



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCE MANAGEMENT DIVISION

Application for a Drilling Authority

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

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

Name and number of well Can. Crude Ranvik Hay River D-301

Location: Unit D Section 30 Grid 60°50', 115°45'

Latitude 60°49'9" Longitude 115°50'30"

From Established Reference Marker Approximately two miles west-northwest of point on Mackenzie Highway 5,000' south of bridge over west channel of Hay River.

Elevation: Ground 540' Est. K.B. 545' Est. feet above sea-level.

Well is expected to produce from Presqu'ile formation at a depth of about 750 feet.

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

Permit No. 4129 Lease No. Acreage 31,244

Permittee, licensee, or lessee Ranvik Oils Limited

Exploratory Licence No. 1009

Surface owned by Crown or Crown
(If alienated submit name and address of owner and occupant.)

Petroleum and natural-gas rights owned by Crown

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

Casing Size O.D. (inches)	Weight (Lb./Ft.)	Grade	Brand	New or Used	Estimated Depth	Sacks of Cement
1. <u>7</u>	<u>20</u>	<u>J-55</u>	<u>Mannesmann</u>	<u>New</u>	<u>200</u>	<u>50</u>
2.	...	...	...	...	...	...
3.	...	...	...	...	...	...
4.	...	...	...	...	...	...
5.	...	...	...	...	...	...

Expected water, gas, and oil horizons and type of control equipment Presqu'ile Formation
Controlled by Mud Weight and blow out preventors.

Well will be drilled with (Rotary) Rig No. 75 by Sedco Exploration Ltd.
(Cable—) (Drilling Contractor or company)

915 - 42 Avenue S.E., Calgary, Alberta.

Responsible agent of applicant: Norman Soul, P. Geol Contractor's Business Licence No. 24245

At well J.C. Sproule and Associates Ltd. Registered office H. Westmore & Associates.

Address 1009 Fourth Avenue S.W. Address 216 - 318 Eighth Avenue S.W.,
Calgary, Alberta. Calgary, Alberta.

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

Dated at Calgary, Alberta, this 14th day of January, 19 66

Signed by [Signature] Company General Crude Oil Company

Title Agent for Applicant Operator's Licence No. 1011

(For Resource Management Division use only)

APPROVED

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

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

Dated 14th January 1966

Oil Conservation Engineer

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

NANR 52-90-1 (7-65)

Universal Well Location Reference - Lat. 60.81917° Long. 115.84166°



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCE MANAGEMENT DIVISION

Application to Abandon a Well or Suspend Drilling

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

Name and number of well Gen. Crude, Ranvik, Hay River, No. D-30
Location: Unit D Section 30 Grid 60°50', 115°45'
Latitude 60°49'09" Longitude 115°50'30"
From Established Reference Marker Approximately two miles west-northwest of point on Mackenzie Highway, 5,000' south of bridge over West Channel of Hay River.
Permit No. 4129 Lease No.

Ranvik Oils Limited

(Permitter, Licensee, Lessee)

Date of commencement of proposed program February 2, 1966

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at --
Gas at --
Water at 769'
Total Depth 772' Date of last operations February 2, 1966
Present condition of well Standing with hole full of mud.

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sack of Cement and Additives	Amount Pulled
1. <u>7"</u>	<u>20 lb.</u>	<u>195.06</u>	<u>200.79 K.B.</u>	<u>60 sacks & 2% CaCl₂</u>	<u>--</u>
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
<u>1</u>	<u>772'-372'</u>	<u>Slave Point and Older</u>	<u>100</u>	<u>Top felt at 570'.</u>
<u>2</u>	<u>250'-150'</u>	<u>Hay River Shale</u>	<u>25</u>	<u>Top felt at 150'.</u>
....				
....				
....				
....				

The following logs have been run Electric Log
Other operations proposed Five sacks cement in top of surface casing with welded steel plate and attached 4-foot riser with well name plate

Operations to be carried out by Sedco Exploration Ltd. Contractor Licence No. 24245

Address 915 - 42 Avenue S.W., Calgary, Alberta Address Same

Responsible Agent in field Norman Soul, J. C. Sproule and Associates Ltd.

Dated at Hay River, N.W.T. this 2 Day of February 1966

Signed by Norman Soul, J. C. Sproule and Associates Ltd. Company General Crude Oil Company

Title Geologist Operator's Exploratory Licence No. 1011

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

(For RESOURCE MANAGEMENT DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.H.V. Thomas on February 2, 1966

Dated 31st March, 19 66

B.H.V. Thomas
Oil Conservation Engineer

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



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCE MANAGEMENT DIVISION

Application to Change a Well Name

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

Gen Crude Ranvik Hay River D-30

(Old name)

to Gen Crude Ranvik Hay River E-30

(Proposed new name)

Well Location

Location: Unit E Section 30 Grid 60-50-115-45

Latitude 60° 49' 23.52" North Longitude 115° 50' 29.79" West

From Established Reference Marker Geodetic Station Vale Latitude 60° 50' 29.748" N.

Longitude 115° 45' 36.353" W.

Reason for Changing Well Name

Plan of Survey dated April 22, 1966 by Hugh E. Impey D.L.S. corrected

location from D-30-60-50-115-45 to E-30-60-50-115-45

Dated at Calgary this 26 day of April 19 66

Signed by Norman Bond

Title Geologist, J.C. Sproule and Associates Ltd.

Application agent for
Company General Crude Oil Company

(For Resource Management Division use only)

APPROVED

This application has been examined and approved:

Date April 29, 19 66

B. H. Thomas
Oil Conservation Engineer

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

File No.

Drilling Authority No. 225



DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCE MANAGEMENT DIVISION

Application to Amend a Drilling Authority

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

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made to amend Drilling Authority No. 225, concerning

Gen. Crude Rarvik Hay River D-30

(Name and Number of Well)

The following amendments are required:

Change in well name to GEN. CRUDE RANVIX HAY RIVER E-30

Location correction to E-30-60-50-115-45

Latitude 60° 49' 23.52" N. Longitude 115° 51' 29.79" W.

Reasons for the amendments:

Plan of Survey dated April 22, 1966 by Hugh E. Impey D.L.S. corrected

location from D-30-60-50-115-45 to E-30-60-50-115-45

Dated at Calgary, this 26 day of April, 1966

Signed by

Title Geologist, J. C. Sproule and Associates Ltd.

Company

General Crude Oil Company

(For Resource Management Division use only)

APPROVED

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

Date April 29, 1966

Oil Conservation Engineer

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



Drilling Authority No. 225

Date Issued JANUARY 14, 1966

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
RESOURCE MANAGEMENT DIVISION

WELL COMPLETION DATA

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

Well name and number Gen Crude Ranvik Hay River No. ^EB-30
Permit No. 4129 Lease No.
Ranvik Oils Limited Exploratory Licence No. 1009
(Permitter, Licensee, Lessee)
General Crude Oil Company Exploratory Licence No. 1011
(Operator)
Location: Unit D Section 30 Grid 60°50' 115°45'
Latitude 60°49'9" Longitude 115°50'30"
From Established Reference Marker Approximately two miles west-northwest of
point on MacKenzie Highway 5,000' south of bridge over west channel of Hay River

	DATE	DEPTH
Spudded	Jan 27/66	
Suspended		
Resumed		
Finished Drilling	Feb 1/66	772
Deepened		
Completed (gas/oil)		
Abandoned	Feb 3/66	772
Rig released	Feb 3/66	

Pool (s)

Interval(s) open to production

Elevation: Gr. 540' est.

K.B. 547' est

Drilling Contractor & Rig No. Sedco Exploration Ltd.
No. 75

Contractor's Business Licence No. 24245

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at—	Sacks of Cement and Additives
1. 7	J-55	20	195.06	200.79 K.B.	60 & 2% CaCl ₂
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth	Sub-Sur	From	To	Rec.	From	To	Rec.
Fort Simpson	70	477±	739'	769'	10'			
Slave Point	428	199±						
Watt Mountain	696	-161±						
Presqu'île	708	-222±						

LOG RECORD

Run No.	Type of Log	From	To
1	Spontaneous Potential Resistivity	769	200

CEMENTING RECORD (Plug, Squeeze, etc.)				PERFORATING RECORD (Bullet, Jet)				SERVICING RECORD (Acidizing, Fracing, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
Feb 2/66	772	370	100 sx + 2% CaCl ₂ - Felt @ 370'								
Feb 3/66	250	150	25 sx + 2% CaCl ₂ - Felt @ 150'								
			5 Sx in top of casing.								

