

GLACIER BAYSEL - CLIMAX

LOON RIVER NO. 1 H-79

Drilling Authority No.
Date Issued

WELL NAME Glacier-Baysal- Climax Loon River No. 1 N-77

FIELD Wildcat Area: Fort Good Hope

LOCATION: Unit N Section 77 Grid 66-30-128-45

Latitude 66°23'26" N. Longitude 128°58'21" W.

From Established Reference Marker

Rig Release Date: 27-8-60

Status D & A

Information Release Date 27-8-62

CHANGE OF NAME:

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

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION BRANCH

RESOURCES DIVISION

For the period from August 10, 1960

to August 27, 1960

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

Permit No. 1544 . . .

Name of well . ~~Glacier Bay~~ ~~Clinax~~ Loon River No. 1 . . . Lease No. . . .Registered owner ~~Glacier Explorers Limited~~ Drilling Company Big Indian Drilling Company LimitedLocation . ~~66° 22' 24"~~ . . . ~~128° 58' 24"~~ N. Lat. . . . N. Long.

Survey description, if available at bearing 345° along Mackenzie shore line then 175 feet at 45° bearing

Elevation: Ground . 72' . . . Last previous depth . . . 934' . . .

Kelly bushing . 80' . . . Present depth Plugged and abandoned . .

Spudded August 10, 1960 . . . Finished drilling Aug. 24 Rig Released

August 27, 1960 .

Deviations from vertical . . . 4° at 934' . . .

CASING RECORD

Date	Size O.D.	Weight lbs/ft	Grade	Set at feet	Sacks Cement	Top of Cement
1 Aug. 13	6 5/8"	24	J-55	205	50	Surface
2						
3						
4						

TUBING RECORD

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

Status of well on completion of drilling .Flowing sulphur water at 10,000 bbl./day

Producing Zone . . . 945 feet and formation .Lower. Bamparts Limestone

~~Interval~~ Cored intervals . . . 1. 946' - 956'

2. 956' - 965'

3. 965' - 974'

4. 974' - 984'

Interval logged: E-log . 984' - 205' . . . Other logs

R-log

M-log

Velocity log

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

DRILL STEM TESTS

<u>Test No.</u>	<u>Date</u>	<u>Interval Tested</u>	<u>Duration</u>	<u>Results</u>
.....				
.....				
.....				
.....				
.....				
.....				
.....				
.....				
.....				
.....				
.....				
.....				
.....				
.....				

(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

<u>Date</u>	<u>Plug set at</u>	<u>Sacks cement</u>	<u>Method</u>	<u>Top found at</u>
August 27	897'	10	Displacement	897'
August 27	255'	14	Displacement	218'
August 27	218'	12	Displacement	155'
.				
.				

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 ~~xx~~ 945' - 946'
 (to be made)

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

ADDITIONAL DETAILS AND COMMENTS

Sulphur water flow shut off by setting Lynce Production Packer from 902' . .
 to 896.5' August 26, 1960

Steel plate with attached well sign welded on top of surface casing.

.

. J. C. SPROULE AND ASSOCIATES LTD.
 Signed. . . *Norman Soul* Address 1009 Fourth Avenue S.W. Calgary
 per Norman Soul

Date . October 4, 1960.

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

C A N A D A

NORTHERN ADMINISTRATION BRANCH

RESOURCE DIVISION

ABANDON

NOTICE OF INTENTION TO

or

a Well

~~SECRETED - POLY-LINE~~

(Strike out operation which does not apply)

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

abandon the well named ~~Glacier-Baycel-Clinax~~ Leon River No. 1 on Oil

Permit No. 1544.

and Gas

Registered in the name of

Lease No.

... Glacier Explorers Limited

Ground surface . 72. . . . ft.

Depth . 934 . .feet. Elevation above sea level:

Kelly bushing . 80. . . . ft.

Location . $66^{\circ} 28' 26''$ N. Lat. $128^{\circ} 58' 24''$ W. Long.

16,309 feet. (N. of S. boundary) (Permit No. 1544)

(S. of N. boundary) of (Lease No.)

3,700 feet. (W. of E. boundary) of (Permit No. 1544)

(E. of W. boundary) (Lease No.)

Survey description, if available Located 700 feet at bearing 345 degrees along Mackenzie River shore line then 175 feet of bearing 045 degrees from the confluence of the Loon and Mackenzie Rivers

CASING RECORD

[illegible]

OIL, GAS AND WATER

[illegible][illegible]

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 . 945 .feet to 946 .feet From 902 .feet to . 897 .feet with
Flow at surface estimated 200 gal./min. sacks cement.

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

Surface and bottom plugs:

1. from . 897 .feet to . 807 .feet with . 10 .sacks cement.
2. from . 315 .feet to . 218 .feet with . 14 .sacks cement.
3. from . 218 .feet to . 143 .feet with . 12 .sacks cement.

Date of last operation August 28 Total depth . . 984

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

The following logs ~~will be~~ run
have been

. Electrical log

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

Present condition of well in addition to above welded steel plate and well . . .
sign on top of casing and filled in pits

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

Program of operation not included above Ran Lynes packer bottom at 902 and
obtained positive water shut off. Plug No. 1 on top of packer

Responsible agents of permittee or lessee in charge of operation:

At well Norman Soul Postal address Fort Good Hope, N. W. T. . . .
J.C. Sproule and Associates P.O. Box 525, 1009 Fourth Avenue
At registered office . . . Limited . . . Postal address Calgary, Alberta.

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

dated at . -Calgary. . . this . 1st . . . day of . September 19-60 .

Signed by
S. R. L. Harding

This program is approved subject to the following provisions

..... Confirming oral approval to abandon when safe to do so given on
..... 26th August.
.....
.....

..... 2nd September, 1960
..... Date

..... *B. H. Shum*
..... Oil Conservation Engineer

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

C A N A D A

NORTHERN ADMINISTRATION BRANCH

RESOURCES DIVISION

NOTICE OF INTENTION TO BEGIN DRILLING OPERATIONS

THE

Canada

In accordance with Section 57 of the ~~Drill~~ Oil and Gas Regulations, notice is hereby given of our intention to begin drilling a well on Oil and Gas Permit No. . 1544 . registered in the name of Lease No.

CLACER EXPLOSIVES LIMITED

TYPE OF WELL:

Wildcat X

Development

Expected total depth . . 1,500 feet, in the . BEAR ROCK
formation of . LOWER DEVONIAN age.

The well will be located at 66° 28' 21" N. Lat. 128° 58' 20" W. Long.

10,000 feet . . . ~~XXXXXXXXXXXX~~ (Permit No. . . 1546)
 (S. of N. boundary) of ~~XXXXXXXX~~
 3,700 feet . . . ~~XXXXXXXXXXXX~~ of (Permit No. . . 1546)
 (E. of W. boundary) ~~XXXXXXXX~~

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

CONFLUENCE OF LOON RIVER AND MACKENZIE RIVER, N. W. T.

Approximate surface elevation of ²⁰⁰ feet above sea level.

Name of well GLACIER-BAYSEL-CLIMAX Loon River No. 1

Type of drilling rig **ROPARY**

Expected date of commencement . . . **AUGUST 15, 1960**

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

[illegible]

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

..... 800' - 1,500'

..... DRILLING, M.D. AND BLOWOUT PREVENTION EQUIPMENT

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

STRUCTURE TEST PROGRAM

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

..... N. Latitudes

..... W. Longitudes

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

Name and address of drilling contractor BIG INDIAN DRILLING CO. LTD.
513 - 8 Avenue S. W.,
CALGARY, Alberta.
.....

Responsible agents of permittee or lessee in charge of operation:

NORMAN SOUL,
At well c/o J.C. SPROULE & ASSOCIATES Postal address PORT GOOD HOPE, N.W.T.

At registered office J.C. SPROULE & ASSOCIATES Postal address 1009 - 4 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 4th day of AUGUST 19 60

Signed by S.R.L. HARDING, P. Geol.
J.C. SPROULE & ASSOCIATES

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

..... The depth of the surface casing shall not be less than 150 feet and
and it shall, if necessary, be increased to ensure that at least 100 feet are
below bedrock.

..... Reports received by radio on the well's progress shall be telephoned
to this office.

5th August, 1960.
Date

B.H. Shorn
Oil Conservation Engineer.

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



File No.
Drilling Authority No. NA

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT

OIL AND MINERAL DIVISION

WELL-SITE INSPECTION REPORT

FROM: Field Office or Area: Norman Wells Date: 11th July 1971

TO: The Oil Conservation Engineer:

RE: Glacier Bayseel-Climax Loon River No. 1

Location: 66°28'21"N., 128°58'20"W. Status: D & A August 1960

This location was inspected by the undersigned on 11th July 1971

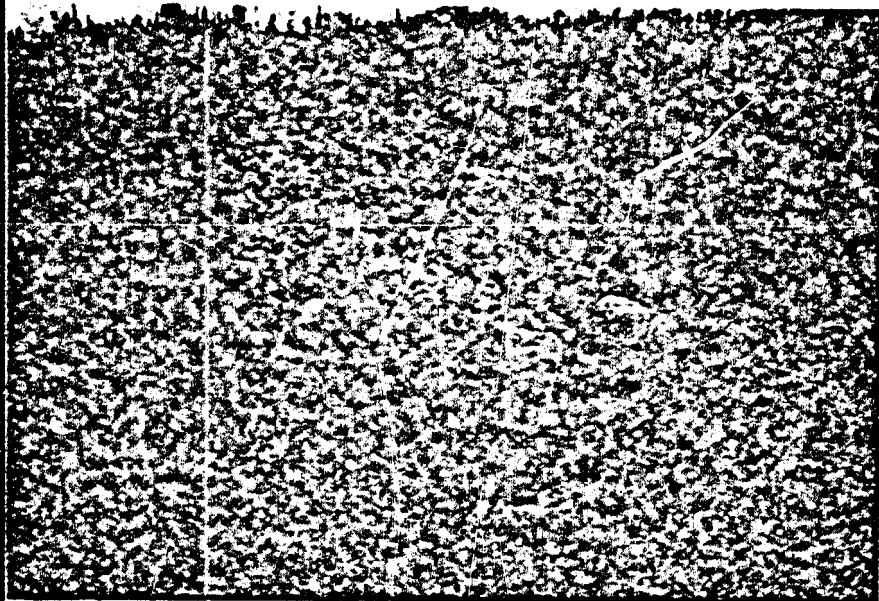
The location is in ~~unsatisfactory~~/unsatisfactory condition. T.D. 984°

The following items require attention:

1. Locate well and provide identification
2. Paint identifier pipe and plate (2' x 4', minimum of 4' above G.L.) fluorescent orange.
3. _____
4. _____
5. _____
6. _____

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

Unable to find physical well.
Bags of mud, lease otherwise clean.



Inspected by M. D. Thomas

Original to Oil Conservation Engineer, Dept of IA & ND, Duplicate to Field Office or Inspecting Engineer. M. D. Thomas
TAND 52-00-14 (0-60) District 2

GEOLOGICAL AND ENGINEERING REPORT
GLACIER BAYSEL CLIMAX LOOK RIVER NO. 1
FORT GOOD HOPE AREA, NORTHWEST TERRITORIES

J. C. SPROULE AND ASSOCIATES LTD.
OIL AND GAS ENGINEERING AND GEOLOGICAL CONSULTANTS

1009 FOURTH AVENUE WEST
CALGARY - ALBERTA

TELEPHONE
AMHERST 9-7951

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY OF PERTINENT WELL DATA	1
DAILY CHRONOLOGICAL WELL REPORT	3
HIT RECORD	6
MUD RECORD	7
CASING TALLY	8
DRILLING TIME RECORD	9
SAMPLE DESCRIPTION	10
CORE DESCRIPTION	12
ENGINEERING AND GEOLOGICAL SUMMARY	13
LOGS	
Electrical Log - Electronic Logging & Velocity Co. Ltd.	In pocket
Visual Well Log	In pocket
WATER ANALYSIS	After p. 13

ILLUSTRATION

Map of P. & N. G. Permit 1544, Fort Good Hope Area, N.W.T., showing location of Glacier Baysel Climax Loon River No. 1	In pocket
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SUMMARY OF PERTINENT WELL DATA

Well Name: Glacier Baysal Climax Loon River No. 1

Location: 66° 28' 21" N. Lat.
128° 58' 20" W. Long.

Elevation: Ground 72'. K. B. 80'.

