

DRILL STEM TEST REPORT

Prepared For: **Hess Oil Company**

225 N Market Ste. #300
Wichita KS 67202

ATTN: Jamie Hess

32-15S-22W Trego KS.

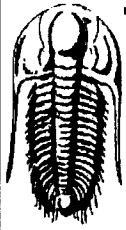
Eunice #1

Start Date: 2002.11.27 @ 23:25:44

End Date: 2002.11.28 @ 03:57:42

Job Ticket #: 15172 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Hess Oil Company
225 N Market Ste. #300
Wichita KS 67202
ATTN: Jamie Hess

Eunice #1
32-15S-22W Trego KS.
Job Ticket: 15172 **DST#: 1**
Test Start: 2002.11.27 @ 23:25:44

GENERAL INFORMATION:

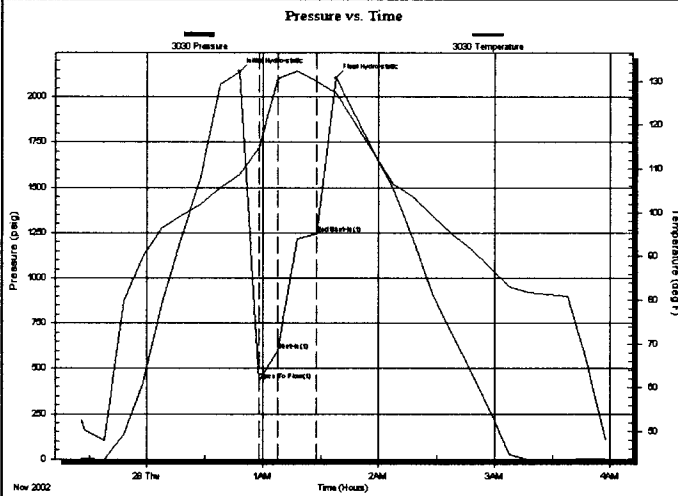
Formation: **Mississippian**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 00:57:42
Time Test Ended: 03:57:42
Interval: **4255.00 ft (KB) To 4355.00 ft (KB) (TVD)**
Total Depth: **4355.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole**
Tester: **Rod Steinbrink**
Unit No: **22**
Reference Elevations: **2395.00 ft (KB)**
2390.00 ft (CF)
KB to GR/CF: **5.00 ft**

Serial #: 3030

Inside

Press@RunDepth: **600.16 psig @ 4256.00 ft (KB)** Capacity: **7000.00 psig**
Start Date: **2002.11.27** End Date: **2002.11.28** Last Calib.: **1899.12.30**
Start Time: **23:25:44** End Time: **03:57:42** Time On Btm: **2002.11.28 @ 00:47:42**
Time Off Btm: **2002.11.28 @ 01:37:42**

TEST COMMENT: **F; Strong blow off btm in 2 mins**
IS; No return blow
FF; TOH @ Company Orders



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2139.77	108.68	Initial Hydro-static
10	433.91	114.88	Open To Flow (1)
20	600.16	130.56	Shut-in(1)
40	1244.73	129.95	End Shut-in(1)
50	2105.22	127.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
325.00	Drig. Mud	2.30
1055.00	Wtr	14.80

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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TOOL DIAGRAM

Hess Oil Company
225 N Market Ste. #300
Wichita KS 67202
ATTN: Jamie Hess

Eunice #1
32-15S-22W Trego KS.
Job Ticket: 15172 **DST#: 1**
Test Start: 2002.11.27 @ 23:25:44

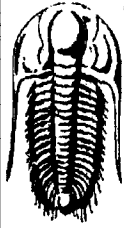
Tool Information

Drill Pipe:	Length: 4006.00 ft	Diameter: 3.80 inches	Volume: 56.19 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 57.41 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4255.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	100.00 ft			
Tool Length:	125.00 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			4235.00	
Hydraulic tool	5.00			4240.00	
Jars	5.00			4245.00	
Packer	5.00			4250.00	25.00 Bottom Of Top Packer
Packer	5.00			4255.00	
Stubb	1.00			4256.00	
Recorder	0.00	3030	Inside	4256.00	
Perforations	29.00			4285.00	
Change Over Sub	1.00			4286.00	
Anchor	63.00			4349.00	
Change Over Sub	1.00			4350.00	
Recorder	0.00	13371	Outside	4350.00	
Bullnose	5.00			4355.00	100.00 Bottom Packers & Anchor

Total Tool Length: 125.00



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FLUID SUMMARY

Hess Oil Company

Eunice #1

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Wichita KS 67202

32-15S-22W Trego KS.

