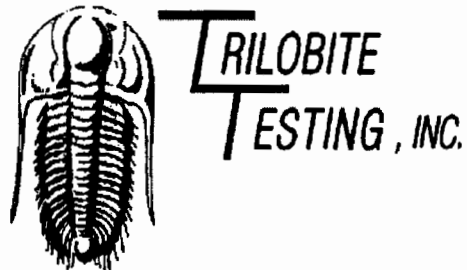


15-135-24218

5-16s-22w



DRILL STEM TEST REPORT

Prepared For: **Hess Oil Co**

225 N. Market,
Wichita, Ks. 66202

ATTN: Jamie Hess

5-16-22-Ness-Ks

Sue #1

Start Date: 2003.04.15 @ 07:50:37

End Date: 2003.04.15 @ 13:56:07

Job Ticket #: 16938 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 Co
225 N. Market,
Wichita, Ks. 66202
ATTN: Jamie Hess

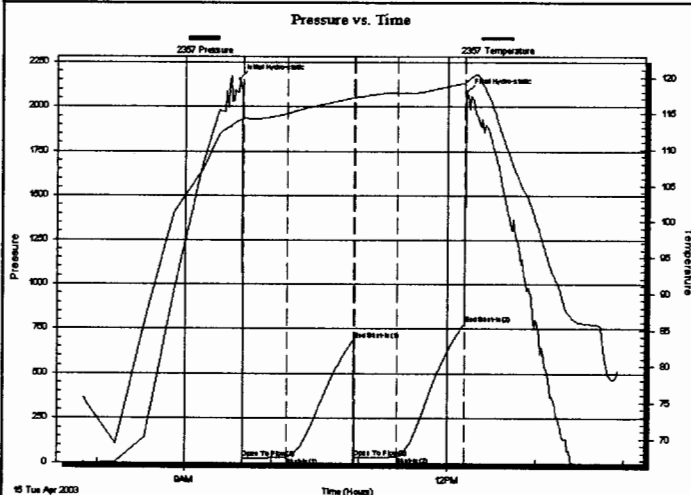
Sue #1
5-16-22-Ness-Ks
Job Ticket: 16938 **DST#: 1**
Test Start: 2003.04.15 @ 07:50:37

GENERAL INFORMATION:

Formation: **Cherokee Sd**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 09:40:07
Time Test Ended: 13:56:07
Interval: **4300.00 ft (KB) To 4380.00 ft (KB) (TVD)**
Total Depth: **4380.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Good**
Test Type: **Conventional Bottom Hole**
Tester: **Dan Bangle**
Unit No: **21**
Reference Elevations: **2425.00 ft (KB)**
2420.00 ft (CF)
KB to GR/CF: **5.00 ft**

Serial #: 2357 **Inside**
Press@RunDepth: **34.57 psig @ 4303.00 ft (KB)**
Start Date: **2003.04.15** End Date: **2003.04.15**
Start Time: **07:50:42** End Time: **13:56:06**
Capacity: **7000.00 psig**
Last Calib.: **2003.04.15**
Time On Btmr: **2003.04.15 @ 09:37:37**
Time Off Btmr: **2003.04.15 @ 12:12:37**

TEST COMMENT: IF-Weak building to 3/4"
FF-Weak surface blow
Times-30-45-60-45



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2154.51	114.06	Initial Hydro-static
3	23.27	114.36	Open To Flow (1)
33	29.20	114.94	Shut-In(1)
79	687.33	117.20	End Shut-In(1)
79	31.12	117.21	Open To Flow(2)
109	34.57	117.82	Shut-In(2)
154	779.56	119.21	End Shut-In(2)
155	2084.67	119.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud w/ show of oil on top	0.07

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hess Oil Co

Sue #1

225 N. Market,
Wichita, Ks. 66202

5-16-22-Ness-Ks

Job Ticket: 16938

DST#: 1

ATTN: Jamie Hess

Test Start: 2003.04.15 @ 07:50:37

Tool Information

Drill Pipe:	Length: 4041.00 ft	Diameter: 3.80 inches	Volume: 56.68 bbl	Tool Weight:	2500.00 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: 247.00 ft	Diameter: 2.25 inches	Volume: 1.21 bbl	Weight to Pull Loose:	80000.00 lb
		Total Volume:	57.89 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	76000.00 lb
Depth to Top Packer:	4300.00 ft			Final	76000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	80.00 ft				
Tool Length:	108.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			4273.00	
S.I. Tool	5.00			4278.00	
HMV	5.00			4283.00	
Jars	5.00			4288.00	
Safety Joint	2.00			4290.00	
Packer	5.00			4295.00	28.00 Bottom Of Top Packer
Packer	5.00			4300.00	
Stubb	1.00			4301.00	
Perforations	1.00			4302.00	
C.O. Sub	1.00			4303.00	
Recorder	0.00	2357	Inside	4303.00	
Blank Spacing	63.00			4366.00	
C.O. Sub	1.00			4367.00	
Recorder	0.00	13254	Outside	4367.00	
Perforations	10.00			4377.00	
Bullnose	3.00			4380.00	80.00 Bottom Packers & Anchor
Total Tool Length:	108.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Co

