

SHELL KAKISIA RIVER No. 2

Drilling Authority No.
Date issued

WELL NAME Shell Creek River No. 2

FIELD Wildcat

Area: Trout Lake

LOCATION: Ush

D

Section

77

Grid 60 70 118 15

Latitude 60°26'12.49"N.

Longitude 118°28'18.46"W.

From Established Reference Marker

Rig Release Date: 27-2-59

Status D & A

Information Release Date 27-2-61

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 AND LANDS BRANCH

(ABANDONMENT)
(COMPLETION)
(REPLENISHMENT)
(STROKE OUT)

REPORT

In duplicate
In duplicate

(Stroke out operations which do not apply)

To be submitted in triplicate in accordance with Section 70 of the Territorial Oil and Gas Regulations to the Conservation Engineer at Edmonton, Alberta.

Name of well . Shell Canadian River No. 2 Permit No. . 584 . . .
Registered owner . Shell Oil Company of Canada Lease No.
Location: (Survey description)
. 60°06'12.49" N. Lat. 118°28'18.46" W. - Long.
Elevation: Ground . 2175 . . . Kelly bushing . 2188 . . Depth . 5675 . . .
Spudded . January 26, 1959 . . . Finished drilling Feb. 22 . . . Rig released Feb. 27/59
Deviations from vertical 1-1/2° @ 2121', 2° @ 2391' and 2741' . . 1-1/4° @ 2828' . .
1-1/2° @ 4798'

CASING

Date	Size O.D.	Weight lbs/foot	Grade	Set at feet	Sacks cement
1. Jan. 29/59	8-5/8"	28	E-40	706.0	900
2.					
3.					

TUBING

.
Status of well on completion of drilling . Dry and abandoned
Producing zone . none
Cored intervals . none
Interval logged: E-log 706-5676 M-log 706-5676
R-log 150-5676 Other velocity and velocimeter surveys

DRILLSTEM TESTS

Test No.	Date	Interval tested	Duration	Results
1.	Feb. 25/59	5275-5380	30 min.	Sec. 2455' of slightly sandy and gas cut salt water. (Over)

Test No.

Date

Interval tested

Duration

Results

Perforations: (Gun.....)

(Dot.....)

Shootings:

Hydraulically fracturing:

Chemical treatment:

Date Initial Production tests:

Initial production data

Pumping or flowing

Plug back: to surface

Other: well plugged and abandoned

CEMENT PLUGS SET

Date	Plug set at	Sacks cement	Method	Top found at
Feb. 25/59	5250-5350	41	Displacement	5305'
Feb. 26/59	5225-5300	20	"	not felt
Feb. 26/59	636-736	75	"	550'

Well samples have been sent to: Shell Oil Company of Canada Ltd.

Cores will be stored at: cut will be forwarded

Electric log is appended: Yes No ☒

Radioactivity log is appended: Yes No ☒

Micrometer log is appended: Yes No ☒

Geologic record or strip log (is . . .) submitted Yes No ☒
(will be)

Results of tests for porosity, permeability, and saturation of each stratum containing oil, gas or water (are . . .) submitted Yes ☒
(will be) Yes . 68 (5) No (6) . .

With respect to abandonment we have complied with Section 60(3) and (4) of the Regulations. (Initial here)

ADDITIONAL DETAILS AND COMMENTS Cut off casing 3' below G.L. Put 5 sacks cement plug in top of casing and 5 sacks each in rat-hole and mouse-hole. Welded plate on casing with marker post 4' above G.L.

Signed *E. R. Shum* Address P. O. Box 186, Edmonton, Alberta
Division Production Manager

CANADA

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION AND LANDS BRANCH

NOTICE OF INTENTION TO

(~~PLUG BACK~~)
(ARANDON)
(~~CONCRETE CEMENT~~)
(~~CONCRETE CEMENT~~)
(~~CONCRETE CEMENT~~)

A WELL

(Stroke-out operations which do not apply).

To be submitted in triplicate to the Conservation Engineer at Edmonton, Alberta.

In accordance with Sections 60, 61, Or 62 of the Territorial Oil and Gas Regulations, notice is hereby given of our intention to

abandon the well named on Oil and Gas (Permit No.) registered in the name of Oil Company (Lease No.)

Total Depth - 675 feet. Elevation above sea level: Ground surface 2175.0 ft. Kelly bushing 2188 ft.

Location (if not accurately stated in Notice of Intention to Begin Drilling Operations):

..... (W of S boundary) of (Permit No.) at actual 60° 06' 12.49" Lat.
..... (S of W boundary) of (Lease No.) at actual 118° 28' 18.46"
..... (W of E boundary) of (Permit No.) at approx W Long.
..... (E of W boundary) of (Lease No.)

Survey description

CASING RECORD

Size O.D. inches	Weight lbs/ft.	Amount feet	Set at feet	Sacks cement	Method	To be Withdrawn
1. 8-5/8"	28	691.46	706.0	500	Displacement	no
2. ....	.....	.....	.....	.....	.....	.....
3. ....	.....	.....	.....	.....	.....	.....

OIL, GAS and WATER

Encountered

Cement plugs to be set

Oil fromfeet to.....feet. Fromfeet tofeet with.....sacks

.....
.....

Gas from feet to.....feet. Fromfeet to.....feet with.....sacks.

.....
.....

(Over)

Water from 5775..feet to 5780...feet. From 5780...feet to 5790...feet with 61...sacks.

Bottom plug from 5725...feet to 5790...feet with ...61...sacks

Surface casing cut 3' below O.L., 5 sacks in top casing, 5 sacks in rat-hole, 5 sacks in
Date of last operations Feb. 27/59 Total depth 5675

Nature of liquid in well Level from surface to surface

Present condition of well in addition to above: Plugged back to surface

An electric log (will be) run. (strike out what is non-applicable)

On abandonment we shall comply with Section 60 (3) and (4) of the Regulations with respect to filling excavations and marking the well site E.R.S. (Please Initial)

Program of operation not included above

Responsible agents of permittee or lessee in charge of operation:

At well J.M. Stewart At registered office: E.R. Shorey, Jr.

Postal Address P.O. Box 186.. Postal Address P.O. Box 186, Edmonton, Alberta
Edmonton, Alberta

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

Dated at Edmonton . . . this 10th . . . day of . . . March 1959

Signed by E. R. Shorey, Jr.
Manager
Edmonton Division Production

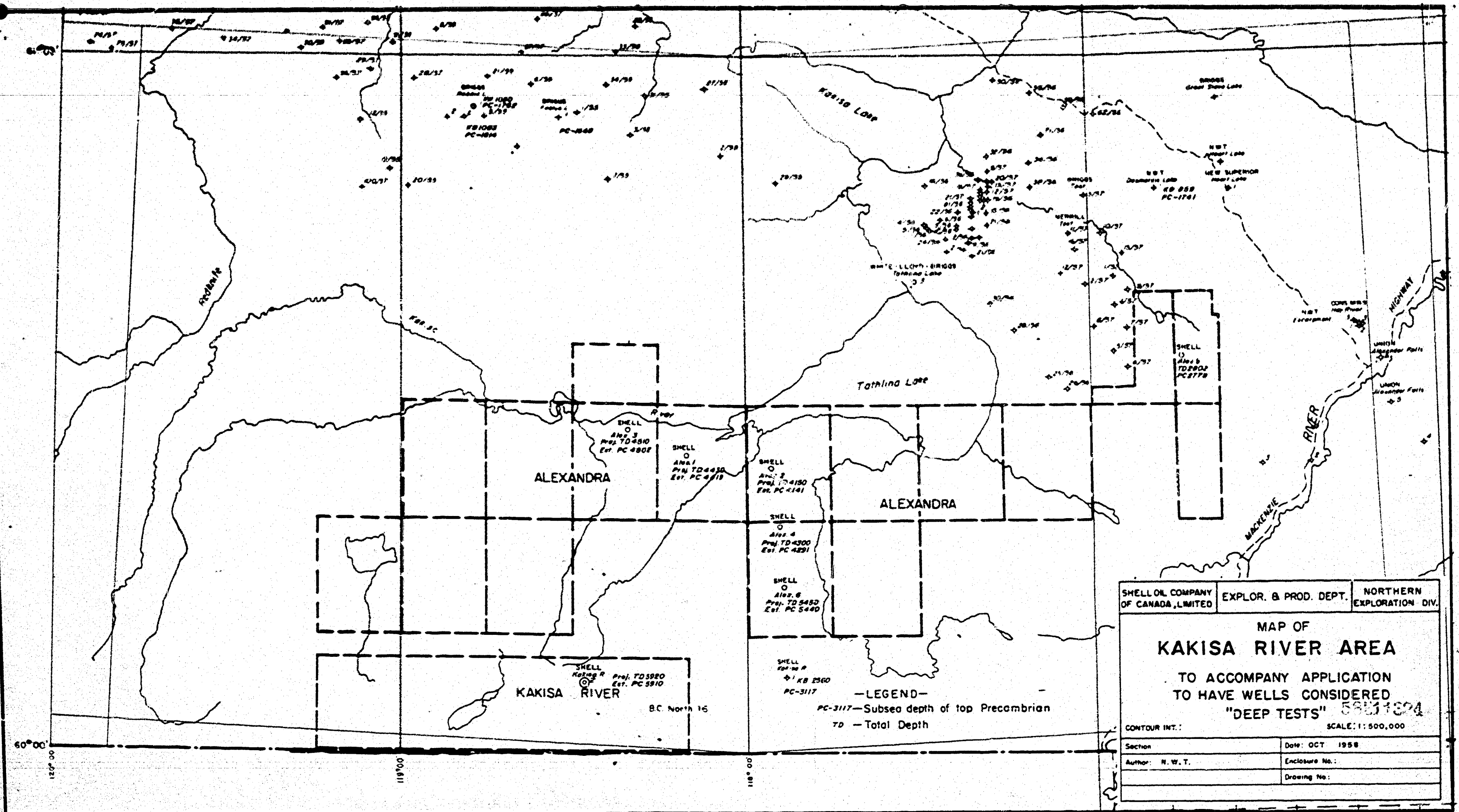
This program is approved subject to the following provisions:

Confirming oral approval.

13th March 1959

Date

B.H. Shorn
Conservation Engineer



SHELL OIL COMPANY OF CANADA, LIMITED		EXPLOR. & PROD. DEPT.	NORTHERN EXPLORATION DIV.
MAP OF KAKISA RIVER AREA			
TO ACCOMPANY APPLICATION TO HAVE WELLS CONSIDERED "DEEP TESTS" 5801324			
CONTOUR INT.:		SCALE: 1:500,000	
Section:		Date: OCT 1958	
Author: N. W. T.		Enclosure No.:	
		Drawing No.:	

C A N A D A

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION AND LANDS BRANCH

NOTICE OF INTENTION TO BEGIN DRILLING OPERATIONS

(To be submitted in triplicate to the Conservation Engineer at Edmonton, Alberta at least 15 days prior to the commencement of drilling).

58

In accordance with Section 58 of the Territorial Oil and Gas Regulations, notice is hereby given of our intention to begin drilling a well on Oil and Gas Permit No. 589 ...registered in the name of

Lease No.

Shell Oil Company of Canada, Limited

TYPE OF WELL:

Stratigraphic test: 79% Wildcat:
Structure Test: Development:
Anticipated number of holes: (Required for Structure Test Only)
Expected total depth: . . 5920 feet.

The well will be located:

.....(N of S boundary) of (Permit No.....) at approx. 60°06'17" N Lat.
.....(S of N boundary) (Lease No.)
.....(W of E boundary) of (Permit No.....) at approx. 116°26'30" W Long.
.....(E of W boundary) (Lease No.....)

Survey description of location Survey plans will be submitted as soon as possible - delay due to access difficulties,

Approximate surface elevation of 2,200 . . .feet above sea level.

Name of well: , Shell Kakisa River No. 2

Type of drilling rig: Rotary

Expected date of commencement: December 15, 1958

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

Size O.D. inches	Weight lbs/foot	Grade	Brand	New or used	Estimated depth	Sacks of cement
1. 8-5/8	26	J-55	Domestic	New	700'	400 + 2% CaCl ₂
2.						
3.						

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

Objectives below 4,700'. Control will be by drilling mud and blow out preventers.

(Over)

An electric log (will ~~will not~~) be run.

The well will be drilled by: Contractor to be selected (name of company)

CONTRACTOR:

Responsible agents of permittee or lessee in charge of operation:

At well D.O. Stinson, At registered office: R. I. Raskin,

Postal address: P. O. Box 186, Postal address: P. O. Box 100, Calgary,
Edmonton, Alberta Alberta

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

Dated at this 19th day of November 1958

Please mail approved form to P. O. Box 186, Edmonton, Alberta.

Signed by
R. I. Raskin

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

. Please forward name of contractor when known.
.
.
.

November 26, 1958,
Date

B. H. Shaw
Conservation Engineer

OPERATOR		LOCATION		LSD.		SEC.		TWP.		RGE.		W.		WELL NAME		No.		PROVINCE																																	
Shell Oil Company of Canada, Limited		60° 6' 17" N. Lat.		119° 28' 30" W. Long.										SHELL KAKISA RIVER.		2		N.W.T.																																	
CONTRACTOR		RIG No.		DRILL PIPE STRING NO. SIZE		TOOL JOINT		OD		PUMPS		CASING & LINER		SIZE		WT & GR.		DEPTH SET FROM TO		PERFORATIONS FROM TO		CEMENT USED		OTHER																											
REGENT DRILLING CO.		26		2 1/2		5 3/4		OD		1. 1.500 2. 1.500 3. 1.500		1. 1.500 2. 1.500 3. 1.500		8 1/2 2 1/2		0 706						5005X + 2 1/2 Cella in the last 200.5X.																													
OPERATOR'S REPRESENTATIVE		CONTRACTOR'S TOOLS PUSHER		TYPE THD FH.																																															
J. H. H. H.		J. H. H. H.																																																	
TIME DISTRIBUTION—HOURS				NO. DRILLING ASSEMBLY				BIT RECORD				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD			
MORN DAY EVE <td colspan="4">STANDS DP FT. RUN NO.</td> <td colspan="4">HRS. DRLD.</td> <td colspan="4">CORE NO.</td> <td colspan="4">FORMATION (SHOW CORE RECOVERY)</td> <td colspan="4">ROTA- RY R.P.M.</td> <td colspan="4">WT. ON BIT 1000#</td> <td colspan="4">PUMP PRESS</td> <td colspan="4">PUMP NO. 1 LINER SIZE S.P.M.</td> <td colspan="4">PUMP NO. 2 LINER SIZE S.P.M.</td> <td colspan="4">METHOD PUMPS RUN</td> <td colspan="4">MUD RECORD</td>				STANDS DP FT. RUN NO.				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
DRILLING ACTUAL				SNGLS. DP FT. SIZE				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
REAMING				D.C. ID FT. MFG.				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
CIRCULATING				RMR BODY OD FT. NO.				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
TRIPS				SYB BODY OD FT. NOZ. SIZE				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
DEVIATION SURVEY				SUBS OD FT. SER. NO.				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
TEST B.O.P.				BIT OR C.B. FT. DEPTH OUT				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
CUT OFF DRILL LINE				CUMULATIVE HOURS RUN				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
REPAIR RIG				COND. OF BIT				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
CORING				REAMER CUTTER NO.				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
WIRE LINE LOGGING				WT OF STRING LBS. TYPE				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
OTHER				DRILLER				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
FISHING				W.A. HOWE.				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
COMPLETING (A) PERFORATING				12:00-8:00 Finished laying down drill pipe, Kelly, rat-hole and mouse-hole. Tore out B.O.P.s. Cut off casing 3' below G.L. Put 5-5X cement each in casing, rat-hole and mouse-hole. Welded plate w/ marker post on casing. RIG RELEASED @ 8:00 A.M. FEBRUARY 27, 1959. WELL D.E.A. LAST REPORT.				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
(B) RUNNING TUBING				8:00-4:00 Rigging down.				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
(C) SWABBING				4:00-12:00 Rigging down and moving out.				HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
(D) TESTING								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
(E) ACIDIZING								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
(F) ADDITIONAL								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
TOTALS								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
TIME SUMMARY (OFFICE USE ONLY)								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
CONTRACTOR'S TIME HRS.								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
OPERATOR'S TIME								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
HRS. W/D.P.								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
HRS. WO/D.P.								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
HRS. STANDBY								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
WIRE LINE RECORD								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
REEL NO.								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
NO. OF LINES SIZE								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
FEET SLIPPED								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
FEET CUT OFF								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
PRESENT LENGTH								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
TON MI. OF TRIPS SINCE LAST CUT								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
CUMULATIVE TON MI. OF TRIPS								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
NO. OF DAYS FROM SPUD								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							
CUMULATIVE ROTATING HRS.								HRS. DRLD.				CORE NO.				FORMATION (SHOW CORE RECOVERY)				ROTA- RY R.P.M.				WT. ON BIT 1000#				PUMP PRESS				PUMP NO. 1 LINER SIZE S.P.M.				PUMP NO. 2 LINER SIZE S.P.M.				METHOD PUMPS RUN				MUD RECORD							

