

HUSKY. HB. ET. AL
WILLOW LAKE H-10

WELL NAME Husky HB et al Willow Lake H-10

FIELD Area: 10
 LOCATION: Unit H Section 10 Grid 62-50-121-45
 Latitude 62-49-16 Longitude 121-45-01
 U.W.L.R. 62.83111 -- 121.75028
 U.W.I. 300H106250121450

Rig Release Date:
 Status:
 Information Release Date...

CHANGE OF NAME:

DATE RECEIVED	INDEX
2-2-70	Application for a Drilling Authority.
	Well Completion Data.
	Well History Report.
	Application to Amend a Drilling Authority.
	Application to change a Well Name.
23/8/70	Application to Abandon a Well or Suspend Drilling.
	Application to Alter Condition of a Well.
26/8/70	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.....

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 NB et al Willowishe H-10

Lease 3a

Imperial Oil Enterprises Ltd. Exploratory Licence No. 1266
(Exemptions, Licences, Leases)

Husky Oil Ltd. (Operator) Exploratory Licence No. 1356

Location: Unit H Section 10 Grid 62° 50' - 121° 45'

Latitude 62° 49' 16" N Longitude 121° 45' 01" N

Unique well identifier 300 H 106250 121450

Universal Well Location Reference Lat 62.82111° N, Long 121.75028° W

	DATE	DEPTH	Pool(s)
Spudded	Feb 27/70		Interval(s) open to production NONE
Suspended			
Resumed Operations			
Finished Drilling	Mar 22/70	3270	
Deepened			Elevation: Gr. 785 K.B. 798
Complete (gas/oil)			Rig No. 4
Abandoned	Mar 27/70	3270	Drilling Contractor S&T Drilling (Western) Co. Ltd.
Rig released	Mar 27/70	3270	Contractor's Business Licence No. 564

CASING RECORD

Casing Size (Inches)	Grade	Weight	Amount	Set at -	Sacks of Cement and Additives
1. 9 5/8	J-55	36	309.45	322'	250 sacks +2% CaCl ₂
2.					
3.					
4.					
5.					
6.					

GEOLOGICAL TOPS LOGS	ELEVATION		CORE RECORD					
	Depths	Sub-Sea	From	To	Rec.	From	To	Rec.
Horn River	402	+ 396	499	549	50			
Hume	486	+ 312	2267	2317	50			
Bear Rock	870	- 72	2318	2370	52			
Ronning	2210	-1412						
Basal Clastics	2750	-1952						
Precambrian	2940	-2142						

LOG RECORD

Run No.	Type of Log	From	To
1	DIL	322	3261
1	BHCS-GR-C	322	3262
1	Formation Density	386	3268
1	SNP	322	3266
1	Continuous Dipmeter	350	3265
1	Directional	322	3270

CEMENTING RECORD (Plug, Squeeze, etc.)				PERFORATING RECORD (Bullet Jet)				SERVICING RECORD (Acidizing, Freezing, etc.)			
Date	From	To	Remarks	Date	From	To	Remarks	Date	From	To	Remarks
Mar 24/70	3255	3155	Tagged at 3153. Drilled off to 3165', 110 sks. Tagged at 2154 90 sks. Plug fell down hole.				N O N E				
Mar 26/70	2350	2250									
Mar 26/70	372	272	95 sks. Pumped cement to surface. Tagged at 165' after 8 hours.								
Mar 26/70	372	272									
Mar 27/70	Surface		5 sks. Erect Monument.								

DRILL STEM TESTS

No.	Date	Formation	From	To	V.O. Mins.	L.S.L. Mins.	F.S.L. Mins.	L.S.L.B.H.P.	F.S.L.B.H.P.	I.F.B.H.P.	F.F.B.H.P.	L.H.P.	F.H.P.	REMARKS
1	Mar 14/70	Ronning	2265	2317	60	30	55	31	358	31	31	1226	1223	Recovered 10' drilling mud.
2	Mar 23/70	Ronning	2200	2263	57	27	55	68	32	16	16	1212	1212	Recovered 5' drilling mud.
3	Mar 25/70	Hume Bear Rock	727	950	57	30	55	Not Recorded	226	66	72	414	414	Recovered 50' drilling mud.

ANALYSIS				PRESENT STATUS OF WELL			
Lab. No.	Sample	From	To	Oil	Gas	Dry	Susp.
GNP-4-5051	Core	2267	2317				
CAL-2-1835	Mud Water	2265	2317				
CAL-2-1964	Mud Water	2200	2263				
CAL-2-1964	Mud Water	727	950				
Complete analysis							
From top of test tool							
From top of test tool							
From top of test tool							
From top of test tool							
XX							

Company **HUSKY OIL LTD.**
 Signed by **C. R. Carrington**
 Title **Drilling Engineer**
 Date **August 26, 1970**

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

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application to Abandon a Well ~~Suspend Drilling~~

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

Name and number of well Husky H-10 et al Willowlake H-10
Location: Unit H Section 10 Grid 62° 50' - 121° 45'
Latitude 62° 49' 16" N Longitude 121° 45' 01" W
From Established Reference Marker
Universal Well Location Reference Lat 62.82111° N, Long 121.75028° W
Permit No. 4410 Lease No.

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

Date of commencement of proposed program

OIL, GAS, AND WATER ENCOUNTERED (Depths)

Oil at None
Gas at None
Water at None
Total Depth 3270 Date of last operations March 27, 1970
Present condition of well Dry and abandoned

CASING RECORD

Casing Size O.D. Inches	Weight	Amount	Set At—	Sacks of Cement and Additives	Amount Pulled
1. 9 5/8	36	309.45	322	250 sacks +2% CaCl ₂	None
2.					
3.					
4.					
5.					

PROPOSED ABANDONMENT PROGRAM

Plug		Geological Formation	Number of Sacks of Cement	Remarks
No.	Position			
1	3255-3155	Precambrian (to cover fish)	50	Drilled off to 3165
2	2350-2250	Basal Clastics-Ronning	110	Tagged at 2154.
3	372-272	Surface casing.	90	Fell down hole.
4	372-272	Surface Casing.	95	Tagged at 165'.
5	Surface	Surface casing.	5	Erected Monument.

The following logs have been run DIL, BHCS-GR-C, FD, SNP, Cont Dipmeter, Directional
Other operations proposed None

Operations to be carried out by S&T Drilling (Western) Contractor Licence No. 564
Address Edmonton, Alberta Address
Responsible Agent in field Glen Robertson, Ft. Simpson, N.W.T.
Dated at Calgary, Alberta this 25th Day of August 19 70
Signed by *[Signature]* 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. G. R. Elias
on the 25th March 1970.

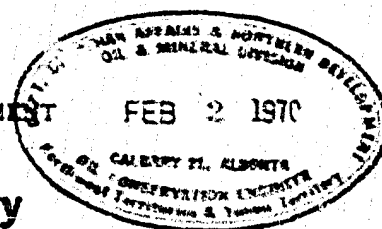
Dated 28th August, 19 70

[Signature]
Oil Conservation Engineer

Drilling Authority No. 416

Project No.

File No.

DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
OIL AND MINERAL DIVISION

Application for a Drilling Authority

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

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

Name and number of well Husky HB et al Willow Lake H-10

Location: Unit H Section 10 Grid 62° 50' ; 121° 45'

Latitude 62° 49' 16" N Longitude 121° 45' 01"

Unique Well Identifier

Universal Well Location Reference Lat. 62.82111° N, Long. 121.75028 W

Elevation: Ground 785 K.B. 797 Est. feet above sea-level.

Well is expected to produce from Devonian or Basal Clastics formation at a depth of about 1800 feet. Expected total final depth 1800'

Area assigned to well

(For Oil Conservation Engineer's use only)

Permit No. 4410 Lease No. Acreage 58,650

Permittee, licensee, or lessee Imperial Oil Enterprises, Ltd.

Exploratory Licence No.

Surface owned by Crown or Crown

(If allocated 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	Sorts of Cement
1. 9 5/8	36	J-55	New	250	As required to surface
2.					
3.					
4.					
5.					

Expected water, gas, and oil horizons and type of control equipment Devonian or Basal Clastics.
Drilling mud and Hydraulic Double Shaffer and Hydril type GK
Blowout Preventors.

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

Address 515 Sixth St., S.W., Calgary, Alberta

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

Dated at Calgary, Alberta this 22 day of January 1970

Signed by Company HUSKY OIL LTD.

Title Drilling Engineer Operator's Licence No. 1355

(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 2nd February 1970

Please see over page

Oil Conservation Engineer

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

POOR COPY

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.
4. Intermediate and production strings of casing are to receive the approval of the Oil Conservation Engineer

B.H.J. Thomas

B.H.J. Thomas, Oil Conservation Engineer

LAT 62° 50' North

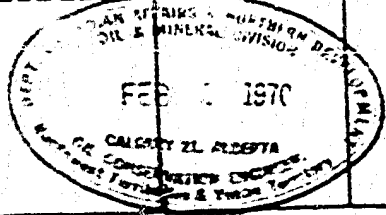
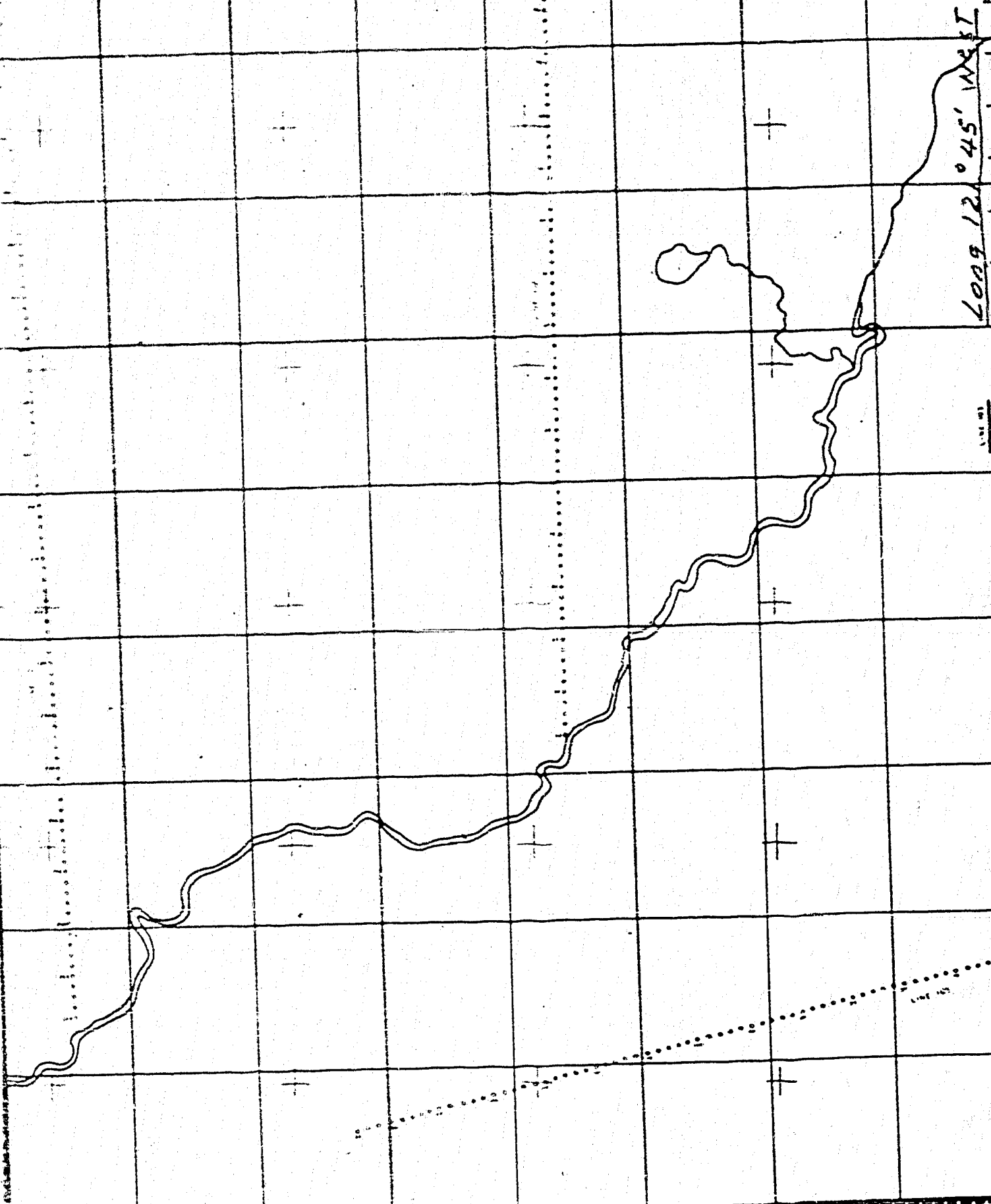
SP10

Location - 48 Willow Lake N-15

SP15

AT Shot Point 11 Line 103

Long 120° 45' West



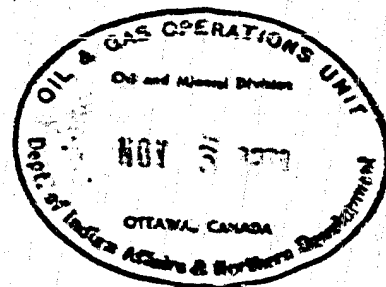
WELL HISTORY

of

Husky H B et al Willowlake

H-10

(Northwest Territories)



HUSKY H B ET AL WILLOW LAKE

H-10

D & A

April 20, 1970

This report prepared and submitted
on behalf of Husky Oil Ltd. by
Oilmen's Wellsite Services Ltd.

Per: Gordon L. Strom
Gordon L. Strom, P. Geol.

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WELL HISTORY REPORT

SECTION I -

SUMMARY OF WELL DATA

a) <u>Well Name and Number</u>	Husky H.B. et al Willow Lake H-10
b) <u>Lessee</u>	Imperial Oil Enterprises, Ltd.
c) <u>Operator</u>	Husky Oil Ltd. - S15 - 6th St. S.W. Calgary, Alberta
d) <u>Location</u>	Unit - H, Section 10, Grid - 62°50'; 121°45'. 62°49' 16"N. 121°45'01"W. Unique Identifier: 300H106250121450 Universal Well Location Ref: Lat. 62.82111°N. Long. 121.75028W
e) <u>Development Well</u> <u>Co-ordinates:</u>	Nil
f) <u>Permit Number</u>	4410
g) <u>Drilling Contractor</u>	S & T Drilling (Western) Co. Ltd. Rig #4 - T-32
h) <u>Drilling Authority</u>	#416 issued 2nd February 1970
i) <u>Well Classification</u>	Wildcat
j) <u>Elevations</u>	Ground 785', K.B. 798'
k) <u>Spudded</u>	February 27, 1970 - 2:30 a.m.
l) <u>Completed Drilling</u>	March 22, 1970
m) <u>Total Depth</u>	3270' - No plug back
n) <u>Well Status</u>	Dry and Abandoned
o) <u>Rig Release Date</u>	12:00 Noon - March 27, 1970
p) <u>Hole Sizes to Total Depth</u>	13 3/4" to 322' - 8 3/4" from 322' to 3270' T.D.
q) <u>Casing</u>	Ran 11 Jts, 9 5/8" 36# -JS Range II & III, 8 rd. Mannesmann casing. Landed @ 322' K.B. Cemented w/250 sax Portland Cement plus 2% CaCl ₂ .

SECTION IIGEOLOGICAL SUMMARYa) FORMATION TOPS

- K.B. 798'

	<u>Log Depth</u>	<u>Sample Depth</u>	<u>Log Subsea</u>	<u>Samp. Subsea</u>
Drift	-	surface	-	
Ft. Simpson	-	270	-	+528
Horn River	402	400	+396	+398
Hume	486	486	+312	+312
Bear Rock	870	860	- 72	- 62
Ronning	2210	2210	-1412	-1412
Basal Clastics	2750	2760	-1952	-1962
Pre-Cambrian	2940	2960	-2142	-2162

NOTE: E-Log tops supplied by Husky Oil Ltd. Geological Department. Sample tops included with sample descriptions.

b) CORED INTERVALS

Core #1	- Hume Fm.	499' - 549'	Rec. 50'
Core #2	- Ronning Fm.	2267' - 2317'	Rec. 50'
Core #3	- Ronning Fm.	2318' - 2370'	Rec. 52'

c) CORE DESCRIPTIONS AND CORE TIMES

See attached Core Descriptions

d) SAMPLE DESCRIPTIONS

See attached "Sample Record"

e) PALEONTOLOGICAL DETERMINATIONS

None

OILMEN'S WELLSITE SERVICES LTD.

CORE RECORD

Well Name Husky H.B. Willow Lake H-10 K.B. 798'

Core No	From	To	Recovery	Core Lost or Pickup	Formation
1	499'	549'	50'	-	Hume

DEPTH		Interval	DESCRIPTION
From	To		
499'	500'	1'	Shale. V. dark gray brown. Calc.
500'	522'	22'	Limestone - v. dark gray brown. Microcrystalline, slightly shaly, clean horizontal breaks like "poker chip" shale. Few shale interbeds. Few scattered calcite inclusions, dense. One large calcite-lined vug near top of interval? stain around vug. Brachs.
522'	527'	5'	Limestone, gray brown, microcrystalline, shaly, shale inclusions, thin shale interbeds. Slightly stylolitic. Top 2' of interval exhibits strong flow structure. Dense.
527'	546'	19'	Limestone, gray brown, microcrystalline. Shale inclusions and thin interbeds, intermittent calcite infill of fractures and calcite inclusions. Minor bioclastic? material. Limestone - light gray tan, microgranular, semi-chalky, Dense.
546'	549'	3'	Limestone - dark gray brown, microcrystalline, shaly, Shale inclusions, dense Shale calcareous, dark gray, interbedded, less than 10%.

Core	12, 7, 7, 6, 8, 8, 8, 7, 6, 10, 13, 9, 11, 10, 9, 10, 10, 11, 11, 11, 16, 12, 11, 14, 13, 14, 1
Time	12, 11, 11, 11, 9, 8, 9, 9, 8, 8, 9, 8, 8, 10, 10, 10, 11, 12, 13, 10, 10, 9, 10

OILMEN'S WELLSITE SERVICES LTD.

CORE RECORD

Well Name Husky H.B. et al Willow Lake H-10

K.B. 798'

Core No	From	To	Recovery	Core Lost or Pickup	Formation
2	2267	2317	50'	-	Ronning

DEPTH		Interval	DESCRIPTION
From	To		
2267	2275.5	8.5	<u>Dolomite</u> , gray brown, v. fine and microcrystalline, dense. Slightly anhydritic, very minor dark gray shale partings and very minor white anhydrite inclusions.
2275.5	2286.0	10.5	<u>Dolomite</u> as above; dense, 50% <u>Anhydrite</u> , gray brown and brown, dolomitic, dark gray shale partings and inclusions, gypsum crystals.
2286.0	2303	17.0	<u>Dolomite</u> , gray brown and dark gray brown, v. fine and microcrystalline, anhydritic. At 2290' a 2" band of <u>Dolomite</u> , as above, slightly vuggy, questionable bleeding gas. Intermittent dark <u>Dolomite</u> bands, slightly vuggy. Minor dark gray-black shale partings, generally dense.
2303.0	2314.5	11.5	<u>Dolomite</u> , as above, vuggy bands thicker, more numerous. Minor gas bleed, fluorescence, dense. <u>Anhydrite</u> , white.
2314.5	2317.0	2.5	<u>Dolomite</u> , gray brown, v. fine and microcrystalline, anhydritic, dense.

Core	18, 13, 13, 12, 15, 17, 20, 19, 32, 30, 27, 26, 28, 29, 28, 21, 30, 29, 30, 40, 33, 36, 31,
Time	38, 34, 28, 28, 30, 37, 40, 45, 43, 50, 39, 36, 36, 38, 41, 32, 25, 30, 30, 35, 30, 30, 25, 25, 30, 35, 30.

