline to microcrystalline, scattered good intercrystalline porosity, also small vugs, minor white calcite crystals. |
| 9.3 | Dolomite - medium brown, microcrystalline, very tight, banded with grey and black wavy stripes, minor stylolites. |
| 0.5 | Dolomitic limestone - light brown, dense, appears brecciated or reworked, very tight and hard. |
| 21.0 | Dolomite - dark brown, banded, microcrystalline, stylolitic, very tight. |

Core No. 2 3,505'-3,534' Recovered 29.0'

- | | |
|------|---|
| 13.8 | Dolomite - medium brown to dark brown, dense, irregular stylolitic partings. |
| 2.5 | Dolomite - dark grey, banded, microcrystalline, very hard. |
| 12.7 | Dolomite - dark grey to black, dense to microcrystalline, stylolitic, siliceous, very hard and tight. |

DRILL STEM TEST REPORT

Briggs Trout

TEST No. 1

Run No. 1

Well Name River

Well No. 3

District N.W.T.

Field Wildcat

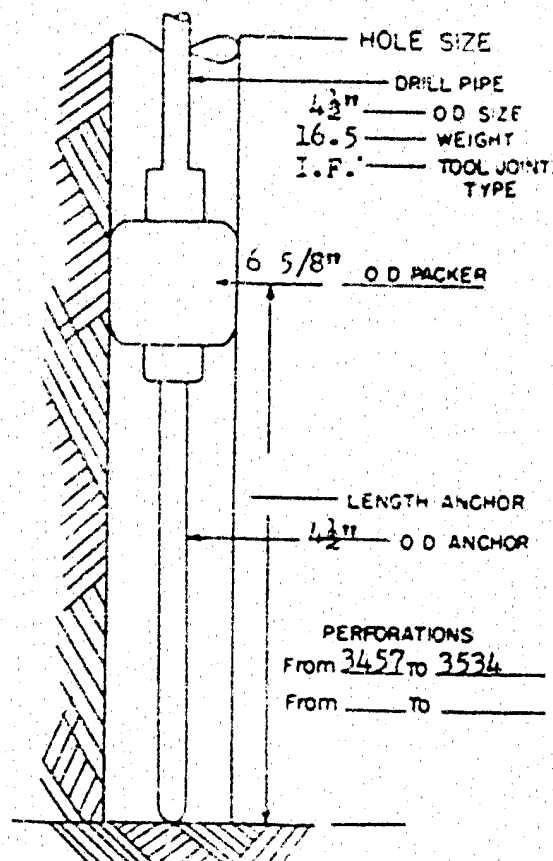
Province N.W.T.

Testing Company Lynes United Services Ltd.

Operator C. Hank

Date Commenced March 2, 1960

Date Completed March 2, 1960



Formation Tested Pine Point Dolomite
 Section Tested. From 3457 To 3534 ft.
 Mud Properties: Wt. 10.7 Vis. 200 sec.
 Filtrate 5.3 c.c. Filter Cake Gel
 Water Cushion 0 ft.
 Type of Packer Bob-tail
 Choke Size, surface 1/2" Bottom Hole 1/2"

Time	Remarks
Tester started in hole 6:00 a.m.	
Tester on bottom 8:30 a.m.	
Tester opened 8:30 a.m.	
Tester closed 9:30 a.m.	
Tester pulled loose 10:30 a.m.	
Tester out of hole 11:30 a.m.	
Total time tester open 30 mins.	

Weight:
 Set on Packer 25,000 lbs. Pull Packer Loose 10,000 lbs.
 Weight drill pipe Before Test 42,000 After Test 48,000
 Mud level in casing Full
 Nature of Blow Good air blow
 Maximum Surface Pressure 0
 Maximum Trap Pressure 0

Gas Flow: 0 MCF/day: How Gauged By
 Oil Flow 0 bbls. in hrs: Est. 24-hr. Flow Rate How Gauged
 Size flow line Inch. I.D. Size Office inch.

Recovery in Drill Pipe:

Remarks

Free oil	stands	feet	bbls.	
Mud	stands	feet	bbls.	
Water	stands	580 feet	bbls.	Muddy sulphurous salt water.
Gravity of oil	° API @		°F.	
Oil sample obtained			Water sample obtained	Yes

Pressures:

Type of pressure bomb (s) used Kuster - AK1
 Maximum Flowing Pressure 301 PSI
 30,60 Minute Shut in Pressure 1538, 1532 PSI
 Static Mud Pressure after unseating packer 1958 PSI
 Mechanically, was Test satisfactory? Yes

REMARKS:

Good initial puff, good air blow, steady throughout test.

Engineer: D. J. B. Marshall

J. C. SPROULE & ASSOCIATES, CALGARY.

GEOLOGICAL AND ENGINEERING SUMMARY

Well Name: Briggs Trout River No. 3

Location: 60° 58' 44" N. Lat.
120° 01' 55" W. Long.

Briggs Trout River No. 3 was drilled 9.5 miles east-northeast of Briggs Trout River No. 2, in the northeast corner of Oil and Gas Permit No. 904, registered in the name of D. Todd Briggs.

The well was drilled on the basis of seismic work done in the winter of 1959-60.

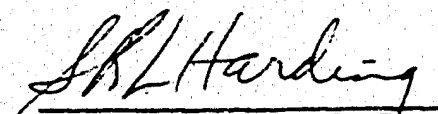
When a depth of 3,425 feet had been reached the well was logged. Drilling was continued to 3,457 feet and then the well was cored to a total depth of 3,534 feet.

Stratigraphically the well was very similar to Briggs Trout River No. 2. The Middle Devonian limestone, found at 2,998 feet, was structurally 128 feet higher than in the No. 2 well.

About 5 feet of porous dolomite was found in the core and, on test from 3,457 to 3,534 feet for 30 minutes, gave up 520 feet of salt water.

During drilling of the well the hole deviated to a maximum of eight degrees at 1,810 feet but returned to about three degrees at 3,400 feet. This crooked hole problem slowed operations considerably, and as a consequence cuttings samples were of poor quality.


D. B. Marshall


S. R. L. Harding, P. Eng.

1009 Fourth Avenue S. W.,
Calgary, Alberta.
April 29, 1960.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton

Fort St. John

Calgary

WATER ANALYSIS REPORT

Field Well No. Briggs Trout River #3
 Operator J. C. Sproules & Associates Date Received April 6, 1960
 Formation Depths 3437' - 3534'
 Other pertinent data D.S.T. #1. Recovered 580 feet.
 Location: 60° 50' 44" N. Latitude; 120° 1' 55" W. Longitude.

Date April 26, 1960 Lab. No. C 2832

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO ₄	Cl	CO ₃	HCO ₃	OH	MnS
35,646	10,785	2,042		701	79,000		870		Present

MILLIGRAM EQUIVALENTS

1550.63	538.17	167.85		14.58	2227.80		14.27		
---------	--------	--------	--	-------	---------	--	-------	--	--

MILLIGRAM EQUIVALENTS IN PERCENT

34.36	11.92	3.72		0.32	49.36		0.32		
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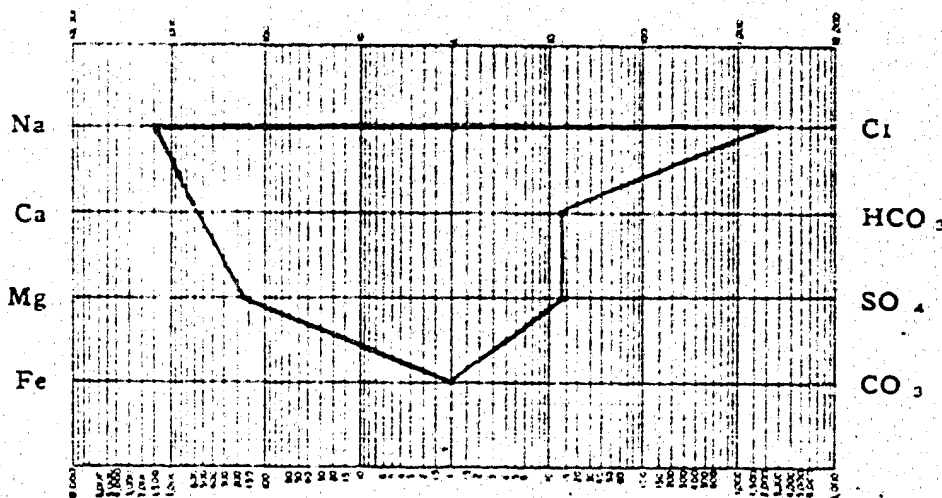
Total Solids in Parts per Million

By evaporation	152,800
After ignition	125,220
Calculated	128,603
Specific Gravity	1.090
Observed pH	6.5
Resistivity	0.086 ohm meters @ 68° F.

Properties of Reaction in Percent

Primary salinity	68.72
Secondary salinity	30.64
Primary alkalinity	---
Secondary alkalinity	0.64
Chloride salinity	99.36
Sulfate salinity	0.64

Remarks and conclusions Organic matter present in total solids.

LOGARITHMIC PATTERN
MEQ per unit

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

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WATER ANALYSIS REPORT

Field Well No. Briggs Trout River #3
 Operator J. C. Sproules & Associates Date Received April 6, 1960
 Formation Depths 3457' - 3534'
 Other pertinent data D.S.T. #1. Recovered 580 feet.
 Location: 60° 50' 44" N. Latitude; 120° 1' 55" W. Longitude.

Date April 26, 1960 Lab. No. C 2832

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO ₄	Cl	CO ₂	HCO ₃	OH	NaS
35,646	10,785	2,042		701	79,000		870		Present

MILLIGRAM EQUIVALENTS

1550.63	538.17	167.85		14.56	2227.60		14.27		
---------	--------	--------	--	-------	---------	--	-------	--	--

MILLIGRAM EQUIVALENTS IN PERCENT

34.36	11.92	3.72		0.32	49.36		0.32		
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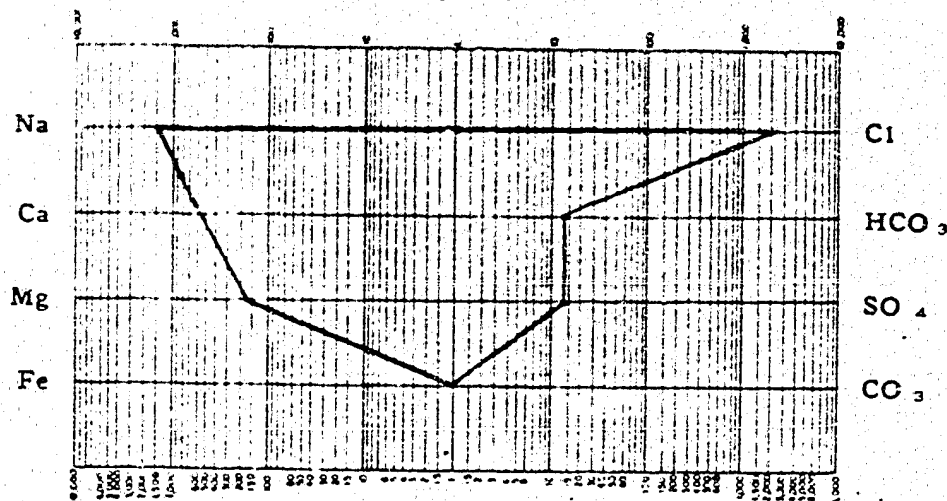
Total Solids in Parts per Million

By evaporation 152,800
 After ignition 125,220
 Calculated 122,603
 Specific Gravity 1.090
 Observed pH 6.5
 Resistivity 0.086 ohm meters @ 68° F.

Properties of Reaction in Percent

Primary salinity 68.72
 Secondary salinity 30.64
 Primary alkalinity ---
 Secondary alkalinity 0.64
 Chloride salinity 99.36
 Sulfate salinity 0.64

Remarks and conclusions Organic matter present in total solids.

LOGARITHMIC PATTERN
MEQ per unit

D. Todd Briggs - Nominee
COMPANY

Briggs Trout River No. 3
WELL NAME AND NUMBER

1
TEST NO.

March 2, 1960
DATE

LYNES UNITED SERVICES LTD.

1000 - 10th AVENUE S.W., CALGARY, ALBERTA

SERVICE REPORT

UNITED TESTERS LTD.

1000 - 10th Ave. West



Calgary, Alberta

Phone CHerry 4-0506

PRESSURE READINGS

TYPE OF TEST	<u>Formation</u>	Inside:	REC. NO. <u>909</u>	CAP. <u>4000</u>	DEPTH <u>3462'</u>	POINTS
INTERVAL TESTED	<u>3457' to 3534'</u>	INITIAL HYD.	<u>1972</u>			<u>1</u>
HOLE SIZE	<u>7 7/8" MUD WT. 10.7</u>	INITIAL SHUT-IN	<u>1538</u>			<u>2</u>
FLUID CUSHION	<u>Nil</u>	INITIAL FLOW	<u>132</u>			<u>3</u>
FLOW PERIOD	<u>30 minutes</u>	FINAL FLOW	<u>301</u>			<u>4</u>
INITIAL SHUT-IN PER	<u>30 minutes</u>	FINAL SHUT-IN	<u>1532</u>			<u>5</u>
FINAL SHUT-IN PER	<u>60 minutes</u>	FINAL HYD.	<u>1958</u>			<u>6</u>

BLOW Good initial puff, good air
blow, steady thru-out test.

FLUID RECOVERY 500' muddy sulphurous
salt water.

TEMP. _____ M.C.F. _____

SUR. CHOKE _____ BOT. CHOKE 1/2"

TICKET NO. 782

PRESSURE READINGS

Outside:	REC. NO. <u>904</u>	CAP. <u>5000</u>	DEPTH <u>3467'</u>	POINTS
INITIAL HYD.	<u>1980</u>			<u>1</u>
INITIAL SHUT-IN	<u>1540</u>			<u>2</u>
INITIAL FLOW	<u>130</u>			<u>3</u>
FINAL FLOW	<u>305</u>			<u>4</u>
FINAL SHUT-IN	<u>1535</u>			<u>5</u>
FINAL HYD.	<u>1965</u>			<u>6</u>