Total Depth: 984'

Operator: Glacier Explorers Limited

Technical Supervision: J. C. Sproule and Associates Ltd.
Norman Soul, Geologist

Drilling Contractor: Big Indian Drilling Company Limited
Rig 5, Maynew 1500

Spudded: August 10, 1960

Completed: August 27, 1960

Status: Plugged and abandoned

<u>Geological Markers:</u>	<u>Marker</u>	<u>Depth</u> Feet	<u>Elevation</u> Feet
	Base of Gravel	135	-55
	Middle Ramparts	135	-55
	Lower Ramparts	550	-470
	Total Depth	984	-904

<u>Core Summary:</u>	<u>No.</u>	<u>Interval</u> Feet	<u>Recovery</u> Feet
	1	946-956	9.0
	2	956-965	8.0
	3	965-974	3.0
	4	974-984	7.5

<u>Drilling Data:</u>	<u>Hole Size</u> Inches	<u>From</u> Feet	<u>To</u> Feet
	8 5/8	Surface	205
	4 3/4	205	984

Deviation Surveys

984' - 4°(?) taken while well flowing water.

Casing:

Surface

8 joints, 197.41' x 6 5/8" x 24-lb., J-55, new Phoenix casing set at 205' K.B. Cemented with 50 sacks, August 13, 1960.

Summary of Drill

Stem Tests:

None taken.

Abandonment Program:

Lynes Production Packer set from 902' to 896.5' to shut off sulphur water flow at 945'.

Plug No. 1 - 10 sacks cement from 897' to 807'.

Plug No. 2 - 26 sacks cement from 255' to 155'.

Logs:

Electronic Logging & Velocity Co. Ltd. electric log from 984' to 205'.

Two plugs:

(a) 255-155 w/14 SX
top 218'

(b) 218-155 w/12 SXs.
Not felt.

DAILY CHRONOLOGICAL WELL REPORT

Well Name: Glacier Baysel Climax Loon River No. 1

Location: 66° 28' 21" N. Lat.
128° 58' 20" W. Long.

Ending 12 midnight

<u>Date</u>	<u>Total Depth Feet</u>	<u>Progress Feet</u>	<u>Days</u>	<u>Remarks</u>
August 10	140	132	1	Big Indir - Drilling Co. Ltd. Rig No. 5, Mayhew 1500, spudded at 10:00 a.m. Drilled 4 3/4" hole to 90' with Bit No. 1. Drilled from 90' to 135' with Bit No. 2 at 9:15 p.m. Drilling with Bit No. 3.
August 11	186	46	2	Drilled 4 3/4" hole to 186' with Bit No. 3 at 12:30 p.m. Reamed hole from surface to 150' with 8 5/8" bit, Bit No. 4. Tripping to change bit.
August 12	205	19	3	Reamed hole with 8 5/8" bit to 186'. Drilled 8 5/8" hole from 186' to 205' with Bit No. 5 at 4:30 p.m. Made two cleanout trips and circulated one hour. Ran 8 joints of 6 5/8", 24-lb. casing with guide shoe and float collar.
August 13	205	-	4	Circulated casing and mixed 50 sacks cement and one sack CaCl ₂ in pit. Pump plugged with cement while pumping due to calcium chloride causing a "flash set." Cleaned cement out of pump, pit and lines. Mixed 50 sacks cement. Displaced with water, plug bumped to 300 psi. Down at 4:50 p.m. Checked float collar and released pressure after 15 minutes. Standing cemented.
August 14	265	60	5	Headed up and tested blowout preventor for leaks. Drilled out plug, cement and shoe at 6:30 p.m. Mixed mud. Repaired kelly and pull-down shaft. Drilling 4 3/4" hole from 10:00 p.m. with Bit No. 6.

<u>Date</u>	<u>Total Depth Feet</u>	<u>Progress Feet</u>	<u>Days</u>	<u>Remarks</u>
August 15	564	299	6	Drilled to 326' with Bit No. 6 at 3:00 a.m. Drilled to 564' with Bit No. 7 at 8:00 p.m. Pulled out of hole. Replacing pull-down shaft.
August 16	618	54	7	Finished replacing pull-down shaft at 4:00 a.m. Drilled with Bit No. 8 to 601' at 4:15 p.m. Drilling with Bit No. 9.
August 17	667	49	8	Drilled to 628' with Bit No. 9 at 4:00 a.m. Drilled to 645' with Bit No. 10 at 1:15 p.m. Repaired pump 2 1/2 hours. Repaired kelly hose 1 1/4 hours. Drilling with Bit No. 11.
August 18	752	85	9	Drilled to 673' with Bit No. 11 at 2:30 a.m. Drilling with Bit No. 12.
August 19	863	111	10	Drilled to 755' with Bit No. 12 at 12:30 p.m. Repaired motors 2 3/4 hours. Drilled to 863' with Bit No. 13 at 11:15 p.m. Tripping.
August 20	935	72	11	Drilled to 934' with Bit No. 14 at 9:15 p.m. Drilling with Bit No. 15.
August 21	946	11	12	Drilled to 946' with Bit No. 15 at 3:00 a.m. Well started to flow sulphur water estimated at 300 gallons per minute. Pulled out of hole. No mud weighting material on location. Ran in with open-end drill pipe and closed B.O.P. Spotted plug 7 sacks cement with 2% CaCl ₂ . Down at 1:45 p.m. Left well shut in with drill pipe in hole. Standing cemented.
August 22	956	10	13	Opened blowout preventor at 1:30 p.m. Well flowed cement slurry then sulphur water. Pulled pipe out of hole. Bottom five singles plugged with set cement. Cement did not set in open hole. Ran in with core barrel. Gas bothering crew's eyes and lungs. Cut Core No. 1 from 946' to 956' at 6:30 p.m. Core out at 9:00 p.m. Ran in with Bit No. 15 to ream core hole. Reaming. Well flowing.

<u>Date</u>	<u>Total Depth Feet</u>	<u>Progress Feet</u>	<u>Days</u>	<u>Remarks</u>
August 23	974	18	14	Finished reaming at 2:00 a.m. Cut Core No. 2 from 956' to 965' at 7:15 a.m. Gas fumes very bad. Core out at 9:15 a.m. Reamed core hole with Bit No. 15 at 1 p.m. Cut Core No. 3 from 965' to 974' at 4:45 p.m. Core out at 7:15 p.m. Reaming with Bit No. 15. Well flowing.
August 24	984	10	15	Finished reaming, pulled out and ran in with core barrel. Cut Core No. 4 from 974' to 984' at 4:00 a.m. Core out at 9:30 a.m. Operations suspended due to poisonous gas fumes. Waiting to run electrical log. Well flowing.
August 25	984	-	16	Operations suspended. Waiting on Logger. Well flowing.
August 26	984	-	17	Shut down until 3:00 p.m. Ran electrical log to 984' by Electronic Logging & Velocity Co. Ltd. Made up Lynes Production Packer and ran it in hole with drill pipe. Pressured up on drill pipe and set packer from 902' to 896.5'. Packer set at 9:30 p.m. and water flow was shut off. Backed off from packer and pulled out of the hole. Cleaning out pits and mixing mud.
August 27	984	-	18	Finished mixing mud and ran in to top of packer with open end drill pipe. Circulated hole full of mud. Set Plug No. 1, 10 sacks cement, from 897' to 807'. Plug down at 4:00 a.m. Pulled out to 255' and laid down drill pipe. Set Plug No. 2, 14 sacks cement with 2% CaCl_2 with bottom at 255', at 7:00 a.m. Felt plug at 218' at 6:30 p.m. - 63' too low. Set additional plug, 12 sacks cement from 218' to 155'. Welded steel plate and well sign on top of casing. Filled in pits. Tearing out from 8:00 p.m.

BIT RECORD

Well Name: Glacier Bayse! Climax Loon River No. 1

Location: 66° 28' 21" N. Lat.
128° 58' 20" W. Long.

<u>No.</u>	<u>Make</u>	<u>Type</u>	<u>Size</u> Inches	<u>Depth</u>		<u>Footage</u>	<u>Hours</u>
				<u>From</u> Feet	<u>To</u> Feet		
1	Walker-McDonald	Drag R.R.	4 3/4	Surface	90	82	2
2	Varel	V-3	4 3/4	90	135	45	6 1/4
3	Varel	V-3	4 3/4	135	186	51	6
4	Hughes	OWV	8 5/8	Surface	150	Reaming Reamed 36' Drilled 19'	10 1/2
5	Hughes	OWV	8 5/8	150	205		14
6	Varel	V-3	4 3/4	205	326	121	4 1/4
7	Varel	Drag	4 3/4	326	564	238	12 3/4
8	Williams	K-2	4 3/4	564	601	37	10
9	Williams	K-2	4 3/4	601	628	27	10 1/2
10	Williams	K-2	4 3/4	628	645	17	7 1/2
11	Williams	K-1	4 3/4	645	673	28	8 1/2
12	Williams	K-1	4 3/4	673	755	82	19 3/4
13	Williams	K-1	4 3/4	755	863	108	17 1/4
14	Williams	K-1	4 3/4	863	934	71	19 1/4
15	Williams	K-1	4 3/4	934	946	12	3 1/4
16	J.K.Smit-Connors	MMP Core	2 1/2	946	984	38	4 1/2

MUD RECORD

Well Name: Glacier Baysel Climax Loon River No. 1

Location: 66° 28' 21" N. Lat.
128° 58' 20" W. Long.

<u>Date</u>	<u>Depth</u>		<u>Weight</u> Lbs./U.S. Gallon	<u>Viscosity</u> Seconds	<u>Water</u> <u>Loss</u> c.c.	<u>Additives</u>
	<u>From</u> Feet	<u>To</u> Feet				
Aug. 10	Surface	140	-	-	-	Gel 1400 lbs.
Aug. 11	140	186	-	-	-	Gel 600 lbs.
Aug. 12	186	205	-	-	-	-
Aug. 14	205	265	8.9	43	-	Gel 400 lbs. Bicarb 100 lbs.
Aug. 15	265	564	9.2	55	-	Quebracho 20 lbs. Caustic 4 lbs.
Aug. 16	564	618	9.9	45	10.4	Quebracho 20 lbs. Caustic 5 lbs.
Aug. 17	618	667	10.2	45	11.0	-
Aug. 18	667	752	9.8	43	9.5	Gel 300 lbs. Quebracho 15 lbs. Caustic 5 lbs.
Aug. 19	752	863	10.2	46	11.0	-
Aug. 20	863	935	10.05	40	11.8	-
Aug. 21	935	946	Sulphur water - flowing 300 gallons per minute.			
Aug. 22	946	956	Sulphur water.			
Aug. 23	956	974	Sulphur water.			
Aug. 24	974	984	Sulphur water.			
Aug. 26	984	984	Water flow shut off.			Gel 1400 lbs.
Aug. 27	984	984	Running cement plugs			Gel 800 lbs.

CASING TALLY

Well Name: Glacier Bayseal Climax Loon River No. 1

Location: 66° 28' 21" N. Lat.
128° 58' 20" W. Long.

8 joints 6 5/8" x 24 lb., J-55 new Phoenix casing.

<u>No.</u>	<u>Length</u> <u>Feet</u>
1	22.93
2	22.79
3	23.06
4	23.12
5	23.14
6	28.27
7	28.54
8	22.80
	<u>194.65</u>
Float collar	1.42
Guide shoe	1.34
	<u>197.41</u>
Top of Collar below K. B.	<u>8.00</u>
Depth of Shoe below K. B.	<u><u>205.41</u></u>

DRILLING TIME RECORD

Well Name:

Glacier Baysel Climax Loon River No. 1

Location:

66° 28' 21" N. Lat.
128° 58' 20" W. Long.

Drilling time given in minutes per five feet.

Depth
Feet

Time in Minutes

400-450	9, 9, 9, 14, 12, 10, 14, 9, 10, 8.
450-500	13, 13, 13, 12, 18, 22, 15, 17, 21, 27.
500-550	25, 12, 9, 13, 13, 12, 9, 22, 32, 27.
550-600	39, 36, 99*, 49, 63, 57, 70, 76, 113, 129.
600-650	129, 131, 134, 127, 78*, 97, 94, 136, 197*, 74.
650-700	60, 91, 108, 81*, 122, 79, 79, 64, 75, 76.
700-750	83, 102, 59, 52, 98, 99, 62, 69, 75, 39.
750-800	49*, 47, 33, 34, 34, 37, 37, 38, 41, 45.
800-850	45, 45, 48, 48, 51, 45, 56, 58, 54, 47.
850-900	49, 67, 83*, 44, 45, 53, 50, 55, 68, 69.
900-945	100, 78, 107, 102, 118, 117, 110*, 83, 85.

Coring time in minutes per foot.

Depth
Feet

Time in Minutes

945-950	5, 5, 5, 6, 5.
950-960	8, 11, 8, 13, -, -, 5, 6, 7, 7.
960-970	12, 9, 7, 12, 12, 6, 6, 7, 8, 6.
970-980	4, 2, 6, -, 3, 7, 12, 9, 7, 6.
980-984	7, 6, 6, 8.

*Bit change.

