SHELL ALEXANDRA NO. 5

Drilling Authority No. .....

Date Issued .....

WELL NAME Shell Alexandra No. 5

FIELD Wildcat Area: Kakisa River

LOCATION: Unit Section Grid .....

Latitude 60°33'05" N. Longitude 116°44'39.4" W.

From Established Reference Marker .....

.....

Rig Release Date: 29-10-58

Status D. & A

Information Release Date 29-10-60

CHANGE OF NAME:

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

NANR 52-90(1-61)

#49

CANADA

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION AND LANDS BRANCH

NOTICE OF INTENTION TO [XXXXXXX / (ABANDON / XXXXXXXXXXXX / XXXXXXXXXXXX / XXXXXXXXXX)] 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 Shell Alexandra No. 5 on Oil and Gas (Permit No. 1389 / XXXXXX) registered in the name of Shell Oil Co. of Can. Ltd.

Depth 2802 ... feet. Elevation above sea level: Ground surface 9319 ... ft. Kelly bushing 9424 .... ft.

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

18,056.5' ... (N XXXXXXXXXXXX) of / NE corner of S 34 T 132 R 16 W5M at approx 59° 34' 15" N Lat.

2629.2' ... (W XXXXXXXXXXXX) of at approx 116° 44' 34" W Long.

Survey description .....

CASING RECORD

	Size O.D. inches	Weight lbs/ft.	Amount feet	Set at feet	Sacks cement	Method	To be Withdrawn
1.	7	20	394.5	408.75	150	Cemented to Surface	No
2.							
3.							

OIL, GAS and WATER

Encountered		Cement plugs to be set		
Oil from None feet to	feet.	From feet to	feet with	sacks
Gas from None feet to	feet.	From feet to	feet with	sacks.

(Over)

Water from..1996 feet to 2315..feet. From..1850 feet to..2100..feet with...[illegible] sacks.

....

....

Bottom plug from 2550..feet to ..2302 feet with ...65..sacks

Surface plug from .350..feet to...450 feet with...35....sacks.

Date of last operations ..October 29. . . . . .Total depth. . .2802' . . . . . .

Nature of liquid in well .Mud . . . . . .Level from surface . .Full. . . .

Present condition of well in addition to above: . . . . . .

. . . . . .

. . . . . .

An electric log ~~has been~~ ~~is to be~~ ~~will not 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 . . . . . .(Please Initial)

Program of operation not included above . . . . . .

. . . . . .

. . . . . .

. . . . . .

Responsible agents of permittee or lessee in charge of operation:

At well H. Taylor . . . . At registered office: .R. L. Rankin . . . . . .

Postal Address Shell Oil. . Postal Address .P. O. Box 186 . . . . . .

P.O. Box 186, Edmonton, Alta. .Edmonton, Alberta . . . . . .

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

Dated at .Edmonton . .this . 29th . . day of . . . October . . . . . 1958...

Signed by . R. L. Rankin . . . . . .

R.L. Rankin
Manager
Edmonton Division Production

This program is approved subject to the following provisions:

. . Compliance with Section 68 subsections .(5). and (6). and Sec.69 of the

. . Regulations. . . . . .

. . Note: This confirms eral approval given be. telephone. . . . . .m. .

. . 14th November, 1958. . . . . B. T. Dunn . . . .

Date Conservation Engineer

C A N A D A

DEPARTMENT OF NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION AND LANDS BRANCH

(ABANDONMENT)
~~(COMPLETION)~~ REPORT

(Strike 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 Alexandra No. 5 . . . . . Permit No. 1389 . . .

Registered owner Shell Oil Co. of Can. Drilling Company Regent Drilling

Location: (Survey description) 2629.2' W, 18,056.5' N of NE corner of

Sec 34, Twp. 132, Rge. 16, W5M. . . . . .

Elevation: Ground 931.9' . . Kelly bushing 942.4' Depth 2802' . . .

Spudded October 11, 1958 . . Finished drilling Oct24/58 Rig released Oct29/58

Deviations from vertical 1/2°@130', 2° @ 430', 1-3/4° @ 520', 3/4° @ 1340' 1/2° @ 1970', 3/4° @ 2795'

CASING

	Date	Size O.D.	Weight lbs/foot	Grade	Set at feet	Sacks cement
1.	10/13/58	7"	20	J-55	408.75'	150
2.						
3.						

TUBING

. . . . . .

Status of well on completion of drilling . Dry and abandoned . . . . . .

Producing zone . . . . None . . . . . .

Cored intervals . . . . None . . . . . .

. . . . . .

. . . . . .

Interval logged: E-log . 408-2803' . . . . M-log . 408-2803' . . . . .

R-log . 200-2804' . . . . Other Caliper 408-2803' . . .

DRILLSTEM TESTS

Test No.	Date	Interval tested	Duration	Results
1	10/18/58	1814-1850'	T.O. 1 hour	Rec 1' of drilling mud
2	10/21/58	2264-2290'	T.O. 1 hour	Rec 14.8 bbls of sul. salt water.
3	10/27/58	1978-2049'	Misrun	

(Over)

Test No.	Date	Interval tested	Formation	Results
3B	10/27/58	1987-2058'	Misrun	
3	10/28/58	1986-2090'	T.O. 1 hour	Rec. 13.9 bbls slightly sulphurous salt water

Perforations: (Gun.....)
(Lot.....)

Shootings:

Hydraulically fracturing:

Chemical treatment:

Date Initial production tests:

Initial production data

Pumping or flowing

Plug back: To surface

Other:

CEMENT PLUGS SET

Date	Plug set at	Sacks cement	Method	Top found at
10/28/58	2550-2802	65	Displacement	
10/28/58	1850-2100	65	Displacement	1800'
10/29/58	350-450'	35	Displacement	325'

Well samples have been sent to: Salt Water - Shell Prod. Lab - Calgary
Formation - Shell Oil Co. - Edmonton

Cores will be stored at:

Electric log is appended: Yes .... No ....

Radioactivity log is appended: Yes .... No ....

Micrometer log is appended: Yes .... No ....

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

Results of tests for porousity, permeability, and saturation of each stratum containing oil, gas or water (are / will be) submitted Yes .... No ....

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

ADDITIONAL DETAILS OR COMMENTS Logs, copies of water analysis, etc, will be forewarded separately.

Signed R. L. Rankin
R. L. Rankin - Manager
Edmonton Division Production

Address P. O. Box 186, Edmonton, Alta.

CANADA

DEPARTMENT
OF
NORTHERN AFFAIRS AND NATIONAL RESOURCES

NORTHERN ADMINISTRATION AND LANDS BRANCH

MINING AND LANDS DIVISION

Immigration Bldg.,
Calgary, Alberta,
29 October, 1958.

MEMORANDUM FOR ACTING CHIEF,
MINING AND LANDS DIVISION.

Shell Alexandra No.5.

Oral approval has been given to abandon this well, which reached a depth of 2802 feet.

One thousand seven hundred and fifty feet of slightly sulphurous salt water was recovered from the drill stem test, interval from 1986 to 2090 feet, in Presquille formation. The water had a salininity of 46,000 P.P.M. equivalent NaCl. There was also a good initial puff as an air blow, which diminished to weak in 32 minutes, and became dead in 56 minutes.

B.H.J. Thoms
Oil Conservation Engineer

BHJT/APP

SHELL OIL COMPANY OF CANADA, LIMITED

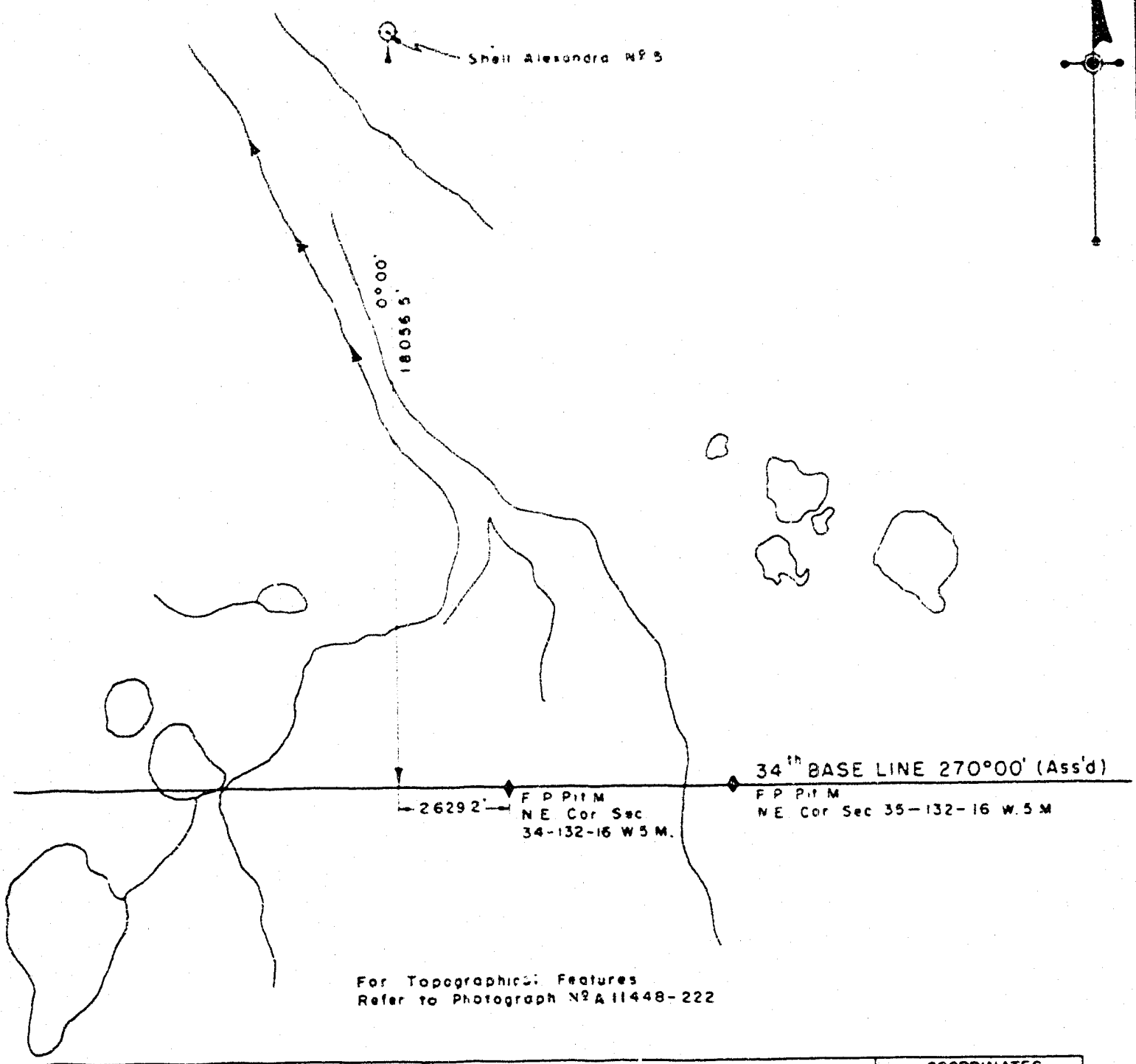
PLAN SHOWING LOCATION OF

SHELL ALEXANDRA Nº 5 N.W.T.

Lat. 60°34'15" Long. 116°44'39.4"

Scale 1" = 3333

1958



For Topographical Features
Refer to Photograph Nº A 11448-222

ELEVATION	DATUM B M	AREAS		COORDINATES
		ORIGINAL	REDUCED	
931.9 Gr.	Top of Post N.E. Cor. 36-132-16 W.5 M. Elev. 960.3'	WELLSITE ACCESS ROAD TANK BATTERY FLOW LINE TOTAL		2629.2' West 18056.5' North From N.E. Cor. of Sec. 34-132-16 W.5 M.

I certify that the survey represented by this plan is correct and true to the best of my knowledge and was completed on the 22 day of Sept. 1958.

C. Fraser PEng

C F Watts
APPROVED

Survey Monuments found shown thus ♦
2" x 2" wooden posts planted shown thus ○
Other survey posts found shown thus ●
Portions referred to outlined in red

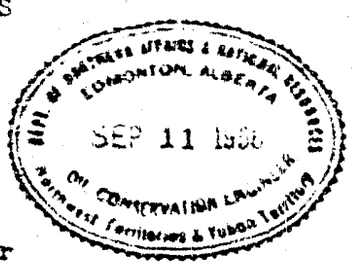
C. Barber.
WITNESS

J. Barber
WITNESS

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).

In accordance with Section 58/59 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. 1389 ...registered in the name of
Lease No. . . . . .

Shell Oil Company of Canada, Limited

TYPE OF WELL:
Stratigraphic test: yes . . Wildcat: . . . . . .
Structure Test: . . - . . Development: . . - . . .
Anticipated number of holes . . . . . (Required for Structure Test Only)
Expected total depth: . . 3050 . . . feet.

The well will be located:

.....(N of S boundary) of (Permit No.....) at approx 60° 34'-00"N Lat.
.....(S of N boundary) (Lease No. ....)
.....(W of E boundary) of (Permit No.....) at approx 116° 44'-45"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 . 920 . . .feet above sea level.

Name of well: , Shell Alexandra No. 5 . . . . . .

Type of drilling rig: . Brewster N-4 . . . . . .

Expected date of commencement: . .September 17 - dependent on access problems

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

Size O.D. inches	Weight lbs/feet	Grade	Brand	New or used	Estimated depth	Sacks of cement
1. 7"	20	J-55	Domestic	New	400'	225 / 2% $CaCl_2$
2.						
3.						

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

. Objectives below 1800 feet. Control by drilling mud and blow out preventors. . . . . .

. . . . . .

. . . . . .

. . . . . .

(Over)

An electric log {(will / ~~will not~~)} be run.

The well will be drilled by: .Regent Drilling Co. . . . . (name of company)

CONTRACTOR:

Responsible agents of permittee or lessee in charge of operation:

At well . .E. A. Ettinger. . . . At registered office: E. R. Shorey, Jr.

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

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

Dated at EDMONTON. . . this . 11th . . .day of September . . . . . 1958.

Signed by . E. R. Shorey Jr. . . . .
E. R. Shorey, Jr.

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

. . . . . .

. . . . . .

. . . . . .

. . . . . .

. 11th September 1958 . . . . . B. H. Shorey . . . .
Date Conservation Engineer

C.P.-238

DAILY DRILLING REPORT

REPORT NO. 19 | DATE Oct 29 1958

LOCATION	LSD.	SEC.	TWP	RGE.	W	WELL NAME	No.	PROVINCE
60° 3?' N Lat. 116° 45' ?? W Long.						Shell, Alexandra	5	N.W.T.

OPERATOR: Shell, Oil, Co.

CONTRACTOR: Regent Drlg Co. (Shell Oil Company of Canada, Limited)

RIG NO. 21

DRILL PIPE STRING NO. SIZE	TOOL JOINT	OD	TYPE THD

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	EMSCO	D-300	14.
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7	20 J55	0	409			150	2% CaCl2

OPERATOR'S REPRESENTATIVE: [signature]

CONTRACTOR'S TOOL PUSHER: [signature]

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	8	12	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 / SIZE	
FEET SLIPPED	
FEET CUT OFF	
PRESENT LENGTH	
TON MI. or TRIPS SINCE LAST CUT	
CUMULATIVE TON MI. or TRIPS	
NO. OF DAYS FROM SPUD	
CUMULATIVE ROTATING HRS.	

MORNING TOUR

NO.	DRILLING ASSEMBLY	FT.	BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT.	MFG. / 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: H. Klatt

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			2802									

DEVIATION RECORD: DEPTH / DEV / DIRECTION

REMARKS

12:00 - 3:30 W. O. C.
3:30 - 4:00 Felt plug no. 2 @ 1000' with 8000 lbs
4:00 - 4:15 Plug no. 3 450 - 350', 85 sks Canada Portland cement with 2% CaCl2 Plug down 4:15 AM H.K.
4:15 - 8:00 W.O.C. Lay Down 34 Singles
12:30 Felt plug no. 3 @ 325' with all weight
"6 Stds Left In Derrick"

MUD RECORD: TIME / WEIGHT / VISC / W.L.C.C. / FLTR. CK. / PH / SD. CONT.

