

HUSKY ET-AL WILLOW LAKE

O-27-A

Drilling Authority No. 605
Date Issued: 20 January 1970

WELL NAME Husky et al Willowlake G-27 - A

FIELD

LOCATION: Unit 0 Area Section 27 Grid 62-20-121-00

Latitude 62-16-48 Longitude 121-04-21

U.W.L.R. 62.28000 --- 121.07250

U.W.I. 306027620121000

2

Rig Release Date: 22/2/70

Status: OPA

Information Release Date:

CHANGE OF NAME

DATE RECEIVED	INDEX
20-1-70	Application for a Drilling Authority.
	Well Completion Date.
	Well History Report.
2/2/70	Application to Amend a Drilling Authority.
2/2/70	Application to change a Well Name.
3/2/70 6/3/70	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
8/4/70	Well History Supplement.
	Well Completion Date.
	Work-over Report No.
	Application to Commingle Production before Measurement.
	Date for Rock Pressure Test on Natural Gas Wells - Manograph 7 Method.
	Date for Rock Pressure Test on Natural Gas Wells - Victor's Method.
	M.P.R. - Oil - Calculations.
	New Oil Well Report.
	New Gas Well Report.
	Well Inspection Report.
	Rig Inspection Report.
	Battery Inspection Report.
	Equipment Report.
	Well Card.
	New Service Well Report.
	Monthly Water Flood Operations Report
	Monthly Water Receipts and Disposal of Fluids Report
	Logs, Large scale. Small scale.



Drilling Authority No. 503
Date Issued: January 20, 1970

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

REVISED

WELL COMPLETION DATA

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

Well name and number: Husky 88 et al Willowlake 0-27A
 Permit No. 4363 Lease No. _____
 Imperial Oil Enterprises Ltd. Exploratory Licence No. 1266
 (Producer, Licensee, Lessee)
 Husky Oil Ltd. Exploratory Licence No. 1356
 (Operator)
 Location: Unit 0 Section 27 Grid 62° 20', 121° 00'
 Latitude 62° 16' 48" North Longitude 121° 04' 21" West
 From Established Reference Markers
 Universal Well Location Reference Lat. 62.28000° N. Long. 121.07250° W.

	DATE	DEPTH	Pack(s)	Undesignated
			Interval(s) open to production	None
Spudded	Jan 29/70	5:30 A.M.		
Completed				
Resumed Operations				
Finished Drilling	Feb 18/70	2920		
Stripped			Elevation Gr. 1085 K.R. 1097	
Complete (gas well)			Rig No. 4	
Abandoned	Feb 22/70	2920	Drilling Contractor S & T Drilling	
Rig released	Feb 22/70	4:00 A.M.	Contractor's Business Licence No. 566	

CASING RECORD

Casing Type (Shorten)	Grade	Weight	Access	Size of Casing	Depth of Cement and Adhesive
1. 9 5/8	J-S	360	416'	409	300 + 27. CaCl ₂
2.					
3.					
4.					
5.					
6.					

LITHOLOGICAL STRATIGRAPHY	ELEVATION		CORE RECORD					
	Depth	Subsidence	From	To	Size	From	To	Size
Ft. Simpson	370	+727	1198	1243	45'			
Horn R. Shale	1050	+67	2255	2303	45'			
Stone	1194	+97	2524	2554	23'			
Dear Rock	1530	+433						
Knoring	1950	+853						
Basal Clastics	2610	+1513						
Pre Cambrian	2720	+1623						
Total Depth	2920	+1823						

LOG RECORD

Log No.	Type of Log	From	To
1	Compensated Formation Density Log	1100	2918"
1	Bore Hole Compensated Sonic Log	409	2917"
1	Sidewall Neutron Porosity Log	1100	2918"
1	Dual-Induction Lateral Log	409	2916"
1	Continuous Dipmeter Directional	409	2917"

CUMULATIVE RECORD (Pump, Squares, etc.)				PERFORMANCE RECORD (Holes, etc.)				ADDITIONAL RECORD (Remarks, Pump, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
Feb. 20/70	2350	2200									
			130 ax + 3% CaCl ₂ . Tried to								
			feel plug, fell down hole.								
Feb. 21/70	2350	2200									
			130 ax + 3% CaCl ₂ . Tagged at								
			2110.								
Feb. 22/70	460	360									
			60 ax + 3% CaCl ₂ .								
			Tagged at 370								
Feb. 22/70	Surface										
			5 ax top of surface								
			casing, erected monument.								

DRILL LOGS

No.	Date	Function	From	To	U.O. Wm.	S.S. Wm.	F.S.S. Wm.	S.S.S.P. P.S.S.P. P.S.S.P.	P. S.S.P.	S.S.P.	P.S.P.	REMARKS
1	2-3-70	Run	1190*	1243	50*	30*	80	23*	24*	37*	56*	Recovered 20' Drilling mud.
2	2-9-70	Running	2236*	2103	45	30	60	72*	60*	112*	112*	Recovered 30' Drilling mud.
3	2-12-70	Running	2480*	2122*	12*	27*	23*	985*	985*	1235*	1223*	Recovered 90' Drilling mud. 0.50' mud cut salt water, oil flecked.
4	2-13-70	Running	2506	2124	59*	28*	60	1007*	780*	1250*	1246*	Recovered 360' mud cut salt water slightly gas cut. 1596' salt water slightly gas cut.
5	2-19-70	Basal Clastics	2624	2660	60	27*	56*	1010*	43*	1361*	1361*	Recovered 150' mud cut salt water.

ANALYSIS

ANALYSIS				PRESENT STATUS OF WELL			
Lab. No.	Sample	From	To	Sample	Remarks	Date	Temp.
Cal - 2 - 1685	1	1190*	1243	DRILL #1	Drilling mud		
Cal - 2 - 1685	2	2236*	2103	DRILL #2	Drilling mud		
Cal - 2 - 1728	3	2480*	2522*	DRILL #3	Water		
Cal - 2 - 1728	4	2506	2524	DRILL #4	Water		
Cal - 2 - 1728	5	2624	2640	DRILL #5	Water		
Cal - 2 - 5021	6	2255	2300	Core #2	Complete Analysis		

Company: HUSKY OIL LTD.

Signed by: *[Signature]*

Title: DRILLING ENGINEER

Date: April 8, 1970.

Form to be printed in duplicate and forwarded to the Oil Conservation Engineers, Calgary, Alberta.

Revisions changes made



File No. _____
Drilling Authority No. 405

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well ~~ON-SHORE~~

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

Name and number of well Husky No. 21 at Willowiske 0-27A
Location: Unit 0 Section 27 Grid 62° 20', 121° 00'
Latitude 62° 16' 48" North Longitude 121° 04' 21" West
From Established Reference Marker
Universal Well Location Reference Lat. 62.28000° N. Long. 121.07250° W
Permit No. 4363 Lease No. _____

Imperial Oil Enterprises Ltd.
(Production, Licence, Lease)

Date of commencement of proposed program February 20, 1970

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at None
Gas at None
Water at 2464 - 2506 2506 - 2524 2524 - 2660
Total Depth 2920 Date of last operations February 22, 1970
Present condition of well Plugged and abandoned

Program approved verbally by Mr. B. J. H. Toms, February 19, 1970

CASING RECORD

Casing Size (O.D. x I.D.)	Weight	Amount	Set At	Notes of Cement and Additives	Amount Poured
1. 9 5/8	36#	426	409	300 plus 2% CaCl ₂	None
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

No.	From	Geological Formation	Number of Sacks of Cement	Remarks
1	2350 - 2200	Franklin Mountain	130 + 3% CaCl ₂	Plug fell down hole
2	2350 - 2200	Franklin Mountain	150 + 3% CaCl ₂	Tagged at 2110
3	460 - 360	Surface Casing	60 + 3% CaCl ₂	Tagged at 370
4	Surface	Surface Casing	5 sack	Erected monument

The following logs have been run Density, Sonic, Neutron Porosity, Induction Dipmeter
Other operations proposed None

Operations to be carried out by S & T Drilling Ltd. Contractor Licence No. 564
Address Edmonton, Alberta
Responsible Agent in field Glen Robertson
Dated at Calgary, Alberta this 3 Day of March 19 70
Signed by [Signature] Company Husky Oil Ltd.
Title Drilling Engineer Operator's Exploratory Licence No. 1355

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Confirming oral approval given by Mr. B.J.H. Toms
on the 24th February 1970.

Dated 5th March 1970

[Signature]
Oil Conservation Engineer

Form to be submitted in duplicate to Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Change a Well Name

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

Husky et al Willowlake 0-27

(Old name)

to Husky 88 et al Willowlake 0-27A

(Proposed new name)



Well Location

Location: Unit 0 Section 27 Grid 62° 20', 121° 00'
Latitude 52° 16' 48" N Longitude 121° 04' 21" W
Unique Well Identifier 3020276220121000
Universal Well Location Reference lat. 62.28000° N, Long. 121.07250 W

Reason for Changing Well Name

Original hole was plugged due to gravel below surface casing. Rig was moved 15' East of old location.

Hudson Bay Oil & Gas Ltd., Partner in this Venture, none to be included.

Dated at Calgary, Alberta this 29 day of January 19 70

Signed by

Title Drilling Engineer

Company HUSKY OIL LTD.

(For Oil and Mineral Division use only)

APPROVED

This application has been examined and approved:

Date 3rd February, 19 70

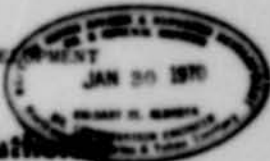
Oil Conservation Engineer

Oil Conservation Engineer

Form 10 to be submitted to duplicate to the Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
RESOURCE MANAGEMENT DIVISION



Application to Amend a Drilling Authority

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

In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made to amend Drilling Authority No. 405, concerning Husky et al Willowiske 0-27

(Name and Number of Well)

The following amendments are required: The surface casing will be changed to 425' of 9 5/8" J-55 and cemented to surface, after skidding rig 15' East of present location.

Reasons for the amendments: After drilling out surface casing a gravel bed was encountered above the Ft. Simpson shale. Due to the inherent dangers of drilling with this bed open in the hole the decision was made to plug and move the rig.

Dated at Calgary, Alberta, this 29 day of January, 19 70

Signed by

This Drilling Engineer

Company HUSKY OIL LTD.

(For Resource Management Division use only)

APPROVED

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

Date 3rd February, 19 70

Oil Conservation Engineer

Form to be submitted to the Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.

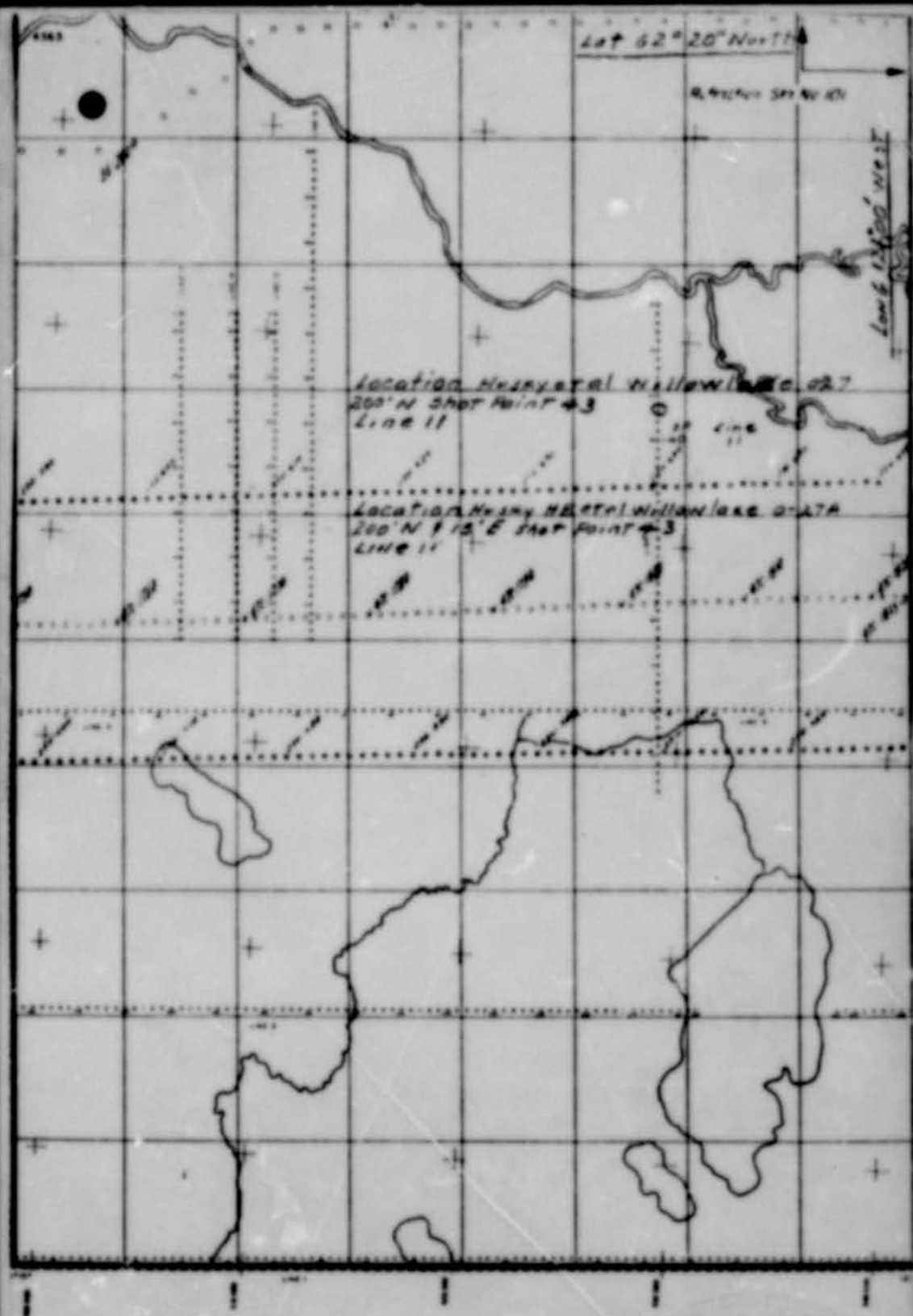
Lat 62° 20' North

RESEARCH SHIP NO. 101

Long 150° West

Location Huskyetal Nallaw Lake 027
200' N SHOT POINT #3
Line 11

Location Huskyetal Nallaw Lake 027A
200' N 15' E SHOT POINT #3
Line 11





File No. _____
Drilling Authority No. 603

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well as Suspended



In compliance with the "Canada Oil and Gas Land Regulations", application is hereby made to abandon, to ~~suspend~~ drilling — Husky et al Willowlake 0-27
Name and number of well
Location: Unit 0 Section 27 Grid 62° 20', 121° 00'
Latitude 62° 16' 48" North Longitude 121° 04' 21" West
From Established Reference Marker
Universal Well Location Reference Lat. 62.28000° N, Long. 121.07250° W
Permit No. 4363 Lease No. _____

Imperial Oil Enterprises Ltd.
(Production, Laramie, Laramie)

Date of commencement of proposed program January 26, 1970

OIL, GAS, AND WATER ENCOUNTERED
(Depths)

Oil at: None
Gas at: None
Water at: None
Total Depth 625' Date of last operations January 26, 1970
Present condition of well Gravel bed encountered below surface casing. Well has been plugged according to program approved verbally by B. Thoms, January 26, 1970.

CASING RECORD

Casing Size (O.D. Inches)	Weight	Amount	Set At	Barrels of Cement and Additives	Remarks
1. 9 5/8	36#	8 joints	260'	235 plus 21 CaCl ₂	None
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

No.	Flow	Geological Formation	Number of Barrels of Cement	Remarks
1	420 - 200	Ft. Simpson & Surface gravel	160 + 21 CaCl ₂	Felt 5 1/2 hrs. @ 135'
2	Surface	Surface Casing	5	

The following logs have been run: None
Other operations proposed: Erect monument after rig moves off second location.

Operations to be carried out by S&T Drilling (Western) Ltd. Contractor License No. 564
Address: Edmonton, Alberta
Responsible Agent in field: Glen Robertson, Esaki Hotel, Ft. Simpson, N.W.T.
Dated at: Calgary, Alberta, this 29 Day of January 19 70
Signed by: _____ Company: HUSKY OIL LTD.
Title: Drilling Engineer Operator's Exploratory License No. 1356

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

(For OIL AND MINERAL DIVISION use only)

APPROVAL

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

Conflicting oral approval given by Mr. B.L.J. Thoms
on the 26th January 1970.

Dated _____

2nd February

, 19

70

B.L.J. Thoms
Oil Conservation Engineer

Return to be submitted in triplicate to Oil Conservation Engineer,
Department of Indian Affairs and Northern Development, Calgary, Alberta.



Drilling Authority No. 408

Project No.

File No.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application for a Drilling Authority

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

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

Name and number of well: HUSKY ET AL WILLOWLAKE 0-27
 Location: Town 0 Section 27 Grid 62° 20', 121° 00'
 Latitude 62° 16' 48" N Longitude 121° 5' 21" W
 Unique Well Identifier: 300076280121000
 Universal Well Location Reference: Lat. 62.28000 N, Long. 121.07250
 Elevation: Ground 1085 M.B. 1097 (Est.) Well above sea level.
 Well is expected to produce from: Devonian or Basal Clastics Formation at a depth
 of about 2500 feet. Expected total final depth 2500
 Area assigned to well

(See Oil Conservation Engineer's report)

Permit No. 4363 Lease No. Average 30,640

Permitter, licensee, or lessee: Imperial Oil Enterprise Ltd.

Exploratory Licence No. 1266

Surface owned by Crown or Crown

(If applicant submits name and address of owner and acreage.)

Petroleum and natural gas rights owned by Crown

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

Casing Size (O.D. x Wall)	Weight (Lb./Ft.)	Grade	How or Used	Estimated Depth	Depth of Cement
1. 9 5/8	36	J-55	New	300	As required to surface
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment: Devonian or Basal Clastics.
 Drilling mud and Double Shaffer and Hydril OK Blow out Preventers

Well will be drilled with Rotary Rig No. 4 by S & T Drilling (Western) Co. Ltd.
 (Drilling Contractor or company)

Responsible agent of applicant—

Contractor's business Licence No. 564

At well: Glen Robertson

At registered office: C. R. Carrington

Address: Ft. Simpson, N.W.T.

Address: 815 Sixth St. S.W., Calgary 2, Alberta

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

Dated at: Calgary, Alberta this 15 day of January 1970

Signed by: [Signature]

Company: HUSKY OIL LTD.

Title: Drilling Engineer

Operator's Licence No. 1356

(For Oil and Mineral Division use only)

APPROVED

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

1. The Company will submit to this office, on Tuesday of each week, the latest reports received by radio on the progress of the well.
2. During well drilling and testing operations, every effort shall be made to ensure

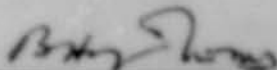
Dated: 20th January 1970

Oil Conservation Engineer

Form to be submitted to Oil Conservation Engineer,
 Department of Indian Affairs and Northern Development, Calgary, Alberta.

that drilling fluids, chemicals and wastes shall be disposed of or contained in a manner that will prevent the contamination of adjacent vegetation and surface or sub-surface waters.

3. We draw your attention to Sections 95 and 96 of the Canada Oil and Gas Land Regulations.



E.H.J. Thoma, Oil Conservation Engineer

86-11-4-15

WELL HISTORY

of

Husky H B et al Willow Lake

9-27A

(North West Territories)

WELL HISTORY

of

Husky H B. et al Willowlake

0-27A

(North West Territories)

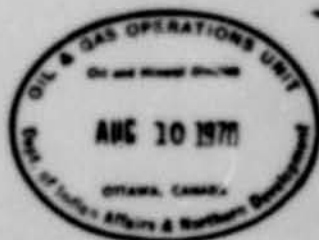
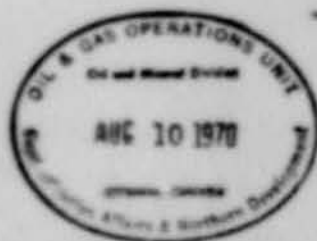


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PREAMBLE

Drilling Authority No. 405 with Unique Well Identifier 300027622012000 was issued to Husky Oil Ltd. as authorization to drill Husky et al Willow Lake 0-27. The well was spudded and 13 3/4" hole was drilled to 264 ft. K. B. This hole was cased w/9 5/8" casing, landed at 266 ft. K. B. and cemented to surface. The surface casing was drilled out and 8 3/4" hole was carried to 625 ft. K. B. However, shortly after the shoe was drilled out, more glacial drift was encountered. This strata took mud. The addition of LCM to the drilling mud did not completely cure the problem. In the interest of safety and economics it was decided to plug and abandon this well. This was done.

The rig was then skidded 15 ft. east. The new location was designated Husky H B et al Willow Lake 0-27A. The original Drilling Authority No. 405 was to be used as authorization for the new well and it was given the Unique Well Identifier No. 3020276220121000. This new well was to set enough surface casing to cover all glacial drift.

The Well History gives all pertinent data relative to both wells.

Report prepared by:

Gordon L. Strom

Gordon L. Strom
P. Geol.

SECTION 1

SUMMARY OF WELL DATA

<u>Well Name & No.</u>	Husky et al Willowlake 0-27
<u>Permittee, Licencee or Lessee:</u>	Imperial Oil Enterprises Ltd.
<u>Operator:</u>	Husky Oil Ltd.: 815 - 6th St. W., Calgary.
<u>Location:</u>	Unit-O Section - 27 Grid - 62° 20', 121° 00'. Latitude: 62° 16' 48" N Longitude: 121° 04' 21" W Unique Well Identifier: 3000276220121000 Universal Well Location Reference: Lat. 62.28000° N Long. 121.07250° W
<u>Permit No.:</u>	4363
<u>Contractor:</u>	S & T Drilling (Western) Co. Ltd. Rig No. 4 (T32-National)
<u>Drilling Authority:</u>	No. 405, issued 20 January, 1970.
<u>Well Classification:</u>	Wildcat
<u>Ground Elevation:</u>	1085 ft. K.B. to G.L.: 12.0 ft.
<u>Spudded:</u>	3:00 a.m. 23 January, 1970
<u>Completed Drilling:</u>	26 January, 1970
<u>Total Depth:</u>	625 ft. K.B. P.B.T.D.: 135ft. K.B.
<u>Well Status:</u>	Abandoned
<u>Rig Released:</u>	Rig was not released but was skidded 15' east to Willow Lake 0-27A.
<u>Hole Sizes:</u>	13 3/4" to 264' K.B. 8 3/4" to 625' K.B.
<u>Casing:</u>	8 Its of 9 5/8, 36#, J-S landed at 260' K.B. Cemented to surface.

SUMMARY OF WELL DATA

<u>Well Name & No.:</u>	Husky H B et al Will-wlaam 0-27A
<u>Permitter, Licencee or Lessee:</u>	Imperial Oil Enterprises Ltd.
<u>Operator:</u>	Husky Oil Ltd.; 815 - 6 St. S. W. Calgary.
<u>Location:</u>	Unit - O Section - 27 Grid - 62° 20', 121° 00' Latitude: 62° 16' 48" Longitude: 121° 04' 21" W. Unique Well Identifier: 3020276220121000 Universal Well Location Reference: Lat. 62.28000° N Long. 121.07250° W
<u>Permit No.:</u>	4361
<u>Contractor:</u>	S & T Drilling (Western) Co. Ltd. Rig No. 4 (T32-National)
<u>Drilling Authority No.:</u>	405, issued 20 January, 1970
<u>Well Classification:</u>	Wildcat
<u>Ground Elevation:</u>	1085 ft. K.B. to G.L. 12.0 ft.
<u>Spudded:</u>	5:30 a.m. 29 January, 1970
<u>Completed Drilling:</u>	18-19 February, 1970
<u>Total Depth:</u>	2920' K.B.
<u>Well Status:</u>	Abandoned
<u>Rig Released:</u>	4:00 a.m. 22 February, 1970
<u>Hole Sizes:</u>	13 3/4" to 412' K.B. 8 3/4" to 2920' K.B.
<u>Casing:</u>	13 jts of 9 5/8, 36# J-S landed at 409' K.B. Cemented to surface.

SECTION 11

COMPANY Husky Oil Ltd.

ELEVATION

GMD 1085.0 ft.

6

WELL NAME Husky H.B. et al Willow Lake 0-27AK.D. 1097.0 ft.

FORMATION RECORD

NAME OF FORMATION	DEPTH		SUBSEA	
	TOP	BASE	TOP	BASE
<u>N.B.</u> Tops from sample picks are the same as those from log picks.				
Cretaceous Ssile	Surface			
Ft. Simpson	370			-727
Horn River Shale	1050			- 47
Hume	1194			- 97
Bear Rock	1530			-433
Ronning	1950			-853
Basal Clastics	2610			-1513
Pre-Cambrian	2720			-1623
T.D.	2920			-1823
NOTE:				
Log and sample picks supplied by				
Husky Oil Ltd. Geological Dept.				

CORING RECORD

CORE NO.	FORMATION	DEPTH		FEET CUT	RECOVERY		MIN. I/T RATE	REMARKS
		FROM	TO		FEET	%		
1	Hume	1198	1243	45	45	100	38	See Core
2	Ronning	2255	2303	48	45.4	94.6	21	Descriptions
3	Ronning	2524	2554	30	23.5	78.3	43	

OILMEN'S WELL SITE
SERVICES LTD.

OPERATING ENGINEER _____

CORE DESCRIPTIONS

CORE NO. 1

Cored the interval 1198-1243 ft. K.B. in Hume Fm.
 Cut 45 ft. Recovered 45 ft.
 Ave. Pen. Rate was 38 mins/ft.

Core Description:

1198 - 1207 :	Ls., v. lt. gy. tan., micro. xln., v. dense, waxy in pt., v. lt. gy. lime incl.
1203- 1208 :	Ls., dk. gys. brn., v.f. - micro, dense, w/bioclastic & bituminous 'hash' intermixed. Minor frac & vags w/some 100% calc. infill.
1208 - 1218 :	Ls., gy. brn., v.f. - micro xln., dense. Frac 100% infill w/calc.
1218 - 1223 :	Ls., dk. gy. brn., v.f.-micro xln., dense bituminous material intermix as inclusions. Minor frac. Some bioclastic debris.
1223 - 1233 :	Ls. dk. gy. brn., micro xln., dense, occ. coral and minor bituminous infill.
1233 - 1243 :	Ls. dk. gy. brn - gy., micro xln. dense, v. minor frac infill w/calc. Minor bioclastic. Styolitic in part.

Remarks: Bioclastic and bituminous material rather common after
 2-3 ft. into cored interval. Seems very much less in
 last 2' of core.

CORE NO. 2

Cored the interval 2255 - 2303 ft. K. B. in Ronning Fm.

Cut 40 ft. Recovered 45.4 ft.

Avg. Pen. Rate was 21 mins/ft.

Core Description

2255 - 2265 :	Dol., dk. brn., mic - v.f. xln., dense, anhydritic.
2265 - 2270 :	As above w/blk. bit. sh. -, thinly interbedded. Sulf. odor on fresh breaks.
2270 - 2275 :	Dol., gry. brn, micro xln. dense, frac.
2275 - 2279 :	As above w/int/ dk. bit. sh.
2279 - 2284 :	As above w/anhydrite infilling.
2284 - 2300 :	Dol., dk. gry. brn., micro xln., dense w/incl. of blk. bit. sh. Strong sulf. odor on fresh breaks.

Remarks: Intermittent fracturing throughout core w/infill of bituminous material occ. present. Porosity poor.

CORE NO. 3

Cored the interval 2524 - 2554 in the Ronning Fm.

Cut 30 ft. Recovered 23.5 ft.

Ave. Pen. Rate was 43 mins/ft.

Core Description

- 2524 - 2533.3 : Dol., gry. brn., v.f. - mic. sl., anhydritic, minor sh. partings, v. scattered questionable stain, v. hard.
- 2533.3-2538.1 : As above w/ minor anhy. incl. Dol. itself less anhydritic than above.
- 2538.1-2547.5 : Dol., gry. brn., mic. sln., dense, hard, shly. incl. & dk. anhy. incl. Questionable v. scat. staining. Dol is slightly lighter gry. toward bottom w/somewhat less disseminated anhy.

SAMPLE RECORD

Well Name Husky H B et al Willow Lake 0-27A

KB 109 Zft.

DEPTH		DESCRIPTION
From	To	
0	370	Shale w/some interbedded glacial drift. Ft. Simpson @ 370'
370	912	Sh., lt. gry., slightly fissile, non-calc., sl. slty.
912	1120	Sh., lt. gry. w/interbedded gry's, blk. to blk. sh. Horn R. @ 1050
1120	1130	Sh. black, sl. slty, semi-bituminous sl. calc. in part. Micro-mica in part.
1130	1140	As above - v. small amt. pyr.
1140	1150	As above - pyr.
1150	1160	As above
1160	1170	As above
1170	1180	As above, w/scattered pyr. and qtz. pebbles & grains.
1180	1190	As above, v. minor qtz. grains & pcb. some pyr.
		<u>HUME @ 1194'</u>
1190	1198	As above; plus -
		Ls, tan-brn, micro xl, dense - sl. frac. 100% infill w/calc.
		(Drill times: 3 min. to 8 min/ft.) V.f. xl. in part. No visible por. or stain, no flur. - sl. stylolitic., VSL. arg.
1198	1243	See Core Description.
1243	1250	Ls, gry. tan, micro xl, dense, hard, in part "waxy" luster
		Ls, v. lt. tan, crypto xl, chalky, soft.
1250	1260	Ls, dk. gry, blk, v.f - micro xl., dense, gran. in part.
		Some evidence of bioclastic material.
1260	1270	As above w/v. minor calc. infill
1270	1280	As above.
1280	1290	As above, some semi-chalky, lt. tan and gy.

CLARK'S WELLS SERVICE LTD.
SAMPLE RECORD

Well Name Hushy H B et al Willow Lake 0-27AKB 1097 ft.

DEPTH		DESCRIPTION
From	To	
1290	1300	Ls. dk. gry. brn. micro. xl. dense, some as above.
1300	1310	As above.
1310	1320	Ls. gry. brn. micro xl. chalky, gran. sl. silty.
1320	1330	As above.
1330	1340	Ls. gry. brn (darker than above) micro xl. dense.
1340	1350	As above, but dk. gry. brn. some blk. sh., bituminous.
1350	1360	Ls. gry. brn. micro xl. gran. softer, sl. arg.
1360	1370	As above, some to v. f. xl. ? arg.
1370	1380	As above.
1380	1390	As above, but to micro xl. sl. gran. in part.
1390	1400	Mixture of what appears last 50'
1400	1410	Ls. gry. brn. vf-micro. xl. dense, in part soft & gran & lt. gry. tan.
1410	1420	Ls. dk. gry. brn - gry brn. v. f - micro xl. dense - v. dense.
1420	1430	Ls. lt. gry - gry brn. chalky in part, v. sl. silty.
1430	1440	Ls. gry. tan and gry. brn. micro xl. gran. in part.
1440	1450	Ls. gry. brn micro-crypto xl. chalky to gran, somewhat mottled, sl. silty to v. arg.
1450	1460	As above, rougher texture and mostly brn - dk. brn., v. poor, v. scattered questionable porosity.
1460	1470	As above plus Ls. dk. gry. brn. micro-crypto xl., dense, harder than above.
1470	1480	As above.
1480	1490	As above, more of dk. brn. xl dense ls.

OILMEN'S WELL SITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky II B at Willow Lake 0-27A

K.B. 1097/01

DEPTH		DESCRIPTION
From	To	
1490	1500	ls. v. lt. / gry. tan. micro-crypto xl., semi-gran. softer. Possibly dolomitic? some arg. ls as above.
1500	1510	Dol. ls or lmy. dol, gran - sacrosic, micro xl -
1510	1530	As above.
1530	1540	Lmy. dol., lt. gry. tan. sacrosic? Bear Rock @ 1530'
1540	1550	As above w/sh. dolomitic, gry. grn.
1550	1570	As above ? Sh.
1570	1590	Anhy. - wh., - gry. - brn. - stringers
1590	1840	Anhy. as above, but bedded and more massive with depth. Minor dolomitic anhy and anhydritic dolomite.
1840	1900	Anhy. wh. v. lt. tan. cross sample becomes much lighter color.
1900	1910	Dol. brn, micro xl. dense, plus as above
1910	1920	Anhy. brn. gry. massive.
1920	1930	As above
1930	1940	As above, some dol. gry, micro xl, anhydritic
1940	1950	Anhy. tan, lt. gry. Ronning @ 1950'
1950	1960	As above, traces of sh. gry. dk. grn. waxy in part, sl. dolomitic in part.
1960	1980	Sh. gry. dk. grn., waxy in part, sl. dolomitic in part - some anhy. as above. Dol. brn, micro xl. (minor amount)
1980	1990	Sh. as above, anhy as above, dolo. micro xl, dense, anhydritic.
1990	2000	Sh. grey dk. grn, waxy in part, sl. dolo. in part - interbedded anhy. and dol., brn. v. f - micro. xl., dense.
2000	2010	As above.

CLARK'S WELLS & SERVICES LTD.
SAMPLE RECORD

14

Well Name Husky H B et al Willow Lake 0-27A

KB 1097ft.

DEPTH		DESCRIPTION
From	To	
2010	2020	As above
2020	2030	As above
2030	2040	As above [70% Sh - 25% Anhy - 5 Dol]
2040	2050	Anhy. gry, brn, massive, bedded.
2050	2070	Anhy. gry, tan & brn as above
2070	2080	Anhy. tan, brn, lt. gy. lt. gry, grn.
2080	2090	As above
2090	2100	As above
2100	2110	As above, w/minor gry, grn. sh.
2110	2120	Anhy, brn, gry., tan, massive.
2120	2130	As above.
2130	2140	As above
2140	2150	As above, gross sample somewhat browner.
2150	2160	Anhy. gry, brn, tan, massive.
2160	2170	As above.
2170	2180	As above, w/minor gry, grn. sh.
2180	2190	As above
2190	2200	Anhy. brn, gry, tan, massive.
2200	2210	As above, w/v. minor sh. partings
2210	2220	As above
2220	2230	As above
2230	2240	Dol. brn - lt. gry, brn, & tan micro-v.f. xl, gyp, infill
2240	2250	As above
2250	2255	As above, more to v.f. xl. w/scat. fair porosity.

CLARK'S WILLOW SERVICES LTD.

15

SAMPLE RECORD

Well Name Husky H B et al Willow Lake 0-27A

KB 1097 ft.

DEPTH		DESCRIPTION
From	To	
2300	2310	Dol. gry. brn. v.f - mic. xl., dense v. minor porosity in part, some frac.
2310	2320	Anhy. gry. - v. sl. dolomitic
2320	2330	Anhy. as above. w/salt casts (drill break - salt -)
2330	2340	As above, anhy. gry-sl. tan, salt casts more frequent (greater % salt) (mud check: Chloride @ 4000 PPM)
2340	2350	As above
2350	2360	As above - gry & gry. tan - salt
2360	2370	As above
2370	2380	As above
2380	2390	Dol. brn. v.f. xl - mic. xl., minor, pin-point porosity.
2390	2400	Dol. gry. brn. mic. xl. dense, inclusions of sl. brn. non-calc material.
2400	2410	Dol. gry. micro xl. anhydritic. Anhy. gry. minor salt casts
2410	2420	Anhy. as above, v. minor dol. & salt casts
2420	2430	Anhy. gry.
2430	2440	As above, v. minor brn. dol. v.f. -micro xl. anhydritic
2440	2450	As above.
2450	2460	Anhy. gry. lt. gry. salt casts.
2460	2470	Anhy. as above, minor salt casts.
2470	2480	As above
2480	2490	Dol. gry tan. v.f - micro xl. fract. anhydrite frac. infill w/macro - gyp and dol. crystals - anhy w/salt casts.
		Dol. gry. anhydritic. (Lost circ. @ 2492)

CLUMEN'S WELL SITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H B et al Willow Lake 0-77A

KB 1097 ft.

DEPTH		DESCRIPTION
From	To	
2490	2500	Dol. gry & gry. tan. v. f - micro xl. dense. frac. - gyp infill - anhydritic
2500	2510	As above, frac.
2510	2520	Anhy. gry, brn, dolo. brn - lt. gry, tan, v. f - mic. xl, frac. anhydritic salt casts
		Cut 2', 2522-24 before taking 2nd test. - Cleaned - while circ. to pull out for 2nd test, oil scum again flowed into mud tanks.
2520	2524	As above plus suspected v. minor amts. ironstone reddish brn. sh. possibly touched into clastics??
		After circ. for approx. 4 hrs. oil scum ceased to be flowing
2524	2527	See Core Desc. for Core #3
2547	2550	Dol. dk. gry, brn, micro xl, dense, hard.
2550	2560	Dol. gry, tan, micro xl, dense anhydritic - some sandy in part?
2560	2570	Dol. brn and dk. gry, brn, v. f-micro xl dense, sl. sandy in part.
2570	2580	As above, some pyrites about 2575.
2580	2590	As above, some with minor fract. infill and inclusions, minor sh.
2590	2600	As above with shly inclusions and crs dol. inclusions. Some color to v. dk. gry. brn.
2600	2610	Dol. v. dk. gry brn, v. f. xl. - micro, shly, sandy, siliceous - gross samp. much darker. Basal Clastics @ 2610'
2610	2617	Sh. v. dk gry. brn, dolomitic, rough texture in part.
2617	2620	As above - minor amt dk. dolo. hard.
2620	2630	As above, plus ss, quartzose, F-crs. scat. cht. & qtz peb. sub-rnd - sub ang. quite a mixture of lithology, more dolo. hard, brn.

OLNEY'S WELLITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H B et al Willow Lake A-27A

KB 1027 ft.