OPERATOR		SHELL OIL COMPANY OF CANADA, LIMITED		LOCATION		LSD.		SEC.		TWP.		RGE.		W.		WELL NAME		No.		PROVINCE									
REGENT DRILL		26		66° 17' N. 118° 28' 30" W.		LONG SHELL RIVER												2		N.W.T.									
CONTRACTOR		RIG No.		DRILL PIPE		TOOL JOINT		6" OD		NO.		MANUFACTURER		TYPE		STROKE LENGTH		CASING & LINER RECORD		DEPTH SET		PERFORATIONS		CEMENT USED		OTHER			
26		7 4/2		TYPE THD		F.H.				1.		EMSCO		0-300		14"		8 3/8 22" 6 706.						500		2 1/2 9/16 1 1/2 LAST 200 SHS.			
OPERATOR'S REPRESENTATIVE		CONTRACTOR'S TOOL PUSHER																											
TIME DISTRIBUTION—HOURS		MORN		DAY		EVE																							
DRILLING ACTUAL																													
REAMING																													
CIRCULATING		1 1/2																											
TRIPS		2 1/2																											
DEVIATION SURVEY																													
TEST B.O.P.																													
CUT OFF DRILL LINE																													
REPAIR RIG																													
CORING																													
WIRE LINE LOGGING																													
OTHER		8.33																											
FISHING																													
COMPLETING (A) PERFORATING																													
(B) RUNNING TUBING																													
(C) SWABBING																													
(D) TESTING																													
(E) ACIDIZING																													
(F) ADDITIONAL																													
TOTALS		8.8																											
TIME SUMMARY (OFFICE USE ONLY)																													
CONTRACTOR'S TIME HRS.																													
OPERATOR'S TIME																													
MRS. W/D.P.																													
MRS. WO/D.P.																													
MRS. STANDBY																													
WIRE LINE RECORD																													
REEL NO.																													
NO. OF LINES		SIZE																											
FEET SLIPPED																													
FEET CUT OFF																													
PRESENT LENGTH																													
TON MI. OF TRIPS SINCE LAST CUT																													
CUMULATIVE TON MI. OF TRIPS																													
NO. OF DAYS FROM SPUD																													
CUMULATIVE ROTATING HRS.																													
NO.		DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FROM		TO		FORMATION (SHOW CORE RECOVERY)		ROTA-RY R.P.M.		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1 LINER SIZE S.P.M.		PUMP NO. 2 LINER SIZE S.P.M.		METHOD PUMPS RUN		MUD RECORD	
STANDS DP		FT.		RUN NO.																									
SNGLS. DP		FT.		SIZE																									
D.C. ID		MFG.																											
D.C. OD		FT.		TYPE																									
RMR BODY OD		FT.		NO.																									
STB BODY OD		FT.		NOZ. SIZE																									
SUBS OD		FT.		SER. NO.																									
BIT OR C.B.		FT.		DEPTH OUT																									
		FT.		CUMULATIVE HOURS RUN																									
KELLY DOWN		FT.		COND. OF BIT																									
TOTAL		FT.		REAMER CUTTER NO.																									
WT OF STRING		LBS.		TYPE																									
DRILLER																													
W. A. Hwang																													
NO.		DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FROM		TO		FORMATION (SHOW CORE RECOVERY)		ROTA-RY R.P.M.		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1 LINER SIZE S.P.M.		PUMP NO. 2 LINER SIZE S.P.M.		METHOD PUMPS RUN		MUD RECORD	
STANDS DP		FT.		RUN NO.																									
SNGLS. DP		FT.		SIZE																									
D.C. ID		MFG.																											
D.C. OD		FT.		TYPE																									
RMR BODY OD		FT.		NO.																									
STB BODY OD		FT.		NOZ. SIZE																									
SUBS OD		FT.		SER. NO.																									
BIT OR C.B.		FT.		DEPTH OUT																									
		FT.		CUMULATIVE HOURS RUN																									
KELLY DOWN		FT.		COND. OF BIT																									
TOTAL		FT.		REAMER CUTTER NO.																									
WT OF STRING		LBS.		TYPE																									
DRILLER																													
G. McBride																													
NO.		DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FROM		TO		FORMATION (SHOW CORE RECOVERY)		ROTA-RY R.P.M.		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1 LINER SIZE S.P.M.		PUMP NO. 2 LINER SIZE S.P.M.		METHOD PUMPS RUN		MUD RECORD	
STANDS DP		FT.		RUN NO.																									
SNGLS. DP		FT.		SIZE																									
D.C. ID		MFG.																											
D.C. OD		FT.		TYPE																									
RMR BODY OD		FT.		NO.																									
STB BODY OD		FT.		NOZ. SIZE																									
SUBS OD		FT.		SER. NO.																									
BIT OR C.B.		FT.		DEPTH OUT																									
		FT.		CUMULATIVE HOURS RUN																									
KELLY DOWN		FT.		COND. OF BIT																									
TOTAL		FT.		REAMER CUTTER NO.																									
WT OF STRING		LBS.		TYPE																									
DRILLER																													
J. H. Smith																													
NO.		DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FROM		TO		FORMATION (SHOW CORE RECOVERY)		ROTA-RY R.P.M.		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1 LINER SIZE S.P.M.		PUMP NO. 2 LINER SIZE S.P.M.		METHOD PUMPS RUN		MUD RECORD	
STANDS DP		FT.		RUN NO.																									
SNGLS. DP		FT.		SIZE																									
D.C. ID		MFG.																											
D.C. OD		FT.		TYPE																									
RMR BODY OD		FT.		NO.																									
STB BODY OD		FT.		NOZ. SIZE																									
SUBS OD		FT.		SER. NO.																									
BIT OR C.B.		FT.		DEPTH OUT																									
		FT.		CUMULATIVE HOURS RUN																									
KELLY DOWN		FT.		COND. OF BIT																									
TOTAL		FT.		REAMER CUTTER NO.																									
WT OF STRING		LBS.		TYPE																									
DRILLER																													
J. H. Smith																													
NO.		DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FROM		TO		FORMATION (SHOW CORE RECOVERY)		ROTA-RY R.P.M.		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1 LINER SIZE S.P.M.		PUMP NO. 2 LINER SIZE S.P.M.		METHOD PUMPS RUN		MUD RECORD	

OPERATOR

Shell Oil Company of Canada, Limited

LOCATION

LSD.

SEC.

TWP

RGE.

W

WELL NAME

No.

PROVINCE

CONTRACTOR

REGENT DRILLING

RIG NO.

CONTRACTOR'S TOOL PUSHER

DRILL PIPE

STRING

NO. 2

SIZE 4 1/2

TOOL

JOINT

6" OD

TYPE THD FH

PUMPS

NO.

MANUFACTURER

TYPE

STROKE

LENGTH

CASING

&

LINER

RECORD

SIZE

WT & GR.

DEPTH SET

FROM

TO

PERFORATIONS

FROM

TO

CEMENT

USED

OTHER

500 SKS. @ 2 1/2 e/s
12 EAST 200 SKS

OPERATOR'S REPRESENTATIVE

CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION—HOURS

MORN DAY EVE

DRILLING ACTUAL

REAMING

CIRCULATING

TRIPS

DEVIATION SURVEY

TEST B.O.P.

CUT OFF

DRILL LINE

REPAIR RIG

CORING

WIRE LINE LOGGING

OTHER

FISHING

COMPLETING

(A) PERFORATING

(B) RUNNING

TUBING

(C) SWABBING

(D) TESTING

(E) ACIDIZING

(F) ADDITIONAL

TOTALS

TIME SUMMARY

(OFFICE USE ONLY)

CONTRACTOR'S TIME HRS.

OPERATOR'S TIME

HRS. W/D.P.

HRS. WO/D.P.

HRS. STANDBY

WIRE LINE RECORD

REEL NO.

NO. OF LINES

SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OF TRIPS

SINCE LAST CUT

CUMULATIVE

TON MI. OF TRIPS

NO. OF DAYS

FROM SPUD

CUMULATIVE

ROTATING HRS.

NO. DRILLING ASSEMBLY

BIT RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

STANDS DP

FT.

RUN NO.

SNGLS. DP

FT.

SIZE

D.C. ID

MFG.

D.C. OD

FT.

TYPE

RMR BODY OD

FT.

NOZ. NO.

STB BODY OD

FT.

NOZ. SIZE

SUBS OD

FT.

SER. NO.

BIT OR C.B.

FT.

DEPTH OUT

FT.

CUMULATIVE HOURS RUN

KELLY DOWN

FT.

COND. OF BIT

TOTAL

FT.

REAMER CUTTER NO.

WT OF STRING

LBS.

TYPE

DRILLER

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P.M.

WT. ON BIT

1000±

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- RY

R.P

REEL NO.	NO. DRILLING ASSEMBLY	BIT RECORD		HRS. DRLD	CORE NO	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTARY R.P.M	WT ON BIT 1000±	PUMP PRESS	PUMP NO 1 LINER SIZE S.P.M	PUMP NO 2 LINER SIZE S.P.M	METHOD PUMPS RUN.	MUD RECORD					
NO. OF LINES	SIZE	STANDS	DP	5171.89 FT.	RUN NO	25									TIME	600	800	1000		
FEET SLIPPED		SNGLS.	DP	FT	SIZE	7 7/8		5578	5611			90	35	950	6" 61					
FEET CUT OFF		ID			MFG	H.T.														
PRESENT LENGTH		15	D.C.	6" OD	415.66 FT.	TYPE	DWC													
TON MI. OF TRIPS SINCE LAST CUT		RMR BODY	OD	FT	NO	3		DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	FLTR. CK			
CUMULATIVE TON MI. OF TRIPS		STB BODY	OD	FT	NOZ	SIZE	46	DEVIATION RECORD	3390	2							PH			
		SUBS	OD	FT	SER NO	59275	400	8" 12	DRILLING 7 7/8" HOLE								SD. CONT.			
NO. OF DAYS FROM SPUD	27	BIT OR C.B		FT	DEPTH OUT	9" 30	8" 30	SERV. RIG								SMALL STRIAM OF WATER				
CUMULATIVE ROTATING HRS.				FT	CUMULATIVE HOURS RUN	13 1/2	8" 30	11" 30	DRILLING 7 7/8" HOLE											
		KELLY DOWN	21.00	FT.	COND. OF BIT	11" 1200	WORK ON PUMP													
		TOTAL	5611.55	FT	REAMER CUTTER NO.															
		WT OF STRING	100,000	LBS.	TYPE															
		DRILLER	Ambridge																	

Shell Oil Company of Canada, Limited

CONTRACTOR

OPERATOR'S REPRESENTATIVE

RIG No.

DRILL PIPE
STRING
NO. SIZETOOL
JOINT

5 3/4 OD

TYPE THD FH

CONTRACTOR'S TOOL PUSHER

LOCATION

LSD.

SEC.

TWP

RGE.

W

WELL NAME

No.

PROVINCE

60° 6'

17"

N. 41° E

118° 28' 30"

W. 40° E

W. 40° E

Shell 10' hole

2

N.W.T.

PUMPS

NO.

MANUFACTURER

TYPE

STROKE
LENGTHCASING
&
LINER
RECORD

SIZE

WT & GR.

DEPTH SET
FROM TOPERFORATIONS
FROM TOCEMENT
USED

OTHER

1.

Emaco

0300

14

4 1/2"

28"

0

706

440

440

440

440

440

440

440

440

2.

Emaco

0300

14

4 1/2"

28"

0

706

440

440

440

440

440

440

440

440

3.

Emaco

0300

14

4 1/2"

28"

0

706

440

440

440

440

440

440

440

440

TIME DISTRIBUTION—HOURS

MORN DAY EVE

DRILLING ACTUAL

REAMING

CIRCULATING

TRIPS

DEVIATION SURVEY

TEST B.O.P.

CUT OFF DRILL LINE

REPAIR RIG

CORING

WIRE LINE LOGGING

OTHER

FISHING

COMPLETING (A) PERFORATING

(B) RUNNING TUBING

(C) SWABBING

(D) TESTING

(E) ACIDIZING

(F) ADDITIONAL

TOTALS

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS.

OPERATOR'S TIME:

HRS. W/D.P.

HRS. WO/D.P.

HRS. STANDBY

WIRE LINE RECORD

REEL NO.

NO. OF LINES SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OF TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OF TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

NO.

DRILLING ASSEMBLY

BIT RECORD

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION (SHOW CORE RECOVERY)

ROTA-
RY
R.P.M.WT. ON
BIT
1000#PUMP
PRESS

PUMP NO. 1

PUMP NO. 2

METHOD
PUMPS
RUN

MUD RECORD

TIME

WEIGHT

VISC.

W.L.C.C.

FLTR. CK.

PH

SD. CONT.

4

STANDS DP

FT.

RUN NO.

22

23

SIZE

7 1/8"

7 1/8"

MFG.

H.T.C.

TYPE

DWC

NO.

3

NOZ.

SIZE

1 1/16"

DEVIATION
RECORD:

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

SINGLS. DP

4971.64

FT.

SIZE

7 1/8"

7 1/8"

MFG.

H.T.C.

TYPE

DWC

NO.

3

NOZ.

SIZE

1 1/16"

DEVIATION
RECORD:

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

D.C.

ID

4971.64

FT.

SIZE

7 1/8"

7 1/8"

MFG.

H.T.C.

TYPE

DWC

NO.

3

NOZ.

SIZE

1 1/16"

DEVIATION
RECORD:

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

RMR BODY OD

4971.64

FT.

NO.

3

NOZ.

SIZE

1 1/16"

DEVIATION
RECORD:

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

STB BODY OD

4971.64

FT.

NO.

3

NOZ.

SIZE

1 1/16"

DEVIATION
RECORD:

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

SUBS OD

4971.64

FT.

SER. NO.

5443

DEPTH OUT

5390

CUMULATIVE
HOURS RUN

13 1/4

COND.
OF BIT

DULL

REAMER
CUTTER NO.

5443

DEVIATION
RECORD:

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

BIT OR C.B.

4971.64

FT.

SER. NO.

5443

DEPTH OUT

5390

CUMULATIVE
HOURS RUN

13 1/4

COND.
OF BIT

DULL

REAMER
CUTTER NO.

5443

DEVIATION
RECORD:

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

KELLY DOWN

4971.64

FT.

SER. NO.

5443

DEPTH OUT

5390

CUMULATIVE
HOURS RUN

13 1/4

COND.
OF BIT

DULL

REAMER
CUTTER NO.

5443

DEVIATION
RECORD:

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

DEPTH

DEV

DIRECTION

TOTAL

4971.64

FT.

SER. NO.

5443

DEPTH OUT

5390

CUMULATIVE
HOURS RUN

13 1/4

COND.
OF BIT

DULL

REAMER
CUTTER NO.

5443

DEVIATION
RECORD:

DEPTH

DEV

DIRECTION

Shell Oil Company of Canada, Limited

LOCATION

LSD.

SEC.

FWP

RGE.

W

WELL NAME

No.

PROVINCE

CONTRACTOR

RIG No.

DRILL PIPE

STRING

TOOL JOINT

5-3/4 OD

TYPE THD FH.

PUMPS

CASING

LINER

RECORD

SIZE

WT & GR.

DEPTH SET

PERFORATIONS

CEMENT USED

OTHER

Regent Drilling Co. Ltd.

26

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

2 1/2

OPERATOR'S REPRESENTATIVE

CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION—HOURS

MORN

DAY

EVE

DRILLING ACTUAL

REAMING

CIRCULATING

TRIPS

DEVIATION SURVEY

TEST B.O.P.

CUT OFF DRILL LINE

REPAIR RIG

CORING

WIRE LINE LOGGING

OTHER

FISHING

COMPLETING (A) PERFORATING

(B) RUNNING TUBING

(C) SWABBING

(D) TESTING

(E) ACIDIZING

(F) ADDITIONAL

TOTALS

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS.

OPERATOR'S TIME

HRS. W/D.P.

HRS. WO/D.P.

HRS. STANDBY

WIRE LINE RECORD

REEL NO.

NO. OF LINES

SIZE

FEET SKIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OF TRIPS SINCE LAST CUT

CUMULATIVE

TON MI. OF TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE

ROTATING HRS.

MORNING TOUR

DAY TOUR

EVENING TOUR

NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M.	WT. ON BIT 1000±	PUMP PRESS	PUMP NO. 1 LINER SIZE	S.P.M.	PUMP NO. 2 LINER SIZE	S.P.M.	METHOD PUMPS RUN	MUD RECORD						
STANDS	DP	FT.	RUN NO.														TIME	WEIGHT	VISC.	W.L.C.C.	FLTR. CK.	PH	SD. CONT.
1	26	2 1/2	2 1/2														12	10.0	68	8.2	3/32	7.0	
12:00-1:30 Circ and condition mud. 1:30-3:00 Pull out. 3:00-4:30 Jet and clean out cellar 4:30-6:45 Wait on orders. 6:45-8:00 Tear out BOP's.																							
8:00 11:00 DIG DOWN AROUND CSC. 11:00 3:00 CUT OFF CSC & WELD ON BAND BELL NIPPLE. 3:00 4:00 NIPPLE UP.																							
10:10 10:30 CIRC. CLEAN TO BOTTOM 10:30 11:00 WORK ON PUMP 11:00 12:00 DRILLING																							
PRESSURE UP ON CSC. RUN IN BIT #21 BREAK CIRC. (FULL TANKS) FINISH RUN IN 400'																							
PRESSURE UP ON 4 1/2 RAME & HYDRIL W/ DEMO. CASING TESTER. FIELD OK. FOR 15 min.																							

Shell Oil Company of Canada, Limited

LOCATION	LSD.	SEC.	TWP	RGE.	W	WELL NAME
----------	------	------	-----	------	---	-----------

PROVINCE

RIG No.

