



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Hess Oil Co.**

PO Box 1009
McPherson KS 67460

ATTN: Jamie Hess

13-19s-20w Rush KS

Helen #1

Start Date: 2006.02.12 @ 13:44:22

End Date: 2006.02.12 @ 19:09:22

Job Ticket #: 24337 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Hess Oil Co.

Helen #1

13-19s-20w Rush KS

DST # 1

Cherokee Sand

2006.02.12



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hess Oil Co.
PO Box 1009
McPherson KS 67460
ATTN: Jamie Hess

Helen #1
13-19s-20w Rush KS
Job Ticket: 24337 DST#: 1
Test Start: 2006.02.12 @ 13:44:22

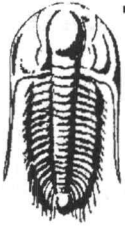
Tool Information

Drill Pipe:	Length: 3858.00 ft	Diameter: 3.80 inches	Volume: 54.12 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 250.00 ft	Diameter: 2.25 inches	Volume: 1.23 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 55.35 bbl</u>	Tool Chased 1.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4120.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	59.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4098.00	
Hydraulic tool	5.00			4103.00	
Jars	5.00			4108.00	
Safety Joint	2.00			4110.00	
Packer	5.00			4115.00	27.00 Bottom Of Top Packer
Packer	5.00			4120.00	
Stubb	1.00			4121.00	
Recorder	0.00	6668	Inside	4121.00	
Perforations	28.00			4149.00	
Recorder	0.00	13266	Outside	4149.00	
Bullnose	3.00			4152.00	32.00 Bottom Packers & Anchor

Total Tool Length: 59.00



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FLUID SUMMARY

Hess Oil Co.
PO Box 1009
McPherson KS 67460
ATTN: Jamie Hess

Helen #1
13-19s-20w Rush KS
Job Ticket: 24337 **DST#: 1**
Test Start: 2006.02.12 @ 13:44:22

Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.19 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 2000.00 ppm			
Filter Cake: 0.04 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Drilling Mud 100%m	0.049
0.00	No GIP	0.000

Total Length: 10.00 ft Total Volume: 0.049 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

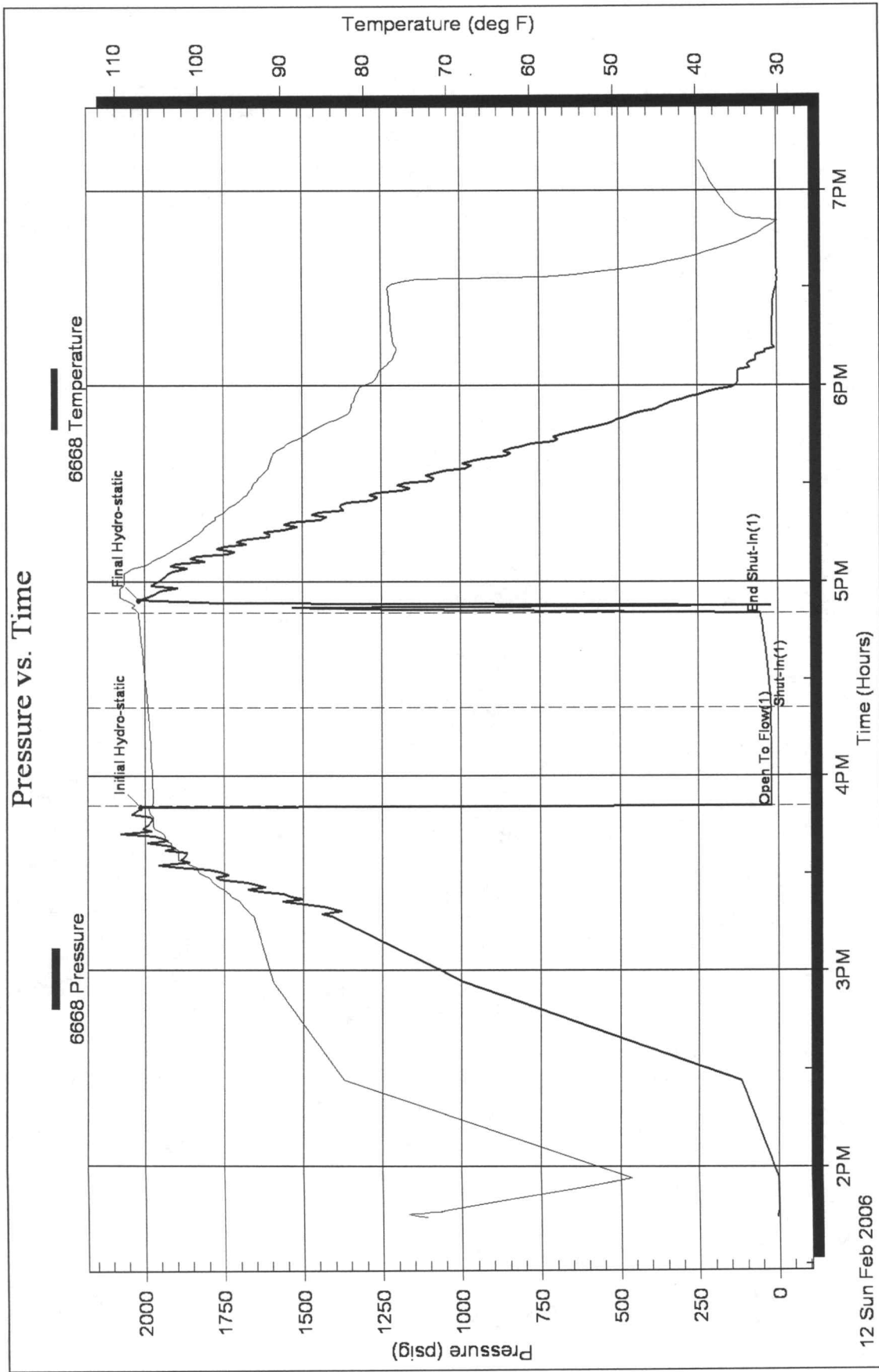
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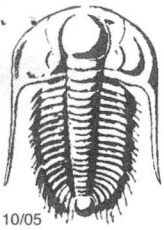
Inside Hess Oil Co.