OILMEN'S WELLSITE SERVICES LTD.

CORE RECORD

Well Name Husky H.B. et al Willow Lake H-10K.B. 798'

Core No.	From	To	Recovery	Core Lost or Pickup	Formation
3	2318	2370	52'	-	Ronning

DEPTH		Interval	DESCRIPTION
From	To		
2318	2327	9'	Dolomite, gray brown, microcrystalline, anhydritic, very minor vugs, very minor, scattered, extremely slow gas bubbles, very minor fluorescence. Minor Shale partings, vugs and very minor gas in top 4' only. Dense and hard.
2327	2335	8'	Dolomite, as above with minor large gypsum inclusions no vugs, dense.
2335	2341	6'	Dolomite as above, but darker gray in part. bands of darker Dolomite are partly vuggy, very slightly gassy and give off sulphurous odor. Slight fluorescence. Gypsum inclusions more numerous, generally dense.
2341	2350	9'	Dolomite, gray brown, microcrystalline, anhydritic, minor Shale partings, dense, hard, gypsum inclusions.
2350	2360	10'	Dolomite, brown gray, anhydritic, gypsiferous, minor vertical fractures gypsum filled, dense. Hard Shale partings.
2360	2370	10'	Dolomite, gray brown, micro to very fine crystalline, anhydritic, gypsum inclusions, generally dense Dolomite somewhat darker toward bottom of interval. At 2365', a 4" band of darker Dolomite, vuggy, with very minor gas bleed and very minor fluorescence. Minor Shale partings.

Core	30, 35, 34, 27, 30, 31, 28, 25, 21, 21, 22, 23, 20, 20, 18, 17, 23, 16, 18, 18, 18, 19, 16, 18,
Time	18, 18, 18, 15, 17, 19, 17, 18, 20, 20, 17, 18, 19, 19, 37, 40, 45, 48, 38, 39, 35, 39, 31, 35, 37, 36, 32, 30.

OILMEN'S WELLSITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H.B. et al Willow Lake H-10K.B. 798'

DEPTH		DESCRIPTION
From	To	
0	150	<u>Shales, Siltstones, Gravels.</u>
		Shales 50%, Siltstones 30%, Gravels 20%. Shales are gray to darker gray in part.
150	270	<u>Shale, light gray to gray, soft, slightly waxy in part, contains very minor plant spores.</u>
		<u>Gravel, very minor amount as above.</u>
		<u>FT. SIMPSON 270' (+528)</u>
270	330	<u>Shales, dark gray, much harder than above, micromicaceous, fissile in part, slightly silty in part, semi-bituminous in part.</u>
		<u>Siltstone, minor amount, less than 5%</u>
		<u>Gravel, very minor amount, probably cavings.</u>
330	360	<u>Shale, gray, soft</u>
360	400	<u>Shale, dark gray, micromicaceous, slightly silty.</u>
		<u>HORN RIVER SH. 400' (+398)</u>
400	486	<u>Shale, dark gray to black, slightly silty, very slightly calcareous and slightly pyritic in part, somewhat bituminous in part, micromicaceous.</u>
		<u>HUME 486' (+312)</u>
486	499	<u>Limestone, gray brown and light gray brown, microcrystalline, shaly in part, dense. Light gray brown material appears as possible bioclastic origin and inclusions. Some minor calcareous infill.</u>

OILMEN'S WELLSITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H.B. et al Willow Lake H-10K.B. 798'

DEPTH		DESCRIPTION
From	To	
499	549	See Core Record for CORE #1.
549	590	<u>Limestone</u> , gray brown and light gray brown, microcrystalline, dense, clean.
		Shale, black to dark brown gray, thin interbedded and calcareous. Less than 10% of sample.
590	650	<u>Limestone</u> , dark gray brown to light gray, tan; very fine to microcrystalline, dense, slightly shaly in part. Lighter brown Limestone grades to slightly chalky in part.
		Minor <u>Shale</u> , very dark gray to black, slightly calcareous in part. Shale less than 10% of sample. Sample becomes darker gray 640' to 650'.
650	720	<u>Limestone</u> , gray brown to light gray tan; very fine to microcrystalline, dense. Some minor calcite inclusions. The light gray tan <u>Limestone</u> grade from semi-granular to chalky. Darker <u>Limestone</u> somewhat silty.
720	750	<u>Limestone</u> , dark gray brown, microcrystalline, dense, clean. <u>Limestone</u> , gray tan, microcrystalline to microgranular; semi chalky in part. Dense. Somewhat darker around 750'
750	780	<u>Limestone</u> , gray, very fine to microcrystalline, dense; very slightly silty.
780	790	<u>Limestone</u> , light gray, very fine to microcrystalline, dolomitic, slightly silty, dense; relatively soft. Good drilling break starting @ 783'.

OILMEN'S WELLSITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H. B. et al Willow Lake H-10K.B. 798'

DEPTH		DESCRIPTION
From	To	
790	800	Limestone, dark gray brown, microcrystalline to very fine crystalline, dense; some calcite infill.
800	810	Limestone, light gray tan, very fine to microcrystalline; semi-granular, dolomitic. Partly limy Dolomite. Some calcite infill, slightly silty to shaly.
810	830	Limestone, gray brown to light gray tan; very fine crystalline; scattered large calcite crystal inclusions; very scattered poor vuggy and intercrystalline porosity
830	840	Limestone, light gray, microcrystalline to granular, minor pyrite.
840	850	Limestone, light gray, microcrystalline to granular; dolomitic, slightly silty, slightly pyritic, dense.
850	860	Limestone, gray brown to dark gray brown; micro to cryptocrystalline; very slightly shaly, pyritic.
		Shale, light gray green, very slightly dolomitic (limy), slightly waxy, and pyritic; constitutes less than 5% of sample.
		BEAR ROCK 860' (-62)
860	870	Dolomite, very fine crystalline, limy, slightly shaly, gray tan to gray brown, dense.
870	890	Limestone, gray brown, cryptocrystalline, dolomitic, dense, slightly silty.
		Shale, gray to dark green; slightly pyritic.
890	900	Limestone, gray brown, cryptocrystalline to very fine crystalline; very poor vuggy and intercrystalline porosity.

OILMEN'S WELLSITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H.B. Willow Lake H-10K.B. 798'

DEPTH		DESCRIPTION
From	To	
900	930	Limestone, gray tan to gray brown, cryptocrystalline to very fine crystalline; mainly dense with very minor scattered poor vuggy and intercrystalline porosity.
		Shale, gray as very minor inclusions in limestone
		Dolomite, white, fine crystalline, dense.
930	1010	Anhydrite, light gray, gray tan and brown microcrystalline to cryptocrystalline, slightly dolomitic.
		Dolomite 30%, gray brown, microcrystalline, dense.
		Below 970', Dolomite decreases to 15% of sample.
1010	1020	Dolomite, gray brown, microcrystalline; some large Dolomite crystals; anhydritic, dense.
		Anhydrite, gray; less than 10% of sample.
1020	1060'	Anhydrite, white, light gray, gray, gray brown.
		Dolomite 5-10%, gray brown, microcrystalline, dense, anhydritic.
1060	1070	Dolomite, tan and gray brown, micro to cryptocrystalline, dense.
		Anhydrite, white to gray brown, less than 10% of sample.
1070	1290	Anhydrite, white to gray brown, more than 95% of sample.
		At 1180' Anhydrite is gray tan; dolomitic with inclusions of large gypsum crystals.
		Anhydrite is very slightly dolomitic in part.
1290	1330	Dolomite, 50%, gray to dark brown; micro to cryptocrystalline; large gypsum crystal inclusions, dense, anhydritic.
		Anhydrite, 50%, gray-brown; micro to cryptocrystalline, dolomitic in part.

OILMEN'S WELLSITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H. B. Willow Lake H-10K.B. 798'

DEPTH		DESCRIPTION
From	To	
1330	1460	Anhydrite, gray tan to dark brown, minor large gypsum crystals
1460	1790	Anhydrite, gray brown and dark brown; some salt casts; drilling rate increased from 6 min. to 2 min. per foot.
		Anhydrite, gray, micro to cryptocrystalline.
		Dolomite, 5%, dark brown, very fine to microcrystalline, anhydritic; very scattered good porosity; no oil stain; dolomite appeared at 1490' and 1530-1550'; probably as very thin beds in anhydrite.
1790	1810	Dolomite, 40%, gray brown to brown; very slightly anhydritic very fine crystalline. Fair to good scattered intercrystalline porosity. Drill rate 10 min. per foot, 1790-1800.
		Anhydrite 60%, gray and gray brown; scattered salt casts; anhydrite crypto to microcrystalline, dense.
1810	1820	Dolomite 60%, light gray tan; very fine crystalline; anhydritic, dense.
		Anhydrite, 40%, gray to gray brown, dense.
1820	1880	Dolomite 60-80%, gray brown, very fine to microcrystalline; dense. Anhydrite 20-40%, gray and gray brown cryptocrystalline, some gypsum crystals and salt casts still evident; drilling rate somewhat slower, decreasing to 12 minutes per foot.
1880	1890	Dolomite 30%, gray brown, very fine crystalline; anhydritic, fair to good intercrystalline porosity, no oil stain.
		Anhydrite 70%, gray and gray brown, crypto to microcrystalline, dolomitic in part; dense.
1890	1900	As above; Dolomite 60%, Anhydrite 40%.

OILMEN'S WELLSITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H. B. et al Willow Lake H-10K.B. 798

DEPTH		DESCRIPTION
From	To	
1900	1920	<u>Anhydrite</u> , gray and gray tan, dolomitic in small part Dolomite 5%, brown gray, very fine crystalline, anhydritic, very poor scattered porosity, no oil staining.
1920	1930	<u>Anhydrite</u> , dark gray brown, cryptocrystalline, dolomitic in part, dense.
1930	2010	<u>Anhydrite</u> , gray to gray tan; dolomitic in small part; generally hard, massive, crypto to microcrystalline.
2010	2150	<u>Anhydrite</u> , 60%, gray and gray tan, very dolomitic in part grading a very anhydritic Dolomite; dense. <u>Anhydrite</u> 40% gray, crypto to microcrystalline, dolomitic, dense.
2150	2190	<u>Dolomite</u> 70%, gray and brown, micro to cryptocrystalline, dense, also some Dolomite, very light gray to white, microcrystalline to sucrosic, slightly anhydritic, dense. <u>Anhydrite</u> 30%, gray, brown, and white, dolomitic, dense.
2190	2210	<u>Dolomite</u> 90%, gray, microcrystalline, sandy in part with minor very thin interbeds of sandstone, quartzose, very fine to medium grain; very dolomitic; slightly pyritic; dense.
<u>RONNING FM. 2210 (-1412)</u>		
2210	2220	Sandstone 30%, brown, quartzose, very fine to medium grain; dolomitic; tight. Dolomite 30%, gray, microcrystalline, dense. <u>Anhydrite</u> 40%, light gray; dolomitic; trace pyrite.
2220	2267	Dolomite, gray, micro to very fine crystalline; slightly anhydritic; also light gray, sucrosic in part; very minor shale and shaly dolomite at 2250'; trace pyrite; dense.

OILMEN'S WELL SITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H. B. et al Willow Lake H-10K.B. 798'

DEPTH		DESCRIPTION
From	To	
2630	2640	Dolomite 90%, dark gray brown, very fine crystalline, slightly shaly, dense.
		Shale 10%, dark gray brown; very slightly dolomitic; mainly as very thin interbeds in Dolomite.
2640	2700	Dolomite 95%, gray brown and dark gray brown; very fine crystalline, slightly shaly in part; minor amount of very fine crystalline gypsum; dense.
		Shale 5%, dark gray to black, dolomitic, very thin bedded.
2700	2750	Dolomite 95%, gray brown and dark gray brown, very fine and microcrystalline; slightly shaly in part; trace chert, dark gray brown.
		Shale 5%, dark gray to black, slightly dolomitic.
2750	2760	Dolomite, gray brown and dark gray brown; very fine and microcrystalline to fine crystalline in small part; very shaly in part.
		very minor chert; dense
		Shale 5%, dark gray, slightly dolomitic, siliceous in part.
<u>BASAL CLASTICS 2760 (-1962)</u>		
2760	2780	Sandstone 20%, quartzitic, very fine and fine grained, very siliceous; tight.
		Shale 20%, dark gray to black; dolomitic and siliceous.
		Dolomite 60% shaly, microcrystalline, dense.
2780	2800	Sandstone 60%, very fine and fine grained; siliceous and siderite cemented; tight.
		Shale 25%, dark gray to black; siliceous and dolomitic.
		Dolomite 15%, dark gray, very fine crystalline; shaly, dense.

OILMEN'S WELL SITE SERVICES LTD.

SAMPLE RECORD

Well Name Husky H.B. et al Willow Lake H-10

K.B. 798'

DEPTH		DESCRIPTION
From	To	
2800	2950	Sandstone, fine grained, quartzose, siliceous and siderite cemented. Siltstone - reddish brown, micaceous. Shale, gray and gray green, siliceous.
2950	2960	Sandstone, very fine and fine grained: pink, reddish brown and gray green, tight. Siltstone, gray green and reddish brown; argillaceous. Shale, gray and gray green. Anhydritic, waxy. Sample generally darker - - toward gray, green in color @ 2960'
2960	3040	Shale 50%, gray and gray green PRE CAMBRIAN @ 2960' (-2162') Siliceous; hard, massive, blocky. Siltstone 30%, gray and gray green, siliceous cemented, hard, dense. Sandstone 20%, fine grained, pink and very light gray, tight.
3040	3170	Siltstone 80%, dark gray and gray green, siliceous, micaceous in part. Shale 10%, dark gray and gray green, siliceous. Sandstone 10%, quartzose, fine grained siliceous, tight.
3170	3240	Sandstone 50%, gray to light green; fine and very fine grained; siliceous; some inclusions chloritic mineral; tight. Shale 50%, dark gray and dark grayish green; siliceous
3240	3270	Sandstone 40%, white, fine and medium grained; quartzose, siliceous cemented, tight. Sandstone 10%, light gray green, fine grained, siliceous, tight. Shale 40%, dark gray green, silty, siliceous. Siltstone 10%, dark gray green, siliceous.
	T. D.	

DRILL STEM TEST REPORT

Well Name Husky H. B. et al Willow Lake H-10 Date March 14/70
 Test No. 1 Testing Co. B & D Operator L. Penner
 Test Interval 2265 - 2317 Formation Barren
 Well Depth 2317 Hole Size 8 3/4" Rathole Depth 50'; 2267-2317' Size 6 3/16"
 Type of Tool Dual, bottom hole O.D. Rubber 7 1/2"
 Drill Pipe Size 4 1/2" F.H. Wt./Fr. 16.6 Choke Size 3/4"
 Mud Wt. 10.3 Visc. 34 W.L. 11.8 Salinity 334000 ppm NaCl
 Cushion - Mud Level Drop in Annulus -
 Time: Started in Hole - M. On Bottom - M.
 Pulled Loose - M. Out of Hole - M.
 Pre-Flow 5 Mins. Valve Open 60 Mins.
 Initial Shut-in 30 Mins. Shut-in (Final) 55 Mins.
 Type of Blow Very weak preflow - no blow on test period G.T.S. - Mins.
- To Surface - Mins. Blow Died - Mins.
 Flow Rates: - Mcf. - Mins.; - Mcf. - Mins.; - Mcf. - Mins.;
- Mcf. - Mins; Measured with -
 Size Riser - Length of Flame -
 Recovery: 10' Mud - Fluid up to sampler.
 Samples Taken of Mud Salinity - ppm NaCl.
 Charts: Test O.K. (x); Misrun (-); Charts Normal -
- Initial Hydrostatic 1226 p.s.i. Final H.P. 1223 p.s.i.
- Initial Shut-in 31 p.s.i. Final S.I. 358 p.s.i.
- Initial Flow 31 p.s.i. Final Flow 31 p.s.i.

REMARKS:

SECTION IIIENGINEERING SUMMARYa) REPORT OF DRILL STEM TESTS

See attached Drill Stem Test Reports
and Charts

b) CASING RECORD: Surface Casing;

See SECTION I, Item (q)

c) BIT RECORD

See attached "Bit Record" form.

d) MUD REPORT

See attached "Mud Record" form.

e) HOLE DEVIATION RECORD

See attached "Deviation Record " Chart

Well Name <u>Husky H.B. et al Willow Lake</u>		Test No. <u>1</u>
Well Number <u>H 10</u>		Zone Tested
Company <u>Husky Oil Limited</u>		Interval <u>2265' - 2317'</u>
Comp Rep. <u>Clay Robertson</u>	Tester <u>Pepper</u>	Date <u>March 13, 1970</u>

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DRILL-STEM TEST DATA

Well Name	Hickey H.B. #1 Willow Lake	Test No	1
Well Number	H 10	Zone Tested	
Company	Hickey Oil Limited	Interval	2265' - 2317'
Comp Rep	Clara Robertson	Tester	Penner
		Date	March 13, 1920

Type of Test Dual Bottom (Open) RFS Tool No 101Pre Flow 0 mins ISI 30 mins Flow 60 mins FSI 55 mins

Specify Inside or Outside	INS REC No. <u>2227</u>	OUT REC No. <u>2015</u>	REC No.
	RANGE <u>12</u> HR CLOCK	RANGE <u>12</u> HR CLOCK	RANGE _____ HR CLOCK
DEPTH			
Initial Hydro Mud Press	<u>2222</u>	<u>2292</u>	
Initial Shut-In Press	<u>1226</u>	<u>1237</u>	
Initial Flow Press	<u>31</u>	<u>36</u>	
Final Flow Press	<u>31</u>	<u>36</u>	
Final Shut-In Press	<u>352</u>	<u>366</u>	
Final Hydro Mud Press	<u>1223</u>	<u>1236</u>	

Mud Drop NTT Fluid Loss 11.8 Mud Weight 10.3
Viscosity 31 Temperature °F 70 Next Pay Tested _____
Top Packer Depth 2259' Bottom Packer Depth 2265' Total Depth 2317'
Drill Pipe Size 2 3/4" P.H. Wt. 16.6 Drill Collar I.D. 2 7/8" Ft. Run. _____
Surface Choke Size CLOSED Bottom Choke Size 4" Main Hole Size 9 3/4"
Anchor Size 1 3/4" Rat Hole Size 6 3/16" Feet of Rat Hole 50
Cushion Amount _____ Type _____ Rubber Size 7 3/4"

Fluid Recovery Total Feet NO FLUID ABOVE TEST TOOL
Recovered _____ Feet of FLUID UP TO SAMPLER
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: VERY WEAK PREFLOW (BUBBLES) NO AIR FLOW ON TEST PERIOD

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



TESTING REPORT

	41 LANDING SUB _____	_____
	41 CHAMBER _____	_____
	_____ P.O. SUB _____	1.00
	CO SUB _____	1.00
	SHUT IN TOOL _____	5.00
	R.P.S. No. <u>101</u> _____	3.25
	R.P.S. No. _____	_____
	HYDRAULIC TOOL _____	7.00
	JARS _____	5.00
	RECORDER No. _____	DEPTH _____
	RECORDER No. _____	DEPTH _____
	SAFETY JOINT _____	_____
	BY PASS SUB _____	_____
1. PACKER DEPTH <u>2250</u>	PACKER _____	6.00
2. PACKER DEPTH <u>2264</u>	PACKER _____	5.00
	ANCHOR—SPECIFY _____	1.00
	<u>Perf</u> _____	15.00
	BLANK OFF OR BY PASS SUB _____	_____
	RECORDER No. <u>2227</u> _____	5.00 DEPTH <u>2282</u>
	<u>Perfs</u> _____	5.00
3. PACKER DEPTH _____	PACKER _____	_____
	ANCHOR—SPECIFY _____	_____
4. PACKER DEPTH _____	PACKER _____	_____
	ANCHOR—SPECIFY _____	_____
	RECORDER No. <u>2015</u> _____	5.00 DEPTH <u>2292</u>
	<u>Perfs</u> _____	19.00
TOTAL DEPTH <u>2317</u>	BULLNOSE _____	2.00
	TOTAL TAIL PIPE _____	52.00
	TOTAL TEST TOOL _____	85.25