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY	FT.	BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	D.C. ID / OD	FT	MFG / 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: [signature]

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	PUMP NO. 1 S.P.M	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH / DEV / DIRECTION

REMARKS

12:30 Felt plug no 3 @ 325' with all weight
Cut off casing 3' below ground level Plugged with 5 sks Canada Portland Cement. Welded cap on casing.
Rathole plugged with 3 sks Canada Portland Cement.

MUD RECORD: TIME / WEIGHT / VISC / W.L.C.C. / FLTR. CK / PH / SD. CONT

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY	FT.	BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT	SIZE	
	D.C ID / OD	FT	MFG / 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: [signature]

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	PUMP NO 1 S P M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH / DEV / DIRECTION

REMARKS

8 hours Travelling to Edmonton.
Rig released 8:00 PM Oct. 29/58
[signature]

MUD RECORD: TIME / WEIGHT / VISC. / W.L.C.C. / FLTR. CK / PH / SD. CONT.

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

C.P.—38

DAILY DRILLING REPORT

REPORT NO. 18 DATE Oct. 28-58

Field	Entry
OPERATOR	Shell Oil Co
CONTRACTOR	Regent Drilling
	Shell Oil Company of Canada, Limited
LOCATION	60° 30' N Lat. 116° 45' W Long.
LSD. / SEC. / TWP / RGE.	
WELL NAME	Shell Alexandra
No.	5
PROVINCE	N.W.T.
RIG NO.	21
OPERATOR'S REPRESENTATIVE	[illegible signature]
CONTRACTOR'S TOOL PUSHER	Jack [illegible]

DRILL PIPE STRING NO. SIZE	TOOL JOINT	OD	TYPE THD

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.			
2.	EMSCO	D-300	14"
3.			

CASING & LINER RECORD SIZE	WT & GR.	DEPTH SET FROM	TO	PERFORATIONS FROM	TO	CEMENT USED	OTHER
7	20 J55	0	409			150	2 % CaCl2

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING	1½		
TRIPS	2		
DEVIATION SURVEY	2¾		
TEST BOP / Cond			
CUT OFF DRILL LINE / wait on daylight	¾		
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER Make up tool	2½		
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING	1		
(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 / SIZE
- FEET SLIPPED
- FEET CUT OFF
- PRESENT LENGTH —
- TON MI. or TRIPS SINCE LAST CUT
- CUMULATIVE TON MI. or TRIPS
- NO. OF DAYS FROM SPUD
- CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		FT.	BIT RECORD	
	STANDS DP		FT.	RUN NO.	
85	SNGLS. DP	2146.49	FT.	SIZE	
	D.C. 2¼ ID			MFG.	
20	4¾ OD	615.68	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	2802.17	FT.	REAMER CUTTER NO.	
	WT OF STRING	50,000	LBS.	TYPE	

DRILLER: [illegible signature]

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
		2802			Circ.			5½				

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2795'	¼							

REMARKS

12:00 - 1:30, Circ. To Test.
1:30 - 2:30, pulled out
2:30 - 5:00, Make up packer.
5:00 - 6:15, Run In
6:15 - 7:00, wait on daylight to open packer
7:00 - 8:00, Testing

MUD RECORD

TIME	12:00
WEIGHT	10.1
VISC	65
W.L.-C.C.	4.2
FLTR. CK.	2/32
PH	7.0
SD. CONT.	pres. .6

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		FT.	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: [illegible signature]

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

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

¼ Tool Open
1 Shut In
2½ Pull Out Lay Down Tool
3 Wait On Orders
1 Lay Down Collars

DST # 2 C
1986 - 2090
I.F. 15 Mins
Valve Open 60 Mins
[illegible] In 60 Mins
Rec. 1750 [illegible]
[illegible]
[illegible]

MUD RECORD

- TIME
- WEIGHT
- VISC
- W.L.-C.C.
- FLTR. CK
- PH
- SD. CONT

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

EVENING TOUR

NO.	DRILLING ASSEMBLY		FT.	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: [illegible signature]

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
		2802										

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV.	DIRECTION

REMARKS

400 515 Finish Running in + picked up Drill pipe To Replace D.C.
515 600 Circ + Rigging up To Cement
600 730 RAN Plugs # 1 + #2
730 1200 W.O.C.
Plug No 1. 2802 - 2550, 65 sks Canada Portland cement
Plug down 6.15 PM.
Plug No. 2 2100 - 1850, 65 sks Canada Portland cement
with 2% CaCl2. Plug down 7:30 PM.

MUD RECORD

- TIME
- WEIGHT
- VISC.
- W.L.-C.C.
- FLTR. CK
- PH
- SD. CONT.

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

C.P.—38

DAILY DRILLING REPORT

REPORT NO. 17 DATE Oct 27-58

OPERATOR: Shell Oil Co.

CONTRACTOR: Regent Drlg Co.

Shell Oil Company of Canada, Limited

LOCATION: 66° 34' 00" N. Lat. 116° 44' 45" W Long

WELL NAME: Shell, Alexandra

No. 5

PROVINCE: N.W.T.

OPERATOR'S REPRESENTATIVE: [signature]

CONTRACTOR'S TOOL PUSHER: Jack Farrow

RIG NO. 21

TOOL JOINT TYPE THD: F.F.

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	EMSCO	D-300	14"
2.			
3.			

CASING & LINER RECORD	SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
	7	20 J55	0	409			150	2% CaCl2

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING			
TRIPS	5		
DEVIATION SURVEY			
TEST B.O.P.			
CUT OFF DRILL LINE			
REPAIR RIG Start Motors	1		
CORING			
WIRE LINE LOGGING	4½		
OTHER Making up packer	2½		
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. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		FT.	BIT RECORD	
	STANDS DP		FT.	RUN NO.	
35	SNGLS. DP		FT.	SIZE	
1	D.C. 2¼ ID	2177.50		MFG.	
20	4½ OD	615.68	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	9.00		COND. OF BIT	
	TOTAL	2802.18	FT.	REAMER CUTTER NO.	
	WT OF STRING	50,000	LBS.	TYPE	

DRILLER: [signature]

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
—			2802					5½				

DEVIATION RECORD: DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2795'	3½°							

REMARKS

2:00 – 4:30, Running velocity survey's.
4:30 – 5:30, Starting All Motors. Blow Lines etc.
5:30 – 8:00 Run 8 D.C. & 4 stds. In Hole Making up packer.

MUD RECORD: TIME 6:00; WEIGHT; VISC 58; W.L.-C.C.; FLTR. CK.; PH; SD. CONT.

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		FT.	BIT RECORD	
	STANDS DP		FT.	RUN NO	
	SNGLS. DP		FT.	SIZE	
	D.C.			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: [signature]

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

DEVIATION RECORD: DEPTH / DEV / DIRECTION

REMARKS

Test # 3 A 1978 – 2049 Misrun No Test.

1 Make Up Packer
1½ Measure In
¼ Initial Shut In OK
¼ Set Packer not (holding)
2½ Pull Out Break Down Tool
1½ Make Up Packer
1 Running In

MUD RECORD: TIME; WEIGHT; VISC; W.L.-C.C.; FLTR. CK; PH; SD. CONT

MUD & CHEMICALS ADDED: TYPE / AMT. / TYPE / AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		FT.	BIT RECORD	
35	STANDS DP	2164?	FT.	RUN NO	
	SNGLS. DP		FT	SIZE	
	D.C ID			MFG	
20	OD	615.68	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	4.0	FT.	COND. OF BIT	
	TOTAL	2842.17	FT	REAMER CUTTER NO.	
	WT OF STRING	50,000	LBS.	TYPE	

DRILLER: [signature]

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
							950	5½	63			

DEVIATION RECORD: DEPTH / DEV. / DIRECTION

REMARKS

Test # 3 B. 1987 – 2050 Misrun No Test.

400 – 430 Running in
430 – 445 Shut in Tool
445 – 500 Trying To Set Packer
500 – 615 Pulling out
615 – 800 Breaking Down Tool + Tail pipe
800 – 830 Velocity Survey
830 – 930 Run in W/Bit
930 – 1200 Circ + Conditioning Mud

MUD RECORD: TIME 10 PM; WEIGHT 101; VISC. 66; W.L.-C.C. 3.6; FLTR. CK 2/32; PH 7.0; SD. CONT.

MUD & CHEMICALS ADDED TYPE	AMT.	TYPE	AMT
Impermex	200#		
Quebracho	50#		
Caustic	50#		

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. DATE Oct 26-58

OPERATOR: Shell Oil Company of Canada, Limited

LOCATION LSD. SEC. 16 TWP 116° RGE. 24° 44' W 4th mer. WELL NAME: Shell Alexandra No. 5 PROVINCE: N. W. T.

CONTRACTOR: Shell Oil Co.

RIG NO.

DRILL PIPE STRING NO. SIZE

TOOL JOINT OD

TYPE THD

OPERATOR'S REPRESENTATIVE: C. L. Thomas

CONTRACTOR'S TOOL PUSHER: Jack Fox

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	EMSCO	D-300	14"
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO
7	20 J55	0	409		

CEMENT USED: 150 OTHER: 2% CaCl2.

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	8	8	8
OTHER			
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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
35	STANDS DP	FT.	RUN NO.	
1	SNGLS. DP	FT.	SIZE	
	D.C 10 ID 2177.50		MFG.	
	OD	FT.	TYPE	
20	RMR BODY OD 7 3/4 615.68	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 9.00	FT.	REAMER CUTTER NO.	
	WT OF STRING 2802.18	LBS.	TYPE	
	DRILLER 50,000			

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			2802					5½"				

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2795'	3/4°							

REMARKS

2:00 - 8:00, Logging

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR. CK.	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

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)	ROTARY R.P.M	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

8:00 4:00 Logging

MUD RECORD

TIME	
WEIGHT	
VISC	
W.L.-C.C.	
FLTR CK	
PH	
SD. CONT	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

EVENING TOUR

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)	ROTARY R.P.M	WT ON BIT 1000#	PUMP PRESS	PUMP NO 1 LINER SIZE	PUMP NO 1 S P M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV.	DIRECTION

REMARKS

4:00 12:00 Logging

MUD RECORD

TIME	
WEIGHT	
VISC.	
W.L.-C.C.	
FLTR. CK	
PH	
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

C.R.—38 **DAILY DRILLING REPORT** REPORT NO. 15 DATE Oct 21/58

OPERATOR — LOCATION LSD. SEC. TWP RGS. W — WELL NAME — No. — PROVINCE

CONTRACTOR: Shell Oil Company of Canada, Limited — RIG NO. — DRILL STRING NO. SIZE — TOOL JOINT OD / TYPE THD

OPERATOR'S REPRESENTATIVE: H Naylor — CONTRACTOR'S TOOL PUSHER: J Lawrence

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD: SIZE 7 20 — WT & GR. — DEPTH SET FROM 0 TO 409 — PERFORATIONS FROM — TO — CEMENT USED 150 — OTHER 2% CaCl

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING	6¼	8	3¼
TRIPS		¼	
DEVIATION SURVEY	1¾	1	1½
TEST B.O.P.			
CUT OFF DRILL LINE Serv. Rig		4	¼
REPAIR RIG			
CORING			
WIRE LINE LOGGING			8
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY			BIT RECORD	
35	STANDS DP		FT.	RUN NO.	
1	SNGLS. DP		FT.	SIZE	6
	D.C. 9¼	ID 2199.50		MFG.	6½
		OD	FT.	TYPE	HTC
20	RMR BODY 7¾	OD 6158	FT.	NOZ. NO.	OWR
	STB BODY	OD	FT.	SIZE	1
	SUBS	OD	FT.	SER. NO.	1½
	BIT OR C.B.		FT.	DEPTH OUT	51571
			FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN		FT.	COND. OF BIT	
	TOTAL 9		FT.	REAMER CUTTER NO.	
WT OF STRING 2802.18		LBS.		TYPE	
DRILLER 50000					

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
		2802					900	5½	63			

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2745	¾							

REMARKS

12:00 – 12:45 Finished Measuring out
12:45 – 1:45 Ran in
1:45 – 8:00 Circ Waiting To Log

MUD RECORD

	8 A.M.	11 A.M.	6 A.M.
TIME			
WEIGHT	10.1	10.1	10.2
VISC	53	59	57
W.L.-C.C.		5.4	
FLTR. CK.		2/32	
PH		7.0	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	14		

DAY TOUR

NO.	DRILLING ASSEMBLY			BIT RECORD	
35	STANDS DP		FT.	RUN NO.	
1	SNGLS. DP		FT.	SIZE	6
	D.C.	ID 2199.50		MFG.	6¼
		OD	FT.	TYPE	H.T.C
20	RMR BODY	OD 6158	FT.	NOZ. NO.	OWR
	STB BODY	OD	FT.	SIZE	1
	SUBS	OD	FT.	SER. NO.	1½
	BIT OR C.B		FT.	DEPTH OUT	51571
			FT.	CUMULATIVE HOURS RUN	Circ.
	KELLY DOWN		FT.	COND. OF BIT	
	TOTAL 9.00		FT.	REAMER CUTTER NO.	
WT OF STRING 2802.18		LBS.		TYPE	
DRILLER 50,000					

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	PUMP NO. 1 S.P.M	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			2802.18			Circ.		5½				

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2745	¾							

REMARKS

8:00 – 8:15 Serv. Rig & Check B.O.P.
8:15 – 3:00 Circ. Waiting To Log.
3:00 – 4:00 Tripping

MUD RECORD

	9	12	3
TIME			
WEIGHT	10.1	10.1	10.1
VISC			
W.L.-C.C.	5.8	5.8	5.8
FLTR. CK	2/32	2/32	2/32
PH		7.0	
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Starch	3 bags		
Preservative	25		
Plaster	50#		

EVENING TOUR

NO.	DRILLING ASSEMBLY			BIT RECORD	
35	STANDS DP		FT.	RUN NO.	
1	SNGLS. DP		FT.	SIZE	6
	D.C. 9¼	ID 2177.50		MFG.	6¼
		OD	FT.	TYPE	HTC
20	RMR BODY 7¾	OD 6158	FT.	NOZ. NO.	OWR
	STB BODY	OD	FT.	SIZE	1
	SUBS	OD	FT.	SER. NO.	1½
	BIT OR C.B		FT.	DEPTH OUT	51571
			FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN		FT.	COND. OF BIT	
	TOTAL 9.00		FT.	REAMER CUTTER NO.	
WT OF STRING 2802.18		LBS.		TYPE	
DRILLER 50 000					

Rob Harrington

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	PUMP NO. 1 S.P.M	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			2802		Circ	600		5½	55			

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2745	¾							

REMARKS

¼ = 4:00 – 4:15 Service
5¼ = 4:15 – 9:30 Circ. To Log
1½ = 9:30 – 11:00 Pull Out Measure
1 = 11:00 – 12:00 Hook Up Schlumberger To Log

MUD RECORD

	4	7	10
TIME			
WEIGHT	10.2	10.2	
VISC.	68	65	
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

KEOTRAP

OLD 2177.50
NEW 2176.64
DIFF .86
No CORRECTION

C.P.-38

DAILY DRILLING REPORT

REPORT NO. 14 DATE Oct 24 /58

OPERATOR	LOCATION LSD.	SEC.	TWP	RGE.	WELL NAME	No.	PROVINCE
Shell Oil Co	Lat 64°45'				Shell Alexander	5	N.W.T.

CONTRACTOR: Shell Oil Company of Canada, Limited

RIG NO.:

OPERATOR'S REPRESENTATIVE: [illegible signature]

CONTRACTOR'S TOOL PUSHER: Jack [illegible]

DRILL STRING NO. SIZE	TOOL JOINT	OD	TYPE THD

PUMPS NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.			
2.	Emsco	D500	14
3.			

CASING & LINER RECORD SIZE	WT & GR.	DEPTH SET FROM	TO	PERFORATIONS FROM	TO	CEMENT USED	OTHER
7	20# J55	0	409			150	3% Cal.