13-19s-20w Rush KS

DST Test Number: 1

Pressure vs. Time





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

8422
No 24337

Test Ticket

Well Name & No. Helen #1 Test No. 1 Date 2-12-06
 Company Hess Oil Company Zone Tested Cherokee Sand
 Address P.O. Box 1009, McPherson, KS 67460 Elevation 2132 KB 2128 GL
 Co. Rep / Geo. Jamie Hess Rig Malkard JV, Inc
 Location: Sec. B Twp. 19^s Rge. 20^w Co. Rush State KS
 Comment: _____ Release date / time: _____

Interval Tested 4120 - 4152 Initial Str Wt./Lbs. 50000 Unseated Str Wt/Lbs. 50000
 Anchor Length 32 Wt. Set Lbs. 20000 Wt. Pulled Loose/Lbs. 75000
 Top Packer Depth 4115 Tool Weight 2100
 Bottom Packer Depth 4120 Hole Size 7 7/8" YES Rubber Size 6 3/4" YES
 Total Depth 4152 Wt. Pipe Run NONE Drill Collar Run YES 250'
 Mud Wt. 8.09 LCM 0 Vis. 50 WL 9.2 Drill Pipe Size 4 1/2" XH Ft. Run 3858

Blow Description FF: Weak blow @ 4", died after 13 minutes.
ISI: No blowback
FF: No blow, flushed tool, no blow.
FSI: Pulled tests.

Recovery - Total Feet 10 GIP 0 Ft. in DC 10 Ft. in DP 0
 Rec. 10 Feet of Dry Mud %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 Rec. _____ Feet of _____ %gas _____ %oil _____ %water _____ %mud _____
 BHT 107.34 °F Gravity NC °API D @ _____ °F Corrected Gravity _____ °API
 RW NC @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides 2000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	2013	PSI	668	9 hour <u>110</u>
(B) First Initial Flow Pressure	19	PSI	(depth) 4121	Jars <u>20</u>
(C) First Final Flow Pressure	21	PSI	Recorder No. 13266	Safety Jt. <u>50</u>
(D) Initial Shut-In Pressure	55	PSI	(depth) 4149	Circ Sub <u>NC</u>
(E) Second Initial Flow Pressure		PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		PSI	Initial Opening <u>30</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud	2018	PSI	Initial Shut-In <u>30</u>	Shale Packer _____

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Approved By _____
 Our Representative Jamie Hess Thank You
 Recorder No. _____ Test _____
 (depth) _____ Jars _____
 Recorder No. _____ Safety Jt. _____
 (depth) _____ Circ Sub _____
 Recorder No. _____ Sampler _____
 (depth) _____ Straddle _____
 Initial Opening _____ Ext. Packer _____
 Initial Shut-In _____ Shale Packer _____
 Final Flow _____ Ruined Packer _____
 Final Shut-In _____ Mileage 200 200
 T-On Location 13:00 Sub Total: 1550
 T-Started 13:44 Std. By _____
 T-Open 15:50 Acc. Chg: _____
 T-Pulled 16:54 Other: _____
 T-Out 19:00 Total: _____

CHART PAGE

This is a photocopy of the actual AK-1 recorder chart.