BEST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



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



DST PRESSURE INCREMENTS

Recorder No. 7777

Depth 2281

Pulse	INITIAL CIP				Time Diff. "	FINAL CIP		
	Time Diff. "	T + 0	$\frac{T + 0}{0}$	PSIG		T + 0	$\frac{T + 0}{0}$	PSIG
1					0			31
2					5			32
3					10			38
4					15			43
5					20			57
6					25			77
7					30			110
8					35			155
9					40			206
10					45			263
11					50			318
12					55			358
13								
14								
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17								
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23								
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**A BJ Laboratory
Report**

**BJ SERVICE DIVISION
BORG-WARNER (CANADA) LIMITED**

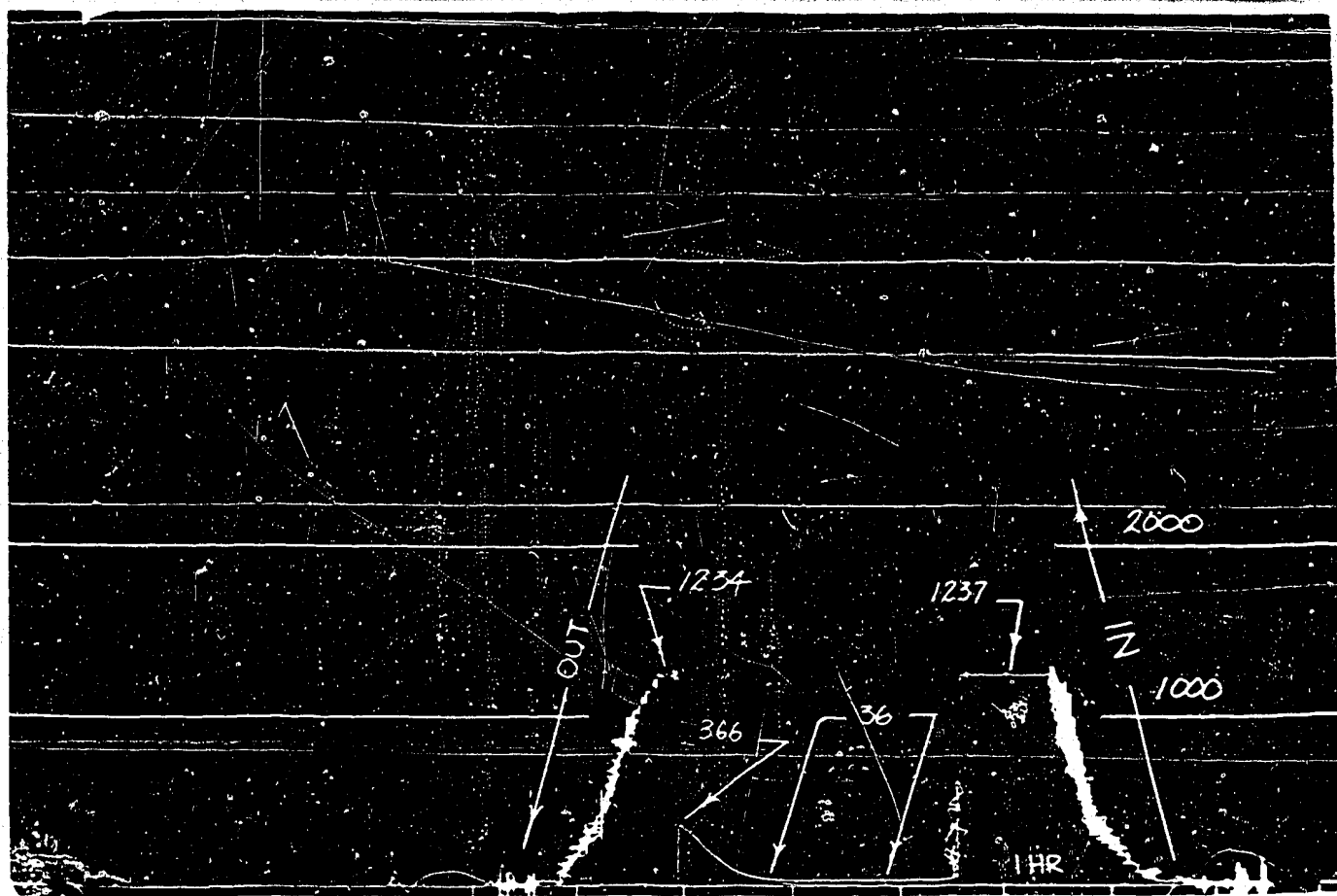
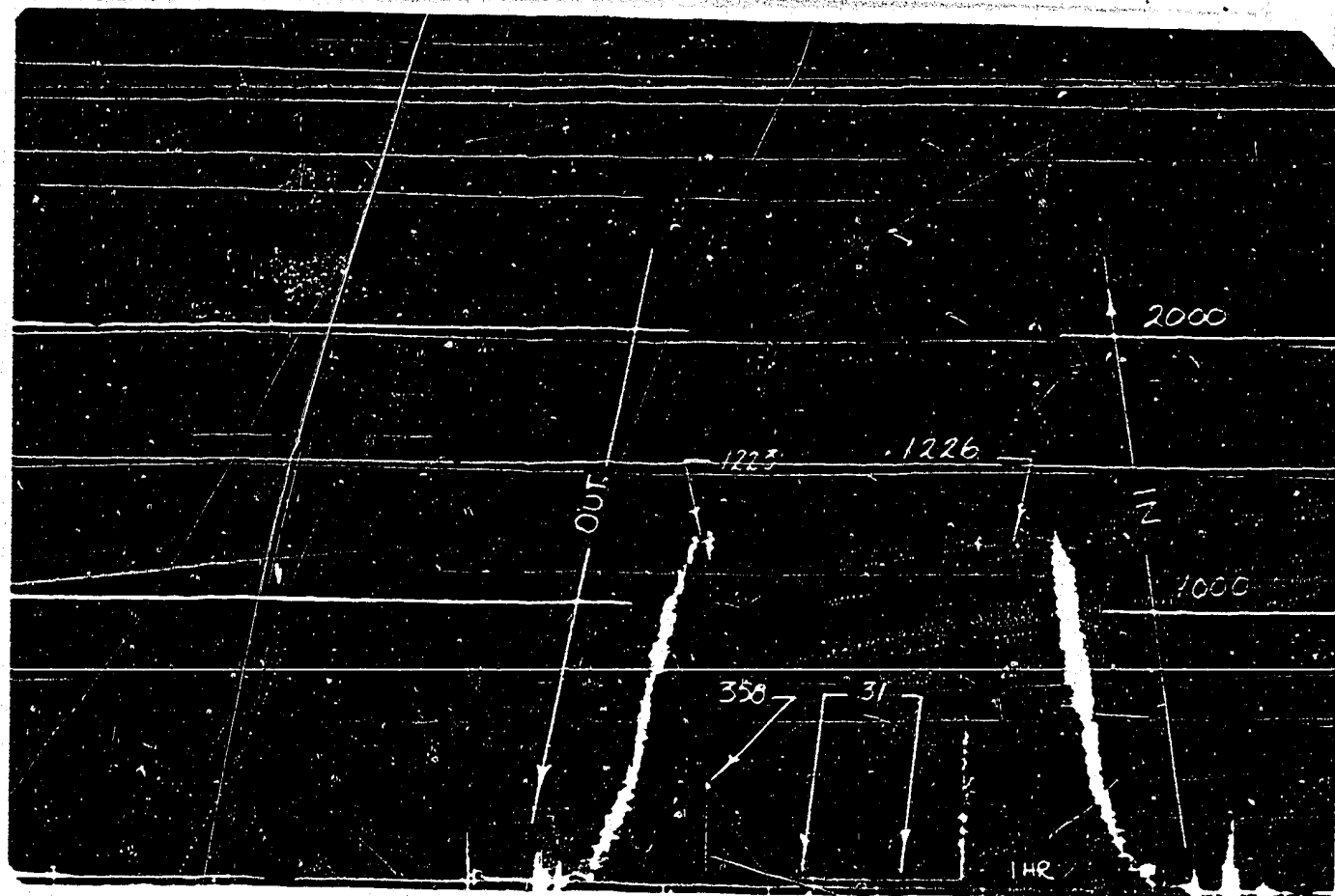
MARCH 24, 1970

SUBJECT: INITIAL SHUT IN RE: DST #1
HUSKY H.B. ET AL WILLOW LAKE

THE ABSENCE OF AN INITIAL SHUT IN CAN BE ATTRIBUTED TO FORMATION DAMAGE WHICH HAS PREVENTED A PRESSURE BUILD UP DURING THE SHUT IN PERIOD.

THIS RESTRICTION WAS REDUCED DURING THE FLOW PERIOD AND THEREFORE A FINAL SHUT IN WAS INDICATED.

BECAUSE OF THE LOW PRESSURES INVOLVED AND NO INDICATIONS OF A MALFUNCTION AT SURFACE WE ARE UNABLE TO MAKE A MORE POSITIVE EVALUATION AT THIS TIME.



DRILL STEM TEST REPORT

Well Name Husky H.B. et al Willow Lake H-10 Date March 23/70

Test No. 2 Testing Co. B & J Operator L. Penner

Test Interval 2200 - 2263 Formation Bonning

Well Depth 3270' Hole Size 8 3/4" Rathole Depth - Size -

Type of Tool Dual straddle w/By Pass O.D. Rubber 7 1/2"

Drill Pipe Size 4 1/2" F.H. Wt./Ft. 16.6 Choke Size -

Mud Wt. 10.3 Visc. 57 W.L. 29.6 Salinity - ppm NaCl

Cushion - Mud Level Drop in Annulus -

Time: Started in Hole - M. On Bottom - M.

Pulled Loose - M. Out of Hole - M.

Pre-Flow 5 Mins. Valve Open 57 Mins.

Initial Shut-in 27 Mins. Shut-in (Final) 55 Mins.

Type of Blow Pre-flow weak - Flow v. weak - dead in 30 mins. G.T.S. - Mins.

- To Surface - Mins. Blow Died - Mins.

Flow Rates: - Mcf. - Mins.; - Mcf. - Mins.; - Mcf. - Mins.;

- Mcf. - Mins; Measured with -

Size Riser - Length of Flame -

Recovery: 5' Drill Mud

Samples Taken of - Salinity - ppm NaCl.

Charts: Test O.K. (x); Misrun (-); Charts Normal -

- Initial Hydrostatic 1212 p.s.i. Final H.P. 1212 p.s.i.

- Initial Shut-in 68 p.s.i. Final S.I. 32 p.s.i.

- Initial Flow 16 p.s.i. Final Flow 16 p.s.i.

REMARKS:

WELL TEST DATA

Well Name	Husky HB at Willow Lake	Test No	2
Well Number	H-10	Zone Tested	Benning
Company	Husky Oil Limited	Interval	2200 - 2262
Comp Rep	Glen Robertson	Tester	Leo Penner Richard J. Penner
		Date	March 23/70

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DRILL-STEM TEST DATA

Well Name <u>Husky HP at Willow Lake</u>		Test No <u>2</u>
Well Number <u>H-10</u>		Zone Tested <u>Running</u>
Company <u>Husky Oil Limited</u>		Interval <u>2200 - 2263</u>
Comp Rep <u>Glen Robertson</u>	Tester <u>Leo Penner</u> <u>Richard Justice</u>	Date <u>March 23/70</u>

Type of Test Dual Straddle By Pass RFS Tool No 101
Prelow _____ mins ISI 27 mins Flow _____ 57 mins FSI 55 mins

Specify Inside or Outside	INS REC No <u>2227</u>	OUT REC No <u>2015</u>	OUT REC No <u>2660</u>
	<u>3600</u> RANGE <u>12</u> HR CLOCK	<u>5750</u> RANGE <u>12</u> HR CLOCK	<u>6100</u> RANGE <u>21</u> HR CLOCK
DEPTH	<u>2181</u>	<u>2250</u>	<u>2255</u>
Initial Hydro Mud Press	<u>1212</u>	<u>1233</u>	<u>1236</u>
Initial Shut-In Press	<u>69</u>	<u>103</u>	
Initial Flow Press	<u>16</u>	<u>57</u>	
Final Flow Press	<u>16</u>	<u>57</u>	
Final Shut-In Press	<u>32</u>	<u>71</u>	
Final Hydro Mud Press	<u>1212</u>	<u>1233</u>	

Mud Drop NIL Fluid Loss 29.6 Mud Weight 10.3
Viscosity 57 Temperature °F 61 Net Pay Tested _____
Top Packer Depth 2200' Bottom Packer Depth 2263' Total Depth 3270'
Drill Pipe Size 2 1/4" FH Wt. 16.6 Drill Collar I.D. 2 7/8" Ft. Run 632
Surface Choke Size CLOSED Bottom Choke Size 3" Main Hole Size 3 1/2"
Anchor Size 4 1/2" OD Rat Hole Size _____ Feet of Rat Hole _____
Cushion Amount _____ Type _____ Rubber Size 7 1/4"

Fluid Recovery Total Feet 5'
Recovered 5' Feet of Drilling 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: Prelow weak Final flow very weak Decreasing dead in 30 min.



TESTING REPORT

43 LANDING SET _____
43 CHAMBER _____
43 TOOL OR P.O. SUB _____
C.O. SUB _____ 1.00
SHUT IN TOOL _____ 5.50
R.F.S. No. _____ 101 _____ 3.25
R.F.S. No. _____
HYDRAULIC TOOL _____ 7.00
JARS _____ 5.50
RECORDER No. _____ 2227 _____ 5.00 DEPTH 2181
RECORDER No. _____ DEPTH _____
SAFETY JOINT _____ 3.75
BY PASS SUB _____ 1.00

1. PACKER DEPTH 2194

PACKER _____ 6.00

PACKER DEPTH 2200

PACKER _____ 5.00 TOTAL TOOL ABOVE INTERVAL 41.00

ANCHOR SPECIFY _____ 1.00

Perfs _____ 49.00

BLANK OFF OR BY PASS SUB _____

RECORDER No. _____ 2015 _____ 5.00 DEPTH 2250

Bottom Recorder _____ 5.00 DEPTH 2255

3. PACKER DEPTH 2263

PACKER _____ 3.00 TOTAL INTERVAL 63.00
3.00

4. PACKER DEPTH 2269

PACKER _____ 6.00

ANCHOR SPECIFY Perfs _____ 1.00

C.O. Sub _____ 1.00

RECORDER No. Dr. Pipe _____ 993.41 DEPTH _____

C.O. Sub _____ 1.00

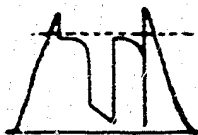
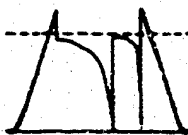
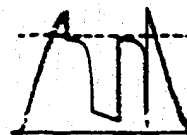
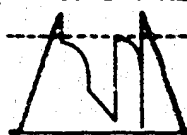
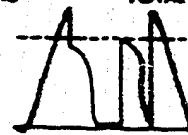
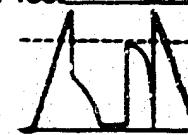
TOTAL DEPTH 3270

BULLMOSE _____ 2.00

TOTAL TAIL PIPE 1007.11

BET CHARTS FOR COMPARATIVE VISUAL ANALYSIS

TOTAL TEST TOOL 1111.43

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

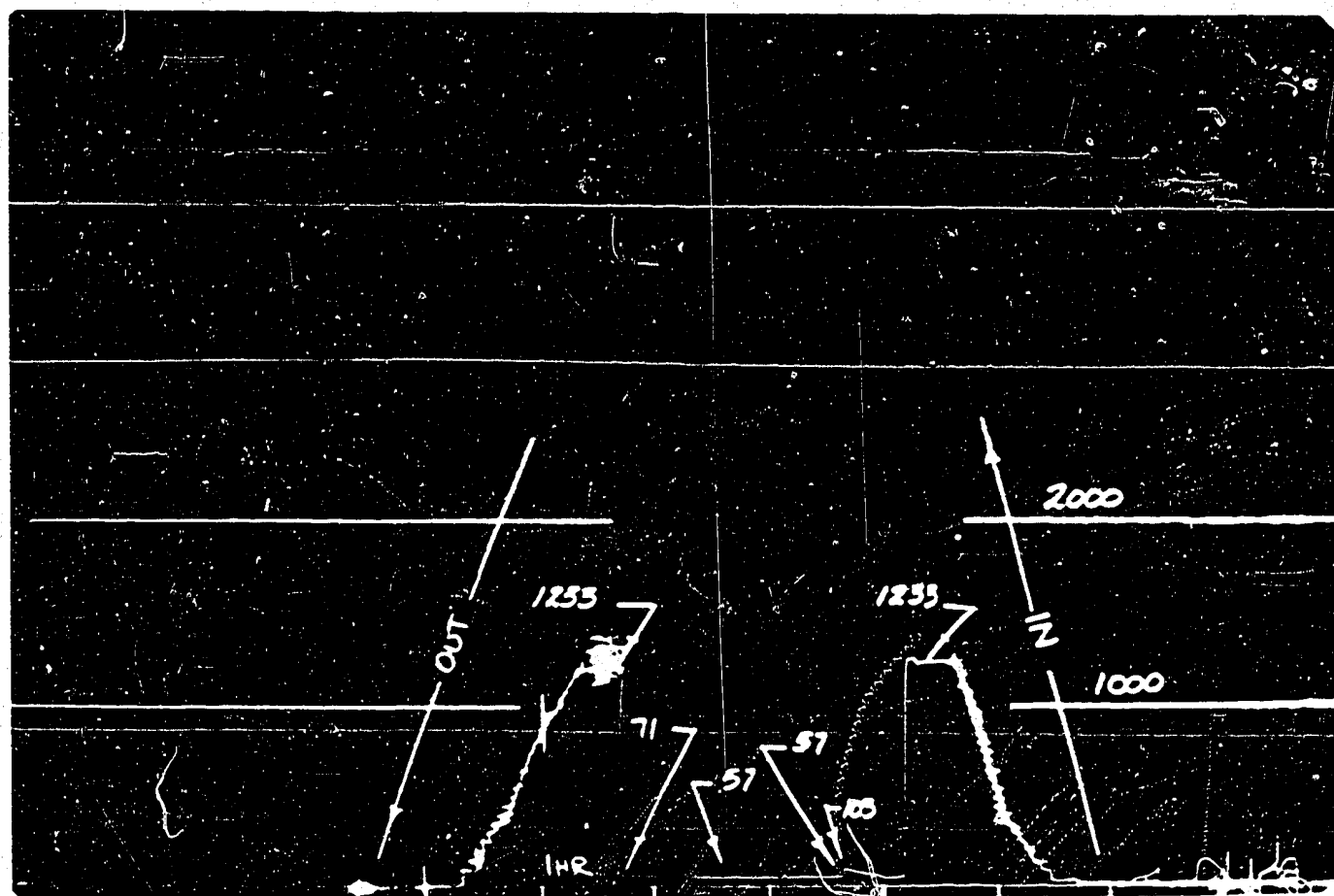
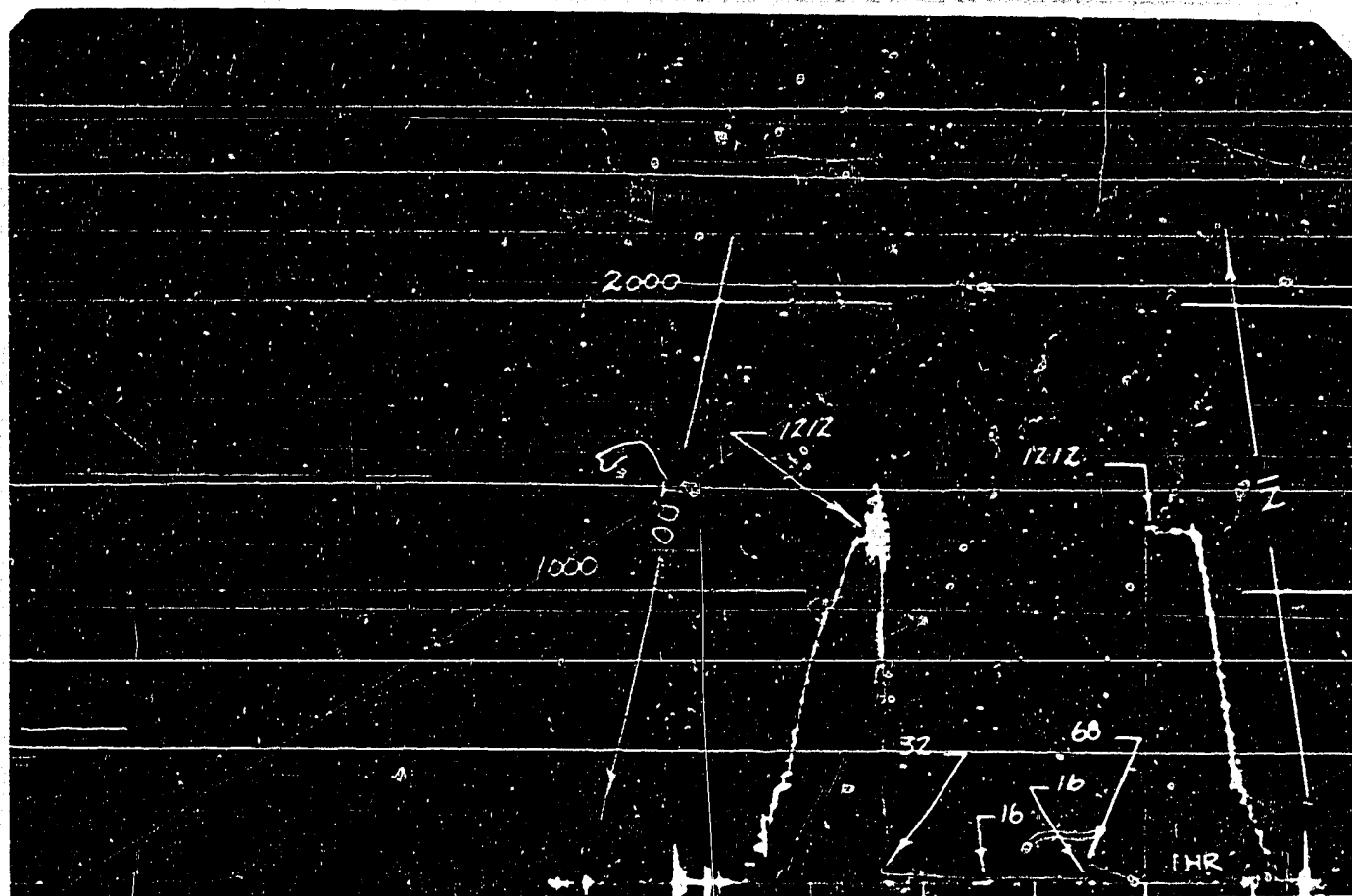