REMARKS

D. Todd Briggs - Nominee,
Briggs Trout River No. 3
D.S.T. No. 1
March 2, 1960

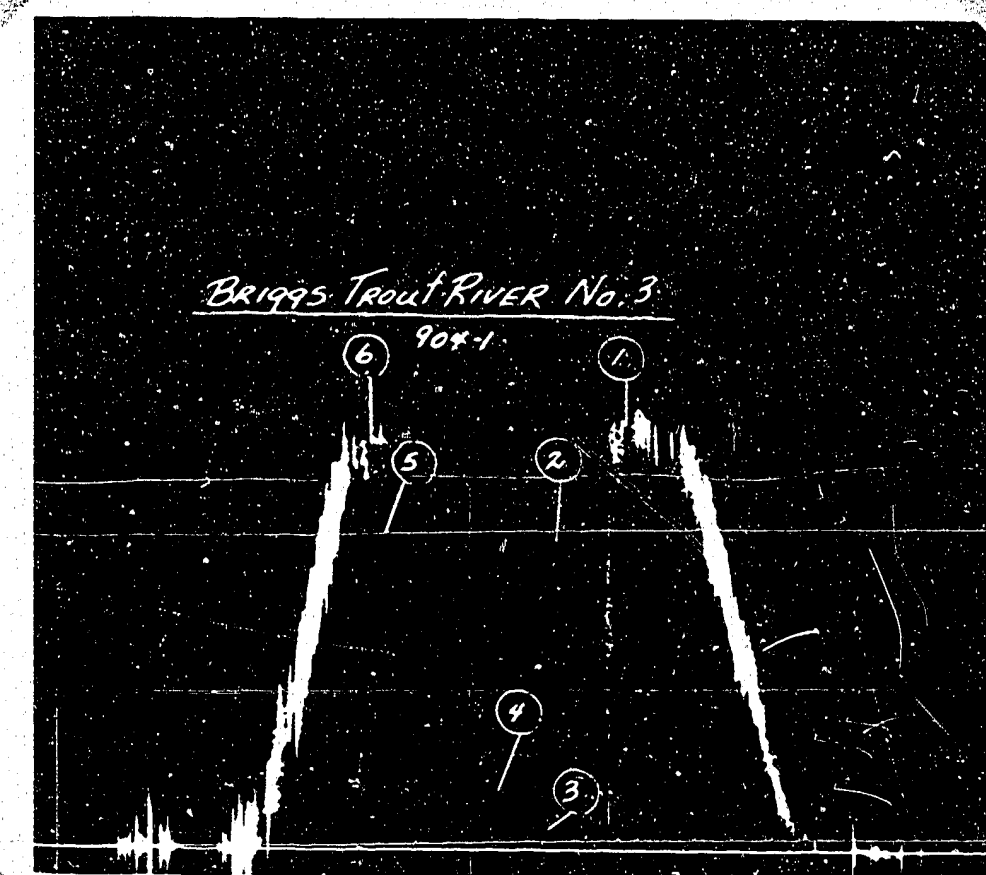
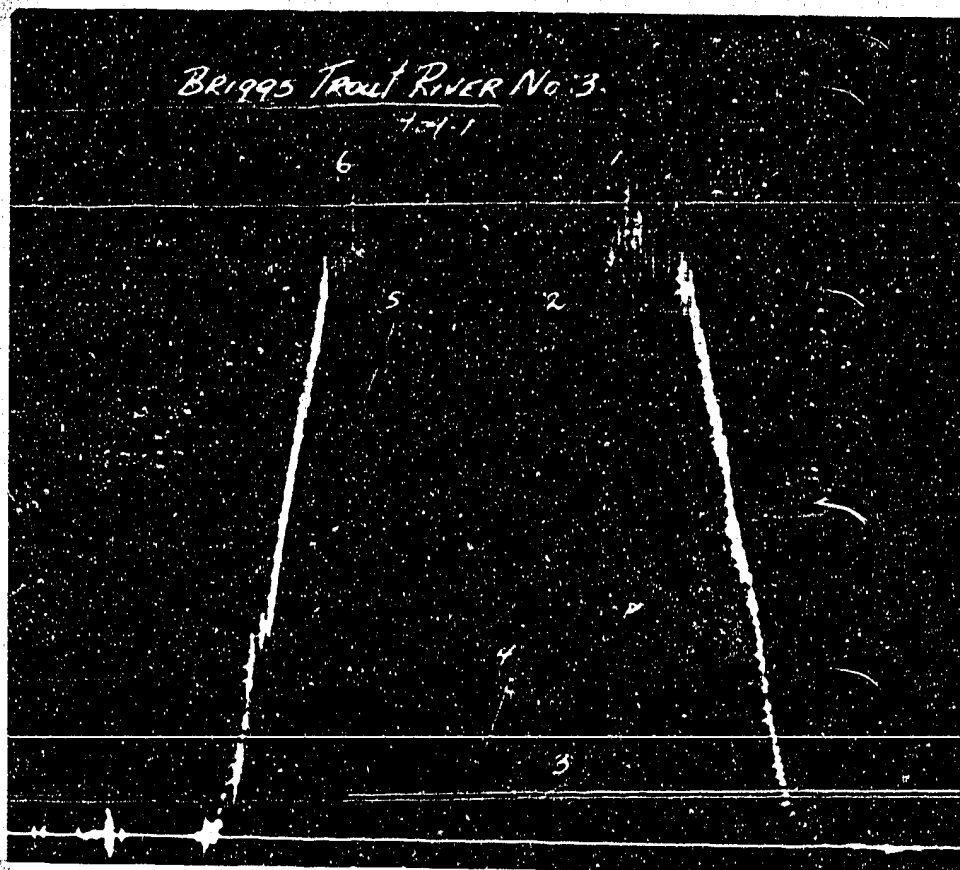
PRESSURES ON BUILD-UP

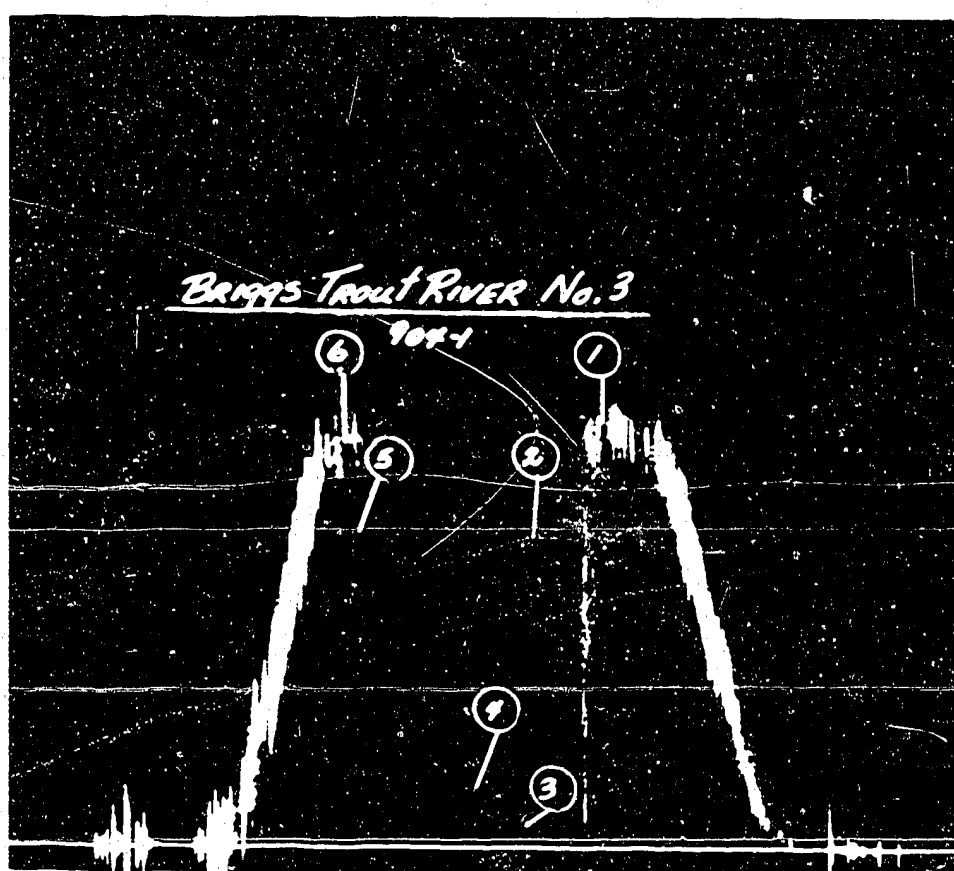
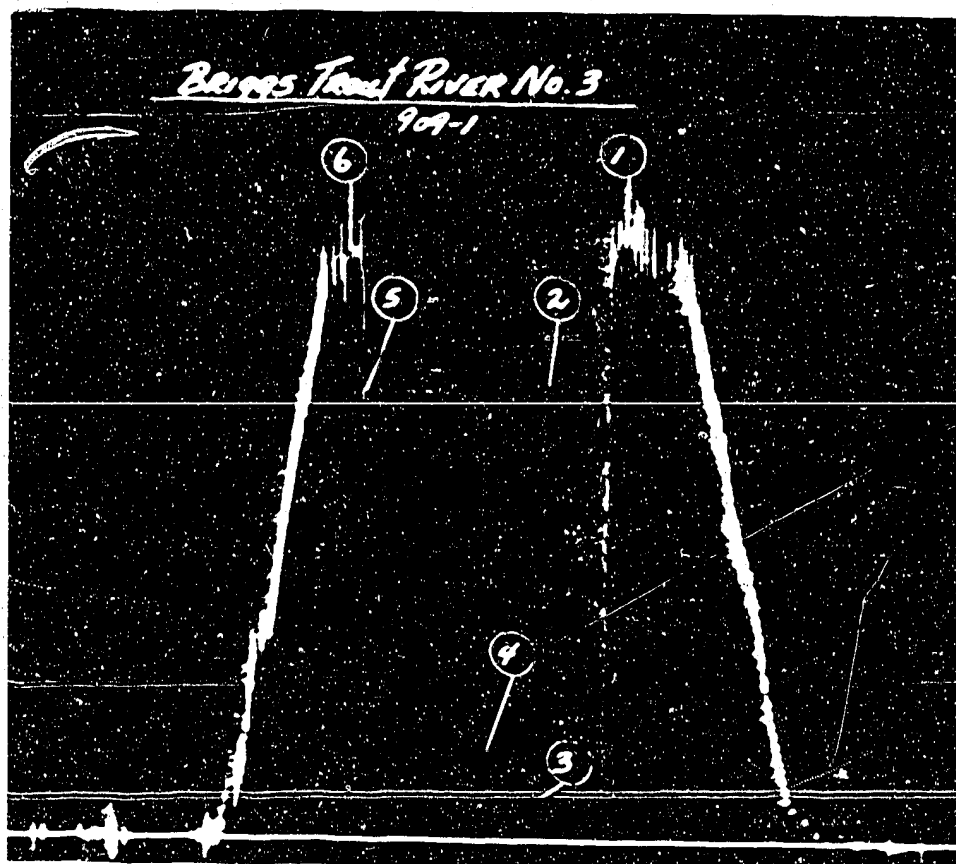
D. Todd Briggs - Hollings
COMPANY

BR1995 Trout River No. 3
WELL NAME AND NUMBER

TEST NO.

1
DATE
March 2, 1960





March 2, 1960

Company Representative

Lsd. Sec. Twp. Rge. W.

Tool Pusher

Bit No.		No. Stds.	Length	Bit No.		No. Stds.	Length	Bit No.		No. Stds.	Length
Serial No.		No. D.C.'s	Length	Serial No.		No. D.C.'s	Length	Serial No.		No. D.C.'s	Length
Bit Size			Length	Bit Size			Length	Bit Size			Length
Bit Type			Length	Bit Type			Length	Bit Type			Length
Dr. from		Kelly in		Dr. from		Kelly in		Dr. from		Kelly in	
Dr. to		TOTAL		Dr. to		TOTAL		Dr. to		TOTAL	
Cored from		D.C.O.D. Top	Hrs. On Bottom	Cored from		D.C.O.D. Top	Hrs. On Bottom	Cored from		D.C.O.D. Top	Hrs. On Bottom
Cored to		D.C.I.D. Top	Hrs. Off Bottom	Cored to		D.C.I.D. Top	Hrs. Off Bottom	Cored to		D.C.I.D. Top	Hrs. Off Bottom
Reamed from		Pipe Size	Trip Time	Reamed from		Pipe Size	Trip Time	Reamed from		Pipe Size	Trip Time
Reamed to		C.S.G. Set at	Serv. Time	Reamed to		C.S.G. Set at	Serv. Time	Reamed to		C.S.G. Set at	Serv. Time
Total Bit Footage		C.S.G. Size	Rep. Time	Total Bit Footage		C.S.G. Size	Rep. Time	Total Bit Footage		C.S.G. Size	Rep. Time
Bit Hrs.		Pipe in Hole	Jts.	Bit Hrs.		Pipe in Hole	Jts.	Bit Hrs.		Pipe in Hole	Jts.
Table R.P.M.		Pipe on Racks	Jts.	Table R.P.M.		Pipe on Racks	Jts.	Table R.P.M.		Pipe on Racks	Jts.
			Diesel Fuel Meter Reading				REMARKS:				REMARKS:
			Today								

Depth	Deviation	Total Pipe on Lease	Jts.	Yesterday		Depth	Deviation	Total Pipe on Lease	Jts.		Depth	Deviation	Total Pipe on Lease	Jts.	
Depth	Deviation			Consumption	Gals.	Depth	Deviation				Depth	Deviation			
Depth	Deviation					Depth	Deviation				Depth	Deviation			
Depth	Deviation					Depth	Deviation				Depth	Deviation			
Depth	Deviation					Depth	Deviation				Depth	Deviation			

Depth							Pressure							Depth							Pressure						
Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	
12							Liner Size	Liner Size	8							Liner Size	Liner Size	4							Liner Size	Liner Size	
1							Water-Loss	Filter Cake	PH	9						Water-Loss	Filter Cake	PH	5						Water-Loss	Filter Cake	PH
2										10									6								
3										11									7								
4										12									8								
5							Mud Added Sacks			1						Mud Added Sacks			9						Mud Added Sacks		
6							Chemicals Added Lbs.			2						Chemicals Added Lbs.			10						Chemicals Added Lbs.		
7										3									11								

CREW	MATERIALS CHARGED TO OPERATOR		CREW	MATERIALS CHARGED TO OPERATOR		CREW	MATERIALS CHARGED TO OPERATOR	
Driller <i>D. MAHNS</i>	Core Bit	Serial	Driller <i>B. BALSCH</i>	Core Bit	Serial	Driller <i>B. SEMER</i>	Core Bit	Serial
Derrickman <i>D. BOESTIE</i>	Reaming Bit	Serial	Derrickman <i>B. L. ANDERSON</i>	Reaming Bit	Serial	Derrickman <i>B. L. ANDERSON</i>	Reaming Bit	Serial
Cat Headman <i>M. LAERENTE</i>	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman <i>L. DANIELUS</i>	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman <i>L. DANIELUS</i>	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper <i>C. ROTTMANN</i>	Swab Cups	Swab Rubbers	Rotary Helper <i>B. L. ANDERSEN</i>	Swab Cups	Swab Rubbers	Rotary Helper <i>B. BOESTIE</i>	Swab Cups	Swab Rubbers
Fireman <i>L. TROSS</i>			Fireman <i>M. HACKNEY</i>			Fireman <i>C. S. ANDERSON</i>		
Leaseman			Leaseman			Leaseman		

REMARKS	FROM	TO	REMARKS	FROM	TO	REMARKS	FROM	TO
RIG HIGH LINE	12:00	12:30	(W) O.C.	8:00	8:00	TEAR OUT		
LAY DOWN 44 STD'S 4 1/2 PIPE	12:30	3:45	FILL DUG 3	11:00	11:30			
RUN & DIS PLACE PLUG #3	3:45	4:00	TEAR OUT	11:30	5:00			
N.O.L.	4:00	8:00						
Plug # 3 300 - 400.								
Mixed 65 Sacks Cement			FILL Plug # 3 @ 11:30 AM			4:00 P.M.		
+ 2 % CaCl ₂ Displaced with 4 H/Ls			Found top at 292'			3 / 60		
Plug in place @ 4:00 AM			R.G. RELEASED			MAAR		
						D.B. Moore Lall		

GUTHRIE McLAREN DRILLING LTD.

Well No. BRIERS TRIBUT RIVER #3

Company Representative

W. Miller
Tool PusherDate MARCH 2/66

Lsd. Sec. Twp. Rge. W.

Cored
Drilled From 2521 To 2534 Hole Made 3

Drilled From To Hole Made

Drilled From To Hole Made

Bit No.	<u>12 A</u>	No. Stds.	<u>51-5</u>	Length	<u>3112.78</u>	Bit No.		No. Stds.		Length		Bit No.		No. Stds.		Length	
Serial No.	<u>C-11</u>	No. D.C.'s	<u>11</u>	Length	<u>318.11</u>	Serial No.		No. D.C.'s		Length		Serial No.		No. D.C.'s		Length	
Bit Size	<u>6 1/8</u>			Length		Bit Size				Length		Bit Size				Length	
Bit Type	<u>0</u>		<u>CORE BAR</u>	Length	<u>64.62</u>	Bit Type				Length		Bit Type				Length	
Dr. from		Kelly in			<u>38.49</u>	Dr. from		Kelly in				Dr. from		Kelly in			
Dr. to		TOTAL			<u>3534.00</u>	Dr. to		TOTAL				Dr. to		TOTAL			
Cored from	<u>3459</u>	D.C.O.D. Top	<u>6 1/4</u>	Hrs. On Bottom	<u>2</u>	Cored from		D.C.O.D. Top		Hrs. On Bottom		Cored from		D.C.O.D. Top		Hrs. On Bottom	
Cored to	<u>3534</u>	D.C.I.D. Top	<u>2 1/8</u>	Hrs. Off Bottom	<u>6</u>	Cored to		D.C.I.D. Top		Hrs. Off Bottom		Cored to		D.C.I.D. Top		Hrs. Off Bottom	
Reamed from		Pipe Size	<u>4 1/2</u>	Trip Time	<u>4</u>	Reamed from		Pipe Size		Trip Time		Reamed from		Pipe Size		Trip Time	
Reamed to		C.S.G. Set at	<u>349</u>	Serv. Time		Reamed to		C.S.G. Set at		Serv. Time		Reamed to		C.S.G. Set at		Serv. Time	
Total Bit Footage	<u>75</u>	C.S.G. Size	<u>8 3/8</u>	Rep. Time		Total Bit Footage		C.S.G. Size		Rep. Time		Total Bit Footage		C.S.G. Size		Rep. Time	
Bit Hrs.	<u>24</u>	Pipe in Hole	<u>103</u>	Jts.	Diesel Fuel Meter Reading	Bit Hrs.		Pipe in Hole		Jts.	REMARKS:	Bit Hrs.		Pipe in Hole		Jts.	REMARKS:
Table R.P.M.	<u>80</u>	Pipe on Racks	<u>22</u>	Jts.	Today	Table R.P.M.		Pipe on Racks		Jts.		Table R.P.M.		Pipe on Racks		Jts.	