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	7	5	6¾
REAMING			
CIRCULATING		½	
TRIPS Sample		½	
DEVIATION SURVEY	3/4	2¼	3/4
TEST B.O.P. Serv.			¼
CUT OFF DRILL LINE Rig	¼		¼
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER			
FISHING	¼		
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
34	STANDS DP		RUN NO.	14
	SNGLS. DP	2084.66 FT.	SIZE	6¼
	D.C. 2¼ ID		MFG.	HTC
	OD		TYPE	OWV
20	RMR 4¾ BODY OD	615.68 FT.	NOZ. NO.	1
	STB BODY OD		SIZE	1½
	SUBS OD		SER. NO.	
	BIT OR C.B.		DEPTH OUT	60303
			CUMULATIVE HOURS RUN	7
	KELLY DOWN	35'	COND. OF BIT	
	TOTAL	2735.35	REAMER CUTTER NO.	
	WT OF STRING	50000 LBS.	TYPE	

DRILLER: [signature]

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
7		2685	2735		110	24	750	5½	59			

DEVIATION RECORD: DEPTH	DEV	DIRECTION
2625	1°	

REMARKS

12:00 12:15 Serviced Rig

12:15 1:00 Ran in

1:00 8:00 Drilling

MUD RECORD			
TIME	2 AM	4 AM	6 AM
WEIGHT	9.8	9.9	9.9
VISC	51	52	52
W.L.C.C.		4.8	
FLTR. CK.		2/32	
PH		7.0	
SD. CONT.			

MUD & CHEMICALS ADDED: TYPE / AMT.

DAY TOUR

DRILLER: [signature]

NO.	DRILLING ASSEMBLY		BIT RECORD		
35	STANDS DP		RUN NO	14	15
	SNGLS. DP	2146.99 FT	SIZE	6¼	6¼
	D.C. 2¼ ID		MFG	H.T.C.	H.T.C.
	OD		TYPE	OWV	W7
20	RMR 4¾ BODY OD	615.68 FT	NOZ NO.	1	1
	STB BODY OD		SIZE	1½	1½
	SUBS OD		SER. NO	60303	53517
	BIT OR C.B.		DEPTH OUT	2755	
			CUMULATIVE HOURS RUN	9	3
	KELLY DOWN	14.00	COND OF BIT	Dull Loose.	
	TOTAL	2776.17 FT	REAMER CUTTER NO.		
	WT OF STRING	51,000 LBS.	TYPE		

DRILLER: [signature]

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
5		2735	2776		110	24	900	5½	60	-	-	-

DEVIATION RECORD: DEPTH	DEV	DIRECTION
2625	1°	

REMARKS

8:00 - 8:15, Serv. Rig & Check B.O.P.

8:15 - 10:15, Drilling.

10:15 - 10:45, Circ. Sample.

10:45 - 1:00, Blow Kelly, Trip.

1:00 - 4:00, Drilling.

MUD RECORD			
TIME	8	11	3
WEIGHT	9.9	9.9	9.9
VISC	60	60	53
W.L.C.C.	4.8		4.8
FLTR. CK		2/32	
PH	7.0		
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.
Caustic	10#
Plaster	50#
Preservative	25#

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
35	STANDS DP		RUN NO	15
1	SNGLS. DP	2177.50 FT	SIZE	6¼
	D.C. 2¼ ID		MFG	HTC
	OD		TYPE	W7
20	RMR 4¾ BODY OD	615.68 FT	NOZ NO	1
	STB BODY OD		SIZE	1½
	SUBS OD		SER NO	53517
	BIT OR C.B.		DEPTH OUT	2802
			CUMULATIVE HOURS RUN	9¾
	KELLY DOWN	9.00	COND. OF BIT	Dull
	TOTAL	2802.18 FT	REAMER CUTTER NO.	
	WT OF STRING	50000 LBS.	TYPE	

DRILLER: [signature]

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
6¾		2776	2802		110	24	900	5½	60			

DEVIATION RECORD: DEPTH	DEV	DIRECTION
2625	1°	

REMARKS

4:00 4:15 = ¼ Service Rig

4:15 11:00 = 6¾ Drill

11:00 11:15 = ¼ Survey

11:15 12:00 = ¾ Strap Out of Hole

Pipe Strap

Old Tally = 2177.50

New Tally = 2176.17

Diff. = 1.33

No Correction

MUD RECORD			
TIME	6	8	10
WEIGHT	9.8	9.8	9.8
VISC.	52	58	6[illegible]
W.L.C.C.	5.2	5.2	5.2
FLTR. CK	3/32	3/32	3/32
PH	7	7	7
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.
Gel	8 SK

CP-38

DAILY DRILLING REPORT

REPORT NO. 13 DATE Oct 23/58

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME	No.	PROVINCE
Shell Oil Company	60° N LAT 34' 00" 116° 44' 45" W Long	Shell Alexander	5	N.W.T.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD	TYPE THD
~~Shell Oil Company~~ Regent Drilling	21			

OPERATOR'S REPRESENTATIVE: [signature]

CONTRACTOR'S TOOL PUSHER:

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7	20# J55	0	409			150	2% CaCl

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	7½	5¾	6¾
REAMING			
CIRCULATING		1¾	
TRIPS			1
DEVIATION SURVEY		¼	
TEST B.O.P. Serv. Rig		¼	¼
CUT OFF DRILL LINE			
REPAIR RIG	¼		
CORING			
WIRE LINE LOGGING			
OTHER	¼		
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

160½

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
32	STANDS DP	1961-18 FT	RUN NO.	12
	SNGLS. DP	FT.	SIZE	6¼
	D.C. 2¼ ID		MFG.	HTC
20	4¾ OD	615.68 FT.	TYPE	OWS J
	RMR BODY OD	FT.	NOZ. NO	3
	STB BODY OD	FT.	NOZ. SIZE	½
	SUBS OD	FT.	SER. NO.	61351
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	8¼
	KELLY DOWN	24.00 FT.	COND. OF BIT	
	TOTAL	2600.86 FT.	REAMER CUTTER NO.	
	WT. OF STRING	5[illegible] LBS.	TYPE	

DRILLER: [signature]

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7½		2540	2600		120	24	1050	5½	64			

DEVIATION RECORD: DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2450	½							

REMARKS

12:00 12:15 Serviced Rig

12:15 12:30 Changed Gland packing.

12:30 8:00 Drilling

MUD RECORD			
TIME	12 AM	2 AM	4 AM
WEIGHT	9.8	9.8	9.8
VISC.	46	47	5
W.L.-C.C.			4.2
FLTR. CK.			2/32
PH			7.0
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	700#		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
32	STANDS DP	FT.	RUN NO	12	13
1	SNGLS. DP	1992.09 FT	SIZE	6¼	6¼
	D.C. 2¼ ID		MFG	H.T.C.	H.T.C.
20	4¾ OD	615.68 FT	TYPE	OWS J	OWS J
	RMR BODY OD	FT	NOZ. NO.	3	3
	STB BODY OD	FT	NOZ. SIZE	½	½
	SUBS OD	FT	SER. NO.	61351	60890
	BIT OR C.B	FT	DEPTH OUT	2627	
		FT	CUMULATIVE HOURS RUN	11½	2½
	KELLY DOWN	34.00 FT	COND OF BIT	Locked Loose	
	TOTAL	2641.77 FT	REAMER CUTTER NO.		
	WT. OF STRING	50,000 LBS.	TYPE		

DRILLER: H Slatt.

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5¾		2600	2641		110	24	900	5½	60			

DEVIATION RECORD: DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2625'	1°							

REMARKS

8:00 - 8:15, Serv. Rig & Check B.O.P.

8:15 - 11:30, Drilling.

11:30 - 11:45 Drop Totco

11:45 - 1:30 Trip.

1:30 - 4:00 Drilling.

MUD RECORD			
TIME	9	12	3
WEIGHT	9.8	9.8	9.8
VISC.	55	60	[illegible]
W.L.-C.C.	4.6	4.5	4.5
FLTR. CK	2/32	2/32	2/32
PH	7.0	7.0	7.0
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Water		Caustic	10#
Gel	6 bags	Plaster	50#
Starch	6 bags		
Preservative	25#		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
33	STANDS DP	FT.	RUN NO	13
1	SNGLS. DP	2054.01 FT	SIZE	6¼
	D.C. 2¼ ID		MFG	HTC
20	4¾ OD	615.68 FT	TYPE	OWS J
	RMR BODY OD	FT	NOZ. NO	3
	STB BODY OD	FT	NOZ. SIZE	½
	SUBS OD	FT	SER NO	60890
	BIT OR C.B	FT	DEPTH OUT	2685
		FT	CUMULATIVE HOURS RUN	9¼
	KELLY DOWN	16.00 FT.	COND. OF BIT	Locked
	TOTAL	2685.69 FT.	REAMER CUTTER NO.	
	WT OF STRING	50000 LBS.	TYPE	

DRILLER: [signature]

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	PUMP NO 1 S.P.M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
6¾		2641	2685		110	24	900	5½	60			

DEVIATION RECORD: DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

4:00 4:15 = ¼ Service

4:15 11:00 = 6¾ Drilling

11:00 12:00 = 1 Tripping

MUD RECORD			
TIME	5	7	9
WEIGHT	9.8	9.8	9.7
VISC.	60	60	55
W.L.-C.C.	4.0	3.6	3.6
FLTR. CK	2/32	2/32	2/32
PH	7.0	7.0	7.0
SD. CONT.			
RES	.6		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 12 DATE Oct 22/58

OPERATOR: Shell Oil | LOCATION: LSD. 60° 34' 00" N LAT SEC. 44° 45' W Long TWP. RGE. W. | WELL NAME: Shell Alexandra No. 5 | PROVINCE: N.W.T

CONTRACTOR: ~~Shell Oil Company~~ Kigiak Drilling | RIG NO. 21 | DRILL PIPE STRING NO. SIZE | TOOL JOINT OD TYPE THD

OPERATOR'S REPRESENTATIVE: H. Taylor | CONTRACTOR'S TOOL PUSHER: J. Saunders

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7	20# J55	0	409			150	2% Calc

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	7½	5½	6
REAMING			
CIRCULATING			
TRIPS		2	3¾
DEVIATION SURVEY		¼	
TEST B.O.P. Set Rig		¼	¼
CUT OFF DRILL LINE			
REPAIR RIG	¼		
CORING			
WIRE LINE LOGGING			
OTHER	¼		
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

DRILLING ASSEMBLY

NO.			
29	STANDS DP		FT
1	SNGLS. DP	1806.52	FT
	2¼ ID D.C.		
20	4¾ OD	615.68	FT
	RMR BODY OD		FT
	STB BODY OD		FT
	SUBS OD		FT
	BIT OR C.B.		FT
			FT
	KELLY DOWN	37	FT
	TOTAL	2459.20	FT
	WT. OF STRING	48000	LBS.

DRILLER: H. E. Wilson

BIT RECORD

RUN NO.	10
SIZE	6¼
MFG.	HTC
TYPE	OSCJ
NOZ. NO.	3
NOZ. SIZE	½
SER. NO.	46832
DEPTH OUT	
CUMULATIVE HOURS RUN	8
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7½		2417	2459		120	20	1000	5½	63			

DEVIATION RECORD

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

1200	1215	Serviced Rig
1215	630	Drilling
630	645	Changed Valves & Gland Packing in Pump
645	800	Drilling

MUD RECORD

	12	4 AM	6 AM
TIME			
WEIGHT	9.7	9.7	9.7
VISC.	57	57	55
W.L.-C.C.		3.8	
FLTR. CK.		2/32	
PH		6.8	
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

DRILLING ASSEMBLY

NO.			
30	STANDS DP		FT.
1	SNGLS. DP	1868.38	FT.
	2¼ ID D.C.		
20	4¾ OD	615.68	FT
	RMR BODY OD		FT
	STB BODY OD		FT
	SUBS OD		FT
	BIT OR C.B.		FT
			FT
	KELLY DOWN	8.00	FT
	TOTAL	2492.06	FT
	WT. OF STRING	49,000	LBS.

DRILLER: H. Klatt.

BIT RECORD

RUN NO	10	11
SIZE	6¼	6¼
MFG	HTC	HTC
TYPE	OSCJ	OWSJ
NOZ. NO.	3	3
NOZ. SIZE	½	½
SER. NO	46031	54631
DEPTH OUT	2461	
CUMULATIVE HOURS RUN	8½	5
COND. OF BIT	Dull	Locsc
REAMER CUTTER NO.		
TYPE		

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5½		2459	2492		110	24	900	5½	61			

DEVIATION RECORD

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2450'	½°							

REMARKS

8:00	8:15,	Serv. Rig & check B.O.P
8:15	8:45,	Drilling
8:45	9:00,	Drop Tot Co.
9:00	11:00,	Trip Respool Drlg Line.
11:00	8:00	Drilling.

MUD RECORD

	8	12	3
TIME			
WEIGHT	9.7	9.7	9.7
VISC.	55	55	56
W.L.-C.C.	4.2		
FLTR. CK		4/32	
PH		7.0	
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Water			
Gel	6 bags		
Starch	6 bags		
Barite	25		

EVENING TOUR

DRILLING ASSEMBLY

NO.			
31	STANDS DP	1899.27	FT.
	SNGLS. DP		FT
	2¼ ID D.C.		
20	4¾ OD	615.68	FT
	RMR BODY OD		FT
	STB BODY OD		FT
	SUBS OD		FT
	BIT OR C.B		FT
			FT
	KELLY DOWN	2600	FT.
	TOTAL	2540.95	FT
	WT OF STRING	49000	LBS.

DRILLER: R. W. Sherrington

BIT RECORD

RUN NO	11	12
SIZE	6¼	6¼
MFG	OWSJ	HTC
TYPE	HTC	OWSJ
NOZ. NO	3	3
NOZ. SIZE	½	½
SER NO	54631	61351
DEPTH OUT	2534	
CUMULATIVE HOURS RUN	10¼	
COND. OF BIT	Locked	New
REAMER CUTTER NO.		
TYPE		

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	PUMP NO 1 S P M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
6		2492	2540		110	24	900	5½	60			

DEVIATION RECORD

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2450	½°							

REMARKS

4:00	4:15 = ¼,	Service
4:15	9:30 = 5¼	Drill
9:30	11:15 = 1¾	Trip
11:15	12:00 = ¾	Drill

MUD RECORD

	4	6	8
TIME			
WEIGHT	9.7	9.7	9.7
VISC.	70	75	70
W.L.-C.C.	4.0	3.8	3.4
FLTR. CK	2/32	2/32	2/32
PH	7	7	7
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT
Caustic	10 lb		
Flosta	Sacks		

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 11 DATE Oct 21/58

OPERATOR	LOCATION LSD.	SEC.	TWP.	RGE.	W.	WELL NAME	No.	PROVINCE
Shell Oil	60 34 00' N.LAT.		44 45	W. Long		Shell Alexander	5	N.W.T

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD
Shell Oil Company Right Drilling	21		

OPERATOR'S REPRESENTATIVE: P.T. Taylor

CONTRACTOR'S TOOL PUSHER: L. Saunders

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7	20#.J55	0	409			150	2% CaCl

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL		3¾	
REAMING			
CIRCULATING	3		
TRIPS	2	2¼	
DEVIATION SURVEY			
TEST B.O.P.	¼		
CUT OFF DRILL LINE			
REPAIR Service			¼
CORING			
WIRE LINE LOGGING			
OTHER	¼	½	
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING	1¼	1	
(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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON-MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
27	STANDS DP	1653.87 FT.	RUN NO.	8
	SNGLS. DP	FT.	SIZE	6¼
	D.C. ID 4¾ OD	615.68 FT.	M.	HTC
20	RMR BODY OD	FT.	TYPE	OWV
	STB BODY OD	T.	OZ. NO.	1
	SUBS OD		SIZE	11/2
	BIT OR C.B.	FT.	SER. NO.	60466
		FT.	DEPTH OUT	2290
	KELLY DOWN	21 FT.	CUMULATIVE HOURS RUN	
	TOTAL	2240.55 FT.	COND. OF BIT	
	WT. OF STRING	45000 LBS.	REAMER CUTTER NO.	
	DRILLER		TYPE	

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
		2290										

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2210	¼							

REMARKS

1200	1215	Serviced
1215	1245	Ran in To Circ
1245	345	Circ WAiting To Test
345	400	Checked Bops
400	445	Pulled out
445	545	Made up Packer + Picked up DC.
545	615	Ran in
615	630	Set Packer

Initial Shut in 630-700

VALVE Open 700-800

MUD RECORD

TIME	12 PM / 2 AM
WEIGHT	9.6 / 9.6
VISC.	49 / 48
W.L.-C.C.	/ 4.1
FLTR. CK.	/ 2/32
PH	/ 7.0
SD. CONT.	