Sue #1

225 N. Market,
Wichita, Ks. 66202

5-16-22-Ness-Ks

Job Ticket: 16938

DST#: 1

ATTN: Jamie Hess

Test Start: 2003.04.15 @ 07:50:37

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: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Mud w/ show of oil on top	0.074

Total Length: 15.00 ft

Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

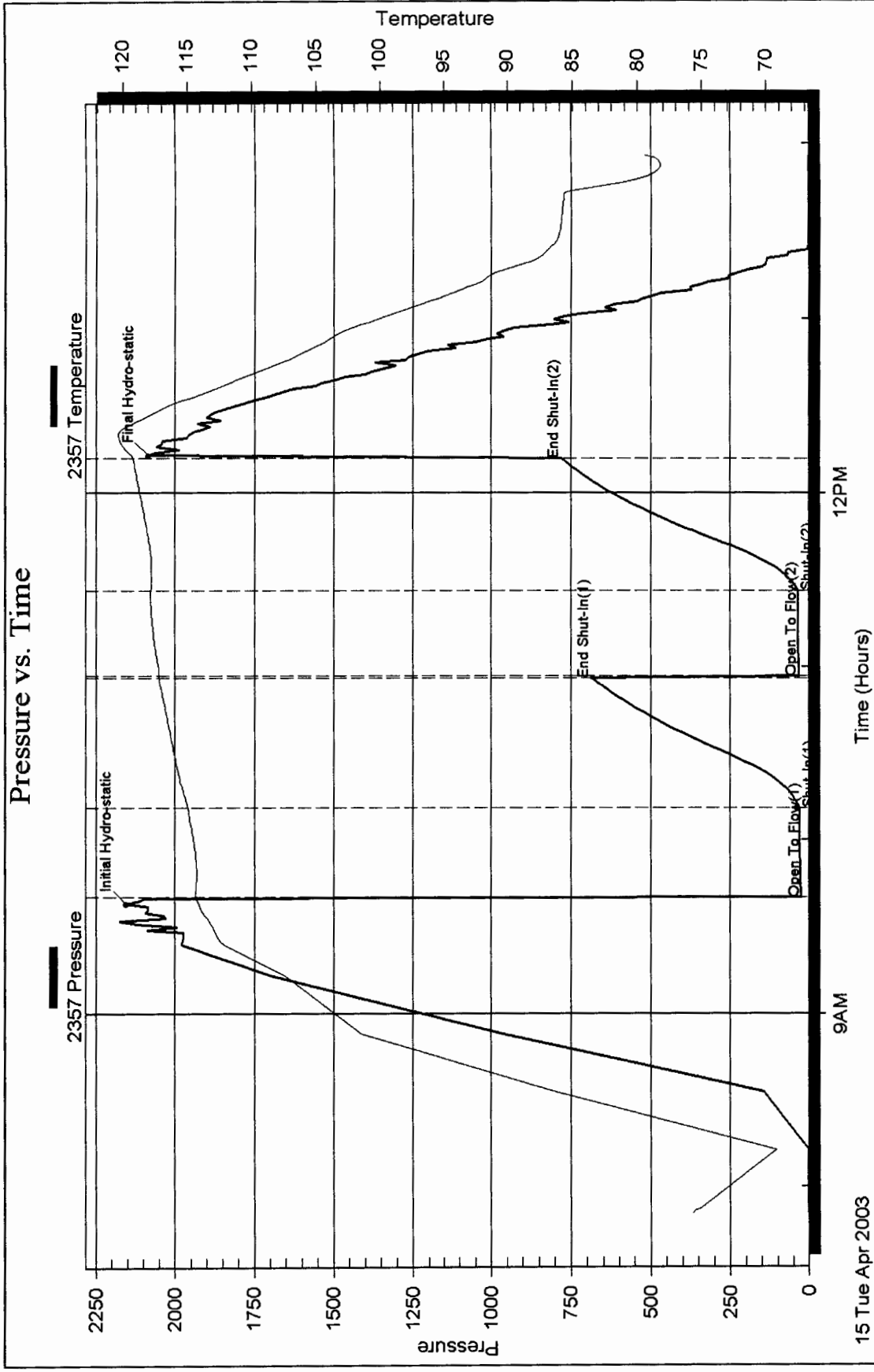
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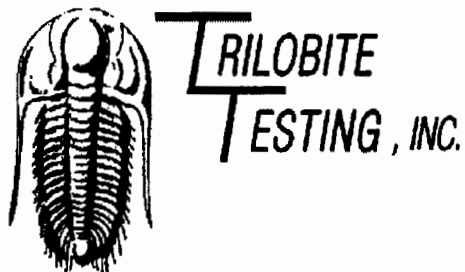
Inside