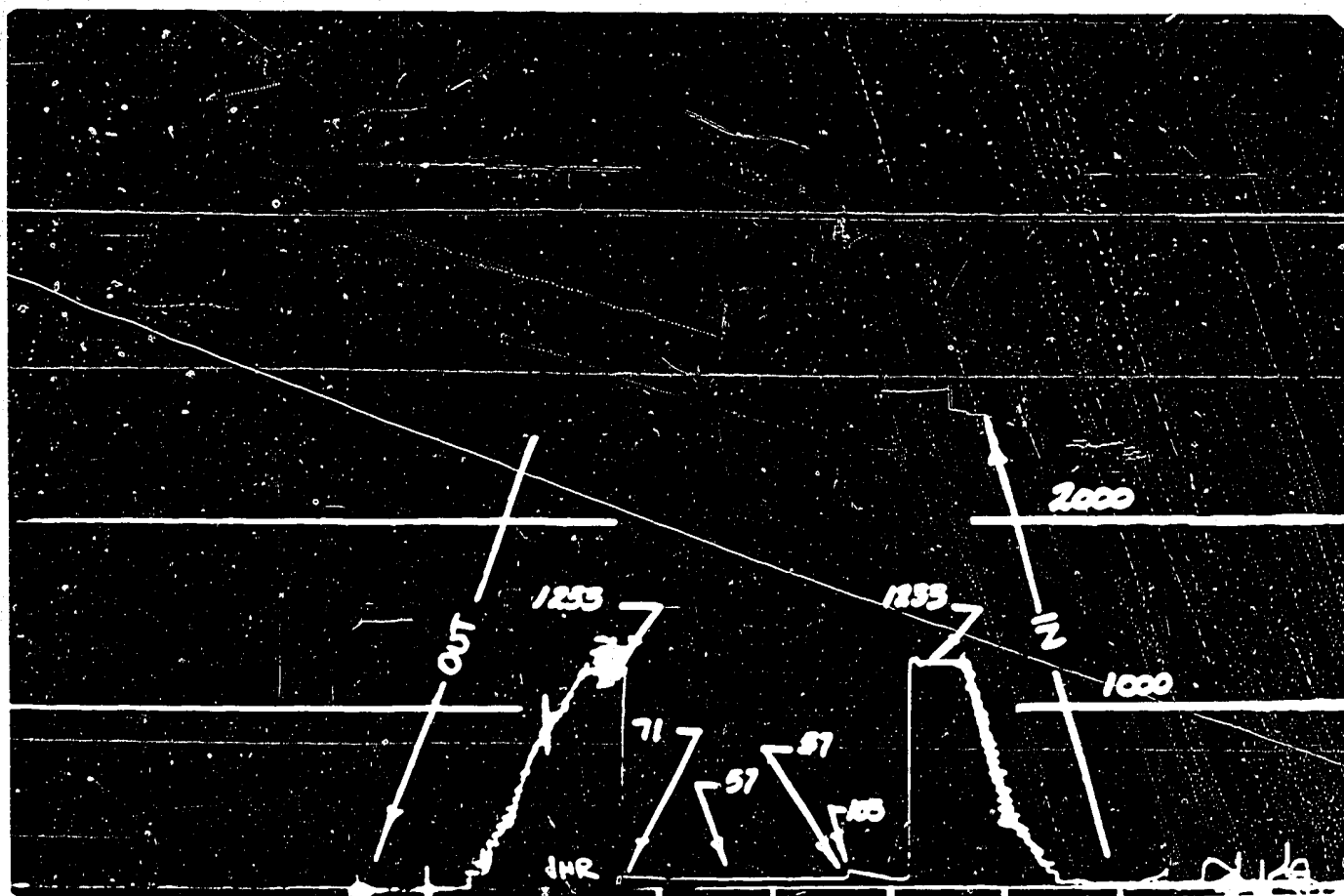
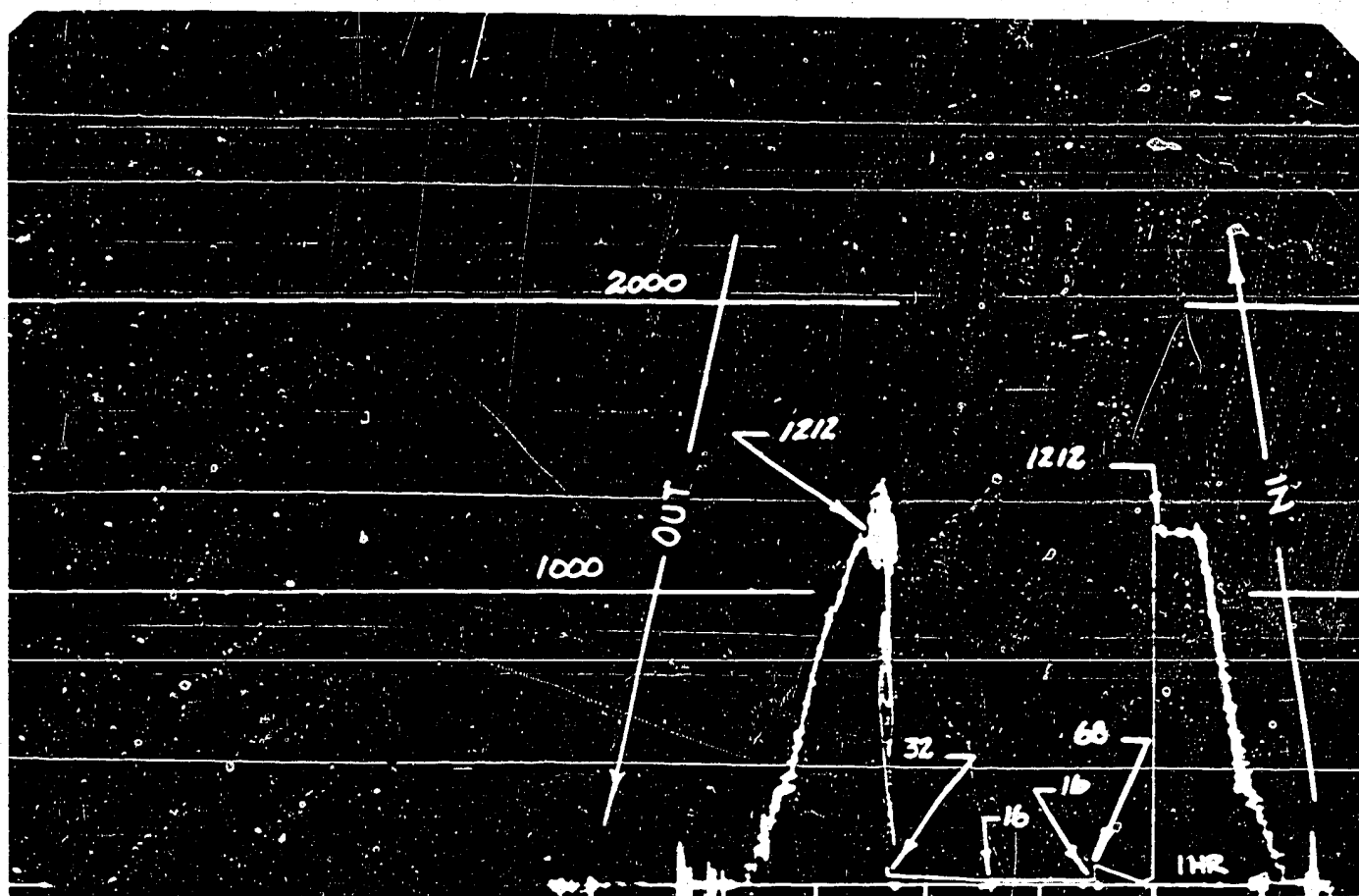
DST PRESSURE INCREMENTS

Recorder No. 2227

Depth 2141

Points	INITIAL CIP				FINAL CIP			
	Time Defl.	T + 0	$\frac{T + 0}{0}$	PSIG	Time Defl.	T + 0	$\frac{T + 0}{0}$	PSIG
1	0			11	0			16
2	5			16	5			16
3	10			20	10			18
4	15			41	15			20
5	20			52	20			22
6	25			66	25			23
7	27			60	30			25
8					35			27
9					40			27
10					45			29
11					50			31
12					55			32
13								
14								
15								
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17								
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19								
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22								
23								
24								





DRILL STEM TEST REPORT

Well Name Husky H.B. et al Willow Lake H-10 Date March 25/70

Test No 3 Testing Co. B.L.I. Operator L. Penner

Test Interval 727' - 950' Formation Hume - Bear Rock

Well Depth 3270' Hole Size 8 3/4" Rathole Depth - Size -

Type of Tool Single-Dual Straddle O.D. Rubber 7 1/2"

Drill Pipe Size 4 1/2" F.H. Wt./Fr. 16.6 Choke Size -

Mud Wt. 10.3 Visc. 42 W.L. 29.6 Salinity - ppm NaCl

Cushion - Mud Level Drop in Annulus 3' on Tool Open

Time: Started in Hole - M. On Bottom - M.

Pulled Loose - M. Out of Hole - M.

Pre-Flow 5 Mins. Valve Open 57 Mins.

Initial Shut-in 30 Mins. Shut-in (Final) 55 Mins.

Type of Blow Pre-flow weak-Final flow open strong, decrease to weak G.T.S. - Mins.
in 3 min. Remain steady to end of test.

- To Surface - Mins. Blow Died - Mins.

Flow Rates: - Mcf - Mins.; - Mcf - Mins.; - Mcf - Mins.;
- Mcf - Mins; Measured with -

Size Riser - Length of Flame -

Recovery: 50' Drilling Mud

Samples Taken of - Salinity - ppm NaCl.

Charts: Test O.K. (x); Misrun (-); Charts Normal -

- Initial Hydrostatic 414 p.s.i. Final H.P. 414 p.s.i.

- Initial Shut-in Not recorded p.s.i. Final S.I. 226 p.s.i.

- Initial Flow 66 p.s.i. Final Flow 72 p.s.i.

REMARKS:

Well Name	Husky HP at Willow Lake	Test No	3
Well Number	H-10	Zone Tested	Hume
Company	Husky Oil Limited	Interval	727' - 950'
Comp Rep	Alan Robertson	Tester	R. Justice I. Penner
		Date	March 25/70

BJ SERVICE DIVI
BORG-WARNER (CANADA)



DRILL-STEM TEST DATA

Well Name <u>Husky H-10 at Willow Lake</u>		Test No <u>3</u>
Well Number <u>H-10</u>		Zone Tested <u>Hume</u>
Company <u>Husky Oil Limited</u>		Interval <u>727' - 950'</u>
Comp Rep <u>Allen Robertson</u>	Tester <u>R. JUSTICH</u> <u>J. Panner</u>	Date <u>March 25/70</u>

Type of Test Single Dual Straddle Blank off RFS Tool No 101Prelow 5 mins ISI 30 mins Flow 57 mins FSI 55 mins

Specify Inside or Outside	IN REC No <u>2227</u>	OUT REC No <u>2015</u>	OUT REC No <u>2660</u>
	<u>3600</u> RANGE <u>12</u> HR CLOCK	<u>5750</u> RANGE <u>12</u> HR CLOCK	<u>6400</u> RANGE <u>24</u> HR CLOCK
DEPTH	<u>720</u>	<u>712</u>	<u>959</u>
Initial Hydro Mud Press		<u>131</u>	<u>539</u>
Initial Shut-In Press			
Initial Flow Press		<u>66</u>	
Final Flow Press		<u>72</u>	
Final Shut-In Press		<u>226</u>	
Final Hydro Mud Press		<u>131</u>	

Mud Drop 3' Fluid Loss 29.6 Mud Weight 10.3
Viscosity 42 Temperature °F 99 Net Pay Tested
Top Packer Depth 727' Bottom Packer Depth 950' Total Depth 3163'
Drill Pipe Size 4 1/2" FH Wt. 16.6 Drill Collar I.D. 2 7/8" Ft. Run 628
Surface Choke Size CLOSED Bottom Choke Size 4" Main Hole Size 92"
Anchor Size 1 1/2" Rot Hole Size _____ Feet of Rot Hole _____
Cushion Amount _____ Type _____ Rubber Size 7 1/2"

Fluid Recovery Total Feet 50' Drilling Mud
Recovered _____ Feet of _____
Recovered _____ Feet of _____
Recovered _____ Feet of This test run w/single packer ion; dual bottom and fourth
Recovered _____ Feet of packer was stripped and used for bullnose on cement
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 weak. Final flow opened strong, mud dropped 3'. Filled hole, mud
holding. Blow decrease to weak in 3 min. Blow weak, remaining same through
out test.



TESTING REPORT



AS LANDING SUB _____
AS CHAMBER _____
AS TOOL OR P.O. SUB _____
CO SUB _____ 1.00
SPUT IN TOOL _____ 5.50
R.P.S. No. 101 _____ 3.25
R.P.S. No. _____
HYDRAULIC TOOL _____ 7.00

JARS _____ ROVER _____ 5.50
RECORDER No. 2227 _____ 5.00 DEPTH 720
RECORDER No. _____ DEPTH _____
SAFETY JOINT _____ 1.75
BY PASS SUB _____

1. PACKER DEPTH _____

PACKER _____

2. PACKER DEPTH 727 _____

PACKER _____ 5.00 TOTAL TOOL ABOVE INTERVAL 31.00

ANCHOR—SPECIFY _____ 1.00
Perfs _____ 11.00
Rec. # 2015 _____ 5.00 Depth 742

BLANK OFF OR BY PASS SUB COS _____ 1.00
RECORDER No. Dr. Pipe _____ 186.71 DEPTH _____

C.O. Sub _____ 2.53
Perfs _____ 10.00

3. PACKER DEPTH 950 _____

PACKER _____ 3.00 TOTAL INTERVAL 222.21
3.00

4. PACKER DEPTH 956 _____

PACKER _____ 6.00

ANCHOR—SPECIFY Rec # 2660 _____ 5.00 Depth 959

Perf _____ 11.00

C.O. _____ 1.00

RECORDER No. Dr. Pipe _____ 2177.23 DEPTH _____

C.O. _____ 1.00

Perfs _____ 5.00

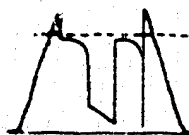
TOTAL DEPTH 3163 _____

BULLNOSE Bob Tail _____ 4.35

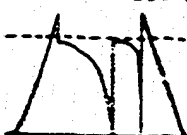
TOTAL TAIL PIPE 2213.59

TOTAL TEST TOOL 2470.92

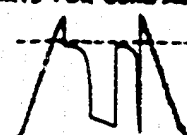
DST CHARTS FOR COMPARATIVE VISUAL ANALYSIS



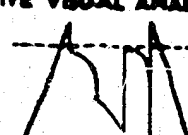
HIGH PERMEABILITY
STRONG DAMAGE EFFECT



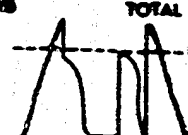
HIGH PERMEABILITY
NO DAMAGE EFFECT



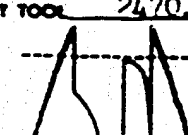
MEDIUM PERMEABILITY
STRONG DAMAGE EFFECT