Depth	Deviation	Total Pipe on Lease	<u>125</u>	Jts.	Yesterday	Depth	Deviation	Total Pipe on Lease		Jts.		Depth	Deviation	Total Pipe on Lease		Jts.	
Depth	Deviation				Consumption	Gals.	Depth	Deviation				Depth	Deviation				
Depth	Deviation						Depth	Deviation				Depth	Deviation				
Depth	Deviation						Depth	Deviation				Depth	Deviation				
Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size
<u>12</u>	<u>10.7</u>	<u>200</u>	<u>35</u>	<u>500</u>	<u>3</u>		<u>6 3/4 x 12</u>	<u>5 x 10</u>	<u>8</u>								
<u>1</u>							<u>6 3/4</u>	<u>5</u>	<u>9</u>								
<u>2</u>									<u>10</u>								
<u>3</u>									<u>11</u>								
<u>4</u>									<u>12</u>								
<u>5</u>									<u>1</u>								
<u>6</u>									<u>2</u>								
<u>7</u>									<u>3</u>								

CREW	MATERIALS CHARGED TO OPERATOR	CREW	MATERIALS CHARGED TO OPERATOR	CREW	MATERIALS CHARGED TO OPERATOR
Driller <u>D. MOHNS</u>	Core Bit	Driller <u>B. DISCOI</u>	Core Bit	Driller <u>W. SEMAK</u>	Core Bit
Derrickman <u>D. BOGSTIE</u>	Reaming Bit	Derrickman <u>D. ANDERSON</u>	Reaming Bit	Derrickman <u>D. ANDERSON</u>	Reaming Bit
Cat Headman <u>M. LAURENTZ</u>	Core Cutters SF. HF.	Cat Headman <u>L. DAULHUS</u>	Core Cutters SF. HF.	Cat Headman <u>S. ANDERSEN</u>	Core Cutters SF. HF.
Rotary Helper <u>O. ROTT MANN</u>	Swab Cups	Rotary Helper <u>S. ANDERSEN</u>	Swab Cups	Rotary Helper <u>H. BOGSTIE</u>	Swab Cups
Rotary Helper	Swab Rubbers	Rotary Helper	Swab Rubbers	Rotary Helper	Swab Rubbers
Fireman <u>L. TROSS</u>		Fireman <u>D. HACKNEY</u>		Fireman <u>G. SANTROCK</u>	
Leaseman		Leaseman		Leaseman	

REMARKS	FROM	TO	REMARKS	FROM	TO	REMARKS	FROM	TO
<u>0 CORING</u>	<u>12:00</u>	<u>2:00</u>	<u>RUN IN W/ PACKER</u>	<u>800</u>	<u>830</u>	<u>DISPLACE PLUG NO 2</u>	<u>400</u>	<u>415</u>
<u>BREAK CORE</u>	<u>2:00</u>	<u>2:15</u>	<u>WELL ON TEST</u>	<u>830</u>	<u>1030</u>	<u>MOIST PIPE</u>	<u>415</u>	<u>500</u>
<u>HOIST CORE</u>	<u>2:15</u>	<u>4:15</u>	<u>HOIST & LAY DOWN PACKER</u>	<u>1030</u>	<u>100</u>	<u>LAY DOWN CORE BALS DRILL COLLARS</u>		
<u>RECOVER CORE & STAND BACK</u>	<u>4:15</u>		<u>RUN IN OPEN END</u>	<u>100</u>	<u>215</u>	<u>4 1/2 DRILL STEM DUMP MUD TANKS</u>	<u>500</u>	<u>1115</u>
<u>CORE BAR</u>	<u>5:15</u>	<u>5:15</u>	<u>RAW & DISJ PLUG ONE</u>	<u>215</u>	<u>315</u>	<u>RUN IN W/ BIT TO FEEL PLUG #2</u>	<u>1115</u>	<u>1200</u>
<u>MAKE UP PACKER</u>	<u>5:15</u>	<u>6:00</u>	<u>HOIST TO RUN PLUG TWO</u>	<u>345</u>	<u>345</u>			
<u>RUN IN W/ SAME</u>	<u>6:00</u>	<u>8:00</u>	<u>RUN PLUG TWO</u>	<u>345</u>	<u>400</u>			
<u>Core #2 - 3505' - 3534' (29')</u>			<u>Plug 1# 3534-3300</u>			<u>Felt Plug # 2 at 1200 pm</u>		
			<u>Mixed 75 SACKS Cement Disp.</u>			<u>Top of Plug at 2800'</u>		
			<u>WITH 46 BALS AMUD PLUG IN PLACE</u>					
			<u>3:5 PM</u>					
			<u>Plug 2# 3200 2900</u>					
			<u>Mixed 110 SACKS Cement Disp.</u>					
			<u>Disp. w/ 41 BALS mud Plug in place</u>					
			<u>@ 4:15 PM</u>					

Well No. BIGGS TROUT RIVER 3rd

Date MARCH 1/60

Lsd. Sec. Twp. Rge. W.

W. Miller
Tool Pusher

Drilled From 3459 To 3488 Hole Made 29

Drilled From 3505 To 3508 Hole Made 3
 Reamed 3488 3505 1

CORED
Drilled From 3508 To 3531 Hole Made 23

Bit No.	11 Row	No. Stds.	52	Length	3142.89	Bit No.	11 Row 12A	No. Stds.	51-5	Length	3112.78	Bit No.	12A	No. Stds.	51-5	Length	3112.78
Serial No.	3916	No. D.C.'s	11	Length	318.11	Serial No.	3916 C-11	No. D.C.'s	11	Length	318.11	Serial No.	C-11	No. D.C.'s	11	Length	318.11
Bit Size	7 7/8			Length		Bit Size	7 7/8 6 1/8			Length		Bit Size	6 1/8			Length	
Bit Type	OWC			Length		Bit Type	OWC S			Length		Bit Type	S			Length	
Dr. from	3364	Kelly in =			27.00	Dr. from	3364	Kelly in =			12.49	Dr. from		Kelly in =			35.49
Dr. to	3415	TOTAL =			3488.00	Dr. to	3415	TOTAL =			3508.00	Dr. to		TOTAL =			3531.00
Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom		Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom		Cored from	3459	D.C.O.D. Top	6 1/4	Hrs. On Bottom	8
Cored to		D.C.L.D. Top	27 1/8	Hrs. Off Bottom		Cored to		D.C.L.D. Top	27 1/8	Hrs. Off Bottom		Cored to	3531	D.C.L.D. Top	27 1/8	Hrs. Off Bottom	
Reamed from	3459	Pipe Size	4 1/2	Trip Time		Reamed from	3459	Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time	
Reamed to	3488	C.S.G. Set at	349	Serv. Time		Reamed to	3505	C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at	349	Serv. Time	
Total Bit Footage	80	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	97 49	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	72	C.S.G. Size	8 5/8	Rep. Time	
Bit Hrs.	12 1/4	Pipe in Hole	104	Jts.	Diesel Fuel Meter Reading	Bit Hrs.	16 14	Pipe in Hole	103	Jts.	REMARKS:	Bit Hrs.	22	Pipe in Hole	103	Jts.	REMARKS:
Table R.P.M.	100	Pipe on Racks	21	Jts.	Today	Table R.P.M.	80 80	Pipe on Racks	22	Jts.		Table R.P.M.	80	Pipe on Racks	22	Jts.	

Total Pipe on Lease 125 Jts.			Yesterday			Total Pipe on Lease 125 Jts.			Total Pipe on Lease 125 Jts.		
Depth	Deviation					Depth	Deviation		Depth	Deviation	
Depth	Deviation		Consumption	Gals.		Depth	Deviation		Depth	Deviation	
Depth	Deviation					Depth	Deviation		Depth	Deviation	
Depth	Deviation					Depth	Deviation		Depth	Deviation	
Depth	Deviation					Depth	Deviation		Depth	Deviation	

Depth		Deviation						Depth		Deviation						Depth		Deviation								
Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size
12							6 3/4 x 12	5 x 10	8							6 3/4 x 12	5 x 10	4	10.5	125	35	500	3/4		6 3/4 x 12	5 x 10
							Liner Size 6 3/4	Liner Size 5								Liner Size 6 3/4	Liner Size 5								Liner Size 6 3/4	Liner Size 5
1							Water-Loss	Filter Cake	9							Water-Loss	Filter Cake	5	10.6	125	35	500	3/4		Water-Loss	Filter Cake
2	TRIP								10									6	10.6	127	35	500	3/4	5.3	3/32	12.5
3							5.4	2/32	11									7	10.6	127	35	500	3/4			
									12									8	10.6	127	35	500	3/4			
5							Mud Added Sacks		1							Mud Added Sacks 400 # C.E.L.		9	10.6	129	35	500	3/4		Mud Added Sacks	
6	10.7	70		600	3/4		Chemicals Added Lbs.		2	10.5	125	35	500	3/4		Chemicals Added Lbs. 200 # M.Y.-6.0-C.E.L.		10	10.7	138	35	500	3/4		Chemicals Added Lbs. 200 # CAUSTIC	
7	10.4	70		600	3/4				3									11	10.9	150	35	500	3/4	✓		

CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR	
Driller	B. D. HUS	Core Bit	Serial	Driller	B. D. HUS	Core Bit	Serial	Driller	W. SEMAK	Core Bit	Serial
Derrickman	B. BOSTIE	Reaming Bit	Serial	Derrickman	D. ANDERSON	Reaming Bit	Serial	Derrickman	D. ANDERSON	Reaming Bit	Serial
Cat Headman	M. LAFFERTY	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman	L. PAULHOS	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman	S. ANDERSEN	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	S. BOYMAN	Swab Cups	Swab Rubbers	Rotary Helper	H. ANDERSEN	Swab Cups	Swab Rubbers	Rotary Helper	H. BOSTIE	Swab Cups	Swab Rubbers
Leaseman	L. TRUSS			Leaseman	M. HACKNEY			Leaseman	E. SANTROCK		

[illegible]

Well No. BRIGGS TRIST RIVER #3

Date FEB 29/68

Lsd. Sec. Twp. Rge. W.

Drilled From To Hole Made

Drilled From 3459 To 3979 Hole Made 2
Cores

CORED
Drilled From 3479 To 3505 Hole Made 26

[illegible]

CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR	
Driller D. MAHNS	Core Bit	Serial	Driller B. BAISCOE	Core Bit	Serial	Driller W. JEMAR	Core Bit	Serial	Driller D. ANDERSON	Core Bit	Serial
Derrickman D. BOGSTIE	Reaming Bit	Serial	Derrickman D. ANDERSON	Reaming Bit	Serial	Derrickman D. ANDERSON	Reaming Bit	Serial	Derrickman D. ANDERSON	Reaming Bit	Serial
Cat Headman M. LAURENTZ	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman M. LAURENTZ	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman S. ANDERSEN	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman S. ANDERSEN	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper O. ROTTMANN	Swab Cups	Swab Rubbers	Rotary Helper I. ANDERSEN	Swab Cups	Swab Rubbers	Rotary Helper H. BOGSTIE	Swab Cups	Swab Rubbers	Rotary Helper H. BOGSTIE	Swab Cups	Swab Rubbers
Rotary Helper			Rotary Helper			Rotary Helper			Rotary Helper		
Fireman L. TRUSS			Fireman M. HACKNEY			Fireman C. SANTROCK			Fireman C. SANTROCK		
Leaseman			Leaseman			Leaseman			Leaseman		
						REMARKS			FROM TO		

[illegible]

Well No. BRIGGS TRAUT RIVER #3

W. Miller
Tool Pusher

Date FEB 28/60

Lsd. Sec. Twp. Rge. W.

Drilled From To Hole Made

Drilled From 3415 To 3423 Hole Made 8

Drilled From 3423 To 3459 Hole Made 36

Bit No.	No. Stds.	Length	Bit No.	No. Stds.	Length	Bit No.	No. Stds.	Length	Bit No.	No. Stds.	Length
Serial No.	No. D.C.'s	Length	Serial No.	No. D.C.'s	Length	Serial No.	No. D.C.'s	Length	Serial No.	No. D.C.'s	Length
Bit Size		Length	Bit Size		Length	Bit Size		Length	Bit Size		Length
Bit Type		Length	Bit Type		Length	Bit Type		Length	Bit Type		Length
Dr. from	Kelly in ==		Dr. from	Kelly in ==		Dr. from	Kelly in ==		Dr. from	Kelly in ==	
Dr. to	TOTAL ==		Dr. to	TOTAL ==		Dr. to	TOTAL ==		Dr. to	TOTAL ==	
Cored from	D.C.O.D. Top	Hrs. On Bottom	Cored from	D.C.O.D. Top	Hrs. On Bottom	Cored from	D.C.O.D. Top	Hrs. On Bottom	Cored from	D.C.O.D. Top	Hrs. On Bottom
Cored to	D.C.I.D. Top	Hrs. Off Bottom	Cored to	D.C.I.D. Top	Hrs. Off Bottom	Cored to	D.C.I.D. Top	Hrs. Off Bottom	Cored to	D.C.I.D. Top	Hrs. Off Bottom
Reamed from	Pipe Size	Trip Time	Reamed from	Pipe Size	Trip Time	Reamed from	Pipe Size	Trip Time	Reamed from	Pipe Size	Trip Time
Reamed to	C.S.G. Set at	Serv. Time	Reamed to	C.S.G. Set at	Serv. Time	Reamed to	C.S.G. Set at	Serv. Time	Reamed to	C.S.G. Set at	Serv. Time
Total Bit Footage	C.S.G. Size	Rep. Time	Total Bit Footage	C.S.G. Size	Rep. Time	Total Bit Footage	C.S.G. Size	Rep. Time	Total Bit Footage	C.S.G. Size	Rep. Time
Bit Hrs.	Pipe in Hole	Jts.	Diesel Fuel Meter Reading	Bit Hrs.	Pipe in Hole	Jts.	REMARKS:	Bit Hrs.	Pipe in Hole	Jts.	REMARKS:
Table R.P.M.	Pipe on Racks	Jts.	Today	Table R.P.M.	Pipe on Racks	Jts.		Table R.P.M.	Pipe on Racks	Jts.	

Depth	Deviation	Total Pipe on Lease <u>125</u> Jts.	Yesterday	Depth	Deviation	Total Pipe on Lease <u>125</u> Jts.	Depth	Deviation	Total Pipe on Lease <u>125</u> Jts.
Depth	Deviation		Consumption	Gals.	Depth	Deviation	Depth	Deviation	
Depth	Deviation				Depth	Deviation	Depth	Deviation	
Depth	Deviation				Depth	Deviation	Depth	Deviation	

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	
12							6 3/4 x 12	5 x 10								6 3/4 x 12	5 x 10	
							Liner Size 6 3/4	Liner Size 5								Liner Size 6 3/4	Liner Size 5	
1							Water-Loss	Filter Cake	PH	9						Water-Loss	Filter Cake	PH
2										10								
3										11								
4										12								
5							Mud Added Sacks			1						Mud Added Sacks		
6							Chemicals Added Lbs.			2						Chemicals Added Lbs.		
7										3	108.8	70	600	1/2	✓			

CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR		
Driller	D. MUNN		Core Bit		Serial	Driller	B. BAISSOE		Core Bit		Serial	Driller	W. SEMAK		Core Bit		Serial
Derrickman	D. BOGSTIE		Reaming Bit		Serial	Derrickman	D. ANDERSON		Reaming Bit		Serial	Derrickman	D. ANDERSON		Reaming Bit		Serial
Cat Headman	M. LAURENTZ		Core Cutters SF. HF.		Core Catchers SF. HF.	Cat Headman	J. DAHLHUS		Core Cutters SF. HF.		Core Catchers SF. HF.	Cat Headman	S. ANDERSEN		Core Cutters SF. HF.		Core Catchers SF. HF.
Rotary Helper	O. ROTTMANN		Swab Cups		Swab Rubbers	Rotary Helper	B. ANDERSEN		Swab Cups		Swab Rubbers	Rotary Helper	H. BOGSTIE		Swab Cups		Swab Rubbers
Fireman	L. T. ROSS					Fireman	M. HACKNEY					Fireman	G. SANTROCK				
Leaseman						Leaseman						Leaseman					

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Company Representative

GUTHRIE McLAREN DRILLING LTD.