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
28	STANDS DP	1714.94 FT.	RUN NO	9
	SNGLS. DP	FT.	SIZE	6¼
	D.C. ID 2¼ OD 4¾	615.68 FT.	MFG	HTC
20	RMR BODY OD	FT.	TYPE	OSC J
	STB BODY OD	FT.	NOZ. NO.	3
	SUBS OD	FT.	SIZE	½
	BIT OR C.B	FT.	SER. NO	43911
		FT.	DEPTH OUT	
	KELLY DOWN	10.00 FT.	CUMULATIVE HOURS RUN	
	TOTAL	2340.62 FT.	COND. OF BIT	
	WT OF STRING	48,000 LBS.	REAMER CUTTER NO.	
	DRILLER		TYPE	

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
3¾		2290	2340		120	22	950	5½	60			

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
2210	½							

REMARKS

8:00	9:00,	Final Shut In.
9:00	10:45,	pulled packer
10:45	11:15,	Break & Lay Down packer
11:15	12:15,	Run In, Break Circ
12:15	4:00	Drilling

D.S.T #2.

2264 = 2290 FT. (76'-Pressure Reef)

I.S.I = 30 Min.

V.O = 60 Min.

F.S.I = 60 Min.

Rec = 1965 Ft of Sulferous Salt water 108,000 ppm.

I.S.I. -960 psi I.F.P. -400 psi, FFP 950 psi, FSI 960 psi HHH 1140 psi Test mechanically OK

MUD RECORD

TIME	12	1	3
WEIGHT	9.7	9.7	9.6
VISC.	47	48	50
W.L.-C.C.	6.0		
FLTR. CK			2/32
PH			7.0
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Water		Plastic	50#
Gel	11 bags	Penetrate	25
Starch	11 bags		
Caustic	2 gal		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
29	STANDS DP	1776.82 FT.	RUN NO	9	10
	SNGLS. DP	FT.	SIZE	6¼	6½
	D.C. ID 2¼ OD 4¾	615.68 FT.	MFG	HTC	HTC
20	RMR BODY OD	FT.	TYPE	OSC-J	OSC J
	STB BODY OD	FT.	NOZ. NO	3	3
	SUBS OD	FT.	SIZE	½	½
	BIT OR C.B	FT.	SER NO	43911	46732
		FT.	DEPTH OUT	2409	
	KELLY DOWN	2500 FT.	CUMULATIVE HOURS RUN	9	
	TOTAL	2417.50 FT.	COND. OF BIT	Locked	New
	WT OF STRING	48000 LBS.	REAMER CUTTER NO.		
	DRILLER		TYPE		

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	PUMP NO 1 S P M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
5¾		2340	2417		120	22	875	5½	60			

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

400	415	1/4 Service
415	930	5¼ Drill
930	1130	2 Trip
1130	1200	½ Drill

MUD RECORD

TIME	4	6	8
WEIGHT	9.7	9.7	9.7
VISC.	75	80	70
W.L.-C.C.	5.2	4	3.6
FLTR. CK	2/32	2/32	2/32
PH	7	7	7
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	3 sx		
Starch	3 sx		

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 10 DATE Oct 20/58

Field	Entry
OPERATOR	Shell Oil.
LOCATION	60° 34' 00" N.LAT 116° 45' 44" W.Long
WELL NAME	Shell Alexander
No.	5
PROVINCE	N.W.T.
CONTRACTOR	~~Shell Oil Company~~ Regent Drilling
RIG NO.	21
OPERATOR'S REPRESENTATIVE	H. T. Baynham
CONTRACTOR'S TOOL PUSHER	J. Davidson

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7	20 # J55	0	409			130	2% Calc

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	5¼	6¾	
REAMING			
CIRCULATING Sample		½	7
TRIPS	1¾	½	1
DEVIATION SURVEY			
TEST B.O.P. Serv. Rig	¼	¼	
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER	¾		
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. or TRIPS SINCE LAST CUT
CUMULATIVE TON MI. or TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

MORNING TOUR

DRILLING ASSEMBLY

NO.	ITEM		FT.
	STANDS	DP	
	SNGLS.	DP	
20	D.C.	2¼ ID, 4¾ OD	615.68
	RMR BODY	OD	
	STB BODY	OD	
	SUBS	OD	
	BIT OR C.B.		
	KELLY DOWN		
	TOTAL		
	WT. OF STRING		LBS.

DRILLER: H. Wilson

BIT RECORD

RUN NO.	7	8
SIZE	6¼	6¼
MFG.	HTC	HTC
TYPE	OWV	OWV
NOZ. NO.	1	1
NOZ. SIZE	1½	1½
SER. NO.	53945	60466
DEPTH OUT	2214	
CUMULATIVE HOURS RUN	12¼	
COND. OF BIT		
REAMER CUTTER NO.		
TYPE		

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5¼		2176	2218		120	22	600	5½	60			

DEVIATION RECORD: DEPTH 2210, DEV ½

REMARKS
1200 1215 Serviced Rig
1215 530 Drilling
530 645 Trip (Dropped Totco)
645 730 Recovering Totco (stuck in DC)
730 800 Running in

MUD RECORD

TIME	12 PA	2 AM
WEIGHT	9.6	9.6
VISC.	39	42
W.L.C.C.		6.6
FLTR. CK.		2/32
PH		7.2
SD. CONT.		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	800#		

DAY TOUR

DRILLING ASSEMBLY

NO.	ITEM		FT.
27	STANDS	DP	1653.87
	SNGLS.	DP	
20	D.C.	2¼ ID, 4¾ OD	615.68
	RMR BODY	OD	
	STB BODY	OD	
	SUBS	OD	
	BIT OR C.B.		
	KELLY DOWN		21.00
	TOTAL		2290.55
	WT. OF STRING		48,000 LBS.

DRILLER: H. Slatt.

BIT RECORD

RUN NO	8
SIZE	6¼
MFG	H.T.C.
TYPE	OWV
NOZ. NO.	1
NOZ. SIZE	1½
SER. NO	60466
DEPTH OUT	
CUMULATIVE HOURS RUN	6¾
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6¾		2218	2290		110	24	700	5½	64			

DEVIATION RECORD: DEPTH 2210', DEV ½°

REMARKS
8:00 = 8:15, Serv. Rig & Check B.O.P.
8:15 = 8:45, Finish Running In, Clean 5 FT. To Bottom.
8:45 = 3:30, Drilling.
3:30 = 4:00, Circ Sample, @ 2290'
Run DST #2 2264 - 2290' (26' - Presqu'ile Reef)
I.S.I. - 30 mins. | I.S.I - 960 psi | F.S.I. - 960 psi
T.O. - 60 mins | IFP - 400 psi | HMH 1140 psi
F.S.I. - 60 mins. | FFP - 950 psi | Test Mech. OK
Rec. 1965' (14.8 bbls) of sulfurous salt water 108,000 ppm.

MUD RECORD

TIME	8	12	3
WEIGHT	9.6	9.6	9.6
VISC.	39	53	51
W.L.C.C.	8.2	4.5	
FLTR. CK.	2/32		2/32
PH	7.0	7.0	7.0
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	8 SX		
Bicarbonate	25#		
Starch	8 SX		
Plaster	50#		

EVENING TOUR

DRILLING ASSEMBLY

NO.	ITEM		FT.
27	STANDS	DP	1653.87
	SNGLS.	DP	
20	D.C.	2¼ ID, 4¾ OD	615.68
	RMR BODY	OD	
	STB BODY	OD	
	SUBS	OD	
	BIT OR C.B		
	KELLY DOWN		21.00
	TOTAL		2290.55
	WT. OF STRING		48000 LBS.

DRILLER: R. W. Cherrington

BIT RECORD

RUN NO	8
SIZE	6¼
MFG	HTC
TYPE	OWV
NOZ. NO	1
NOZ. SIZE	1½
SER. NO	60466
DEPTH OUT	
CUMULATIVE HOURS RUN	6¾
COND. OF BIT	
REAMER CUTTER NO.	
TYPE	

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	PUMP NO 1 S.P.M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
			2290									

DEVIATION RECORD:

REMARKS
4:00 11:00 = 7 Circulate - Test
11:00 12:00 = 1 Pull Out (Measure) Hole OK.

MUD RECORD

TIME	4	6	8
WEIGHT	9.6	9.6	9.6
VISC.	47	44	44
W.L.C.C.	4.4	4.2	4.2
FLTR. CK	2/32	2/32	2/32
PH	6.8	6.8	6.8
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	10 SX		

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 9 DATE Oct 19 58

OPERATOR Shell Oil	LOCATION LSD. 60° 34' 00" N. LAT.	SEC.	TWP. 116°	RGE. 45' 44" W. Long	WELL NAME Shell Alexander #	No. 3	PROVINCE N.W.T.

CONTRACTOR: ~~Shell Oil Company~~ Regent Drilling — RIG NO. 21 — DRILL PIPE STRING NO. SIZE — TOOL JOINT OD — TYPE THD

OPERATOR'S REPRESENTATIVE: D. Taylor — CONTRACTOR'S TOOL PUSHER: C. Saunders

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7	#23	0	409			150	2% Calc

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	4 1/2	5 1/4	3 1/4
REAMING			
CIRCULATING			
TRIPS	3/4	1	3/4
DEVIATION SURVEY			
TEST B.O.P. Serv. Rig		1/4	1/4
CUT OFF DRILL LINE			
REPAIR RIG	3 3/4	1 1/2	
CORING			
WIRE LINE LOGGING			
OTHER			
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
33	STANDS DP	1408.93 FT.	RUN NO.	6
	SNGLS. DP	FT.	SIZE	6 1/4
	D.C. 3 1/4 ID		MFG.	HTC
20	4 3/4 OD	615.68 FT.	TYPE	OSC
	RMR BODY OD	FT.	NOZ. NO.	1
	STB BODY OD	FT.	SIZE	1/2
	SUBS OD	FT.	SER. NO.	59582
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	39.47 FT.	COND. OF BIT	
	TOTAL	2064.08 FT.	REAMER CUTTER NO.	
WT. OF STRING	~~48000~~ LBS.		TYPE	

DRILLER: H. Hedstrom

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
4 1/2		1990	2064		150	20	500	5 1/2	64			

DEVIATION RECORD: DEPTH 1970 DEV 1/4 DIRECTION

REMARKS

1200-245 Changed Heads & Liners

245 330 Ran in

330 800 Drilling

MUD RECORD

TIME	4 AM	6 AM
WEIGHT	9.3	9.3
VISC.	43	43
W.L.-C.C.		4.6
FLTR. CK.		2/32
PH		7.2
SD. CONT.		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
24	STANDS DP	1469.79 FT.	RUN NO	6
	SNGLS. DP	FT.	SIZE	6 1/4
	D.C. 2 1/4 ID		MFG	HTC
20	4 3/4 OD	615.68 FT	TYPE	OSC
	RMR BODY OD	FT	NOZ. NO.	1
	STB BODY OD	FT	SIZE	1 1/2
	SUBS OD	FT	SER. NO	59582
	BIT OR C.B	FT	DEPTH OUT	2105
		FT	CUMULATIVE HOURS RUN	9 3/4
	KELLY DOWN	26.00 FT	COND. OF BIT	Out Loose
	TOTAL	2105.47 FT	REAMER CUTTER NO.	
WT OF STRING	48,000 LBS.		TYPE	

DRILLER: H. Platt

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5 1/4		2064	2105		110	22,000	600	5 1/2	64	-	-	-

DEVIATION RECORD: DEPTH 1970' DEV 1/4° DIRECTION

REMARKS

8:00 = 8:15. Serv. Rig & Check B.O.P.

8:15 = 1:00 Drilling.

1:00 = Change Gland Packing, Oil & Filter In Light plant.

2:30 work on pump.

2:30 = 3:00, Drilling.

3:00 = 4:00, pulled out " Check For washouts"

(wash out In 8th Single From Top of String)

MUD RECORD

TIME	9.	12	3
WEIGHT	9.3	9.3	9.3
VISC.	42	44	44
W.L.-C.C.	4.8	4.9	4.9
FLTR. CK	2/32	2/32	2/32
PH	7.2	7.2	7.2
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gelo	5 bags		
Preservative	2		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
25	STANDS DP	1531.79 FT.	RUN NO	7
	SNGLS. DP	FT	SIZE	6 1/4
	D.C. 2 1/4 ID		MFG	HTC
20	4 3/4 OD	615.68 FT	TYPE	DWV
	RMR BODY OD	FT	NOZ. NO	1
	STB BODY OD	FT	SIZE	1 1/2
	SUBS OD	FT	SER NO	53945
	BIT OR C.B	FT	DEPTH OUT	
		FT	CUMULATIVE HOURS RUN	7
	KELLY DOWN	29.00 FT.	COND. OF BIT	Drilling
	TOTAL	2176.47 FT	REAMER CUTTER NO.	
WT OF STRING	48,000 LBS.		TYPE	

DRILLER: Rud Harrington

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	PUMP NO 1 S P M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
7		2105	2176		110	22	600	5 1/2	60			

DEVIATION RECORD: DEPTH 1970 DEV 1/4° DIRECTION

REMARKS

4:00 4:15 = 1/4 Service

4:15 5:00 = 3/4 Ran In

5:00 1:00 = 7 Drill

MUD RECORD

TIME	6 PM	8 PM	10 PM
WEIGHT	9.3	9.3	9.3
VISC.	40	41	41
W.L.-C.C.	4.8	4.5	4.5
FLTR. CK	3/32	2/32	2/32
PH	7	7	7
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 8 DATE Oct 18-58

OPERATOR: Shell Oil | LOCATION: LSD. 60° SEC. 34 00' TWP. N. LAT. 116° RGE. 45 44" W. W.2M.O | WELL NAME: Shell Alexandra No. 5 | PROVINCE: N. W. T.

