

HUSKY ET-AL WILLOW LAKE

O-27-A

Drilling Authority No. 405
Date Issued 20 January 1970

WELL NAME Husky et al Willowlake 0-27 - A
FIELD Area:
LOCATION: Unit 0 Section 27 Grid 62-20-121-6
Latitude 62-16-48 Longitude 121-04-21
U.W.L.R. 62.28000 — 121.07250
U.W.I. 3040276220121000
2

Rig Release Date 22/2/70
Status P.F.A.
Information Release Date

CHANGE OF NAME:

DATE RECEIVED	INDEX
<u>20-1-70</u>	Application for a Drilling Authority. Well Completion Data. Well History Report.
<u>3/2/70</u>	Application to Amend a Drilling Authority.
<u>3/2/70</u>	Application to change a Well Name.
<u>3/2/70</u> <u>6/3/70</u>	Application to Abandon a Well or Suspend Drilling.
<u>8/4/70</u>	Application to Alter Condition of a Well. Well History Supplement. Well Completion Data. Work-over Report No.
	Application to Commingle Production before Measurement.
	Data for Back Pressure Test on Natural Gas Wells — Monograph 7 Method.
	Data for Back Pressure Test on Natural Gas Wells — Vitter'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. 405
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 HB et al Willowlake 0-27A
Permit No. 4363 Lease No.
Imperial Oil Enterprises Ltd. Exploratory Licence No. 1266
(Permitter, 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 Marker
Universal Well Location Reference Lat. 62.28000° N. Long. 121.07250 W.

	DATE	DEPTH	Pool(s)	Undesignated
			interval(s) open to production	None
Spudded	Jan 29/70	5:30 A.M.		
Suspended				
Resumed Operations				
Finished Drilling	Feb 18/70	2920		
Deepened			Elevation: Gr. 1085 K.B. 1097	
Complete (gas/oil)			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. 564	

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at -	Scale of Cement and Additives
1. 9 5/8	J-S	36#	426'	409	300 + 2% CaCl ₂
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS	ELEVATION		CORE RECORD					
	Depth	Sub-Sea	From	To	Rec.	From	To	Rec.
Ft. Simpson	370	+727	1198	1243	45'			
Horn R. Shale	1050	+47	2255	2303*	45'			
Hume	1194	-97	2524	2554	23'			
Bear Rock	1530	-433						
Ronning	1950	-853						
Basal Clastics	2610	-1513						
Pre Cambrian	2720	-1623						
Total Depth	2920	-1823						
LOG RECORD								
			Run 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	2914*	
			1	Continuous Dipmeter Directional		409	2917	
						409	2919*	

CEMENTING RECORD (Plug, Squeeze, etc.)				PERFORATING RECORD (Bullet, Jet)				SERVICING RECORD (Acidizing, Fracturing, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
Feb. 20/70	2350	2200	130 sax + 3% CaCl ₂ . Tried to feel plug, fell down hole.								
Feb. 21/70	2350	2200	150 sax + 3% CaCl ₂ . Tagged at 2110.								
Feb. 22/70	460	360	60 sax + 3% CaCl ₂ . Tagged at 370								
Feb. 22/70	Surface		5 sax top of surface casing, erected monument.								

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	I.S.L. Mins.	F.S.L. Mins.	I.S.I.B.H.P.	F.S.I.B.H.P.	L.F.B.H.P.	F.F.B.H.P.	L.H.P.	F.H.P.	REMARKS
1	2-3-70	Hume	1190*	1243	50*	30*	60	23*	23*	24*	23*	579*	584*	Recovered 20' Drilling mud.
2	2-9-70	Running	2236*	2303	45	30	60	72*	105*	40*	43*	1126*	1126*	Recovered 30' Drilling mud.
3	2-12-70	Running	2480*	2522*	12*	25*	25*	985*	994*	984*	985*	1235*	1221*	Recovered 50' Drilling mud. 650' mud cut salt water, oil flecked.
4	2-13-70	Running	2506	2524	59*	29*	60	1007*	1007*	786*	1002*	1250*	1246*	Recovered 360' mud cut salt water slightly gas cut. 1596' salt water slightly gas cut, slightly sulphurous.
5	2-19-70	Basal Clastics	2624	2660	60	27*	56*	1010*	986*	43*	99*	1361*	1361*	Recovered 150' mud cut salt water.

ANALYSIS

Lab. No.	Sample	From	To	Source	Remarks
Cal - 2 - 1685	1	1190*	1243	DST #1	Drilling mud
Cal - 2 - 1685	2	2236*	2303	DST #2	Drilling mud
Cal - 2 - 1723	3	2480*	2522*	DST #3	Water
Cal - 2 - 1723	4	2506	2524	DST #4	Water
Cal - 2 - 1723	5	2624	2660	DST #5	Water
CNP - 5021	6	2255	2300	Core #2	Complete Analysis

PRESENT STATUS OF WELL.

Oil		(Interval)
Gas		(Interval)
Dry	X	
Susp.		

Company HUSKY OIL LTD.

Signed by *[Signature]*

Title DRILLING ENGINEER

Date April 8, 1971

Forms to be prepared in duplicate and forwarded to the Oil Conservation Engineer, Calgary, Alberta.

*Denotes changes made



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well ~~Imperial Oil Ltd.~~

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 HB et al Willowlake 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
Perm. No. 4363 Lease No. -----

Imperial Oil Enterprises Ltd.
(Permitter, Lessee, Licensee)

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 2624 - 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. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 9 5/8	36#	426	409	300 plus 2% CaCl ₂	None
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
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 Address

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.H.J. Toms
on the 20th February 1970.

Dated 5th March 19 70

[Signature]
Oil Conservation Engineer



DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Change a Well Name

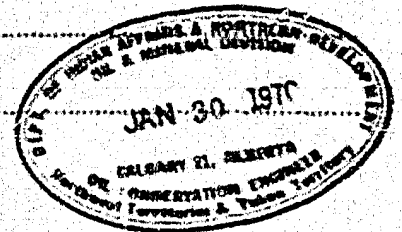
Application is made hereby to change the name of the well, recorded in the Well-names Register as—

Husky et al Willowlake 0-27

(Old name)

to Husky HB et al Willowlake 0-27A

(Proposed new name)



Well Location

Location: Unit 0 Section 27 Grid 62° 20' 121° 00'

Latitude 62° 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, name to be included.

Dated at Calgary, Alberta this 29 day of January 1970

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 1970

Oil Conservation Engineer

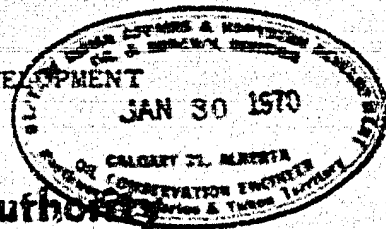
3rd February

70

Forms to be submitted in triplicate 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 Willowlake 0-27

(Name and Number of Well)

The following amendments are required: The surface casing will be changed to 425'

of 9 5/8" 36# 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 23 day of January, 19 70

Signed by *[Signature]*

Title 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

[Signature]
Oil Conservation Engineer

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

4561

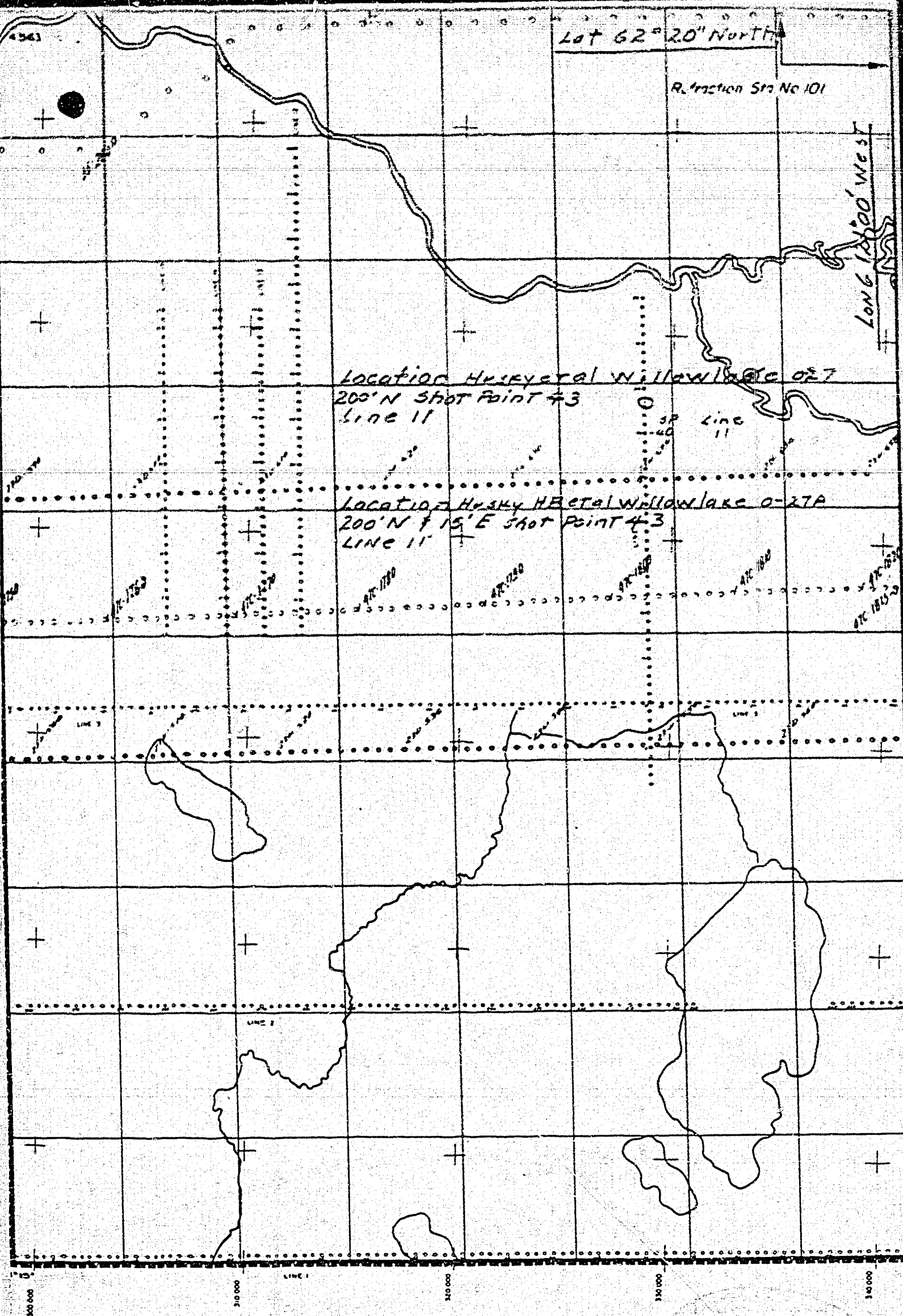
Lot 62° 20' North

Refraction Sta No 101

Long 101° 00' West

Location Husky H. Etal Willow Lake 0-27
200' N Shot Point #3
Line 11

Location Husky H. Etal Willow Lake 0-27A
200' N + 15' E Shot Point #3
Line 11





File No. 405
Drilling Authority No.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well or Suspend Drilling

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

Name and number of well Husky et al Willowlake 0-27

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.
(Permitter, Licensee, Lessee)

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—	Sacks of Cement and Additives	Amount Pulled
1. 9 5/8	36#	8 joints	260'	235 plus 2% CaCl ₂	None
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

No.	Plug Position	Geological Formation	Number of Sacks of Cement	Remarks
1	420 - 200	Ft. Simpson & Surface gravel	160 + 2% 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 Licence No. 564

Address Edmonton, Alberta Address

Responsible Agent in field Glen Robertson Eski Motel, Ft. Simpson, N.W.T.

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

Signed by Drilling Engineer Company HUSKY OIL LTD.

Title Drilling Engineer Operator's Exploratory Licence 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:

Confirming oral approval given by Mr. B.H.J. Thoms
on the 26th January 1970.

Dated 19

3rd February

70

Oil Conservation Engineer

Form to be submitted in triplicate 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 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: Unit 0 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
Elevation: Ground 1085 K.B. 1097 (Est.) feet 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
(for Oil Conservation Engineer's use only)

Permit No. 4363 Lease No. 59,640 Acreage 59,640
Permittee, licensee, or lessee Imperial Oil Enterprise Ltd.
Exploratory Licence No. 1266
Surface owned by Crown or Crown
(If alienated submit name and address of owner and occupant.)
Petroleum and natural-gas rights owned by Crown
We propose to use the following strings of casing, either cementing or landing them as indicated below:—

Casing Size O.D. (Inches)	Weight (Lb./Ft.)	Grade	New or Used	Estimated Depth	Ends of Casing
1. <u>9 5/8</u>	<u>36</u>	<u>J-55</u>	<u>New</u>	<u>300</u>	<u>As required to surface</u>
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 GK 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 19 70
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

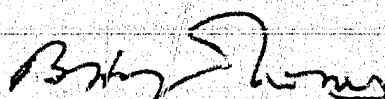
Dated 20th January 19 70

Oil Conservation Engineer

Forms 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.



B.H.J. Thoms, Oil Conservation Engineer

86-11-4-15

WELL HISTORY
of

Husky H B et al Willow Lake
0-27A
(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 260 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 I

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 Jts of 9 5/8, 36#, J-S landed at 260' K.B. Cemented to surface.

SUMMARY OF WELL DATA

Well Name & No.: Husky H B et al Willowlake 0-27A

Permittee, Licencee
or Lessee: Imperial Oil Enterprises Ltd.

Operator: Husky Oil Ltd.; 815 - 6 St. S. W. Calgary.

Location: 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

Permit No.: 4363

Contractor: S & T Drilling (Western) Co. Ltd. Rig No. 4
(T32-National)

Drilling Authority No.: 405, issued 20 January, 1970

Well Classification: Wildcat

Ground Elevation: 1085 ft. K.B. to G.L. 12.0 ft.

Spudded: 5:30 a.m. 29 January, 1970

Completed Drilling: 18-19 February, 1970

Total Depth: 2920' K.B.

Well Status: Abandoned

Rig Released: 4:00 a.m. 22 February, 1970

Hole Sizes: 13 3/4" to 412' K.B.
8 3/4" to 2920' K.B.

Casing: 13 jts of 9 5/8, 36# J-S landed at 409' K.B.
Cemented to surface.

SECTION I I

COMPANY Husky Oil Ltd. ELEVATION 1085.0 ft. 6
WELL NAME Husky H.B. et al Willowlake 0-27A K.B. 1097.0 ft.

FORMATION RECORD

NAME OF FORMATION	DEPTH		SURFACE	
	TOP	BASE	TOP	BASE
N.B. Tops from sample picks are the same as those from log picks.				
Cretaceous Shale		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./FT. 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	

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 - 1203 : 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 & vugs 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 48 ft. Recovered 45.4 ft.

Ave. 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. v. thinly inter-bedded. 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. xl., 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. xln., dense, hard, shly. incl. & dk. anhy. incl. Questionable v. scat. staining. Dol is slightly lighter gry. toward bottom w/somewhat less disseminated anhy.

OILMEN'S WELLSITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H B et al Willow Lake 0-27AK.B. 1097ft.

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.
		HUME @ 1194'
1190	1198	As above; plus - Ls, tan-brn, micro.xl, dense - sl. frac. 100% infill w/calc. (Drill time: 3 min. to 8 min/ft.) V.f. xl. in part. No visible por. or stain, no fluor - sl. stylolitic, VSL-arg
1198	1243	See Core Description.
1245	1250	Ls, gr, tan, micro xl, dense, hard, in part "waxy" luster Ls, v.lt. tan, crypto xl, chalky, soft.
1250	1260	Ls, dk. gry, brn, 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.

OILMEN'S WELL SITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H B et al Willow Lake 0-27AK.B. 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. slty.
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. slty.
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. slty 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 WELLSITE SERVICES LTD.

SAMPLE RECORD

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

K.B. 1097 ft.

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 - sucrosic, micro xl -
1510	1530	As above.
1530	1540	Lmy. dol., lt. gry. tan. sucrosic? 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. gross 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.

OLMEN'S WELLSITE SERVICES LTD.

SAMPLE RECORD

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

K.B. 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.

OILMEN'S WELL SITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H B et al Willowlake 0-27A

K.B. 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)

OILMEN'S WELL SITE SERVICES LTD.

SAMPLE RECORD

Well Name Huskv H B et al Willowlake 0-27A

K.B. 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	2547	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 sndy in part?
2560	2570	Dol. brn and dk. gry. brn. v.f-micro xl dense. sl. sndy 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, sndy, 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.

OILMEN'S WELL SITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H. B. at Willow Lake 0-27A K.B. 1097 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. (a 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, v.f - f, siliceous. Sh. dk grn gry, siliceous, hard for a shale. (Gross sample grn gry)

SECTION I I I



DRILL-STEM TEST DATA

Well Name <u>HUSKY/ET AL WILLOW LAKE</u>	Test No <u>ONE</u>
Well Number <u>0-27-A</u>	Zone Tested <u>HUME</u>
Company <u>HUSKY OIL LIMITED</u>	Interval <u>1190 - 1243</u>
Comp Rep <u>GORDON STROM</u> <u>TED WILSON</u>	Tester <u>L. PENNER</u> Date <u>FEB. 3, 1970</u>

Type of Test DUAL BOTTOM HOLE RFS Tool No. 101Preflow 4 mins ISI 30 mins Flow 50 mins PSI 60 mins

Specify Inside or Outside	INS REC No. <u>2227</u> 3600 RANGE 12 HR CLOCK	OUT REC No. <u>2015</u> 5750 RANGE 12 HR CLOCK	REC No. _____ RANGE _____ HR CLOCK
DEPTH	<u>1198</u>	<u>1201</u>	
Initial Hydro Mud Press	<u>579</u>	<u>584</u>	
Initial Shut-In Press	<u>23</u>	<u>32</u>	
Initial Flow Press	<u>23</u>	<u>32</u>	
Final Flow Press	<u>24</u>	<u>32</u>	
Final Shut-In Press	<u>23</u>	<u>30</u>	
Final Hydro Mud Press	<u>576</u>	<u>584</u>	

Mud Drop NIL Fluid Loss _____ Mud Weight 92
Viscosity 35 Temperature °F 75 Net Pay Tested 50
Top Packer Depth _____ Bottom Packer Depth 1190' Total Depth 1243'
Drill Pipe Size 4 3/4" FH Wt. 16.6 Drill Collar I.D. 2 7/8" Ft. Run 446
Surface Choke Size _____ Bottom Choke Size 3" Main Hole Size 8 1/2"
Anchor Size 1 1/2" AN Base Hole Size _____ Feet of Rat Hole _____
Cushion Amount _____ Type _____ Rubber Size 7 1/2"

Fluid Recovery Total Feet NIL
Recovered _____ Feet of _____
Recovered _____ Feet of FLUID LEVEL UP TO JUST BELOW SAMPLER - MUD-
Recovered _____ Feet of _____
Recovered _____ Feet of _____
Recovered _____ Feet of _____

Gas Recovery How Measured _____ Riser size: _____
_____ mins. Temp. °F Press Rdg. _____ psi Orifice Size _____ MCF/Day
_____ mins. Temp. °F Press Rdg. _____ psi Orifice Size _____ MCF/Day
_____ mins. Temp. °F Press Rdg. _____ psi Orifice Size _____ MCF/Day
_____ mins. Temp. °F Press Rdg. _____ psi Orifice Size _____ MCF/Day
_____ mins. Temp. °F Press Rdg. _____ psi Orifice Size _____ MCF/Day
_____ mins. Temp. °F Press Rdg. _____ psi Orifice Size _____ MCF/Day

Bleed Off Time for Drill Pipe _____

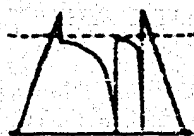
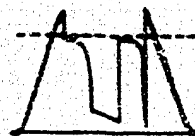
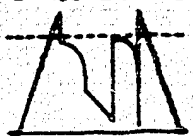
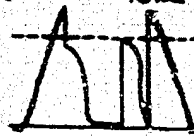
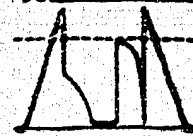
REMARKS PREFLOW VERY SMALL TEST PERIOD V.V. SMALL (BUBBLES) AIR BLOW - RESET IN 30 MIN. - NO INDICATION OF BLOW.



TESTING REPORT

	45 LANDING SUB		
	45 CHAMBER		
	45 TOOL OR F.O. SUB		
	CO SUB	1.00	
	SHUT IN TOOL	5.00	
	R.F.S. No. 101	3.25	
	R.F.S. No.		
	HYDRAULIC TOOL	7.00	
	JARS	6.00	
	RECORDER No.	DEPTH	
	RECORDER No.	DEPTH	
	SAFETY JOINT	1.75	
	BY PASS SUB		
1. PACKER DEPTH	1184	PACKER	6.00
2. PACKER DEPTH	1190	PACKER	5.00
			1.00
	ANCHOR—SPECIFY		
	PERF	6.00	
	BLANK OFF OR BY PASS SUB		
	RECORDER No. 2227	1.00	DEPTH 1198
	PERF	5.00	
3. PACKER DEPTH		PACKER	
			TOTAL INTERVAL 53.50
4. PACKER DEPTH		PACKER	
	ANCHOR—SPECIFY		
	RECORDER No. 2015	1.00	DEPTH 1204
	PERF	5.00	
	C.O. SUB	1.00	
	D.C.	30.00	
	C.O. SUB	1.00	
	BULLNOSE	2.50	
TOTAL DEPTH	1213		
		TOTAL TAIL PIPE	53.50
		TOTAL TEST TOOL	88.50

BEST 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

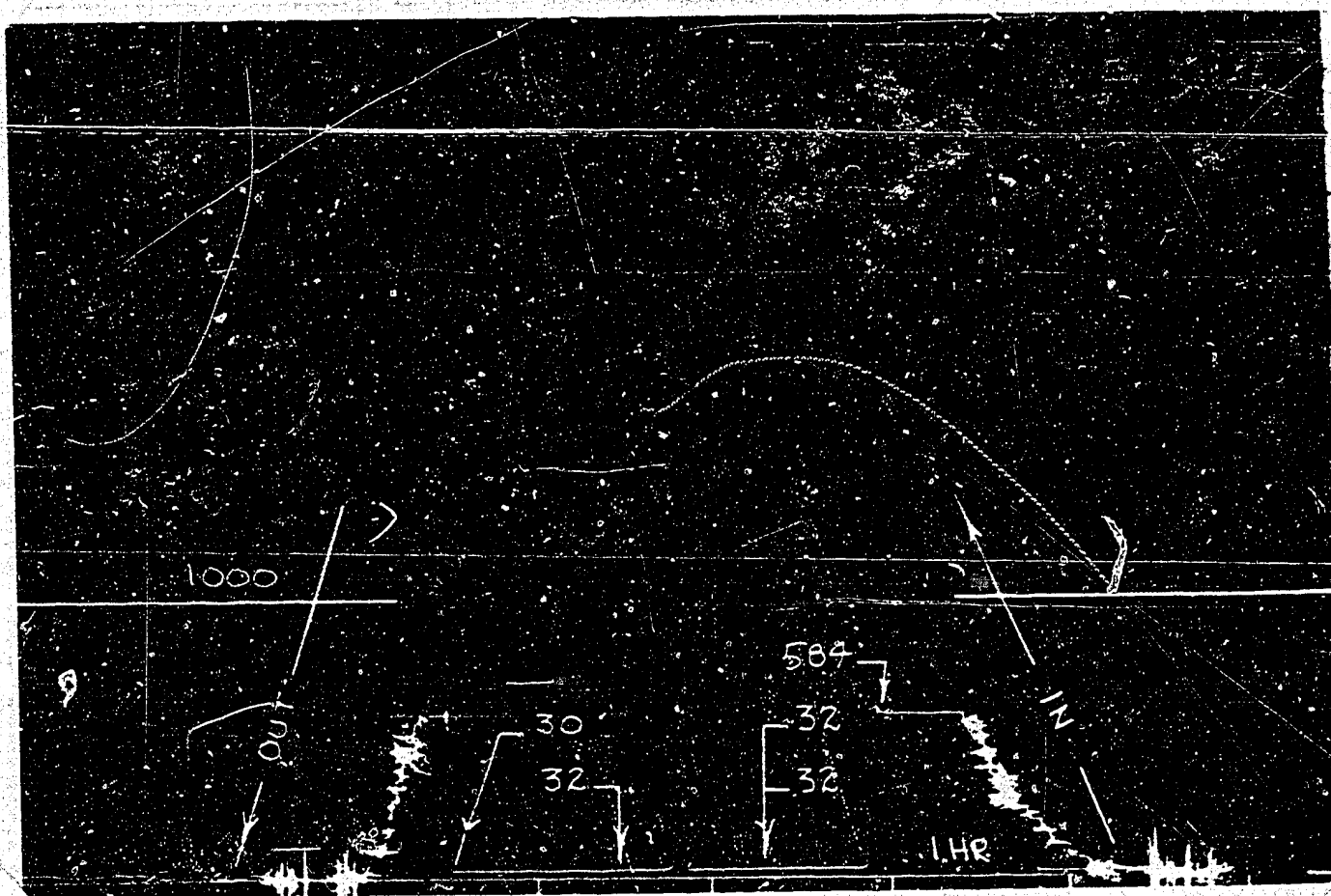
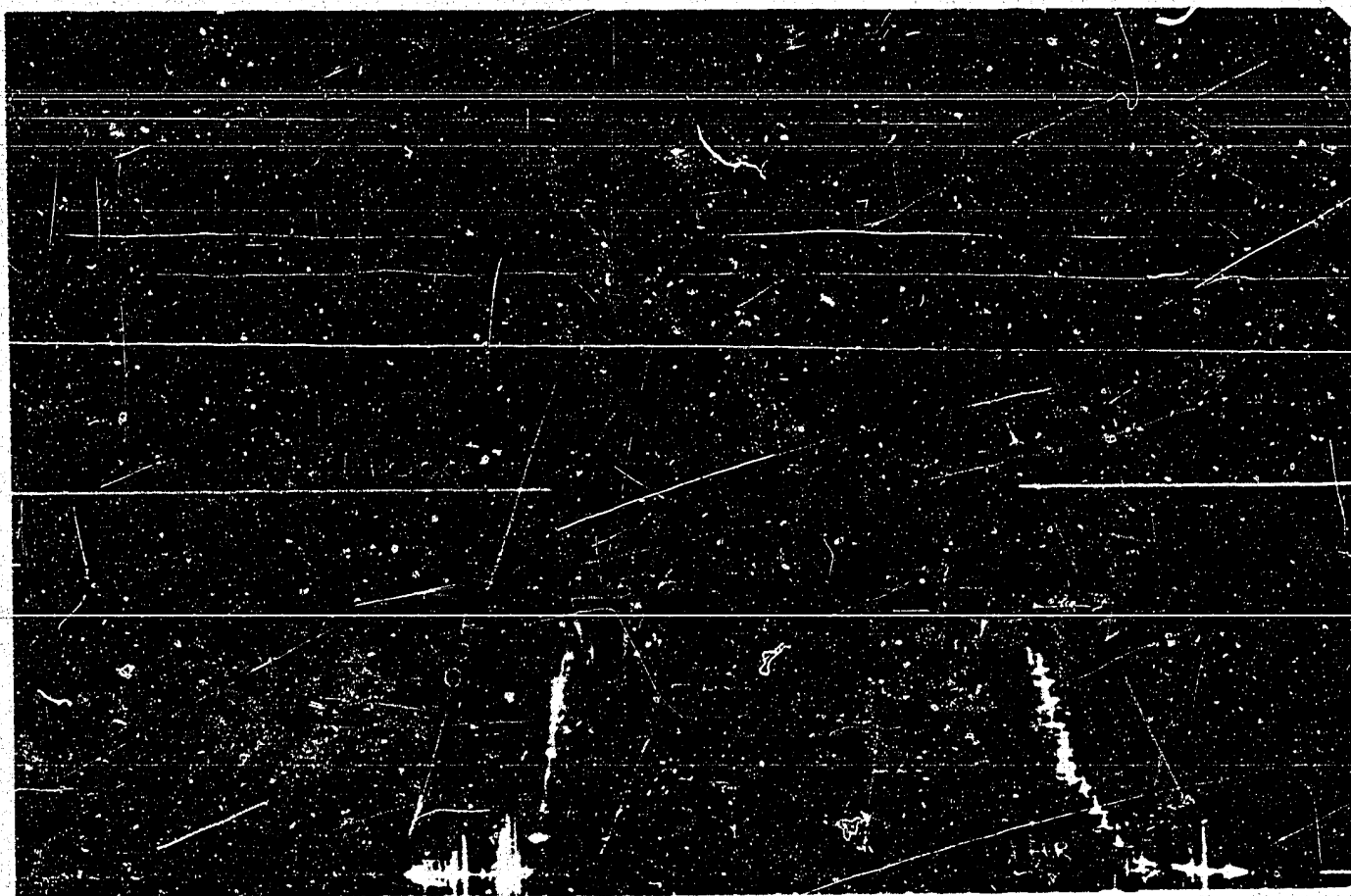