Well No. BRIGGS TROUT RIVER #3

Lsd. Sec. Twp. Rge. W.

Tool Pusher

Date FEB 27/60

Drilled From 3373 To 3411 Hole Made 38

Drilled From 3411 To 3415 Hole Made 4

Drilled From _____ To 3415 Hole Made _____

Bit No.	11	No. Stds.	Length	3082.13	Bit No.	11	No. Stds.	Length	3082.13	Bit No.		No. Stds.	Length				
Serial No.	3916	No. D.C.'s	11	Length	318.11	Serial No.	3916	No. D.C.'s	11	Length		No. D.C.'s	Length				
Bit Size	7 1/8		Length		Bit Size	7 1/8		Length		Bit Size		Length					
Bit Type	OWC		Length		Bit Type	OWC		Length		Bit Type		Length					
Dr. from	3364	Kelly in =		10.76	Dr. from	3364	Kelly in =		14.76	Dr. from		Kelly in =					
Dr. to	3411	TOTAL =		3411.00	Dr. to	3415	TOTAL =		3415.00	Dr. to		TOTAL =					
Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	7 1/2	Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom		D.C.O.D. Top	6 1/4	Hrs. On Bottom			
Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	1/2	Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom		D.C.I.D. Top	2 7/8	Hrs. Off Bottom			
Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time	
Reamed to		C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at	349	Serv. Time	
Total Bit Footage	47	C.S.G. Size	8 5/8	Rep. Time	1/2	Total Bit Footage	51	C.S.G. Size	8 5/8	Rep. Time	2	Total Bit Footage		C.S.G. Size	8 5/8	Rep. Time	
Bit Hrs.	9	Pipe in Hole	102	Jts.	Diesel Fuel Meter Reading	Bit Hrs.	9 3/4	Pipe in Hole	102	Jts.	REMARKS:	Bit Hrs.		Pipe in Hole		Jts.	REMARKS:
Table R.P.M.	90	Pipe on Racks	23	Jts.	Today	Table R.P.M.	80	Pipe on Racks	23	Jts.		Table R.P.M.		Pipe on Racks		Jts.	

Depth	Deviation	Total Pipe on Lease 125 Jts.	Yesterday	Depth	Deviation	Total Pipe on Lease 125 Jts.	Depth	Deviation	Total Pipe on Lease	Jts.
Depth	Deviation		Consumption	Gals.	Depth	Deviation		Depth	Deviation	
Depth	Deviation				Depth	Deviation		Depth	Deviation	
Depth	Deviation				Depth	Deviation		Depth	Deviation	

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size		
12	10.8	75	70	600	1/2		6 3/4 x 12	5 x 10	8	11	85	70	600	1/2		6 3/4 x 12	5 x 10	4										
							Liner Size 6 3/4	Liner Size 5								Liner Size 6 3/4	Liner Size 5											
1	10.8	75	70	600	1/2		Water-Loss	Filter Cake	PH	9						Water-Loss	Filter Cake	PH	5	11.0	150	70				Water-Loss	Filter Cake	PH
2	10.8	75	70	600	1/2		3.8	3/32	13.0	10									6						3.2	3/32	13.0	
3	10.8	78	70	600	1/2		3.0	3/32	13.0	11									7									
4	10.8	80	70	600	3/4					12									8									
5	10.8	80	70	600	3/4		Mud Added Sacks 1200 # CEB		1							Mud Added Sacks 1400 # CEB		9							Mud Added Sacks 700 #			
6	10.9	80	70	600	3/4		Chemicals Added Lbs.		2							Chemicals Added Lbs.		10							Chemicals Added Lbs. 100 # MY-LO-CEB			
7	10.9	83	70	600					3									11										

CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR		
Driller	W. SEMAK		Core Bit	Serial		Driller	D. McHANS		Core Bit	Serial		Driller	B. BAILEY		Core Bit	Serial	
Derrickman	D. ANDERSON		Reaming Bit	Serial		Derrickman	D. ROESTIE		Reaming Bit	Serial		Derrickman	B. ANDERSON		Reaming Bit	Serial	
Cat Headman	S. ANDERSEN		Core Cutters SF. HF.	Core Catchers SF. HF.		Cat Headman	M. LAURENTZ		Core Cutters SF. HF.	Core Catchers SF. HF.		Cat Headman	L. RAUHLUS		Core Cutters SF. HF.	Core Catchers SF. HF.	
Rotary Helper	H. ROESTIE		Swab Cups	Swab Rubbers		Rotary Helper	A. RATTMANN		Swab Cups	Swab Rubbers		Rotary Helper	B. ANDERSEN		Swab Cups	Swab Rubbers	
Rotary Helper						Rotary Helper						Rotary Helper					
Fireman	G. SANTROCK					Fireman	L. TROSS					Fireman	M. HACKNEY				
Leaseman						Leaseman						Leaseman					

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Company Representative

GUTHRIE McLAREN DRILLING LTD.

Well No. BRIGGS TROUT RIVER #3

Tool Pusher

Date FEB 26/60

Lsd. Sec. Twp. Rge. W.

Drilled From 3294 To 3317 Hole Made 23

Drilled From 3317 To 3347 Hole Made 30

Drilled From 3347 To 3373 Hole Made 26

Bit No.	9	10	No. Stds.	Length	2961.22	Bit No.	10	No. Stds.	49.5	Length	2991.76	Bit No.	10	11	No. Stds.	50	Length	3321.99	
Serial No.	59027	6480	No. D.C.'s	11	Length	318.11	Serial No.	6480	No. D.C.'s	11	Length	318.11	Serial No.	6480	3916	No. D.C.'s	11	Length	318.11
Bit Size	7 3/8	7 7/8		Length		Bit Size	7 7/8			Length		Bit Size	7 7/8	7 7/8			Length		
Bit Type	OSC	OWC		Length		Bit Type	OWC			Length		Bit Type	OWC	OWC			Length		
Dr. from	3249	3306	Kelly in =		37.67	Dr. from	3306	Kelly in =		37.13	Dr. from	3306	3364	Kelly in =			37.90		
Dr. to	3306	3317	TOTAL =		3317.00	Dr. to	3347	TOTAL =		3347.00	Dr. to	3364	3373	TOTAL =			3373.00		
Cored from			D.C.O.D. Top	6 1/4	Hrs. On Bottom	5	Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	7 3/4	Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom		
Cored to			D.C.I.D. Top	2 7/8	Hrs. Off Bottom	3	Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	1 1/4	Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom		
Reamed from			Pipe Size	4 1/2	Trip Time	3	Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time		
Reamed to			C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at	349	Serv. Time	14	Reamed to		C.S.G. Set at	349	Serv. Time		
Total Bit Footage	57	11	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	41	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	58	9	C.S.G. Size	8 5/8	Rep. Time	
Bit Hrs.	8 1/2	2	Pipe in Hole	98	Jts.	Diesel Fuel Meter Reading	Bit Hrs.	9 3/4	Pipe in Hole	99	Jts.	REMARKS:	Bit Hrs.	14	1 1/2	Pipe in Hole	100	Jts.	REMARKS:
Table R.P.M.	90	90	Pipe on Racks	27	Jts.	Today	Table R.P.M.	90	Pipe on Racks	26	Jts.		Table R.P.M.	90	90	Pipe on Racks	25	Jts.	

Depth	Deviation	Total Pipe on Lease	125 Jts.	Yesterday	Depth	Deviation	Total Pipe on Lease	125 Jts.	Depth	Deviation	Total Pipe on Lease	125 Jts.
Depth	Deviation			Consumption	Gals.	Depth	Deviation		Depth	Deviation		
Depth	Deviation					Depth	Deviation		Depth	Deviation		
Depth	Deviation					Depth	Deviation		Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size
2	10.3	68	70	600	1/2		6 3/4 x 12	5 x 10	8	10.4	65	70	600	1/2		6 3/4 x 12	5 x 10	4	10.8	75	70	600	1/2		6 3/4 x 12	5 x 10
1	10.4	65	70	600	1/2		Liner Size 6 3/4	Liner Size 5	9	10.3	65	70	600	1/2		Liner Size 6 3/4	Liner Size 5	5	10.7	70	70	600	1/2		Liner Size 6 3/4	Liner Size 5
2	10.4	65	70	600	1/2		Water-Loss	Filter Cake	10	10.3	65	70	600	1/2		Water-Loss	Filter Cake	6	10.4	70	70	600	1/2		Water-Loss	Filter Cake
3									11	10.3	65	70	600	1/2		3.8	7 3/2	7	10.7	70	70	600	1/2		3.4	7 3/2
4									12	10.8	75	70	600	1/2		3.2	7 3/2	8	10.7	70	70	600	1/2			13.0
5							Mud Added Sacks		1	10.8	75	70	600	1/2		Mud Added Sacks 6 EL 500 LBS		9							Mud Added Sacks	
6							Chemicals Added Lbs.		2	10.8	75	70	600	1/2		Chemicals Added Lbs. CAUSTIC 100 LBS		10							Chemicals Added Lbs.	
7	10.4	65	70	600	1/2				3	10.8	75	70	600	1/2		SPERSENE 100 LBS		11	10.8	75	70	600	1/2			

CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR	
Driller	W. SEMAR	Core Bit	Serial	Driller	D. McHANS	Core Bit	Serial	Driller	B. Briscoe	Core Bit	Serial
Derrickman	D. ANDERSON	Reaming Bit	Serial	Derrickman	D. BOGSTIE	Reaming Bit	Serial	Derrickman	D. Anderson	Reaming Bit	Serial
Cat Headman	S. ANDERSEN	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman	M. LAURENTZ	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman	L. Bulhus	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	H. BOGSTIE	Swab Cups	Swab Rubbers	Rotary Helper	O. ROTTMAN	Swab Cups	Swab Rubbers	Rotary Helper	B. Andersen	Swab Cups	Swab Rubbers
Rotary Helper				Rotary Helper				Rotary Helper			
Fireman	G. SANTROCK			Fireman	L. TROSS			Fireman			
Leaseman				Leaseman				Leaseman			

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Lsd. Sec. Twp. Rge. W.

Drilled From 3249 To 3294 Hole Made 45

Bit No.	8	No. Stds.	47-5	Length	2870.67	Bit No.	8	No. Stds.	48	Length	2900.50	Bit No.	7	No. Stds.	49	Length	2961.22
Serial No.	94446	No. D.C.'s	11	Length	318.11	Serial No.	94446	No. D.C.'s	11	Length	318.11	Serial No.	59027	No. D.C.'s	11	Length	318.11
Bit Size	7 7/8			Length		Bit Size	7 7/8			Length		Bit Size	7 7/8			Length	
Bit Type	OSC			Length		Bit Type	OSC			Length		Bit Type	OSC			Length	
Dr. from	3082	Kelly in =			34.22	Dr. from	3082	Kelly in =			30.09	Dr. from	3249	Kelly in =			14 67
Dr. to	3223	TOTAL =			3223.00	Dr. to	3249	TOTAL =			3249.00	Dr. to	3294	TOTAL =			3294.00
Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	8	Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	4 1/4	Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	
Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom		Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	3 3/4	Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	
Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time	2 3/4	Reamed from		Pipe Size	4 1/2	Trip Time	
Reamed to		C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at	349	Serv. Time	14	Reamed to		C.S.G. Set at	349	Serv. Time	
Total Bit Footage	141	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	167	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	45	C.S.G. Size	8 5/8	Rep. Time	
Bit Hrs.	193 1/2	Pipe in Hole	95	Jts.	Diesel Fuel Motor Reading	Bit Hrs.	24	Pipe in Hole	96	Jts.	REMARKS:	Bit Hrs.	5 1/2	Pipe in Hole	98	Jts.	REMARKS:
Table R.P.M.	100	Pipe on Racks	30	Jts.	Today	Table R.P.M.	100	Pipe on Racks	29	Jts.		Table R.P.M.	90	Pipe on Racks	27	Jts.	

Depth	Deviation	Total Pipe on Lease 125 Jts.	Yesterday	Depth	Deviation	Total Pipe on Lease 125 Jts.	Depth	Deviation	Total Pipe on Lease 125 Jts.
Depth	Deviation		Consumption Gals.	Depth 3249	Deviation 4°		Depth	Deviation	
Depth	Deviation			Depth	Deviation		Depth	Deviation	
Depth	Deviation			Depth	Deviation		Depth	Deviation	

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	
2	10.7	70	70	600	1/2	✓	6 3/4 x 12	5 x 10	8	10.9	70	50	400	1/2		6 3/4 x 12	5 x 10	4							6 3/4 x 12	5 x 10	
							Liner Size 6 3/4	Liner Size 5								Liner Size 6 3/4	Liner Size 5								Liner Size 6 3/4	Liner Size 5	
1	MIX						Water-Loss	Filter Cake	PH	9	10.9	70	50	400	1/2			5							Water-Loss	Filter Cake	PH
2	MUD						3	2 1/32	12.8	10	10.8	70	50	400	1/2			6	10.1	70	70	600	1/2	✓			
3	10.9	77	70	600	1/2	✓	3.2	2 1/32	12.5	11	10.8	70	50	400	1/2			7	10.1	70	70	600	1/2	✓	3.6	2 1/32	13.0
4	10.9	85	70	600	1/2	✓				12	10.8	70	50	400	1/2			8	10.1	70	70	600	1/2				
5	10.9	80	70	600	1/2	✓	Mud Added Sacks GEL-1500+BS.			1								9	10.1	70	70	200	1/2		Mud Added Sacks		
6	10.9	70	70	600	1/2	✓	Chemicals Added Lbs. SPERSENE-100 IRS.			2								10	10.1	70	70	600	1/2		Chemicals Added Lbs.		
7	10.9	70	70	600	1/2		CAUSTIC-200 IRS.			3								11	10.3	68	70	600	1/2				

CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR		
Driller	W. SEMAR		Core Bit	Serial		Driller	D. McANIS		Core Bit	Serial		Driller	B. BRISCOE		Core Bit	Serial	
Derrickman	D. ANDERSON		Reaming Bit	Serial		Derrickman	D. BOESTIE		Reaming Bit	Serial		Derrickman	D. ANDERSON		Reaming Bit	Serial	
Cat Headman	S. ANDERSON		Core Cutters SF. HF.	Core Catchers SF. HF.		Cat Headman	M. LAURENTZ		Core Cutters SF. HF.	Core Catchers SF. HF.		Cat Headman	P. DAULHUIS		Core Cutters SF. HF.	Core Catchers SF. HF.	
Rotary Helper	H. BOESTIE		Swab Cups	Swab Rubbers		Rotary Helper	O. ROTTMANN		Swab Cups	Swab Rubbers		Rotary Helper	P. ANDERSON		Swab Cups	Swab Rubbers	
Rotary Helper						Rotary Helper						Rotary Helper					
Fireman	E. SANTRUCK					Fireman	L. TRUSS					Fireman	M. HACKNEY				
Leaseman						Leaseman						Leaseman					

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Company Representative

GUTHRIE McLAREN DRILLING LTD.

Well No. BRIGGS TROUT RIVER #3

Tool Pusher

Date FEB 24/60

Lsd. Sec. Twp. Rge. W.

