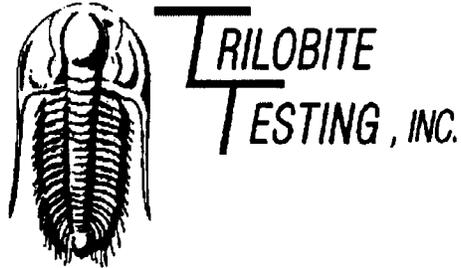


15-135-24340

5-16s-2/w



## DRILL STEM TEST REPORT

Prepared For: **Hess Oil Company**

P.O. Box 1009  
McPherson, Ks 67460

ATTN: Jamie Hess

**5-16-21 Ness**

**Paula #1**

Start Date: 2005.02.07 @ 14:50:11

End Date: 2005.02.07 @ 19:47:16

Job Ticket #: 20466                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Hess Oil Company

Paula #1

5-16-21 Ness

DST # 1

Cherokee Sand

2005.02.07



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Hess Oil Company  
P.O. Box 1009  
McPherson, Ks 67460  
ATTN: Jamie Hess

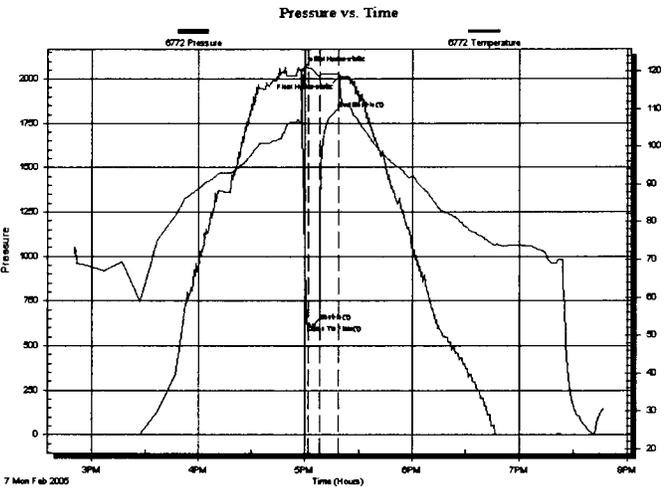
**Paula #1**  
**5-16-21 Ness**  
Job Ticket: 20466      **DST#: 1**  
Test Start: 2005.02.07 @ 14:50:11

## GENERAL INFORMATION:

Formation: **Cherokee Sand**  
Deviated: **No Whipstock:**                      ft (KB)  
Time Tool Opened: 17:01:46  
Time Test Ended: 19:47:16  
Interval: **4220.00 ft (KB) To 4283.00 ft (KB) (TVD)**  
Total Depth: **4283.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Good**  
Test Type: **Conventional Bottom Hole**  
Tester: **Brandon Turley**  
Unit No: **18**  
Reference Elevations: **2390.00 ft (KB)**  
**2385.00 ft (CF)**  
KB to GR/CF: **5.00 ft**

**Serial #: 6772      Inside**  
Press@RunDepth: **636.23 psig @ 4284.00 ft (KB)**  
Start Date: **2005.02.07**      End Date: **2005.02.07**  
Start Time: **14:50:11**      End Time: **19:47:16**  
Capacity: **7000.00 psig**  
Last Calib.: **1899.12.30**  
Time On Btm: **2005.02.07 @ 16:57:46**  
Time Off Btm: **2005.02.07 @ 17:19:01**

TEST COMMENT: **F: 1/4 blow BOB in 30 sec.**  
**IS: No return.**



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2048.23	106.11	Initial Hydro-static
4	568.20	120.71	Open To Flow (1)
11	636.23	118.84	Shut-In(1)
21	1829.92	119.37	End Shut-In(1)
22	2015.65	118.80	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1163.00	mud 100%m	14.07

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Hess Oil Company  
P.O. Box 1009  
McPherson, Ks 67460  
ATTN: Jamie Hess

**Paula #1**  
**5-16-21 Ness**  
Job Ticket: 20466      **DST#: 1**  
Test Start: 2005.02.07 @ 14:50:11

**Tool Information**

Drill Pipe:	Length: 4045.00 ft	Diameter: 3.80 inches	Volume: 56.74 bbl	Tool Weight: 1500.00 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: 246.00 ft	Diameter: 2.25 inches	Volume: 1.21 bbl	Weight to Pull Loose: 82000.00 lb
			<u>Total Volume: 57.95 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	36.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4283.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	63.00 ft			
Tool Length:	91.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

**Tool Description**

**Length (ft)    Serial No.    Position    Depth (ft)    Accum. Lengths**

Change Over Sub	1.00			4256.00		
Shut In Tool	5.00			4261.00		
Hydraulic tool	5.00			4266.00		
Jars	5.00			4271.00		
Safety Joint	3.00			4274.00		
Packer	5.00		Fluid	4279.00	28.00	Bottom Of Top Packer
Packer	4.00			4283.00		
Stubb	1.00			4284.00		
Recorder	0.00	6772	Inside	4284.00		
Perforations	24.00			4308.00		
Change Over Sub	1.00			4309.00		
Drill Pipe	31.00			4340.00		
Change Over Sub	1.00			4341.00		
Recorder	0.00	10248	Inside	4341.00		
Bulhose	5.00			4346.00	63.00	Bottom Packers & Anchor

**Total Tool Length: 91.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Hess Oil Company  
P.O. Box 1009  
McPherson, Ks 67460  
ATTN: Jamie Hess

**Paula #1**  
**5-16-21 Ness**  
Job Ticket: 20466      **DST#: 1**  
Test Start: 2005.02.07 @ 14:50:11

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 46.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.56 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 3500.00 ppm			
Filter Cake: 2.00 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
1163.00	mud 100%m	14.073