CONTRACTOR: Shell Oil Company (Recent Drilling) | RIG NO. 21 | DRILL PIPE STRING NO. SIZE | TOOL JOINT OD, TYPE THD

OPERATOR'S REPRESENTATIVE: J. Taylor | CONTRACTOR'S TOOL PUSHER: L. Davidson

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 300	14"
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7	J55-20#	0	409			150	2% CC

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			6
REAMING			
CIRCULATING	2		
TRIPS	2		3/4
DEVIATION SURVEY			1/4
TEST B.O.P. Rig Serv			1/4
CUT OFF DRILL LINE			
REPAIR Rig on Pumps			3/4
CORING			
WIRE LINE LOGGING			
OTHER	3		
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING	1		
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
20	STANDS DP	122494 FT.	RUN NO.	4
	SNGLS. DP	FT.	SIZE	6 1/4
	D.C. 2 1/4 ID		MFG.	H.T.C.
20	D.C. 4 3/4 OD	615.68 FT.	TYPE	OSC3J
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	7/16
	SUBS OD	FT.	SER. NO.	4086
	BIT OR C.B.	FT.	DEPTH OUT	1850
		FT.	CUMULATIVE HOURS RUN	4 1/4
	KELLY DOWN	1000 FT.	COND. OF BIT	Cir
	TOTAL	185062 FT.	REAMER CUTTER NO.	
	WT. OF STRING	40 000 LBS.	TYPE	

DRILLER: Rus Shevington

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			1850				500	6 1/4	23			

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

12:00	12:15 = 1/4	Service
12:15	2:15 = 2	Circ Test
2:15	3:15 = 1	Pulled Out Measure
3:15	4:15 = 1	Make Up Packer
4:15	6:00 = 1 3/4	Wait On Daylight
6:00	7:00 = 1	Ream In
7:00	7:30 = 1/2	Initial Shut In
7:30	8:00 = 1/2	Tool Open

NEW MEASUREMENT 122421

OLD MEASUREMENT 122494

MUD RECORD

TIME	12	2	4
WEIGHT	9.1	9.1	
VISC.	39	38	
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
21	STANDS DP	128583 FT.	RUN NO	5
	SNGLS. DP	FT.	SIZE	6 1/4
	D.C. 2 1/4 ID		MFG.	H.T.C.
20	D.C. 4 3/4 OD	615.68 FT.	TYPE	OSC J
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	1/2
	SUBS OD	FT.	SER. NO	4634
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	4
	KELLY DOWN	31 FT.	COND. OF BIT	
	TOTAL	193251 FT.	REAMER CUTTER NO.	
	WT. OF STRING	40 000 LBS.	TYPE	

DRILLER: L. Hebert

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
4		1850	1932		150	16	1000	6 3/4	46			

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

8:00	9:30	Testing
9:30	10:15	Pulled out
10:15	11:00	Broke Down Tool
11:00	11:45	Ran in
11:45	12:00	Cleaned 15' To Bottom
12:00	4:00	Drilling

Ran DST #1 - 1814' to 1850' (36' - Slave Point) I.S.I. - 30 mins, T.O. - 60 mins, F.S.I - 60 mins, Poor initial blow dieing in 3 mins. Recovered 5' - M Drilling mud. Pressures: I.S.I - 210 psi, I.F. - 10 psi, F.F. - 12 psi, FST - 50 psi, H.H.H - 890 psi

MUD RECORD

TIME			
WEIGHT			
VISC.			
W.L.-C.C.			
FLTR. CK	Clear Gray		
PH			
SD. CONT	Nil		

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1500#		
plaster	205 sks		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
22	STANDS DP	134716 FT.	RUN NO	5
	SNGLS. DP	FT.	SIZE	6 1/4
	D.C. 2 1/4 ID		MFG	H.T.C.
20	D.C. 4 3/4 OD	615.68 FT.	TYPE	OSC J
	RMR BODY OD	FT.	NOZ. NO	3
	STB BODY OD	FT.	NOZ. SIZE	1/2
	SUBS OD	FT.	SER NO	46934
	BIT OR C.B	FT.	DEPTH OUT	1990
		FT.	CUMULATIVE HOURS RUN	10
	KELLY DOWN	28.00 FT.	COND. OF BIT	Out Loose
	TOTAL	1990.84 FT.	REAMER CUTTER NO.	
	WT. OF STRING	43,000 LBS.	TYPE	

DRILLER: H. Klatt

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	PUMP NO 1 S.P.M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M.	METHOD PUMPS RUN
6		1932	1990		120	18	1000	6 3/4	54	-	-	

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
1750'	1/2°	1970'	1/4°					

REMARKS

4:00	4:15,	Service Rig
4:15	5:30,	Drilling
5:30	6:00,	Work on pump "Remove Roots From Valves"
6:00	7:30,	Drilling
7:30	7:45,	Work on pump "Remove Root From Valve"
7:45	11:00,	Drilling
11:00	11:15,	Drop Totco
11:15	12:00,	pulled Out

MUD RECORD

TIME	5	8	11
WEIGHT	9.2	9.3	9.3
VISC.	42	54	52
W.L.-C.C.	3.4	3.8	3.8
FLTR. CK	1/32	1/32	1/32
PH	7.0	7.0	7.0
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT
Preservative	150		
Starch	450 sxs		
Water	0		

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 7 DATE Oct 17-58

OPERATOR: Shell Oil | LOCATION: 60° 34' 00" N. LAT. | LSD. | SEC. | TWP. 116° 45' 44" W. LONG | RGE. | W. | WELL NAME: Shell Alexandra No. #5 | PROVINCE: N.W.T.

CONTRACTOR: Shell Oil Company (Recent Drilling) | RIG NO. 21 | DRILL PIPE STRING NO. 1 SIZE 3½ | TOOL JOINT OD TYPE TH 3½ I.F.

OPERATOR'S REPRESENTATIVE: W. Taylor | CONTRACTOR'S TOOL PUSHER: J. Saunders

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 300	14"
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7	5cs 20	0	4003			150	20 cc

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	2½		
REAMING			
CIRCULATING	4½	11¼	7
TRIPS	¾	¾	¾
DEVIATION SURVEY			
TEST B.O.P.			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER Service	¼		¾
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
20	STANDS DP	1224.94 FT.	RUN NO.	4
	SNGLS. DP	FT.	SIZE	6¼
	D.C. 2¼ ID		MFG.	HTC
20	D.C. 4¾ OD	615.68 FT.	TYPE	OSC3J
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	7/16
	SUBS OD	FT.	SER. NO.	61086
	BIT OR C.B.	FT.	DEPTH OUT	1850
		FT.	CUMULATIVE HOURS RUN	4¼
	KELLY DOWN	10 00 FT.	COND. OF BIT	Fair
	TOTAL	1850.62 FT.	REAMER CUTTER NO.	
WT. OF STRING	40 000 LBS.		TYPE	

DRILLER: R. Shevington

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
2½		1757	1850	→ Slave Point	130	16	1000	6¼	43			

DEVIATION RECORD: DEPTH 1750 | DEV 1½° | DIRECTION | DEPTH | DEV | DIRECTION | DEPTH | DEV | DIRECTION

		REMARKS
12:00	12:15 = ¼	Service
12:15	2:00 = 1¾	Drill
2:00	3:00 = 1	Take Sample 1830
3:00	3:15 = ¼	Drill
3:15	4:45 = 1½	Take Sample 1840
4:45	7:15 = 3	Circ to Test 1850
7:15	8:00 = ¾	Tripping Hole OK.

MUD RECORD

	2	4	6
TIME			
WEIGHT	8.7	8.7	8.7
VISC.	30	30	36
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	16 SX		
Starch	25#		

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
20	STANDS DP	1224.94 FT.	RUN NO	4
	SNGLS. DP	FT.	SIZE	6¼
	D.C. 2¼ ID		MFG	HTC
20	D.C. 4¾ OD	615.68 FT	TYPE	OSC3J
	RMR BODY OD	FT	NOZ. NO.	3
	STB BODY OD	FT	NOZ. SIZE	7/16
	SUBS OD	FT	SER. NO	61086
	BIT OR C.B	FT	DEPTH OUT	1850
		FT	CUMULATIVE HOURS RUN	4¼
	KELLY DOWN	10 00 FT	COND OF BIT	
	TOTAL	1850.62 FT	REAMER CUTTER NO.	
WT. OF STRING	40000 LBS.		TYPE	

DRILLER: H Wilson

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH | DEV | DIRECTION | DEPTH | DEV | DIRECTION | DEPTH | DEV | DIRECTION

		REMARKS
8:00	8:15	Finished Trip
8:15	3:30	Circ
3:30	4:00	Pulling Out

MUD RECORD

	8	10	2
TIME			
WEIGHT	9.1	9.2	9.2
VISC.	33	34	35
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	500#		
Starch	10#		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
20	STANDS DP	1224.94 FT.	RUN NO	4
	SNGLS. DP	FT	SIZE	6¼
	D.C. 2¼ ID		MFG	H.T.C.
20	D.C. 4¾ OD	615.68 FT	TYPE	OSC3J
	RMR BODY OD	FT	NOZ. NO	3
	STB BODY OD	FT	NOZ. SIZE	7/16
	SUBS OD	FT	SER. NO	61086
	BIT OR C.B	FT	DEPTH OUT	1850
		FT	CUMULATIVE HOURS RUN	4¼
	KELLY DOWN	10.00 FT.	COND. OF BIT	
	TOTAL	1850.62 FT	REAMER CUTTER NO.	
WT OF STRING	40,000 LBS.		TYPE	

DRILLER: H Klatt

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	PUMP NO 1 S P M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
—			1850	Circ	To	Test		6¾				

DEVIATION RECORD: DEPTH 1750' | DEV ½° | DIRECTION | DEPTH | DEV | DIRECTION | DEPTH | DEV | DIRECTION

		REMARKS
4:00	4:15,	Service Rig
4:15	5:00,	pulling Out "To csg" Run Back In Hole Good
5:00	12:00	Circ. waiting To Test.

MUD RECORD

	6:00	8:00	10:00
TIME			
WEIGHT	9.1	9.1	9.1
VISC.	35	37	41
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	10 bags		
Caustic	10 lbs.		

C.P.-38 **DAILY DRILLING REPORT** REPORT NO. 6 DATE Oct 16-58

OPERATOR	LOCATION LSD. SEC. TWP. RGE. W.	WELL NAME	No.	PROVINCE
Shell Oil Company	60° 34' 00" N. LAT 116° 45' 14" W. LONG	Shell Alexandra #5	5	B.C.

CONTRACTOR	RIG NO.	DRILL PIPE STRING NO. SIZE	TOOL JOINT OD / TYPE THD
Shell Oil Company (Rotary Wireline)	21		

OPERATOR'S REPRESENTATIVE	CONTRACTOR'S TOOL PUSHER
J. Taylor	Henderson

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D300	14"
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7"	$55 20#	0	409			150	2% CaCl

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	7¼	6¾	5½
REAMING			
CIRCULATING			
TRIPS			½
DEVIATION SURVEY	½	1	¾
TEST B.O.P.			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER Serv.	¼	¼	¼
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
1	STANDS DP	6184 FT.	RUN NO.	3
	SNGLS. DP	FT.	SIZE	6¼
	D.C. 2¼ ID		MFG.	HTC
20	D.C. 4¾ OD	615.68 FT.	TYPE	OSC3J
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	½
	SUBS OD	FT.	SER. NO.	59123
	BIT OR C.B.	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	9¼
	KELLY DOWN	37.00 FT.	COND. OF BIT	
	TOTAL	714.99 FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER Cuddlington

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7¼		544	714		120	9000	1000	6¼	60			

DEVIATION RECORD:	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
	590'	1¾		650	1¾°				

REMARKS

12:00 = 12:15, Service Rig
12:15 = 3:00, Drill 2¾
3:00 = 3:15, Survey ¼
3:15 = 6:00, Drill 2¾
6:00 = 6:15, Survey ¼
6:15 = 8:00, Drill 1¾

MUD RECORD

TIME	2	4	6
WEIGHT	8.6	8.6	8.6
VISC.	WATER		
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
9	STANDS DP	FT.	RUN NO.	3
1	SNGLS. DP	578.57 FT.	SIZE	6¼
	D.C. 2¼ ID		MFG	HTC
20	D.C. 4¾ OD	FT.	TYPE	OSC3J
	RMR BODY OD	615.68 FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	½
	SUBS OD	FT.	SER. NO	59123
	BIT OR C.B	FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	14
	KELLY DOWN	39.47 FT.	COND. OF BIT	
	TOTAL	1233.72 FT.	REAMER CUTTER NO.	
	WT. OF STRING	34000 LBS.	TYPE	

DRILLER J. Welsom

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6¾		714	1233		150	14000	1000	6¾	57			

DEVIATION RECORD:	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
	740	1½	S	890	1°		1040-1090	¾	

REMARKS

8:00 = 8:15, Service & Rig
8:15 = 9:00, Drilling 245-300 Totco + Tighted pit
9:00 = 9:15, Totco 300-400 Drilling
9:15 = 11:15, Drilling
11:15 = 11:30, Totco
11:30 = 1:00, Drilling
1:00 = 1:15, Totco
1:15 = 2:45, Drilling

MUD RECORD

TIME			
WEIGHT			
VISC.			
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
18	STANDS DP	FT.	RUN NO	3	4
1	SNGLS. DP	1132.13 FT.	SIZE	6¼	6¼
	D.C. 2¼ ID		MFG	H.T.C.	H.T.C.
20	D.C. 4¾ OD	615.68 FT.	TYPE	OSC3J	OSC3J
	RMR BODY OD	FT.	NOZ. NO.	3	3
	STB BODY OD	FT.	NOZ. SIZE	½	7/16
	SUBS OD	FT.	SER. NO	59123,	61086
	BIT OR C.B	FT.	DEPTH OUT	1603	
		FT.	CUMULATIVE HOURS RUN	18¾	1¾
	KELLY DOWN	10.00 FT.	COND. OF BIT	Out,	Loose
	TOTAL	1757.81 FT.	REAMER CUTTER NO.		
	WT. OF STRING	40,000 LBS.	TYPE		

DRILLER J. Klatt

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	PUMP NO 1 S.P.M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
5½		1233	1757		150	16000	1000	6¾				

DEVIATION RECORD:	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
	1340'	¾°	1550'	1°		1750'	½°		

REMARKS

4:00 = 4:15, Service Rig
4:15 = 5:15, Drilling
5:15 = 5:30, Run Totco
5:30 = 8:15, Drilling
8:15 = 8:30, Drop Totco
8:30 = 10:00, Trip, Break circ
10:00 = 11:45, Drilling
11:45 = 12:00, Run Totco.

MUD RECORD

TIME	4:00	6:00	8:00
WEIGHT	8.7	8.7	8.7
VISC.	water		
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. 5 DATE Oct 15-58

OPERATOR: Shell Oil Company | LOCATION LSD. 60° 34' 00" N. LAT. SEC. | TWP. 116° 45' 44" W. RGE. W. | WELL NAME: Shell Alexandra #5 | No. | PROVINCE: N.W.T.

CONTRACTOR: Shell Oil Company (Rotary Drilling) | RIG NO. 21 | DRILL PIPE STRING NO. SIZE | TOOL JOINT OD | TYPE THD J.F.

OPERATOR'S REPRESENTATIVE | CONTRACTOR'S TOOL PUSHER: J. Rawlson

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	EMSCO	D 300	14"
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7"	J55 20	0	409			150	2% CC

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	7¼	8½	8½
REAMING			
CIRCULATING			
TRIPS			¾
DEVIATION SURVEY	¼	½	¾
TEST B.O.P.			
CUT OFF DRILL LINE			
REPAIR RIG pump		1	
CORING			
WIRE LINE LOGGING			
OTHER R. Drain	½	1	4½
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT	RUN NO.	2
	SNGLS. DP	FT	SIZE	6¼
	D.C. 2¼ ID		MFG.	HTC
14	4¾ OD	430.84 FT	TYPE	OSC3
	RMR BODY OD	FT	NOZ. NO.	3
	STB BODY OD	FT	NOZ. SIZE	5/8
	SUBS OD	FT	SER. NO.	61359
	BIT OR C.B.	FT	DEPTH OUT	
		FT	CUMULATIVE HOURS RUN	7¼
	KELLY DOWN	25.00 FT	COND. OF BIT	
	TOTAL	455.84 FT	REAMER CUTTER NO.	
	WT. OF STRING	21,000 LBS.	TYPE	

DRILLER: Lee Worthington

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7¼		414	455				500	6¼	60			

DEVIATION RECORD: DEPTH 430' DEV 2° DIRECTION

		REMARKS
12:00	12:15 = ¼	Service
12:15	12:30 = ¼	Drill 30' Garment Shoe
12:30	3:30 = 3	Drill
3:30	3:45 = ¼	Survey
3:45	8:00 = 4¼	Drill

MUD RECORD

TIME	12	2	4
WEIGHT			
VISC.	WATER		
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT	RUN NO	2
	SNGLS. DP	FT	SIZE	6¼
	D.C. 2¼ ID		MFG	HTC
16	4¾ OD	492.48 FT	TYPE	OSC3
	RMR BODY OD	FT	NOZ. NO.	3
	STB BODY OD	FT	NOZ. SIZE	5/8
	SUBS OD	FT	SER. NO	61359
	BIT OR C.B	FT	DEPTH OUT	
		FT	CUMULATIVE HOURS RUN	12¾
	KELLY DOWN	EBS'1 FT	COND. OF BIT	
	TOTAL	513.00 FT	REAMER CUTTER NO.	
	WT OF STRING	24,000 LBS.	TYPE	

DRILLER: J. Nelson

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
5½		455	513		130	4	700	6¼	60			

DEVIATION RECORD: DEPTH 460 DEV 2° DIRECTION; DEPTH 490 DEV 2° DIRECTION

		REMARKS
8:00	8:15	Serviced Rig
8:15	9:00	Drilling 245-300 Totco
9:00	9:45	Working on BOPs 300-400 Drilling
9:45	10:30	Drilling
10:30	10:45	Totco
10:45	11:5	Drilling
11:5	2:15	Working on Pump
2:15	2:45	Drilling

MUD RECORD

TIME			
WEIGHT			
VISC.			
W.L.-C.C.			
FLTR. CK.	Water		
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
	STANDS DP	FT.	RUN NO	2	3
	SNGLS. DP	FT.	SIZE	6¾	6¼
	D.C 2¼ ID		MFG	H.T.C.	H.T.C.
17	4¾ OD	523.30 FT	TYPE	OSC3	OSC3J
	RMR BODY OD	FT	NOZ. NO	3	3
	STB BODY OD	FT	NOZ. SIZE	5/8	½
	SUBS OD	FT	SER NO	61359	59123
	BIT OR C.B	FT	DEPTH OUT	531	
		FT	CUMULATIVE HOURS RUN	14¼	1
	KELLY DOWN	21.00 FT.	COND. OF BIT	Fair	New
	TOTAL	544.30 FT	REAMER CUTTER NO.		
	WT OF STRING	24,000 LBS.	TYPE		

DRILLER: J. Klatte.