TOOL JOINT 5 3/4 OD

JUMPS		TYPE	STROKE LENGTH
1	1		
2	1		
3	1		
4	1		
5	1		
6	1		
7	1		
8	1		
9	1		
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87	1		
88	1		
89	1		
90	1		
91	1		
92	1		
93	1		
94	1		
95	1		
96	1		
97	1		
98	1		
99	1		
100	1		

SIZE	WT & GR.
8 1/2"	25 1/2
	11 1/2

DEPTH 5	
FROM	
0	2

KEY	PERFORATIONS	
TO	FROM	TO
06		

CEMENT USED	OTHER
1000000 2% Ca	

OPERATOR'S REPRESENTATIVE

CONTRACTOR'S TOOL PUSH

TIME DISTRIBUTION—HOURS

MORNING TOUR

8	DAY TOUR
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NO. DRILLING ASSEMBLY				BIT RECORD	
57	STANDS	DP	FT.	RUN NO.	20
1	SNGLS.	DP	4750.62 FT.	SIZE	7 1/8"
		ID		MFG.	bc
15"	D.C	8" OD	413.66 FT.	TYPE	M4
	RMR BODY	OD	FT.	NO.	3
	STB BODY	OD	FT.	SIZE	1 1/4
	SUBS	OD	FT.	SER. NO.	34687
	BIT OR C.B.		FT.	DEPTH OUT	
			FT.	CUMULATIVE HOURS RUN	11 3/4
	KELLY DOWN	37.00 FT.		COND. OF BIT	Drilling
	TOTAL	5206.23 FT.		REAMER CUTTER NO.	
WT. OF STRING			98,000 LBS.	TYPE	
DRILLER					

NO. DRILLING ASSEMBLY				BIT RECORD	
51	STANDS	DP	4750.62	RUN-NO	20
1	SNGLS.	DP		SIZE	7 7/8
		ID		MFG	SEL.
15	D.C.	6" OD	418.66	TYPE	M4.
	RMR			NO.	3
	BODY	OD		SIZE	8 1/16
	STB				
	BODY	OD			
44	SUBS	OD	2.65	SER. NO	341637.
	BIT OR C.B.			DEPTH OUT	5208
				CUMULATIVE HOURS RUN	12 1/2
	KELLY DOWN		37.00	COND OF BIT	DULL TRAIL
	TOTAL		5208.93	REAMER CUTTER NO.	
	WT OF STRING		98,000	TYPE	
	DRILLER		1		

NO. DRILLING ASSEMBLY				BIT RECORD	
52	STANDS	DP	4750.62	RUN NO	20
1	SNGLS.	DP		SIZE	7 1/2
		ID		MFG	SEC
15	D.C	6	418.66	TYPE	M4
	RMR BODY	OD		NOZ	NO 3
	STB BODY	OD		SIZE	4 1/2
	SUBS	OD		SER NO	341687
	BIT OR C.B			DEPTH OUT	5208
				CUMULATIVE HOURS RUN	12 1/2
	KELLY DOWN		39.65	COND. OF BIT	Full Circ
	TOTAL		5208.93	REAMER CUTTER NO.	7011504
	WT OF STRING		99.000	LBS.	TYPE
	DRILLER				

MRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	
	6 1/2	5175	5206		
DEVIATION RECORD:	DEPTH	DEV	DIRECTION	DEPTH	DEV
	1082	1/2°			
1200 - 1085			Drill 7 1/8" hole		REMARKS
115 - 100			ing severe		& gu
100 - 600			Drill 7 1/8" hole		
600 - 415			work on mud pump		
415 - 300			Drill 7 1/8" hole		

MRS. DRILL RECORD NO.		FROM	TO	FORMATION (SHOW CORE RECOVERY)
3/4		5206	5208	
DEVIATION RECORD:		DEPTH	DEV	DIRECTION
		5208	3°	
800 845 DRILL 7 1/8" HOLE				REMARK
845 1030 CLEAN OUT CELLER, LEAK				
1030 1130 FIRE CLEAN HOLE.				
NO 1130 1145 BLEW KELLY DROP TOT				
1145 130 HOIST BIT # 20.				
130400 WAIT ON ORDERS CLEAN CE				

[illegible]

ROTARY R.P.M	WT.ON BIT 1000#	PUMP PRESS	LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	PUMPS RUN
80	96	950	6"	70			
DIRECTION		DEPTH		DEV		DIRECTON	
<i>n suction tank.</i>							
<i>k</i>							

ROTARY R.P.M.	WT.ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE	S.P.M.	PUMP NO. LINER SIZE	S.P.M.	METHOD PICKUP RUN
86	35.	950	L	70.			1

V	DIRECTION	DEPTH	DEV.	DIRECTION

IN LSL. ~~HAND~~ TO BOTTOM OF BOWL

CO.

ALLER & D.O.P.S.

[illegible]

TIME	12 Mid	2 PM.	4 PM.
WEIGHT	16	10	10
VISC	67	67	64
W.L.-C.C.	7.8		
FLTR. CK.	2/2V		
PH	7.0		
SD. CONT.			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
Gel	165x		
Starch	25x		

[illegible]

	TIME	1600	1700	
	WEIGHT	10.0	10.0	
	VISC.	56	60	
	W.L.-C.C.	9.0		
N	FLTR. CK	✓		
	PH	7.		
	SD. CONT.			
	MUD & CHEMICALS ADDED			
	TYPE	AMT.	TYPE	AMT.
	GEL	23 S#s		
	MILSTAR	3 S#s		
AS	TERPARK	5 S#s		

DAILY DRILLING REPORT

REPORT NO.

28

DATE

FEB. 14/59.

Sheil Oil Company of Canada, Limited

LOCATION

LSD.

SEC.

TWP.

RGE.

W.

WELL NAME

60° 6' 17" N. LAT. 118° 25' 30" W. LONG

SHELL KAKISA RIVER

No.

2

PROVINCE

N.W.T.

CONTRACTOR

RIG No.

DRILL PIPE

TOOL JOINT

5 3/4 OD

NO.

MANUFACTURER

TYPE

STROKE LENGTH

CASING & LINER RECORD

SIZE

WT & GR.

DEPTH SET

FROM

TO

PERFORATIONS

CEMENT USED

OTHER

REGENT DRILLING

26

2 4 1/2

TYPE THD F.H.

1.

EMSCO

D. 300

14"

8 5/8

25 H40

0

206

50 0

LAST 200

5 2 9/16

50 0

LAST 200

OPERATOR'S REPRESENTATIVE

CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION—HOURS

	MORNING	DAY	EVE
DRILLING ACTUAL	1 1/2		
REAMING			
CIRCULATING	1/2		
TRIPS	4 1/2		
DEVIATION SURVEY			
TEST B.O.P.			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER	1 1/2		

FISHING

COMPLETING (A) PERFORATING

(B) RUNNING TUBING

(C) SWABBING

(D) TESTING

(E) ACIDIZING

(F) ADDITIONAL

TOTALS

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS.

OPERATOR'S TIME

HRS. W/D.P.

HRS. WO/D.P.

HRS. STANDBY

WIRE LINE RECORD

REEL NO.

NO. OF LINES

SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. OF TRIPS SINCE LAST CUT

CUMULATIVE TON MI. OF TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

NO. DRILLING ASSEMBLY

BIT RECORD

50 STANDS DP	4599.96	FT.	RUN NO.	17	18
2 SNGLS. DP		FT.	SIZE	7 7/8	7 7/8
15 D.C. ID		FT.	MFG.	SEC	H.T.
	418.66	FT.	TYPE	54	OSC16
RMR BODY OD		FT.	NOZ.	NO.	3
STB BODY OD		FT.	SIZE	1 1/2	1 1/2
SUBS OD		FT.	SER. NO.	225863	55311
BIT OR C.B.		FT.	DEPTH OUT	5038	
		FT.	CUMULATIVE HOURS RUN	15 1/2	1
KELLY DOWN	30.00	FT.	COND. OF BIT	OUT & LOOSE	
TOTAL	5048.62	FT.	REAMER CUTTER NO.		
WT OF STRING	96000	LBS.	TYPE		

DRILLER

J.M. McBride

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- R.P.M.

WT. ON BIT 1000#

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

TIME

WEIGHT

VISC

W.L.C.C.

FLTR. CK.

PH

SD. CONT.

NO. DRILLING ASSEMBLY

BIT RECORD

51 STANDS DP	4624.16	FT.	RUN NO.	18	19
1 SNGLS. DP		FT.	SIZE	7 7/8	7 7/8
15 D.C. ID		FT.	MFG.	H.T.C.	
	418.66	FT.	TYPE	OSC16	
RMR BODY OD		FT.	NOZ.	NO.	3
STB BODY OD		FT.	SIZE	1 1/2	1 1/2
SUBS OD		FT.	SER. NO.	225863	
BIT OR C.B.		FT.	DEPTH OUT		
		FT.	CUMULATIVE HOURS RUN	3 1/4	
KELLY DOWN	24.00	FT.	COND. OF BIT	DRILLING	
TOTAL	5082.82	FT.	REAMER CUTTER NO.		
WT OF STRING	96000	LBS.	TYPE		

DRILLER

D.H. Hummel

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- R.P.M.

WT. ON BIT 1000#

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

TIME

WEIGHT

VISC

W.L.C.C.

FLTR. CK.

PH

SD. CONT.

NO. DRILLING ASSEMBLY

BIT RECORD

51 STANDS DP	4659.85	FT.	RUN NO.	18	19
1 SNGLS. DP		FT.	SIZE	7 7/8	7 7/8
15 D.C. ID		FT.	MFG.	H.T.	H.T.
	418.66	FT.	TYPE	OSC16	D.W.D.
RMR BODY OD		FT.	NOZ.	NO.	3
STB BODY OD		FT.	SIZE	1 1/2	1 1/2
SUBS OD	2.65	FT.	SER. NO.	225863	22034
BIT OR C.B.		FT.	DEPTH OUT	5082	
		FT.	CUMULATIVE HOURS RUN	8 3/4	3 1/2
KELLY DOWN		FT.	COND. OF BIT	DRILL NEW	
TOTAL		FT.	REAMER CUTTER NO.		
WT OF STRING	98000	LBS.	TYPE		

DRILLER

W.A. Howdy

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION

(SHOW CORE RECOVERY)

ROTA- R.P.M.

WT. ON BIT 1000#

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

TIME

WEIGHT

VISC

W.L.C.C.

FLTR. CK.

PH

SD. CONT.

MUD & CHEMICALS ADDED

TYPE

AMT.

TYPE

AMT.

PROVINCE	N.W.T.
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OTHER

MUD RECORD			
TIME	700	400	200

WEIGHT	9.6	9.6	9.6
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WISC	58	60	65
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W.L.C.C.	11.4	7.0	3.7
FLTR. CH.	14.2	7.0	3.7

PH	6.8	
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SD. CONT.			
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[illegible]

L 57914 30545

MUD RECORD

TIME			
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WEIGHT	9.6
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VISC	65
	14

W.L.C.C.		6.1
ELTR. CK		5.7

PH	7.0
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SD. CONT.			
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[illegible]

MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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MUD RECORD

TIME	6:00	8:50	10:00
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WEIGHT	9.6	9.7	9.7
	1.7	1.7	1.1

VISC.	63	63	61
W.L.-C.C.	7.2		6.4

FLTR. CK	SOFT FLUFF
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PH	6.4	6.8
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SD. CONT.				
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MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AM

11	STARTED 5 SHS.
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REEL NO.	NO. DRILLING ASSEMBLY				BIT RECORD				HRS. DRLD		CORE NO	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M	WT ON BIT 1000±	PUMP PRESS	PUMP NO 1		PUMP NO 2		METHOD PUMPS RUN	MUD RECORD					
NO. OF LINES	SIZE		STANDS	DP	FT.	RUN NO	13												LINER SIZE	S.P.M	LINER SIZE	S.P.M		TIME				
FEET SLIPPED			2.	SNGLS.	DP	387397	SIZE	7 7/8	7			4190	4324			100	35	900	634	49			1	WEIGHT	600	800	1000	
FEET CUT OFF				ID		MFG	H.T.																VISC.	55	50	50.		
PRESENT LENGTH			15	D.C	6'00	418.66	TYPE	623.															W.L.C.C.	8.8				
TON MI. OF TRIPS SINCE LAST CUT				RMR BODY	OD	FT	NOZ	NO	3	DEVIATION RECORD		DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	FLTR. CK	2/32			
CUMULATIVE TON MI. OF TRIPS				STB BODY	OD	FT	SIZE	1 1/16				4134	120										PH	7.2				
				SUBS	OD	FT	SER NO	78957	400		REMARKS 430 FINISH INSTALLING NEW UNION.													SD. CONT.	CLEANED			
NO. OF DAYS FROM SPUD	14			BIT OR C.B	FT	DEPTH OUT	430		405		SERV. RIG.													SHAKER TANK.				
CUMULATIVE ROTATING HRS.					FT	CUMULATIVE HOURS RUN	445		730		DRILL 7 7/8" HOLE.																	
				KELLY DOWN	32.00	FT.	COND. OF BIT	730		745		CLEAN SHAKER TANK.																
				TOTAL	4324.53		REAMER CUTTER NO.	745		1200		DRILL 7 7/8" HOLE.																
				WT OF STRING	28,000		TYPE																		MUD & CHEMICALS ADDED			
				DRILLER	D.A. Houty																			TYPE AMT. TYPE AMT.				
																								GEL 50 SKS				
																								WATER.				

OPERATOR
Shell Oil Company of Canada, LimitedLOCATION L.S.D. SEC. TWP. RGE. W. WELL NAME
60° 6' 17" N. 101° 18' 28" W. 106. SHELL KAKISA RIVER

No. 2

PROVINCE N.W.T.

CONTRACTOR

RIG NO. 26

DRILL PIPE STRING NO. 2

TOOL JOINT 5 3/4" MOD

TYPE THD F.H.

PUMPS

CASING & LINER RECORD

SIZE WT & GR.

DEPTH SET FROM TO

PERFORATIONS FROM TO

CEMENT USED

OTHER

OPERATOR'S REPRESENTATIVE

CONTRACTOR'S TOOL PUSHER

TIME DISTRIBUTION—HOURS

MORN DAY EVE

DRILLING ACTUAL 6 55

REAMING

CIRCULATING

TRIPS 1 1/2

DEVIATION SURVEY 1/4

TEST B.O.P.

CUT OFF DRILL LINE

REPAIR RIG

CORING

WIRE LINE LOGGING

OTHER 1/4

FISHING

COMPLETING (A) PERFORATING

(B) RUNNING TUBING

(C) SWABBING

(D) TESTING

(E) ACIDIZING

(F) ADDITIONAL

TOTALS 8.8

TIME SUMMARY (OFFICE USE ONLY)

CONTRACTOR'S TIME HRS.

OPERATOR'S TIME

HRS. W/D.P.

HRS. WO/D.P.

HRS. STANDBY

WIRE LINE RECORD

REEL NO.

NO. OF LINES 6 SIZE 1 1/2

FEET SLIPPED

FEET CUT OFF NEW

PRESENT LENGTH 1750

TON. MI. OF TRIPS SINCE LAST CUT

CUMULATIVE TON. MI. OF TRIPS 372

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS. 157 3/4

NO. DRILLING ASSEMBLY

BIT RECORD

STANDS DP 34 1/2 FT

SNGLS. DP 31 1/2 FT

D.C. 6" OD 418.66

RMR BODY OD FT

STB BODY OD FT

SUBS OD FT

BIT OR C.B. FT

KELLY DOWN 16.00 FT

TOTAL 3578.93

WT OF STRING 78.00 LBS

DRILLER

DA Hong

NO. DRILLING ASSEMBLY

STANDS DP 32 66.66

SNGLS. DP 1 FT

D.C. 6" OD 418.66

RMR BODY OD FT

STB BODY OD FT

SUBS OD FT

BIT OR C.B. FT

KELLY DOWN 20.00 FT

TOTAL 3705.32

WT OF STRING 77000 LBS

DRILLER

Jm = Bride

NO. DRILLING ASSEMBLY

STANDS DP 34 1/2 FT

SNGLS. DP 34 1/2 FT

D.C. 6" OD 418.66

RMR BODY OD FT

STB BODY OD FT

SUBS OD FT

BIT OR C.B. FT

KELLY DOWN 9.00 FT

TOTAL 3775.25

WT OF STRING 77000 LBS

DRILLER

DA Humphreys

HRS. DRLD.

CORE NO.

FROM

TO

FORMATION (SHOW CORE RECOVERY)

ROTA- R.P.M.

WT. ON BIT 1000#

PUMP PRESS

PUMP NO. 1

PUMP NO. 2

METHOD PUMPS RUN

MUD RECORD

TIME

WEIGHT

VISC

W.L.C.C.

FLTR. CK

PH

SD. CONT.

MUD & CHEMICALS ADDED

TYPE

AMT.

TYPE

AMT.

TYPE

AMT.

TYPE

AMT.

TYPE

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TYPE

AMT.

OPERATOR Shell Oil Company of Canada, Limited	LOCATION, L.D. SEC. TWP RGE. W. WELL NAME 60° 17' N. 24° 11' W. LONG. SHELL KAMISA RIVER	No. 2.	PROVINCE N. W. T.							
CONTRACTOR REGENT DRILLING	RIG NO. 26	DRILL PIPE STRING NO. 2	TOOL JOINT 5 3/4	PUMPS	CASING & LINER RECORD	SIZE WT & GR.	DEPTH SET FROM TO	PERFORATIONS FROM TO	CEMENT USED	OTHER
OPERATOR'S REPRESENTATIVE J. Stewart	CONTRACTOR'S TOOL PUSHER B. B. B.	TYPE THD F.H.	1. EMSCO 1	TYPE D-300	STROKE LENGTH 14	8 3/4 22 1/2	0 706		500 + 2 1/2	2 1/2 IN. LAST 200 SACKS

TIME DISTRIBUTION—HOURS				NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD. CORE NO.		FORMATION (SHOW CORE RECOVERY)		PUMP NO. 1		PUMP NO. 2		MUD RECORD						
MORN	DAY	EVE		STANDS	DP	FT.	RUN NO.	SIZE	FROM	TO		LINE SIZE	S.P.M.	LINE SIZE	S.P.M.	TIME	WEIGHT	VISC.	W.L.C.C.	FLTR. CK.	PH	SD. CONT.
DRILLING ACTUAL	7 3/4	5 1/2		2	2782.8	11	9	7 1/8	3085	3241		1 1/2	30	900	6 3/4	55	1	10.2	10.2	10.3		
REAMING																						
CIRCULATING																						
TRIPS	1 3/4																					
DEVIATION SURVEY	1 1/4																					
TEST B.O.P.	1 1/2																					
CUT OFF DRILL LINE																						
REPAIR RIG																						
CORING																						
WIRE LINE LOGGING																						
OTHER	1 1/4																					
FISHING																						
COMPLETING PERFORATING																						
(B) RUNNING TUBING																						
(C) SWABBING																						
(D) TESTING																						
(E) ACIDIZING																						
(F) ADDITIONAL																						
TOTALS	8.8																					
TIME SUMMARY (OFFICE USE ONLY)																						
CONTRACTOR'S TIME HRS.																						
OPERATOR'S TIME:																						
HRS. W/D.P.																						
HRS. WO/D.P.																						
HRS. STANDBY																						
WIRE LINE RECORD																						
REEL NO.																						
NO. OF LINES 6 SIZE 1 1/2																						
FEET SLIPPED																						
FEET CUT OFF NEW																						
PRESENT LENGTH 1350																						
TON MI. OF TRIPS SINCE LAST CUT																						
CUMULATIVE TON MI. OF TRIPS 321																						
NO. OF DAYS FROM SPUD 11																						
CUMULATIVE ROTATING HRS. 138 1/2																						
NO. DRILLING ASSEMBLY																						
BIT RECORD																						
HRS. DRLD. CORE NO.																						
FORMATION (SHOW CORE RECOVERY)																						
PUMP NO. 1																						
PUMP NO. 2																						
MUD RECORD																						
TIME																						
WEIGHT																						
VISC.																						
W.L.C.C.																						
FLTR. CK.																						
PH																						
SD. CONT.																						
MUD & CHEMICALS ADDED																						
TYPE AMT. TYPE AMT.																						
GEL 1150																						
WATER																						

DAILY DRILLING REPORT

REPORT NO. 19 DATE FEB. 5/59.