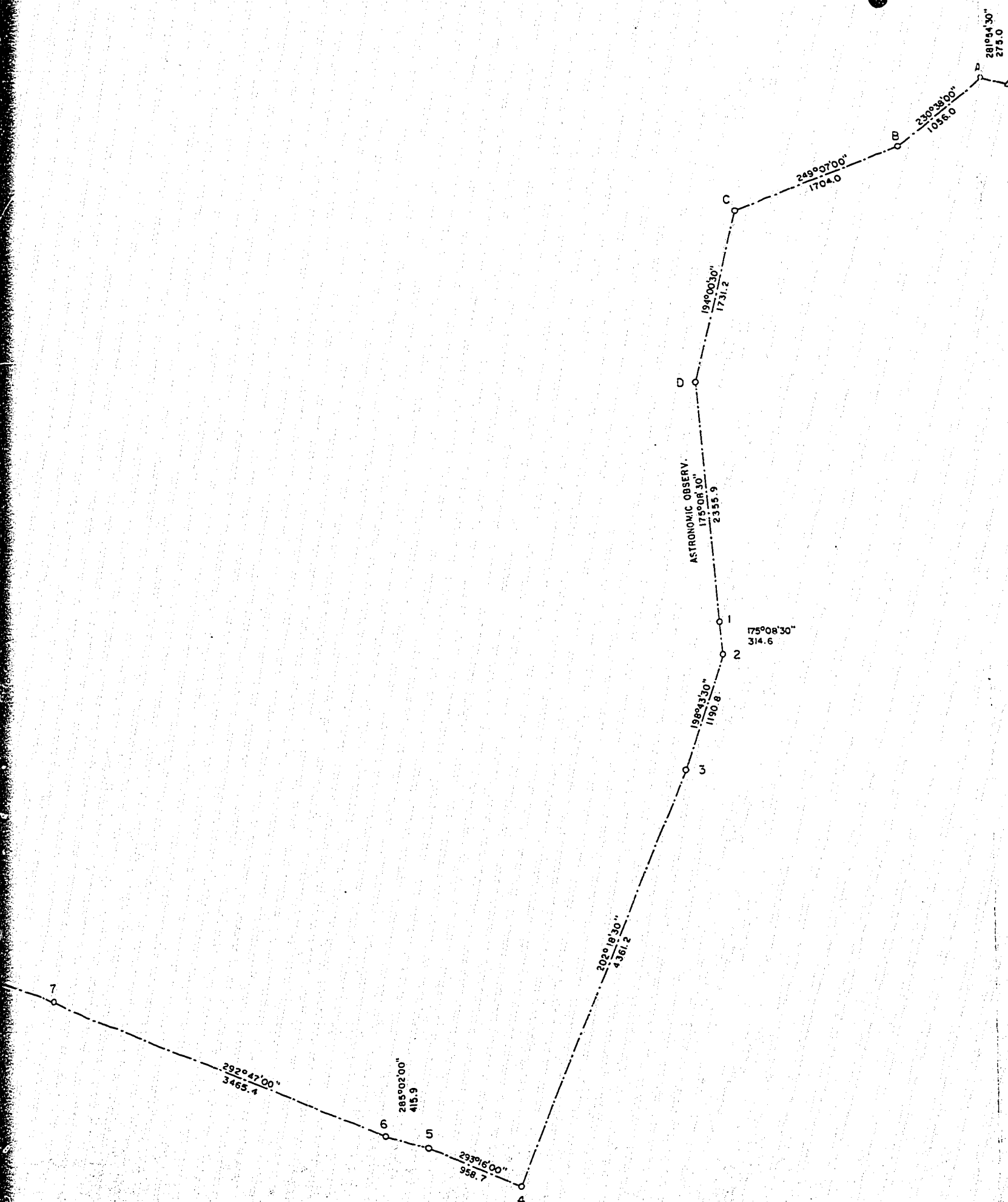
DRILL STEM TESTS														
No.	Date	Formation	From	To	V.O. Mins.	ISL Mins.	FSI Mins.	LSIBHP.	FSIBHP.	LFBHP.	FFBHP.	LHP.	FHP.	REMARKS
1	Jan 31/65	Presqu'ile	666	739	60	30	60	- Tool Plugged		-	-	354	355	Mis-run, Tool Plugged

ANALYSIS						PRESENT STATUS OF WELL				
Lab. No.	Sample	From	To	Source	Remarks	Oil		(Interval)	Company	
		769'		Presqu'ile	Well flowed. Killed with heavy mud				Signed by	Norman Soul <i>Norman Soul</i>
						Gas		(Interval)	Title	Geologist - J.C. Sproule and Associates Ltd.
						Dry	X		Date	March 24, 1966
						Steam			Forms to be prepared in duplicate and forwarded to the Oil Conservation Engineer, Calgary, Alberta.	

Geodetic Station
VALE

Latitude: $60^{\circ}50'29.748''$ N.
Longitude: $115^{\circ}45'36.353''$ W.

GEN. CRUDE
at Lat. $60^{\circ}4$



THIS REPORT HAS BEEN PREPARED
FOR THE EXCLUSIVE USE OF:

General Crude Oil Company

COPY NO: 13

GEOLOGICAL AND ENGINEERING REPORT
GEN. CRUDE RANVIK HAY RIVER E-30
HAY RIVER 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>
INTRODUCTION	1
SECTION I	
Summary of Well Data	2
SECTION II	
Geological Summary	3
Geological Markers	3
Core Summary	3
Core Description	3
Coring Time Record	3
Sample Description	4
Drilling Time Record	6
SECTION III	
Engineering Summary	7
Daily Chronological Report	7
Drill Stem Test Report	9
Casing and Cement Report	10
Pipe Tally	11
Bit Record	11
Mud Record	11
Abandonment Plugs	12
SECTION IV	
Logs	In Pocket
SECTION V	
Water Analysis	13
GEOLOGICAL AND ENGINEERING SUMMARY	14
Johnston Testers Report - DST No. 1	In Pocket

INTRODUCTION

Gen. Crude Ranvik Hay River No. E-30 was the first test to be drilled in the 1966 exploration program along the southwest shore of Great Slave Lake, Northwest Territories, west of the town of Hay River.

The well was drilled to a total depth of 772 feet to test the Slave Point and Presqu'ile formations of Devonian age. There are no producing wells in the area and the closest test is Frobisher Hay River Test No. 8, eight miles south, drilled to a total depth of 1,072 feet and abandoned in 1946.

The well was drilled by Sedco Exploration Ltd. Rig No. 75. Operations were supervised by J. C. Sproule and Associates Ltd. for the operator, General Crude Oil Company of Houston, Texas. Partners in the operation were Ranvik Oils Limited and Ridgefield Development Ltd.

SECTION ISummary of Well Data

Well Name: Gen. Crude Ranvik Hay River E-30
Permittee: Ranvik Oils Limited
Name of Operator: General Crude Oil Company, Houston, Texas.
Location: E-30-60-50-115-45
 Lat. 60°49'23.2" Long. 115°50'29.79"
Permit No.: 4129
Drilling Contractor: Name: Sedco Exploration Ltd.
 Rig No.: 75
 Type: Rotary G.D. 2000
 Mast: 58' - 60,000-lb. capacity.
 Pump: G.D. 5" x 10"
 B.O.P.: Shaffer.
Drilling Authority: No. 225, January 14, 1966.
Classification: Wildcat.
Elevation: Ground - 540' (Estimated).
 Kelly Bushing - 547' (7' above ground level).
Date Spudded: January 27, 1966.
Date Completed Drilling: February 1, 1966.
Total Depth: Driller - 772'. Logs - 769'.
Status: Plugged and abandoned.
Date Rig Released: February 3, 1966.
No. of Rig Days: 8.
Drilling Data:

<u>Hole Size</u> Inches	<u>Depth</u>	
	<u>From</u> Feet	<u>To</u> Feet
9 7/8	Surface	210
6 1/4	210	772

Casing: Surface - 6 joints (195.06') x 7" x 20-lb., J-55,
 Range 2, new Japanese casing landed at 200.79' K.B.
 Cemented with 60 sacks and 2% CaCl₂. Plug down at
 7:30 a.m., January 28, 1966.

SECTION IIGEOLOGICAL SUMMARYGEN. CRUDE RANVIK HAY RIVER E-30Geological Markers:

<u>Formation</u>	<u>Samples</u>		<u>Log</u>	
	<u>Depth</u> Feet	<u>Subsea</u> <u>Elevation</u> Feet	<u>Depth</u> Feet	<u>Subsea</u> <u>Elevation</u> Feet
Fort Simpson	70	+477 [±]	-	-
Slave Point	420		428	+119 [±]
Watt Mountain	700		696	-149 [±]
Presqu'ile Reef Complex	710		708	-161 [±]
Total Depth	772		769	-222 [±]

Core Summary: No. 1 from 739 to 769 feet. Recovered 10 feet. Formation - Presqu'ile.

Core Description:

<u>Interval</u> Feet	<u>Thickness</u> Feet	<u>Description</u>
<u>Core No. 1 - 739'-769'. Recovery - 10'.</u>		
739.0-744.5	5.5	Dolomite, predominantly greyish white, microcrystalline, with minor irregular bands, blebs and patches of dolomite, brown, dense to crystalline. One thin irregular band of dense greyish white anhydrite in top six inches associated with free yellow sulphur. Several large vugs containing coarse white crystals of dolomite. Poor intercrystalline porosity but fair apparent vuggy porosity.
744.5-749.0	4.5	Dolomite, greyish white to buff and light brownish grey, microcrystalline to crystalline. Scattered vugs, apparently disconnected, partly filled with coarse white crystals of dolomite. Poor apparent porosity.

Coring Time Record:

<u>Interval</u> Feet	<u>Zone</u>	<u>Time in Minutes per Foot</u>
739-749	Presqu'ile Reef	12, 12, 12, 12, 7, 6, 6, 6, 6, 6.
749-759	Presqu'ile Reef	6, 3, 4, 4, 4, 5, 5, 4, 5, 9.
759-769	Presqu'ile Reef	8, 5, 4, 5, 4, 4, 6, 7, 8, 8.

GEN. CRUDE RANVIK HAY RIVER E-30

Sample Description: Location - E-30-60-50-115-45
 Elevation - 547' (Estimated) K.B.
 Examined By - Norman Soul, P. Geol.