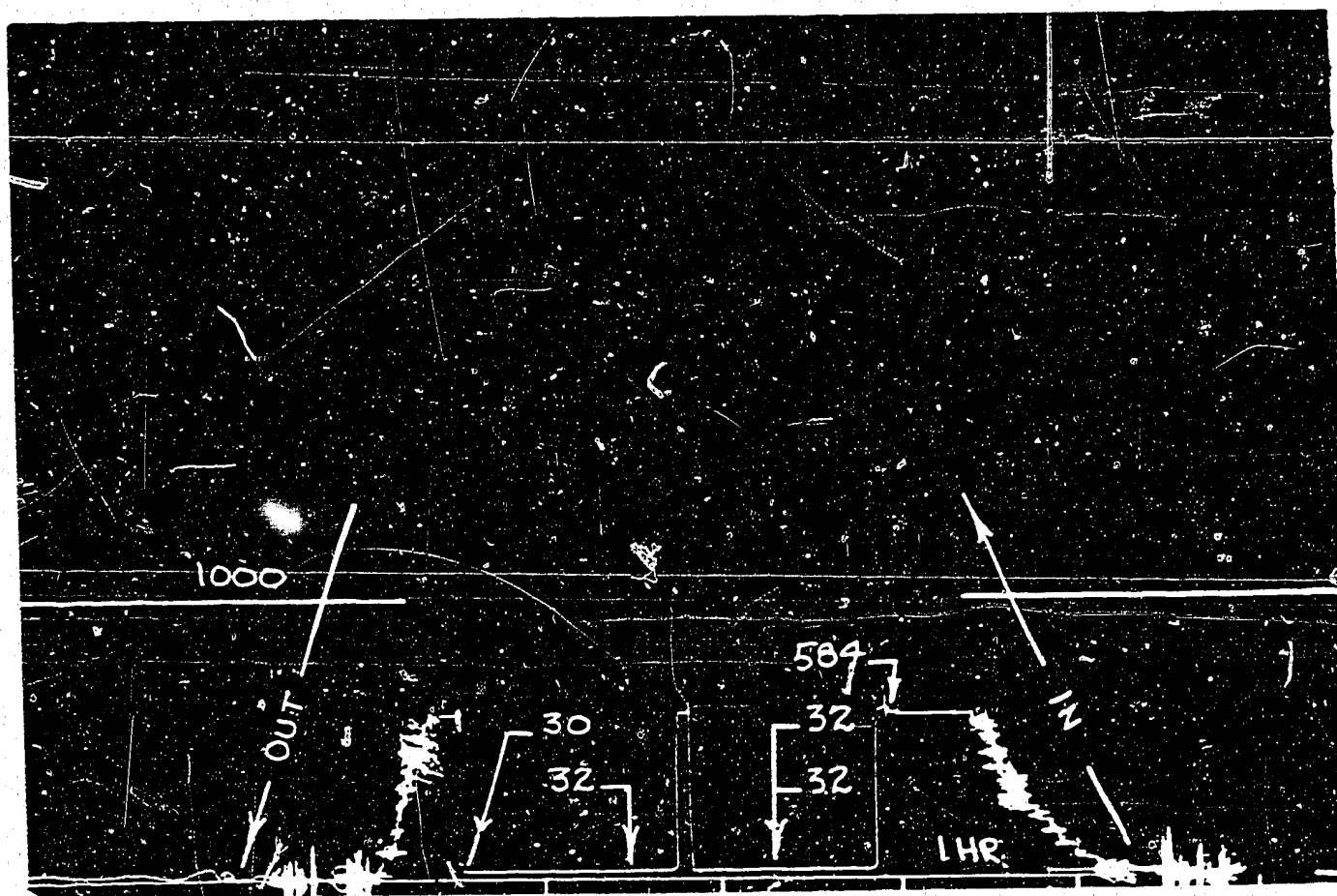
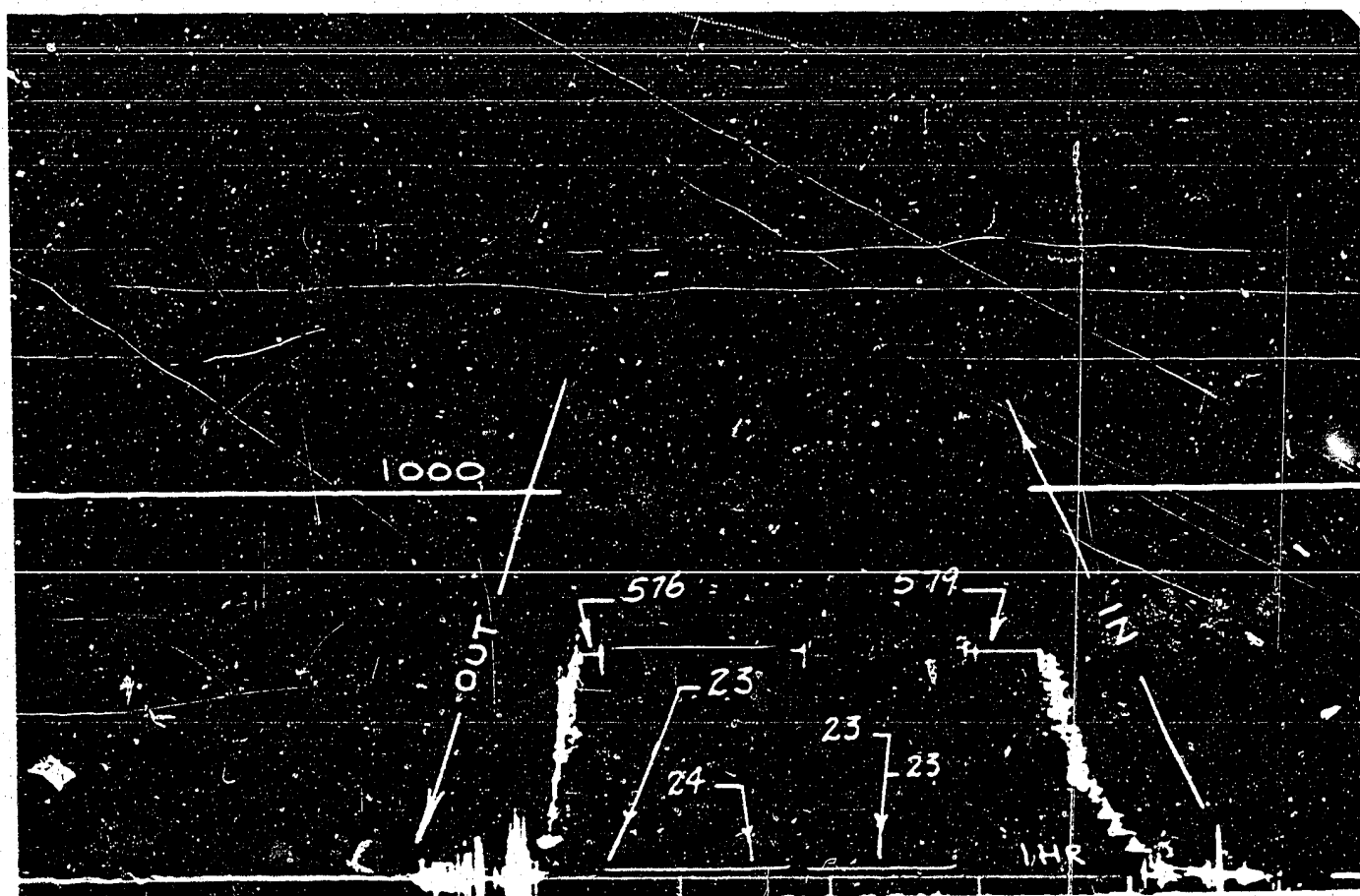
DST PRESSURE INCREMENTS

Recorder No. 2277

Depth 1198

Pulse	INITIAL CIP				FINAL CIP			
	Time Defl.	T+0	$\frac{T+0}{6}$	PSIG	Time Defl.	T+0	$\frac{T+0}{6}$	PSIG
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								
16								
17								
18								
19								
20								
21								
22								
23								
24								







DRILL-STEM TEST DATA

Well Name <u>Husky / et al Willow Lake</u>	Test No <u>Two</u>
Well Number <u>(-7-A)</u>	Zone Tested: <u>Upper Ronning</u>
Company <u>Husky Oil Limited</u>	Interval <u>2236' - 2303'</u>
Comp Rep <u>Glen Robertson</u>	Tester <u>Leo Penner</u>
Date <u>Feb. 9, 1970</u>	

Type of Test Dual Bottom Open RFS Tool No. 101

Preflow 3 mins ISI 30 mins Flow 45 mins FSI 60 mins

Specify Inside or Outside	INS REC No. <u>2227</u>	OUT REC No. <u>2015</u>	REC No.
	<u>3600</u> RANGE <u>1</u> HR CLOCK	<u>5750</u> RANGE <u>12</u> HR CLOCK	RANGE HR CLOCK
DEPTH	<u>2261</u>	<u>2266</u>	
Initial Hydro Mud Press	<u>1126</u>		
Initial Shut-in Press	<u>72</u>		
Initial Flow Press	<u>40</u>		
Final Flow Press	<u>43</u>		
Final Shut-in Press	<u>105</u>		
Final Hydro Mud Press	<u>1126</u>		

Mud Drop NEL Fluid Loss 12.4 Mud Weight 9.6

Viscosity 37 Temperature °F 70 Net Pay Tested 52

Top Packer Depth Bottom Packer Depth 2236' Total Depth 2303'

Drill Pipe Size 1 1/2" P.H. Wt. 16.6 Drill Collar I.D. 2 7/8" Ft Run 5 1/4

Surface Choke Size 2" valve Bottom Choke Size 4" Main Hole Size 2 1/2"

Anchor Size 4 1/2" OD Rat Hole Size 6 3/16" Feet of Rat Hole 48

Cushion Amount Type Rubber Size 7 1/2"

Fluid Recovery Total Feet 30' 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 Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins.	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day

Bleed Off Time for Drill Pipe

REMARKS: Weak preflow. Very weak air blow during test period, decreasing to nil in 35 min. Reset after 35 min. flow. Very weak air blow, dead in 5 min.

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



TESTING REPORT

45 LANDING SESS _____
45 CHAMBER _____
45 TOOL ON F.O. SUB _____
CO SUB _____ 1.00
SHUT IN TOOL _____ 5.00
R.F.S. No. 101 _____ 3.25
R.F.S. No. _____
HYDRAULIC TOOL _____ 7.00
IARS 1st _____ 6.00
RECORDER No. _____ DEPTH _____
RECORDER No. _____ DEPTH _____
SAFETY JOINT _____ 1.75
BY PASS SUB _____

1. PACKER DEPTH 2230

PACKER _____ 6.00

2. PACKER DEPTH 2236

PACKER _____ 5.00
ANCHOR-SPECIFY _____ 1.00
Perf _____ 24.00
TOTAL TOOL ABOVE INTERVAL 35.00

BLANK OFF OR BY PASS SUB _____
RECORDER No. 2227 _____ 5.00 DEPTH 2261

3. PACKER DEPTH _____

PACKER _____ TOTAL INTERVAL 67.00

4. PACKER DEPTH _____

PACKER _____

ANCHOR-SPECIFY _____

RECORDER No. 2015 _____ 5.00 DEPTH 2266
Perfs _____ 30.00

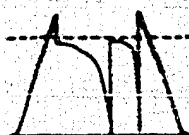
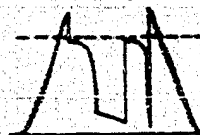
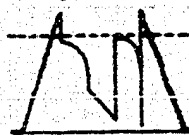
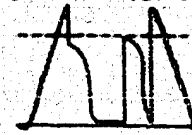
TOTAL DEPTH 2303

BULLNOSE _____ 2.00

TOTAL TAIL PIPE 67.00

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS

TOTAL TEST TOOL 102.00

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

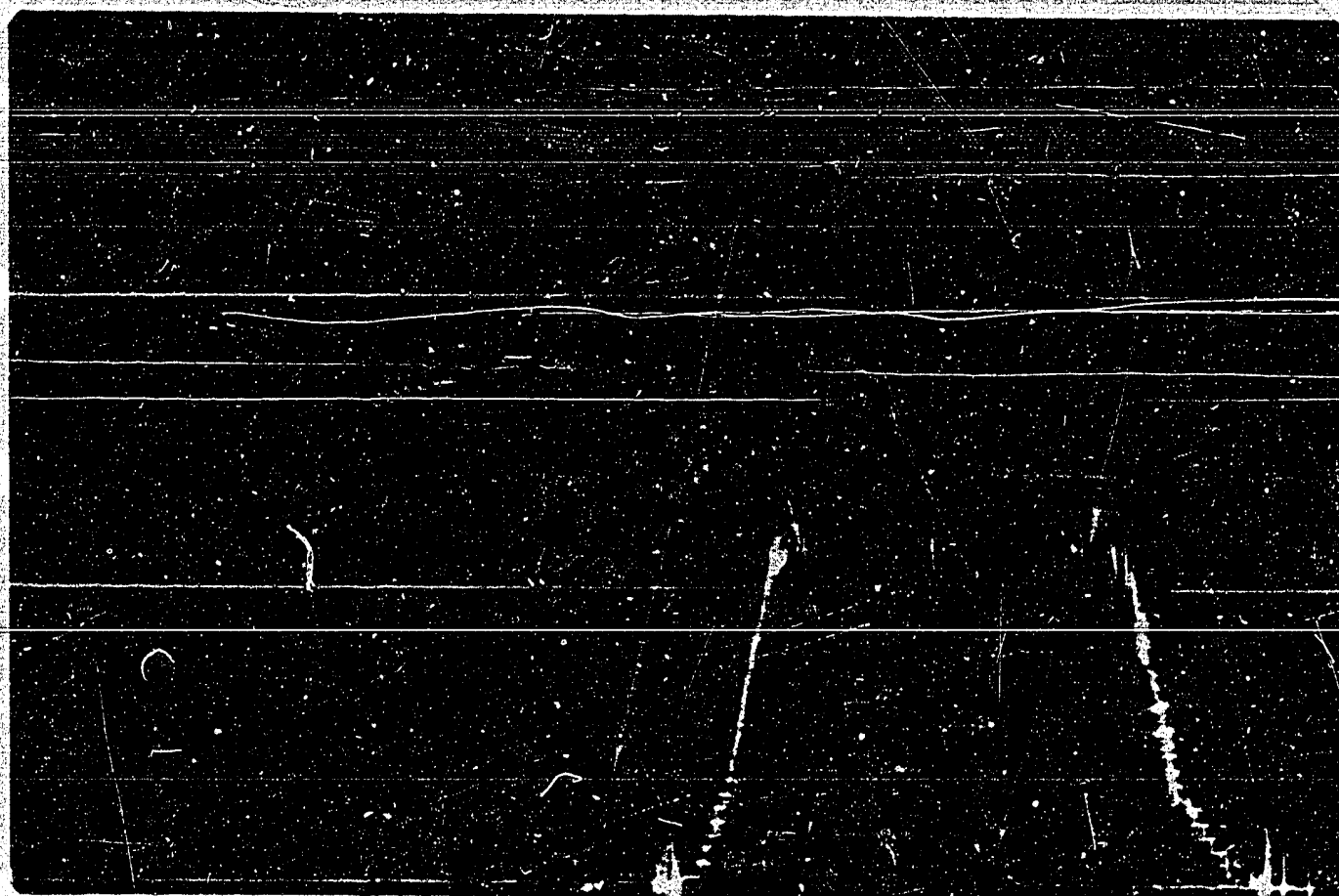


DST PRESSURE INCREMENTS

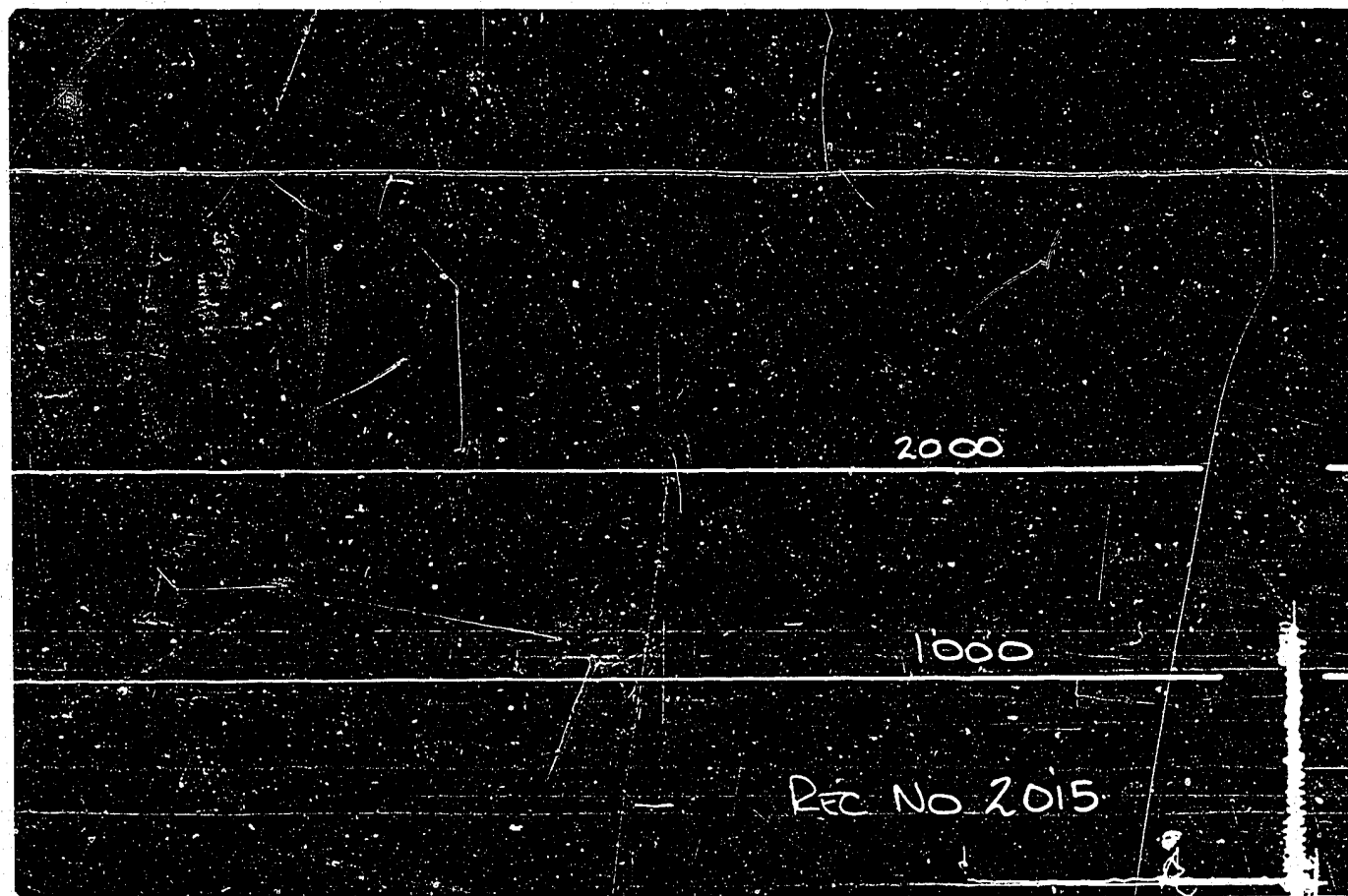
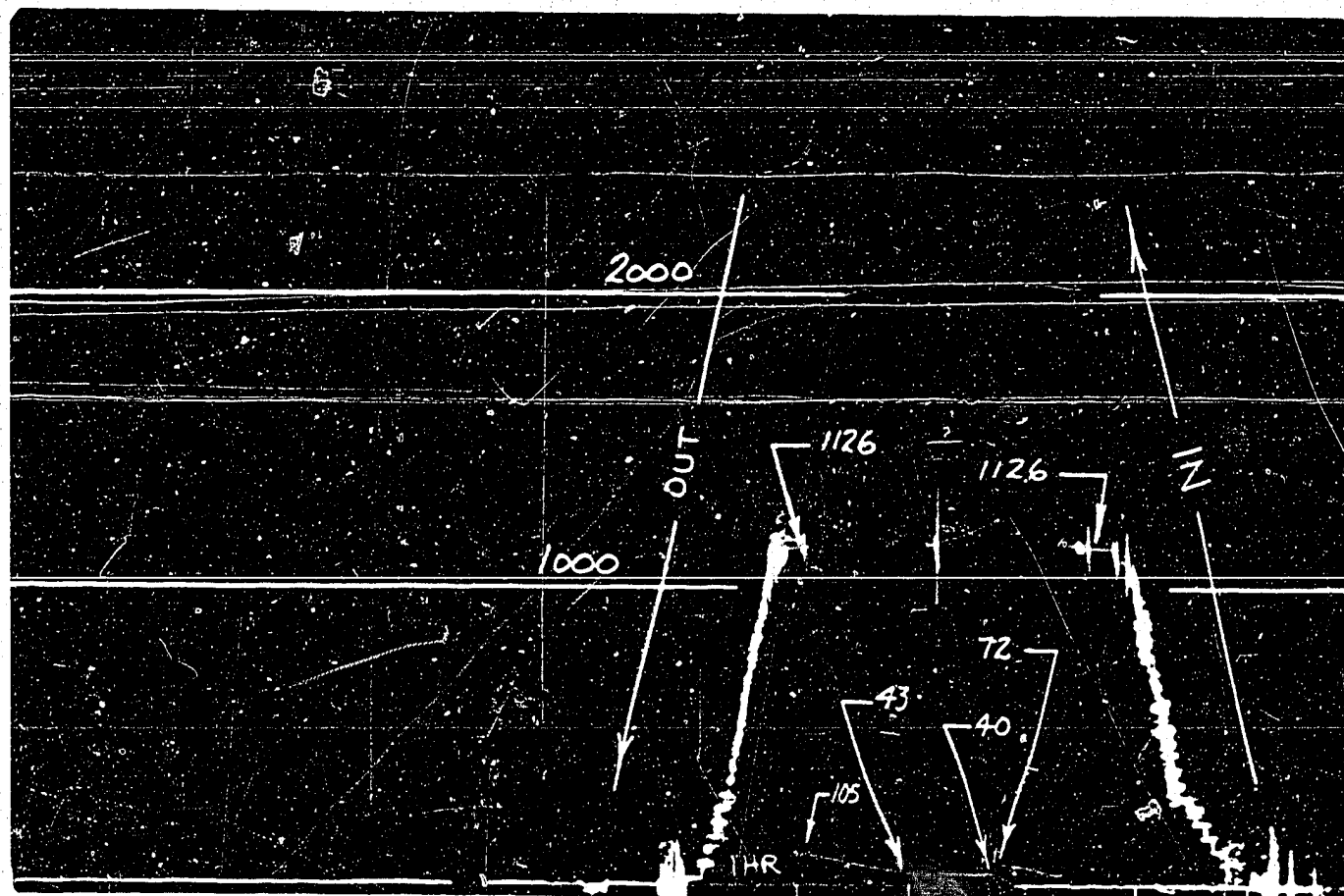
Recorder No. 2227

Depth 2261

Pulse	Time Sec.	INITIAL CIP				FINAL CIP		
		$T + \frac{P}{2}$	$\frac{T+P}{2}$	PMS	$\frac{T+P}{2}$	$T + \frac{P}{2}$	$\frac{T+P}{2}$	PMS
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			105
13								
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POOR COPY





DRILL-STEM TEST DATA

Well Name <u>HB Husky/El Al Willow Lake</u>	Test No <u>3</u>
Well Number <u>0-27-A</u>	Zone Tested <u>Running at</u> <u>Fracture Zone</u>
Company <u>Husky Oil Limited</u>	Interval <u>2480' - 2522'</u>
Camp Rep <u>G. Robertson</u>	Tester <u>G. Ostrander</u>
Date <u>Feb. 12, 1970</u>	

Type of Test Dual Bottom Hole RFS Tool No 101Preflow 3 mins ISI 25 mins Flow 6 & 6 mins FSI 25 mins
Reset 20 min.