Hess Oil Co

5-16-22-Ness-Ks

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Hess Oil Co**

225 N. Market,
Wichita, Ks. 66202

ATTN: Jamie Hess

5-16-22-Ness-Ks

Sue #1

Start Date: 2003.04.15 @ 19:03:40

End Date: 2003.04.16 @ 01:11:10

Job Ticket #: 16939 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 Co
225 N. Market,
Wichita, Ks. 66202
ATTN: Jamie Hess

Sue #1

5-16-22-Ness-Ks

Job Ticket: 16939

DST#: 2

Test Start: 2003.04.15 @ 19:03:40

GENERAL INFORMATION:

Formation: **Cherokee Sd**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 20:44:40

Time Test Ended: 01:11:10

Test Type: **Conventional Bottom Hole**

Tester: **Dan Bangle**

Unit No: **21**

Interval: **4300.00 ft (KB) To 4385.00 ft (KB) (TVD)**

Total Depth: **4385.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **2425.00 ft (KB)**

2420.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 2357

Inside

Press@RunDepth: **100.96 psig @ 4303.00 ft (KB)**

Start Date: **2003.04.15**

End Date: **2003.04.16**

Start Time: **19:03:45**

End Time: **01:09:39**

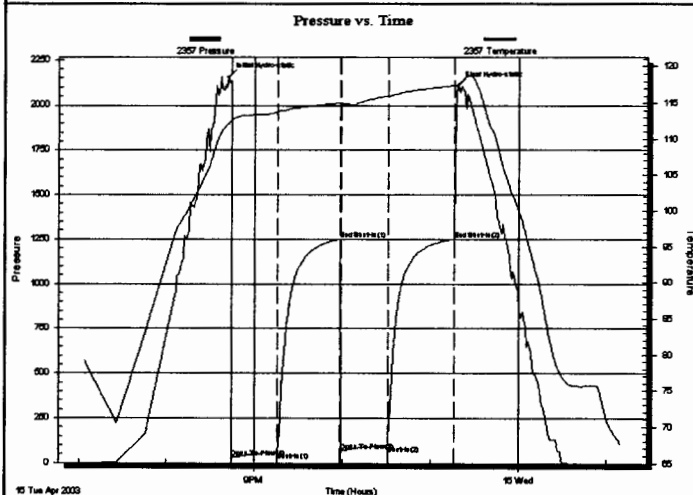
Capacity: **7000.00 psig**

Last Calib.: **2003.04.16**

Time On Btm: **2003.04.15 @ 20:42:10**

Time Off Btm: **2003.04.15 @ 23:18:40**

TEST COMMENT: **F-Weak steady 3/4" blow**
FF-Weak steady 1/4" blow
Times-30-45-30-45



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2156.27	112.12	Initial Hydro-static
3	30.96	112.65	Open To Flow (1)
34	63.55	113.84	Shut-in(1)
76	1251.72	115.03	End Shut-in(1)
77	71.24	115.02	Open To Flow (2)
109	100.96	115.95	Shut-in(2)
154	1251.64	117.40	End Shut-in(2)
157	2110.51	117.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Silty OCM 3%o 97% m	0.30
120.00	HOCM 20%o 80% m	0.59
5.00	CO	0.02

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hess Oil Co

Sue #1

225 N. Market,
Wichita, Ks. 66202

5-16-22-Ness-Ks

Job Ticket: 16939

DST#: 2

ATTN: Jamie Hess

Test Start: 2003.04.15 @ 19:03:40

Tool Information

Drill Pipe:	Length: 4041.00 ft	Diameter: 3.80 inches	Volume: 56.68 bbl	Tool Weight: 2600.00 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: 247.00 ft	Diameter: 2.25 inches	Volume: 1.21 bbl	Weight to Pull Loose: 100000.0 lb
		Total Volume: 57.89 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	4300.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	113.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			4273.00	
S.I. Tool	5.00			4278.00	
HMV	5.00			4283.00	
Jars	5.00			4288.00	
Safety Joint	2.00			4290.00	
Packer	5.00			4295.00	28.00 Bottom Of Top Packer
Packer	5.00			4300.00	
Stubb	1.00			4301.00	
Perforations	1.00			4302.00	
C.O. Sub	1.00			4303.00	
Recorder	0.00	2357	Inside	4303.00	
Blank Spacing	63.00			4366.00	
C.O. Sub	1.00			4367.00	
Recorder	0.00	13254	Outside	4367.00	
Perforations	15.00			4382.00	
Bullnose	3.00			4385.00	85.00 Bottom Packers & Anchor
Total Tool Length:	113.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Co