<u>Depth Feet</u>	<u>Description</u>
7-10	Sand, medium- to coarse-grained, grey to brown, quartzose.
10-70	Gravel, varicoloured pebbles of igneous origin.
<u>Fort Simpson Formation - 70'</u>	
70-120	Shale, dull greenish brown, firm, calcareous.
120-210	Shale, dark greenish grey, slightly calcareous.
210-270	Shale, dark green, non-calcareous.
270-280	Limestone, buff to light brown, dense. Shale, as above.
280-290	Limestone, buff to brown, dense to fossiliferous-fragmental.
290-360	Shale, dark greyish brown to dark grey, hard, slightly calcareous.
360-420	Shale, dark grey, non-calcareous.
<u>Slave Point Formation - 428'</u>	
420-440	Limestone, medium grey, microgranular to fossiliferous-fragmental, slightly pyritic, no apparent porosity.
440-450	Limestone, buff to brown, dense to microcrystalline. Shale, dark grey.
450-470	Limestone, buff to brown, dense to microgranular.
470-480	Limestone, dark brown, microcrystalline.
480-490	Limestone, buff to light brown, dense to microgranular, fossiliferous.
490-500	Limestone, buff to brown, dense to cryptocrystalline.
500-510	Limestone, light brown, microgranular to granular, traces of oolitic limestone, traces of poor porosity.
510-540	Limestone, light brown, dense.
540-560	Limestone, brown, microgranular to fragmental, fossiliferous.
560-570	Limestone, brown, dense to microgranular.

<u>Depth Feet</u>	<u>Description</u>
570-590	Limestone, brown, dense, slightly argillaceous.
590-600	Limestone, light brown, dense.
600-630	Limestone, buff to light brown, dense to microgranular.
630-640	Limestone, buff, microgranular.
640-650	Limestone, buff, microgranular. Shale, dark green, non-calcareous and dark brown, slightly calcareous.
650-660	Shale, dark greenish grey and dark brown, slightly calcareous.
660-670	Shale, dark greenish grey and dark grey to dark brown, non-calcareous.
670-700	Shale, dark grey, non-calcareous.
<u>Watt Mountain Formation - 696' Log</u>	
700-710	Shale, light green, waxy. Limestone, buff to light brown, dense, with finely disseminated pyrite.
<u>Presqu'ile Reef Complex - 708' Log</u>	
710-720	Dolomite, brownish grey, coarsely crystalline, stained with light brown oil.
720-730	Dolomite, light grey to greyish white, coarsely crystalline, oil stained.
730-739	Shale, dark grey and dark greenish grey, slightly calcareous. Minor shale, light green, waxy.
739-769	Cored. Recovered 10'. See Core Description. Well flowed salt water.
<u>Samples from reaming core hole</u>	
739-740	Shale, green, waxy, pyritic, calcareous (Watt Mountain type). Dolomite, greyish white, coarsely crystalline.
740-770	Dolomite, greyish white, coarsely crystalline. Minor shale, light green, waxy.
Total Depth - 772'. Driller 769' Log.	

Drilling Time Record:

<u>Interval</u> <u>Feet</u>	<u>Time in Minutes per 5-Foot Interval</u>
400-450	3, 4, 4, 4, 6, 9, 7, 26, 22, 21.
450-500	30, 23, 21, 22, 17, 27, 22, 21, 16, 18.
500-550	18, 12, 13, 16, 14, 21, 18, 20, 22, 25.
550-600	24, 20, 22, 23, 25, 30, 24, 25, 19, 20.
600-650	22, 23, 23, 20, 19, 21, 14, 29, 41, 23.
650-700	22, 19, 20, 23, 22, 15, 24, 20, 20, 21.
700-735	14, 17, 11, 13, 24, 26, 22.

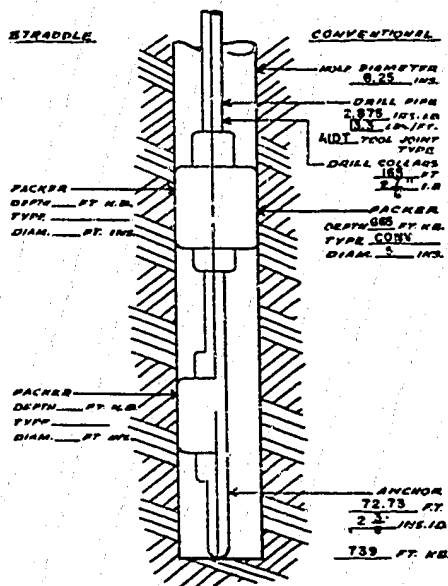
SECTION IIIEngineering SummaryGEN. CRUDE RANVIK HAY RIVER E-30Daily Chronological Report:

<u>Date</u> 1966	<u>Day</u>	<u>Depth</u>		<u>Progress</u> Feet	<u>Remarks</u>
		<u>From</u> Feet	<u>To</u> Feet		
					Operations ending at 12:00 midnight.
Jan. 27	1	7	195	188	Sedco Rig No. 75 spudded at 7:00 a.m. Drilled 9" hole with Bit No. 1A to 195' at 5:45 p.m. Reaming 9" hole to 9 7/8" from 8:00 p.m. with Bit No. 2A.
Jan. 28	2	195	210	15	Reamed 9" hole to 9 7/8" to 195' at 2:00 a.m. Drilled 9 7/8" hole to 210' with Bit No. 2A at 3:00 a.m. Circulated 1/2-hour. Ran 6 joints (195.06') of 7", 20-lb., J-55, Range 2, new Japanese casing with Davis guide shoe from 4:00 a.m. to 5:00 a.m. Landed casing at 200.79' K.B. Cemented by Sedco with 60 sacks and 2% CaCl ₂ . Plug down at 7:30 a.m. Standing cemented.
Jan. 29	3	210	502	292	Headed up at 7:00 a.m. Ran in with Bit No. 1. Pressured up to 500 psi and held for 15 mins. Drilled 6 1/4" hole from 210' to 470' from 8:15 to 6:15 p.m. Made trip for Bit No. 2. Drilling with Bit No. 2 from 9:30 p.m.
Jan. 30	4	502	697	195	Drilled to 612' with Bit No. 2 at 8:30 a.m. Made trip for Bit No. 3. Drilling with Bit No. 3 from 3:15 p.m.
Jan. 31	5	697	739	42	Drilled to 701' with Bit No. 3 at 12:15 a.m. Twisted off at top of drill collars. Recovered fish at 4:45 a.m. Drilled from 701' to 739' from 5:45 a.m. to 8:30 a.m. with Bit No. 4. Ran Drill Stem Test No. 1 (mis-run) from 666' to 739'. Initial shut-in 30 mins. Flow period 60 mins. Final shut-in 60 mins. Laid down testing tool at 11:30 p.m. Charts indicated tool failed to open. Running in hole with core barrel.

<u>Date</u> 1966	<u>Day</u>	<u>Depth</u>		<u>Progress</u> Feet	<u>Remarks</u>
		<u>From</u> Feet	<u>To</u> Feet		
Feb. 1	6	739	772	33	Cut Core No. 1, 739'-769', from 4:45 a.m. to 8:15 a.m. Out of hole at 10:30 a.m. Recovery 10.0'. Hole started to flow sulphurous salt water while pulling core. Ran in with Bit No. 5, mixed mud, and stopped well flowing at 5:00 p.m. Reamed core hole to 6 1/4" from 6:30 p.m. to 9:15 p.m. Drilled 6 1/4" hole with Bit No. 5 from 769' to 772' from 9:15 p.m. to 9:30 p.m. Unable to continue drilling when U-joint yoke broke on rotary drive. Re-paired broken air line and started out of hole.
Feb. 2	7	772 - F.T.D.		-	Out of hole at 1:00 a.m. Shut down waiting on parts and repairs to 9:15 a.m. Ran Spontaneous Potential and Resistivity logs by Electronic Logging & Velocity Co. Ltd. from 9:15 a.m. to 10:00 a.m. Total depth by logger 769'. Ran Plug No. 1, 100 sacks and 2% CaCl ₂ from 772' to 372'. In place at 6:00 p.m. Standing cemented.
Feb. 3	8	772 - F.T.D.		-	Felt top of Plug No. 1 at 370' at 2:15 a.m. Set Plug No. 2, 25 sacks and 2% CaCl ₂ from 250' to 150'. In place at 3:00 a.m. Felt top of Plug No. 2 at 150' at 11:15 a.m. Laid down drill pipe. Spotted 5 sacks in top of surface casing and welded steel plate on top of casing. Prepared for move to next location. Access road not finished. Rig released at 4:00 p.m.