Specify Inside or Outside	INS REC No. <u>2227</u> <u>3600</u> RANGE <u>12</u> HR. CLOCK	OUT REC No. <u>2015</u> <u>5750</u> RANGE <u>12</u> HR. CLOCK	REC No. _____ RANGE _____ HR. CLOCK
DEPTH	<u>2163</u>	<u>2505</u>	
Initial Hydro Mud Press	<u>1235</u>	<u>1261</u>	
Initial Shut-In Press	<u>985</u>	<u>1006</u>	
Initial Flow Press	<u>986</u>	<u>1006</u>	
Final Flow Press	<u>985</u>	<u>1015</u>	
Final Shut-In Press	<u>996</u>	<u>1020</u>	
Final Hydro Mud Press	<u>1223</u>	<u>1269</u>	

Mud Drop _____ Fluid Loss 9.6 Mud Weight 9.6
Viscosity 38 Temperature °F 82 Net Pwy Tested _____
Top Packer Depth 2174' Bottom Packer Depth 2480' Total Depth 2522'
Drill Pipe Size 4 1/2 PH Wt. 16.6 Drill Collar I.D. 2 7/8" Fr. Run 536
Surface Choke Size CLOSED Bottom Choke Size 5/8" Main Hole Size 8 3/4
Anchor Size 4 1/2 Rat Hole Size _____ Feet of Rat Hole _____
Cushion Amounts _____ Type _____ Rubber Size 7 1/4"

Fluid Recovery Total Feet 740
Recovered 90 Feet of Drilling Mud
Recovered 650 Feet of Mud Cut Salt Water
Recovered _____ Feet of _____
Recovered _____ Feet of _____
Recovered _____ Feet of _____

Gas Recovery _____ How Measured _____ Riser size: _____

_____ mins.	Temp. °F	Press Rdg. _____ psi	Orifice Size _____	_____ MCF/Day
_____ mins.	Temp. °F	Press Rdg. _____ psi	Orifice Size _____	_____ MCF/Day
_____ mins.	Temp. °F	Press Rdg. _____ psi	Orifice Size _____	_____ MCF/Day
_____ mins.	Temp. °F	Press Rdg. _____ psi	Orifice Size _____	_____ MCF/Day
_____ mins.	Temp. °F	Press Rdg. _____ psi	Orifice Size _____	_____ MCF/Day
_____ mins.	Temp. °F	Press Rdg. _____ psi	Orifice Size _____	_____ MCF/Day

Bleed Off Time for Drill Pipe Pre-flow 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 tool was 16' high (bridged).

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



TESTING REPORT

45 LANDING SUB	_____	_____
45 CHAMBER	_____	_____
45 POOL OR P.O. SUB	_____	1.00
CO SUB	_____	1.00
SHUT IN TOOL	_____	5.50
R.F.S. No. 101	_____	3.80
D.F.S. No.	_____	_____
HYDRAULIC TOOL	_____	7.20
JASS	1.00	6.00
RECORDER No. 2227	_____	5.00
RECORDER No.	_____	_____
SAFETY JOINT	_____	2.75
BY PASS SUB	_____	_____
PACKER 7 1/2"	_____	6.00
PACKER 7 1/2"	_____	5.00
ANCHOR—SPECIFY	_____	1.00
Perfs	_____	23.00
BLANK OFF OR BY PASS SUB	_____	_____
RECORDER No.	_____	_____
PACKER	_____	_____
ANCHOR—SPECIFY	_____	_____
RECORDER No. 2015	_____	5.00
Perfs	_____	10.00
BULLNOSE	_____	2.85

Depth 2445

Depth 2463

DEPTH

1. PACKER DEPTH 2474

PACKER DEPTH 2480

3. PACKER DEPTH

4. PACKER DEPTH

TOTAL TOOL ABOVE INTERVAL 42.25

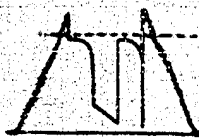
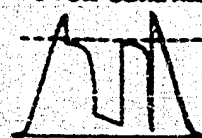
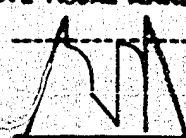
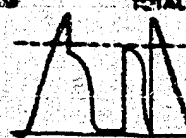
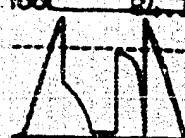
TOTAL INTERVAL 41.85

TOTAL DEPTH 2522

TOTAL TANK PIPE 47.85

TOTAL TEST TOOL 84.10

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

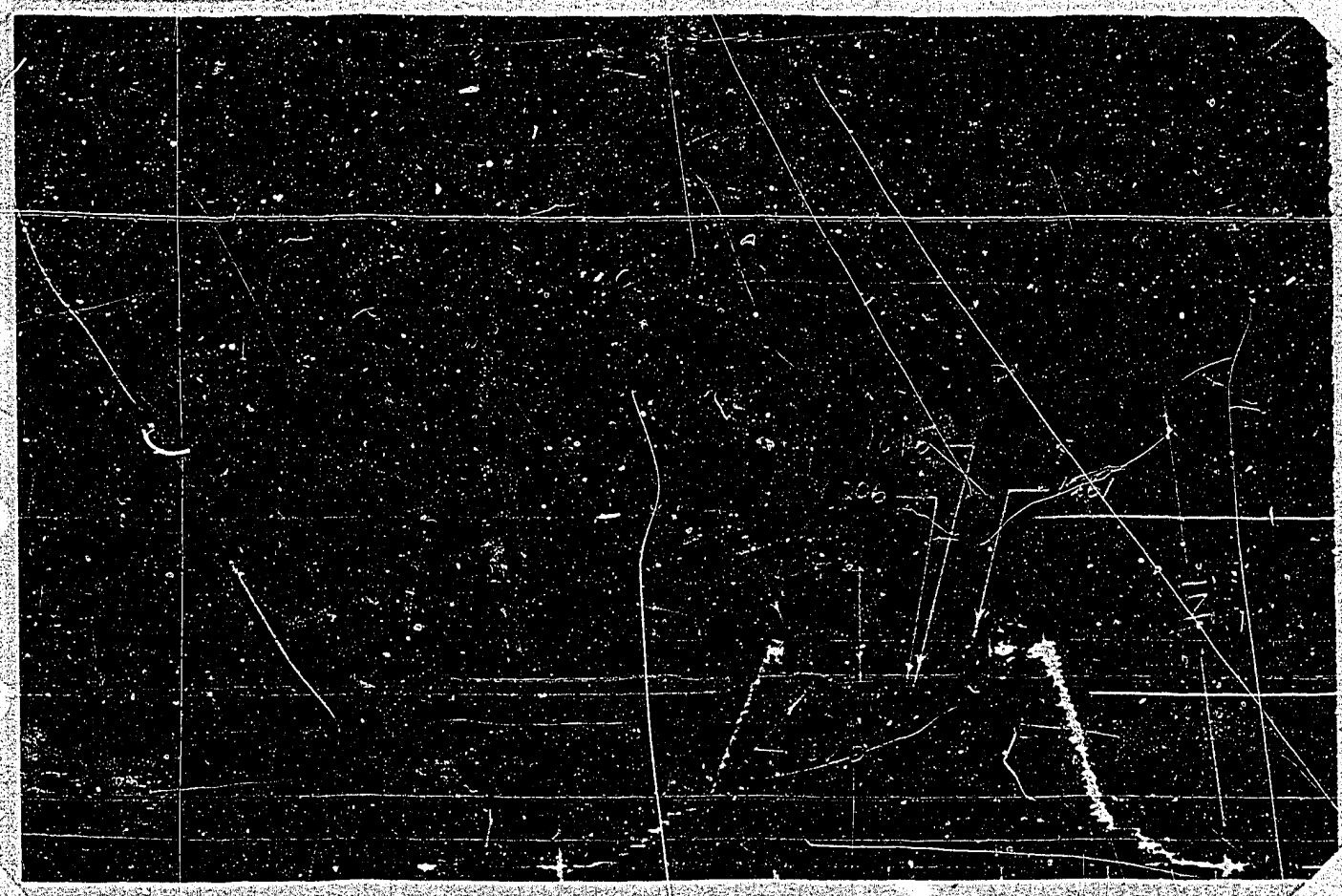
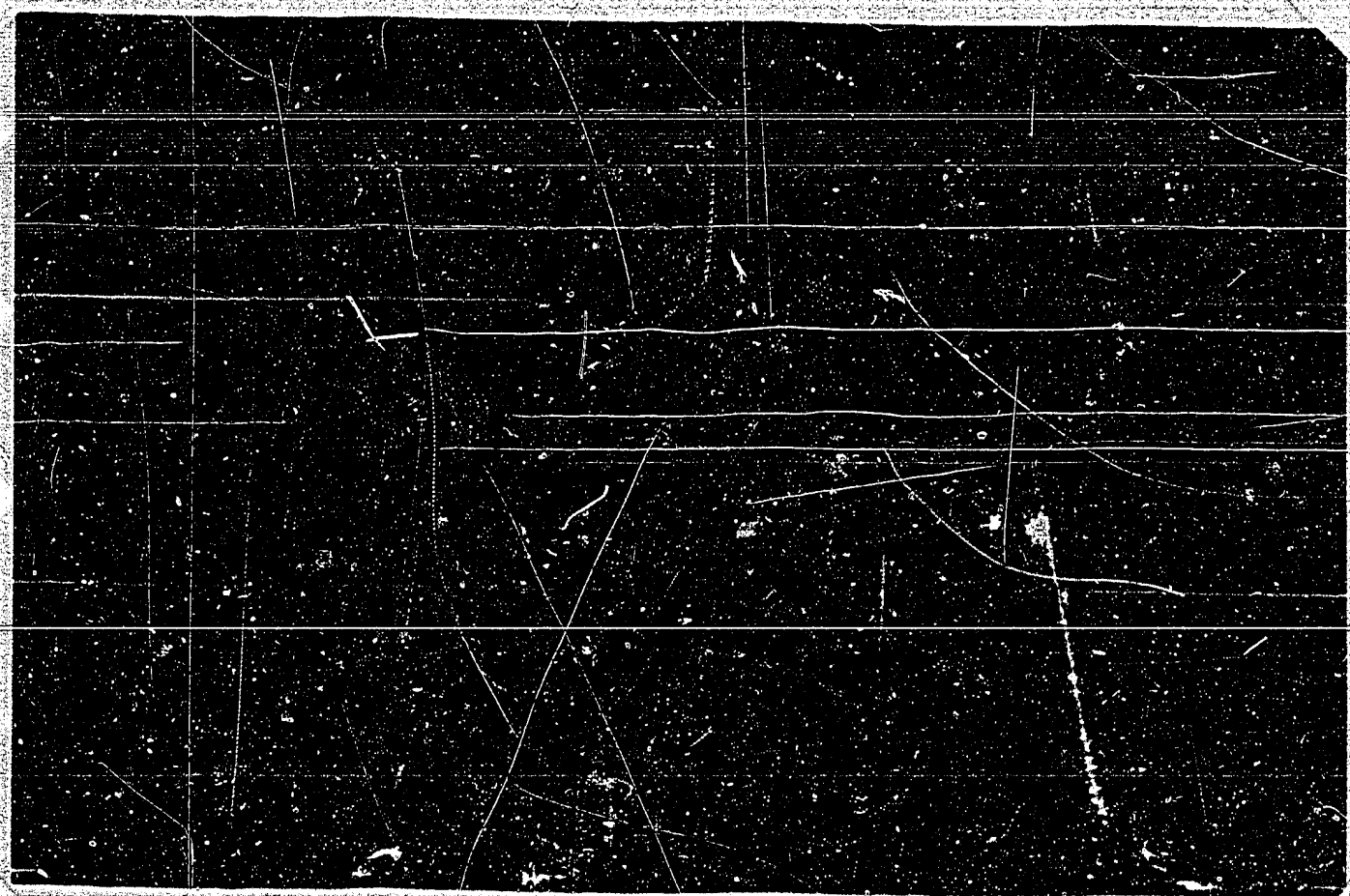


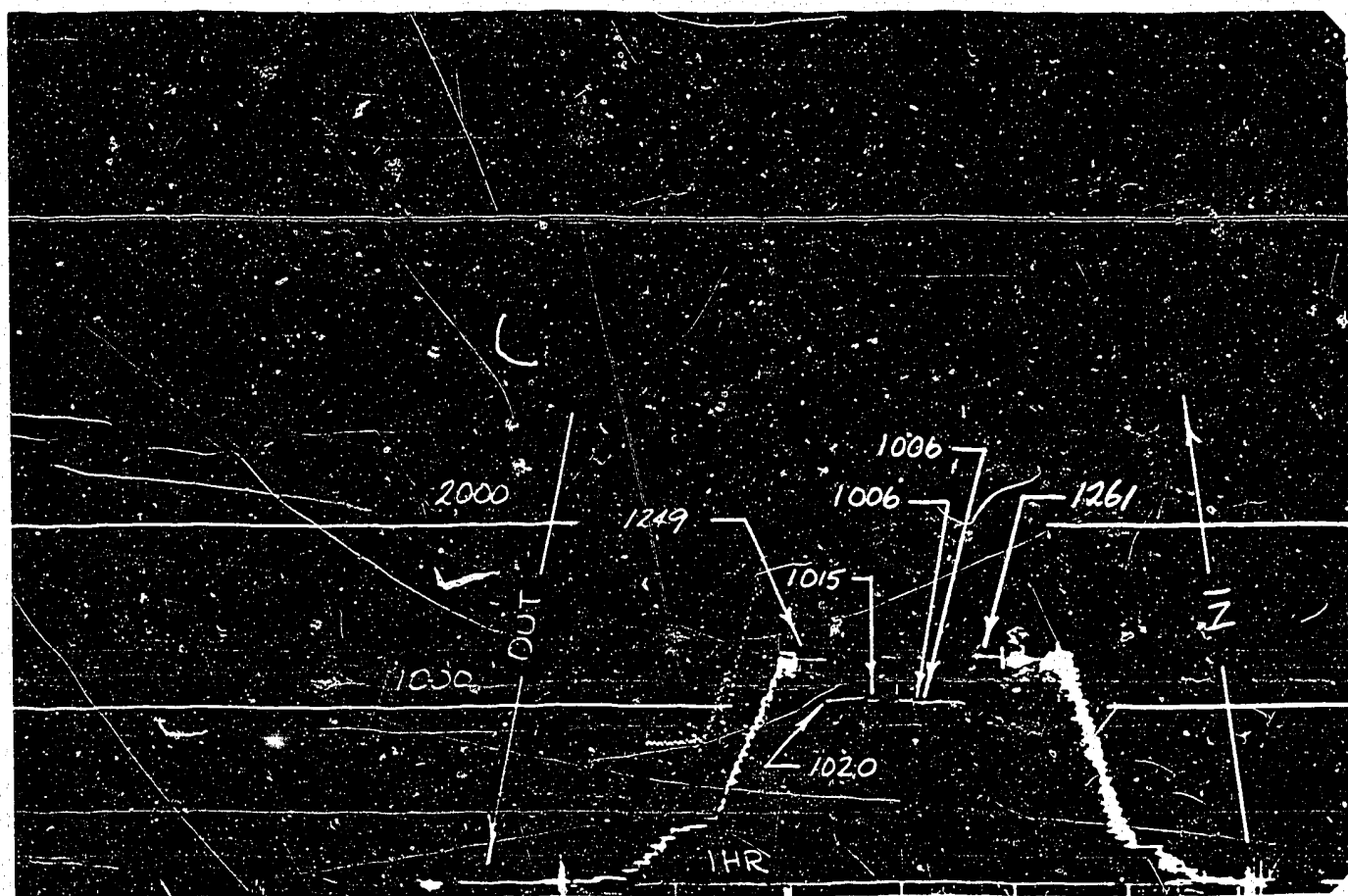
DST PRESSURE INCREMENTS

Recorder No 2227

Depth 2463

Point	INITIAL CIP				FINAL CIP			
	Time Defl.	T+G	$\frac{T+G}{G}$	PSIG	Time Defl.	T+G	$\frac{T+G}{G}$	PSIG
1	0			865	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			994
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DRILL-STEM TEST DATA

Well Name Husky-Mt. Al Willowlake	Test No. 4	
Well Number Q-27-A	Zone Tested L. Ronning 45 Franklin 45	
Company Husky Oil Limited	Interval 2506' - 2524'	
Comp. Rep. G. Robertson	Tester G. Ostrander	Date Feb. 12/70

Type of Test **Dual Bottom Hole** RFS Test No. **101**
Pressure **4** mins ISI **29** mins Flow **59** mins FSI **60** mins

Specify Inside or Outside	INS REC No. 2227 3600 RANGE 12 HR CLOCK	OUT REC No. 2015 5750 RANGE 12 HR CLOCK	REC No. RANGE HR CLOCK
DEPTH	2689	2517	
Initial Hydro Mud Press	1250	1266	
Hydro Press	1007	1017	
Flow Press	786	844	
Flow Press	1002	1020	
Flow Press	1007	1023	
Final Hydro Mud Press	1246	1258	

Mud Drop **NIL** Fluid Loss **Low** Mud Weight **9.6**
Viscosity **44** Temperature °F **82** Net Pay Tested **13'**
Top Packer Depth **2500'** Bottom Packer Depth **2506'** Total Depth **25'**
Drill Pipe Size **4 1/2" FH** Wt. **16.6** Drill Collar I.D. **2 7/8"** Ft. Run **534**
Surface Choke Size **Adjustable** Bottom Choke Size **5/8"** Main Hole Size **8 1/2"**
Anchor Size **4 1/2"** Rot Hole Size _____ Feet of Rot Hole _____
Cushion Amount _____ Type _____ Rubber Size **7 1/4"**

Fluid Recovery Total Feet **1956**
Recovered **160** Feet of **Mud Cut Salt Water Slightly. Gas Cut**
Recovered **1596** Feet of **Salt Water**
Recovered _____ Feet of _____
Recovered _____ Feet of _____
Recovered _____ Feet of _____

Gas Recovery	How Measured	Riser size
mins	Temp. °F Press Rdg. _____ psi	Orifice Size _____ = _____ MCF/Day
mins	Temp. °F Press Rdg. _____ psi	Orifice Size _____ = _____ MCF/Day
mins	Temp. °F Press Rdg. _____ psi	Orifice Size _____ = _____ MCF/Day
mins	Temp. °F Press Rdg. _____ psi	Orifice Size _____ = _____ MCF/Day
mins	Temp. °F Press Rdg. _____ psi	Orifice Size _____ = _____ MCF/Day
mins	Temp. °F Press Rdg. _____ psi	Orifice Size _____ = _____ MCF/Day

Bleed Off Time for Drill Pipe _____
REMARKS: **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.**

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



TESTING REPORT



45 LANDING SUB _____

45 CHAMBER _____

45 TOOL OR P.O. SUB _____ 1.00

CO SUB _____ 1.00

SNUT IN TOOL _____ 5.20

R.F.S. No. 101 _____ 3.80

R.F.S. No. _____

HYDRAULIC TOOL _____ 7.20

LARS _____ 1.00 _____ 6.00

RECORDER No. 2227 _____ 5.00 DEPTH 2187

RECORDER No. _____ DEPTH _____

SAFETY JOINT _____ 1.75

BY PASS SUB _____

1. PACKER DEPTH 2500

PACKER 74 _____ 6.00

2. PACKER DEPTH 2506

PACKER 74 _____ 5.00

TOTAL TOOL ABOVE INTERVAL 41.95

ANCHOR—SPECIFY _____ 1.00

Perfs _____ 9.00

BLANK OFF OR BY PASS SUB _____

RECORDER No. _____ DEPTH _____

3. PACKER DEPTH _____

PACKER _____

TOTAL INTERVAL 17.85

4. PACKER DEPTH _____

PACKER _____

ANCHOR—SPECIFY _____

RECORDER No. 2015 _____ 5.00 DEPTH 2517

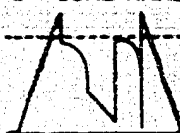
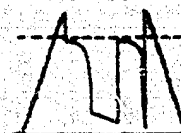
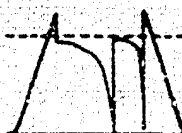
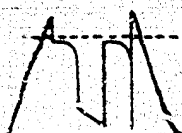
TOTAL DEPTH 2524

BULLHORN _____ 2.85

TOTAL TAIL PIPE 17.85

DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS

TOTAL TEST TOOL 59.80

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

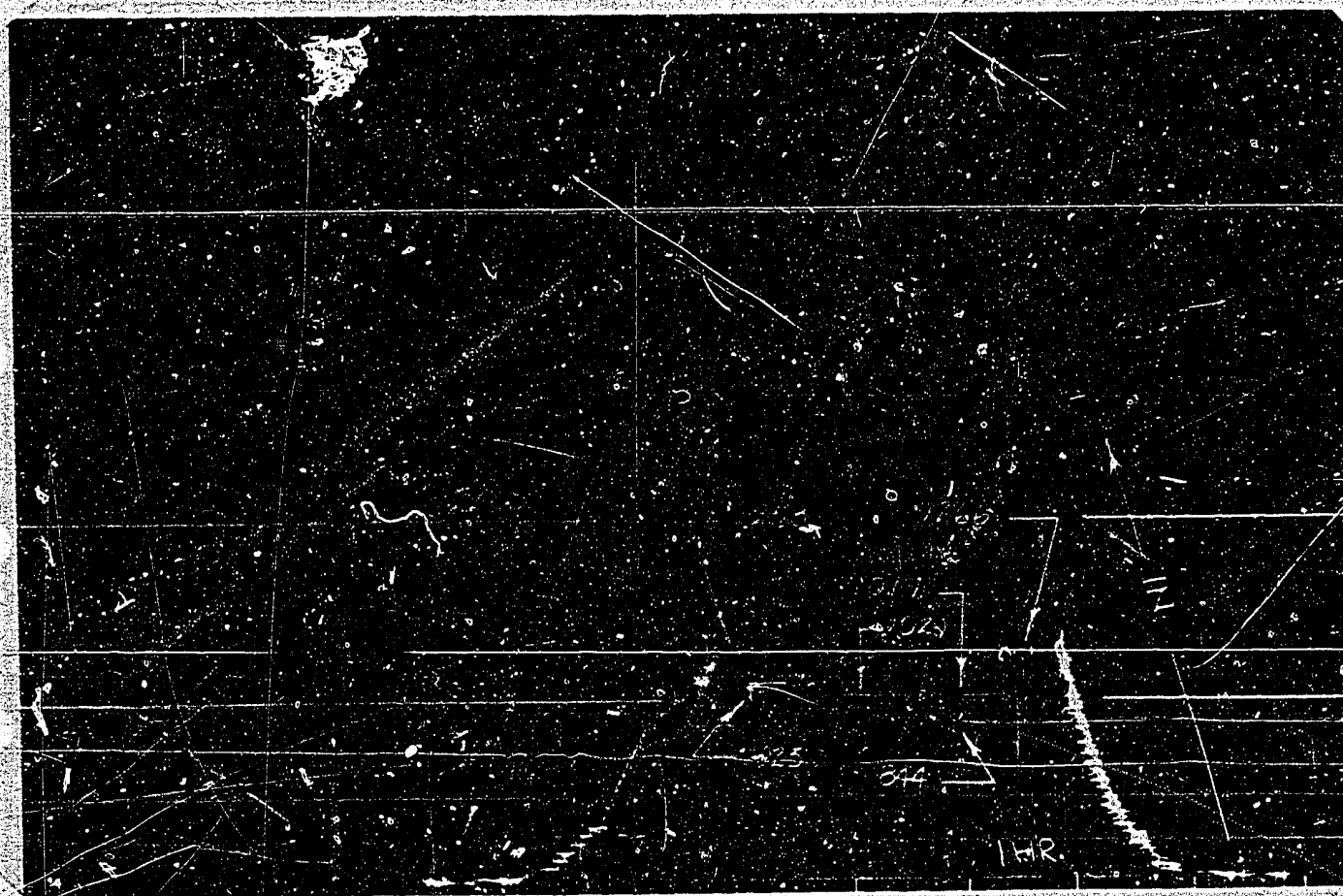
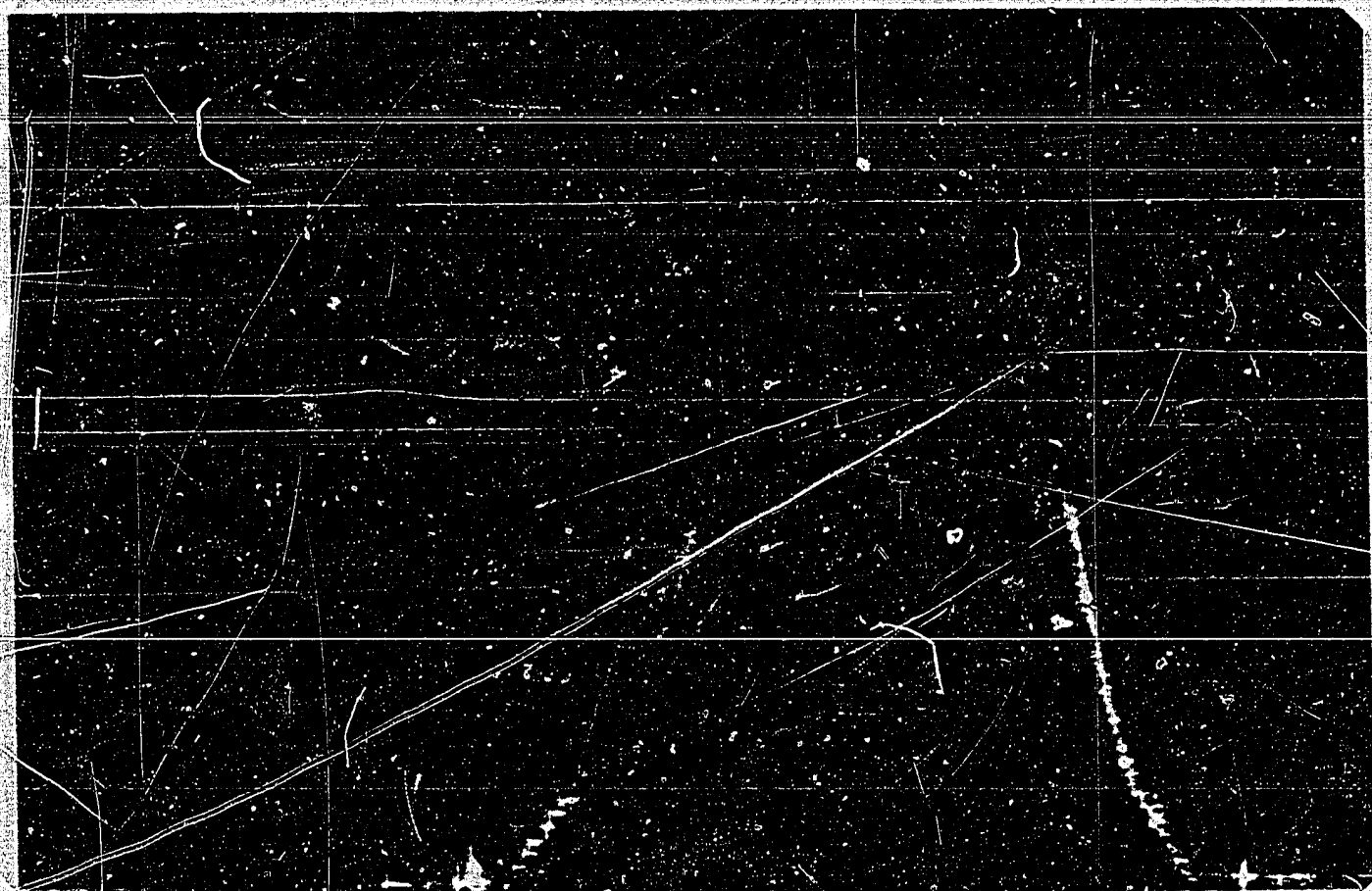