Job Ticket: 15172

DST#: 1

ATTN: Jamie Hess

Test Start: 2002.11.27 @ 23:25:44

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:	18000 ppm
Viscosity:	46.00 sec/qt	Cushion Volume:	bbbl		
Water Loss:	8.98 in ³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
325.00	Drig. Mud	2.300
1055.00	Wtr	14.799

Total Length: 1380.00 ft Total Volume: 17.099 bbl

Num Fluid Samples: 0

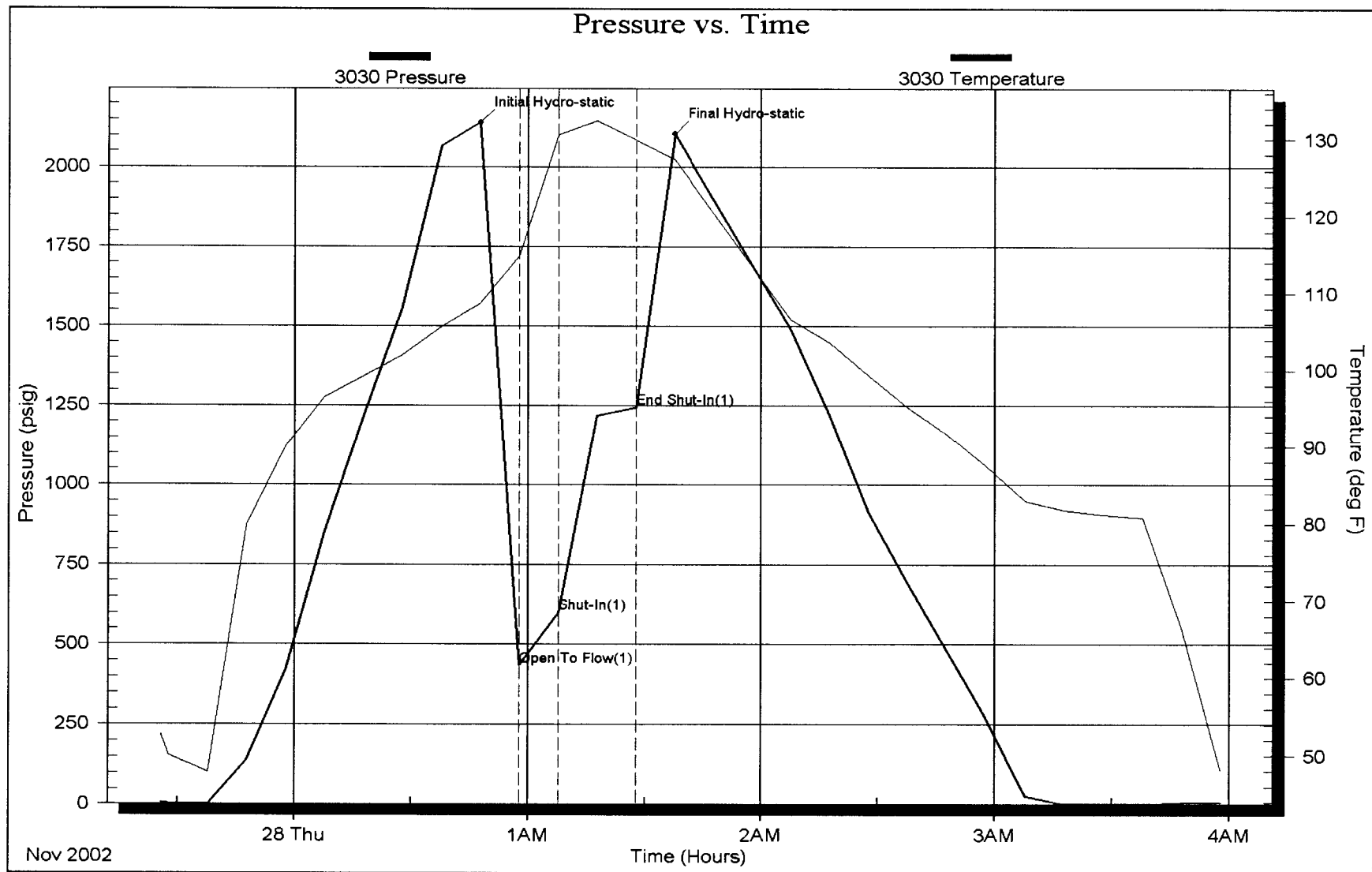
Num Gas Bombs: 0

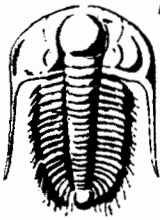
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .39 @ 70 deg =





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

IWV #5266 \$1228.00

No 15172

Test Ticket

Well Name & No. Eunice #1 Test No. 1 Date 11-27-02
 Company Hess Oil Company Zone Tested Mississippian
 Address 225 N. Market Ste 300 Wichita, KS. 67202 Elevation 2395 KB 2390 GL
 Co. Rep / Geo. Jamie Hess Cont. Mallard #2 Est. Ft. of Pay Por. %
 Location: Sec. 32 Twp. 15^S Rge. 22^W Co. Trego State KS.
 No. of Copies Distribution Sheet (Y, N) Turnkey (Y, N) Evaluation (Y, N)

Interval Tested 4255 - 4355 Initial Str Wt./Lbs. 60,000 Unseated Str Wt./Lbs. 70,000
 Anchor Length 100' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 75,000
 Top Packer Depth 4250 Tool Weight 2,000
 Bottom Packer Depth 4255 Hole Size — 7 7/8" Rubber Size — 6 3/4"
 Total Depth 4355 Wt. Pipe Run Drill Collar Run 248'
 Mud Wt. 9.4 LCM Vis. 46 WL 9.0 Drill Pipe Size 4 1/2" XH Ft. Run 4006'
 Blow Description IF: Strong blow off btm 2 mins.
ISI: No return blow.
FF: ToH @ Co Orders.