DEPTH		DESCRIPTION
From	To	
2630	2640	Sh. v. dk. gry, brn, sl. dolo., rough texture in part - Ss. qtz, f-crs fair porosity
2640	2650	Ss. qtzose, f-v. crs, qtz, peb. fair - good porosity
2650	2660	Ss. as above, plus v.f - f. Ss. grey & L.T. gry, shaly in part, tighter.
2660	2670	Ss. qtz, v.f - v. crs qtz, peb. frosted. Fair porosity.
2670	2680	Ss. as above, plus Ss. qtzose, tgt, siliceous, dolomite, dk. brn, sl. arg. (= mixture) Anhy. red iron stain, some green.
2680	2690	Ss. reddish - brn, v.f, hard, as above
2690	2700	Ss. reddish & greenish, v.f, siliceous, hard.
2700	2710	As above, some ironstone, dk. shales. Gross sample becomes darker.
2710	2720	As above, plus eroded granite? Siliceous shales, sndy.
2720	2730	Granite, eroded, reddish - dk gry. Feldspar in granite appears weathered Pre-Cambrian @ 2720'
2730	2740	As above - qtz & hornblend? - blk. material appears somewhat weathered.
2740	2750	As above - feldspar??
2750	2760	As above
2760	2770	As above
2770	2780	As above
2780	2790	As above
2790	2800	Ss. gry. lt. grn, vf - f, siliceous. Sh. dk grn gry, siliceous, hard for a shale. (Gross sample grn gry)

SECTION 111

DRILL-STEM TEST DATA

Well Name: HUSKY BY AL WILLOW LAKE	Test No: ONE
Well Number: 0-27-4	Zone Tested: NEED
Company: HUSKY OIL LIMITED	Interval: 1190 - 1243
Comp. Rep: GORDON SYMON	Date: PED. 3, 1970
TED MILLER	Tester: L. PETERSEN

Type of Test: **INITIAL B. TEST** B.F.S. Test No: **101**

Pressure: **6** mm Hg **50** mm Hg **50** mm Hg **60** mm Hg

Specify Inside or Outside	INS. SEC. No. 2227	OUT. SEC. No. 2015	SEC. No.
	1600 RANGE 12 NO. CLOCK	5750 RANGE 12 NO. CLOCK	RANGE NO CLOCK
DEPTH	1190	1206	
Initial Hydro Mud Press	579	586	
Initial Shut In Press	23	32	
Initial Flow Press	23	32	
Final Flow Press	26	32	
Final Shut In Press	23	30	
Final Hydro Mud Press	576	586	

Mud Drop: **ELL** Fluid Loss: **92** Mud Weight: **92**
 Viscosity: **35** Temperature: **75** Net Pay Tested: **50**
 Top Packer Depth: **1190'** Bottom Packer Depth: **1243'** Total Depth: **1243'**
 Drill Pipe Size: **4 1/2" PH** Wt: **16.6** Drill Collar ID: **2 7/8"** Pi Pin: **446**
 Surface Choke Size: **8"** Bottom Choke Size: **8"** Main Hole Size: **8 1/2"**
 Anchor Size: **4 1/2" OD** Bar Hole Size: **7 1/2"** Feet of Bar Hole: **7 1/2"**
 Cushion Amount: **7 1/2"** Type: **7 1/2"** Rubber Size: **7 1/2"**

Fluid Recovery Total feet: **ELL**
 Recovered: **Feet of**
 Recovered: **Feet of** **FLUID LEVEL UP TO JUST BELOW SAMPLER - NEED-**
 Recovered: **Feet of**
 Recovered: **Feet of**
 Recovered: **Feet of**

Gas Recovery: **How Measured:** **Bar size**

mm	Temp: 7	Press: 80	Orifice Size: 11	MCY/Day
mm	Temp: 7	Press: 80	Orifice Size: 11	MCY/Day
mm	Temp: 7	Press: 80	Orifice Size: 11	MCY/Day
mm	Temp: 7	Press: 80	Orifice Size: 11	MCY/Day
mm	Temp: 7	Press: 80	Orifice Size: 11	MCY/Day
mm	Temp: 7	Press: 80	Orifice Size: 11	MCY/Day

Shut Off Time for Drill Pipe: **---**

REMARKS: **PREFLUX VERY SMALL. TEST PERIOD V.F. SMALL (SHUTTER) AIR BLow - FUMES IN 10 MIN. - NO INDICATION OF BLow.**

BJ

21

TRUCK SURVEY

45 LANDING SUR	_____
45 CHARGED	_____
45 TONN ON P.D. SUR	_____
CO SUR	1.00
DRY IN TONN	5.00
S.F.S. No. 101	3.25
S.F.S. No.	_____
WINDMILL TONN	7.00
AND	6.00
RECOVERED No.	_____
RECOVERED No.	_____
SURVEY ADJUST	1.75
OF P.D. SUR	_____

1. PAVED SURF 1186

PAVED 6.00

2. PAVED SURF 1190

PAVED 5.00

TOTAL SURF ADJUST 11.00

ADJUSTED SURF 1.00

PAVED 6.00

PAVED 5.00

PAVED 5.00

PAVED 5.00

PAVED 5.00

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TOTAL SURF 1263

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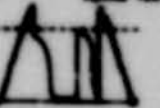
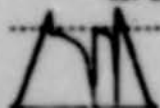
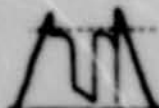
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TOTAL SURF 57.50

TOTAL SURF 57.50



1. HIGH PERMEABILITY, STRONG DAMAGE EFFECT
 2. HIGH PERMEABILITY, NO DAMAGE EFFECT
 3. MEDIUM PERMEABILITY, STRONG DAMAGE EFFECT
 4. MEDIUM PERMEABILITY, NO DAMAGE EFFECT
 5. LOW PERMEABILITY, STRONG DAMAGE EFFECT
 6. LOW PERMEABILITY, NO DAMAGE EFFECT

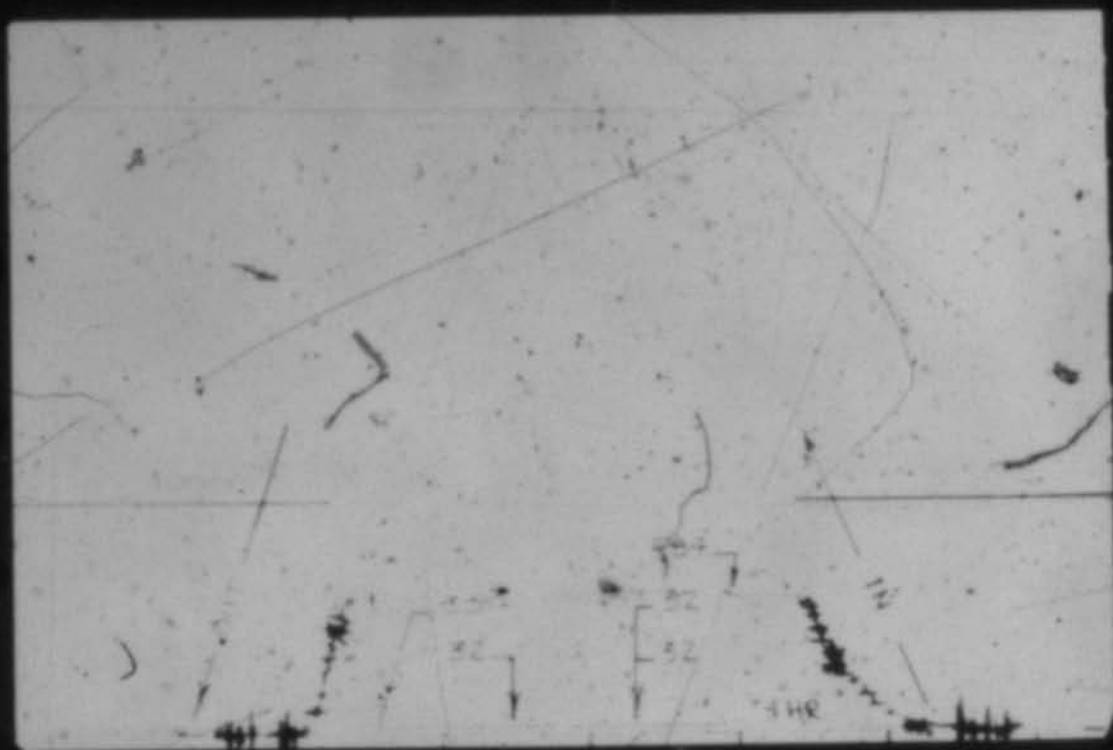
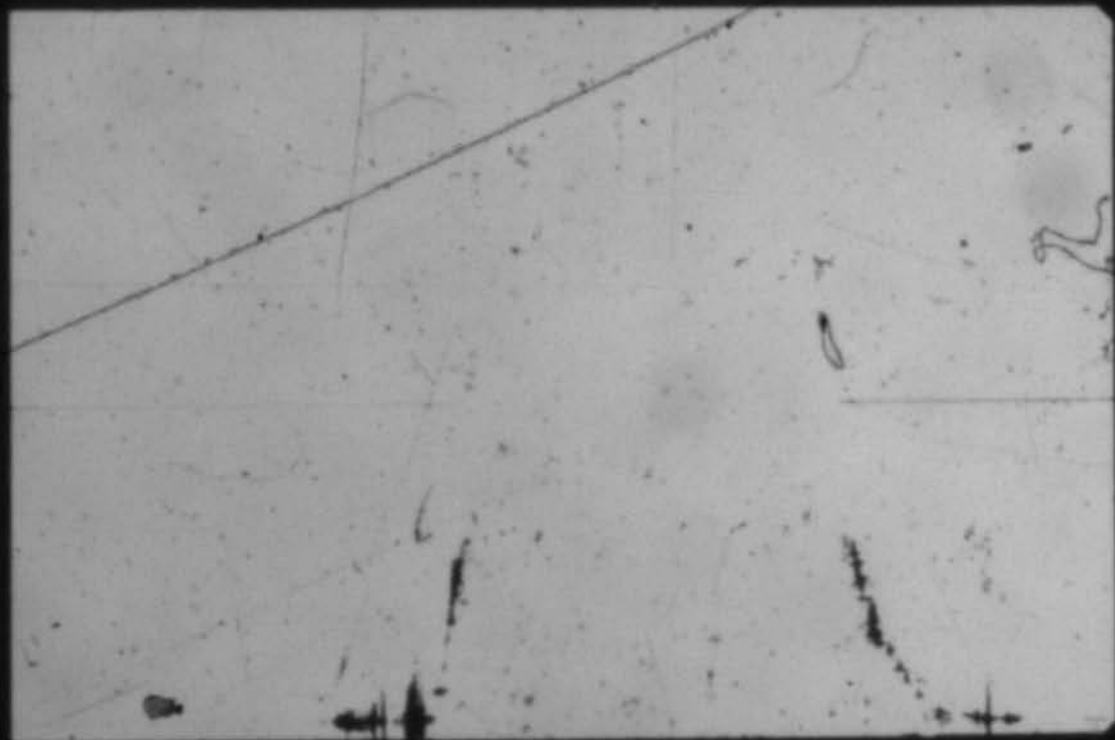


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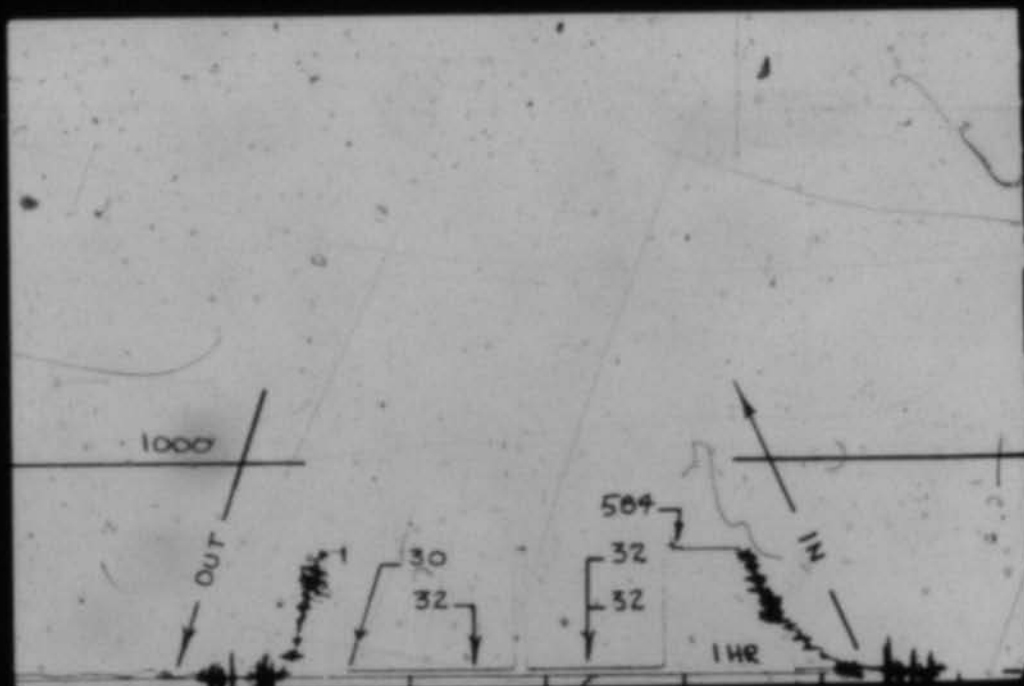
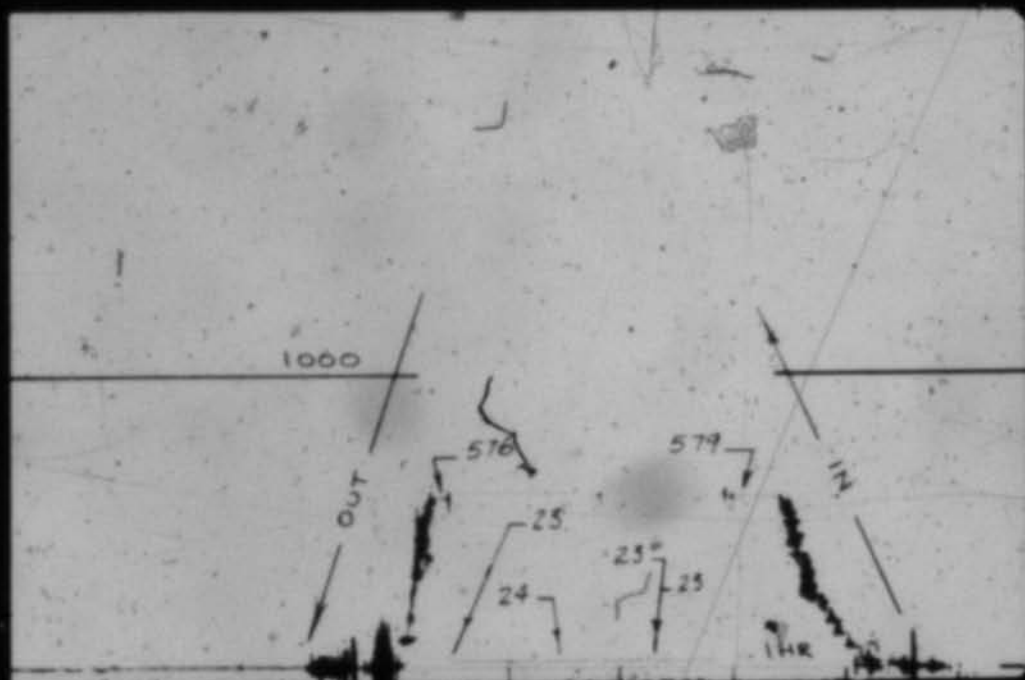
Recorder No. 2277

Depth 1198

Pulse	INITIAL GIP				FINAL GIP			
	Time Shift	T + 0	T + 0 5	PSD	Time Shift	T + 0	T + 0 0	PSD
1	0			23	0			23
2	5			23	5			23
3	10			23	10			23
4	15			23	15			23
5	20			23	20			23
6	25			23	25			23
7	30			23	30			23
8					35			23
9					40			23
10					45			23
11					50			23
12					55			23
13					60			23
14								
15								
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19								
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21								
22								
23								
24								



POOR COPY





DRILL-STEM TEST DATA

Well Name: <u>W-2-4</u>	Test No: <u>101</u>
Well Number: <u>W-2-4</u>	Zone Tested: <u>Upper Rinning</u>
Company: <u>Husky Oil Limited</u>	Interval: <u>2016.1 - 2017.1</u>
Comp. Rep: <u>Glen Robertson</u>	Date: <u>Feb. 9, 1970</u>

Type of Test: Flow Bottom Open B.F.S. Test No: 101

Pressure: 3 min. (5) 30 min. Flow: 45 min. (75) 60 min.

Specify Inside or Outside	IN. REC. No. <u>2017</u>	OUT. REC. No. <u>2015</u>	ST. No.
	<u>3600</u> RANGE <u>12</u> HE. CLOCK	<u>5750</u> RANGE <u>12</u> HE. CLOCK	RANGE <u>12</u> HE. CLOCK
DEPTH	<u>2061</u>	<u>2066</u>	
Initial Hydro Mud Press	<u>1126</u>		
Initial Shut-in Press	<u>72</u>	<u>38</u>	
Initial Flow Press	<u>60</u>	<u>48</u>	
Final Flow Press	<u>45</u>	<u>35</u>	
Final Shut-in Press	<u>105</u>	<u>35</u>	
Final Hydro Mud Press	<u>1126</u>		

Mud Drop: Nil Fluid Loss: 12.6 Mud Weight: 2.6

Viscosity: 31 Temperature °F: 70 Test Poy Tested: 52

Top Packer Depth: 2016.1 Bottom Packer Depth: 2017.1 Taper Depth: 2017.1

Drill Pipe Size: 4.5" F.H. Wt: 16.6 Drill Collar ID: 2.75" Ft. Run: 526

Surface Choke Size: 2" valve Bottom Choke Size: 1" Main Hole Size: 3.5"

Anchor Size: 4.5" OD Bar Hole Size: 6.3/16" Feet of Bar Hole: 60

Cushion Amount: None Type: None Rubber Size: 7.5"

Fluid Recovery Total Feet: 30.7 Drilling Mud

Recovered: Feet of

Recovered: Feet of

Recovered: Feet of

Recovered: Feet of

Recovered: Feet of

Gas Recovery: How Measured Riser size

mins	Temp. °F	Press. Sdg.	ps	Orifice Size	=	MCF/Day
mins	Temp. °F	Press. Sdg.	ps	Orifice Size	=	MCF/Day
mins	Temp. °F	Press. Sdg.	ps	Orifice Size	=	MCF/Day
mins	Temp. °F	Press. Sdg.	ps	Orifice Size	=	MCF/Day
mins	Temp. °F	Press. Sdg.	ps	Orifice Size	=	MCF/Day
mins	Temp. °F	Press. Sdg.	ps	Orifice Size	=	MCF/Day

Shut Off Time for Drill Pipe: 35 min.

REMARKS: Weak preflow. Very weak air blow during test period, decreasing to nil in 35 min. Shut after 35 min. Flow. Very weak air blow, shut in 5 min.



TESTING REPORT

	45 LANDING SUB		
	45 CHAMBER		
	45 TOOL OR P.O. SUB		
	CO SUB	1.00	
	SHUT IN TOOL	5.00	
	S.F.S. IN 101	3.75	
	S.F.S. IN		
	HYDRAULIC TOOL	7.00	
	LAST LOG	6.00	
	RECORDED IN		DEPTH
	RECORDED IN		DEPTH
	SAFETY JOINT	1.75	
	BY PASS SUB		
1. PACKER DEPTH 2230	PACKER	6.00	
2. PACKER DEPTH 2236	PACKER	5.00	TOTAL TOOL ABOVE INTERVAL 35.00
		1.00	
	ANCHOR—SPECIFY		
	Parl	36.00	
	SLAVE OFF OR BY PASS SUB		
	RECORDED IN 2227	5.00	DEPTH 2261
3. PACKER DEPTH	PACKER		TOTAL INTERVAL 67.00
4. PACKER DEPTH	PACKER		
	ANCHOR—SPECIFY		
	RECORDED IN 2015	5.00	DEPTH 2266
	Parla	30.00	
TOTAL DEPTH 2303	BALLOON	2.00	TOTAL TAP PIPE 67.00
			TOTAL TEST TOOL 102.00

KEY CHARTS FOR COMPARATIVE VISUAL ANALYSIS



5

HIGH PERMEABILITY STRONG DAMAGE EFFECT HIGH PERMEABILITY NO DAMAGE EFFECT MEDIUM PERMEABILITY STRONG DAMAGE EFFECT MEDIUM PERMEABILITY NO DAMAGE EFFECT LOW PERMEABILITY STRONG DAMAGE EFFECT LOW PERMEABILITY NO DAMAGE EFFECT

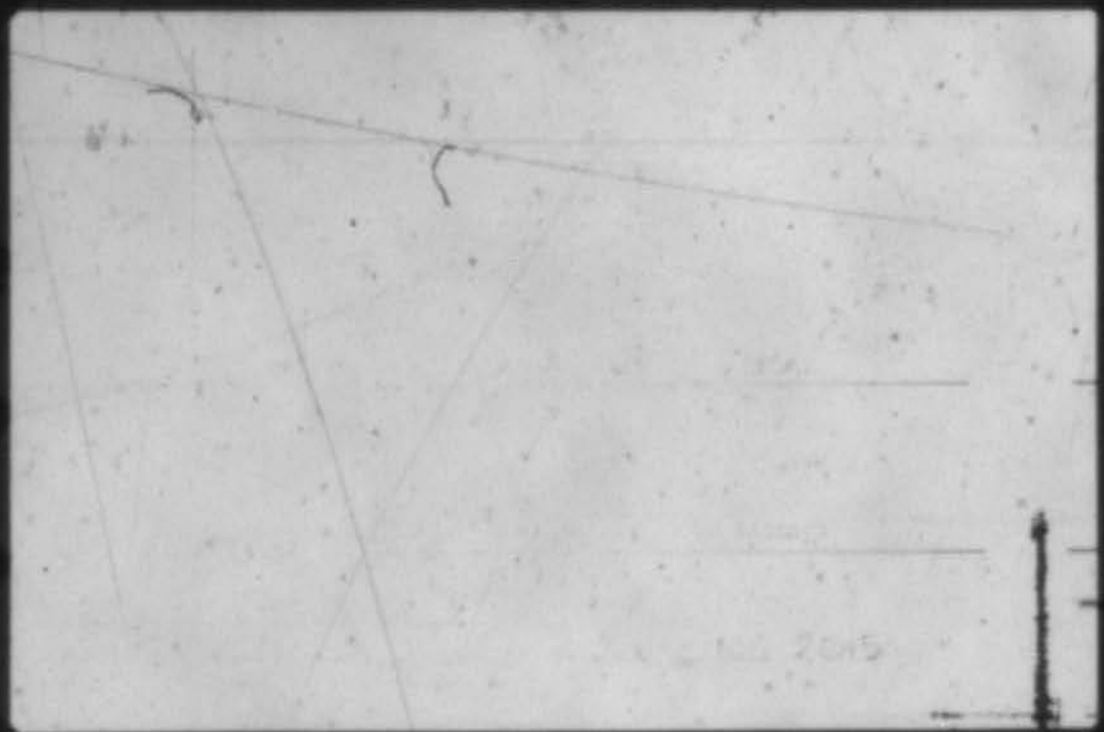
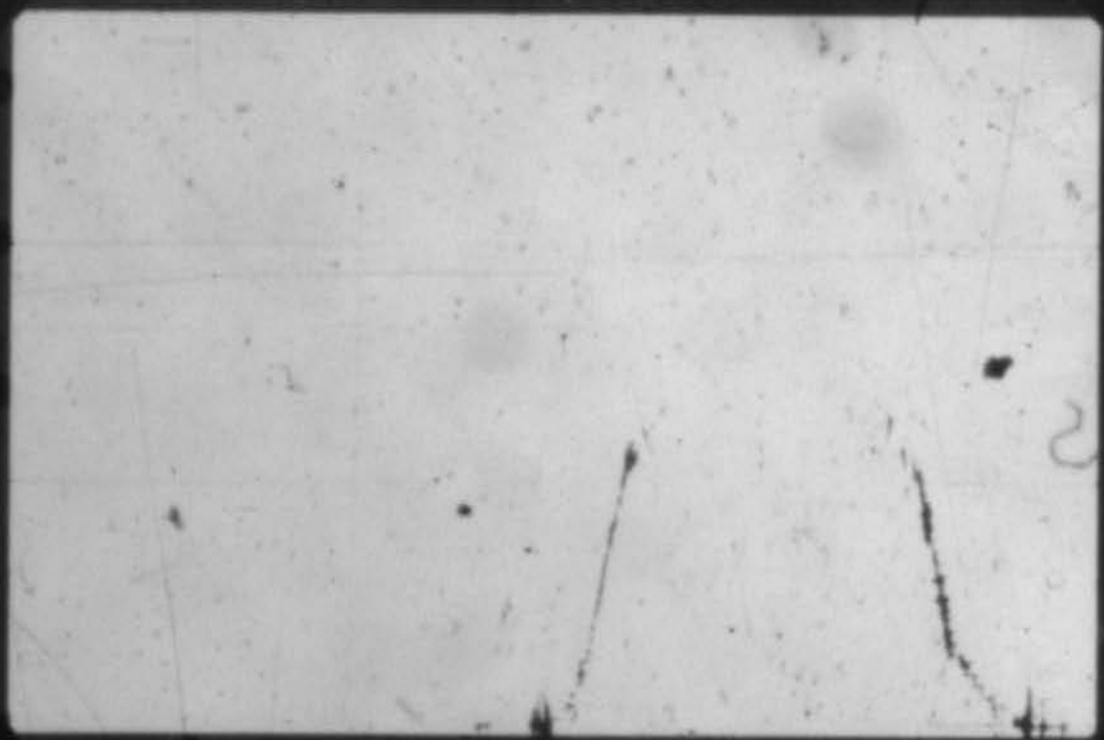


DST PRESSURE INCREMENTS

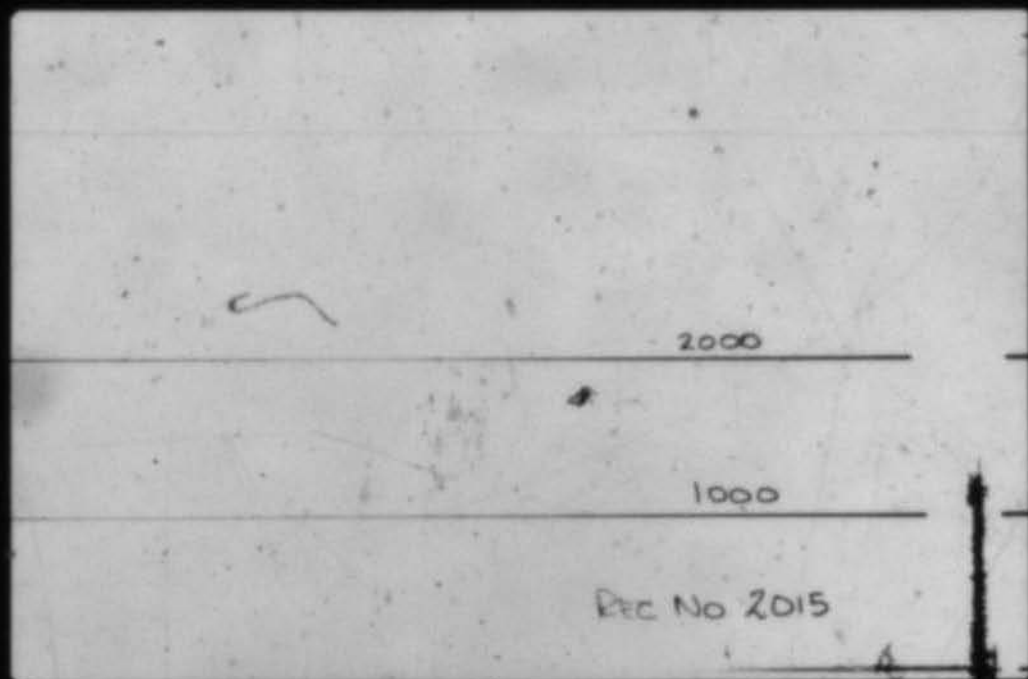
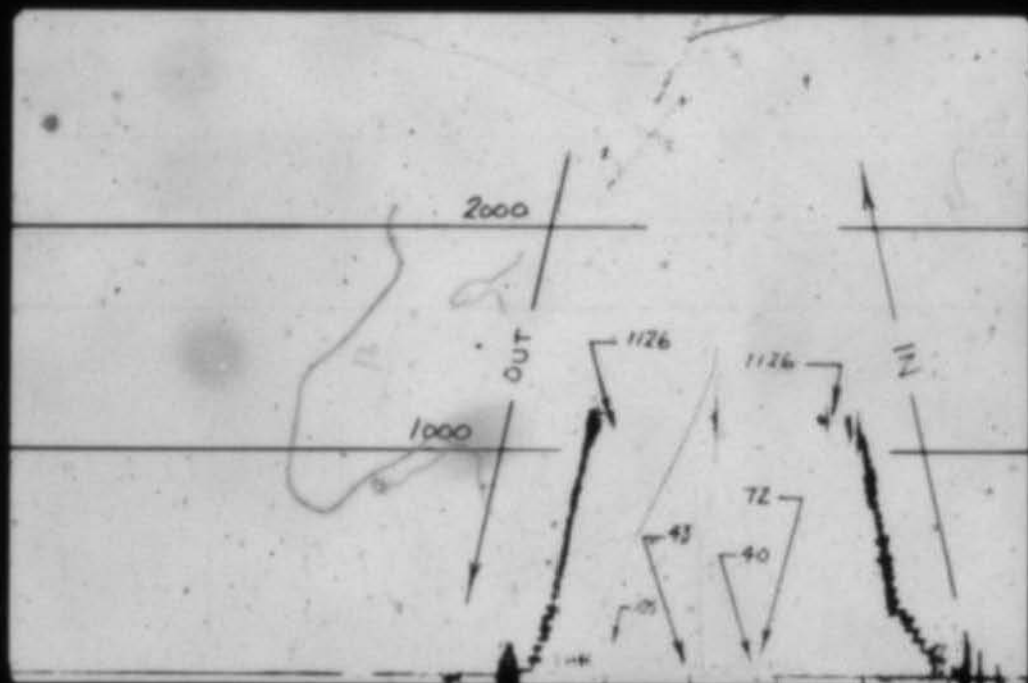
Recorder No. 2227

Depth 2261

Piston	INITIAL CIP				FINAL CIP			
	Time Bulb	T + 0	$\frac{T + 0}{0}$	PSIG	Time Bulb	T + 0	$\frac{T + 0}{0}$	PSIG
1	0			36	0			43
2	5			41	5			48
3	10			49	10			55
4	15			56	15			61
5	20			62	20			68
6	25			68	25			73
7	30			72	30			79
8					35			86
9					40			91
10					45			96
11					50			101
12					55			106
13								
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REC NO 2015

DRILL-STEM TEST DATA

Well Name	HB Husky/El Al Willow Lake	Test No.	3
Well Number	0m27nd	Zone Tested	Running 48 Packer-Blow
Company	Husky Oil Limited	Interval	2480' - 2522'
Comp. Rep.	G. Robertson	Tester	G. Guzman
		Date	Feb. 12, 1970

Type of Test Dual Bottom Hole B F S Tool No. 101

Preflow 3 min. IS 25 min. Flow A A A min. FS 25 min.
Reset 20 min.

Specify Inside or Outside	INS. SEC. No. 2227	OUT. SEC. No. 2015	SEC. No.
	3600' BAND 12 HR. CLOCK	5750' BAND 12 HR. CLOCK	BAND HR. CLOCK
DEPTH	2463	2505	
Initial Hydro Mud Press	1235	1261	
Initial Shut-in Press	985	1006	
Initial Pipe Press	986	1006	
Final Pipe Press	985	1015	
Final Shut-in Press	996	1020	
Final Hydro Mud Press	1243	1269	

Mud Drop Fluid Loss 9.6 Mud Weight 9.6
Viscosity 38 Temperature °F 82 Heat Pay Tested
Top Packer Depth 2474' Bottom Packer Depth 2480' Total Depth 2522'
Drill Pipe Size 4.8 FH Wt 16.5 Drill Collar I.D. 2 7/8" Ft / Ton 534
Surface Choke Size CLOSED Bottom Choke Size 5/8" Main Hole Size 8 1/4
Anchor Size 62 Bit Hole Size Feet of Bit Hole
Cushion Amount Type Rubber Size 7 1/2"

Fluid Recovery Total Feet 760
Recovered 90 Feet of Drilling Mud
Recovered 650 Feet of Mud Out Salt Water
Recovered Feet of
Recovered Feet of
Recovered Feet of

Gas Recovery How Measured Bar size
min. Temp. °F Press Bdg psi Orifice Size MCF / Day
min. Temp. °F Press Bdg psi Orifice Size MCF / Day
min. Temp. °F Press Bdg psi Orifice Size MCF / Day
min. Temp. °F Press Bdg psi Orifice Size MCF / Day
min. Temp. °F Press Bdg psi Orifice Size MCF / Day
min. Temp. °F Press Bdg psi Orifice Size MCF / Day

Bleed Off Time for Drill Pipe Preflow Nil.

REMARKS Tool opened w/weak blow, increasing to med. died upon closing tool (no bleed off). Reopened w/no blow. Left open from 7:38 - 7:45. Suspect tool plugged. Pulled free, filled hole opened Hyd. tool, no blow. Closed tool for final shut-in & pulled free. Concluded that due to extra stick up on string test was 16' high (bridged).

A Core Lab Gas Cont. No. Chem. Gas Lab Gas Cont. No.

AS LANDING ROD _____
 AS CHANGED _____
 AS TESTED FOR P.D. ROD _____ 1.00
 CO ROD _____ 1.00
 SHUT IN ROD _____ 5.50
 S.F.A. No. 101 _____ 3.80 Depth 2445
 S.F.A. No. _____
 HYDRAULIC TOOL _____ 7.20
 JAW Loss. Set. _____ 6.00
 RECORD NO. 2227 _____ 5.00 DEPTH 2443
 RECORD NO. _____ DEPTH _____
 SAFETY ADJUST _____ 1.75
 BY PAGES END _____

1. PAGES DEPTH 2474

PAGES 74" _____ 6.00

PAGES DEPTH 2480

PAGES 74" _____ 5.00 TOTAL TOOL ABOVE INTERVAL 62.25

ANCHOR-SPICY _____ 1.00

Perfa _____ 21.00

BLANK OFF END BY PAGES END

RECORD NO. _____ DEPTH _____

2. PAGES DEPTH

PAGES _____ TOTAL INTERVAL 61.85

4. PAGES DEPTH

PAGES _____

ANCHOR-SPICY _____

RECORD NO. 2015 _____ 5.00 DEPTH 2505

Perfa _____ 10.00

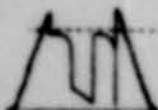
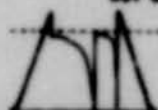
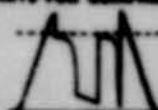
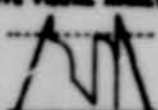
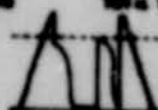
TOTAL DEPTH 2522

BALANCE _____ 2.85

TOTAL TOOL ROD 61.85

TOTAL ROD TOOL 61.10

DUTY CHARTS FOR COMPARATIVE VISUAL ANALYSIS


HIGH PERMEABILITY
STRONG DAMAGE EFFECT

HIGH PERMEABILITY
NO DAMAGE EFFECT

MEDIUM PERMEABILITY
STRONG DAMAGE EFFECT

MEDIUM PERMEABILITY
NO DAMAGE EFFECT

LOW PERMEABILITY
STRONG DAMAGE EFFECT

LOW PERMEABILITY
NO DAMAGE EFFECT

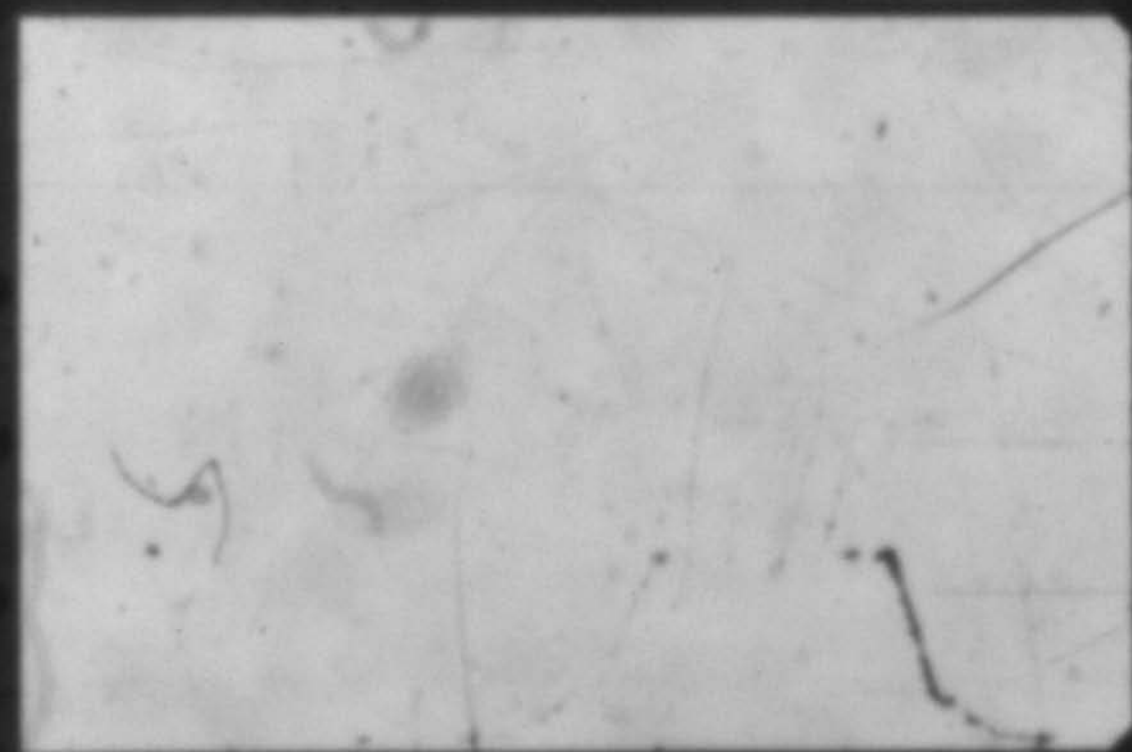
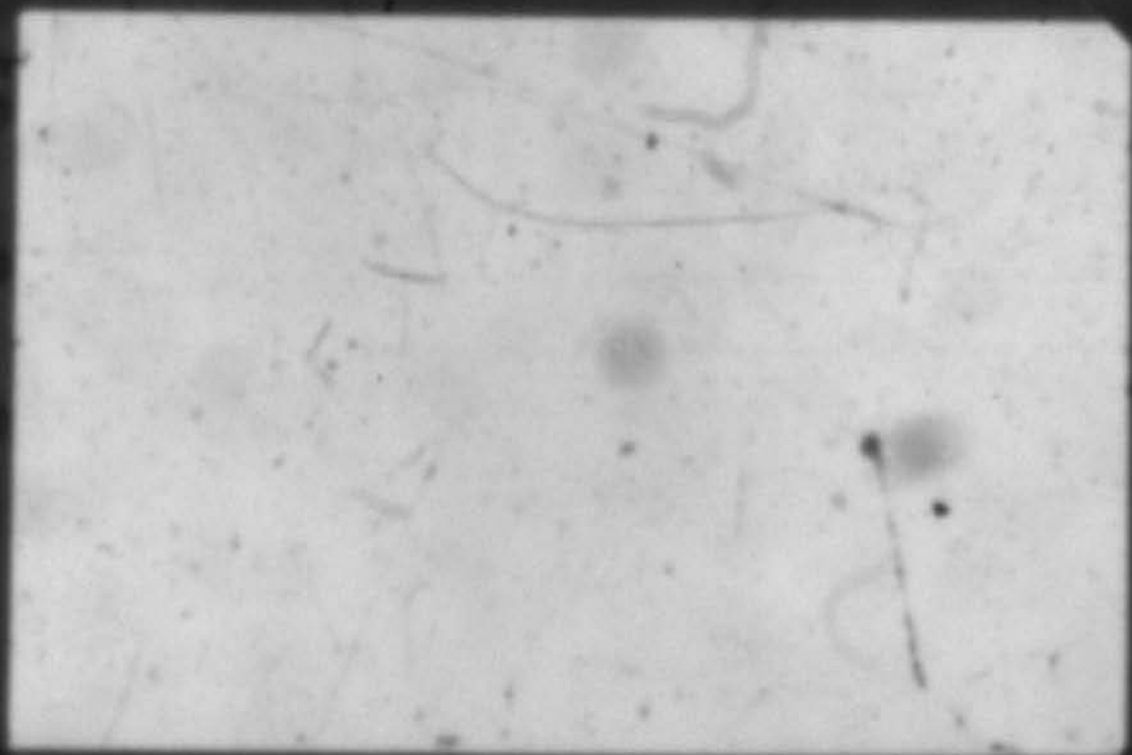