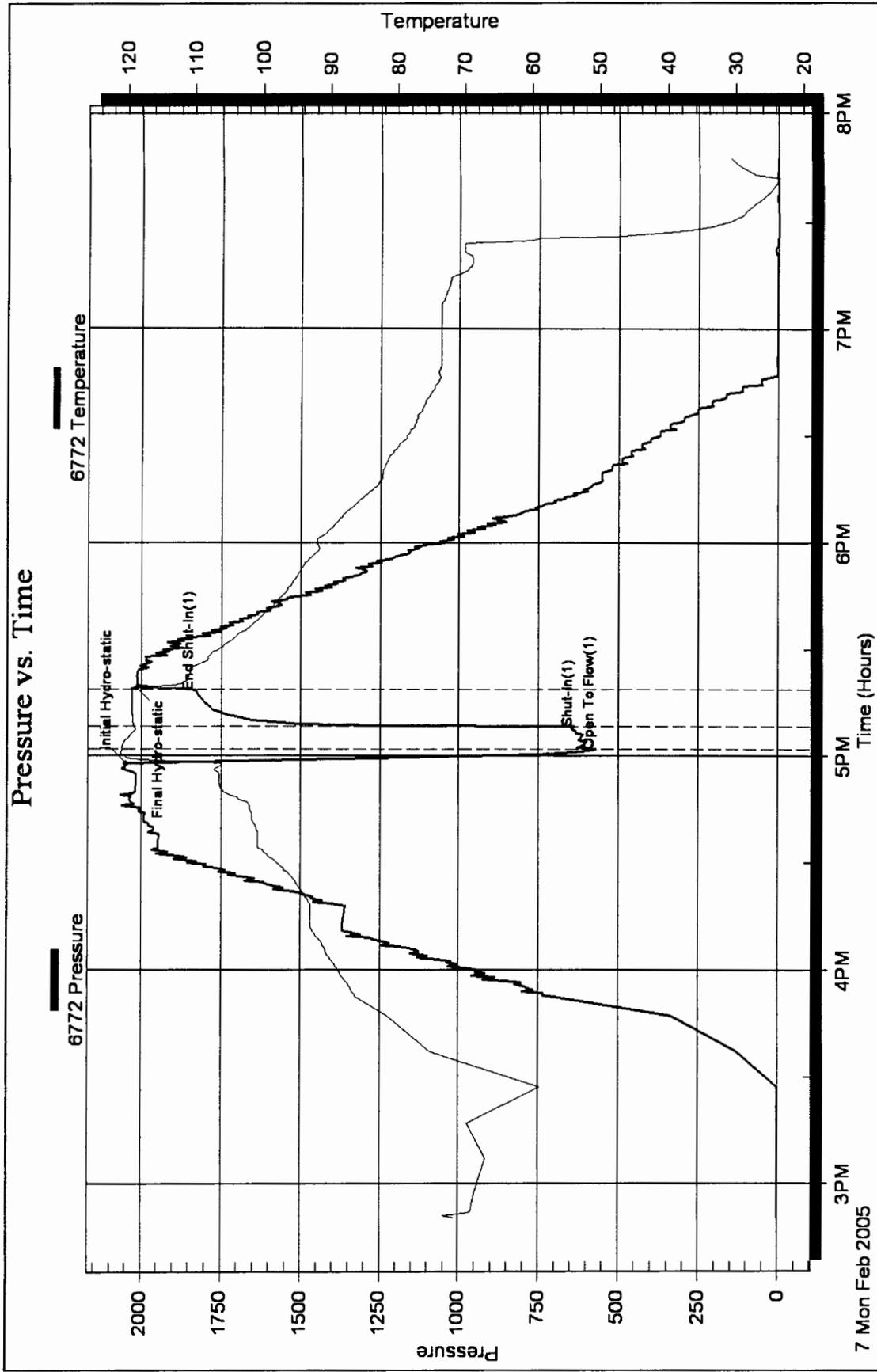
Total Length: 1163.00 ft      Total Volume: 14.073 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

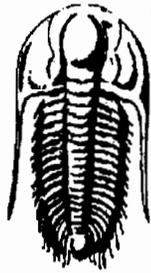
Serial #: 6772

Inside Hess Oil Company

5-16-21 Ness

DST Test Number: 1





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Hess Oil Company**

P.O. Box 1009  
McPherson, Ks 67460

ATTN: Jamie Hess

**5-16-21 Ness**

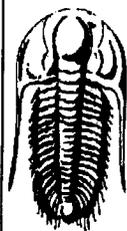
**Paula #1**

Start Date: 2005.02.07 @ 20:25:26

End Date: 2005.02.08 @ 00:48:31

Job Ticket #: 20467                      DST #: 2

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  
P.O. Box 1009  
McPherson, Ks 67460  
ATTN: Jamie Hess

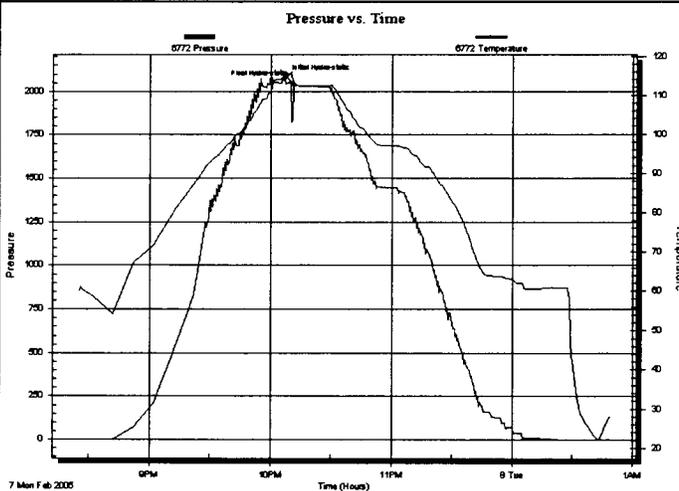
**Paula #1**  
**5-16-21 Ness**  
Job Ticket: 20467      **DST#: 2**  
Test Start: 2005.02.07 @ 20:25:26