SAMPLE DESCRIPTION

Well Name: Glacier Baysel Climax Loon River No. 1

Location: 66° 28' 21" N. Lat.
128° 58' 20" W. Long.

<u>Depth</u> <u>Feet</u>	<u>Description</u>
Surface-135	Outwash consisting of gravel, sand and clay. No permafrost below 30 feet.
<u>MIDDLE DEVONIAN</u>	
<u>Ramparts Formation</u>	
Middle Shale Member	
135-400	Shale, greenish grey to medium grey, calcareous, silty.
400-470	Shale, light to medium grey, calcareous.
470-490	Shale, medium to dark grey, calcareous.
490-500	Shale, dark brownish grey, slightly calcareous to non-calcareous.
500-520	Shale, dark brown to black, bituminous, containing brown fossil resin.
520-550	Shale, dark brown, non-calcareous, pyritic.
Lower Limestone Member	
550-560	Limestone, dark brown, argillaceous, bituminous, with irregular partings of dark brown bituminous shale, slickensided, traces of fossils, slightly pyritic.
560-630	Limestone, brown to buff, dense to finely crystalline, slightly argillaceous to argillaceous, in part slightly siliceous; traces of brown, finely crystalline dolomite at 600'; stylolitic partings.
630-640	Limestone, buff to light buff, and greyish white, dense to crystalline, fossiliferous, reefoidal.
640-650	Limestone, reefoidal, as above; Limestone, dark brown, dense to microcrystalline.
650-700	Limestone, dark brown, as above, slightly pyritic; Limestone, medium grey, dense to microcrystalline, pyritic, fossiliferous.

<u>Depth Feet</u>	<u>Description</u>
700-710	Limestone, grey to light brown, dense to microcrystalline, with partings of shale, greyish green, calcareous.
710-720	Limestone, grey to buff, dense to microcrystalline, fossiliferous.
720-730	Limestone, light to dark brown, dense to cryptocrystalline.
730-740	Limestone, brown, dense, fossiliferous.
740-750	Interbedded limestone as above and shale, greenish grey, calcareous.
750-760	Shale, greenish grey to greyish green, calcareous; Limestone, as above.
760-790	Shale, as above; Minor interbedded limestone, brown and grey, fossiliferous, argillaceous.
790-860	Interbedded shale, greenish grey to greyish green, calcareous, and limestone, greenish grey, argillaceous, dense to microcrystalline to fossiliferous-fragmental.
860-870	Limestone, greenish grey to greyish brown, dense to fragmental, fossiliferous.
870-890	Interbedded limestone, grey to greenish grey, dense to fragmental, argillaceous and silty, fossiliferous, pyritic, and shale, greyish green, calcareous.
890-900	Interbedded limestone, greyish brown, fragmental, fossiliferous, argillaceous, pyritic, and minor shale, greyish green, calcareous.
900-910	Limestone, greyish brown to dark brown, dense to cryptocrystalline, slightly pyritic.
910-930	Limestone, buff to dark brown, mottled, finely crystalline and granular, fossiliferous (ostracods), irregular partings of dark bituminous shale.
930-940	Limestone, buff to dark brown, dense to cryptocrystalline, pyritic, abundant partings of black bituminous shale and stylolitic partings.
940-946	Limestone, light brown to dark brown, dense to cryptocrystalline; Shale, dark grey, hard, non-calcareous; Vugs and fractures in limestone lined with clusters of calcite crystals with intercrystalline pyrobitumen; evidence of oil-staining. Well flowed sulphur water at rate of 300 gallons per minute from 946 feet.

CORE DESCRIPTION

Well Name: Glacier Bayseel Climax Loon River No. 1

Location: 66° 28' 21" N. Lat.
128° 58' 20" W. Long.

<u>Depth</u> Feet	<u>Description</u>
	<u>Core No. 1:</u> 946'-956'. Recovered 9.0'.
946-955	Limestone, brown, dense to microcrystalline, argillaceous, interbedded with limestone, grey to greyish brown and buff, dense; numerous stylolitic partings.
	<u>Core No. 2:</u> 956'-965'. Recovered 8.0'.
956-965	Interbedded limestone, brown, buff and minor grey, dense, with stylolitic partings and few irregular partings of soft, green shale.
	<u>Core No. 3:</u> 965'-974'. Recovered 3.0'
965-974	Limestone, dark brown, dense.
	<u>Core No. 4:</u> 974'-984'. Recovered 7.5'.
974-984	Limestone, brown to buff, dense, with stylolitic partings.

ENGINEERING AND GEOLOGICAL SUMMARY

Well Name: Glacier Baysel Climax Loon River No. 1

Location: 66° 28' 21" N. Lat.
128° 58' 20" W. Long.

Glacier Baysel Climax Loon River No. 1 was the first well drilled in the structure test program undertaken on Permits held in the name of Glacier Explorers Limited in the Fort Good Hope area, Northwest Territories. The well site is 700 feet north of the confluence of the Loon and Mackenzie Rivers and about 20 feet above river level.

The well penetrated 135 feet of outwash gravel, sand and clay, and 6 5/8-inch casing was set and cemented at 205 feet in the Middle Shale member (Hare Indian formation) of the Ramparts formation of Middle Devonian age. The top of the Lower Limestone member of the Ramparts formation was encountered at a depth of 550 feet. The upper 200 feet of the Lower Limestone member consists of brown and grey limestones with one small reef development noted between 630 and 650 feet. The underlying 100 feet is essentially green calcareous shale with minor thin interbedded fossiliferous limestone bands down to 860 feet. From 860 to 900 feet the strata consist of interbedded limestones and shales which overlie a dense brown limestone member from 900 feet to total depth of 984 feet.

At 946 feet a strong flow of sulphur water estimated to be in excess of 10,000 barrels per day was encountered. Four cores were taken below this depth but as no porosity was observed in the cores, it is concluded that the water flow is coming from a fractured zone. The well was logged while still flowing sulphur water as no mud weighting material was available with which to kill the well. The water flow was finally shut off by setting a Lynes Inflatable Packer at 902 feet and the well was abandoned in accordance with Government regulations.

Norman Soul
Norman Soul, P. Geol.

1009 Fourth Avenue S. W.,
Calgary, Alberta,
October 20, 1960.

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

Edmonton

Fort St. John

Calgary

WATER ANALYSIS REPORT

Field Fort Good Hope Area, Northwest Territories. Well No. Glacier Bayseal Climax Loon River #1

Operator J.C. Sproule & Associates

Date Received October 20, 1960

Formation

Depths

Other pertinent data Location: 66° 28' 21" N. Lat., 128° 58' 20" W. Long..

Water flowing from depth of 946 feet.

Date October 26, 1960 Lab. No. C 3341

PARTS PER MILLION (MILLIGRAMS PER LITER)

Na + K	Ca	Mg	Fe	SO ₄	Cl	CO ₃	HCO ₃	OH	H ₂ S
4,309	306	396		18	7,500		1,425		Present

MILLIGRAM EQUIVALENTS

187.42	15.27	32.55		0.37	211.50		23.37		
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MILLIGRAM EQUIVALENTS IN PERCENT

39.84	3.25	6.91		0.08	44.95		4.97		
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Total Solids in Parts per Million

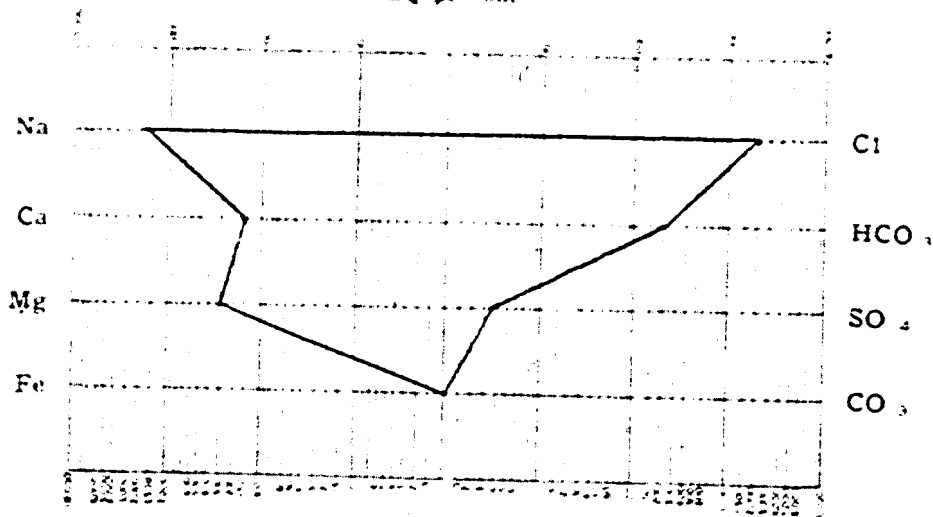
By evaporation	13,310
After ignition	9,070
Calculated	13,231
Specific Gravity	1.011
Observed pH	7.3
Resistivity	0.657 ohm meters @ 68° F.

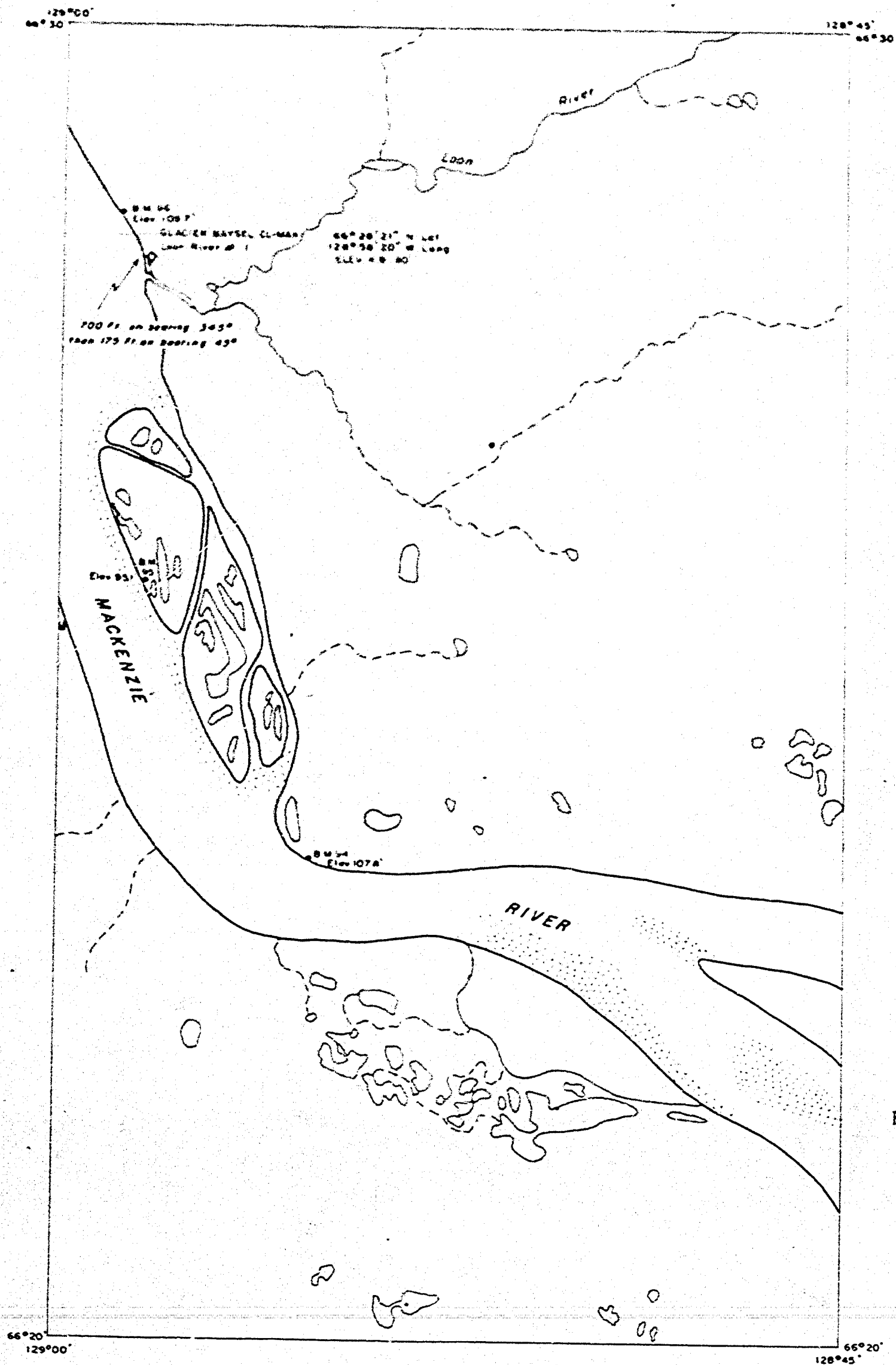
Properties of Reaction in Percent

Primary salinity	79.68
Secondary salinity	10.38
Primary alkalinity	---
Secondary alkalinity	9.94
Chloride salinity	99.82
Sulfate salinity	0.18