DST PRESSURE INCREMENTS

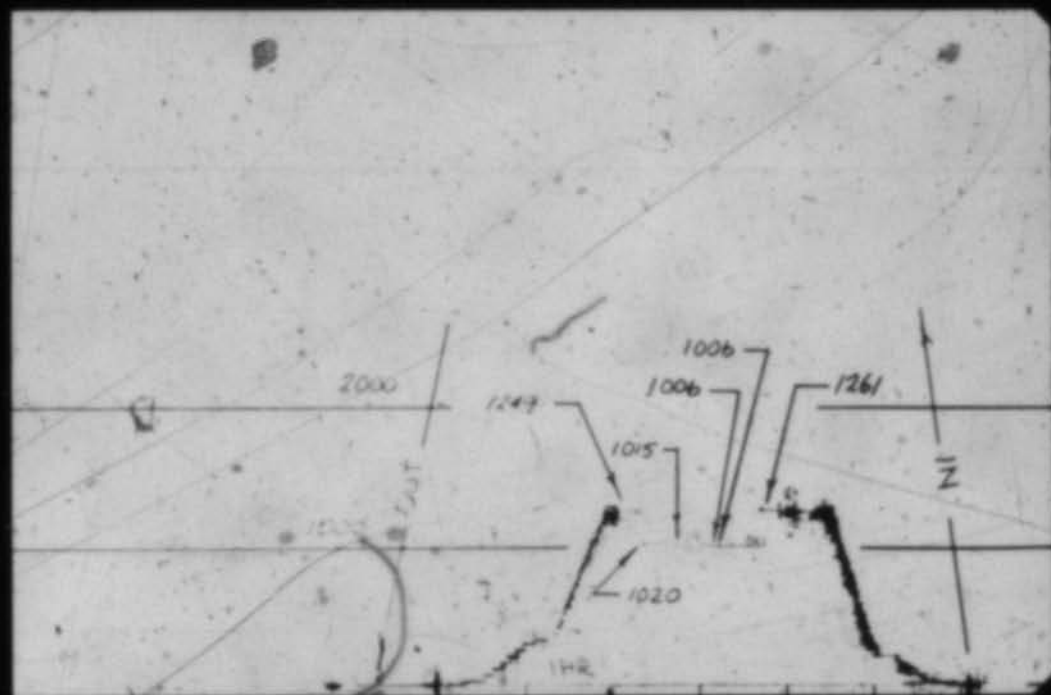
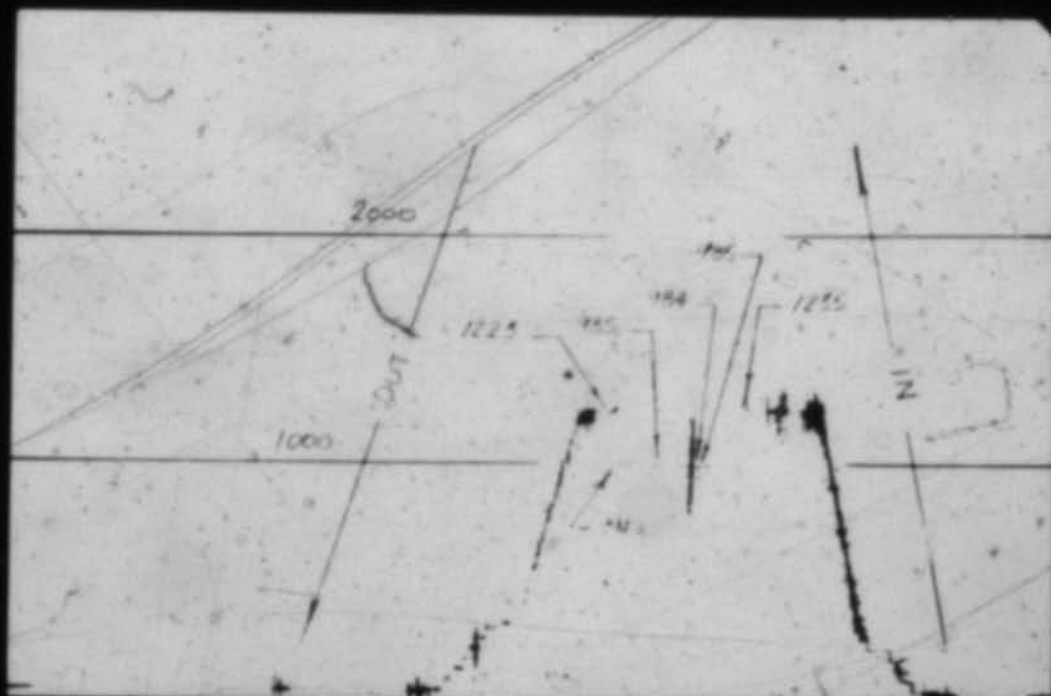
Recorder No. 2227

Depth 2463

Piston	INITIAL CIP				FINAL CIP			
	Time Bell	T + 0	T + 0 0	PSI	Time Bell	T + 0	T + 0 0	PSI
1	0			985	0			985
2	5			985	5			1007
3	10			985	10			1001
4	15			985	15			998
5	20			985	20			995
6	25			985	25			996
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DRILL-STEM TEST DATA

Well Name	Paddy/H. Al Willowlake		Test No.	1	
Well Number	D-07-04		Zone Tested	1. Penning 04	
Company	Husky Oil Limited		Interval	2506' - 2508'	
Comp. No.	Robertson	Tester	G. G. G. G.	Date	Feb. 13/70

Type of Test	Drill Bottom Hole	WTS Test No.	101
Pressure	4	Time	29
Flow Rate	59	Flow Rate	60

Specify Inside or Outside	INCH. WTS. NO. 2207	INCH. WTS. NO. 2015	INCH. WTS. NO. 2015
	3600' RANGE 12' WTS. 1000'	5750' RANGE 12' WTS. 1000'	5750' RANGE 12' WTS. 1000'
DEPTH	2489	2517	2517
Initial Hydro. Mud Press.	1250	1256	1256
Initial Shut-in Press.	1007	1017	1017
Initial Flow Press.	786	944	944
Final Flow Press.	1000	1000	1000
Final Shut-in Press.	1007	1003	1003
Final Hydro. Mud Press.	1246	1250	1250

Mud Drop	NIL	Fluid Loss	2.2	Mud Weight	9.6
Viscosity	44	Temperature	82	Test Pore Tested	18'
Top Packer Depth	2500'	Bottom Packer Depth	2506'	Total Depth	2504'
Drill Pipe Size	4 1/2" PH	Wt 16.6	Drill Collar ID	2 7/8"	Fr. Run 534
Surface Choke Size	Adjustable	Bottom Choke Size	5/8"	Main Hole Size	32"
Anchor Size	44"	Bar Hole Size		Feet of Bar Hole	
Cushion Amount		Type		Rubber Size	7 1/2"

Fluid Recovery Total Feet	1956
Recovered	160 feet of Mud Cut Salt Water Slightly. Gas Cut
Recovered	1576 feet of Salt Water
Recovered	Feet of
Recovered	Feet of
Recovered	Feet of

Gas Recovery	How Measured	Flow size
Flow	Temp. 7	Press. 800
Flow	Temp. 7	Press. 800
Flow	Temp. 7	Press. 800
Flow	Temp. 7	Press. 800
Flow	Temp. 7	Press. 800
Flow	Temp. 7	Press. 800

Dead Oil Time for Drill Pipe	
------------------------------	--

WTS-403 Tool opened w/weak blow increasing to strong after 3 min. Bled off upon closing tool. Reopened w/weak blow increased to strong after 3 min. Bled off to very weak after 19 min. Dead after 23 min. Closed tool after 1 hr. flow period. Pulled loose.

Core Lab Gas Cont. No.	Chem. Geo Lab Gas Cont. No.
------------------------	-----------------------------

BJ

33

TESTING REPORT

	45 LANDING SUB		
	45 CHAMBER		
	45 TORN ON P.O. SUB	1.00	
	CO SUB	1.00	
	BOLT IN TORN	5.70	
	S.F.S. No. 101	3.80	
	S.F.S. No.		
	HYDRAULIC TORN	7.20	
	455 Loe	6.00	
	RECORDED No. 2027	5.00	DEPTH 24.00
	RECORDED No.		DEPTH
	SAFETY ARM	1.75	
	BY PAGE SUB		
1. PACE DEPTH 2500	PACE 71	6.00	
2. PACE DEPTH 2506	PACE 71	5.00	TOTAL ROCK ABOVE INTERVAL 11.75
	ANCHOR-SPECIFY	1.00	
	Perfa	9.00	
	BLAKE OFF OR BY PAGE SUB		
	RECORDED No.		DEPTH
3. PACE DEPTH	PACE		TOTAL INTERVAL 17.85
4. PACE DEPTH	PACE		
	ANCHOR-SPECIFY		
	RECORDED No. 2015	5.00	DEPTH 2517
TOTAL DEPTH 2521	BLINDS	2.85	TOTAL TAIL PIV 17.85
	DOT CHARTS FOR COMPARATIVE VISUAL ANALYSIS		TOTAL TEST TOOK 59.80

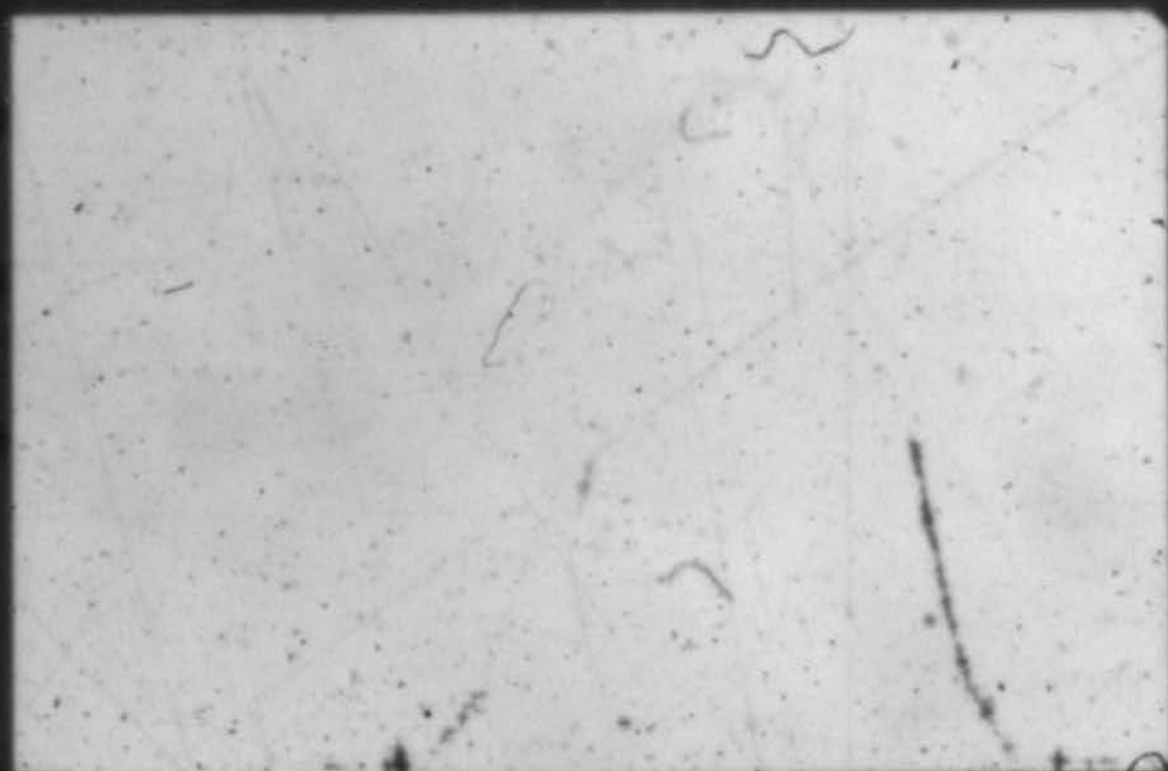


BJ**DST PRESSURE INCREMENTS**

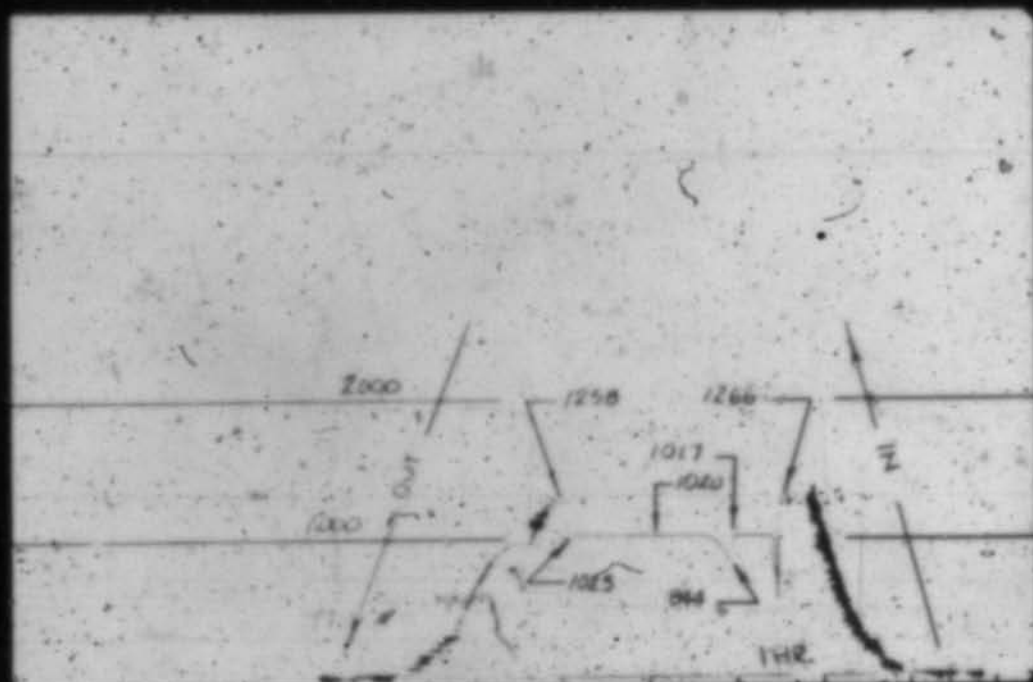
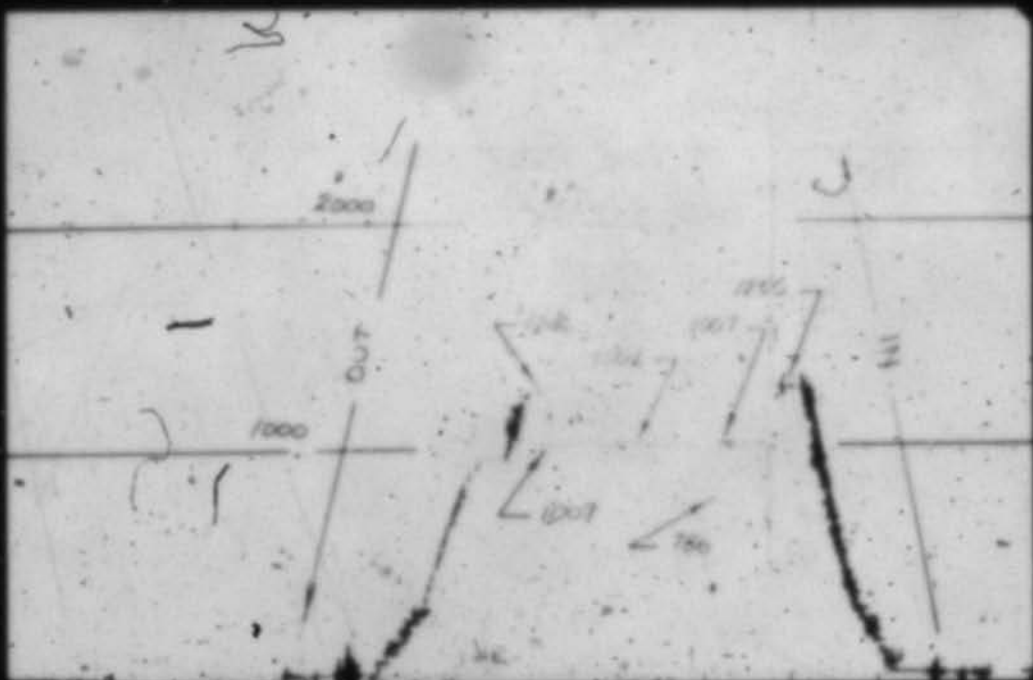
Recorder No. 2327

Depth 24.99

Index	INITIAL CIP				FINAL CIP			
	Time Bulk	T + 0	T + 0 0	PSIG	Time Bulk	T + 0	T + 0 0	PSIG
1	0			757	0			1007
2	5			1007	5			1007
3	10			1007	10			1007
4	15			1007	15			1007
5	20			1007	20			1007
6	25			1007	25			1007
7	29			1007	30			1007
8					35			1007
9					40			1007
10					45			1007
11					50			1007
12					55			1007
13					60			1007
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DRILL-STEM TEST DATA

Well Name	Husky HB et al Willowlake G-27A	Test No.	5
Well Number	G-27-A	Zone Tested	1. Renning ss
Company	Husky Oil Limited	Interval	2624' - 2660'
Comp. Rep.	G. Robertson	Tester	G. Oelreander
		Date	Feb. 20/70

Type of Test Dual Straddle Hy-Pass B F S Tool No 101

Pressure 11 min (5) 27 min Flow 60 min (5) 56 min

Specify Inside or Outside	INS. sec. no. 2227	OUT. sec. no. 2015	Hy-Pass no. 2660
	1000. range 12. 48. 0.000	5750. range 12. 48. 0.000	6400. range 24. 48. 0.000
DEPTH	2607	2653	2678
Initial Hydro Mud Press	1361	1379	1408
Initial Shut-in Press	1010	1029	
Initial Flow Press	43	69	
Final Flow Press	59	116	
Final Shut-in Press	986	1006	
Final Hydro Mud Press	1361	1379	

Mud Drop NIL Fluid Loss 10.3 Mud Weight 9.5
 Viscosity 65 Temperature °F Heat Flow Tested 36"
 Top Packer Depth 2624' Bottom Packer Depth 2660' Taper Depth 2920'
 Drill Pipe Size 4 1/2" PH Wt 16.6 Drill Collar ID 2 7/8" Ft Run 534
 Surface Choke Size Bottom Choke Size 5/8" Main Hole Size 8 1/2"
 Anchor Size 4 1/2 & 56 Bit Hole Size Fear of Bit Hole
 Cushion Amount Type Rubber Size 7 1/2"

Fluid Recovery Total Feet 150'
 Recovered 150 Feet of Mud
 Recovered Feet of
 Recovered Feet of
 Recovered Feet of
 Recovered Feet of

Gas Recovery How Measured Error size
 min Temp. 1 Press Edg. psi Orifice Size MCF/Day
 min Temp. 1 Press Edg. psi Orifice Size MCF/Day
 min Temp. 1 Press Edg. psi Orifice Size MCF/Day
 min Temp. 1 Press Edg. psi Orifice Size MCF/Day
 min Temp. 1 Press Edg. psi Orifice Size MCF/Day
 min Temp. 1 Press Edg. psi Orifice Size MCF/Day

Bleed Off Time for Drill Pipe

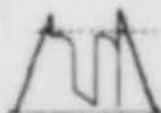
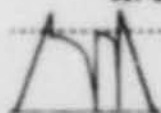
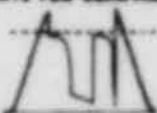
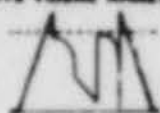
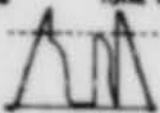
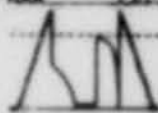
REMARKS: Tool opened w/no visible indication @ surface. Tool closed after 8 min.
 Reopened w/very weak blow, died slowly, dead after 20 min. with surface choke
 fully closed. (Valve on flare line closed also) Pulled free & came out of
 hole.



TESTING REPORT

	45 LANDING SUB		
	45 CHAMBER		
	45 TOOL ON P.O. SUB	1.00	
	CO SUB	1.00	
	SHUT IN TOOL	5.50	
	S.F.S. No. 1011	3.80	
	S.F.S. No.		
	HYDRA-VAC TOOL	7.20	
	LABS Brown	5.00	
	RECORDED No.	5.00	DEPTH 2607
	RECORDED No.		DEPTH
	SAFETY JOINT Brown	1.75	
	BY PASS SUB	1.00	
1. PACKER DEPTH 2618	PACKER 74"	4.00	
2. PACKER DEPTH 2674	PACKER 74"	5.00	TOTAL ROCK ABOVE INTERVAL 12.25
	ANCHOR-SPECIFY	1.00	
	Perfa	27.00	
		1.00	
	BLAME OFF ON BY PASS SUB		
	RECORDED No.	4.00	DEPTH 2653
3. PACKER DEPTH 2660	PACKER 74"	3.00	TOTAL INTERVAL 36.00
		3.00	
4. PACKER DEPTH 2668	PACKER 74"	6.00	
	ANCHOR-SPECIFY Perfa	8.00	
	RECORDED No. 2660	1.00	DEPTH 2674
	C.O. Sub.	1.00	
	Drill Collar	236.98	
	C.O. Sub.	1.00	
TOTAL DEPTH 2920	BULLMOSE 42	2.85	
	TOTAL TAIL PWS	259.79	
	TOTAL TEST TOOL	138.06	

DET CHARTS FOR COMPARATIVE VISUAL ANALYSIS

HIGH PERMEABILITY
STRONG DAMAGE EFFECTHIGH PERMEABILITY
NO DAMAGE EFFECTMEDIUM PERMEABILITY
STRONG DAMAGE EFFECTMEDIUM PERMEABILITY
NO DAMAGE EFFECTLOW PERMEABILITY
STRONG DAMAGE EFFECTLOW PERMEABILITY
NO DAMAGE EFFECT



DST PRESSURE INCREMENTS

Recorder No. 2227

Depth 2607

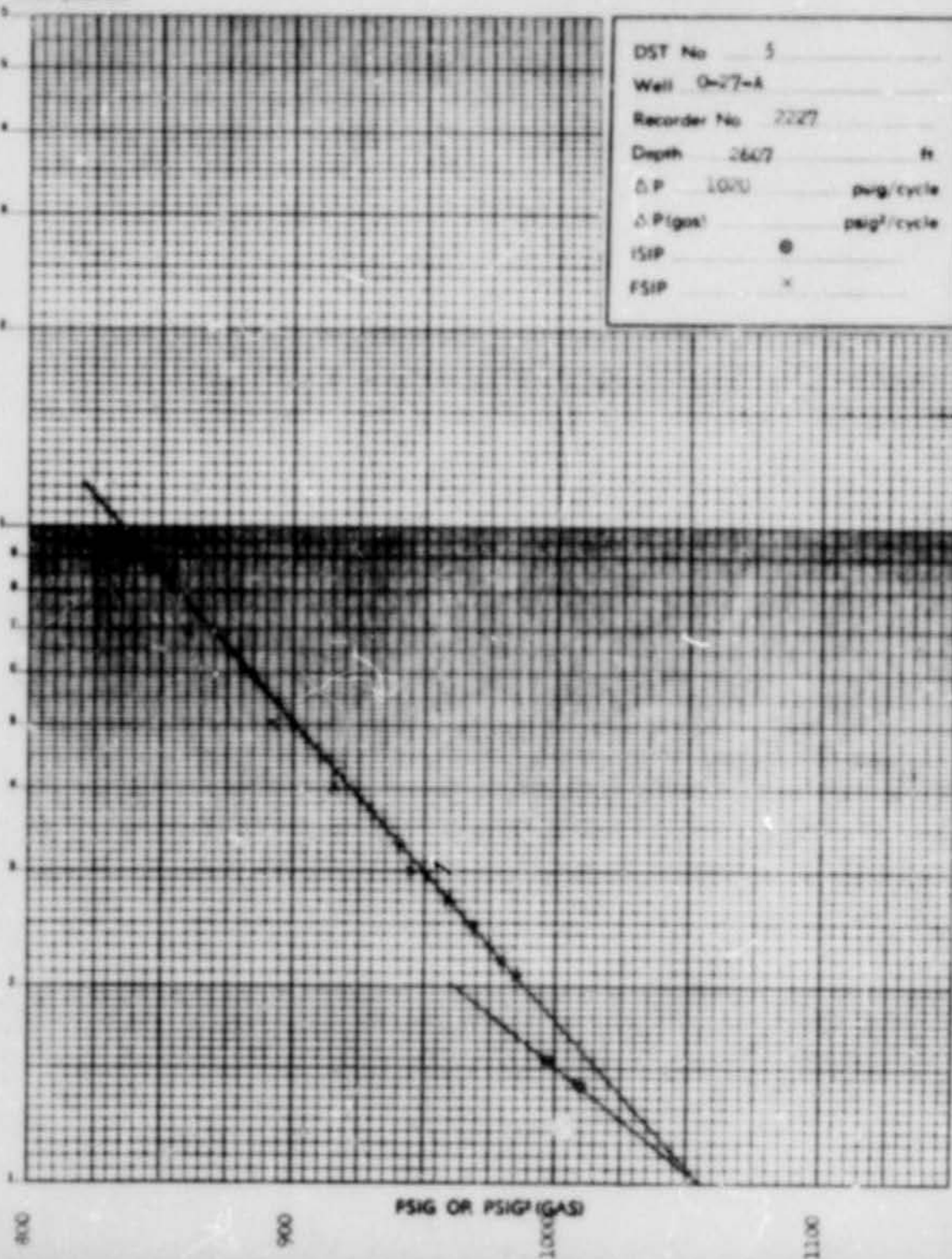
Points	INITIAL CIP				FINAL CIP			
	Time Surf.	T + 0	$\frac{T + 0}{0}$	PSIG	Time Surf.	T + 0	$\frac{T + 0}{0}$	PSIG
1	0			31	0			99
2	5			896	5			799
3	10			951	10			858
4	15			978	15			893
5	20			998	20			916
6	25			1007	25			934
7	27			1010	30			946
8					35			958
9					40			967
10					45			976
11					50			981
12					55			986
13					56			986
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TESTING REPORT

DST No. 5
Well O-27-A
Recorder No. 7227
Depth 2647 ft
 ΔP 1070 psig/cycle
 $\Delta P(\text{gas})$ psig²/cycle
ISIP @
FSIP x

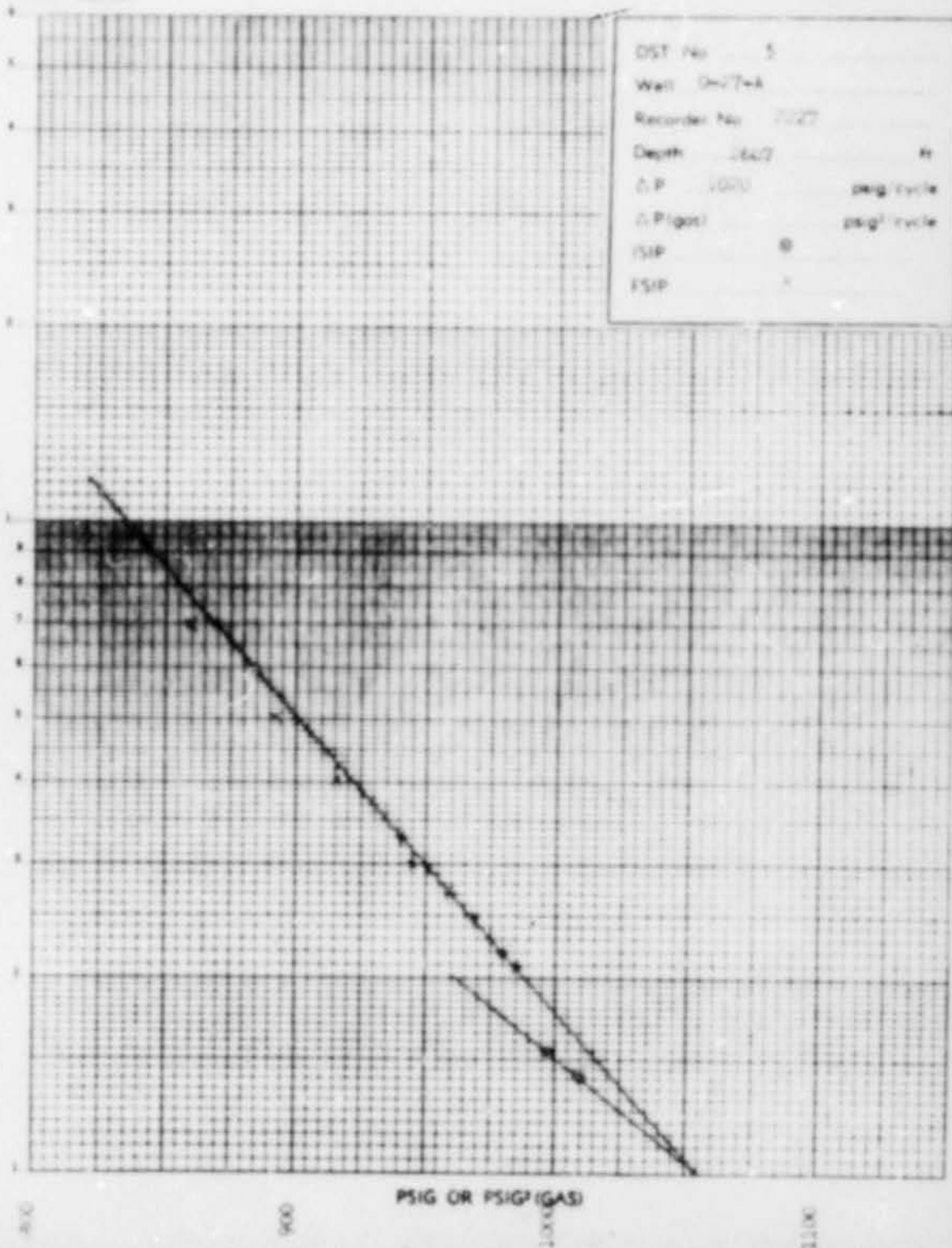
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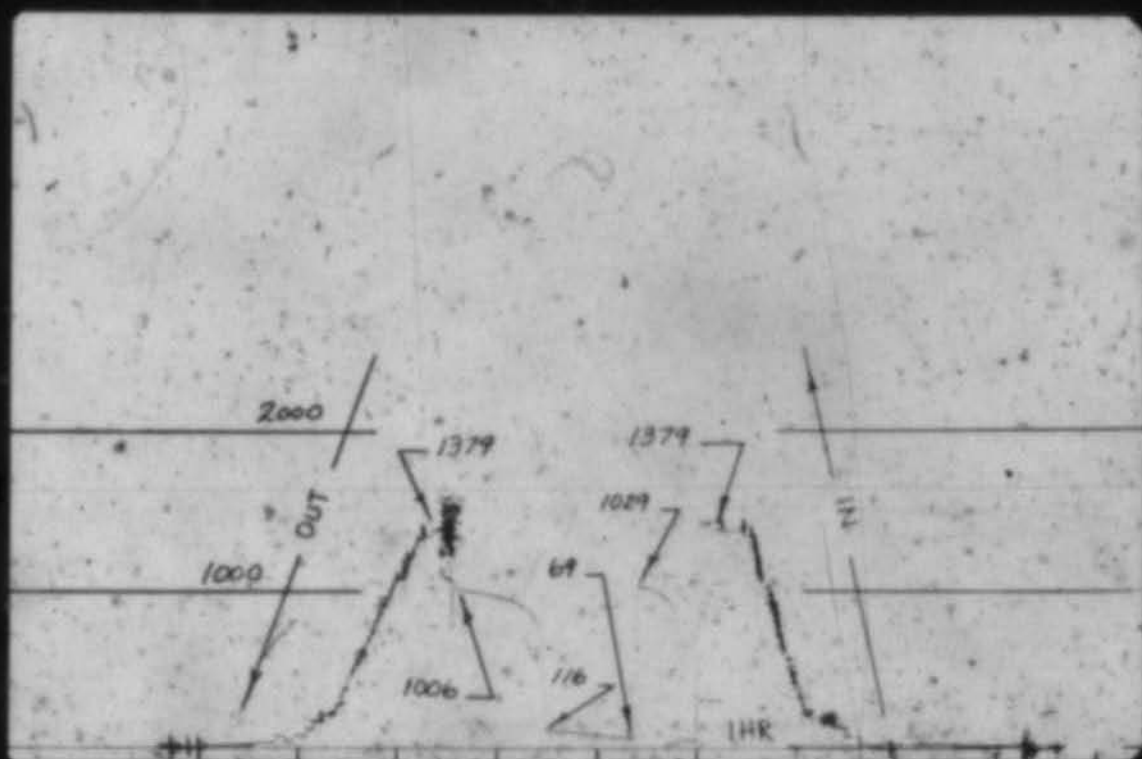




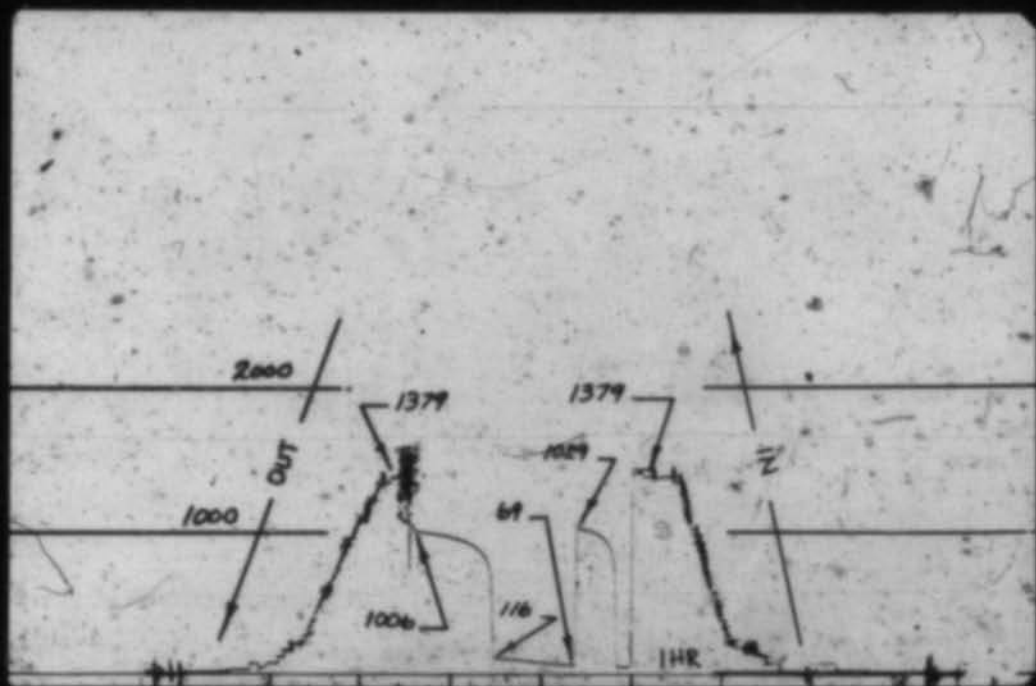
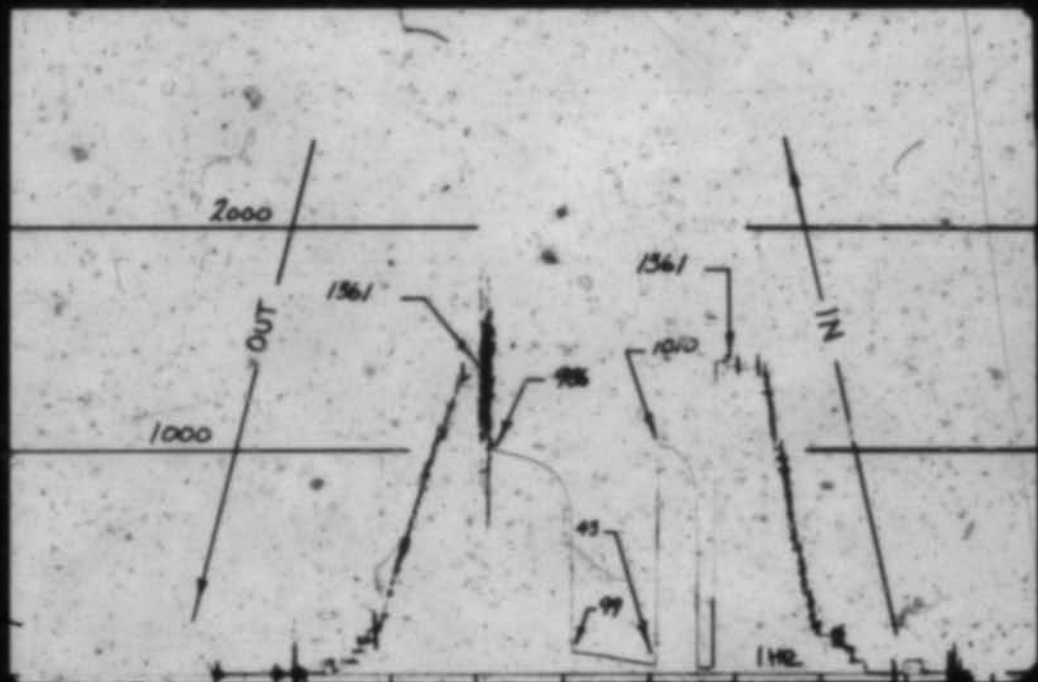
TESTING REPORT

DST No. 5
Well 0m27w-8
Recorder No. 7007
Depth 2642 ft
 ΔP 1000 psig/cycle
 $\Delta P(\text{gas})$ psig/cycle
ISIP @
FSIP *





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CASING RECORD

Two attempts were made to drill a well on this lease.

On the first well, Willowlake 0-27, 13 3/4" was drilled to 264 ft. K.B., 9 5/8" casing was landed at 260 ft. K.B. and cemented to surface. This casing was drilled out with 8 3/4" bits and glacial drift was encountered below the shoe. This strata took mud. Drilling was continued to 625 ft. K.B. but the lost circulation problem was so severe that a decision was made to abandon the hole. This was done and the rig was skidded 15 ft. east to the new location, numbered 0-27A.

As a result there are two surface casing records for this lease:

(1) Husky Willowlake 0-27

Ran 8 jts of new Mannesmann 9 5/8", 36#/ft., J-S, 8rd. ST&C casing. Landed, in 13 3/4" hole, at 260 ft. K.B.

Cemented by Howco w/225 sax of Oilwell plus 2% CaCl₂ in 15.5#/gal. slurry. Plug down w/1000 psi at 11:05 a.m., 24 January, 1970. Good returns to surface.

(2) Husky H.B. Willowlake 0-27A

Ran 13 jts of new Mannesmann, 9 5/8", 36#/ft., J-S, 8rd. ST&C casing. Landed in 13 3/4" hole at 409' K.B.

Cemented by Howco w/300 sax of Oilwell plus 2% CaCl₂ in 15.5#/gal. slurry. Plug down w/1000 psi at 6:15 p.m., 30 January, 1970. Good returns to surface.