OPERATOR		CONTRACTOR		LOCATION		SEC.		TWP.		RGE.		W.		WELL NAME		No.		PROVINCE	
Shell Oil Company of Canada, Limited		REGENT DRILLING CO.		60° 6' 17" N. 118° 28' 30" W.		118° 28' 30" W.		118° 28' 30" W.		118° 28' 30" W.		118° 28' 30" W.		LONG SHELL HAKISA RIVER		2.		N.W.T.	
OPERATOR'S REPRESENTATIVE		CONTRACTOR'S TOOL PUSHER		DRILL PIPE NO. 26		TOOL JOINTS 2		TYPE THD F.H.		PUMPS		CASING & LINER RECORD		SIZE		WT. & GR.		DEPTH SET	
1. EMSCO.		D-300		14"		14"		14"		14"		14"		14"		14"		14"	
2.																			
3.																			
TIME DISTRIBUTION—HOURS		MORN		DAY		EVE		NO.		DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.		FORMATION	
DRILLING ACTUAL		5:45		5:45		5:45		25		STANDS DP		FT. RUN NO.		7 8		2707		2787	
REAMING								15		SNGLS. DP		SIZE		7 7/8 7 7/8		2707		2787	
CIRCULATING		1/4		1/4		1/4		15		D.C. ID		MFG.		H.T. H.T.					
TRIPS		2		2		2		15		RMR BODY OD		FT.		NO. 3					
DEVIATION SURVEY		1/4		1/4		1/4		15		STB BODY OD		FT.		NO. 3					
TEST B.O.P.		1/4		1/4		1/4		15		SUBS OD		FT.		NO. 3					
CUT OFF DRILL LINE								15		BIT OR C.B.		FT.		NO. 3					
REPAIR RIG								15		KELLY DOWN		40.00		COND. OF BIT		12.00		12.00	
CORING								15		TOTAL		2787.45		REAMER CUTTER NO.					
WIRE LINE LOGGING								15		WT. OF STRING		68,000 LBS.		TYPE					
OTHER		1/4		1/4		1/4		15		DRILLER		W. Houdy							
FISHING								15		NO.		DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.	
COMPLETING (A) PERFORATING								27		STANDS DP		FT. RUN NO.		8 9		2787		2968	
(B) RUNNING TUBING								27		SNGLS. DP		SIZE		7 7/8 7 7/8		2787		2968	
(C) SWABBING								27		D.C. ID		MFG.		H.T. H.T.					
(D) TESTING								27		RMR BODY OD		FT.		NO. 3					
(E) ACIDIZING								27		STB BODY OD		FT.		NO. 3					
(F) ADDITIONAL								27		SUBS OD		FT.		NO. 3					
TOTALS		8.8		8.8		8.8		27		TOTAL		2968.83		REAMER CUTTER NO.					
TIME SUMMARY (OFFICE USE ONLY)								27		WT. OF STRING		68,000 LBS.		TYPE					
CONTRACTOR'S TIME HRS.		10		10		10		27		DRILLER		H. M. Brice							
OPERATOR'S TIME								27		NO.		DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.	
HRS. W/D.P.								27		STANDS DP		FT. RUN NO.		8 9		2968		3085	
HRS. WO/D.P.								27		SNGLS. DP		SIZE		7 7/8 7 7/8		2968		3085	
HRS. STANDBY								27		D.C. ID		MFG.		H.T. H.T.					
WIRE LINE RECORD								27		RMR BODY OD		FT.		NO. 3					
FEEL NO.								27		STB BODY OD		FT.		NO. 3					
NO. OF LINES		6		6		6		27		SUBS OD		FT.		NO. 3					
SIZE		1"		1"		1"		27		BIT OR C.B.		FT.		NO. 3					
FEET CLIPPED								27		KELLY DOWN		25.00		COND. OF BIT		12.00		12.00	
FEET CUT OFF		NEW		NEW		NEW		27		TOTAL		3085.43		REAMER CUTTER NO.					
PRESENT LENGTH		1350		1350		1350		27		WT. OF STRING		68,000 LBS.		TYPE					
TON MI. OF TRIPS								27		DRILLER		D. H. Houdy							
SINCE LAST CUT								27		NO.		DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.		CORE NO.	
CUMULATIVE								27		STANDS DP		FT. RUN NO.		8 9		3085		3200	
TON MI. OF TRIPS		280		280		280		27		SNGLS. DP		SIZE		7 7/8 7 7/8		3085		3200	
NO. OF DAYS		10		10		10		27		D.C. ID		MFG.		H.T. H.T.					
FROM S.								27		RMR BODY OD		FT.		NO. 3					
CUMUL.								27		STB BODY OD		FT.		NO. 3					
ROTAT.		HRS. 119 1/4		HRS. 119 1/4		HRS. 119 1/4		27		SUBS OD		FT.		NO. 3					
								27		BIT OR C.B.		FT.		NO. 3					
								27		KELLY DOWN		25.00		COND. OF BIT		12.00		12.00	
								27		TOTAL		3085.43		REAMER CUTTER NO.					
								27		WT. OF STRING		68,000 LBS.		TYPE					
								27		DRILLER		D. H. Houdy							

OPERATOR		LOCATION		WELL NAME		No.		PROVINCE	
Shell Oil Company of Canada, Limited		60° 6' 17" N. LAT. 118° 28' 30" W. LONG.		KAKISA RIVER.		2		N.W.T.	
CONTRACTOR		RIG NO.		TOOL JOINT		PUMPS		CEMENT USED	
REGENT DRILLING		26		4 1/2		1. EMSCO D-300 14"		5051+2 1/2 1/2 in last	
OPERATOR'S REPRESENTATIVE		CONTRACTOR'S TOOL PUSHER		TYPE THD		CASING & LINER RECORD		OTHER	
J. H. Stewart		G. B. Stas		F.H.		H 40		200 ST.	
TIME DISTRIBUTION—HOURS									
MORNING TOUR									
DAY TOUR									
EVENING TOUR									
WIRE LINE RECORD									
REEL NO.									
NO. OF LINES 6 SIZE 1"									
FEET SLIPPED									
FEET CUT OFF NEW									
PRESENT LENGTH 1350									
TON MI. OF TRIPS SINCE LAST CUT									
CUMULATIVE TON MI. OF TRIPS									
NO. OF DAYS FROM SPUD									
CUMULATIVE ROTATING HRS. 101 1/4									
NO. DRILLING ASSEMBLY									
BIT RECORD									
HRS. DRILL									
CORE NO.									
FROM									
TO									
FORMATION (SHOW CORE RECOVERY)									
ROTA- RY R.P.M.									
WT. ON BIT 1000±									
PUMP PRESS									
PUMP NO. 1									
PUMP NO. 2									
METHOD PUMPS RUN									
MUD RECORD									
TIME									
WEIGHT									
VISC									
W.L.C.C.									
FLTR. CK.									
PH									
SD. CONT.									
MUD & CHEMICALS ADDED									
TYPE									
AMT.									
TYPE									
AMT.									
MILLIGEL 105X									
CAUSTIC 25#									
Ray Flo 50#									
MILL FIBRE 15X									
NO. DRILLING ASSEMBLY									
BIT RECORD									
HRS. DRILL									
CORE NO.									
FROM									
TO									
FORMATION (SHOW CORE RECOVERY)									
ROTA- RY R.P.M.									
WT. ON BIT 1000±									
PUMP PRESS									
PUMP NO. 1									
PUMP NO. 2									
METHOD PUMPS RUN									
MUD RECORD									
TIME									
WEIGHT									
VISC									
W.L.C.C.									
FLTR. CK.									
PH									
SD. CONT.									
MUD & CHEMICALS ADDED									
TYPE									
AMT.									
TYPE									
AMT.									
G.F.L. 115Ks									
MILTRON 25LBS.									
Water									
NO. DRILLING ASSEMBLY									
BIT RECORD									
HRS. DRILL									
CORE NO.									
FROM									
TO									
FORMATION (SHOW CORE RECOVERY)									
ROTA- RY R.P.M.									
WT. ON BIT 1000±									
PUMP PRESS									
PUMP NO. 1									
PUMP NO. 2									
METHOD PUMPS RUN									
MUD RECORD									
TIME									
WEIGHT									
VISC									
W.L.C.C.									
FLTR. CK.									
PH									
SD. CONT.									
MUD & CHEMICALS ADDED									
TYPE									
AMT.									
TYPE									
AMT.									
Ray Flo 50#									
Caustic 25#									

PROVINCE N. W. T.

OTHER
42% 9/10 in

7-605X.

MUD RECORD			
TIME	2:00	4:00	6:00
WEIGHT	8.5	8.6	8.6
VISC	22	28	28
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
PARA. 3	200#		
APP.	50#		

MUD RECORD			
TIME	8 ⁰⁰	10 ⁰⁰	12 ⁰⁰
WEIGHT	8.8	8.8	9.2
VISC	29	29	29
W.L.C.C.			
FLTR. CK			
PH	9.5 10 AM 9.0 11		
SO. CONT			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AM
SAP.P.	50 ⁴		
BICARB	100 ⁴		

MUD RECORD			
TIME	6	8	10
WEIGHT	T	9.2	9.1
VISC.	1P	43	34
W.L.C.C.	1		
FLTR. CK	1P		
PH			9.0
SD. CONT.			
MUD & CHEMICALS ADDED			
TYPE	AMT.	TYPE	AMT.
Cement	200 ^{lb}		

DATE Jan 31st 1959

OPERATOR Shell Oil Company of Canada, Limited		LOCATION 600-17" N		SEC. LAT 118°-22' 30"	TWP W	RGE. W	WELL NAME Shell Hukia River		No. 2	PROVINCE N.W.T.						
CONTRACTOR Regent Drilling Co Ltd		RIG No. 26	DRILL PIPE STRING NO. & SIZE 2 1/2	TOOL JOINT 5 3/4	OD	PUMPS			CASING & LINER	SIZE 8 1/2	WT & GR. 25	DEPTH SET FROM 0	TO 706.0	PERFORATIONS FROM TO	CEMENT USED 500 sacks + 2% CaCl ₂ in last 200 sx.	OTHER
OPERATOR'S REPRESENTATIVE J. Stewart		CONTRACTOR'S TOOL DUSHER J. Stewart		TYPE THD F H			RECORD									
							1. Remco 12300 14									
							2.									
							3.									

[illegible]

(B) RUNNING TUBING				NO. DRILLING ASSEMBLY				BIT RECORD				HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M	WT.ON BIT T000#	PUMP PRESS	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN	MUD RECORD							
(C) SWABBING				STANDS	DP	FT.	RUN NO														LINER SIZE	S.P.M	LINER SIZE	S.P.M.		TIME						
(D) TESTING				SNGLS.	DP	FT.	SIZE																		WEIGHT							
(E) ACIDIZING				D.C.	ID		MFG																		VISC.							
(F) ADDITIONAL				OD		FT	TYPE																		W.L.-C.C.							
TOTALS 828				RMR BODY	OD	FT	NOZ	NO.		DEVIATION RECORD:	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	FLTR. CK					PH							
TIME SUMMARY (OFFICE USE ONLY)				STD BODY	OD	FT	SIZE				670	1 1/2																				
CONTRACTOR'S TIME HRS:				SUBS	OD	FT	SER. NO	8:00-12:00 4 - NIPPLE UP.										REMARKS										SD. CONT				
OPERATOR'S TIME:				BIT OR C.B		FT	DEPTH OUT	12:00-3:00 3 OIL Mousse Hole.																								
HRS. W/D.P.						FT	CUMULATIVE HOURS RUN	3:00-4:00 1 REPAIR 2" LINE ON D-3w.																								
				KELLY DOWN		FT	COND OF BIT																									
HRS. WO/D.P.				TOTAL		FT	REAMER CUTTER NO.																									
				WT OF STRING		LES.	TYPE																									
HRS. STANDBY				DRILLER	WA Andy.										TOTAL DEPTH. 708.																	
WIRE LINE RECORD																																

REEL NO.	NO. DRILLING ASSEMBLY	BIT RECORD		HRS. DRLD	CORE NO	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M	WT ON BIT 1000#	PUMP PRESS	PUMP NO 1		PUMP NO 2		METHOD PUMPS RUN	MUD RECORD			
NO. OF LINES	SIZE	STANDS DP	27060 FT	RUN NO	1							LINER SIZE	S.P.M	LINER SIZE	S.P.M		TIME			
FEET SLIPPED		SNGLS. DP		SIZE	2 1/2			689 710	DRILLED OUT CEMENT	100	10,000	350	7 1/2	62			WEIGHT			
FEET CUT OFF		ID		MFG	WT.												VISC.			
PRESENT LENGTH		15 D.C	6	OD	4 1/8 66												W.L.-C.C.			
TON MI. OF TRIPS SINCE LAST CUT		RMR BODY OD		FT		NOZ	NO	35	DEVIATION RECORD	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	FLTR. CK	
CUMULATIVE TON MI. OF TRIPS		STB BODY OD		FT		SIZE	1 1/2			670	1 1/2								PH	
		SUBS OD		FT		SERIAL NO	39492	430		415		REMARKS						SD. CONT.		
		BIT OR C.B		FT		DEPTH CUT		10 5/8		700		SERU. R.I.G.								
NO. OF DAYS FROM SPUD				FT		CUMULATIVE HOURS RUN	2 1/4	6 30		700		HOOK UP LINE TO BOWL PRESSURE UP BLIND RAMS								
CUMULATIVE ROTATING HRS.		KELLY DOWN	17.74	FT.		COND. OF BIT		700		8 15		PRESSURE UP ON 4 1/2" RAMS & HYDRIL								
		TOTAL	710	FT		REAMER CUTTER NO.		8 15		10 30		DRILLED OUT CEMENT								
		WT OF STRING	40,000	BS.		TYPE	10 3/4	12 00				HYDRIL & B.O.P.S TESTED TO 1500# HEAD OK FOR 15 MIN								
		DRILLER	Jm Brink									NO LEAKS IN BOP EQUIPMENT OR BOP. HYDRAULIC LINES								
												LINES								

Jan 26/59

OPERATOR		LOCATION		SEC.	TWP.	RGE.	W.	WELL NAME	No.	PROVINCE									
Shell Oil Company of Canada, Limited		6606' 17' N LAT		118° 28'	W LONG	Shell Nakara River #2		2	N.W.T.										
CONTRACTOR		RIG No.	DRILL PIPE STRING NO. & SIZE	TOOL JOINT	PUMPS			CASING & LINER RECORD	SIZE	WT & GR.	DEPTH SET FROM TO	PERFORATIONS FROM TO	CEMENT USED	OTHER					
Report Nakara Co. Ltd		26	2 1/2" 472	5 3/4" OD	1. Ramco 10200 14														
OPERATOR'S REPRESENTATIVE		CONTRACTOR'S TOOL PUSHER																	
Ray J. Stewart		J. Bates																	
TIME DISTRIBUTION—HOURS		NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA-RY R.P.M.	WT. ON BIT 1000±	PUMP PRESS	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	MUD RECORD		
MORNING TOUR		STANDS DP		FT.	RUN NO.	1A												TIME	
DRILLING ACTUAL 1/26		SNGLS. DP		FT.	SIZE	12 1/4	1/2	25'	30'		85		200	7 1/2	65			WEIGHT	
REAMING		D.C. ID			MFG.	H.T.C.												VISC.	
CIRCULATING		RMR BODY OD		FT.	NO.	3												W.L.C.C.	
TRIPS		STB BODY OD		FT.	NOZ.	SIZE	1/2											FLTR. CK.	
DEVIATION SURVEY		SUBS OD		FT.	SER. NO.	26472	3 1/2	Wait on fuel										PH	
TEST B.O.P.		BIT OR C.B.		FT.	DEPTH OUT		5	Start flow & pump motor & prepare										SD. CONT.	
CUT OFF DRILL LINE				FT.	CUMULATIVE HOURS RUN	1/2													
REPAIR RIG		KELLY DOWN		FT.	COND. OF BIT	NEW	1/2	Spud in & pull 12 1/4" surface hole											
CORING		TOTAL		FT.	REAMER CUTTER NO.														
WIRE LINE LOGGING		WT OF STRING		LBS.	TYPE														
OTHER 1/27 &		DRILLER																	
FISHING		288																	
COMPLETING (A) PERFORATING		NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA-RY R.P.M.	WT. ON BIT 1000±	PUMP PRESS	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	MUD RECORD		
(B) RUNNING TUBING		STANDS DP		FT.	RUN NO.	1A												TIME	
(C) SWABBING		SNGLS. DP		FT.	SIZE	12 1/4	1	36	44.50		85		200	7 1/2	65			WEIGHT	
(D) TESTING		D.C. ID			MFG.	H.T.												VISC.	
(E) ACIDIZING		RMR BODY OD		FT.	NO.	3												W.L.C.C.	
(F) ADDITIONAL		STB BODY OD		FT.	NOZ.	SIZE	3/4"											FLTR. CK.	
TOTALS 8 8.8		SUBS OD 4.50		FT.	SER. NO.	26472												PH	
TIME-SUMMARY (OFFICE USE ONLY)		BIT OR C.B.		FT.	DEPTH OUT		1	THAW OUT WATER LINES										SD. CONT.	
CONTRACTOR'S TIME HRS.				FT.	CUMULATIVE HOURS RUN	1 1/2		WASHED OUT CONO. PIPE.											
OPERATOR'S TIME		KELLY DOWN 40.0		FT.	COND. OF BIT	NEW		DIG CELLER HOOK UP CELLER JET & MIX MUD & SAW DUST.											
HRS. W/D.P.		TOTAL 44.50		FT.	REAMER CUTTER NO.			DRILL. 12 1/4" HOLE.											
HRS. WO/D.P.		WT OF STRING		LBS.	TYPE			MIX MUD & LOSS CIRC. MATERIAL.											
HRS. STANDBY		DRILLER																	
WIRE LINE RECORD		W.A. Howg.																	
REEL NO.		NO. DRILLING ASSEMBLY		BIT RECORD		HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA-RY R.P.M.	WT. ON BIT 1000±	PUMP PRESS	PUMP NO. 1 LINER SIZE S.P.M.	PUMP NO. 2 LINER SIZE S.P.M.	METHOD PUMPS RUN	MUD RECORD		
NO. OF LINES SIZE		STANDS DP		FT.	RUN NO.	1A												TIME	
FEET SLIPPED		SNGLS. DP		FT.	SIZE	12 1/4												WEIGHT	
FEET CUT OFF		D.C. ID			MFG.	H.T.												VISC.	
PRESENT LENGTH		RMR BODY OD		FT.	NO.	3												W.L.C.C.	
TON MI. OF TRIPS SINCE LAST CUT		STB BODY OD		FT.	NOZ.	SIZE	3/4"											FLTR. CK.	
CUMULATIVE TON MI. OF TRIPS		SUBS OD		FT.	SER. NO.	26472												PH	
NO. OF DAYS FROM SPUD		BIT OR C.B.		FT.	DEPTH OUT		1 1/2	HR. SERU RIG										SD. CONT.	
CUMULATIVE ROTATING HRS.		KELLY DOWN		FT.	CUMULATIVE HOURS RUN	1 1/2		DIG RAT HOLE											
		TOTAL		FT.	COND. OF BIT	NEW													
		WT OF STRING		LBS.	TYPE														
		DRILLER																	
		Jm Brice																	