MEDIUM PERMEABILITY
NO DAMAGE EFFECT



LOW PERMEABILITY
STRONG DAMAGE EFFECT



LOW PERMEABILITY
NO DAMAGE EFFECT

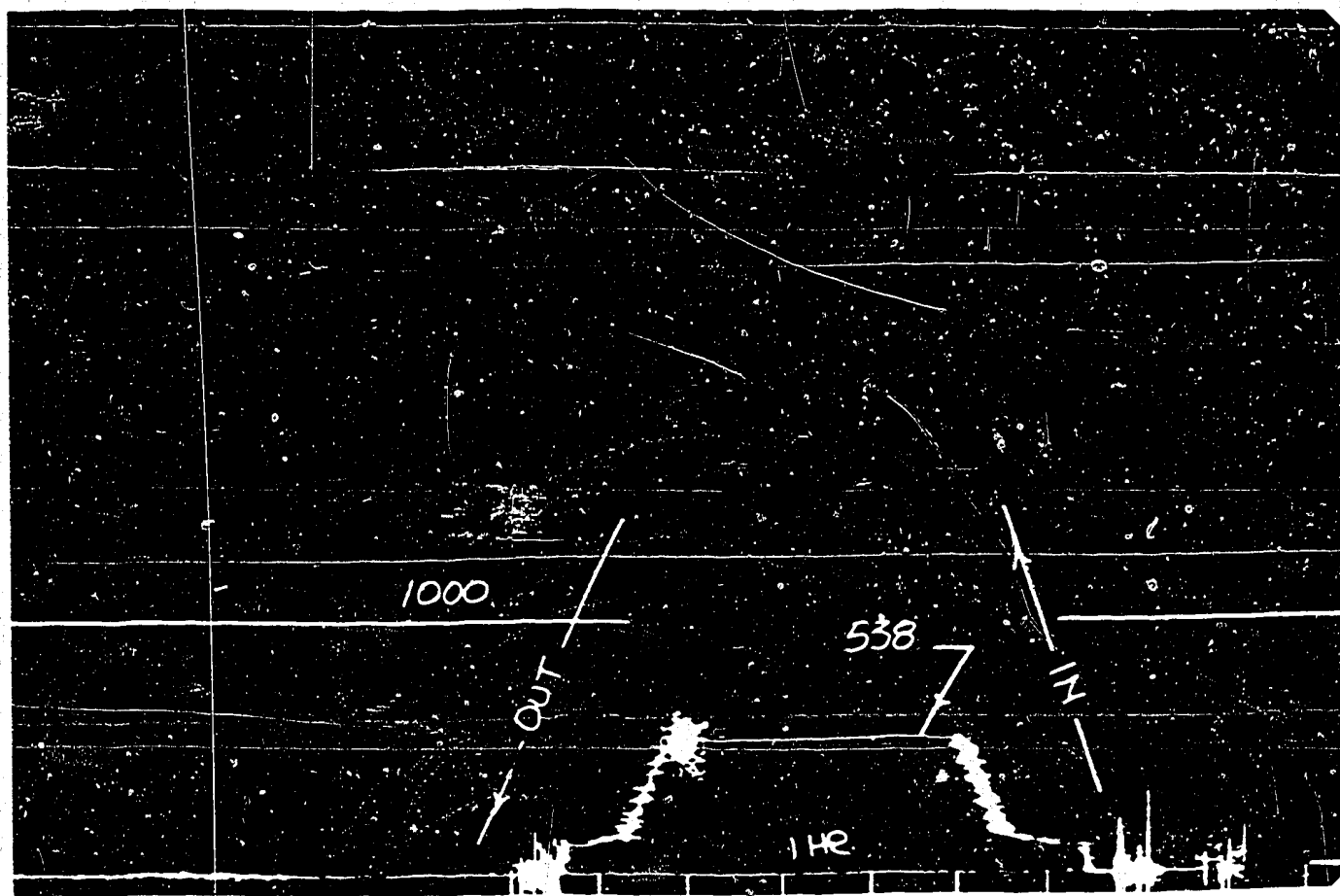
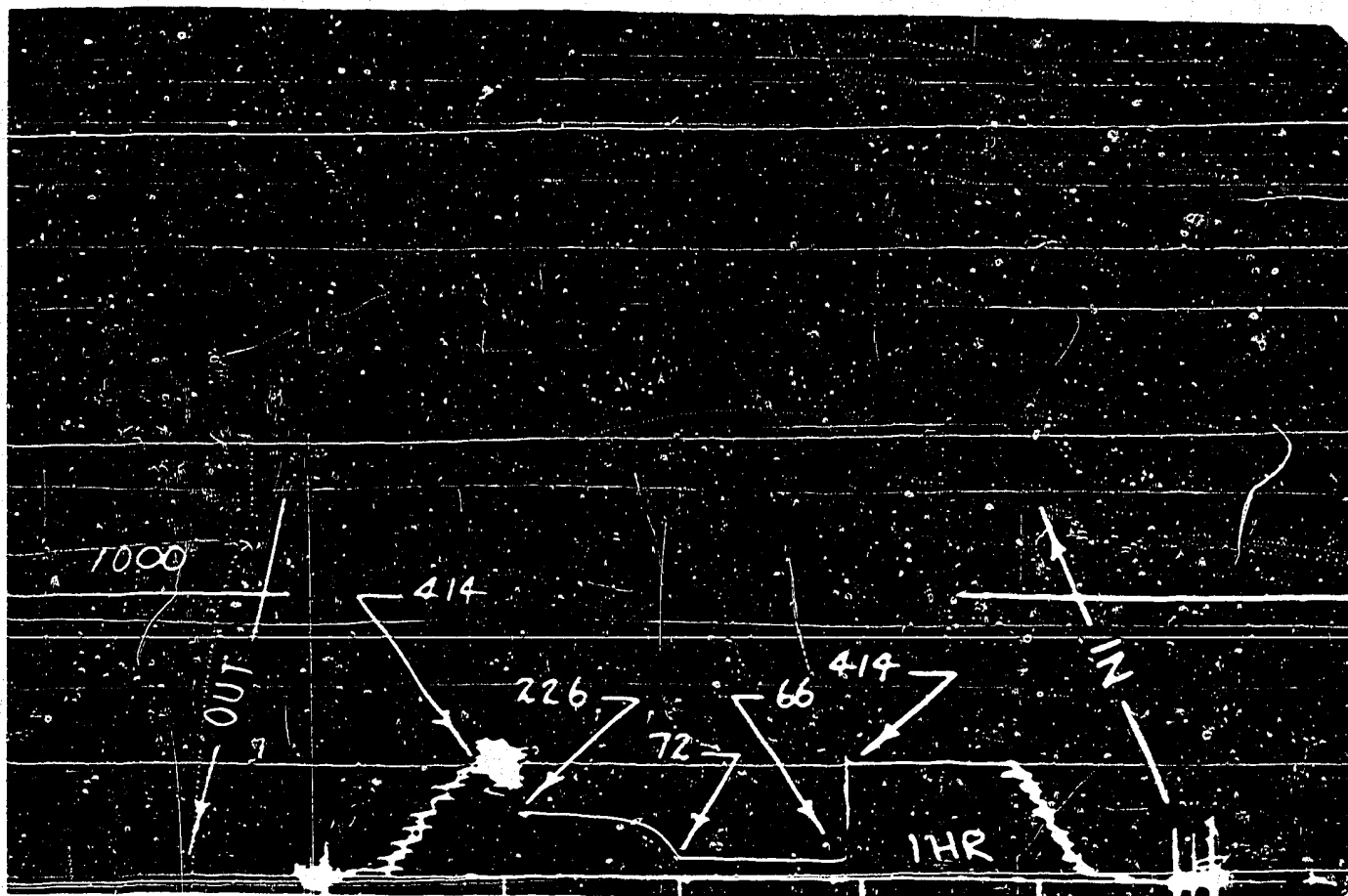


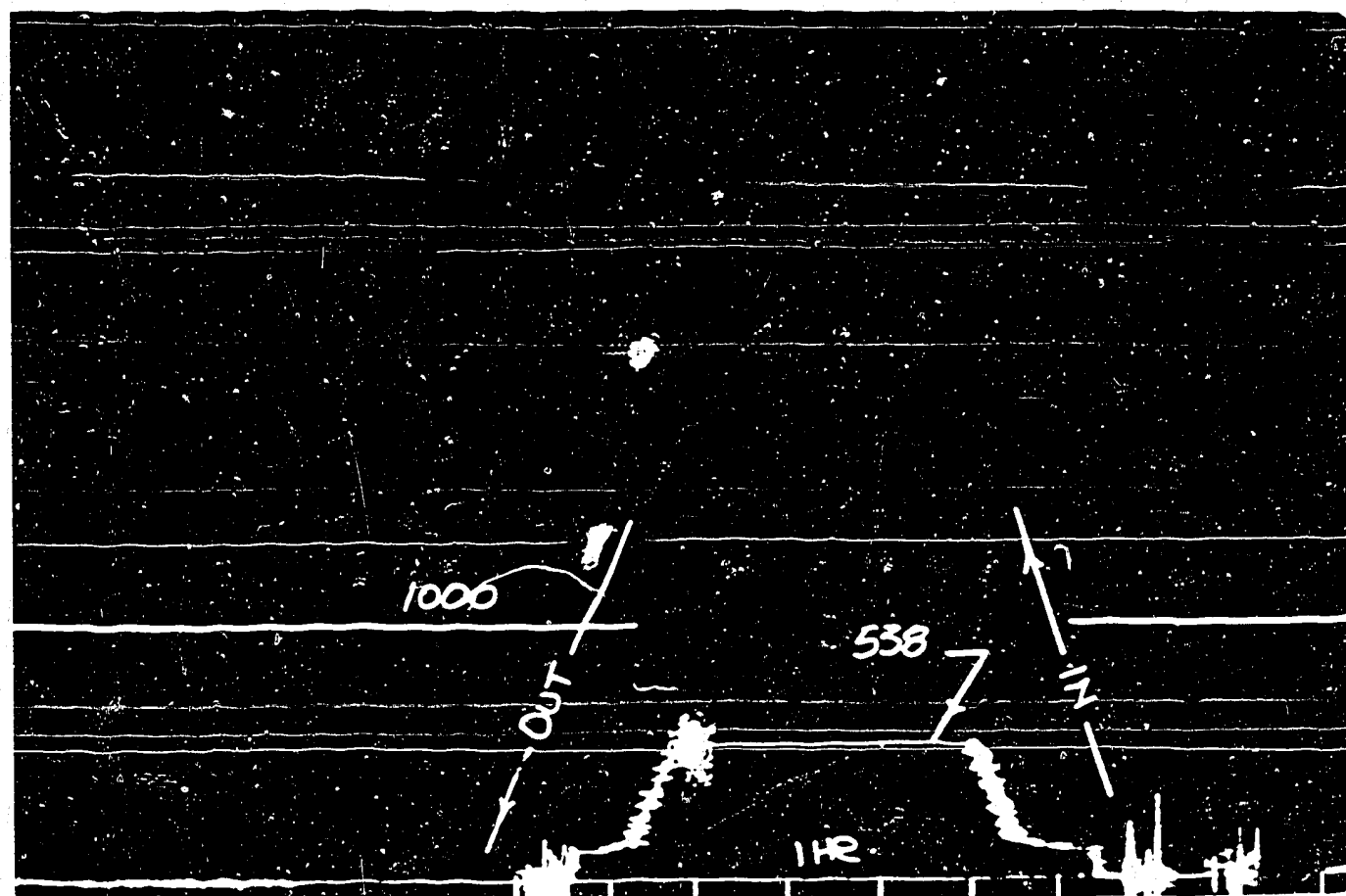
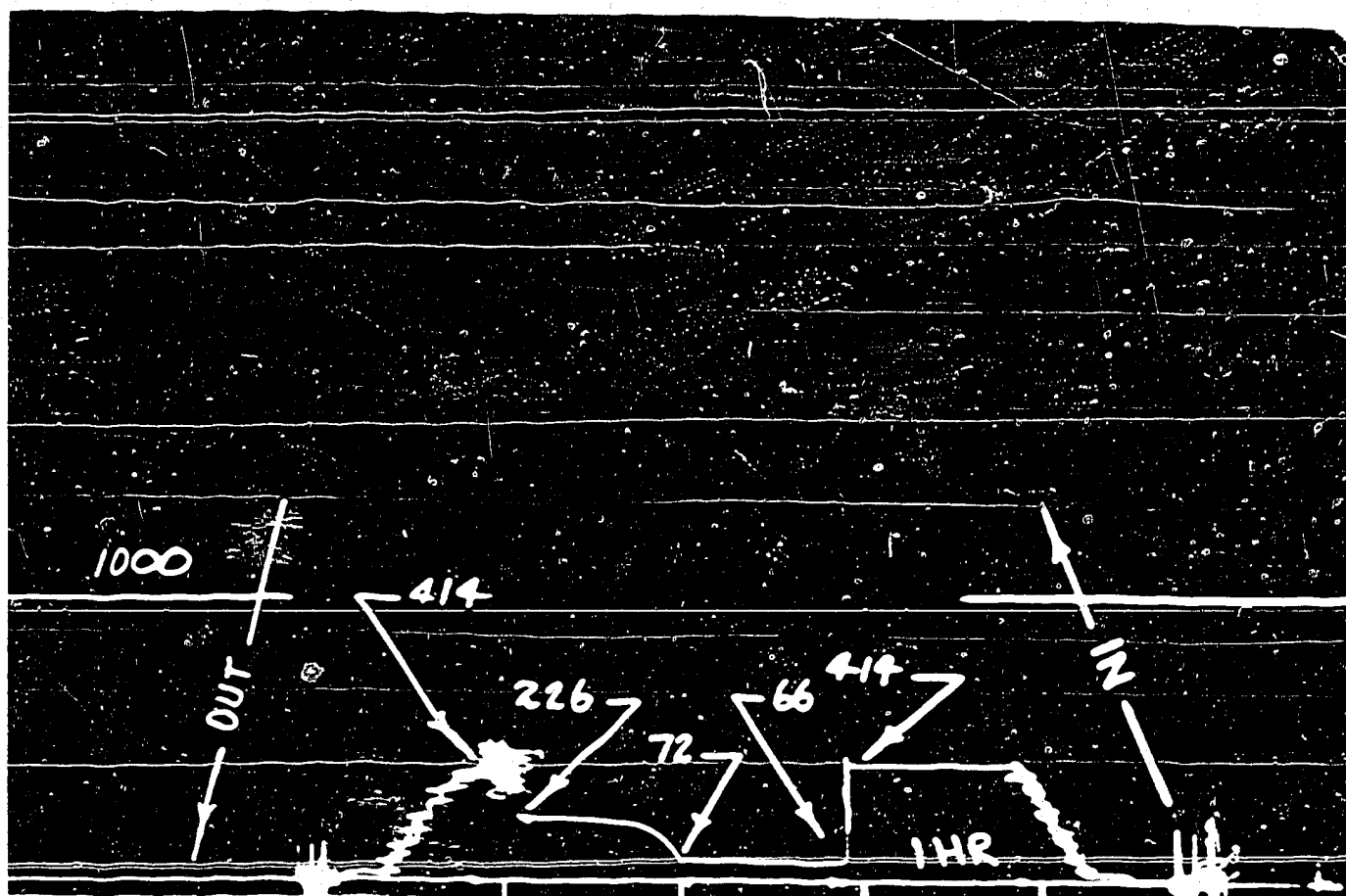
DST PRESSURE INCREMENTS

Recorder No. 2011

Depth 760

Points	INITIAL CIP				FINAL CIP			
	Time Defl. "	T + 0	$\frac{T + 0}{0}$	PSIG	Time Defl. "	T + 0	$\frac{T + 0}{0}$	PSIG
1					0			22
2					5			174
3					10			174
4					15			104
5					20			205
6					25			214
7					30			217
8					35			220
9					40			222
10					45			224
11					50			224
12					55			224
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								





MUD RECORDCompany Husky Oil Ltd.Well Name Husky HB et al Willow Lake H.10

DEPTH		AV. WT. Lbs./U.S. Gal.	AV. VISC.	AV. WTR. L.	AV. P.H.	MUD ADDITIVES
From	To					
0	141'	9.2	80	-	-	Gel - 17,400#
141'	420'	10.5	85	-	-	Caustic - 900#
420'	528'	8.7	35	10.0	9.0	CMC - 1,350#
528'	654'	8.7	34	10.2	8.0	*S. Dust - 1,200#
654'	886'	8.8	35	9.6	10.5	Mil Starch - 6,100#
1152'	1410'	9.6	31	13.6	8.0	Dowicide "B"- 100#
1410'	1720'	10.1	34	7.8	10.5	Chrom Alum - 300#
1720'	1890'	10.0	34	9.6	6.4	Salt Gel - 14,400#
1890'	2030'	10.1	36	7.0	6.4	Bi Carb - 200#
2030'	2195'	10.3	37	9.0	6.4	Kelzan - 700#
2195'	2290'	10.3	36	11.2	6.4	*Sawdust for floor use only.
2290'	2317'	10.3	34	11.8	6.4	No lost circulation encountered in well.
2317'	2318'	Beam and Drill 10.1 34	34	21.0	11.0	
2318'	2359'	10.1	36	7.0	9.5	
2359'	2371'	Core and drill 10.1 34	34	6.2	8.0	
2371'	2518'	9.9	33	9.0	8.5	
2518'	2674'	10.0	35	12.2	6.8	
2674'	2825'	10.0	35	7.8	8.5	
2825'	3004'	10.2	35	5.4	6.8	
3004'	3200'	10.2	37	5.4	6.8	
3200'	3270'	10.3	57	29.6	7.2	
3270'	3270'	10.3	57	21.0	7.2	
T.D.						

OILMEN'S WELLSITE
SERVICES LTD.

Operating Engineer _____

Section III (cont.)

HOLE DEVIATION RECORD

Husky HR. et al Willow Lake H-10

Depth	Dev.	Dia.	Depth	Dev.	Dia.
96'	1 1/2°	13 3/4"	1290'	1/2°	8 3/4"
130'	1°	8 3/4"	1410'	3/4°	8 3/4"
142'	1 1/4°	13 3/4"	1504'	3/4°	8 3/4"
158'	1/2°	8 3/4"	1598'	1/2°	8 3/4"
160'	1/2°	13 3/4"	1671'	1 3/4°	8 3/4"
189'	1 1/4°	8 3/4"	1693'	1 1/4°	8 3/4"
205'	1 1/4°	13 3/4"	1717'	1 1/4°	8 3/4"
229'	7/8°	8 3/4"	1781'	1 3/4°	8 3/4"
235'	7/8°	13 3/4"	1810'	1 1/2°	8 3/4"
257'	1°	8 3/4"	1873'	1 1/2°	8 3/4"
257'	1 1/2°	13 3/4"	1888'	1°	8 3/4"
287'	1 1/2°	8 3/4"	1907'	7/8°	8 3/4"
287'	3/4°	13 3/4"	2030'	1/4°	8 3/4"
308'	0°	8 3/4"	2122'	3/4°	8 3/4"
307'	1°	13 3/4"	2216'	3/4°	8 3/4"
348'	1 1/2°	8 3/4"	2266'	3/4°	8 3/4"
380'	3/4°	8 3/4"	2318'	1/4°	8 3/4"
411'	1 1/4°	8 3/4"	2528'	3/4°	8 3/4"
430'	1 1/2°	8 3/4"	2622'	1/2°	8 3/4"
469'	3/4°	8 3/4"	2717'	3/4°	8 3/4"
520'	1 1/2°	8 3/4"	2810'	3/4°	8 3/4"
592'	1°	8 3/4"	2904'	7/8°	8 3/4"
654'	1°	8 3/4"	2997'	1°	8 3/4"
739'	1°	8 3/4"	3184'	2 3/4°	8 3/4"
770'	1°	8 3/4"	3184'	2 1/4°	8 3/4" To verify previous survey
895'	7/8°	8 3/4"			
1113'	1 1/8°	8 3/4"	3270'	2 1/4°	8 3/4"

SECTION III (continued)f) ABANDONMENT PLUGS

<u>Number and Formation</u>	<u>Interval</u>	<u>Sacks</u>	<u>Remarks</u>
1 - Bottom	3255' - 3155'	50+2% CaCl_2	Fish in hole - drilled off before setting plug March 24, 1970.
2 - Ronning	2350' - 2250'	Felt @ 3153'. Polished off to 3165'. 110+2% CaCl_2	Tagged @ 2154' March 26, 1970.
3 - Ft. Simpson into Surface Casing	372' - 272'	90	Plug fell, no tag.
3 - Same	372' - 272'	95+3% CaCl_2	Pump cement to surface - tagged @ 165' March 26, 1970.
4 - Surface		5	Added monument March 27, 1970.

g) LOST CIRCULATION ZONES

None

h) BLOWOUTS

None

SECTION IV - LOGS

<u>Type</u>	<u>Date Run</u>	<u>Interval</u>
Dual Induction - Laterolog	March 22, 1970	322'-3261'
Borehole Compensated Sonic-Gamma-Cal.	March 22, 1970	322'-3268'
Compensated Formation Density	March 22, 1970	386'-3268'
Sidewall Neutron Porosity	March 22, 1970	322'-3266'
Continuous Dipmeter	March 22, 1970	350'-3265'
Directional Log	March 22, 1970	322'-3270'

LOGS IN BACK POCKET

SECTION V - ANALYSIS

- a) CORE
Core #2 - see attached forms
- b) WATER
DST #1 - see attached forms
- c) GAS
None
- d) OIL
None

SECTION VI - COMPLETION RECORD

- a) TUBING RECORD - not needed
- b) PERFORATION RECORD - not needed
- c) CEMENTATION RECORD
Plug Intervals - see Section III, Item (f)
- d) ACIDIZATION AND FRACTURING RECORD - not needed
- e) BACK PRESSURE AND PRODUCTION TESTS - not needed

CORE LABORATORIES - CANADA, LTD.
CALGARY ALBERTA

COMPANY HUSKY OIL LTD.
WELL HUSKY HB ET AL WILLOW LAKE H-13
FIELD WILDCAT, NORTHWEST TERRITORIES
LOCATION 62° 49' 16.00" N. LAT
121° 45' 01.00" W. LONG

FORMATION
DRILLING FLUID
ELEVATION
ANALYSIS

WATER BASE MUD

FULL DIAMETER & RESIDUAL SATURATIONS.

