WILKINSON REDKNIFE RIVER

NO. 2 E-33

Drilling Authority No.
Date Issued

WELL NAME Wilkinson Redknife River No. 2 [illegible]
FIELD Wildcat **Area:** Redknife River
LOCATION: Unit E **Section** 33 **Grid** [illegible]
Latitude 60°52'29" N. **Longitude** 119°22'23" W.
From Established Reference Marker

Rig Release Date: 22-2-63
Status D & A
Information Release Date 22-2-63

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.

NANR 52-90(1-61)

Hand

FORM "B"

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION BRANCH

RESOURCES DIVISION

For the period from . . . . . .

to March 12, 1961

REPORT of ~~COMPLETION~~ REWORK ~~RECOMPLETION~~ ~~SUSPENSION~~ ABANDONMENT of a Well

Permit No. 907

Name of well WILKINSON REDKNIFE RIVER NO. 2 . . . . . Lease No. . . . .

Registered owner James C. Wilkinson Nominee Account . . . . . Drilling Company Guthrie McLaren . . . . .

Location 60°52'29" . . . . . N. Lat. 119°22'23" W. Long.

Survey description, if available 15,000 N. of S. bdry Permit 907 22,600'.E. of W. bdry Permit 907 . . . . . .

Elevation: Ground . . . 1042'. . Last previous depth . 3420' . . . . . .

Kelly bushing. . 1055' . . Present depth . Plugged . . . . . .

Spudded . . February 26, 1961 . . . . . Finished drilling 10/3/61 Rig Released

. . . March 12, 1961

Deviations from vertical 505'-¼°; 1246'-½°; 1620-1/8°; 1980'-½°; 2575'-¼°; . .

. 2887'-½°; 3393'-½°. . . . . .

CASING RECORD

	Date	Size O.D.	Weight lbs/ft	Grade	Set at feet	Sacks Cement	Top of Cement
1	27/2/61	8 5/8	24	J-55	201	100	Surface
2	. . . .	. . . . .	. . . .	. . . .	. . . .	. . . .	. . . .
3	. . . .	. . . . .	. . . .	. . . .	. . . .	. . . .	. . . .
4	. . . .	. . . . .	. . . .	. . . .	. . . .	. . . .	. . . .

TUBING RECORD

Size	Wt.Lbs/foot	Grade	Amount	Landed Depth	Remarks
. . . .	. . . . .	. . . .	. . . .	. . . .	. . . .
. . . .	. . . . .	. . . .	. . . .	. . . .	. . . .

Wellhead . . . . . .(Manufacturer). . . . (Size). . . .(Series)

.. 2

Status of well on completion of drilling Hole full of drilling mud.

Producing Zone ..... and formation .....
Injection

~~Cord intervals~~ Cored Intervals 3221'-3246', Recovered 11'

Interval logged: E-log 3414'-201' Other logs .....

R-log 3404'-50'

M-log 3418'-2960'; 1347'-201'

Velocity log Sonic 3413'-201'

The above logs (are)
(~~will be~~) submitted in accordance with Section 65 of the Regulations.

DRILL STEM TESTS

Test No.	Date	Interval Tested	Duration	Results
1	7/3/61	3156'-3221'	64 mins.	2680' Salt water
2	8/3/61	3150'-3180'	216 mins.	2880' Salt water
3	11/3/61	3210'-3240'	59 mins.	2580' Salt water.

(If space insufficient, attach further sheet)

(Strike out the non-applicable) (Completion) (Rework) (Recompletion)

Perforations Bullet.....

Shootings .....

Hydraulic fracturing .....

Chemical treatment .....

Date initial production tests .....

Initial production data .....

Pumping or flowing . . . . . .

Plug back . . . . . .

Other . . . . . .

. . . . . .

. . . . . .

. . . . . .

. . . . . .

CEMENT PLUGS SET

Date	Plug set at	Sacks cement	Method	Top found at
12/3/61	3,420' - 2950	160	Displacement	Not felt
12/3/61	251' - 151	40	Displacement	143'
. . . .	. . . . .	. . . . .	. . . . .	. . . . .
. . . .	. . . . .	. . . . .	. . . . .	. . . . .
. . . .	. . . . .	. . . . .	. . . . .	. . . . .

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

Cores will be stored at GEOLOGICAL SURVEY OF CANADA, CALGARY . . . . . .

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 3156'-3221'; 3150'-3180'; 3210'-3240'
~~(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 AND ASSOCIATES LTD. Address 1009 FOURTH AVENUE S. W.,
CALGARY, ALBERTA.

Date . May 4, 1961. . . . . .

(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.)

FORM "C"

C A N A D A

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION BRANCH

RESOURCES DIVISION

ABANDON

NOTICE OF INTENTION TO ~~OBX~~ a Well

~~[illegible]~~

(Strike out operation which does not apply)

In accordance with Sections 68 & 69 of the Territorial Oil and Gas Regulations, notice is hereby given of our intention to

abandon the well named ~~WILKINSON KEEWATIN RIVER NO. 2~~ on Oil and Gas Permit No. 907 Lease No. ....

Registered in the name of James C. Wilkinson

Depth 3420 feet. Elevation above sea level: Ground surface 1042 ft. Kelly bushing ~~1055~~ ft.

Location 60°32'29" N. Lat. 119°22'23" W. Long.

15,000 feet (N.of S. boundary) ~~(S.of N. boundary)~~ of (Permit No. 907 / Lease No. ....)

22,600 feet (E.of W.boundary) ~~(W.of E. boundary)~~ of (Permit No. 907 / Lease No. ....)

Survey description, if available ....

CASING RECORD

	Size O.D. inches	Weight lbs/ft	Grade	Amount feet	Set at feet	Sacks cement	Method	to be withdrawn
1	8 5/8	24	J-55	188	201	100	Displacement	Nil
2								
3								
4								

OIL, GAS AND WATER

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

Oil from ....feet to ....feet From ....feet to ....feet with ....sacks 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 3156. .feet to 3240. feet From .3420 .feet to 2950. .feet with .160. . sacks cement.

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

Surface and bottom plugs:

1. from 3420 .feet to 2950 .feet with 160 . .sacks cement.
2. from . 251 .feet to . 151 .feet with 40 . .sacks cement.
3. from . . . .feet to . . . .feet with . . . .sacks cement.

Date of last operation March 12, 1961. . . . . .Total depth . 3420. . . . .

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

The following logs ~~will be~~ have been run ~~Induction-Electrical, Sonic, Gamma Ray,~~

. . microlog-caliper. . . . . .

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 . . . . . .

. . Seal surface plug after 6 1/2 hours. . . . . .

. . Weld steel plate, with well name sign attached, to top of surface casing. . .

. . . . . .

Responsible agents of permittee or lessee in charge of operation:

At well . A. Whiting . . . . . Postal address Hay River, N. W. T. . . . .

At registered office . A. M. Lloyd . . .Postal address 1017 First National Bank Bldg., 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 . . 17. . . day of . May . . . . . .19. 61.

Signed by . J. C. SPROULE AND ASSOCIATES LTD. . .

D R L Harding

This program is approved subject to the following provisions

confirming oral approval given at well site

19th May 1961
Date

B. Thomas
Oil Conservation Engineer

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

Date 10,100

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

or

TO CARRY OUT A STRUCTURE TEST PROGRAM

In accordance with Section 57 of the CANADA Oil and Gas Regulations, notice is hereby given of our intention to begin drilling a well on Oil and Gas Permit No. 907 . . . registered in the name of
Lease No. . . . . .

JAMES C. WILKINSON NORTHERN ACCOUNT . . .
A.H. LLOYD, OPERATOR

TYPE OF WELL:

Wildcat .X. . . . . .

Development . . . . . .

Expected total depth . 3525 . . . . . feet, in the Granite .

formation of . . Precambrian . . . . . age.

The well will be located at 60° 52' 24" . . . . . N. Lat. . . . . 119° 22' 30" W.Long.

. . 275 miles .(N. of S. boundary) (Permit No. . 907 . . . . .)
(S. of N. boundary) of (Lease No. . . . . .)
. . 425 miles .(W. of E. boundary) of (Permit No. . 907 . . . . .)
(E. of W. boundary) (Lease No. . . . . .)
Sec.33 Unit E

Survey description of Location, if known . . . . . .

. . . . . .

Approximate surface elevation of 1,050 feet . . feet above sea level.

Name of well . . . . Wilkinson Redknife River No. 2 . . . . . .

Type of drilling rig . . . . . Rotary . . . . . .

Expected date of commencement . February 25, 1961 . . . . . .

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. 8 5/8"	24	J-55		New	200	125
2.						
3.						

.. 2

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

. . . . . .

. . . . . .

Various zones from 2,700 to 3,525 feet. Controlled by adequate mud fluid of proper density and blowout prevention. . . . . .

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

STRUCTURE TEST PROGRAM

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

. . . . . .N. Latitudes

. . . . . .W. Longitudes

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

Name and address of drilling contractor . . Guthrie-McLaren Drilling Ltd. . .
11810 - 124 Street
. . . . . .
Edmonton, Alberta.
. . . . . .

. . . . . .

Responsible agents of permittee or lessee in charge of operation:

At well . . Art Whiting. . . . . Postal address . Hay Rives, N. W. T. .

At registered office . . . . . J. C. Sproule and Associates Ltd. Postal address 1009 Fourth Avenue S. W. Calgary, Alberta. . . . .

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

Dated at . . Calgary this . . 22nd . . . . day of . February . . . 19 61 . . .

Signed by S.R.L. Harding . . .
S.R.L. Harding, J.C. SPROULE AND ASSOCIATES LTD.

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

Because of the delays which will be caused by the remoteness of your . . . operation in furnishing the daily drilling reports each week to my office oral, or if preferred, written reports on the progress of the well are to . . . . . be sent based on the daily reports you receive by radio. . . . . .

. . . . . .

23 February, 1961. . . . . .
Date Oil Conservation Engineer.

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

GEOLOGICAL AND ENGINEERING REPORT

WILKINSON REDKNIFE RIVER NO. 2

REDKNIFE RIVER AREA, NORTHWEST TERRITORIES

J. G. SPROULE & ASSOCIATES
GEOLOGICAL & EXPLORATION CONSULTANTS

[illegible] FOURTH AVENUE WEST
CALGARY — ALBERTA

[illegible]
[illegible]

TABLE OF CONTENTS

	Page
INTRODUCTION	1
SUMMARY OF WELL DATA	2
DAILY CHRONOLOGICAL REPORT	4
DEVIATION SURVEYS	6
MUD RECORD	7
BIT SUMMARY	9
TIME DRILLING RECORD	10
TIME CORING RECORD	11
DRILL STEM TEST REPORTS	12
SURFACE CASING TALLY	15
SAMPLE DESCRIPTION	16
SUMMARY AND CONCLUSIONS	25

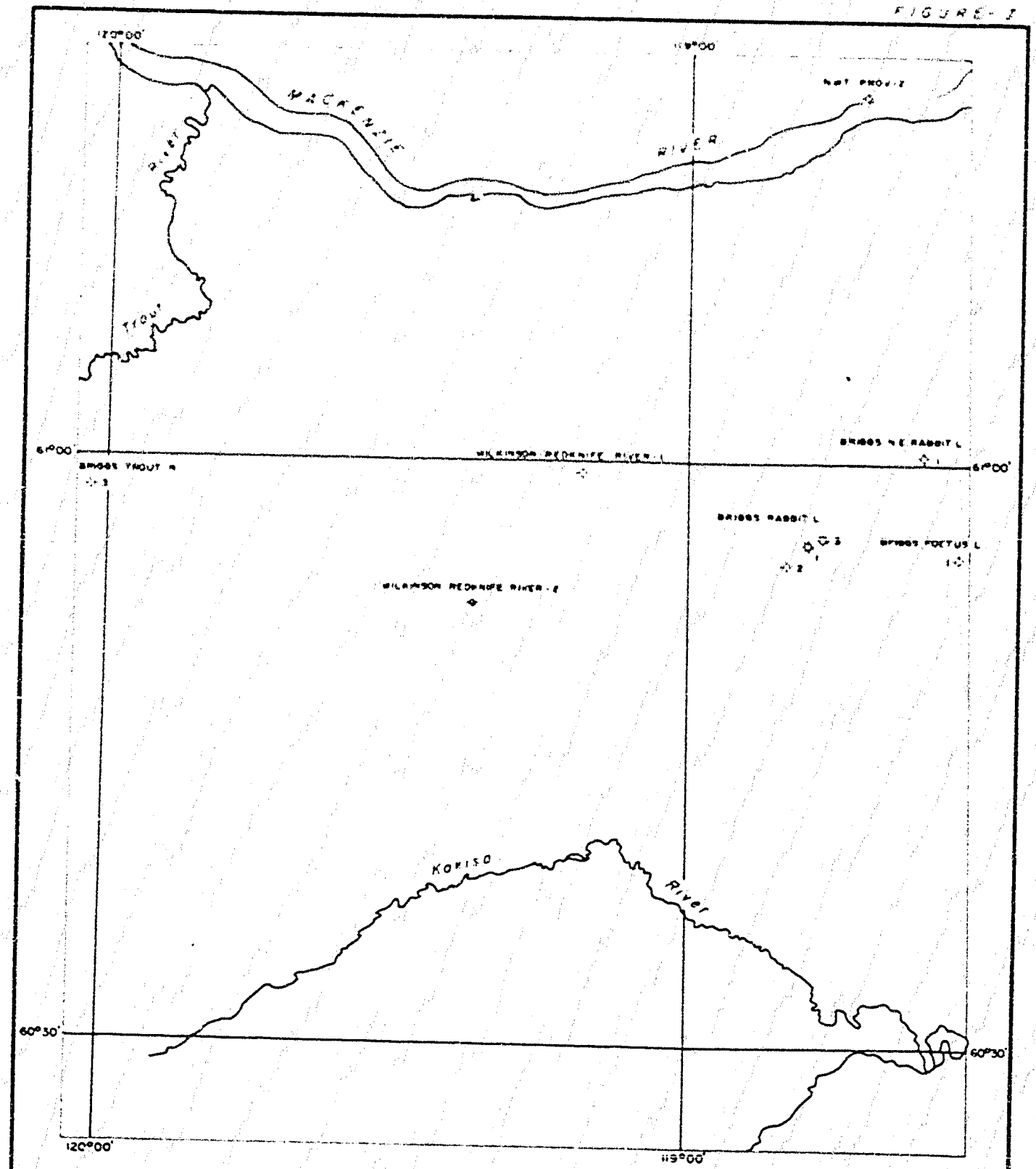
APPENDICES

NOTICE OF INTENTION TO BEGIN DRILLING OPERATIONS	Appendix I
WATER ANALYSIS REPORT	Appendix II
DRILL STEM TEST REPORTS NOS. 1 TO 3 - Lynes United Services Ltd.	In pocket
LOGS - Schlumberger of Canada - Induction-Electrical	In pocket
- Gamma Ray-Integrated Sonic	In pocket
- Microlog-Caliper	In pocket
Visual Well Log	In pocket

LIST OF ILLUSTRATIONS

Figure I - Index Map showing Location of Wilkinson Redknife River Wells	Frontispiece

FIGURE - I



INDEX MAP

SHOWING

LOCATION OF WILKINSON REDKNIFE RIVER WELLS

Abandoned Well

Gas Well

8 0 8 16

SCALE 1" = 8 MILES

4180

Wells Revised to Apr 1, 1961

J.C. SPROULE AND ASSOCIATES LTD. CALGARY

INTRODUCTION

Wilkinson Redknife River No. 2 was the third well drilled in the 1961 drilling program on Permits held in the name of James C. Wilkinson Nominee Account. The well was drilled to the Precambrian to test the oil and gas possibilities of the Slave Point and older formations. The location was based on seismic work done during the 1959-60 winter season. The drilling site was situated on a surveyed seismic line which was easily accessible from existing roads. The location is 10 miles southwest of the Wilkinson Redknife No. 1 test and 20 miles west and south of the Rabbit Lake gas area.

Radiotelephone communication was established between the camp and Hay River, Northwest Territories, from where daily telegrams were sent to Calgary for further distribution. The operator was present at the well site for the drilling and testing operations below 3,100 feet and for the logging of the hole by Schlumberger of Canada.

SUMMARY OF WELL DATA

Name of Operator:	James C. Wilkinson Nominee Account, Northwest Territories C. F. Moulton, Operator.
Well Name:	Wilkinson Redknife River No. 2
Location:	60° 52' 29" North Latitude 119° 22' 23" West Longitude
Permit No:	907
Co-ordinates:	15,000' North of South boundary of Permit No. 907 22,600' East of West boundary of Permit No. 907
Elevation:	Ground - 1042' Kelly Bushing - 1055' Kelly Bushing to Casing Flange 12.5'
Technical Supervision:	J. C. Sproule and Associates Ltd. Norman Soul, P. Geol.
Drilling Contractor:	Guthrie McLaren Drilling Ltd. Rig No. 3 Drawworks: National T32 Trailer-mounted Derrick: 97' Lee C. Moore Trailer-mounted Pump: Oilwell 14-P-HD 7½"x 14" Blow-out Preventors: 10" x 900 series Hydril 10" x 900 series Cameron 80 Gal. Hydril Accumulator Drill Pipe: 4½" Internal Flush
Status:	Plugged and abandoned.
Date Spudded:	February 26, 1961
Total Depth:	Driller: 3,420' Logs: 3,419'
Date Completed Drilling:	March 10, 1961
Date Rig Released:	March 12, 1961
Number of Rig Days:	15
Hole Size:	12¼" Surface to 203' 9" 203' to 383' 7 7/8" 383' to 3,420'
Casing:	188.07' x 8 5/8" x 24 lb. J-55 new set at 201.07' K.B. Cemented with 100 sacks and 2% Calcium Chloride, February 27, 1961.
Mud Type:	Gel

Geological Markers:

Marker	Depth Feet	Elevation Feet
Glacial Drift	Surface	+1,042
Wabamun Group	120	+935
Trout River Formation	700	+355
Grumbler Formation	910	+145
Kakisa Reef Member	910	+145
Island Reef Member	1,293	-238
Simpson Formation	1,320	-265
Spence River Formation	2,880	+1,825
Slave Point Formation	2,990	-1,935
Watt Mountain Formation	3,115	-2,060
Presqu'ile Formation	3,125	-2,070
Precambrian	3,409	-2,354

Total Depth - 3,420'

Core Summary:

No.	Interval Feet	Formation	Recovery Feet
1	3,221-3,246	Presqu'ile	11

Formation Test Summary:

No.	Interval Feet	Formation	Duration Minutes	Recovery
1	3,156-3,221	Presqu'ile	64	2,680' gas-cut, oil-flecked, watery mud.
2	3,150-3,180	Presqu'ile	216	2,880' gas-cut, oil-flecked, muddy salt water.
3	3,210-3,240	Presqu'ile	59	2,580' salty sulphurous water.

Logs:

Induction-Electrical Survey - 3,414'-201'
Integrated Sonic Log - 3-foot spacing 3,413'-201'
1-foot spacing 3,413'-2,990'
Gamma Ray - 3,404'-50'
Microlog-Caliper - 1,347'-201' and 3,418'-2,960'

Geological Markers:

Marker	Depth Feet	Elevation Feet
Glacial Drift	Surface	+1,042
Wabamun Group	120	+935
Trout River Formation	700	+355
Grumbler Formation	910	+145
Kakisa Reef Member	910	+145
Island Reef Member	1,293	-238
Simpson Formation	1,320	-265
Spence River Formation	2,880	+1,825
Slave Point Formation	2,990	-1,935
Watt Mountain Formation	3,115	-2,060
Presqu'ile Formation	3,125	-2,070
Precambrian	3,409	-2,354

Total Depth - 3,420'

Core Summary:

No.	Interval Feet	Formation	Recovery Feet
1	3,221-3,246	Presqu'ile	11

Formation Test Summary:

No.	Interval Feet	Formation	Duration Minutes	Recovery
1	3,156-3,221	Presqu'ile	64	2,680' gas-cut, oil-flecked, watery mud.
2	3,150-3,180	Presqu'ile	216	2,880' gas-cut, oil-flecked, muddy salt water.
3	3,210-3,240	Presqu'ile	59	2,580' salty sulphurous water.

Logs:

Induction-Electrical Survey - 3,414'-201'
Integrated Sonic Log - 3-foot spacing 3,413'-201'
1-foot spacing 3,413'-2,990'
Gamma Ray - 3,404'-50'
Microlog-Caliper - 1,347'-201' and 3,418'-2,960'

DAILY CHRONOLOGICAL REPORT

Well Name: Wilkinson Redknife River No. 2

Location: 60° 52' 29" N. Lat.
119° 22' 23" W. Long.

Operations ending at 12 midnight.

Date	Total Depth Feet	Progress Feet	Day	Operations
February 26	296	284	1	Guthrie McLaren Rig 3 spudded at 12 noon. Drilled 12 1/4" hole to 123' at 6:00 p.m. Drilling 9" pilot hole from 6:30 p.m.
February 27	637	341	2	Drilled 9" hole to 383' at 2:45 a.m. Reamed 9" hole to 12 1/4" from 123' to 203' from 3:30 a.m. to 8:00 a.m. Drilled 7 7/8" hole with Bit No. 1 from 383' to 637' from 8:45 a.m. to 9:00 p.m. Circulated 1/2 hour. Ran float shoe and 6 joints of 8 5/8" x 24 lb. surface casing to 203'. Cemented 188.07' casing at 201.07' K.B. with 100 sacks and 2% $CaCl_2$ with Howco Skid Unit. Top of casing bowl to K.B. is 12.5'. Standing cemented at midnight.
February 28	655	18	3	Slacked off casing at noon and installed blow-out preventors. Dug mouse-hole. Finished heading up at 8:30 p.m. Pressured casing to 1,000 psi for 15 minutes. Found top of cement at 196'. Drilled out cement, plug and shoe at 10:00 p.m. Cleaned out to bottom. Drilled from 637' to 655' with Bit No. 2 from 10:45 p.m. to 11:15 p.m. Working on pump.
March 1	1055	400	4	Drilled from 655' to 943' with Bit No. 2 from 1;15 a.m. to 2:45 p.m. Drilling with Bit No. 3 from 3:45 p.m.
March 2	1525	470	5	Drilled to 1246' with Bit No. 3 at 9:30 a.m. Drilled to 1,525' with Bit No. 4 from 11:30 a.m. to 10:30 p.m. Reaming undergauge hole with Bit No. 5.
March 3	2194	669	6	Drilled to 1,980' with Bit No. 5 from 12:45 a.m. to 1:15 p.m. Drilled to 2,194' with Bit No. 6 from 3:00 p.m. to 11:15 p.m. Tripping to change bit.

Date	Total Depth Feet	Progress Feet	Day	Operations
March 4	2685	511	7	Drilled to 2,608' with Bit No. 7 from 1:30 a.m. to 6:15 p.m. Drilling with Bit No. 8 from 8:30 p.m.
March 5	3016	331	8	Drilled to 2,887' with Bit No. 8 at 9:45 a.m. Drilling with Bit No. 9 from 12:15 p.m.
March 6	3149	133	9	Drilled to 3,040' with Bit No. 9 at 3:15 a.m. Drilled to 3,149' with Bit No. 10 from 5:45 a.m. to 10:15 a.m. Tripping to change bit.
March 7	3221	72	10	Drilled to 3,221' from 1:15 a.m. to 10:00 a.m. Circulated sample. Pulled out to run D.S.T. No. 1 from 3,156' to 3,221'. Valve open one hour. Packer laid down at 8:30 p.m. Ran in with magnet to clean hole for coring. Circulating and conditioning mud.
March 8	3241	20	11	Circulated and worked magnet to 2:30 a.m. Started in hole to run D.S.T. No. 2 from 3,150' to 3,180' at 5:00 a.m. Valve open 3 1/2 hours. Packer laid down at 3:30 p.m. Cutting Core No. 1 from 7:00 p.m. Losing drilling fluid to formation.
March 9	3351	110	12	Finished cutting Core No. 1 from 3,221' to 3,246' at 1:30 a.m. Conditioned mud to 4:30 a.m. Recovered 11' of core at 6:30 a.m. Reamed core hole to 7 7/8" with Bit No. 12 from 10:45 a.m. to 12:15 p.m. Drilling with Bit No. 12. Losing drilling fluid to formation.
March 10	3420	69	13	Drilled to 3,407' with Bit No. 12 at 5:15 a.m. Drilled to 3,420' with Bit No. 13 from 8:15 a.m. to 12:30 p.m. Conditioned mud to 10:30 p.m. while waiting for Schlumberger Logging Truck. Measured out of hole. Final Total Depth 3,420'.
March 11	3420	-	14	Ran Induction-Electrical log, Integrated Sonic-Gamma Ray Log and Microlog-Caliper. Finished logging at 8:00 a.m. Ran D.S.T. No. 3 from 3,210' to 3,240'. Started in hole at noon. Valve open one hour. Packer laid down at 8:00 p.m. Laid down drill collars. Ran in open-ended. Circulating and rigging up to cement.
March 12	3420	-	15	Set Plug No. 1, 160 sacks from 3420' to 2950'. In place at 1:30 a.m. Laid down drill pipe. Set Plug No. 2, 40 sacks and 2% $CaCl_2$ from 251' to 151'. In place at 4:00 a.m. Felt Plug No. 2 at 10:30 a.m. at 143' K.B. Laid down drill pipe. Rig released at 11:00 a.m.

DEVIATION SURVEYS

Well Name: Wilkinson Redknife River No. 2

Location: 60° 52' 29" N. Lat.
119° 22' 23" W. Long.

Depth Feet	Deviation Degrees
70	0
180	1/2
324	1/2
505	1/4
866	0
1246	1/2
1620	1/8
1980	1/2
2194	1/4
2575	1/4
2887	1/2
3149	1/2
3393	1/2

MUD RECORD

Well Name: Wilkinson Redknife River No. 2

Location: 60° 52' 29" N. Lat.
119° 22' 23" W. Long.

Date	Depth From Feet	Depth To Feet	Weight lb./U.S. gal.	Viscosity seconds	Water Loss c.c.	PH	Additives
February 26	Surface	296	9.4	75	-	-	Gel 3,900 lbs. Bicarbonate 300 lbs.
February 27	296	637	9.1	66	9.0	12.5	Gel 6,200 lbs. Caustic 650 lbs. Spersene 750 lbs.
February 28	637	655	9.3	40	-	13.0	Gel 300 lbs. Bicarbonate 400 lbs.
March 1	655	1055	9.6	72	4.8	12.5	Gel 1600 lbs. Caustic 300 lbs. Spersene 300 lbs. My-lo-jel 500 lbs.
March 2	1055	1525	9.9	60	5.8	13.0	Gel 300 lbs. Caustic 100 lbs. Spersene 100 lbs. My-lo-jel 500 lbs.
March 3	1525	2194	10.6	60	3.2	13.0	Gel 900 lbs. Caustic 450 lbs. Spersene 450 lbs. My-lo-jel 200 lbs.
March 4	2194	2685	11.1	62	4.2	13.0	Gel 500 lbs. Caustic 250 lbs. Sperrene 250 lbs. My-lo-jel 350 lbs.
March 5	2685	3016	11.2	58	4.0	12.5	Gel 800 lbs. Caustic 200 lbs. Spersene 200 lbs. My-lo-jel 300 lbs.
March 6	3016	3149	10.7	65	3.6	13.0	Gel 3,900 lbs. Caustic 350 lbs. Spersene 350 lbs. My-lo-jel 500 lbs.