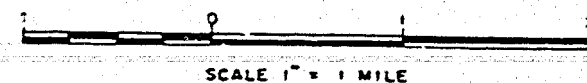
Remarks and conclusions

Milligram Equivalents multiplied by 10 on the graph.
LOGARITHMIC PATTERN
MEQ per unit

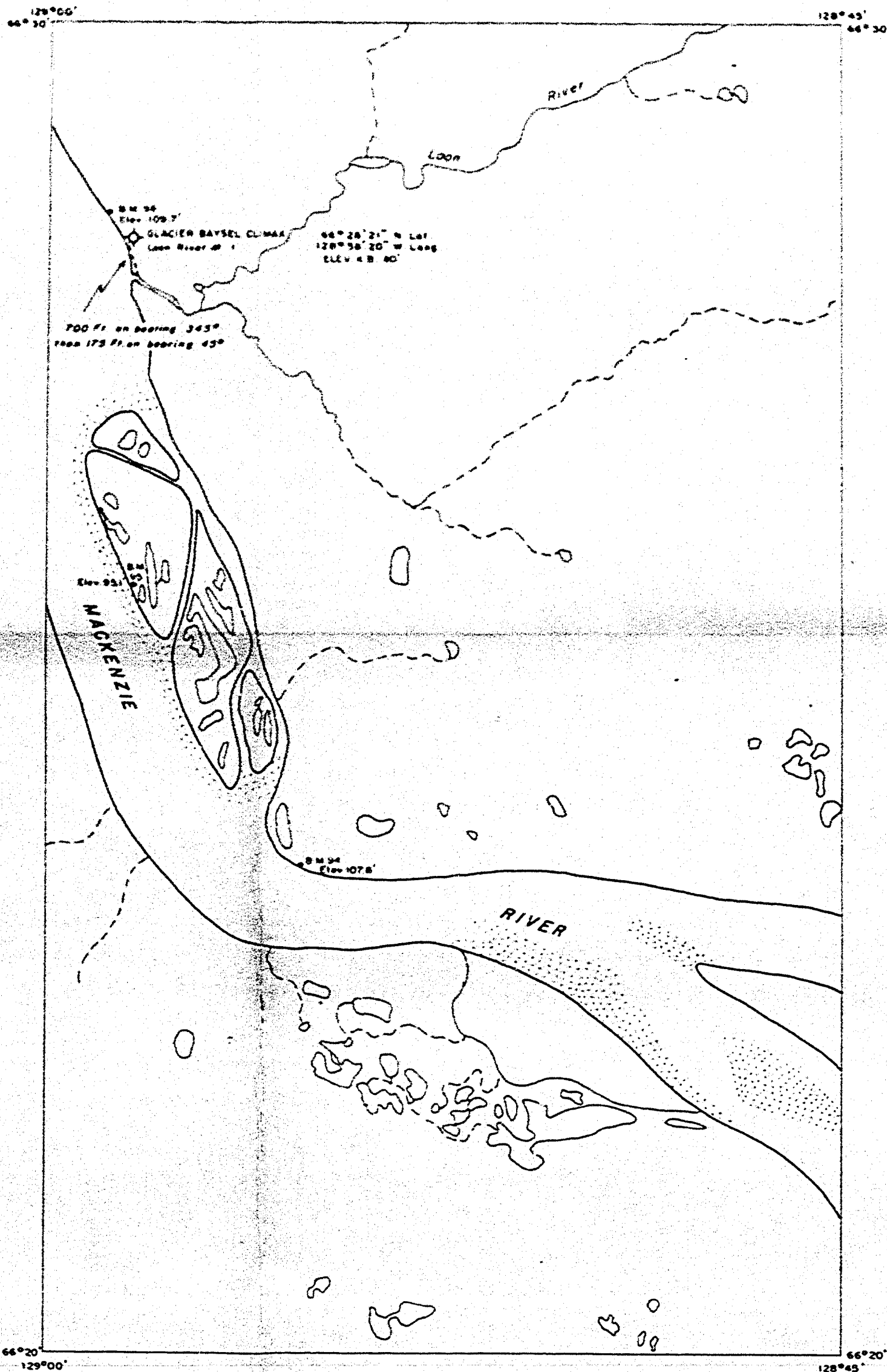




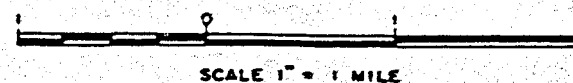
P.B.N.G. PERMIT 1544
 FORT GOOD HOPE AREA, N.W.T.
 SHOWING LOCATION OF
GLACIER BAYSEL CLIMAX
Loon River #1



I certify that this plan is correct
Norman Soul
 Calgary, Nov. 16, 1960. N.Soul, P.Geol.



P.B.N.G. PERMIT 1544
 FORT GOOD HOPE AREA, N.W.T.
 SHOWING LOCATION OF
GLACIER BAYSEL CLIMAX
Loon River #1



COMPANY

J. C. Spruill & Associates

DAILY REPORT

DATE

Aug 28/60

BOARD COPY

(TO BE SENT TO BOARD
FIELD OFFICE)

CONTRACTOR

Big Indian

RIG No. 5

Licensed Well Name & Location

Blasier Bayou, Clay County, La.

K. B. Elev.

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.																												
	Start of Tour		Hole Made This Tour				End of Tour		Start of Tour		Hole Made This Tour				End of Tour		Start of Tour		Hole Made This Tour				End of Tour																						
DEPTH																																													
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom																						
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.																					
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.								Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.								Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.													
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind								Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind								Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind										
CORING	Time	Interval		Ft. Cut		Ft. Rec'd		Type								Time	Interval		Ft. Cut		Ft. Rec'd		Type								Time	Interval		Ft. Cut		Ft. Rec'd		Type							
SURVEY	Depth	Degrees Off		Depth		Degrees Off									Depth	Degrees Off		Depth		Degrees Off									Depth	Degrees Off		Depth		Degrees Off											
CASING & CEMENTING DETAILS	Size	Amount		Set at K.B.		Wt./Ft.									New/Used	Grade	Cubic Feet of Mix (Dry Volume)		Type of Cementing Material		ADDITIVES Including Ratio or Percentage									Slurry Weight Lb./Gal.															
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type								Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type								Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type													
ACIDIZING or FRACING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.								Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.								Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.													
FORMATION TESTS	No.	Interval Tested		to									No.	Interval Tested		to									No.	Interval Tested		to																	
	Valve Open	min.		Shut in		mins.									Valve Open	min.		Shut in		mins.									Valve Open	min.		Shut in		mins.											
	Gas to Surface	min.		@		Mcf/d Max.									Gas to Surface	min.		@		Mcf/d Max.									Gas to Surface	min.		@		Mcf/d Max.											
	Oil to Surface	min.		@		Bbl/d Max.									Oil to Surface	min.		@		Bbl/d Max.									Oil to Surface	min.		@		Bbl/d Max.											
	Recovery:	ft.													Recovery:	ft.													Recovery:	ft.															
		ft.														ft.														ft.															
		ft.														ft.														ft.															
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time								No.	Interval	Cement	Additive	Plug Down	Felt At	Time								No.	Interval	Cement	Additive	Plug Down	Felt At	Time										
LOGS	Type	Int.														Type	Int.														Type	Int.													
REMARKS	Load on pump range to move to 4th level. (Blair) left from River at 8:30 P.M.																																												
Operator	Driller							Operator							Driller							Operator							Driller																

COMPANY J.C. Smalley & Associates

DAILY REPORT

CONTRACTOR Big Indian Ridge

RIG No. 5

Licensed Well Name & Location: GLACIER BASIN CLIMAX LEON RIVER #

DATE Aug 27/60

BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)

K. B. Elev

RIG No. 3										Licensed Well Name & Location. GACIERA BAYSEL CLIMAX LEON RIVER #1										K. B. Elev.									
FIRST TOUR										SECOND TOUR										THIRD TOUR									
12:00 p.m. — 8:00 a.m.										8:00 a.m. — 4:00 p.m.										4:00 p.m. — 12:00 p.m.									
Start of Tour										Start of Tour										Start of Tour									
Hole Made This Tour										Hole Made This Tour										Hole Made This Tour									
End of Tour										End of Tour										End of Tour									
DEPTH										DEPTH										DEPTH									
TIME										TIME										TIME									
On Bottom										On Bottom										On Bottom									
Off Bottom										Off Bottom										Off Bottom									
On Bottom										On Bottom										On Bottom									
Off Bottom										Off Bottom										Off Bottom									
B.T. RECORD										B.T. RECORD										B.T. RECORD									
Size										Size										Size									
No.										No.										No.									
Type										Type										Type									
Condition										Condition										Condition									
Wt.										Wt.										Wt.									
R.P.M.										R.P.M.										R.P.M.									
Ft. Drilled										Ft. Drilled										Ft. Drilled									
Bit-hrs.										Bit-hrs.										Bit-hrs.									
DRILL PIPE										DRILL PIPE										DRILL PIPE									
Size										Size										Size									
Stands										Stands										Stands									
Singles										Singles										Singles									
Drill Collar										Drill Collar										Drill Collar									
Kelly										Kelly										Kelly									
Core Bbl.										Core Bbl.										Core Bbl.									
MUD RECORD										MUD RECORD										MUD RECORD									
Time										Time										Time									
Weight										Weight										Weight									
Vis.										Vis.										Vis.									
Gel Str.										Gel Str.										Gel Str.									
pH										pH										pH									
Am't Added										Am't Added										Am't Added									
Kind										Kind										Kind									
CORING										CORING										CORING									
Time										Time										Time									
Interval										Interval										Interval									
Ft. Cut										Ft. Cut										Ft. Cut									
Ft. Rec'd										Ft. Rec'd										Ft. Rec'd									
Type										Type										Type									
SURVEY										SURVEY										SURVEY									
Depth										Depth										Depth									
Degrees Off										Degrees Off										Degrees Off									
Casing & Cementing Details										Casing & Cementing Details										Casing & Cementing Details									
Size										Size										Size									
Amount										Amount										Amount									
Set at K.B.										Set at K.B.										Set at K.B.									
Wt./Ft.										Wt./Ft.										Wt./Ft.									
PERFORATING										PERFORATING										PERFORATING									
Interval										Interval										Interval									
Shot/Ft.										Shot/Ft.										Shot/Ft.									
Type										Type										Type									
ACIDIZING or FLUORINATING										ACIDIZING or FLUORINATING										ACIDIZING or FLUORINATING									
Interval										Interval										Interval									
Amount Gals.										Amount Gals.										Amount Gals.									
Kind										Kind										Kind									
Breakdown Press.										Breakdown Press.										Breakdown Press.									
Final Press.										Final Press.										Final Press.									
Feed Rate Bbls./Min.										Feed Rate Bbls./Min.										Feed Rate Bbls./Min.									
FORMATION TESTS										FORMATION TESTS										FORMATION TESTS									
No.										No.										No.									
Interval Tested										Interval Tested										Interval Tested									
to										to										to									
Valve Open										Valve Open										Valve Open									
min.										min.										min.									
Shut in										Shut in										Shut in									
mins.										mins.										mins.									
Gas to Surface										Gas to Surface										Gas to Surface									
min.										min.										min.									
@										@										@									
Oil to Surface										Oil to Surface										Oil to Surface									
min.										min.										min.									
@										@										@									
Recovery:										Recovery:										Recovery:									
ft.										ft.										ft.									
ft.										ft.										ft.									
ft.										ft.										ft.									
ABANDONMENT PLUGS										ABANDONMENT PLUGS										ABANDONMENT PLUGS									
No.										No.										No.									
Interval										Interval										Interval									
Cement										Cement										Cement									
Additive										Additive										Additive									
Plug Down										Plug Down										Plug Down									
Felt At										Felt At										Felt At									
Time										Time										Time									
LOGS										LOGS										LOGS									
Type										Type										Type									
Int.										Int.										Int.									
REMARKS										REMARKS										REMARKS									
12:00 - 1:00 - MIX MUD										12:00 - 1:00 - MIX MUD										12:00 - 1:00 - MIX MUD									
1:00 - 2:00 - Run in to top of packer with										1:00 - 2:00 - Run in to top of packer with										1:00 - 2:00 - Run in to top of packer with									
chill pipe										chill pipe										chill pipe									
2:00 - 2:30 - Circulate hole full of mud										2:00 - 2:30 - Circulate hole full of mud										2:00 - 2:30 - Circulate hole full of mud									
2:30 - 4:00 - Rig up mix cement plug										2:30 - 4:00 - Rig up mix cement plug										2:30 - 4:00 - Rig up mix cement plug									
4:00 - 5:15 - Pull lead to 255 ft. lay down										4:00 - 5:15 - Pull lead to 255 ft. lay down										4:00 - 5:15 - Pull lead to 255 ft. lay down									
5:15 - 8:00 - Cement & hydrate										5:15 - 8:00 - Cement & hydrate										5:15 - 8:00 - Cement & hydrate									
Operator - J. B. Peters										Operator - J. B. Peters																			