### GENERAL INFORMATION:

Formation: **Cherokee sand**  
Deviated: **No Whipstock:**      ft (KB)  
Time Tool Opened:  
Time Test Ended: **00:48:31**  
Interval: **4260.00 ft (KB) To 4283.00 ft (KB) (TVD)**  
Total Depth: **4283.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Good**  
Test Type: **Conventional Bottom Hole**  
Tester: **Brandon Turley**  
Unit No: **18**  
Reference Elevations: **2390.00 ft (KB)**  
**2385.00 ft (CF)**  
KB to GR/CF: **5.00 ft**

**Serial #: 6772**      **Inside**  
Press@RunDepth:      psig @ **4284.00 ft (KB)**      Capacity:      **7000.00 psig**  
Start Date:      **2005.02.07**      End Date:      **2005.02.08**      Last Calib.:      **1899.12.30**  
Start Time:      **20:25:26**      End Time:      **00:48:31**      Time On Btm:      **2005.02.07 @ 22:07:01**  
Time Off Btm:      **2005.02.07 @ 22:11:16**

**TEST COMMENT:** Packers failed at open.  
Reset packers.  
Pulled tool.



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2074.25	113.75	Initial Hydro-static
5	2040.69	113.47	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
372.00	mud 100%m	2.98

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Hess Oil Company  
P.O. Box 1009  
McPherson, Ks 67460  
ATTN: Jamie Hess

**Paula #1**  
**5-16-21 Ness**  
Job Ticket: 20467      **DST#: 2**  
Test Start: 2005.02.07 @ 20:25:26

### Tool Information

Drill Pipe:	Length: 4036.00 ft	Diameter: 3.80 inches	Volume: 56.61 bbl	Tool Weight: 1500.00 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: 246.00 ft	Diameter: 2.25 inches	Volume: 1.21 bbl	Weight to Pull Loose: 82000.00 lb
			<u>Total Volume: 57.82 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4283.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	51.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			4256.00	
Shut In Tool	5.00			4261.00	
Hydraulic tool	5.00			4266.00	
Jars	5.00			4271.00	
Safety Joint	3.00			4274.00	
Packer	5.00		Fluid	4279.00	28.00      Bottom Of Top Packer
Packer	4.00			4283.00	
Stubb	1.00			4284.00	
Recorder	0.00	6772	Inside	4284.00	
Perforations	17.00			4301.00	
Recorder	0.00	10248	Inside	4301.00	
Bullnose	5.00			4306.00	23.00      Bottom Packers & Anchor

**Total Tool Length: 51.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Hess Oil Company  
P.O. Box 1009  
McPherson, Ks 67460  
ATTN: Jamie Hess

Paula #1  
5-16-21 Ness  
Job Ticket: 20467  
Test Start: 2005.02.07 @ 20:25:26  
DST#: 2

**Mud and Cushion Information**

Mud Type: Gel Chem	Cushion Type:	Oil API:	0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	0 ppm
Viscosity: 46.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.56 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 3500.00 ppm			
Filter Cake: 2.00 inches			

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
372.00	mud 100%m	2.977

Total Length: 372.00 ft      Total Volume: 2.977 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

Serial #: 6772

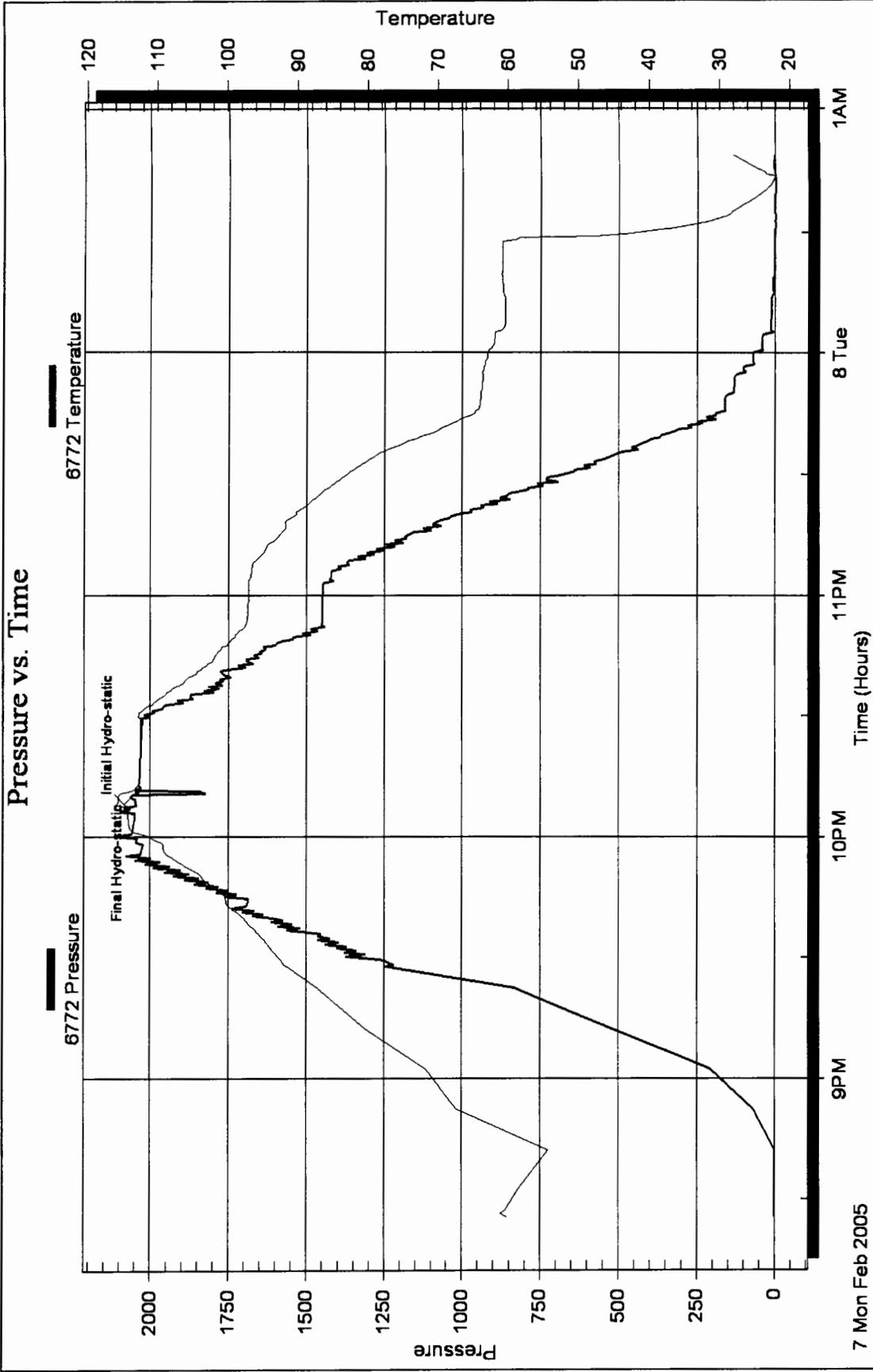
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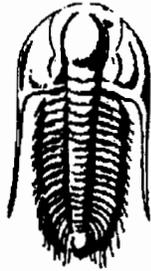
Hess Oil Company