Drilled From 3029 To 3077 Hole Made 48

Drilled From 3077 To 3103 Hole Made 26

Drilled From 3103 To 3165 Hole Made 62

Bit No.	7	No. Stds.	45	Length	2719.95	Bit No.	7	8	No. Stds.	45-5	Length	2750.03	Bit No.	8	No. Stds.	46-5	Length	2810.43
Serial No.	7251	No. D.C.'s	11	Length	318.11	Serial No.	7251	94446	No. D.C.'s		Length	318.11	Serial No.	94446	No. D.C.'s	11	Length	318.11
Bit Size	7 7/8			Length		Bit Size	7 7/8	7 7/8			Length		Bit Size	7 7/8			Length	
Bit Type	OSC			Length		Bit Type	OSC	OSC			Length		Bit Type	OSC			Length	
Dr. from	2870	Kelly in ==			38.94	Dr. from	2870	3082	Kelly in ==			34.86	Dr. from	3082	Kelly in ==			36.46
Dr. to	3077	TOTAL ==			3077.00	Dr. to	3082	3103	TOTAL ==			3103.00	Dr. to	3165	TOTAL ==			3165.00
Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	8	Cored from			D.C.O.D. Top	6 1/4	Hrs. On Bottom	4 1/2	Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	
Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom		Cored to			D.C.I.D. Top	2 7/8	Hrs. Off Bottom	3 1/2	Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	
Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from			Pipe Size	4 1/2	Trip Time	3 1/4	Reamed from		Pipe Size	4 1/2	Trip Time	
Reamed to		C.S.G. Set at	349	Serv. Time		Reamed to			C.S.G. Set at	349	Serv. Time	14	Reamed to		C.S.G. Set at	349	Serv. Time	
Total Bit Footage	207	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	212	21	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	83	C.S.G. Size	8 5/8	Rep. Time	
Bit Hrs.	25 3/4	Pipe in Hole	90	Jts.	Diesel Fuel Meter Reading	Bit Hrs.	26 1/2	3 3/4	Pipe in Hole	91	Jts.	REMARKS:	Bit Hrs.	11 3/4	Pipe in Hole	93	Jts.	REMARKS:
Table R.P.M.	90	Pipe on Racks	35	Jts.	Today	Table R.P.M.	80	80	Pipe on Racks	34	Jts.		Table R.P.M.	100	Pipe on Racks	32	Jts.	

Depth	Deviation	Total Pipe on Lease <u>125</u> Jts.	Yesterday	Depth	Deviation	Total Pipe on Lease <u>125</u> Jts.	Depth	Deviation	Total Pipe on Lease <u>125</u> Jts.
Depth	Deviation		Consumption Gals.	Depth <u>3080</u>	Deviation <u>5°</u>		Depth	Deviation	
Depth	Deviation			Depth	Deviation		Depth	Deviation	
Depth	Deviation			Depth	Deviation		Depth	Deviation	

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size
1	11.1	85	70	600	3/4		634x12	5x10	8	11.1	75	70	600	3/4		634	5
2	11.1	80	70	600	3/4		3.8	432	12.5	10							
3	11.1	80	70	600	3/4				11								
4	11.1	78	70	600	3/4				12								
5	11.1	77	70	600	3/4		Mud Added Sacks		1								
6	11.1	75	70	600	3/4		Chemicals Added Lbs.		2								
7	11.1	76	70	600	3/4				3								

CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR		
Driller	W. S. F. MAK		Core Bit		Serial	Driller	D. MOHNS		Core Bit		Serial	Driller	B. BRISCOE		Core Bit		Serial
Derrickman	D. ANDERSON		Reaming Bit		Serial	Derrickman	D. BOGSTIE		Reaming Bit		Serial	Derrickman	D. ANDERSON		Reaming Bit		Serial
Cat Headman	S. ANDERSEN		Core Cutters SF. HF.		Core Catchers SF. HF.	Cat Headman	M. LA FRENTZ		Core Cutters SF. HF.		Core Catchers SF. HF.	Cat Headman	L. DAHLHUS		Core Cutters SF. HF.		Core Catchers SF. HF.
Rotary Helper	H. BOGSTIE		Swab Cups		Swab Rubbers	Rotary Helper	O. ROTHMANN		Swab Cups		Swab Rubbers	Rotary Helper	B. ANDERSEN		Swab Cups		Swab Rubbers
Rotary Helper						Rotary Helper						Rotary Helper					
Fireman	G. SANTRICK					Fireman	L. TRUSS					Fireman	M. HACKNEY				
Leaseman						Leaseman						Leaseman					

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Lsd. Sec. Twp. Rge. W

Drilled From 2961 To 3029 Hole Made 68

Bit No.	6	7	No. Stds.	42-5	Length	2568.91	Bit No.	7	No. Stds.	43-5	Length	2629.39	Bit No.	7	No. Stds.	44-5	Length	2689.85
Serial No.	86751	1251	No. D.C.'s	11	Length	318.11	Serial No.	1251	No. D.C.'s	11	Length	318.11	Serial No.	1251	No. D.C.'s	11	Length	318.11
Bit Size	7 7/8	7 7/8			Length		Bit Size	7 7/8			Length		Bit Size	7 7/8			Length	
Bit Type	OSC-1C	OSC			Length		Bit Type	OSC			Length		Bit Type	OSC			Length	
Dr. from	2480	2870	Kelly in ==		15.98		Dr. from	2870	Kelly in ==		13.50		Dr. from	2870	Kelly in ==		21.94	
Dr. to	2870	2903	TOTAL ==		2903.00		Dr. to	2961	TOTAL ==		2961.00		Dr. to		TOTAL ==		3029.30	
Cored from			D.C.O.D. Top	6 1/4	Hrs. On Bottom	5 1/4	Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	6 3/4	Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	
Cored to			D.C.I.D. Top	2 7/8	Hrs. Off Bottom	2 3/4	Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	1 1/4	Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	
Reamed from			Pipe Size	4 1/2	Trip Time	2 1/2	Reamed from		Pipe Size	4 1/2	Trip Time	1 1/2	Reamed from		Pipe Size	4 1/2	Trip Time	
Reamed to			C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at	349	Serv. Time	14	Reamed to		C.S.G. Set at	349	Serv. Time	
Total Bit Footage	390	33	C.S.G. Size	8 5/8	Rep. Time	14	Total Bit Footage	91	C.S.G. Size	8 5/8	Rep. Time	12	Total Bit Footage	159	C.S.G. Size	8 5/8	Rep. Time	
Bit Hrs.	27 1/2	3	Pipe in Hole	85	Jts.	Diesel Fuel Meter Reading	Bit Hrs.	9 3/4	Pipe in Hole	87	Jts.	REMARKS:	Bit Hrs.	173/4	Pipe in Hole	89	Jts.	REMARKS:
Table R.P.M.	100	100	Pipe on Racks	40	Jts.	Today	Table R.P.M.	70	Pipe on Racks	38	Jts.		Table R.P.M.	90	Pipe on Racks	36	Jts.	

Depth 2860	Deviation 6°	Total Pipe on Lease 125 Jts.	Yesterday	Depth	Deviation	Total Pipe on Lease 125 Jts.	Depth	Deviation	Total Pipe on Lease 125 Jts.
Depth	Deviation		Consumption Gals.	Depth 2950	Deviation 6°		Depth	Deviation	
Depth	Deviation			Depth	Deviation		Depth	Deviation	
Depth	Deviation			Depth	Deviation		Depth	Deviation	

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size			
	10.9	85	70	600	3/4		6 3/4 x 12	5 x 10		10.9	90	70	600	3/4		6 3/4 x 12	5 x 10		10.9	85	70	600	3/4		6 3/4 x 12	5 x 10			
							Liner Size 6 3/4	Liner Size 5								Liner Size 6 3/4	Liner Size 5								Liner Size 6 3/4	Liner Size 5			
1	10.9	85	70	600	3/4		Water-Loss	Filter Cake	PH	9	10.8	105	70	600	3/4		Water-Loss	Filter Cake	PH	5	10.2	90	70	600	3/4		Water-Loss	Filter Cake	PH
2	10.9	88	70	600	3/4		2.2	3/32	12.5	10	10.6	90	70	600	3/4		2.8	3/32	12.5	6	10.2	90	70	600	3/4		3.2	3/32	12.5
3										11	10.6	87	70	600	3/4		3.0	3/32	12.5	7	10.2	90	70	600	3/4				
4										12	10.6	95	70	600	3/4					8	10.2	90	70	600	3/4				
5	1	R	1	P		✓	Mud Added Sacks			1	10.6	85	70	600	3/4		Mud Added Sacks			9	10.7	90	70	600	3/4		Mud Added Sacks		
6	10.8	105	70	600	3/4	✓	Chemicals Added Lbs.			2	10.4	85	70	600	3/4		Chemicals Added Lbs. CAUSTIC 100 LBS			10	10.7	95	70	600	3/4		Chemicals Added Lbs.		
7	10.9	80	70	600	3/4					3	10.4	85	70	600	3/4		SPERSENE 100 LBS			11	10.7	95	70	600	3/4				

96 CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR		
Driller	W. SEMAK		Core Bit	Serial		Driller	D. McHANE		Core Bit	Serial		Driller	B. BRISCOE		Core Bit	Serial	
Derrickman	D. ANDERSON		Reaming Bit	Serial		Derrickman	D. BOGSTIE		Reaming Bit	Serial		Derrickman	D. ANDERSON		Reaming Bit	Serial	
Cat Headman	S. ANDERSEN		Core Cutters SF. HF.	Core Catchers SF. HF.		Cat Headman	M. LAURENTZ		Core Cutters SF. HF.	Core Catchers SF. HF.		Cat Headman	D. BOGHUS		Core Cutters SF. HF.	Core Catchers SF. HF.	
Rotary Helper	H. BOGSTIE		Swab Cups	Swab Rubbers		Rotary Helper	R. RITTMANN		Swab Cups	Swab Rubbers		Rotary Helper	P. ANDERSEN		Swab Cups	Swab Rubbers	
Rotary Helper						Rotary Helper						Rotary Helper					
Fireman	C. SANDROCK					Fireman	L. TRUSS					Fireman	M. HADNLEY				
Leaseman						Leaseman						Leaseman					

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Company Representative

GUTHRIE McLAREN DRILLING LTD.

Well No. TROUT RIVER #3 BRIGGS

Lsd. Sec. Twp. Rge. W.

Tool Pusher

Date FEB 22/60

Drilled From 2510 To 2643 Hole Made 133

Drilled From 2643 To 2729 Hole Made 86

Drilled From 2729 To 2842 Hole Made 113

Bit No.	6	No. Stds.	38	Length	2296.03	Bit No.	6	No. Stds.	39-5	Length	2387.15	Bit No.	6	No. Stds.	41-5	Length	2508.63
Serial No.	86751	No. D.C.'s	11	Length	318.11	Serial No.	86751	No. D.C.'s	11	Length	318.11	Serial No.	86751	No. D.C.'s	11	Length	318.11
Bit Size	7 7/8			Length		Bit Size	7 7/8			Length		Bit Size	7 7/8			Length	
Bit Type	OSC-1C			Length		Bit Type	OSC-1C			Length		Bit Type	OSC-1C			Length	
Dr. from	2480	Kelly in =		28.86		Dr. from	2480	Kelly in =		23.74		Dr. from	2480	Kelly in =		15.26	
Dr. to	2643	TOTAL =		2643.00		Dr. to	2729	TOTAL =		2729.00		Dr. to	2842	TOTAL =		2842.00	
Cored from		D.C.O.D. Top	6' 1/4	Hrs. On Bottom	8	Cored from		D.C.O.D. Top	6' 1/4	Hrs. On Bottom	7 1/4	Cored from		D.C.O.D. Top	6' 1/4	Hrs. On Bottom	8
Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom		Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	3/4	Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	
Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time	
Reamed to		C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at	349	Serv. Time	1/4	Reamed to		C.S.G. Set at	349	Serv. Time	
Total Bit Footage	163	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	249	C.S.G. Size	8 5/8	Rep. Time	1/2	Total Bit Footage	362	C.S.G. Size	8 5/8	Rep. Time	
Bit Hrs.	10	Pipe in Hole	76	Jts.	Diesel Fuel Meter Reading	Bit Hrs.	17 1/4	Pipe in Hole	79	Jts.	REMARKS:	Bit Hrs.	25 1/4	Pipe in Hole	83	Jts.	REMARKS:
Table R.P.M.	100	Pipe on Racks	49	Jts.	Today	Table R.P.M.	100	Pipe on Racks	46	Jts.		Table R.P.M.	120	Pipe on Racks	42	Jts.	

Depth	Deviation	Total Pipe on Lease /25 Jts.	Yesterday	Depth 2710	Deviation 5°	Total Pipe on Lease /25 Jts.	Depth	Deviation	Total Pipe on Lease /25 Jts.
Depth	Deviation		Consumption	Gals.	Depth	Deviation	Depth	Deviation	
Depth	Deviation				Depth	Deviation	Depth	Deviation	
Depth	Deviation				Depth	Deviation	Depth	Deviation	

Depth									Depth									Depth											
Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size			
12	10.5	75	70	600	1/2		6 3/4 x 12	5 x 10	8	10.8	80	70	600	2/3		6 3/4 x 12	5 x 10	4	10.5	85	70	600	1/2		6 3/4 x 12	5 x 10			
							Liner Size 6 3/4	Liner Size 5								Liner Size 6 3/4	Liner Size 5								Liner Size 6 3/4	Liner Size 5			
1	10.5	75	70	600	1/2		Water-Loss	Filter Cake	PH	9	10.8	80	70	600	2/3		Water-Loss	Filter Cake	PH	5	10.8	85	70	600	1/2		Water-Loss	Filter Cake	PH
2	10.5	75	70	600	1/2		2.4	1/2	13.0	10	10.8	85	70	600	2/3		3.2	3/2	12.5	6	10.8	80	70	600	3/4		3.6	1/2	13.0
3	10.6	75	70	600	1/2		3.5	1/2	13.0	11	10.9	150	70	600	2/3	✓				7	10.7	70	70	600	3/4		3.0	1/2	13.0
4	10.6	75	70	600	1/2					12	10.5	105	70	600	2/3	✓				8	10.7	70	70	600	3/4				
5	10.6	75	70	600	1/2		Mud Added Sacks			1	10.5	85	70	600	2/3		Mud Added Sacks MY-40-JEL 350 LBS GEL 700 LBS			9	10.7	75	70	600	3/4		Mud Added Sacks		
6	10.6	78	70	600	1/2		Chemicals Added Lbs. Caustic 100 lb.			2	10.5	90	70	600	2/3		Chemicals Added Lbs. CAUSTIC 100 LBS			10	10.8	80	70	600	3/4		Chemicals Added Lbs. 150 LBS SPERSENE		
7	10.6	80	70	600	1/2		Spersene 50 lb.			3	10.6	90	70	600	2/3		SPERSENE 100 LBS			11	10.8	75	70	600	3/4				

CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR		
Driller	W. SEMAR		Core Bit		Serial	Driller	D. MOHNS		Core Bit		Serial	Driller	B. BISCOE		Core Bit		Serial
Derrickman	D. ANDERSON		Reaming Bit		Serial	Derrickman	D. BOESTIE		Reaming Bit		Serial	Derrickman	D. ANDERSON		Reaming Bit		Serial
Cat Headman	S. ANDERSEN		Core Cutters SF. HF.		Core Catchers SF. HF.	Cat Headman	M. LAURENTZ		Core Cutters SF. HF.		Core Catchers SF. HF.	Cat Headman	C. ROHLFUS		Core Cutters SF. HF.		Core Catchers SF. HF.
Rotary Helper	H. BOESTIE		Swab Cups		Swab Rubbers	Rotary Helper	O. RITTMANN		Swab Cups		Swab Rubbers	Rotary Helper	B. ANDERSEN		Swab Cups		Swab Rubbers
Rotary Helper						Rotary Helper						Rotary Helper					
Fireman	G. SANTROCK					Fireman	L. TROSS					Fireman	M. HARRIS				
						Leaseman						Leaseman					

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Date FEB 21/60

1. _____ Sec. _____ Twp. _____ Rge. _____ W. _____

Tool Pusher

Drilled From 2156 To 22.96 Hole Made 140

Drilled From 2296 To 2398 Hole Made 102

Drilled From 23 8 To 2510 Hole Made 112

Bit No.	No. Stds.	Length	Bit No.	No. Stds.	Length	Bit No.	No. Stds.	Length
5	32-5	1966.09	5	34	2053.23	5	36	2174.38
Serial No. 80514	No. D.C.'s 11	Length 318.11	Serial No. 80514	No. D.C.'s 11	Length 318.11	Serial No. 80514	No. D.C.'s 11	Length 318.11
Bit Size 7 7/8		Length	Bit Size 7 7/8		Length	Bit Size 7 7/8		Length
Bit Type OSC-3		Length	Bit Type OSC-3		Length	Bit Type OSC-3		Length
Dr. from 2017	Kelly in = 1180		Dr. from 2017	Kelly in = 26.66		Dr. from 2017	Kelly in = 17.51	
Dr. to 2296	TOTAL = 2296.00		Dr. to 2398	TOTAL = 2398.00		Dr. to 2480	TOTAL = 2510.00	
Cored from	D.C.O.D. Top 6 1/4 Hrs. On Bottom 7 3/4		Cored from	D.C.O.D. Top 6 1/4 Hrs. On Bottom 7 1/4		Cored from	D.C.O.D. Top 6 1/4 Hrs. On Bottom 7 1/4	
Cored to	D.C.I.D. Top 2 3/8 Hrs. Off Bottom 1/4		Cored to	D.C.I.D. Top 2 7/8 Hrs. Off Bottom 3/4		Cored to	D.C.I.D. Top 2 7/8 Hrs. Off Bottom 3/4	
Reamed from	Pipe Size 4 1/2 Trip Time		Reamed from	Pipe Size 4 1/2 Trip Time		Reamed from	Pipe Size 4 1/2 Trip Time	
Reamed to	C.S.G. Set at 349 Serv. Time		Reamed to	C.S.G. Set at 349 Serv. Time		Reamed to	C.S.G. Set at 349 Serv. Time	
Total Bit Footage 279	C.S.G. Size 8 5/8 SURVEY Rep. Time 1/4		Total Bit Footage 381	C.S.G. Size 8 5/8 Rep. Time		Total Bit Footage 463	C.S.G. Size 8 5/8 Rep. Time	
Bit Hrs. 19 1/4	Pipe in Hole 65 Jts. Diesel Fuel Meter Reading		Bit Hrs. 26 1/2	Pipe in Hole 68 Jts. REMARKS:		Bit Hrs. 30 1/2	Pipe in Hole Jts. REMARKS:	
Table 100	Pipe on Racks 60 Jts. Today		Table R.P.M. 100	Pipe on Racks 57 Jts.		Table R.P.M. 125	Pipe on Racks Jts.	