DST PRESSURE INCREMENTS

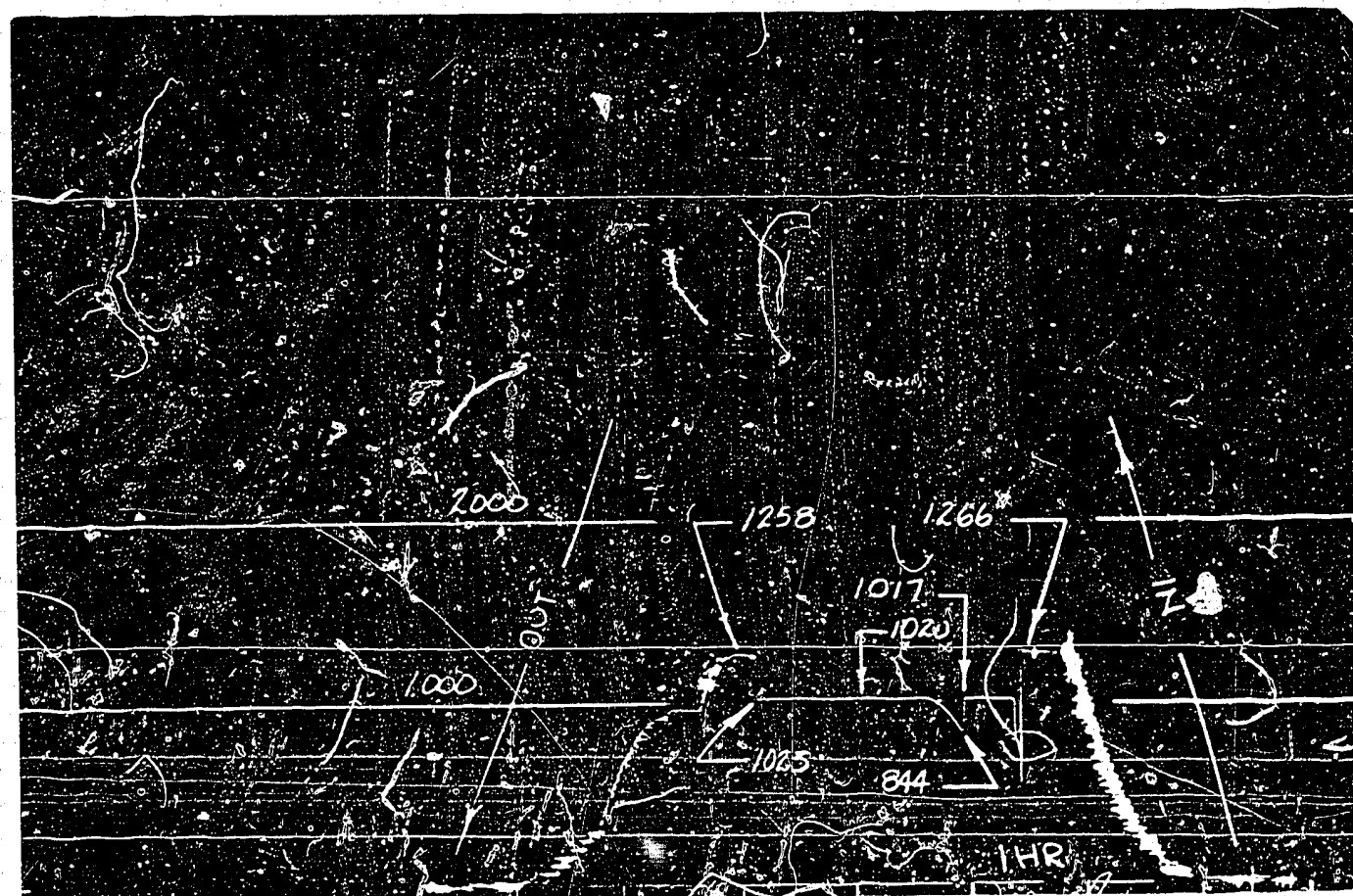
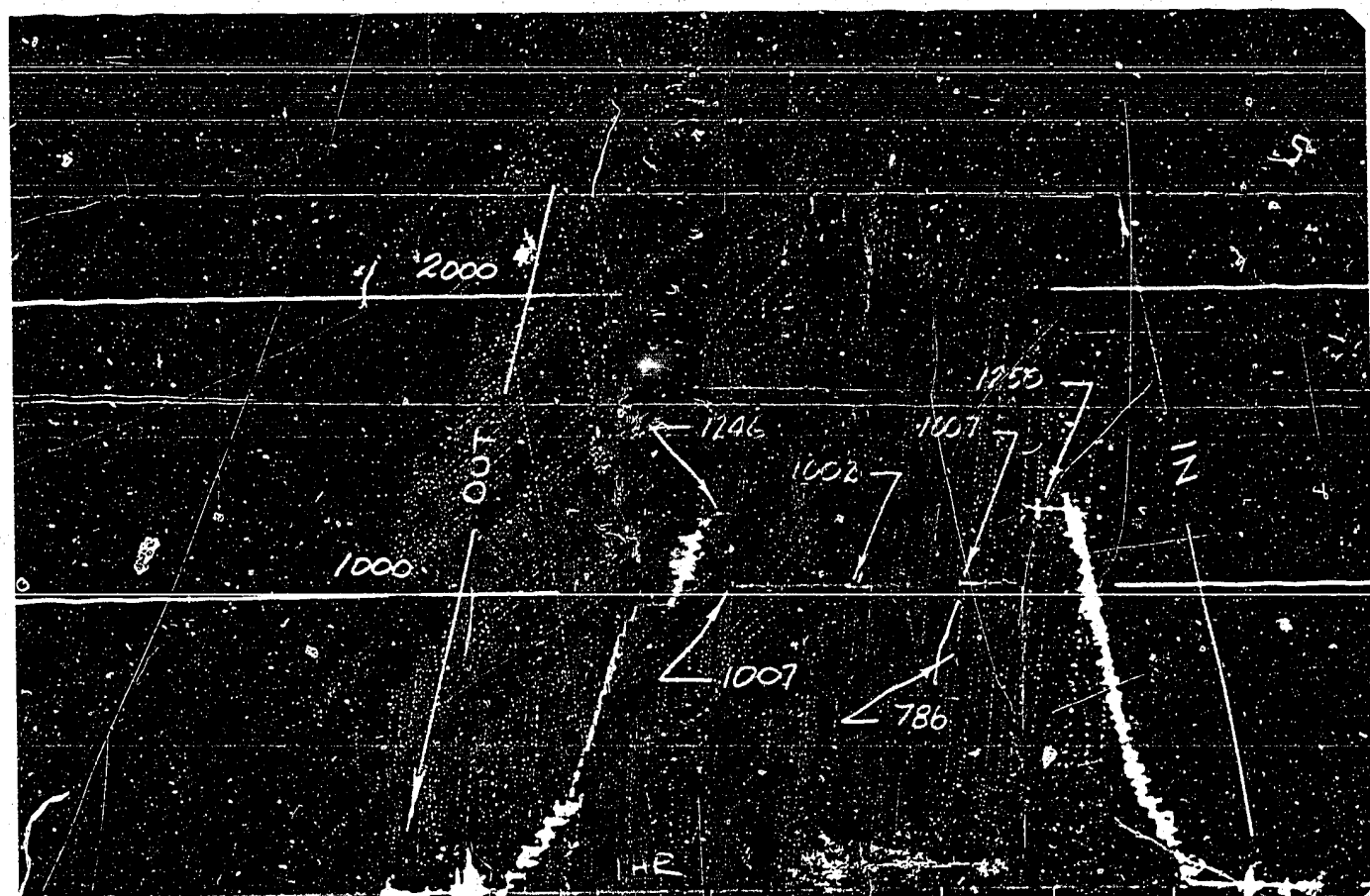
Recorder No. 2227

Depth 2489

Points	INITIAL CIP				FINAL CIP			
	Time Diff.	T+G	$\frac{T+G}{G}$	PSIG	Time Diff.	T+G	$\frac{T+G}{G}$	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
14								
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DRILL-STEM TEST DATA

Well Name	Husky HB et al Willowlake O-27A	Test No	5
Well Number	O-27-A	Zone Tested	L. Running ss
Company	Husky Oil Limited	Interval	2624' - 2660'
Comp Rep	C. Robertson	Tester	C. Ostrander
		Date	Feb. 20/70

Type of Test Dual Straddle By-Pass RFS Tool No 101Pretlow 11 mins ISI 27 mins Flow 60 mins FSI 56 mins

Specify Inside or Outside	INS REC No 2227	OUT REC No 2015	By-Pass No 2660
	3600 RANGE 12 HR CLOCK	5750 RANGE 12 HR CLOCK	6400 RANGE 24 HR CLOCK
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	99	116	
Final Shut-In Press	986	1006	
Final Hydro Mud Press	1361	1379	

Mud Drop NIL Fluid Loss 10.8 Mud Weight 9.5
Viscosity 65 Temperature °F Net Pay Tested 36'
Top Packer Depth 2624' Bottom Packer Depth 2660' Total Depth 2920'
Drill Pipe Size 4 1/2" FH WA 16.6 Drill Collar I.D. 2 7/8" Fr. Run 534
Surface Choke Size Bottom Choke Size 5/8" Main Hole Size 8 1/2"
Anchor Size 4 1/2" & 6 1/2" Rat Hole Size Feet of Rat 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

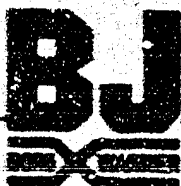
Gas Recovery How Measured Riser size:

mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	psi	Orifice Size	=	MCF/Day
mins	Temp. °F	Press Rdg.	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.

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



TESTING REPORT

AS LANDING SUB _____
AS CHAMBER _____
AS TOOL OR P.O. SUB _____ 1.00
CO SUB _____ 1.00
SHUT IN TOOL _____ 5.50
R.P.S. No. 101 _____ 3.80
R.P.S. No. _____
HYDRAULIC TOOL _____ 7.20
JARS _____ Bored _____ 5.00
RECORDER No. _____ 5.00 DEPTH 2607
RECORDER No. _____ DEPTH _____
SAFETY JOINT _____ Bored _____ 1.75
BY PASS SUB _____ 1.00

1. PACKER DEPTH 2618

PACKER 7 1/2" _____ 1.00

2. PACKER DEPTH 2624

PACKER 7 1/2" _____ 5.00

TOTAL TOOL ABOVE INTERVAL 12.25

ANCHOR SPECIFY _____ 1.00

Perfa _____ 27.00

_____ 1.00

BLANK OPV OR BY PASS SUB _____

RECORDER No. _____ 4.00 DEPTH 2653

3. PACKER DEPTH 2660

PACKER 7 1/2" _____ 3.00

TOTAL INTERVAL 36.00

3.00

4. PACKER DEPTH 2668

PACKER 7 1/2" _____ 6.00

ANCHOR SPECIFY Perfa _____ 8.00

RECORDER No. 2660 _____ 1.00 DEPTH 2678

C.O. Sub. _____ 1.00

Drill Collar _____ 236.9%

C.O. Sub _____ 1.00

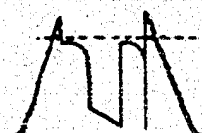
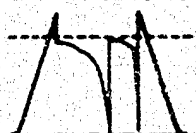
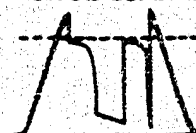
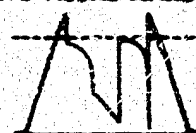
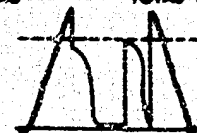
TOTAL DEPTH 2920

BULLNOSE 1 1/2" _____ 2.85

TOTAL TAIL PIPE 259.79

DET CHARTS FOR COMPARATIVE VISUAL ANALYSIS

TOTAL TEST TOOL 338.04

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

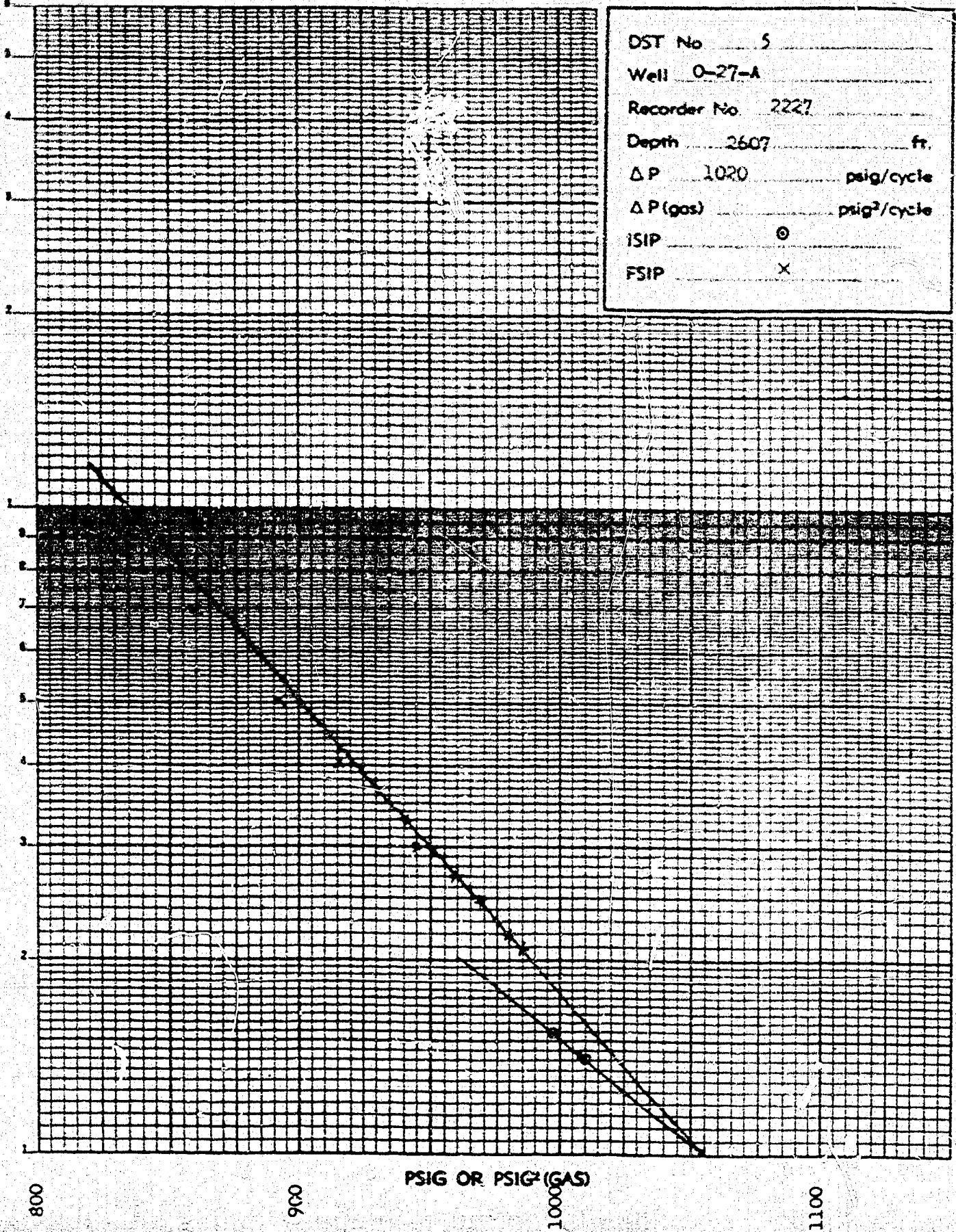
Recorder No. 2227

Depth 2607

Points	INITIAL CV				FINAL CV			
	Time Dial	T+0	$\frac{T+0}{0}$	PSIG	Time Dial	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			974
11					50			981
12					55			986
13					56			986
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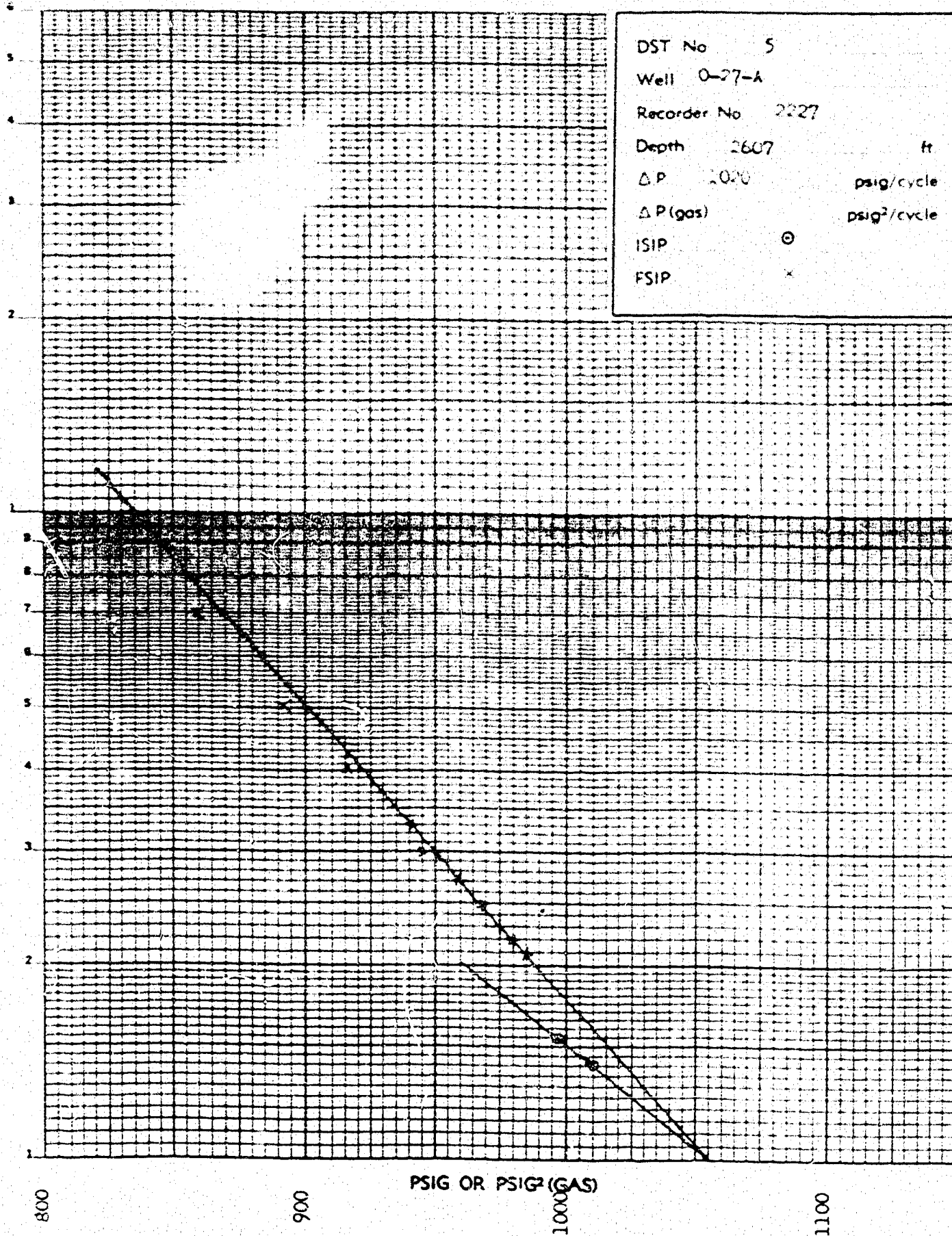


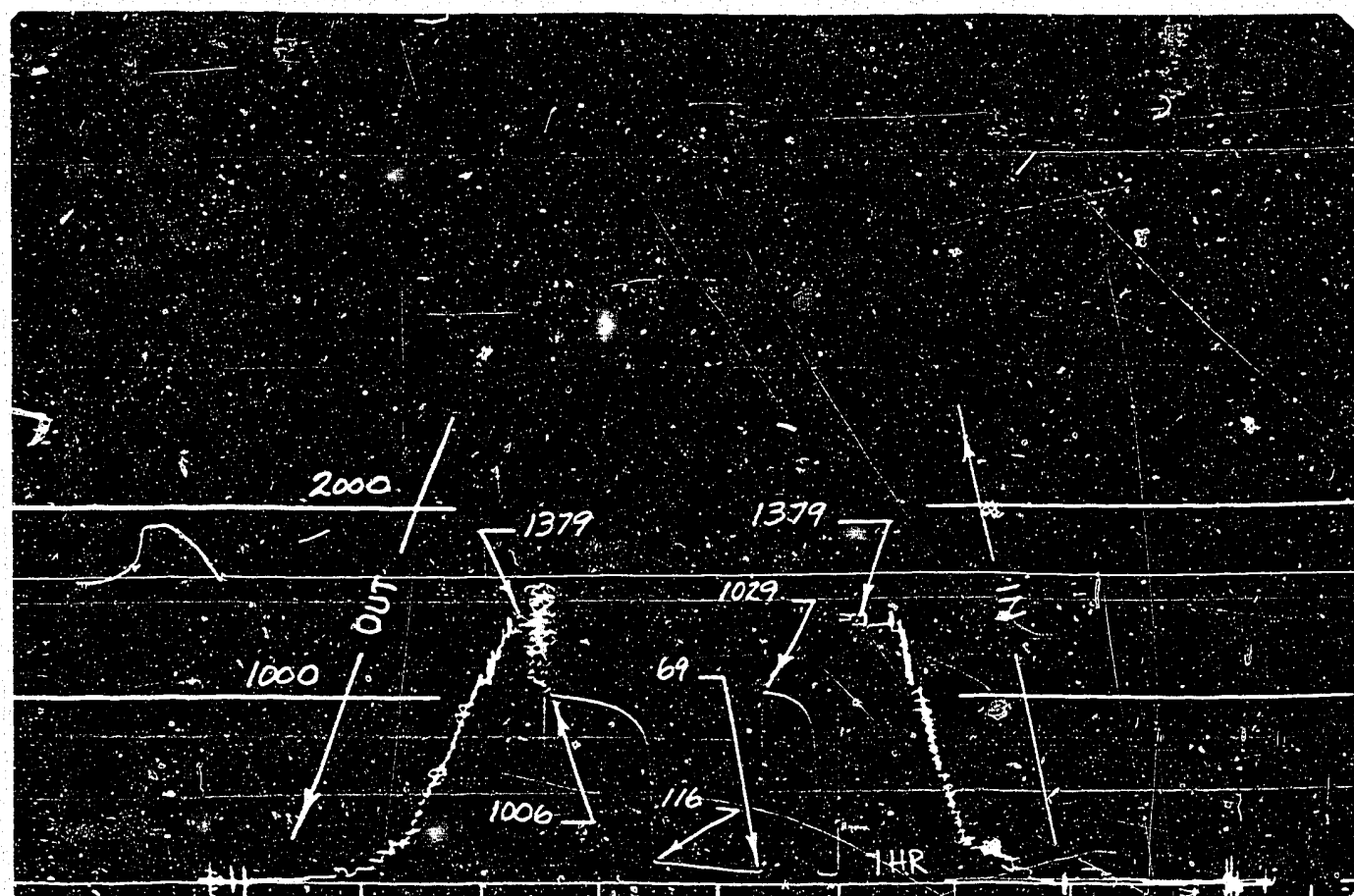
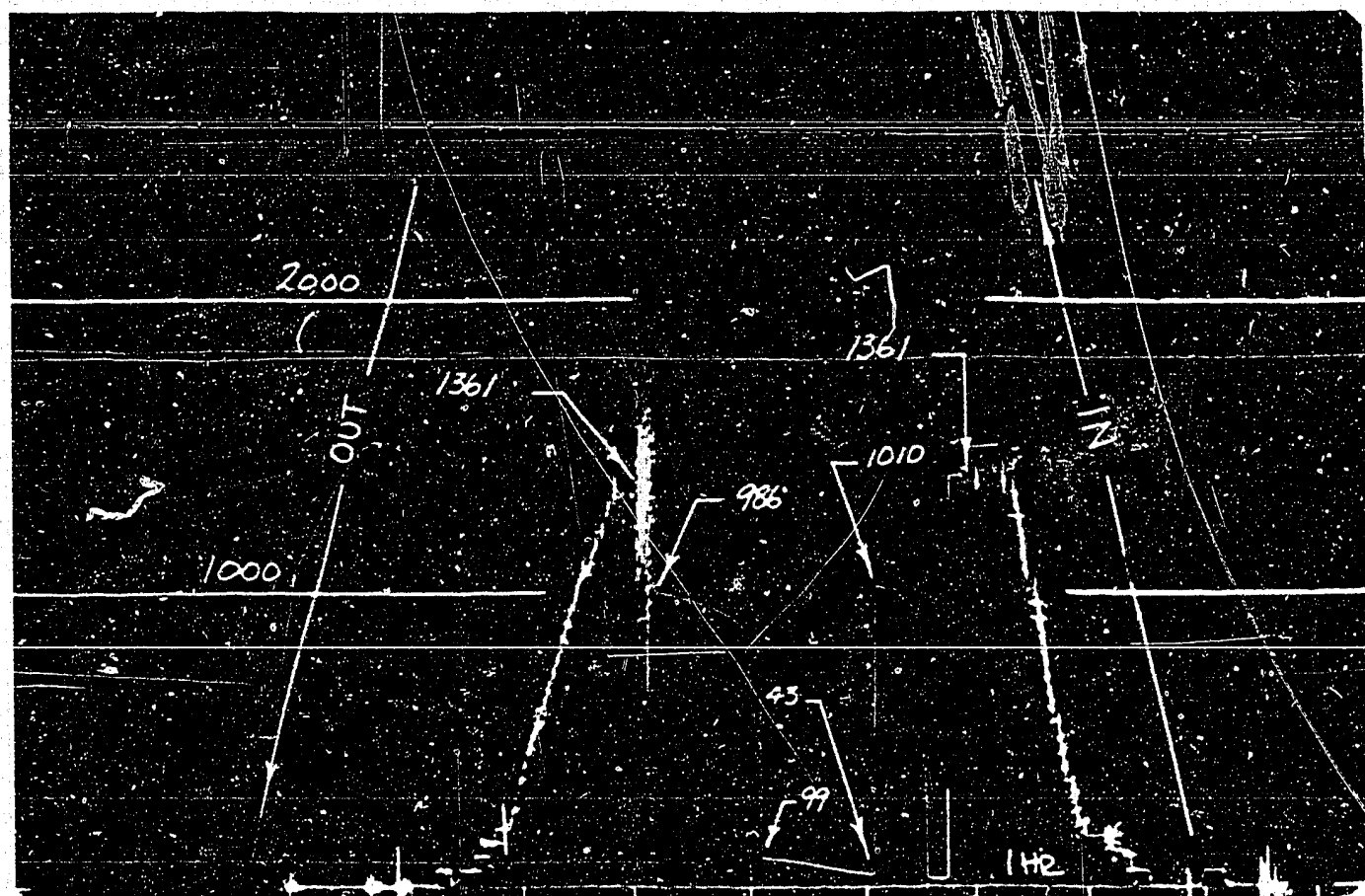
DST No 5
Well O-27-A
Recorder No 2227
Depth 2607 ft.
 ΔP 1020 psig/cycle
 $\Delta P(\text{gas})$ psig²/cycle
ISIP $\odot$
FSIP $\times$





DST No 5
 Well O-27-A
 Recorder No 2227
 Depth 2607 ft
 ΔP 2020 psig/cycle
 $\Delta P(\text{gas})$ psig²/cycle
 ISIP $\odot$
 FSIP $\times$





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% CaCl_2 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% CaCl_2 in 15.5#/gal. slurry. Plug down w/1000 psi at 6:15 p.m., 30 January, 1970. Good returns to surface.