Sue #1

225 N. Market,
Wichita, Ks. 66202

5-16-22-Ness-Ks

Job Ticket: 16939

DST#: 2

ATTN: Jamie Hess

Test Start: 2003.04.15 @ 19:03:40

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: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Silly OCM 3%o 97%m	0.295
120.00	HOCM 20%o 80%m	0.590
5.00	CO	0.025

Total Length: 185.00 ft

Total Volume: 0.910 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 2357

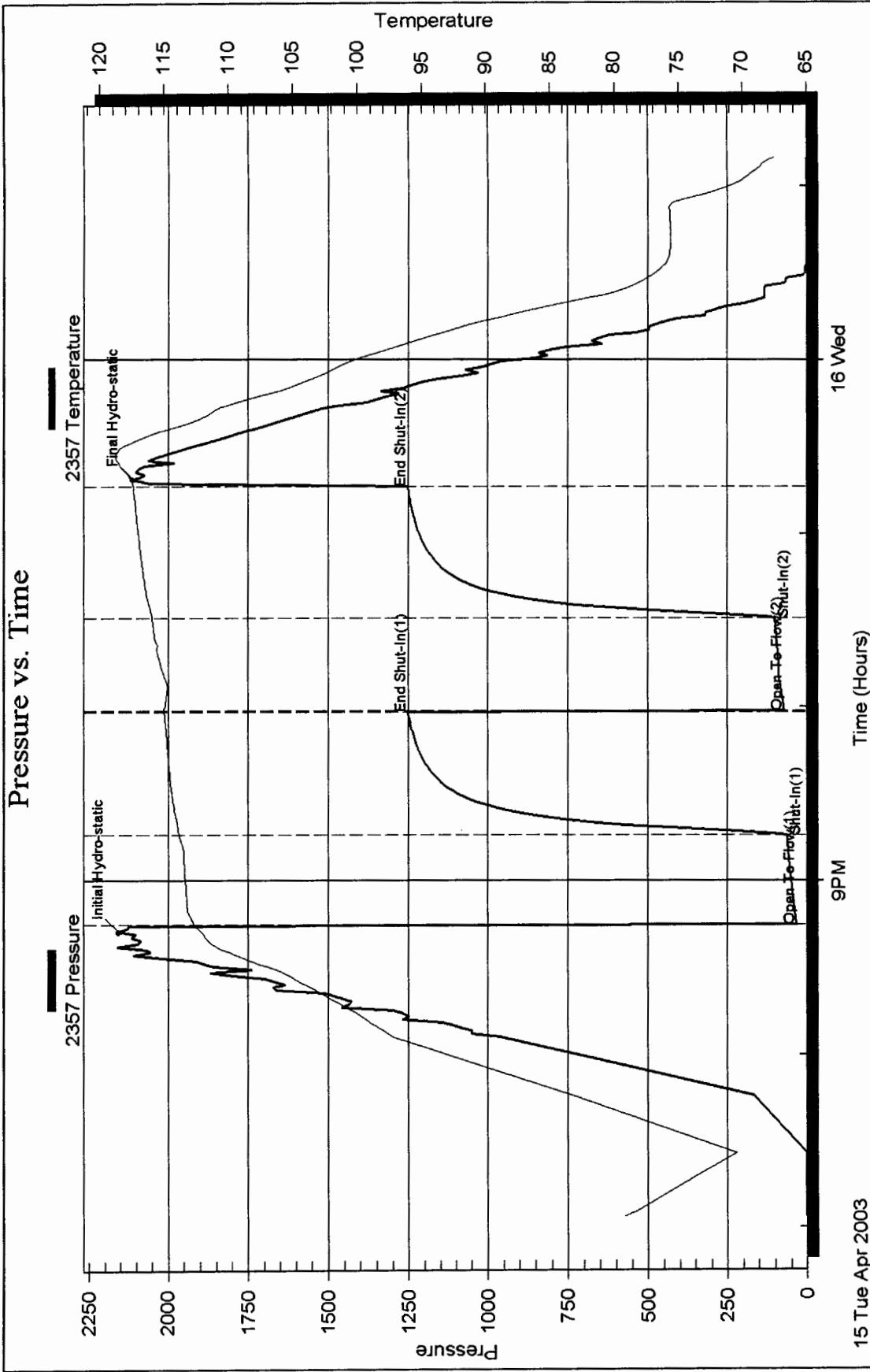
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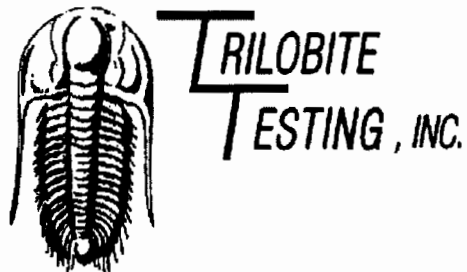
Hess Oil Co