OPERATOR Shell Oil Company of Canada, Limited		LOCATION 60° 6' 17" N. Lat. 118° 28' 30" W. Long		WELL NAME SHELL KAXISA RIVER		No. 2		PROVINCE N. W. T.				
CONTRACTOR REGENT DRILLING CO. LTD.		RIG No. 26	DRILL PIPE STRING NO. SIZE 2 7/8	TOOL JOINT 5 3/4 OD	PUMPS		CASING & LINER RECORD	SIZE WT & GR.	DEPTH SET FROM TO	PERFORATIONS FROM TO	CEMENT USED	OTHER
OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		CONTRACTOR'S TOOL RUSHER <i>[Signature]</i>		TYPE THD FN	NO. MANUFACTURER TYPE STROKE LENGTH							
					1. EMSCO D-300 7 1/2 x 1 1/4							
					2.							
					3.							

TIME DISTRIBUTION—HOURS				NO. DRILLING ASSEMBLY			BIT RECORD			HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M	WT.ON BIT 1000±	PUMP PRESS	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN	MUD RECORD			
MORN DAY EVE				STANDS DP	FT.	RUN NO.												LINER SIZE	S.P.M.	LINER SIZE	S.P.M.		TIME			
DRILLING ACTUAL				SNGLS. DP	FT.	SIZE							25'										WEIGHT			
REAMING				D.C. ID		MFG.																	VISC.			
CIRCULATING				RMR BODY OD	FT.	TYPE																	W.L.-C.C.			
TRIPS				STB BODY OD	FT.	NOZ. NO.																	FLTR. CK.			
DEVIATION SURVEY				SUBS OD	FT.	SER. NO.																	PH			
TEST B.O.P.				BIT OR C.B.	FT.	DEPTH OUT																	SD. CONT.			
CUT OFF DRILL LINE						CUMULATIVE HOURS RUN																				
REPAIR RIG				KELLY DOWN	FT.	COND. OF BIT																				
CORING				TOTAL	FT.	REAMER CUTTER NO.																				
WIRE LINE LOGGING				WT OF STRING	LBS.	TYPE																				
OTHER				DRILLER																						
FISHING																										
COMPLETING (A) PERFORATING																										
(B) RUNNING TUBING																										
(C) SWABBING																										
(D) TESTING																										
(E) ACIDIZING																										
(F) ADDITIONAL																										
TOTALS																										
TIME SUMMARY (OFFICE USE ONLY)																										
CONTRACTOR'S TIME HRS:																										
OPERATOR'S TIME:																										
HRS. W/D.P.																										
HRS. WO/D.P.																										
HRS. STANDBY																										

N. W. T.

Y	OTHER
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CONTRACTOR'S TOOL PUSHER

MORNING TOUR

PAY TO:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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NO. DRILLING ASSEMBLY				BIT RECORD	
STANDS	DP	FT.	RUN NO.		
SNGLS.	DP	FT.	SIZE		
D.C	ID		MFG.		
	OD	FT.	TYPE		
RM R	OD	FT.	NO.		
SYB			NOZ.		
BODY	OD	FT.	SIZE		
SUBS	OD	FT.	SER. NO.		
BIT OR C.B.		FT.	DEPTH OUT		
		FT.	CUMULATIVE HOURS RUN		
KELLY DOWN		FT.	COND. OF BIT		
TOTAL		FT.	REAMER CUTTER NO.		
WT OF STRING		LBS.	TYPE		

NO. DRILLING ASSEMBLY			BIT RECORD		
	STANDS DP	FT.	RUN NO		
	SNGLS. DP	FT.	SIZE		
	ID		MFG		
	D.C.		TYPE		
	OD	FT			
	RMR BODY OD	FT	NO.		
	STB BODY OD	FT	SIZE		
	SUBS OD	FT	SER. NO		
	BIT OR C.B	FT	DEPTH OUT		
		FT	CUMULATIVE HOURS RUN		
	KELLY DOWN	FT	COND OF BIT		
	TOTAL	FT	REAMER CUTTER NO.		
	WT OF STRING	LBS.	TYPE		
DRILLER					

NO. DRILLING ASSEMBLY			BIT RECORD		
STANDS	DP	FT.	RUN NO		
SNGLS.	DP	FT	SIZE		
D.C	ID		MFG		
	OD	FT	TYPE		
RMR BODY	OD	FT	NOZ	NO	
STB BODY	OD	FT		SIZE	
SUBS	OD	FT	SER	NO	
BIT OR C.B		FT	DEPTH OUT		
		FT	CUMULATIVE HOURS RUN		
KELLY DOWN		FT.	COND. OF BIT		
TOTAL		FT	REAMER CUTTER NO.		
WT OF STRING		LBS.	TYPE		
DRILLER					

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M	WT.ON BIT 1000±	PUMP PRESS	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN	MUD RECORD			
								LINER SIZE	S.P.M.	LINER SIZE	S.P.M.		TIME			
													WEIGHT			
													VISC			
													W.L.-C.C.			
DEVIATION RECORD:	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	FLTR. CK.	PH	SD. CONT.				
REMARKS																
												MUD & CHEMICALS ADDED				
												TYPE	AMT.	TYPE	AMT.	

HRS. DRLD.	CORE NO.	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M.	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1		PUMP NO. 2		METHOD PUMPS RUN	MUD RECORD																					
								LINER SIZE	S.P.M.	LINER SIZE	S.P.M.		TIME	WEIGHT	VISC	W.L.-C.C.																		
			25																															
DEVIATION RECORD: <table border="1"> <thead> <tr> <th>DEPTH</th> <th>DEV</th> <th>DIRECTION</th> <th>DEPTH</th> <th>DEV</th> <th>DIRECTION</th> <th>DEPTH</th> <th>DEV</th> <th>DIRECTION</th> </tr> </thead> <tbody> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table>													DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION										FLTR. CK			
													DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION													
REMARKS 8:00 - 4:00 - Rigging up, waiting on cement and welder for conductor pipe.													PH																					
													SD. CONT																					
													MUD & CHEMICALS ADDED																					
													TYPE	AMT.	TYPE	AMT.																		

HRS. DRLD	CORE NO	FROM	TO	FORMATION (SHOW CORE RECOVERY)	ROTA- RY R.P.M	WT ON BIT 1000 =	PUMP PRESS	PUMP NO 1		PUMP NO 2		METHOD PUMPS RUN	MUD RECORD																					
								LINER SIZE	S.P.M	LINER SIZE	S.P.M		TIME	WEIGHT	VISC.	W.L.-C.C																		
			25'																															
DEVIATION RECORD: <table border="1"> <thead> <tr> <th>DEPTH</th> <th>DEV</th> <th>DIRECTION</th> <th>DEPTH</th> <th>DEV</th> <th>DIRECTION</th> <th>DEPTH</th> <th>DEV</th> <th>DIRECTION</th> </tr> </thead> <tbody> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table>													DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION										FLTR. CK			
													DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION													
REMARKS 4:00-12:00. Rigging up. Waiting for cement and welder.													PH																					
													SD. CONT.																					
													MUD & CHEMICALS ADDED																					
													TYPE	AMT.	TYPE	AMT.																		

DEELING

REF ID: A66042

KEEP NO.

NO. OF LINES 578



FEET SLIP

FEET OUT OFF

PRESENT LENGTH

PRESINO LENGTH

TOMMY or TRIPS

SINCE LAST CUT

**CUMULATIVE
TONEI. 5-TRIPS**

TOURIST OF TRIPS

100-443887-14

NO. OF DAYS 243

FROM SPUD

CUMULATIVE

ROTATING HRS.

100

100

1

[illegible]

100

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

OTHER _____

CASING
&
LINER
RECORD

CONTRACTOR'S TOOL PUSHER

06-11-1964

[illegible]

FORMATION
ELEVATION DATUM

ONE WAY TRAVEL TIME (seconds)

000
0

.100

.200

.300

WELL VELOCITY GRAPHS

SHELL ALEXANDRA NO. 5

60° 34' 0" N LAT., 116° 44' 45" W. LONG.

NORTHWEST TERRITORIES, CANADA

OCTOBER 26 & 27, 1958

SHELL OIL COMPANY

CASING
HAY RIVER SHALE

TOP SLAVE POINT

TOP OF PRESQUILLE

TOP BEAR ROCK

TOP RED BEDS

GRANITE (2778')

DEPTH BELOW ELEVATION DATUM

1000

2000

3000

TIME - DEPTH

WELL VELOCITY

INTERVAL VELOCITY

8000 10,000 12,000 14,000 16,000 18,000 20,000
VELOCITY (feet/second)



Velocity Survey Report
on
SHELL KAKISA RIVER NO. 2

by
S.S.C.

DA-51

CONTINUOUS VELOCITY LOG

a n d

GEOPHONE SURVEY

SHELL KAKISA RIVER No. 2

60°06'17"N. Lat.

118°28'30"W. Long.

NORTHWEST TERRITORIES, CANADA

f o r

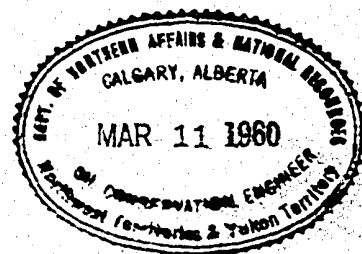
SHELL OIL COMPANY OF CANADA LIMITED

EDMONTON, ALBERTA



Seismograph Service Corporation of Canada

Calgary, Alberta



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III VELOCITY CALCULATION SHEET	
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INTRODUCTION

A survey was conducted on February 24, 1959, to determine the subsurface seismic velocities at the Shell Kakisa River No. 2 Well located at $60^{\circ}06'17''\text{N}$. Lat., $118^{\circ}28'30''\text{W}$. Long., Northwest Territories, Canada.

Both standard well geophone and continuous velocity logging methods were used to make this survey. The logging sonde and the pressure sensitive diaphragm-type geophone were coupled together and run on a Schlumberger cable into the well, which had been drilled to a depth of 5677 feet with casing set to 707 feet. Due to bottom hole conditions in the well, 5669 feet was the maximum depth reached by the survey.

The well and cable truck were made available to the crew at 15:30 on February 24, 1959, and the geophone survey commenced at 15:35 with the firing of the first shot. The last shot was fired at 19:10 after which the Continuous Velocity Log was run and all operations were completed by 23:30.

There were no operational difficulties encountered during the survey and the results obtained are considered to be reliable.



FIELD PROCEDURE

The geophone survey was run first as the bore hole instruments were lowered to the bottom of the well and ten levels were tested. For each level, the geophone was lowered at least 50 feet below the desired depth and then slowly raised to the proper place, so that in all cases its last movement was upward. All depth measurements were obtained by the standard measuring device of the cable truck and were referred to the kelly bushing at an elevation of 2188 feet above sea level.

Shot holes were drilled to a depth of 60 feet and located between 505 and 630 feet from the well as shown in the Shooting Plan, Appendix II. Two additional holes B & G located 555 and 595 feet respectively from the well were drilled to a depth of 120 feet to accommodate sub-shot reference geophones. Dynamite charges used varied from 5/8 of a pound to 2 1/2 pounds.

The polarity of the well geophone was arranged so that all "first breaks" would be downward. The trace arrangement used on the velocity test records is as follows:

Trace #1	Travel time from shot to well geophone - low gain
----------	--



Trace #2	Travel time from shot to well geophone - medium gain
Trace #3	Travel time from shot to well geophone - high gain
Trace #4	Time break or shot instant
Trace #5	Uphole or vertical time in shot hole
Trace #6	Sub-shot reference geophone
Traces #7 to #12	Reflection profile from surface geophones

The three amplifiers, recording the output of the well geophone, were adjusted to a frequency response band of 18 to 120 cycles per second at 70.7 percent amplitude response. Automatic level control was not used on these traces.

A six station reflection spread was laid northeast from the well as shown in the Shooting Plan and was recorded simultaneously with each velocity test shot. At the completion of the survey, a twelve station reflection spread laid northeast from the well was recorded from shots fired in Shot Point A. Three geophones were used per trace and station intervals were maintained at 60 feet for both spreads. Due to equipment damage caused by tracked equipment on the lease, only eleven of the twelve stations making up



the reflection spread could be recorded.

The amplifiers, recording the surface geophone spread, were adjusted to a filter setting which gave a frequency response band of approximately 37 to 84 cycles per second at 70.7 percent amplitude response for the specimen record. The outputs of these amplifiers were not mixed.

Immediately after the last shot completing the geophone portion of the survey, the Continuous Velocity Log was obtained as the instruments were raised from the bottom of the bore hole. The logging speed was such that at least ten to twenty overlapping measurements were taken for each foot of travel. The log was run from a depth of 5669 feet to the foot of the surface casing at 707 feet below the kelly bushing.

At the completion of the Continuous Velocity Logging run, two separate near surface velocity surveys were recorded. A crystal geophone cable was suspended in holes B and G and subsurface travel times were recorded from shots fired in Shot Point A and Shot Point I. The results of these surveys appear in Appendices IX and IX A.



INTERPRETATION and RESULTS

Velocity Determination

Twenty-one velocity test records are submitted in Appendix V.

The calculation of velocities from these data was based on the assumption of straight line paths of energy travel from shot to well geophone. The observed "first break" times of the well geophone traces were converted to vertical travel times by application of the cosine function:

$$\cos i = \cos \arctan X/(Z + de)$$

The vertical travel times were then reduced to an elevation datum of 2055 feet above sea level coincident with the elevations of the two sub-shot reference geophones. Elevation corrections were computed from the reference geophone arrival times by the application of an appropriate cosine function. The method and calculations appear in Appendix III A.

The subsurface velocity calculations are shown in Appendix III. Final time-depth, average velocity and interval velocity curves are shown in Appendix IV.



Reflection Identification

An eleven trace reflection record is submitted in Appendix VII to permit evaluation of the velocity data with respect to reflection arrival times. This record was shot from Shot Point A and recorded on the geophone spread laid northeast from the well.

Reflection identification times (T_R) were computed for the geophone nearest the shot point, using the following equation:

$$T_R = 2T_c + \Sigma t$$

These calculations are shown in Appendix VI and times obtained were plotted against the reflection record, Appendix VII. These times represent the "first break" arrival times only. As such, they will lead the true reflection trough times by an amount which is a function of frequency and attenuation of the reflected energy, both influenced by ground and instrumental factors.

Continuous Velocity Log

Single and two receiver Continuous Velocity Logs were recorded simultaneously in the field and a calibrated copy, traced from the field original is enclosed in the pocket of the back cover of this report. The log consists of four curves:



1) Interval Velocity Curves:

These curves are the continuous recording in microseconds of the interval time through formation distances of 6.0000 feet for the single receiver curve and 3.0000 feet for the two receiver curve. These times can be read as interval velocity on the appropriate scale at the top of the log.

2) Integrated Curves:

Integrated time was derived from both interval velocity curves by an automatic integrating device. The results have been calibrated to the geophone survey and total travel times over any section of the log may be obtained from the single or two receiver log.

The integrated time for the interval velocity curves appears as two diagonal lines moving to the right on the log with increasing depth. The integrated time scale has been selected as two milliseconds per 0.1 inch, as shown on the appropriate scale at the top of the log. Each cycle of the re-



cording pen increases the time scale by 100 milliseconds.