Date	Depth From Feet	Depth To Feet	Weight Lb./U.S. Gal.	Viscosity Seconds	Water Loss C.C.	pH	Additives
March 7	3149	3221	10.7	55	4.1	12.5	Gel 1300 lbs. Caustic 200 lbs. Spersene 200 lbs. My-lo-jel 250 lbs.
March 8	3221	3241	10.4	85	4.0	12.5	Gel 1500 lbs. Caustic 50 lbs. Spersene 50 lbs. My-lo-jel 450 lbs.
March 9	3241	3351	9.5	130	9.0	11.5	Gel 15,500 lbs. Caustic 400 lbs. Spersene 350 lbs. My-lo-jel 350 lbs. NaCMC 50 lbs. Gel-flake 4 sacks.
March 10	3351	3420	9.5	148	4.2	12.5	Gel 4600 lbs. Caustic 450 lbs. Spersene 450 lbs. My-lo-jel 850 lbs.
March 11	3420	3420	9.5	148	4.2	12.5	-

BIT RECORD

Well Name: Wilkinson Redknife River No. 2

Location: 60° 52' 29" N. Lat.
119° 22' 23" W. Long.

No.	Make	Type	Serial No.	Size Inches	Depth From Feet	Depth To Feet	Progress Feet	Hours
1A	Hughes	OSC	Rerun	12 1/4	0	123	123	6
2A	Hughes	W-7	Retip	9	123	383	260	7 3/4
1A	Hughes	OSC	Rerun	12 1/4	123	203	Reamed-80	4 1/2
1	Reed	YT1	901557	7 7/8	383	637	254	12
2	Reed	YT	807038	7 7/8	637	943	306	14
3	Reed	YT	905651	7 7/8	943	1246	303	16 1/2
4	Reed	YT	905617	7 7/8	1246	1525	279	11
5	Reed	YT3	702058	7 7/8	1525	1980	455	12
6	Reed	YT3	005361	7 7/8	1980	2194	214	8
7	Reed	YT3	005359	7 7/8	2194	2608	414	16 1/4
8	Reed	YT1	N05646	7 7/8	2608	2887	279	13
9	Reed	YT	905614	7 7/8	2887	3040	153	14 3/4
10	Reed	YT	001912	7 7/8	3040	3149	109	16
11	Reed	YS1	905448	7 7/8	3149	3221	72	8 3/4
							Pulled to test.	
11A	Diamond		17257	6 1/8	3221	3246	Cored 25	6 1/2
12	Reed	YM	N83170	7 7/8	3246	3407	161	18 1/4
					3221	3246	Reamed-25	
13	Reed	YM	N83158	7 7/8	3407	3420	13	1 1/4

BIT SUMMARY BELOW SURFACE CASING SHOE

Type	No.	Type	No.
YT1	3	YS1	1
YT	5	YM	2
YT3	3		

Total Bits - 14

TIME DRILLING RECORD

Well Name: Wilkinson Redknife River No. 2

Location: 60° 52' 29" N. Lat.
119° 22' 23" W. Long.

Interval Feet	Time Mins.									
	Five-foot intervals.									
2800-2850	11,	12,	10,	10,	9,	11,	9,	8,	8,	9.
2850-2900	9,	10,	10,	11,	12,	26,	28,	25,	24,	24.
2900-2950	17,	15,	14,	12,	14,	13,	15,	20,	14,	22.
2950-3000	22,	22,	18,	24,	27,	30,	32,	31,	32,	40.
3000-3050	46,	44,	36,	35,	40,	42,	46,	42,	24,	27.
3050-3100	34,	44,	43,	43,	41,	46,	49,	47,	48,	48.
3100-3150	45,	50,	56,	46,	25,	43,	43,	44,	49,	46.
3150-3200	36,	37,	33,	18,	23,	21,	34,	53,	47,	46.
3200-3250	45,	43,	42,	20,	13,	13,	9,	12,	25,	21.
3250-3300	22,	21,	16,	23,	24,	24,	13,	13,	19,	39.
3300-3350	20,	17,	47,	48,	41,	30,	28,	43,	48,	39.
3350-3400	42,	48,	25,	27,	20,	16,	16,	14,	15,	22.
3400-3420	32,	100,	87,	102.						
T. D.										

TIME CORING RECORD

Well Name: Wilkinson Redknife River No. 2

Location: 60° 52' 29" N. Lat.
119° 22' 23" W. Long.

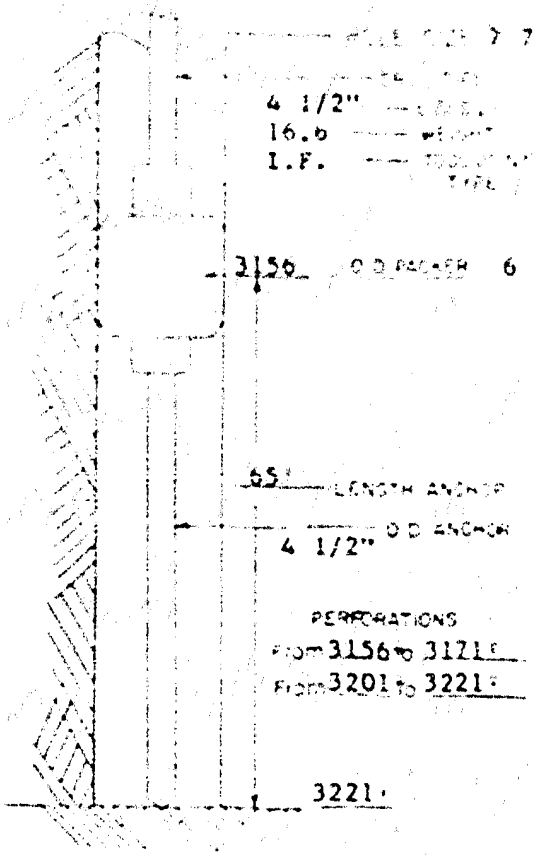
Core No. 1 - Recovered approximately 11 feet.

Interval Feet	Time Mins.	Interval Feet	Time Mins.	Interval Feet	Time Mins.
3221-3222	18	3231-3232	114	3241-3242	7
3222-3223	13	3232-3233	20	3242-3243	5
3223-3224	13	3233-3234	20	3243-3244	28
3224-3225	12	3234-3235	12	3244-3245	10
3225-3226	12	3235-3236	11	3245-3246	13
3226-3227	15	3236-3237	12		
3227-3228	11	3237-3238	14		
3228-3229	10	3238-3239	14		
3229-3230	12	3239-3240	19		
3230-3231	17	3240-3241	29		

DRILL STEM TEST REPORT

Well Name: Wilkinson Redknife River Well No. 2
Field: Wildcat
Testing Company: Lynes United Services Ltd.
Date Commenced: March 7, 1961

TEST No. 1 Run No. 1
District: Redknife River
Province: Northwest Territories
Operator: Lyle Gillis
Date Completed: March 7, 1961



Formation Tested: Presqu'ile Dolomite
Interval Tested: From 3156 To 3221 ft.
Mud Density: Wt. 10.7 Vis. 55 sec.
Fluid Loss: 4.1 cc Filter Cake 2/32 Gel
Recovery: Nil ft.
Type of Packer: Bobtail
Choke Size: Surface Bottom Hole 1/2"

	Time	Remarks
Tester started in hole	1:00 p.m.	
Tester on bottom	2:15 p.m.	Initial shut in
Tester opened	3:00 p.m.	(2:30-3:00 p.m.
Tester closed	4:04 p.m.	Final shut in
Tester pulled loose	4:34 p.m.	(4:00-4:30 p.m.
Tester out of hole	6:45 p.m.	

Total time tester open 64 minutes

Weight:
Set on Packer 20,000 lbs Pull Packer Loose 13,000 lbs
Weight drill pipe Before Test 42,000 lbs After Test 54,000 (lbs)
Mud level in casing Full
Nature of Blow Good air blow. Gas in 20 minutes.
Maximum Surface Pressure -
Maximum Trap Pressure -

Gas Flow 50 MCF/day. How Gauged Estimated By Norman Soul
Oil Flow Nil bbls. in hrs. Est. 24-hr. Flow Rate How Gauged
Size flow line 3 Inch I.D. Size Orifice inch.

Recovery in Drill Pipe:

						Remarks
Free Oil	Nil	stands		feet	bbls.	-
Mud)	44	stands	2680	feet	38 bbls.	Oil-flecked, gas-cut, salt water-cut.
Water)		stands		feet	bbls.	

Gravity of oil - API @ F.
Oil sample obtained - Water sample obtained Yes

Pressures:

Type of pressure bomb (s) used Kuster
Maximum Flowing Pressure 1021 and 1067 PSI
30 Minute Shut in Pressure 1358 and 1362 PSI
Static Mud Pressure after unseating packer 1792 and 1791 PSI
Mechanically, was Test satisfactory? Yes.

REMARKS:
Initial Hydrostatic Pressure 1836 and 1813 psi. Initial shut-in pressure 1396 and 1378 psi. Minimum Flowing Pressure 386 and 396 psi.

Engineer: Norman Soul

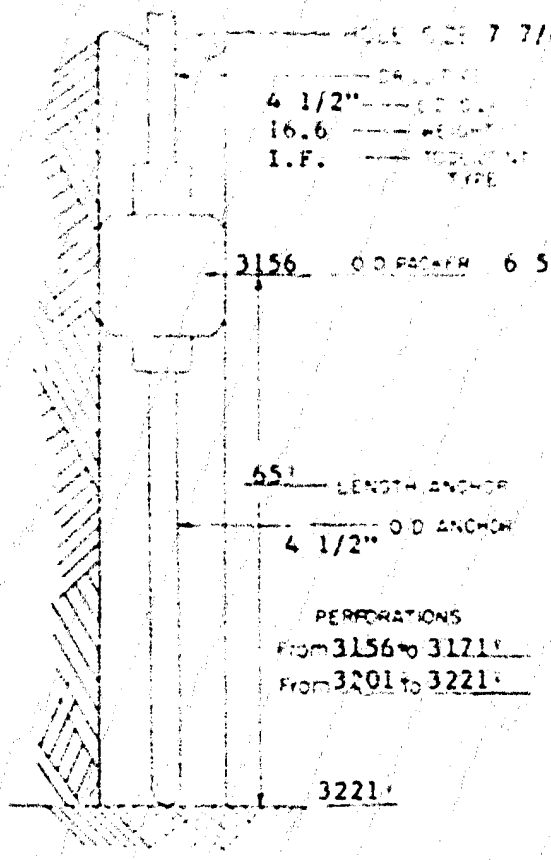
J. C. SPROULE & ASSOCIATES, CALGARY.

DRILL STEM TEST REPORT

TEST No. 1 Run No. 1

Well Name: Wilkinson Redknife River Well No. 2
Field: Wildcat
Testing Company: Lynes United Services Ltd.
Date Commenced: March 7, 1961

District: Redknife River
Province: Northwest Territories
Operator: Lyle Gillis
Date Completed: March 7, 1961



Formation Tested: Presqu'ile Dolomite
Interval Tested: From 3156 To 3221 ft.
Mud Properties: Wt. 10.7 Vis. 55 sec.
Filtrate 4.1 c.c. Filter Cake 2/32 Gel
Water Cushion: Nil ft.
Type of Packer: Bobtail
Choke Size, surface: Bottom Hole 1/2"

	Time	Remarks
Tester started in hole	1:00 p.m.	
Tester on bottom	2:15 p.m.	Initial shut in
Tester opened	3:00 p.m.	(2:30-3:00 p.m.
Tester closed	4:04 p.m.	Final shut in
Tester pulled loose	4:34 p.m.	(4:00-4:30 p.m.
Tester out of hole	6:45 p.m.	

Total time tester open 64 minutes

Weight:
Set on Packer 20,000 lbs. Pull Packer Loose 13,000 lbs.
Weight drill pipe Before Test 42,000 lbs. After Test 54,000 (lbs.
Mud level in casing: Full
Nature of Blow: Good air blow. Gas in 20 minutes.
Maximum Surface Pressure -
Maximum Trap Pressure -

Gas Flow: 50 MCF/day: How Gauged Estimated By Norman Soul
Oil Flow: Nil bbls. in hrs: Est. 24-hr. Flow Rate How Gauged
Size flow line: 3 Inch. I.D. Size Orifice inch.

Recovery in Drill Pipe:

						Remarks
Free oil	Nil	stands		feet	bbls.	
Mud	) 44	stands	2680	feet	38 bbls.	Oil-flecked, gas-cut, salt water-cut.
Water	)	stands		feet	bbls.	

Gravity of oil - °API @ F.
Oil sample obtained: - Water sample obtained: Yes

Pressures:

Type of pressure bomb(s) used: Kuster
Maximum Flowing Pressure: 1021 and 1067 PSI
30 Minute Shut in Pressure: 1358 and 1362 PSI
Static Mud Pressure after unseating packer: 1792 and 1791 PSI
Mechanically was Test satisfactory? Yes.

REMARKS:
Initial Hydrostatic Pressure 1836 and 1813 psi. Initial shut-in pressure 1396 and 1378 psi. Minimum Flowing Pressure 386 and 396 psi.

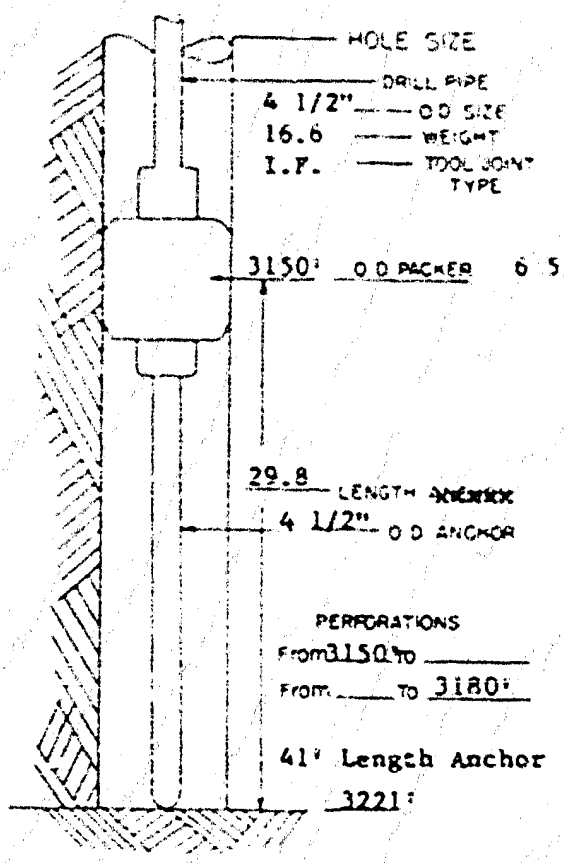
Engineer: Norman Soul

J. C. SPROULE & ASSOCIATES, CALGARY.

DRILL STEM TEST REPORT

Wilkinson
Well Name Redknife River Well No. 2
Field Wildcat
Testing Company Lynes United Services Ltd.
Date Commenced March 8, 1961

TEST No. 2 Run No. 1
District Redknife River
Province Northwest Territories
Operator Lyle Gillis
Date Completed March 8, 1961



Formation Tested Presqu'ile Dolomite
Section Tested. From 3150' To 3180' ft.
Mud Properties: Wt. 10.6 Vis. 77 sec.
Filtrate 3.8 c.c. Filter Cake 2/32 Gel -
Water Cushion Nil ft.
Type of Packer Conventional (Straddle Test)
Choke Size, surface - Bottom Hole 1/2"

	Time	Remarks
Tester started in hole	5:00 a.m.	
Tester on bottom	7:00 a.m.	Initial shut in
Tester opened	8:00 a.m.	(7:30 a.m.-8:00a.m.
Tester closed	11:30 a.m.	Final shut in
Tester pulled loose	12:30 p.m.	(11:30a.m.-12:30p.m.
Tester out of hole	3:00 p.m.	
Total time tester open	216 minutes	

Weight:
Set on Packer 20,000lbs. Pull Packer Loose 20,000lbs.
Weight drill pipe Before Test 46,000 After Test 60,000 lbs.
Mud level in casing Full
Nature of Blow Good air blow. Gas in 30 minutes.
Maximum Surface Pressure
Maximum Trap Pressure

Gas Flow: 50 MCF/day: How Gauged Estimated By Norman Soul
Oil Flow - bbls. in hrs: Est. 24-hr. Flow Rate How Gauged
Size flow line 3 Inch. I.D. Size Orfice inch.

Recovery in Drill Pipe:

							Remarks
Free oil	Nil	stands		feet		bbls.	
Mud		stands		feet		bbls.	
Water	48	stands	2880	feet	42	bbls.	Salty, gas-cut, oil-flecked, muddy.

Gravity of oil - ° API @ - °F.
Oil sample obtained - Water sample obtained Yes

Pressures:

Type of pressure bomb (s) used Kuster
Maximum Flowing Pressure 1259 and 1234 PSI
60 Minute Shut in Pressure 1362 and 1337 PSI
Static Mud Pressure after unseating packer 1757 and 1730 PSI
Mechanically, was Test satisfactory? Yes

REMARKS:

Initial Hydrostatic 1825 and 1792 psi. Initial Shut-in not obtained. Minimum flowing pressure 379 and 386 psi.

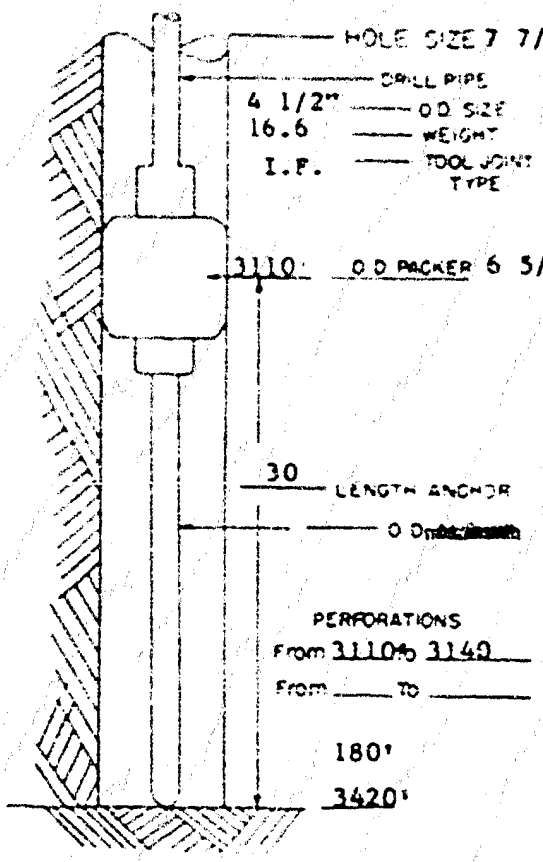
Engineer: Norman Soul

J. C. SPROULE & ASSOCIATES, CALGARY.

DRILL STEM TEST REPORT

Well Name Wilkinson Redknife River Well No. 2
Field Wildcat
Testing Company Lynes United Services Ltd.
Date Commenced March 11, 1961

TEST No. 3 Run No. 1
District Redknife River
Province Northwest Territories
Operator Lyle Gillis
Date Completed March 11, 1961



Formation Tested Presqu'ile Dolomite
Section Tested. From 3210 To 3240 ft.
Mud Properties: Wt 9.5 Vis. 148 sec.
Filtrate 4.2 c.c. Filter Cake 2/32 Gel
Water Cushion - ft.
Type of Packer Conventional (Straddle Test)
Choke Size, surface Bottom Hole

	Time	Remarks
Tester started in hole	12:00 noon	
Tester on bottom	1:45 p.m.	Initial Shut in
Tester opened	2:05 p.m.	(1:50p.m.-2:05 p.m.
Tester closed	3:04 p.m.	
Tester pulled loose	3:34 p.m.	
Tester out of hole	6:15 p.m.	
Total time tester open	59 minutes	

Weight:
Set on Packer 20,000 lbs. Pull Packer Loose 75,000 lbs.
Weight drill pipe Before Test 52,000 After Test 70,000 lbs.
Mud level in casing Full
Nature of Blow Good air blow.
Maximum Surface Pressure -
Maximum Trap Pressure -

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

Recovery in Drill Pipe:

					Remarks
Free oil	stands		feet	bbls.	
Mud	stands		feet	bbls.	
Water 43	stands	2580	feet	37 bbls.	Salty, sulphurous.

Gravity of oil - ° API @ °F.
Oil sample obtained - Water sample obtained Yes.

Pressures:

Type of pressure bomb (s) used Kuster
Maximum Flowing Pressure 1152 and 1191 PSI
30 Minute Shut in Pressure 1378 and 1384 PSI
Static Mud Pressure after unseating packer 1585 and 1599 PSI
Mechanically, was Test satisfactory? Yes

REMARKS:
Initial Hydrostatic 1626 and 1622 psi. Initial shut in 1389 and 1395 psi.
Minimum flowing pressure 193 and 218 psi.

Engineer: Norman Soul
J. C. SPROULE & ASSOCIATES. CALGARY.

SURFACE CASING TALLY

Well Name: Wilkinson Redknife River No. 2

Location: 60° 52' 29" N. Lat.
119° 22' 23" W. Long.

Ran 6 joints (188.07) of 8 5/8" x 24 lbs., J-55 new casing. Landed at 201.07' K. B. Cemented by Howco with 100 sacks cement, plus $CaCl_2$.
Plug down at 12:00 midnight, February 27, 1961.

No.	Feet	
1	32.98	
2	30.50	
3	29.83	
4	29.36	
5	32.50	
6	31.00	
	186.17	
	1.90	- Float shoe
	188.07	- Total

SAMPLE DESCRIPTION

Well Name: Wilkinson Redknife River No. 2

Location: 60° 52' 29" N. Lat.
119° 22' 23" W. Long.

Elevation: Ground - 1,042'
K. B. - 1,055'

Depth Feet	Description
0-120	Glacial drift; clay, sand and gravel. Few granite boulders to 80 feet.

UPPER DEVONIAN

Wabamun Group - 120'

120-220	Limestone, cream coloured to light grey, microgranular to dense, clean to slightly argillaceous, sparsely fossiliferous.
220-240	Limestone, light grey to light greenish grey, argillaceous, dense to fossiliferous fragmental; minor shale, light greyish green, calcareous; may be reef debris.
240-260	Shale, light greyish green, calcareous.
260-270	Limestone, buff to light greenish grey, dense to fossiliferous fragmental, argillaceous, with interbedded shale, as above.
270-300	Limestone, light greenish grey to buff, dense, argillaceous; minor interbedded shale, as above.
300-360	Limestone, buff to light grey, dense to microgranular, slightly argillaceous in part.
360-400	Limestone, light grey to cream, dense to cryptocrystalline.
400-440	Limestone, buff to light grey, dense to microcrystalline, clean, fossiliferous, pyritic; Shale, greyish brown, calcareous; pyritic in part.

Structure Test Marker "Br" - 440' E-log

440-450	Limestone, light grey to cream, dense, with many dark coloured fossil inclusions, in part replaced by green shale; fossiliferous fragmental in part.
450-540	Limestone, cream, dense to cryptocrystalline, fossiliferous.
540-550	Limestone, cream, dense to microcrystalline, fossiliferous, and limestone, grey, fossiliferous fragmental, pseudo-oolitic, dark coloured fossil fragments, pyritic.

Depth Feet	Description
530-637	Limestone, buff to cream and light grey, dense to cryptocrystalline and microcrystalline in part, slightly argillaceous, fossiliferous; minor irregularly interbedded shale, brown, calcareous.
637-650	Limestone, cream coloured, dense to microcrystalline, fossiliferous; traces of shale, light greyish green, calcareous.
650-700	Limestone, buff, dense, scattered vugs, fossiliferous, clean.
	Trout River Formation - 700' E-Log
700-740	Limestone, buff to light grey, microgranular, silty, fossiliferous, argillaceous in part, scattered intergranular porosity.
740-760	Limestone, light grey to cream, granular to fossiliferous fragmental, slightly silty, scattered porosity; minor grey oolitic limestone, pyritic.
760-790	Limestone, light grey to buff, granular to fossiliferous fragmental, silty, poor to fair scattered intergranular porosity.
790-850	Limestone, light grey, dense to microgranular, silty, fossiliferous.
850-860	Limestone, light grey to light greenish grey, microgranular to fragmental, silty, fossiliferous.
860-870	Sandstone, light grey to light greenish grey, very fine-grained, calcareous, fossiliferous; minor interbedded shale, greyish green, calcareous.
870-880	Sandstone, light greenish grey, fine-grained, calcareous; Limestone, cream coloured, dense to microcrystalline.
880-910	Sandstone, light grey and light greenish grey, fine- to medium-grained, slightly glauconitic, good porosity; minor green shale partings.
	Grumbler Formation - 910' E-Log
910-920	Sandstone, as above, medium-grained, porous; Shale, green, calcareous; Limestone, cream coloured to brown, dense to crystalline and fossiliferous fragmental, reefoidal, scattered porosity after fossils, dead oil staining. Top of Kakisa reef member.
920-930	Limestone, light grey to buff, hard, dense to cryptocrystalline, scattered vugs; Limestone, greyish white to cream, microgranular to fossiliferous fragmental, reefoidal, good scattered porosity associated with fossils.