DRILL STEM TEST REPORT

TEST No 1
 Well Name Gen. Crude Ranvik Hay River E-30 Location E-30-60-50-115-45
 Field or Area Hay River Province Northwest Territories
 Testing Company Johnston Testers Ltd. Operator L. Corrigan
 Date Commenced January 31, 1966 Date Completed January 31, 1966



Formation Tested Presqu'ile
 Section Tested: From 666 To 739 ft.
 Mud Properties: Wt. 10.7 Vis. 38 sec.
 Filtrate - c.c. Filter Cake - ph.
 Water Cushion Nil ft.
 Type of Packer Conventional
 Choke Size, surface - Bottom Hole 1/2"

Time	Remarks
Tester started in hole 13:00	
Tester on bottom 16:20	
Tester opened 17:45	Tool failed to open.
Tester closed 18:45	
Tester pulled loose 19:45	
Tester out of hole 22:00	
Initial Closed In - hrs. 30 mins.	
Flow Period - hrs. 60 mins.	
Final Closed In - hrs. 60 mins.	
Weight:	
Set on Packer 10,000 lbs. Pull Packer Loose 10,000 lbs.	
Weight drill pipe Before Test 10,000. After Test 10,000.	
Mud level in casing Full	
Nature of Blow None - Tool did not open.	
Maximum Surface Pressure Nil	

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

Recovery in Drill Pipe:

	stands	feet	bbls.	Remarks
Free oil				
Mud				
Water				
Gravity of oil	-	° API @	° F.	
Oil sample obtained	-			Water sample obtained
Temperature:	-	° F. @	Ft. K.B.	
Pressures: Type of pressure bomb(s) used	AKI	-	2300; MOJI	-
Initial Hydrostatic Mud Pressure	354		Final Hydrostatic Mud Pressure	355 P.S.I.G.
Initial Closed in Pressure			Final Closed in Pressure	P.S.I.G.
Initial Flow Pressure Mis-run, tool plugged.			Final Flow Pressure	P.S.I.G.

REMARKS

Mechanically, was Test Satisfactory? No. Mis-run. Charts indicated tool failed to open.

Engineer Norman Soul, P. Geol.
J. C. SPROULE AND ASSOCIATES LTD., CALGARY

CASING AND CEMENT REPORT

Well Name Gen. Crude Ranvik Hay River E-30 Date January 28, 1966

Casing Record: (Show complete details for each type of casing run in mixed strings.)

Time Casing Started in Hole: 4:00 a.m. Time finished running casing: 5:00 a.m.

SIZE O. D.	WEIGHT LB/FT.	GRADE	RANGE 1, 2 OR 3	COUPLING LONG / SHORT	THREAD	MAKE	NO. OF JOINTS	AMOUNT
7"	20	J-55	2	Short	8 round	Japanese	6	193.76
TOTALS							6	193.76

Type of Shoe: Davis Guide Shoe Type of Collars: Length: 1.30Stick-up on last
joint of pipe: ft.Total length of pipe run: 195.06

Make - up allowance: ft.

Distance from K. B. to ground level: 7.00

Total: ft.

Pipe landed at: 200.79

CENTRALIZERS		
NO.	MAKE	LOCATION JOINTS
<u>N11</u>		

SCRATCHERS		
NO.	MAKE	LOCATION JOINTS
<u>N11</u>		

CEMENTING RECORD

No. of Sacks Cement Mixed: 60

Weight of Slurry: -

% Aquagel Used: N11% Calcium Chloride: 2

Time Started Mix Cement: -

Time Completed Mixing: -

Time Started Pump Plug Down: -

Time Plug On Bottom: 7:30 a.m.

Displacement Fluid Used (Bbls.): -

Max. Displacement Pressure: -

Plug Pump Pressure: -

Was Pressure Left On? -

How Much? -

Mud Weight - -

Viscosity -

Water Loss -

If Pressure Released,

How Much Bled Back? -

Remarks: (To include comments on tight hole, stuck pipe, etc.)

Obtained three barrels cement returns.

Pipe Tally:Joint No.Length
Feet

1	32.50
2	32.56
3	32.18
4	32.10
5	32.10
6	32.32
	<u>193.76</u>

Total Casing	193.76
Davis Guide Shoe	<u>1.30</u>
Grand Total	<u>195.06</u>

Bit Record:

<u>No.</u>	<u>Size</u> <u>Inches</u>	<u>Make</u>	<u>Type</u>	<u>Depth</u>		<u>Footage</u>	<u>Hours</u>	<u>Condition</u>
				<u>In</u> <u>Feet</u>	<u>Out</u> <u>Feet</u>			
1A	9	Reed E16261	YT3	7	195	188	10 1/4	
2A	9 7/8	HW Re-Run	OSC-3	7	210	203	5	Reamed 188'.
1	6 1/4	Reed 93009	YT3	210	470	260	8 1/2	
2	6 1/4	Reed E16212	YT1A	470	612	142	10 3/4	
3	6 1/4	Reed E16216	YT1A	612	701	89	8	Loose bearings.
4	6 1/4	Reed E16213	YT1A	701	739	38	2 1/2	Good.
5A	4 11/16	Christensen Diamond	EC2513	739	769	30	3 1/2	Cored.
5	6 1/4	Reed E16211	YT1A	739	772	33	1 3/4	Reamed 30'.

Mud Record:

<u>Date</u> <u>1966</u>	<u>Depth</u> <u>Feet</u>	<u>Weight</u> <u>Lb./Gal.</u>	<u>Viscosity</u> <u>Sec.</u>	<u>Water</u> <u>Loss</u> <u>cc</u>	<u>pH</u>	<u>Additives</u>
Jan. 27	195	-	-	-	-	Gel 1,500 lb. Sawdust 10 sacks.
Jan. 28	210	-	-	-	-	-
Jan. 29	502	-	-	-	-	Gel 700 lb. Sawdust 4 sacks.
Jan. 30	697	-	-	-	-	-
Jan. 31	739	10.7	37	-	-	-
Feb. 1	772	-	-	-	-	Gel 3,500 lb. Caustic 50 lb.

Summary of Mud Used: Gel - 57 sacks
Sawdust - 14 sacks
Caustic - 50 lb.

Deviation Surveys: None

<u>Abandonment Plugs:</u>	<u>No.</u>	<u>Interval Feet</u>	<u>Cement</u>	<u>Remarks</u>
	1	772-372	100+2% <i>Caustic</i>	Top felt at 370'
	2	250-150	25+ "	Top felt at 150'
	3	Top of Casing	5	Steel plate welded on top of casing.

SECTION IV

Logs:

<u>Company</u>	<u>Name</u>	<u>Depth</u>	<u>Scale</u>
Electronic Logging and Velocity Co. Ltd.	Spontaneous Potential	200'-769'	2" - 100'
	Resistivity	200'-769'	2" - 100'

SECTION V

Water Analysis:

CHEMICAL & GEOLOGICAL LABORATORIES LTD.

WATER ANALYSIS

Lab No. C66-262

Received: March 30, 1966 Reported: April 1, 1966 Well: Location: Gen. Crude Ranvik Bay River E-30-60-50-115-45

Operator: Westmore & Associates

Field or Area:

Elev.: K.B.

Grd.

Zone/Formation: Presqu'ile

Sample Interval: 768'

Method of Production: Flowing

Sampled from:

Sampled by:

Date: Feb. 1,
1966

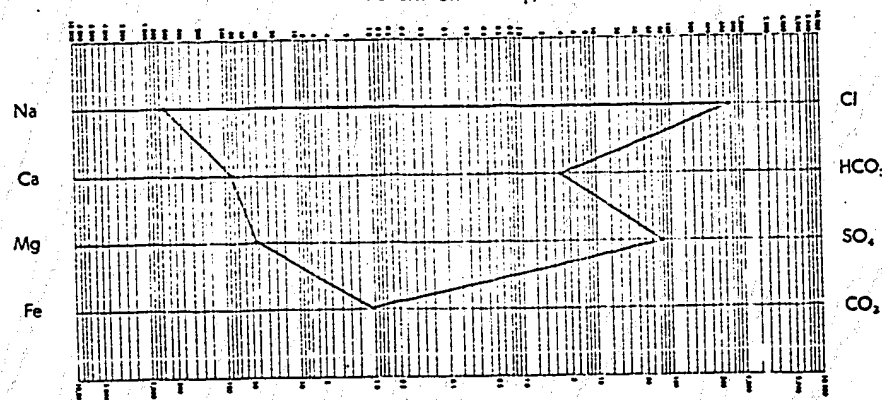
OTHER PERTINENT DATA

(Signed)

	Na&K	Ca	Mg					SO ₄	Cl			CO ₂	HCO ₃		
Mg./L	14,595	1,645	558					3,822	24,100				230		
Meq./L	634.88	82.14	45.87					79.50	679.62				3.77		
Meq. %	41.61	5.38	3.01					5.21	44.54				0.25		

Total Solids Mg/L: By Evaporation 47,600 Fe Trace Specific Gravity 1.036 @60°F Observed pH 7.7 @ 66 °F
 Calculated 44,951 After Ignition 43,960 H₂S Present Refractive Index @25°C Resistivity 0.164 ohm meters @ 68 °F

Pattern Unit Meq./L



Remarks and Conclusions

GEOLOGICAL AND ENGINEERING SUMMARY

Gen. Crude Ranvik Hay River E-30 was spudded on January 27, 1966, and completed drilling at a total depth of 772 feet on February 1, 1966.

The top of the Slave Point Formation was picked at 428 feet and no significant porosity or oil staining was observed in the cuttings from the formation. The basal part of the formation consists of dark greenish grey shale. The top of the Presqu'ile Reef complex is placed at 708 feet. An unsuccessful drill stem test was made of the interval from 666 feet to 739 feet. One core was then taken and the hole started to flow sulphurous salt water while the core was being pulled. A sample of the water was obtained for analysis. Oil staining was observed in cuttings from the top of the Presqu'ile but it was concluded that the reef is essentially salt water laden at this locality. The thickness of the reef was not determined as drilling was terminated due to repairs having to be made on the drilling rig.