REMARKS

ALL SAMPLES SANDBLASTED PRIOR TO KH ANALYSIS.

PAGE

FILE

DATE REPORT

ANALYSIS

1 of 2

CNP-4-5051

MARCH 24, 1970

KH CC MR

ANALYSIS TO: ☐ PERMEABILITY ☐ POROSITY ☐ DENSITY ☐ GRAIN ☐ OIL ☐ WATER
 ANALYSIS TO: ☐ PERMEABILITY ☐ POROSITY ☐ DENSITY ☐ GRAIN ☐ OIL ☐ WATER
 ANALYSIS TO: ☐ PERMEABILITY ☐ POROSITY ☐ DENSITY ☐ GRAIN ☐ OIL ☐ WATER

SAMPLE NUMBER	INTERVAL REPRESENTED, FEET		PERMEABILITY TO AIR, MILLIDARCS		PERMEABILITY FEET	POROSITY PER CENT	POROSITY FEET	DENSITY, GR./CC.			VISUAL CHARACTERIZATION	
	DEPTH	THICK	K MAX	K90				BULK	GRAIN	OIL	WATER	CHARACTERIZATION

CORED INTERVAL 2267' - 2317'

CORE NO. 2 2267' - 2317' (REC. 50', (11 BOXES))

-	2267.0-72.4	5.4	-	-	-	-	-	-	-	-	-	DENSE
1	2272.4-74.2	1.8	0.02	-0.01	0.04	0.6	1.08	2.84	2.86	-	-	I
2	2274.2-75.8	1.6	1.03	0.41	1.65	2.2	3.52	2.79	2.85	-	-	I STY F
-	2275.8-89.5	13.7	-	-	-	-	-	-	-	-	-	DENSE
3	2289.5-90.6	1.1	0.07	0.05	0.08	2.0	2.20	2.81	2.86	0.0	42.8	PPV
-	2290.6-96.6	6.0	-	-	-	-	-	-	-	-	-	DENSE
4	2296.6-97.3	0.7	0.46	0.27	0.32	2.2	1.54	2.80	2.87	24.4	32.6	PPV F
-	2297.3-02.2	4.9	-	-	-	-	-	-	-	-	-	DENSE
5	2302.2-03.3	1.1	0.02	0.02	0.02	3.4	3.74	2.75	2.85	Trace	58.0	SV GYPSUM
-	2303.3-04.4	1.1	-	-	-	-	-	-	-	-	-	DENSE
6	2304.4-05.3	0.9	0.28	0.07	0.25	4.9	4.41	2.70	2.84	12.5	15.7	I PPV F GYPSUM
7	2305.3-06.1	0.8	0.65	0.44	0.52	5.2	4.16	2.70	2.84	17.0	17.0	I PPV F GYPSUM
8	2306.1-07.0	0.9	0.48	0.26	0.43	6.1	5.49	2.66	2.83	10.1	27.1	I PPV F
9	2307.0-08.0	1.0	0.05	0.05	0.05	2.2	2.20	2.77	2.83	0.0	54.1	SV
10	2308.0-09.0	1.0	0.09	0.06	0.09	2.1	2.10	2.76	2.81	0.0	43.7	PPV F
11	2309.0-09.7	0.7	0.02	0.02	0.01	1.1	0.77	2.79	2.82	0.0	58.7	PPV
12	2309.7-10.5	0.8	0.09	0.06	0.07	3.9	3.12	2.71	2.82	0.0	67.6	I PPV
-	2310.5-11.2	0.7	-	-	-	-	-	-	-	-	-	DENSE
13	2311.2-12.2	1.0	0.63	0.46	0.63	6.7	6.70	2.64	2.83	16.8	3.7	I PPV F
14	2312.2-13.1	0.9	0.28	0.24	0.25	3.8	3.42	2.73	2.84	22.2	22.2	I PPV STY F
15	2313.1-13.6	0.5	0.11	0.11	0.06	1.2	0.60	2.82	2.85	0.0	45.0	PPV
16	2313.6-14.5	0.9	0.09	0.06	0.08	5.1	4.59	2.71	2.85	0.0	24.3	I PPV
-	2314.5-17.0	2.5	-	-	-	-	-	-	-	-	-	DENSE

TEST #1 WATER; INTERVAL 2265' - 2317'
 RESISTIVITY - 0.044 @ 69°F.
 CL - 141,392 mg/l

CORE LABORATORIES - CANADA, LTD.

Petroleum Reservoir Engineering

PAGE: 2 of 2
FILE: CNP-4-5051

HUSKY HB ET AL WILLOW LAKE H-10

WELL:

FORMATION:

SUMMARY INTERVAL: 2267.0 - 2317.0

TOTAL FOOTAGE: 50.0

FOOTAGE ANALYZED: 15.7

FOOTAGE NOT ANALYZED:

TOTAL: 34.3 DENSE 34.3 LOST .0 DRILLED .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 %	POROSITY FEET	WEIGHTED AVERAGE PERM MD	PERM FEET	WEIGHTED AVERAGE GRAB D/N	WEIGHTED AVERAGE YOT WATER %
15.7	100.00	3.16	49.64	.29	4.55	5.59	28.46
8.4	53.51	2.36	19.80	.05	.44	.00	38.78
3.9	24.84	3.96	15.46	.34	1.31	14.72	26.62
1.8	11.46	6.03	10.86	.64	1.15	16.89	9.61
1.6	10.19	2.20	3.52	1.03	1.65	.00	.00
.0	.00	.00	.00	.00	.00	.00	.00

*NOT ANALYZED BY REQUEST



CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
WATER ANALYSIS



File CAL-2-1964 Page 1 of 2

Company Husky Oil Ltd.

Well Husky HB et al Willow Lake H-10 K.B. Grd. 785'

Location 62 49'16.00 N.L.
121 45'01.00 W.L. Field Willow Lake Area Province N.W.T.

Formation Renning Interval 2200' - 2263'

Sampled from DST #2 (Top of Tool) by

Date sampled March 23/70 Date analysed April 6/70 Analyst DS

Recovery

 Mud type Water cushion

Resistivity 0.046 Ohm-meters @ 72 °F

Specific gravity 1.1728 @ 60°F

pH 6.9 H₂S Absent

Refractive Index 1.378 @ 75°F

Total Solids:

Calculated 254,215 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
96,308	2,001	531	Pres.	Abs.	-	-	148,766	449	6,160	Nil	Nil

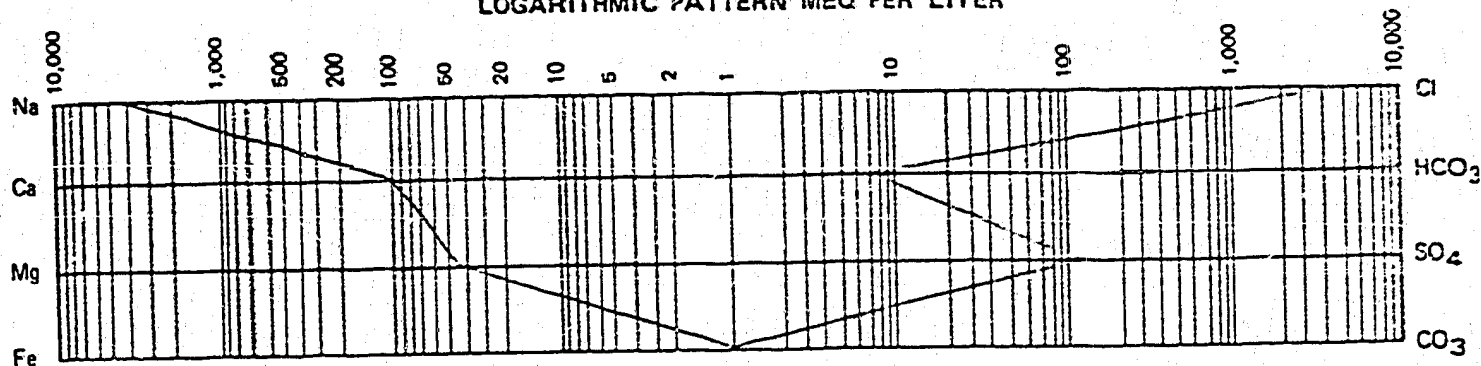
PER CENT CALCULATED SOLIDS

37.9	0.8	0.2	Pres.	Abs.	-	-	58.5	0.2	2.4	Nil	Nil

MEQ PER LITER

4187.3	99.8	43.6	Pres.	Abs.	-	-	4195.2	7.4	128.1	Nil	Nil

LOGARITHMIC PATTERN MEQ PER LITER





CORE LABORATORIES - CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING
WATER ANALYSIS

File CAL-2-1964 Page 2 of 2

Company Husky Oil Ltd.

Well Husky HB et al Willow Lake H-10 K.B. Grd. 785'

Location 62 49'16.00 N.L.
121 45'01.00 W.L. Field Willow Lake Area Province N.W.T.

Formation Hume Interval 727' - 950'

Sampled from DST #3 (Top of Tool) by

Date sampled March 25/70 Date analysed April 6/70 Analyst DS

Recovery

 Mud type Water cushion

Total Solids:

Resistivity 0.048 Ohm-meters @ 72 °F Calculated 225,012 mg/liter

Specific gravity 1.1528 @ 60°F By evaporation @ 110°C - mg/liter

pH 9.2 H₂S Absent By evaporation @ 180°C - mg/liter

Refractive Index 1.372 @ 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
85,279	2,001	329	Pres.	Abs.	-	-	131,885	322	5,038	158	Nil

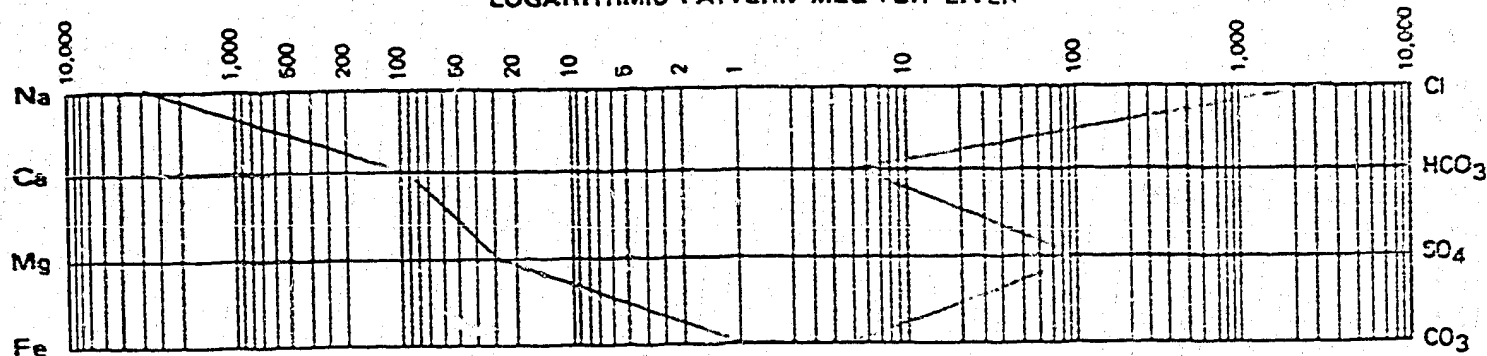
PER CENT CALCULATED SOLIDS

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₃	OH
37.9	0.9	0.1	Pres.	Abs.	-	-	58.7	0.1	2.2	0.1	Nil

MEQ PER LITER

Na + K	Ca	Mg	Fe	Ba	Br	I	Cl	HCO ₃	SO ₄	CO ₃	OH
3707.8	99.8	27.0	Pres.	Abs.	-	-	3719.2	5.3	104.8	5.3	Nil

LOGARITHMIC PATTERN MEQ PER LITER





CORE LABORATORIES — CANADA LTD.
PETROLEUM RESERVOIR ENGINEERING



Company Husky Oil Ltd. Page 1 of 1
 Well Husky HB et al Willow Lak H-10 File CAL-2-1835
 Field Wildcat, Northwest Territories Analyst DS
 Location 62 49'16.00 N.L.
121 45'01.00 W.L. Elevation: K.B. _____ Grd. 785'
 Formation _____ Depth 2265' - 2317'
 Sampled from DST #1 by _____
 Sampling pressure _____ psig Sampling temp. _____ °F Ambient temp. _____ °F
 Date sampled March 13/70 Date received March 17/70 Date analysed March 19/70
 Container pressure _____ Mud _____ Water cushion _____
 Recovery or flowrate: _____

Chloride 141,392 mg/liter

Resistivity 0.044 Ohm-meters @ 69°F

Quaky A. B. E. T. A L.
Willow Lake H- 10

HUSKY HB ET AL WILLOW LAKE. H-10

D.A. 416 - Daily Tour Reports


Shuckly H Bet at Willow Lake H-10.

396
10/1

DAILY DRILLING REPORT

REPORT NO. 27

DATE MARCH 27/70

OPERATOR Husky Oil Ltd.		LEASE Husky H.B. E. H. 7-10		WELL NO. 9-10	FIELD OR DIST. Willow Lake	COUNTY A.B. 7.	STATE								
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 4	DRILL PIPE STRING NO. SIZE	TOOL JOINT O.D.	PUMPS		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>R. H. Robertson</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>R. H. Robertson</i>		TYPE THD.		NO.	MANUFACTURER	TYPE	STROKE LENGTH						
1.		2.		3.											

TIME DISTRIBUTION-HOURS				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	WEIGHT	VISC.-SEC	W.L.-C.C.	FLTR. CK.	PH	SD. CONT. %	PRESSURE GRADIENT	TYPE	AMT.	TYPE	AMT.	DRILLER		
RIG UP & TEAR DOWN				SINGLES D.P.		SIZE		MFG.		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT	
DRILLING ACTUAL				D.C.		MFG.		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		PUMP NO.	
REAMING				I.D. O.D.		FT.		TYPE		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		PUMP NO.	
CONDITIONING MUD & CIRCULATING				D.C.		MFG.		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		PUMP NO.	
TRIPS				I.D. O.D.		FT.		NOZZLE		NO.		SIZE		PH		SD. CONT. %		PRESSURE GRADIENT		PUMP NO.	
LUBRICATE RIG				STB. BODY O.D.		FT.		SER. NO.		DEPTH OUT		DEPTH IN		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.	
DEVIATION SURVEY				STB. BODY O.D.		FT.		DEPTH OUT		DEPTH IN		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE	
TEST B.O.P.				RMR. BODY O.D.		FT.		DEPTH OUT		DEPTH IN		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE	
CUT OFF DRILLING LINE				SUBS O.D.		FT.		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE		DRILLER			
WIRE LINE LOGGING				BIT OR C.B.		FT.		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE		DRILLER			
RUNNING CASING & CEMENTING				KELLY DOWN		FT.		COND. OF BIT		REAMER NO.		REAMER TYPE		DRILLER							
WAITING ON CEMENT				TOTAL		FT.		REAMER NO.		REAMER TYPE		DRILLER									
DRILL STEM TEST				WT. OF STRING		LBS.		REAMER TYPE		DRILLER											
OTHER				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO.		PUMP NO.		METHOD RUN	
FISHING				STANDS D.P.		FT.		BIT NO.		TIME		WEIGHT		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH	
A. PERFORATING				SINGLES D.P.		FT.		SIZE		MFG.		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %	
B. TUBING TRIPS				D.C.		MFG.		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		PUMP NO.	
C. SNABBING				I.D. O.D.		FT.		TYPE		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		PUMP NO.	
D. TESTING				D.C.		MFG.		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		PUMP NO.	
E. ADDITIONAL				I.D. O.D.		FT.		NOZZLE		NO.		SIZE		PH		SD. CONT. %		PRESSURE GRADIENT		PUMP NO.	
TOTAL DAY WORK				STB. BODY O.D.		FT.		SER. NO.		DEPTH OUT		DEPTH IN		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.	
WIRE LINE RECORD				STB. BODY O.D.		FT.		DEPTH OUT		DEPTH IN		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE	
REEL NO.				RMR. BODY O.D.		FT.		DEPTH OUT		DEPTH IN		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE	
NO. OF LINES				SUBS O.D.		FT.		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE		DRILLER			
SIZE				BIT OR C.B.		FT.		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE		DRILLER			
FEET SLIPPED				KELLY DOWN		FT.		COND. OF BIT		REAMER NO.		REAMER TYPE		DRILLER							
FEET CUT OFF				TOTAL		FT.		REAMER NO.		REAMER TYPE		DRILLER									
PRESENT LENGTH				WT. OF STRING		LBS.		REAMER TYPE		DRILLER											
TON M. OR TRIPS SINCE LAST CUT				NO.		DRILLING ASSEMBLY AT END OF TOUR		BIT RECORD		MUD RECORD		FOOTAGE		FORMATION (SHOW CORE RECOVERY)		PUMP NO.		PUMP NO.		METHOD RUN	
CUMULATIVE TON M. OR TRIPS				STANDS D.P.		FT.		BIT NO.		TIME		WEIGHT		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH	
NO. OF DAYS FROM SPUD				SINGLES D.P.		FT.		SIZE		MFG.		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %	
CUMULATIVE ROTATING HRS.				D.C.		MFG.		VISC.-SEC		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		PUMP NO.	
				I.D. O.D.		FT.		TYPE		W.L.-C.C.		FLTR. CK.		PH		SD. CONT. %		PRESSURE GRADIENT		PUMP NO.	
				I.D. O.D.		FT.		NOZZLE		NO.		SIZE		PH		SD. CONT. %		PRESSURE GRADIENT		PUMP NO.	
				STB. BODY O.D.		FT.		SER. NO.		DEPTH OUT		DEPTH IN		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.	
				STB. BODY O.D.		FT.		DEPTH OUT		DEPTH IN		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE	
				RMR. BODY O.D.		FT.		DEPTH OUT		DEPTH IN		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE	
				SUBS O.D.		FT.		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE		DRILLER			
				BIT OR C.B.		FT.		TOTAL FTG.		TOTAL HR. RUN		COND. OF BIT		REAMER NO.		REAMER TYPE		DRILLER			
				KELLY DOWN		FT.		COND. OF BIT		REAMER NO.		REAMER TYPE		DRILLER							
				TOTAL		FT.		REAMER NO.		REAMER TYPE		DRILLER									
				WT. OF STRING		LBS.		REAMER TYPE		DRILLER											