Depth Feet	Description
930-940	Limestone, light grey to buff, dense to microcrystalline, hard, scattered vugs, poor porosity and permeability.
940-950	Limestone, brownish grey, microgranular to fossiliferous fragmental, argillaceous and silty to sandy in part, poor apparent porosity, probably of reefoidal or near-reef origin.
950-980	Limestone, light greenish buff to yellowish grey, microgranular, silty, argillaceous, fossiliferous, hard.
980-990	Limestone, light grey to buff, granular, fossiliferous, silty, argillaceous.
990-1020	Limestone, light greenish grey, dense to microgranular, silty, argillaceous, fossiliferous, pyritic.
1020-1030	Limestone, greenish grey, silty, argillaceous, fossiliferous, and Shale, dark greyish green, calcareous, silty.
1030-1050	Limestone, light grey, dense to cryptocrystalline, fossiliferous, argillaceous.
1050-1060	Limestone, light grey to buff, coarsely crystalline, granular and fossiliferous fragmental, reefoidal.
1060-1100	Limestone, light grey, microgranular, silty, argillaceous, fossiliferous. Base of Kakisa Reef Member.
1100-1110	Shale, green, silty, calcareous; Limestone, greenish grey, silty to sandy, microgranular, fossiliferous.
1110-1140	Limestone, as above, with green shale partings.
1140-1180	Limestone, buff to light brown, dense to microgranular, pyritic, fossiliferous, silty; Shale, green, non-calcareous to slightly calcareous; Siltstone, green, calcareous.
1180-1230	Limestone, greenish grey, microgranular and microcrystalline, silty to sandy, fossiliferous, traces of glauconite; Minor green shale; Limestone, cream coloured, dense in thin bands.
1230-1250	Shale, dark green, splintery, non-calcareous. Limestone, greyish green and buff, silty, as above.
1250-1270	Shale, dark green, non-calcareous.
1270-1280	Siltstone, dark greyish green, calcareous, argillaceous, grading into limestone, greenish grey and light grey, microgranular, silty, fossiliferous.

Depth Feet	Description
1280-1290	Limestone, coquina bed with fossils replaced in part by limonite; Interbedded siltstone and shale, as above.
	Island River Member - 1,293' E-Log
1290-1320	Limestone, light grey to brownish grey, microgranular, argillaceous, silty, fossiliferous.
	Simpson Formation - 1,320' E-Log
1320-1330	Shale, dark green, calcareous; Limestone, buff, microgranular, silty, argillaceous, fossiliferous.
1330-1360	Siltstone, grey and greyish green, calcareous, glauconitic in part; Shale, green, non-calcareous to slightly calcareous; Limestone, grey and buff, dense to microgranular, silty in part, fossiliferous.
1360-1370	Limestone, buff, dense to cryptocrystalline, hard, fossiliferous; Siltstone and shale, as above.
1370-1380	Shale, dark green, non-calcareous; Siltstone, greenish grey, calcareous; Shale, greyish brown, non-calcareous.
1380-1390	Shale, reddish brown, non-calcareous with interbedded green shale and siltstone, as above.
1390-1400	Siltstone and very fine-grained sandstone, greenish grey, calcareous, with interbedded green and brown shale.
1400-1410	Shale, brown, soft, fissile, non-calcareous.
1410-1430	Interbedded siltstone and very fine-grained sandstone, greenish grey, calcareous, fossiliferous, and shale, brown and green, non-calcareous.
1430-1440	Shale, dark green, non-calcareous.
1440-1450	Siltstone, greenish grey, micromicaceous, calcareous, grading into sandstone, greenish grey, fine-grained, glauconitic; interbedded shale, dark green, non-calcareous.
1450-1460	Limestone, cream to buff, dense to microgranular.
1460-1490	Interbedded siltstone, greenish grey, calcareous, and shale, green, non-calcareous.
1490-1500	Shale, dark green, non-calcareous, splintery. Minor limestone, cream to buff, dense to microcrystalline and siltstone, as above.

Depth Feet	Description
1500-1510	Limestone, cream to buff, dense to microgranular, fossiliferous; Siltstone, greyish green, calcareous; in part micromicaceous, grading to very fine-grained sandstone. Shale, green, non-calcareous.
1510-1540	Siltstone and very fine-grained sandstone, greyish green, micromicaceous, calcareous, with interbedded shale, green and brown, non-calcareous; Sandstone, light greenish grey with brown specks c.f. Redknife No. 1 - 1,010'-1,030'; Trace of red speckled sandstone c.f. Redknife No. 1 - 1,080'-1,090'. Shale, green, non-calcareous.
1540-1550	Siltstone, greyish green, micromicaceous, calcareous, grading to very fine-grained sandstone. Shale, green, non-calcareous.
1550-1570	Shale, green and maroon, non-calcareous with interbedded siltstone, as above.
1570-1670	Siltstone, greenish grey and greyish green, calcareous, grading into sandstone, fine-grained, slightly glauconitic, with interbedded shale, green and maroon; Minor limestone bands, buff, microgranular to fossiliferous fragmental.
1670-1680	Limestone, buff, dense to microgranular, fossiliferous.
1680-1720	Siltstone, greyish green, calcareous, micromicaceous, with interbedded shale, green and maroon.
1720-1740	Limestone, cream coloured, dense, fossiliferous, with interbedded siltstone, greyish green, calcareous.
1740-1760	Shale, brown, non-calcareous.
1760-1810	Shale, reddish brown to maroon, non-calcareous.
1810-1900	Shale, reddish brown, non-calcareous and green, slightly calcareous, silty in part, with interbedded siltstone, greyish green, calcareous.
1900-1940	Interbedded siltstone, greyish green, calcareous and limestone, buff, dense to cryptocrystalline.
1940-1980	Interbedded siltstone, as above, and shale, brown and green.
1980-2050	Shale, green, silty in part, calcareous; minor shale, reddish brown, non-calcareous.
2050-2090	Siltstone, greyish green, calcareous, grading into limestone, greenish grey, argillaceous, silty, and shale, green, silty, calcareous.

Depth Feet	Description
2090-2160	Shale, green, silty, calcareous.
2160-2170	Shale, brownish grey, slightly calcareous; Shale, green, calcareous.
2170-2200	Shale, dark green, slightly calcareous.
2200-2230	Shale, green, silty, calcareous.
2230-2270	Shale, dark green, soft, non-calcareous to slightly calcareous.
2270-2340	Shale, dark green, calcareous; Minor shale, maroon, non-calcareous.
2340-2360	Shale, brownish grey, calcareous; Shale, dark green and maroon, as above.
2360-2380	Shale, dark greenish grey and dark green, calcareous, with minor maroon shale, as above.
2380-2400	Shale, dark brownish grey and dark brown, with interbedded dark green and maroon shale, as above.
2400-2440	Shale, as above, with thin bands of limestone, buff, grey and greenish grey, dense to granular, in part silty to sandy, traces of fossils.
2440-2460	Shale, dark green, brown and maroon; Minor limestone bands, buff and grey, granular.
2460-2500	Shale, dark green, splinterty, slightly calcareous.
2500-2530	Shale, dark green and maroon, non-calcareous to slightly calcareous, splinterty.
2530-2570	Shale, dark green with small irregular black elongated spots, calcareous; Shale, dark green and maroon, as above.
2570-2650	Shale, dark green, splinterty, slightly calcareous; Minor shale, reddish brown to maroon, non-calcareous.
2650-2790	Shale, dark brownish grey, calcareous, with interbedded dark green and maroon shale, as above.
2790-2870	Shale, greyish brown, calcareous, and interbedded shale, as above.
2870-2880	Limestone, light greenish grey to buff, dense to microcrystalline.
	Spence River Formation?

Depth Feet	Description
2880-2940	Shale, dark brown, bituminous, calcareous, pyritic.
2940-2970	Shale, dark brownish grey, calcareous, grading into limestone, greyish brown, very argillaceous.
2970-2990	Shale, dark brown, bituminous, calcareous, pyritic.

MIDDLE DEVONIAN AND OLDER

Slave Point Formation - 2,990' E-Log

2990-3000	Limestone, brown, dense to microgranular, hard, slickensided, argillaceous.
3000-3005	Limestone, brown to buff, mottled, microgranular to granular, and dense to cryptocrystalline, argillaceous, slightly bituminous.
3005-3010	Limestone, dark brown, dense to cryptocrystalline, hard.
3010-3015	Limestone, buff to dark brown, dense to granular, slight scattered porosity.
3015-3025	Limestone, brown, dense to granular, earthy in part.
3025-3035	Limestone, buff to dark brown, mottled, dense to granular, fossiliferous.
3035-3050	Limestone, buff to dark brown, in part mottled, dense to granular, irregular bituminous partings, slickensided, fossiliferous.
3050-3060	Limestone, dark brown, dense to cryptocrystalline, argillaceous, hard; Limestone, buff to dark brown, mottled, granular.
3060-3070	Limestone, light buff to dark brown, mottled, granular, slickensided.
3070-3080	Limestone, dark brown, dense, argillaceous, hard.
3080-3085	Limestone, grey to buff and dark brown, mottled, granular, irregular bituminous partings, slickensided.
3085-3095	Limestone, buff to dark brown, in part mottled, dense to granular and fossiliferous fragmental, slickensided.
3095-3100	Limestone, brown, dense, hard.
3100-3110	Limestone, buff to dark brown, dense to granular; Limestone, dark brown, dense to cryptocrystalline, hard.
3110-3115	Limestone, light brown, very dense, very hard.

Depth Feet	Description
	Watt Mountain Formation - 3,115' E-Log
3115-3120	Limestone, dark brown, light brown and buff, in part mottled, brecciated, irregular partings of shale, bluish grey, waxy, pyritic.
	Presqu'ile Equivalent - 3,125' Gamma Ray Log
3120-3150	Limestone, greyish white to cream, chalky to microgranular and dense to cryptocrystalline.
3150-3160	Dolomite, grey to brown, crystalline, slight intercrystalline porosity.
3160-3165	Dolomite, brown to grey, crystalline, fair intercrystalline porosity.
3165-3170	Dolomite, buff to brown, crystalline, excellent porosity.
3170-3175	Dolomite, brown, microcrystalline to crystalline, good porosity, intercrystalline and vuggy.
3175-3180	Dolomite, brown to grey, cryptocrystalline to crystalline, fair porosity.
3180-3195	Dolomite, grey and brown, crystalline, vuggy porosity.
3195-3210	Limestone, greyish white, dense to microgranular, in part chalky.
3210-3215	Dolomite, grey and buff, crystalline, fair intercrystalline porosity.
3215-3221	Dolomite, white, coarsely crystalline, excellent porosity.
3221-3246	Cored. Recovered 11'.
	Dolomite, grey to brown, fine to coarsely crystalline with vugs, brecciated; irregular partings of bluish grey non-calcareous shale.
3246-3270	Dolomite, dark brown, microcrystalline to finely crystalline.
3270-3275	Dolomite, brown and grey, finely crystalline to medium crystalline.
3275-3285	Dolomite, buff to brown, crystalline, good intercrystalline porosity.
3285-3295	Dolomite, brown, microcrystalline to crystalline, scattered vugs containing corase crystals of white dolomite.
3295-3300	Dolomite, buff, microcrystalline, sugary texture.

Depth Feet	Description
3300-3305	Dolomite, buff, dense to microcrystalline.
3305-3325	Dolomite, buff to brown, crystalline.
3325-3330	Dolomite, grey to brown, microcrystalline to crystalline.
3330-3360	Dolomite, buff, dense.
3360-3370	Dolomite, buff to brown, dense to microcrystalline.
3370-3380	Dolomite, grey, buff and dark brown, dense to crystalline.
3380-3385	Dolomite, light buff, dense; Dolomite, brown to dark brown, microcrystalline to finely crystalline.
3385-3390	Dolomite, buff, dense to microcrystalline, hard, pyritic.
3390-3395	Dolomite, buff to brown, microcrystalline to crystalline.
3395-3405	Dolomite, as above; Quartzite, greyish white, medium- to coarse-grained to conglomeratic pyritic, dolomitic.
3405-3409	Quartzite, light grey and light greenish grey, very pyritic.
PRECAMBRIAN - 3,409'	
3409-3420	Granite, pink, composed of pink feldspar, quartz and dark mica.
3420	Total Depth.

SUMMARY AND CONCLUSIONS

Well Name: Wilkinson Redknife River No. 2

Location: 60° 52' 29" N. Lat.
119° 22' 23" W. Long.

Wilkinson Redknife River No. 2 was drilled to the Precambrian basement at a total depth of 3,420 feet in March, 1961. Surface casing was cemented in the Wabamun formation of Upper Devonian age at 201 feet and a 7 7/8-inch hole was drilled to total depth. The interval from 3,221 feet to 3,246 feet in the Presqu'ile dolomite was cored. Three formation tests were run in the Presqu'ile dolomite, each of which yielded small amounts of gas and substantial volumes of salty, sulphurous water.

The Slave Point formation was found to be 125 feet thick and consists of buff to dark brown, dense to granular limestone, similar to the Slave Point in Wilkinson Redknife River No. 1. The Watt Mountain formation was recognizable in the well cuttings and also on the Gamma Ray log between 3,115 feet and 3,125 feet. The top of the Presqu'ile formation was picked at 3,125 feet. The upper part consists of 25 feet of chalky white limestone with low porosity and permeability. This is underlain by 45 feet of grey, buff and brown, crystalline dolomite with excellent intercrystalline and vuggy porosity, followed by 25 feet of chalky white limestone. Another dolomite zone with excellent porosity extends from 3,210 feet to 3,300 feet. The basal dolomite which is 65 feet thick in Redknife River No. 1 is 100 feet thick in this well. The Red Beds formation is not present in Redknife River No. 2. Its place in the section is taken by 10 feet of light grey and light greenish grey quartzitic sandstone resting on pink granite of Precambrian age.

Schlumberger Induction-Electrical, Sonic Gamma Ray and Microlog-Caliper logs were run on the well. A straddle test was run of the interval 3,210 feet to 3,240 feet after the logs were interpreted but yielded only salt water. The well was plugged and abandoned as approved by the Oil Conservation Engineer of the Department of Northern Affairs and National Resources.

Norman Soul

Norman Soul, P. Geol.

S. R. L. Harding

S. R. L. Harding, P. Geol.

1009 Fourth Avenue S. W.,
Calgary, Alberta.
April 26, 1961.

POOR COPY

APPENDIX I

D.A. No. 100

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

or

TO CARRY OUT A STRUCTURE TEST PROGRAM

In accordance with Section 57 of the ~~Territorial~~ CANADA Oil and Gas Regulations, notice is hereby given of our intention to begin drilling a well on Oil and Gas Permit No. 907 . . . registered in the name of
Lease No. . . . . .

JAMES G. WILKINSON ~~BEHALF ACCOUNT~~ . . .
A.M. LLOYD, OPERATOR

TYPE OF WELL:

Wildcat .X. . . . . .

Development . . . . . .

Expected total depth . 3325 . . . . . feet, in the ~~Granite~~ .

formation of . . ~~Precambrian~~ . . . . . age.

The well will be located at 60° 52' 24" . . . . . N. Lat. 119° 22' 30" . . . . . W.Long.

. . 275 miles .(N. of S. boundary) (Permit No. . 907 . . . . .)
(~~S. of N. boundary~~) of (~~Lease No.~~ . . . . . .)
. . 425 miles .(~~W. of E. boundary~~) of (Permit No. . 907 . . . . .)
(E. of W. boundary) (~~Lease No.~~ . . . . . .)

Sec.33 Unit E

Survey description of Location, if known . . . . . .

. . . . . .

Approximate surface elevation of 1,050 feet . . feet above sea level.

Name of well . . . . Wilkinson Redknife River No. 2 . . . . . .

Type of drilling rig . . . . . Rotary . . . . . .

Expected date of commencement . February 25, 1961 . . . . . .

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. 8 5/8"	24	J-55	. . . .	New	200	125
2.	. . . .	. . . .	. . . .	. . . .	. . . . .	. . . . .
3.	. . . .	. . . .	. . . .	. . . .	. . . . .	. . . . .

.. 2

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

. . . . . .

. . . . . .

Various zones from 2,700 to 3,325 feet. Controlled by adequate mud fluid of proper density and blowout prevention. . . . . .

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

STRUCTURE TEST PROGRAM

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

. . . . . .N. Latitudes

. . . . . .W. Longitudes

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

Name and address of drilling contractor . . Guthrie Melcrom Drilling Ltd.
11810 - 124 Street
. . . . . .
Edmonton, Alberta.
. . . . . .
. . . . . .

Responsible agents of permittee or lessee in charge of operation:

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

At registered office J. C. Sproule and Associates Ltd. . . . . Postal address 1009 Fourth Avenue S. W. Calgary, Alberta. . . . .

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

Dated at . Calgary this . 23rd . . . . day of . February . . . 19 61. . . .

Signed by S.R.L. Harding. . .
S.R.L. Harding, J.C. SPROULE AND ASSOCIATES LTD.

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

Because of the delays which will be caused by the remoteness of your . . . operation in furnishing the daily drilling reports, each week to my office oral, or if preferred, written reports on the progress of the well are to . . . . . be sent based on the daily reports you receive by radio. . . . . .

. . . . . .

23 February, 1961. . . .
Date

. . . . . .
Oil Conservation Engineer.

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

POOR COPY

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

. . . . . .

. . . . . .

Varies ranges from 2,700 to 3,525 feet. Controlled by adequate mud fluid of proper density and blowout prevention. . . . . .

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

STRUCTURE TEST PROGRAM

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

. . . . . .N. Latitudes

. . . . . .W. Longitudes

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

Name and address of drilling contractor . . Guthrie McLaren Drilling Ltd.
11810 - 124 Street
. . . . . .
Edmonton, Alberta.
. . . . . .
. . . . . .

Responsible agents of permittee or lessee in charge of operation:

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

At registered office . J. C. Speckle and Associates Ltd. . . . . Postal address 1009 Fourth Avenue S. W. Calgary, Alberta. . . . .

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

Dated at . Calgary this . 22nd . . . . day of . February . . . 19 61. . . .

Signed by S.R.L. Harding. . .
S.R.L. Harding, J.C. SPECKLE AND ASSOCIATES LTD.

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

Because of the delays which will be caused by the remoteness of your operation in furnishing the daily drilling reports, each week to my office oral, or if preferred, written reports on the progress of the well are to be sent based on the daily reports you receive by radio. . . . . .

. . . . . .

23 February, 1961. . . . . .
Date

. . . . . .
Oil Conservation Engineer.

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

CGL-6

APPENDIX II

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT

Field

Well No. Wilkinson Redknife River #2

Operator James C. Wilkinson c/o J. C. Sproule and Associates Ltd.

Date Received March 14, 1961

Formation

Depths 3156' - 3221'

Other pertinent data D.S.T. #1

Date March 27, 1961 Lab. No. C3685-1

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
38,439	8,058	2,160		627	79,000		665		

MILLIGRAM EQUIVALENTS

1672.11	402.69	177.55		13.04	2227.80		10.91		

MILLIGRAM EQUIVALENTS IN PERCENT

37.13	8.93	3.94		0.29	49.47		0.24		

Total Solids in Parts per Million

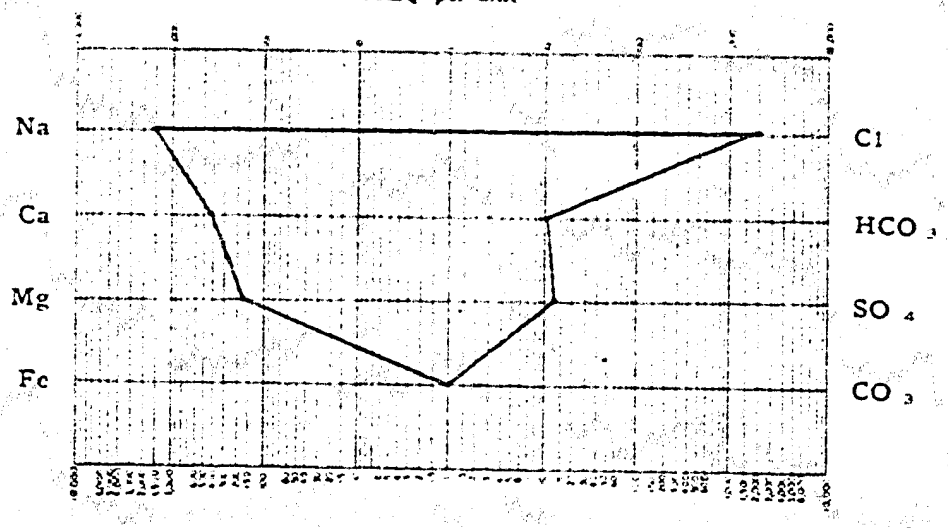
By evaporation	153,070
After ignition	124,600
Calculated	128,612
Specific Gravity	1.094
Observed pH	6.8
Resistivity	0.071 ohm meters @ 68° F.

Properties of Reaction in Percent

Primary salinity	74.26
Secondary salinity	25.26
Primary alkalinity	—
Secondary alkalinity	0.48
Chloride salinity	99.42
Sulfate salinity	0.58

Remarks and conclusions Organic matter present in total solids. Nothing to compare with this water on file.

LOGARITHMIC PATTERN
MEQ per unit



CGL4

APPENDIX II

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT

Field

Operator James C. Wilkinson c/o J. C. Sproule and Associates Ltd.

Formation

Other pertinent data D.S.T. #1

Well No. Wilkinson Redknife River #2

Date Received March 14, 1961

Depths 3156' - 3221'

Date March 27, 1961 Lab. No. C3685-1

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
38,439	8,058	2,160		627	79,000		665		

MILLIGRAM EQUIVALENTS

1672.11	402.69	177.55		13.04	2227.80		10.91		

MILLIGRAM EQUIVALENTS IN PERCENT

37.13	8.93	3.94		0.29	49.47		0.24		

Total Solids in Parts per Million

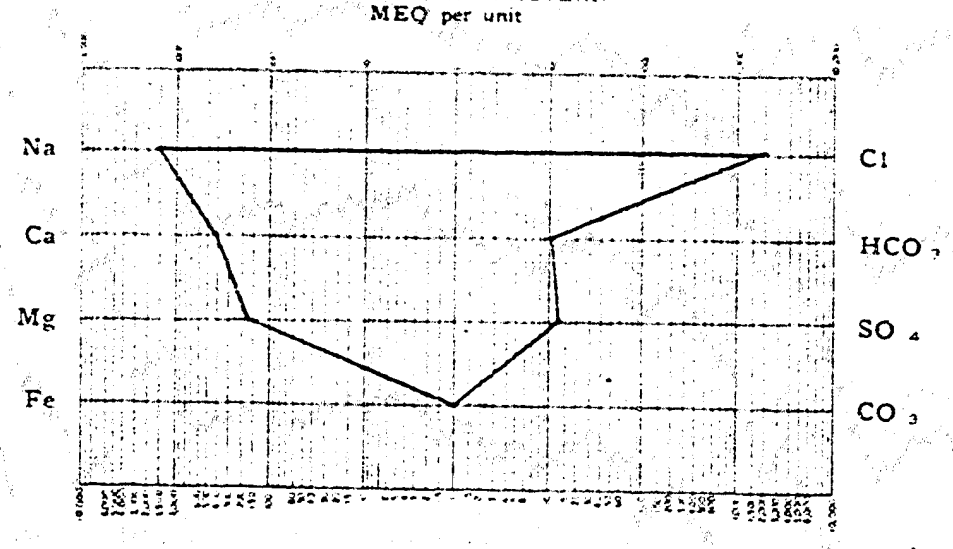
By evaporation	153,070
After ignition	124,600
Calculated	128,612
Specific Gravity	1.094
Observed pH	6.8
Resistivity	0.071 ohm meters @ 68° F.

Properties of Reaction in Percent

Primary salinity	74.26
Secondary salinity	25.26
Primary alkalinity	—
Secondary alkalinity	0.48
Chloride salinity	99.42
Sulfate salinity	0.58

Remarks and conclusions Organic matter present in total solids. Nothing to compare with this water on file.

LOGARITHMIC PATTERN
MEQ per unit



CGL-4

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT

Field James C. Wilkinson Well No. Wilkinson Redknife River #2

Operator c/o J. C. Sproule and Associates Ltd. Date Received March 14, 1961

Formation Depths 3150' - 3180'

Other pertinent data D.S.T. #2

Date March 27, 1961 Lab. No. C3685-2

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
40,603	9,370	2,274		482	85,000		835		

MILLIGRAM EQUIVALENTS

1766.24	467.56	186.92		10.03	2397.00		13.69		

MILLIGRAM EQUIVALENTS IN PERCENT

36.48	9.66	3.86		0.21	49.51		0.28		

Total Solids in Parts per Million

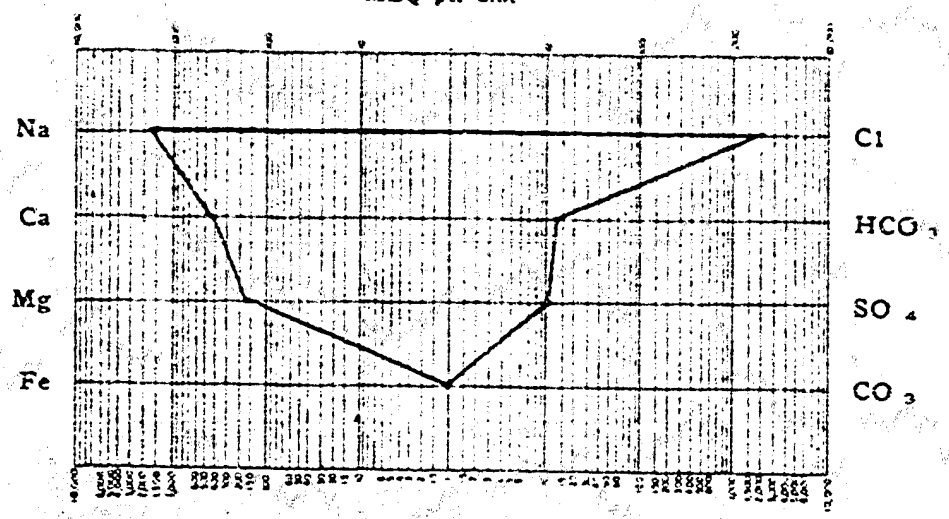
By evaporation	161,300
After ignition	132,310
Calculated	138,140
Specific Gravity	1.099
Observed pH	6.8
Resistivity 0.078	ohm meters @ 68° F.

Properties of Reaction in Percent

Primary salinity	72.96
Secondary salinity	26.48
Primary alkalinity	—
Secondary alkalinity	0.56
Chloride salinity	99.58
Sulfate salinity	0.42

Remarks and conclusions Organic matter present in total solids. Nothing to compare with this water on file.

LOGARITHMIC PATTERN
MEQ per unit



CGL-6

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton — Fort St. John — Calgary

WATER ANALYSIS REPORT

Field ..... Well No. Wilkinson Redknife River #2.

Operator James C. Wilkinson c/o J. C. Sproule and Associates Ltd. Date Received March 14, 1961

Formation ..... Depths 3210' - 3240'

Other pertinent data D.S.T. #3.