COMPANY Huckey Oil Ltd.

CONTRACTOR S & T Drilling

WELL NAME Husky H E et al Willowlake
0-27A

RIG No. 4

BIT RECORD

[illegible]

**OILMEN'S WELLSITE
SERVICES LTD.**

OPERATING ENGINEER

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 Willowlake 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, Willowlake 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.	-	$1/2^{\circ}$
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

FORMATION WATER BASE MUD
DRILLING FLUID FULL DIAMETER
ELEVATION ANALYSIS
REMARKS

COMPANY HUSKY OIL LTD.
WELL HUSKY HB ET AL WILLOW LAKE O-27A
FIELD WILDCAT, WILLOW LAKE AREA, N.W.T.
LOCATION 52 16' 48.00 N. LAT.
121 04' 21.00 W. LONG.

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCS		PERMEABILITY, FEET	POROSITY PERCENT	DENSITY, g/cc	VISUAL EXAMINATION	
	DEPTH	THICK	KMAX	K90				BULK	GRAIN

CORED INTERVAL 2255 - 2300.4

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

1	2255.0-61.8	6.8	29	17	-0.1	20	2.5	1.75	2.77	2.85	DENSE
2	2261.8-62.5	.7	25.10	21.90	.55	17.57	3.1	2.17	2.66	2.75	FEW SV
3	2262.5-63.2	.7	-0.1	-0.1	-0.1	-	2.5	1.75	2.79	2.86	FEW SV
4	2263.2-63.9	.7	65.60	62.90	18.60	32.80	4.0	2.00	2.59	2.70	1 F
5	2263.9-64.4	.5	*	-0.1	*	-	1.8	.90	2.75	2.80	PPV VF
6	2264.4-64.9	.5	38.20	24.40	.22	26.74	6.0	4.20	2.51	2.67	1 PPV F
7	2264.9-65.6	.7	35.40	26.70	.05	21.24	4.2	2.52	2.56	2.68	1 PPV F
8	2265.6-66.2	.6	31.00	23.00	-0.1	21.70	3.3	2.31	2.61	2.70	1 PPV F
9	2266.2-66.9	.7	36.50	12.40	1.08	21.90	4.0	2.40	2.66	2.77	1 F
10	2266.9-67.5	.6	28.20	15.90	8.66	22.56	3.3	2.64	2.61	2.70	1 F
11	2267.5-68.3	.8	*	10.90	*	7.63	4.1	2.87	2.65	2.76	1 STY F
12	2268.3-69.0	.7	.22	.16	*	.24	2.3	2.53	2.77	2.83	FEW SV VF
13	2269.0-70.1	1.1	.42	.13	-0.1	.55	2.4	3.12	2.77	2.84	FEW SV STY F
14	2270.1-71.4	1.3	.12	.04	.37	.18	2.1	3.15	2.78	2.84	FEW SV F
15	2271.4-72.9	1.5	3.34	2.99	.61	5.01	5.2	7.80	2.64	2.79	1 PPV F
16	2272.9-74.4	1.5	13.00	10.30	5.55	14.30	4.2	4.62	2.74	2.85	1 F
17	2274.4-75.5	1.1	*	1.19	*	1.30	5.9	6.49	2.67	2.84	1 F
18	2275.5-76.6	1.1	.09	-0.1	-0.1	.09	5.4	5.40	2.69	2.85	1 F
19	2276.6-77.6	1.0	2.33	.16	1.96	2.33	3.1	3.10	2.74	2.83	PPV F
20	2277.6-78.6	1.0	-	-	-	-	1.5	1.50	2.76	2.80	DENSE A
21	2278.6-91.0	12.4	1.87	1.46	-0.1	1.87	1.7	2.21	2.72	2.77	FEW PPV F
22	2291.0-92.0	1.0	4.15	2.81	-0.1	5.40	2.0	2.40	2.70	2.76	FEW PPV F
23	2292.0-93.3	1.3	-	-	-	-	2.2	2.64	2.67	2.73	DENSE
24	2293.3-94.1	.8	3.26	3.22	.06	3.91	2.0	2.40	2.70	2.76	PPV F
25	2294.1-95.3	1.2	5.67	5.44	-0.1	6.80	2.2	2.64	2.67	2.73	PPV F
26	2295.3-96.5	1.2	-	-	-	-	-	-	-	-	-

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

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCS			PERMEABILITY FEET	POROSITY, PERCENT	POROSITY FEET	DENSITY, g/cc		USUAL EXAMINATION
	DEPTH	THICK	KMAX	K90	AV				BULK	GRAIN	
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

PAGE: 3 OF 3

FILE: CNP-4-5021

WELL: HUSKY HB ET AL WILLOW LAKE 0-27A

FORMATION:

SUMMARY INTERVAL: 2255.0 - 2300.4

TOTAL FOOTAGE: 45.4

FOOTAGE ANALYZED 25.4

FOOTAGE NOT ANALYZED: TOTAL: 20.0 DENSE 20.0 LOST .0 DRILLED .0 *NASH .0 RUBBLE .0

SUMMARY
OF
ANALYZED CORE:

TOTAL

BY
PERM
RANGES:

LESS THAN 0.10 Md.

0.10 0.49 Md.

0.50 0.99 Md.

1.00 9.99 Md.

GREATER THAN 9.99 Md.

FOOTAGE	% OF ANALYZED CORE	WEIGHTED AVERAGE POROS %	PERMEABILITY FEET	WEIGHTED AVERAGE PERM MD	PERM FEET	WEIGHTED AVERAGE RESIDUAL OIL %	WEIGHTED AVERAGE TOTAL WATER %
25.4	100.00	3.08	78.30	10.21	259.34	.00	.00
2.2	8.66	3.66	8.05	.04	.09	.00	.00
4.6	18.11	2.29	10.55	.25	1.17	.00	.00
.0	.00	.00	.00	.00	.00	.00	.00
9.6	37.80	3.06	29.39	3.27	31.38	.00	.00
9.0	35.43	3.37	30.31	25.19	226.70	.00	.00

*NOT ANALYZED BY REQUEST

CORE LABORATORIES - CANADA LTD.

Petroleum Reservoir Engineering

P.O. BOX 3870, POSTAL STATION "A"
CALGARY 8, ALBERTA
TELEPHONE 263-3381

Company: Husky Oil Ltd.
Core Sample
Husky HB et al Willow Lake 0-27A
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 ₂ O ₃)	0.1%
Sodium	0.1%
Potassium	0.01%
Silica (SiO ₂)	3.5%
Undetermined	66.99% (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



Company Husky Oil Ltd. Page 1 of 2

Well Husky et al Willowlake 0-27A File CAL-2-1685

Field Willow Lake Area, Northwest Territories Analyst DS
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 _____ psi Sampling temp. _____ °F Ambient temp. _____ °F

Date sampled Feb. 3/70 Date received Feb. 16/70 Date analysed Feb. 25/70

Container pressure _____ Mud _____ Water cushion _____

Recovery or flowrate: 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

File CAL-2-1685 Page 2 of 2

Company Husky Oil Ltd.

Well Husky et al Willowlake 0-27A K.B. Grd. 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 Penning Interval 2236' - 2303'

Sampled from DST #2 (30' from Top) by

Date sampled Feb. 9/70 Date analysed Feb. 25/70 Analyst DS

Recovery 65% Mud

Mud type Water cushion

Resistivity 0.680 Ohm-meters @ 71 °F

Specific gravity 1.0080 @ 60 °F

pH 7.6 H₂S Absent

Refractive Index 1.335 @ 75°F

Total Solids:

Calculated 11,541 mg/liter

By evaporation @ 110°C - mg/liter

By evaporation @ 180°C - mg/liter

At ignition - mg/liter

MILLIGRAMS PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₃	OH
2,847	917	10	Pres.	Abs.	-	-	1,677	810	5,260	Nil	Nil

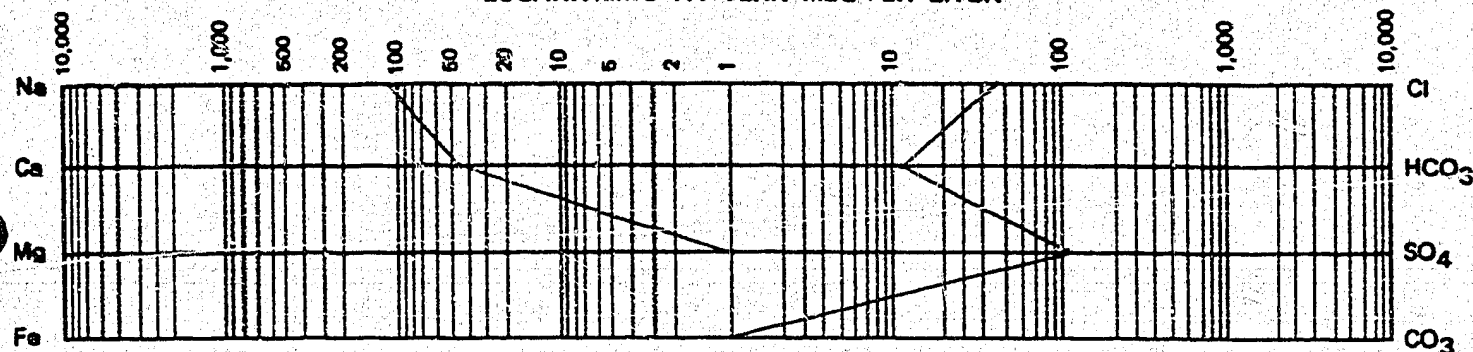
PER CENT CALCULATED SOLIDS

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. Grd. 1085'
 Location 62 16'48.00 N.L. 121 04'21.00 W.L. Field Willow Lake Area Province N.W.T.
 Formation ~~Franciscan Mountain~~ Ronning A3 Interval 2480' - 2522'
 Sampled from DST #3 by
 Date sampled Feb. 12/70 Date analysed Mar. 2/70 Analyst DS
 Recovery 90' Mud, 650' Mud-Cut Salt Water, Oil Flecked.

Mud type Water cushion
 Total Solids:
 Resistivity 0.044 Ohm-meters @ 73 °F Calculated 199,165 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	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₃	OH
74,642	1,959	632	Pres.	Abs.	-	-	116,262	410	5,280	Nil	Nil

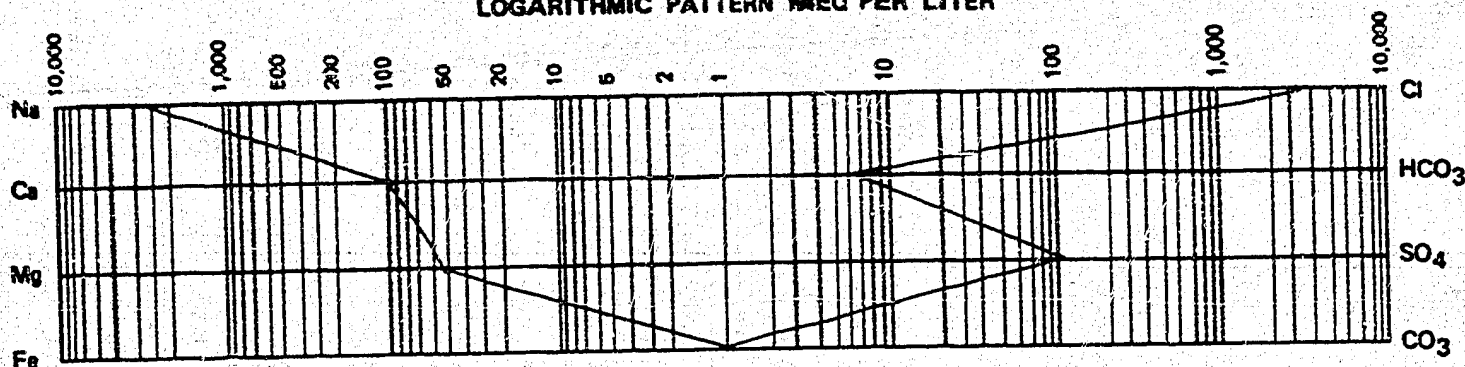
PER CENT CALCULATED SOLIDS

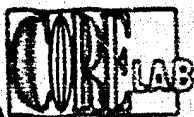
37.5	1.0	0.3	Pres.	Abs.	-	-	58.4	0.2	2.7	Nil	Nil
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MEQ PER LITER

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 CAL-2-1723 Page 2 of 3

Company Husky Oil Ltd.

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

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

Formation ~~Pranville Mountain~~ L. Renning AS Interval 2506' -2524'

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. 1596' Salter, Slightly Gas-Cut.

Mud type Water cushion Resistivity 0.037 Ohm-meters @ 71 °FSpecific gravity 1.1842 @ 60°FpH 6.7 H₂S AbsentRefractive Index 1.380 @ 75°F

Total Solids:

Calculated 266,390 mg/literBy evaporation @ 110°C - mg/literBy evaporation @ 180°C - mg/literAt 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

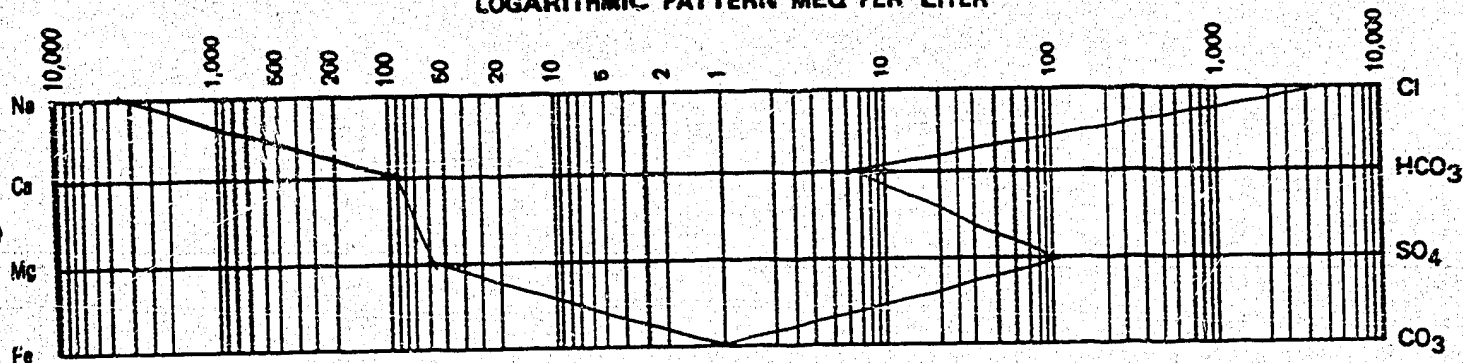
PER CENT CALCULATED SOLIDS

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.	-	-	4439.9	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. Grd. 1085'

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

Formation L. Renning to Basal Clastic Interval 2624' - 2660'

Sampled from DST #5 (2375') by

Date sampled Feb. 20/70 Date analysed Mar. 2/70 Analyst DS

Recovery 150" Mud-Cut Salt Water

Mud type Water cushion

Resistivity 0.068 Ohm-meters @ 73 °C

Specific gravity 1.0794 @ 60°F

pH 7.0 H₂S Absent

Refractive Index 1.351 @ 75°F

Total Solids:

Calculated 115,048 mg/liter

By evaporation @ 110°C - mg/liter

By evaporation @ 180°C - mg/liter

Az 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	38	Trace	Abs.	-	-	64,144	400	6,160	Nil	Nil

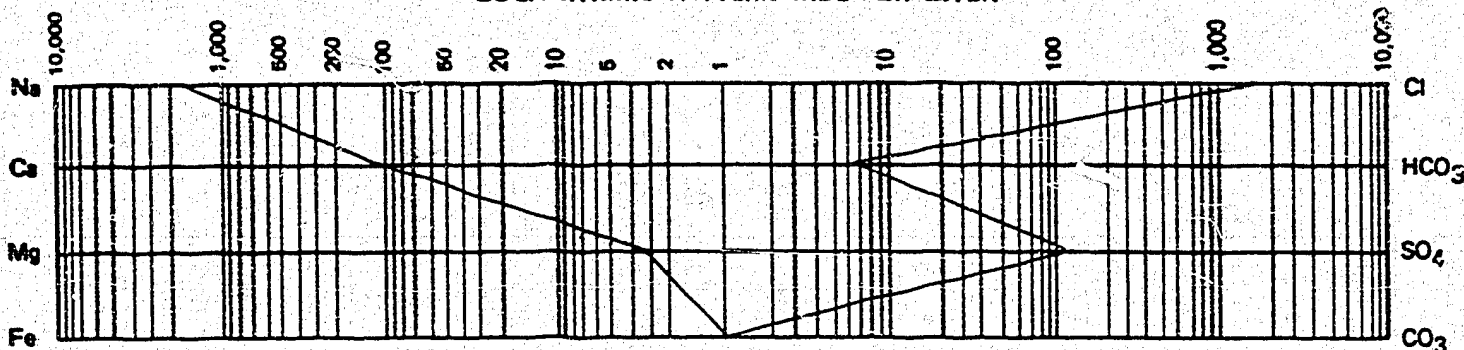
PER CENT CALCULATED SOLIDS

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 sax 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 B Willowlake 0-27A.

Plug No. 1: Dropped 130 sax 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 sax 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 sax 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.

HUSKY HB ET AL WILLOWLAKE 0-27A

D.A. 405

- Daily Tour Reports

DATE Feb 22-10

OPERATOR HUSKY ET AL		LEAS?		WILLOW LAKE 0-27-A		WELL NO. 0-27-A		FIELD OR DIST. WILLOW		COUNTY KANE		STATE N.W.T.	
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 4		DRILL PIPE STRING NO. SIZE		TOOL JOINT O.D.		PUMPS NO. MANUFACTURER TYPE STROKE LENGTH		LAST CASING TUBING OR LINER		SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT REMARKS	
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		TYPE THD.		1.		2.		3.			
TIME DISTRIBUTION-HOURS		MORN		DAY		EVE							
RIG UP & TEAR DOWN													
DRILLING ACTUAL													
REAMING													
CONDITIONING MUD & CIRCULATING													
TRIPS													
LUBRICATE RIG													
DEVIATION SURVEY													
TEST B.O.P.													
CUT OFF DRILLING LINE													
PAID RIG													
WIRE LINE LOGGING													
RUNNING CASING & CEMENTING													
WAITING ON CEMENT													
DRILL STEM TEST													
OTHER													
FISHING													
A. PERFORATING													
B. TUBING TRIPS													
C. SNABBING													
D. TESTING													
E. ADDITIONAL													
TIME SUMMARY (OFFICE USE ONLY)													
DAY WORK													
HRS. W/DP													
HRS. WO/DP													
HRS. STANDBY													
TOTAL DAY WORK													
WIRE LINE RECORD													
REEL NO.													
NO. OF LINES													
SIZE													
FEET SLIPPED													
FEET CUT OFF													
PRESENT LENGTH													
TON MI. OR TRIPS SINCE LAST CUT													
CUMULATIVE TON MI. OR TRIPS													
NO. OF DAYS FROM SPUD													
CUMULATIVE ROTATING HRS.													

DATE JUL 31 1970

OPERATOR Husky Et AL		LEASE Willow Lake 0-27-A		WELL NO. 0-27A		F D OR DIST. Willow Lake		COUNTY N. D.		STATE N. D.						
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 4	DRILL PIPE STRING 2 7/8	TOOL JOINT 6" O.D.	PUMPS TYPE THD. F.H.		LAST CASING TUBING OR LINER		SIZE 9 5/8	MAKE MANN	WT. & GR. 30 3/4	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT 409	REMARKS
SIGNATURE OF OPERATOR'S REPRESENTATIVE [Signature]		SIGNATURE OF CONTRACTOR'S TOOL PUSHER L. A. Webber		1. NAT. C-250 15"		2. NAT. C-150 12"										
TIME DISTRIBUTION-HOURS		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO.		PUMP NO.		METHOD RUN
MORN DAY EVE		STANDS D.P. FT.		BIT NO.		TIME		FROM TO		FORMATION		PUMP NO.		PUMP NO.		METHOD RUN
RIG UP & TEAR DOWN		SINGLES D.P. FT.		SIZE		WEIGHT										
DRILLING ACTUAL		D.C.		MFG.		VISC.-SEC										
REAMING		I.D. O.D. FT.		TYPE		W.L.-C.C.										
CONDITIONING MUD & CIRCULATING		D.C.		NOZZLE NO. SIZE		FLTR. CK.										
TRIPS		I.D. O.D. FT.		SER. NO.		SD. CONT. %										
LUBRICATE RIG		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT										
DEVIATION SURVEY		STB. BODY O.D. FT.		DEPTH IN												
TEST B.O.P.		RMR. BODY O.D. FT.		TOTAL FTG.		MUD & CHEMICALS ADDED										
CUT OFF DRILLING LINE		SUBS O.D. FT.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.										
FAIR RIG		BIT OR C.B. FT.		COND. OF BIT												
WIRE LINE LOGGING		KELLY DOWN FT.		REAMER NO.		DRILLER										
RUNNING CASING & CEMENTING		TOTAL FT.		REAMER TYPE												
WAITING ON CEMENT		WT. OF STRING LBS.														
DRILL STEM TEST		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO.		PUMP NO.		METHOD RUN
OTHER		STANDS D.P. FT.		BIT NO.		TIME		FROM TO		FORMATION		PUMP NO.		PUMP NO.		METHOD RUN
FISHING		SINGLES D.P. FT.		SIZE		WEIGHT										
A. PERFORATING		D.C.		MFG.		VISC.-SEC										
B. TUBING TRIPS		I.D. O.D. FT.		TYPE		W.L.-C.C.										
C. SWABBING		D.C.		NOZZLE NO. SIZE		FLTR. CK.										
D. TESTING		I.D. O.D. FT.		SER. NO.		SD. CONT. %										
E. ADDITIONAL		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT										
TIME SUMMARY (OFFICE USE ONLY)		STB. BODY O.D. FT.		DEPTH IN												
DAY WORK		RMR. BODY O.D. FT.		TOTAL FTG.		MUD & CHEMICALS ADDED										
HRS. W/DP		SUBS O.D. FT.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.										
HRS. WO/DP		BIT OR C.B. FT.		COND. OF BIT												
HRS. STANDBY		KELLY DOWN FT.		REAMER NO.		DRILLER										
TOTAL DAY WORK		TOTAL FT.		REAMER TYPE												
WIRE LINE RECORD		WT. OF STRING LBS.														
REEL NO.		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO.		PUMP NO.		METHOD RUN
NO. OF LINES		STANDS D.P. FT.		BIT NO.		TIME		FROM TO		FORMATION		PUMP NO.		PUMP NO.		METHOD RUN
SIZE		SINGLES D.P. FT.		SIZE		WEIGHT										
FEET SLIPPED		D.C.		MFG.		VISC.-SEC										
FEET CUT OFF		I.D. O.D. FT.		TYPE		W.L.-C.C.										
PRESENT LENGTHS		D.C.		NOZZLE NO. SIZE		FLTR. CK.										
TON MI. OR TRIPS SINCE LAST CUT		I.D. O.D. FT.		SER. NO.		SD. CONT. %										
CUMULATIVE TON MI. OR TRIPS		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT										
NO. OF DAYS FROM SPUD		STB. BODY O.D. FT.		DEPTH IN												
CUMULATIVE ROTATING HRS.		RMR. BODY O.D. FT.		TOTAL FTG.		MUD & CHEMICALS ADDED										
		SUBS O.D. FT.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.										
		BIT OR C.B. FT.		COND. OF BIT												

DATE 4-18-2017

OPERATOR Husky Et Al		LEASE Willow Lake 0-22-A		WELL NO. 0-22-A		FIELD OR DIST. Willow Lake		COUNTY NW 7		STATE																					
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 4		DRILL PIPE STRING 6" O.D.		PUMPS		SIZE 9 5/8		MAKE MAN		WT. & GR. 36 7/8		NO. JOINTS 13		FEET 409		RKB. TO CSG. HD.		SET AT		REMARKS									
SIGNATURE OF OPERATOR'S REPRESENTATIVE [Signature]		SIGNATURE OF CONTRACTOR'S TOOL PUSHER [Signature]		NO. 1 NAT.		TYPE C-250		STROKE LENGTH 15"		LAST CASING TUBING OR LINER																					
TIME DISTRIBUTION-HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL-S PAR-EL-P COM-D			
RIG UP & TEAR DOWN		24		STANDS D.P. 2236.39 FT.		BIT NO.		TIME		FROM TO						2920 T.D. D.S. #5 - RECOVERED 150' MUD CUT SAT WATER.															
DRILLING ACTUAL		1		SINGLES D.P. 3172 FT.		SIZE		WEIGHT								PAID FOR - NO VISIBLE SHOW ON SURFACE.															
REAMING		3		D.C. 6 3/4 I.D. O.D. 90.95 FT.		MFG.		VISC.-SEC								V.D. - VERY WORK. BLOW DEAD AFTER 20 MIN.															
CONDITIONING MUD & CIRCULATING		18		D.C. 6 1/4 I.D. O.D. 534.79 FT.		TYPE		W.L.-C.C.																							
TRIPS		2 1/2		STB. BODY O.D. FT.		NOZZLE NO. SIZE		FLTR. CK.								H.D. - IS 107000 PPM. SALT.															
LUBRICATE RIG		1 1/4		STB. BODY O.D. FT.		SER. NO.		SD. CONT. %																							
DEVIATION SURVEY		1		RMR. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT																							
TEST B.O.P.		1		SUBS O.D. FT.		DEPTH IN																									
CUT OFF DRILLING LINE		1		BIT OR C.B. FT.		TOTAL FTG.		MUD & CHEMICALS ADDED TYPE AMT. TYPE AMT.																							
FAIR RIG		1		KELLY DOWN 1987 FT.		TOTAL HR. RUN		COND. OF BIT																							
WIRE LINE LOGGING		1		TOTAL 2920.00 FT.		REAMER NO.		REAMER TYPE		DRILLER B. Lott																					
WAITING ON CEMENT		1		WT. OF STRING LBS.																											
DRILL STEM TEST		2 1/2		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000 #		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SOL-S PAR-EL-P COM-D	
OTHER		2 1/2		STANDS D.P. FT.		BIT NO.		TIME										Slipped 23' cut 41' D.S. #5													
FISHING		2 1/2		SINGLES D.P. FT.		SIZE		WEIGHT																							
COMPLETION WORK		2 1/2		D.C. FT.		MFG.		VISC.-SEC																							
A. PERFORATING		2 1/2		I.D. O.D. FT.		TYPE		W.L.-C.C.																							
B. TUBING TRIPS		2 1/2		D.C. FT.		NOZZLE NO. SIZE		FLTR. CK.																							
C. SWABBING		2 1/2		I.D. O.D. FT.		PH		SD. CONT. %																							
D. TESTING		2 1/2		STB. BODY O.D. FT.		SER. NO.		PRESSURE GRADIENT																							
E. ADDITIONAL		2 1/2		STB. BODY O.D. FT.		DEPTH OUT																									
TOTAL		2 1/2		RMR. BODY O.D. FT.		DEPTH IN																									
TIME SUMMARY (OFFICE USE ONLY)		2 1/2		SUBS O.D. FT.		TOTAL FTG.		MUD & CHEMICALS ADDED TYPE AMT. TYPE AMT.																							