MUD RECORD

(a) Types of Mud Used:

- (1) Surface Hole: water-gel
- (2) Main Hole: XC Polymer

(b) Mud Materials Used:

Hydrogel	396 sax
Salt Gel	7020 lbs.
Bi-Carb	300 lbs.
Caustic	1250 lbs.
CMC	850 lbs.
Lime	100 lbs.
Peltex	700 lbs.
Plaster	200 lbs.
SAPP	100 lbs.
CaCl ₂	600 lbs.
Starch	2250 lbs.
XC Polymer	750 lbs.
Dowicide B	100 lbs.
Chrome Alum	200 lbs.
Defoam	20 gals.
Sawdust	158 sax
Polyseal	3 sax
Cane Fiber	4 sax

Lost Circulation

Lost circulation was encountered in glacial drift, below the surface casing shoe, on Willow Lake 0-27. It took the form of a slow but steady seepage loss. The addition of L.C.M. did not completely stop the loss of mud. It was therefore decided to: plug and abandon this well w/cement, skid the rig to 0-27A and, run enough surface casing to cover this loss zone. This was done.

The new well, Willow Lake 0-27A, experienced some loss of mud in the glacial drift, encountered while drilling the surface hole, but the addition of LCM cured the problem. This well also experienced a minor loss of mud at 2492 H.K.B. in the Ronning Fm. Again, the addition of L.C.M. cured the problem.

DEVIATION RECORD

70 ft.	-	$1/2^3$
130 ft.	-	1
160 ft.	-	$3/4$
190 ft.	-	1
220 ft.	-	$3/4$
280 ft.	-	$3/4$
340 ft.	-	1
380 ft.	-	$3/4$
400 ft.	-	1
896 ft.	-	$3/4$
1198 ft.	-	$3/4$
1460 ft.	-	$3/4$
1660 ft.	-	2
1940 ft.	-	$4 \frac{1}{2}$
1970 ft.	-	5
2000 ft.	-	$4 \frac{1}{2}$
2062 ft.	-	$4 \frac{3}{4}$
2095 ft.	-	$5 \frac{1}{2}$
2124 ft.	-	5
2155 ft.	-	6
2184 ft.	-	$4 \frac{3}{4}$
2215 ft.	-	5
2255 ft.	-	$4 \frac{3}{4}$
2308 ft.	-	$5 \frac{1}{4}$
2369 ft.	-	$4 \frac{1}{4}$
2399 ft.	-	$4 \frac{1}{8}$
2429 ft.	-	$3 \frac{1}{2}$
2461 ft.	-	$3 \frac{3}{4}$
2920 ft.	-	$1 \frac{3}{4}$

SECTION IV

LOG RECORD

All logs listed were run by Schlumberger on February 19, 1970. Copies of all logs enclosed.

- (1) Gamma Ray - BHC Sonic;
2" & 5" scales; 2917 - 409 ft. K, B.
- (2) Dual Induction Laterlog;
2" & 5" scales; 2914 - 409 ft. K, B.
- (3) Sidewall Neutron Porosity Log;
2" & 5" scales; 2918 - 1100 ft. K, B.
- (4) Formation Density Log w/caliper;
2" & 5" scales; 2918 - 1100 ft. K, B.
- (5) Four Arm High Resolution Continuous Dipmeter (Computed);
2917 - 409 ft. K, B.
- (6) Directional Log (Computed);
2919 - 409 ft. K, B.

SECTION V

CORE ANALYSIS REPORT
of
CORE NO. 2

CORE LABORATORIES - CANADA LTD.

PAGE 1 OF 3
FILE CNP-4-5021
DATE REPORT MAR. 2/70
ANALYSTS BK. CC

COMPANY	MUSKY OIL LTD.
WELL	MUSKY MB ET AL
FIELD	WILDCAT, WILLOW LAKE AREA, N.W.T.
LOCATION	62 16' 48.00 N. LAT. 129 04' 21.20 W. LONG.
FORMATION	
DRILLING FLUID	O-27A
ELEVATION	
ANALYSIS	
REMARKS	

[illegible]

CORREC INTERVAL 2255 - 2300.4

CORE NO. 2 2255 - 2300.4 REC. 45.4 10 BOXES

[illegible]

CORE LABORATORY - CANADA LTD.

COMPANY HUSKY OIL LTD.
WELL HUSKY MB ET AL WILLOW LAKE 0-27A

PAGE 2 OF 3
FILE CNP-4-5021

SAMPLE NUMBER	INTERNAL REPRESENTED FEET		PERMEABILITY TO AIR MILLI DARCYS		PERMEABILITY FEET	FLUID TO FLUID	HYDROLYTIC FEET	DENSITY (G/CC)		SOLID EXAMINATION	
	DEPTH	THICK	MM	CM				WELL	LOG		
24	2296.5-97.7	1.2	12.90	12.10	-0.1	15.48	1.6	1.92	2.68	2.72	PPV F
25	2297.7-99.1	1.4	17.70	7.67	.64	24.78	1.9	2.66	2.69	2.74	PPV F
26	2299.1- .4	1.3	3.65	2.76	-0.1	4.75	2.5	3.25	2.70	2.77	PPV F
CORE NO. 3 2524 - 2547 REC. 23 5 BOXES											
2524.0-47.0 23.0 - - - - - DENSE											

NOTE:

PERMEABILITIES AND POROSITIES MAY BE ERRONEOUSLY HIGH DUE TO EROSION OF THE OUTSIDE SURFACE OF THE CORE.

CORE LABORATORIES - CANADA, LTD.

Petroleum Reservoir Engineering

WELL:

HUSKY MB ET AL WILLOW LAKE 0-27A

PAGE 3 OF 3

FORMATION:

FILE: CMP-4-S021

SUMMARY INTERVAL:

2255.0 - 2300.4

TOTAL FOOTAGE:

45.4

FOOTAGE ANALYZED:

25.4

FOOTAGE NOT ANALYZED:

TOTAL 20.0 DEBRIS 20.0 LOST .0 DRILLED .0 N/A .0 RUBBLE .0

SUMMARY
OF
ANALYZED CORE

TOTAL

BY

PERM

RANGES:

LESS THAN 0.10 MG

0.10 0.40 MG

0.40 0.80 MG

0.80 1.60 MG

GREATER THAN 1.60 MG

FOOTAGE	S.D. MULTIPLY FOOT	GRANULES ANALYZED PERCENT	PERCENT FOOT	GRANULES ANALYZED PERCENT	PERCENT FOOT	GRANULES ANALYZED PERCENT	PERCENT FOOT	GRANULES ANALYZED PERCENT
25.4	100.00	3.08	78.30	10.21	259.34	.00	.00	.00
2.2	8.66	3.66	8.05	.04	.09	.00	.00	.00
4.6	18.11	2.29	10.55	.25	1.17	.00	.00	.00
.0	.00	.00	.00	.00	.00	.00	.00	.00
9.6	37.80	3.06	29.39	3.27	31.38	.00	.00	.00
9.0	35.43	3.37	30.31	25.19	226.70	.00	.00	.00

*NOT ANALYZED BY REQUEST

CORE LABORATORIES - CANADA LTD.

Petroleum Reservoir Engineering

P.O. BOX 1070, POSTAL STATION A
CALGARY 8, ALBERTA
TELEPHONE 267-2141

Company: Husky Oil Ltd.
Core Sample
Husky HB et al Willow Lake G-27A
Willow Lake Area, N.W.T.

File: CAL-2-1759
Date: March 13/70

Chemical Analysis of the Core Sample

Organics @ Ignition	0.2%
Acid Insolubles	0.5%
Water Soluble	81.0%
Acid Soluble	77.8% (excluding the water components)

Breakdown of Water Soluble Compounds

<u>Element</u>	<u>Wt. %</u>
Sodium	22.1
Calcium	10.1
Magnesium	0.1
Chloride	35.4
Sulphate	21.5
Bicarbonate	10.8

Breakdown of Acid Soluble Compounds

Calcium	16.7%
Magnesium	12.6%
Iron (Fe_2O_3)	0.1%
Sodium	0.1%
Potassium	0.01%
Silica (SiO_2)	3.5%
Undetermined	66.9% (comprising water of crystallization etc.)

Note: The silica analysis produced inconsistent results, the cause of which has not been identified. The analysis was done by X-Ray and the matter is still being looked into.

WATER ANALYSIS REPORT
of
DRILL STEM TEST RECOVERIES



CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING



54

Company Husky Oil Ltd. Page 1 of 2
Well Husky et al Willowlawn G-27A File CAI-2-1625
Field Willow Lake Area, Northwest Territories Analyst JS
62 16'48.00 N.L.
Location 121 04'21.00 W.L. Elevation: K.B. _____ Grd. 1085'
Formation Hume Depth 1190' - 1243'
Sampled from DST #1 (Below Sampler) by _____
Sampling pressure _____ psig Sampling temp. _____ °F Ambient temp. _____ °F
Date sampled Feb. 3/70 Date received Feb. 16/70 Date analyzed Feb. 25/70
Container pressure _____ Mud _____ Water cushion _____
Recovery or Remarks: Mud (Fluid Recovery less than 10')

Chloride 438 mg/liter

Resistivity 2.02 Ohm-meters @ 73°F



CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
WATER ANALYSIS



55

File CAI-2-1685 Page 2 of 2

Company Husky Oil Ltd.
 Well Husky et al Willowlake 0-27A K.B. Ord. 1085'
 Location 62 16'48.00 N.L.
121 04'21.00 W.L. Field Willow Lake Area Province N.W.T.
 Formation ~~Beaver Creek~~ Upper Rannag 06 Interval 2236' - 2303'
 Sampled from DST #2 (30' from Top) by
 Date sampled Feb. 9/70 Date analyzed Feb. 25/70 Analyst DB
 Recovery 65' Mud

Mud type Water cushion

Total Solids:

Resistivity 0.680 Ohm-meters @ 71 °F Calculated 11.541 mg/liter
 Specific gravity 1.0080 @ 80°F By evaporation @ 110°C - mg/liter
 pH 7.6 H_2S Absent By evaporation @ 180°C - mg/liter
 Refractive Index 1.335 @ 75°F At ignition - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₂	OH
2,847	917	10	Pres.	Abs.	-	-	1,677	810	5,282	Nil	Nil

PER CENT CALCULATED SOLIDS

24.7	7.9	0.1	Pres.	Abs.	-	-	14.5	7.0	45.8	Nil	Nil
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MEQ PER LITER

123.8	45.8	0.8	Pres.	Abs.	-	-	47.3	13.3	109.8	Nil	Nil
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LOGARITHMIC PATTERN MEQ PER LITER





CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
WATER ANALYSIS



File CAL-2-1723 Page 1 of 3

Company Husky Oil Ltd.

Well Husky et al Willow Lake 0-27A K.B. 1085'

Location 62 16' 48.00 N.L.
121 04' 21.00 W.L. Field Willow Lake Area Province N.W.T.

Formation Peace River-Horsehead Reynolds al Interval 2480' - 2122'

Sampled from DST #3 by

Date sampled Feb. 12/70 Date analyzed Mar. 2/70 Analyst DS

Recovery 90' Mud, 650' Mud-Cut Salt Water, Oil Flecked.

_____ Soil type _____ Water cushion _____

Total Solids

Resistivity 0.044 Ohm-cm @ 73 °F Calculated 199,185 mg/liter

Specific gravity 1.1380 @ 60°F By evaporation @ 110°C - mg/liter

pH 6.9 H₂S Absent By evaporation @ 180°C - mg/liter

Refractive Index 1.368 @ 75°F At ignition - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Si	Br	I	Cl	HCO ₃	SO ₄	CO ₂	OH
74,642	1,959	632	Pres.	Abs.	-	-	116,262	410	5,280	Nil	Nil

PER CENT CALCULATED SOLIDS

37.5	1.0	0.3	Pres.	Abs.	-	-	58.4	0.2	2.7	Nil	Nil
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MEQ PER LITER

3245.3	97.8	52.0	Pres.	Abs.	-	-	3278.6	6.7	109.8	Nil	Nil
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LOGARITHMIC PATTERN MEQ PER LITER





CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
WATER ANALYSIS

File CAI-2-1723 Page 2 of 3

Company Husky Oil Ltd.

Well Husky et al Willow Lake G-27A K.B. Ord. 1085'

Location 62 16'48.00 N.L.
121 04'21.00 W.L. Field Willow Lake Area Province N.W.T.

Formation Point Barre Formation Interval 2506' - 2531'

Sampled from DST #4 by

Date sampled Feb. 13/70 Date analysed Mar. 2/70 Analyst DS

Recovery 360' Mud-Cut Salt Water, Slightly Gas-Cut. 1526' Salter, Slightly Gas-Cut.

Mud type Water cushion

Total Solids:

Resistivity 0.037 Ohm-meters @ 71 °F Calculated 766,320 mg/liter

Specific gravity 1.1842 @ 60°F By evaporation @ 110°C - mg/liter

pH 6.7 H_2S Absent By evaporation @ 180°C - mg/liter

Refractive Index 1.380 @ 75°F At ignition - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₃	OH
101,285	1,709	708	Pres.	Abs.	-	-	157,445	381	4,862	Nil	Nil

PER CENT CALCULATED SOLIDS

38.0	0.6	0.3	Pres.	Abs.	-	-	59.1	0.1	1.8	Nil	Nil
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MEQ PER LITER

4403.7	85.3	58.2	Pres.	Abs.	-	-	4439.5	6.2	101.1	Nil	Nil
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LOGARITHMIC PATTERN MEQ PER LITER





CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
WATER ANALYSIS



File CAL-2-1723 Page 3 of 3

Company Husky Oil Ltd.
Well Husky et al Willow Lake 0-27A K.B. 1085'
Location 62 16'48.00 N.L.
121 04'21.00 W.L. Field Willow Lake Area Province N.W.T.
Formation L. Keenings to basal clastic Interval 2624' - 2660'
Sampled from DST #5 (2375') by
Date sampled Feb. 20/70 Date analyzed Mar. 2/70 Analyst DS
Recovery 150' Mud-Cut Salt Water

Mud type Water cushion

Total Solids:

Refractive: 0.068 Dispersion @ 73 °F Calculated 115,048 mg/liter
Specific gravity 1.0794 @ 60°F By evaporation @ 110°C - mg/liter
pH 7.0 H₂S Absent By evaporation @ 180°C - mg/liter
Refractive Index 1.351 @ 75°F At ignition - mg/liter

MILLIGRAMS PER LITER

Na+K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₃	OH
42,097	2,209	36	Trace	Abs.	-	-	64,144	400	6,160	Nil	Nil

PER CENT CALCULATED SOLIDS

36.6	1.9	0.0	Trace	Abs.	-	-	55.8	0.3	5.4	Nil	Nil
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MEQ PER LITER

1830.3	110.2	3.1	Trace	Abs.	-	-	1808.9	6.6	128.1	Nil	Nil
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LOGARITHMIC PATTERN MEQ PER LITER



SECTION VI

ABANDONMENT PLUGS(a) On Husky Willowlake 0-27:

On this well 9 5/8" casing had been landed at 260 ft. K. B. and had been cemented to surface - 8 3/4" hole had been drilled to 625' K. B. Because of glacial drift, exposed below the shoe, it was decided to abandon this well. Details of the abandonment plug are:

Plugged interval 400 - 200 ft. K. B. w/160 sack of Oilwell plus 2% CaCl_2 in 15.8#/gal. slurry. Plug dropped by Howco at 9:40 p.m., 26 January, 1970. Felt for plug at 3:00 a.m. 27 January, 1970 and found top of plug at 135 ft. K. B.

(b) On Husky H 5 Willowlake 0-27A.

Plug No. 1: Dropped 130 sack of Oilwell plus 3% CaCl_2 in 15.5#/gal. slurry across interval 2350-2200 ft. K. B. in the Ronning Fm. Plug dropped by Howco at 8:00 p.m. 20 February, 1970. Ran in to tag plug at 4:30 a.m. 21 February, 1970. Plug not there. Re-ran plug across same interval utilizing 150 sack Oilwell plus 3% CaCl_2 in 15.5#/gal. slurry. Plug in place at 9:20 a.m. February 21, 1970. Tagged top of this plug at 2110 ft. K. B. at 4:00 p.m. February 21, 1970.

Plug No. 2: Dropped 60 sack of Oilwell plus 3% CaCl_2 in 15.8#/gal. slurry across the interval 460-360 ft. K. B. (across csg. shoe). Plug down at 6:20 p.m. 21 February, 1970. Tagged top of this plug at 370 ft. K. B. at 12:30 a.m. 22 February, 1970. Ran 5 sack plug at surface.

SCHLUMBERGER

FORMATION DENSITY LOG

NORTHWEST TERRITORIES
PROVINCE WILDCAT
WELL HUSKY HR ET AL WILLOW LAKE
0-27A
COMPANY HUSKY OIL LTD.

COMPANY HUSKY OIL LTD.

WELL HUSKY HR ET AL WILLOW LAKE

0-27A

FIELD WILDCAT

PROVINCE NORTHWEST TERRITORIES

LOCATION

62°16'48"N LAT

127°05'42"W LONG

Permanent Station OL Elev. 1985

Log Measured From KR 1.3 ft Above Perm. Station

Other Services

DIL, SNP, SLC-GR

RD

LUV: KR 1985.7

OL 1985

CMF

Date 19 FEB 70

Run No. ONE

First Reading 2918

Last Reading 1100

First Measurement 1818

Log Measured From 2919

Log Measured From 2920

Log Measured From 2921

Log Measured From 2922

Log Measured From 2923

Log Measured From 2924

Log Measured From 2925

Log Measured From 2926

Log Measured From 2927

Log Measured From 2928

Log Measured From 2929

Log Measured From 2930

Log Measured From 2931

Log Measured From 2932

Log Measured From 2933

Log Measured From 2934

Log Measured From 2935

Log Measured From 2936

Log Measured From 2937

Log Measured From 2938

Log Measured From 2939

Log Measured From 2940



Drilling Request 2100 / 1818 - Completion Request 0030 / 1918 - Tool on Bottom 1100 / 1918 - 14679

Tool on Bottom 1100 / 1918 - 14679

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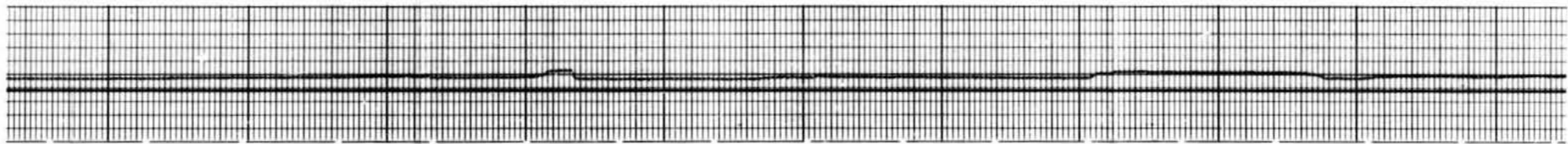
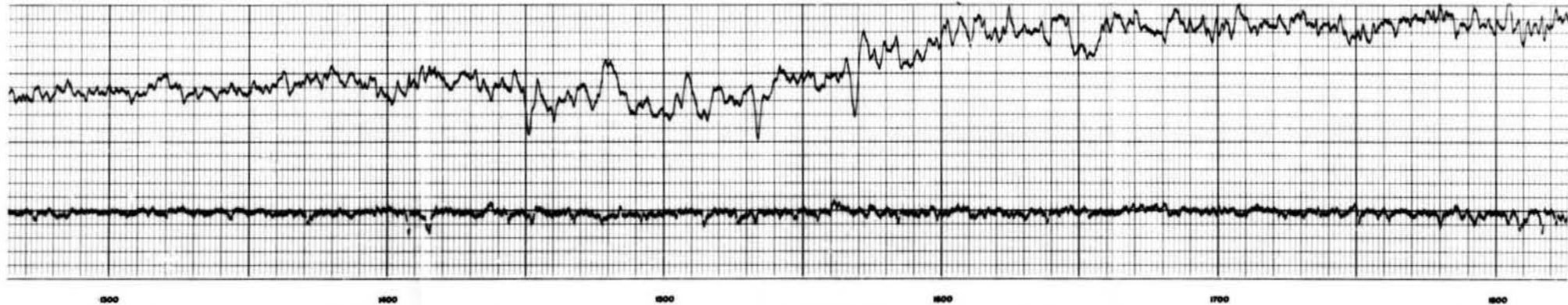
Tool on Bottom 1100 / 1918 - 14679

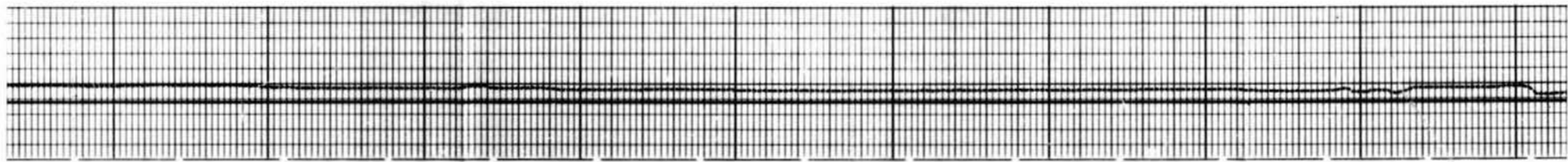
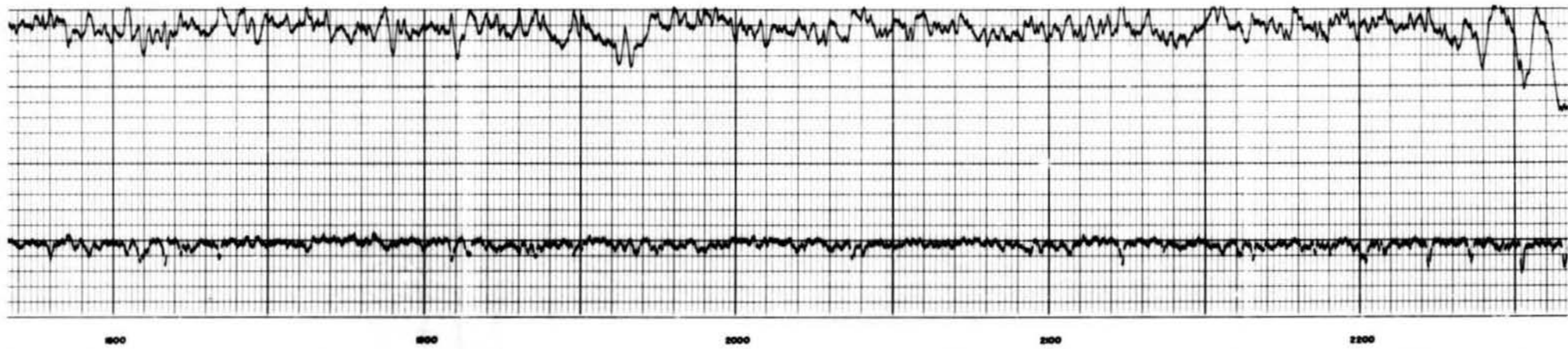
Tool on Bottom 1100 / 1918 - 14679

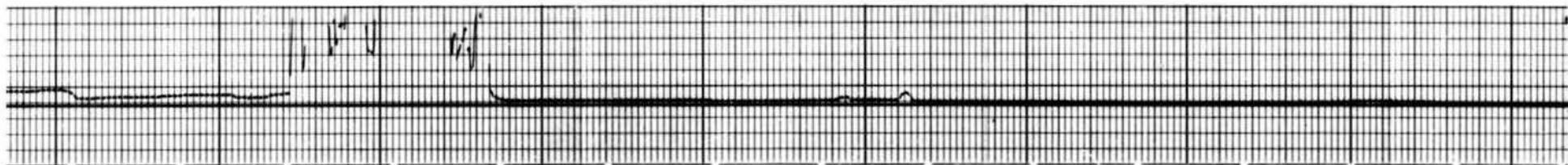
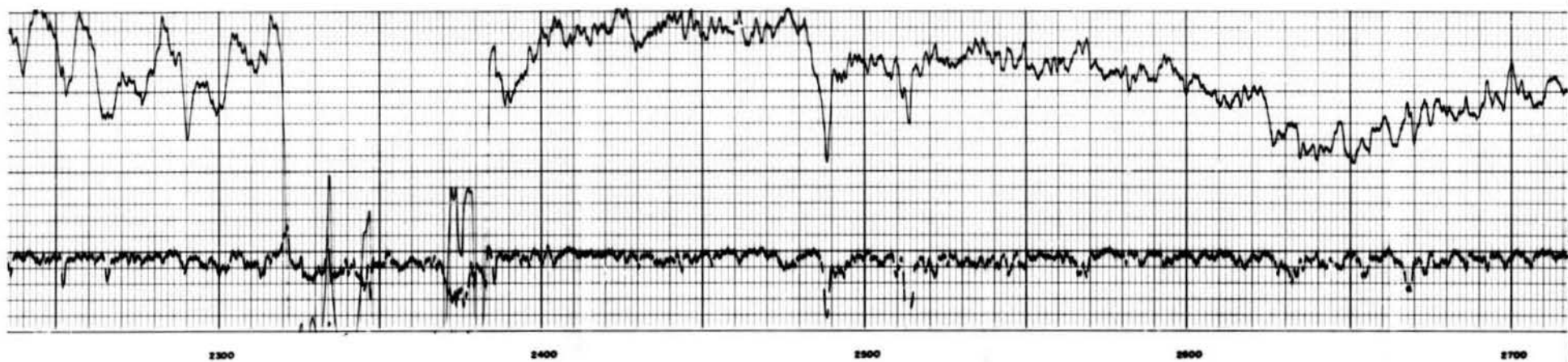
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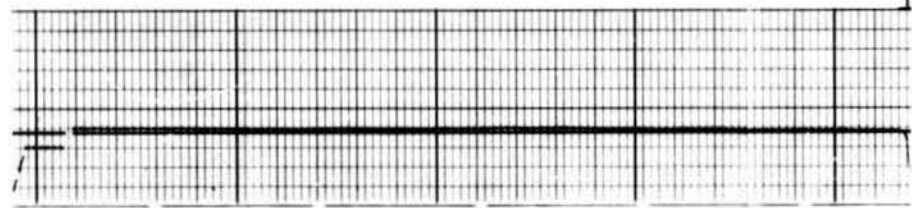
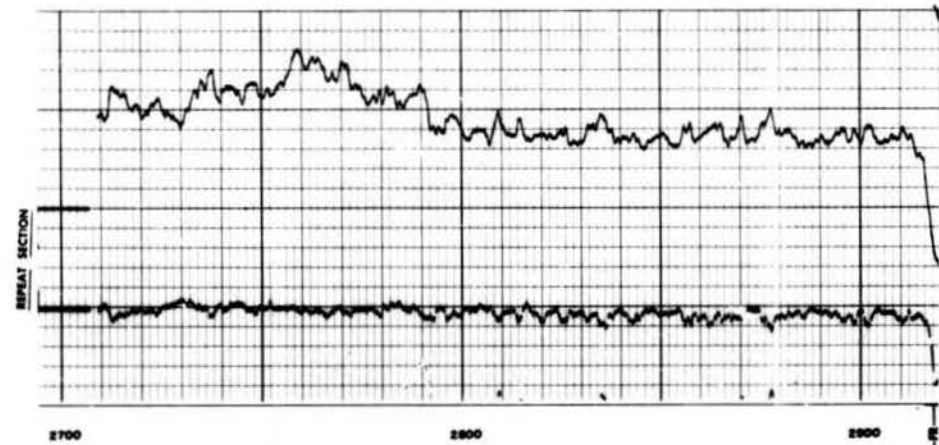
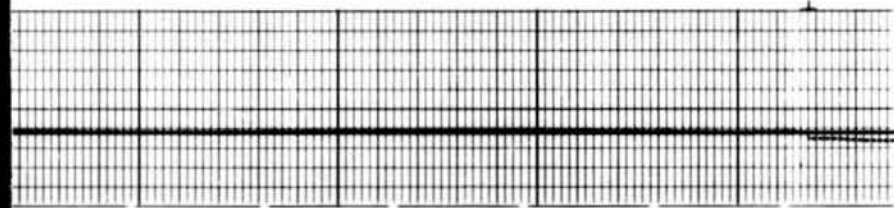
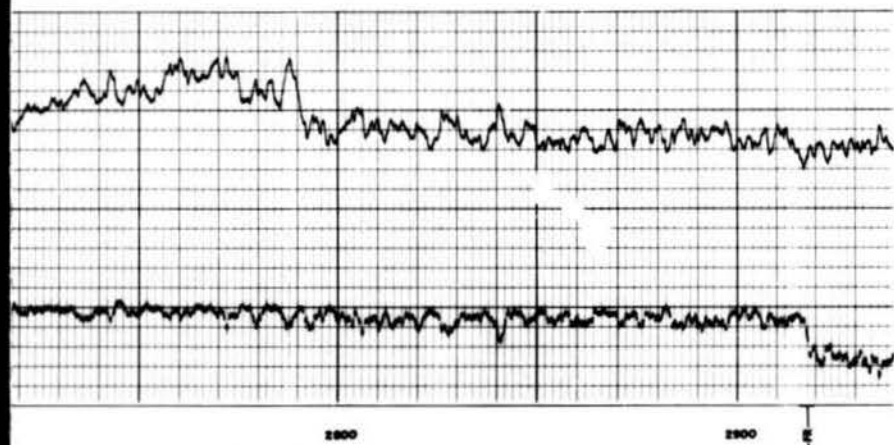
Tool on Bottom 1100 / 1918 - 14679

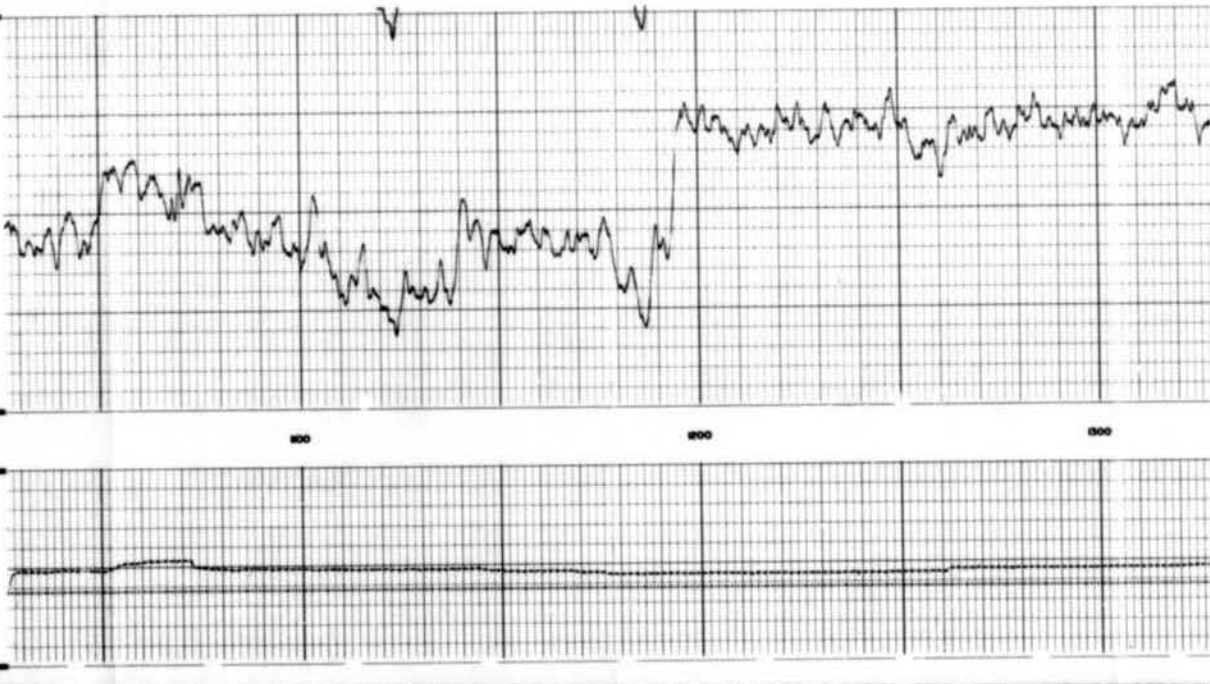
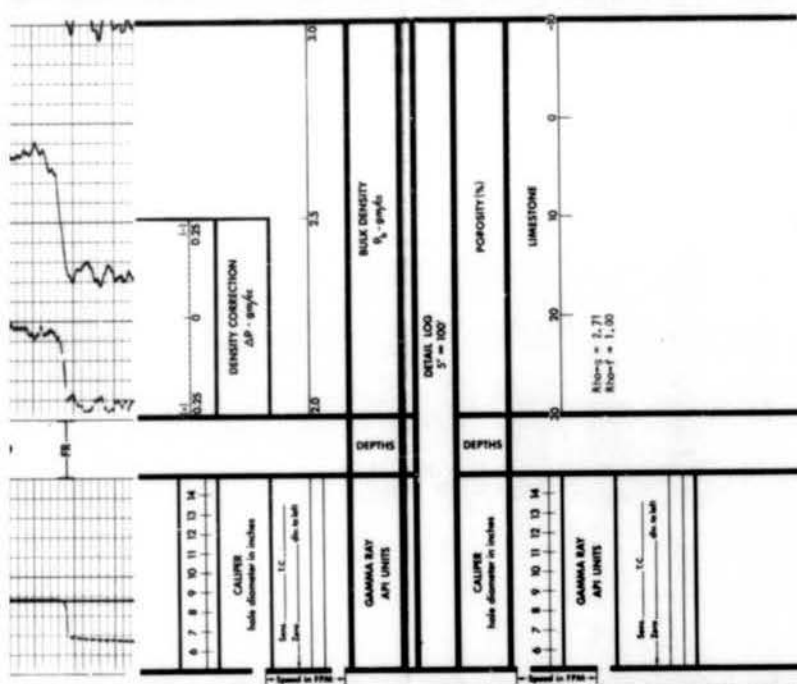
Tool on Bottom 1100 / 1918 - 14679

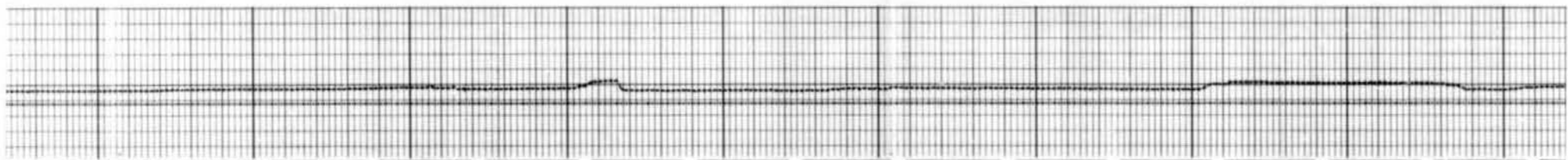
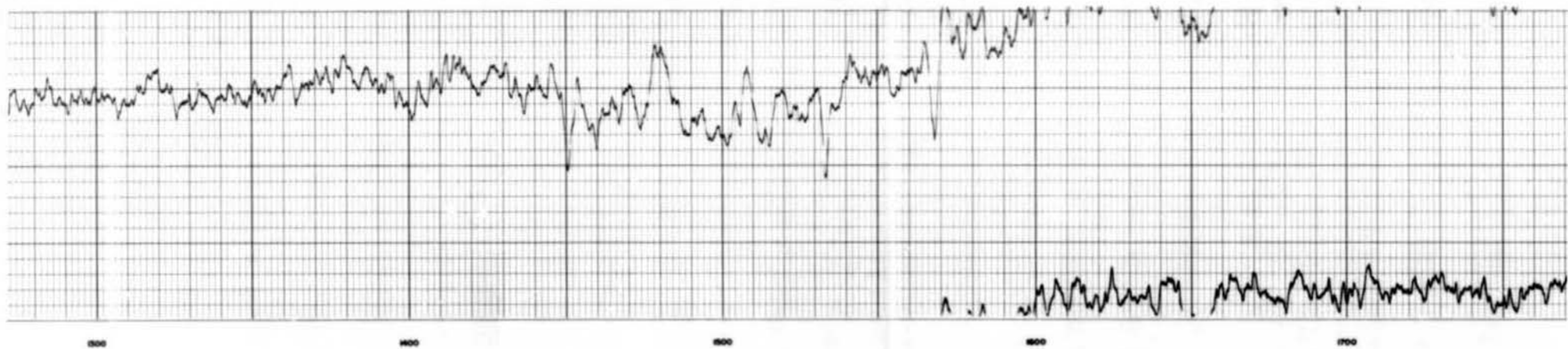


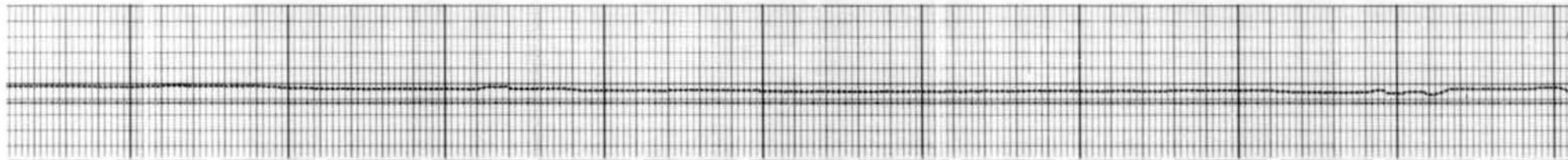
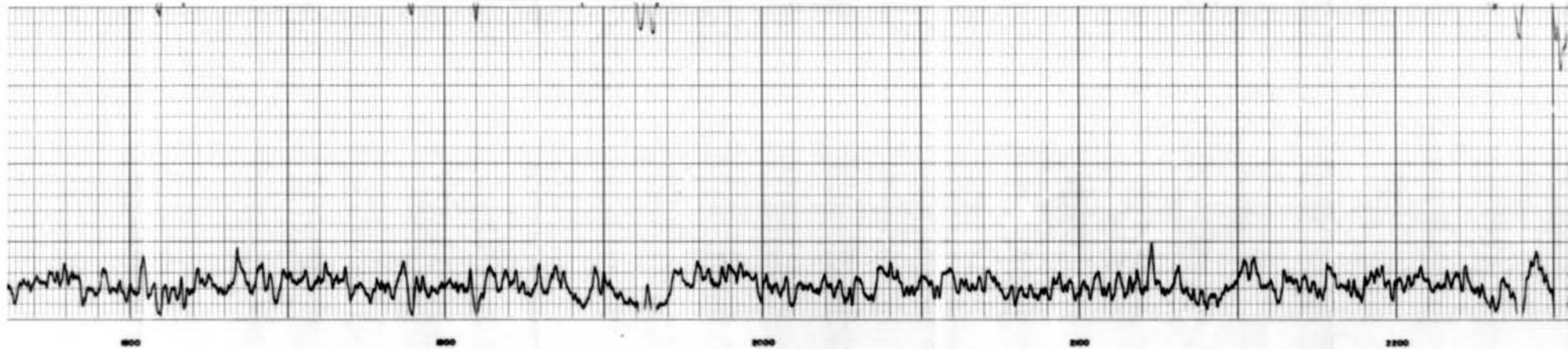