Date March 27, 1961 Lab. No. C3685-3

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO_4	Cl	CO_3	HCO_3	OH	H_2S
29,970	6,184	1,364		754	60,000		1,020		Present

MILLIGRAM EQUIVALENTS

1303.71	308.58	112.12		15.68	1692.00		16.73		

MILLIGRAM EQUIVALENTS IN PERCENT

37.80	8.95	3.25		0.45	49.06		0.49		

Total Solids in Parts per Million

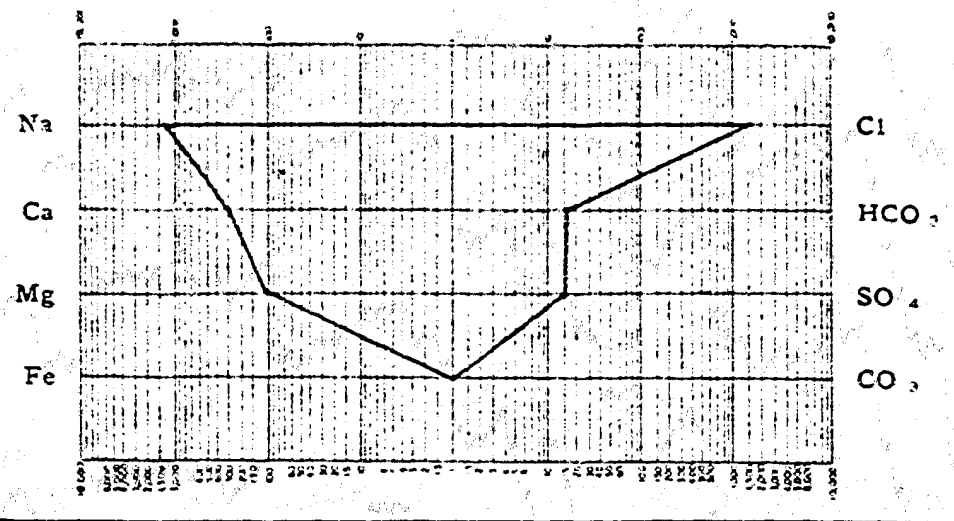
By evaporation	121,350
After ignition	96,660
Calculated	96,774
Specific Gravity	1.074
Observed pH	6.8
Resistivity 0.097	ohm meters @ 68° F.

Properties of Reaction in Percent

Primary salinity	75.69
Secondary salinity	23.42
Primary alkalinity	—
Secondary alkalinity	0.98
Chloride salinity	99.09
Sulfate salinity	0.91

Remarks and conclusions Organic matter present in total solids. Nothing to compare with this water on file.

LOGARITHMIC PATTERN
MEQ per unit



James C. Wilkinson, Nominee Acct.	Wilkinson Red Knife River #2	1	March 7, 1961
COMPANY	WELL NAME AND NUMBER	TEST NO.	DATE

LYNES UNITED SERVICES LTD.

104 - 61st AVENUE S.E., Sub. P.O. 28, CALGARY, ALBERTA

SERVICE REPORT

UNITED TESTERS LTD.

1000 - 10th Ave. West UTL Calgary, Alberta

Phone CHerry 4-0506

TYPE OF TEST Formation

INTERVAL TESTED 3156' to 3221'

HOLE SIZE 7 7/8" MUD WT. 10.7

FLUID CUSHION Nil

FLOW PERIOD 64 Minutes

INITIAL SHUT-IN PER 30 Minutes

FINAL SHUT-IN PER 30 Minutes

BLOW Good initial puff, strong air blow, with gas to sfc. in 21 mins.

FLUID RECOVERY 2660' gas cut oil flecked salty drilling fluid.

TEMP. M.C.F.

SUR. CHOKE BOT. CHOKE 1/2"

TICKET NO. 1290

PRESSURE READINGS

Outside:
REC. NO. 1097 CAP. 4100 DEPTH 3212'

		POINTS
INITIAL HYD.	1792	1
INITIAL SHUT-IN	1372	2
INITIAL FLOW	390	3
FINAL FLOW	1041	4
FINAL SHUT-IN	1352	5
FINAL HYD.	1784	6

PRESSURE READINGS

Outside:
REC. NO. 1135 CAP. 4500 DEPTH 3218'

		POINTS
INITIAL HYD.	1798	1
INITIAL SHUT-IN	1379	2
INITIAL FLOW	393	3
FINAL FLOW	1050	4
FINAL SHUT-IN	1361	5
FINAL HYD.	1789	6

REMARKS

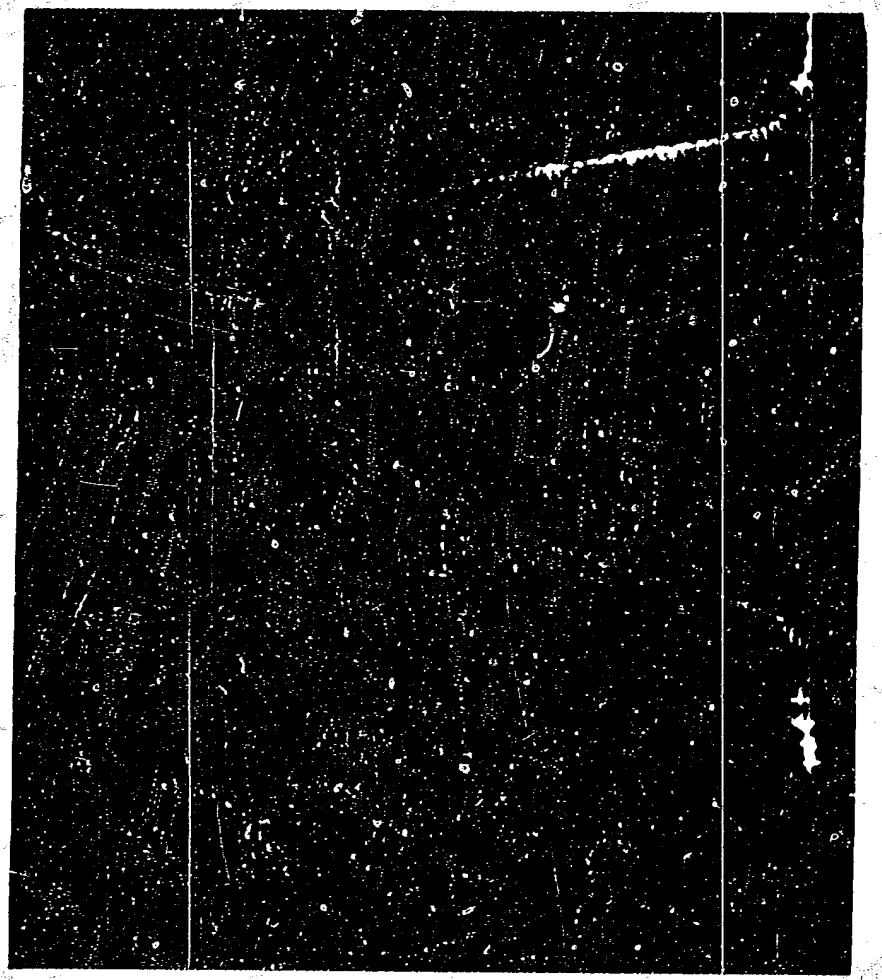
James C. Wilkinson, Nominee Account

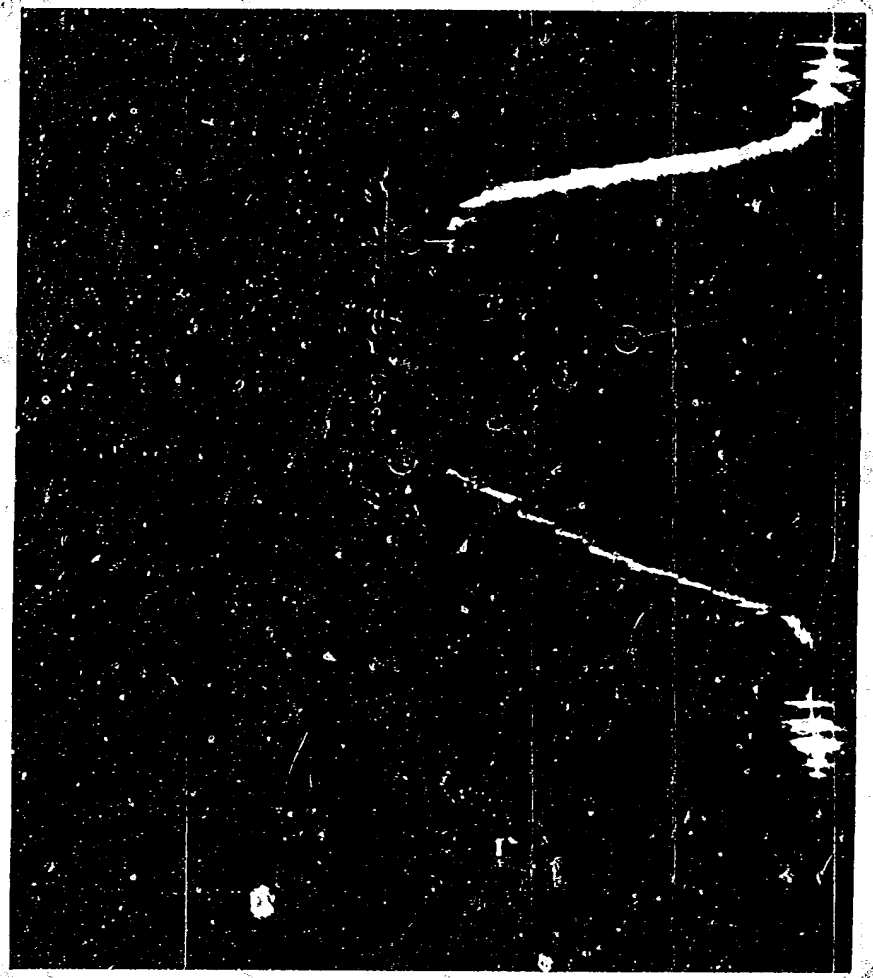
Wilkinson Red Knife River #2

D.S.T. #1, March 7th, 1961

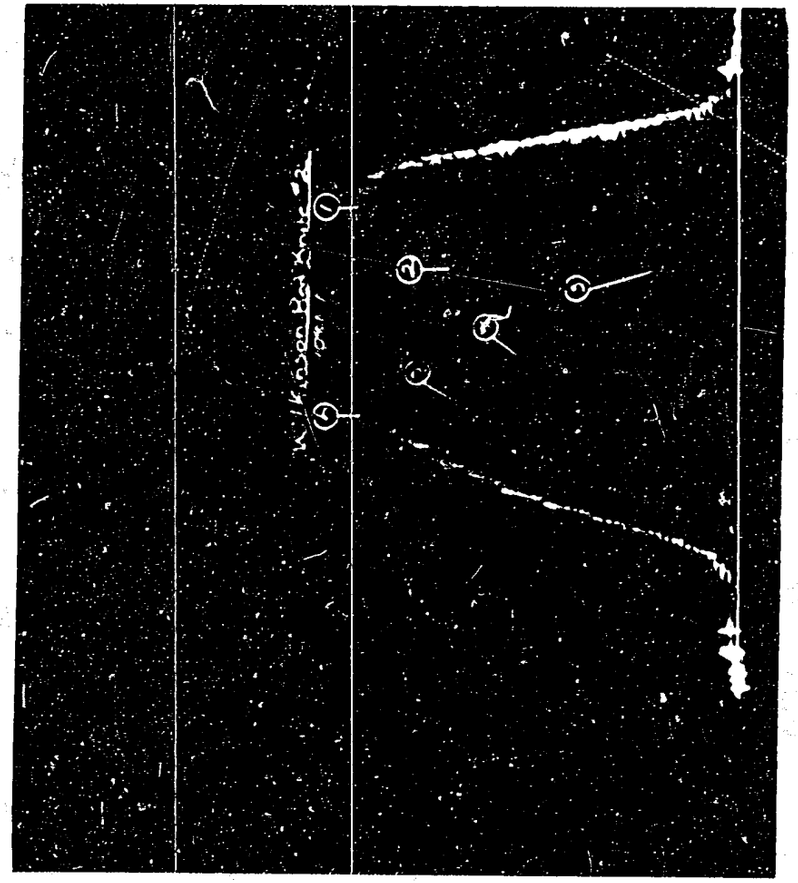
PRESSURES ON BUILD-UP

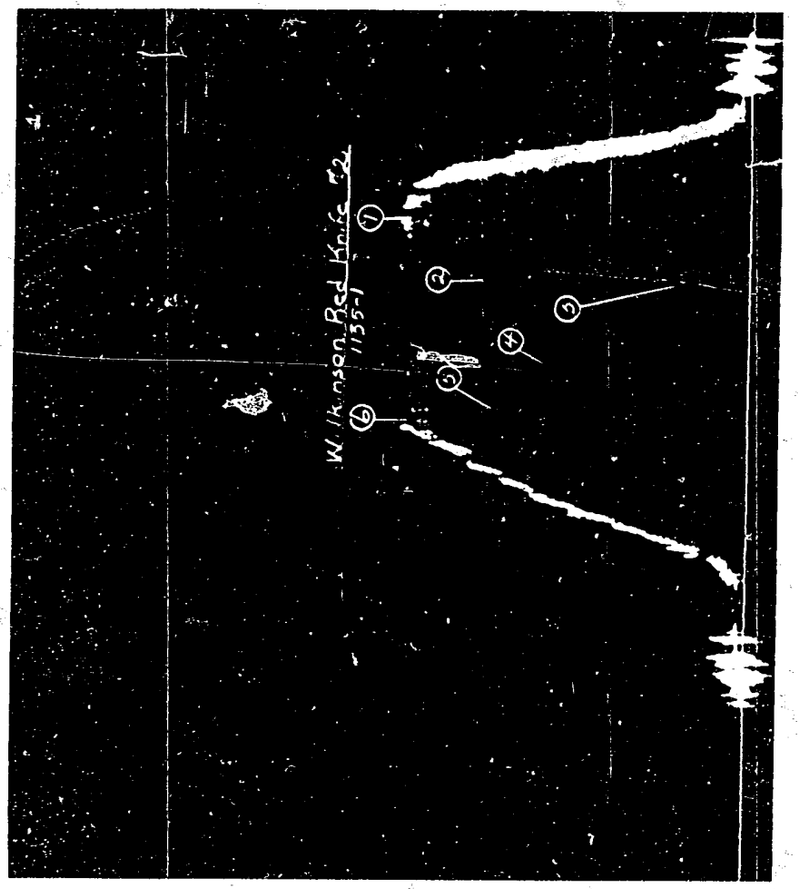
James C. Wilkinson, Nominee Acct.	Wilkinson Red Knife River #2	1	March 7, 1961
COMPANY	WELL NAME AND NUMBER	TEST NO.	DATE





Wilkinson, Number Acct.	Wilkinson Red Knife River #2	1	March 7, 1961
COMPANY	WELL NAME AND NUMBER	TEST NO.	DATE





James C. Wilkinson, Nominee Acct.	Wilkinson Red Knife River #2	2	March 8, 1961
COMPANY	WELL NAME AND NUMBER	TEST NO.	DATE

LYNES UNITED SERVICES LTD.

104 - 61st AVENUE S.E., ... P.O. 28, CALGARY, ALBERTA

SERVICE REPORT

UNITED TESTERS LTD.

1000 - 10th Ave. West UTL Calgary, Alberta

Phone Cherry 4-0506

TYPE OF TEST Formation - Straddle
Total Depth: 3221'

INTERVAL TESTED 3150' to 3180'

HOLE SIZE 7 7/8" MUD WT. 10.6

FLUID CUSHION Nil

FLOW PERIOD 216 Minutes

INITIAL SHUT-IN PER 30 Minutes

FINAL SHUT-IN PER 60 Minutes

BLOW Good initial puff, fair to strong air blow, with gas to sfc. 30 mins.

FLUID RECOVERY 2880' gas cut oil flecked muddy salt water.

TEMP. _____ M.C.F. _____

SUR. CHOKE _____ BOT. CHOKE 1/2"

TICKET NO. 1291

PRESSURE READINGS

Outside:
REC. NO. 1097 CAP. 4100 DEPTH 3140'

		POINTS
INITIAL HYD.	1759	1
INITIAL SHUT-IN	Nil *	2
INITIAL FLOW	392	3
FINAL FLOW	1241	4
FINAL SHUT-IN	1341	5
FINAL HYD.	1759	6

PRESSURE READINGS

Outside:
REC. NO. 1135 CAP. 4300 DEPTH 3146'

		POINTS
INITIAL HYD.	1764	1
INITIAL SHUT-IN	Nil *	2
INITIAL FLOW	395	3
FINAL FLOW	1251	4
FINAL SHUT-IN	1350	5
FINAL HYD.	1764	6

* Lost Initial Shut-in, Packing Leaked.

REMARKS

James C. Wilkinson, Nominee Account

Wilkinson Red Knife River #2

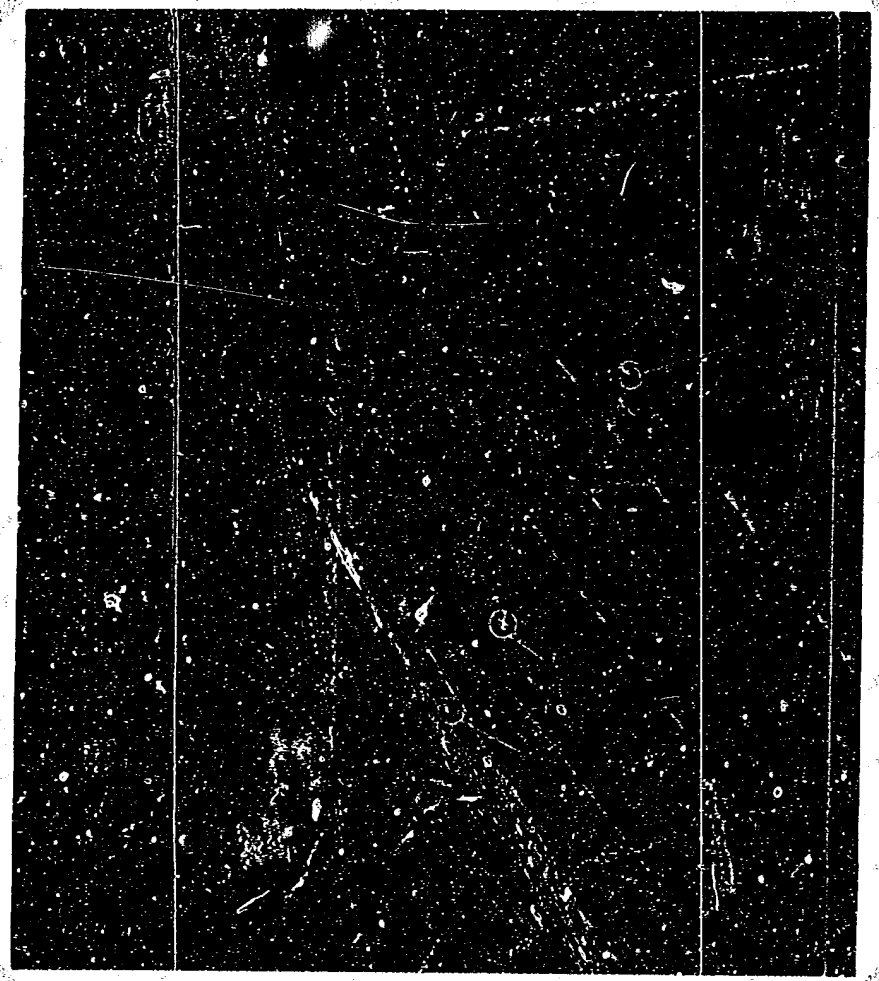
D.S.T. #2. March 8th, 1961

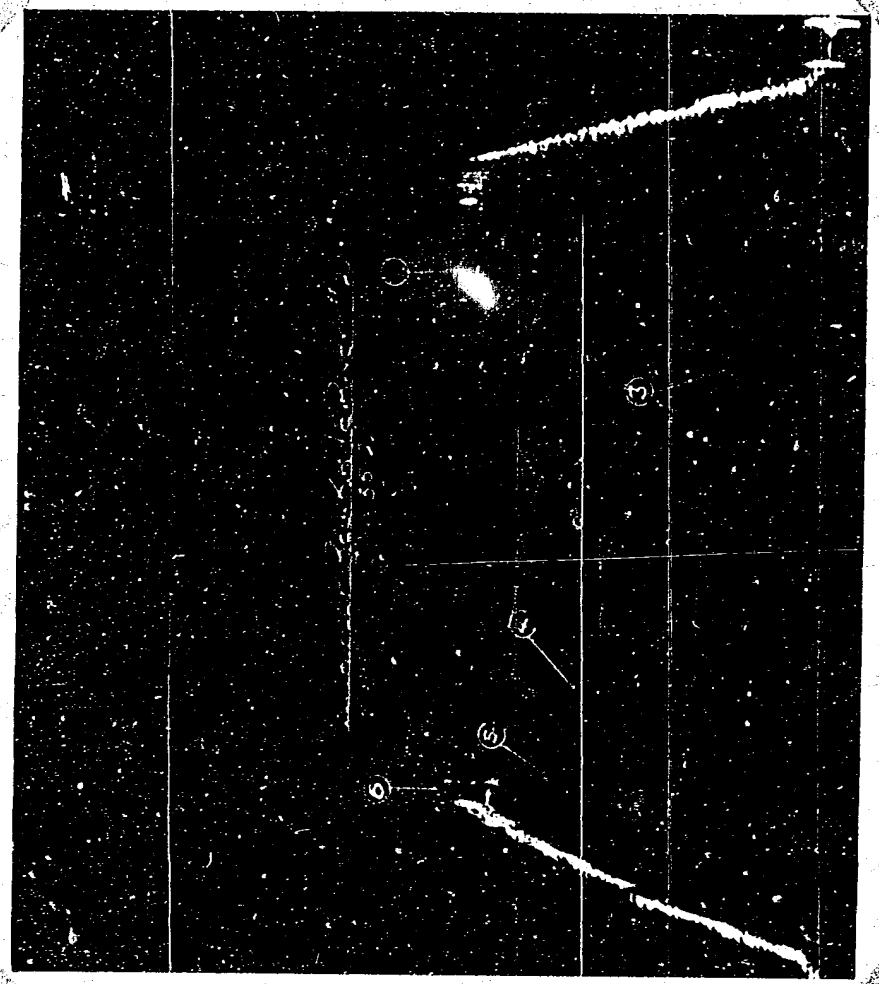
PRESSURES ON BUILD-UP

Rec. # 7, Cap. 5000, Depth: 3178'

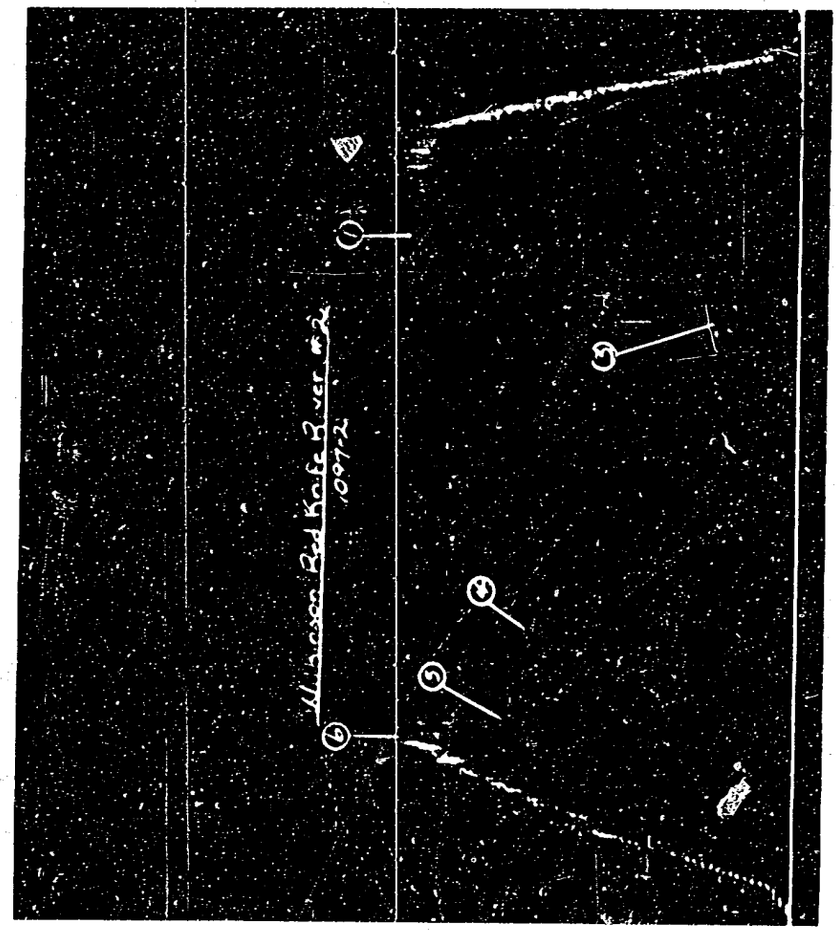
Initial Hyd.	1790
Drawdown	1385
Final Hyd.	1790

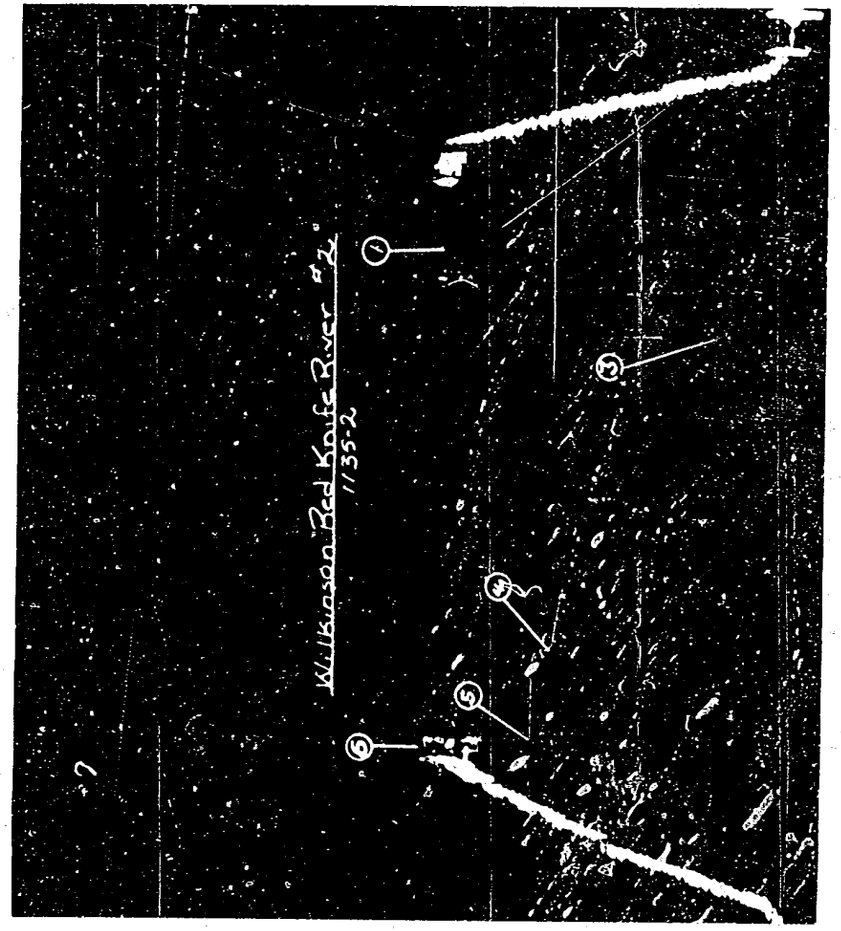
James C. Wilkinson, Nominee Acct.	Wilkinson Red Knife River #2	2	March 8, 1961
COMPANY	WELL NAME AND NUMBER	TEST NO.	DATE

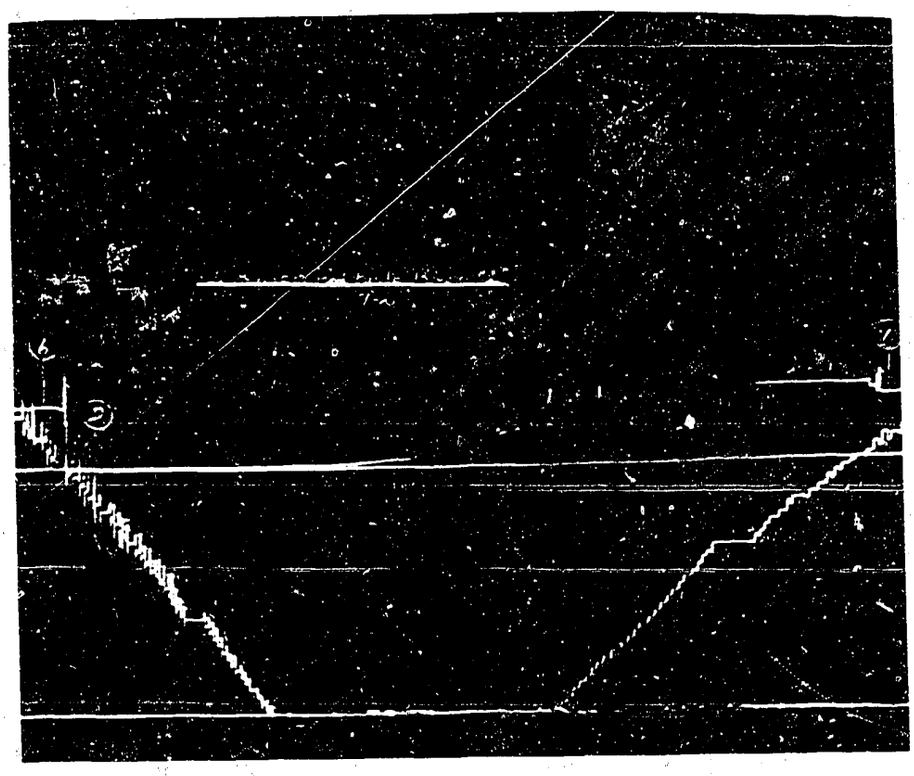




Lacers Wilkinson, Mounce Assoc.	Wilkinson Red Knife River #2	2	March 8, 1961
COMPANY	WELL NAME AND NUMBER	TEST NO.	DATE







James C. Wilkinson, Nominee Acct.	Wilkinson Red Knife River #2	3	March 11, 1961
COMPANY	WELL NAME AND NUMBER	TEST NO.	DATE

LYNES UNITED SERVICES LTD.