5-16-22-Ness-Ks

DST Test Number: 2

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Hess Oil Co**

225 N. Market,
Wichita, Ks. 66202

ATTN: Jamie Hess

5-16-22-Ness-Ks

Sue #1

Start Date: 2003.04.16 @ 06:25:23

End Date: 2003.04.16 @ 11:26:23

Job Ticket #: 16940 DST #: 3

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 Co
225 N. Market,
Wichita, Ks. 66202
ATTN: Jamie Hess

Sue #1
5-16-22-Ness-Ks
Job Ticket: 16940 **DST#: 3**
Test Start: 2003.04.16 @ 06:25:23

GENERAL INFORMATION:

Formation: **Cherokee Sl**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 08:15:23
Time Test Ended: 11:26:23

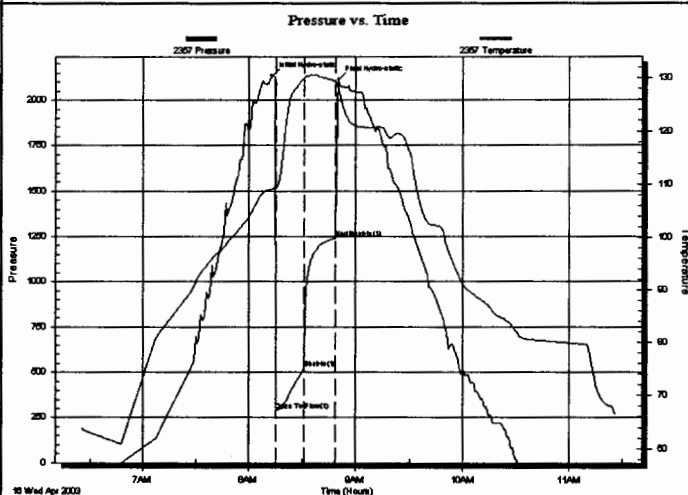
Test Type: Conventional Bottom Hole
Tester: Dan Bangle
Unit No: 21

Interval: **4296.00 ft (KB) To 4390.00 ft (KB) (TVD)**
Total Depth: 4390.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2425.00 ft (KB)
2420.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 2357 **Inside**
Press@RunDepth: 520.63 psig @ 4299.00 ft (KB)
Start Date: 2003.04.16 End Date: 2003.04.16
Start Time: 06:25:28 End Time: 11:26:22
Capacity: 7000.00 psig
Last Calib.: 2003.04.16
Time On Btm: 2003.04.16 @ 08:12:53
Time Off Btm: 2003.04.16 @ 08:50:23

TEST COMMENT: F-Strong BOB in 1min 15 sec
Times-15-15



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2133.28	109.11	Initial Hydro-static
3	287.43	109.33	Open To Flow (1)
19	520.63	130.07	Shut-In (1)
36	1240.31	129.41	End Shut-In (1)
38	2112.81	128.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1550.00	Mdy Wtr	19.49

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hess Oil Co

Sue #1

225 N. Market,
Wichita, Ks. 66202

5-16-22-Ness-Ks

Job Ticket: 16940

DST#: 3

ATTN: Jamie Hess

Test Start: 2003.04.16 @ 06:25:23

Tool Information

Drill Pipe:	Length: 4041.00 ft	Diameter: 3.80 inches	Volume: 56.68 bbl	Tool Weight: 2800.00 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: 247.00 ft	Diameter: 2.25 inches	Volume: 1.21 bbl	Weight to Pull Loose: 100000.0 lb
		Total Volume: 57.89 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	4296.00 ft			Final 81000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	89.00 ft			
Tool Length:	117.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			4269.00	
S.I. Tool	5.00			4274.00	
HMV	5.00			4279.00	
Jars	5.00			4284.00	
Safety Joint	2.00			4286.00	
Packer	5.00			4291.00	28.00 Bottom Of Top Packer
Packer	5.00			4296.00	
Stubb	1.00			4297.00	
Perforations	1.00			4298.00	
C.O. Sub	1.00			4299.00	
Recorder	0.00	2357	Inside	4299.00	
Blank Spacing	63.00			4362.00	
C.O. Sub	1.00			4363.00	
Recorder	0.00	13254	Outside	4363.00	
Perforations	19.00			4382.00	
Bullnose	3.00			4385.00	89.00 Bottom Packers & Anchor
Total Tool Length:		117.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Hess Oil Co