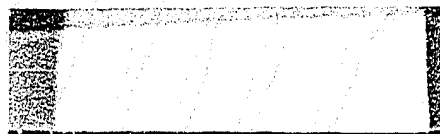
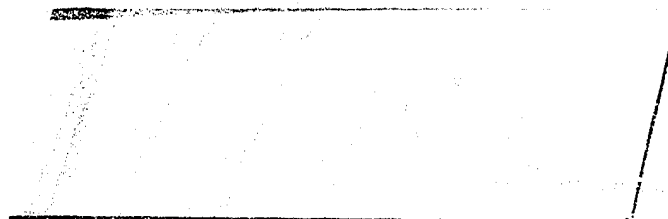
The well was logged, two cement plugs were run, and the hole was abandoned in accordance with government regulations approved by the Oil Conservation Engineer.

Norman Soul
Norman Soul, P. Geol.

1009 Fourth Avenue S. W.,
Calgary, Alberta.
April 6, 1966.
NS/fc



JOHNSTON TESTERS



JOHNSTON TESTERS

TEST DATA							
Formation	Zone Thickness			Ft.	Elevation	545 KB 540 GL	
Interval	665	To	738	T.D.	738	Bottom Hole Choke Size 1/2"	
Type of Test	OPEN HOLE, BOTTOM HOLE			Fluid Cushion Type			
Time Started in Hole	1300	Hrs.	Tool Open	1650	Hrs.	Amount	
First Flow	20	Min.	Shut In	35	Min.	TOOL SEQUENCE	
Second Flow	60	Min.	Final Shut In	60	Min.		
Pulled Loose @	1945	Hrs.	Out of Hole	2200	Hrs.		
Wt. Set on Packer	10,000	#	Pulled Loose Wt.	10,000	#		
Remarks							
Description of Blow During Test MIS-RUN, PLUGGED TOOL,					Tool	Length	
						O.D.	
GAS BLOW MEASUREMENTS					D.P. SUB.	.85	
					SHUT IN TOOL	6.06	
Measured with I.D. Riser or Est. ☐					HYD. TOOL	7.45	
					JARS	6.86	
Type of Instrument					SAFETY JT.	1.75	
					T.C. & PKR.	5.25	
Time					TOTAL	28.22	
					STUB	1.50	
Sice. Choke					RECORDER	4.40	
					RECORDER	5.90	
Reading inches					PERF.	4.42	
					PERF.	5.00	
Cubic Feet/Day					PERF.	5.02	
					PERF.	4.97	
					PERF.	4.73	
					PERF.	5.00	
					PERF.	4.90	
					PERF.	5.00	
					PERF.	5.10	
					PERF.	5.05	
					PERF.	1.95	
					PERF.	3.25	
					PERF.	3.95	
					PERF. & B.N.	2.59	
					TOTAL	72.73	
					INTV.		
FLUID RECOVERY							
Was Test Reverse Circulated Yes ☐ No ☒							
Fluid Recovered (Total) 40'					Ft.	TOTAL LENGTH 100.95	
Description of Fluid Recovered 40' DRILLING FLUID					MUD AND HOLE DATA		
					Mud Type	GEL W.L.	
					Filter Cake	2/32 Visc. 38 Wt. 10.7	
					Time Taken	1000 HRS.	
					Contractor	SEDCO DRILLING	
Remarks MIS-RUN PLUGGED TOOL.					Rig No. 75		
					Drill Pipe Size	3 1/2 IF	
					Drill Collar Size	2 7/8 ID Length 530'	
					Main Hole Size	6 1/2"	
					Rat Hole Size	6 1/4"	
Co. Rep.	N. SOUL						
Tester	L. CORRIGAL						
District	EDMONTON				Ticket No.	C-6882	
Company	J.C. SPROULE AND ASSOCIATES				Address	1009- 4TH AVENUE S.W., CALGARY, ALBERTA	
Well Name	GEN CRUDE RANVIX HAY RIVER				Test No.	1	
Number	#E-30 #60°-49'-1"N-115°-50'				Field	HAY RIVER	
Formation	29.77'-W 23.52 665-738				Province	N.W.T.	
and Interval	DST# 1				Consultant		
Distribution of Reports					10 - CALGARY		

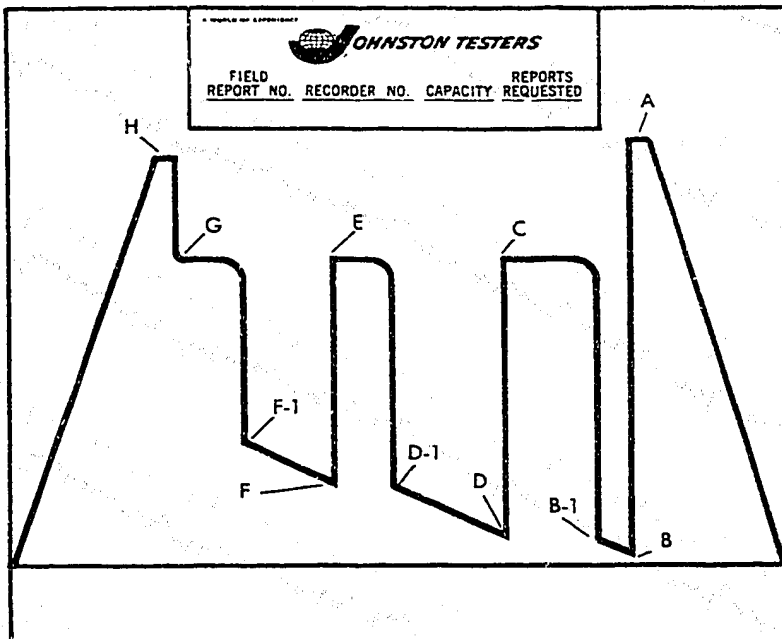
PRESSURE DATA						
INSTRUMENT No.	AK1-2259	T-4911			FIELD REPORT No. <u>C-6882</u>	
CAPACITY (psig)	2300	3000				
INSTRUMENT DEPTH	667	672				
INSTRUMENT OPENING	INSIDE	INSIDE				
PRESSURE GRADIENT psi/FT.					TIME DATA	
WELL TEMP. °F.	80° EST.	80° EST.				
INITIAL HYDROSTATIC	A	354#	353#		TIME GIVEN	TIME COMPUTED
FIRST FLOW	B	MIS-RUN, TOOL			MINS	MINS
		PLUGGED.				
INITIAL SHUT-IN	C				MINS	MINS
SECOND FLOW	D				MINS	MINS
SECOND SHUT-IN	E				MINS	MINS
THIRD FLOW	F				MINS	MINS
FINAL SHUT-IN	G				MINS	MINS
FINAL HYDROSTATIC	H	355#	353#		CLOCK TRAVEL	IN/MIN

REMARKS:

PRESSURE INCREMENTS

[illegible]

GUIDE TO IDENTIFICATION OF DRILL STEM TEST PRESSURE CHARTS



- A. Initial Hyd. Mud
- B. First Flow
- C. Initial Shut-In
- D. Second Flow
- E. Second Shut-In
- F. Third Flow
- G. Final Shut-In
- H. Final Hyd. Mud

The following points are either fluctuating pressures or points indicating other packer settings (testing different zones).

- A-1, A-2, A-3, etc. Initial Hyd. Pressures
- B, B-1, Initial Flow Pressures
- C, Initial Shut-In
- D-1, D-2, D-3, etc. Second Flow Pressures
- E, Second Shut-In
- F, F-1, F-2. Third Flow Pressures
- G, Final Shut-In
- H, Final Hyd. Pressures
- Z — Special pressure points such as pumping pressures recorded for formation breakdown.

SEDCO

DAILY DRILLING REPORT

DAY WORK RECORD

No. 393

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS

RIG No. 75 LOCATION Gen Crude Ravvik D-30 AREA Hay River DATE Feb 2 1966

Tour — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS				C.B. Ft.	Subs Ft.	Ft. Up On Kelly	
Specify actual hours worked	Hrs.	772	—	772	—				No.	O. D.	I. D.	Length	Wgt.			
Driller <i>E. Poudrier</i>	8	IT IS ESSENTIAL TO RECORD SIZE OF JET NOZZLES OR WATER COURSES														
Derrick <i>Gerald Medelac</i>	8	B No. Size Type & Jet Size Serial No. Weight R.P.M. Ft. Drilled Hrs. Feet Reamed Hrs. CONDITION														
Floor <i>Gary Medelac</i>	8	T														
Floor <i>W. Jackson</i>	8	S														
		MUD 12 Mn. 2 a.m. 4 a.m. 6 a.m.				Additives		At Surveys Degree		MOTOR HOURS		Next Oil Change		FUEL		
		WEIGHT								1				Gals.		
		VISCOSITY								2				WATER		
		GEL								3				Bbls.		
		Pump Pres- Model								4				COAL		
		Pump S.P.M. Model								5				Tons		
		Pump Liner Size Model														
		W.L. F.C. pH.														
Tour — 8 a.m. to 4 p.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS				C.B. Ft.	Subs Ft.	Ft. Up On Kelly	
Specify actual hours worked	Hrs.	772	FTD	FSD					No.	O. D.	I. D.	Length	Wgt.			
Driller <i>Ron Schneider</i>	12	IT IS ESSENTIAL TO RECORD SIZE OF JET NOZZLES OR WATER COURSES														
Derrick <i>H. Burke</i>	12	B No. Size Type & Jet Size Serial No. Weight R.P.M. Ft. Drilled Hrs. Feet Reamed Hrs. CONDITION														
Floor <i>H. Burke</i>	12	T														
Floor <i>D. Goodline</i>	12	S														
		MUD 8 a.m. 10 a.m. 12 noon 2 p.m.				Additives		At Surveys Degree		MOTOR HOURS		Next Oil Change		FUEL		
		WEIGHT								1				Gals.		
		VISCOSITY								2				WATER		
		GEL								3				Bbls.		
		Pump Pres- Model								4				COAL		
		Pump S.P.M. Model								5				Tons		
		Pump Liner Size Model														
		W.L. F.C. pH.														
Tour — 4 p.m. to Midnight		From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS				C.B. Ft.	Subs Ft.	Ft. Up On Kelly	
Specify actual hours worked	Hrs.								No.	O. D.	I. D.	Length	Wgt.			
Driller <i>E. Poudrier</i>	4	IT IS ESSENTIAL TO RECORD SIZE OF JET NOZZLES OR WATER COURSES														
Derrick <i>Gerald Medelac</i>	11	B No. Size Type & Jet Size Serial No. Weight R.P.M. Ft. Drilled Hrs. Feet Reamed Hrs. CONDITION														
Floor <i>Gary Medelac</i>	11	T														
Floor <i>W. Jackson</i>	11	S														
		MUD 4 p.m. 6 p.m. 8 p.m. 10 p.m.				Additives		At Surveys Degree		MOTOR HOURS		Next Oil Change		FUEL		
		WEIGHT								1				Gals.		
		VISCOSITY								2				WATER		
		GEL								3				Bbls.		
		Pump Pres- Model								4				COAL		
		Pump S.P.M. Model								5				Tons		
		Pump Liner Size Model														
		W.L. F.C. pH.														