Recovery — Total Feet 1380' GIP Ft. in DC 248' Ft. in DP 1132'
 Rec. Feet Of %gas %oil %water %mud
 Rec. 325' Feet Of Drlg Mud %gas %oil %water %mud
 Rec. Feet Of %gas %oil %water %mud
 Rec. 1055' Feet Of Wtr. %gas %oil %water %mud
 Rec. Feet Of %gas %oil %water %mud
 BHT 132° °F Gravity °API D@ °F Corrected Gravity °API
 RW -39 @ 70° °F Chlorides 18,000 ppm Recovery Chlorides N/A ppm System

	AK-1	Alpine	PSI	Recorder No.	T-On Location
(A) Initial Hydrostatic Mud	<u>2236</u>	<u>2139</u>		<u>3030</u>	<u>2245</u>
(B) First Initial Flow Pressure	<u>315</u>	<u>433</u>	PSI	(depth) <u>4256</u>	T-Started <u> </u>
(C) First Final Flow Pressure	<u>599</u>	<u>600</u>	PSI	Recorder No. <u>13371</u>	T-Open <u> </u>
(D) Initial Shut-In Pressure	<u>1233</u>	<u>1244</u>	PSI	(depth) <u>4350</u>	T-Pulled <u> </u>
(E) Second Initial Flow Pressure	<u> </u>	<u> </u>	PSI	Recorder No. <u> </u>	T-Out <u>0357</u>
(F) Second Final Flow Pressure	<u> </u>	<u> </u>	PSI	(depth) <u> </u>	T-Off Location <u>0500</u>
(G) Final Shut-in Pressure	<u> </u>	<u> </u>	PSI	Initial Opening <u>20</u>	Test <u>800</u>
(Q) Final Hydrostatic Mud	<u>2136</u>	<u>2105</u>	PSI	Initial Shut-in <u>20</u>	Jars <u>X</u> <u>200</u>

Final Flow Safety Joint
 Final Shut-in Straddle
 Circ. Sub X N/C
 Sampler
 Extra Packer
 Elec. Rec. X N/C 150
 Mileage 78 IWV 78
 Other
 TOTAL PRICE \$ \$1228.00

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Approved By Jamie Hess
Our Representative Rod Steinbrink

CHART PAGE

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