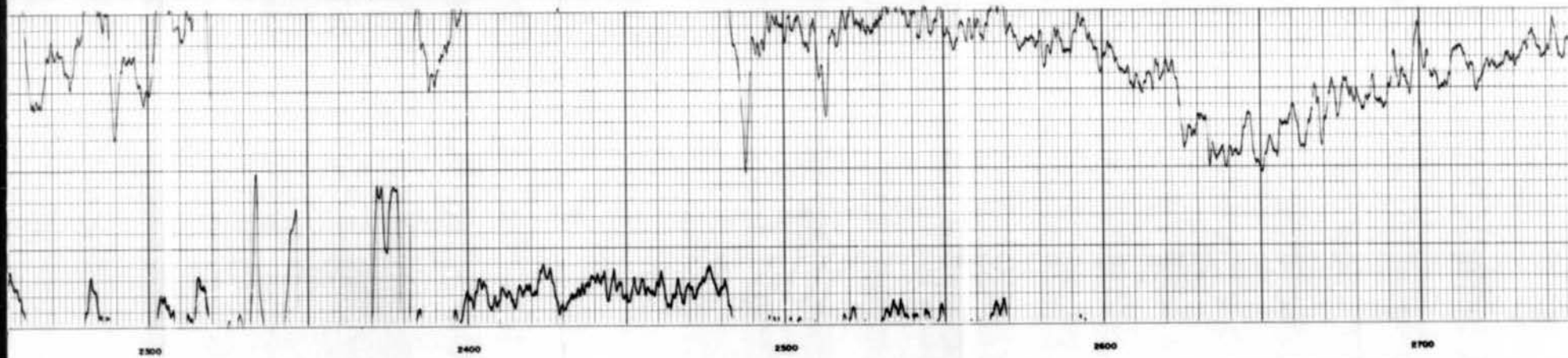


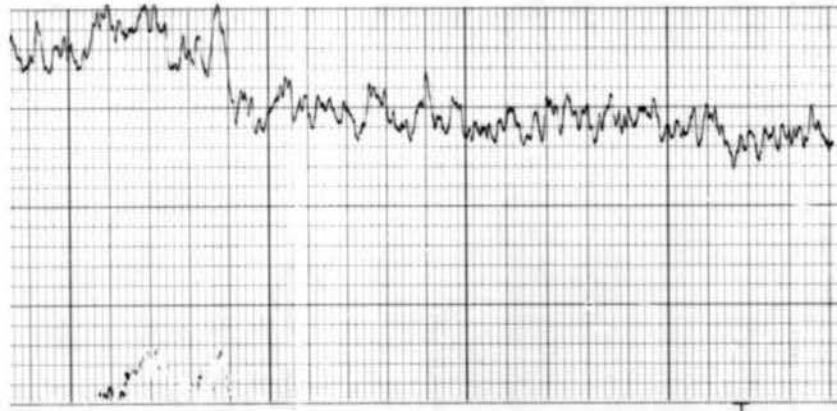








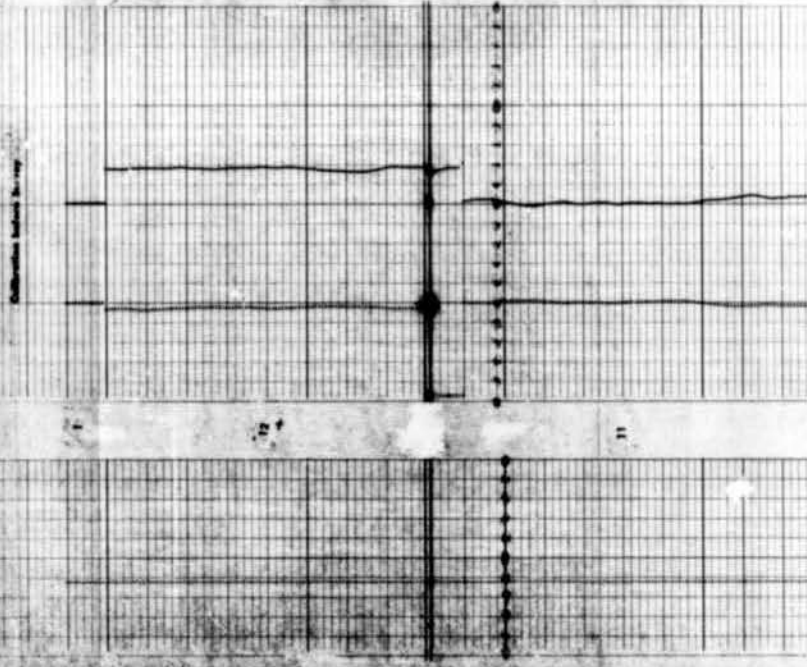
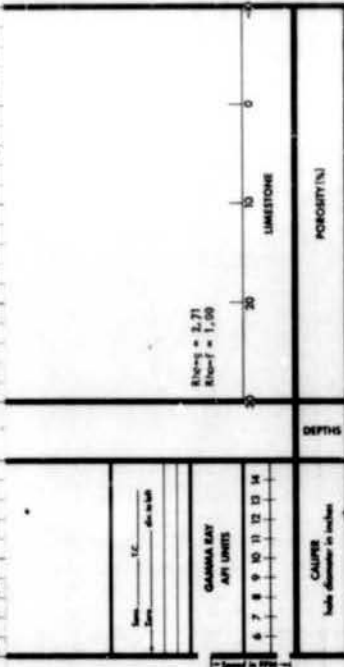


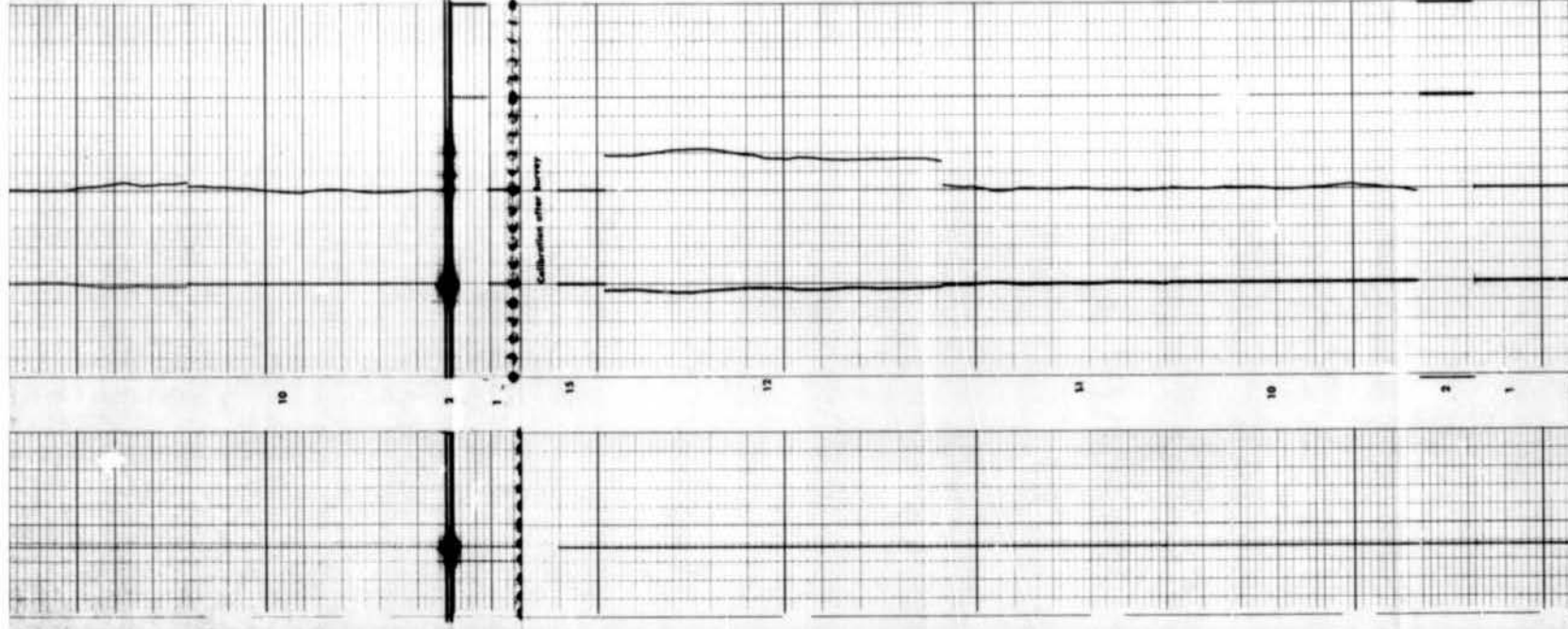


2800

2900

DEPTH



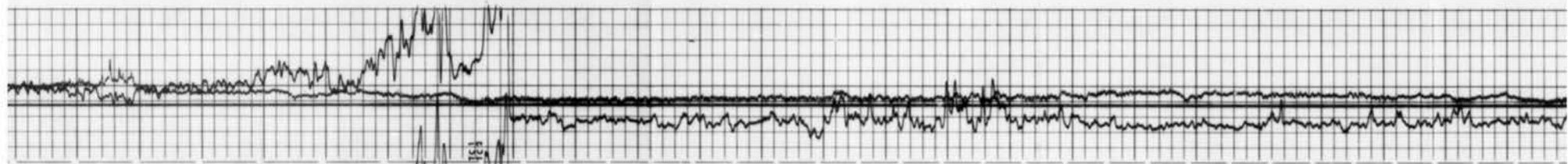
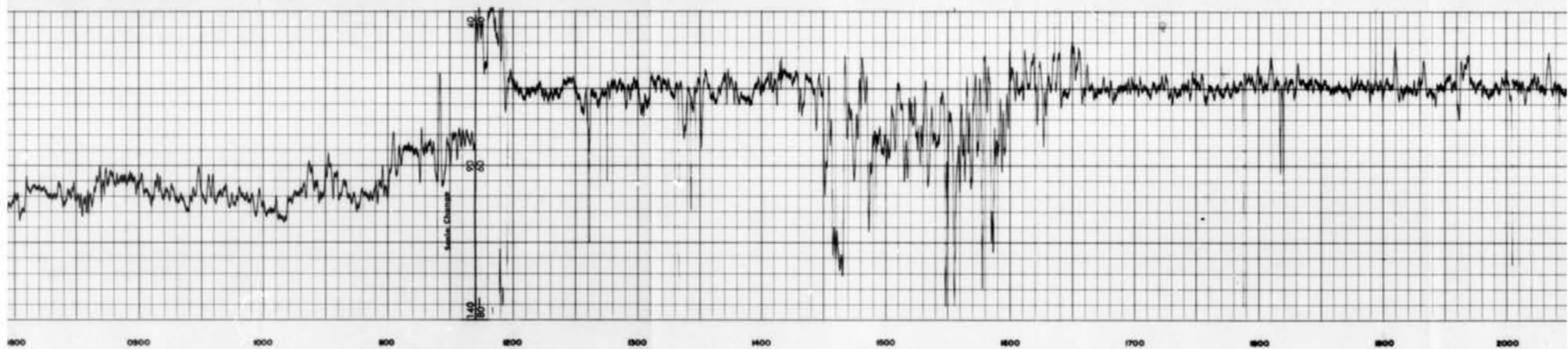


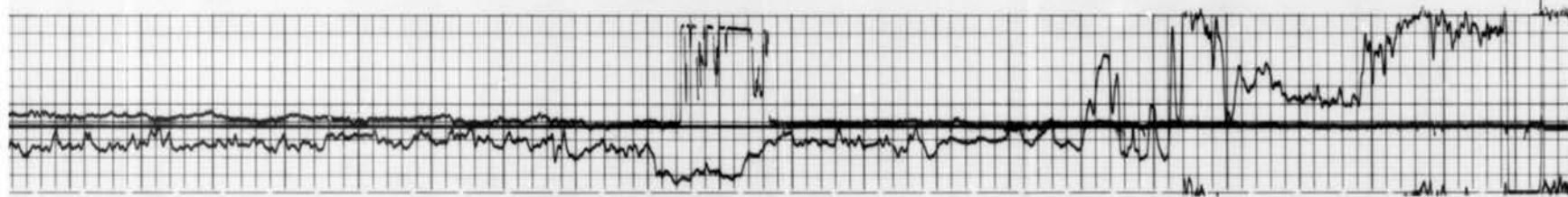
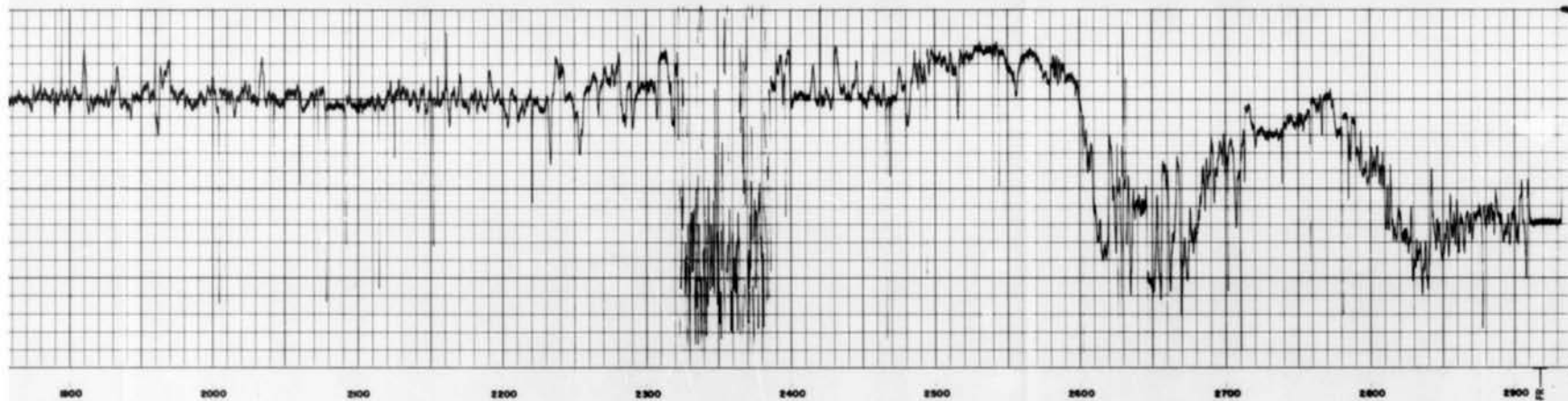
COMPANY HESKY OIL LTD.

WELL HESKY HB ET AL WILLING LAKE D-27A

FIELD WILDCAT PROVINCE NORTHWEST TERRITORIES







1800 2000 2200 2400 2600 2800 3000 FT

120 80 100 60 40	120 80 100 60 40	6 7 8 9 10 11 12 13 14 CALIPER hole diameter in inches 200 100 50 200 100 50 200 100 50	DEPTHS	SONIC INTERVAL TRANSIT TIME microseconds per foot	GAMMA RAY API UNITS DETAIL LOG 6" x 10"
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APU LIMITS

1

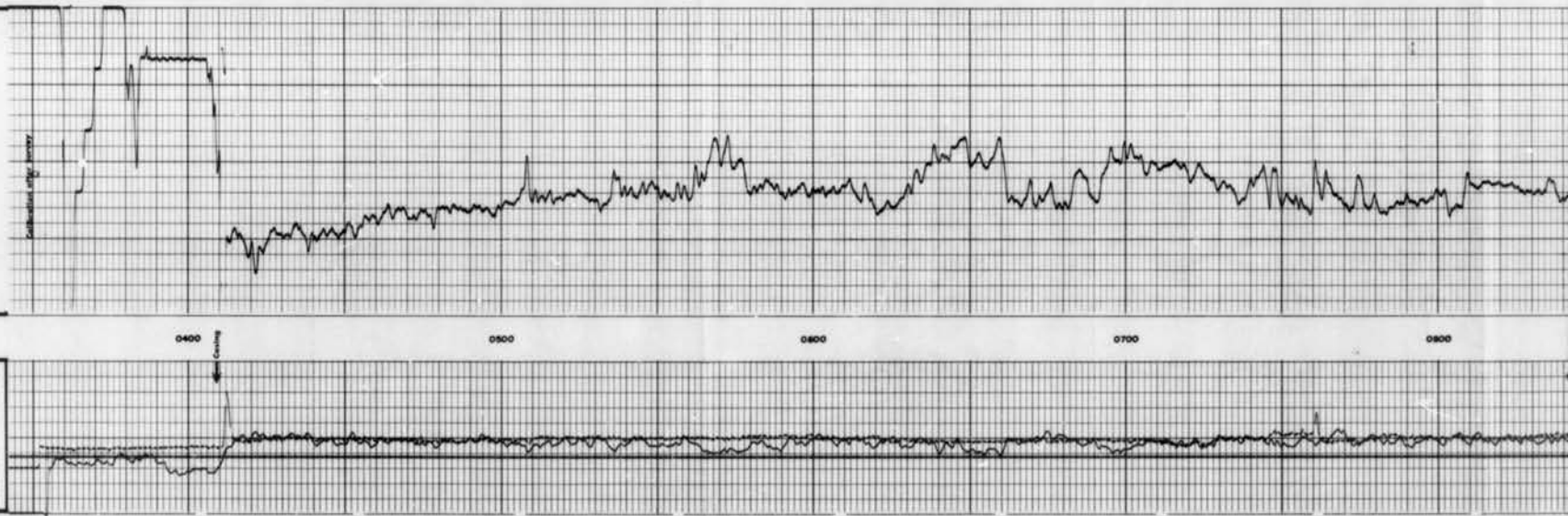
JAMMALA EAT
API URGENT
$$\frac{20}{3} \div 12$$

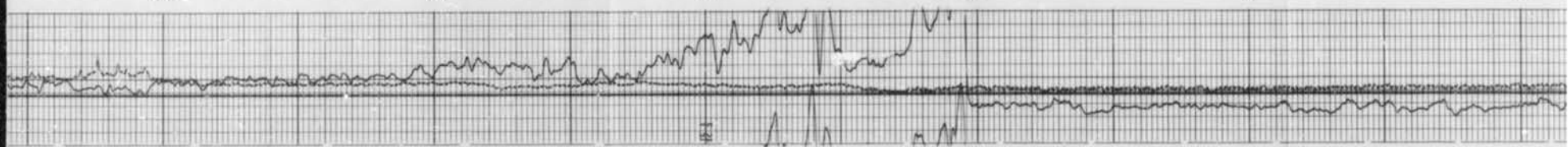
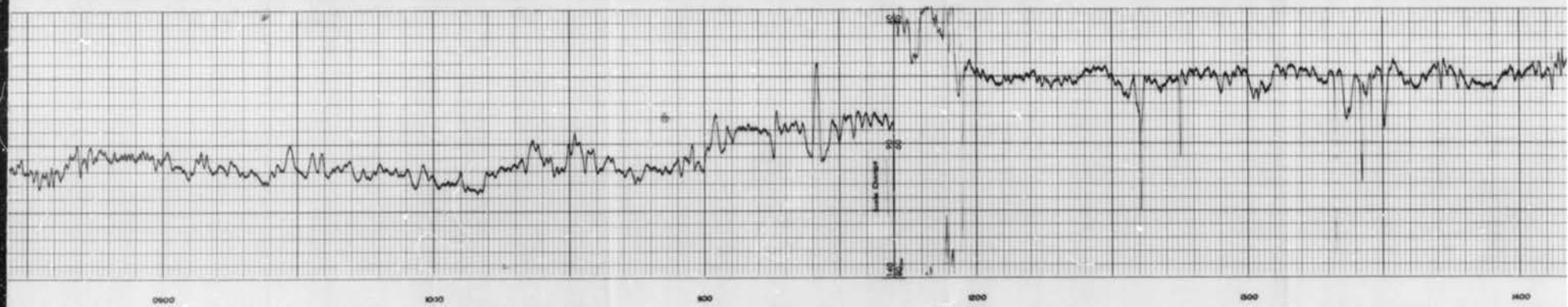
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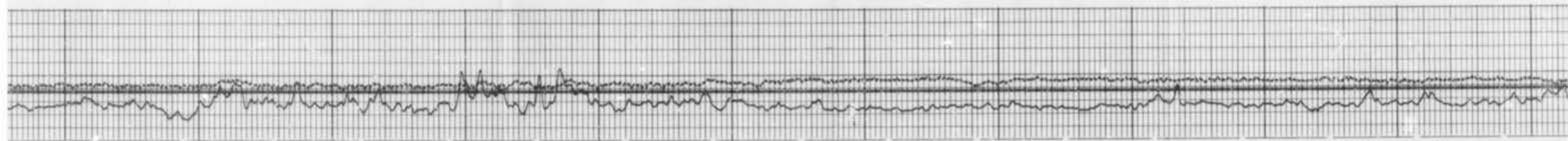
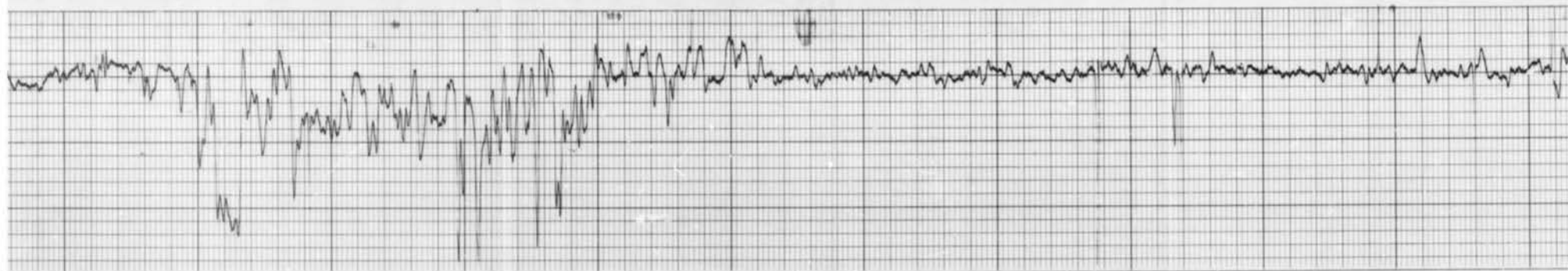
CALIPER
hole diameter in inches

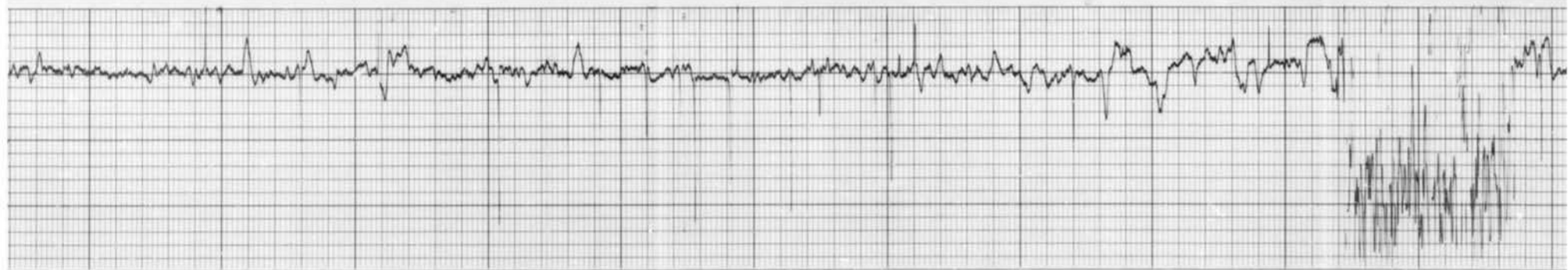
[illegible]

Calicut District Office, Kerala









1800

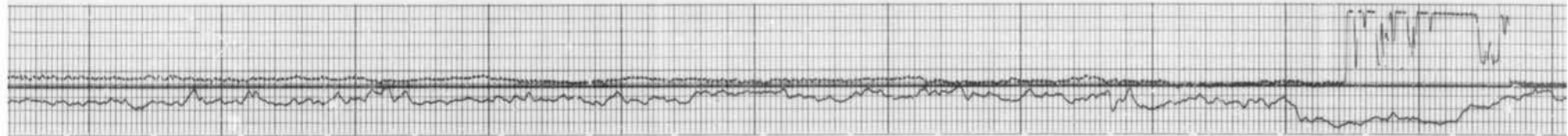
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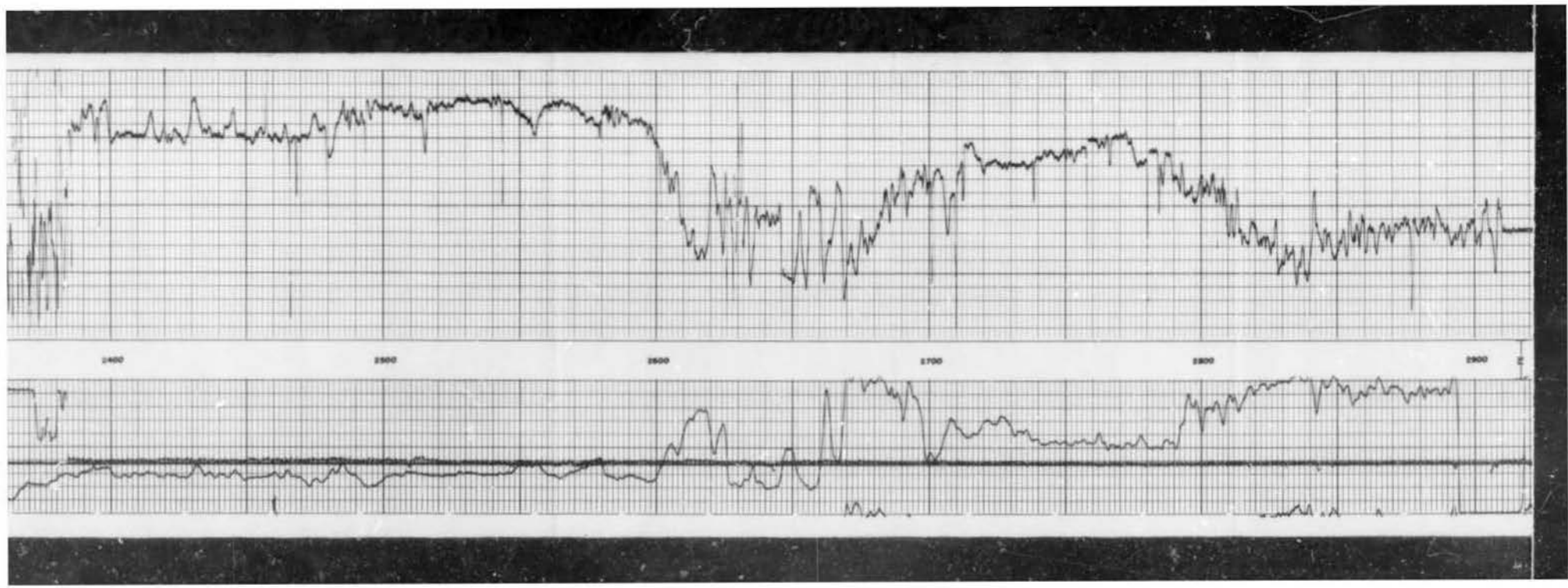
2100

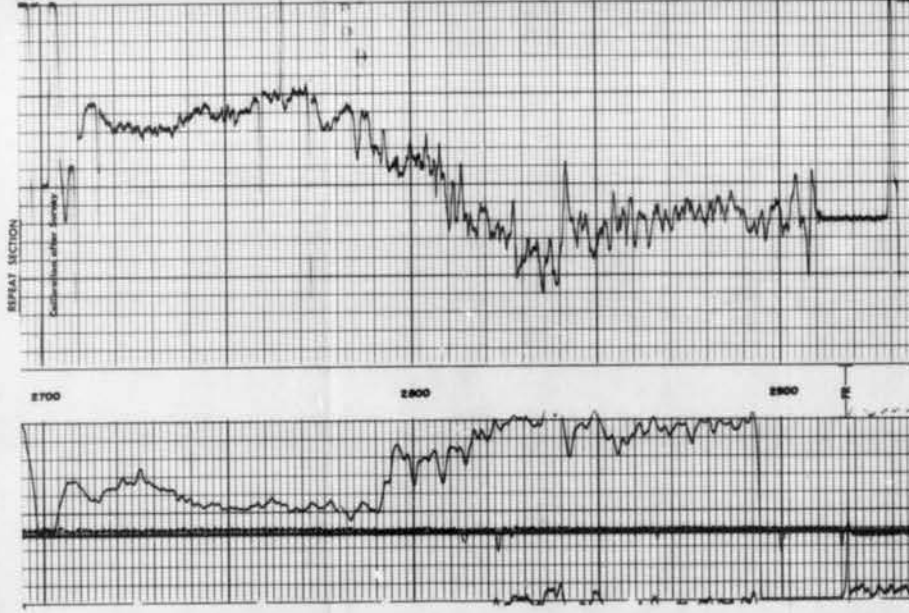
2200

2300

2400







CALIBRE hole diameter in in.		SONIC INTERVAL TRASSIT TIME msec. - 100 ft. log	
Size	200 TC 2	120	80
Size	2	60	40

GAMMA RAY API UNITS		DEPTHS	
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COMPANY HUSKY OIL LTD.
 WELL HUSKY HS ET AL WILLOW LAKE D-27A
 FIELD WILFCAT PROVINCE NORTHWEST TERRITORIES



Schlumberger

SIDEWALL NEUTRON POROSITY LOG

PROVINCE	NORTHWEST TERRITORIES
FIELD	WILDCAT
WELL	HEERY HSE ET AL, WILLOW LAKE
	5-27A
COMPANY	HEERY OIL LTD.

COMPANY	HUSKY OIL LTD.
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WELL HUSKY HB ET AL WILLOW LAKE

0-774

FIELD WILDCAT

PROVINCE NORTHWEST TERRITORIES

LOCATION 62°16'48"N LAT
121°04'31"W LONG

Permanent Dates: 04 Nov 1985

Log Returned From: CR 12 Ft. Adams Park, Oregon

15 FEB 70

CHINESE JOURNAL OF MANAGEMENT SCIENCE, Vol. 16, No. 4, 2014

2918	
1185	

1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398</
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2919

2923	
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409	158
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XC POLYMER

3.6	56		
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[illegible][illegible]

0.08	20		
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0.05	•	100	•
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8.8/10	
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0.247		

10	1
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PGT-8		
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4.193	
4.194	

CLASS	
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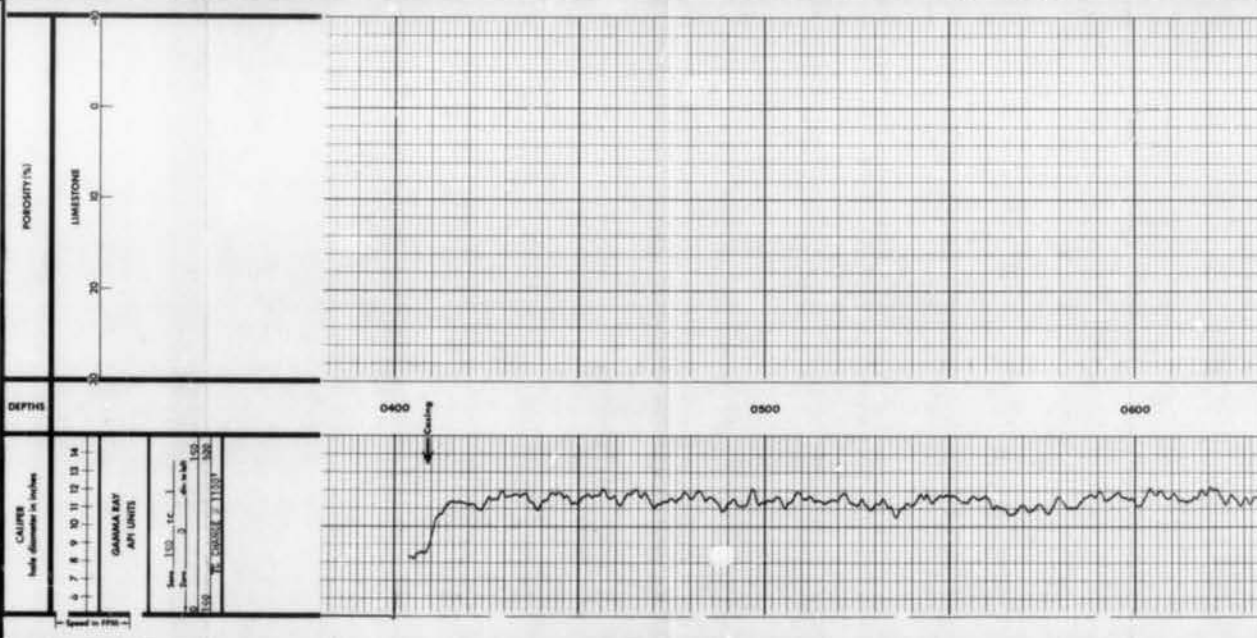
ROBERTSON, SYDNEY, CHARRINGTON	
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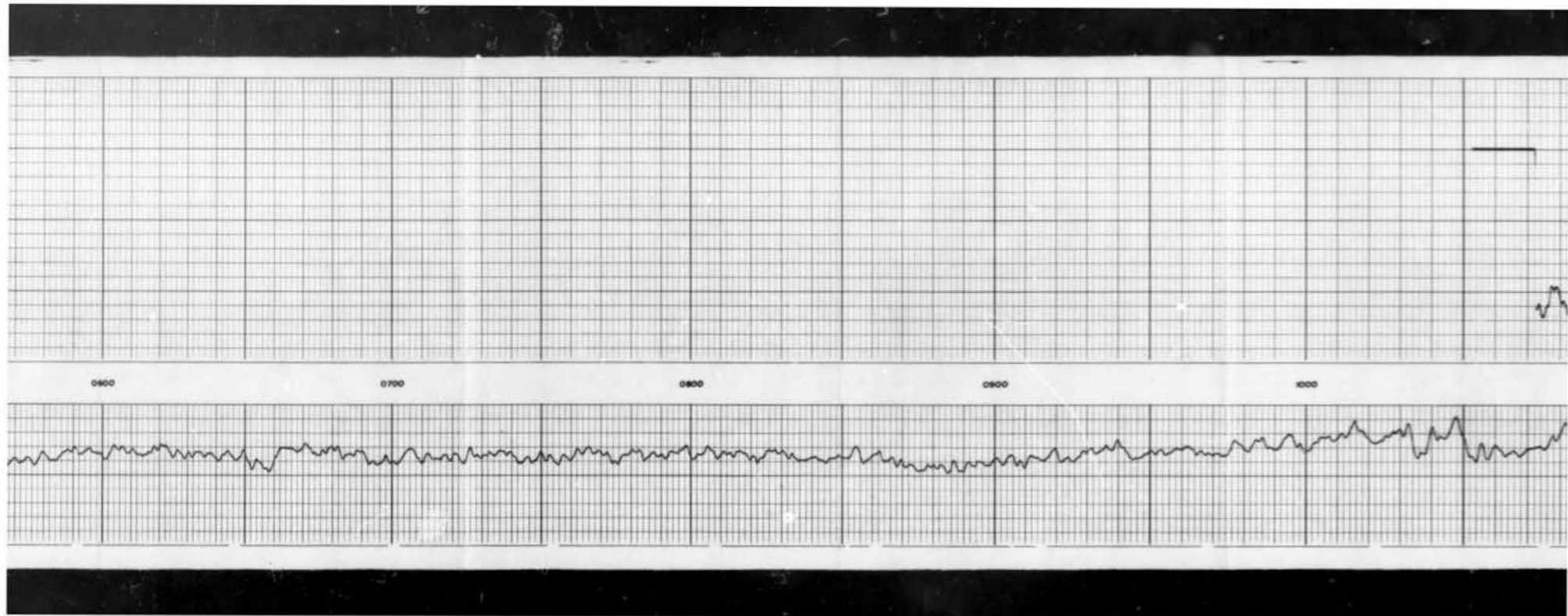
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REMARKS					
Rolling Stopped	21:22	/	18:10	Conclusions Stopped	00:30
				End of Station	1:00
				1st Run Service Order #	56779
					0:41
					1:00

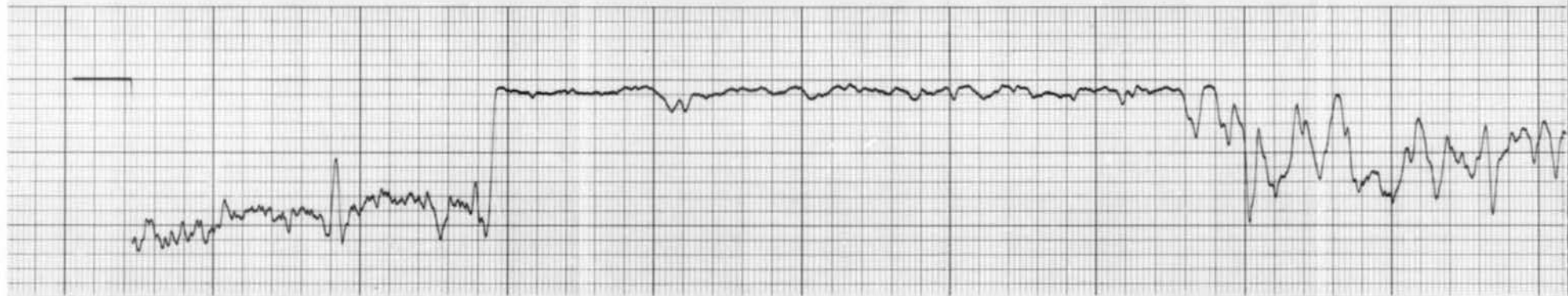
SNP ASSN WITH NO CALLER CONNECTION

[illegible][illegible]

This interpretation represents our best judgment. Nevertheless since all interpretations are opinions based solely on inferences from electrical or other measurements, we cannot and do not guarantee the accuracy or correctness of any interpretation and shall not be liable or responsible for any loss, cost, damages, or expenses that may be incurred or sustained resulting from this or any other interpretation.