Depth	2220	Deviation	6 3/4°	Total Pipe on Lease	125 Jts.	Yesterday	Depth	2320	Deviation	6 1/2°	Total Pipe on Lease	125 Jts.	Depth	2480	Deviation	5 1/4	Total Pipe on Lease	Jts.
Depth		Deviation				Consumption	Gals.	Depth		Deviation			Depth		Deviation			
Depth		Deviation						Depth		Deviation			Depth		Deviation			
Depth		Deviation						Depth		Deviation			Depth		Deviation			

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CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR	
Driller	W. JEMAR	Core Bit	Serial	Driller	D. McHANS	Core Bit	Serial	Driller	B. BAISCOE	Core Bit	Serial
Derrickman	D. ANDERSON	Reaming Bit	Serial	Derrickman	D. BIGSTIE	Reaming Bit	Serial	Derrickman	D. ANDERSON	Reaming Bit	Serial
Cat Headmen	S. ANDERSEN	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headmen	M. LAERENTZ	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headmen	L. P. RULLHUS	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	H. BOGSTIE	Swab Cups	Swab Rubbers	Rotary Helper	O. ROTTMAN	Swab Cups	Swab Rubbers	Rotary Helper	B. ANDERSEN	Swab Cups	Swab Rubbers
Rotary Helper				Rotary Helper				Rotary Helper			
Fireman	G. SANTROCK			Fireman	L. TRUSS			Fireman	M. HACKNEY		
				Leaseman				Leaseman			

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Art W. [Signature]
Company Representative

GUTHRIE McLAREN DRILLING LTD.

Well No. BIGGS TROUT RIVER 3

Lsd. _____ Sec. _____ Twp. _____ Rge. _____ W. _____

Date FEB 20/60

Tool Pusher

Drilled From 1934 To 2010 Hole Made 76

Drilled From 2010 To 2077 Hole Made 67

Drilled From 2077 To 2156 Hole Made 79

Bit No. <u>4</u>	No. Stds. <u>27-5</u>	Length <u>1663.12</u>	Bit No. <u>4</u>	No. Stds. <u>57</u>	Length <u>1723.83</u>	Bit No. <u>5</u>	No. Stds. <u>27-5</u>	Length <u>1815.15</u>
Serial No. <u>95263</u>	No. D.C.'s <u>11</u>	Length <u>318.11</u>	Serial No. <u>95263</u>	No. D.C.'s <u>11</u>	Length <u>318.11</u>	Serial No. <u>80514</u>	No. D.C.'s <u>11</u>	Length <u>318.11</u>
Bit Size <u>7 7/8</u>		Length	Bit Size <u>7 7/8</u>		Length	Bit Size <u>7 7/8</u>		Length
Bit Type <u>OSC-3</u>		Length	Bit Type <u>OSC-3</u>		Length	Bit Type <u>OSC-3</u>		Length
Dr. from <u>1642</u>	Kelly in <u>28.27</u>		Dr. from <u>1934</u>	Kelly in <u>35.06</u>		Dr. from <u>2017</u>	Kelly in <u>22.74</u>	
Dr. to <u>2010</u>	TOTAL <u>2010.00</u>		Dr. to <u>2017</u>	TOTAL <u>2077.00</u>		Dr. to <u>2156</u>	TOTAL <u>2156.00</u>	
Cored from	D.C.O.D. Top <u>6 1/4</u>	Hrs. On Bottom	Cored from	D.C.O.D. Top <u>6 1/4</u>	Hrs. On Bottom	Cored from	D.C.O.D. Top <u>6 1/4</u>	Hrs. On Bottom
Cored to	D.C.I.D. Top <u>2 7/8</u>	Hrs. Off Bottom	Cored to	D.C.I.D. Top <u>2 7/8</u>	Hrs. Off Bottom	Cored to	D.C.I.D. Top <u>2 7/8</u>	Hrs. Off Bottom
Reamed from	Pipe Size <u>4 1/2</u>	Trip Time	Reamed from	Pipe Size <u>4 1/2</u>	Trip Time	Reamed from	Pipe Size <u>4 1/2</u>	Trip Time
Reamed to	C.S.G. Set at <u>349</u>	Serv. Time	Reamed to	C.S.G. Set at <u>349</u>	Serv. Time	Reamed to	C.S.G. Set at <u>349</u>	Serv. Time
Total Bit Footage <u>368</u>	C.S.G. Size <u>8 5/8</u>	Rep. Time	Total Bit Footage <u>375</u>	C.S.G. Size <u>8 5/8</u>	Rep. Time	Total Bit Footage <u>139</u>	C.S.G. Size <u>8 5/8</u>	Rep. Time
Bit Hrs. <u>28 3/4</u>	Pipe in Hole <u>55</u>	Jts.	Bit Hrs. <u>29 3/4</u>	Pipe in Hole <u>57</u>	Jts.	Bit Hrs. <u>11 1/2</u>	Pipe in Hole <u>60</u>	Jts.
Table R.P.M. <u>150</u>	Pipe on Racks <u>20</u>	Jts.	Table R.P.M. <u>150</u>	Pipe on Racks <u>68</u>	Jts.	Table R.P.M. <u>100</u>	Pipe on Racks <u>65</u>	Jts.
Depth <u>1990</u>	Deviation <u>7 1/4</u>	Total Pipe on Lease <u>125</u>	Depth <u>2010</u>	Deviation <u>7</u>	Total Pipe on Lease <u>125</u>	Depth <u>2140</u>	Deviation <u>7</u>	Total Pipe on Lease <u>125</u>
Depth	Deviation		Depth	Deviation		Depth	Deviation	
Depth	Deviation		Depth	Deviation		Depth	Deviation	
Depth	Deviation		Depth	Deviation		Depth	Deviation	

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size <u>6 3/4 x 12</u>	No. 2 Pump Size <u>5 x 10</u>	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size <u>6 3/4 x 12</u>	No. 2 Pump Size <u>5 x 10</u>	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size <u>6 3/4 x 12</u>	No. 2 Pump Size <u>5 x 10</u>
12	10.5	75	70	600	3/4		Liner Size <u>6 3/4</u>	Liner Size <u>5</u>	8	10.3	70	70	600	3/4		Liner Size <u>6 3/4</u>	Liner Size <u>5</u>	4	10.9	105	70	600	3/4		Liner Size <u>6 3/4</u>	Liner Size <u>5</u>
1	10.5	100	70	600	3/4		Water-Loss	Filter Cake	9	10.3	70	70	600	3/4		Water-Loss	Filter Cake	5	10.9	115	70	600	3/4		Water-Loss	Filter Cake
2	10.5	100	70	600	3/4		3.4	7/32	10	10.3	70	70	600	3/4		3.2	7/32	6	10.9	125	70	600	3/4		3.0	7/32
3	10.4	110	70	600	3/4		2.6	7/32	11	10.7	70	70	600	3/4				7	10.9	125	70	600	3/4		3.2	7/32
4	10.4	110	70	600	3/4				12	10.8	72	70	600	3/4				8	10.9	125	70	600	3/4			
5	10.4	87	70	600	3/4		Mud Added Sacks		1	10.3	75	70	600	3/4		Mud Added Sacks		9	10.7	105	70	600	3/4		Mud Added Sacks	
6	10.4	85	70	600	3/4		Chemicals Added Lbs.	<u>300 LBS SPERSENE</u>	2	10.7	70	70	600	3/4		Chemicals Added Lbs.	<u>GEL-500 LBS</u>	10	10.7	105	70	600	3/4		Chemicals Added Lbs.	<u>CAUSTIC 150 LBS</u>
7	10.3	77	70	600	3/4				3	10.7	70	70	600	3/4				11	10.6	78	70	600	3/4			<u>SPERSENE 100 LBS</u>

CREW	MATERIALS CHARGED TO OPERATOR	CREW	MATERIALS CHARGED TO OPERATOR	CREW	MATERIALS CHARGED TO OPERATOR
Driller <u>B. BRISCOE</u>	Core Bit	Driller <u>W. SEMAR</u>	Core Bit	Driller <u>D. MAHNS</u>	Core Bit
Derrickman <u>D. ANDERSON</u>	Reaming Bit	Derrickman <u>D. ANDERSON</u>	Reaming Bit	Derrickman <u>D. BOESTIE</u>	Reaming Bit
Cat Headman <u>P. PAULHUS</u>	Core Cutters SF. HF.	Cat Headman <u>S. ANDERSEN</u>	Core Cutters SF. HF.	Cat Headman <u>M. LAURENTZ</u>	Core Cutters SF. HF.
Rotary Helper <u>B. ANDERSEN</u>	Swab Cups	Rotary Helper <u>H. BOESTIE</u>	Swab Cups	Rotary Helper <u>O. RUTTMANN</u>	Swab Cups
Fireman <u>M. HACKNEY</u>	Swab Rubbers	Fireman <u>G. SANTROCK</u>	Swab Rubbers	Fireman <u>L. TRUSS</u>	Swab Rubbers
Leaseman		Leaseman <u>C. GRAY</u>		Leaseman	

REMARKS	FROM	TO	REMARKS	FROM	TO	REMARKS	FROM	TO
<u>DRILLING</u>	<u>12:00</u>	<u>5:45</u>	<u>DRILL</u>	<u>8:00</u>	<u>9:00</u>	<u>DRILL</u>	<u>4:00</u>	<u>6:45</u>
<u>BUN SURVEY</u>	<u>5:45</u>	<u>6:15</u>	<u>TRIP FOR BIT DROP SURVEY</u>	<u>9:00</u>	<u>11:15</u>	<u>WORK ON AIR LINES</u>	<u>6:45</u>	<u>7:30</u>
<u>DRILLING</u>	<u>6:15</u>	<u>8:00</u>	<u>DRILL</u>	<u>11:15</u>	<u>4:00</u>	<u>DRILL</u>	<u>7:30</u>	<u>10:15</u>
						<u>SURVEY</u>	<u>10:15</u>	<u>10:45</u>
						<u>DRILL</u>	<u>10:45</u>	<u>12:00</u>

Well No. BR. 665 TROUT BULLER 3rd

Lsd. Sec. Twp. Rge. W.

Drilled From 1886 To 1934 Hole Made 48

Bit No.	4	No. Stds.	24	Length	1452.39	Bit No.	4	No. Stds.	25-8	Length	1541.84	Bit No.	4	No. Stds.	26-5	Length	1602.54
Serial No.	95263	No. D.C.'s	11	Length	318.11	Serial No.	95263	No. D.C.'s	11	Length	318.11	Serial No.	95263	No. D.C.'s	11	Length	318.11
Bit Size	77/8			Length		Bit Size	77/8			Length		Bit Size	77/8			Length	
Bit Type	OSC-3			Length		Bit Type	OSC-3			Length		Bit Type	OSC-3			Length	
Dr. from	1642	Kelly in =			39.50	Dr. from	1642	Kelly in =			26.05	Dr. from	1642	Kelly in =			13.35
Dr. to	1810	TOTAL =			1810.00	Dr. to	1886	TOTAL =			1886.00	Dr. to	1934	TOTAL =			1934.00
Cored from		D.C.O.D. Top	6'14	Hrs. On Bottom		Cored from		D.C.O.D. Top	6'14	Hrs. On Bottom		Cored from		D.C.O.D. Top	6'14	Hrs. On Bottom	
Cored to		D.C.I.D. Top	2718	Hrs. Off Bottom		Cored to		D.C.I.D. Top	2718	Hrs. Off Bottom		Cored to		D.C.I.D. Top	2718	Hrs. Off Bottom	
Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time	
Reamed to		C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at	349	Serv. Time	
Total Bit Footage	158	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	234	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	292	C.S.G. Size	8 5/8	Rep. Time	
Bit Hrs.	6 1/2	Pipe in Hole	48	Jts.	Diescl Fuel Meter Reading	Bit Hrs.	13 3/4	Pipe in Hole	51	Jts.	REMARKS:	Bit Hrs.	21 1/4	Pipe in Hole	53	Jts.	REMARKS:
Table R.P.M.	120	Pipe on Racks	77	Jts.	Today	Table R.P.M.	120	Pipe on Racks	74	Jts.		Table R.P.M.	100	Pipe on Racks	72	Jts.	

Depth 1642	Deviation 4 1/2°	Total Pipe on Lease 125 Jts.	Yesterday	Depth 1810	Deviation 8°	Total Pipe on Lease 125 Jts.	Depth	Deviation	Total Pipe on Lease 125 Jts.
Depth	Deviation		Consumption	Depth 1860	Deviation 7 1/2°		Depth 1930	Deviation 7 1/2°	
Depth	Deviation			Depth	Deviation		Depth	Deviation	
Depth	Deviation			Depth	Deviation		Depth	Deviation	

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size		
12							6 3/4 x 12	5 x 10								6 3/4 x 12	5 x 10		
							Liner Size 6 3/4	Liner Size 5	8	11.100	70	600	1/2			Liner Size 6 3/4	Liner Size 5		
1	Mud						Water-Loss	Filter Cake	PH	9	10.9	85	70	600	1/2		Water-Loss	Filter Cake	PH
2										10	10.7	70	70	600	1/2	2.8	3/32	12.5	
3										11	10.7	65	70	600	1/2				
4										12	10.7	65	70	600	1/2				
5							CAUSTIC 100 LBS			1	10.7	63	70	600	1/2		Mud Added Sacks MY-LO-CEL-400 LBS		
6							Mud Added Sacks MY-LO-CEL-400 LBS			2	10.8	60	70	600	1/2		Mud Added Sacks CEL-800 LBS		
							Chemicals Added Lbs. SPERSENE-400 LBS			10	10.6	95	70	600	1/2		Chemicals Added Lbs. CAUSTIC-150 LBS		
7	11.100	70	600	1/2			GEL-800 LBS			11	10.5	95	70	600	1/2		Chemicals Added Lbs. CAUSTIC-150 LBS		
							GEL-800 LBS										SPERSENE-300		

CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR	
Driller		Core Bit	Serial	Driller		Core Bit	Serial	Driller		Core Bit	Serial
Derrickman	13 B. H. S. C. C.	Reaming Bit	Serial	Derrickman	W. SEMAK	Reaming Bit	Serial	Derrickman	D. MOHNS	Reaming Bit	Serial
Cat Headman	11 ANDERSON	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman	D. ANDERSON	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman	D. BOGSTIE	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	13 ANDERSEN	Swab Cups	Swab Rubbers	Rotary Helper	S. ANDERSEN	Swab Cups	Swab Rubbers	Rotary Helper	M. LAERENTZ	Swab Cups	Swab Rubbers
Rotary Helper				Rotary Helper	H. BOGSTIE			Rotary Helper	D. ROTTMANN		
Fireman	M. HACKNEY			Fireman	E. SANTROCK			Fireman	L. TROSS		
Leaseman				Leaseman	C. GRAY			Leaseman			

[illegible]

GUTHRIE McLAREN DRILLING LTD.