During the drafting process noise spikes and other spurious events were removed. No allowance was made in the field for the effects of mud delay, formation invasion, and other bore hole factors affecting the delay time normally encountered with Continuous Velocity Logs. The log was calibrated by comparing the integrated times of the Continuous Velocity Log with the time-depth curve of the geophone survey. The time difference at each level tested by the well geophone was plotted against depth and the results appear in Appendix VIII. The resulting slopes indicate that the single receiver curve required a mud delay time of 82 microseconds from total depth to 4000 feet and 105 microseconds from 4000 feet to the foot of the surface casing at 707 feet below the kelly bushing.

Comparison of the interval velocities recorded by the geophone survey and the two receiver log indicated that the logged velocities were in excess of the true formation velocities. To decrease the interval velocity, the curve was shifted towards the



low velocity end of the scale by an amount of 32 microseconds.

The following tabulation shows the deviation between the well geophone data and the corrected integrated times which were calibrated to a geophone check shot at the 5648 foot level.

<u>Depth (K. B.)</u>	<u>Single Receiver Log</u>			<u>Two Receiver Log</u>	
	<u>Tc (Geo)</u>	<u>Tc (Log)</u>	<u>ΔF</u>	<u>Tc (Log)</u>	<u>ΔF</u>
1530	.1975	.1984	+.0009	.1973	-.0002
2100	.2340	.2321	-.0019	.2333	-.0007
2745	.2745	.2724	-.0021	.2757	+.0012
3350	.3375	.3379	+.0004	.3383	+.0008
4000	.4030	.4025	-.0005	.4026	-.0004
4765	.4670	.4672	+.0002	.4663	-.0007
4964	.4765	.4774	+.0009	.4770	+.0005
5300	.4940	.4939	-.0001	.4941	+.0001
5648	.5135	.5135	.0000	.5135	.0000

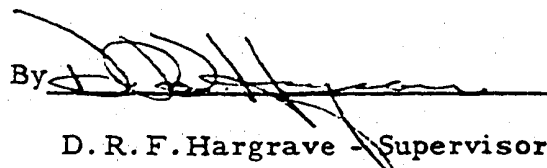
Inspection of the table shows reasonable agreement between the data at all levels tested and the Continuous Velocity Log is



considered to be reliable.

Respectfully submitted,

Seismograph Service Corporation
of Canada

By 

D. R. F. Hargrave - Supervisor

March 20, 1959

APPROVED:

By 

G. E. Blackledge
Manager of Velocity Logging

DRFH/mm



SP

ELEVATION

DISTANCE

DIRECTION FROM WELL

S.P. ELEVATION

DISTANCE

DIRECTION FROM WELL

WELL ELEVATION

K.B. 2188 feet

TOTAL DEPTH

5677 feet

CASING RECORD

707 feet

WELL NAME: SHELL KAKISA RIVER NO. 2

LOCATION: 60° - 6' - 17" N. Lat., 118° - 28' - 30" W. Long., Northwest Territories

COMPANY: SHELL OIL COMPANY

DATE SURVEYED: February 24, 1959

A

2173

585

N 66° 00' E

G

2172

595

S 63° 45' W

B

2173

555

N 66° 00' E

H

2172

630

S 66° 15' W

C

2174

505

N 63° 00' E

I

2171

600

S 66° 15' W

D

2174

535

N 64° 15' E

J

2172

570

S 66° 15' W

E

2173

565

N 64° 30' E

K

2171

540

S 66° 15' W

F

2173

595

N 64° 15' E

ELEVATION DATUM

2055 feet above sea level

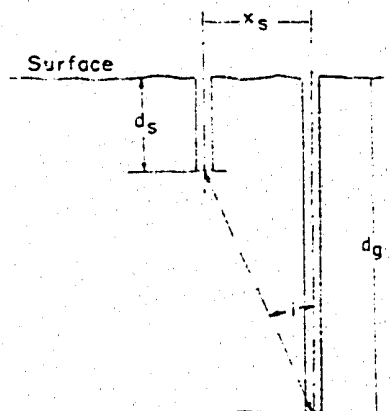
ELEVATION VELOCITY

feet / second

GEOLOGICAL LOG	Record Number	Shot Hole Number	Grade	d	d _s	t _s	Shot Hole Elevation	d _e	Δe	Δe+d _s	t _e	T	Z+d _e	X	tan i	cos i	T̄	T _c	Z	V ₀	ΔZ	ΔT _c	V _i	
	1A	I	G	650	50	.009	2171	66	17	67	.013	.124	583	600	1.0292	.6969	.086	.073	.073	517	7082			
	12A	D	G	650	50	.010	2174	69	14	64	.013	.117	586	535	.9130	.7385	.086	.073		517		880	.1245	7068
HAY RIVER LIMESTONE	2B	I	G	1530	48	-	2171	68	17	65	.013	.227	1465	600	.4096	.9254	.210	.197	.1975	1397	7073			
	3C	I	G	1530	48	.009	2171	68	17	65	.013	.227	1465	600	.4096	.9254	.210	.197		1397				
	13B	D	G	1530	50	.011	2174	69	14	64	.012	.224	1466	535	.3649	.9394	.210	.198		1397		570	.0365	15616
	4D	I	G	2100	48	.010	2171	68	17	65	.012	.255	2035	600	.2948	.9592	.245	.233	.234	1967	8406			
	14C	D	G	2100	46	.011	2174	73	14	60	.012	.255	2040	535	.2623	.9673	.247	.235		1967		645	.0405	15926
HAY RIVER SHALE	5E	I	G	2745	50	.010	2171	66	17	67	.012	.293	2678	600	.2240	.9758	.286	.274	.2745	2612	9515			
	15D	D	G	2745	46	.010	2174	73	14	60	.013	.294	2685	535	.1993	.9807	.288	.275		2612		605	.063	9603
	6F	I	G	3350	51	.010	2171	65	17	68	.012	.355	3282	600	.1828	.9837	.349	.337	.3375	3217	9532			
	16E	D	G	3350	46	.010	2174	73	14	60	.013	.356	3290	535	.1626	.9870	.351	.338		3217		650	.0655	9924
	7G	I	G	4000	51	-	2171	65	17	68	.012	.419	3932	600	.1526	.9886	.414	.402	.403	3867	9596			
	17F	D	G	4000	46	.010	2174	73	14	60	.013	.421	3940	535	.1358	.9909	.417	.404		3867		765	.064	11953
SLAVE POINT	8H	I	G	4765	51	.010	2171	65	17	68	.011	.481	4697	600	.1277	.9919	.477	.466	.467	4632	9919			
	18G	D	G	4765	49	.011	2174	70	14	63	.012	.483	4702	535	.1138	.9936	.480	.468		4632		199	.0095	20947
MUSKOG	9I	I	G	4964	51	.010	2171	65	17	68	.011	.490	4896	600	.1225	.9926	.486	.475	.4765	4831	10139			
	19H	D	G	4964	50	.011	2174	69	14	64	.011	.492	4900	535	.1092	.9941	.489	.478		4831		336	.0175	19200
METHY	10J	I	G	5300	52	.010	2171	64	17	69	.011	.508	5231	600	.1147	.9935	.505	.494	.494	5167	10460			
	20I	D	G	5300	40	.009	2174	79	14	54	.013	.510	5246	535	.1020	.9948	.507	.494		5167		348	.0195	17846
PRE-CAMBRIAN	11A	K	G	5648	50	.009	2171	66	17	67	.011	.526	5581	540	.0968	.9953	.524	.513	.5135	5515	10740			
	21J	D	G	5648	41	.011	2174	78	14	55	.013	.529	5593	535	.0957	.9955	.527	.514		5515				

ALL TIMES CORRECTED TO SURFACE ELEVATION

CABLED HOLE ELEVATION: 2173 Ft.



$$\frac{x_s}{d_q - d_s} = \tan i$$

$$\cos i \times T_c = T_c$$

UPHOLE TIME (t_s) = .004 Sec.

[illegible]

UPHOLE VELOCITY SURVEY DATA
SHELL KAKISA RIVER NO. 2

ALL TIMES CORRECTED TO SURFACE ELEVATION

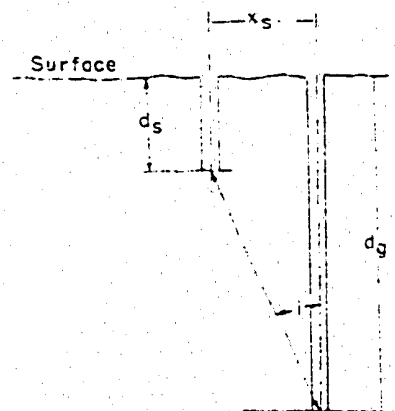
SHOT POINT ELEVATION 2173 Ft.

CABLED HOLE ELEVATION: 2173 Ft.

$$\frac{x_s}{d_g - d_s} = \tan i$$

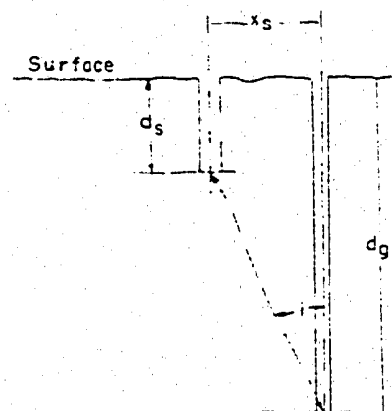
$$\cos i \times T = T_c$$

UPHOLE TIME (t_s) = .004 Sec.

[illegible]

ALL TIMES CORRECTED TO SURFACE ELEVATION

CABLED HOLE ELEVATION: 2172 Ft.