REMARKS	Start	Stop	Interval
Finish Pulling out	1200	100	1
wait on Parts	100	800	7
Change 8.000 in Mud Pump			
Re Bolt 7000 rps			
GEN CRUDE RANVIL RIVER D-30			
Company Time 1	Cont'r Time 7		
Pull Collars to Log -	800	905	1 1/2
check BOP			
Logging	905	1000	1 3/4
Rig Service	1000	1030	1/2
Prepare to run cement	1030	1230	2
Run in to cement + line.	1030	230	2
Run 5000 cement Plug #1	230	400	1 1/2
Pull down 7000 ft. + 1000 ft.			
Pull Pipe	530	600	1/2
W.O.C.			
Company Time 8	Cont'r Time		
Pull Back 7 joints + Run	400	530	1 1/2
5000 cement			
Pull Pipe	530	600	1/2
W.O.C.	600	1200	6
Company Time 8	Cont'r Time		

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
 B.O.P. Test-Operated _____ Time _____ Results _____
 FORM E-2

Total Contractor Time 7 Hrs. Toolpusher *W. W. Thie*
 Total Company Time 17 Hrs. Approved by *Harmon Doud*

SEDCO

DAILY DRILLING REPORT

DAY WORK RECORD

No. 392

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS. (6)

RIG No. 75 LOCATION Gen Crude Ranvik D-30 AREA Hay River DATE Feb 1/66

Tour — Midnight - 8 a.m.		From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS				C.B. Ft.	Subs Ft.	Ft. Up On Kelly	
Specify actual hours worked									No.	O. D.	I. D.	Length	Wgt.			
8		739	28	767	3	4								3438	8.81	at 739'
IT IS ESSENTIAL TO RECORD SIZE OF JET NOZZLES OR WATER COURSES																
Driller	E. Poudrier	8														
Derrick	Gerald Medelac	8														
Floor	Gary Medelac	8														
Floor	W. Jackson	8														
MUD			12 Mn.	2 a.m.	4 a.m.	6 a.m.	Additives			At Surveys Degree		MOTOR HOURS		Next Oil Change		FUEL
WEIGHT						10.7										Gals.
VISCOSITY						37										Bbls.
GEL																Tons
Pump Pressure	Model															
Pump S.P.M.	Model															
Pump Liner Size	Model															
General																
W.L.			F.C.			pH.										
Tour — 8 a.m. to 4 p.m.																
Specify actual hours worked									DRILL COLLARS				C.B. Ft.	Subs Ft.	Ft. Up On Kelly	
12		767	2	769	1/2	4			No.	O. D.	I. D.	Length	Wgt.			
IT IS ESSENTIAL TO RECORD SIZE OF JET NOZZLES OR WATER COURSES																
Driller	A. Schneider	12														
Derrick	H. Burke	12														
Floor	K. Burke	12														
Floor	D. Goodine	12														
MUD			8 a.m.	10 a.m.	12 noon	2 p.m.	Additives			At Surveys Degree		MOTOR HOURS		Next Oil Change		FUEL
WEIGHT																Gals.
VISCOSITY																Bbls.
GEL																Tons
Pump Pressure	Model															
Pump S.P.M.	Model															
Pump Liner Size	Model															
General			CORE NO 1 739'-769' Recovery 10'													
W.L.			F.C.			pH.										
Tour — 4 p.m. to Midnight																
Specify actual hours worked									DRILL COLLARS				C.B. Ft.	Subs Ft.	Ft. Up On Kelly	
4		769	3	772	1/4				No.	O. D.	I. D.	Length	Wgt.			
IT IS ESSENTIAL TO RECORD SIZE OF JET NOZZLES OR WATER COURSES																
Driller	E. Poudrier	4														
Derrick	Gerald Medelac	4														
Floor	Gary Medelac	4														
Floor	W. Jackson	4														
MUD			4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives			At Surveys Degree		MOTOR HOURS		Next Oil Change		FUEL
WEIGHT						50 lbs. Caustic										Gals.
VISCOSITY						3500 lbs Gal.										Bbls.
GEL																Tons
Pump Pressure	Model															
Pump S.P.M.	Model															
Pump Liner Size	Model															
General																
W.L.			F.C.			pH.										

REMARKS	Start	Stop	Interval
Work on Pump & Brakes	1200	200	2
Service Core Barrel + Run in	200	500	3
Cutting Core #1	500	800	3
GEN CRUDE RANVIK HAY RIVER D-30			
Company Time 8	Cont'r Time		
Coring + Check B.O.P. OK	800	830	1/2
Pull Core Barrel	830	1230	4
Wait started to flow at 10:30 am	1230	130	1
Run in to drill ahead	130	2100	2 1/2
Pump out Pit			
Company Time 8	Cont'r Time		
Mix Mud (Flowing well)	4100	600	2
Ream	600	700	1
Work on Pump clutch	700	730	1/2
Pump out Core Halc	730	800	1/2
Rig Service	800	830	1/2
Ream to 769	830	915	3/4
Drilled from 769 to 772	915	930	1/4
Break down make on Rotaw	930	1200	2 1/2
Drive Repair Broken air line			
+ Start out of Hole			
UNABLE TO CONTINUE DRILLING			
Company Time 5 1/2	Cont'r Time 2 1/2		

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
 B.O.P. Test-Operated _____ Time _____ Results _____
 FORM E-2

Total Contractor Time 2 1/2 Hrs. Toolpusher W. Twiftee
 Total Company Time 2 1/2 Hrs. Approved by Roman Dine

SEDCO

DAILY DRILLING REPORT

GEN CRUDE RANVIK HAY RIVER

D-30

DAY WORK RECORD

No 391

NOTE—Please show FOOTAGE made while "Control Drilling" as well as HOURS

RIG No. 75 LOCATION Gen Crude Ranvik D-30

AREA Hay River DATE Jan 31 1946

Tour — Midnight - 8 a.m.	From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS				C.B. Ft.	Subs Ft.	Ft. Up On Kelly	
Specify actual hours worked	6:47	729	729	3	14			No.	O. D.	I. D.	Length	Wgt.			
Driller <i>P. Poudrier</i>	8	IT IS ESSENTIAL TO RECORD SIZE OF JET NOZZLES OR WATER COURSES													
Derrick <i>Gerard Medec</i>	8	No.	Size	Type & Jet Size	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION			
Floor <i>Gary Medec</i>	8	3	6 1/4	Reed YTH	E 16216	11000	85	88	8			Loose Bearings			
Floor <i>W. Jackson</i>	8	4	6 1/4	Reed YTH	E 16213	11000	85	28	2 1/4						
MUD	12 Mn.	2 a.m.	4 a.m.	6 a.m.	Additives				At Surveys	Degree	MOTOR HOURS	Next Oil Change	FUEL		
WEIGHT															
VISCOSITY															
GEL															
Pump Pressure	Model														
Pump S.P.M.	Model														
Pump Liner Size	Model														
W.L.	F.C.	pH.													

REMARKS	Time		
	Start	Stop	Interval
Drill to top	12:00	12:30	1/2
Twisted off. Fishing + Run in with new bit 8" No 4	12:30	5:30	5
Drill with Bit No 4	5:30	8:00	2 1/2
Twist off at top of drill collars			
Pull out of hole	12:30	1:30	1
Recover fish	1:30	4:45	3 1/4
Run in with Bit No 4	4:45	5:45	1
Drilling with Bit No 4	5:45	8:00	2 1/4
Company Time	4 3/4	Cont'r Time	3 1/4

Tour — 8 a.m. to 4 p.m.	From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS				C.B. Ft.	Subs Ft.	Ft. Up On Kelly	
Specify actual hours worked	7:29	10	739	1/4	11			No.	O. D.	I. D.	Length	Wgt.			
Driller <i>K. Schneider</i>	12	IT IS ESSENTIAL TO RECORD SIZE OF JET NOZZLES OR WATER COURSES													
Derrick <i>H. Burke</i>	12	No.	Size	Type & Jet Size	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION			
Floor <i>K. Burke</i>	12	4	6 1/4	Reed YTH	E 16213	11000	85	30	2 1/2			Green			
Floor <i>D. Goodine</i>	12														
MUD	8 a.m.	10 a.m.	12 noon	2 p.m.	Additives				At Surveys	Degree	MOTOR HOURS	Next Oil Change	FUEL		
WEIGHT	107														
VISCOSITY	37														
GEL															
Pump Pressure	Model														
Pump S.P.M.	Model														
Pump Liner Size	Model														
W.L.	F.C.	pH.													