104 - 61st AVENUE S.E., Sub. P.O. 28, CALGARY, ALBERTA

SERVICE REPORT

UNITED TESTERS LTD.

1000 - 10th Ave. West UTL Calgary, Alberta

Phone CHerry 4-0506

TYPE OF TEST Formation - Straddle
Total Depth: 3420'

INTERVAL TESTED 3210' to 3240'

HOLE SIZE 7 7/8" MUD WT. 9.5

FLUID CUSHION Nil

FLOW PERIOD 59 Minutes

INITIAL SHUT-IN PER 15 Minutes

FINAL SHUT-IN PER 30 Minutes

BLOW Good initial puff, strong air blow, decreasing to Nil at end of flow period.

FLUID RECOVERY 2580' salty muddy sulphur water

TEMP. _____ M.C.F. _____

SUR. CHOKE _____ BOT. CHOKE 1/2"

TICKET NO. 1292

PRESSURE READINGS

Outside:
REC. NO. 1027 CAP. 4100 DEPTH 3220'

		POINTS
INITIAL HYD.	1608	1
INITIAL SHUT-IN	1387	2
INITIAL FLOW	213	3
FINAL FLOW	1179	4
FINAL SHUT-IN	1385	5
FINAL HYD.	1601	6

PRESSURE READINGS

Outside:
REC. NO. 1135 CAP. 4500 DEPTH 3227'

		POINTS
INITIAL HYD.	1610	1
INITIAL SHUT-IN	1395	2
INITIAL FLOW	214	3
FINAL FLOW	1189	4
FINAL SHUT-IN	1387	5
FINAL HYD.	1602	6

REMARKS

James C. Wilkinson, Nominee Account

Wilkinson Red Knife River #2

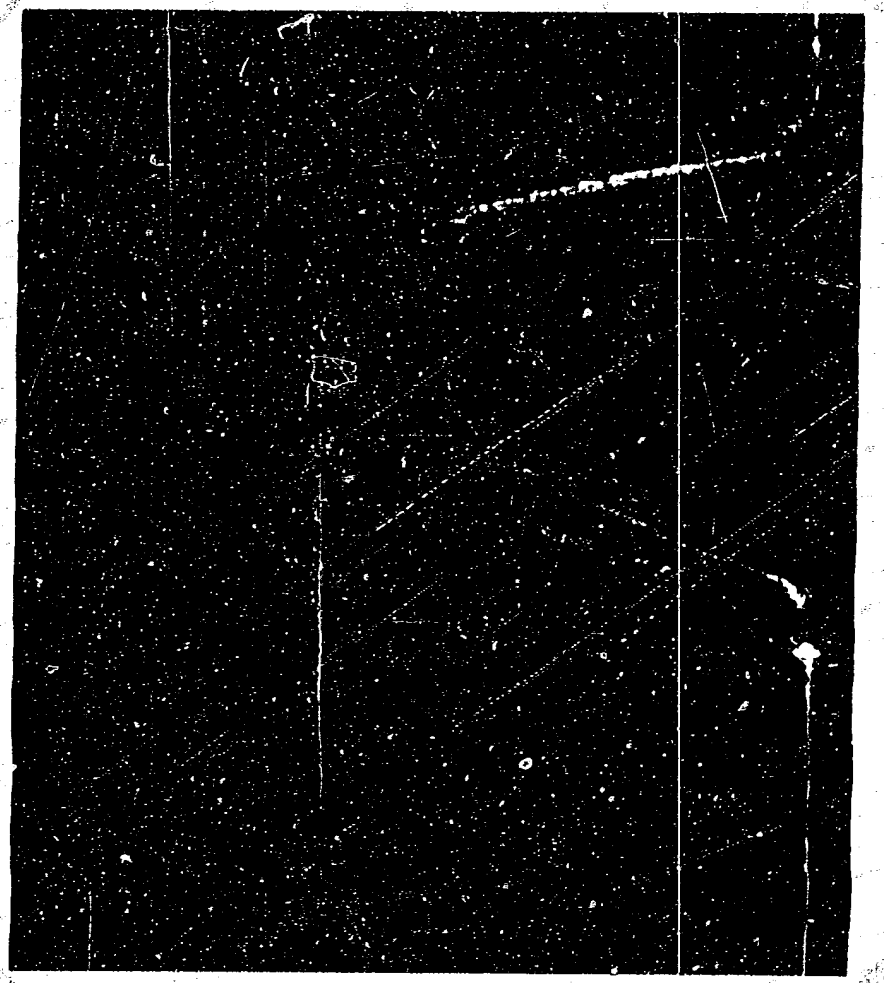
D.S.T. #3, March 11th, 1961

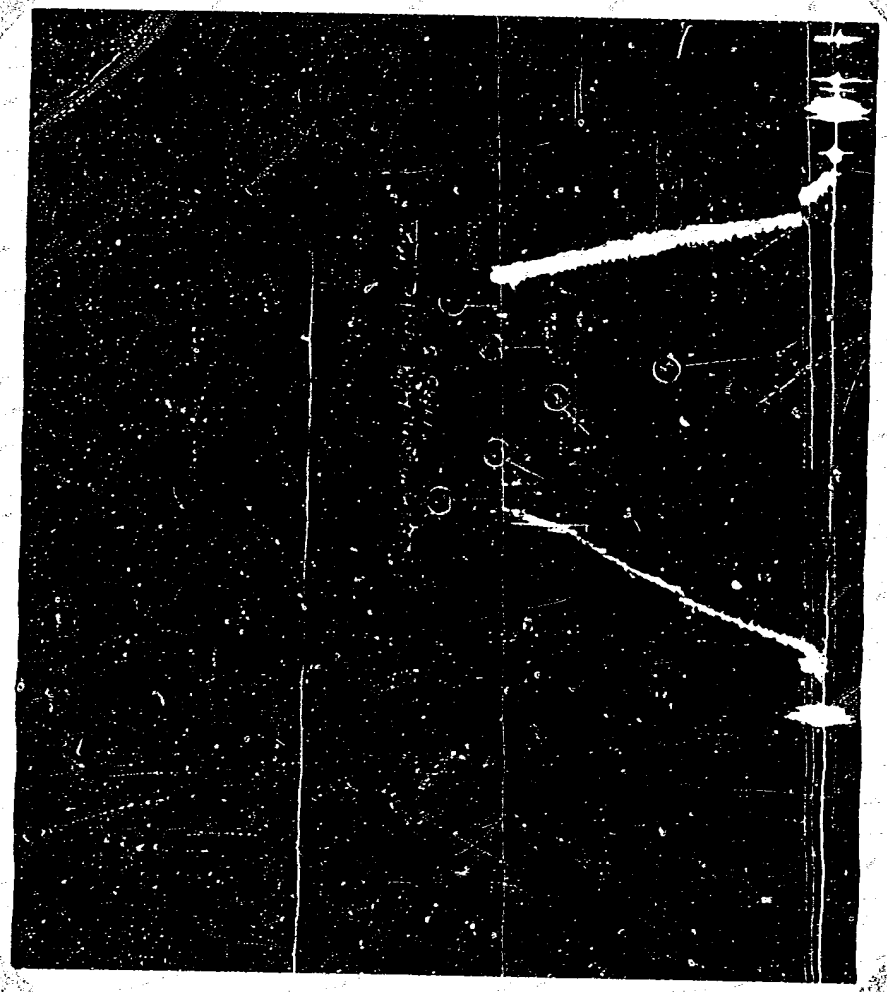
PRESSURES ON BUILD-UP

Rec. #7. Cap. 5000. Depth: 3235'

Initial Hyd.	1620
Drawdown	1440
Final Hyd.	1615

James C. Wilkinson, Nominee Acct.	Wilkinson Red Knife River #2	3	March 11, 1961
COMPANY	WELL NAME AND NUMBER	TEST NO.	DATE



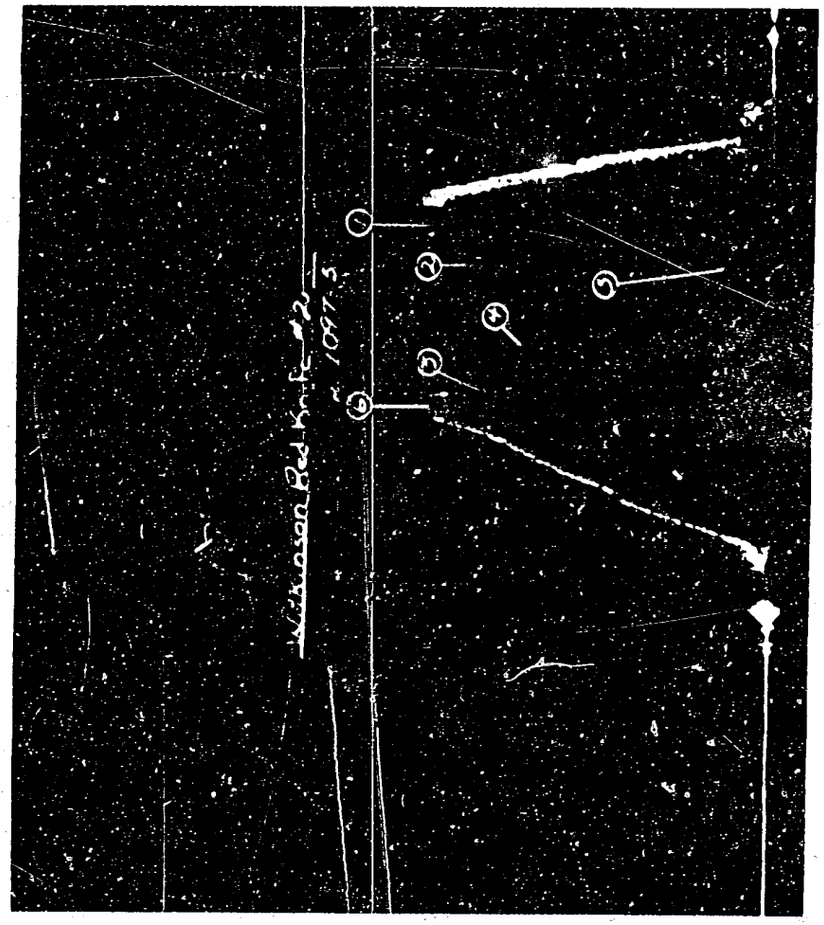


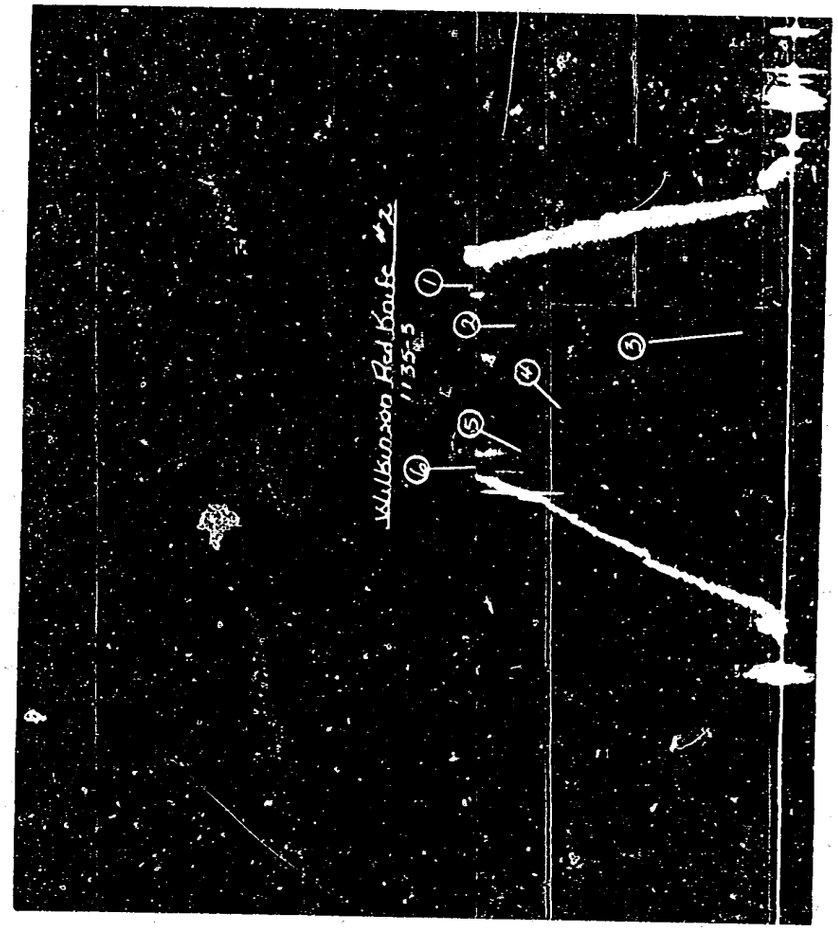
James C. Wilkinson, Nominee Acct.
ANY

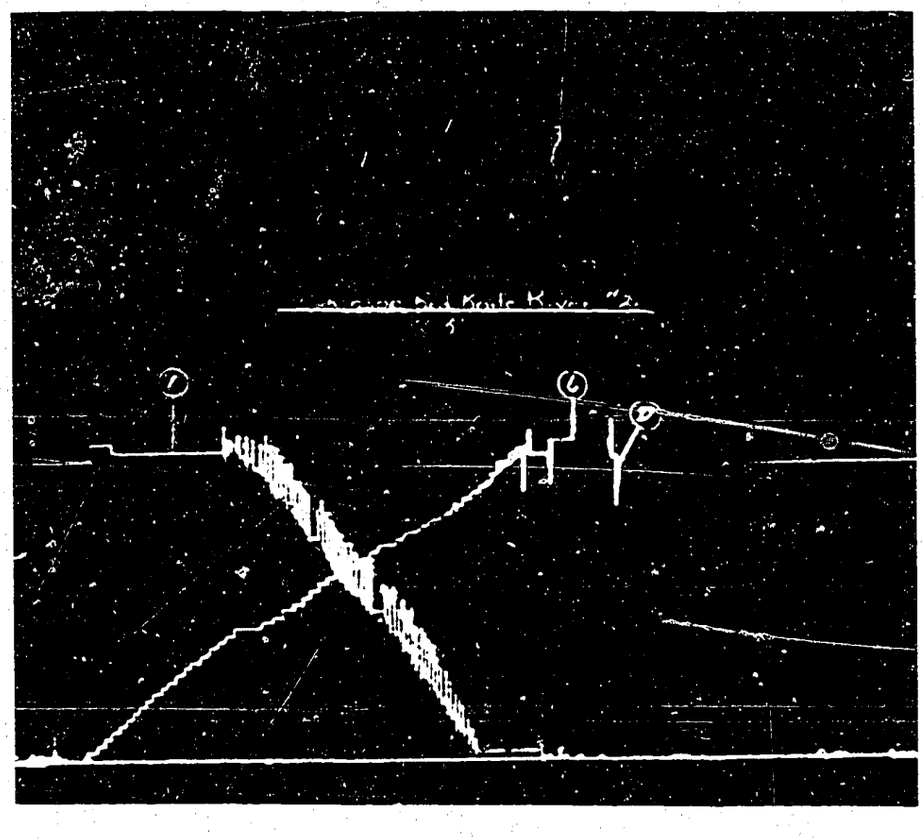
Wilkinson Red Knife River #2
WELL NAME AND NUMBER

3
TEST NO.

March 11, 1961
DATE







GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date March 12 1961

Well No. Wilkinson Red Knife River #2

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

Drilled From ..... To ..... Hole Made .....

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

Diesel Fuel Meter Reading

Today

Yesterday

Consumption Gals.

Depth	Deviation	Total Pipe on Lease	Jts.
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
12							Liner Size	Liner Size
1							Water-Loss	Filter Cake / PH
2								
3								
4								
5							Mud Added Sacks	
6							Chemicals Added Lbs.	
7								

CREW

Driller W. SEMAR 13 HRS
Derrickman L. SWEEZEY 12 HRS
Cat Headman N. BERGSTRISER 12 HRS
Rotary Helper P. DAKUS 12 HRS
Rotary Helper
Fireman V. C. OLSEN
Leaseman

MATERIALS CHARGED TO OPERATOR

Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS

	FROM	TO
RUN ABANDONMENT PLUG #1	12:00	1:30
LAY DOWN 4½ DRILL PIPE	1:30	3:00
RIG UP HALIBURTON	3:00	3:30
RUN ABANDONMENT PLUG #2	3:30	4:00
W.O.C.	4:00	8:00
Plug #1 3420 - 2950 160 52x Cement		
Down 1:15 A.M.		
Plug #2 251 - 151 40 5sx		
2% Calcium Down 4:00 A.M.		

Drilled From ..... To ..... Hole Made .....

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

REMARKS:

Depth	Deviation	Total Pipe on Lease	Jts.
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
8							Liner Size	Liner Size
9							Water-Loss	Filter Cake / PH
10								
11								
12								
1							Mud Added Sacks	
2							Chemicals Added Lbs.	
3								

CREW

Driller D. MOHNS 15
Derrickman D. BOGSTIE 14
Cat Headman
Rotary Helper J. ALARY 14
Rotary Helper
Fireman L. TRUSS 14 HRS
Leaseman

MATERIALS CHARGED TO OPERATOR

Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS

	FROM	TO
W.O.C	8:00	9:00
Run in & Feel Plug 2"	9:00	10:30
Lay Down 4½	10:30	11:00
Tear out & Load Trucks	11:00	4:00
Found Plug #2 143 K.B		
Rig released 11:00 A.M.		

Drilled From ..... To ..... Hole Made .....

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

REMARKS:

Depth	Deviation	Total Pipe on Lease	Jts.
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
4							Liner Size	Liner Size
5							Water-Loss	Filter Cake / PH
6								
7								
8								
9							Mud Added Sacks	
10							Chemicals Added Lbs.	
11								

CREW

Driller B. BRISCOE 15
Derrickman L. WHITING 15
Cat Headman B. GRAY 15
Rotary Helper T. NYHUS 15
Rotary Helper
Fireman
Leaseman

MATERIALS CHARGED TO OPERATOR

Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS

	FROM	TO
Tear out & Load Trucks		

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date March 11/61

Well No. Wainwright Rankin Rural 2-5

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

Drilled From ..... To 3420 Hole Made .....

Bit No.			No. Stds.	Length
Serial No.			No. D.C.'s	Length
Bit Size				Length
Bit Type				Length
Dr. from			Kelly in =	
Dr. to			TOTAL =	
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
Reamed from			Pipe Size 4 1/2	Trip Time
Reamed to			C.S.G. Set at 2.31	Serv. Time
Total Bit Footage			C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.			Pipe in Hole Jts.	Diesel Fuel Meter Reading
Table R.P.M.			Pipe on Racks Jts.	Today
Depth	Deviation		Total Pipe on Lease Jts.	Yesterday
Depth	Deviation			Consumption Gals.
Depth	Deviation			
Depth	Deviation			

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 X 14	No. 2 Pump Size 5 X 10
12							Liner Size 6 3/4	Liner Size 5
1							Water-Loss	Filter Cake / PH
2								
3								
4								
5							Mud Added Sacks	
6							Chemicals Added Lbs.	
7								

CREW		MATERIALS CHARGED TO OPERATOR	
Driller	B. BRISCOE	Core Bit	Serial
Derrickman	I. WHITING	Reaming Bit	Serial
Cat Headman	R. GRAY 10	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	T. MINUS 10	Swab Cups	Swab Rubbers
Rotary Helper			
Fireman	R. WIM		
Leaseman			

REMARKS	FROM	TO
Rig up to Log	12:00	12:30
Logging	12:30	8:00

Drilled From ..... To 3420 Hole Made .....

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

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 X 14	No. 2 Pump Size 5 X 10
8							Liner Size 6 3/4	Liner Size 5
9							Water-Loss	Filter Cake / PH
10								
11								
12								
1							Mud Added Sacks	
2							Chemicals Added Lbs.	
3								

CREW		MATERIALS CHARGED TO OPERATOR	
Driller	W. SEMAK	Core Bit	Serial
Derrickman	L. SWEENEY	Reaming Bit	Serial
Cat Headman	N. BERGSTREISER	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	P. DARUS	Swab Cups	Swab Rubbers
Rotary Helper			
Fireman	V. C. OLSEN		
Leaseman	J. GERBRANDT		

REMARKS	FROM	TO
WAIT ON ORDERS	8:00	11:00
MAKE UP TESTING TOOL	11:00	12:30
RUN IN W/ PACKER	12:30	2:00
TESTING	2:00	4:00
DST NO 3 3210'-3240' Valve open 59 min.		
Recovered 2580 Ft. salty sulphurous water. No gas		
Hydrostatic Pressure 1626 psi.		
Initial Shut-in 1389 psi		
Flowing Pressures 193 psi. to 1152 psi		
Final Shut-in 1378 psi		

Drilled From ..... To ..... Hole Made .....