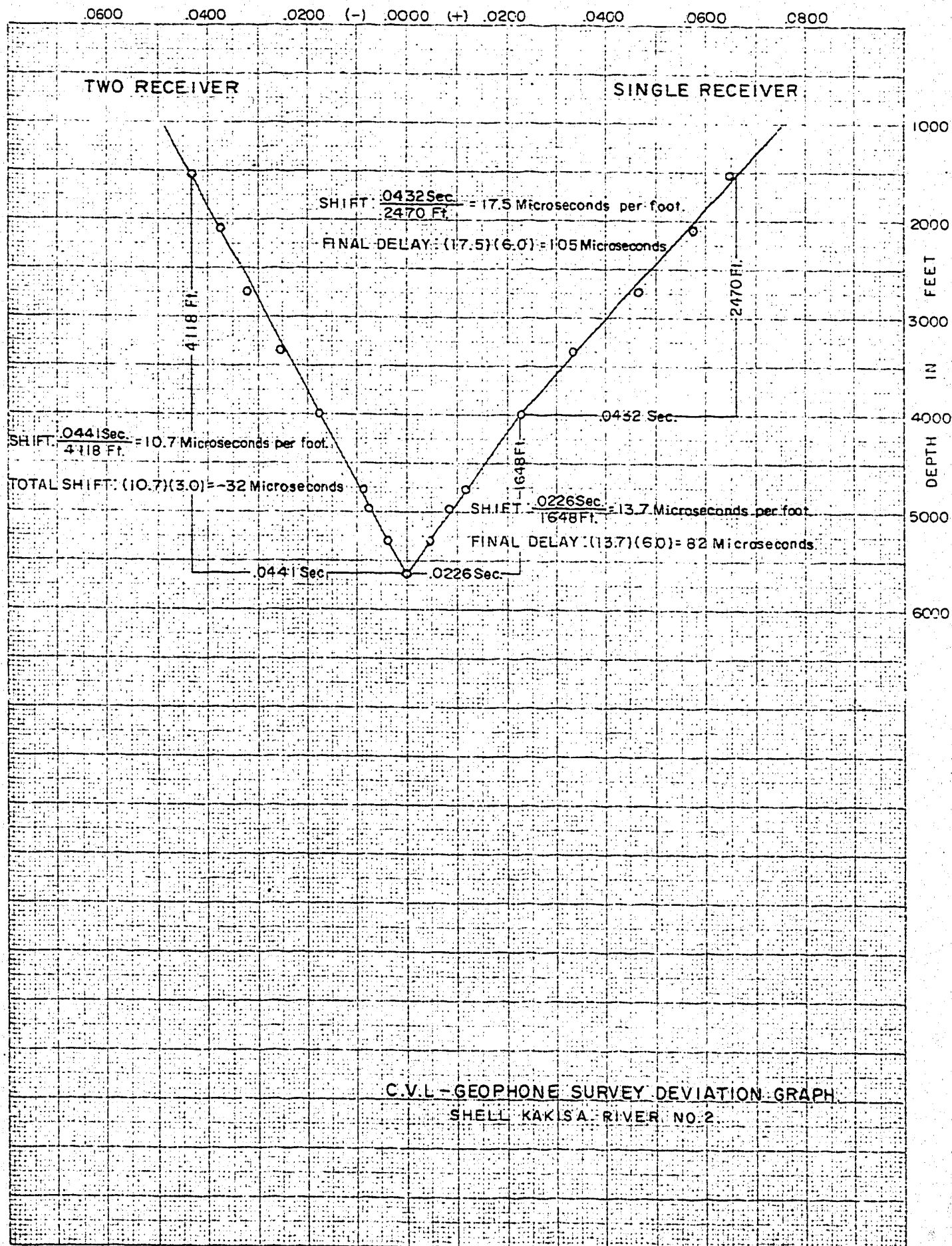


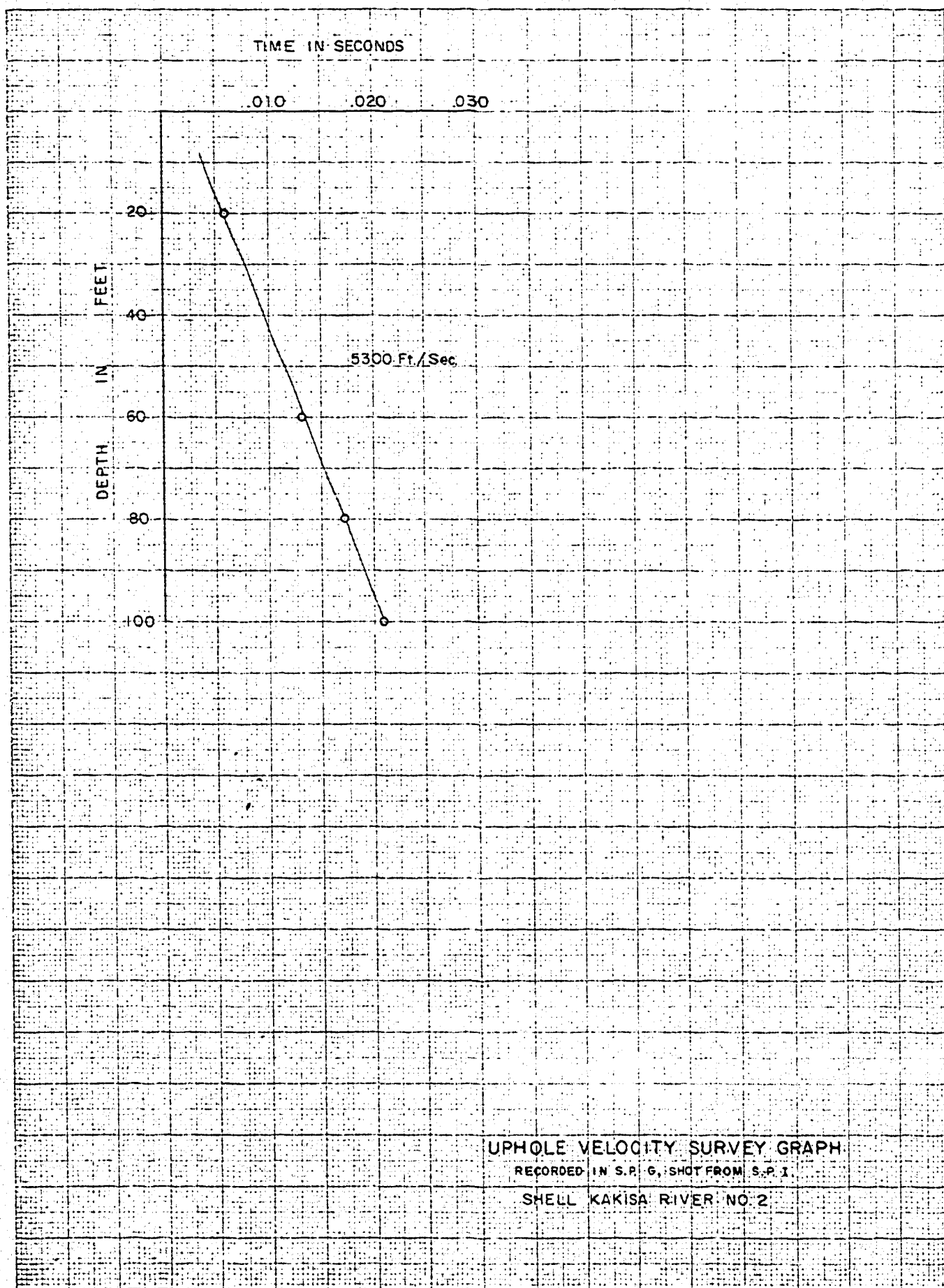
$$\frac{x_s}{d_G - d_s} = \tan i$$

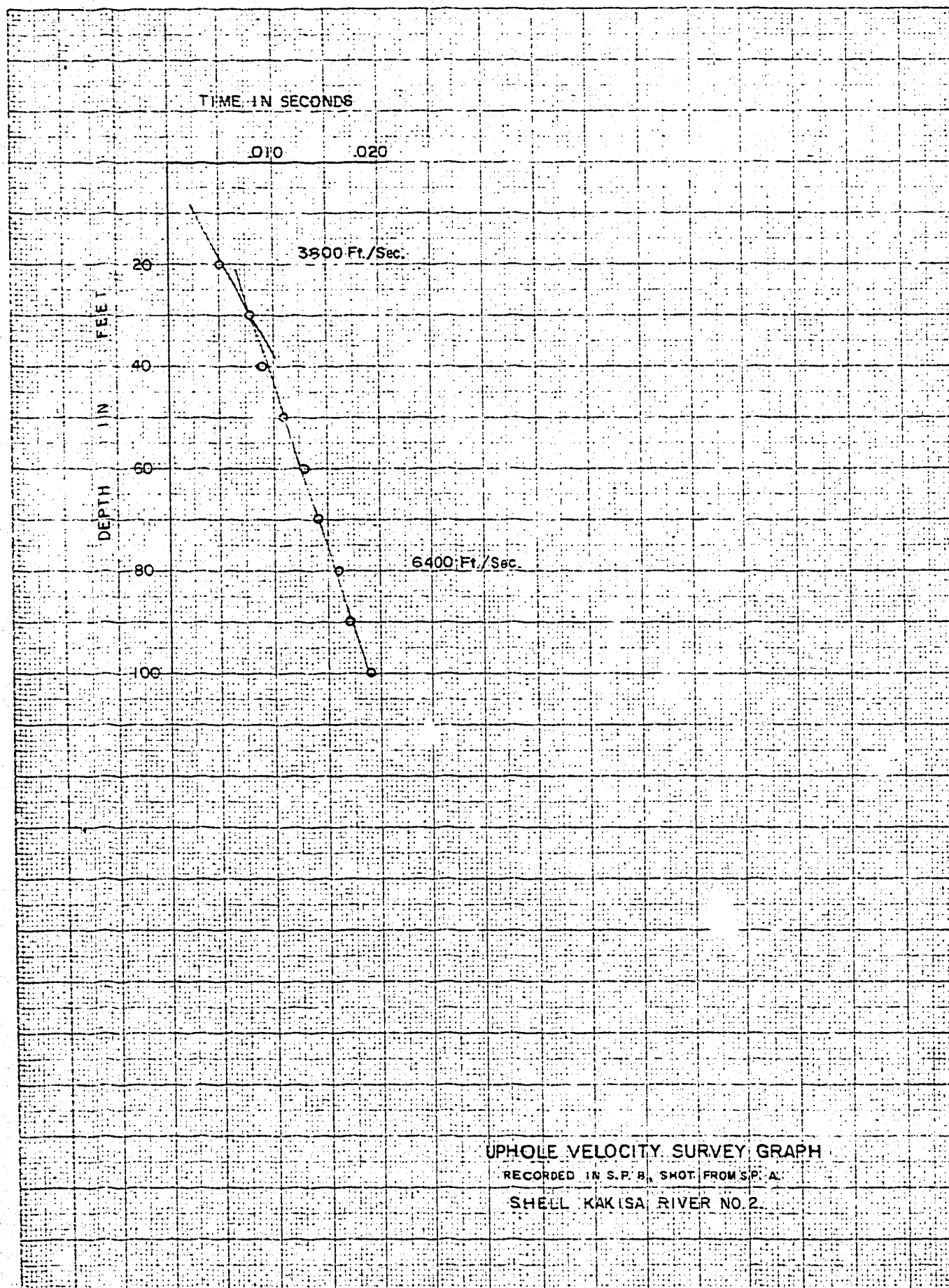
$$\cos i \times T = T_c$$

UPHOLE TIME (t_s) = .004 Sec.

[illegible]



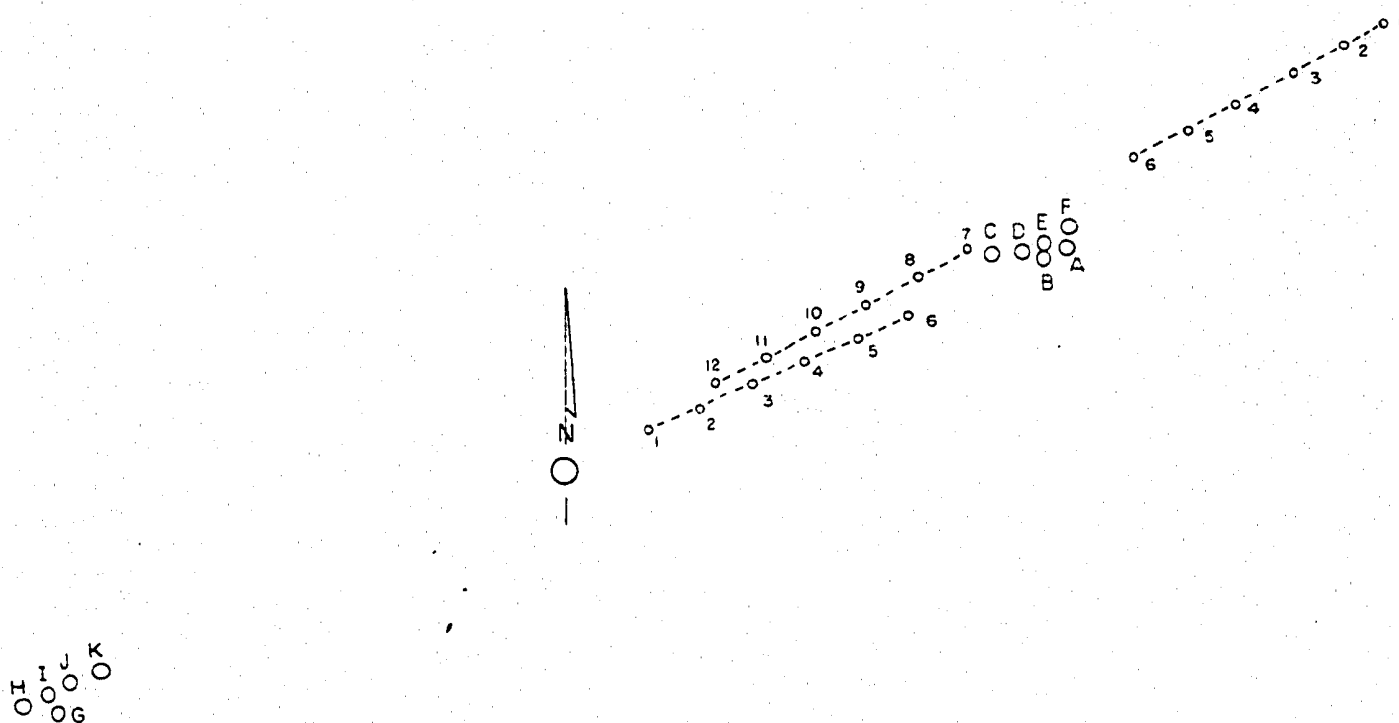




SHOOTING PLAN

SHELL KAKISA RIVER NO. 2

60°-6'-17" N. LAT., 118°-28'-30" W. LONG.
 LSD SEC T R W A



LEGEND:

○ WELL SURVEYED.

○ SHOT POINT.

○ GEOPHONE.

SCALE: 1 IN. = 200 FT.



ELEVATION CORRECTIONS

SHELL KAKISA RIVER NO. 2

REFERENCE HOLE: G

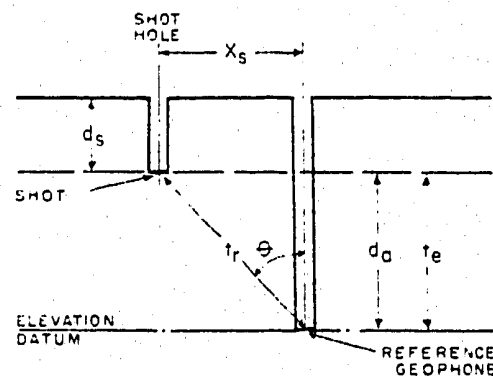
HOLE ELEVATION: 2172 Ft.

GEOPHONE DEPTH: 118 Ft.

GEOPHONE ELEVATION: 2054 Ft.

$$\tan \theta = \frac{X_s}{d_o}$$

$$t_e = t_r \cos \theta$$



S.F. - ELEVATION	SHOT NO	d _s	SHOT ELEV.	X _s	d _o	TAN θ	COS θ	t _r	t _e
I-2171 Ft.	1A	50	2121	25	67	.3731	.9369	.014	.013
	2B	48	2123	25	69	.3623	.9402	.014	.013
	3C	48	2123	25	69	.3623	.9402	.014	.013
	4D	48	2123	25	69	.3623	.9402	.013	.012
	5E	50	2121	25	67	.3731	.9369	.013	.012
	6F	51	2120	25	66	.3788	.9352	.013	.012
	7G	51	2120	25	66	.3788	.9352	.013	.012
	8H	51	2120	25	66	.3788	.9352	.012	.011
	9I	51	2120	25	66	.3788	.9352	.012	.011
	10J	52	2119	25	65	.3846	.9333	.012	.011
K-2171 Ft.	11A	50	2121	60	67	.8955	.7450	.015	.011



SHELL KAKISA RIVER NO. 2

REFERENCE HOLE : B

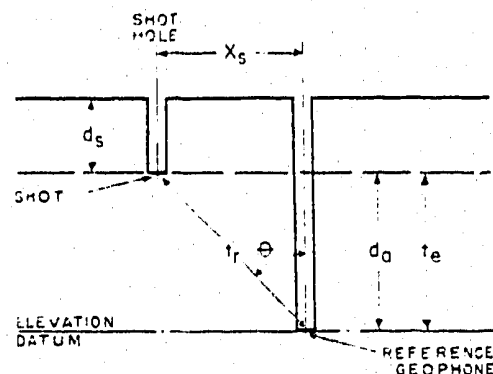
HOLE ELEVATION. 2173 Ft.

GEOPHONE DEPTH: 118 Ft.

GEOPHONE ELEVATION: 2055 Ft.

$$\tan \theta = \frac{x_s}{d_n}$$

$$r_e = r_r \cos \theta$$

[illegible]

VELOCITY TEST RECORD NO. 186

WELL GEOPHONE LEVEL 4765 FT. (KB)

S.P. 0 CHARGE 5/8 DEPTH 49 FT.

VELOCITY TEST RECORD NO. 91

WELL GEOPHONE LEVEL 4964 FT. (KB)

S.P. 1 CHARGE 5/8 DEPTH 51 FT.

VELOCITY TEST RECORD NO. 19H

WELL GEOPHONE LEVEL 4964 FT. (KB)

S.P. 0 CHARGE 5/8 DEPTH 50 FT.

VELOCITY TEST RECORD NO. 10J

WELL GEOPHONE LEVEL 5300 FT. (KB)

S.P. 1 CHARGE 5/8 DEPTH 52 FT.

VELOCITY TEST RECORD NO. 20I

WELL GEOPHONE LEVEL 5300 FT. (KB)

S.P. 0 CHARGE 5/8 DEPTH 40 FT.

VELOCITY TEST RECORD NO. 11A

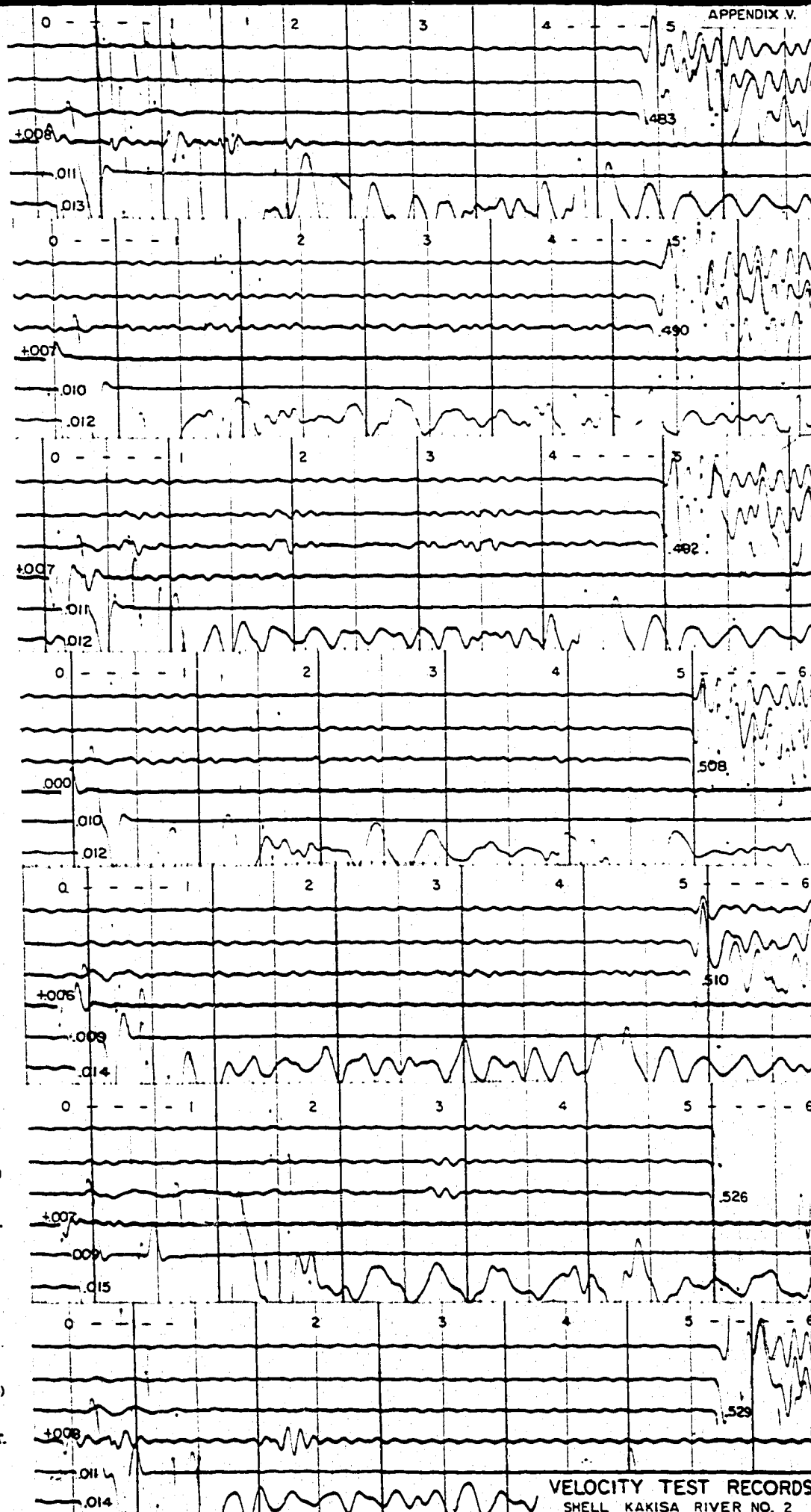
WELL GEOPHONE LEVEL 5648 FT. (KB)

S.P. 1 CHARGE 2 1/2 DEPTH 50 FT.

VELOCITY TEST RECORD NO. 21J

WELL GEOPHONE LEVEL 5648 FT. (KB)

S.P. 0 CHARGE 1 1/4 DEPTH 41 FT.

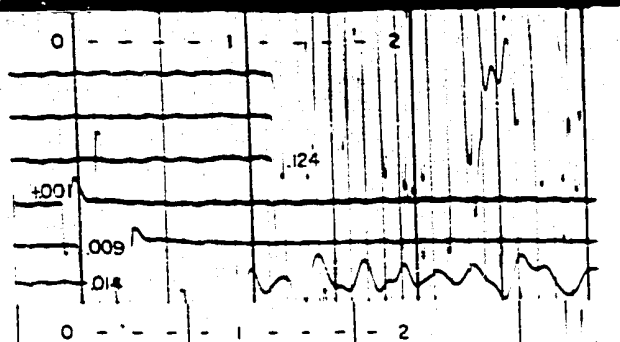


VELOCITY TEST RECORDS
SHELL KAKISA RIVER NO. 2

VELOCITY TEST RECORD NO. 1A

WELL GEOPHONE LEVEL 650 FT. (KB)

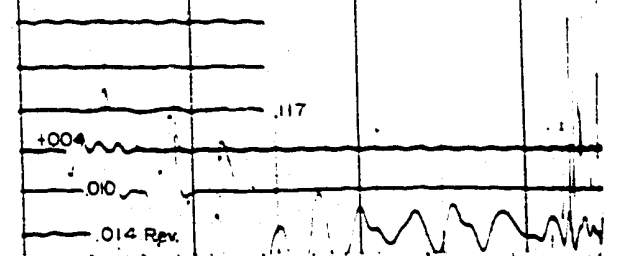
S.P. 1 CHARGE $\frac{5}{16}$ DEPTH 50 FT.



VELOCITY TEST RECORD NO. 12A

WELL GEOPHONE LEVEL 650 FT. (KB)

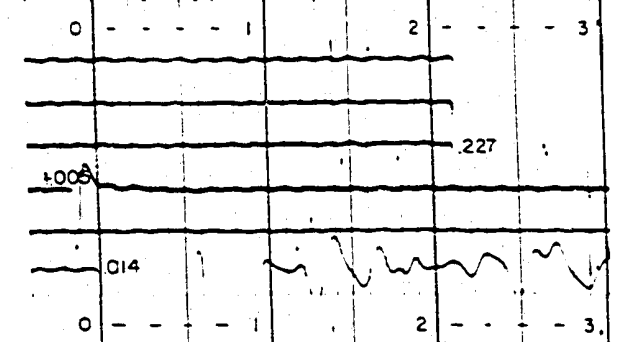
S.P. 0 CHARGE $2\frac{1}{2}$ DEPTH 50 FT.



VELOCITY TEST RECORD NO. 28

WELL GEOPHONE LEVEL 1530 FT. (KB)

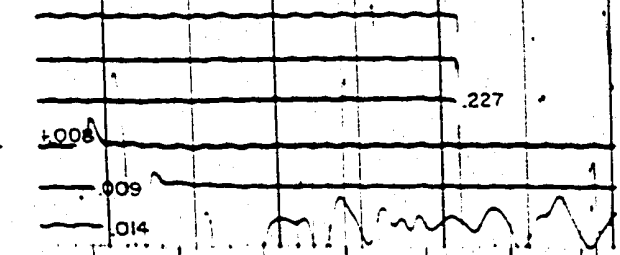
S.P. 1 CHARGE $\frac{5}{16}$ DEPTH 48 FT.