Sue #1

225 N. Market,
Wichita, Ks. 66202

5-16-22-Ness-Ks

Job Ticket: 16940

DST#: 3

ATTN: Jamie Hess

Test Start: 2003.04.16 @ 06:25:23

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: 47.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1550.00	Mdy Wtr	19.492

Total Length: 1550.00 ft

Total Volume: 19.492 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

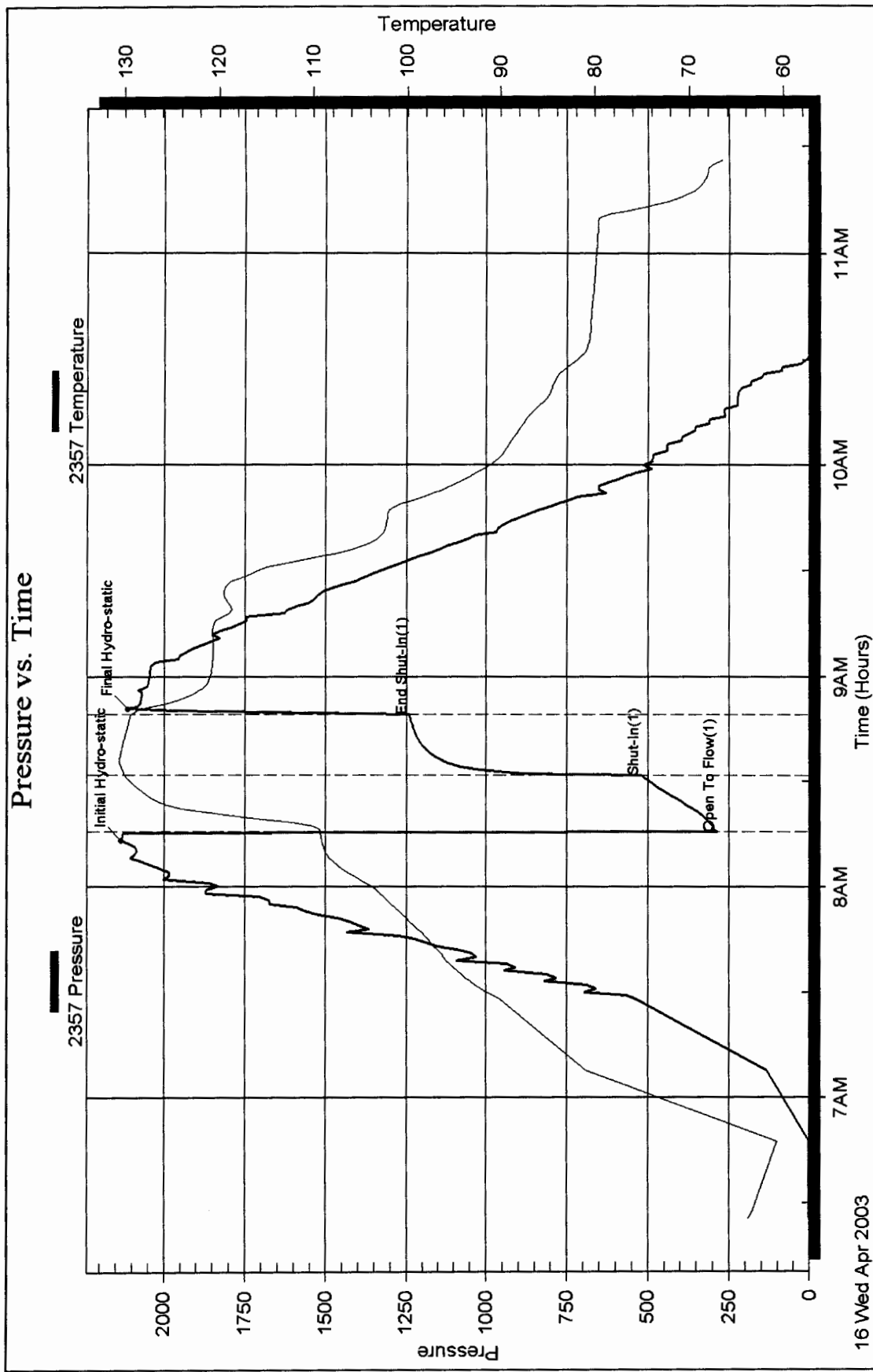
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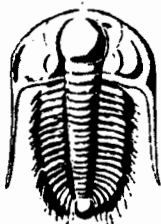
Inside