REMARKS	Time		
	Start	Stop	Interval
Drill	8:00	8:15	1/4
Fix Rotary Clutch	8:15	9:00	3/4
Circulating + check B.O.P.	9:09	9:15	1/4
Pull out to Test	9:15	10:45	1 1/2
Run in with Tester	10:45	3:30	1 3/4
Rig Service	3:30	4:00	1/2
RUNNING DST No 1			
666-739			
Company Time	8	Cont'r Time	

Tour — 4 p.m. to Midnight	From	Footage	To	Hrs. on Bottom	Wt. Drill Pipe (1000 lbs.)	Stands	Singles	DRILL COLLARS				C.B. Ft.	Subs Ft.	Ft. Up On Kelly	
Specify actual hours worked	7:39	0	739	0				No.	O. D.	I. D.	Length	Wgt.			
Driller <i>F. Poudrier</i>	4	IT IS ESSENTIAL TO RECORD SIZE OF JET NOZZLES OR WATER COURSES													
Derrick <i>Gerard Medec</i>	4	No.	Size	Type & Jet Size	Serial No.	Weight	R.P.M.	Ft. Drilled	Hrs.	Feet Reamed	Hrs.	CONDITION			
Floor <i>Gary Medec</i>	4														
Floor <i>W. Jackson</i>	4														
MUD	4 p.m.	6 p.m.	8 p.m.	10 p.m.	Additives				At Surveys	Degree	MOTOR HOURS	Next Oil Change	FUEL		
WEIGHT															
VISCOSITY															
GEL															
Pump Pressure	Model														
Pump S.P.M.	Model														
Pump Liner Size	Model														
W.L.	F.C.	pH.													

REMARKS	Time		
	Start	Stop	Interval
Testing	4:00	8:00	4
Pull Tester	8:00	9:30	1 1/2
Break down Tester	9:30	11:00	1 1/2
Pick up Core Barren	11:00	11:30	1/2
Rig Service	11:30	12:00	1/2
First flow	4:45	5:15	1/2
ISI	5:15	5:45	1/2
Flow Period	5:45	6:45	1
Final Shut in	6:45	7:45	1
Pulled out	7:45	10:00	2 1/4
Laid down tool	10:00	11:30	1 1/2
Picked up core bit	11:30	12:00	1/2
Company Time	8	Cont'r Time	

Totco Ring on Bit No. _____ D.P. Calipered Date _____ Results _____ From Pipe Rack _____
 B.O.P. Test-Operated _____ Time _____ Results _____
 FORM E-2

Total Contractor Time 3 3/4 Hrs. Toolpusher *Old Trottie*
 Total Company Time 20 3/4 Hrs. Approved by *Morgan Paul*

Well Gen. Crude Romvik Hay River 30 Contractor Sedco Exploration

SED CO

GEN CRUDE RANVIK HAY RIVER

D-30

DAILY DRILLING REPORT

Type Rig GD 2000

Date Jan 30/66

Days on Well 4

[illegible]

Toolpusher

Approved by

Company: GC Sproule GENERAL CRUDE OIL COMPANY

SEDCO

GEN CRUDE RANVIK HAY RIVER

D-30

DAILY DRILLING REPORT

Well Gen. Crude Ranvik Hay River Contractor Sedco ExplorationType Rig GD 2000Date Jan 29/66Days on Well 3

DEPTH	1st Tour From: <u>8 AM</u> To: <u>8 AM</u>					2nd Tour From: <u>8 AM</u> To: <u>4 PM</u>					3rd Tour From: <u>4 PM</u> To: <u>12 Mid.</u>																					
	From	To	Hole Made	Hole Size	Formation	From	To	Hole Made	Hole Size	Formation	From	To	Hole Made	Hole Size	Formation																	
	<u>210</u>	<u>210</u>	<u>-</u>	<u>9 7/8"</u>	<u>FACT SIMPSON</u>	<u>210</u>	<u>443</u>	<u>233</u>	<u>6 1/4"</u>	<u>SLAVE POINT</u>	<u>443</u>	<u>500</u>	<u>57</u>	<u>6 1/4"</u>																		
DRILL PIPE	Stds.	Singles	Kelly	Drill Collar Ft.	Core Bbl. Ft.	Stds.	Singles	Kelly	Drill Collar Ft.	Core Bbl. Ft.	Stds.	Singles	Kelly	Drill Collar Ft.	Core Bbl. Ft.																	
BIT RECORD	No.	Type	On Bottom At	Pulled At	Total Hours Run	Depth	Wt. Lbs.	FEET			No.	Type	On Bottom At	Pulled At	Total Hours Run	Depth	Wt. Lbs.	FEET														
								Drilled	Reamed									Drilled	Reamed													
	<u>1</u>	<u>YT3</u>	<u>-</u>								<u>1</u>	<u>YT3</u>	<u>210</u>	<u>470</u>	<u>8 1/2</u>	<u>470</u>		<u>280</u>	<u>-</u>													
											<u>2</u>	<u>YT1A</u>	<u>470</u>	<u>running</u>	<u>2 1/2</u>	<u>500</u>		<u>30</u>	<u>-</u>													
	Bit Serial No. <u>93009</u>					R.P.M.						Bit Serial No. <u>93009</u>					R.P.M.						Bit Serial No. <u>① 93009</u> <u>② E16212</u>					R.P.M.				
SURVEYS	Kind	at	Ft.	Deg. off		Kind	at	Ft.	Deg. off		Kind	at	Ft.	Deg. off																		
	HOURS		Line Press	REPAIRS		HOURS		Line Press	REPAIRS		HOURS		Line Press	REPAIRS																		
SLUSH PUMP RECORD	On Line	Circulating		Yes	No	On Line	Circulating		Yes	No	On Line	Circulating		Yes	No																	
Pump No. 1																																
MUD RECORD	Wt.	Visc.	W.L.	Time	Additives	Wt.	Visc.	W.L.	Time	Additives	Wt.	Visc.	W.L.	Time	Additives																	
										<u>700 lbs Gel.</u> <u>4 shs Sandust</u>																						
CORING	From	To	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Rec'd.	Core No.	Type Bbl.	From	To	Ft. Rec'd.	Core No.	Type Bbl.																	
DETAIL OF OPERATIONS AND REMARKS	Total Contract Time _____ hrs. Total Company Time <u>8</u> hrs.					Total Contract Time _____ hrs. Total Company Time <u>8</u> hrs.					Total Contract Time _____ hrs. Total Company Time <u>8</u> hrs.																					
	Start	Stop	Interval	REMARKS		Start	Stop	Interval	REMARKS		Start	Stop	Interval	REMARKS																		
	<u>12:00</u>	<u>3:00</u>	<u>3:00</u>	<u>W.O.C.</u>		<u>8:00</u>	<u>9:00</u>	<u>1</u>	<u>Drilling</u>		<u>4:00</u>	<u>6:00</u>	<u>2</u>	<u>Drilling</u>																		
	<u>3:00</u>	<u>7:00</u>	<u>4:00</u>	<u>Heading up</u>		<u>9:00</u>	<u>9:30</u>	<u>1/2</u>	<u>work on pump & rig service</u>		<u>6:00</u>	<u>8:30</u>	<u>2 1/2</u>	<u>Trip for N.B.</u>																		
	<u>7:00</u>	<u>8:00</u>	<u>1</u>	<u>Run in Pressure up 500 lbs</u>		<u>9:30</u>	<u>10:30</u>	<u>1</u>	<u>Drilling</u>		<u>8:30</u>	<u>9:00</u>	<u>1/2</u>	<u>Repair Rotary 35 Speed</u>																		
				<u>for 15 min</u>		<u>10:30</u>	<u>11:00</u>	<u>1/2</u>	<u>Mix Mud</u>		<u>9:00</u>	<u>9:30</u>	<u>1/2</u>	<u>work on Pumps</u>																		
						<u>11:00</u>	<u>12:30</u>	<u>1 1/2</u>	<u>Drilling</u>		<u>9:30</u>	<u>12:00</u>	<u>2 1/2</u>	<u>dry & wind Bit No 2</u>																		
						<u>12:30</u>	<u>1:00</u>	<u>1/2</u>	<u>FIX RECORDER cable</u>																							
						<u>1:00</u>	<u>4:00</u>	<u>3</u>	<u>Drilling</u>																							
	Driller <u>Poudrier Nedelec Nedelec Jackson</u>					Driller <u>R. SCHNEIDER. H. BURKE. K. BURKE Goodline</u>					Driller <u>Poudrier Nedelec Nedelec Jackson</u>																					