VELOCITY TEST RECORD NO. 32

WELL GEOPHONE LEVEL 1530 FT. (KB)

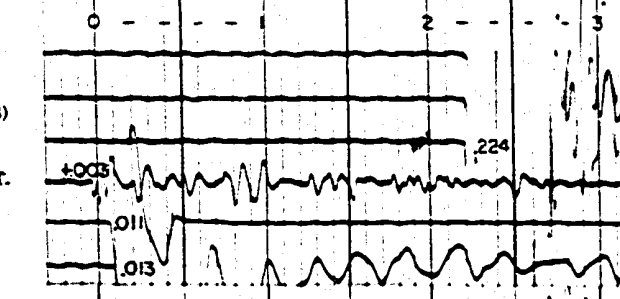
S.P. 1 CHARGE $\frac{5}{16}$ DEPTH 48 FT.



VELOCITY TEST RECORD NO. 13B

WELL GEOPHONE LEVEL 1530 FT. (KB)

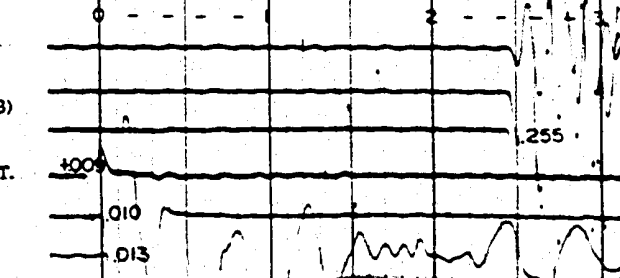
S.P. 0 CHARGE $\frac{5}{16}$ DEPTH 50 FT.



VELOCITY TEST RECORD NO. 4D

WELL GEOPHONE LEVEL 2100 FT. (KB)

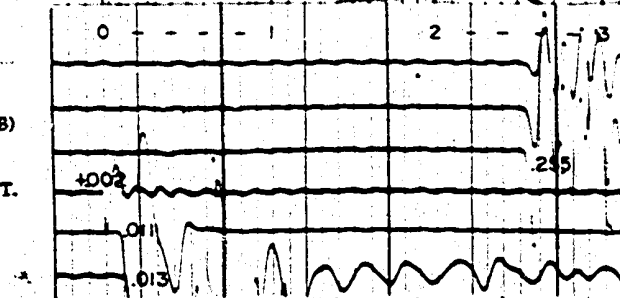
S.P. 1 CHARGE $\frac{5}{16}$ DEPTH 48 FT.



VELOCITY TEST RECORD NO. 14C

WELL GEOPHONE LEVEL 2100 FT. (KB)

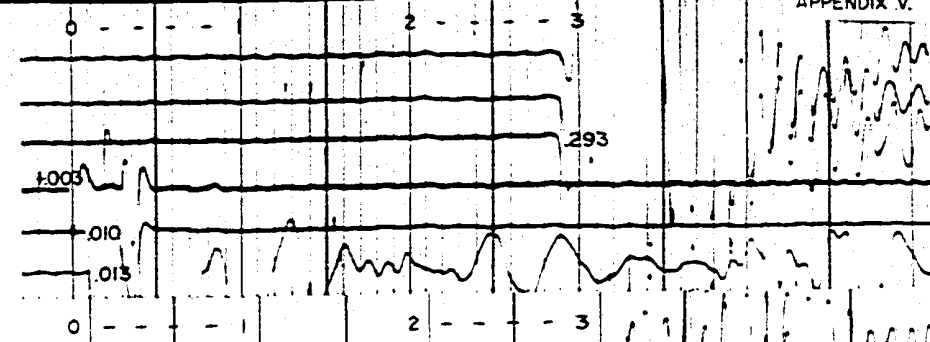
S.P. 0 CHARGE $\frac{5}{16}$ DEPTH 46 FT.



VELOCITY TEST RECORD NO. 5E

WELL GEOPHONE LEVEL 2745 FT. (KB)

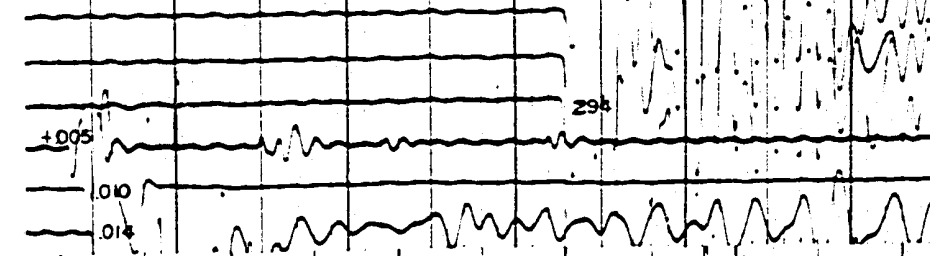
S.P. 1 CHARGE $\frac{5}{16}$ DEPTH 50 FT.



VELOCITY TEST RECORD NO. 15D

WELL GEOPHONE LEVEL 2745 FT. (KB)

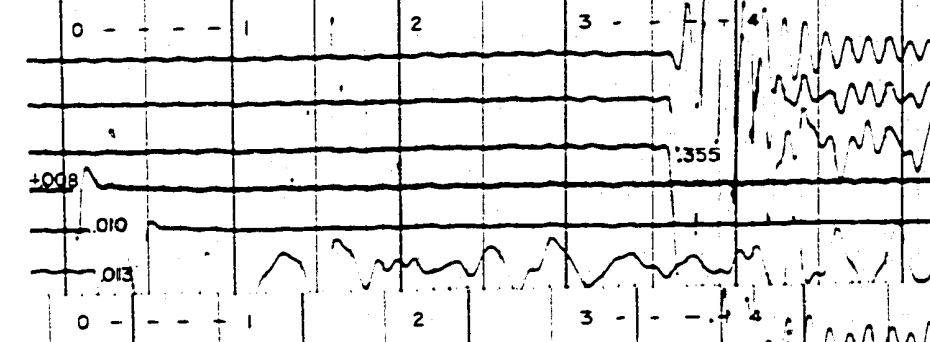
S.P. 0 CHARGE $\frac{5}{16}$ DEPTH 46 FT.



VELOCITY TEST RECORD NO. 6F

WELL GEOPHONE LEVEL 3350 FT. (KB)

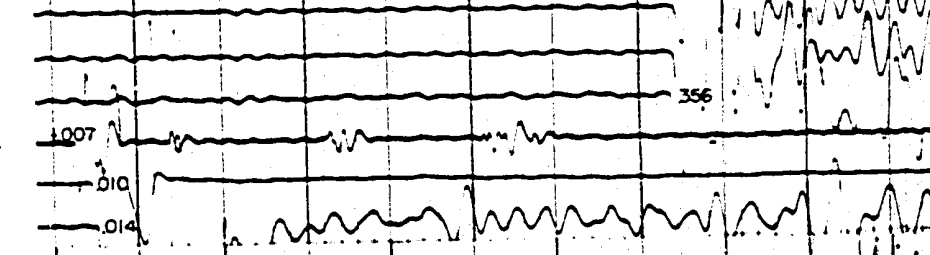
S.P. 1 CHARGE $\frac{5}{16}$ DEPTH 51 FT.



VELOCITY TEST RECORD NO. 16E

WELL GEOPHONE LEVEL 3350 FT. (KB)

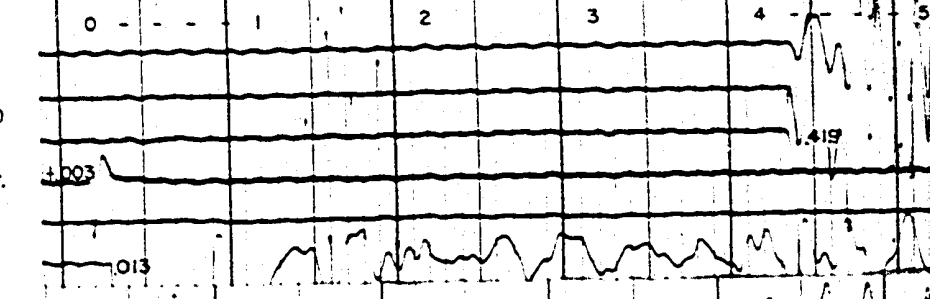
S.P. 0 CHARGE $\frac{5}{16}$ DEPTH 46 FT.



VELOCITY TEST RECORD NO. 7G

WELL GEOPHONE LEVEL 4000 FT. (KB)

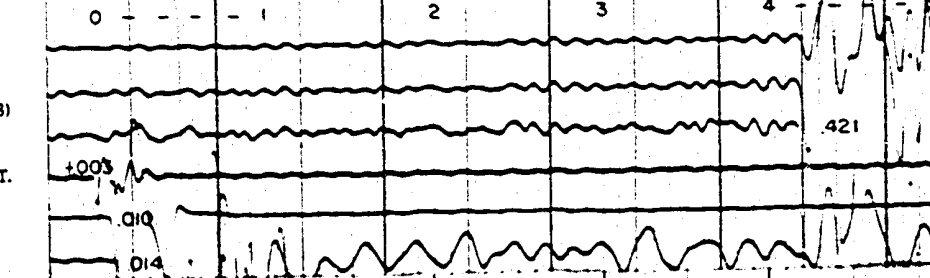
S.P. 1 CHARGE $\frac{5}{16}$ DEPTH 51 FT.



VELOCITY TEST RECORD NO. 17F

WELL GEOPHONE LEVEL 4000 FT. (KB)

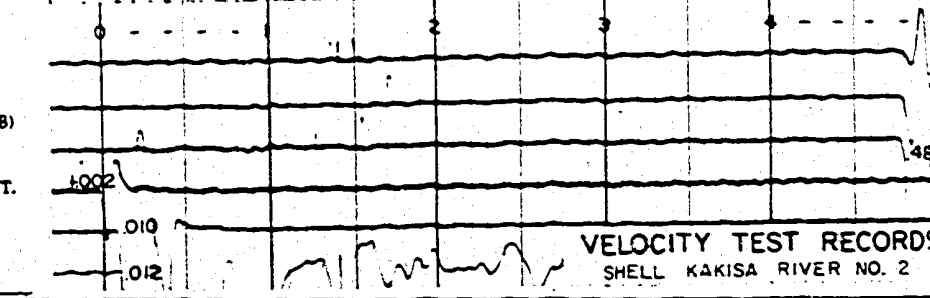
S.P. 0 CHARGE $\frac{5}{16}$ DEPTH 46 FT.



VELOCITY TEST RECORD NO. 8H

WELL GEOPHONE LEVEL 4765 FT. (KB)

S.P. 1 CHARGE $\frac{5}{16}$ DEPTH 51 FT.



VELOCITY TEST RECORDS
SHELL KAKISA RIVER NO. 2

DEPTH BELOW K.B.

FORMATION

TIME IN SECONDS

1530'
HAY RIVER LIMESTONE
4262745'
HAY RIVER SHALE
580

4765'	SLAVE POINT	965
4964'	MUSKEG	984
5300'	METHY	1019
5648'	PRE-CAMBRIAN	1058

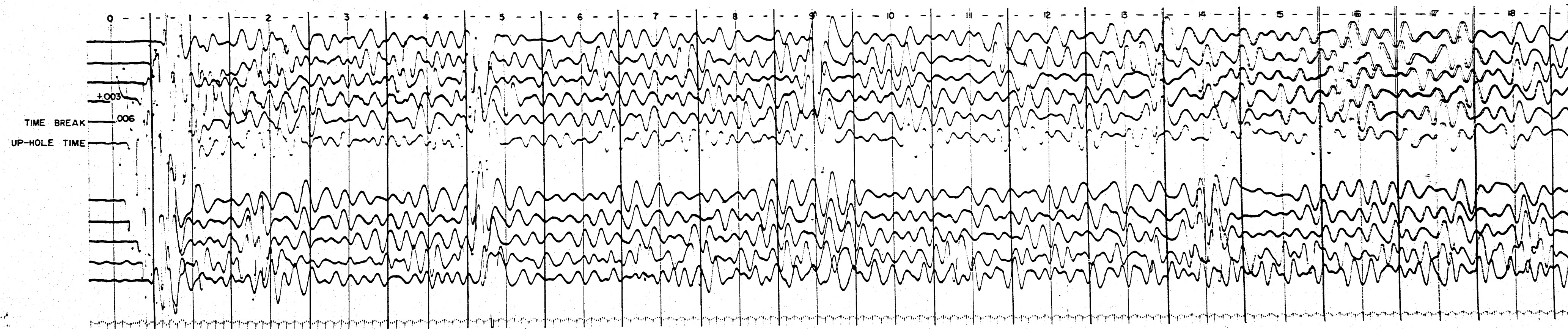
REFLECTION RECORD

SHOT POINT 1 RECORD NO. 40

DEPTH OF SHOT 36'

SHELL MOUNTAIN RIVER NO. 2

FILTER SETTING 37 CYCLES TO 84 CYCLES PER SECOND
AT 70% AMPLITUDE RESPONSE. OUTPUTS NOT MIXED.



Poor Copy

WELL VELOCITY GRAPHS

SHELL KAKISA RIVER NO. 2.

60°-6'-17" N. LAT., 118°-28'-30" W. LONG.

NORTHWEST TERRITORIES, CANADA.

FEBRUARY 24, 1959.

SHELL OIL COMPANY.

1 of

FORMATION
ELEVATION DATUM

ONE WAY TRAVEL TIME (seconds)

CASING

HAY RIVER LIMESTONE

HAY RIVER SHALE

2055'

Well 1530

Well 230

DATUM

0 100 200 300 400 500 600

1000

2000

3000

INTERVAL VELOCITY



HAY RIVER SHALE

DEPTH BELOW ELEVATION DATUM

3000

2 in 3360
F1 Sg 2440

4000

SLAVE POINT

2L Pt 4760

MUSKEG

5000

METHY

Reg Rr 5210

L. Reg Rr 5400

PRE-CAMBRIAN

PE 5670

6000

INTERVAL VELOCITY

AVERAGE VELOCITY

TIME DEPTH

2 of

DEPT

4000

5000

6000

SLAVE POINT

MUSKEG

METHY

PRE-CAMBRIAN

22. PE 4760

11.2 PE 5210

L. Kig for 5490

PE 5870

VELOCITY (feet/second)

4000

6000

8000

10000

12000

14000

16000

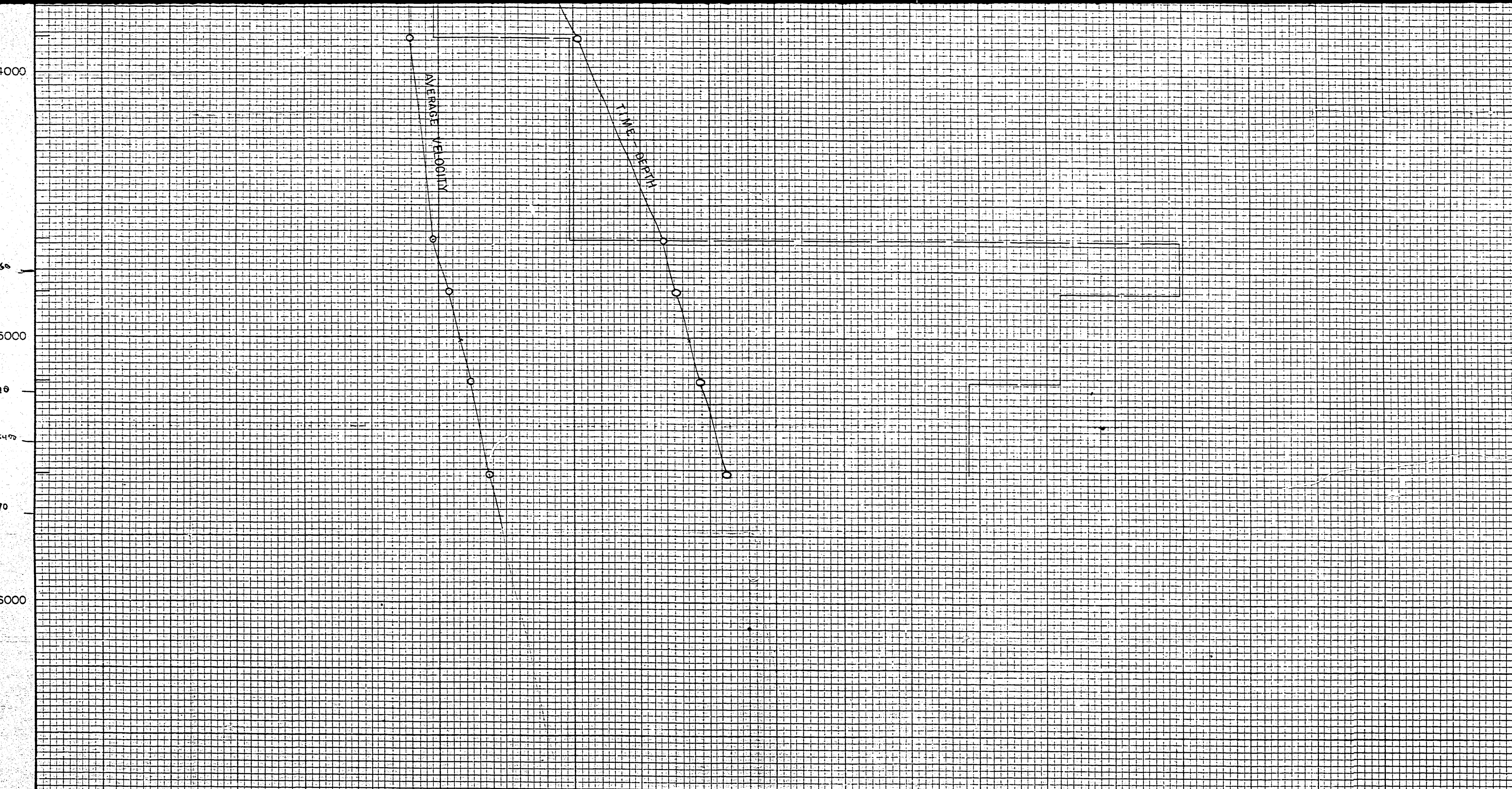
18000

20000

22000

AVERAGE VELOCITY

TIME DEPTH



Seismograph Service Corporation of Canada



60-10-119-15

3013