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

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 X 14	No. 2 Pump Size 5 X 10
4							Liner Size 6 3/4	Liner Size 5
5							Water-Loss	Filter Cake / PH
6								
7								
8								
9							Mud Added Sacks	
10							Chemicals Added Lbs.	
11								

CREW		MATERIALS CHARGED TO OPERATOR	
Driller	D. MOHNS	Core Bit	Serial
Derrickman	D. BOESTIE	Reaming Bit	Serial
Cat Headman	H. BOESTIE	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	J. ALARY	Swab Cups	Swab Rubbers
Rotary Helper			
Fireman	L. TROSS		
Leaseman			

REMARKS	FROM	TO
HOIST PACKER	4:00	6:15
BREAK & LAY DOWN PACKER &	6:15	
LOAD OUT SAME		8:00
LAY DOWN COLLARS	8:00	9:30
RUN IN OPEN END	9:30	10:45
CIRC & RIG TO CEMENT	10:45	12:00

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Well No. Wilkinson Red Knife Bluff 2

Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Date March 10/61

Drilled From 3351 To 3407 Hole Made 56

Bit No.	12	No. Stds. 51	Length 3081.06
Serial No.	N83170	No. D.C.'s	Length 312.07
Bit Size	7 7/8		Length
Bit Type	YM		Length
Dr. from	3346	Kelly in =	13.87
Dr. to	3407	TOTAL =	3407.00
Cored from		D.C.O.D. Top 6 1/4	Hrs. On Bottom 5 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 3/4
Reamed to		C.S.G. Set at 201	Serv. Time
Total Bit Footage	161	C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	18 1/4	Pipe in Hole 102 Jts.	Diesel Fuel Meter Reading
Table R.P.M.	90	Pipe on Racks 22 Jts.	Today
Depth	Deviation	Total Pipe on Lease 124 Jts.	Yesterday
Depth	Deviation		Consumption Gals.
Depth	Deviation		
Depth	Deviation		

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4

No. 2 Pump Size 5 x 10 — Liner Size 5

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
12	9.6	123	58	350	1/2	✓
1	9.6	107	58	350	1/2	✓
2	9.6	118	58	350	1/2	✓
3	9.6	142	58	350	1/2	✓
4	9.5	140	58	350	1/2	✓
5	9.6	145	58	350	1/2	✓
6						
7						

Water-Loss	Filter Cake	PH
8.8		

Mud Added Sacks: 9 SAXS GEL

Chemicals Added Lbs.:

CREW	
Driller	B. BRISCOE
Derrickman	W. TING
Cat Headman	B. GRAY
Rotary Helper	T. NYKUS
Rotary Helper	
Fireman	R. KLEM
Leaseman	

MATERIALS CHARGED TO OPERATOR: Core Bit — Serial; Reaming Bit — Serial; Core Cutters SF. HF. — Core Catchers SF. HF.; Swab Cups — Swab Rubbers

REMARKS	FROM	TO
DRILLING	12:00	5:15
TRIP FOR BIT	5:15	8:00

Drilled From 3407 To 3420 Hole Made 13

Bit No.	13	No. Stds. 51	Length 3081.06
Serial No.	N83158	No. D.C.'s 11	Length 312.07
Bit Size	7 7/8		Length
Bit Type	YM		Length
Dr. from	3407	Kelly in =	26.87
Dr. to	3420	TOTAL =	3420.00
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
Reamed from		Pipe Size 4 1/2	Trip Time
Reamed to		C.S.G. Set at 201	Serv. Time
Total Bit Footage	13	C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	4 1/4	Pipe in Hole 102 Jts.	REMARKS:
Table R.P.M.	75	Pipe on Racks 22 Jts.	CHECKED BOPS
Depth 3393	Deviation 1/2°	Total Pipe on Lease 124 Jts.	O.K.
Depth	Deviation		
Depth	Deviation		
Depth	Deviation		

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4

No. 2 Pump Size 5 x 10 — Liner Size 5

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
8	9.6	70	53	550	1/2	✓
9	9.6	71	53	550	1/2	✓
10	9.6	75	53	550	1/2	✓
11	9.5	74	53	550	1/2	✓
12	9.5	76	53	550	1/2	✓
1	9.7	98	53	550	1/2	✓
2	9.7	150	44	400	1/2	✓
3	9.7	150	44	400	1/2	

Water-Loss	Filter Cake	PH
	3/32	10.5
7.2		11.5
4.6		13.0

Mud Added Sacks: GEL 200# MYBOGEL 500#

Chemicals Added Lbs.: CAUSTIC 300# SPERSENE 300#

CREW	
Driller	W. SEMAK
Derrickman	L. SWEEZEY
Cat Headman	N. BERGSTREISER
Rotary Helper	D. DAKOS
Rotary Helper	
Fireman	V. C. OLSEN
Leaseman	J. GERBRANDT

MATERIALS CHARGED TO OPERATOR: Core Bit — Serial; Reaming Bit — Serial; Core Cutters SF. HF. — Core Catchers SF. HF.; Swab Cups — Swab Rubbers

REMARKS	FROM	TO
RIG SERVICE & CHECK B.OPS OK.	8:00	8:15
DRILL	8:15	12:30
CIRC SAMPLE	12:30	1:15
RUN SURVEY	1:15	1:30
CIRC HOLE CLEAN & CONDITION MUD	1:30	3:30
HOIST 10 STANDS TO CONDITION HOLE	3:30	4:00
WAITING ON LOGGERS		

Drilled From ____ To 3420 Hole Made ____

Bit No.	13	No. Stds. 51	Length 3081.06
Serial No.	N83158	No. D.C.'s 11	Length 312.07
Bit Size	7 7/8		Length
Bit Type	YM		Length
Dr. from	3407	Kelly in =	26.87
Dr. to	3420	TOTAL =	3420.00
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 8
Reamed from		Pipe Size 4 1/2	Trip Time 2.
Reamed to		C.S.G. Set at 201	Serv. Time
Total Bit Footage	13	C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	4 1/4	Pipe in Hole 102 Jts.	REMARKS:
Table R.P.M.	75	Pipe on Racks 22 Jts.	
Depth	Deviation	Total Pipe on Lease 124 Jts.	
Depth	Deviation		
Depth	Deviation		
Depth	Deviation		

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4

No. 2 Pump Size 5 x 10 — Liner Size 5

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
4	9.7	140	44	400	1/2	
5	9.7	140	44	400	1/2	
6	9.6	125	44	400	1/2	✓
7	9.6	120	44	400	1/2	✓
8	9.5	145	44	400	1/2	✓
9						
10						
11						

Water-Loss	Filter Cake	PH
4.7	2/32	13.0
4.2	2/32	12.5

Mud Added Sacks: GEL 1700# MY-LO-JEL 350#

Chemicals Added Lbs.: CAUSTIC 100# SPERSENE 100#

CREW	
Driller	D. MOHNS
Derrickman	D. ROESTIE
Cat Headman	H. ROESTIE
Rotary Helper	J. ALARY
Rotary Helper	
Fireman	L. TRUSS
Leaseman	

MATERIALS CHARGED TO OPERATOR: Core Bit — Serial; Reaming Bit — Serial; Core Cutters SF. HF. — Core Catchers SF. HF.; Swab Cups — Swab Rubbers

REMARKS	FROM	TO
RUN IN 10 STANDS TO CONDITION HOLE	4:00	4:30
CIRC, CONDITION MUD & WAIT ON LOGGERS	4:30	10:30
HOIST TO LOG & STRAP PIPE	10:30	12:00
PIPE MEASURED 3081.46		
PIPE TALLY 3081.06		
DIFF 40		

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date March 9/61

Well No. Wainwright Rio Knife River 2

Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From 3241 To 3246 Hole Made 5 (CORED)

Bit No.	11A	No. Stds. 47-5	Length 2869.08
Serial No.	172557	No. D.C.'s	Length 312.07
Bit Size	6 1/4		Length 36.00
Bit Type	◇		Length
Dr. from		Kelly in =	28.85
Dr. to		TOTAL =	3246.00
Cored from	3221	D.C.O.D. Top 6 1/4	Hrs. On Bottom
Cored to	3246	D.C.I.D. Top 2 7/8	Hrs. Off Bottom
Reamed from		Pipe Size 4 1/2	Trip Time
Reamed to		C.S.G. Set at 201	Serv. Time
Total Bit Footage	25	C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	6 1/2	Pipe in Hole 95 Jts.	Diesel Fuel Meter Reading
Table R.P.M.	85	Pipe on Racks 29 Jts.	Today
Depth	Deviation	Total Pipe on Lease 124 Jts.	Yesterday
Depth	Deviation		Consumption Gals.
Depth	Deviation		
Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 X 14	No. 2 Pump Size 5 X 10
12							Liner Size 6 3/4	Liner Size 5
1	MIXING MUD						Water-Loss	Filter Cake / PH
2								
3	10.0	75	54	400	1/2	—		12.5
4	TRIP							
5							Mud Added Sacks 22 SAXS GEL-4SAKS MY-LO-GEL	
6	MIXING MUD						Chemicals Added Lbs. 250# CAUSTIC 250# SPERESENE	
7							1 BAG CMC	

CREW: Driller B. BRISCOE; Derrickman L. WHITING; Cat Headman; Rotary Helper I. NYHUS 12 hrs; Rotary Helper; Fireman B. KLEM; Leaseman

MATERIALS CHARGED TO OPERATOR: Core Bit; Serial; Reaming Bit; Serial; Core Cutters SF. HF.; Core Catchers SF. HF.; Swab Cups; Swab Rubbers

REMARKS	FROM	TO
DIAMOND CORING	12:00	1:30
MIX GEL & COND MUD	1:30	4:30
HOIST CORE.	4:30	5:45
HANDLE CORE	5:45	6:30
SERVICE & LAY DOWN BBL.	6:30	7:00
COND MUD & MIX LOSS CIRC MATERIAL.	7:00	8:00
LOSING MUD - CONTINUOUSLY.		

Drilled From 3246 To 3294 Hole Made 48 (REAMED FROM 3221 TO 3246 HOLE REAMED 25)

Bit No.	12	No. Stds. 49	Length 2959.84
Serial No.	H83170	No. D.C.'s 11	Length 312.07
Bit Size	7 7/8		Length
Bit Type	YM		Length
Dr. from	3246	Kelly in =	22.09
Dr. to	3294	TOTAL =	3294.00
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
Reamed from	3221	Pipe Size 4 1/2	Trip Time
Reamed to	3246	C.S.G. Set at 201	Serv. Time
Total Bit Footage	73	C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	5 1/4	Pipe in Hole 78 Jts.	REMARKS:
Table R.P.M.	85	Pipe on Racks 46 Jts.	CHECKED B.O.P'S
Depth	Deviation	Total Pipe on Lease 124 Jts.	OPEN HOLE O.K.
Depth	Deviation		
Depth	Deviation		
Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 X 14	No. 2 Pump Size 5 X 10
8	9.6	110					Liner Size 6 3/4	Liner Size 5
9							Water-Loss	Filter Cake / PH
10		TRIP						11.5
11	9.6	115	46	400	3/4			
12	9.6	82	46	400	3/4			
1	9.6	77	46	400	1/2		Mud Added Sacks GEL 31.00# MYLOGEL 150#	
2	9.6	80	46	400	1/2	✓	Chemicals Added Lbs. CAUSTIC 50#	
3	9.6	105	46	400	1/2	✓	SPERSENE 50#	

CREW: Driller W. SEMAK; Derrickman L. SWEEZEY; Cat Headman N. BERGSTREISER; Rotary Helper; Rotary Helper; Fireman V. C. OLSEN; Leaseman J. GERBRANDT

MATERIALS CHARGED TO OPERATOR: Core Bit; Serial; Reaming Bit; Serial; Core Catchers SF. HF.; Swab Cups; Swab Rubbers

REMARKS	FROM	TO
CONDITION MUD	8:00	9:30
RUN IN W/ BIT	9:30	10:45
REAMING TO 7 7/8	10:45	12:15
DRILL 7 7/8 HOLE	12:15	4:00
LOSING MUD CONTINUOUSLY		

Drilled From 3294 To 3351 Hole Made 57

Bit No.	12	No. Stds. 50	Length 3020.33
Serial No.	H83170	No. D.C.'s 11	Length 312.07
Bit Size	7 7/8		Length
Bit Type	YM		Length
Dr. from	3246	Kelly in =	18.60
Dr. to	3351	TOTAL =	3351.00
Cored from		D.C.O.D. Top 6 1/4	Hrs. On Bottom 7 3/4
Cored to		D.C.I.D. Top 2 7/8	Hrs. Off Bottom 1/4
Reamed from	3221	Pipe Size 4 1/2	Trip Time
Reamed to	3246	C.S.G. Set at 201	Serv. Time 1/4
Total Bit Footage	130	C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	13	Pipe in Hole 100 Jts.	REMARKS:
Table R.P.M.	90	Pipe on Racks 24 Jts.	
Depth	Deviation	Total Pipe on Lease 124 Jts.	
Depth	Deviation		
Depth	Deviation		
Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 X 14	No. 2 Pump Size 5 X 10
4	9.6	95	46	400	1/2	✓	Liner Size 6 3/4	Liner Size 5
5	9.6	123	46	400	1/2	✓	Water-Loss	Filter Cake / PH
6	9.6	170	46	400	1/2	—		
7	9.6	170	46	400	1/2	—	9.0	
8	9.7	225	46	400	1/2	—		
9	9.7	222	46	400	1/2	—	Mud Added Sacks 4200# GEL 45 SX CEL FLAKE	
10	9.6	135	46	400	1/2	—	Chemicals Added Lbs. CAUSTIC 50#	
11	9.5	130	46	400	1/2	—	SPERSENE 50#	

CREW: Driller D. MEHNS; Derrickman D. ROBSTIE; Cat Headman H. ROBSTIE; Rotary Helper T. ALARY; Rotary Helper; Fireman L. TROSS; Leaseman

MATERIALS CHARGED TO OPERATOR: Core Bit; Serial; Reaming Bit; Serial; Core Catchers SF. HF.; Swab Cups; Swab Rubbers

REMARKS	FROM	TO
RIG SERVICE	4:00	4:15
DRILLING 7 7/8 HOLE	4:15	12:00
LOST MUD FROM 4:00 - 8:00		

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date March 5/61

Well No. Wainwright Rockier Rivers 2

Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From ____ To 3221 Hole Made ____

Bit No.			No. Stds.	Length
Serial No.			No. D.C.'s	Length
Bit Size				Length
Bit Type				Length
Dr. from			Kelly in =	
Dr. to			TOTAL =	
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
Reamed from			Pipe Size 4 1/2	Trip Time
Reamed to			C.S.G. Set at 201	Serv. Time
Total Bit Footage			C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.			Pipe in Hole Jts.	Diesel Fuel Meter Reading
Table R.P.M.			Pipe on Racks Jts.	Today
Depth	Deviation		Total Pipe on Lease Jts.	Yesterday
Depth	Deviation			Consumption Gals.
Depth	Deviation			
Depth	Deviation			

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
12	10.6	98	58	600	1/2	
1	10.6	96	58	600	1/2	
2	10.6	96	58	600	1/2	
3						
4						
5						
6						
7						

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
3.8	2/32	12.5

Mud Added Sacks 7 SAXS MY-LO-GEL
Chemicals Added Lbs.

CREW	
Driller	J. KRISCOF
Derrickman	T. WHITING
Cat Headman	R. GRAY
Rotary Helper	T. NYHUS 12 HRS
Rotary Helper	
Fireman	B. KLIM
Leaseman	

MATERIALS CHARGED TO OPERATOR	
Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS	FROM	TO
Circ & Clean Magnet	12:00	2:30
Hoisting	2:30	3:30
Make up Packer	3:30	5:00
Run in w/ Packer	5:00	6:30
Make up Testing Head	6:30	7:00
Wait for Daylight	7:00	7:15
Check BOPE — OK	7:15	7:30
Initial Shut in	7:30	8:00

Drilled From ____ To 3221 Hole Made ____

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

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
8	10.6	77				
9						
10						
11						
12						
1						
2						
3						

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH

Mud Added Sacks
Chemicals Added Lbs.

CREW	
Driller	W. SEMAK
Derrickman	L. SWEEZEY
Cat Headman	N. BERGSTREISER
Rotary Helper	
Rotary Helper	
Fireman	V.C. OLSEN
Leaseman	J. GERBRANDT

MATERIALS CHARGED TO OPERATOR	
Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS	FROM	TO
TESTING	8:00	12:30
HOIST PACKER	12:30	3:00
LAYDOWN PACKER PICK UP CORE BBLS	3:00	4:00
D.ST #2 INTERVAL 3150-3180 (STRADDLE)		
WITHAB SHUT IN 30 MINS VO 2½ MINS		
FINAL " " 60 " GAS TO SURFACE 30 MINS.		
HYD 1825		
ISIP BLEEDED		
FLOW 279 - 1259		
FSIP 1362		
FHYD 1757		
REC = 2880 - oil & gas cut watery mud.		

CORED ~~Drilled~~ From 3221 To 3241 Hole Made 20

Bit No.	11A		No. Stds. 47-S	Length 2869.08
Serial No.	17257		No. D.C.'s 11	Length 312.07
Bit Size	6 1/8		CORE BBL & SUB	Length 36.00
Bit Type	D			Length
Dr. from			Kelly in =	23.85
Dr. to			TOTAL =	3241.00
Cored from	3221		D.C.O.D. Top 6 1/4	Hrs. On Bottom 5
Cored to	3241		D.C.I.D. Top 2 7/8	Hrs. Off Bottom 3
Reamed from			Pipe Size 4 1/2	Trip Time 1 1/4
Reamed to			C.S.G. Set at 201	Serv. Time
Total Bit Footage	20		C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	5		Pipe in Hole 95 Jts.	REMARKS:
Table R.P.M.	85		Pipe on Racks 29 Jts.	
Depth	Deviation		Total Pipe on Lease 124 Jts.	
Depth	Deviation			
Depth	Deviation			
Depth	Deviation			

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
4						
5						
6	~~10~~					
7	10.4	95	58	550	1/2	
8	10.4	80	58	550	1/2	
9	10.4	68	58	550	1/2	
10	10.4	80	58	550	1/2	
11	10.4	85	58	550	1/2	

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
4.0	1/32	12.5

Mud Added Sacks 100 # MY-LO-JEL
Chemicals Added Lbs. 50 # CAUSTIC 50 # SPERSENE
1500 # GEL

CREW	
Driller	D. MOHNS
Derrickman	D. BOGSTIE
Cat Headman	H. BOGSTIE
Rotary Helper	J. ALARY 12 HRS
Rotary Helper	
Fireman	L. TRUSS
Leaseman	

MATERIALS CHARGED TO OPERATOR	
Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS	FROM	TO
SERVICE CORE BBL	4:00	4:45
RUN IN W/ SAME	4:45	6:00
BREAK CIRC & CIRC HOLE CLEAN	6:00	7:00
& CORING	7:00	12:00
LOSING MUD FROM 1200 - 12:00		
APP. 20 BBLS		

GUTHRIE McLAREN DRILLING LTD.

Company Representative: G. Houston
Tool Pusher

Date: MARCH 7/61

Well No. WILKINSON RED KNIFE RIVER 2A
Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From 3149 To 3203 Hole Made 54

Bit No.	11	No. Stds. 47-5	Length 2869.08
Serial No.	905448	No. D.C.'s 11	Length 312.07
Bit Size	7 7/8		Length
Bit Type	VSI		Length
Dr. from	3149	Kelly in =	21.85
Dr. to	3203	TOTAL =	3203.00
Cored from		D.C.O.D. Top 6 1/4	Hrs. On Bottom 6 3/4
Cored to		D.C.I.D. Top 2 7/8	Hrs. Off Bottom 1 1/4
Reamed from		Pipe Size 4 1/2	Trip Time 1 1/4
Reamed to		C.S.G. Set at 201	Serv. Time
Total Bit Footage	54	C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	6 3/4	Pipe in Hole 95 Jts.	Diesel Fuel Meter Reading
Table R.P.M.	90	Pipe on Racks 29 Jts.	Today
Depth	Deviation	Total Pipe on Lease 124 Jts.	Yesterday
Depth	Deviation		Consumption Gals.
Depth	Deviation		
Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 x 14	No. 2 Pump Size 5 x 10
12		TRIP					Liner Size 6 3/4	Liner Size 5
1	10.7	65	58	600	2/3	✓	Water-Loss	Filter Cake / PH
2	10.7	60	58	600	2/3	✓	4.0	2/32 / 13.0
3	10.7	56	58	600	2/3	✓		
4	10.7	60	58	600	2/3	✓		
5	10.8	68	58	600	2/3	✓	Mud Added Sacks 3 SAKS 10# LG-GEL 10 SAKS GEL	
6	10.8	65	58	600	2/3	✓	Chemicals Added Lbs.	
7	10.8	60	58	600	2/3	✓		

CREW: Driller B. BRISCOE; Derrickman L. WHITING; Cat Headman H. GRAY; Rotary Helper T. NYHUS 12 HRS; Rotary Helper; Fireman R. KLEIN; Leaseman

MATERIALS CHARGED TO OPERATOR: Core Bit; Serial; Reaming Bit; Serial; Core Cutters SF. HF.; Core Catchers SF. HF.; Swab Cups; Swab Rubbers

REMARKS	FROM	TO
RUN IN W/ BIT No. 11	12:00	1:15
DRILLING	1:15	8:00
LOST MUD		

Drilled From 3203 To 3221 Hole Made 18

Bit No.	11	No. Stds. 47-5	Length 2869.08
Serial No.	905448	No. D.C.'s 11	Length 312.07
Bit Size	7 7/8		Length
Bit Type	VSI		Length
Dr. from	3149	Kelly in =	39.85
Dr. to	3221	TOTAL =	3221.00
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
Reamed from		Pipe Size 4 1/2	Trip Time
Reamed to		C.S.G. Set at 201	Serv. Time
Total Bit Footage	72	C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	8 3/4	Pipe in Hole 95 Jts.	REMARKS:
Table R.P.M.	90	Pipe on Racks 29 Jts.	
Depth	Deviation	Total Pipe on Lease 124 Jts.	
Depth	Deviation		
Depth	Deviation		
Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 x 14	No. 2 Pump Size 5 x 10
8	10.7	55	58	700	2/3	✓	Liner Size 6 3/4	Liner Size 5
9	10.7	62	58	700	2/3	✓	Water-Loss	Filter Cake / PH
10	10.7	55	58	700	2/3	✓	4.1	2/32 / 12.5
11								
12								
1							Mud Added Sacks GEL 700#	
2							Chemicals Added Lbs. MY LO GEL 100#	
3							CAUSTIC 100# SPERSENE 100#	

CREW: Driller W. SEMAR; Derrickman L. SWEEZEY; Cat Headman N. BERGSTREISER; Rotary Helper; Rotary Helper; Fireman V. C. OLSEN; Leaseman J. GERBRANDT

MATERIALS CHARGED TO OPERATOR: Core Bit; Serial; Reaming Bit; Serial; Core Cutters SF. HF.; Core Catchers SF. HF.; Swab Cups; Swab Rubbers

REMARKS	FROM	TO
RIG SERVICE & CHECK B.O.P.S	8:00	8:15
DRILL	8:15	10:00
CIRC SAMPLE	10:00	10:45
HOIST TO TEST	10:45	12:00
MAKE UP TESTING TOOL CHECK B.O.P.S	12:00	1:00
RUN IN W/ PACKER	1:00	2:15
MAKE UP TESTING HEAD	2:15	2:30
TESTING	2:30	4:00
DST #1 INTERVAL 3156-3221 H.P. 1836		
INITIAL SHUT IN 30 MINS ISIP 1396		
FLOW 60 MINS I.F. 341 - F.F. 1067		
FINAL SHUT IN FSIP. 1362		
REC ~~[illegible]~~ - F.HYD. 1791		
2680' GAS CUT OIL FLECKED SALTY DRILLING FLUID		
Watery		

Drilled From ____ To ____ Hole Made ____

Bit No.		No. Stds. 47-5	Length 2869.08
Serial No.		No. D.C.'s 11	Length 312.07
Bit Size			Length
Bit Type		MAGNET & SUB.	Length 3.28
Dr. from		Kelly in =	26.57
Dr. to		TOTAL =	3221.00
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 8
Reamed from		Pipe Size 4 1/2	Trip Time 3 1/2
Reamed to		C.S.G. Set at 201	Serv. Time
Total Bit Footage		C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.		Pipe in Hole 95 Jts.	REMARKS:
Table R.P.M.		Pipe on Racks 29 Jts.	
Depth	Deviation	Total Pipe on Lease 124 Jts.	
Depth	Deviation		
Depth	Deviation		
Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 x 14	No. 2 Pump Size 5 x 10
4							Liner Size 6 3/4	Liner Size 5
5		TESTING					Water-Loss	Filter Cake / PH
6								
7								
8								
9		TRIPPING					Mud Added Sacks GEL 300#	
10							Chemicals Added Lbs. CAUSTIC 100#	
11	10.7	84	58	700	2/3		SPERSENE 100#	

CREW: Driller D. MOHNS; Derrickman D. BOESTIE; Cat Headman H. BOESTIE; Rotary Helper J. ALARY 12 HRS; Rotary Helper; Fireman L. TRUSS; Leaseman

MATERIALS CHARGED TO OPERATOR: Core Bit; Serial; Reaming Bit; Serial; Core Cutters SF. HF.; Core Catchers SF. HF.; Swab Cups; Swab Rubbers

REMARKS	FROM	TO
TESTING	4:00	4:45
HOIST PACKER	4:45	6:45
BREAK & LAY DOWN PACKER	6:45	8:30
SLIP DRILLING LINE	8:30	9:00
RUN IN W/ MAGNET	9:00	10:30
CIRC & CONDITION MUD	10:30	12:00

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date March 6/11

Well No. Wilkinson Red Knife River 2

Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From 3016 To 3060 Hole Made 44

Bit No.	9	10
Serial No.	905614	001912
Bit Size	7 7/8	7 7/8
Bit Type	YT	YT
Dr. from	2887	3040
Dr. to	3040	3060
Cored from		
Cored to		
Reamed from		
Reamed to		
Total Bit Footage	153	20
Bit Hrs.	14 3/4	2 1/4
Table R.P.M.	150	150

No. Stds. 45 Length 2717.56
No. D.C.'s 11 Length 312.07
Length
Length
Kelly in = 30 37
TOTAL = 3060.00
D.C.O.D. Top 6 1/4 Hrs. On Bottom 5 1/2
D.C.I.D. Top 2 7/8 Hrs. Off Bottom 2 1/2
Pipe Size 4 1/2 Trip Time 2 1/2
C.S.G. Set at 201 Serv. Time
C.S.G. Size 8 5/8 Rep. Time
Pipe in Hole 90 Jts.
Pipe on Racks 34 Jts.
Total Pipe on Lease 124 Jts.
Diesel Fuel Meter Reading
Today
Yesterday
Consumption Gals.

Depth Deviation
Depth Deviation
Depth Deviation
Depth Deviation

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
12	11.2	50	58	600	1/2	✓
1	11.2	50	58	600	1/2	✓
2	11.2	50				
3	11.2	55	58	600	1/2	
4	TRIP					
5						
6	11.2	50	58	600	1/2	✓
7	11.3	65	58	600	1/2	✓

No. 1 Pump Size 7 1/4 x 14 Liner Size 6 3/4
No. 2 Pump Size 5 x 10 Liner Size 5

Water-Loss	Filter Cake	PH
4.0	2/32	12.5
		12.5

Mud Added Sacks 8 SH
Chemicals Added Lbs. 100# CAUSTIC 100# SPERESENE

CREW
Driller H BRISCOE
Derrickman L WHITING
Cat Headman B GRAY
Rotary Helper T MYHUS
Rotary Helper
Fireman K KLEM
Leaseman

MATERIALS CHARGED TO OPERATOR
Core Bit Serial
Reaming Bit Serial
Core Cutters SF. HF. Core Catchers SF. HF.
Swab Cups Swab Rubbers

REMARKS

	FROM	TO
Drilling	1200	315
Trip for Bit	315	545
Drilling	545	600

Drilled From 3060 To 3110 Hole Made 50

Bit No.	10	
Serial No.	001912	
Bit Size	7 7/8	
Bit Type	YT	
Dr. from	3040	
Dr. to	3110	
Cored from		
Cored to		
Reamed from		
Reamed to		
Total Bit Footage	70	
Bit Hrs.	10	
Table R.P.M.	95	

No. Stds. 46 Length 2778.62
No. D.C.'s 11 Length 312.07
Length
Length
Kelly in = 19.31
TOTAL = 3110.00
D.C.O.D. Top 6 1/4 Hrs. On Bottom
D.C.I.D. Top 2 7/8 Hrs. Off Bottom
Pipe Size 4 1/2 Trip Time
C.S.G. Set at 201 Serv. Time
C.S.G. Size 8 5/8 Rep. Time
Pipe in Hole 92 Jts.
Pipe on Racks 32 Jts.
Total Pipe on Lease 124 Jts.