Toolpusher Al. TwatApproved by Al. Twat

Company: (J.C. S. Proutle) GEN CRUDE OIL COMPANYSEDCO GEN CRUDE RANVIK HAY RIVER
D-30

DAILY DRILLING REPORT

Well Gen Crude Ranvik Hay River D-30 Contractor Sedco ExplorationType Rig GD 2000Date Jan 28/66Days on Well 2

DEPTH	1st Tour From: <u>12 Mid</u> To: <u>8 AM</u>					2nd Tour From: <u>8 AM</u> To: <u>4 PM</u>					3rd Tour From: <u>4 PM</u> To: <u>12 Mid.</u>									
	From	To	Hole Made	Hole Size	Formation	From	To	Hole Made	Hole Size	Formation	From	To	Hole Made	Hole Size	Formation					
	<u>195</u>	<u>210</u>	<u>15</u>	<u>9 7/8</u>	<u>FORT SIMPSON</u>	<u>210</u>	<u>210</u>	<u>-</u>	<u>9 7/8</u>	<u>FORT SIMPSON</u>	<u>210</u>	<u>210</u>	<u>-</u>	<u>9 7/8</u>	<u>FORT SIMPSON</u>					
DRILL PIPE	Stds.	Singles	Kelly	Drill Collar Ft.	Core Bbl. Ft.	Stds.	Singles	Kelly	Drill Collar Ft.	Core Bbl. Ft.	Stds.	Singles	Kelly	Drill Collar Ft.	Core Bbl. Ft.					
BIT RECORD	No.	Type	On Bottom At	Pulled At	Total Hours Run	Depth	Wt. Lbs.	FEET		No.	Type	On Bottom At	Pulled At	Total Hours Run	Depth	Wt. Lbs.	FEET			
								Drilled	Reamed								Drilled	Reamed		
	<u>2A Hughes</u>	<u>7</u>	<u>210</u>	<u>5</u>	<u>210</u>			<u>15</u>	<u>188</u>	<u>-</u>										
	Bit Serial No. <u>RERUN</u> R.P.M.					Bit Serial No. <u>-</u> R.P.M.					Bit Serial No. <u>-</u> R.P.M.									
SURVEYS	Kind	at	Ft.	Deg. off		Kind	at	Ft.	Deg. off		Kind	at	Ft.	Deg. off						
	HOURS		Line Press	REPAIRS		HOURS		Line Press	REPAIRS		HOURS		Line Press	REPAIRS						
SLUSH PUMP RECORD	On Line	Circulating		Yes	No	On Line	Circulating		Yes	No	On Line	Circulating		Yes	No					
Pump No. 1	<u>32.50</u>	<u>32.56</u>	<u>32.18</u>	<u>32.10</u>	<u>32.10</u>	<u>32.32</u>														
MUD RECORD	Wt.	Visc.	W.L.	Time	Additives		Wt.	Visc.	W.L.	Time	Additives		Wt.	Visc.	W.L.	Time	Additives			
	<u>Run 6 STs New 20" 7" casing</u>																			
	<u>7" Davis Guide Shoe.</u>																			
CORING	From	To	Ft. Rec'd.	Core No.	Type	Bbl.	From	To	Ft. Rec'd.	Core No.	Type	Bbl.	From	To	Ft. Rec'd.	Core No.	Type	Bbl.		
	<u>Landed at 2:00. 7" N.B. Type Bbl.</u>																			
	<u>Cement 60 Sks. + 2% Calcium.</u>																			
	<u>Down at 7:30 A.M. Jan 28/66.</u>																			
	<u>3 Bbls. Returns. M. Watts</u> Hrs.																			
DETAIL OF OPERATIONS AND REMARKS	Total Contract Time _____ hrs. Total Company Time <u>8</u> hrs.					Total Contract Time _____ hrs. Total Company Time <u>8</u> hrs.					Total Contract Time _____ hrs. Total Company Time <u>8</u> hrs.					Total Contract Time _____ hrs. Total Company Time <u>8</u> hrs.				
	TIME	REMARKS	TIME	REMARKS	TIME	REMARKS	TIME	REMARKS	TIME	REMARKS	TIME	REMARKS	TIME	REMARKS	TIME	REMARKS				
	Start	Stop	Interval		Start	Stop	Interval		Start	Stop	Interval		Start	Stop	Interval					
	<u>12:00</u>	<u>12:30</u>	<u>1/2</u>	<u>Rig Service</u>	<u>4:00</u>	<u>4:00</u>	<u>1</u>	<u>Pump out pits. W.O.C.</u>	<u>4:00</u>	<u>8:00</u>	<u>4</u>	<u>W.O.C.</u>								
	<u>12:30</u>	<u>2:00</u>	<u>1 1/2</u>	<u>Rooming</u>	<u>9:00</u>	<u>4:00</u>	<u>7</u>	<u>W.O.C.</u>	<u>8:00</u>	<u>12:00</u>	<u>1</u>	<u>W.O.C.</u>								
	<u>2:00</u>	<u>3:00</u>	<u>1</u>	<u>drlg</u>																
	<u>3:00</u>	<u>3:30</u>	<u>1/2</u>	<u>Circulating</u>																
	<u>3:30</u>	<u>4:00</u>	<u>1/2</u>	<u>Pull out</u>																
	<u>4:00</u>	<u>5:00</u>	<u>1</u>	<u>Run casing</u>																
	<u>5:00</u>	<u>6:00</u>	<u>1</u>	<u>Prepare to cement</u>																
	<u>6:00</u>	<u>7:30</u>	<u>1 1/2</u>	<u>Cementing</u>																
	<u>7:30</u>	<u>8:00</u>		<u>Pump pits W.O.C.</u>																
	Driller <u>Poudrier Nedelec Nedelec</u>					Driller <u>R. SCHNEIDER, H. BURKE, K. BURKE, P. GOODINE</u>					Driller <u>Poudrier Nedelec Nedelec Jackson</u>									

Toolpusher Al. WattsApproved by Norman Paul

Well Gr. Grade Road at Hay River Dn30 Contractor Redco

SED CO

GEN CRUDE RANVIK HAY RIVER

D-30

DAILY DRILLING REPORT

Type Rig L.D. 2000

Date Jan 27/66

Days on Well 1

DEPTH	1st Tour From: 12 Mid To: 8 AM					2nd Tour From: 2 AM To: 4 PM					3rd Tour From: 4 PM To: 12 Mid											
	From	To	Hole Made	Hole Size	Formation	From	To	Hole Made	Hole Size	Formation	From	To	Hole Made	Hole Size	Formation							
DRILL PIPE	0	25	25	9"	SURFACE	25	163	138"	9"	FORT SIMPSON	163	195	32	9"	FORT SIMPSON							
	Stds.	Singles	Kelly	Drill Collar Ft.	Core Bbl. Ft.	Stds.	Singles	Kelly	Drill Collar Ft.	Core Bbl. Ft.	Stds.	Singles	Kelly	Drill Collar Ft.	Core Bbl. Ft.							
BIT RECORD	No.	Type	On Bottom At	Pulled At	Total Hours Run	Depth	Wt. Lbs.	FEET		No.	Type	On Bottom At	Pulled At	Total Hours Run	Depth	Wt. Lbs.	FEET					
								Drilled	Reamed								Drilled	Reamed				
SURVEYS	1A	YTS	07		1	25		25		1A	YTS	7		8 1/2	163		156					
	Bit Serial No. E11261					R.P.M.					Bit Serial No. E16261					R.P.M.						
SLUSH PUMP RECORD	Kind	at		Ft.	Deg. off		HOURS		Line Press	REPAIRS		Kind	at		Ft.	Deg. off		HOURS		Line Press	REPAIRS	
	On Line	Circulating			Yes	No	On Line	Circulating		Yes	No	On Line	Circulating			Yes	No	On Line	Circulating		Yes	No
MUD RECORD	Wt.	Visc.	W.L.	Time	Additives		Wt.	Visc.	W.L.	Time	Additives		Wt.	Visc.	W.L.	Time	Additives					
					1500lb 15 bags bel 10 sks. Sandvut																	
CORING	From	To	Ft. Rec'd.	Core No.	Type	Bbl.	From	To	Ft. Rec'd.	Core No.	Type	Bbl.	From	To	Ft. Rec'd.	Core No.	Type	Bbl.				
						Hrs.						Hrs.						Hrs.				
DETAIL OF OPERATIONS AND REMARKS	Total Contract Time _____ hrs. Total Company Time 8 hrs.					Total Contract Time _____ hrs. Total Company Time 8 hrs.					Total Contract Time _____ hrs. Total Company Time 8 hrs.											
	Start	Stop	Interval	REMARKS		Start	Stop	Interval	REMARKS		Start	Stop	Interval	REMARKS								
	12:00	4:00		Digging Pits		8:00	1:30	5 1/2	Drilling		4:00	5:45	1 3/4	Drilling								
	4:00	5:00		W.O. Water		1:30	2:00	1/2	Fix blocks on Kelly		5:45	8:00	2 1/4	Pull out To ream 9" to 9 1/2"								
	5:00	7:00		Mix Mud		2:00	5:00	2 1/2	Drilling		8:00	9:30	1 1/2	Reaming								
	7:00	8:00		Spud in & drlg 9" hole							9:30	11:00	1 1/2	Work on Pumps								
											11	12:00	1	Reaming								
	Driller Poudrier Nedelec Nedelec Jackson					Driller R. SCHNEIDER H. BURKE M. BURKE					Driller Poudrier Nedelec Nedelec Jackson											

Toolpusher

Approved by