Well No. BRIGGS TROUT RIVER W 4

Company Representative

Tool Pusher

Date FEB 18/60

Lsd. Sec. Twp. Rge. W.

Drilled From 1087 To 1278 Hole Made 191

Drilled From 1278 To 1504 Hole Made 226

Drilled From 1504 To 1642 Hole Made 138

Bit No.	2	3	No. Stds.	15-5	Length	939.51	Bit No.	3	No. Stds.	19	Length	1150.37	Bit No.	3	No. Stds.	21-5	Length	1361.94
Serial No.	94463	95302	No. D.C.'s		Length	318.11	Serial No.	95302	No. D.C.'s	11	Length	318.11	Serial No.	95302	No. D.C.'s	11	Length	318.11
Bit Size	7 1/8	7 1/8			Length		Bit Size	7 1/8			Length		Bit Size	7 1/8			Length	
Bit Type	OSC	OSC-3			Length		Bit Type	OSC-3			Length		Bit Type	OSC-3			Length	
Dr. from	771	1185	Kelly in ==			20.38	Dr. from	1185	Kelly in ==			35.52	Dr. from	1185	Kelly in ==			21.95
Dr. to	1185	1278	TOTAL ==			1278.00	Dr. to	1504	TOTAL ==			1504.00	Dr. to	1642	TOTAL ==			1642.00
Cored from			D.C.O.D. Top	6 1/4	Hrs. On Bottom		Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	6 3/4	Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	7 1/4
Cored to			D.C.I.D. Top	2 7/8	Hrs. Off Bottom		Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	1 1/4	Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	3/4
Reamed from			Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time	1/2
Reamed to			C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at	349	Serv. Time	4	Reamed to		C.S.G. Set at	349	Serv. Time	
Total Bit Footage	414	93	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	319	C.S.G. Size	8 5/8	Rep. Time	1	Total Bit Footage	457	C.S.G. Size	8 5/8	Rep. Time	
Bit Hrs.	22	2	Pipe in Hole	31	Jts.	Diesel Fuel Meter Reading	Bit Hrs.	83.4	Pipe in Hole	38	Jts.	REMARKS:	Bit Hrs.	16	Pipe in Hole	43	Jts.	REMARKS:
Table R.P.M.	175	180	Pipe on Racks	94	Jts.	Today	Table R.P.M.	150	Pipe on Racks	87	Jts.		Table R.P.M.	150	Pipe on Racks	82	Jts.	

Depth 1185	Deviation 0°	Total Pipe on Lease 125 Jts.	Yesterday	Depth	Deviation	Total Pipe on Lease 125 Jts.	Depth	Deviation	Total Pipe on Lease 125 Jts.
Depth	Deviation		Consumption Gals.	Depth	Deviation		Depth 1642	Deviation 41°	
Depth	Deviation			Depth	Deviation		Depth	Deviation	
Depth	Deviation			Depth	Deviation		Depth	Deviation	

Time	Wt.	Via.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Via.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Via.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size			
12	10.1	8.0	90	500	3/4		6 3/4 x 12	5 x 10	8	10.1	100	70	600	3/4		6 3/4 x 12	5 x 10	4	10.2	75	70	600	3/4		6 3/4 x 12	5 x 10			
1	10.1	8.5	90	500	3/4		Liner Size 6 3/4	Liner Size 5	9	10.1	100	70	600	3/4		Liner Size 6 3/4	Liner Size 5	5	10.2	75	70	600	3/4		Liner Size 6 3/4	Liner Size 5			
2	10.1	8.5	90	500	3/4		Water-Loss	Filter Cake	PH	10	10.1	100	70	600	3/4		Water-Loss	Filter Cake	PH	6	10.2	75	70	600	3/4		Water-Loss	Filter Cake	PH
3	10.1	8.5	90	500	3/4		3.4	3/2 2	12.5	11	10.2	105	70	600	3/4		3.2	3/2 2	12.5	7	10.2	75	70	600	3/4		3.6	3/2 2	12.5
4	10.1	9.0	90	500	3/4					12	10.7	70	70	600	3/4		3.4	3/2 2	12.5	8	10.2	75	70	600	3/4		3.8	3/2 2	12.5
5							Mud Added Sacks		1	9.8	65	70	600	3/4					9	10.3	85	70	600	3/4					
6	9.8	100	90	500	3/4		Chemicals Added Lbs.		2	9.9	80	70	600	3/4		Mud Added Sacks			10	10.3	85	70	600	3/4		Mud Added Sacks	8 Sacks Gel		
7	9.8	100	90	100	3/4				3	10.1	75	70	600	3/4		Chemicals Added-Lbs.	SPERSENE-100 LBS.		11	10.4	85	70	600	3/4		Chemicals Added-Lbs.	CAUSTIC-50 LBS.		

CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR			CREW			MATERIALS CHARGED TO OPERATOR		
Driller			Core Bit	Serial		Driller			Core Bit	Serial		Driller			Core Bit	Serial	
Derrickman	B. BISCOE		Reaming Bit	Serial		Derrickman	W. SEMAK		Reaming Bit	Serial		Derrickman	D. MONNS		Reaming Bit	Serial	
Cat Headman	D. ANDERSON		Core Cutters SF. HF.	Core Catchers SF. HF.		Cat Headman	D. ANDERSON		Core Cutters SF. HF.	Core Catchers SF. HF.		Cat Headman	D. B. ESTIE		Core Cutters SF. HF.	Core Catchers SF. HF.	
Rotary Helper	J. PAULHUS		Swab Cups	Swab Rubbers		Rotary Helper	S. ANDERSEN		Swab Cups	Swab Rubbers		Rotary Helper	M. LAURENTZ		Swab Cups	Swab Rubbers	
Rotary Helper	B. ANDERSEN					Rotary Helper	H. BOGSE					Rotary Helper	O. RITTMANN				
Fireman	M. HACKNEY					Fireman	G. SANTRUP					Fireman	L. TRUSS				
Leaseman						Leaseman	C. GRAY					Leaseman					

[illegible]

Well No. BIGGS TRIBUT BIVER. 3rd

Date FEB 17/60

Drilled From 961 To 1087 Hole Made 126

CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR	
Driller	B. B. RUSSELL	Core Bit	Serial	Driller	W. SLEMAR	Core Bit	Serial	Driller	D. MONNS	Core Bit	Serial
Derrickman	D. ANDERSON	Reaming Bit	Serial	Derrickman	S. ANDERSON	Reaming Bit	Serial	Derrickman	D. BOESTIE	Reaming Bit	Serial
Cat Headman	L. PAULHUS	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman	S. ANDERSEN	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman	M. LAERENTZ	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	B. ANDERSEN	Swab Cups	Swab Rubbers	Rotary Helper	H. BOESTIE	Swab Cups	Swab Rubbers	Rotary Helper	O. ROTTMANN	Swab Cups	Swab Rubbers
Fireman	M. HACKNEY			Fireman	E. SANTROCK			Fireman	L. TROSS		
Leaseman				Leaseman	C. GRAY			Leaseman			

[illegible]

Art W. Peterson
Company Representative

GUTHRIE McLAREN DRILLING LTD.

Well No. BRIGGS TRAUT RIVER 3^d

Lsd. _____ Sec. _____ Twp. _____ Rge. _____ W. _____

Date FEB 16/60

Tool Pusher _____

Drilled From 358 To 388 Hole Made 30

Drilled From 388 To 530 Hole Made 142

Drilled From 530 To 671 Hole Made 141

Bit No.	1	No. Stds.	1 SINGLE Length	30.03	Bit No.	1	No. Stds.	3 Length	181.10	Bit No.	1	No. Stds.	5-5 Length	333.02
Serial No.	94449	No. D.C.'s	Length	318.11	Serial No.	94449	No. D.C.'s	11 Length	318.11	Serial No.	94449	No. D.C.'s	11 Length	318.11
Bit Size	7 7/8		Length		Bit Size	7 7/8		Length		Bit Size	7 7/8		Length	
Bit Type	OSC		Length		Bit Type	OSC		Length		Bit Type	OSC		Length	
Dr. from	358	Kelly in =		39.86	Dr. from	358	Kelly in =		30.79	Dr. from	358	Kelly in =		19.87
Dr. to	388	TOTAL =		388.00	Dr. to	530	TOTAL =		530.00	Dr. to	671	TOTAL =		671.00
Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom		Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom		D.C.O.D. Top	6 1/4	Hrs. On Bottom
Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom		Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom		Cored to		D.C.I.D. Top
Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size	4 1/2	Trip Time		Reamed from		Pipe Size
Reamed to		C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at	349	Serv. Time		Reamed to		C.S.G. Set at
Total Bit Footage	30	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	172	C.S.G. Size	8 5/8	Rep. Time		Total Bit Footage	313	C.S.G. Size
Bit Hrs.	1	Pipe in Hole	Jts.	Diesel Fuel Meter Reading		Bit Hrs.	8	Pipe in Hole	6 Jts.	REMARKS:		Bit Hrs.	15 1/2	Pipe in Hole
Table R.P.M.	150	Pipe on Racks	Jts.	Today		Table R.P.M.	100	Pipe on Racks	119 Jts.			Table R.P.M.	100	Pipe on Racks

Depth				Deviation		Total Pipe on Lease				Jts.		Yesterday				Depth				Deviation		Total Pipe on Lease				Jts.	
Depth				Deviation		TOTAL RING ON BIT.				Consumption		Gals.		Depth				Deviation									
Depth				Deviation		NO FLOAT ON.						Depth				Deviation											
Depth				Deviation								Depth				Deviation											
Time				Wt.		Vis.		Pump Stroke		Pump Pres-sure		Pit Gauge		Water Added		No. 1 Pump Size		6 3/4 x 12		No. 2 Pump Size		5 x 10					
																Liner Size		6 3/4		Liner Size		5					
1																9											
2																10											
3																11											
4																12											
5																1											
6																2											
7																3											

CREW	MATERIALS CHARGED TO OPERATOR	CREW	MATERIALS CHARGED TO OPERATOR	CREW	MATERIALS CHARGED TO OPERATOR
Driller <u>B. BRISCOE</u>	Core Bit Serial	Driller <u>W. SEMAK</u>	Core Bit Serial	Driller <u>D. MOHNS</u>	Core Bit Serial
Derrickman <u>D. ANDERSON</u>	Reaming Bit Serial	Derrickman <u>D. ANDERSON</u>	Reaming Bit Serial	Derrickman <u>D. BOESTIE</u>	Reaming Bit Serial
Cat Headman <u>L. PAULHUS</u>	Core Cutters SF. HF.	Cat Headman <u>S. ANDERSEN</u>	Core Cutters SF. HF.	Cat Headman <u>M. LAFFRENTZ</u>	Core Cutters SF. HF.
Rotary Helper <u>B. ANDERSEN</u>	Swab Cups	Rotary Helper <u>H. BOESTIE</u>	Swab Cups	Rotary Helper <u>O. ROTTMANN</u>	Swab Cups
Fireman <u>M. HACKNEY</u>		Fireman <u>G. SANTROCK</u>		Fireman <u>L. TRUSS</u>	
Leaseman		Leaseman <u>C. GRAY</u>		Leaseman	

REMARKS	FROM	TO	REMARKS	FROM	TO	REMARKS	FROM	TO
N.P. 211 UP	1200	400	RIG SERVICE	800	800	DRILL	4.00	9.45
DIG MOUNT HOLE			DRILL	800	930	WORK ON PUMP	9.45	10.15
BURN IN HOLE			JETMUD TANK ON FUEL LINE	930	1000	DRILL	10.15	12.00
PRESSURE UP			DRILL	1000	130			
DRILL OUT PLUG			WELD ON GOOSENECK	130	145			
DRILLING 7 7/8 HOLE			DRILL	145	400			
PRESSURED UP UNDER SHOE								
360 PSI								
CHECKED BOP TO 600 PSI								
HELD OFF FOR 10 MIN								
TOP OF PLUG - 280-KB								

Company Representative

GUTHRIE McLAREN DRILLING LTD.

Well No. 15M663 / BOB BUCKS

Tool Pusher

Date 1-23-50

Lsd. Sec. Twp. Rge. W.

[illegible]

Bit No.	No. Stds.	Length	Bit No.	No. Stds.	Length	Bit No.	No. Stds.	Length
Serial No.	No. D.C.'s	Length	Serial No.	No. D.C.'s	Length	Serial No.	No. D.C.'s	Length
Bit Size		Length	Bit Size		Length	Bit Size		Length
Bit Type		Length	Bit Type		Length	Bit Type		Length
Dr. from	Kelly in ==		Dr. from	Kelly in ==		Dr. from	Kelly in ==	
Dr. to	TOTAL ==		Dr. to	TOTAL ==		Dr. to	TOTAL ==	
Cored from	D.C.O.D. Top D.C.I.D. Top	Hrs. On Bottom Hrs. Off Bottom	Cored from	D.C.O.D. Top D.C.I.D. Top	Hrs. On Bottom Hrs. Off Bottom	Cored from	D.C.O.D. Top D.C.I.D. Top	Hrs. On Bottom Hrs. Off Bottom
Cored to			Cored to			Cored to		
Reamed from	Pipe Size	Trip Time	Reamed from	Pipe Size	Trip Time	Reamed from	Pipe Size	Trip Time
Reamed to	C.S.G. Set at	Serv. Time	Reamed to	C.S.G. Set at	Serv. Time	Reamed to	C.S.G. Set at	Serv. Time
Total Bit Footage	C.S.G. Size	Rep. Time	Total Bit Footage	C.S.G. Size	Rep. Time	Total Bit Footage	C.S.G. Size	Rep. Time
Bit Hrs.	Pipe in Hole	Jts.	Bit Hrs.	Pipe in Hole	Jts.	Bit Hrs.	Pipe in Hole	Jts.
Table R.P.M.	Pipe on Racks	Jts.	Table R.P.M.	Pipe on Racks	Jts.	Table R.P.M.	Pipe on Racks	Jts.

Depth	Deviation	Total Pipe on Lease	Jts.	Yesterday	Depth	Deviation	Total Pipe on Lease	Jts.		Depth	Deviation	Total Pipe on Lease	Jts.
Depth	Deviation			Consumption	Gals.	Depth	Deviation			Depth	Deviation		
Depth	Deviation					Depth	Deviation			Depth	Deviation		
Depth	Deviation					Depth	Deviation			Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pres-sure	Pit Gauge	Water Added	No. 1 Pump Size			No. 2 Pump Size			Time	Wt.	Vis.	Pump Stroke	Pump Pres-sure	Pit Gauge	Water Added	No. 1 Pump Size			No. 2 Pump Size			Time	Wt.	Vis.	Pump Stroke	Pump Pres-sure	Pit Gauge	Water Added	No. 1 Pump Size			No. 2 Pump Size				
							Liner Size			Liner Size			8								Liner Size			Liner Size			4								Liner Size			Liner Size		
1							Water-Loss	Filter Cake	PH	9							Water-Loss	Filter Cake	PH	5													Water-Loss	Filter Cake	PH					
2										10																														
3										11																														
4										12																														
5							Mud Added Sacks			1							Mud Added Sacks			9													Mud Added Sacks							
6							Chemicals Added Lbs.			2							Chemicals Added Lbs.			10													Chemicals Added Lbs.							
7										3										11																				

CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR	
Driller	13 13415602 16	Driller	W. SEMAK	Driller	D. MANN	Core Bit	Serial	Driller	D. MANN	Core Bit	Serial
Derrickman	171 ANDERSON	Derrickman	D. ANDERSON	Derrickman	D. ROGSTIE	Reaming Bit	Serial	Derrickman	D. ROGSTIE	Reaming Bit	Serial
Cat Headman	1 PAULUS	Cat Headman	S. ANDERSEN	Cat Headman	M. LAFFRENTZ	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman	M. LAFFRENTZ	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	13 ANDERSEN	Rotary Helper	H. BOESTIE	Rotary Helper	O. ROTTMANN	Swab Cups	Swab Rubbers	Rotary Helper	O. ROTTMANN	Swab Cups	Swab Rubbers
Rotary Helper		Rotary Helper		Rotary Helper				Rotary Helper			
Fireman	M. HACKNEY	Fireman	G. BANTROCK	Fireman	L. TRUSS			Fireman	L. TRUSS		
Leaseman		Leaseman	C. CROV	Leaseman				Leaseman			

[illegible]

Company Representative

GUTHRIE McLAREN DRILLING LTD.