REMARKS:

Depth Deviation
Depth Deviation
Depth Deviation
Depth Deviation

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
8	11.1	47	58	700	2/3	✓
9	11.1	48	58	700	2/3	✓
10	11.1	47	58	700	2/3	✓
11	11.0	53	58	700	2/3	✓
12	10.9	55	58	700	3/4	✓
1	10.9	55	58	700	3/4	✓
2	10.9	60	58	700	Full	✓
3	10.9	63	58	700	2/3	✓

No. 1 Pump Size 7 1/4 x 14 Liner Size 6 3/4
No. 2 Pump Size 5 x 10 Liner Size 5

Water-Loss	Filter Cake	PH
5.2	2/32	12.5
		12.5
4.6		13.0

Mud Added Sacks GEL 270# MYACGEL 500#
Chemicals Added Lbs. CAUSTIC 200# SPERSENE 200#

CREW
Driller L. J. SEMAK
Derrickman L. SWEEZEY
Cat Headman N. BERGSTREISER
Rotary Helper G FREDRICKS
Rotary Helper
Fireman V. C. OLSEN
Leaseman T. GERBRANDT

MATERIALS CHARGED TO OPERATOR
Core Bit Serial
Reaming Bit Serial
Core Cutters SF. HF. Core Catchers SF. HF.
Swab Cups Swab Rubbers

REMARKS

	FROM	TO
RIG SERVICE & CHECK B.OPS OK	800	815
DRILL	815	400

Drilled From 3110 To 3149 Hole Made 39

Bit No.	10	
Serial No.	001912	
Bit Size	7 7/8	
Bit Type	YT	
Dr. from	3040	
Dr. to	3149	
Cored from		
Cored to		
Reamed from		
Reamed to		
Total Bit Footage	109	
Bit Hrs.	16	
Table R.P.M.	90	

No. Stds. 46-S Length 2808.72
No. D.C.'s 11 Length 312.07
Length
Length
Kelly in = 28.21
TOTAL = 3149.00
D.C.O.D. Top 6 1/4 Hrs. On Bottom 6
D.C.I.D. Top 2 7/8 Hrs. Off Bottom 2
Pipe Size 4 1/2 Trip Time 1 1/2
C.S.G. Set at 201 Serv. Time 1/4
C.S.G. Size 8 5/8 Rep. Time
Pipe in Hole 93 Jts.
Pipe on Racks 31 Jts.
Total Pipe on Lease 124 Jts.

REMARKS: FIRE EXTINGUISHERS CHECKED

Depth 3149 Deviation 1 1/2°
Depth Deviation
Depth Deviation
Depth Deviation

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
4	10.6	80	58	700	3/4	✓
5	10.6	73	58	700	3/4	✓
6	10.7	65	58	700	3/4	✓
7	10.7	70	58	700	Full	✓
8	10.7	75	58	700	"	✓
9	10.7	68	58	700	2/3	✓
10	10.7	65	58	700	2/3	✓
11	TRIP					

No. 1 Pump Size 7 1/4 x 14 Liner Size 6 3/4
No. 2 Pump Size 5 x 10 Liner Size 5

Water-Loss	Filter Cake	PH
		13.0
3.6	2/32	13.0

Mud Added Sacks GEL 400#
Chemicals Added Lbs. CAUSTIC 50# SPERSENE 50#

CREW
Driller D MOHNS
Derrickman D. BOESTIE
Cat Headman H BOESTIE
Rotary Helper J ALARY
Rotary Helper
Fireman L. TROSS
Leaseman

MATERIALS CHARGED TO OPERATOR
Core Bit Serial
Reaming Bit Serial
Core Cutters SF. HF. Core Catchers SF. HF.
Swab Cups Swab Rubbers

REMARKS

	FROM	TO
RIG SERVICE	4:00	4:15
DRILLING	4:15	10:15
DROP SURVEY	10:15	10:30
HOOK PIPE & RETREIVE TOOL	10:30	12:00

Lost mud

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date March 5/61

Well No. Wilkinson Rio Knife River 2#

Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From 2685 To 2867 Hole Made 182

Bit No.	8	No. Stds. 42	Length 2535.88
Serial No.	N05646	No. D.C.'s 11	Length 312.07
Bit Size	7 7/8		Length
Bit Type	YT1		Length
Dr. from	2608	Kelly in =	19.05
Dr. to	2867	TOTAL =	2867.00
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
Reamed from		Pipe Size 4 1/2	Trip Time
Reamed to		C.S.G. Set at 201	Serv. Time
Total Bit Footage	259	C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	11 1/2	Pipe in Hole 84 Jts.	Diesel Fuel Meter Reading
Table R.P.M.	150	Pipe on Racks 40 Jts.	Today
Depth	Deviation	Total Pipe on Lease 124 Jts.	Yesterday
Depth	Deviation		Consumption Gals.
Depth	Deviation		
Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
12	11.1	66	58	550	1/2	✓
1	11.1	62	58	600	1/2	✓
2	11.2	64	58	600	1/2	✓
3	11.2	68	58	600	1/2	✓
4	11.3	75	58	600	1/2	✓
5	11.3	77	58	600	1/2	✓
6	11.3	70	58	600	1/2	✓
7	11.5	78	58	600	1/2	✓

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
4.2	2/32	13.0
		13.0

Mud Added Sacks
Chemicals Added Lbs. 50# CAUSTIC
50# SPERESENE

CREW	
Driller	R. KRISCOE
Derrickman	J. GLITTING
Cat Headman	R. GRAI
Rotary Helper	T. NYHUS
Rotary Helper	
Fireman	H. KLEM
Leaseman	

MATERIALS CHARGED TO OPERATOR: Core Bit — Serial; Reaming Bit — Serial; Core Cutters SF. HF. — Core Catchers SF. HF.; Swab Cups — Swab Rubbers

REMARKS	FROM	TO
Rig Service	12:00	12:15
Drilling	12:15	5:00

Drilled From 2867 To 2945 Hole Made 78

Bit No.	8	9	No. Stds. 43 — Length 2596.47
Serial No.	N05646	905614	No. D.C.'s 11 — Length 312.07
Bit Size	7 7/8	7 7/8	Length
Bit Type	YT1	YT	Length
Dr. from	2608	2887	Kelly in = 36.46
Dr. to	2887	2945	TOTAL = 2945.00
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
Reamed from			Pipe Size 4 1/2 — Trip Time
Reamed to			C.S.G. Set at 201 — Serv. Time
Total Bit Footage	279	58	C.S.G. Size 8 5/8 — Rep. Time
Bit Hrs.	13	3 3/4	Pipe in Hole 86 Jts. — REMARKS:
Table R.P.M.	150	150	Pipe on Racks 38 Jts. — CHECK B.O.P.S
Depth 2887	Deviation 1 1/2°		Total Pipe on Lease 124 Jts. — OPEN HOLE
Depth	Deviation		O.K.
Depth	Deviation		
Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
8	11.5	68	58	750	2/3	✓
9	11.5	70	58	750	2/3	✓
10						
11		TRIP.				
12						
1	11.5	58	58	750	2/3	✓
2	11.3	56	58	700	2/3	✓
3	11.3	56	58	700	2/3	✓

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
~~4.0~~ 4.4	~~2/32~~ 2/32	~~13.0~~ 12.5 ~~13.0~~ 13.0

Mud Added Sacks
Chemicals Added Lbs. MYLOGEL 200# CAUSTIC 100# SPERSENE 100#

CREW	
Driller	W. SEMAK
Derrickman	L. SWEEZEY
Cat Headman	N. BERGSTREISER
Rotary Helper	C. FREDRICKS
Rotary Helper	
Fireman	V. C. OLSEN
Leaseman	J. GERBRANDT

MATERIALS CHARGED TO OPERATOR: Core Bit — Serial; Reaming Bit — Serial; Core Cutters SF. HF. — Core Catchers SF. HF.; Swab Cups — Swab Rubbers

REMARKS	FROM	TO
RIG SERVICE	8:00	8:15
DRILL	8:15	9:45
DROP SURVEY	9:45	10:00
TRIP FOR BIT	10:00	12:15
DRILL	12:15	4:00

Drilled From 2945 To 3016 Hole Made 71

Bit No.	9	No. Stds. 44-S	Length 2687.03
Serial No.	905614	No. D.C.'s 11	Length 312.07
Bit Size	7 7/8		Length
Bit Type	YT		Length
Dr. from	2887	Kelly in =	16.90
Dr. to	3016	TOTAL =	3016.00
Cored from		D.C.O.D. Top 6 1/4	Hrs. On Bottom 7 3/4
Cored to		D.C.I.D. Top 2 7/8	Hrs. Off Bottom 1/4
Reamed from		Pipe Size 4 1/2	Trip Time
Reamed to		C.S.G. Set at 201	Serv. Time 1/4
Total Bit Footage	129	C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	11 1/2	Pipe in Hole 89 Jts.	REMARKS:
Table R.P.M.	150	Pipe on Racks 35 Jts.	
Depth	Deviation	Total Pipe on Lease 124 Jts.	
Depth	Deviation		
Depth	Deviation		
Depth	Deviation		

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
4	11.4	70	58	750	2/3	✓
5	11.4	70	58	750	2/3	✓
6	11.3	64	58	750	2/3	✓
7	11.3	60	58	750	2/3	✓
8	11.3	62	58	750	2/3	✓
9	11.3	57	58	750	2/3	✓
10	11.3	52	58	750	2/3	✓
11	11.2	58	58	750	2/3	✓

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
4.0	2/32	12.5
		12.5

Mud Added Sacks MY-LO-JEL 100# GEL 800#
Chemicals Added Lbs. CAUSTIC 50#
SPERSENE 50#

CREW	
Driller	D. MOLINS
Derrickman	D. ROESTIE
Cat Headman	H. ROESTIE
Rotary Helper	J. ALARY
Rotary Helper	
Fireman	L. TRUSS
Leaseman	

MATERIALS CHARGED TO OPERATOR: Core Bit — Serial; Reaming Bit — Serial; Core Cutters SF. HF. — Core Catchers SF. HF.; Swab Cups — Swab Rubbers

REMARKS	FROM	TO
RIG SERVICE	4:00	4:15
DRILLING	4:15	12:00

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date MARCH 4/61

Well No. WILKINSON ~~Rig~~ KNIFE RIVER ~~Rig~~ No 2

Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From 2194 To 2362 Hole Made 168

Bit No.	7		No. Stds.	33-5	Length 2020.82
Serial No.	005359		No. D.C.'s	11	Length 312.07
Bit Size	7 7/8				Length
Bit Type	YT3				Length
Dr. from	2194		Kelly in =		29.11
Dr. to	2362		TOTAL =		2362.00
Cored from			D.C.O.D. Top	6 1/4	Hrs. On Bottom 6 1/2
Cored to			D.C.I.D. Top	2 7/8	Hrs. Off Bottom 1 1/2
Reamed from			Pipe Size	4 1/2	Trip Time 1 1/4
Reamed to			C.S.G. Set at	201	Serv. Time 1/4
Total Bit Footage	168		C.S.G. Size	8 5/8	Rep. Time
Bit Hrs.	6 1/2		Pipe in Hole	67 Jts.	Diesel Fuel Meter Reading
Table R.P.M.	150		Pipe on Racks	57 Jts.	Today 4' 5"
Depth 2194	Deviation 1/2°		Total Pipe on Lease	124 Jts.	Yesterday
Depth	Deviation				Consumption Gals.
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
12	TRIP					
1						
2	10.5	70	58	600	1/2	✓
3	10.5	70	58	600	1/2	✓
4	10.5	70	58	600	1/2	✓
5	10.6	68	58	600	1/2	✓
6	10.7	63	58	600	1/2	✓
7	10.7	55	58	600	1/2	✓

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4

No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
4.0	2/32	12.5
		13.0

Mud Added Sacks MY-LO-JEL 100#

Chemicals Added Lbs. CAUSTIC 50#

SPERSENE 50#

CREW

Driller D. MOHNS
Derrickman D. BOGSTIE
Cat Headman H. BOGSTIE
Rotary Helper S. ALARY
Rotary Helper
Fireman L. TRUSS
Leaseman

MATERIALS CHARGED TO OPERATOR

Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

	FROM	TO
HOIST, RETREIVE TOTCO & RUN IN W/BIT #7	12:00	1:15
BREAK CIRC & RIG SERVICE	1:15	1:30
DRILLING	1:30	8:00

Drilled From 2362 To 2585 Hole Made 223

Bit No.	7		No. Stds.	37	Length 2332.71
Serial No.	005359		No. D.C.'s	11	Length 312.07
Bit Size	7 7/8				Length
Bit Type	YT3				Length
Dr. from	2194		Kelly in =		40.22
Dr. to	2585		TOTAL =		2585.00
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
Reamed from			Pipe Size	4 1/2	Trip Time
Reamed to			C.S.G. Set at	201	Serv. Time
Total Bit Footage	391		C.S.G. Size	8 5/8	Rep. Time
Bit Hrs.	~~[illegible]~~	14 1/4	Pipe in Hole	74 Jts.	REMARKS:
Table R.P.M.	150		Pipe on Racks	50 Jts.	
Depth	Deviation		Total Pipe on Lease	124 Jts.	
Depth	Deviation				
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
8	10.8	43	58	600	1/2	✓
9	10.8	64	58	600	1/2	✓
10	11.0	70	58	600	1/2	✓
11	10.9	65	58	600	1/2	✓
12	10.9	62	58	600	1/2	✓
1	10.7	60	58	600	1/2	✓
2	10.7	67	58	600	1/2	✓
3	11.0	63	58	600	1/2	✓

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4

No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
		12.5
3.0	2/32	13.0

Mud Added Sacks 35 SKS MY-LO-GEL 5 SKS GEL

Chemicals Added Lbs. 150# SPERISENE

150# CAUSTIC

CREW

Driller R. BRISCOE
Derrickman J. WHITING
Cat Headman R. GRAY
Rotary Helper T. NYHUS
Rotary Helper
Fireman K. KIEM
Leaseman T. GERBRANT

MATERIALS CHARGED TO OPERATOR

Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

	FROM	TO
RIG SERVICE & CHECK BOPS	8:00	8:15
DRILLING	8:15	4:00

Drilled From 2585 To 2685 Hole Made 100

Bit No.	7	8	No. Stds.	39	Length 2353.96
Serial No.	005359	N056246	No. D.C.'s	11	Length 312.07
Bit Size	7 7/8	7 7/8			Length
Bit Type	YT3	YT1			Length
Dr. from	2194	2608	Kelly in =		18.97
Dr. to	2608		TOTAL =		2685.00
Cored from			D.C.O.D. Top	6 1/4	Hrs. On Bottom 5 1/2
Cored to			D.C.I.D. Top	2 7/8	Hrs. Off Bottom 2 1/2
Reamed from			Pipe Size	4 1/2	Trip Time 2
Reamed to			C.S.G. Set at	201	Serv. Time 1/4
Total Bit Footage	414	100	C.S.G. Size	8 5/8	SURVEY Rep. Time 1/4
Bit Hrs.	16 1/4	~~14 3/4~~ 3 1/2	Pipe in Hole	78 Jts.	REMARKS:
Table R.P.M.	150	150	Pipe on Racks	46 Jts.	
Depth 2575	Deviation 1/4°		Total Pipe on Lease	124 Jts.	
Depth	Deviation				
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
4	11.0	68	58	650	1/2	✓
5	11.0	66	58	650	1/2	✓
6	11.0	64	58	650	1/2	✓
7		TRIP				
8						
9	11.0	61	58	675	1/2	✓
10	11.1	63	58	700	1/2	✓
11	11.1	62	58	700	1/2	✓

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4

No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
	2/32	12.5
4.2		12.5
		13.0

Mud Added Sacks MYLOGEL 100#

Chemicals Added Lbs. CAUSTIC 50#

SPERSENE 50#

CREW

Driller W. SEMAR
Derrickman L. SWEEZEY
Cat Headman N. BERGSTREISER
Rotary Helper C. FREDRICKS
Rotary Helper
Fireman V. C. OLSEN
Leaseman

MATERIALS CHARGED TO OPERATOR

Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

	FROM	TO
RIG SERVICE	4:00	4:15
DRILL	4:15	6:15
DROP SURVEY	6:15	6:30
TRIP FOR BIT	6:30	8:30
DRILL	8:30	12:00

DEPT. OF NORTHERN AFFAIRS & NATIONAL RESOURCES
CALGARY, ALBERTA
MAR 8 1961
Conservation Engineer
Northwest Territories & Yukon Territory

GUTHRIE McLAREN DRILLING LTD.

Company Representative: H. Johnston
Tool Pusher

Date MARCH 31/61

Well No. WILKINSON RED KNIFE RIVER #2
Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From 1525 To 1826 Hole Made 301

Bit No.	5		No. Stds.	24.5	Length 1478.48
Serial No.	702058		No. D.C.'s	11	Length 312.07
Bit Size	7 7/8				Length
Bit Type	YT3				Length
Dr. from	1525		Kelly in =		35.45
Dr. to	1826		TOTAL =		1826.00
Cored from			D.C.O.D. Top	6 1/4	Hrs. On Bottom 7
Cored to			D.C.I.D. Top	2 7/8	Hrs. Off Bottom 1
Reamed from			Pipe Size	4 1/2	Trip Time
Reamed to			C.S.G. Set at	201	Serv. Time 1/4
Total Bit Footage	301		C.S.G. Size	8 5/8	Rep. Time
Bit Hrs.	7		Pipe in Hole	49 Jts.	Diesel Fuel Meter Reading
Table R.P.M.	150		Pipe on Racks	75 Jts.	Today 5 FEET
Depth 1620	Deviation 1/8°		Total Pipe on Lease	124 Jts.	Yesterday
Depth	Deviation				Consumption Gals.
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
12	9.8	68	58	550	3/4	✓
1	9.8	68	58	550	3/4	✓
2	9.9	64	58	550	3/4	✓
3	10.0	67	58	550	3/4	✓
4	10.1	58	58	550	3/4	✓
5	10.2	55	58	550	3/4	✓
6	10.3	54	58	600	3/4	✓
7	10.3	55	58	600	3/4	✓

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
3.6	2/32	12.0

Mud Added Sacks: GEL 600#
Chemicals Added Lbs.: CAUSTIC 150#, SPERSENE 150#

CREW	
Driller	D. MOHNS
Derrickman	D. BOESTIE
Cat Headman	H. BOESTIE
Rotary Helper	J. ALARY
Rotary Helper	
Fireman	L. TRUSS
Leaseman	

MATERIALS CHARGED TO OPERATOR	
Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS	FROM	TO
REAM TO BOTTOM	12:00	12:30
RIG SERVICE	12:30	12:45
DRILLING	12:45	2:45
SURVEY	2:45	3:00
DRILLING	3:00	8:00

Drilled From 1826 To 2010 Hole Made 184

Bit No.	5	6	No. Stds.	~~150~~	Length 1660.39
Serial No.	702058	005361	No. D.C.'s	11 27-3	Length 312.07
Bit Size	7 7/8	7 7/8			Length
Bit Type	YT3	YT3			Length
Dr. from	1525	1980	Kelly in =		37.54
Dr. to	1980	2010	TOTAL =		2010.00
Cored from			D.C.O.D. Top	6 1/4	Hrs. On Bottom 6
Cored to			D.C.I.D. Top	2 7/8	Hrs. Off Bottom 2
Reamed from			Pipe Size	4 1/2	Trip Time ~~1 3/4~~ 1 1/2
Reamed to			C.S.G. Set at	201	Serv. Time 1/4
Total Bit Footage	455	30	C.S.G. Size	8 5/8	Rep. Time SURVEY 1/4
Bit Hrs.	12	1	Pipe in Hole	55 Jts.	REMARKS:
Table R.P.M.	150	150	Pipe on Racks	69 Jts.	
Depth 1980	Deviation 1/2		Total Pipe on Lease	124 Jts.	
Depth	Deviation				
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
8	10.1	58	58	550	2/3	✓
9	10.4	64	58	550	2/3	✓
10	10.4	72	55	550	2/3	✓
11	10.4	69	58	550	2/3	✓
12	10.4	65	58	550	2/3	✓
1	10.4	63	58	550	2/3	✓
2	T.R.P.					
3	10.4	57	58	550	2/3	✓

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
		12.5
3.5	2/32	13.0+

Mud Added Sacks: 3 SAXS GEL
Chemicals Added Lbs.: 200# SPERESENE, 200# CAUSTIC

CREW	
Driller	B. BRISCOE
Derrickman	J. WHITTRIC
Cat Headman	R. GRAY
Rotary Helper	T. NYHUS
Rotary Helper	
Fireman	B. ALEM
Leaseman	T. GERRAANT

MATERIALS CHARGED TO OPERATOR	
Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS	FROM	TO
RIG SERVICE & CHECK BOPS	8:00	8:15
DRILLING	8:15	1:15
DROP SURVEY	1:15	1:30
TRIP FOR BIT	1:30	3:00
DRILLING	3:00	4:00

Drilled From 2010 To 2194 Hole Made 184

Bit No.	6		No. Stds.	31	Length 1868.40
Serial No.	005361		No. D.C.'s	11	Length 312.07
Bit Size	7 7/8				Length
Bit Type	YT3				Length
Dr. from	1980		Kelly in =		13.53
Dr. to	2194		TOTAL =		2194.00
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
Reamed from			Pipe Size	4 1/2	Trip Time
Reamed to			C.S.G. Set at	201	Serv. Time
Total Bit Footage	214		C.S.G. Size	8 5/8	Rep. Time
Bit Hrs.	8		Pipe in Hole	62 Jts.	REMARKS:
Table R.P.M.	150		Pipe on Racks	62 Jts.	
Depth	Deviation		Total Pipe on Lease	124 Jts.	
Depth	Deviation				
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
4	10.5	54	58	625	1/2	✓
5	10.5	61	58	600	1/2	✓
6	10.5	65	58	600	1/2	✓
7	10.5	63	58	600	1/2	✓
8	10.6	59	58	600	1/2	✓
9	10.6	61	58	600	1/2	✓
10	10.6	62	58	600	1/2	✓
11	10.6	60	58	600	1/2	✓

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
		12.5
4.8	3/32	12.5
		13.0
3.2		13.0

Mud Added Sacks: MyloGEL 200#
Chemicals Added Lbs.: CAUSTIC 100#, SPERSENE 100#

CREW	
Driller	W. SEMAR
Derrickman	L. SWEEZEY
Cat Headman	N. BERGSTREISER
Rotary Helper	C. FREDRICKS
Rotary Helper	
Fireman	V. C. OLSEN
Leaseman	

MATERIALS CHARGED TO OPERATOR	
Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS	FROM	TO
RIG SERVICE	4:00	4:15
DRILL	4:15	11:15
DROP SURVEY	11:15	11:30
HOIST FOR BIT	11:30	12:00

GUTHRIE McLAREN DRILLING LTD.

Company Representative: D. [illegible]
Tool Pusher

Date MARCH 21/61

Well No. WILKINSON REDKNIFE RIVER #2
Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From 1055 To 1215 Hole Made 160

Bit No.	3		No. Stds.	145	Length 874.10
Serial No.	905651		No. D.C.'s	11	Length 312.07
Bit Size	7 7/8				Length
Bit Type	YT				Length
Dr. from	943		Kelly in =		28.83
Dr. to	1215		TOTAL =		1215.00
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 3/4
Reamed from			Pipe Size	4 1/2	Trip Time
Reamed to			C.S.G. Set at	201	Serv. Time 1/4
Total Bit Footage	272		C.S.G. Size	8 5/8	Rep. Time 1/2
Bit Hrs.	15 1/4		Pipe in Hole	29 Jts.	Diesel Fuel Meter Reading
Table R.P.M.	150		Pipe on Racks	95 Jts.	Today 2'8"
Depth	Deviation		Total Pipe on Lease	124 Jts.	Yesterday
Depth	Deviation				Consumption Gals.
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
12	9.6	75	58	400	2/3	—
1	9.6	74	58	400	2/3	✓
2	9.5	72	58	400	2/3	✓
3	9.5	70	58	400	2/3	✓
4	9.5	71	58	400	2/3	✓
5	9.5	65	58	400	2/3	✓
6	9.4	64	58	400	2/3	✓
7	9.5	60	58	400	2/3	

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
		13.0
4.4	2/32	13.0

Mud Added Sacks: MY-LO-JEL 200#
Chemicals Added Lbs.:

CREW
Driller: D. MOHNS
Derrickman: D. ROGSTIE
Cat Headman: H. ROGSTIE
Rotary Helper: J. ALARY
Rotary Helper:
Fireman: L. TRUCS
Leaseman:

MATERIALS CHARGED TO OPERATOR
Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

	FROM	TO
RIG SERVICE	12:00	12:15
DRILLING	12:15	1:15
REPAIR ROTARY CHAIN	1:15	1:45
DRILLING	1:45	8:00

Drilled From 1215 To 1385 Hole Made 170

Bit No.	3	4	No. Stds.	175	Length 1055.75
Serial No.	905651	905617	No. D.C.'s	11	Length 312.07
Bit Size	7 7/8	7 7/8			Length
Bit Type	YT	YT			Length
Dr. from	943	1246	Kelly in =		17.18
Dr. to	1246	1385	TOTAL =		1385.00
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
Reamed from			Pipe Size	4 1/2	Trip Time
Reamed to			C.S.G. Set at	201	Serv. Time
Total Bit Footage	303	170	C.S.G. Size	8 5/8	Rep. Time
Bit Hrs.	16 1/2	4 1/2	Pipe in Hole	Jts.	REMARKS:
Table R.P.M.	150	150	Pipe on Racks	Jts.	CHECKED HOLE
Depth 1246	Deviation 1/2°		Total Pipe on Lease	Jts.	HOLE OK
Depth	Deviation				
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
8	9.6	62	58	400	2/3	✓
9	9.6	60	58	400	2/3	✓
10	TRIP					
11						
12	9.7	70	58	400	2/3	✓
1	9.6	65	58	400	2/3	✓
2	9.8	68	58	400	2/3	✓
3	9.8	73	58	400	2/3	✓

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
		12.5
4.4	2/32	13.0

Mud Added Sacks: 3 SAKS GEL
Chemicals Added Lbs.:

CREW
Driller: R. BRISCOE
Derrickman: J. WHITNEY
Cat Headman: K. GRAY
Rotary Helper: T. NYHUS
Rotary Helper:
Fireman: B. KLEM
Leaseman: J. GRAGRONT

MATERIALS CHARGED TO OPERATOR
Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

	FROM	TO
RIG SERVICE.	8:00	8:15
DRILLING.	8:15	9:30
DROP SURVEY.	9:30	9:45
TRIP FOR BIT.	9:45	10:45
REAM UNDERGAUGED HOLE.	10:45	11:30
DRILLING.	11:30	4:00