Hess Oil Co

5-16-22-Ness-Ks

DST Test Number: 3





TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 16938

Test Ticket

Well Name & No. Sue #1 Test No. 1 Date 4-15-03
Company Hess Oil Co. Zone Tested Cherokee Sd
Address 225 N. Market, Ste 300, Wichita, Ks. 67202 Elevation 2425 KB 2420 GL
Co. Rep / Geo. Jamie Hess Cont. Mallard Est. Ft. of Pay _____ Por. _____ %
Location: Sec. 5 Twp. 16 Rge. 22 Co. Ness State Ks
No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 4300 — 4380 Initial Str Wt./Lbs. 76,000 Unseated Str Wt./Lbs. 76,000
Anchor Length 80 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 89,000
Top Packer Depth 4295 Tool Weight 2500
Bottom Packer Depth 4300 Hole Size 7 7/8" Rubber Size 6 3/4"
Total Depth 4380 Wt. Pipe Run _____ Drill Collar Run 247
Mud Wt. 9.3 LCM _____ Vis. 47 WL 7.2 Drill Pipe Size 4.5xH Ft. Run 4104
Blow Description I.E. Weak - building to 3/4"

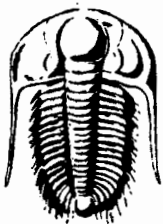
F.F. Weak surface blow

Recovery - Total Feet 15 GIP _____ Ft. in DC 15 Ft. in DP _____
Rec. 15 Feet of Mud w/oil show on top
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
BHT 119 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides _____ ppm System

AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2154</u> PSI	<u>2357</u>	<u>800</u>
(B) First Initial Flow Pressure	<u>23</u> PSI	(depth) <u>430.3</u>	Elec. Rec. <u>X</u> <u>150</u>
(C) First Final Flow Pressure	<u>29</u> PSI	Recorder No. <u>13254</u>	Jars <u>X</u> <u>200</u>
(D) Initial Shut-In Pressure	<u>687</u> PSI	(depth) <u>4367</u>	Safety Jt. <u>X</u> <u>50</u>
(E) Second Initial Flow Pressure	<u>31</u> PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure	<u>34</u> PSI	(depth) _____	Sampler _____
(G) Final Shut-In Pressure	<u>779</u> PSI	Initial Opening <u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>2084</u> PSI	Initial Shut-In <u>40</u>	Ext. Packer _____
		Final Flow <u>30</u>	Shale Packer _____
		Final Shut-In <u>40</u>	Mileage <u>45</u> <u>45</u>
		T-On Location <u>07:05</u>	Sub Total: <u>1245</u>
		T-Started <u>07:50</u>	Std. By _____
		T-Open <u>09:40</u>	Other _____
		T-Pulled <u>12:10</u>	Total: _____
		T-Out <u>13:56</u>	

TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By [Signature]
Our Representative Dan Rangle



TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 16939

Test Ticket

Well Name & No. Sue #1 Test No. 2 Date 4-15-03
Company Hess Oil Co. Zone Tested Cherokee Sd
Address _____ Elevation 2425 KB 2420 GL
Co. Rep / Geo. Jamie Hess Cont. Mallord Est. Ft. of Pay _____ Por. _____ %
Location: Sec. 5 Twp. 16 Rge. 22 Co. Ness State Ks
No. of Copies _____ Disbtribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 4300 — 4385 Initial Str Wt./Lbs. 26,000 Unseated Str Wt./Lbs. 26,000
Anchor Length _____ Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 100,000
Top Packer Depth 4295 Tool Weight 2600
Bottom Packer Depth 4300 Hole Size 7 7/8" Rubber Size 6 3/4"
Total Depth 4385 Wt. Pipe Run _____ Drill Collar Run 247
Mud Wt. 9.3 LCM _____ Vis. 47 WL 7.2 Drill Pipe Size 4.5XH Ft. Run 4104
Blow Description I.F. Weak steady 3/4" blow

E.F. Weak steady 1/4" blow

Recovery - Total Feet 185 GIP _____ Ft. in DC 185 Ft. in DP _____
Rec. 5 Feet of CC
Rec. 120 Feet of HPCM 20700 8070M
Rec. 60 Feet of Slightly OCM 3900 9790M
Rec. _____ Feet of _____
Rec. _____ Feet of _____
BHT 117 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides _____ ppm System