1100

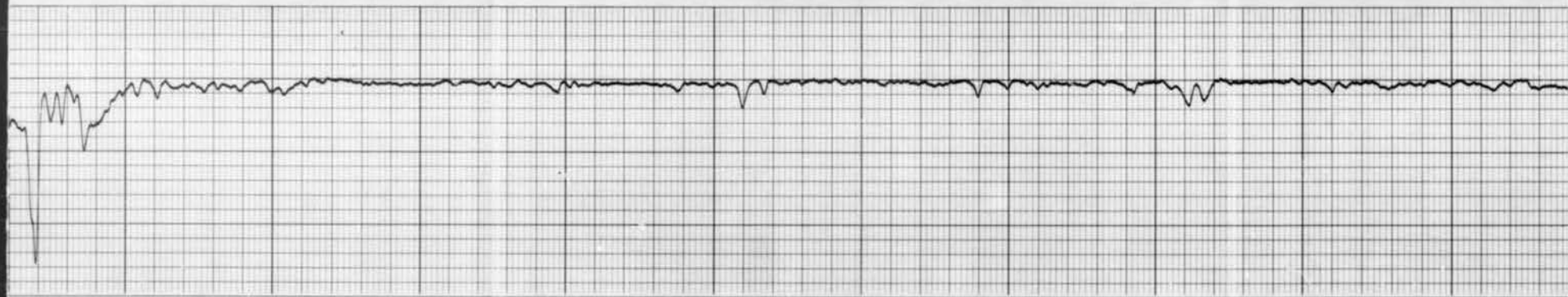
1200

1300

1400

1500





1800

1700

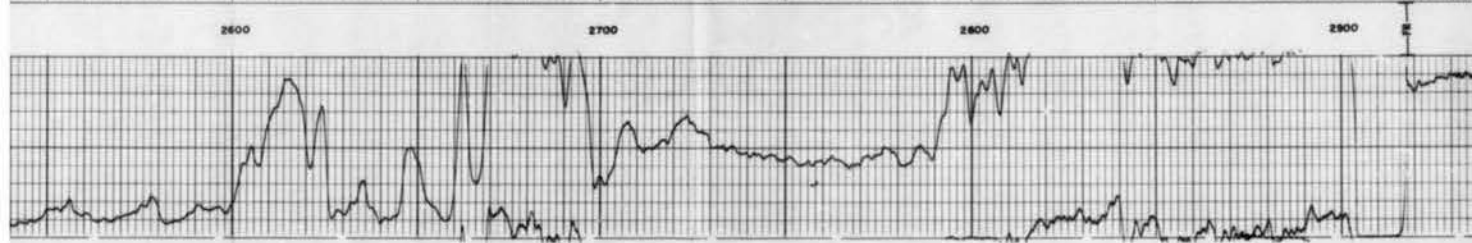
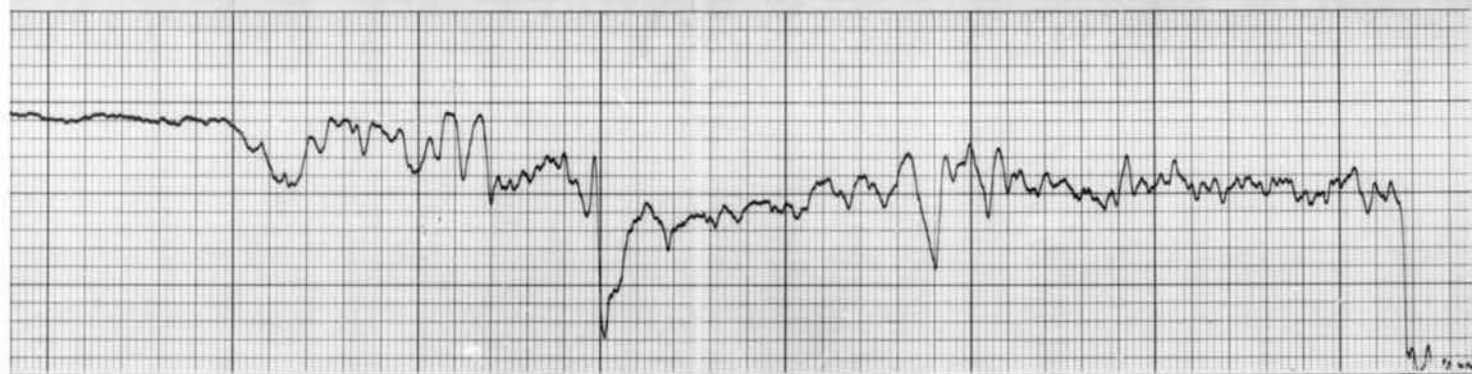
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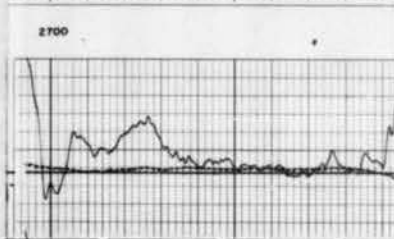
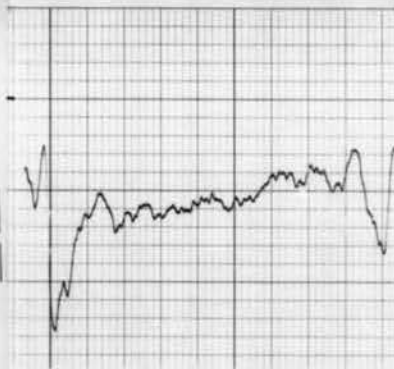
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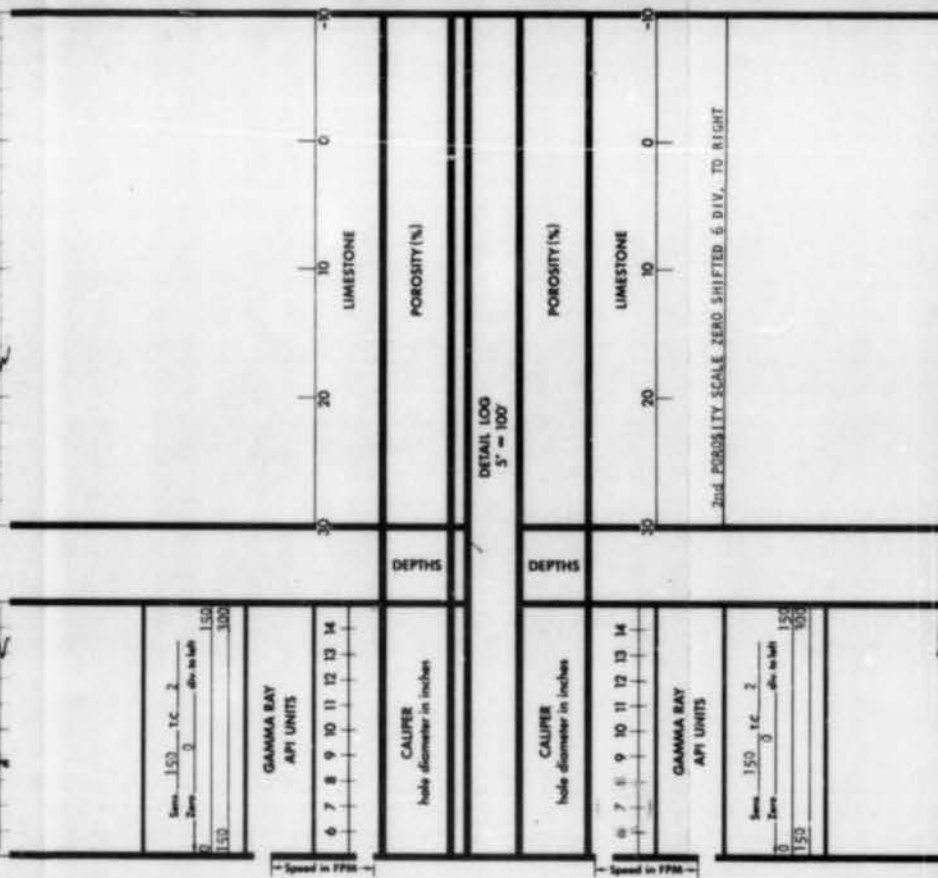
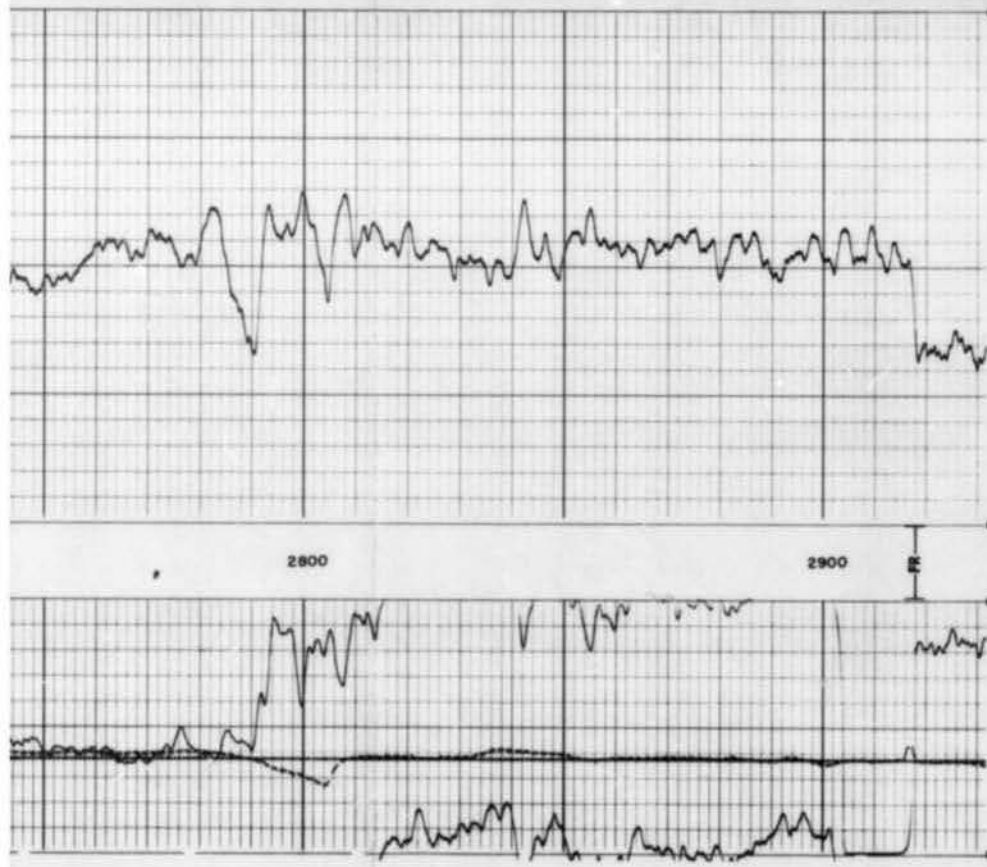


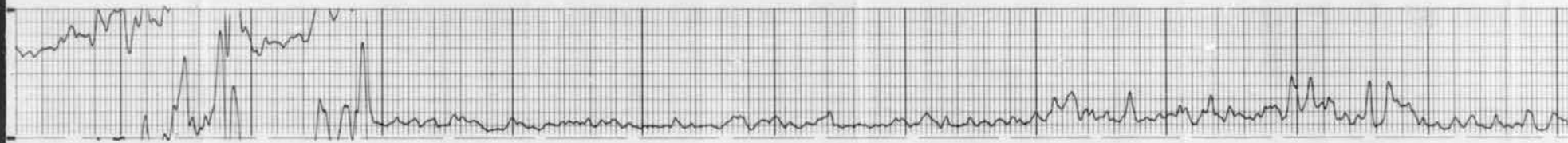


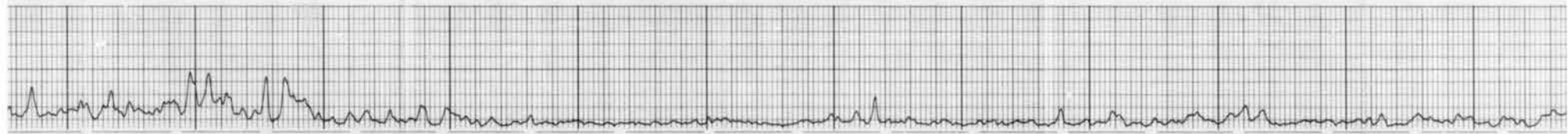
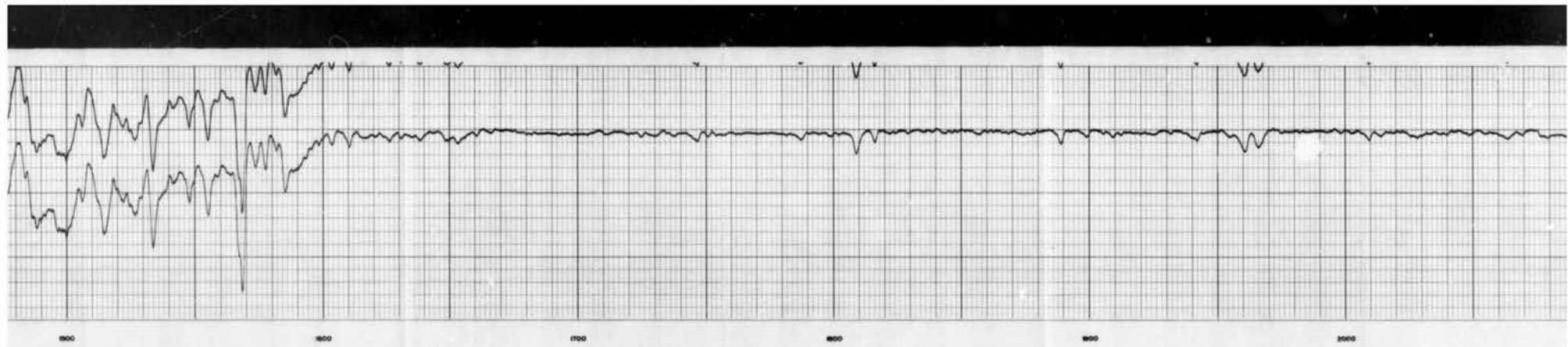


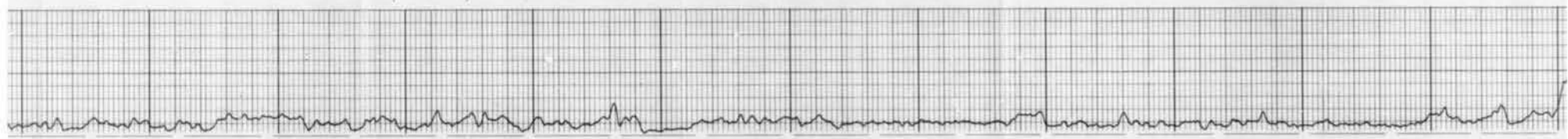
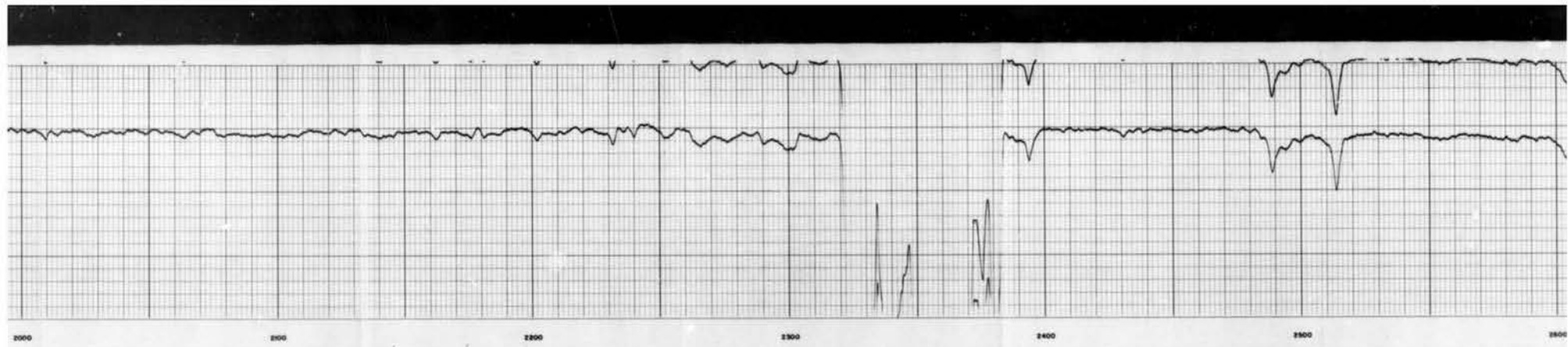
REPEAT SECTION

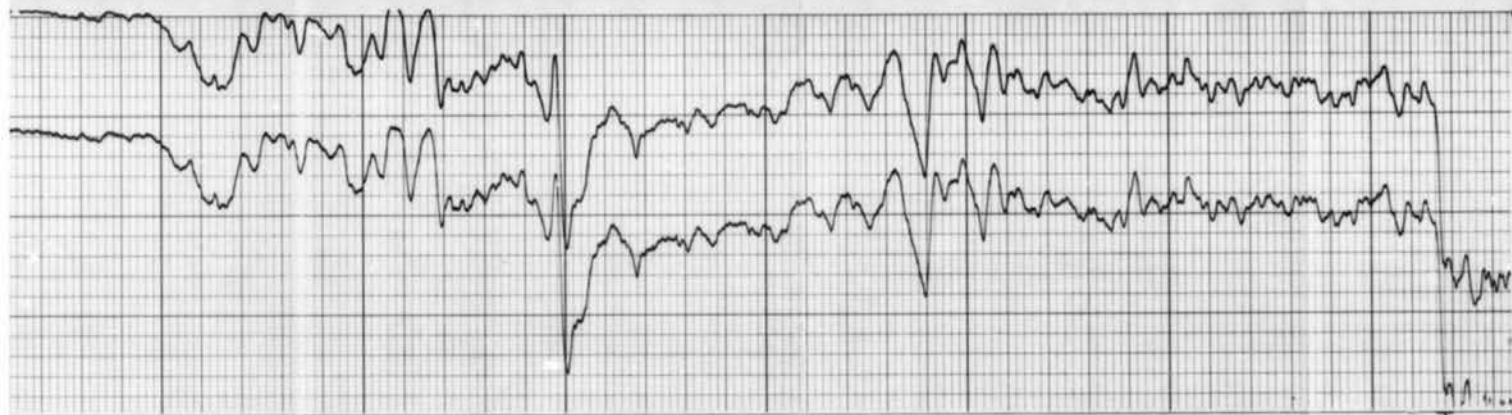












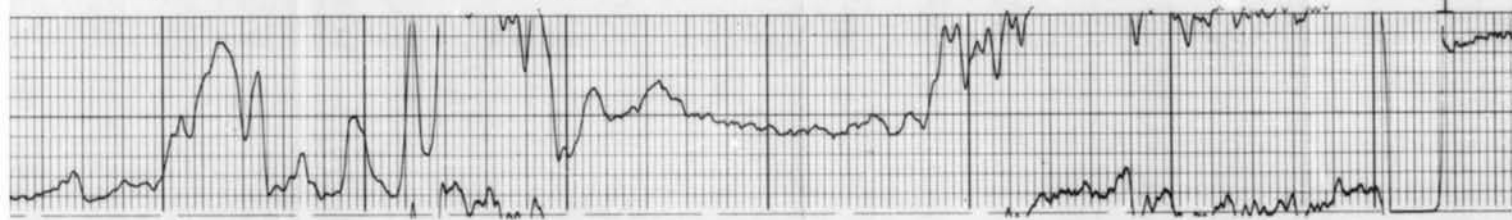
2600

2700

2800

2900

3000



2nd POROSITY SCALE ZERO SHIFTED 6 DIV. TO RIGHT		LIMESTONE		POROSITY (%)
0	10	20	30	
DEPTHS		GAUSSIAN RAY API UNITS		CALIPER hole diameter in inches
0	10	20	30	
Speed in FPM		150 100 50 0		

Calibration after Survey

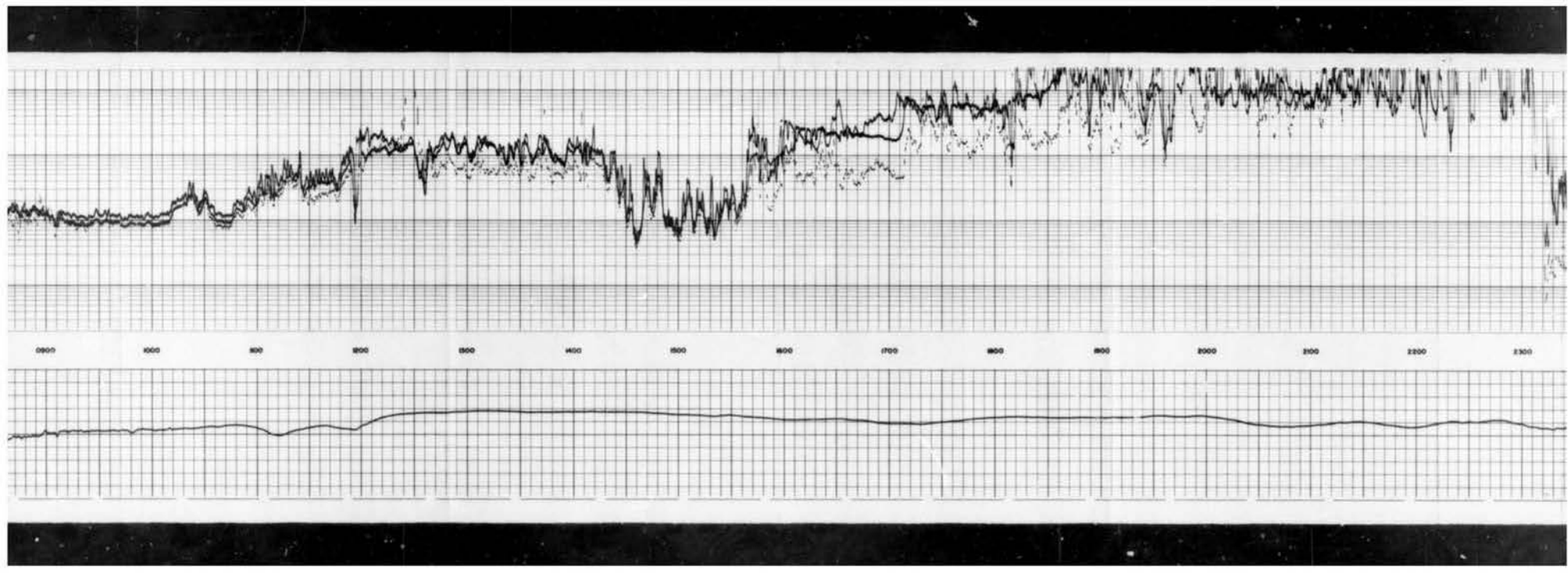
Calibration before Survey

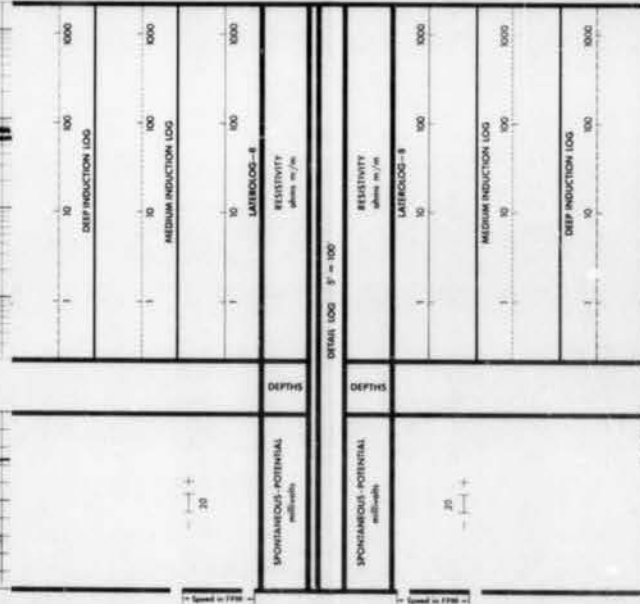
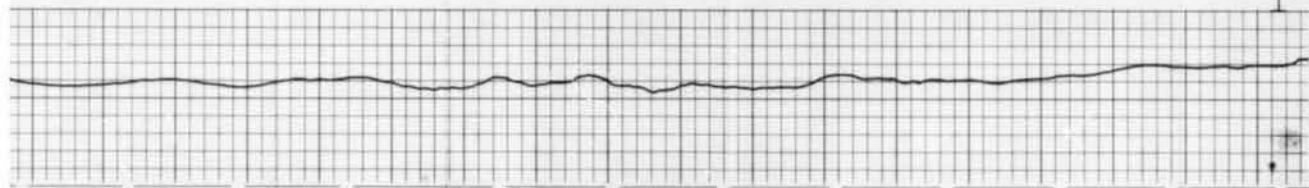
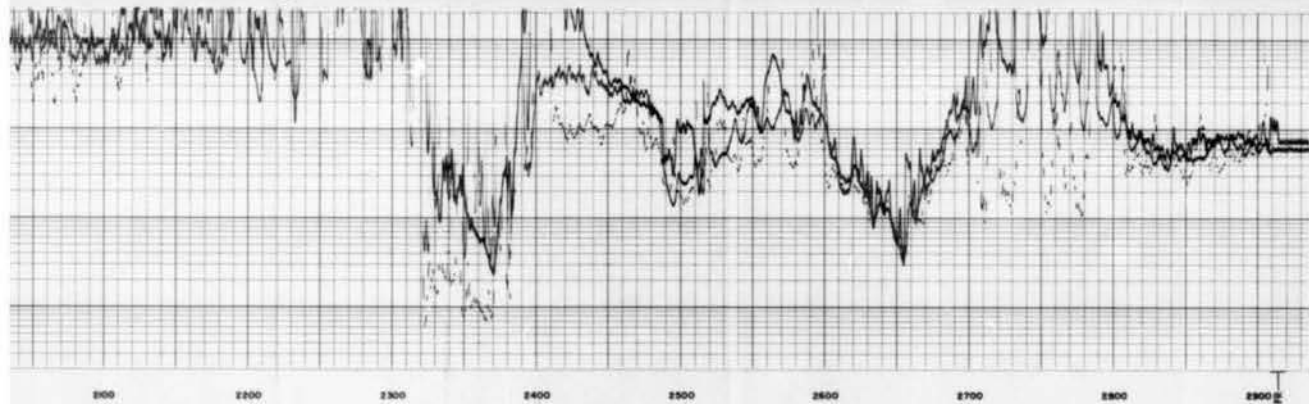
COMPANY HUSKY OIL LTD.

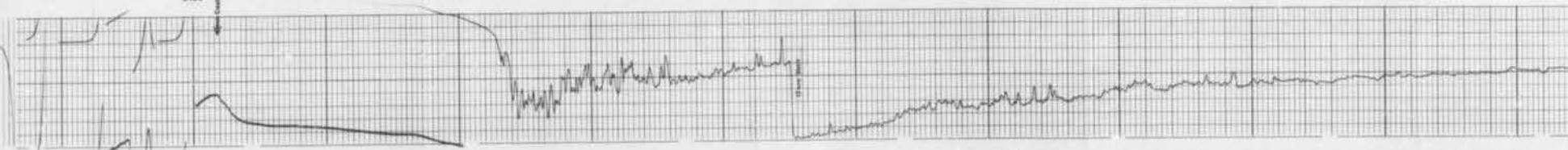
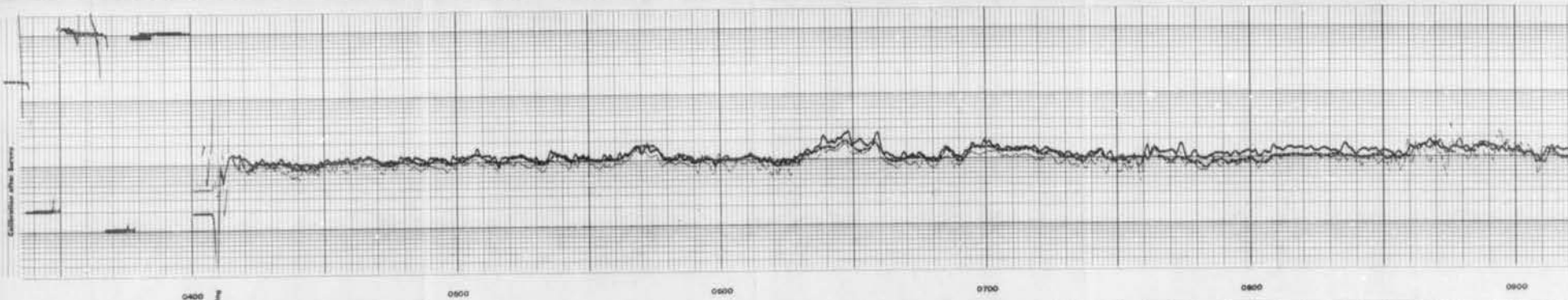
WELL HUSKY HE ET AL WILLOW LAKE 0-27A

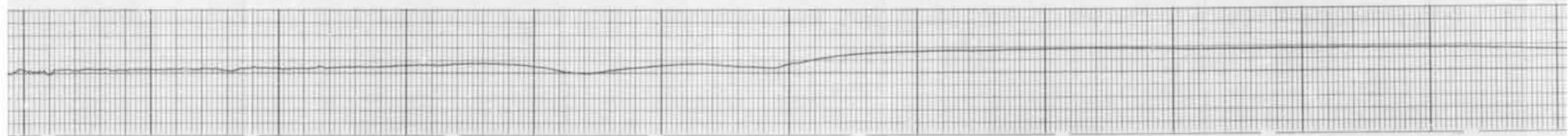
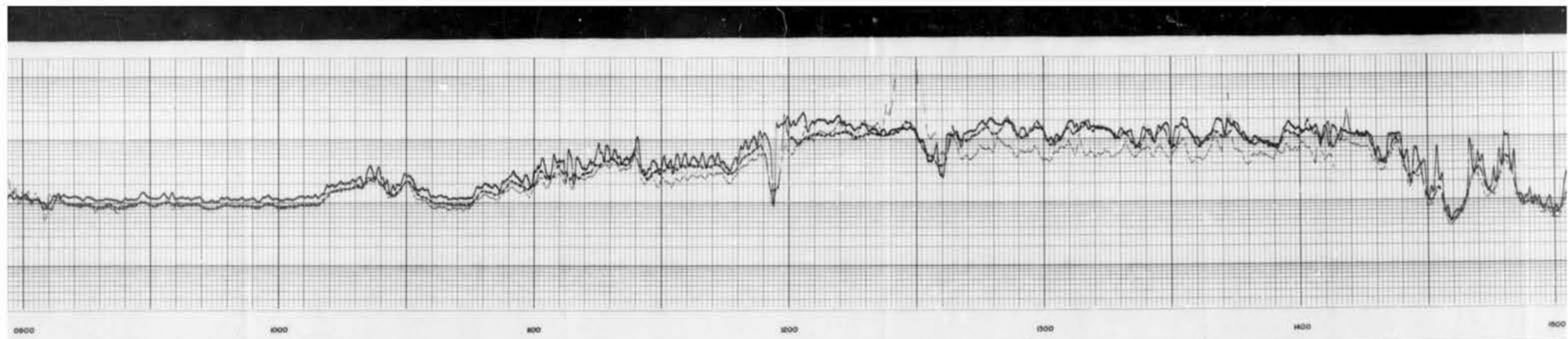
FIELD WILLCAT PROVINCE NORTHWEST TERRITORIES

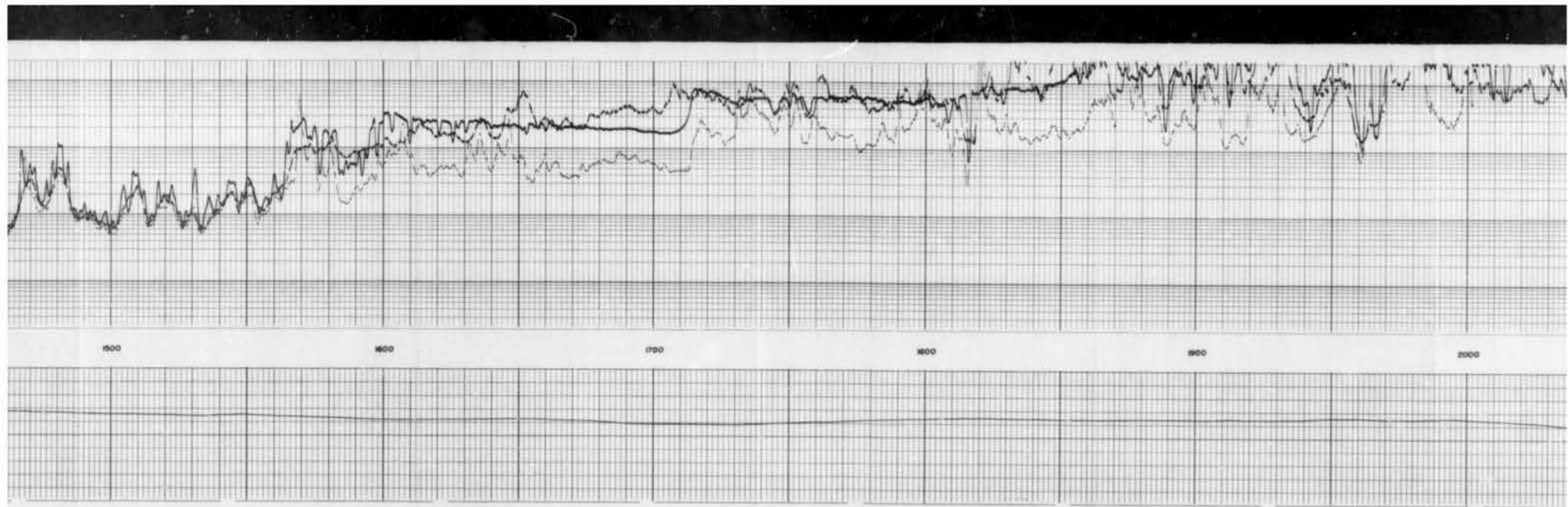
SCHLUMBERGER

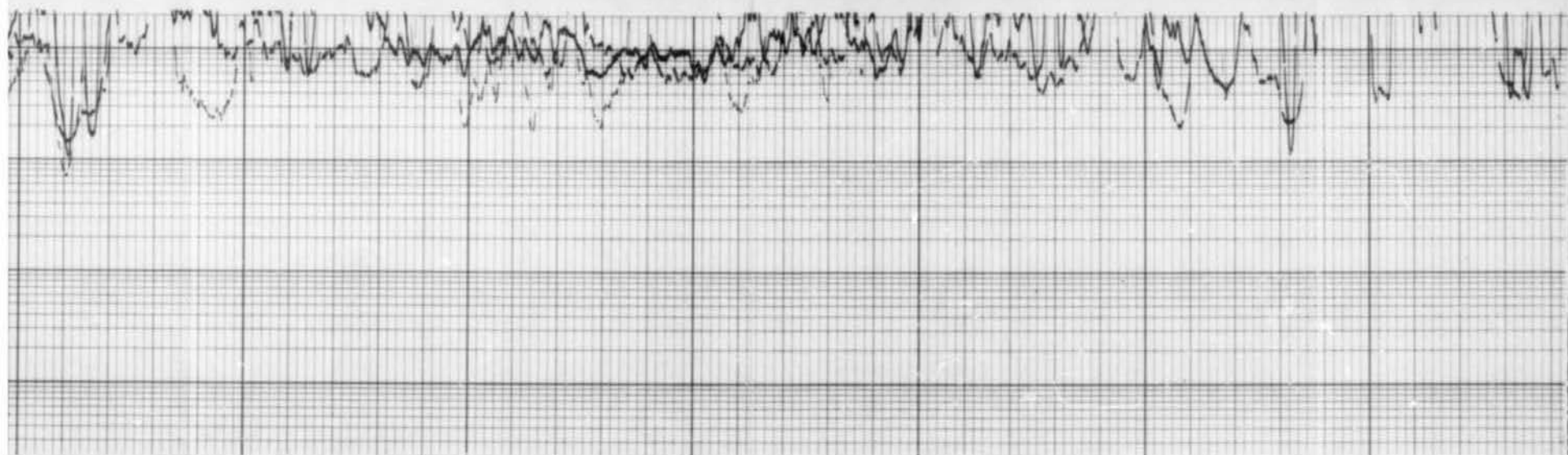








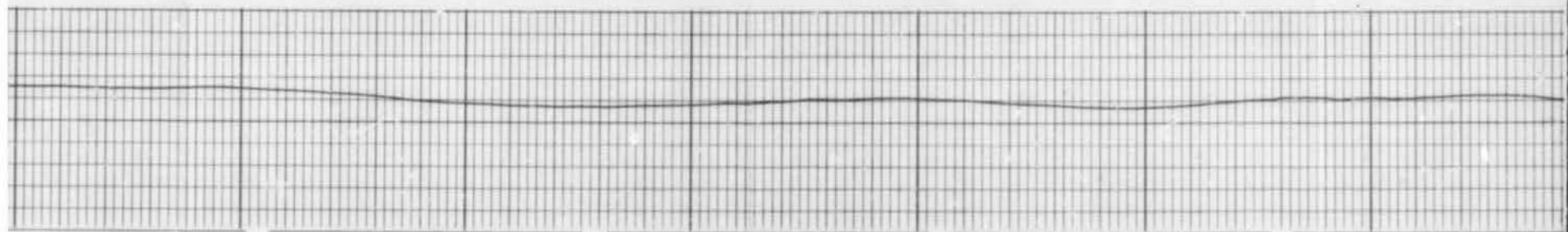


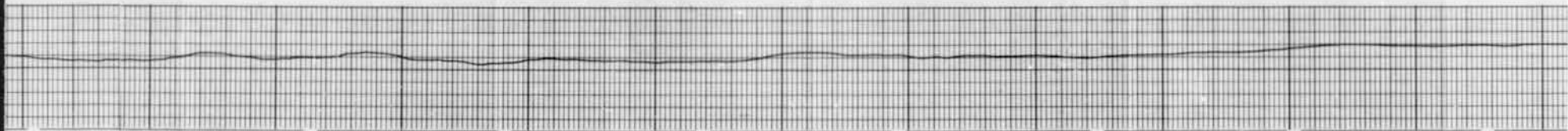
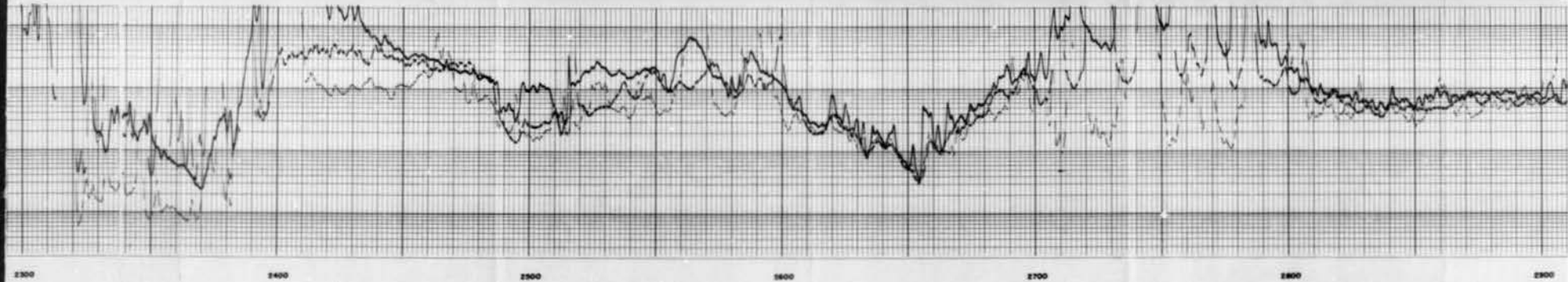