COMPANY J.C. SPROULE AND ASSOCIATES

DAILY REPORT

DATE AUG 26, 1960BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR BIG INDIAN DRIG RIG No. 5 Licensed Well Name & Location GLACIER BASIN CLIMAX LOAN RIVER #1 K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.							
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour			
DEPTH	984		0		984				984		0		984				984		0		984			
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom	
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.		
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added		Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added		Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added		Kind
CORING	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type
SURVEY	Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off			
CASING & CEMENTING DETAILS	Size	Amount		Set at K.B.		Wt./Ft.			Size	Amount		Set at K.B.		Wt./Ft.			Size	Amount		Set at K.B.		Wt./Ft.		
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type		
ACIDIZING or PACING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.		
FORMATION TESTS	No.	Interval Tested		to					No.	Interval Tested		to					No.	Interval Tested		to				
	Valve Open	min.		Shut in		mins.			Valve Open	min.		Shut in		mins.			Valve Open	min.		Shut in		mins.		
	Gas to Surface	min.		@		Mcf/d Max.			Gas to Surface	min.		@		Mcf/d Max.			Gas to Surface	min.		@		Mcf/d Max.		
	Oil to Surface	min.		@		Bbl/d Max.			Oil to Surface	min.		@		Bbl/d Max.			Oil to Surface	min.		@		Bbl/d Max.		
	Recovery:	ft.							Recovery:	ft.							Recovery:	ft.						
		ft.								ft.								ft.						
		ft.								ft.								ft.						
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time	
LOGS	Type	Int.							Type	Int.							Type	Int.						
REMARKS	RIG SHUT DOWN DUE TO GAS FUMES WAITING ON LOGGER								8:00 - 3:00 WAITING ON LOGGER 3:00 - 4:00 LOGGING HOLE								4:00 - 5:00 LOGGING HOLE 5:00 - 6:00 MAKING UP PACKER 6:00 - 8:30 RUNNING IN WITH PACKER 8:30 - 9:30 Pumping up & out packer. LYNES PRODUCT PUMP PACKER SET AT 900 - 896.5 9:30 - 11:00 - Trip out of hole 11:00 - 12:00 - Trip back & clean out pipe. Operator HUMBERE							
	Operator _____ Driller PETERS								Operator _____ Driller HUMBERE								Operator HUMBERE Driller PETERS							

COMPANY J. C. SPROUKE & ASSOCIATES

DAILY REPORT

DATE AUG. 25 1960

BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)

CONTRACTOR BIG INDIAN DRUG RIG No. 5 Licensed Well Name & Location GLACIER BAYSEA CLIMAX LOON RIVER⁴ K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.																																																							
DEPTH	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour																																																			
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom																																																	
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.																																																
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.								Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.								Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.																																								
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind								Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind								Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind																																					
CORING	Time	Interval		Ft. Cut		Ft. Rec'd		Type								Time	Interval		Ft. Cut		Ft. Rec'd		Type								Time	Interval		Ft. Cut		Ft. Rec'd		Type																																		
SURVEY	Depth	Degrees Off		Depth		Degrees Off									Depth	Degrees Off		Depth		Degrees Off									Depth	Degrees Off		Depth		Degrees Off																																						
CASING & CEMENTING DETAILS	Size	Amount		Set at K.B.		Wt./Ft.		New/Used		Grade	Cubic Feet of Mix (Dry Volume)		Type of Cementing Material		ADDITIVES including Ratio or Percentage		Slurry Weight Lb./Gal.																																																							
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type								Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type								Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type																																								
ACIDIZING or FRACING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.								Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.								Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.																																								
FORMATION TESTS	No.	Interval Tested		to									No.	Interval Tested		to									No.	Interval Tested		to																																												
	Valve Open	min.		Shut in		mins.									Valve Open	min.		Shut in		mins.									Valve Open	min.		Shut in		mins.																																						
	Gas to Surface	min.		@				Mcf/d Max.									Gas to Surface	min.		@				Mcf/d Max.									Gas to Surface	min.		@				Mcf/d Max.																																
	Oil to Surface	min.		@				Bbl/d Max.									Oil to Surface	min.		@				Bbl/d Max.									Oil to Surface	min.		@				Bbl/d Max.																																
	Recovery:	ft.															Recovery:	ft.															Recovery:	ft.																																						
		ft.																ft.																ft.																																						
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time								No.	Interval	Cement	Additive	Plug Down	Felt At	Time								No.	Interval	Cement	Additive	Plug Down	Felt At	Time																																					
LOGS	Type	Int.														Type	Int.														Type	Int.																																								
REMARKS	12:00 - 8:00 RIG SHUT DOWN DUE TO GAS FUMES. WAITING ON LOGGER.																								8:00 - 4:00 RIG SHUT DOWN WAITING ON LOGGER																								4:00 - 12:00 RIG SHUT DOWN WAITING ON LOGGER																							

COMPANY J.C. Spraul & Associates

DAILY REPORT

DATE Aug 24/60BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR Big Indian Ridge RIG No. 5 Licensed Well Name & Location Blaine Bayou Clenny from River #1 K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.																			
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour															
DEPTH	974'		10'		984'				984'		0		984'				984'		0		984'															
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom													
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.												
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.														
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind								
CORING	Time	Interval	Ft. Cut		Ft. Rec'd		Type	Time	Interval	Ft. Cut		Ft. Rec'd		Type	Time	Interval	Ft. Cut		Ft. Rec'd		Type	Time	Interval	Ft. Cut		Ft. Rec'd		Type								
SURVEY	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off								
CASING & CEMENTING DETAILS	Size	Amount	Set at K.B.		Wt./Ft.		New/Used	Grade	Cubic Feet of Mix (Dry Volume)	Type of Cementing Material	ADDITIVES Including Ratio or Percentage		Slurry Weight Lb./Gal.																							
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type						
ACIDIZING or FLUORINATING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.						
FORMATION TESTS	No.	Interval Tested	to		Valve Open	min.	Shut in	mins.	No.	Interval Tested	to		Valve Open	min.	Shut in	mins.	No.	Interval Tested	to		Valve Open	min.	Shut in	mins.	No.	Interval Tested	to		Valve Open	min.	Shut in	mins.				
	Gas to Surface		min.		@	Mcf/d Max.		Gas to Surface		min.		@	Mcf/d Max.		Gas to Surface		min.		@	Mcf/d Max.		Gas to Surface		min.		@	Mcf/d Max.		Gas to Surface		min.		@	Mcf/d Max.		
	Oil to Surface		min.		@	Bbl/d Max.		Oil to Surface		min.		@	Bbl/d Max.		Oil to Surface		min.		@	Bbl/d Max.		Oil to Surface		min.		@	Bbl/d Max.		Oil to Surface		min.		@	Bbl/d Max.		
	Recovery:		ft.				Recovery:		ft.				Recovery:		ft.				Recovery:		ft.				Recovery:		ft.				Recovery:		ft.			
	Recovery:		ft.				Recovery:		ft.				Recovery:		ft.				Recovery:		ft.				Recovery:		ft.				Recovery:		ft.			
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	
LOGS	Type	Int.							Type	Int.							Type	Int.																		
REMARKS	12:00 - 1:00 - Circulate								8:00 - 9:30 - Trip out & make core out of barrel								4:00 - 12:00 RIG SHUT DOWN DUE TO GAS FUMES WAITING ON LOGGER																			
	1:00 - 2:00 - Trip out & make core barrel								9:30 - 4:00 - Shut down due to poisonous fumes & wait on loggers																											
	2:00 - 2:45 - Run in with core barrel																																			
	2:45 - 4:00 - Coring																																			
	4:00 - 7:00 - Trip out & make core barrel																																			
	7:00 - 8:00 - Drilling																																			
	Operator _____ Driller <u>Peters</u>								Operator _____ Driller <u>Humbke</u>								Operator <u>HUMBKE</u> Driller <u>PETERS</u>																			

COMPANY J.C. Spruill & Associates

DAILY REPORT

DATE Aug 23/60BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR Big Indian Drilling RIG No. 5 Licensed Well Name & Location Alacres Bayou, Lamar #1 K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.							
	Start of Tour		Hole Made This Tour				End of Tour		Start of Tour		Hole Made This Tour				End of Tour		Start of Tour		Hole Made This Tour				End of Tour	
DEPTH	955'		10				965'		965		2				967		967		7				974	
TIME	On Bottom		Off Bottom				On Bottom		Off Bottom		On Bottom				Off Bottom		On Bottom		Off Bottom				On Bottom	
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.
	core barrel																							
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.		
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	
CORING	Time	Interval	Ft. Cut	Ft. Rec'd	Type				Time	Interval	Ft. Cut	Ft. Rec'd	Type				Time	Interval	Ft. Cut	Ft. Rec'd	Type			
SURVEY	Depth	Degrees Off	Depth	Degrees Off					Depth	Degrees Off	Depth	Degrees Off					Depth	Degrees Off	Depth	Degrees Off				
CASING & CEMENTING DETAILS	Size	Amount	Set at K.B.	Wt./Ft.					Size	Amount	Set at K.B.	Wt./Ft.					Size	Amount	Set at K.B.	Wt./Ft.				
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type		
ACIDIZING OR PACING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.		
FORMATION TESTS	No.	Interval Tested	to	min.	Shut in	mins.			No.	Interval Tested	to	min.	Shut in	mins.			No.	Interval Tested	to	min.	Shut in	mins.		
	Valve Open								Valve Open								Valve Open							
	Gas to Surface	min.	@			Mcf/d Max.			Gas to Surface	min.	@				Mcf/d Max.		Gas to Surface	min.	@					Mcf/d Max.
	Oil to Surface	min.	@			Bbl/d Max.			Oil to Surface	min.	@				Bbl/d Max.		Oil to Surface	min.	@					Bbl/d Max.
	Recovery:	ft.							Recovery:	ft.							Recovery:	ft.						
		ft.								ft.								ft.						
		ft.								ft.								ft.						
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time	
LOGS	Type	Int.							Type	Int.							Type	Int.						
REMARKS	12:00 - 2:00 - Drilling																							
	2:00 - 5:30 - Trip out & run in core barrel & remain in core																							
	5:30 - 7:00 - Coring																							
	7:00 - 8:00 - Trip out of hole																							
	(4 times way back around rig).																							
	Operator											Driller	Peters											
	8:00 - 9:00 Pulled out. 9:00 - 10:00 cleaned out core barrel. 10:00 - 11:00 run in with TRICONE. 11:00 - 1:00 reaming.																							
	1:00 - 2:30 pulled out. 2:30 - 3:45 run in with core barrel. 3:52 - 4:00 coring.																							
	Operator											Driller	HUMBKE											
	4:00 - 5:00 Coring 5:00 - 6:30 Pulled out. 6:30 - 8:00 cleaned out and straightened core barrel.																							
	8:00 - 10:00 - Remain with bit																							
	10:00 - 12:00 - Remain & mix mud.																							
	Operator											Driller	HUMBKE											

COMPANY J. C. SPROUSE & COMPANY

DAILY REPORT

DATE AUG. 22 1960

BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)

CONTRACTOR BIG INDIAN DRILLING RIG No. 5 Licensed Well Name & Location GLACIER BASIN EL CLIMAX LOOK RIVER # 1 K. B. Elev. _____