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	PUMP NO 1 S.P.M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
2½		511	544		120	9,000	925	6¾				

DEVIATION RECORD: DEPTH 520' DEV 1¾ DIRECTION

		REMARKS
4:00	4:15	Service Rig
4:15	5:00	Drilling
5:00	6:30	Tighten Nipple on Goose Neck on Stand pipe
6:30	7:15	Drilling
7:15	7:45	Tighten Half Union ON Kelly Hose
7:45	8:00	Drop Totco
8:00	8:45	Trip, Break Circ.
8:45	9:00	work on pump
9:00		Remove Standpipe & Weld
11:00		Nipple In Goose Neck
11:00	12:00	Drilling

MUD RECORD

TIME			
WEIGHT			
VISC.	Water.		
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

GP-38 **DAILY DRILLING REPORT** REPORT NO. DATE Oct 14-58

OPERATOR: Shell Oil
CONTRACTOR: Shell Oil Company
OPERATOR'S REPRESENTATIVE: Regent Drilling — H. Taylor
RIG NO: 21
CONTRACTOR'S TOOL PUSHER: J. Saunders
DRILL PIPE STRING NO. SIZE:
TOOL JOINT OD / TYPE THD:
LOCATION LSD. SEC. TWP. RGE. W.: 60 34'00" N. LAT. 116° 45'44" W. LONG
WELL NAME No.: Shell Alexandra #5
PROVINCE: N.W.T.

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 300	14"
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7"	J55 20#	0	409			150 SK	2% CC

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL			
REAMING			
CIRCULATING			
TRIPS			1/2
DEVIATION SURVEY			1/2
TEST B.O.P.			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER	8	8	7
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. or TRIPS SINCE LAST CUT
CUMULATIVE TON MI. or TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	
	SNGLS. DP	FT.	SIZE	
	D.C. 2 1/4 ID		MFG.	
13	D.C. 4 3/4 OD	400.27 FT.	TYPE	
	RMR BODY OD	FT.	NOZ. NO.	
	STB BODY OD	FT.	NOZ. SIZE	
2	SUBS OD	27.7 FT.	SER. NO.	
1	BIT OR C.B.	70 FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	
	KELLY DOWN	11.50 FT.	COND. OF BIT	
	TOTAL	414.71 FT.	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER: Lew Cherrington

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
			414									

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

12:00 – 7:30 W.O.C.
7:30 – 8:00 Shut off + Cut off Collar

MUD RECORD

TIME				
WEIGHT				
VISC.				
W.L.-C.C.				
FLTR. CK.				
PH				
SD. CONT.				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT 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: J. Welsh

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

8:00 – 4:00 Nippling up

MUD RECORD

TIME				
WEIGHT				
VISC.				
W.L.-C.C.				
FLTR. CK				
PH				
SD. CONT				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	2
	SNGLS. DP	FT	SIZE	6 1/2
	D.C. 2 1/2 ID		MFG	H.T.C.
12	D.C. 4 3/4 OD	369.23 FT.	TYPE	OSC-3
	RMR BODY OD	FT	NOZ. NO	3
	STB BODY OD	FT	NOZ. SIZE	5/8
	SUBS OD	FT	SER NO	61359
	BIT OR C.B	FT	DEPTH OUT	
		FT	CUMULATIVE HOURS RUN	
	KELLY DOWN	14.00 FT.	COND. OF BIT	
	TOTAL	383.23 FT	REAMER CUTTER NO.	
WT. OF STRING		LBS.	TYPE	

DRILLER: K. Keath.

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	PUMP NO 1 S P M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
			414.					6 3/4				

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION

REMARKS

4:00 – 10:30, Finish Nippling up.
10:30 – 11:00, pick up 1 D.C. & Run In
11:00 – 11:15, pressure up on Hydril
11:15 – 11:45, Drill out Cement Plug & Float, 5 FT Below Float
11:45 – 12:00, pressure up on Cameron.

MUD RECORD

TIME				
WEIGHT				
VISC.				
W.L.-C.C.				
FLTR. CK				
PH				
SD. CONT.				

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. DATE Oct 13-58

OPERATOR: Shell Oil | LOCATION: LSD. 60° SEC. 34-00" TWP. N LAT. 116° RGE. 45:44 W of 6 | WELL NAME: Shell Alexander #5 | No. | PROVINCE: N.W.T.

CONTRACTOR: Shell Oil Company (Rotary Drlg) | RIG NO. 21 | DRILL PIPE STRING NO. SIZE | TOOL JOINT OD / TYPE THD

OPERATOR'S REPRESENTATIVE: W Taylor | CONTRACTOR'S TOOL PUSHER: J Saunders

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 300	14
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER
7"	20 J55	0	409			150	2% CaCl2

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	2¼		
REAMING			
CIRCULATING	1½		
TRIPS	½		
DEVIATION SURVEY	¼		
TEST B.O.P.			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHER	2	8	8
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACID/ZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TON MI. or TRIPS SINCE LAST CUT
CUMULATIVE TON MI. or TRIPS
NO. OF DAYS FROM SPUD
CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT	RUN NO.	1B R.R.
	SNGLS. DP	FT.	SIZE	9 7/8
	2¼ ID		MFG.	HTC
13	D.C. 4¾ OD	400.24 FT.	TYPE	OSC3
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	SIZE	¾
2	SUBS OD	2.77 FT.	SER. NO.	18634
1	BIT OR C.B.	.70 FT.	DEPTH OUT	414
		FT.	CUMULATIVE HOURS RUN	17
	KELLY DOWN	11.00 FT.	COND. OF BIT	3/4 in
	TOTAL	414.71 FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER: Lu Lotherington

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
2¾		376	414		130	½	300	6¼	60			

DEVIATION RECORD: DEPTH | DEV | DIRECTION | DEPTH | DEV | DIRECTION | DEPTH | DEV | DIRECTION

REMARKS

12:00 – 12:30 = ½ Service Rig + Clean Air Chamber Screen
12:30 – 1:15 = ¾ Drill
1:15 – 1:45 = ½ Work on GM's Fuel System
1:45 – 3:45 = 2 Drill
3:45 – 4:15 = ½ Repair
4:15 – 5:15 = 1 Trip Measure
5:15 – 6:15 = 1 Service Rig & Clean Air Chamber Screen
6:15 – 7:00 = ¾ Survey + Dig → 7:00-8:00 = 1 Rig for Base

MUD RECORD

TIME	12	2	4
WEIGHT	~~5~~	~~5~~	~~6~~
VISC.	55	58	60
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT.	SIZE	
	ID		MFG	
	D.C. 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)	ROTARY R.P.M	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. 1 LINER SIZE	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN

DEVIATION RECORD: DEPTH | DEV | DIRECTION | DEPTH | DEV | DIRECTION | DEPTH | DEV | DIRECTION

REMARKS

8:00 – 8:15 Ran Casing
8:15 – 11:45 Rigging up To Cement + Working Pipe
11:45 – 12:15 Cementing
12:15 – 4:00 W.O.C.

7" – 20# J-55 New Seamless Casing + Baker Guide Shoe;
Ran 13 Jts. (394.50)
Float Coll with 150 sacks Canada Portland Cement + 2% CaCl2

MUD RECORD

TIME			
WEIGHT			
VISC.			
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT	SIZE	
	ID		MFG	
	D.C. 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: H Klatt

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	PUMP NO 1 S P M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
			414					6¾				

DEVIATION RECORD: DEPTH 416' | DEV 1° | DIRECTION | DEPTH | DEV | DIRECTION | DEPTH | DEV | DIRECTION

REMARKS

4:00 – 12:00 W. O. C.

Cement Outside of Csg & Cellar w/ 10 Bags Cement & 50# CaCl2.

MUD RECORD

TIME			
WEIGHT			
VISC.			
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

C.P.—38 **DAILY DRILLING REPORT** REPORT NO. DATE Oct 12-58

OPERATOR: Shell Oil Company | LOCATION: LSD. 60° SEC. 34'00" TWP. N. LAT. RGE. 116° 44'45" W. W/O/M | WELL NAME: Shell Alexandra #5 | No. | PROVINCE: N.W.T.

CONTRACTOR: Shell Oil Company Regent Drlg | RIG NO. 21 | DRILL PIPE STRING NO. SIZE | TOOL JOINT OD | TYPE THD

OPERATOR'S REPRESENTATIVE: D. Taylor | CONTRACTOR'S TOOL PUSHER: J. Dawden

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 300	14"
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO	CEMENT USED	OTHER

MORNING TOUR

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE.
DRILLING ACTUAL	6¾	7¼	9
REAMING			
CIRCULATING	¼		
TRIPS	½		1½
DEVIATION SURVEY	½	½	¼
TEST B.O.P.			
CUT OFF DRILL LINE			
REPAIR RIG			
CORING			
WIRE LINE LOGGING			
OTHERS Serv.	¼	¼	¼
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	8	8

NO.	DRILLING ASSEMBLY		BIT RECORD	1C
	STANDS DP	FT	RUN NO.	
	SNGLS. DP	FT.	SIZE	9⅞
6	D.C. 2¼ ID 4¾ OD	184.61 FT.	MFG.	HTC
			TYPE	OSC3
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	SIZE	¾
2	SUBS OD	27.7 FT.	SER. NO.	18634
1	BIT OR C.B.	.70 FT.	DEPTH OUT	180
		FT.	CUMULATIVE HOURS RUN	1d
	KELLY DOWN	22.00 FT.	COND. OF BIT	Fair
	TOTAL	210.08 FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER: R. Witherington

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6¾		165	210		120			6¾	60			

DEVIATION RECORD: DEPTH 160 DEV ¾° DIRECTION | DEPTH 190 DEV ½° DIRECTION | DEPTH DEV DIRECTION

REMARKS

12⁰⁰	12¹⁵ = ¼	Service
12¹⁵	12³⁰ = ¼	Survey
12³⁰	3³⁰ = 3	Drill
3³⁰	4⁰⁰ = ½	Trip
4⁰⁰	6¹⁵ = 2¼	Drill
6¹⁵	6³⁰ = ¼	Survey
6³⁰	8⁰⁰ = 1½	Drill

MUD RECORD

TIME	12	2	4
WEIGHT			
VISC.	43	42	42
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	1C
	STANDS DP	FT.	RUN NO	
	SNGLS. DP	FT:	SIZE	9⅞
9	D.C. 2¼ ID 4¾ OD	276.99	MFG	HTC
			TYPE	OSC3
	RMR BODY OD	FT	NOZ. NO.	3
	STB BODY OD	FT.	SIZE	¾
2	SUBS OD	27.7 FT	SER. NO	18491
1	BIT OR C.B	.70 FT	DEPTH OUT	
		FT	CUMULATIVE HOURS RUN	11
	KELLY DOWN	11.00 FT.	COND. OF BIT	Good
	TOTAL	291.46 FT.	REAMER CUTTER NO.	
	WT OF STRING	LBS.	TYPE	

DRILLER: [illegible]

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7¼		210	291		130							

DEVIATION RECORD: DEPTH 220 DEV ½ DIRECTION | DEPTH 280 DEV ½ DIRECTION | DEPTH DEV DIRECTION

REMARKS

8⁰⁰	8¹⁵	Serviced Rig
8¹⁵	9³⁰	Drilling
9³⁰	9⁴⁵	Tot. Co
9⁴⁵	3¹⁵	Drilling
3¹⁵	3³⁰	Tot. Co
3³⁰	4⁰⁰	Drilling

MUD RECORD

TIME			
WEIGHT			
VISC.			
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	1C	RR 1B
	STANDS DP	FT.	RUN NO		
	SNGLS. DP	FT	SIZE	9⅞	9⅞
11	D.C ID OD	338.58 FT	MFG	H.T.C.	H.T.C
			TYPE	OSC-3	OSC3
	RMR BODY OD	FT	NOZ. NO	3	3
	STB BODY OD	FT	SIZE	¾	¾
2	SUBS OD	2.77 FT	SER NO	15491	18634
	BIT OR C.B	1.0 FT	DEPTH OUT	376	
		FT	CUMULATIVE HOURS RUN	18	
	KELLY DOWN	34.00 FT.	COND. OF BIT	Fair	
	TOTAL	376.05 FT	REAMER CUTTER NO.		
	WT OF STRING	LBS.	TYPE		

DRILLER: H. Klatt.

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	PUMP NO 1 S P M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
7		291	376		130		300	6¾	60			

DEVIATION RECORD: DEPTH 340 DEV ½° DIRECTION | DEPTH DEV DIRECTION | DEPTH DEV DIRECTION

REMARKS

4:00	4:15,	service Rig
4:15	8:30,	Drilling.
8:30	8:45,	Run Totco.
8:45	11:30,	Drilling
11:30	12:00,	Trip.

MUD RECORD

TIME	4	7.	10
WEIGHT			
VISC.	46	48	50
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

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. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

Gp.—38

DAILY DRILLING REPORT

REPORT NO. _____ DATE Oct 12-58

OPERATOR Shell Oil Co

LOCATION LSD. SEC. TWP. RGE. W.

WELL NAME Shell Alexander #5 No. _____ PROVINCE N.W.T.

CONTRACTOR Shell Oil Company (Regent Drlg)

RIG NO. 21

DRILL PIPE STRING NO. SIZE _____

TOOL JOINT OD _____ TYPE TH 3½ IF

OPERATOR'S REPRESENTATIVE _____

CONTRACTOR'S TOOL PUSHER C. Saunders

PUMPS

NO.	MANUFACTURER	TYPE	STROKE LENGTH
1.	Emsco	D 300	14"
2.			
3.			

CASING & LINER RECORD

SIZE	WT & GR.	DEPTH SET FROM	DEPTH SET TO	PERFORATIONS FROM	PERFORATIONS TO

CEMENT USED _____ OTHER _____

TIME DISTRIBUTION—HOURS

	MORN	DAY	EVE
DRILLING ACTUAL	7¾	6½	7¼
REAMING			
CIRCULATING			
TRIPS		½	
DEVIATION SURVEY			¼
TEST B.O.P.			
CUT OFF DRILL LINE			
REPAIR RIG		¾	
CORING			
WIRE LINE LOGGING			
OTHERS Serv.	¼	¼	¾
FISHING			
COMPLETING (A) PERFORATING			
(B) RUNNING TUBING			
(C) SWABBING			
(D) TESTING			
(E) ACIDIZING			
(F) ADDITIONAL			
TOTALS	8	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 SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON MI. or TRIPS SINCE LAST CUT

CUMULATIVE TON MI. or TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

MORNING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD	
	STANDS DP	FT.	RUN NO.	17-RR
	SNGLS. DP	FT.	SIZE	9⅞
	D.C. ID		MFG.	HTC
1	D.C. OD	308.0 FT.	TYPE	OSC3
	RMR BODY OD	FT.	NOZ. NO.	3
	STB BODY OD	FT.	NOZ. SIZE	¾
2	SUBS OD	27.7 FT.	SER. NO.	35459
	BIT OR C.B.	70 FT.	DEPTH OUT	
		FT.	CUMULATIVE HOURS RUN	7¾
	KELLY DOWN	31.47 FT.	COND. OF BIT	
	TOTAL	64.94 FT.	REAMER CUTTER NO.	
	WT. OF STRING	LBS.	TYPE	

DRILLER Rud Newington

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
7¾		0	64					6¼	60			

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
12°	12° 15'	= ¼						
12° 15'	0°	= 7¾						

REMARKS Service Rig Drill

MUD RECORD

TIME			
WEIGHT			
VISC.	43	42	42
W.L.-C.C.			
FLTR. CK.			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.