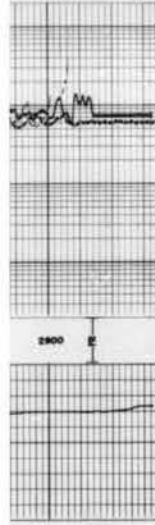
2000

2100

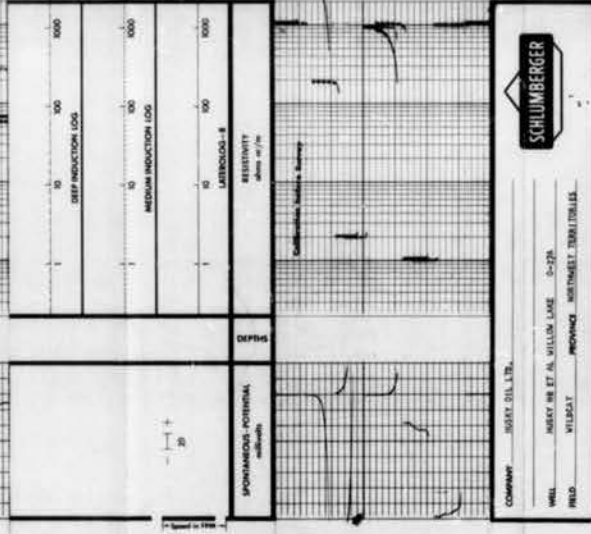
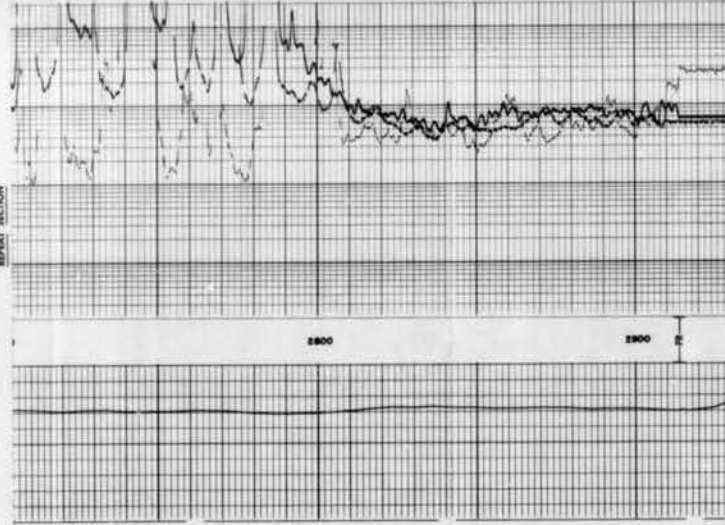
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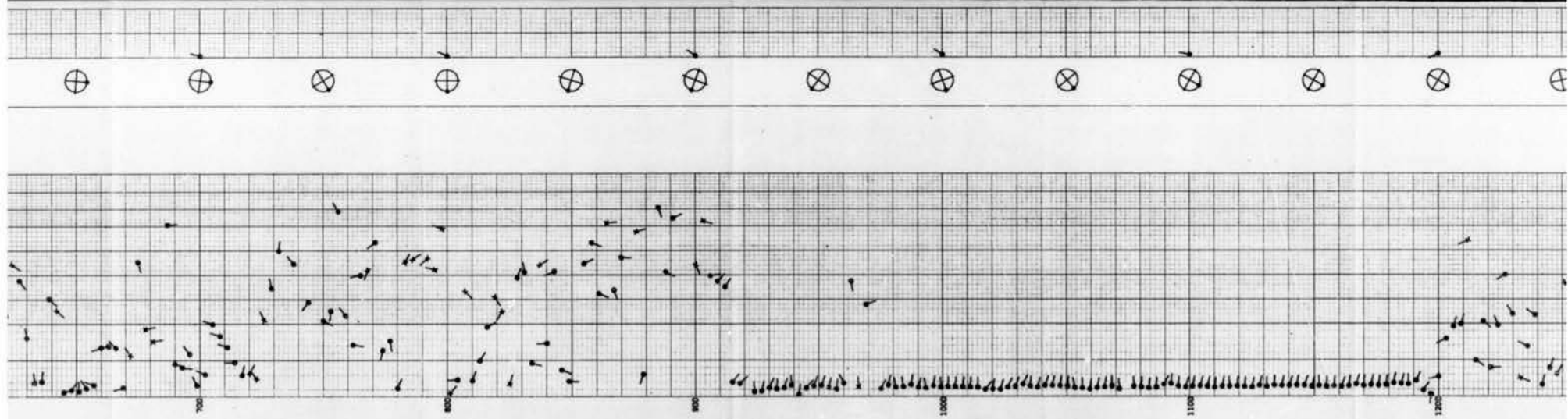


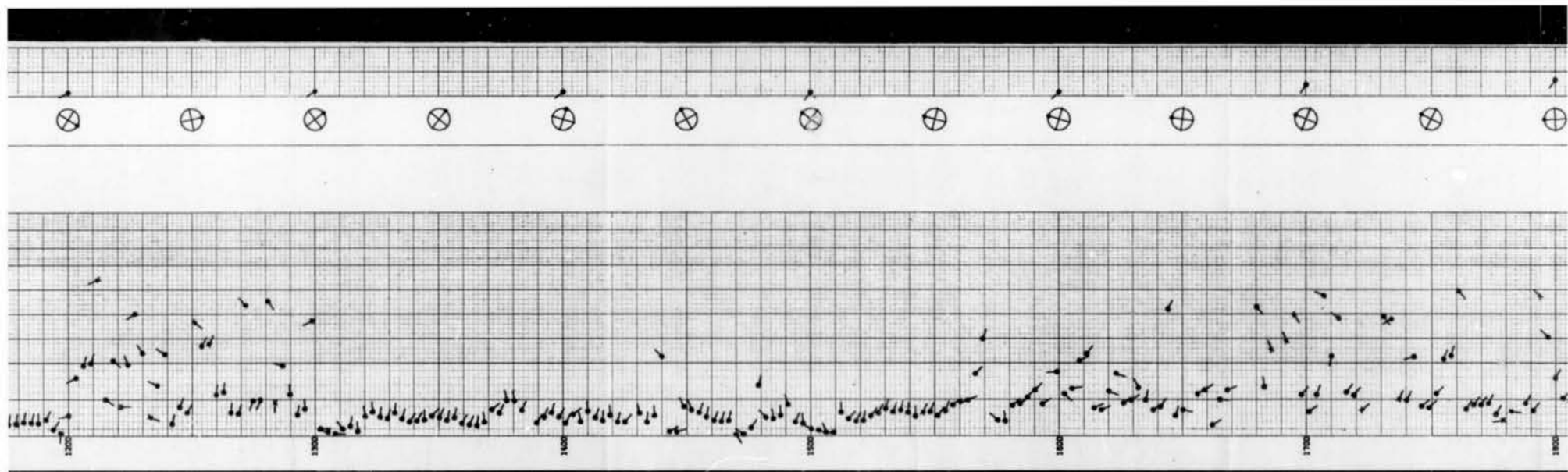


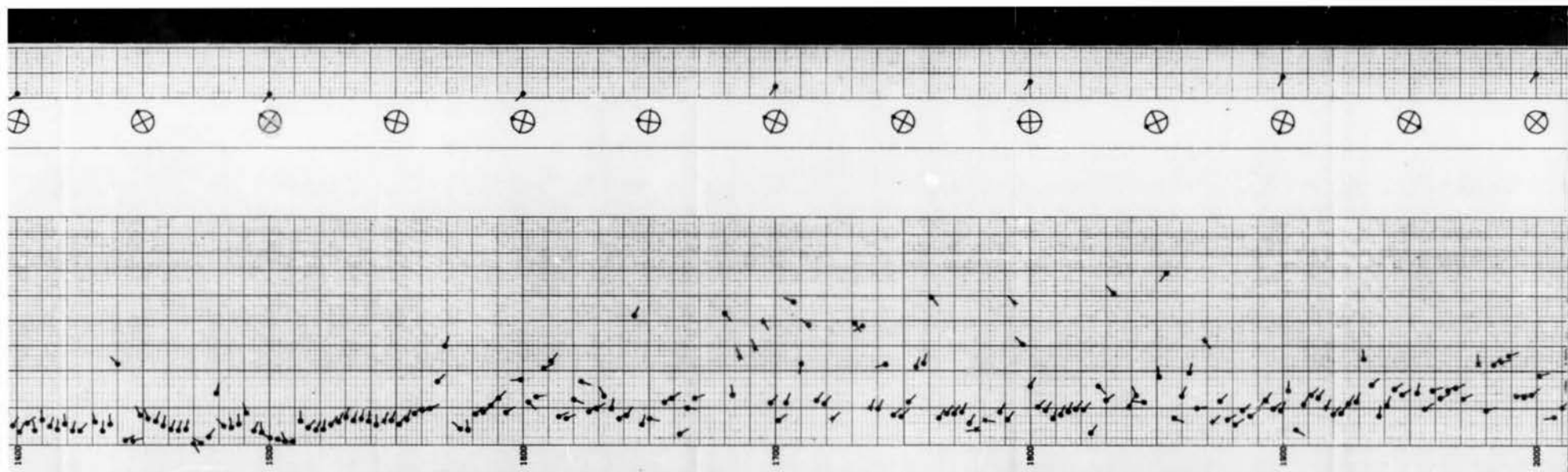


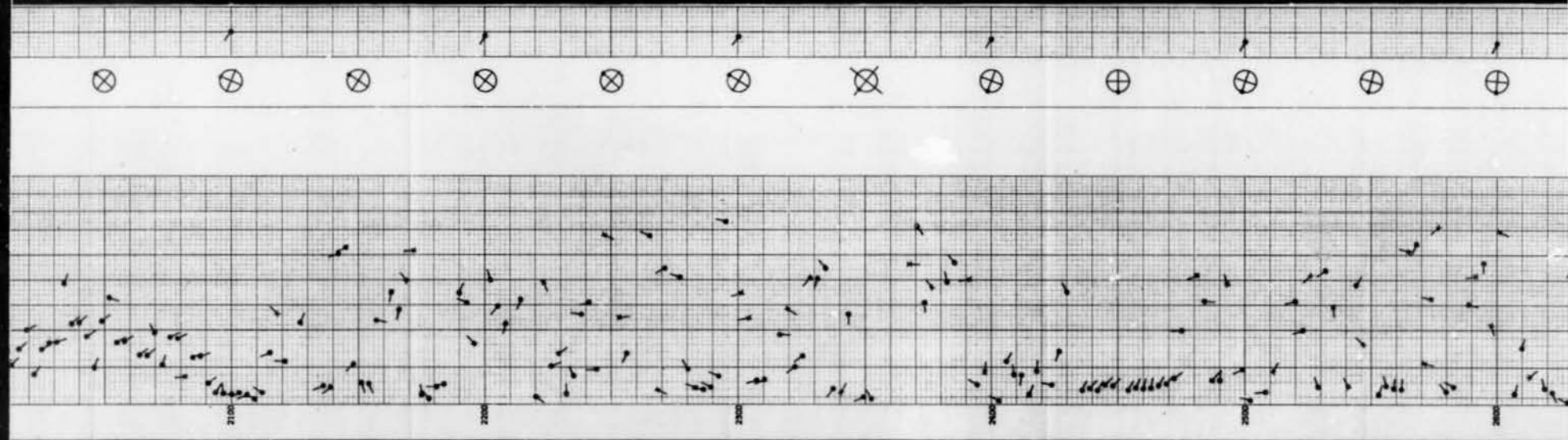
REPEAT SECTION

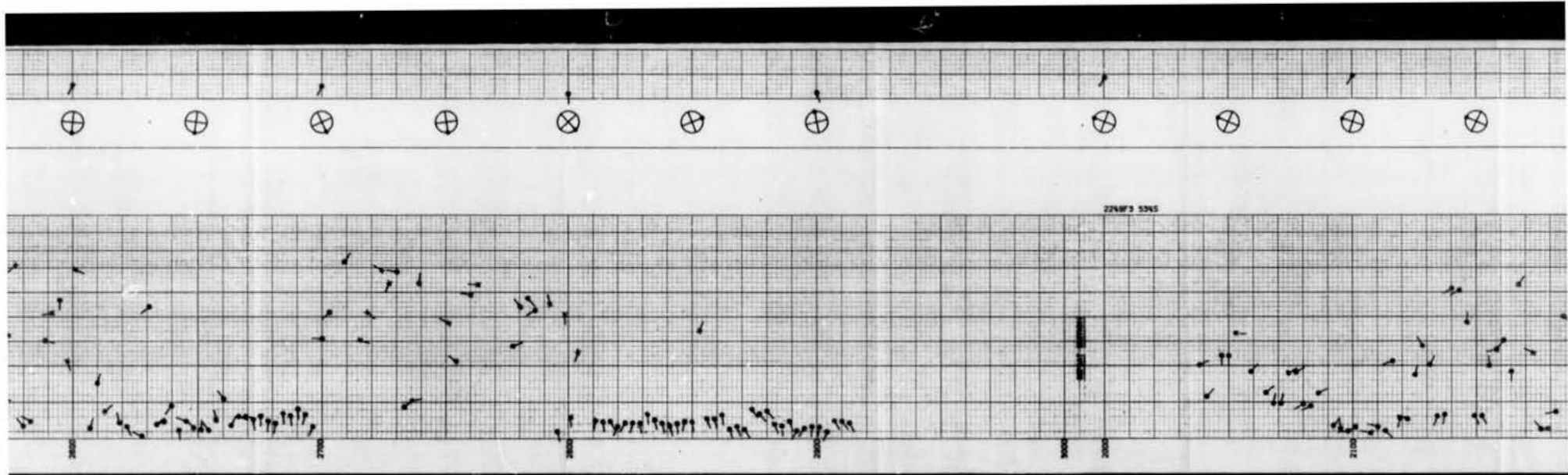


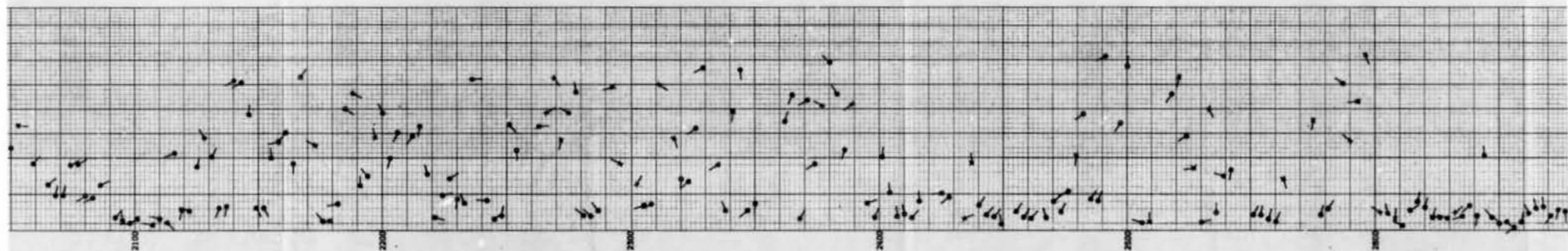
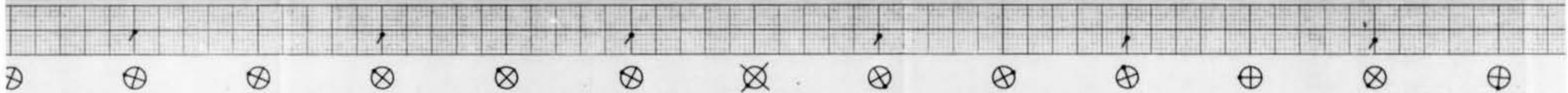


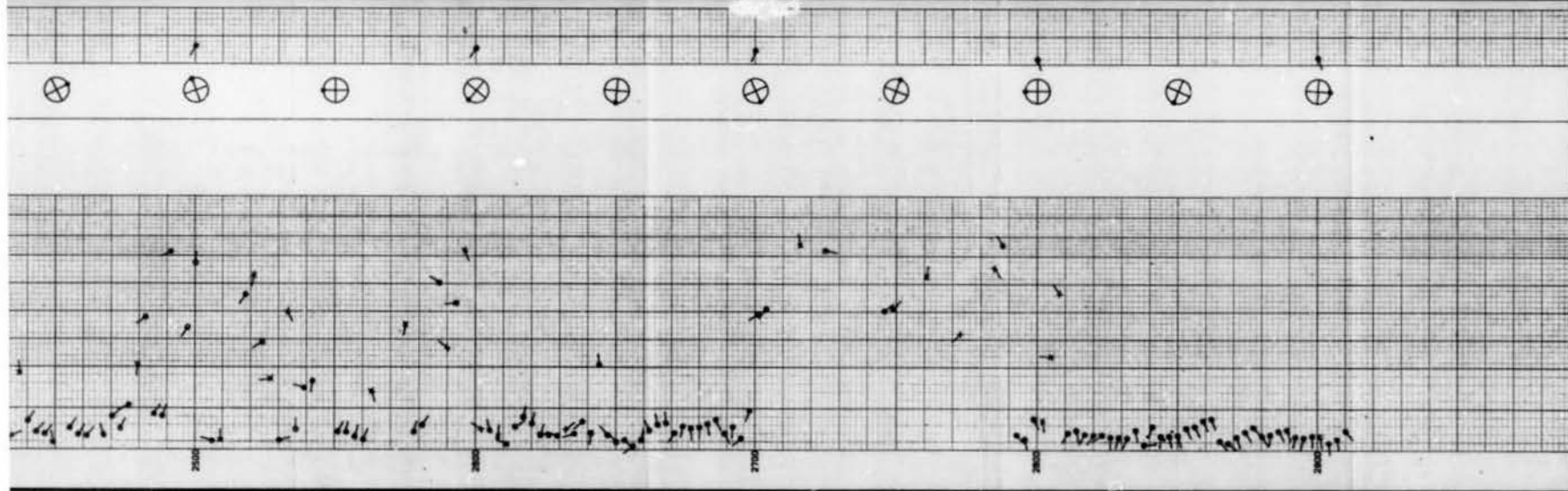








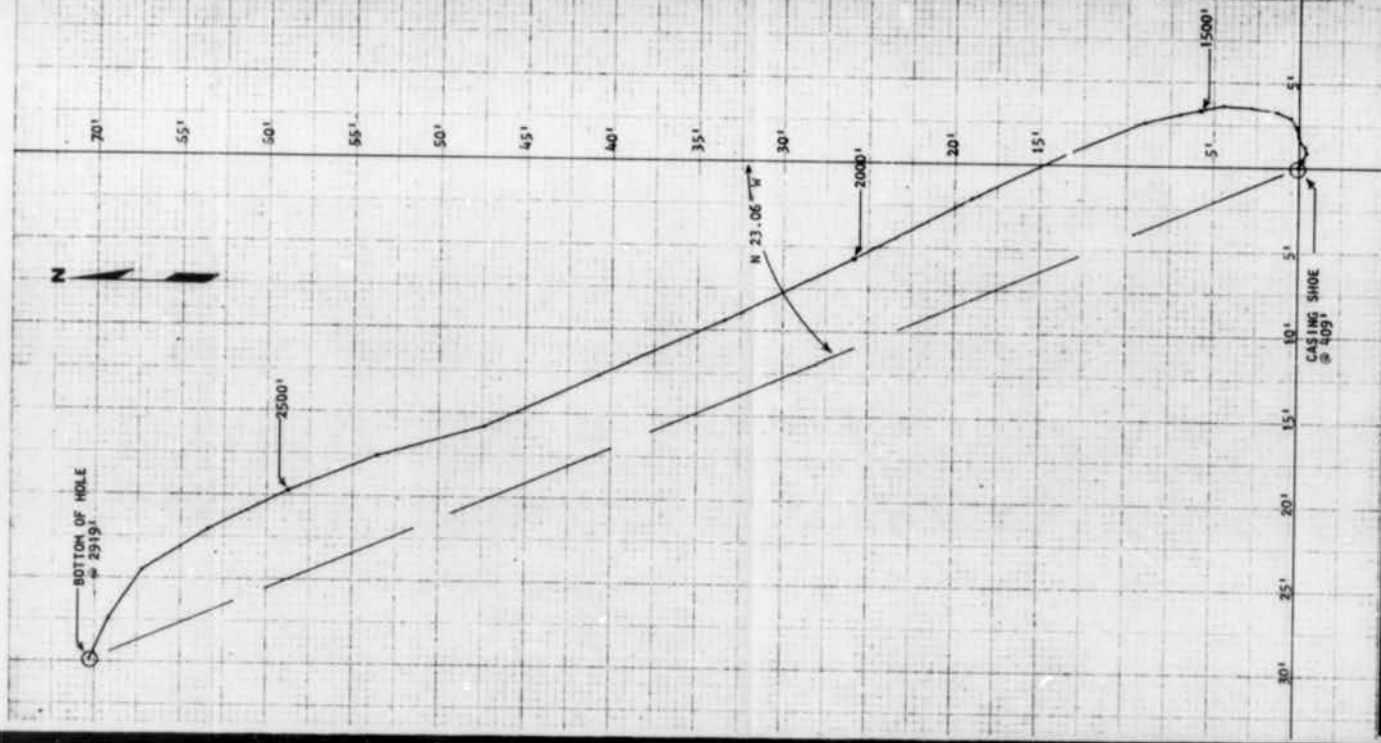




DEPTH
TRUE DIP ANGLE
DIST. & TRUE DIRECTION OF TENDENCY



COMPANY: JAGGER OIL LTD.
WELL: HAZY HB ET AL WILLOWLAKE 027A
FIELD: WILLOWAT PROVINCE NORTHWEST TERRITORIES



COMPANY HUSKY OIL LTD.

WELL HUSKY HB ET AL WILLOWLAKE 027A

FIELD WILDCAT PROVINCE NORTHWEST TERRITORIES

SCHLUMBERGER

HUSKY RD ST AL WILLOWLAKE C-27A

D.A. 405

* Daily Tour Reports

OPERATOR				LEASE				REPORT NO. 47				DATE 7/26/22			
Husky ET AL				WILLOW LAKE 0-27-A				WELL NO. 0-27-A				FIELD OR DIST. ALBERTA			
CONTRACTOR				S & T DRILLING (WESTERN) CO. LTD.				PUMPS				COUNTY N.W.T.			
SIGNATURE OF OPERATOR'S REPRESENTATIVE				SIGNATURE OF CONTRACTOR'S TOOL PUMPER				NO. MANUFACTURER				TYPE			
TIME DISTRIBUTION-HOURS				DRILLING ASSEMBLY				BIT RECORD				MUD RECORD			
HOUR DAY EYE				STANDS D.P.				TIME				FOOTAGE			
DRILLING ACTUAL				SIZES D.P.				WEIGHT				FROM TO			
BEARING				D.C.				VISC-SEC				DEVIATION RECORD			
PUMPING MUD & CIRCULATING				I.D. O.D.				W.L.-C.C.				DEPTH			
TRIPS				D.C.				FLTR. CK.				DEVIATION RECORD			
LUBRICATE RIG				I.D. O.D.				PN				DEVIATION RECORD			
DEVIATION SURVEY				I.D. O.D.				VISC-SEC				DEVIATION RECORD			
TEST B.P.				I.D. O.D.				W.L.-C.C.				DEVIATION RECORD			
CUT OFF DRILLING LINE				I.D. O.D.				FLTR. CK.				DEVIATION RECORD			
WIRE RIG				I.D. O.D.				PN				DEVIATION RECORD			
WIRE LINE LOGGING				I.D. O.D.				VISC-SEC				DEVIATION RECORD			
RUNNING CASING & CEMENTING				I.D. O.D.				W.L.-C.C.				DEVIATION RECORD			
WAITING ON CEMENT				I.D. O.D.				FLTR. CK.				DEVIATION RECORD			
DRILL STOP TEST				I.D. O.D.				PN				DEVIATION RECORD			
OTHER				I.D. O.D.				VISC-SEC				DEVIATION RECORD			
FINISH				I.D. O.D.				W.L.-C.C.				DEVIATION RECORD			
A. PERFORATION				I.D. O.D.				FLTR. CK.				DEVIATION RECORD			
B. TUBING TRIPS				I.D. O.D.				PN				DEVIATION RECORD			
C. DRABING				I.D. O.D.				VISC-SEC				DEVIATION RECORD			
D. TESTING				I.D. O.D.				W.L.-C.C.				DEVIATION RECORD			
E. ADDITIONAL				I.D. O.D.				FLTR. CK.				DEVIATION RECORD			
TIME SUMMARY (DIFFERENTIAL ONLY)				I.D. O.D.				PN				DEVIATION RECORD			
DAY WORK				I.D. O.D.				VISC-SEC				DEVIATION RECORD			
NRL. W.D.P.				I.D. O.D.				W.L.-C.C.				DEVIATION RECORD			
NRL. NO. OF				I.D. O.D.				FLTR. CK.				DEVIATION RECORD			
NRL. STANDBY				I.D. O.D.				PN				DEVIATION RECORD			
TOTAL DAY WORK				I.D. O.D.				VISC-SEC				DEVIATION RECORD			
WIRE LINE RECORD				I.D. O.D.				W.L.-C.C.				DEVIATION RECORD			
REEL NO.				I.D. O.D.				FLTR. CK.				DEVIATION RECORD			
NO. OF LINES				I.D. O.D.				PN				DEVIATION RECORD			
FEET SLIPPED				I.D. O.D.				VISC-SEC				DEVIATION RECORD			
FEET CUT OFF				I.D. O.D.				W.L.-C.C.				DEVIATION RECORD			
PRESENT LENGTH				I.D. O.D.				FLTR. CK.				DEVIATION RECORD			
TON. OF TRIPS				I.D. O.D.				PN				DEVIATION RECORD			
WHICH LAST CUT				I.D. O.D.				VISC-SEC				DEVIATION RECORD			
CUMULATIVE FOR H. OR TRIPS				I.D. O.D.				W.L.-C.C.				DEVIATION RECORD			
NO. OF DAYS FROM SPUD				I.D. O.D.				FLTR. CK.				DEVIATION RECORD			
CUMULATIVE ROTATING HBL				I.D. O.D.				PN				DEVIATION RECORD			

REPORT NO. 53 DATE 2/4/1970

OPERATOR		WELL NO.		FIELD OR DIST.		COUNTY		STATE	
Husky Et Al		Willow Lake 0-77-A		Willow Lake		N.W.T.			
CONTRACTOR		S & T DRILLING (WESTERN) CO. LTD.		PUMPS		LAST CANNED TUBING OR LINER		FOOTAGE	
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUMPER		MANUFACTURER		TYPE		STUBS LENGTH	
R. H. Webster		L. H. Webster		N.A.T.		N.A.T.		2-750 15"	
TIME DISTRIBUTION - HOURS		NO. DRILLING ASSEMBLY AT END OF TIME		BIT RECORD		MUD RECORD		FOOTAGE	
NOON DAY EYE		STANDS D.P.		FT. BIT NO.		TIME		FROM TO	
BIG UP & TEAR TOWN		UNLOADED D.P.		FT. SIZE		WEIGHT		NO. OF PUMP	
STILLING ACTUAL		D.C.		WFL		WVC-SEC		NO. OF PUMP	
BEARING		I.D. O.D.		FT. TYPE		W.L.-C.C.		NO. OF PUMP	
BUSHINGS AND CIRCULATING		D.C.		NO. NOZZLE		FLTR. CR.		NO. OF PUMP	
TIPS		I.D. O.D.		FT. NO.		PH		NO. OF PUMP	
LUBRICATE MUD		STD.		FT. SER. NO.		CON. N		NO. OF PUMP	
DEVIATION METER		STD.		FT. DEPTH OUT		PRESSURE GRADIENT		NO. OF PUMP	
TEST & G.P.		STD.		FT. DEPTH IN		MUD & CHEMICAL ANAL.		NO. OF PUMP	
TEST OFF DRILLING LINE		STD.		FT. TOTAL FTL		TYPE		NO. OF PUMP	
MUD RIG		STD.		FT. TOTAL M. RUN		COND. OF BIT		NO. OF PUMP	
MUD		STD.		FT. KELLY DOWN		REARER NO.		NO. OF PUMP	
WIRE LINE DRILLING		STD.		FT. TOTAL		REARER TYPE		NO. OF PUMP	
FISHING, CASING & CEMENTING		STD.		FT. REARER NO.		DRILLER		NO. OF PUMP	
WAITING ON CEMENT		STD.		FT. REARER TYPE		DRILLER		NO. OF PUMP	
BRILL STEM TEST		NO. DRILLING ASSEMBLY AT END OF TIME		BIT RECORD		MUD RECORD		FOOTAGE	
OTHER		STANDS D.P.		FT. BIT NO.		TIME		FROM TO	
FISHING		UNLOADED D.P.		FT. SIZE		WEIGHT		NO. OF PUMP	
A. FERTILIZING		D.C.		WFL		WVC-SEC		NO. OF PUMP	
B. TUBING TIPS		I.D. O.D.		FT. TYPE		W.L.-C.C.		NO. OF PUMP	
C. TRASSING		D.C.		NO. NOZZLE		FLTR. CR.		NO. OF PUMP	
D. TESTING		I.D. O.D.		FT. NO.		PH		NO. OF PUMP	
E. ADDITIONAL		STD.		FT. SER. NO.		CON. N		NO. OF PUMP	
F. OTHER		STD.		FT. DEPTH OUT		PRESSURE GRADIENT		NO. OF PUMP	
G. SUMMARY (OTHER USE ONLY)		STD.		FT. DEPTH IN		MUD & CHEMICAL ANAL.		NO. OF PUMP	
DAY MUD		STD.		FT. TOTAL FTL		TYPE		NO. OF PUMP	
MUD WSP		STD.		FT. TOTAL M. RUN		COND. OF BIT		NO. OF PUMP	
MUD NO. UP		STD.		FT. KELLY DOWN		REARER NO.		NO. OF PUMP	
MUD STANDBY		STD.		FT. TOTAL		REARER TYPE		NO. OF PUMP	
TOTAL DAY MUD		NO. DRILLING ASSEMBLY AT END OF TIME		BIT RECORD		MUD RECORD		FOOTAGE	
WIRE LINE RECORD		STANDS D.P.		FT. BIT NO.		TIME		FROM TO	
REEL NO.		UNLOADED D.P.		FT. SIZE		WEIGHT		NO. OF PUMP	
NO. OF LINES		D.C.		WFL		WVC-SEC		NO. OF PUMP	
FEET SLIPPED		I.D. O.D.		FT. TYPE		W.L.-C.C.		NO. OF PUMP	
FEET CUT OFF		D.C.		NO. NOZZLE		FLTR. CR.		NO. OF PUMP	
PRESENT LENGTH		I.D. O.D.		FT. NO.		PH		NO. OF PUMP	
TIN W. OF TIPS		STD.		FT. SER. NO.		CON. N		NO. OF PUMP	
TIN W. OF TIPS SINCE LAST CUT		STD.		FT. DEPTH OUT		PRESSURE GRADIENT		NO. OF PUMP	
CONSULATIVE		STD.		FT. DEPTH IN		MUD & CHEMICAL ANAL.		NO. OF PUMP	
TIN W. OF TIPS		STD.		FT. TOTAL FTL		TYPE		NO. OF PUMP	
NO. OF DAYS		STD.		FT. TOTAL M. RUN		COND. OF BIT		NO. OF PUMP	
CONSULATIVE		STD.		FT. KELLY DOWN		REARER NO.		NO. OF PUMP	
ROTATING MUD		STD.		FT. TOTAL		REARER TYPE		NO. OF PUMP	

DATE: 10-14-2008

WELL NO. 0-270 **FIELD OR DIST.** Wabshaw Lake **COUNTY** N.W.T. **STATE**

CONTRACTOR S & T DRILLING (WESTERN) CO. LTD. **RIG NO.** 4 **DRILL TYPE** STERN **TOOL JOINT** 6" O.D. **PUMPS**

INITIALS OF OPERATOR'S REPRESENTATIVE *R. H. Wabber* **SIGNATURE OF CONTRACTOR'S TOOL PUMPER** *R. H. Wabber*

SIZE 9 5/8" **HAIR** 36" **WT. & GR.** 13 **FEET** 409 **NO. OF DAYS** 409

THE DISTRIBUTION-HOURS

MON	TUE	WED	THUR	FRI	SAT	SUN
1	1	1	1	1	1	1

DRILLING ACTUAL *28* **TRIPS** *1* **CLUBS** *1* **REPAIRS** *1*

DRILLING LOG

STANDS D.P.	FEET	BIT NO.	TIME	WEIGHT	W.C. - SEC	W.C. - C.C.	FLTR. GR.	PN	HT. & CH. & A.D.	TYPE	AMT.	TYPE	AMT.
1	31.72	FEET											
2	70.95	FEET											
3	534.79	FEET											
4	6.28	FEET											
5	1987	FEET											
6	2920	FEET											

DRILLING ASSEMBLY

STANDS D.P.	FEET	BIT NO.	TIME	WEIGHT	W.C. - SEC	W.C. - C.C.	FLTR. GR.	PN	HT. & CH. & A.D.	TYPE	AMT.	TYPE	AMT.
1	31.72	FEET											
2	70.95	FEET											
3	534.79	FEET											
4	6.28	FEET											
5	1987	FEET											
6	2920	FEET											

DRILLING LOG

STANDS D.P.	FEET	BIT NO.	TIME	WEIGHT	W.C. - SEC	W.C. - C.C.	FLTR. GR.	PN	HT. & CH. & A.D.	TYPE	AMT.	TYPE	AMT.
1	31.72	FEET											
2	70.95	FEET											
3	534.79	FEET											
4	6.28	FEET											
5	1987	FEET											
6	2920	FEET											

DRILLING ASSEMBLY

STANDS D.P.	FEET	BIT NO.	TIME	WEIGHT	W.C. - SEC	W.C. - C.C.	FLTR. GR.	PN	HT. & CH. & A.D.	TYPE	AMT.	TYPE	AMT.
1	31.72	FEET											
2	70.95	FEET											
3	534.79	FEET											
4	6.28	FEET											
5	1987	FEET											
6	2920	FEET											

DRILLING LOG

STANDS D.P.	FEET	BIT NO.	TIME	WEIGHT	W.C. - SEC	W.C. - C.C.	FLTR. GR.	PN	HT. & CH. & A.D.	TYPE	AMT.	TYPE	AMT.
1	31.72	FEET											
2	70.95	FEET											
3	534.79	FEET											
4	6.28	FEET											
5	1987	FEET											
6	2920	FEET											

DRILLING ASSEMBLY

STANDS D.P.	FEET	BIT NO.	TIME	WEIGHT	W.C. - SEC
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DAILY DRILLING REPORT				REPORT NO. 14		DATE 11/27/10	
OPERATOR Husky Et Al				LEASE Willow Lake 0-27-M		WELL NO. 027A	
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.				RIG NO. 4		FIELD OR DIST. Willow Lake	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>				SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>		COUNTY N.W.T.	
TIME DISTRIBUTION - HOURS				PUMPS		STATE	
DRILLING ACTUAL 5:34 1/2				NO. 1 MANUFACTURER Nat.		SIZE 9 3/4	
REARING 34				NO. 2 TYPE F.H.		W.C. & G. 36" JS	
CONDUITING AND CEMENTING 34				NO. 3 TYPE Nat.		FEET 13	
TRIPS 1 1/4				LAST CASING TUBING OR LINES		SET AT 409	
LUBRICATE RIG 1 1/4				NO. 4 TYPE Nat.		REMARKS	
DEVIATION SURVEY 1 1/4				NO. 5 TYPE Nat.			
TEST B.P.P.				NO. 6 TYPE Nat.			
CUT OFF DRILLING LINE				NO. 7 TYPE Nat.			
WASH RIG				NO. 8 TYPE Nat.			
MAX LINE LOGGING				NO. 9 TYPE Nat.			
RUNNING CASING & CEMENTING				NO. 10 TYPE Nat.			
WAITING ON ORDER 15				NO. 11 TYPE Nat.			
DRILL STEM TEST 68				NO. 12 TYPE Nat.			
FOHRING				NO. 13 TYPE Nat.			
A. PERFORATING				NO. 14 TYPE Nat.			
B. TUBING TRIPS				NO. 15 TYPE Nat.			
C. GRABBER				NO. 16 TYPE Nat.			
D. TESTING				NO. 17 TYPE Nat.			
E. ADDITIONAL				NO. 18 TYPE Nat.			
TOTAL 8 8 8				NO. 19 TYPE Nat.			
TIME SUMMARY (SEE LAST PAGE)				NO. 20 TYPE Nat.			
DAY WORK				NO. 21 TYPE Nat.			
NEL. W.D.P.				NO. 22 TYPE Nat.			
NEL. W.D.P.				NO. 23 TYPE Nat.			
NEL. STANDBY				NO. 24 TYPE Nat.			
TOTAL DAY WORK				NO. 25 TYPE Nat.			
WIRE LINE RECORD				NO. 26 TYPE Nat.			
REEL NO.				NO. 27 TYPE Nat.			
NO. OF LINES				NO. 28 TYPE Nat.			
FEET SLOPPED				NO. 29 TYPE Nat.			
FEET CUT OFF				NO. 30 TYPE Nat.			
PRESENT LENGTH				NO. 31 TYPE Nat.			
TON. W. OR TRIPS				NO. 32 TYPE Nat.			
TON. W. OR TRIPS				NO. 33 TYPE Nat.			
COMPLETION				NO. 34 TYPE Nat.			
NO. OF DAYS				NO. 35 TYPE Nat.			
FROM 11/27/10				NO. 36 TYPE Nat.			
ROTATING RIG				NO. 37 TYPE Nat.			
NO. 1 DRILLING ASSEMBLY				NO. 38 TYPE Nat.			
NO. 2 DRILLING ASSEMBLY				NO. 39 TYPE Nat.			
NO. 3 DRILLING ASSEMBLY				NO. 40 TYPE Nat.			
NO. 4 DRILLING ASSEMBLY				NO. 41 TYPE Nat.			
NO. 5 DRILLING ASSEMBLY				NO. 42 TYPE Nat.			
NO. 6 DRILLING ASSEMBLY				NO. 43 TYPE Nat.			
NO. 7 DRILLING ASSEMBLY				NO. 44 TYPE Nat.			
NO. 8 DRILLING ASSEMBLY				NO. 45 TYPE Nat.			
NO. 9 DRILLING ASSEMBLY				NO. 46 TYPE Nat.			
NO. 10 DRILLING ASSEMBLY				NO. 47 TYPE Nat.			
NO. 11 DRILLING ASSEMBLY				NO. 48 TYPE Nat.			
NO. 12 DRILLING ASSEMBLY				NO. 49 TYPE Nat.			
NO. 13 DRILLING ASSEMBLY				NO. 50 TYPE Nat.			
NO. 14 DRILLING ASSEMBLY				NO. 51 TYPE Nat.			
NO. 15 DRILLING ASSEMBLY				NO. 52 TYPE Nat.			
NO. 16 DRILLING ASSEMBLY				NO. 53 TYPE Nat.			
NO. 17 DRILLING ASSEMBLY				NO. 54 TYPE Nat.			
NO. 18 DRILLING ASSEMBLY				NO. 55 TYPE Nat.			
NO. 19 DRILLING ASSEMBLY				NO. 56 TYPE Nat.			
NO. 20 DRILLING ASSEMBLY				NO. 57 TYPE Nat.			
NO. 21 DRILLING ASSEMBLY				NO. 58 TYPE Nat.			
NO. 22 DRILLING ASSEMBLY				NO. 59 TYPE Nat.			
NO. 23 DRILLING ASSEMBLY				NO. 60 TYPE Nat.			
NO. 24 DRILLING ASSEMBLY				NO. 61 TYPE Nat.			
NO. 25 DRILLING ASSEMBLY				NO. 62 TYPE Nat.			
NO. 26 DRILLING ASSEMBLY				NO. 63 TYPE Nat.			
NO. 27 DRILLING ASSEMBLY				NO. 64 TYPE Nat.			
NO. 28 DRILLING ASSEMBLY				NO. 65 TYPE Nat.			
NO. 29 DRILLING ASSEMBLY				NO. 66 TYPE Nat.			
NO. 30 DRILLING ASSEMBLY				NO. 67 TYPE Nat.			
NO. 31 DRILLING ASSEMBLY				NO. 68 TYPE Nat.			
NO. 32 DRILLING ASSEMBLY				NO. 69 TYPE Nat.			
NO. 33 DRILLING ASSEMBLY				NO. 70 TYPE Nat.			
NO. 34 DRILLING ASSEMBLY				NO. 71 TYPE Nat.			
NO. 35 DRILLING ASSEMBLY				NO. 72 TYPE Nat.			
NO. 36 DRILLING ASSEMBLY				NO. 73 TYPE Nat.			
NO. 37 DRILLING ASSEMBLY				NO. 74 TYPE Nat.			
NO. 38 DRILLING ASSEMBLY				NO. 75 TYPE Nat.			
NO. 39 DRILLING ASSEMBLY				NO. 76 TYPE Nat.			
NO. 40 DRILLING ASSEMBLY				NO. 77 TYPE Nat.			
NO. 41 DRILLING ASSEMBLY				NO. 78 TYPE Nat.			
NO. 42 DRILLING ASSEMBLY				NO. 79 TYPE Nat.			
NO. 43 DRILLING ASSEMBLY				NO. 80 TYPE Nat.			
NO. 44 DRILLING ASSEMBLY				NO. 81 TYPE Nat.			
NO. 45 DRILLING ASSEMBLY				NO. 82 TYPE Nat.			
NO. 46 DRILLING ASSEMBLY				NO. 83 TYPE Nat.			
NO. 47 DRILLING ASSEMBLY				NO. 84 TYPE Nat.			
NO. 48 DRILLING ASSEMBLY				NO. 85 TYPE Nat.			
NO. 49 DRILLING ASSEMBLY				NO. 86 TYPE Nat.			
NO. 50 DRILLING ASSEMBLY				NO. 87 TYPE Nat.			
NO. 51 DRILLING ASSEMBLY				NO. 88 TYPE Nat.			
NO. 52 DRILLING ASSEMBLY				NO. 89 TYPE Nat.			
NO. 53 DRILLING ASSEMBLY				NO. 90 TYPE Nat.			
NO. 54 DRILLING ASSEMBLY				NO. 91 TYPE Nat.			
NO. 55 DRILLING ASSEMBLY				NO. 92 TYPE Nat.			
NO. 56 DRILLING ASSEMBLY				NO. 93 TYPE Nat.			
NO. 57 DRILLING ASSEMBLY				NO. 94 TYPE Nat.			
NO. 58 DRILLING ASSEMBLY				NO. 95 TYPE Nat.			
NO. 59 DRILLING ASSEMBLY				NO. 96 TYPE Nat.			
NO. 60 DRILLING ASSEMBLY				NO. 97 TYPE Nat.			
NO. 61 DRILLING ASSEMBLY				NO. 98 TYPE Nat.			
NO. 62 DRILLING ASSEMBLY				NO. 99 TYPE Nat.			
NO. 63 DRILLING ASSEMBLY				NO. 100 TYPE Nat.			