5-16-21 Ness

DST Test Number: 2

### Pressure vs. Time





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Hess Oil Company**

P.O. Box 1009  
McPherson, Ks 67460

ATTN: Jamie Hess

**5-16-21 Ness**

**Paula #1**

Start Date: 2005.02.08 @ 19:57:38

End Date: 2005.02.09 @ 03:00:13

Job Ticket #: 20468                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Hess Oil Company

Paula #1

5-16-21 Ness

DST # 3

Cherokee

2005.02.08



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

Hess Oil Company  
P.O. Box 1009  
McPherson, Ks 67460  
ATTN: Jamie Hess

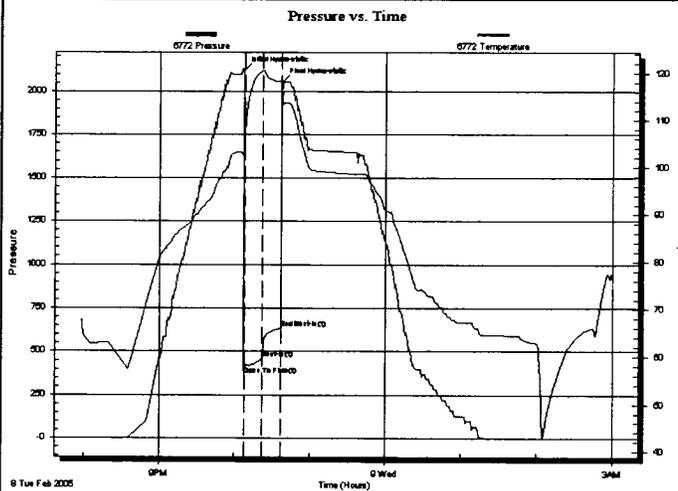
**Paula #1**  
**5-16-21 Ness**  
Job Ticket: 20468      **DST#: 3**  
Test Start: 2005.02.08 @ 19:57:38

### GENERAL INFORMATION:

Formation: **Cherokee**  
Deviated: **No Whipstock:**      ft (KB)  
Time Tool Opened: 22:08:13  
Time Test Ended: 03:00:13  
Interval: **4270.00 ft (KB) To 4290.00 ft (KB) (TVD)**  
Total Depth: **4362.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Good**  
Test Type: **Conventional Straddle**  
Tester: **Brandon Turley**  
Unit No: **18**  
Reference Elevations: **2390.00 ft (KB)**  
**2385.00 ft (CF)**  
KB to GR/CF: **5.00 ft**

**Serial #: 6772**      **Inside**  
Press@RunDepth: **461.52 psig @ 4363.00 ft (KB)**  
Start Date: **2005.02.08**      End Date: **2005.02.09**  
Start Time: **19:57:38**      End Time: **03:00:13**  
Capacity: **7000.00 psig**  
Last Calib.: **1899.12.30**  
Time On Btm: **2005.02.08 @ 22:06:58**  
Time Off Btm: **2005.02.08 @ 22:37:43**

**TEST COMMENT:** F: 1/4 blow BOB in 1 1/2 min.  
IS: Weak surface blow built to 1/4 in 15 min.



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2120.54	102.38	Initial Hydro-static
2	365.91	107.44	Open To Flow (1)
16	461.52	120.56	Shut-In(1)
30	634.25	118.22	End Shut-In(1)
31	2055.82	113.85	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
123.00	omcw 10%o 80%w 10%m	0.60
123.00	omcw 30%o 60%w 10%m	0.60
588.00	ocm 10%o 90%m	8.25

### Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Hess Oil Company  
P.O. Box 1009  
McPherson, Ks 67460  
ATTN: Jamie Hess