	FIRST TOUR								SECOND TOUR								THIRD TOUR																																																																																																																															
	12:00 p.m. — 8:00 a.m.								8:00 a.m. — 4:00 p.m.								4:00 p.m. — 12:00 p.m.																																																																																																																															
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour																																																																																																																											
DEPTH	946'		①		946'				946'		①		946'				946'		9		955'																																																																																																																											
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom																																																																																																																									
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.																																																																																																																								
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.								Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.								Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.																																																																																																																
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind								Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind								Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind																																																																																																													
CORING	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type																																																																																																																								
SURVEY	Depth	Degrees Off		Depth		Degrees Off									Depth	Degrees Off		Depth		Degrees Off									Depth	Degrees Off		Depth		Degrees Off																																																																																																														
CASING & CEMENTING DETAILS	Size	Amount		Set at K.B.		Wt./Ft.		New/Used		Grade		Cubic Feet of Mix (Dry Volume)				Type of Cementing Material		ADDITIVES Including Ratio or Percentage				Slurry Weight Lb./Gal.																																																																																																																										
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type								Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type								Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type																																																																																																																
ACIDIZING or FACING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.								Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.								Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.																																																																																																																
FORMATION TESTS	No.	Interval Tested		to									No.	Interval Tested		to									No.	Interval Tested		to																																																																																																																				
	Valve Open	min.		Shut in		mins.									Valve Open	min.		Shut in		mins.									Valve Open	min.		Shut in		mins.																																																																																																														
	Gas to Surface	min.		@		Mcf/d Max.									Gas to Surface	min.		@		Mcf/d Max.									Gas to Surface	min.		@		Mcf/d Max.																																																																																																														
	Oil to Surface	min.		@		Bbl/d Max.									Oil to Surface	min.		@		Bbl/d Max.									Oil to Surface	min.		@		Bbl/d Max.																																																																																																														
	Recovery:	ft.											Recovery:	ft.											Recovery:	ft.																																																																																																																						
		ft.												ft.												ft.																																																																																																																						
		ft.												ft.												ft.																																																																																																																						
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time								No.	Interval	Cement	Additive	Plug Down	Felt At	Time								No.	Interval	Cement	Additive	Plug Down	Felt At	Time																																																																																																													
LOGS	Type	Int.														Type	Int.														Type	Int.																																																																																																																
REMARKS	12.00 - 8:00 W.O.C.																								8.00 - 1.30 - W.O.C.																								4.00 - 6.30 - Run in & out 9' Core																																																																																															
																									1.30 - 4.00 - Trip out & plug ready to run in core barrel.																								6.30 - 8.00 - Trip out & out core.																																																																																															
																									Cement plug didn't hold at all.																								8.00 - 9.00 - Take core out of barrel																																																																																															
																																																	9.00 - 11.30 - Run in & out																																																																																															
																																																	11.30 - 12.00 - Reaming.																																																																																															
	Operator																								Driller PETERS																								Operator																								Driller Humble.																								Operator																								Driller																							

COMPANY J.C. SPROULE & ASSOCIATES

DAILY REPORT

DATE AUG 21 1960BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR BIG INDIAN DRILL RIG No. 5 Licensed Well Name & Location GLACIER BAY SEA CLIMAX LODN RIVER #1 K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.							
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour			
DEPTH	935		10		945				945		0		945											
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom	
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.
	4 3/4	1742	TRILANE				11	3 1/4																
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.		
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added		Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added		Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added		Kind
CORING	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type
SURVEY	Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off			
CASING & CEMENTING DETAILS	Size	Amount		Set at K.B.		Wt./Ft.			New/Used	Grade		Cubic Feet of Mix (Dry Volume)		Type of Cementing Material		ADDITIVES Including Ratio or Percentage		Slurry Weight Lb./Gal.						
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type		
ACIDIZING or FLUORINATING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.		
FORMATION TESTS	No.	Interval Tested		to					No.	Interval Tested		to					No.	Interval Tested		to				
	Valve Open	min.		Shut in		mins.			Valve Open	min.		Shut in		mins.			Valve Open	min.		Shut in		mins.		
	Gas to Surface	min.		@		Mcf/d Max.			Gas to Surface	min.		@		Mcf/d Max.			Gas to Surface	min.		@		Mcf/d Max.		
	Oil to Surface	min.		@		Bbl/d Max.			Oil to Surface	min.		@		Bbl/d Max.			Oil to Surface	min.		@		Bbl/d Max.		
	Recovery:	ft.							Recovery:	ft.							Recovery:	ft.						
		ft.								ft.								ft.						
		ft.								ft.								ft.						
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time	
									1	945-896	Heavy 250cc		1.45pm											
LOGS	Type	Int.							Type	Int.							Type	Int.						
REMARKS	12:00 - 3:00 DRILLING 3:00 - 5:30 WELL FLOWING WATER APPROX 400 PULL OUT AND SHUT IN 9 P.M. 5:30 - 8:00 - WAITING ON ORDERS																							
	8:00 - 10:00 FINISHED PULLING OUT OF HOLE AND THEN RUN IN WITH OPEN RODS. 10:00 - 12:00 PREPARING TO CEMENT 12:00 - 1:45 CEMENTING 1:45 - 4:00 W.O.C.																							
	4:00 - 12:00 W.O.C.																							
Operator	Driller PETERS							Operator	Driller HUMBRKE							Operator	Driller HUMBRKE							

COMPANY J.C.S. PROOLE & ASSOCIATES

DAILY REPORT

DATE AUG 20BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR BIG INDIAN DRILLING RIG No. 5 Licensed Well Name & Location GLACIER BAYSEL CLIMAX MOUNTAIN RIVER #1 K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.																																						
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour																																		
DEPTH	863'		35'		898'				898		23		921				921		14		935'																																		
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom																																
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.		Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.		Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.																													
	4 3/4	1743	TRICONE	NEW			35	6 1/2		4 3/4	1743	TRICONE				58	14		4 3/4	1742	TRICONE	NEW			71	19 1/2																													
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.								Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.																																				
MUD RECORD	Time	Weight	Vis.	Gal. Sp.	pH	Am't Added	Kind								Time	Weight	Vis.	Gal. Sp.	pH	Am't Added	Kind																																		
	3:36	10.35	48	10.5	9.5										12:30	10.0	40	11.5	9																																				
CORING	Time	Interval	Ft. Cut	Ft. Rec'd	Type								Time	Interval	Ft. Cut	Ft. Rec'd	Type																																						
	0																																																						
SURVEY	Depth	Degrees Off	Depth	Degrees Off								Depth	Degrees Off	Depth	Degrees Off																																								
CASING & CEMENTING DETAILS	Size	Amount	Set at K.B.	Wt./Ft.					New/Used	Grade	Cubic Feet of Mix (Dry Volume)				Type of Cementing Material	ADDITIVES Including Ratio or Percentage				Slurry Weight Lb./Gal.																																			
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type								Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type																																				
ACIDIZING OR FLUORINATING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.								Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.																																				
FORMATION TESTS	No.	Interval Tested	min.	Shut in	mins.					No.	Interval Tested	min.	Shut in	mins.					No.	Interval Tested	min.	Shut in	mins.																																
		Gas to Surface	min.	@	Mcf/d Max.						Gas to Surface	min.	@	Mcf/d Max.						Gas to Surface	min.	@	Mcf/d Max.																																
		Oil to Surface	min.	@	Bbl/d Max.						Oil to Surface	min.	@	Bbl/d Max.						Oil to Surface	min.	@	Bbl/d Max.																																
		Recovery:	ft.									Recovery:	ft.									Recovery:	ft.																																
			ft.										ft.										ft.																																
			ft.										ft.										ft.																																
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time								No.	Interval	Cement	Additive	Plug Down	Felt At	Time																																		
LOGS	Type	Int.												Type	Int.												Type	Int.																											
	12:00 - 1:30	TRIPPING												8:00 - 8:30	DRILLING												4:00 - 4:15	DRILLING																											
	1:30 - 8:00	DRILLING												8:30 - 9:05	GREASING												4:15 - 4:45	REPAIR RIG MOTOR																											
														9:05 - 4:00	DRILLING												4:45 - 11:45	TRIPPING TO CHANGE BIT																											
																											11:45 - 12:00	DRILLING																											
REMARKS																																																							
Operator	Driller <u>PETERS</u>											Operator											Driller <u>HUMBRE</u>											Operator <u>HUMBRE</u>											Driller <u>PETERS</u>										

COMPANY JCS PROBLE & ASSOCIATES

DAILY REPORT

DATE AUG 19 1960BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR BIG INDIAN DRILL RIG No. 5 Licensed Well Name & Location GLACIER BAYSEAL CLIMAX LACON RIVER #1 K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.																			
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour															
DEPTH	752		27		779				779		48		827				827		36		863															
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom													
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.												
	4 3/4	1739	TRICONE				91	20	4 3/4	1741	TRICONE					75	10 1/2	4 3/4	1741	TRICONE				108	17 1/2											
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.														
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind								
	7:00	9.9	44					3:30	10.2	46	11	9																								
CORING	Time	Interval	Ft. Cut	Ft. Rec'd	Type	Time	Interval	Ft. Cut	Ft. Rec'd	Type	Time	Interval	Ft. Cut	Ft. Rec'd	Type	Time	Interval	Ft. Cut	Ft. Rec'd	Type	Time	Interval	Ft. Cut	Ft. Rec'd	Type	Time	Interval	Ft. Cut	Ft. Rec'd	Type						
SURVEY	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off	Depth	Degrees Off						
CASING & CEMENTING DETAILS	Size	Amount	Set at K.B.	Wt./Ft.	New/Used	Grade	Cubic Feet of Mix (Dry Volume)	Type of Cementing Material	ADDITIVES Including Ratio or Percentage	Slurry Weight Lb./Gal.	Size	Amount	Set at K.B.	Wt./Ft.	New/Used	Grade	Cubic Feet of Mix (Dry Volume)	Type of Cementing Material	ADDITIVES Including Ratio or Percentage	Slurry Weight Lb./Gal.	Size	Amount	Set at K.B.	Wt./Ft.	New/Used	Grade	Cubic Feet of Mix (Dry Volume)	Type of Cementing Material	ADDITIVES Including Ratio or Percentage	Slurry Weight Lb./Gal.						
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			
ACIDIZING or CING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.
FORMATION TESTS	No.	Interval Tested	to	min.	Shut in	mins.	No.	Interval Tested	to	min.	Shut in	mins.	No.	Interval Tested	to	min.	Shut in	mins.	No.	Interval Tested	to	min.	Shut in	mins.	No.	Interval Tested	to	min.	Shut in	mins.	No.	Interval Tested	to	min.	Shut in	mins.
	Valve Open						Valve Open						Valve Open						Valve Open						Valve Open						Valve Open					
	Gas to Surface	min.	@			Mcf/d Max.	Gas to Surface	min.	@			Mcf/d Max.	Gas to Surface	min.	@			Mcf/d Max.	Gas to Surface	min.	@			Mcf/d Max.	Gas to Surface	min.	@			Mcf/d Max.	Gas to Surface	min.	@			Mcf/d Max.
	Oil to Surface	min.	@			Bbl/d Max.	Oil to Surface	min.	@			Bbl/d Max.	Oil to Surface	min.	@			Bbl/d Max.	Oil to Surface	min.	@			Bbl/d Max.	Oil to Surface	min.	@			Bbl/d Max.	Oil to Surface	min.	@			Bbl/d Max.
	Recovery:	ft.					Recovery:	ft.					Recovery:	ft.					Recovery:	ft.					Recovery:	ft.					Recovery:	ft.				
		ft.						ft.						ft.						ft.						ft.										
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	
LOGS	Type	Int.						Type	Int.						Type	Int.																				
REMARKS	12:00 - 12:30 DRILLING								8:00 - 8:40 DRILLING								4:00 - 11:15 DRILLING																			
	12:30 - 12:45 - SET UP SANDLINE BRAKE								8:40 - 9:40 GREASING								11:15 - 12:00 TRIPPING																			
	12:45 - 2:05 TRIP FOR BIT CH ANGLE																																			
	2:05 - 4:45 - REPAIR MOTOR																																			
	4:45 - 8:00 DRILLING																																			
Operator _____ Driller <u>PETERS</u>								Operator _____ Driller <u>S. HUMBRE</u>								Operator _____ Driller <u>PETERS</u>																				

COMPANY J.C. SPROULE & ASSOCIATES

DAILY REPORT

DATE AUG 18, 1960

BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)