DATE 2/19/20

FEB 25 1970

OPERATOR Husky Et Al.		LEASE Willow Lake 0-27-A		WELL NO. 0-27-A		FIELD OR DIST. Willow Lake		COUNTY N.W.T.		STATE							
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 4	DRILL PIPE STRING NO. 2 SIZE 4 1/2	TOOL JOINT TYPE THD.	PUMPS			LAST CASING TUBING OR LINER	SIZE 9 5/8	MAKE Mann	WT. & GR. 30 75	NO. JOINTS 13	FEET	RKB. TO CSG. HD.	SET AT 409	REMARKS	
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>			1. NAT. TYPE C-250 STROKE LENGTH 15"			2. NAT. TYPE C-150 STROKE LENGTH 12"									
TIME DISTRIBUTION-HOURS		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		PUMP NO.		METHOD RUN	
RIG UP & TEAR DOWN		STANDS D.P. 2236.39 FT.		BIT NO. 10		TIME 12 15		FROM 2920 TO T.D.		FORMATION #1 MOTOR 20- #3 MOTOR 30-		ROTARY RPM		PUMP NO. MURPHY 10-		METHOD RUN SGL-S PAR-EL-P COM-D-C	
DRILLING ACTUAL		SINGLES D.P. 31.72 FT.		SIZE 8 3/4		WEIGHT 9.6				FORMATION #2 MOTOR 30- #4 " 10-				PUMP NO. R.9 Hant 30-		METHOD RUN CAMP 20-	
REAMING		D.C. 6 3/4		MFG. H.W.		VISC.-SEC 56				FORMATION #1 MOTOR 20- #3 MOTOR 30-				PUMP NO. MURPHY 10-		METHOD RUN SGL-S PAR-EL-P COM-D-C	
CONDITIONING MUD & CIRCULATING 1/4		I.D. O.D. 90.95 FT.		TYPE AX55R		W.L.-C.C. 10.8				FORMATION #2 MOTOR 30- #4 " 10-				PUMP NO. R.9 Hant 30-		METHOD RUN CAMP 20-	
TRIPS 1/2		D.C. 6 1/4		NOZZLE NO. 2 1		FLTR. CK. 132				FORMATION #1 MOTOR 20- #3 MOTOR 30-				PUMP NO. MURPHY 10-		METHOD RUN SGL-S PAR-EL-P COM-D-C	
LUBRICATE RIG		I.D. O.D. 534.79 FT.		NOZZLE SIZE 3 1/4		PH 8.5				FORMATION #2 MOTOR 30- #4 " 10-				PUMP NO. R.9 Hant 30-		METHOD RUN CAMP 20-	
DEVIATION SURVEY 1/4		STB. BODY O.D. 19.87 FT.		SER. NO. 3893		SD. CONT. %				FORMATION #1 MOTOR 20- #3 MOTOR 30-				PUMP NO. MURPHY 10-		METHOD RUN SGL-S PAR-EL-P COM-D-C	
TEST B.O.P.		STB. BODY O.D. 2920.00 FT.		DEPTH OUT 2920		PRESSURE GRADIENT				FORMATION #2 MOTOR 30- #4 " 10-				PUMP NO. R.9 Hant 30-		METHOD RUN CAMP 20-	
CUT OFF DRILLING LINE		SUBS O.D. 6.28 FT.		DEPTH IN 2804						FORMATION #1 MOTOR 20- #3 MOTOR 30-				PUMP NO. MURPHY 10-		METHOD RUN SGL-S PAR-EL-P COM-D-C	
PAIR RIG		BIT OR C.B. 19.87 FT.		TOTAL FTG. 116		MUD & CHEMICALS ADDED				FORMATION #2 MOTOR 30- #4 " 10-				PUMP NO. R.9 Hant 30-		METHOD RUN CAMP 20-	
WIRE LINE LOGGING 6 8 7		KELLY DOWN 19.87 FT.		COND. OF BIT 2-2-1						FORMATION #1 MOTOR 20- #3 MOTOR 30-				PUMP NO. MURPHY 10-		METHOD RUN SGL-S PAR-EL-P COM-D-C	
RUNNING CASING & CEMENTING		TOTAL 2920.00 FT.		REAMER NO.						FORMATION #2 MOTOR 30- #4 " 10-				PUMP NO. R.9 Hant 30-		METHOD RUN CAMP 20-	
WAITING ON CEMENT		WT. OF STRING 79000 LBS.		REAMER TYPE				DRILLER B. Scott		FORMATION #1 MOTOR 20- #3 MOTOR 30-				PUMP NO. MURPHY 10-		METHOD RUN SGL-S PAR-EL-P COM-D-C	
DRILL STEM TEST		STANDS D.P. 2236.39 FT.		BIT NO. 10		TIME 12 15		FROM 2920 TO T.D.		FORMATION #1 MOTOR 20- #3 MOTOR 30-				PUMP NO. MURPHY 10-		METHOD RUN SGL-S PAR-EL-P COM-D-C	
OTHER		SINGLES D.P. 31.72 FT.		SIZE 8 3/4		WEIGHT 9.6				FORMATION #2 MOTOR 30- #4 " 10-				PUMP NO. R.9 Hant 30-		METHOD RUN CAMP 20-	
FISHING		D.C. 6 3/4		MFG. H.W.		VISC.-SEC 56				FORMATION #1 MOTOR 20- #3 MOTOR 30-				PUMP NO. MURPHY 10-		METHOD RUN SGL-S PAR-EL-P COM-D-C	
A. PERFORATING		I.D. O.D. 90.95 FT.		TYPE AX55R		W.L.-C.C. 10.8				FORMATION #2 MOTOR 30- #4 " 10-				PUMP NO. R.9 Hant 30-		METHOD RUN CAMP 20-	
B. TUBING TRIPS		D.C. 6 1/4		NOZZLE NO. 2 1		FLTR. CK. 132				FORMATION #1 MOTOR 20- #3 MOTOR 30-				PUMP NO. MURPHY 10-		METHOD RUN SGL-S PAR-EL-P COM-D-C	
C. SWABBING		I.D. O.D. 534.79 FT.		NOZZLE SIZE 3 1/4		PH 8.5				FORMATION #2 MOTOR 30- #4 " 10-				PUMP NO. R.9 Hant 30-		METHOD RUN CAMP 20-	
D. TESTING		STB. BODY O.D. 19.87 FT.		SER. NO. 3893		SD. CONT. %				FORMATION #1 MOTOR 20- #3 MOTOR 30-				PUMP NO. MURPHY 10-		METHOD RUN SGL-S PAR-EL-P COM-D-C	
E. ADDITIONAL		STB. BODY O.D. 2920.00 FT.		DEPTH OUT 2920		PRESSURE GRADIENT				FORMATION #2 MOTOR 30- #4 " 10-				PUMP NO. R.9 Hant 30-		METHOD RUN CAMP 20-	

DATE 2/14/18 120

OPERATOR Husky E.T. H.L.		LEASE Willow Lake 0-27-A		WELL NO. 0-27-A		FIELD OR DIST. Willow Lake		COUNTY N.W.T.		STATE																									
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. H		DRILL PIPE STRING NO. 2 SIZE 4 1/2 TYPE THD. F.H.		TOOL JOINT 6" O.D.		PUMPS		LAST CASING TUBING OR LINER		SIZE 7 5/8 MAUN 35-35		MAKE 13		WT. & GR.		NO. JOINTS		FEET		RKB. TO CSG. HD.		SET AT 409		REMARKS									
SIGNATURE OF OPERATOR'S REPRESENTATIVE P. Robertson				SIGNATURE OF CONTRACTOR'S TOOL PUSHER				NO. 1. NPT. C-250 15" 2. NPT. C-150 12" 3.																											
TIME DISTRIBUTION-HOURS		MORN		DAY		EVE		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D R.M. R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
RIG UP & TEAR DOWN								23		STANDS D.P. 2142.11 FT.		BIT NO. 10		TIME 1 3 5 50 1700		FROM 2804 TO 2853		D						40		3 3/4		750		5 1/2		60		S	
DRILLING ACTUAL		7 3/4		7 3/4		3 1/2		2		SINGLES D.P. 62.49 FT.		SIZE 8 3/4		WEIGHT 9.7 9.7 9.7/87																					
REAMING								3		D.C. 6 3/4 I.D. O.D. 90.95 FT.		MFG. H.W		VISC.-SEC 34 35 35/35																					
CONDITIONING MUD & CIRCULATING								18		D.C. 6 1/2 I.D. O.D. 534.79 FT.		TYPE RX55R		W.L.-C.C. 9.8 9 9.8																					
TRIPS										STB. BODY O.D. FT.		NO. 2-1		FLTR. CK. 1/32 1/32																					
LUBRICATE RIG		4 1/2								STB. BODY O.D. FT.		SIZE 13-14		PH 9.0 9.5																					
DEVIATION SURVEY										SER. NO. 3893				SD. CONT. %																					
TEST B.O.P.										DEPTH OUT				PRESSURE GRADIENT																					
CUT OFF DRILLING LINE										DEPTH IN 2804																									
REPAIR RIG										TOTAL FTG. 49																									
WIRE LINE LOGGING										TOTAL HR. RUN 7 3/4																									
RUNNING CASING & CEMENTING										KELLY DOWN 16.38 FT.																									
WAITING ON CEMENT										TOTAL 2853.10 FT.																									
DRILL STEM TEST										WT. OF STRING 791000 LBS.																									
OTHER										REAMER NO.																									
FISHING										REAMER TYPE																									
A. PERFORATING										NO. 24		STANDS D.P. 2236.39 FT.		BIT NO. 10		TIME 8:30 12:30 300		FROM 2853 TO 2902		D				40		35		750		5 1/2		60		S	
B. TUBING TRIPS										3		SINGLES D.P. FT.		SIZE 8 3/4		WEIGHT 9.7 9.8 9.8																			
C. SWABBING										D.C. 6 3/4 I.D. O.D. 90.95 FT.		MFG. H.W		VISC.-SEC 33 36 36																					
D. TESTING										D.C. 6 1/2 I.D. O.D. 534.79 FT.		TYPE RX55R		W.L.-C.C. 10.4																					
E. ADDITIONAL										STB. BODY O.D. FT.		NO. 2-1		FLTR. CK. 2/3																					

DATE Feb. 17/70

OPERATOR Husky Et Al		DATE OF REPORT 10-27-80		LEASE Willow Lake 0-27-A		WELL NO. 0-27-A		FIELD OR DIST. Willow Lake		COUNTY N.W.T.		STATE																	
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 4		DRILL PIPE STRING NO. 1 SIZE 4 1/2 TYPE THD. F.H.		TOOL JOINT 1" O.D.		PUMPS		LAST CASING TUBING OR LINER		SIZE 9 5/8 MAN 36 JS		MAKE 13		WT. & GR.		NO. JOINTS		FEET		RKB. TO CSG. HD.		SET AT 409		REMARKS			
SIGNATURE OF OPERATOR'S REPRESENTATIVE [Signature]				SIGNATURE OF CONTRACTOR'S TOOL PUSHER L.H. Webber				1. NAT. C-250 15"		2. NAT. C-150 12"																			
TIME DISTRIBUTION-HOURS				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1 LINER SIZE S.P.M.		PUMP NO. 2 LINER SIZE S.P.M.		METHOD RUN SOL. PARCEL COM'D.	
RIG UP & TEAR DOWN				22 STANDS D.P. 20478.4 FT.		BIT NO. 9 RR		TIME 130 330 530		FROM 2684 TO 2734		D						40		30		825		5 1/2 60				S	
DRILLING ACTUAL 7 1/4 7 3/4				1 SINGLES D.P. 31.33 FT.		SIZE 8 3/4		WEIGHT 9.8 9.8 9.8																					
REAMING				3 D.C. 6 3/4		MFG. REED		VISC.-SEC 36 37 35																					
CONDITIONING MUD & CIRCULATING				18 I.D. O.D. 90.95 FT.		TYPE SCMT		W.L.-C.C. 9.8 10.8																					
TRIPS				D.C. 6 1/4		NOZZLE NO. 3		FLTR. CK. 1/32 1/2																					
LUBRICATE RIG 1/4 1/4				I.D. O.D. 534.79 FT.		SER. NO. 856665		SD. CONT. %																					
DEVIATION SURVEY				STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT																					
TEST B.O.P.				STB. BODY O.D. FT.		DEPTH IN																							
CUT OFF DRILLING LINE				RMR. BODY O.D. FT.		TOTAL FTG. 916		MUD & CHEMICALS ADDED																					
PAIR RIG				SUBS O.D. 6.28 FT.		TOTAL HR. RUN 14 1/4		TYPE AMT. TYPE AMT.																					
WIRE LINE LOGGING				BIT OR C.B. FT.		COND. OF BIT RUN		DRILLER B. Smith																					
RUNNING CASING & CEMENTING				KELLY DOWN 22.81 FT.		REAMER NO.																							
WAITING ON CEMENT				TOTAL 2734.0 FT.		REAMER TYPE																							
DRILL STEM TEST				WT. OF STRING 78,000 LBS.																									
OTHER				NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1 LINER SIZE S.P.M.		PUMP NO. 2 LINER SIZE S.P.M.		METHOD RUN SOL. PARCEL COM'D.	
FISHING				22 STANDS D.P. 20478.4 FT.		BIT NO. 9 RR		TIME 1030 1230 300		FROM 2734 TO 2781		D						40		30		300		5 1/2 49		5		S	
A. PERFORATING				2 SINGLES D.P. 62.54 FT.		SIZE 8 3/4		WEIGHT 9.7 9.7 9.8										40		30		500		X		X		S	
B. TUBING TRIPS				D.C. 6 3/4		MFG. REED		VISC.-SEC 36 36 38																					
C. SWABBING				3 I.D. O.D. 90.95 FT.		TYPE SCMT		W.L.-C.C. 11.6 10.4																					
D. TESTING				D.C. 6 1/4		NOZZLE NO. 3		FLTR. CK. 1/32 1/32																					
E. ADDITIONAL				I.D. O.D. 534.79 FT.		SER. NO. 856065		SD. CONT. %																					
TOTALS 8 8 8				STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT																					
TIME SUMMARY (OFFICE USE ONLY)				STB. BODY O.D. FT.		DEPTH IN																							
DAY WORK				RMR. BODY O.D. FT.		TOTAL FTG. 143		MUD & CHEMICALS ADDED				</																	

DAILY DRILLING REPORT

REPORT NO. 14

DATE 11-22-1961

OPERATOR		LEASE		WELL NO.	FIELD OR DIST.	COUNTY	STATE										
Husky Et Al		Willow Lake D-27-A		0-27-A	Willow Lake	N.W.T.											
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	PUMPS	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	DET AT	REMARKS				
S & T DRILLING (WESTERN) CO. LTD.		4	2 4 1/2	TYPE THD. F.H.	1 NAT. C-250 15"	9 5/8	Mann	36 1/2	13			409					
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		LAST CASING TUBING OR LINER													
[Signature]		[Signature]		3. NAT. C-150 12"													
TIME DISTRIBUTION - HOURS		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
MORN DAY EVE		NO. STANDS D.P. 1954.96 FT.		BIT NO. 8		TIME 2 30 5 00 7 00		FROM TO				PUMP NO. 1		PUMP NO. 2		METHOD RUN	
RIG UP & TEAR DOWN		1 SINGLES D.P. 31.40 FT.		SIZE 8 3/4		WEIGHT 9.8 9.8 9.8		2610 2638		D		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
DRILLING ACTUAL 5 34 1/2 6 1/2		3 D.C. 6 3/4		MFG. H.W.		VISC.-SEC 36 36 37						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
REAMING		I.D. O.D. 90.95 FT.		TYPE W.D.7		W.L.-C.C. 7.4 7.8						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
CONDITIONING MUD & CIRCULATING 2 1/2		D.C. 6 1/4		NOZZLE NO. 2-1		FLTR. CK. 1/32 1/32						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
TRIPS		I.D. O.D. 5.34.79 FT.		SER. NO. 17130		PH 8.0 8.5 8.5						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
LUBRICATE RIG 1 1/4 1/4		STB. BODY O.D. FT.		DEPTH OUT 2638		PRESSURE GRADIENT						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
DEVIATION SURVEY 1/4		STB. BODY O.D. FT.		DEPTH IN 2524								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
TEST B.O.P.		RMR. BODY O.D. FT.		TOTAL FTG. 114		MUD & CHEMICALS ADDED						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
CUT OFF DRILLING LINE		SUBS O.D. 6.28 FT.		TOTAL HR. RUN 24 3/4		TYPE AMT. TYPE AMT.						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
REPAIR RIG		BIT OR C.B. FT.		COND. OF BIT 8-7-1		Caustic 50						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
WIRE LINE LOGGING		KELLY DOWN 19.62 FT.		REAMER NO.		DRILLER B. Smith						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
RUNNING CASING & CEMENTING		TOTAL 2638.00 FT.		REAMER TYPE								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
WAITING ON CEMENT ORDER 1 1/2		WT. OF STRING 78,100 LBS.										PUMP NO. 1		PUMP NO. 2		METHOD RUN	
DRILL STEM TEST		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
OTHER 6 1/2		21 STANDS D.P. 1954.96 FT.		BIT NO. 9-R		TIME		FROM TO				PUMP NO. 1		PUMP NO. 2		METHOD RUN	
FISHING		1 SINGLES D.P. 31.40 FT.		SIZE 8 3/4		WEIGHT		2638				PUMP NO. 1		PUMP NO. 2		METHOD RUN	
A. PERFORATING		3 D.C. 6 3/4		MFG. REED		VISC.-SEC						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
B. TUBING TRIPS		I.D. O.D. 90.95 FT.		TYPE SCM-3		W.L.-C.C.						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
C. SWABBING		D.C. 6 1/4		NOZZLE NO. 3		FLTR. CK.						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
D. TESTING		I.D. O.D. 534.79 FT.		SER. NO. 85606		PH						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
E. ADDITIONAL		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
TOTALS 8 8 8		STB. BODY O.D. FT.		DEPTH IN 2638								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
TIME SUMMARY (OFFICE USE ONLY)		RMR. BODY O.D. FT.		TOTAL FTG. 204		MUD & CHEMICALS ADDED						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
DAY WORK		SUBS O.D. 6.28 FT.		TOTAL HR. RUN 23 3/4		TYPE AMT. TYPE AMT.						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
HRS. W/D		BIT OR C.B. FT.		COND. OF BIT RUN								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
HRS. WO/D		KELLY DOWN 19.62 FT.		REAMER NO.		DRILLER C. Sauter						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
HRS. STANDBY		TOTAL 2638.00 FT.		REAMER TYPE								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		WT. OF STRING 78,000 LBS.										PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		21 STANDS D.P. 1954.96 FT.		BIT NO. 9-R		TIME 5:30 8:30 10:30		FROM TO				PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		1 SINGLES D.P. 61.62 FT.		SIZE 8 3/4		WEIGHT 9.9 9.9 9.8		2638 2684		D		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		3 D.C. 6 3/4		MFG. REED		VISC.-SEC 38 37 35						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		I.D. O.D. 90.95 FT.		TYPE SCM-3		W.L.-C.C. 8.6						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		D.C. 6 1/4		NOZZLE NO. 3		FLTR. CK. 1/32						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		I.D. O.D. 534.79 FT.		SER. NO. 85606		PH 7.2						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		STB. BODY O.D. FT.		DEPTH IN 2638								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		RMR. BODY O.D. FT.		TOTAL FTG. 46		MUD & CHEMICALS ADDED						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		SUBS O.D. 6.28 FT.		TOTAL HR. RUN 6 1/2		TYPE AMT. TYPE AMT.						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		BIT OR C.B. FT.		COND. OF BIT RUN		Caustic 50						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		KELLY DOWN 34.40 FT.		REAMER NO.		DRILLER						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		TOTAL 2684.00 FT.		REAMER TYPE								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		WT. OF STRING 78,100 LBS.										PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		21 STANDS D.P. 1954.96 FT.		BIT NO. 9-R		TIME 4:00 4:15 4:30		FROM TO				PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		1 SINGLES D.P. 61.62 FT.		SIZE 8 3/4		WEIGHT 9.9 9.9 9.8		2638 2684		D		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		3 D.C. 6 3/4		MFG. REED		VISC.-SEC 38 37 35						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		I.D. O.D. 90.95 FT.		TYPE SCM-3		W.L.-C.C. 8.6						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		D.C. 6 1/4		NOZZLE NO. 3		FLTR. CK. 1/32						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		I.D. O.D. 534.79 FT.		SER. NO. 85606		PH 7.2						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		STB. BODY O.D. FT.		DEPTH IN 2638								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		RMR. BODY O.D. FT.		TOTAL FTG. 46		MUD & CHEMICALS ADDED						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		SUBS O.D. 6.28 FT.		TOTAL HR. RUN 6 1/2		TYPE AMT. TYPE AMT.						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		BIT OR C.B. FT.		COND. OF BIT RUN		Caustic 50						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		KELLY DOWN 34.40 FT.		REAMER NO.		DRILLER						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		TOTAL 2684.00 FT.		REAMER TYPE								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		WT. OF STRING 78,100 LBS.										PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		21 STANDS D.P. 1954.96 FT.		BIT NO. 9-R		TIME 4:00 4:15 4:30		FROM TO				PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		1 SINGLES D.P. 61.62 FT.		SIZE 8 3/4		WEIGHT 9.9 9.9 9.8		2638 2684		D		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		3 D.C. 6 3/4		MFG. REED		VISC.-SEC 38 37 35						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		I.D. O.D. 90.95 FT.		TYPE SCM-3		W.L.-C.C. 8.6						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		D.C. 6 1/4		NOZZLE NO. 3		FLTR. CK. 1/32						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		I.D. O.D. 534.79 FT.		SER. NO. 85606		PH 7.2						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		STB. BODY O.D. FT.		DEPTH IN 2638								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		RMR. BODY O.D. FT.		TOTAL FTG. 46		MUD & CHEMICALS ADDED						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		SUBS O.D. 6.28 FT.		TOTAL HR. RUN 6 1/2		TYPE AMT. TYPE AMT.						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		BIT OR C.B. FT.		COND. OF BIT RUN		Caustic 50						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		KELLY DOWN 34.40 FT.		REAMER NO.		DRILLER						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		TOTAL 2684.00 FT.		REAMER TYPE								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		WT. OF STRING 78,100 LBS.										PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		21 STANDS D.P. 1954.96 FT.		BIT NO. 9-R		TIME 4:00 4:15 4:30		FROM TO				PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		1 SINGLES D.P. 61.62 FT.		SIZE 8 3/4		WEIGHT 9.9 9.9 9.8		2638 2684		D		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		3 D.C. 6 3/4		MFG. REED		VISC.-SEC 38 37 35						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		I.D. O.D. 90.95 FT.		TYPE SCM-3		W.L.-C.C. 8.6						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		D.C. 6 1/4		NOZZLE NO. 3		FLTR. CK. 1/32						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		I.D. O.D. 534.79 FT.		SER. NO. 85606		PH 7.2						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		STB. BODY O.D. FT.		DEPTH IN 2638								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		RMR. BODY O.D. FT.		TOTAL FTG. 46		MUD & CHEMICALS ADDED						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		SUBS O.D. 6.28 FT.		TOTAL HR. RUN 6 1/2		TYPE AMT. TYPE AMT.						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		BIT OR C.B. FT.		COND. OF BIT RUN		Caustic 50						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		KELLY DOWN 34.40 FT.		REAMER NO.		DRILLER						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		TOTAL 2684.00 FT.		REAMER TYPE								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		WT. OF STRING 78,100 LBS.										PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		21 STANDS D.P. 1954.96 FT.		BIT NO. 9-R		TIME 4:00 4:15 4:30		FROM TO				PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		1 SINGLES D.P. 61.62 FT.		SIZE 8 3/4		WEIGHT 9.9 9.9 9.8		2638 2684		D		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		3 D.C. 6 3/4		MFG. REED		VISC.-SEC 38 37 35						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		I.D. O.D. 90.95 FT.		TYPE SCM-3		W.L.-C.C. 8.6						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		D.C. 6 1/4		NOZZLE NO. 3		FLTR. CK. 1/32						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		I.D. O.D. 534.79 FT.		SER. NO. 85606		PH 7.2						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		STB. BODY O.D. FT.		DEPTH IN 2638								PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		RMR. BODY O.D. FT.		TOTAL FTG. 46		MUD & CHEMICALS ADDED						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		SUBS O.D. 6.28 FT.		TOTAL HR. RUN 6 1/2		TYPE AMT. TYPE AMT.						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		BIT OR C.B. FT.		COND. OF BIT RUN		Caustic 50						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		KELLY DOWN 34.40 FT.		REAMER NO.		DRILLER						PUMP NO. 1		PUMP NO. 2		METHOD RUN	
		TOTAL 2684.00 FT.		REAMER TYPE													