**Paula #1**  
**5-16-21 Ness**  
Job Ticket: 20468      DST#: 3  
Test Start: 2005.02.08 @ 19:57:38

**Tool Information**

Drill Pipe:	Length: 4104.00 ft	Diameter: 3.80 inches	Volume: 57.57 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 246.00 ft	Diameter: 2.25 inches	Volume: 1.21 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 58.78 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4362.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	4379.00 ft			
Interval between Packers:	17.00 ft			
Tool Length:	120.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4335.00	
Shut In Tool	5.00			4340.00	
Hydraulic tool	5.00			4345.00	
Jars	5.00			4350.00	
Safety Joint	3.00			4353.00	
Packer	5.00		Fluid	4358.00	28.00      Bottom Of Top Packer
Packer	4.00			4362.00	
Stubb	1.00			4363.00	
Recorder	0.00	6772	Inside	4363.00	
Perforations	15.00			4378.00	
Blank Off Sub	1.00			4379.00	17.00      Tool Interval
Packer	3.00			4382.00	
Stubb	1.00			4383.00	
Perforations	2.00			4385.00	
Change Over Sub	1.00			4386.00	
Drill Pipe	62.00			4448.00	
Change Over Sub	1.00			4449.00	
Recorder	0.00	10248	Inside	4449.00	
Bullnose	5.00			4454.00	75.00      Bottom Packers & Anchor

**Total Tool Length: 120.00**



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Hess Oil Company  
P.O. Box 1009  
McPherson, Ks 67460  
ATTN: Jamie Hess

**Paula #1**  
**5-16-21 Ness**  
Job Ticket: 20468      **DST#: 3**  
Test Start: 2005.02.08 @ 19:57:38

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 0 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 16500 ppm
Viscosity: 46.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.56 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig	
Salinity: 3500.00 ppm		
Filter Cake: 2.00 inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
123.00	omcw 10%o 80%w 10%m	0.605
123.00	omcw 30%o 60%w 10%m	0.605
588.00	ocm 10%o 90%m	8.248

Total Length: 834.00 ft      Total Volume: 9.458 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

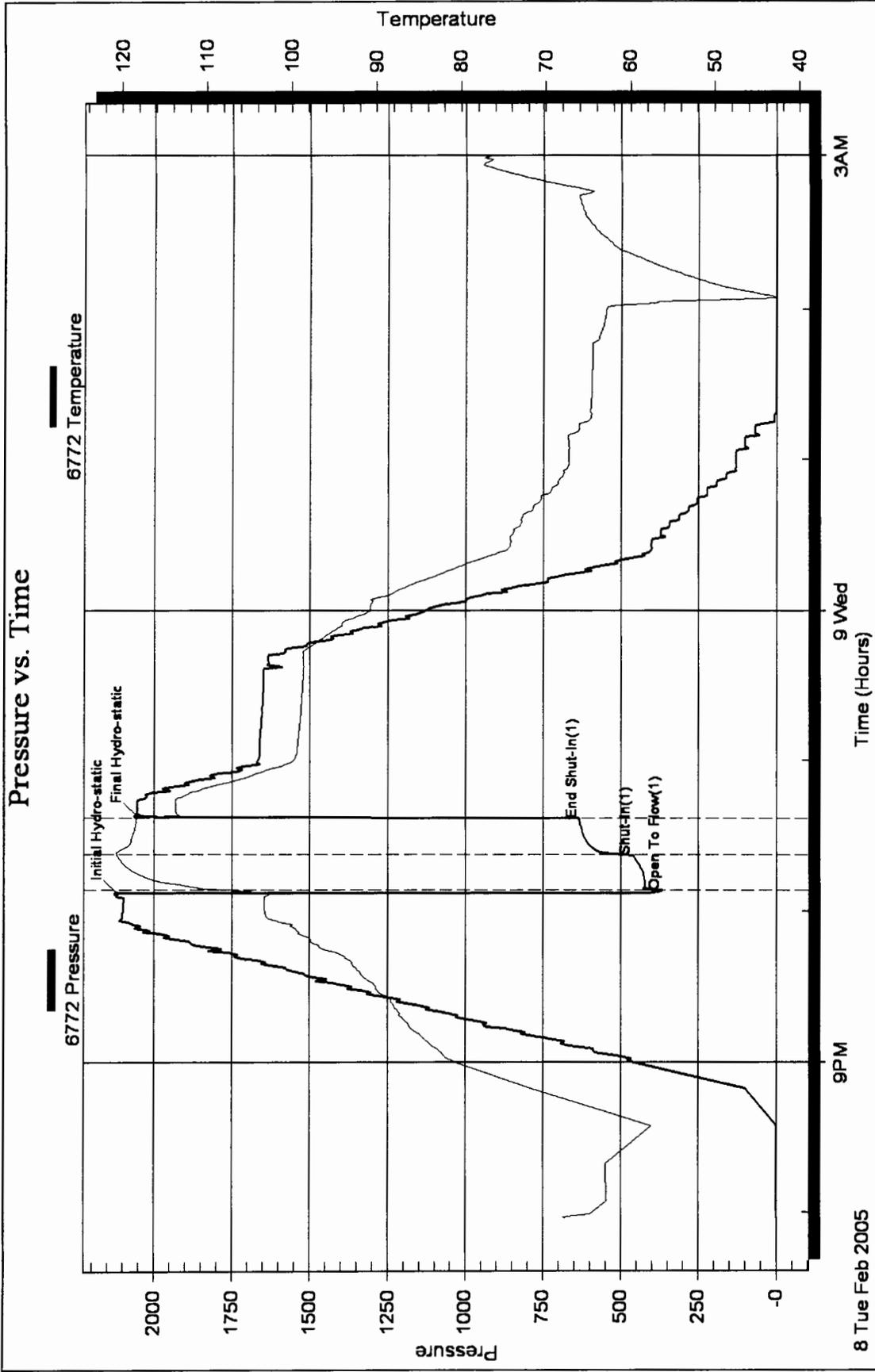
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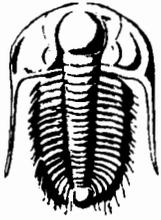
Inside