Drilled From 1385 To 1525 Hole Made 140

Bit No.	4	5	No. Stds.	19-S	Length 1176.87
Serial No.	905617	702055	No. D.C.'s	11	Length 312.07
Bit Size	7 7/8	7 7/8			Length
Bit Type	YT	YT3			Length
Dr. from	1246	1525	Kelly in =		36.06
Dr. to	1525		TOTAL =		1525.00
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
Reamed from			Pipe Size	4 1/2	Trip Time
Reamed to			C.S.G. Set at	201	Serv. Time
Total Bit Footage	279		C.S.G. Size	8 5/8	Rep. Time
Bit Hrs.	11		Pipe in Hole	39 Jts.	REMARKS:
Table R.P.M.	150		Pipe on Racks	85 Jts.	
Depth	Deviation		Total Pipe on Lease	124 Jts.	
Depth	Deviation				
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
4	9.9	62	58	550		
5	9.9	59	58	550		
6	9.9	57	58	550		
7	9.9	59	58	550		
8	9.9	61	58	550		
9	9.9	60	58	550		
10		TRIP				
11						

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
		12.5
5.8	2/32	12.5
		13.0

Mud Added Sacks: MYLOGEL 200#
Chemicals Added Lbs.: CAUSTIC 100#
SPERSENE 100#

CREW
Driller: W. SEMAK
Derrickman: L. S. WEEZEY
Cat Headman: N. BERGSTREISER
Rotary Helper: G. FREDRICKS
Rotary Helper:
Fireman: V. C. OLSEN
Leaseman:

MATERIALS CHARGED TO OPERATOR
Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

	FROM	TO
RIG SERVICE	4:00	4:15
DRILL	4:15	10:30
HOIST FOR BIT REAM UNDERGAUGE HOLE	10:30	12:00

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date MARCH 1 161

Well No. WILKINSON REDKNIFE RIVER #2

Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From 655 To 860 Hole Made 205

Bit No.	2	No. Stds.	8-5	Length	512.55
Serial No.	807038	No. D.C.'s	11	Length	312.07
Bit Size	7 7/8			Length	
Bit Type	YT			Length	
Dr. from	637	Kelly in =			35.38
Dr. to	860	TOTAL =			860.00
Cored from		D.C.O.D. Top	6 1/4	Hrs. On Bottom	6 3/4
Cored to		D.C.I.D. Top	2 7/8	Hrs. Off Bottom	1 3/4
Reamed from		Pipe Size	4 1/2	Trip Time	
Reamed to		C.S.G. Set at	201	Serv. Time	
Total Bit Footage	223	C.S.G. Size	8 5/8	Rep. Time	1 3/4
Bit Hrs.	7 1/4	Pipe in Hole	17 Jts.	Diesel Fuel Meter Reading	
Table R.P.M.	150	Pipe on Racks	107 Jts.	Today	3'5"
Depth	Deviation	Total Pipe on Lease	124 Jts.	Yesterday	
Depth	Deviation			Consumption	Gals.
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
12						
1						
2	9.3	58	58	350	3/4	
3	9.3	57	58	350	3/4	
4	9.3	62	58	350	3/4	
5	9.4	65	58	350	3/4	
6	9.4	60	58	350	3/4	
7	9.4	60	58	350	3/4	

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
		12.0
4.6		

Mud Added Sacks: GEL 600 #
Chemicals Added Lbs.: CAUSTIC 50 #, SPERSENE 50 #

CREW	
Driller	D. MOHNS
Derrickman	D. BORSTIE
Headman	H. BORSTIE
Rotary Helper	J. ALARY
Rotary Helper	
Fireman	L. TROSS
Leaseman	

MATERIALS CHARGED TO OPERATOR	
Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS	FROM	TO
WORK ON PUMP	12:00	1:15
DRILLING	1:15	2:15
CHANGE BLAND PACKING IN PUMP	2:15	2:45
DRILLING	2:45	8:00

Drilled From 860 To 946 Hole Made 86

Bit No.	2	3	No. Stds.	10	Length 602.10
Serial No.	807038	905615	No. D.C.'s	11	Length 312.07
Bit Size	7 7/8	7 7/8			Length
Bit Type	YT	YT			Length
Dr. from	637	943	Kelly in =		31.83
Dr. to	943	946	TOTAL =		946.00
Cored from			D.C.O.D. Top	6 1/4	Hrs. On Bottom 6 3/4
Cored to			D.C.I.D. Top	2 7/8	Hrs. Off Bottom 1 1/4
Reamed from			Pipe Size	4 1/2	Trip Time 1
Reamed to			C.S.G. Set at	201	Serv. Time Survey 1/4
Total Bit Footage	306	3	C.S.G. Size	8 5/8	Rep. Time
Bit Hrs.	14	1/4	Pipe in Hole	20 Jts.	REMARKS:
Table R.P.M.	150	150	Pipe on Racks	104 Jts.	
Depth 866	Deviation 0°		Total Pipe on Lease	124 Jts.	
Depth	Deviation				
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
8	9.4	65	58	350	3/4	
9	9.4	68	58	350	3/4	
10	9.6	70	58	350	3/4	
11	9.6	77	58	350	3/4	
12	9.6	65	58	350	3/4	
1	9.6	67	58	350	3/4	
2	9.6	65	58	350	3/4	
3						

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
		13.0+
3.8	2/32	13.5

Mud Added Sacks:
Chemicals Added Lbs.: 200# CAUSTIC 200# SPERSENE
8 SACKS MY-LO-GEL

CREW	
Driller	R. BRISCOE
Derrickman	J. WRITING
Cat Headman	K. GRAY
Rotary Helper	T. MYHUS
Rotary Helper	K. KIEM
Fireman	
Leaseman	T. GERBRANT

MATERIALS CHARGED TO OPERATOR	
Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS	FROM	TO
RIG SERVICE & SURVEY	800	815
DRILLING	815	245
TRIP FOR BIT	245	345
DRILLING	345	400

Drilled From ____ To 1055 Hole Made 109

Bit No.	3	No. Stds.	12	Length	723.38
Serial No.	905615	No. D.C.'s	11	Length	312.07
Bit Size	7 7/8			Length	
Bit Type	YT			Length	
Dr. from	943	Kelly in =			19.55
Dr. to	1055	TOTAL =			1055.00
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	
Reamed from		Pipe Size	4 1/2	Trip Time	
Reamed to		C.S.G. Set at	201	Serv. Time	
Total Bit Footage	112	C.S.G. Size	8 5/8	Rep. Time	
Bit Hrs.	8	Pipe in Hole	24 Jts.	REMARKS:	
Table R.P.M.	150	Pipe on Racks	100 Jts.		
Depth	Deviation	Total Pipe on Lease	124 Jts.		
Depth	Deviation				
Depth	Deviation				
Depth	Deviation				

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
4	9.6	60	58	400	2/3	✓
5	9.6	58	58	400	2/3	✓
6	9.6	57	58	400	2/3	✓
7	9.6	55	58	400	2/3	✓
8	9.6	59	58	400	2/3	✓
9	9.6	65	58	400	2/3	✓
10	9.6	68	58	400	2/3	✓
11	9.6	72	58	400	2/3	✓

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
		13.0
4.6	2/32	
4.8		12.5

Mud Added Sacks: GEL 100 #, MYLOGEL 100 #
Chemicals Added Lbs.: CAUSTIC 50 #, SPERSENE 50 #

CREW	
Driller	W. SEMAK
Derrickman	L. SWEEZEY
Cat Headman	N. BERGSTREISER
Rotary Helper	C. FREDRICKS
Rotary Helper	
Fireman	V.C. OLSEN
Leaseman	

MATERIALS CHARGED TO OPERATOR	
Core Bit	Serial
Reaming Bit	Serial
Core Cutters SF. HF.	Core Catchers SF. HF.
Swab Cups	Swab Rubbers

REMARKS	FROM	TO
RIG SERVICE	400	415
DRILLING	415	1100

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date FEB 28/61

Well No. WILKINSON REDKNIFE RIVER #2

Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From ____ To ____ Hole Made ____

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

Diesel Fuel Meter Reading: Today ____ Yesterday ____ Consumption ____ Gals.

Depth ____ Deviation ____
Depth ____ Deviation ____
Depth ____ Deviation ____
Depth ____ Deviation ____

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
12						
1						
2						
3						
4						
5						
6						
7						

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH

Mud Added Sacks
Chemicals Added Lbs.

CREW

Driller D. MOHNS
Derrickman D. ROSTIE
Cat Headman H. ROSTIE
Rotary Helper J. ALARY
Rotary Helper
Fireman L. TRUSS
Leaseman

MATERIALS CHARGED TO OPERATOR

Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

	FROM	TO
W. O. C.	12:00	8:00

Drilled From ____ To 637 Hole Made ____

Bit No.			No. Stds.	Length
Serial No.			No. D.C.'s	Length
Bit Size				Length
Bit Type				Length
Dr. from			Kelly in =	
Dr. to			TOTAL =	
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
Reamed from			Pipe Size 4 1/2	Trip Time
Reamed to			C.S.G. Set at 201	Serv. Time
Total Bit Footage			C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.			Pipe in Hole	Jts.
Table R.P.M.			Pipe on Racks	Jts.
			Total Pipe on Lease	Jts.

REMARKS:

Depth ____ Deviation ____
Depth ____ Deviation ____
Depth ____ Deviation ____
Depth ____ Deviation ____

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
8						
9						
10						
11						
12						
1						
2						
3						

No. 1 Pump Size ____ — Liner Size ____
No. 2 Pump Size ____ — Liner Size ____

Water-Loss	Filter Cake	PH

Mud Added Sacks
Chemicals Added Lbs.

CREW

Driller L. BRISCOE
Derrickman J. WHITING
Cat Headman R. GRAY
Rotary Helper T. NIVHUS
Rotary Helper
Fireman A. WIEM
Leaseman T. CERRANT

MATERIALS CHARGED TO OPERATOR

Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

	FROM	TO
W.O.C		
NIPPLE UP	8:00	12:00
	12:00	4:00

Drilled From 637 To 655 Hole Made 18

Bit No.	2		No. Stds. 5	Length 301.85
Serial No.	807038		No. D.C.'s 11	Length 312.07
Bit Size	7 7/8			Length
Bit Type	VT			Length
Dr. from	637		Kelly in =	41.08
Dr. to	655		TOTAL =	655.00
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
Reamed from			Pipe Size 4 1/2	Trip Time
Reamed to			C.S.G. Set at 201	Serv. Time
Total Bit Footage	18		C.S.G. Size 8 5/8	Rep. Time
Bit Hrs.	1		Pipe in Hole 10	Jts.
Table R.P.M.	150		Pipe on Racks 114	Jts.
			Total Pipe on Lease 124	Jts.

REMARKS:

Depth ____ Deviation ____
Depth ____ Deviation ____
Depth ____ Deviation ____
Depth ____ Deviation ____

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added
4						
5						
6						
7						
8						
9						
10						
11	9.3	40				

No. 1 Pump Size 7 1/4 x 14 — Liner Size 6 3/4
No. 2 Pump Size 5 x 10 — Liner Size 5

Water-Loss	Filter Cake	PH
		13.0

Mud Added Sacks GEL. 300# B.CARB 400#
Chemicals Added Lbs.

CREW

Driller W. SEMAK
Derrickman L. SUFFEZEY
Cat Headman N. BERGSTRESER
Rotary Helper C. FREDRICKS
Rotary Helper
Fireman V. C. OLSEN
Leaseman

MATERIALS CHARGED TO OPERATOR

Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

	FROM	TO
DRILL MOUSE HOLE	4:00	6:30
FINISH NIPPLE UP	6:30	8:30
RUN IN W/BIT PRESSURED UP CASING TO 1000# HELD OK FOR 15 MIN	8:30	
DRILL OUT CEMENT & SHOE		9:15
CLEAN OUT HOLE TO BOTTOM	9:15	10:00
DRILL 7 7/8 HOLE	10:00	10:45
WORK ON PUMP	10:45	11:30
	11:30	12:00
FOUND TOP OF CEMENT AT 196 FEET K.B		

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date FEB 27/61

Well No. WILKINSON REDKNIFE RIVER #2

Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From 296 To 383 Hole Made 87

REAMED FROM 123 TO 203 REAMED 80

Bit No.	2A	1A	No. Stds. 5	Length 30.14
Serial No.	RETIP	RERUN	No. D.C.'s 11	Length 312.07
Bit Size	9"	12 1/4		Length
Bit Type	W1	OSC		Length
Dr. from	123	0	Kelly in =	40.79
Dr. to	383	123	TOTAL =	383.00
Cored from			D.C.O.D. Top 6 1/4	Hrs. On Bottom 2 1/2
Cored to			D.C.I.D. Top 2 7/8	Hrs. Off Bottom 5 1/2
Reamed from		123	Pipe Size 4 1/2	Trip Time 3/4
Reamed to		203	C.S.G. Set at	Serv. Time 1/4
Total Bit Footage	260	203	C.S.G. Size	Rep. Time
Bit Hrs.	7 3/4	10 1/2	Pipe in Hole 1 Jts.	Diesel Fuel Meter Reading
Table R.P.M.	175		Pipe on Racks 123 Jts.	Today 3 FEET
Depth 324	Deviation 1/2°		Total Pipe on Lease 124 Jts.	Yesterday
Depth	Deviation			Consumption Gals.
Depth	Deviation			
Depth	Deviation			

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 x 14	No. 2 Pump Size 5 x 10
12	9.6	50	58	250	1/4	✓	Liner Size 6 3/4	Liner Size 5
1	9.6	50	58	250	1/4	✓	Water-Loss	Filter Cake / PH
2	9.6	52	58	250	1/4	✓	0	
3	9.6	48	58	250	1/4	✓		
4	9.6	52	58	250	1/4	✓		
5	9.6	49	58	250	1/4	✓	Mud Added Sacks GEL 1500#	
6	9.6	47	58	250	1/4	✓	Chemicals Added Lbs. CAUSTIC 100#	
7	9.6	45	58	250	1/4	✓	SPERSENE 150#	

CREW	MATERIALS CHARGED TO OPERATOR	
Driller D. MOHNS	Core Bit	Serial
Derrickman D. BOESTIE	Reaming Bit	Serial
Cat Headman H. BOESTIE	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper J. ALARY	Swab Cups	Swab Rubbers
Rotary Helper		
Fireman L. TROSS		
Leaseman		

REMARKS	FROM	TO
DRILL 9" HOLE	12:00	12:30
RIG SERVICE & SURVEY	12:30	12:45
DRILL 9" HOLE	12:45	2:45
HOIST PIPE & PICK UP 12 1/4 BIT & RUN IN	2:45	3:30
REAMING TO 12 1/4	3:30	8:00

Drilled From 383 To 547 Hole Made 164

Bit No.	1		No. Stds. 3-S	Length 212.43
Serial No.	901557		No. D.C.'s	Length 312.07
Bit Size	7 7/8			Length
Bit Type	YT1			Length
Dr. from	383		Kelly in =	22.50
Dr. to	547		TOTAL =	547.00
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
Reamed from			Pipe Size 4 1/2	Trip Time
Reamed to			C.S.G. Set at	Serv. Time
Total Bit Footage	164		C.S.G. Size	Rep. Time
Bit Hrs.	7		Pipe in Hole 7 Jts.	REMARKS:
Table R.P.M.	150		Pipe on Racks 117 Jts.	
Depth 505	Deviation 1/4°		Total Pipe on Lease 124 Jts.	
Depth	Deviation			
Depth	Deviation			
Depth	Deviation			

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 x 14	No. 2 Pump Size 5 x 10
8							Liner Size 6 3/4	Liner Size 5
9			MUD	OLD			Water-Loss	Filter Cake / PH
10								12.5
11							8.8	2/32 13.0
12	MIX	NEW						
1							Mud Added Sacks 43 SAXS GEL	
2	9.1	50	58	300	2/3	✓	Chemicals Added Lbs. 500# CAUSTIC	
3	9.1	48	58	300	2/3	✓	11 SAXS SPERESENE	

CREW	MATERIALS CHARGED TO OPERATOR	
Driller B. BRISCOE	Core Bit	Serial
Derrickman L. WHITING	Reaming Bit	Serial
Cat Headman B. GRAY	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper T. ALVHUS	Swab Cups	Swab Rubbers
Rotary Helper		
Fireman B. KLEIN		
Leaseman L. CERRANT 12 HRS		

REMARKS	FROM	TO
HOIST 12 1/4 & RUN IN W/ 7 7/8.	8:00	8:45
DRILL AHEAD W/ 7 7/8.	8:45	2:00
SURVEY 1/4° @ 505'	2:00	2:15
DRILLING.	2:15	4:00

Drilled From 547 To 637 Hole Made 90

Bit No.	1		No. Stds. 5	Length 301.85
Serial No.	901557		No. D.C.'s 11	Length 312.07
Bit Size	7 7/8			Length
Bit Type	YT1			Length
Dr. from	383		Kelly in =	23.08
Dr. to	637		TOTAL =	637.00
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
Reamed from			Pipe Size 4 1/2	Trip Time
Reamed to			C.S.G. Set at	Serv. Time
Total Bit Footage	254		C.S.G. Size	Rep. Time
Bit Hrs.	12		Pipe in Hole 10 Jts.	REMARKS:
Table R.P.M.	150		Pipe on Racks 114 Jts.	
Depth	Deviation		Total Pipe on Lease 124 Jts.	
Depth	Deviation			
Depth	Deviation			
Depth	Deviation			

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7 1/4 x 14	No. 2 Pump Size 5 x 10
4	9.0	55	58	300	2/3		Liner Size 6 3/4	Liner Size 5
5	9.0	58	58	300	2/3		Water-Loss	Filter Cake / PH
6	9.0	60	58	300	2/3		9.0	2/32 13.0
7	9.0	65	58	300	2/3			12.5
8	9.1	66	58	300	2/3			
9							Mud Added Sacks GEL 400#	
10							Chemicals Added Lbs. SPERSENE 50#	
11							CAUSTIC 50#	

CREW	MATERIALS CHARGED TO OPERATOR	
Driller W. SEMAK	Core Bit	Serial
Derrickman L. SWEEZEY	Reaming Bit	Serial
Cat Headman N. BERGSTREISER	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper C. FREDRICKS	Swab Cups	Swab Rubbers
Rotary Helper		
Fireman V. C. OLSEN		
Leaseman		

REMARKS	FROM	TO
DRILL	4:00	9:00
CIRC HOLE CLEAN PRIOR TO RUN CASING	9:00	9:30
HOISTERIC UP TO RUN CASING	9:30	10:15
RUN CASING	10:15	11:30
CEMENT CASING	11:30	12:00

RAN 188.07 FT. 8 5/8 24 lb J-55
Casing Cemented by Howco with
100 SAX CONSTRUCTION Cement 2% CaCl 2
SET AT 201.07 K.B.
Job completed 12:00 midnite
12.50 From K.B. To Top Csg Bowl

GUTHRIE McLAREN DRILLING LTD.

Company Representative: G. Robertson
Tool Pusher

Date FEB 26/61

Well No. WILKINSON REDKNIFE RIVER #2
Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From		To		Hole Made		Drilled From	0	To	80	Hole Made	80	Drilled From	80	To	296	Hole Made	216								
Bit No.				No. Stds.	Length	Bit No.	1A			No. Stds.	Length	Bit No.	1A	2A		No. Stds.	Length								
Serial No.				No. D.C.'s	Length	Serial No.	RERUN			No. D.C.'s 2	Length 52.61	Serial No.	RERUN	RETIP		No. D.C.'s 10	Length 282.94								
Bit Size					Length	Bit Size	12¼				Length 2.90	Bit Size	12¼	9			Length								
Bit Type					Length	Bit Type	OSC				Length	Bit Type	OSC	W7			Length								
Dr. from				Kelly in =		Dr. from	0			Kelly in =	24.49	Dr. from	0	123		Kelly in =	13.06								
Dr. to				TOTAL =		Dr. to	80			TOTAL =	80.00	Dr. to	123	296		TOTAL =	296.00								
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 6¼	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 2⅞	Hrs. Off Bottom								
Reamed from				Pipe Size	Trip Time	Reamed from				Pipe Size	Trip Time	Reamed from				Pipe Size 4½	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	80			C.S.G. Size	Rep. Time	Total Bit Footage	123	173		C.S.G. Size	Rep. Time								
Bit Hrs.				Pipe in Hole Jts.	Diesel Fuel Meter Reading	Bit Hrs.	4			Pipe in Hole Jts.	REMARKS:	Bit Hrs.	6	5¼		Pipe in Hole Jts.	REMARKS:								
Table R.P.M.				Pipe on Racks Jts.	Today	Table R.P.M.	V 50			Pipe on Racks Jts.		Table R.P.M.	175	175		Pipe on Racks Jts.									
Depth		Deviation		Total Pipe on Lease Jts.	Yesterday	Depth 70		Deviation 0°		Total Pipe on Lease Jts.		Depth 180		Deviation ½°		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 7¼ x 14	No. 2 Pump Size 5 X 10
12							Liner Size 6¾	Liner Size 5
1							Water-Loss	Filter Cake / PH
2								
3								
4							Mud Added Sacks	
5							Chemicals Added Lbs.	
6								
7								

CREW
Driller D. MOHNS
Derrickman D. ROGSTIE
Cat Headman H. ROGSTIE
Rotary Helper S. ALARY
Rotary Helper
Fireman L. TRUSS 10 HRS.
Leaseman

MATERIALS CHARGED TO OPERATOR
Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

FROM	TO
12:00	8:00

W.O.C. & DIGGING RAT HOLE

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7¼ x 14	No. 2 Pump Size 5 X 10
8							Liner Size 6¾	Liner Size 5
9							Water-Loss / Filter Cake	PH
10								
11								
12								
1							Mud Added Sacks 28 SAXS GEL	
2							Chemicals Added Lbs. 3 SAXS BICARB	
3								

CREW
Driller B. BRISCOE 13 HRS
Derrickman L. WHITING 12 HRS
Cat Headman B. GRAY 14 HRS
Rotary Helper T. NYHUS 11 HRS
Rotary Helper
Fireman B. BLEM 14 HRS
Leaseman T. ZERRAWT

MATERIALS CHARGED TO OPERATOR
Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

FROM	TO
8:00	12:00
12:00	3:00
3:00	3:15
3:15	4:00

W.O.C
DRILLING 12¼ HOLE
SURVEY
DRILLING

SPUD IN 12:00 NOON

Time	Wt.	Vis.	Pump Stroke	Pump Pressure	Pit Gauge	Water Added	No. 1 Pump Size 7¼ x 14	No. 2 Pump Size 5 X 10
4		42	58	250			Liner Size 6¾	Liner Size 5
5		47	58	250			Water-Loss / Filter Cake	PH
6		55	58	250				
7		60	58	250		✓		
8		55	58	250		✓		
9		60	58	250		✓	Mud Added Sacks CEL 1100#	
10							Chemicals Added Lbs.	
11	9.4	75	58	250				

CREW
Driller W. SEMAR
Derrickman L. SWEEZEY
Cat Headman N. BERGSTREISER
Rotary Helper C. FREDRICKS
Rotary Helper
Fireman V. OLSEN
Leaseman

MATERIALS CHARGED TO OPERATOR
Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

FROM	TO
4:00	6:00
6:00	6:30
6:30	8:30
8:30	8:45
8:45	12:00

DRILL 12¼" HOLE
HOIST TO DRILL PILOT HOLE RUN IN
W/ PILOT BIT
DRILL 9" PILOT HOLE
SURVEY
DRILL 9" PILOT HOLE

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date FEB 25/61

Well No. Wilkinson Bear Knife River 2

Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From ____ To ____ Hole Made ____

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

Diesel Fuel Meter Reading
Today
Yesterday
Consumption ____ Gals.

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

CREW

Driller W. SEMAK 16HRS
Derrickman L. SWEETEY 16HRS
Cat Headman N. BERGSTREISER 12 HRS
Rotary Helper G. FREDRICKS 14 HRS
Rotary Helper
Fireman V. C. OLSEN 12 HRS
Leaseman

MATERIALS CHARGED TO OPERATOR

Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

RIGGING UP & STARTED UP BOILER

FROM	TO

Drilled From ____ To ____ Hole Made ____

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

REMARKS:

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

CREW

Driller D. MOHNS 14 HRS
Derrickman D. BOESTIE 14 HRS
Cat Headman H. BOESTIE 14 HRS
Rotary Helper J. BLARY 12 HRS
Rotary Helper
Fireman L. TRUSS 16 HRS
Leaseman J. GERBRANDT

MATERIALS CHARGED TO OPERATOR

Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

RIGGING UP & DIG CONDUCTOR PIPE HOLE

FROM	TO

Drilled From ____ To ____ Hole Made ____

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

REMARKS:

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

CREW

Driller F. BRISCOE 16
Derrickman T. WHITING 16
Cat Headman K. CLAY 16
Rotary Helper T. ARVHOS 16
Rotary Helper
Fireman K. KLEM 16 HRS
Leaseman

MATERIALS CHARGED TO OPERATOR

Core Bit — Serial
Reaming Bit — Serial
Core Cutters SF. HF. — Core Catchers SF. HF.
Swab Cups — Swab Rubbers

REMARKS

FROM	TO
8:00	9:00
9:00	8:00
9:00	12:00

RIG UP
DIG CONDUCTOR PIPE HOLE
& CEMENT SAME
W.O.C.

GUTHRIE McLAREN DRILLING LTD.

Company Representative

Tool Pusher

Date Feb 24/61

Well No. Whitewater Ran Knife River 2F

Lsd. ____ Sec. ____ Twp. ____ Rge. ____ W. ____

Drilled From ____ To ____ Hole Made ____

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

Diesel Fuel Meter Reading

Today

Yesterday

Consumption Gals.

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

CREW		MATERIALS CHARGED TO OPERATOR	
Driller	B. SEMAK	Core Bit	Serial
Derrickman	L. SWEELEY	Reaming Bit	Serial
Cat Headman	N. BERGSTREISER	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	C. FREDRICKS	Swab Cups	Swab Rubbers
Rotary Helper			
Fireman	V.C. OLSEN		
Leaseman			

REMARKS	FROM	TO
Rig up Camp & Rig		

Drilled From ____ To ____ Hole Made ____

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

REMARKS:

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

CREW		MATERIALS CHARGED TO OPERATOR	
Driller	D. MOHNS	Core Bit	Serial
Derrickman	D. BOGSTIE	Reaming Bit	Serial
Cat Headman	H. BOGSTIE	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	J. HLARY	Swab Cups	Swab Rubbers
Rotary Helper			
Fireman	L. TRUSS		
Leaseman	T. GERBRANT		

REMARKS	FROM	TO
Rig up Camp & Rig		

Drilled From ____ To ____ Hole Made ____

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

REMARKS:

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

CREW		MATERIALS CHARGED TO OPERATOR	
Driller	R. BISCOE	Core Bit	Serial
Derrickman	L. WHITING	Reaming Bit	Serial
Cat Headman	K. QUAN	Core Cutters SF. HF.	Core Catchers SF. HF.
Rotary Helper	T. MYHUS	Swab Cups	Swab Rubbers
Rotary Helper			
Fireman	K. KLIM		
Leaseman			

REMARKS	FROM	TO
Rig up Camp & Rig		