DATE FINAL 24/10

OPERATOR Husky Oil Ltd.		LEASE Husky H.B. ET. AL. H-10		WELL NO. H-10		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		SIZE 9 7/8		MAKE MAN.		WT. & GR. 36" J.S.		NO. JOINTS 11		FEET 322		RKB. TO CSG. HD. 11.20		SET AT 322		REMARKS CEMENTED 1/250 SAK 220 CALCIUM			
SIGNATURE OF OPERATOR'S REPRESENTATIVE [Signature]		SIGNATURE OF CONTRACTOR'S TOOL PUSHER [Signature]		NO.		MANUFACTURER HAT.		TYPE 250		STROKE LENGTH 15		NO.		FORMATION (SHOW CORE RECOVERY)		ROTARY RPM		WT. ON BIT 1000#		PUMP PRESS		PUMP NO.		PUMP NO.		METHOD RUN			
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 EVE		27		STANDS D.P. 2522.78 FT.		BIT NO.		TIME		FROM TO		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	
RIG UP & TEAR DOWN		0		SINGLES D.P. 9391 FT.		SIZE 8 1/2		WEIGHT		315 315		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	
DRILLING ACTUAL		3		D.C. 6 3/4 I.D. O.D. 90.81 FT.		MFG. H.W.		VISC.-SEC		315 445		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	
REAMING		18		D.C. 6 3/4 I.D. O.D. 532.70 FT.		TYPE 155 R		W.L.-C.C.		315 445		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	
CONDITIONING MUD & CIRCULATING		2		SUBS O.D. 6.28 FT.		NOZZLE NO. 1 2		FLTR. CK.		315 445		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	
TRIPS		2		STB. BODY O.D. FT.		SER. NO. 21362		PH		315 445		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	
LUBRICATE RIG		2		STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT		315 445		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	
DEVIATION SURVEY		2		RMR. BODY O.D. FT.		DEPTH IN		MUD & CHEMICALS ADDED		315 445		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	
TEST S.O.P.		2		SUBS O.D. 6.28 FT.		TOTAL FTG.		TYPE AMT. TYPE AMT.		315 445		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	
CUT OFF DRILLING LINE		2		BIT OR C.B. FT.		TOTAL HR. RUN		COND. OF BIT		315 445		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	
PAIR RIG		2		KELLY DOWN 22.16 FT.		REAMER NO.		REAMER TYPE		315 445		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	
WIRE LINE LOGGING		2		TOTAL 32 4000 FT.		WT. OF STRING LBS.		REAMER TYPE		315 445		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	
RUNNING CASING & CEMENTING		2		WT. OF STRING LBS.		REAMER TYPE		REAMER TYPE		315 445		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	
WAITING ON CEMENT		2		WT. OF STRING LBS.		REAMER TYPE		REAMER TYPE		315 445		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	
DRILL STEM TEST		2		WT. OF STRING LBS.		REAMER TYPE		REAMER TYPE		315 445		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		2		WT. OF STRING LBS.		REAMER TYPE		REAMER TYPE		315 445		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	
FISHING		2		WT. OF STRING LBS.		REAMER TYPE		REAMER TYPE		315 445		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	

DATE PLHKL 723/70

		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 SECT. PART- COM'D
						BIT NO.		TIME				FROM	TO								LINER SIZE	S.P.M.	LINER SIZE	S.P.M.	
		28		STANDS D.P. 2616.69 FT.								3270													
				SINGLES D.P. FT.		SIZE		WEIGHT																	
		3		D.C. 6 3/4 I.D. O.D. 90.88 FT.		MFG.		VISC.-SEC																	
				D.C.		TYPE		W.L.-C.C.																	
		18		I.D. 6 1/4 O.D. 532.70 FT.		NOZZLE NO. SIZE		FLTR. CK				DEVIATION RECORD		DEPTH		DEV.		DIRECTION		DEPTH		DEV.		DIRECTION	
				STB. BODY O.D. FT.		SER. NO.		SD. CONT. %				TIME LOG		ELAPSED TIME		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS									
				STB. BODY O.D. FT.		DEPTH OUT		PRESSURE GRADIENT				FROM 4:00 TO 6:30		2 1/2		TESTING W/BJ.									
				RMR. BODY O.D. FT.		DEPTH IN						6:30 8:30		2		BREAK CHICK SANDS & HEAD PULL OUT TEST									
		2		SUBS O.D. 6.28 FT.		TOTAL FTG.						8:30 10:00		1 1/2		BREAK DOWN TEST TOOL & PULL 10 STD. OF DRILL P.P.N									
				BIT OR C.B. FT.		TOTAL HR. RUN						10:00 12:00		2		LAY DOWN G/BBH. SAFETY JT. BRAKE IN SLIPS									
				KELLY DOWN 23.45 FT.		COND. OF BIT										TAKE FLOW LINE & NIPPLE OFF									
				TOTAL 3270.00 FT.		REAMER NO.																			
				WT. OF STRING LBS.		REAMER TYPE																			
						DRILLER																			

DATE: 11/10/2010

STATE

[illegible]

L. E. Weber

VENING TOUR

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 SGL-S PAR-P COM-C
NO.	STANDS D.P.	FT.	BIT NO.	SIZE	MFG.	TIME	WEIGHT	VISC.-SEC	W.L.-C.C.	FLTR. CK.	PH	SD. CONT. %	FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS				
3	2149.28	FT.	8	8 3/4	H.W.	4:00	10	36	3.8	1/32	7.2		12:00	12:15	15	DRILL 8 3/4 HOLE				
18	532.70	FT.	1	1 1/2	X55R	17:30	10.2	35	6.4	1/32	7.0		10:00	10:15	15	Rig SER. 17330				
2	6.28	FT.	13	13 1/8		28:25	10.1	36	8.4	1/32	6.8		10:15	10:30	15	DRILL 8 3/4 HOLE				
TOTAL			TOTAL FTG.			TOTAL HR. RUN			COND. OF BIT			REAMER NO.			REAMER TYPE			DRILLER		
2862.00			454 37			664 RUN			331									2862.00		
68,000																				
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 SGL-S PAR-P COM-C
NO.	STANDS D.P.	FT.	BIT NO.	SIZE	MFG.	TIME	WEIGHT	VISC.-SEC	W.L.-C.C.	FLTR. CK.	PH	SD. CONT. %	FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS				
1	30.97	FT.	8 3/4	8 3/4	H.W.	8:32	10.2	35	6.4	1/32	7.2		2862	2924	62	DRILL 8 3/4 HOLE				
3	90.88	FT.	1	1 1/2	X55R	12:30	10.2	35	6.4	1/32	7.0		10:00	10:15	15	Rig SER. 17330				
18	532.70	FT.	13	13 1/8		28:25	10.1	36	8.4	1/32	6.8		10:15	10:30	15	DRILL 8 3/4 HOLE				
TOTAL			TOTAL FTG.			TOTAL HR. RUN			COND. OF BIT			REAMER NO.			REAMER TYPE			DRILLER		
2924.00			99			12			RUN									2924.00		
69,000																				
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 SGL-S PAR-P COM-C
NO.	STANDS D.P.	FT.	BIT NO.	SIZE	MFG.	TIME	WEIGHT	VISC.-SEC	W.L.-C.C.	FLTR. CK.	PH	SD. CONT. %	FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS				
3	2336.10	FT.	9	8 3/4	H.W.	6:00	10.1	35	8.4	1/32	6.8		2924	3004	80	DRILL 8 3/4 HOLE				
18	532.70	FT.	1	1 1/2	X55R	17:30	10.2	35	6.4	1/32	7.0		10:00	10:15	15	Rig SER. 17330				
2	6.28	FT.	13	13 1/8		28:25	10.1	36	8.4	1/32	6.8		10:15	10:30	15	DRILL 8 3/4 HOLE				
TOTAL			TOTAL FTG.			TOTAL HR. RUN			COND. OF BIT			REAMER NO.			REAMER TYPE			DRILLER		
3004.00			174			19 1/2			RUN									3004.00		
69,000																				
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 SGL-S PAR-P COM-C
NO.	STANDS D.P.	FT.	BIT NO.	SIZE	MFG.	TIME	WEIGHT	VISC.-SEC	W.L.-C.C.	FLTR. CK.	PH	SD. CONT. %	FROM	TO	ELAPSED TIME	DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS				
3	2149.28	FT.	8	8 3/4	H.W.	4:00	10	36	3.8	1/32	7.2		12:00	12:15	15	DRILL 8 3/4 HOLE				
18	532.70	FT.	1	1 1/2	X55R	17:30	10.2	35	6.4	1/32	7.0		10:00	10:15	15	Rig SER. 17330				
2	6.28	FT.	13	13 1/8		28:25	10.1	36	8.4	1/32	6.8		10:15	10:30	15	DRILL 8 3/4 HOLE				
TOTAL			TOTAL FTG.			TOTAL HR. RUN			COND. OF BIT			REAMER NO.			REAMER TYPE			DRILLER		
2862.00			454 37			664 RUN			331									2862.00		
68,000																				

DAILY DRILLING REPORT

REPORT NO. 21

DATE JANUARY 1919

OPERATOR

LEASE

Husky Oil LTD

Husky H.B. EL. AL. H-10

WELL NO.
H-10

FIELD OR DIST.

WILLOW LAKE

COUNTY

N.W.T.

STATE

CONTRACTOR

RIG NO.

DRILL PIPE

TOOL JOINT

O.D.

PUMPS

S & T DRILLING (WESTERN) CO. LTD.

SIGNATURE OF OPERATOR'S REPRESENTATIVE

SIGNATURE OF CONTRACTOR'S TOOL PUSHER

M. H. Webster

P. H. Webster

TIME DISTRIBUTION-HOURS

RIG UP & TEAR DOWN

DRILLING ACTUAL

REAMING

CONDITIONING MUD & CIRCULATING

TRIPS

LUBRICATE RIG

DEVIATION SURVEY

TEST S.O.P.

CUT OFF DRILLING LINE

PAIR RIG

WIRE LINE LOGGING

RUNNING CASING & CEMENTING

WAITING ON CEMENT

DRILL STEM TEST

OTHER

FISHING

COMPLETION WORK

A. PERFORATING

B. TUBING TRIPS

C. SWABBING

D. TESTING

E. ADDITIONAL

TOTAL DAY WORK

HRS. W/DP

HRS. W/O DP

HRS. STANDBY

WIRE LINE RECORD

REEL NO.

NO. OF LINES

SIZE

FEET SLIPPED

FEET CUT OFF

PRESENT LENGTH

TON M. OR TRIPS SINCE LAST CUT

CUMULATIVE TON M. OR TRIPS

NO. OF DAYS FROM SPUD

CUMULATIVE ROTATING HRS.

NO. DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

SINGLES D.P.

D.C.

I.D.

O.D.

D.C.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO. DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

SINGLES D.P.

D.C.

I.D.

O.D.

D.C.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO. DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

SINGLES D.P.

D.C.

I.D.

O.D.

D.C.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

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. 1

PUMP NO.

LINER SIZE

S.P.M.

LINER SIZE

S.P.M.

METHOD RUN

SGL.-S PART.-P COMD.-C

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DATE MARCH 11 1962

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 SGL-S PAR-P COM-C								
STANDS D.P.		FT.	BIT NO.			TIME			FROM	TO							LINER SIZE	S.P.M.	LINER SIZE	S.P.M.									
18	1	1683.04	1	8		4:32	6:30		2341	2370	R			90	15	500	5 1/2	60			S								
3	1	90.88	3	H.W.	H.W.	34	34										X												
18	1	532.70	1	2	2	1:32	1:32																						
2	1	6.28	2	13	13	2:00	2:00																						
TOTAL DAY WORK			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.					
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.		
TOTAL DAY WORK			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.					
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.		
TOTAL DAY WORK			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.					
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.		
TOTAL DAY WORK			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.					
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.		
TOTAL DAY WORK			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.					
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.		
TOTAL DAY WORK			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.					
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.		
TOTAL DAY WORK			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.					
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.		
TOTAL DAY WORK			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.					
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.		
TOTAL DAY WORK			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.					
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.		
TOTAL DAY WORK			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.					
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.		

DATE 17 APR 64 15/10

[illegible]

DAILY DRILLING REPORT

REPORT NO. 13

DATE 11/14/17 13/10

OPERATOR

LEASE

Husky Oil LTD.

Husky HB EL AL H-10

CONTRACTOR

RIG NO.

DRILL PIPE

TOOL JOINT

O.D.

PUMPS

WELL NO.

FIELD OR DIST.

COUNTY

STATE

S & T DRILLING (WESTERN) CO. LTD.

41

NO.

SIZE

TYPE THD.

F.H.

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

TIME DISTRIBUTION-HOURS

EQUIP & TEAR DOWN

DRILLING ACTUAL

REAMING

CONDITIONING MUD & CIRCULATING

TRIPS

LUBRICATE RIG

DEVIATION SURVEY

TEST B.O.P.

CUT OFF DRILLING LINE

WIRE RIG

WIRELINE LOGGING

RUNNING CASING & CEMENTING

WAITING ON CEMENT

DRILL STEM TEST

OTHER

FISHING

COMPLETION WORK

A. PERFORATING

B. TUBING TRIPS

C. SWABBING

D. TESTING

E. ADDITIONAL

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

TONS 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

17

STANDS D.P.

3

SINGLES D.P.

18

D.C.

18

I.D. O.D.

2

SUBS

2

TOTAL

WT. OF STRING

LBS.

REAMER TYPE

DRILLER

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. 1

PUMP NO. 2

METHOD RUN

SGL-S PAR-EL-P COM-D-C

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

TIME LOG

FROM

TO

ELAPSED TIME

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

DATE MARCH 11 1960

[illegible]

DATE MARCH 8/70

[illegible]

DAILY DRILLING REPORT

REPORT NO. 7

DATE JAN 27 1970

OPERATOR

LEASE

WELL NO.

FIELD OR DIST.

COUNTY

STATE

CONTRACTOR

RIG NO.

DRILL PIPE STRING

TOOL JOINT

O.D.

PUMPS

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

NO.

MANUFACTURER

TYPE

STROKE LENGTH

1.

HART

C 250

15

2.

HART

C 150

12

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

PAIR RIG

WIRING

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

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.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

STB. BODY

O.D.

STB. BODY

O.D.

RMR. BODY

O.D.

SUBS

O.D.

BIT OR C.B.

FT.

KELLY DOWN

FT.

TOTAL

FT.

WT. OF STRING

LBS.

NO.

DRILLING ASSEMBLY AT END OF TOUR

STANDS D.P.

FT.

SINGLES D.P.

FT.

D.C.

O.D.

I.D.

O.D.

DAILY DRILLING REPORT

REPORT NO. 4

DATE March 4

OPERATOR

LEASE

Husky Oil LTD

Husky H.B. ET Al Willow Lake

WELL NO.
H10

FIELD OR DIST.

Willow Lake #10

COUNTY

H.W.T.

STATE

CONTRACTOR

S & T DRILLING (WESTERN) CO. LTD.

RIG NO.

4

DRILL PIPE

STRING

NO. 2

SIZE 1 1/2

TYPE THD. F.H.

TOOL JOINT

C.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

1.

NAT

250

15"

2.

NAT

150

12"

3.

9 3/8

MAINS

36" JS

11

322

Cemented 250 SAX

2% Cal.

TIME DISTRIBUTION-HOURS

MORN DAY EVE

RIG UP & TEAR DOWN

DRILLING ACTUAL

REAMING

CONDITIONING MUD & CIRCULATING

TRIPS

LUBRICATE RIG

DEVIATION SURVEY

TEST S.O.P.

CUT OFF DRILLING LINE

WIRE RIG

WIRE LINE LOGGING

RUNNING CASING & CEMENTING

WAITING ON CEMENT

DRILL STEM TEST

OTHER

FISHING

COMPLETION WORK

A. PERFORATING

B. TUBING TRIPS

C. SWABBING

D. TESTING

E. ADDITIONAL

TOTALS

TIME SUMMARY (OFFICE USE ONLY)

DAY WORK

HRS. W/DP

HRS. W/O/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.

MORNING TOUR

DAY TOUR

EVENING TOUR

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
1	STANDS D.P. 8934 FT.	BIT NO. 81/2 32	TIME 12:30 3:00 7:30	FROM 528 TO 548									
2	SINGLES D.P. FT.	SIZE 6 3/8 8 3/8	WEIGHT 8.7 8.7 8.1										
3	D.C. 6 3/8 9083 FT.	MFG. HW	VISC.-SEC 36 36 34										
4	I.D. O.D. 271.05 FT.	TYPE 0 OBYA	W.L.-C.C.										
5	NOZZLE NO. 2-13	FLTR. CK.											
6	STB. BODY O.D. FT.	PH 8.5 8.5 8.5											
7	STB. BODY O.D. FT.	SER. NO. 114436	SD. CONT. %										
8	RMR. BODY O.D. FT.	DEPTH OUT 5 48	PRESSURE GRADIENT										
9	SUBS O.D. 263 FT.	DEPTH IN 4 99											
10	BIT OR C.B. 365 FT.	TOTAL FTG. 183	MUD & CHEMICALS ADDED										
11	1 FT.	TOTAL HR. RUN 8 3/4	TYPE AMT. TYPE AMT.										
12	KELLY DOWN 1200 FT.	COND. OF BIT											
13	TOTAL 503 3/5 FT.	REAMER NO.											
14	WT. OF STRING 42 M LBS.	REAMER TYPE	DRILLER C. Seelmer										
2	STANDS D.P. 184.97 FT.	BIT NO. 32	TIME 9:00 12:30 4:00	FROM 503 TO 548									
3	SINGLES D.P. FT.	SIZE 8 3/8 8 3/8	WEIGHT 8.6 8.6 8.7	548 592									
4	D.C. 6 3/8 90.83 FT.	MFG. HW	VISC.-SEC 35 36 38										
5	I.D. O.D. 271.05 FT.	TYPE 00U-J	W.L.-C.C. 10.4 10.4 11										
6	NOZZLE NO. 2 1/1	FLTR. CK. 2/32 2/32 2/32											
7	STB. BODY O.D. FT.	PH 8.5 8.0 8.0											
8	STB. BODY O.D. FT.	SER. NO. 14436	SD. CONT. %										
9	RMR. BODY O.D. FT.	DEPTH OUT 4 99	PRESSURE GRADIENT										
10	SUBS O.D. FT.	DEPTH IN 4 99											
11	BIT OR C.B. 365 FT.	TOTAL FTG. 93	MUD & CHEMICALS ADDED										
12	1 FT.	TOTAL HR. RUN 7 1/2	TYPE AMT. TYPE AMT.										
13	KELLY DOWN 241.50 FT.	COND. OF BIT RUN	BEL 5225										
14	TOTAL 592.00 FT.	REAMER NO.	KELZAN 1325										
15	WT. OF STRING 42 M LBS.	REAMER TYPE	Sawdust Wax ON FLOOR										
2	STANDS D.P. 184.97 FT.	BIT NO. 2	TIME 6:00 8:30	FROM 592 TO 654									
3	SINGLES D.P. 6223 FT.	SIZE 8 3/8 8 3/8	WEIGHT 8.7 8.1										
4	D.C. 9088 FT.	MFG. HW	VISC.-SEC 37 34										
5	I.D. O.D. 271.05 FT.	TYPE 00U-J	W.L.-C.C. 8.6 10.2										
6	NOZZLE NO. 1 1/2	FLTR. CK. 2/32 2/32											
7	STB. BODY O.D. FT.	PH 8.0 8											
8	STB. BODY O.D. FT.	SER. NO. 14436	SD. CONT. %										
9	RMR. BODY O.D. FT.	DEPTH OUT 654	PRESSURE GRADIENT										
10	SUBS O.D. FT.	DEPTH IN 4 99											
11	BIT OR C.B. 365 FT.	TOTAL FTG. 155	MUD & CHEMICALS ADDED										
12	1 FT.	TOTAL HR. RUN 14	TYPE AMT. TYPE AMT.										
13	KELLY DOWN 4150 FT.	COND. OF BIT 4-3-1	PMG 1 SAX										
14	TOTAL 654 3/3 FT.	REAMER NO.											
15	WT. OF STRING 42 M LBS.	REAMER TYPE	DRILLER										

DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS

Coing w/ B.J.