Hess Oil Company

5-16-21 Ness

DST Test Number: 3





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

TNV  
1/19/97

No 20466

05/03

## Test Ticket

Well Name & No. Pay 1a #1 Test No. 1 Date 2-7-05  
 Company Hess oil company Zone Tested Cherokee sand  
 Address P.O. Box 1009 McPherson, KS 67460 Elevation 2390 KB 2385 GL  
 Co. Rep / Geo. Jamie Hess Cont. Mallard Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 5 Twp. 16 Rge. 21 Co. Ness State KS  
 No. of Copies Norm Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 4220 4283 Initial Str Wt./Lbs. 58000 Unseated Str Wt./Lbs. 62000  
 Anchor Length \_\_\_\_\_ 63 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 82000  
 Top Packer Depth \_\_\_\_\_ 4215 Tool Weight 1500  
 Bottom Packer Depth \_\_\_\_\_ 4220 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth \_\_\_\_\_ 4283 Wt. Pipe Run \_\_\_\_\_ Drill Collar Run 246  
 Mud Wt. 9.2 LCM 0 Vis. 46 WL 8.6 Drill Pipe Size 4 1/2 X 4 Ft. Run 4045  
 Blow Description IF: 1/4 blow BOB in 30 sec.  
IS: No return.

Recovery - Total Feet 1163 GIP \_\_\_\_\_ Ft. in DC 246 Ft. in DP 917  
 Rec. 1163 Feet of Mud %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water 100 %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 88 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides 3500 ppm Recovery 3500 Chlorides 3500 ppm System

	AK-1	Alpine	PSI	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>2048</u>		<u>6772</u>	<u>X 900.00</u>
(B) First Initial Flow Pressure		<u>568</u>		<u>4221</u>	Elec. Rec. <u>X</u>
(C) First Final Flow Pressure		<u>636</u>		<u>10248</u>	Jars <u>X 200.00</u>
(D) Initial Shut-In Pressure		<u>1829</u>		<u>4282</u>	Safety Jt. <u>X 50.00</u>
(E) Second Initial Flow Pressure					Circ Sub <u>X N/C</u>
(F) Second Final Flow Pressure					Sampler _____
(G) Final Shut-In Pressure					Straddle _____
(Q) Final Hydrostatic Mud		<u>2015</u>			Ext. Packer _____

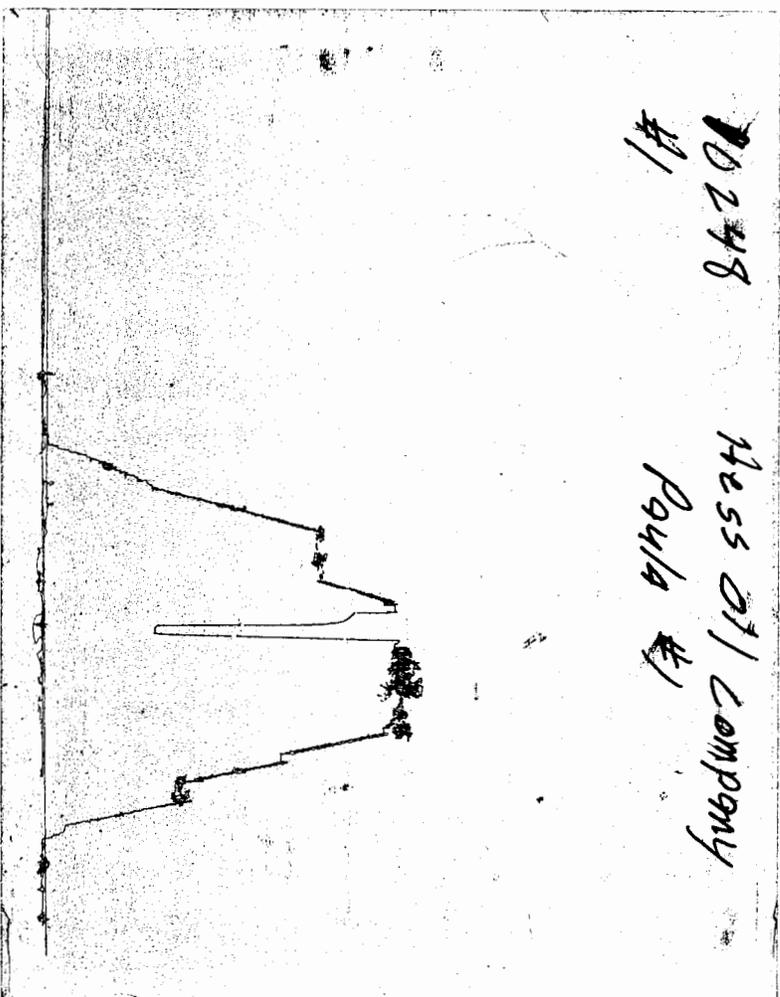
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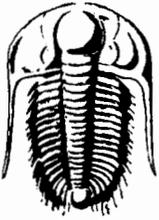
Approved By [Signature]  
 Our Representative [Signature]

Initial Opening 10  
 Final Flow \_\_\_\_\_  
 Final Shut-In \_\_\_\_\_  
 T-On Location 1400  
 T-Started 1450  
 T-Open 17:00  
 T-Pulled 17:20  
 T-Out 19:48

Shale Packer \_\_\_\_\_  
 Mileage 162 @ 162.00  
 Sub Total: 1312.00  
 Std. By \_\_\_\_\_  
 Other \_\_\_\_\_  
 Total: \_\_\_\_\_