DAILY DRILLING REPORT

REPORT NO. 17

DATE 7/15/70

OPERATOR		LEASE		WELL NO.		FIELD OR DIST.		COUNTY		STATE																							
Husky Et Al		Willow Lake O-27-A		2-22A		Willow Lake		N.W.T.																									
CONTRACTOR		RIG NO.	DRILL PIPE STRING	TOOL JOINT	O.D.	PUMPS		SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS																		
S & T DRILLING (WESTERN) CO. LTD.		4	2 1/2	6"	6"			13	MANN	36 JS	13			409																			
SIGNATURE OF OPERATOR'S REPRESENTATIVE		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		NO.		MANUFACTURER	TYPE	STROKE LENGTH	LAST CASING TUBING OR LINER																								
		P.H. Wilber		1.		NAT.	C-250	15"																									
				2.		NAT.	C-150	12"																									
				3.																													
TIME DISTRIBUTION - HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-O R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN					
MORN DAY EVE		20		STANDS D.P. 1861.79 FT.		BIT NO. 8		TIME 5:30 7:00		FROM 2524 TO 2545		A				RECOVERED 23' OF CORE 80		10/15650		5 1/2		60				5							
RIG UP & TEAR DOWN		1		SINGLES D.P. 30.54 FT.		SIZE 8 3/4		WEIGHT 96 9.6																									
DRILLING ACTUAL		6 7/8		D.C. 6 1/4		MFG. H.W.		VISC.-SEC 40 38																									
REAMING		3 1/2		I.D. 6 1/4		TYPE WDT		W.L.-C.C. 40 38																									
CONDITIONING MUD & CIRCULATING		3 1/2		D.C. 6 1/4		NOZZLE NO. 2-1		FLTR. CK. 1/32 1/32																									
TRIPS		2		I.D. 6 1/4		SER. NO. 17130		PH 90 90 90																									
LUBRICATE RIG		1/2		STB. BODY O.D. 6 1/4		DEPTH OUT 17130		SD. CONT. % 100																									
DEVELOPMENT SURVEY		1/2		STB. BODY O.D. 6 1/4		DEPTH IN 2524		PRESSURE GRADIENT 100																									
TEST B.O.P.				RMR. BODY O.D. 6 1/4		TOTAL FTG. 21		MUD & CHEMICALS ADDED																									
CUT OFF DRILLING LINE				SUBS O.D. 6 1/4		TOTAL HR. RUN 3 1/2		TYPE AMT. TYPE AMT.																									
REPAIR RIG				BIT OR C.B. 6 1/4		COND. OF BIT RUN																											
LOGGING				KELLY DOWN 20.65 FT.		REAMER NO.		DRILLER B. Leath																									
RUNNING CASING & CEMENTING				TOTAL 2545.00 FT.		REAMER TYPE																											
WAITING ON CEMENT				WT. OF STRING 28,000 LBS.																													
DRILL STEEL TEST				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-O R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN			
OTHER		2 1/2		20		STANDS D.P. 1861.79 FT.		BIT NO. 8		TIME 8:30 12:00 3:00		FROM 2545 TO 2554		R						80		10/1650		5 1/2		60		5					
FISHING				1		SINGLES D.P. 62.12 FT.		SIZE 8 3/4		WEIGHT 96 9.6		2554 2574		D						80		30 650		X		60							
A. PERFORATING				D.C. 6 1/4		MFG. H.W.		VISC.-SEC 40 39 38																									
B. TUBING TRIPS				2		I.D. 6 1/4		TYPE WDT		W.L.-C.C. 12.2 6.6																							
C. SWABBING				3		D.C. 6 1/4		NOZZLE NO. 2-1		FLTR. CK. 1/32 1/32																							
D. TESTING				4		I.D. 6 1/4		SER. NO. 17130		PH 90 90 90																							
E. ADDITIONAL				5		STB. BODY O.D. 6 1/4		DEPTH OUT 17130		PRESSURE GRADIENT 100																							
TOTALS		8 8 8		6		STB. BODY O.D. 6 1/4		DEPTH IN 2524		MUD & CHEMICALS ADDED																							
TIME SUMMARY (OFFICE USE ONLY)				7		RMR. BODY O.D. 6 1/4		TOTAL FTG. 50		TYPE AMT. TYPE AMT.																							
DAY WORK				8		SUBS O.D. 6 1/4		TOTAL HR. RUN 11 1/2		SEARCH 100																							
HRS. W/DP				8		BIT OR C.B. 6 1/4		COND. OF BIT RUN		DOWEL 10																							
HRS. WO/DP				8		KELLY DOWN 1827 FT.		REAMER NO.		DRILLER C. Saulnier																							
HRS. STANDBY				8		TOTAL 2574.80 FT.		REAMER TYPE																									
TOTAL DAY WORK				8		WT. OF STRING 28 M LBS.																											
WIRE LINE RECORD				8		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-O R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN	
REEL NO.				8		21		STANDS D.P. 1954.96 FT.		BIT NO. 8		TIME 5:00 8:30 11:45		FROM 2574 TO 2610		D						80		30		650		5 1/2		60		5	
NO. OF LINES				8		1		SINGLES D.P. 62.12 FT.		SIZE 8 3/4		WEIGHT 97 9.7 9.7																					
FEET SLIPPED				8		D.C. 6 1/4		MFG. WDT		VISC.-SEC 39 36 3.7																							
FEET CUT OFF				8		2		I.D. 6 1/4		TYPE WDT		W.L.-C.C. 24.7 6.6 8.0																					
PRESENT LENGTH				8		3		D.C. 6 1/4		NOZZLE NO. 2-1		FLTR. CK. 1/32 1/32																					
TON M.L. OR TRIPS SINCE LAST CUT				8		4		I.D. 6 1/4		SER. NO. 17130		PH 8.0 6.8																					
CUMULATIVE TON M.L. OR TRIPS				8		5		STB. BODY O.D. 6 1/4		DEPTH OUT 17130		SD. CONT. % 100																					
NO. OF DAYS FROM SPUD				8		6		STB. BODY O.D. 6 1/4		DEPTH IN 2524		PRESSURE GRADIENT 100																					
CUMULATIVE ROTATING HRS.				8		7		RMR. BODY O.D. 6 1/4		TOTAL FTG. 86		MUD & CHEMICALS ADDED																					
				8		8		SUBS C.D. 6 1/4		TOTAL HR. RUN 19		TYPE AMT. TYPE AMT.																					
				8		9		BIT OR C.B. 6 1/4		COND. OF BIT RUN																							
				8		10		KELLY DOWN 23.02 FT.		REAMER NO.		DRILLER																					
				8		11		TOTAL 2610.00 FT.		REAMER TYPE																							
				8		12		WT. OF STRING 29 M LBS.																									
				8		13																											
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DATE 7.12.14/70

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DATE 2/13/70

OPERATOR Husky Et 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		DRILL PIPE STRING 6" O.D.		PUMPS		SIZE		MAKE		WT. & GR.		NO. JOINTS		FEET		RKB. TO CSG. HD.		SET AT		REMARKS									
SIGNATURE OF OPERATOR'S REPRESENTATIVE Robertson		SIGNATURE OF CONTRACTOR'S TOOL/PUSHER CL Hansen		NO. 1 SIZE 1 1/2 TYPE THD. F.H.		NO. 1 MANUFACTURER Nat. TYPE C-250 STROKE LENGTH 15"		LAST CASING TUBING OR LINER		9 5/8		MAUN 36 JS		13						409											
SIGNATURE OF OPERATOR'S REPRESENTATIVE Robertson		SIGNATURE OF CONTRACTOR'S TOOL/PUSHER CL Hansen		NO. 2 SIZE 1 1/2 TYPE THD. F.H.		NO. 2 MANUFACTURER Nat. TYPE C-150 STROKE LENGTH 12"		LAST CASING TUBING OR LINER																							
SIGNATURE OF OPERATOR'S REPRESENTATIVE Robertson		SIGNATURE OF CONTRACTOR'S TOOL/PUSHER CL Hansen		NO. 3 SIZE 1 1/2 TYPE THD. F.H.		NO. 3 MANUFACTURER Nat. TYPE C-150 STROKE LENGTH 12"		LAST CASING TUBING OR LINER																							
TIME DISTRIBUTION-HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN SGL-S PAR-L-P COM'D-C			
RIG UP & TEAR DOWN		19		STANDS D.P. 1953.77 FT.		BIT NO. 6RB 8		TIME 12:00 2:00 6:00		FROM 2524																					
DRILLING ACTUAL		18		SINGLES D.P. 6 1/4		SIZE 8 3/4 8 3/4		WEIGHT 9.5 9.5 9.6		TO																					
REAMING		17		D.C. 534.79 FT.		MFG. REED HUN		VISC.-SEC 44 44 46																							
CONDITIONING MUD & CIRCULATING		16		I.D. O.D. 534.79 FT.		TYPE YMG3WD7		W.L.-C.C. 7.2 9.6																							
TRIPS		15		D.C. 534.79 FT.		NOZZLE NO. 2		FLTR. CK. 1/32 1/32																							
LUBRICATE RIG		14		I.D. O.D. 534.79 FT.		SIZE 13 14		PH 9.0 9.0																							
DEVIATION SURVEY		13		STB. BODY O.D. 534.79 FT.		SER. NO. 854755 17130		SD. CONT. %																							
TEST B.O.P.		12		STB. BODY O.D. 534.79 FT.		DEPTH OUT		PRESSURE GRADIENT																							
CUT OFF DRILLING LINE		11		STB. BODY O.D. 534.79 FT.		DEPTH IN																									
REPAIR RIG		10		SUBS O.D. 2.20 FT.		TOTAL FTG. 155 0		MUD & CHEMICALS ADDED																							
TIME LOG		9		BIT OR C.B. 534.79 FT.		TOTAL HR. RUN 25 0		TYPE AMT. TYPE AMT.																							
WIRE LINE LOGGING		8		KELLY DOWN 33.29 FT.		COND. OF BIT 1-1-1		DRILLER B Smith																							
RUNNING CASING & CEMENTING		7		TOTAL 2524.00 FT.		REAMER NO.																									
WAITING ON CEMENT		6		WT. OF STRING 69000 LBS.		REAMER TYPE																									
DRILL STEM TEST		5		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN SGL-S PAR-L-P COM'D-C	
OTHER		4		STANDS D.P. 1933.72 FT.		BIT NO.		TIME 8:00		FROM 2524																					
FISHING		3		SINGLES D.P. 6 1/4		SIZE		WEIGHT 9.6		TO																					
COMPLETION WORK		2		D.C. 534.79 FT.		MFG.		VISC.-SEC 44																							
A. PERFORATING		1		I.D. O.D																											

DATE 7/24/11 170

OPERATOR Husky Et Al		LEASE Willow Lake 0-27-A		WELL NO. 077-4		FIELD OR DIST. Willow Lake		COUNTY N.W.T.		STATE																																					
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO.		DRILL PIPE STRING 6" O.D.		TOOL JOINT 6" O.D.		PUMPS		SIZE 9 5/8 MAW 36 JS		MAKE 13		WT. & GR.		NO. JOINTS		FEET		RKB. TO CSG. HD.		SET AT 409		REMARKS																							
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>		NO.		MANUFACTURER NAT.		TYPE C-250		STROKE LENGTH 15"		LAST CASING TUBING OR LINER																																			
TIME DISTRIBUTION-HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN																			
RIG UP & TEAR DOWN		MORN		DAY		EVE		STANDS D.P.		1861.48 FT.		BIT NO.		7		TIME		2:00		11:00		6:00		FROM		TO		2403		2452		0		40		3 5/8		750		5 1/2		60		5			
DRILLING ACTUAL		7		6				SINGLES D.P.		31.22 FT.		SIZE		8 3/4		WEIGHT		9.6		9.6		9.6																									
REAMING				1 1/4		4 1/2		D.C.		6 1/4		MFG.		KEED		VISC.-SEC		27		37		43																									
CONDITIONING MUD & CIRCULATING				1 1/4		1 1/2		I.D. O.D.		534.79 FT.		TYPE		SCM3		W.L.-C.C.		12.0		12.0		10.																									
TRIPS								D.C.				NOZZLE		NO. 3		FLTR. CK.		2 1/2		2 1/2		4 1/2																									
LUBRICATE RIG				4 1/2		3 1/2		STB. BODY O.D.		FT.		SER. NO.		856063		SD. CONT. %																															
DEVIATION SURVEY		1/2		1/2		1/4		STB. BODY O.D.		FT.		DEPTH OUT				PRESSURE GRADIENT																															
TEST B.O.P.								RMR. BODY O.D.		FT.		DEPTH IN		2318																																	
CUT OFF DRILLING LINE								SUBS O.D.		220 FT.		TOTAL FTG.		134																																	
REPAIR RIG		1/4						BIT OR C.B.		FT.		TOTAL HR. RUN		13 1/2																																	
WIRE LINE LOGGING								KELLY DOWN		2231 FT.		COND. OF BIT		RUN																																	
RUNNING CASING & CEMENTING								TOTAL		2452.00 FT.		REAMER NO.																																			
WAITING ON CEMENT								WT. OF STRING		68,000 LBS.		REAMER TYPE				DRILLER		D. Smith																													
DRILL STEM TEST								NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN													
OTHER								20		STANDS D.P.		1861.48 FT.		BIT NO.		7		TIME		10:00		1:00		3:00		FROM		TO		2452		2492		0		40		35		120		5 1/2		60		5	
FISHING								18		SINGLES D.P.		61.49 FT.		SIZE		8 3/4		WEIGHT		9.7		10.0																									
A. PERFORATING								D.C.				MFG.		KEED		VISC.-SEC		3.7		36																											
B. TUBING TRIPS																																															

DATE Feb 10 1970

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DATE Feb 9/70

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DATE Feb 8/ 78

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DATE 1-15-75

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REPORT NO. 7 DATE FEB 6/70

DATE FEB 6/70

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DAILY DRILLING REPORT										REPORT NO. 8	DATE FEB 5/70									
OPERATOR HUSKY ET AL			LEASE WILLOW LAKE 0-27-A			WELL NO. 0-27-A		FIELD OR DIST. WILLOW LAKE		COUNTY N.W.T.		STATE								
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.			RIG NO. 4	DRILL PIPE STRING NO. 2	TOOL JOINT 6" O.D.	PUMPS		LAST CASING TUBING OR LINER		SIZE 9 5/8	MAKE MANN	WT. & GR. 36 5/8	NO. JOINTS 13	FEET 409	WT. TO CSG. HD. 2.50	SET AT 409	REMARKS			
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>			SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>			1. NAT. 250 15		2. NAT. 150 12								CEMENTED 4/300 SAX 2% CALCIUM				
TIME DISTRIBUTION - HOURS			NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE NO.	FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000 #	PUMP PRESS	PUMP NO. 1	PUMP NO. 2	METHOD RUN	
MORN DAY EVE			11 STANDS D.P. 1031.05 FT.		BIT NO. 3		TIME 12 10 500 700		FROM 1628 TO 1730		0			45	45	700	5 1/2	60	5 1/2	S
RIG UP & TEAR DOWN			1 SINGLES D.P. 29.35 FT.		SIZE 8 3/4		WEIGHT 9.6 9.6 9.7 9.7													
DRILLING ACTUAL 7 1/2 6 3/4 7 1/4			3 D.C. 90.95 FT.		MFG. H.W.		VISC.-SEC 43 42 46 42													
REAMING			18 D.C. 534.79 FT.		TYPE X55R		W.L.-C.C. 13 8 16 13 4													
CONDITIONING MUD & CIRCULATING			NOZZLE NO. 3		SIZE 13		FLTR. CK. 1/2 1/2 1/2 1/2													
TRIPS			SER. NO. 17988		SD. CONT. %		PH 8 3 2 4													
LUBRICATE RIG 5 1/4 1/4 1/4			DEPTH OUT		DEPTH IN		TOTAL FTG. 487													
DEVIATION SURVEY 4 3/4 1/2			TOTAL HR. RUN 34		COND. OF BIT		REAMER NO.													
TEST B.O.P.			KELLY DOWN 37.58 FT.		REAMER TYPE		DRILLER													
CUT OFF DRILLING LINE			TOTAL 1730.00 FT.		WT. OF STRING 60.000 LBS.															
REPAIR RIG																				
WIRE LINE LOGGING																				
RUNNING CASING & CEMENTING																				
WAITING ON CEMENT																				
DRILL STEM TEST			12 STANDS D.P. 1122.08 FT.		BIT NO. 3		TIME 9 00 11 00 10 1/2		FROM 1730 TO 1810		D			45	3 1/2	725	5 1/2	60		
OTHER			1 SINGLES D.P. 30.23 FT.		SIZE 8 3/4		WEIGHT 9.7 9.7 9.4 9.6													
FISHING			3 D.C. 90.95 FT.		MFG. H.W.		VISC.-SEC 38 40 35 37													
A. PERFORATING			18 D.C. 534.79 FT.		TYPE X55R		W.L.-C.C. 12.0 13.6													
B. TUBING TRIPS			NOZZLE NO. 3		SIZE 13		FLTR. CK. 1/2 1/2 1/2 1/2													
C. SWABBING			SER. NO. 17988		SD. CONT. %		PH 8 3 2 4													
D. TESTING			DEPTH OUT		DEPTH IN		TOTAL FTG. 567													
E. ADDITIONAL			TOTAL HR. RUN 40 3/4		COND. OF BIT		REAMER NO.													
TIME SUMMARY (OFFICE USE ONLY)			KELLY DOWN 25.17 FT.		REAMER TYPE		DRILLER B. Smith													
DAY WORK			TOTAL 1810.00 FT.		WT. OF STRING 63.000 LBS.															
HRS. W/DP																				
HRS. WO/DP																				
HRS. STANDBY																				
TOTAL DAY WORK 10			13 STANDS D.P. 1215.16 FT.		BIT NO. 3		TIME 6 00 8 30 12 00		FROM 1810 TO 1894		D			45	30	750	5 1/2	60	5 1/2	S
WIRE LINE RECORD			1 SINGLES D.P. 30.46 FT.		SIZE 8 3/4		WEIGHT 9.6 9.6 9.5													
REEL NO. 1			3 D.C. 90.95 FT.		MFG. H.W.		VISC.-SEC 37 35 35													
NO. OF LINES			18 D.C. 534.79 FT.		TYPE X55R		W.L.-C.C. 12 12 16 4 14 8													
FEET SLIPPED			NOZZLE NO. 3		SIZE 13		FLTR. CK. 1/2 1/2 1/2 1/2													
FEET CUT OFF			SER. NO. 17988		SD. CONT. %		PH 8 3 2 4													
PRESENT LENGTH			DEPTH OUT		DEPTH IN		TOTAL FTG. 651													
TON N. OR TRIPS SINCE LAST CUT			TOTAL HR. RUN 48		COND. OF BIT		REAMER NO.													
CUMULATIVE TON N. OR TRIPS			KELLY DOWN 16.36 FT.		REAMER TYPE		DRILLER													
NO. OF DAYS FROM SPUD			TOTAL 1894.00 FT.		WT. OF STRING 63.000 LBS.															
CUMULATIVE ROTATING HRS.																				

DATE 1 FEB 41 10

OPERATOR Husky et al		LEASE WILLOW LAKE 0-27-A		WELL NO. 0-27-A		FIELD OR DIST. WILLOW LAKE		COUNTY N.W.T.		STATE													
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 4	DRILL PIPE STRING NO. 2 SIZE 4 1/2	TOOL JOINT 6" O.D.	PUMPS NO. 1 MANUFACTURER NAT. TYPE 250 STROKE LENGTH 15 NO. 2 MANUFACTURER NAT. TYPE 150 STROKE LENGTH 12		LAST CASING TUBING OR LINER		SIZE 9 5/8	MAKE MANA	WT. & GR. 36 J.S.	NO. JOINTS 13	FEET 4107	RKB. TO C.G. HD. 12.50	SET AT 4107	REMARKS CEMENTED w/300 SAX 2% CALCIUM							
SIGNATURE OF OPERATOR'S REPRESENTATIVE [Signature]		SIGNATURE OF CONTRACTOR'S TOOL PUSHER [Signature]																					
TIME DISTRIBUTION-HOURS		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO.		METHOD RUN	
RIG UP & TEAR DOWN		7 STANDS D.P. 686.07 FT.		BIT NO. 3		TIME 2.00 4.00 7.00		FROM 1300 TO 1422 0				45		40		125		5 1/2		60		S	
DRILLING ACTUAL		0 SINGLES D.P. 62.56 FT.		SIZE 8 3/4		WEIGHT 9.3 9.2 9.4																	
REAMING		I.D. O.D. 90.95 FT.		MFG. H.W.		VISC.-SEC 35 35 36																	
CONDITIONING MUD & CIRCULATING		D.C. 6 1/4		TYPE X55R		W.L.-C.C. 11 11 11.4																	
TRIPS		18 I.D. O.D. 534.79 FT.		NOZZLE NO. 3		FLTR. CK. 2/32 2/32 2/32																	
LUBRICATE NG		STB. BODY O.D. FT.		SER. NO. 17988		SD. CONT. %																	
DEVIATION SURVEY		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT																	
TEST B.O.P.		SUBS O.D. 6.28 FT.		DEPTH IN																			
CUT OFF DRILLING LINE		BIT OR C.B. FT.		TOTAL FTG.		MUD & CHEMICALS ADDED																	
WIRE LINE LOGGING		KELLY DOWN 41.50 FT.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.																	
RUNNING CASING & CEMENTING		TOTAL 1422-15 FT.		COND. OF BIT																			
WAITING ON CEMENT		WT. OF STRING 58,000 LBS.		REAMER NO.		DRILLER [Signature]																	
DRILL STEM TEST		NO. 9 STANDS D.P. 843.40 FT.		BIT NO. 3		TIME 9.00 11.00 10.15		FROM 1422 TO 1527 0				45		40		750		5 1/2		60		S	
OTHER		1 SINGLES D.P. 31.21 FT.		SIZE 8 3/4		WEIGHT 9.4 9.5 9.5/95																	
FISHING		D.C. 6 3/4		MFG. H.W.		VISC.-SEC 35 36 34/36																	
A. PERFORATING		3 I.D. O.D. 90.95 FT.		TYPE X55R		W.L.-C.C. 11 11 11.4																	
B. TUBING TRIPS		D.C. 6 1/4		NOZZLE NO. 3		FLTR. CK. 2/32 2/32 2/32																	
C. SWABBING		18 I.D. O.D. 534.79 FT.		SER. NO. 17988		SD. CONT. %																	
D. TESTING		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT																	
E. ADDITIONAL		STB. BODY O.D. FT.		DEPTH IN																			
TOTALS		SUBS O.D. 6.28 FT.		TOTAL FTG.		MUD & CHEMICALS ADDED																	
TIME SUMMARY (OFFICE USE ONLY)		BIT OR C.B. FT.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.																	
DAY WORK		KELLY DOWN 20.37 FT.		COND. OF BIT																			
HRS. W/DP		TOTAL 1527.00 FT.		REAMER NO.		DRILLER [Signature]																	
HRS. WO/DP		WT. OF STRING 58,000 LBS.		REAMER TYPE																			
HRS. STANDBY		NO. 10 STANDS D.P. 937.29 FT.		BIT NO. 3		TIME 6.00 9.10 11.00		FROM 1527 TO 1628 0				45		40		750		5 1/2		60			
TOTAL DAY WORK		1 SINGLES D.P. 30.81 FT.		SIZE 8 3/4		WEIGHT 9.5 9.7 9.5																	
WIRE LINE RECORD		D.C. 6 3/4		MFG. H.W.		VISC.-SEC 35 50 43																	

DATE FEB 21 10

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DATE 12-22-70

OPERATOR HUSKY ET AL		LEASE WILLOW LAKE 0-27-A		WELL NO. 0-27-A		FIELD OR DIST. WILLOW LAKE		COUNTY N.W.T.		STATE	
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 4		DRILL PIPE STRING 6" O.D.		TOOL JOINT 6" O.D.		PUMPS		LAST CASING TUBING OR LINER	
SIGNATURE OF OPERATOR'S REPRESENTATIVE R.H. Wilber		SIGNATURE OF CONTRACTOR'S TOOL PUSHER R.H. Wilber		NO. 1 1. NAT		MANUFACTURER 250		TYPE 15"		STROKE LENGTH 12"	
NO. 2 2. NAT		MANUFACTURER 150		TYPE 12"		STROKE LENGTH 12"		SIZE 9 1/2		MAKE MANA	
WT. & GR. 365.5		NO. JOINTS 13		FEET 409		RKB. TO CSG. HD. 1250		SET AT		REMARKS	
TIME DISTRIBUTION-HOURS		MORN		DAY		EVE		MORN		DAY	
RIG UP & TEAR DOWN											
DRILLING ACTUAL											
REAMING											
CONDITIONING MUD & CIRCULATING											
TRIPS											
LUBRICATE RIG											
DEVIATION SURVEY											
TEST B.O.P.											
CUT OFF DRILLING LINE											
AIR RIG											
WIRE LINE LOGGING											
RUNNING CASING & CEMENTING											
WAITING ON CEMENT											
DRILL STEM TEST											
OTHER											
FISHING											
A. PERFORATING											
B. TUBING TRIPS											
C. SWABBING											
D. TESTING											
E. ADDITIONAL											
TOTALS		8		8		8					
TIME SUMMARY (OFFICE USE ONLY)											
D.I.Y. WORK											
HRS. W/DP											
HRS. WO/DP											
HRS. STANDBY											
TOTAL DAY WORK											
WIRE LINE RECORD											
REEL NO.											
NO. OF LINES											
FEET SLIPPED											
FEET CUT OFF											
PRESENT LENGTH											
TON MI. OR TRIPS SINCE LAST CUT											
CUMULATIVE TON MI. OR TRIPS											
NO. OF DAYS FROM SPUD											
CUMULATIVE ROTATING HRS.											
NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)	
7		STANDS D.P. 656.92 FT.		BIT NO. 1C		TIME 5:00 7:00 10:00		FROM 1230 TO 1243		C 1	
1		SINGLES D.P. 31.40 FT.		SIZE 6 3/16		WEIGHT 9.2 9.2 9.2					
3		D.C. 6 3/4 I.D. O.D. 90.95 FT.		MFG. ACC		VISC.-SEC 35 33 35					
12		D.C. 6 3/4 I.D. O.D. 360.55 FT.		TYPE D		W.L.-C.C. 11 11					
2		STB. BODY O.D. 6.28 FT.		NOZZLE NO. 6586		FLTR. CK 10 10 9.5					
1		STB. BODY O.D. 6.28 FT.		SER. NO. 6586		SD. CONT. %					
2		STB. BODY O.D. 6.28 FT.		DEPTH OUT 1198		PRESSURE GRADIENT					
3		SUBS O.D. 6.28 FT.		TOTAL FTG. 45		MUD & CHEMICALS ADDED					
4		BIT OR C.B. 62.85 FT.		TOTAL HR. RUN 28 1/2		TYPE AMT. TYPE AMT.					
5		KELLY DOWN 33.06 FT.		COND. OF BIT RUN							
6		TOTAL 1143.00 FT.		REAMER NO.							
7		WT. OF STRING 53,000 LBS.		REAMER TYPE							
8											
9											
10											
11											
12											
13											
14											
15											

DATE 5-6-54

NO.