Well No. B-1665 ~~TROUT RIVER~~

Lsd. Sec. Twp. Rge. W.

Date FEB 14/60

Tool Pusher
Drilled From 308 To 358 Hole Made 50
Reamed From 275 To 300 Hole Made 25

Bit No.	<u>1B</u>	<u>1B</u>	No. Stds.	Length	Bit No.	<u>1A</u>	No. Stds.	Length	Bit No.		No. Stds.	Length
Serial No.	<u>1294140-R</u>	<u>1294140-R</u>	No. D.C.'s	<u>7</u>	Length	<u>264.63</u>	Serial No.	<u>REAR</u>	No. D.C.'s	<u>11</u>	Length	<u>318.11</u>
Bit Size	<u>7 7/8</u>	<u>12 1/4</u>	<u>50B 5 1/2</u>	<u>12.5</u>	Length	<u>3.35</u>	Bit Size	<u>12 1/4</u>	<u>50B 5 1/2</u>	<u>12.5</u>	Length	<u>3.35</u>
Bit Type	<u>Y51</u>	<u>050-3</u>			Length		Bit Type	<u>050-3</u>			Length	
Dr. from	<u>275</u>	<u>220</u>	Kelly in	<u>32.62</u>	Dr. from		Kelly in	<u>30.54</u>	Dr. from		Kelly in	
Dr. to	<u>358</u>	<u>275</u>	TOTAL	<u>30.00</u>	Dr. to		TOTAL	<u>352.00</u>	Dr. to		TOTAL	
Cored from			D.C.O.D. Top	<u>6 1/4</u>	Hrs. On Bottom		Cored from		D.C.O.D. Top	<u>6 1/4</u>	Hrs. On Bottom	
Cored to			D.C.I.D. Top	<u>2 1/4</u>	Hrs. Off Bottom		Cored to		D.C.I.D. Top	<u>2 1/4</u>	Hrs. Off Bottom	
Reamed from		<u>275</u>	Pipe Size	<u>4 1/2</u>	Trip Time		Reamed from	<u>300</u>	Pipe Size	<u>4 1/2</u>	Trip Time	
Reamed to		<u>300</u>	C.S.G. Set at		Serv. Time		Reamed to	<u>352</u>	C.S.G. Set at		Serv. Time	
Total Bit Footage	<u>83</u>	<u>300</u>	C.S.G. Size		Rep. Time		Total Bit Footage	<u>352</u>	C.S.G. Size		Rep. Time	
Bit Hrs.	<u>6 1/4</u>	<u>8 1/2</u>	Pipe in Hole	Jts.	Diesel Fuel Meter Reading		Bit Hrs.	<u>12 1/4</u>	Pipe in Hole	Jts.	REMARKS:	
Table R.P.M.	<u>100</u>	<u>100</u>	Pipe on Racks	Jts.	Today		Table R.P.M.	<u>100</u>	Pipe on Racks	Jts.	REMARKS:	

R.P.M.														Total Pipe on Lease														Total Pipe on Lease														Total Pipe on Lease																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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CREW	MATERIALS CHARGED TO OPERATOR	CREW	MATERIALS CHARGED TO OPERATOR	CREW	MATERIALS CHARGED TO OPERATOR
Driller <u>B. ALSCA</u>	Core Bit	Driller <u>W. SEMAR</u>	Core Bit	Driller <u>D. MOHNS</u>	Core Bit
Derrickman <u>D. ANDERSON</u>	Reaming Bit	Derrickman <u>D. ANDERSON</u>	Reaming Bit	Derrickman <u>D. BOGSTIE</u>	Reaming Bit
Cat Headman <u>B. ANDERSON</u>	Core Cutters SF. HF.	Cat Headman <u>S. ANDERSON</u>	Core Cutters SF. HF.	Cat Headman <u>M. LAERENTZ</u>	Core Cutters SF. HF.
Rotary Helper <u>B. ANDERSON</u>	Swab Cups	Rotary Helper <u>H. BOGSTIE</u>	Swab Rubbers	Rotary Helper <u>O. RATTMANN</u>	Swab Rubbers
Fireman <u>M. HACKNEY</u>		Fireman <u>E. SANTROCK</u>		Fireman <u>L. TRUSS</u>	
Leaseman		Leaseman <u>C. GRAY</u>		Leaseman	

REMARKS	FROM	TO	REMARKS	FROM	TO	REMARKS	FROM	TO
Mixing GEL (Loss Circulation)	12:00	2:00	RIG SERVICE	8:00	8:15	RUN CASING	4:00	7:00
RUN IN & DRILL PILOT HOLE	2:00	5:15	REAM 7 7/8 HOLE TO 12 1/4	8:15	2:00	CIRC. CASING	7:00	7:30
DROP SURVEY HOIST TO REAM	5:15	5:50	TRIP TO CONDITION HOLE	2:00	2:45	CEMENT CASING	7:30	8:00
RUN IN REAM 7 7/8 HOLE TO 12 1/4	6:00	8:00	CIRCULATE	2:45	3:15	W. O. C.	8:00	12:00
			HOIST TO RUN CASING	3:15	3:45			
			RIG TO RUN CASING	3:45	4:00			
						Run 334.71 FT 8 7/8 34 1/2 J-55		
						MANHESMAN Casing		
						SET AT 349.11 K.B.		
						CEMENTED BY HOWCO WITH 200 SACK		
						14 Lb CEMENT 2% CLCA 2		
						Job completed 8:00 P.M.		
						12.40 From K.B. To TOP Casing 60W		
						good cement Return		

Company Representative

GUTHRIE McLAREN DRILLING LTD.

Well No. BRIEGS ~~WATER~~ TROUT ~~WELL~~ #3

Lsd. Sec. Twp. Rge. W.

Tool Pusher

Date FEB 13/60

Drilled From 162 To 220 Hole Made 58

Drilled From 220 To 275 Hole Made 55
Reamed From 0 To 220 - 220

Drilled From 275 To 308 Hole Made 33

Bit No.	1	No. Stds.	Length	Bit No.	1A	No. Stds.	Length	Bit No.	1B	No. Stds.	Length
Serial No.	RE RUN	No. D.C.'s	Length	Serial No.	RE RUN	No. D.C.'s	Length	Serial No.	094140	No. D.C.'s	Length
Bit Size	9 7/8	BELL SPR. BIT	Length	Bit Size	12 1/4		Length	Bit Size	7 3/4		Length
Bit Type	OSC.		Length	Bit Type	OSC-3		Length	Bit Type	YS1		Length
Dr. from	0	Kelly in =	39.67	Dr. from	215 220	Kelly in =	39.52	Dr. from	275	Kelly in =	15.17
Dr. to	220	TOTAL =	220.00	Dr. to	215 275	TOTAL =	275.00	Dr. to	308	TOTAL =	308.00
Cored from		D.C.O.D. Top	6 1/4	Cored from		D.C.O.D. Top	6 1/4	Cored from		D.C.O.D. Top	6 1/4
		D.C.I.D. Top	2 7/8			D.C.I.D. Top	2 7/8			D.C.I.D. Top	2 7/8
Cored to		Hrs. On Bottom	2	Cored to		Hrs. On Bottom		Cored to		Hrs. On Bottom	
		Hrs. Off Bottom	6			Hrs. Off Bottom				Hrs. Off Bottom	
Reamed from		Pipe Size	Trip Time	Reamed from	0	Pipe Size	4 1/2	Reamed from		Pipe Size	4 1/2
Reamed to		C.S.G. Set at	Serv. Time	Reamed to	220	C.S.G. Set at	Serv. Time	Reamed to		C.S.G. Set at	Serv. Time
Total Bit Footage	220	C.S.G. Size	Rep. Time	Total Bit Footage	275	C.S.G. Size	Rep. Time	Total Bit Footage	33	C.S.G. Size	Rep. Time
Bit Hrs.	8 1/4	Pipe in Hole	Jts.	Bit Hrs.	6 1/2	Pipe in Hole	Jts.	Bit Hrs.	3	Pipe in Hole	Jts.
Table R.P.M.	150	Pipe on Racks	Jts.	Table R.P.M.	150	Pipe on Racks	Jts.	Table R.P.M.	100	Pipe on Racks	Jts.
		Diesel Fuel Meter Reading				REMARKS:				REMARKS:	
		Today									

Depth <i>190</i>	Deviation <i>4</i>	Total Pipe on Lease	Jts.	Yesterday	Depth	Deviation	Total Pipe on Lease	Jts.	Depth <i>275</i>	Deviation <i>340</i>	Total Pipe on Lease	Jts.
Depth	Deviation			Consumption	Gals.	Depth	Deviation		Depth	Deviation		
Depth	Deviation					Depth	Deviation		Depth	Deviation		
Depth	Deviation					Depth	Deviation		Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pres-sure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	Time	Wt.	Vis.	Pump Stroke	Pump Pres-sure	Pit Gauge	Water Added	No. 1 Pump Size	No. 2 Pump Size	
							6 3/4 x 12	5 x 10								6 3/4 x 12	5 x 10	
							Liner Size 6 3/4	Liner Size 5								Liner Size 6 3/4	Liner Size 5	
1							Water-Loss	Filter Cake	PH	9						Water-Loss	Filter Cake	PH
2										10								
3										11								
4										12								
5							Mud Added Sacks 2200 7 CEL			1						Mud Added Sacks 13 500 5 EL		
6							Chemicals Added Lbs.			2						Chemicals Added Lbs.		
7										3								

CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR		CREW		MATERIALS CHARGED TO OPERATOR	
Driller	D. MOHNS	Core Bit	Serial	Driller	B. BRISCOE	Core Bit	Serial	Driller	W. SEMAK	Core Bit	Serial
Derrickman	D. BORSTIE	Reaming Bit	Serial	Derrickman	D. ANDERSON	Reaming Bit	Serial	Derrickman	D. ANDERSON	Reaming Bit	Serial
Cat Headman	M. LAFFENTZ	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman	E. DAHLGUS	Core Cutters SF. HF.	Core Catchers SF. HF.	Cat Headman	S. ANDERSEN	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	C. RATTMANN	Swab Cups	Swab Rubbers	Rotary Helper	B. ANDERSEN	Swab Cups	Swab Rubbers	Rotary Helper	H. BORSTIE	Swab Cups	Swab Rubbers
Fireman	L. TRUSS			Fireman	M. HACKNEY			Fireman	G. SANTROCK		
Leaseman				Leaseman				Leaseman			

[illegible]

Arthur H. H. H.
Company Representative

GUTHRIE McLAREN DRILLING LTD.

Well No. *BAIGGS WEST TROT 37*

Date *FEB 12/60*

Lsd. _____ Sec. _____ Twp. _____ Rge. _____ W. _____

Tool Pusher _____

Drilled From _____ To _____ Hole Made _____ Drilled From _____ To _____ Hole Made _____ Drilled From *0* To *162* Hole Made *162*

Bit No.		No. Stds.	Length	Bit No.		No. Stds.	Length	Bit No.		No. Stds.	Length
Serial No.		No. D.C.'s	Length	Serial No.		No. D.C.'s	Length	Serial No.		No. D.C.'s	Length
Bit Size			Length	Bit Size			Length	Bit Size			Length
Bit Type			Length	Bit Type			Length	Bit Type			Length
Dr. from		Kelly in =		Dr. from		Kelly in =		Dr. from	<i>0</i>	Kelly in =	
Dr. to		TOTAL =		Dr. to		TOTAL =		Dr. to	<i>162</i>	TOTAL =	
Cored from		D.C.O.D. Top	Hrs. On Bottom	Cored from		D.C.O.D. Top	Hrs. On Bottom	Cored from		D.C.O.D. Top	Hrs. On Bottom
Cored to		D.C.I.D. Top	Hrs. Off Bottom	Cored to		D.C.I.D. Top	Hrs. Off Bottom	Cored to		D.C.I.D. Top	Hrs. Off Bottom
Reamed from		Pipe Size	Trip Time	Reamed from		Pipe Size	Trip Time	Reamed from		Pipe Size	Trip Time
Reamed to		C.S.G. Set at	Serv. Time	Reamed to		C.S.G. Set at	Serv. Time	Reamed to		C.S.G. Set at	Serv. Time
Total Bit Footage		C.S.G. Size	Rep. Time	Total Bit Footage		C.S.G. Size	Rep. Time	Total Bit Footage		C.S.G. Size	Rep. Time
Bit Hrs.		Pipe in Hole	Jts.	Bit Hrs.		Pipe in Hole	Jts.	Bit Hrs.		Pipe in Hole	Jts.
Table R.P.M.		Pipe on Racks	Jts.	Table R.P.M.		Pipe on Racks	Jts.	Table R.P.M.		Pipe on Racks	Jts.

Depth	Deviation	Total Pipe on Lease	Jts.	Yesterday	Depth	Deviation	Total Pipe on Lease	Jts.	Yesterday
Depth	Deviation			Consumption	Depth	Deviation			
Depth	Deviation				Depth	Deviation			
Depth	Deviation				Depth	Deviation			

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size			No. 2 Pump Size			Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size			No. 2 Pump Size		
							Liner Size			Liner Size										Liner Size			Liner Size		
1							Water-Loss	Filter Cake	PH				9							Water-Loss	Filter Cake	PH			
2													10												
3													11												
4													12												
5							Mud Added Sacks	6 EL 2500						1						Mud Added Sacks	6 EL 1500				
6							Chemicals Added Lbs.							2						Chemicals Added Lbs.					
7														3											

CREW	MATERIALS CHARGED TO OPERATOR	CREW	MATERIALS CHARGED TO OPERATOR	CREW	MATERIALS CHARGED TO OPERATOR
Driller <i>D. MOHNS</i>	Core Bit	Driller <i>B. BRISCOE</i>	Core Bit	Driller <i>W. SEIMAR</i>	Core Bit
Derrickman <i>D. BOGSTIE</i>	Reaming Bit	Derrickman <i>D. ANDERSON</i>	Reaming Bit	Derrickman <i>D. ANDERSON</i>	Reaming Bit
Cat Headman <i>M. LAERENTZ</i>	Core Cutters SF. HF.	Cat Headman <i>B. BOGSTIE</i>	Core Cutters SF. HF.	Cat Headman <i>S. ANDERSEN</i>	Core Cutters SF. HF.
Rotary Helper <i>O. RUTMANN</i>	Swab Cups	Rotary Helper <i>B. ANDERSEN</i>	Swab Cups	Rotary Helper <i>H. BOGSTIE</i>	Swab Cups
Rotary Helper		Rotary Helper		Rotary Helper	
Fireman <i>L. THUSS</i>		Fireman <i>M. HACKNEY</i>		Fireman <i>E. SANTRICK</i>	
Leaseman		Leaseman		Leaseman	

REMARKS	FROM	TO	REMARKS	FROM	TO	REMARKS	FROM	TO
<i>W. O. C.</i>	<i>12⁰⁰</i>	<i>8⁰⁰</i>	<i>Big up pumps to Dig RAT</i>	<i>8⁰⁰</i>	<i>10⁰⁰</i>	<i>DRILL SURFACE HOLE</i>	<i>4⁰⁰</i>	<i>8³⁰</i>
			<i>HOLE.</i>			<i>WORK MUD RING</i>	<i>8³⁰</i>	<i>9⁰⁰</i>
			<i>Dig RAT HOLE (ROCKS)</i>	<i>10⁰⁰</i>	<i>3⁰⁰</i>	<i>DRILL</i>	<i>9⁰⁰</i>	<i>10⁰⁰</i>
			<i>WORK ON SHALE SHAKER</i>	<i>3⁰⁰</i>	<i>4⁰⁰</i>	<i>WORK MUD RING</i>	<i>10⁰⁰</i>	<i>10³⁰</i>
						<i>SURVEY</i>	<i>10³⁰</i>	<i>10⁴⁵</i>
						<i>DRILL</i>	<i>10⁴⁵</i>	<i>11³⁰</i>
						<i>LOSS CIRC THRU RAT HOLE MIX GEL</i>	<i>11³⁰</i>	<i>12⁰⁰</i>