CONTRACTOR BIG INDIAN DRILLING RIG No. 5 Licensed Well Name & Location GLACIER BAYSE L. CLIMAX LOON RIVER #1 K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.													
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour									
DEPTH	667		23		690				690		30		720				720		32		752									
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom							
B.T. RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.						
	4 3/4	6370	TRICONE				26	8 3/4	4 3/4	1739	TRICONE				56	1 1/2	4 3/4	1739	TRICONE				88	19 1/2						
	4 3/4	1739	TRICONE	NEW			17	4 1/4																						
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.								
MUD RECORD	Time	Weight	Vis.	pH	Am't Added	Kind			Time	Weight	Vis.	pH	Am't Added	Kind			Time	Weight	Vis.	pH	Am't Added	Kind								
	6:00	10.3	48	10.4	9				2:00	10.4	46	11.2	9				7:30	10.0	47	13.4	8.5	300	MAGGOSOL							
																	12:00	9.8	43	9.5	10	300 CCL 15" 5" CAUSTIC								
CORING	Time	Interval	Ft. Cut	Ft. Rec'd	Type			Time	Interval	Ft. Cut	Ft. Rec'd	Type			Time	Interval	Ft. Cut	Ft. Rec'd	Type											
SURVEY	Depth	Degrees Off	Depth	Degrees Off					Depth	Degrees Off	Depth	Degrees Off			Depth	Degrees Off	Depth	Degrees Off												
CASING & CEMENTING DETAILS	Size	Amount	Set at K.B.	Wt./Ft.	New/Used	Grade			Size	Amount	Set at K.B.	Wt./Ft.	New/Used	Grade			Size	Amount	Set at K.B.	Wt./Ft.	New/Used	Grade								
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type								
ACIDIZING or CING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.								
FORMATION TESTS	No.	Interval Tested	to	min.	Shut in	mins.			No.	Interval Tested	to	min.	Shut in	mins.			No.	Interval Tested	to	min.	Shut in	mins.								
		Gas to Surface	min.	@	Mcf/d Max.					Gas to Surface	min.	@	Mcf/d Max.					Gas to Surface	min.	@	Mcf/d Max.									
		Oil to Surface	min.	@	Bbl/d Max.					Oil to Surface	min.	@	Bbl/d Max.					Oil to Surface	min.	@	Bbl/d Max.									
		Recovery:	ft.								Recovery:	ft.								Recovery:	ft.									
			ft.									ft.																		
			ft.									ft.																		
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time			No.	Interval	Cement	Additive	Plug Down	Felt At	Time			No.	Interval	Cement	Additive	Plug Down	Felt At	Time					
LOGS	Type	Int.								Type	Int.								Type	Int.										
		12:00 - 2:30 DRILLING									8:00 - 8:20 DRILLING									4:00 - 12:00 DRILLING										
		2:30 - 3:45 - TRIP TO CHANGE BIT									8:20 - 9:00 GREASING																			
		3:45 - 4:00 DRILLING									9:00 - 4:00 DRILLING																			
REMARKS																														
Operator	Driller <u>PETERS</u>						Operator						Driller <u>HUMBRE</u>						Operator <u>HUMBRE</u>						Driller <u>PETERS</u>					

COMPANY J.C. SPROULE & ASSOCIATES

DAILY REPORT

DATE AUG 17 1960

BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)

CONTRACTOR BIG INDIAN DRILLING RIG No. 5 Licensed Well Name & Location GLACIER BAYSEA CLIMAX LODN RIVER #1 K. B. Elev.

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.													
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour									
DEPTH	618		19		637				637		#8		645				645		22		667									
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom							
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.						
	4 3/4	9	TRICONE	FAIR			27	10 1/4	4 3/4	10	TRICONE					8 1/4	4 3/4	4 3/4	11	TRICONE	NEW			22	6 3/4					
	4 3/4	10	TRICONE	NEW			3008	3	4 3/4	11	TRICONE	NEW				2	3 3/4													
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.								
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind							
	6:00	10.1	47	10.8	9				12:30	10.1	45						8:30	10.2	45	11	9									
																	15:00	10.2	45											
CORING	Time	Interval	Ft. Cut		Ft. Rec'd		Type		Time	Interval	Ft. Cut		Ft. Rec'd		Type		Time	Interval	Ft. Cut		Ft. Rec'd		Type							
SURVEY	Depth	Degrees Off	Depth	Degrees Off					Depth	Degrees Off	Depth	Degrees Off					Depth	Degrees Off	Depth	Degrees Off										
CASING & CEMENTING DETAILS	Size	Amount	Set at K.B.		Wt./Ft.		New/Used		Grade	Cubic Feet of Mix (Dry Volume)		Type of Cementing Material		ADDITIVES Including Ratio or Percentage		Slurry Weight Lb./Gal.														
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval		Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval		Shot/Ft.	Type	Interval	Shot/Ft.	Type										
ACIDIZING or FLOCCING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.		Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.		Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.										
FORMATION TESTS	No.	Interval Tested	to		min.		Shut in		mins.		No.	Interval Tested	to		min.		Shut in		mins.		No.	Interval Tested	to		min.		Shut in		mins.	
		Valve Open										Valve Open										Valve Open								
		Gas to Surface	min.		@		Mcf/d Max.					Gas to Surface	min.		@		Mcf/d Max.					Gas to Surface	min.		@		Mcf/d Max.			
		Oil to Surface	min.		@		Bbl/d Max.					Oil to Surface	min.		@		Bbl/d Max.					Oil to Surface	min.		@		Bbl/d Max.			
		Recovery:	ft.									Recovery:	ft.									Recovery:	ft.							
			ft.										ft.										ft.							
			ft.										ft.										ft.							
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time							
LOGS	Type	Int.							Type	Int.							Type	Int.												
		12:00 - 4:00 DRILLING								8:00 - 8:20 DRILLING								4:00 - 5:20 REPAIR MUD PUMP												
		4:00 - 5:00 - TRIPPING								8:20 - 9:00 GREASING								5:20 - 10:15 DRILLING												
		5:00 - 8:00 DRILLING								9:00 - 1:15 DRILLING								10:15 - 11:30 REPAIRING KELLY HOSE												
										1:15 - 2:15 TRIP PUT ON NEW BIT								11:30 - 12:00 DRILLING												
										2:15 - 3:00 DRILLING																				
										3:00 - 4:00 REPAIR MUD PUMP																				
REMARKS																														
Operator	Driller <u>PETERS</u>							Operator	Driller <u>HUMBRE</u>							Operator	Driller <u>PETERS</u>													

COMPANY J.C. SPROULE & ASSOCIATES

DAILY REPORT

DATE Aug 16 1960

BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)

CONTRACTOR BIG INDIAN DRILLING RIG No. 5 Licensed Well Name & Location GLACIER BASIN CLIMAX LEON RIVER #1 K. B. Elev. _____

	FIRST TOUR								SECOND TOUR								THIRD TOUR							
	12:00 p.m. — 8:00 a.m.								8:00 a.m. — 4:00 p.m.								4:00 p.m. — 12:00 p.m.							
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour			
DEPTH	564		16		580				580		20		600				600		18		618			
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom	
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.
	4 3/4	3044	TRI CONE	NEW			16	3	4 3/4	3044	TRI CONE				36	10	4 3/4	3044	TRI CONE				37	10 3/4
																	4 3/4	3045	TRI CONE	NEW			16	6 1/4
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.		
MUD RECORD	Time	Weight	Vis.	Gal. Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gal. Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gal. Str.	pH	Am't Added	Kind	
									11:30	10.2	59	12 cc	8.0				7:10	10.0	49	13 cc	8.0	25 LBS.	200X SENSIS	
																	10:30	9.9	45	10.4	9.5			
CORING	Time	Interval	Ft. Cut	Ft. Rec'd	Type				Time	Interval	Ft. Cut	Ft. Rec'd	Type				Time	Interval	Ft. Cut	Ft. Rec'd	Type			
SURVEY	Depth	Degrees Off	Depth	Degrees Off					Depth	Degrees Off	Depth	Degrees Off					Depth	Degrees Off	Depth	Degrees Off				
CASING & CEMENTING DETAILS	Size	Amount	Set at K.B.	Wt./Ft.					New/Used	Grade	Cubic Feet of Mix (Dry Volume)			Type of Cementing Material	ADDITIVES Including Ratio or Percentage		Slurry Weight Lb./Gal.							
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type		
ACIDIZING or FROTHING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.		
FORMATION TESTS	No.	Interval Tested	to	min.	Shut in	mins.			No.	Interval Tested	to	min.	Shut in	mins.			No.	Interval Tested	to	min.	Shut in	mins.		
	Valve Open								Valve Open								Valve Open							
	Gas to Surface	min.	@			Mcf/d Max.			Gas to Surface	min.	@				Mcf/d Max.		Gas to Surface	min.	@					Mcf/d Max.
	Oil to Surface	min.	@			Bbl/d Max.			Oil to Surface	min.	@				Bbl/d Max.		Oil to Surface	min.	@					Bbl/d Max.
	Recovery:	ft.							Recovery:	ft.							Recovery:	ft.						
		ft.								ft.								ft.						
		ft.								ft.								ft.						
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time	
LOGS	Type	Int.							Type	Int.							Type	Int.						
REMARKS	12:00 - 4:00 - REPLACE PULDOWN SHAFT								8:00 - 9:00 DRILLING								4:00 - 4:45 DRILLING							
	4:00 - 5:00 - RUN IN HOLE								9:00 - 10:00 LEVELLING RIG								4:45 - 5:45 TRIPPING TAPER & NEW BIT							
	5:00 - 8:00 - DRILLING								10:00 - 4:00 DRILLING								5:45 - 12:00 DRILLING							
	Operator: PETERS								Operator: HUMBRE								Operator: HUMBRE							
	Driller								Driller								Driller PETERS							

COMPANY J C SPROULE & ASSOCIATES

DAILY REPORT

DATE AUG 15BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR BIG INDIAN DRILLING RIG No. 5 Licensed Well Name & Location GLACIER BAYSEA CLIMAX LAWN RIVER #1 K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.								
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				
DEPTH	265		95		370				370		165		535				535		29		564				
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	
	4 3/4	6	WICLINE	GOOD			125	6	4 3/4	7	DRAG				205	810	4 3/4	7	DRAG	GOOD			234	14	
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		
	3:00	9.2	55			10" Qx 3" Gels																			
CORING	Time	Interval	Ft. Cut	Ft. Rec'd	Type				Time	Interval	Ft. Cut	Ft. Rec'd	Type				Time	Interval	Ft. Cut	Ft. Rec'd	Type				
SURVEY	Depth	Degrees Off	Depth	Degrees Off	Wt./Ft.	New/Used	Grade		Depth	Degrees Off	Depth	Degrees Off	Wt./Ft.	New/Used	Grade		Depth	Degrees Off	Depth	Degrees Off	Wt./Ft.	New/Used	Grade		
CASING & CEMENTING DETAILS	Size	Amount	Set at K.B.						Size	Amount	Set at K.B.							Size	Amount	Set at K.B.					
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			
ACIDIZING or LACING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			
FORMATION TESTS	No.	Interval Tested	min.	Shut in	mins.				No.	Interval Tested	min.	Shut in	mins.				No.	Interval Tested	min.	Shut in	mins.				
						Mcf/d Max.																			
						Bbl/d Max.																			
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time		
LOGS	Type	Int.							Type	Int.							Type	Int.							
REMARKS	12:00 - 265 DRILLING 265 - 230 - REPAIR PUMP 2:30 - 300 - DRILLING 300 - 500 - TRIPPING FOR BIT CHANGE REAR BACK 500 - 600 - DRILLING 600 - 700 - REPAIR PUMP Operator 700 - 900 - DRILLING Driller PETERS								8:00 - 4:00 DRILLING								4:00 - 8:00 DRILLING 8:00 - 8:45 - TRIP OUT 8:45 - 12:00 - REPLACE PULDOWN SHAFT Operator HUMBRE Driller PETERS								

COMPANY J.C. SPROULE AND ASSOCIATES

DAILY REPORT

DATE AUG 14BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR BIG INDIAN DRILL RIG No. 5 Licensed Well Name & Location GLACIER BAYSEAL CLIMAX LOON RIVER #1 K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.							
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour			
DEPTH	205		0		205				205		0		205				205		60		265			
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom	
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.		
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	
CORING	Time	Interval		Ft. Cut	Ft. Rec'd	Type			Time	Interval		Ft. Cut	Ft. Rec'd	Type			Time	Interval		Ft. Cut	Ft. Rec'd	Type		
SURVEY	Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off			
CASING & CEMENTING DETAILS	Size	Amount		Set at K.B.	Wt./Ft.				New/Used	Grade		Cubic Feet of Mix (Dry Volume)					Type of Cementing Material		ADDITIVES Including Ratio or Percentage		Slurry Weight Lb./Gal.			
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type		
ACIDIZING OR FRACING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.		
FORMATION TESTS	No.	Interval Tested		to					No.	Interval Tested		to					No.	Interval Tested		to				
	Valve Open	min.		Shut in	mins.				Valve Open	min.		Shut in	mins.				Valve Open	min.		Shut in	mins.			
	Gas to Surface	min.	@			Mcf/d Max.			Gas to Surface	min.	@			Mcf/d Max.			Gas to Surface	min.	@			Mcf/d Max.		
	Oil to Surface	min.	@			Bbl/d Max.			Oil to Surface	min.	@			Bbl/d Max.			Oil to Surface	min.	@			Bbl/d Max.		
	Recovery:	ft.							Recovery:	ft.							Recovery:	ft.						
		ft.								ft.								ft.						
		ft.								ft.								ft.						
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time	
LOGS	Type	Int.							Type	Int.							Type	Int.						
REMARKS	12:00 - 8:00 - W.O.C. HEADING UP.							8:00 - 4:00 - W.O.C.							4:00 - 4:30 - Run in to top of plug 4:30 - 5:30 - Pressure up on B.O.P. to 500 PSI 5:30 - 6:30 - Shut out plug & plug 6:30 - 10:00 - Run in - well fully 10:00 - 12:00 - Drilling									
	Operator _____ Driller <u>PETERS</u>							Operator _____ Driller <u>Humbke</u>							Operator _____ Driller <u>Peters</u>									

COMPANY J. C. Sproule & Associates

DAILY REPORT

DATE Aug 13/60BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR Big Indian Drilling Co Ltd RIG No. 5 Licensed Well Name & Location GLACIER BAYSEL CLIMAX LBDN RIVER #1 K. B. Elev.