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





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 20467

05/03

## Test Ticket

Well Name & No. Paul #4 Test No. Z Date 2-7-05  
 Company Hess Oil Company Zone Tested Cherokee Sand  
 Address P.O. Box 1009 McPherson, KS 67460 Elevation 2390 KB 2385 GL  
 Co. Rep / Geo. Jamie Hess Cont. Mallard Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 5 Twp. 16 Rge. 21 Co. Ness State KS  
 No. of Copies Norm Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 4260 4283 Initial Str Wt./Lbs. 58000 Unseated Str Wt./Lbs. 60000  
 Anchor Length \_\_\_\_\_ 23 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 82000  
 Top Packer Depth \_\_\_\_\_ 4255 Tool Weight 1500  
 Bottom Packer Depth \_\_\_\_\_ 4260 Hole Size 7 7/8"  Rubber Size 6 3/4"   
 Total Depth \_\_\_\_\_ 4283 Wt. Pipe Run \_\_\_\_\_ Drill Collar Run 246  
 Mud Wt. 9.2 LCM 0 Vis. 46 WL 816 Drill Pipe Size 4 1/2 XH Ft. Run 4036  
 Blow Description Packers failed at open.  
Reset packers.  
Pulled tool

Recovery - Total Feet 392 GIP \_\_\_\_\_ Ft. in DC 246 Ft. in DP 126  
 Rec. 392 Feet of Mud %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water 100 %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 113 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides 3500 ppm Recovery 3500 Chlorides 3500 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2074</u>	PSI	<u>6772</u>	<u>X 900.00</u>
(B) First Initial Flow Pressure	<u>-</u>	PSI	<u>4261</u>	Elec. Rec. <u>X</u>
(C) First Final Flow Pressure	<u>-</u>	PSI	<u>4282</u>	Jars <u>X 200.00</u>
(D) Initial Shut-In Pressure	<u>-</u>	PSI		Safety Jt <u>X 50.00</u>
(E) Second Initial Flow Pressure	<u>-</u>	PSI		Circ Sub <u>X N/C</u>
(F) Second Final Flow Pressure	<u>-</u>	PSI		Sampler _____
(G) Final Shut-In Pressure	<u>-</u>	PSI	<b>Initial Opening</b>	Straddle _____
(Q) Final Hydrostatic Mud	<u>2040</u>	PSI	Initial Shut-In	Ext. Packer _____

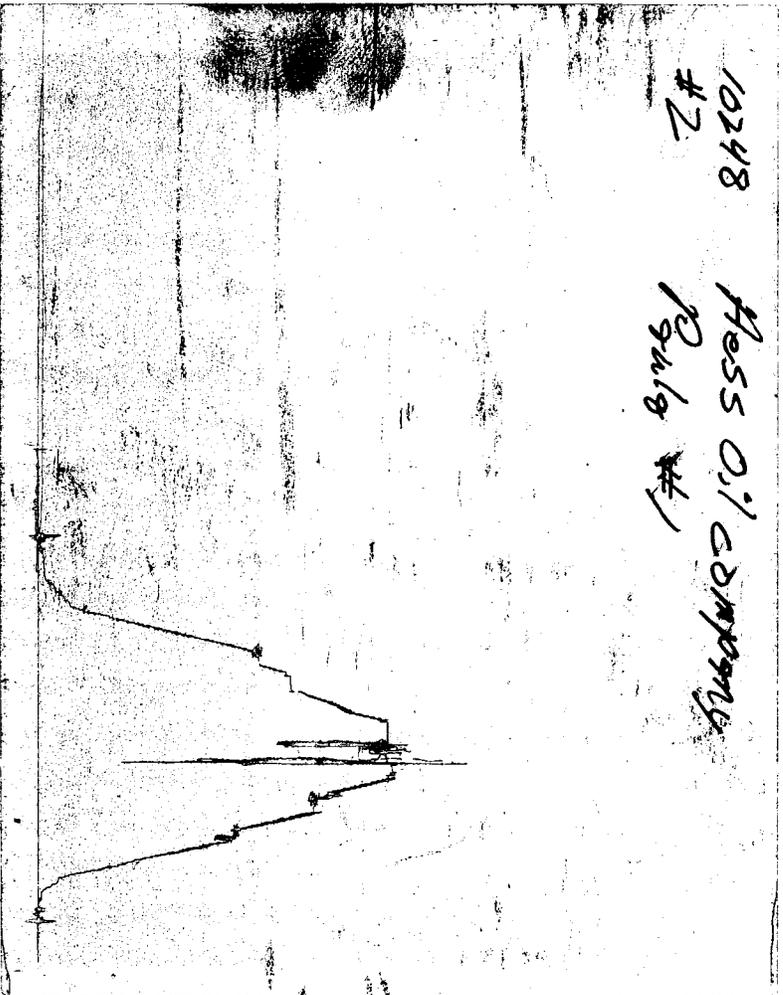
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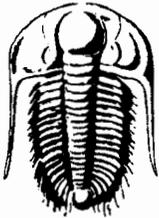
Approved By \_\_\_\_\_  
 Our Representative \_\_\_\_\_

Final Flow	<u>-</u>
Final Shut-In	<u>-</u>
T-On Location	<u>14:00</u>
T-Started	<u>20:25</u>
T-Open	<u>22:10</u>
T-Pulled	<u>22:15</u>
T-Out	<u>24:48</u>
Mileage	<u>1150</u>
Sub Total:	<u>1150</u>
Std. By	<u>_____</u>
Other	<u>_____</u>
Total:	<u>_____</u>