Rig Ser

Coing w/ B.J.

Recover core 50' full recovered 1 BLIND Rams

Box and help take away frame

Ser Core BBI and stand back same

Run in Hole

Reaming Rat Hole

Rig Service w/ Bop's & Kelly Cock

Reaming Rat Hole

Survey @ 520

Reaming Rat Hole

Drill Rat Hole

Rig Ser + Survey @ 592

Drop Survey @ 654 1"

Pull out of Hole Lay Down Drill pipe

Run in Hole Pickup & Drill collar

Strap pipe out 65431 - Pipe Tally 65423

Puff .08

DAILY DRILLING REPORT

REPORT NO. 751

DATE MAR 3 1970

OPERATOR HUSKY OIL LTD		LEASE HUSKY ET AL		WELL NO. 14-10		FIELD OR DIST. WILLOWLAKE RIVER		COUNTY		STATE N. W. T.				
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 4	DRILL PIPE STRING NO. 2 SIZE 4 1/2 TYPE THD. FH	TOOL JOINT 6" O.D.	PUMPS		SIZE 9 5/8	MAKE MAHON	WT. & CR. 36 TS	NO. JOINTS 18	FEET 341	RKB. TO CSG. HD.	SET AT 322	REMARKS
SIGNATURE OF OPERATOR'S REPRESENTATIVE <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER		1. NAT		TYPE C-250		STROKE LENGTH 15"		LAST CASING TUBING OR LINER				
2. NAT				3.										

TIME DISTRIBUTION - HOURS				NO.		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.		PUMP NO.		METHOD RUN	
MORNING TOUR				3		D.C. 90.83 FT.		BIT NO. 1		TIME 15-11.20		FROM 12.00 TO 12.15		FORMATION		80		2030		450		5 1/2		60		5	
DRILLING ACTUAL 4				9		D.C. 271.05 FT.		SIZE 8 3/4		VISC.-SEC 34		12.15 1.00		RIG SERVICE V BOP		80		2030		450		5 1/2		60		5	
REAMING								MFG. REED		W.L.-C.C. 10.2		1.00 3.00		WORK WAY TO BOTTOM had to rotate bit		80		2030		450		5 1/2		60		5	
CONDITIONING MUD & CIRCULATING 2								TYPE YSIG		10.1		3.00 4.00		Pressure Test Pipe Ramo Hydril and manifold O.K.		80		2030		450		5 1/2		60		5	
TRIPS 1								NOZZLE NO. 2-13		FLTR. CK. 3/32		4.00 4.30		Only out Float and Shoe @ Top of log 286		80		2030		450		5 1/2		60		5	
LUBRICATE RIG 1/4								SER. NO. 856876		PH 9.0		4.30 6.30		Pick Flo Tee and put in GASKET		80		2030		450		5 1/2		60		5	
DEVIATION SURVEY 1/2								DEPTH OUT 420		PRESSURE GRADIENT		6.30 7.00		DRUG OUT FLOAT + SHOE		80		2030		450		5 1/2		60		5	
TEST B.O.P.								TOTAL FTG. 420				7.00 7.45		PRESSURE UP FORMATION 200 PSI OK		80		2030		450		5 1/2		60		5	
CUT OFF DRILLING LINE								TOTAL HR. RUN 4				7.45 8.00		STUCK AT 4070 PICK UP 3PC & CLEAN PILOT HOLE		80		2030		450		5 1/2		60		5	
WIRE LINE LOGGING								COND. OF BIT				8.00 8.30															
RUNNING CASING & CEMENTING								REAMER NO.				8.30 9.00															
WAITING ON CEMENT								REAMER TYPE				9.00 9.30															
DRILL STEM TEST								DRILLER		C. Paulmier		9.30 10.00															
OTHER 1 1/2												10.00 10.45															
FISHING												10.45 11.00															
A. PERFORATING												11.00 12.15															
B. TUBING TRIPS												12.15 12.30															
C. SNABBING												12.30 12.45															
D. TESTING												12.45 1.00															
E. ADDITIONAL												1.00 1.15															
TOTAL DAY WORK												1.15 1.30															
WIRE LINE RECORD												1.30 1.45															
REEL NO.												1.45 2.00															
NO. OF LINES												2.00 2.15															
FEET SLIPPED												2.15 2.30															
FEET CUT OFF												2.30 2.45															
PRESENT LENGTH												2.45 2.60															
TON MI. OR TRIPS SINCE LAST CUT												2.60 2.75															
CUMULATIVE TON MI. OR TRIPS												2.75 2.90															
NO. OF DAYS FROM SPUD												2.90 3.05															
CUMULATIVE ROTATING HRS.												3.05 3.20															
												3.20 3.35															
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OPERATOR Husky Oil Ltd		LEASE Husky Up H8000 WILLOW LAKE		WELL NO. H10		FIELD OR DIST. Willow Lake River		COUNTY		STATE N.W.T.																			
CONTRACTOR S & T DRILLING (WESTERN) CO. LTD.		RIG NO. 41		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 <i>[Signature]</i>		SIGNATURE OF CONTRACTOR'S TOOL PUSHER <i>[Signature]</i>		1.		2.		3.		9 1/2 MM		11		322		KB. Cement 250 Bago Plus 2% oil													
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-EL-P COM-D-C	
RIG UP & TEAR DOWN				STANDS D.P. FT.		BIT NO. SIZE MFG. TYPE NO. NOZZLE SIZE		TIME WEIGHT VISC.-SEC W.L.-C.C. FLTR. CK. PH SD. CONT. % PRESSURE GRADIENT		FROM TO		ELAPSED TIME		DETAILS OF OPERATIONS IN SEQUENCE AND REMARKS															
DRILLING ACTUAL				SINGLES D.P. FT.		D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		12 00		12 15		Reg W O C															
REAMING				D.C. I.D. O.D. FT.		NOZZLE NO. NOZZLE SIZE		MUD & CHEMICALS ADDED						WOC															
CONDITIONING MUD & CIRCULATING				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TRIPS				D.C. I.D. O.D. FT.		NOZZLE NO. NOZZLE SIZE		MUD & CHEMICALS ADDED																					
LUBRICATE RIG				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
DEVIATION SURVEY				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TEST B.O.P. CUT OFF DRILLING LINE				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
PAIR RIG				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
WORKING				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
WIRE LINE LOGGING				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
RUNNING CASING & CEMENTING				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
WAITING ON CEMENT				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
DRILL STEM TEST				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
OTHER				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
FISHING				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
A. PERFORATING				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
B. TUBING TRIPS				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
C. SWABBING				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
D. TESTING				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
E. ADDITIONAL				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TIME SUMMARY (OFFICE USE ONLY)				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
DAY WORK				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
HRS. W/DP				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
HRS. WO/DP				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
HRS. STANDBY				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TOTAL DAY WORK				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
WIRE LINE RECORD				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
REEL NO.				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
NO. OF LINES SIZE				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
FEET SLIPPED				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
FEET CUT OFF				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
PRESENT LENGTH				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TON MI. OR TRIPS SINCE LAST CUT				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
CUMULATIVE TON MI. OR TRIPS				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
NO. OF DAYS FROM SPUD				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
CUMULATIVE ROTATING HRS.				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TOTAL DAY WORK				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
WIRE LINE RECORD				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
REEL NO.				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
NO. OF LINES SIZE				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
FEET SLIPPED				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
FEET CUT OFF				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
PRESENT LENGTH				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TON MI. OR TRIPS SINCE LAST CUT				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
CUMULATIVE TON MI. OR TRIPS				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
NO. OF DAYS FROM SPUD				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
CUMULATIVE ROTATING HRS.				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TOTAL DAY WORK				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
WIRE LINE RECORD				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
REEL NO.				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
NO. OF LINES SIZE				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
FEET SLIPPED				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
FEET CUT OFF				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
PRESENT LENGTH				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TON MI. OR TRIPS SINCE LAST CUT				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
CUMULATIVE TON MI. OR TRIPS				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
NO. OF DAYS FROM SPUD				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
CUMULATIVE ROTATING HRS.				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TOTAL DAY WORK				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
WIRE LINE RECORD				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
REEL NO.				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
NO. OF LINES SIZE				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
FEET SLIPPED				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
FEET CUT OFF				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
PRESENT LENGTH				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TON MI. OR TRIPS SINCE LAST CUT				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
CUMULATIVE TON MI. OR TRIPS				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
NO. OF DAYS FROM SPUD				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
CUMULATIVE ROTATING HRS.				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
TOTAL DAY WORK				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					
WIRE LINE RECORD				D.C. I.D. O.D. FT.		SER. NO. DEPTH OUT DEPTH IN TOTAL FTG. TOTAL HR. RUN COND. OF BIT REAMER NO. REAMER TYPE		MUD & CHEMICALS ADDED																					

Operator: Husky Oil Ltd. Report No. 3 Date: 4/10/11. Well No. 4410, Field or Dist. Willow Lake River, County N.W.T. Contractor: S & T Drilling (Western) Co. Ltd. Rig No. 4. Drilling Assembly: STANDS D.P. 3119 FT., SINGLES D.P. 9083 FT., D.C. 6 3/4" I.D. 17907 FT., STB. BODY O.D. 365 FT., BIT OR C.B. 263 FT., KELLY DOWN 1190 FT., TOTAL 34287 FT. Bit Record: BIT NO. 4, SIZE 8 3/4", MFG. HW, TYPE OSC3, NO. 95232, NOZZLE 1/2", SER. NO. 95232, DEPTH OUT 257, DEPTH IN 257, TOTAL FTG. 91, TOTAL HR. RUN 324, COND. OF BIT Good, REAMER NO., REAMER TYPE. Mud Record: TIME 8:00, WEIGHT 10.5, VISC.-SEC 85, W.L.-C.C., FLTR. CK., PH, SD. CONT. %, PRESSURE GRADIENT. Footage: FROM 257 TO 348, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY RPM 110, WT. ON BIT 1000# 8M, PUMP PRESS 350, PUMP NO. 7 1/2, LINER SIZE 5 1/2, S.P.M. 12. Deviation Record: DEPTH 287, DEV. 3/4, DIRECTION Rammer 13 1/2, DEPTH 317, DEV. 10, DIRECTION 13 3/4 Rammer. Details of Operations: 12:00-12:15 RIG SERVICE, 12:15-12:45 CIRCULATE + CLEAN HOLE, 12:45-1:30 TRIP OUT 8 3/4 RUN IN 2 1/2 REAMER, 1:30-3:00 REAMING, 3:00-3:15 Work pipe for Survey @ 287 3/4 13 3/4 Rammer, 3:15-5:00 Reaming 13 3/4 Hole Drilled Survey @ 317/10 13 3/4, 5:00-6:00 Trip for 2 1/2 B.T., 6:00-7:30 Dig 8 3/4 and Survey @ 348 1 1/2 730.800 1 1/2 pump. Completion Work: A. PERFORATING, B. TUBING TRIPS, C. SWABBING, D. TESTING, E. ADDITIONAL. Time Summary: LAY WORK, HRS. W/DP, HRS. WO/DP, HRS. STANDBY. Wire Line Record: REEL NO., NO. OF LINES, SIZE, FEET SLIPPED, FEET CUT OFF, PRESENT LENGTH, TON MI. OR TRIPS SINCE LAST CUT, CUMULATIVE TON MI. OR TRIPS, NO. OF DAYS FROM PUD, CUMULATIVE ROTATING HRS. Evening Tour: Drilling Assembly: STANDS D.P., SINGLES D.P., D.C. 6 3/4" I.D. 17907 FT., STB. BODY O.D. 365 FT., BIT OR C.B. 263 FT., KELLY DOWN 41.50 FT., TOTAL 324.23 FT. Bit Record: BIT NO. 4, SIZE 8 3/4", MFG. HW, TYPE OSC3, NO. 95232, NOZZLE 1/2", SER. NO. 95232, DEPTH OUT 257, DEPTH IN 257, TOTAL FTG. 263, TOTAL HR. RUN 9 1/2, COND. OF BIT 1-1-1, REAMER NO., REAMER TYPE. Mud Record: TIME 8:00, WEIGHT 10.5, VISC.-SEC 85, W.L.-C.C., FLTR. CK., PH, SD. CONT. %, PRESSURE GRADIENT. Footage: FROM 348 TO 420, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY RPM 80, WT. ON BIT 1000# 4-6, PUMP PRESS 400, PUMP NO. 7 1/2, LINER SIZE 5 1/2, S.P.M. 10. Deviation Record: DEPTH 380, DEV. 3/4, DIRECTION Rammer 13 1/2, DEPTH 411, DEV. 1 1/2, DIRECTION Rammer 13 1/2. Details of Operations: 8:00-8:15 RIG SER, 8:15-10:00 DRAG 8 3/4 HOLE, 10:00-10:15 SURVEY @ 380, 10:15-12:00 DRAG 8 3/4 HOLE, 12:00-12:30 WELD ON STAND PIPE, 12:30-1:00 DRAG 8 3/4 HOLE, 1:00-1:15 SURVEY @ 411, 1:15-2:30 DRAG 8 3/4 HOLE. Completion Work: A. PERFORATING, B. TUBING TRIPS, C. SWABBING, D. TESTING, E. ADDITIONAL. Time Summary: LAY WORK, HRS. W/DP, HRS. WO/DP, HRS. STANDBY. Wire Line Record: REEL NO., NO. OF LINES, SIZE, FEET SLIPPED, FEET CUT OFF, PRESENT LENGTH, TON MI. OR TRIPS SINCE LAST CUT, CUMULATIVE TON MI. OR TRIPS, NO. OF DAYS FROM PUD, CUMULATIVE ROTATING HRS. Evening Tour: Drilling Assembly: STANDS D.P., SINGLES D.P., D.C. 6 3/4" I.D. 17907 FT., STB. BODY O.D. 365 FT., BIT OR C.B. 263 FT., KELLY DOWN 41.50 FT., TOTAL 324.23 FT. Bit Record: BIT NO. 4, SIZE 8 3/4", MFG. HW, TYPE OSC3, NO. 95232, NOZZLE 1/2", SER. NO. 95232, DEPTH OUT 257, DEPTH IN 257, TOTAL FTG. 263, TOTAL HR. RUN 9 1/2, COND. OF BIT 1-1-1, REAMER NO., REAMER TYPE. Mud Record: TIME 8:00, WEIGHT 10.5, VISC.-SEC 85, W.L.-C.C., FLTR. CK., PH, SD. CONT. %, PRESSURE GRADIENT. Footage: FROM 420 TO 430, DR-D RM-R CORE-C, CORE NO., FORMATION (SHOW CORE RECOVERY), ROTARY RPM 80, WT. ON BIT 1000# 4-6, PUMP PRESS 400, PUMP NO. 7 1/2, LINER SIZE 5 1/2, S.P.M. 10. Deviation Record: DEPTH 430, DEV. 3/4, DIRECTION Rammer 13 1/2, DEPTH 440, DEV. 1 1/2, DIRECTION Rammer 13 1/2. Details of Operations: 4:00-4:15 PULL OUT TO RUN CASING, 4:15-8:30 RIG TO RUN 9 5/8 SURFACE CASING, 8:30-9:00 Casing in pipe hole clean, 9:00-9:30 RIG TO RUN CEMENT, 9:30-10:30 MIX CEMENT + PUMP PLUG DOWN @ 9:30 PM, 10:30-12:00 W.D.C.

OPERATOR Husky Oil LTD						LEASE Husky ET AL Willow Lake H10						WELL NO. #10		FIELD OR DIST. Willow Lake		COUNTY		STATE NWT																																	
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			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		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		COMPLETION WORK A. PERFORATING B. TUBING TRIPS C. SWABBING D. TESTING E. ADDITIONAL		TOTALS		TIME SUMMARY (OFFICE USE ONLY)		DAY WORK HRS. W/D HRS. WO/D 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.	
MORNING TOUR						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-P COM'D-C																											
3						STANDS D.P. FT.		BIT NO. 1 2RR		TIME		FROM 141		TO 199		D			170	8MM	300	7 1/4	X																												
8						SINGLES D.P. FT.		SIZE 13 3/4 8 3/4		WEIGHT																																									
3						D.C. 6 3/4 I.D. O.D. 9083 FT.		MFG. OSC3 HW		VISC.-SEC																																									
3						D.C. 6 3/4 I.D. O.D. 8875 FT.		TYPE NEEDLE BEAM WDT		W.L.-C.C.																																									
3						STB. BODY O.D. FT.		NOZZLE NO. 1/2 INCH SIZE 1/2		FLTR. CK.																																									
3						STB. BODY O.D. FT.		SER. NO. 16560 17214		PH																																									
3						STB. BODY O.D. FT.		DEPTH OUT		SD. CONT. %																																									
3						STB. BODY O.D. FT.		DEPTH IN		PRESSURE GRADIENT																																									
3						SUBS O.D. FT.		TOTAL FTG. 24 93		MUD & CHEMICALS ADDED																																									
3						BIT OR C.B. FT.		TOTAL HR. RUN 4 6		TYPE AMT. TYPE AMT.																																									
3						KELLY DOWN 1050 FT.		COND. OF BIT RUN RUN																																											
3						TOTAL 198 97 FT.		REAMER NO.		REAMER TYPE		C Saulnier																																							
3						WT. OF STRING LBS.																																													
DAY TOUR						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-P COM'D-C																											
3						STANDS D.P. FT.		BIT NO. 3R 2RR		TIME		FROM 199		TO 257		0			70	15	350	7 1/2	60	5 1/2	5																										
3						SINGLES D.P. FT.		SIZE 13 3/4 8 3/4		WEIGHT																																									
3						D.C. 6 3/4 I.D. O.D. 9083 FT.		MFG. OSC3 HW		VISC.-SEC																																									
3						D.C. 6 3/4 I.D. O.D. 119.07 FT.		TYPE NEEDLE BEAM WDT		W.L.-C.C.																																									
3						D.C. 6 3/4 I.D. O.D. 160.58 FT.		NOZZLE NO. 1/2 INCH SIZE 1/2		FLTR. CK.																																									
3						STB. BODY O.D. FT.		SER. NO. 16560 17214		PH																																									
3						STB. BODY O.D. FT.		DEPTH OUT		SD. CONT. %																																									
3						STB. BODY O.D. FT.		DEPTH IN		PRESSURE GRADIENT																																									
3						SUBS O.D. FT.		TOTAL FTG. 151 121		MUD & CHEMICALS ADDED																																									
3						BIT OR C.B. FT.		TOTAL HR. RUN 7		TYPE AMT. TYPE AMT.																																									
3						KELLY DOWN 211.50 FT.		COND. OF BIT RUN RUN																																											
3						TOTAL 257.68 FT.		REAMER NO.		REAMER TYPE		Edna Mahoney																																							
3						WT. OF STRING 31 M. LBS.																																													
EVENING TOUR						NO. DRILL																																													