DATE 2/2/74

OPERATOR Husky et al		LEASE WILLOW LAKE		WELL NO. 0-27		FIELD OR DIST. WILLOW LAKE		COUNTY N.W.T.		STATE																			
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 411		DRILL PIPE STRING 6" O.D.		PUMPS		SIZE 9 5/8		MAKE MANN.		WT. & GR. 36 J.S.		NO. JOINTS 13		FEET 4109		RKB. TO CSG. HD. 1250		SET AT		REMARKS CEMENTED W/300 SAX. 2% CALCIUM							
SIGNATURE OF OPERATOR'S REPRESENTATIVE L.H. Webber		SIGNATURE OF CONTRACTOR'S TOOL PUSHER L.H. Webber		NO. 1. NAT. 2. NAT. 3.		MANUFACTURER NAT.		TYPE 250 150		STROKE LENGTH 15" 12"		LAST CASING TUBING OR LINER																	
TIME DISTRIBUTION—HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SGL-S PAR-EL-COM'D-C	
RIG UP & TEAR DOWN		STANDS D.P.		FT.		BIT NO.		TIME		FROM		TO																	
DRILLING ACTUAL		SINGLES D.P.		FT.		SIZE		WEIGHT																					
REAMING		D.C.				MFG.		VISC.-SEC																					
CONDITIONING MUD & CIRCULATING		I.D. O.D.		FT.		TYPE		W.L.-C.C.																					
TRIPS		D.C.				NOZZLE		NO.																					
LUBRICATE RIG		I.D. O.D.		FT.		SIZE		PH																					
DEVIATION SURVEY		STB. BODY O.D.		FT.		SER. NO.		SD. CONT. %																					
TEST S.O.P.		STB. BODY O.D.		FT.		DEPTH OUT		PRESSURE GRADIENT																					
CUT OFF DRILLING LINE		RMR. BODY O.D.		FT.		DEPTH IN																							
FAIR RIG		SUBS O.D.		FT.		TOTAL FTG.		MUD & CHEMICALS ADDED																					
BORING		BIT OR C.B.		FT.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.																					
WIRE LINE LOGGING		KELLY DOWN		FT.		COND. OF BIT																							
RUNNING CASING & CEMENTING		TOTAL		FT.		REAMER NO.																							
WAITING ON CEMENT		WT. OF STRING		LBS.		REAMER TYPE																							
DRILL STEM TEST		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. LINER SIZE S.P.M.		PUMP NO. LINER SIZE S.P.M.		METHOD RUN SGL-S PAR-EL-COM'D-C	
OTHER		STANDS D.P.		FT.		BIT NO.		TIME		FROM		TO																	
FISHING		SINGLES D.P.		FT.		SIZE		WEIGHT																					
A. PERFORATING		D.C.				MFG.		VISC.-SEC																					
B. TUBING TRIPS		I.D. O.D.		FT.		TYPE		W.L.-C.C.																					
C. SWABBING		D.C.				NOZZLE		NO.																					
D. TESTING		I.D. O.D.		FT.		SIZE		PH																					
E. ADDITIONAL		STB. BODY O.D.		FT.		SER. NO.		SD. CONT. %																					
TOTALS		STB. BODY O.D.		FT.		DEPTH OUT		PRESSURE GRADIENT																					
TIME SUMMARY (OFFICE USE ONLY)		RMR. BODY O.D.		FT.		DEPTH IN																							
DAY WORK		SUBS O.D.		FT.		TOTAL FTG.		MUD & CHEMICALS ADDED																					
HRS. W/DP		BIT OR C.B.		FT.		TOTAL HR. RUN		TYPE AMT																					

DAILY DRILLING REPORT

REPORT NO.

DATE 07/11/10

OPERATOR Husky et al		LEASE WILLOW LAKE 0-27		WELL NO. 0-27	FIELD OR DIST. WILLOW LAKE	COUNTY N.W.T.	STATE							
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.	RIG NO. 4	DRILL PIPE STRING 2 1/2	TOOL JOINT 6"	PUMPS		SIZE 9 5/8" MANNS 36" JS	MAKE 13	WT. & CR. 409	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS	
SIGNATURE OF OPERATOR'S REPRESENTATIVE L.H. Webber		SIGNATURE OF CONTRACTOR'S TOOL PUSHER L.H. Webber		TYPE THD. F.H.		NO.		MANUFACTURER NAT.	TYPE 250	STROKE LENGTH 15"	LAST CASING TUBING OR LINER 9 5/8" MANNS 36" JS 13 409			REMARKS lengthed w/ 300' of cement + 2' of Calc. E.A.H. Plug DOWN @ 615 PM. good RETURNS

TIME DISTRIBUTION-HOURS				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
						STANDS D.P.		BIT NO.		TIME		FROM		TO																	
RIG UP & TEAR DOWN																															
DRILLING ACTUAL																															
REAMING																															
CONDITIONING MUD & CIRCULATING																															
TRIPS																															
LUBRICATE RIG																															
DEVIATION SURVEY																															
TEST B.O.P.																															
CUT OFF DRILLING LINE																															
WIRE LINE LOGGING																															
RUNNING CASING & CEMENTING																															
WAITING ON CEMENT																															
DRILL STEM TEST																															
OTHER																															
FISHING																															
COMPLETION WORK																															
A. PERFORATING																															
B. YUBING TRIPS																															
C. SWABBING																															
D. TESTING																															
E. ADDITIONAL																															
TOTALS																															
TIME SUMMARY (OFFICE USE ONLY)																															
DAY WORK																															
HRS. W/DP																															
HRS. NO/DP																															
HRS. STANDBY																															
TOTAL DAY WORK																															
WIRE LINE RECORD																															
REEL NO.																															
NO. OF LINES																															
SIZE																															
FEET SLIPPED																															
FEET CUT OFF																															
PRESENT LENGTH																															
TON MI. OR TRIPS SINCE LAST CUT																															
CUMULATIVE TON MI. OR TRIPS																															
NO. OF DAYS FROM SPUD																															
CUMULATIVE ROTATING HRS.																															

NO.				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
				STANDS D.P.		BIT NO.		TIME		FROM		TO																	
1				3094		3AAR		10:00 12:00		379		412		D				100		250		7 1/4						5	
3				90.95		13 1/4		REED		VISC.-SEC 140																			
9				267.54		NO. 3		FLTR. CK.		DEVIATION RECORD		370		3 1/4		400		10											
2				6.28		852999		412		379		33		44															
2				2.65		TOTAL FTG.		33		TOTAL HR. RUN		44																	
2				13.68		COND. OF BIT				REAMER NO.																			
2				12.00		REAMER TYPE				DRILLER		B. Smith																	
2				18.00																									

NO.				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
				STANDS D.P.		BIT NO.		TIME		FROM		TO																	
1				3094		3AAR		10:00 12:00		379		412		D				100		250		7 1/4						5	
3				90.95		13 1/4		REED		VISC.-SEC 140																			
9				267.54		NO. 3		FLTR. CK.		DEVIATION RECORD		370		3 1/4		400		10											
2				6.28		852999		412		379		33		44															
2				2.65		TOTAL FTG.		33		TOTAL HR. RUN		44																	
2				13.68		COND. OF BIT				REAMER NO.																			
2				12.00		REAMER TYPE				DRILLER		B. Smith																	
2				18.00																									

NO.				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
				STANDS D.P.		BIT NO.		TIME		FROM		TO																	
1				3094		3AAR		10:00 12:00		379		412		D				100		250		7 1/4						5	
3				90.95		13 1/4		REED		VISC.-SEC 140																			
9				267.54		NO. 3		FLTR. CK.		DEVIATION RECORD		370		3 1/4		400		10											
2				6.28		852999		412		379		33		44															
2				2.65		TOTAL FTG.		33		TOTAL HR. RUN		44																	
2				13.68		COND. OF BIT				REAMER NO.																			
2				12.00		REAMER TYPE				DRILLER		B. Smith																	
2				18.00																									

NO.				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
				STANDS D.P.		BIT NO.		TIME		FROM		TO																	
1				3094		3AAR		10:00 12:00		379		412		D				100		250		7 1/4						5	
3				90.95		13 1/4		REED		VISC.-SEC 140																			
9				267.54		NO. 3		FLTR. CK.		DEVIATION RECORD		370		3 1/4		400		10											
2				6.28		852999		412		379		33		44															
2				2.65		TOTAL FTG.		33		TOTAL HR. RUN		44																	
2				13.68		COND. OF BIT				REAMER NO.																			
2				12.00		REAMER TYPE				DRILLER		B. Smith																	
2				18.00																									

NO.				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
				STANDS D.P.		BIT NO.		TIME		FROM		TO																	
1				3094		3AAR		10:00 12:00		379		412		D				100		250		7 1/4						5	
3				90.95		13 1/4		REED		VISC.-SEC 140																			
9				267.54		NO. 3		FLTR. CK.		DEVIATION RECORD		370		3 1/4		400		10											
2				6.28		852999		412		379		33		44															
2				2.65		TOTAL FTG.		33		TOTAL HR. RUN		44																	
2				13.68		COND. OF BIT				REAMER NO.																			
2				12.00		REAMER TYPE				DRILLER		B. Smith																	
2				18.00																									

NO.				DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D. R.M.R. CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.	
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DATE JUN 27 1960

[illegible]

[illegible]

DATE 4/12/10

OPERATOR Husky et al		LEASE WILLOW LAKE 0-27		WELL NO. 0-27		FIELD OR DIST. WILLOW LAKE		COUNTY ALBERTA		STATE											
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO.	DRILL PIPE STRING NO. SIZE	TOOL JOINT O.D. TYPE THD.	PUMPS NO. MANUFACTURER TYPE STROKE LENGTH			LAST CASING TUBING OR LINER	SIZE	MAKE	WT. & GR.	NO. JOINTS	FEET	RKB. TO CSG. HD.	SET AT	REMARKS					
SIGNATURE OF OPERATOR'S REPRESENTATIVE L.H. Webber		SIGNATURE OF CONTRACTOR'S TOOL PUSHER L.H. Webber			1. 2. 3.																
TIME DISTRIBUTION-HOURS MORN DAY EVE		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE S.P.M.	PUMP NO. LINER SIZE S.P.M.	METHOD RUN SGL. S PAR. L. P. COM. D. C.
RIG UP & TEAR DOWN 5		STANDS D.P. FT.		BIT NO.		TIME		FROM TO		ELAPSED TIME				DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
DRILLING ACTUAL		SINGLES D.P. FT.		SIZE		WEIGHT															
REAMING		D.C.		MFG.		VISC.-SEC															
CONDITIONING MUD & CIRCULATING		I.D. O.D. FT.		TYPE		W.L.-C.C.															
TRIPS		D.C.		NOZZLE NO. SIZE		FLTR. CK.															
LUBRICATE RIG		I.D. O.D. FT.		PH																	
DEVIATION SURVEY		STB. BODY O.D. FT.		SER. NO.		SD. CONT. %															
TEST S.O.P.		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT															
CUT OFF DRILLING LINE		RMR. BODY O.D. FT.		DEPTH IN																	
REPAIR RIG		SUBS O.D. FT.		TOTAL FTG.		MUD & CHEMICALS ADDED															
DRILLING		BIT OR C.B. FT.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.															
WIRE LINE LOGGING		KELLY DOWN FT.		COND. OF BIT																	
RUNNING CASING & CEMENTING		TOTAL FT.		REAMER NO.																	
WAITING ON CEMENT 3		WT. OF STRING LBS.		REAMER TYPE		DRILLER Steve Mohringer															
DRILL STEM TEST		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE S.P.M.	PUMP NO. LINER SIZE S.P.M.	METHOD RUN SGL. S PAR. L. P. COM. D. C.
OTHER		STANDS D.P. FT.		BIT NO.		TIME		FROM TO		ELAPSED TIME				DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							
FISHING		SINGLES D.P. FT.		SIZE		WEIGHT															
A. PERFORATING		D.C.		MFG.		VISC.-SEC															
B. TUBING TRIPS		I.D. O.D. FT.		TYPE		W.L.-C.C.															
C. SWABBING		D.C.		NOZZLE NO. SIZE		FLTR. CK.															
D. TESTING		I.D. O.D. FT.		PH																	
E. ADDITIONAL		STB. BODY O.D. FT.		SER. NO.		SD. CONT. %															
TOTALS 8		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT															
TIME SUMMARY (OFFICE USE ONLY)		RMR. BODY O.D. FT.		DEPTH IN																	
DAY WORK		SUBS O.D. FT.		TOTAL FTG.		MUD & CHEMICALS ADDED															
HRS. W/DP.		BIT OR C.B. FT.		TOTAL HR. RUN		TYPE AMT. TYPE AMT.															
HRS. WO/DP		KELLY DOWN FT.		COND. OF BIT																	
HRS. STANDBY		TOTAL FT.		REAMER NO.																	
		WT. OF STRING LBS.		REAMER TYPE		DRILLER B. Scott															
		NO. DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE. C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM	WT. ON BIT 1000#	PUMP PRESS	PUMP NO. LINER SIZE S.P.M.	PUMP NO. LINER SIZE S.P.M.	METHOD RUN SGL. S PAR. L. P. COM. D. C.
		STANDS D.P. FT.		BIT NO.		TIME		FROM TO		ELAPSED TIME				DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS							

DAILY DRILLING REPORT										REPORT NO.		DATE																			
OPERATOR HUSKY ET AL				LEASE WILLOW LAKE 0-27				WELL NO. 0-27		FIELD OR DIST. WILLOW LAKE		COUNTY N.W.T.		STATE																	
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.				RIG NO. 41		DRILL PIPE STRING 2 1/2" 43		TOOL JOINT 6" O.D.		PUMPS		SIZE 9 1/2"		MAKE MAN. JS. 36"		WT. & GR. 8		FEET 260		RKB. TO CSG. HD. 12.50		SET AT 260		REMARKS CEMENTED 4/25							
SIGNATURE OF OPERATOR'S REPRESENTATIVE L.H. Wubben				SIGNATURE OF CONTRACTOR'S TOOL PUSHER L.H. Wubben				NO.		MANUFACTURER		TYPE		STROKE LENGTH		LAST CASING TUBING OR LINER															
								1.		NAT.		250		15"																	
								2.		NAT.		150		12"																	
								3.																							
TIME DISTRIBUTION-HOURS				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
MORN DAY EYE				STANDS D.P.		FT.		BIT NO.		TIME		FROM TO																			
RIG UP & TEAR DOWN				SINGLES D.P.		FT.		SIZE		WEIGHT		322 471		0						70		200		450		5 1/2		60		5	
DRILLING ACTUAL				D.C.		FT.		MFG.		VISC.-SEC																					
REAMING				I.D.		O.D.		TYPE		W.L.-C.C.																					
CONDITIONING MUD & CIRCULATING				D.C.		FT.		NO.		FLTR. CK.																					
TRIPS				I.D.		O.D.		NOZZLE		PH																					
LUBRICATE RIG				STB. BODY		O.D.		SER. NO.		SD. CONT. %																					
DEVIATION SURVEY				STB. BODY		O.D.		DEPTH OUT		PRESSURE GRADIENT																					
TEST B.O.P.				RMR. BODY		O.D.		DEPTH IN																							
CUT OFF DRILLING LINE				SUBS		O.D.		TOTAL FTG.		MUD & CHEM. CALS ADDED																					
REPAIR RIG				BIT OR C.B.		FT.		TOTAL HR. RUN		TYPE																					
DRILLING				SHOCK SUB		9.14		COND. OF BIT		AMT.																					
WIRE LINE LOGGING				KELLY DOWN		10.03		REAMER NO.		AMT.																					
RUNNING CASING & CEMENTING				TOTAL		471.50		REAMER TYPE		AMT.																					
WAITING ON CEMENT				WT. OF STRING		LBS.		DRILLER																							
DRILL STEM TEST				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
OTHER				1		STANDS D.P.		1		TIME		471 625		0						90		25		900		5 1/2		60			
FISHING				1		SINGLES D.P.		SIZE		WEIGHT																					
A. PERFORATING				D.C.		FT.		MFG.		VISC.-SEC																					
B. TUBING TRIPS				I.D.		O.D.		TYPE		W.L.-C.C.																					
C. SWABBING				D.C.		FT.		NO.		FLTR. CK.																					
D. TESTING				I.D.		O.D.		NOZZLE		PH																					
E. ADDITIONAL				STB. BODY		O.D.		SER. NO.		SD. CONT. %																					
TOTALS				STB. BODY		O.D.		DEPTH OUT		PRESSURE GRADIENT																					
TIME SUMMARY (OFFICE USE ONLY)				RMR. BODY		O.D.		DEPTH IN																							
DAY WORK				SUBS		O.D.		TOTAL FTG.		MUD & CHEMICALS ADDED																					
HRS. W/DP				BIT OR C.B.		FT.		TOTAL HR. RUN		TYPE																					
HRS. W/O/DP				SHOCK SUB		9.14		COND. OF BIT		AMT.																					
HRS. STANDBY				KELLY DOWN		41.50		REAMER NO.		AMT.																					
				TOTAL		625.87		REAMER TYPE		AMT.																					
				WT. OF STRING		LBS.		DRILLER																							
				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
				STANDS D.P.		FT.		1		TIME		625 712		0						RAN		200		105		Sal Cement					
				SINGLES D.P.		FT.		SIZE		WEIGHT																					
				D.C.		FT.		MFG.		VISC.-SEC																					
				I.D.		O.D.		TYPE		W.L.-C.C.																					
				D.C.		FT.		NO.		FLTR. CK.																					
				I.D.		O.D.		NOZZLE		PH																					
				STB. BODY		O.D.		SER. NO.		SD. CONT. %																					
				STB. BODY		O.D.		DEPTH OUT		PRESSURE GRADIENT																					
				RMR. BODY		O.D.		DEPTH IN																							
				SUBS		O.D.		TOTAL FTG.		MUD & CHEMICALS ADDED																					
				BIT OR C.B.		FT.		TOTAL HR. RUN		TYPE																					
				SHOCK SUB		9.14		COND. OF BIT		AMT.																					
				KELLY DOWN		41.50		REAMER NO.		AMT.																					
				TOTAL		625.87		REAMER TYPE		AMT.																					
				WT. OF STRING		LBS.		DRILLER																							
				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
				STANDS D.P.		FT.		1		TIME		625 712		0						RAN		200		105		Sal Cement					
				SINGLES D.P.		FT.		SIZE		WEIGHT																					
				D.C.		FT.		MFG.		VISC.-SEC																					
				I.D.		O.D.		TYPE		W.L.-C.C.																					
				D.C.		FT.		NO.		FLTR. CK.																					
				I.D.		O.D.		NOZZLE		PH																					
				STB. BODY		O.D.		SER. NO.		SD. CONT. %																					
				STB. BODY		O.D.		DEPTH OUT		PRESSURE GRADIENT																					
				RMR. BODY		O.D.		DEPTH IN																							
				SUBS		O.D.		TOTAL FTG.		MUD & CHEMICALS ADDED																					
				BIT OR C.B.		FT.		TOTAL HR. RUN		TYPE																					
				SHOCK SUB		9.14		COND. OF BIT		AMT.																					
				KELLY DOWN		41.50		REAMER NO.		AMT.																					
				TOTAL		625.87		REAMER TYPE		AMT.																					
				WT. OF STRING		LBS.		DRILLER																							
				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR-D RM-R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN	
				STANDS D.P.		FT.		1		TIME		625 712		0						RAN		200		105		Sal Cement					
				SINGLES D.P.		FT.		SIZE		WEIGHT																					
				D.C.		FT.		MFG.		VISC.-SEC																					
				I.D.		O.D.		TYPE		W.L.-C.C.																					
				D.C.		FT.		NO.		FLTR. CK.																					
				I.D.		O.D.		NOZZLE		PH																					
				STB. BODY		O.D.		SER. NO.		SD. CONT. %																					
				STB. BODY		O.D.		DEPTH OUT		PRESSURE GRADIENT																					
				RMR. BODY		O.D.		DEPTH IN																							
				SUBS		O.D.		TOTAL FTG.		MUD & CHEMICALS ADDED																					
				BIT OR C.B.		FT.		TOTAL HR. RUN		TYPE																					
				SHOCK SUB</																											

DATE: 4/14/25/50

[illegible]

DATE 5 MAY 75

OPERATOR MUSKY ET AL		DATE OF DRILLING WILLOW LAKE 0-27		LEASE WILLOW LAKE		WELL NO. 0-27		FIELD OR DIST. WILLOW LAKE		COUNTY N.W.T.		STATE																					
CONTRACTOR S & I DRILLING (WESTERN) CO. LTD.		RIG NO. 4		DRILL PIPE STRING 2 4 1/2		TOOL JOINT 6" O.D.		PUMPS		SIZE		MAKE		WT. & GR.		NO. JOINTS		FEET		RKB. TO CSG. HD.		SET AT		REMARKS									
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>		NO.		MANUFACTURER		TYPE		STROKE LENGTH		LAST CASING TUBING OR LINER																					
				1.		NAT		250		15"																							
				2.		NAT		150		12"																							
				3.																													
TIME DISTRIBUTION-HOURS		NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN					
MORN DAY EVE										FROM TO																							
RIG UP & TEAR DOWN										0 40 0								100		AL3		150		7 1/4		60							
DRILLING ACTUAL		1 6 1/4		29.40 FT.		MFG. REED		VISC.-SEC																									
REAMING						I.D. O.D.		TYPE		W.L.-C.C.																							
CONDITIONING MUD & CIRCULATING						NO. 3		FLTR. CK.																									
TRIPS		1				NOZZLE		SIZE		PH																							
LUBRICATE RIG		1/4				SER. NO.		SD. CONT. %																									
DEVIATION SURVEY		1/4				DEPTH OUT		PRESSURE GRADIENT																									
TEST B.O.P.						DEPTH IN																											
CUT OFF DRILLING LINE						TOTAL FTG.		MUD & CHEMICALS ADDED																									
PAIR RIG						TOTAL HR. RUN		TYPE AMT. TYPE AMT.																									
WIRE LINE LOGGING						COND. OF BIT		SAWDUST 8																									
RUNNING CASING & CEMENTING						REAMER NO.		CAUSTIC 150"																									
WAITING ON CEMENT						REAMER TYPE		DRILLER																									
DRILL STEM TEST						WT. OF STRING		15,000 LBS.																									
OTHER		6 1/2				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		DR. D RM. R CORE-C		CORE NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO. 1		PUMP NO. 2		METHOD RUN	
FISHING														FROM TO																			
A. PERFORATING						STANDS D.P.		FT.		BIT NO.		TIME		40 75 11								100		AL3		175		7 1/4		60			
B. TUBING TRIPS						SINGLES D.P.		FT.		SIZE		WEIGHT																					
C. SWABBING						D.C.				MFG. REED		VISC.-SEC																					
D. TESTING						I.D. O.D.		29.40 FT.		TYPE		W.L.-C.C.																					
E. ADDITIONAL						D.C.				NO. 3		FLTR. CK.																					
TOTALS		8 88				I.D. O.D.		FT.		NOZZLE		SIZE																					

[illegible]

OPERATOR Husky E.A. Ak										LEASE WILLOW LAKE 0-27										DATE Jan 24/70										WELL NO. 0-27										FIELD OR DIST. WILLOW LAKE										COUNTY N. W. T.										STATE																			
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.										RIG NO. 4										DRILL PIPE STRING NO. SIZE TOOL JOINT O.D. TYPE THD.										PUMPS NO. MANUFACTURER TYPE STROKE LENGTH 1. NAT. 250 15 2. NAT. 150 12 3.										LAST CASING TUBING OR LINER										SIZE MAKE WT. & GR. NO. JOINTS FEET RKB. TO CSG. HD. SET AT REMARKS																													
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>										SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>																																																																					
TIME DISTRIBUTION-HOURS MORN DAY EVE										DRILLING ASSEMBLY AT END OF TOUR STANDS D.P. FT. SINGLES D.P. FT. D.C. I.D. O.D. FT. D.C. I.D. O.D. FT. STB. BODY O.D. FT. STB. BODY O.D. FT. RMR. BODY O.D. FT. SUBS O.D. FT. BIT OR C.B. FT. KELLY DOWN FT. TOTAL FT. WT. OF STRING LBS.										BIT RECORD BIT NO. SIZE MFG. TYPE NO. NOZZLE SIZE SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE										MUD RECORD TIME WEIGHT VISC.-SEC. W.L.-C.C. FLTR. CK. PH SD. CONT. % PRESSURE GRADIENT MUD & CHEMICALS ADDED TYPE AMT. TYPE AMT.										FOOTAGE FROM TO DR. D RM. R CORE-C CORE NO. FORMATION (SHOW CORE RECOVERY) ROTARY RPM WT. ON BIT 1000 # PUMP PRESS PUMP NO. LINER SIZE S.P.M. LINER SIZE S.P.M. METHOD RUN SGL. S PAR. L-P COM'D-C										DEVIATION RECORD DEPTH DEV. DIRECTION DEPTH DEV. DIRECTION DEPTH DEV. DIRECTION										TIME LOG FROM TO ELAPSED TIME 1200 800 8										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS Rigging Up									
MORNING TOUR																																																																															
DAY TOUR										DRILLING ASSEMBLY AT END OF TOUR STANDS D.P. FT. SINGLES D.P. FT. D.C. I.D. O.D. FT. D.C. I.D. O.D. FT. STB. BODY O.D. FT. STB. BODY O.D. FT. RMR. BODY O.D. FT. SUBS O.D. FT. BIT OR C.B. FT. KELLY DOWN FT. TOTAL FT. WT. OF STRING LBS.										BIT RECORD BIT NO. SIZE MFG. TYPE NO. NOZZLE SIZE SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE										MUD RECORD TIME WEIGHT VISC.-SEC. W.L.-C.C. FLTR. CK. PH SD. CONT. % PRESSURE GRADIENT MUD & CHEMICALS ADDED TYPE AMT. TYPE AMT.										FOOTAGE FROM TO DR. D RM. R CORE-C CORE NO. FORMATION (SHOW CORE RECOVERY) ROTARY RPM WT. ON BIT 1000 # PUMP PRESS PUMP NO. LINER SIZE S.P.M. LINER SIZE S.P.M. METHOD RUN SGL. S PAR. L-P COM'D-C										DEVIATION RECORD DEPTH DEV. DIRECTION DEPTH DEV. DIRECTION DEPTH DEV. DIRECTION										TIME LOG FROM TO ELAPSED TIME 800 400 8										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS Rigging Up To Spud									
EVENING TOUR										DRILLING ASSEMBLY AT END OF TOUR STANDS D.P. FT. SINGLES D.P. FT. D.C. I.D. O.D. FT. D.C. I.D. O.D. FT. STB. BODY O.D. FT. STB. BODY O.D. FT. RMR. BODY O.D. FT. SUBS O.D. FT. BIT OR C.B. FT. KELLY DOWN FT. TOTAL FT. WT. OF STRING LBS.										BIT RECORD BIT NO. SIZE MFG. TYPE NO. NOZZLE SIZE SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE										MUD RECORD TIME WEIGHT VISC.-SEC. W.L.-C.C. FLTR. CK. PH SD. CONT. % PRESSURE GRADIENT MUD & CHEMICALS ADDED TYPE AMT. TYPE AMT.										FOOTAGE FROM TO DR. D RM. R CORE-C CORE NO. FORMATION (SHOW CORE RECOVERY) ROTARY RPM WT. ON BIT 1000 # PUMP PRESS PUMP NO. LINER SIZE S.P.M. LINER SIZE S.P.M. METHOD RUN SGL. S PAR. L-P COM'D-C										DEVIATION RECORD DEPTH DEV. DIRECTION DEPTH DEV. DIRECTION DEPTH DEV. DIRECTION										TIME LOG FROM TO ELAPSED TIME 400 1800 4										DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS Rigging Up To Spud. Drilling Rat Hole & mouse hole Spudded @ 300 Am. Jan. 23/70									