**CHART PAGE**

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





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 20468

05/03

## Test Ticket

Well Name & No. Paula #1 Test No. 3 Date 2/18/05  
 Company Hess Oil Company Zone Tested Cherokee  
 Address P.O. Box 1009 McPherson, KS 67460 Elevation 2390 KB 2385 GL  
 Co. Rep / Geo. Jamie Hess Cont. McHard Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 5 Twp. 16 Rge. 21 Co. Ness State KS  
 No. of Copies norm Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 4270 4290 Initial Str Wt./Lbs. 58000 Unseated Str Wt/Lbs. 60000  
 Anchor Length \_\_\_\_\_ 20 Wt. Set Lbs. 30000 Wt. Pulled Loose/Lbs. 80000  
 Top Packer Depth \_\_\_\_\_ 4270 Tool Weight 1500  
 Bottom Packer Depth \_\_\_\_\_ 4290 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth \_\_\_\_\_ 4362 Wt. Pipe Run \_\_\_\_\_ Drill Collar Run 246  
 Mud Wt. 9.2 LCM 1/2 Vis. 52 WL 10 Drill Pipe Size 4 1/2 X H Ft. Run 4104  
 Blow Description IF: 1/4 blow BOB in 1 1/2 min.  
IS: Weak surface blow built to 1/4 in 15 min.

Recovery - Total Feet 834 GIP 30 Ft. in DC 246 Ft. in DP 588  
 Rec. 588 Feet of OCM %gas 10 %oil \_\_\_\_\_ %water 90 %mud \_\_\_\_\_  
 Rec. 123 Feet of ~~MOCW~~ OMCW %gas 30 %oil 60 %water 10 %mud \_\_\_\_\_  
 Rec. 123 Feet of OMCW %gas 10 %oil 80 %water 10 %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 BHT 120 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW .47 @ 60 °F Chlorides 16500 ppm Recovery 16500 Chlorides 3000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>2120</u> PSI	<u>6772</u>	<u>1000.00</u>
(B) First Initial Flow Pressure		<u>365</u> PSI	<u>4271</u>	Elec. Rec. <u>X</u>
(C) First Final Flow Pressure		<u>461</u> PSI	<u>7437</u>	Jars <u>X</u> <u>200.00</u>
(D) Initial Shut-In Pressure		<u>634</u> PSI	<u>4288</u>	Safety Jt. <u>X</u> <u>50.00</u>
(E) Second Initial Flow Pressure		— PSI	<u>10248</u>	Circ Sub <u>X</u>
(F) Second Final Flow Pressure		— PSI	<u>4361</u>	Sampler _____
(G) Final Shut-In Pressure		— PSI	<u>15</u>	Straddle <u>X</u> <u>250.00</u>
(Q) Final Hydrostatic Mud		<u>2055</u> PSI	<u>15</u>	Ext. Packer _____

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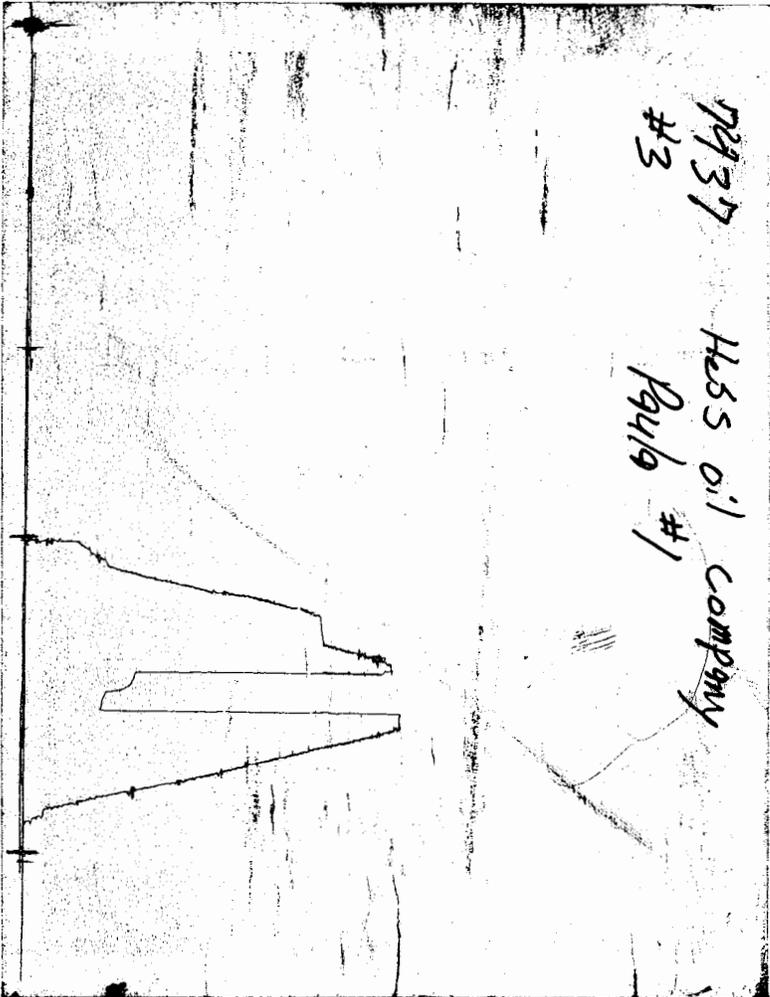
Approved By Jamie Hess  
 Our Representative Bob [Signature]

Initial Opening 15  
 Initial Shut-In \_\_\_\_\_  
 Final Flow \_\_\_\_\_  
 Final Shut-In \_\_\_\_\_  
 T-On Location 19:20  
 T-Started 19:57  
 T-Open 22:06  
 T-Pulled 22:36  
 T-Out 03:00

Mileage 162 \$162.00  
 Sub Total: 1662  
 Std. By \_\_\_\_\_  
 Other \_\_\_\_\_  
 Total: \_\_\_\_\_

**CHART PAGE**

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



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