DAILY DRILLING REPORT REPORT NO. 3 DATE Feb 15/70

OPERATOR Husky Et Al LEASE Willow Lake P-27-A WELL NO. P-27A FIELD OR DIST. Willow Lake COUNTY N.W.T. STATE

CONTRACTOR S & T DRILLING (WESTERN) CO. LTD. BIG NO. 4 DRILL PIPE STEEL 6" TOL. ADJUST 6" PUMPS SIZE 9 3/4 MAKE MAN WT. & GR. 13 FEET 409 REMARKS

SIGNATURE OF OPERATOR'S REPRESENTATIVE [Signature] SIGNATURE OF CONTRACTOR'S TOOL DRESSER P.H. Wierben

MANUFACTURER NAT. TYPE C-250 STROKE 15" LAST CASING TUBING OR LINER

TIME DISTRIBUTION - HOURS

NO.	DRILLING ASSEMBLY AT END OF TURN	BIT RECORD	MUD RECORD	FOOTAGE	FORMATION (WHEN CORE RECOVERED)	REMARKS
20	STANDS D.P. <u>1861.79</u> FT.	BIT NO. <u>8</u>	TIME <u>5:30</u> <u>7:00</u>	FROM <u>2524</u> TO <u>2545</u>	<u>A</u>	<u>RECOVERED 238' OF CORE 70' 15/430 54 60</u>
21	SHOLES D.P. <u>30.59</u> FT.	SIZE <u>8 3/4</u>	WEIGHT <u>96</u> <u>96</u>			
22	D.C. <u>6.70</u>	WFL <u>H.W.</u>	WFL-SEC <u>40</u> <u>38</u>			
23	L.B. O.D. <u>90.95</u> FT.	TYPE <u>W07</u>	W.L.-CC <u></u>			
24	D.C. <u>6.70</u>	NO. <u>2-1</u>	PLTR. CL. <u></u>			
25	L.D. O.D. <u>534.29</u> FT.	SIZE <u>13-14</u>	PH <u></u>			
26	STL. BODY O.D. <u></u> FT.	SER. NO. <u>17130</u>	SO. CONT. N. <u></u>			
27	STL. BODY O.D. <u></u> FT.	DEPTH OUT <u></u>	PRESSURE GRADIENT <u></u>			
28	STL. BODY O.D. <u></u> FT.	DEPTH IN <u>2524</u>				
29	STL. BODY O.D. <u></u> FT.	TOTAL FTG. <u>21</u>				
30	STL. BODY O.D. <u></u> FT.	TOTAL NO. RUN <u>3 1/2</u>				
31	STL. BODY O.D. <u></u> FT.	COND. OF BIT <u>Run</u>				
32	STL. BODY O.D. <u></u> FT.	REARER NO. <u></u>				
33	STL. BODY O.D. <u></u> FT.	REARER TYPE <u></u>				
34	STL. BODY O.D. <u></u> FT.					
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DAILY DRILLING REPORT										REPORT NO. 17		DATE 2-22-70			
OPERATOR Husky Et Al				LEASE Willow Lake 2-22-8				WELL NO. 0770		FIELD OR DEV. Willow Lake		COUNTY N.W.T.		STATE	
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.				RIG NO. 4		DRILL PIPE STRENGTH 6" 10		TOOL JOINT 6" 10		PUMPS		SEE MARK 94 Havn 36" IS 13		REMARKS	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>				SIGNATURE OF CONTRACTOR'S TOOL JOINT <i>[Signature]</i>				L. NAT.		T. C-350		LAST CASING TUBING ON LINE		709	
TIME DISTRIBUTION—HOURS				DRILLING ASSEMBLY AT END OF TIME		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (ONLY CORE RECOVERY)		REMARKS	
RIG UP & TEAR DOWN				STANDS D.P. 186.148		BIT NO. 3C		TIME 2:00 4:00		FROM 2524		TO 2538		C 3	
DRILLING ACTUAL				SINGLES D.P. 62.54		SIZE 6 3/4		WEIGHT 9.5 9.6		VISC-SEC 42 41		VISC-SEC 42 41		44	
REASONING				L.B. C.B. 534.79		WFL ACC		W.L.-C.C. 2.4 2.4		FLTR. CR. 42 42		FLTR. CR. 42 42		44	
CUTTING MUD & CIRCULATING				L.D. O.D. 5.20		NOZZLE 7/8		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
TRIPS				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
LUBRICATE RIG				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
DEVIATION SURVEY				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
TEST S.D.P.				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
CUT OFF DRILLING LINE				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
REMARKS				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
TIME SUMMARY (OFFER FOR ONLY)				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
OTHER				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
FORMING				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
A. PERFORATING				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
B. TUBING TRIPS				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
C. TRASSING				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
D. TESTING				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
E. ADDITIONAL				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
TOTAL DAY HOURS				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
WELL LINE RECORD				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
NO. OF LINES				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
FEET SLIPPED				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
FEET CUT OFF				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
PRESENT LENGTH				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
TON N. OF TRIPS				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
TON N. OF TRIPS				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
NO. OF DAYS				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
COMPLETION				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	
NOTATIONS				S.D. O.D. 5.20		SER. NO. 7018C		SER. NO. 7018C		DEVIATION RECORD		DEPTH 12.00		DEVIATION RECORD	

DAILY DRILLING REPORT										REPORT NO. 16		DATE 2-13-70			
OPERATOR Husky E & AL				LEASE Willow Lake 0-27-A				WELL NO. 0-27-A		FIELD OR DIST. Willow Lake		COUNTY		STATE	
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.				RIG NO. 4		TOOL JOINT 6"		PUMPS		LAST CASING TUBING OR LINES		SIZE 9 5/8" MANH 36" IS 13		REMARKS 409	
SIGNATURE OF OPERATOR REPRESENTATIVE [Signature]				SIGNATURE OF CONTRACTOR'S REPRESENTATIVE [Signature]				MANUFACTURER Nat.		TYPE C-250 15"		STRENGTH C-150 12"			
TIME DISTRIBUTION - HOURS				DRILLING ASSEMBLY AT END OF TIME		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW LOG RECORDS)		REMARKS	
NO. OF S. TEAR DOWN				STANDS D.P. 1953.72 ft.		BIT NO. 688 8		TIME 12:00 2:00		FROM 2524		TO			
DRILLING ACTUAL				SHOLES D.P. 6 1/2		SIZE 8 3/4 8 3/4		WEIGHT 9.5 9.5		TO					
REASON				I.B. D.D. 524.79 ft.		WFL AC10 MAN		VISC-SEC 44		TO					
DRILLING AND CEMENTING				I.B. D.D. 524.79 ft.		TYPE YMGH 1007		VISC-SEC 44		TO					
TRIPS				I.B. D.D. 524.79 ft.		NO. 2		FLTR. CL. 52		TO					
LUBRICATE MUD				I.B. D.D. 524.79 ft.		SIZE 13 1/4		PH 9.0		TO					
DEVIATION SURVEY				I.B. D.D. 524.79 ft.		SER. NO. 854255		DEPT. IN 17120		TO					
TEST B.O.P.				I.B. D.D. 524.79 ft.		DEPT. OUT		PRESSURE GRADIENT		TO					
CUT OFF DRILLING TIME				I.B. D.D. 524.79 ft.		TOTAL FTL 155		MUD & CHEMICALS ADDED		TO					
REPAIR MUD				I.B. D.D. 524.79 ft.		TOTAL NO. RUN 85		TYPE		TO					
MUD				I.B. D.D. 524.79 ft.		COND. OF BIT		REMARKS		TO					
MUD LINE LOGGING				I.B. D.D. 524.79 ft.		REMARKS NO.		DRILLER D. Scott		TO					
RECORDING CASING & CEMENTING				I.B. D.D. 524.79 ft.		REMARKS TYPE				TO					
TESTING ON CEMENT				I.B. D.D. 524.79 ft.						TO					
DRILL STEW TEST				I.B. D.D. 524.79 ft.						TO					
OTHER				I.B. D.D. 524.79 ft.						TO					
FISHING				I.B. D.D. 524.79 ft.						TO					
A. PERFORATING				I.B. D.D. 524.79 ft.						TO					
B. TUBING TYPE				I.B. D.D. 524.79 ft.						TO					
C. DRABBING				I.B. D.D. 524.79 ft.						TO					
D. TESTING				I.B. D.D. 524.79 ft.						TO					
E. ADDITIONAL				I.B. D.D. 524.79 ft.						TO					
WALL				I.B. D.D. 524.79 ft.						TO					
TIME SUMMARY (OFFICIAL USE ONLY)				I.B. D.D. 524.79 ft.						TO					
DAY WORK				I.B. D.D. 524.79 ft.						TO					
MEL. W.D.P.				I.B. D.D. 524.79 ft.						TO					
MEL. W.D.P.				I.B. D.D. 524.79 ft.						TO					
MEL. STANDST.				I.B. D.D. 524.79 ft.						TO					
TOTAL DAY WORK				I.B. D.D. 524.79 ft.						TO					
WIRE LINE RECORD				I.B. D.D. 524.79 ft.						TO					
REEL NO.				I.B. D.D. 524.79 ft.						TO					
NO. OF LINES				I.B. D.D. 524.79 ft.						TO					
FEET SLIPPED				I.B. D.D. 524.79 ft.						TO					
FEET CUT OFF				I.B. D.D. 524.79 ft.						TO					
PRESENT LENGTH				I.B. D.D. 524.79 ft.						TO					
TOW. M. OR TRIPS SINCE LAST CUT				I.B. D.D. 524.79 ft.						TO					
CUMULATIVE TOW. M. OR TRIPS				I.B. D.D. 524.79 ft.						TO					
NO. OF DAYS FROM SPUD				I.B. D.D. 524.79 ft.						TO					
CUMULATIVE ROTATING				I.B. D.D. 524.79 ft.						TO					
WIRE LINE LOGGING				I.B. D.D. 524.79 ft.						TO					
REMARKS				I.B. D.D. 524.79 ft.						TO					

DAILY DRILLING REPORT

REPORT NO. 15

DATE Feb 12 / 70[illegible]

DATE 2014.11.27

[illegible]

DAILY DRILLING REPORT

REPORT NO. 17

DATE Jul 10 1970

OPERATOR Husky Et Al		LEASE Willow Lake 2-27-A		WELL NO. 0-72A	FIELD OR DIST. Willow Lake	COUNTY Manit.	STATE
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 4	DRILL PIPE STRENGTH 4	TOOL JOINT 6"	DR. B. 0.72A	PUMPS	NO. WIRE 7 1/2 Mann 36" JS
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUMPER <i>[Signature]</i>		MANUFACTURER NAL	TYPE C-250	STROKE LENGTH 12"	LAST CASING TUBING OR LINER
TIME DISTRIBUTION - HOURS		BIT RECORD		FOOTAGE		FORMATION (DOWN CORE RECOVERY)	

TIME DISTRIBUTION - HOURS	NO.	DRILLING ASSEMBLY AT END OF TIME	BIT RECORD	MUD RECORD	FOOTAGE	FORMATION (DOWN CORE RECOVERY)	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
DRILLING ACTUAL	18	STANDS D.P. 1626.8 FT.	BIT NO. 7	TIME 2" 4" 6"	FROM 2255 TO 2272	FUEL 2' 9"	20' 10" 750 5.8 60
DRILLING ACTUAL	2	SHOULDS D.P. 622.2 FT.	SIZE 8 3/4	WEIGHT 9.6 9.6 9.6			
DRILLING ACTUAL	19	SHOULDS D.P. 534.7 FT.	WFL 11.8	WFL-SEC 35 36 35			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	TYPE 11.8	WFL-CC 11.8			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	NOZZLE 3	FLTR. CR 3.2			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	SIZE 13	PH 8			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	SER. NO. 854755	SC. CONT. & PRESSURE GRADIENT			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	DEPTH OUT 2255	MUD & CHEMICALS ADDED			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	DEPTH IN 2255	TYPE AMT. TYPE AMT.			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	TOTAL FTL 42				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	TOTAL NO. RUN 20				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	COND. OF BIT				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	REMARKS NO.				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	REMARKS TYPE				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	DRILLER				

TIME DISTRIBUTION - HOURS	NO.	DRILLING ASSEMBLY AT END OF TIME	BIT RECORD	MUD RECORD	FOOTAGE	FORMATION (DOWN CORE RECOVERY)	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
DRILLING ACTUAL	18	STANDS D.P. 1769.2 FT.	BIT NO. 7	TIME 10" 12" 2"	FROM 2277 TO 2311		80 28 75 5.6 60
DRILLING ACTUAL	2	SHOULDS D.P. 622.2 FT.	SIZE 8 3/4	WEIGHT 9.6 9.6 9.6			
DRILLING ACTUAL	19	SHOULDS D.P. 534.7 FT.	WFL 11.8	WFL-SEC 35 36 35			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	TYPE 11.8	WFL-CC 11.8			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	NOZZLE 3	FLTR. CR 3.2			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	SIZE 13	PH 8			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	SER. NO. 854755	SC. CONT. & PRESSURE GRADIENT			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	DEPTH OUT 2255	MUD & CHEMICALS ADDED			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	DEPTH IN 2255	TYPE AMT. TYPE AMT.			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	TOTAL FTL 42				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	TOTAL NO. RUN 20				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	COND. OF BIT				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	REMARKS NO.				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	REMARKS TYPE				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	DRILLER				

TIME DISTRIBUTION - HOURS	NO.	DRILLING ASSEMBLY AT END OF TIME	BIT RECORD	MUD RECORD	FOOTAGE	FORMATION (DOWN CORE RECOVERY)	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS
DRILLING ACTUAL	19	STANDS D.P. 1769.2 FT.	BIT NO. 7	TIME 10" 12" 2"	FROM 2318 TO 2403		40 28 75 5.6 60
DRILLING ACTUAL	2	SHOULDS D.P. 622.2 FT.	SIZE 8 3/4	WEIGHT 9.6 9.6 9.6			
DRILLING ACTUAL	19	SHOULDS D.P. 534.7 FT.	WFL 11.8	WFL-SEC 35 36 35			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	TYPE 11.8	WFL-CC 11.8			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	NOZZLE 3	FLTR. CR 3.2			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	SIZE 13	PH 8			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	SER. NO. 854755	SC. CONT. & PRESSURE GRADIENT			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	DEPTH OUT 2255	MUD & CHEMICALS ADDED			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	DEPTH IN 2255	TYPE AMT. TYPE AMT.			
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	TOTAL FTL 42				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	TOTAL NO. RUN 20				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	COND. OF BIT				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	REMARKS NO.				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	REMARKS TYPE				
DRILLING ACTUAL		SHOULDS D.P. 534.7 FT.	DRILLER				

DAILEY DRILLING REPORT REPORT NO. 7 DATE 10/26/70

OPERATOR **Husky et al** LEASE **WILLOW LAKE O-27A** WELL NO. **0-27A** FIELD OR DIST. **WILLOW LAKE** COUNTY **N.W.T.** STATE

CONTRACTOR **S & T DRILLING (WESTERN) CO. LTD.** NO. **4** TYPE **THD. F.H.** PUMPS

SIGNATURE OF OPERATOR'S REPRESENTATIVE **R. H. Robertson** SIGNATURE OF CONTRACTOR'S TOOL PUMPER **R. H. Wulfer**

NO. **1** MANUFACTURER **NAT.** TYPE **250** STROKE LENGTH **15"** LAST CASING TUBING OR LINER

NO. **2** MANUFACTURER **NAT.** TYPE **150** STROKE LENGTH **12"**

NO. **3** MANUFACTURER **NAT.** TYPE **150** STROKE LENGTH **12"**

TIME DISTRIBUTION - HOURS

NO. **13** STANDS D.P. **135.16** FT. BIT NO. **3** TIME **2:00** **2:00** FROM **1894** TO **1920** D

NO. **2** SHOULDER D.P. **61.71** FT. SIZE **8 3/4** WEIGHT **9.4** **9.4** **1894** **1920** **0**

NO. **3** D.C. **6 3/4** WFL **H.W. AERO** VISC-SEC **35** **35** **1920** **1926**

NO. **18** D.C. **6 3/4** TYPE **K50A YANKEE** W.L.-C.C. **M.6** **146**

NO. **18** D.C. **6 3/4** NOZZLE **NO. 3** SIZE **13** **13** **1920** **5"**

NO. **18** D.C. **6 3/4** SER. NO. **17988** **2107** NO. CONT. **5** **5** **17988** **2107**

NO. **2** D.C. **6 3/4** DEPTH OUT **1920** DEPTH IN **1920** **1920** **1920**

NO. **2** D.C. **6 3/4** TOTAL FTL **627** **6** **627** **6**

NO. **2** D.C. **6 3/4** TOTAL HR. RUN **502** **14** **502** **14**

NO. **2** D.C. **6 3/4** COND. OF BIT **5-1-1** **5-1-1**

NO. **2** D.C. **6 3/4** KELLY DOWN **17.11** **17.11**

NO. **2** D.C. **6 3/4** TOTAL **1926.00** **1926.00**

NO. **14** STANDS D.P. **1308.06** FT. BIT NO. **4** TIME **9:00** **9:00** **1926** **1981** **0**

NO. **2** SHOULDER D.P. **62.68** FT. SIZE **8 3/4** WEIGHT **9.4** **9.4** **1926** **1981** **0**

NO. **3** D.C. **6 3/4** WFL **AERO** VISC-SEC **37** **32** **1926** **1981** **0**

NO. **18** D.C. **6 3/4** TYPE **YANKEE** W.L.-C.C. **15.2** **148** **1926** **1981** **0**

NO. **18** D.C. **6 3/4** NOZZLE **NO. 3** SIZE **13** **13** **1926** **1981** **0**

NO. **2** D.C. **6 3/4** SER. NO. **26267** **26267** NO. CONT. **5** **5** **26267** **26267**

NO. **2** D.C. **6 3/4** DEPTH OUT **1920** DEPTH IN **1920** **1920** **1920**

NO. **2** D.C. **6 3/4** TOTAL FTL **61** **6** **61** **6**

NO. **2** D.C. **6 3/4** TOTAL HR. RUN **839** **839**

NO. **2** D.C. **6 3/4** COND. OF BIT **AWA** **AWA**

NO. **2** D.C. **6 3/4** KELLY DOWN **4082** **4082**

NO. **2** D.C. **6 3/4** TOTAL **1981.00** **1981.00**

NO. **14** STANDS D.P. **1108.06** FT. BIT NO. **4** TIME **8:00** **8:00** **1981** **2035** **0**

NO. **2** SHOULDER D.P. **62.68** FT. SIZE **8 3/4** WEIGHT **9.4** **9.4** **1981** **2035** **0**

NO. **3** D.C. **6 3/4** WFL **AERO** VISC-SEC **36** **34** **1981** **2035** **0**

NO. **18** D.C. **6 3/4** TYPE **YANKEE** W.L.-C.C. **15.2** **148** **1981** **2035** **0**

NO. **18** D.C. **6 3/4** NOZZLE **NO. 3** SIZE **13** **13** **1981** **2035** **0**

NO. **2** D.C. **6 3/4** SER. NO. **26267** **26267** NO. CONT. **5** **5** **26267** **26267**

NO. **2** D.C. **6 3/4** DEPTH OUT **1920** DEPTH IN **1920** **1920** **1920**

NO. **2** D.C. **6 3/4** TOTAL FTL **115** **115**

NO. **2** D.C. **6 3/4** TOTAL HR. RUN **162** **162**

NO. **2** D.C. **6 3/4** COND. OF BIT **AWA** **AWA**

NO. **2** D.C. **6 3/4** KELLY DOWN **3424** **3424**

NO. **2** D.C. **6 3/4** TOTAL **2035.00** **2035.00**

NO. **14** STANDS D.P. **1108.06** FT. BIT NO. **4** TIME **8:00** **8:00** **2035** **2035** **0**

NO. **2** SHOULDER D.P. **62.68** FT. SIZE **8 3/4** WEIGHT **9.4** **9.4** **2035** **2035** **0**

NO. **3** D.C. **6 3/4** WFL **AERO** VISC-SEC **36** **34** **2035** **2035** **0**

NO. **18** D.C. **6 3/4** TYPE **YANKEE** W.L.-C.C. **15.2** **148** **2035** **2035** **0**

NO. **18** D.C. **6 3/4** NOZZLE **NO. 3** SIZE **13** **13** **2035** **2035** **0**

NO. **2** D.C. **6 3/4** SER. NO. **26267** **26267** NO. CONT. **5** **5** **26267** **26267**

NO. **2** D.C. **6 3/4** DEPTH OUT **1920** DEPTH IN **1920** **1920** **1920**

NO. **2** D.C. **6 3/4** TOTAL FTL **115** **115**

NO. **2** D.C. **6 3/4** TOTAL HR. RUN **162** **162**

NO. **2** D.C. **6 3/4** COND. OF BIT **AWA** **AWA**

NO. **2** D.C. **6 3/4** KELLY DOWN **3424** **3424**

NO. **2** D.C. **6 3/4** TOTAL **2035.00** **2035.00**

DAILY DRILLING REPORT

REPORT NO. 7 DATE FEB 3/72

OPERATOR: HUSKY ET AL

CONTRACTOR: S & T DRILLING (WESTERN) CO. LTD.

SIG. OF OPERATOR'S REPRESENTATIVE: [Signature]

SIG. OF CONTRACTOR'S TOOL PUMPER: R. H. Webber

WELL NO. 0-27-A

FIELD OR DIST. WILLOW LAKE

COUNTY N.W.T.

STATE

DRILL PIPE: 6" O.D.

TOOL JOINT: 6" O.D.

PUMPS: 1. NAT. 2. NAT.

SIZE: 98

MAKE: MANN 3655

WT. & GR. 13

FEET 409

NO. JOINTS 409

SET AT 409

REMARKS: Cemented 4/300 SAX 236 CALCIUM

TIME DISTRIBUTION - HOURS

WORK DAY EYE

DRILLING ACTUAL: 7 1/2 6 3/4 7 1/2

REARING

CONCRETE AND CEMENTING

TRIPS

LUBRICATE RIG

DEVIATION SURF. BY

TEST B.O.P.

CUT OFF

DRILLING LINE

WIRE LINE

WIRE LINE LOGGING

BURNING CASING & CEMENTING

PAVING ON CEMENT

DRILL STEM TEST

OTHER

FINISHING

COMPLETION WORK

A. PERFORATING

B. TUBING TRIPS

C. DRILLING

D. TESTING

E. ADDITIONAL

F. OTHERS

TIME SUMMARY (OFF HOURS ONLY)

DAY WORK

NEL. W.D.P.

NEL. W.D.P.

NEL. STANDBY

TOTAL DAY WORK

WIRE LINE RECORD

REEL NO.

NO. OF LINES

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON. H. OR TRIPS SINCE LAST CUT

CUMULATIVE TON. H. OR TRIPS

NO. OF DAYS FROM 1700

CUMULATIVE

NOTATING HRS.

NO. DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

NUD RECORD

FOOTAGE

FORMATION (SHOW CORE RECOVERY)

DEVIATION RECORD

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

NO. DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

NUD RECORD

FOOTAGE

FORMATION (SHOW CORE RECOVERY)

DEVIATION RECORD

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

NO. DRILLING ASSEMBLY AT END OF TOUR

BIT RECORD

NUD RECORD

FOOTAGE

FORMATION (SHOW CORE RECOVERY)

DEVIATION RECORD

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DATE 1-28-74

OPERATION
Husky et al
CONTRACTOR
S & T DRILLING (WESTERN) CO. LTD.
SIGNATURE OF OPERATOR'S REPRESENTATIVE
WILLIAM L. WILSON
WILLOW LAKE 0-27-A
WILLOW LAKE
W.T.
STATE

NO. 4
DRILL PIPE
TOOL JOINT 6"
TYPE T.H.E.H.

NO. 1
MANUFACTURER
TYPE
STROKE LENGTH
LAST CASING TUBING ON LINER

SIZE
NAME
WT. & GR.
NO. JOINTS
FEET
RES. TO CHS. NO.
SET AT
REMARKS

95 MAN 36.5. 13 402 12.0 419 CEMENTED
W/200 SAK
270 CEMENT

TIME DISTRIBUTION—HOURS
WORK DAY
DRILLING ACTUAL
BEARING
COND. TUBING AND CEMENTING
TRIPS
LUBRICATE RIG
DEVIATION SURVEY
TEST B.O.P.
CUT OFF DRILLING LINE
WIRE LINE RECORD
NO. OF LINES
FEET SLIPPED
FEET CUT OFF
PRESENT LENGTH
TOP H. OR TRIPS SINCE LAST CUT
CUMULATIVE TOP H. OR TRIPS
NO. OF DAYS FROM IPOD
CUMULATIVE ROTATING HRS.

NO. 7
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 8
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 9
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 10
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 11
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 12
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 13
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 14
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 15
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 16
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 17
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 18
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 19
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 20
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 21
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 22
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 23
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 24
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT
DEPTH IN
TOTAL FTG.
TOTAL HR. RUN
COND. OF BIT
REARER NO.
REARER TYPE

NO. 25
STANDS D.P.
SINGLES D.P.
B.C.
LB. O.D.
NOZZLE
SIZE
STR. ROOT
NO. O.D.
DEPTH OUT

OPERATION: **HUSKY ET AL** DAILY DRILLING REPORT: **WINDY LAKE 0-27** LEASE: **WINDY LAKE** REPORT NO.: **0-27** DATE: **04/10**

CONTRACTOR: **S & T DRILLING (WESTERN) CO. LTD.** SIG. NO.: **4** WELL NO.: **W-27** FIELD OR DIST.: **WINDY LAKE** COUNTY: **N.W.T.** STATE: **ALBERTA**

SIGNATURE OF OPERATOR'S REPRESENTATIVE: *[Signature]* SIGNATURE OF CONTRACTOR'S TOOL PUMPER: *[Signature]*

TYPE: **THD F.H.** MANUFACTURER: **PLAT.** TYPE: **250** SIZE: **15"** LAST CASING TUBING ON LINES: **95 WINDY 26.55 13 409 17.50**

TIME DISTRIBUTION - HOURS: **34**

NO.	DRILLING ASSEMBLY AT END OF TURN	BIT RECORD	MUD RECORD	FOOTAGE	DE-9	CORE NO.	FORMATION (FROM CORE RECOVERY)	REMARKS
8	STANDS D.P. 749.63 FT.	BIT NO. 2	TIME 4:00	FROM 1198 TO 1243				
3	SHOLES D.P. 63 FT.	SIZE 8 1/2	WEIGHT 9.2					
2	W.C. 63 FT.	W.C. H.W.	VISC-SEC 34					
2	W.C. 63 FT.	W.C. 402.7	W.C. 11					
2	W.C. 63 FT.	W.C. 13	W.C. 9.5					
2	W.C. 63 FT.	W.C. 172.14	W.C. 1					
2	W.C. 63 FT.	W.C. 1198	W.C. 1					
2	W.C. 63 FT.	W.C. 45	W.C. 1					
2	W.C. 63 FT.	W.C. 45	W.C. 1					
2	W.C. 63 FT.	W.C. 1-1	W.C. 1					
2	W.C. 63 FT.	W.C. 36.59	W.C. 1					
2	W.C. 63 FT.	W.C. 1243.00	W.C. 1					
2	W.C. 63 FT.	W.C. 53.000	W.C. 1					
2	W.C. 63 FT.	W.C. 749.63	W.C. 1					
2	W.C. 63 FT.	W.C. 360.55	W.C. 1					
2	W.C. 63 FT.	W.C. 909.5	W.C. 1					
2	W.C. 63 FT.	W.C. 6.28	W.C. 1					
2	W.C. 63 FT.	W.C. 36.59	W.C. 1					
2	W.C. 63 FT.	W.C. 1243.00	W.C. 1					
2	W.C. 63 FT.	W.C. 53.000	W.C. 1					
2	W.C. 63 FT.	W.C. 749.63	W.C. 1					
2	W.C. 63 FT.	W.C. 360.55	W.C. 1					
2	W.C. 63 FT.	W.C. 909.5	W.C. 1					
2	W.C. 63 FT.	W.C. 6.28	W.C. 1					
2	W.C. 63 FT.	W.C. 36.59	W.C. 1					
2	W.C. 63 FT.	W.C. 1243.00	W.C. 1					
2	W.C. 63 FT.	W.C. 53.000	W.C. 1					
2	W.C. 63 FT.	W.C. 749.63	W.C. 1					
2	W.C. 63 FT.	W.C. 360.55	W.C. 1					
2	W.C. 63 FT.	W.C. 909.5	W.C. 1					
2	W.C. 63 FT.	W.C. 6.28	W.C. 1					
2	W.C. 63 FT.	W.C. 36.59	W.C. 1					
2	W.C. 63 FT.	W.C. 1243.00	W.C. 1					
2	W.C. 63 FT.	W.C. 53.000	W.C. 1					
2	W.C. 63 FT.	W.C. 749.63	W.C. 1					
2	W.C. 63 FT.	W.C. 360.55	W.C. 1					
2	W.C. 63 FT.	W.C. 909.5	W.C. 1					
2	W.C. 63 FT.	W.C. 6.28	W.C. 1					
2	W.C. 63 FT.	W.C. 36.59	W.C. 1					
2	W.C. 63 FT.	W.C. 1243.00	W.C. 1					

DATE 1-23-41 10

HUSKY CT 44		WILLOW LAKE 0-27-A		WILLOW LAKE		COUNTY		STATE	
CONTRACTOR		NO. NO.		DRILL PIPE		TOOL JOINT		PUMPS	
S & T DRILLING (WESTERN) CO. LTD.		4		2 1/2		6		LAST CADING TUBING OR LINES	
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL POWER		MANUFACTURER		TYPE		STROKE LENGTH	
R. H. W. Wilson		R. H. W. Wilson		NAT		NAT		15"	
TIME DISTRIBUTION - HOURS		NO.		DRILLING ASSEMBLY		BIT RECORD		MUD RECORD	
MORN DAY EVE		7		STANDS D.P.		655.92 FT.		TIME	
		1		SHOULES D.P.		6.34		WEIGHT	
		3		B.C.		90.95 FT.		VISC-SEC	
		6		D.C.		360.55 FT.		VISC-SEC	
		14		LUBRICATE MUD				FLTR. CR.	
		2		DEVIATION SURVEY				PRESSURE GRADIENT	
		8		TEST B.O.P.				MUD & CHEMICALS ADDED	
		8		CUT OFF DRILLING LINE				TYPE AMT. TYPE AMT.	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8		FUEL 3.70				Bluff	
		8		MUD NO.				100"	
		8		REMARKS				DRILLER	
		8							

HUSKY ET AL	WINDOW LAKE 0-27A	WELL NO. 0-27	FIELD OR DIST. WINDOW LAKE	COUNTY DAKE	STATE NEB
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CONTRACT NO.	S & T DRILLING (WESTERN) CO. LTD.		BIG NO.	21		DRILL PIPE	TOOL JOINT	6" O.D.		PUMPS		SIZE	WAKE	WT. & GR.	NO. JOINTS	FEET	PER TO CHG. NO.	SET AT	REMARKS
						NO.	TYPE	NO.	MANUFACTURER	TYPE	STROKE LENGTH	LAST							
						3	FH					05			13				

SIGNATURE OF OPERATOR'S REPRESENTATIVE	SIGNATURE OF CONNECTOR'S TOOL, PUMPER	1.	NAT.	250	15"	CASING	1X	17MM	26	23	15	107	12.73	CEMENTED
<i>T. Wilson</i>	<i>P. N. Webb</i>	2.	NAT.	150	12"	TUBING								4300 SAK
		3.				OR LINES								38 CALUM

TIME DISTRIBUTION-HOURS				NO.		DRILLING ALTERNATE TO LOG OF CORE		BIT RECORD		MUD RECORD		FOOTAGE		CORE NO.		FORMATION (FROM CORE RECOVERY)		REMARKS		
MON	TUE	WED	THUR	FRI	SAT	SUN	MON	TUE	WED	THUR	FRI	SAT	SUN	MON	TUE	WED	THUR	FRI	SAT	SUN
NO. OF HRS. WORKED				6		STANIS D.P. 563.48		FT. SIT NO.		TIME 2 ³⁰		FOOTAGE 400		CORE NO. 806		FORMATION (FROM CORE RECOVERY)		REMARKS		
NO. OF HRS. WORKED				6		SINGLES D.P. 3110		FT. WIZ		WEIGHT 86		FOOTAGE 400		CORE NO. 806		FORMATION (FROM CORE RECOVERY)		REMARKS		

ROLLING ACTUAL		7.34	B.C.		6.8	9295 FT.	PG.	NEEP	VISC-AND	45	65	781	1094	15.135000		5.3	6.2	8	2
TEASING			B.C.		6.8		TYPE	41.108	PL-CC	15	13					X	X	X	
CIRCUITRY, WIND MIB & CIRCULATING		12	B.C.				NO.	3	PLN. CK.	11.3	11					15	12		
												DEXTATION	DEPTN	DEK	SPROCKET	DEPTN	DEK	SUBSECTION	DEPTN

[illegible][illegible]

WEEK END	53	PT	TOTAL NO. HUR	13	But not	0	1	many
LOCATIONS		PT	COND. OF LIT	AVA	human			
REMARKS		PT	REMARKS NO.					
TOTAL	1044.16							

[illegible]

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

A. TUBING DATA		D.E.		TYPE		M.L.-C.C.		15'	
C. DRABING		L.D. O.D.		NOZZLE		PLUG OR		DEVIATION RECORDED	
D. TESTING		STD.		SIZE		PW		DEPTH DEVI. DIRECTION DEPTH DEVI. DIRECTION	

DATE		TIME		LAT.		LONG.		SUN. NO.		CONT. NO.		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS	
8 8 8		11:00		25° 44' N		159° 25' W		6544/8		1		R ₁ Sea + B.O.P. 150-250°C. Sample	
TIME SUMMARY		1.30		DEPTH OUT		1198		PRESSURE GRADIENT		2		R ₂ 9.3 24	
WIND		1.30		DEPTH IN		412				3		R ₃ 2.5 24	

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NO. OF TIPS	6285	PT.	TOTAL NO. RUN	53	6285	53	6285	53
NO. OF DAYS								
TOTAL WGS	55	PT.	COND. OF BUT	Rust	55	55	55	55
CUMULATIVE								
STATISTICAL	1204.00	PT.	REMARKS NO.		1204.00	1204.00	1204.00	1204.00

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DATE 12/11/11 PAGE 10

CALLING ASSEMBLY at End of Trip		BIT RECORD		MUD RECORD		FOOTAGE		POSITION (DRILL CIRCLE RECOVERY)		ATTACH SPR	RT. IN BIT CORR	FLAT FEET	PISTOL CORR	SPR	PISTOL CORR	SPR	PISTOL CORR
NO.		FT.		TIME		FROM	TO	TIME HOUR	MIN.								
STARTER S.P.		FT.	BIT NO.			RAN 13 IPS 9 5/8" 36" J.S. - 5" L. CASING											
WHOLEY S.P.		FT.	SIZE	WEIGHT		N/GWIDE SHAL & INSERT FLOAT											
P.C.			W.P.C.		W.P.C. - SEC												
I.D. O.D.		FT.	TYPE		N.L. - C.C.												
D.C.			NO.		PLTS. CK												
I.D. O.D.		FT.	MOUSE	SIZE	PN												
ITS. BODY O.D.		FT.	SEX. NO.		INT. V												
ITS. BODY O.D.		FT.	DEPTH OUT		FREE/LINE GRADIENT												
RUN. NOD. O.D.		FT.	DEPTH IN														
NOD. O.D.		FT.	TOTAL FTL		MUD & CHEMICALS ADDED												
TOW IN OR TRIPS SINCE LAST CUT			TOTAL NO. RUN		TYPE	AMT.	TYPE	AMT.									
PRESENT LENGTH			CONDS. OF BIT														
TOW IN OR TRIPS SINCE LAST CUT			REMARK NO.														
CUMULATIVE TOW IN OR TRIPS																	
NO. OF DAYS FROM START																	
CUMULATIVE ROTATING HR.																	
TOTAL		FT.															
REMARKS			DRILLER														

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME HOUR	TIME MIN.	SLIP TIME	REMARKS
400	430	5	Ran 9 5/8" CASING
430	530	2	CIRCUIT CASING
500	615	5	CONNECTING
615	1200	58	W.O.C. Pump Dr. V.N @ 615 PM

DATE JAN 19 4 21 PM

[illegible]

DATE JAN 29 70

TIME DISTRIBUTION—HOURS				DRILLING ASSEMBLY AT END OF TOUR				BIT RECORD				MUD RECORD				FOOTAGE				FORMATION (OWN CORE RECOVERY)				ROTARY RPM				PUMP PRESS				PUMP NO.				PUMP NO.				PUMP NO.			
MON	TUE	WED	THU	STANDS D.P.	FT.	BIT NO.	TIME	WEIGHT	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.	HTG.						
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40				
1	2	3	4	5	6	7	8	9	10	11	12	13																															

DATE: 4/21/2004

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DATE 5/28/25/10[illegible]

DATE JAN 24 1975

[illegible]