DAY TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
	STANDS DP	FT.	RUN NO	1ARR	1B
	SNGLS. DP	FT.	SIZE	9⅞	9⅞
	D.C. ID		MFG	Hughes	Hughes
2	D.C. OD	92.42 FT.	TYPE	OSC3	OSC3
	RMR BODY OD	FT.	NOZ. NO.	3	3
	STB BODY OD	FT.	NOZ. SIZE	¾	¾
2	SUBS OD	27.7 FT.	SER. NO	35459	18634
	BIT OR C.B	70 FT.	DEPTH OUT	74	
		FT.	CUMULATIVE HOURS RUN		
	KELLY DOWN	9 FT.	COND OF BIT	Dull	Good
	TOTAL	104.89 FT.	REAMER CUTTER NO.		
	WT OF STRING	LBS.	TYPE		

DRILLER Wilson

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	PUMP NO. 1 S.P.M.	PUMP NO. 2 LINER SIZE	PUMP NO. 2 S.P.M.	METHOD PUMPS RUN
6½		64	TON									

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
65'	1°							

REMARKS

8:00	8:15	Service
8:15	9:15	Drilling
9:15	9:30	Ran Totco
9:30	11:00	Drilling
11:00	12:00	Changed Bit & Replaced Safety Clamp on Kelly Hose
12:00	4:00	Drilling

MUD RECORD

TIME			
WEIGHT			
VISC.			
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT.
Gel	1200 #		
Cement	100 #		

EVENING TOUR

NO.	DRILLING ASSEMBLY		BIT RECORD		
	STANDS DP	FT.	RUN NO	~~1A~~	1B
	SNGLS. DP	FT.	SIZE	9⅞	
	D.C. 2¼ ID		MFG	H.T.C	
4	D.C. 4¾ OD	122.96 FT.	TYPE		
	RMR BODY OD	FT.	NOZ. NO	3	
	STB BODY OD	FT.	NOZ. SIZE	¾	
2	SUBS OD	2.77 FT.	SER NO	18634	
	BIT OR C.B	.70 FT.	DEPTH OUT		
		FT.	CUMULATIVE HOURS RUN		
	KELLY DOWN	39.00 FT.	COND. OF BIT		
	TOTAL	165.43 FT.	REAMER CUTTER NO.		
	WT OF STRING	LBS.	TYPE		

DRILLER H Watt

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	PUMP NO 1 S P M	PUMP NO 2 LINER SIZE	PUMP NO 2 S.P.M	METHOD PUMPS RUN
16¼		104	165		130		300	6¾	60			

DEVIATION RECORD:

DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION	DEPTH	DEV	DIRECTION
100'	½°		130'	½°				

REMARKS

4:00	4:30,	Serv. Rig & Run Totco
4:30	8:00,	Drilling
8:00	8:15,	Run Totco
8:15	12:00,	Drilling.

MUD RECORD

TIME	4:00	7:30	11:00
WEIGHT			
VISC.	36	42	42
W.L.-C.C.			
FLTR. CK			
PH			
SD. CONT.			

MUD & CHEMICALS ADDED

TYPE	AMT.	TYPE	AMT
Gel	900#		
Cement	100#		

FILE

Velocity Survey Report
on
SHELL ALEXANDRA #5
for
Shell Oil Company of Canada, Ltd.
by
S.S.C

DA-49

CONTINUOUS VELOCITY LOG

a n d

GEOPHONE SURVEY

SHELL ALEXANDRA No. 5

60°34'0"N. Latitude
116°44'45"W. Longitude

NORTHWEST TERRITORIES, CANADA

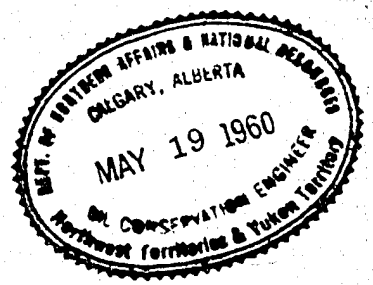
f o r

SHELL OIL COMPANY

EDMONTON, ALEERTA

Seismograph Service Corporation of Canada

Calgary, Alberta



CONTENTS

INTRODUCTION

A survey was conducted on October 26 &27, 1958, to determine the subsurface seismic velocities at the Shell Alexandra No. 5 Well located 60°34'0"N. Latitude, 116°44'45"W. Longitude, 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 2802 feet with 7 inch casing set to 408 feet. Due to bottom hole conditions in the well, 2794 feet was the maximum depth reached by the survey.

The well and cable truck were made available to the crew at 19:00 on October 26, 1958, and the geophone survey commenced at 22:10 with the firing of the first shot. The last shot was fired at 03:15 on October 27, 1958 after which the Continuous Velocity Log was run and all operations were completed by 04:15.

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 942 feet above sea level.

Shot holes were drilled to a depth of 50 feet and located between 460 and 535 feet from the well as shown in the Shooting Plan, Appendix II. An additional hole "A" located 520 feet from the well was drilled to a depth of 140 feet to accommodate a sub-shot reference geophone. Shot hole charges used varied from a booster cap to 5/8 of a pound of dynamite.

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
Trace #7	Surface reference geophone at well
Traces #8 to #13	Reflection profile from surface geophones

The three amplifiers, recording the output of the well geophone, were adjusted to a frequency response band of 22 to 64 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 southeast from the well as shown in the Shooting Plan and was recorded simultaneously with each velocity test shot. Three geophones were used per trace and station intervals were maintained at 60 feet.

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 2794 feet to the foot of the surface casing at 408 feet below the kelly bushing.

At the completion of the survey, reflection information was recorded from a twelve station spread laid northwest from Shot Point C. Three geophones were used per trace and station intervals were maintained at 60 feet.

The amplifiers, recording this spread, were adjusted to a filter setting which gave a frequency response band of approximately 29 to 68 cycles per second at 70.7 percent amplitude response for the specimen record. The outputs of these amplifiers were not mixed.

INTERPRETATION and RESULTS

Velocity Determination

Nineteen 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:

$$\cos i = \cos \text{arc} \tan X/(Z + de)$$

The vertical travel times were then reduced to an elevation datum of 785 feet above sea level coincident with the elevation of the sub-shot reference geophone. Travel times recorded from Shot Point D were reduced to the elevation datum using an elevation correction velocity approximated at 13000 feet per second. Elevation corrections for the vertical travel times recorded from Shot Point C were computed from sub-shot reference geophone 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

A twelve 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 C and recorded on the geophone spread laid northwest across the well.

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

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

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

A corrected copy of the Continuous Velocity Log, traced from the field original, is enclosed in the pocket of the back cover of this report. The log consists of two curves:

1) The Interval Velocity Curve:

This curve is the continuous recording of the interval time in microseconds through a formation distance of 5.9167 feet or 71 inches, and can be read as interval velocity on the appropriate scale at the top of the log.

2) The Integrated Curve:

This curve was plotted simultaneously with the interval velocity curve and was derived from it by the automatic integrating device contained in the instrument. The curve has been calibrated to the geophone survey, and total travel times over any section of the log may be obtained from it. The time scale for the log paper has been selected as one millisecond per 0.1 inch, as shown on the appropriate scale at the top of the log. Each cycle of the recording pen increases the time scale by 100 milliseconds.

During the drafting process noise spikes and other spurious

events were removed. No allowance for mud travel time between the sonde and the hole wall, was made in the field. This delay time was found by comparing the integrated curve of the Continuous Velocity Log with the time-depth curve of the geophone survey. The time difference between the curves at each level tested by the well geophone was plotted against depth and the results appear in Appendix VIII. The slope of the line drawn through these points shows that the delay time amounted to 60 microseconds from total depth to 1812 feet and 16 microseconds from 1812 feet to the foot of the surface casing at 408 feet below the kelly bushing. The interval velocity curve was therefore laterally displaced, and the slope of the integrated curve adjusted before final drafting, using these delay times.

The integrated curve was tied to the geophone survey by a calibrating shot at 2790 feet. The following tabulation shows the deviation between the well geophone data and the corrected integrated curve.

Depth (K.B.)	Tc (Geo)	Tc (Log)	ΔTc
425	.0175	.0167	-.0008
502	.0220	.0220	.0000

1000	.0755	.0756	+.0001
1400	.1200	.1201	+.0001
1812	.1635	.1635	.0000
1996	.1730	.1729	-.0001
2300	.1890	.1889	-.0001
2630	.2060	.2059	-.0001
2724	.2110	.2111	+.0001
2790	.2155	.2155	.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 _____

November 13, 1958 D.R.F.Hargrave - Supervisor

APPROVED:

By _____

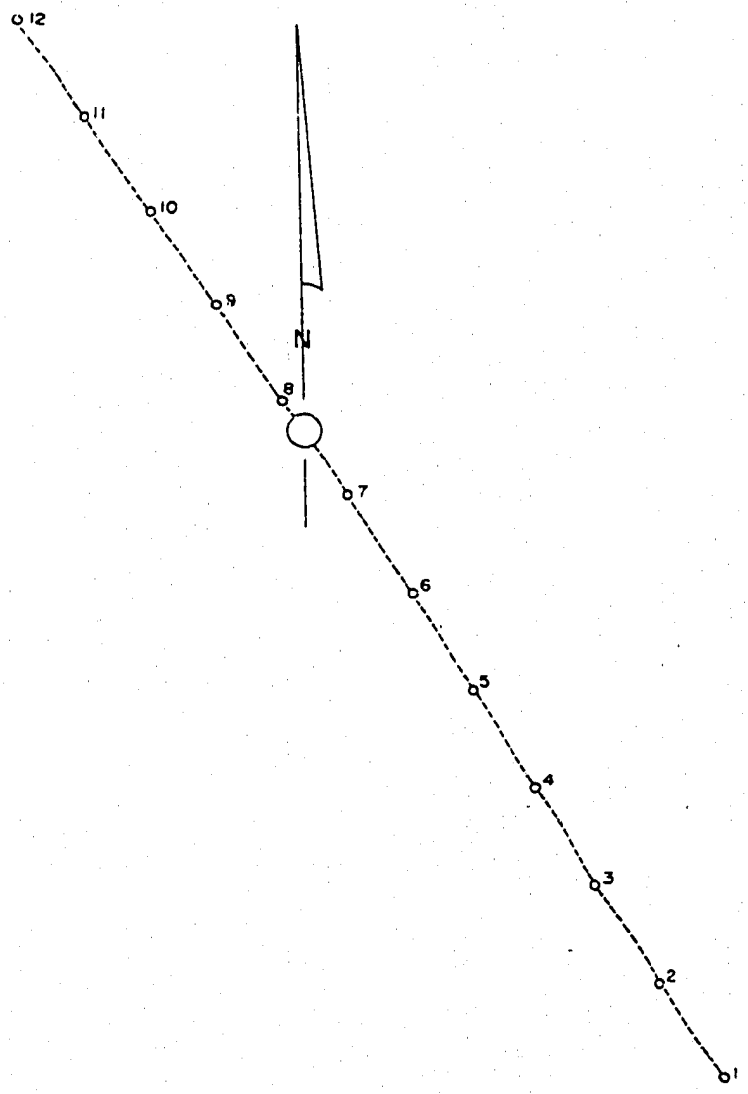
G. E. Blackledge
Manager of Velocity Logging

DRFH/mm

SHOOTING PLAN

SHELL ALEXANDRA NO. 5

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



LEGEND:

- ○ WELL SURVEYED.
- O SHOT POINT.
- c GEOPHONE.

SCALE : 1 IN. =100 FT.

ELEVATION CORRECTIONS

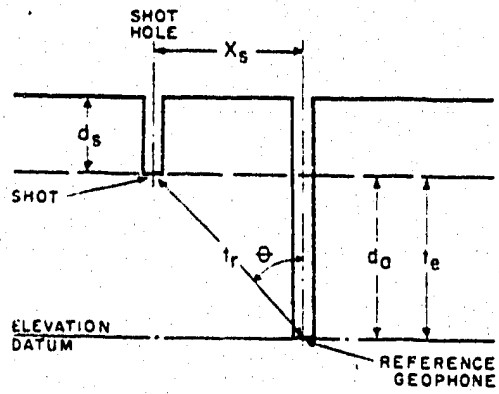
SHELL ALEXANDRA No. 5

REFERENCE HOLE: **A**

HOLE ELEVATION: **926 ft.**

GEOPHONE DEPTH: **140 ft.**

GEOPHONE ELEVATION: **786 ft.**



$$\text{TAN } \theta = \frac{X_s}{d_a}$$

$$t_e = t_r \cos \theta$$

S.P. - ELEVATION	SHOT NO.	d_s	SHOT ELEV.	X_s	d_a	TAN θ	COS θ	t_r	t_e
C 926'	1A	50	876	60	90	.6667	.8321	.009	.007
	2B	50	876	60	90	.6667	.8321	.009	.007
	4C	50	876	60	90	.6667	.8321	.015	.012
	6D	50	876	60	90	.6667	.8321	.009	.007
	8E	50	876	60	90	.6667	.8321	.008	.007
	10F	50	876	60	90	.6667	.8321	.009	.007
	12G	50	876	60	90	.6667	.8321	.009	.007
	14I	50	876	60	90	.6667	.8321	.008	.007
	17J	50	876	60	90	.6667	.8321	.009	.007
	18K	50	876	60	90	.6667	.8321	.008	.007
	19L	50	876	60	90	.6667	.8321	.009	.007

REFLECTION IDENTIFICATION CALCULATIONS

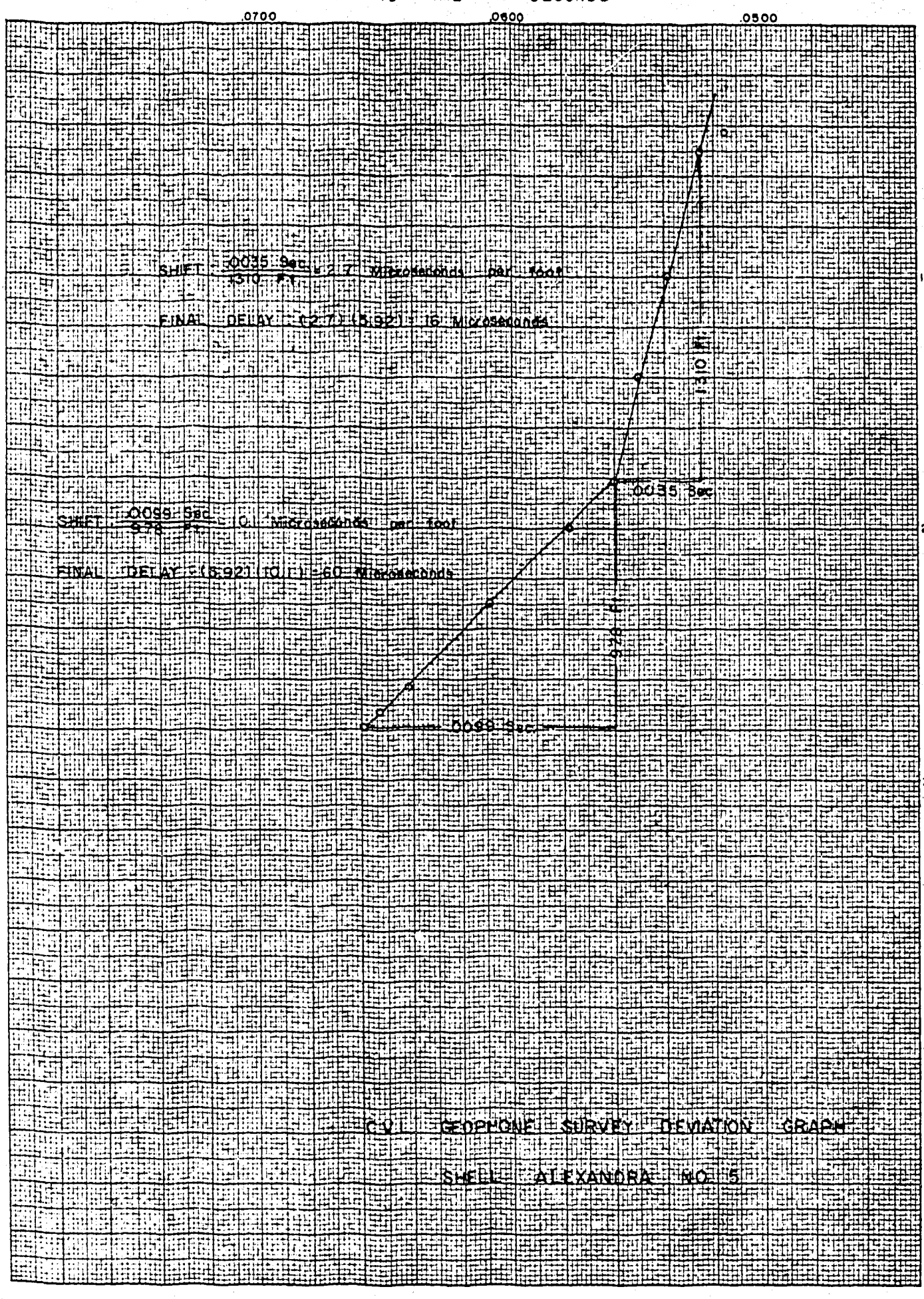
SHELL ALEXANDRA No. 5

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

SHOT POINT = C
RECORD NO = 23M
ELEVATION = 926 ft.
ELEVATION DATUM = + 785 ft.

d_s = 50 ft.
t_e = .007 sec. (Record 19L - App. III)
$2t_e$ = .014 sec.
t_s = .016 sec.
Σt = .030 sec.