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.											
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour							
DEPTH	203		0		205				205		0		205				205		0		205							
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom					
BITS RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.				
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.						
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind
CORING	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type				
SURVEY	Depth	Degrees Off		Depth	Degrees Off		Depth	Degrees Off		Depth	Degrees Off		Depth	Degrees Off		Depth	Degrees Off		Depth	Degrees Off		Depth	Degrees Off					
CASING & CEMENTING DETAILS	Size	Amount	Set at K.B.		Wt./Ft.		New/Used	Grade	Cubic Feet of Mix (Dry Volume)	Type of Cementing Material	ADDITIVES Including Ratio or Percentage		Slurry Weight Lb./Gal.		Size	Amount	Set at K.B.		Wt./Ft.		New/Used	Grade	Cubic Feet of Mix (Dry Volume)	Type of Cementing Material	ADDITIVES Including Ratio or Percentage		Slurry Weight Lb./Gal.	
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type				
ACIDIZING or FLUORINATING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.				
FORMATION TESTS	No.	Interval Tested		to		min.	Shut in	mins.	No.	Interval Tested		to		min.	Shut in	mins.	No.	Interval Tested		to		min.	Shut in	mins.				
	Valve Open	min.		@		Mcf/d Max.		Gas to Surface	min.	min.		@		Mcf/d Max.		Gas to Surface	min.	min.		@		Mcf/d Max.						
	Oil to Surface	min.		@		Bbl/d Max.		Oil to Surface	min.	min.		@		Bbl/d Max.		Oil to Surface	min.	min.		@		Bbl/d Max.						
	Recovery:	ft.		ft.		ft.		Recovery:	ft.		ft.		ft.		Recovery:	ft.		ft.		ft.		ft.						
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	No.	Interval	Cement	Additive	Plug Down	Felt At	Time	No.	Interval	Cement	Additive	Plug Down	Felt At	Time
LOGS	Type	Int.							Type	Int.							Type	Int.										
REMARKS	12:00 - 1:00 - Circulate casing & mix up to cement 1:00 - 2:00 - Mixing Cement 2:00 - 8:00 - Pump cemented up & cleaning out lines. 8:00 - 2:30 - Cleaning cement out of lines & pump & pits 2:30 - 5:00 - Mix cement & displace 4:00 - 5:00 - Mix & displace of cement Plug down at 4:50 P.M. 5:00 am displaced with water & released pressure to 300 P.S.I. checked float collar & released pressure after 15 minutes 8:00 - 12:00 - W.O.C																											
Operator	Driller <u>PETERS</u>							Operator	Driller <u>Humble</u>							Operator	Driller <u>PETERS</u>											

COMPANY LC SPRULE AND ASSOCIATES

DAILY REPORT

DATE AUG. 12 1940BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR BIG INDIAN DRUG. RIG No. 5 Licensed Well Name & Location GLACIER BAYSEL CLIMAX LOON RIVER #1 K. B. Elev.

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.											
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour							
DEPTH	150		45 45		195				195		5'		200'				200		3		203							
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom					
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.				
	8 7/8	5	TRICONE	NEW			45	7 1/2	8 7/8	5	O.W.V.				50	13 1/2	8 7/8	5	O.W.V.				53	14				
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.						
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added		Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added		Kind	Time	Weight	Vis.	Gel Str.	pH	Am't Added		Kind				
CORING	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type				
SURVEY	Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off							
CASING & CEMENTING DETAILS	Size	Amount		Set at K.B.		Wt./Ft.			Size	Amount		Set at K.B.		Wt./Ft.			Size	Amount		Set at K.B.		Wt./Ft.						
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type						
ACIDIZING or LACING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.						
FORMATION TESTS	No.	Interval Tested		to					No.	Interval Tested		to					No.	Interval Tested		to								
	Valve Open	min.		Shut in		mins.			Valve Open	min.		Shut in		mins.			Valve Open	min.		Shut in		mins.						
	Gas to Surface	min.		@		Mcf/d Max.			Gas to Surface	min.		@		Mcf/d Max.			Gas to Surface	min.		@		Mcf/d Max.						
	Oil to Surface	min.		@		Bbl/d Max.			Oil to Surface	min.		@		Bbl/d Max.			Oil to Surface	min.		@		Bbl/d Max.						
	Recovery:	ft.							Recovery:	ft.							Recovery:	ft.										
		ft.								ft.								ft.										
		ft.								ft.								ft.										
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time					
LOGS	Type	Int.							Type	Int.							Type	Int.										
REMARKS	12:00 - 12:30 - TRIPPING FOR BIT CHANGE 12:30 - 8:00 DRILLING 8:00 - 10:00 - Pulling 10:00 - 12:00 - High hole - working pipe 12:00 - 1:00 - Repairs to rotary table 1:00 - 1:30 - Pull back to room 1:30 - 2:00 - Repair 3 mud 2:00 - 4:00 - Running & pulling 4:00 - 4:30 - Pulling 4:30 - 6:30 - Pull out screen into circulation hole 6:30 - 7:30 - Circulate 7:30 - 8:30 - Trip & lay down pipe 8:30 - 12:00 - Run casing																											
	Operator							Driller <u>PETERS</u>							Operator							Driller <u>Thurble</u>						
	Operator							Driller <u>PETERS</u>							Operator							Driller <u>PETERS</u>						

COMPANY J.C. SPROULE AND ASSOCIATES

DAILY REPORT

DATE AUG. 11, 1960BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR BIG INDIAN DRILLING RIG No. 5 Licensed Well Name & Location GLACIER BASEL CLIMAX LOON RIVER #1 K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.							
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour			
DEPTH	140'		6		146'				140'		40'		186'				140'		10		150'			
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom	
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.
	4 3/4	3	TRICONE	GOOD			11	3	8 3/4	4	TRICONE	NEW			140	3	8 3/4	4	TRICONE				150	1 1/2
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.		
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind	
						600	ACID GEL																	
CORING	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type
SURVEY	Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off			
CASING & CEMENTING DETAILS	Size	Amount		Set at K.B.		Wt./Ft.			Size	Amount		Set at K.B.		Wt./Ft.			Size	Amount		Set at K.B.		Wt./Ft.		
PERFORATING	Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type			Interval	Shot/Ft.	Type	Interval	Shot/Ft.	Type		
ACIDIZING or ACING	Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.			Interval	Amount Gals.	Kind	Breakdown Press.	Final Press.	Feed Rate Bbls./Min.		
FORMATION TESTS	No.	Interval Tested		to					No.	Interval Tested		to					No.	Interval Tested		to				
	Valve Open	min.		Shut in		mins.			Valve Open	min.		Shut in		mins.			Valve Open	min.		Shut in		mins.		
	Gas to Surface	min.		@		Mcf/d Max.			Gas to Surface	min.		@		Mcf/d Max.			Gas to Surface	min.		@		Mcf/d Max.		
	Oil to Surface	min.		@		Bbl/d Max.			Oil to Surface	min.		@		Bbl/d Max.			Oil to Surface	min.		@		Bbl/d Max.		
	Recovery:	ft.							Recovery:	ft.							Recovery:	ft.						
		ft.								ft.								ft.						
		ft.								ft.								ft.						
ABANDONMENT PLUGS	No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time		No.	Interval	Cement	Additive	Plug Down	Felt At	Time	
LOGS	Type	Int.							Type	Int.							Type	Int.						
REMARKS	12:00-12:30 DRILLING GRAVEL								8:00-8:30 - Trip in hole								4:00-8:30 REAMING TO 8 3/4"							
	12:30-12:45 - MIXING GEL								8:30-12:30 - Drilling 4 3/4" hole to find bedrock contact								11:30-12:00 TRIPPING TO CHANGE BIT							
	12:45-2:00 - DRILLING GRAVEL								find bedrock contact								DRILLING							
	2:00-6:00 - PULL OUT AND REPAIR PUMPS								12:30-1:00 - key down pipe & repair															
	6:00-6:30 - PLUGGED BIT								To ream hole to 8 3/4"															
	6:30-8:00 - CLEANED PITS AND MIXED MUD								1:00-4:00 REAMING TO 8 3/4"															
	Operator _____ Driller <u>PETERS</u>								Operator _____ Driller <u>S. Nembke</u>								Operator <u>Peters</u> Driller <u>PETERS</u>							

COMPANY J.C. Sprule & Associates

DAILY REPORT

DATE Aug 10/60BOARD COPY
(TO BE SENT TO BOARD
FIELD OFFICE)CONTRACTOR Big Indian Drilling RIG No. 5 Licensed Well Name & Location GLACIER BAY SEL CLIMAX LACON RIVER #1 K. B. Elev. _____

	FIRST TOUR 12:00 p.m. — 8:00 a.m.								SECOND TOUR 8:00 a.m. — 4:00 p.m.								THIRD TOUR 4:00 p.m. — 12:00 p.m.																
	Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour				Start of Tour		Hole Made This Tour		End of Tour												
DEPTH									0		95'		95'				95'		75'		140												
TIME	On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom		On Bottom		Off Bottom										
BIT RECORD	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.	Size	No.	Type	Condition	Wt.	R.P.M.	Ft. Drilled	Bit-hrs.									
	4 3/4"	1	Reg	Worn			90	3	4 3/4"	2	Reg	Worn			5	2	4 3/4"	2	Reg	Worn			45	6 1/4									
	4 3/4"	2	Reg	Worn					4 3/4"	3	Reg	Worn						4 3/4"	3	Reg	Worn			5	1 1/4								
DRILL PIPE	Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.			Size	Stands	Singles	Drill Collar	Kelly	Core Bbl.											
MUD RECORD	Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind		Time	Weight	Vis.	Gel Str.	pH	Am't Added	Kind										
														1400 lbs	GEL																		
CORING	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type	Time	Interval		Ft. Cut		Ft. Rec'd		Type									
SURVEY	Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off				Depth	Degrees Off		Depth	Degrees Off												
CASING & CEMENTING DETAILS	Size	Amount		Set at K.B.		Wt./Ft.			Size	Amount		Set at K.B.		Wt./Ft.			Size	Amount		Set at K.B.		Wt./Ft.											
PERFORATING	Interval	Shot/Ft.		Type		Interval	Shot/Ft.		Type	Interval	Shot/Ft.		Type		Interval	Shot/Ft.		Type	Interval	Shot/Ft.		Type											
ACIDIZING or ACING	Interval	Amount Gals.		Kind		Breakdown Press.		Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.		Kind		Breakdown Press.		Final Press.	Feed Rate Bbls./Min.	Interval	Amount Gals.		Kind		Breakdown Press.		Final Press.	Feed Rate Bbls./Min.						
FORMATION TESTS	No.	Interval Tested		to		min.		Shut in		mins.		No.	Interval Tested		to		min.		Shut in		mins.		No.	Interval Tested		to		min.		Shut in		mins.	
	Valve Open											Valve Open											Valve Open										
	Gas to Surface	min.		@						Mcf/d Max.		Gas to Surface	min.		@								Gas to Surface	min.		@				Mcf/d Max.			
	Oil to Surface	min.		@						Bbl/d Max.		Oil to Surface	min.		@								Oil to Surface	min.		@				Bbl/d Max.			
	Recovery:	ft.										Recovery:	ft.										Recovery:	ft.									
		ft.											ft.											ft.									
		ft.											ft.											ft.									
ABANDONMENT PLUGS	No.	Interval		Cement	Additive	Plug Down	Felt At	Time		No.	Interval		Cement	Additive	Plug Down	Felt At	Time		No.	Interval		Cement	Additive	Plug Down	Felt At	Time							
LOGS	Type	Int.							Type	Int.							Type	Int.															
REMARKS	Help to rig up & mix mud								8.00 - 10.00 - mix mud & prepare to spud								4.00 - 4.30 - Drilling in gravel																
	Peters								10.00 - 12.00 - Drilling								4.30 - 5.30 - Plug bit & trip out & in.																
									12.00 - 1.00 - Repair bit								5.30 - 8.00 - DRILLING IN GRAVEL																
									1.00 - 1.30 - Bit Change								8.00 - 9.15 - DRILLING IN GRAVEL																
									1.30 - 3.30 - Drilling								9.15 - 10.00 - BIT CHANGE																
									3.30 - 4.10 - Repair top nut								10.00 - 10.45 - BIT PLUGGED																
																	10.45 - 12.00 - DRILLING IN GRAVEL																
	Operator								Driller								Operator								Driller PETERS								