REC NO	d	FORMATION	T_C	$2T_C$	Σt	AVG. T_R
1,2,3	425		.0175	.035	.030	.065
4,5	502	HAY RIVER SHALE	.022	.044	.030	.074
6,7	1000		.0755	.151	.030	.181
8,9	1400		.120	.240	.030	.270
10,11	1812	TOP SLAVE POINT	.1635	.327	.030	.357
12,13	1996	TOP OF PRESQUILLE	.173	.346	.030	.376
14	2300		.189	.378	.030	.408
16,17	2630	TOP BEAR ROCK	.206	.412	.030	.442
18	2724	TOP RED BEDS	.211	.422	.030	.452
19,15	2790	GRANITE (2778')	.2155	.431	.030	.461



C.V.I. GEOPHONE SURVEY DEVIATION GRAPH

SHELL ALEXANDRA NO. 5

S.P.	ELEVATION	DISTANCE	DIRECTION FROM WELL	S.P.	ELEVATION	DISTANCE	DIRECTION FROM WELL
A	926	520	S 32°00'E				
C	926	460	S 32°00'E				
D	932	535	N 30°00'W				

WELL ELEVATION	TOTAL DEPTH	CASING RECORD
K.B. 942 feet	2802 feet	7 inches to 408 feet

ELEVATION DATUM: 785 feet above sea level

ELEVATION VELOCITY: 13000 feet/second

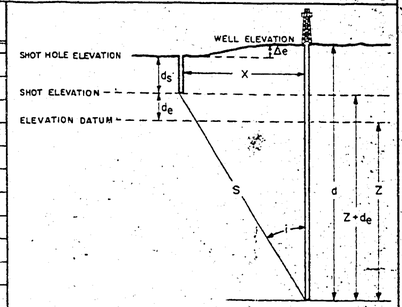
WELL NAME: SHELL ALEXANDRA No. 5

LOCATION: 60°34'0"N. Lat., 116°44'45"W. Long., Northwest Territories

COMPANY: SHELL OIL COMPANY

DATE SURVEYED: OCTOBER 26 & 27, 1958

GEOLOGICAL LOG	Record Number	Shot Hole Number	Grade	d	d_s	t_s	Shot Hole Elevation	d_e	Δe	$\Delta e + d_s$	t_e	T	$Z + d_e$	X	tan i	cos i	$\bar{T}$	T_c	Z	V_a	ΔZ	ΔT_c	V_i
	1A	C	F	425	50	.016	926	91	16	66	.007	.040	359	460	1.2813	.6153	.025	.018	268				
	2B	C	G	425	50	.016	926	91	16	66	.007	.040	359	460	1.2813	.6153	.025	.018 .0175	268	15314			
	3A	D	F	425	50	.018	932	97	10	60	.007	.042	365	535	1.4658	.5636	.024	.017	268				
HAY RIVER SHALE	4C	C	F	502	50	.010	926	91	16	66	.012	.049	436	460	1.0550	.6879	.034	.022	345		77	.0045	17111
	5B	D	F	502	50	.018	932	97	10	60	.007	.045	442	535	1.2104	.6369	.029	.022 .022	345	15682			
	6D	C	G	1000	50	.016	926	91	16	66	.007	.092	934	460	.4925	.8971	.083	.076	843		498	.0535	9308
	7C	D	F	1000	50	.019	932	97	10	60	.007	.094	940	535	.5691	.8691	.082	.075 .0755	843	11166			
	8E	C	G	1400	50	.016	926	91	16	66	.007	.134	1334	460	.3448	.9454	.127	.120	1243		400	.0445	8989
	9D	D	G	1400	35	.017	932	112	10	45	.009	.139	1355	535	.3948	.9301	.129	.120 .120	1243	10358			
TOP SLAVE POINT	10F	C	G	1812	50	.016	926	91	16	66	.007	.178	1746	460	.2635	.9670	.172	.165	1655		412	.0435	9471
	11E	D	G	1812	48	.020	932	99	10	58	.008	.178	1754	535	.3050	.9565	.170	.162 .1635	1655	10122			
TOP OF PRESQUILLE	12G	C	G	1996	50	.016	926	91	16	66	.007	.186	1930	460	.2383	.9728	.181	.174	1839		184	.0095	19368
	13F	D	G	1996	50	.021	932	97	10	60	.007	.186	1936	535	.2763	.9639	.179	.172 .173	1839	10630			
	14I	C	G	2300	50	.016	926	91	16	66	.007	.200	2234	460	.2059	.9795	.196	.189	2143	11339	304	.016	19000
TOP BEAR ROCK	16J	D	G	2630	15	.017	932	132	10	25	.010	.220	2605	535	.2054	.9796	.216	.206	2473		330	.017	19412
	17J	C	G	2630	50	.016	926	91	16	66	.007	.216	2564	460	.1794	.9843	.213	.206 .206	2473	12005			
TOP RED BEDS	18K	C	G	2724	50	.017	926	91	16	66	.007	.221	2658	460	.1731	.9853	.218	.211	2567	12166	94	.005	18800
GRANITE (2778')	19L	C	G	2790	50	.016	926	91	16	66	.007	.226	2724	460	.1689	.9860	.223	.216	2633		66	.0045	14667
	15I	D	F	2790	20	.014	932	127	10	30	.010	.229	2760	535	.1938	.9817	.225	.215 .2155	2633	12218			



X = Horizontal distance from well to shot point.

d = Well geophone depth measured from well elevation.

d_s = Depth of shot.

d_e = Difference in elevation between shot and elevation datum.

Δe = Difference in elevation between well and shot point.

Z = Well geophone depth measured from elevation datum = d-(K.B.elevation - elevation datum).

$Z+d_e$ = Well geophone depth measured from shot elevation = $d - d_s - \Delta e$.

S = Straight line travel path from shot to well geophone.

T = Observed time from shot to well geophone.

t_s = Uphole time at shot or other surface reference time.

t_e = Vertical time from shot to elevation datum = $\frac{d_e}{V_e}$.

$\tan i = \frac{X}{Z+d_e}$.

$\bar{T}$ = Vertical travel time from shot elevation to well geophone = cos i T.

T_c = Vertical travel time from elevation datum to well geophone = $\bar{T} - t_e$.

V_e = Topmost velocity in consolidated layer.

$V_a = \frac{Z}{T_c}$ = Average velocity.

$V_i = \frac{\Delta Z}{\Delta T_c}$ = Interval velocity.

Seismograph Service Corporation of Canada

CALGARY, ALBERTA

APPENDIX IV

WELL VELOCITY GRAPHS

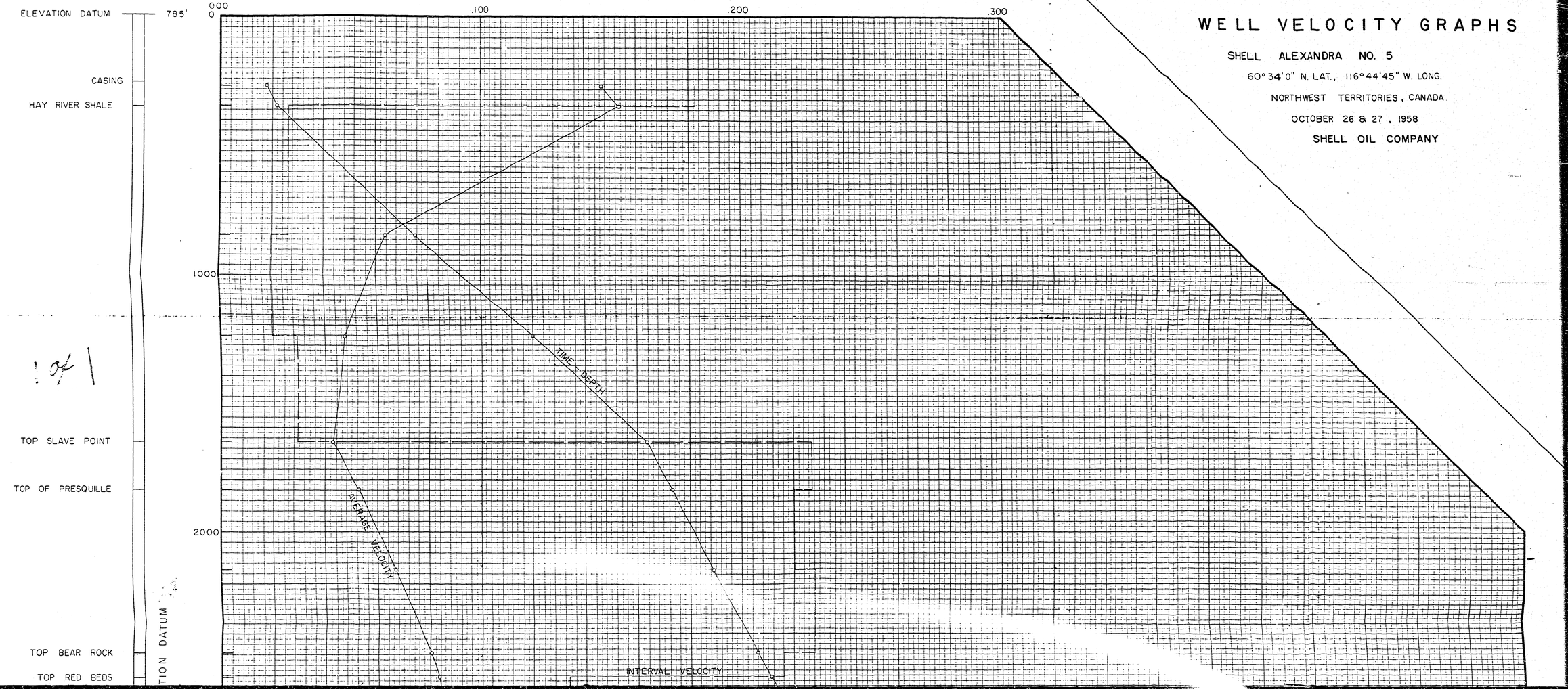
SHELL ALEXANDRA NO. 5

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

NORTHWEST TERRITORIES, CANADA

OCTOBER 26 & 27, 1958

SHELL OIL COMPANY



TOP BEAR ROCK

TOP RED BEDS

GRANITE (2778')

DEPTH BELOW ELEVATION DATUM

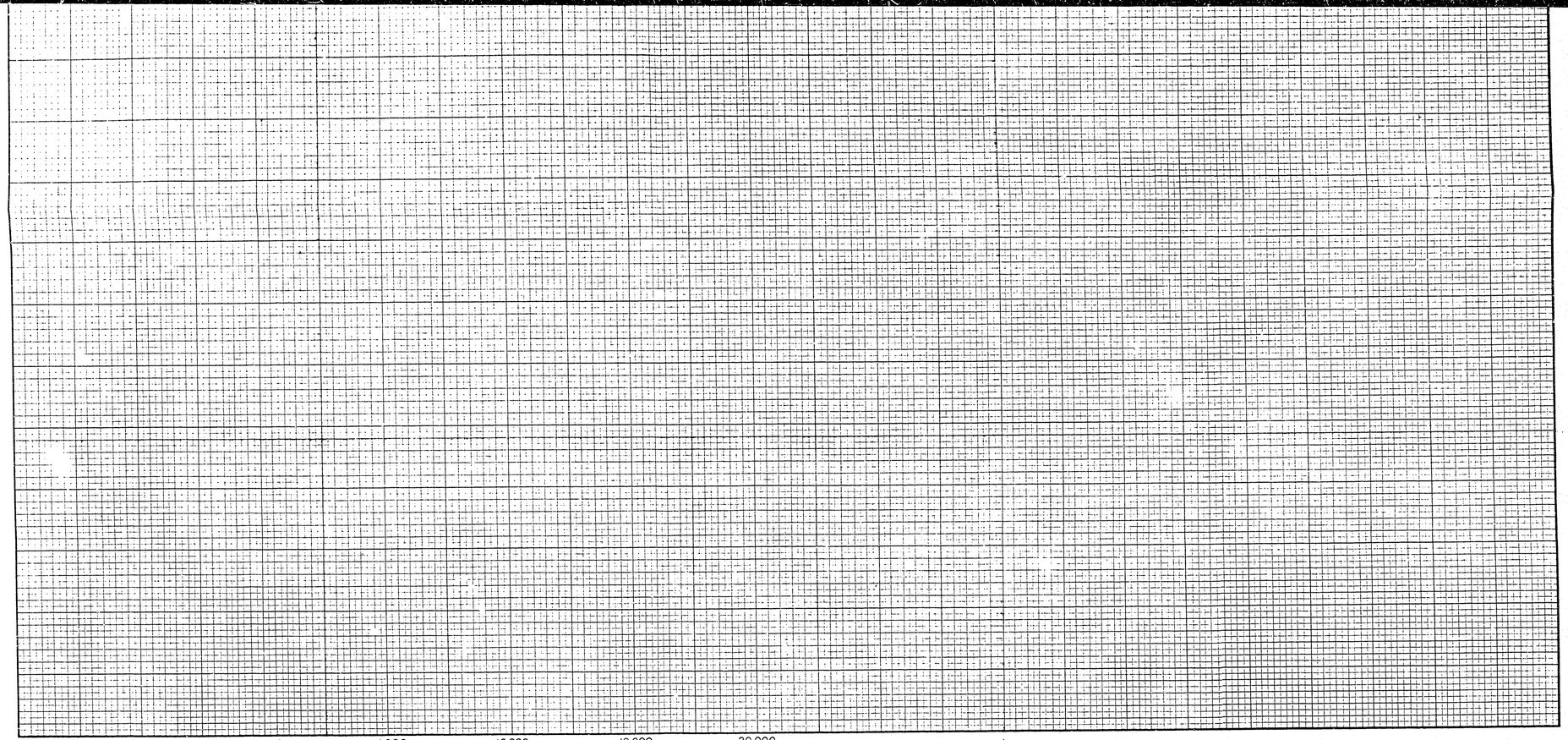
2000

3000

AVERAGE VELOCITY

INTERVAL VELOCITY

DEPT



Seismograph Service Corporation of Canada