	AK-1	Alpine			
(A) Initial Hydrostatic Mud	<u>2156</u>	PSI	Recorder No.	<u>2307</u>	Test <u>800</u>
(B) First Initial Flow Pressure	<u>30</u>	PSI	(depth)	<u>4303</u>	Elec. Rec. <u>X</u> <u>150</u>
(C) First Final Flow Pressure	<u>63</u>	PSI	Recorder No.	<u>13254</u>	Jars <u>X</u> <u>200</u>
(D) Initial Shut-In Pressure	<u>1251</u>	PSI	(depth)	<u>4367</u>	Safety Jt. <u>X</u> <u>50</u>
(E) Second Initial Flow Pressure	<u>71</u>	PSI	Recorder No.		Circ Sub _____
(F) Second Final Flow Pressure	<u>100</u>	PSI	(depth)		Sampler _____
(G) Final Shut-In Pressure	<u>1251</u>	PSI	Initial Opening	<u>30</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>2110</u>	PSI	Initial Shut-In	<u>45</u>	Ext. Packer _____
			Final Flow	<u>30</u>	Shale Packer _____
			Final Shut-In	<u>45</u>	Mileage <u>45</u> <u>45</u>

TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGE OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By [Signature]

Our Representative [Signature]

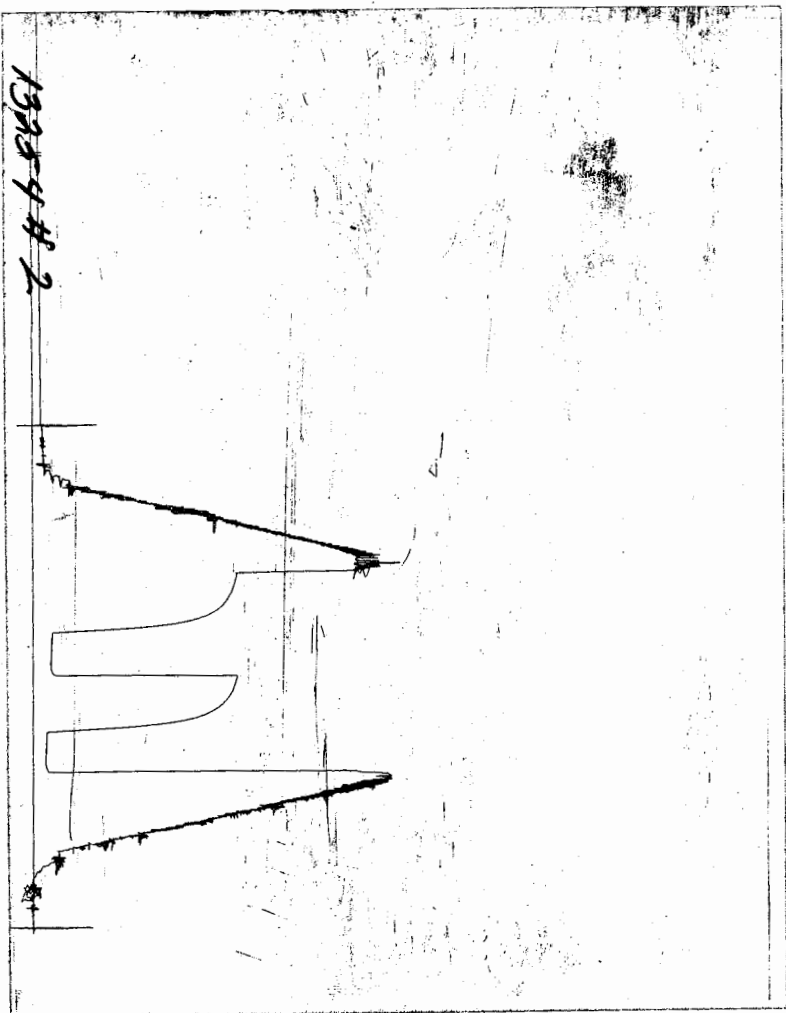
T-On Location

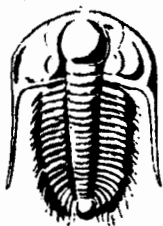
T-Started 19:03
T-Open 20:45
T-Pulled 23:15
T-Out _____

Sub Total: 1245
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 16940

Test Ticket

Well Name & No. Sue #1 Test No. 3 Date 4-16-03
Company Hess Oil Co. Zone Tested Cherokee Sd
Address _____ Elevation 2425 KB 2420 GL
Co. Rep / Geo. Jamie Hess Cont. Mallard Est. Ft. of Pay _____ Por. _____ %
Location: Sec. 5 Twp. 16 Rge. 22 Co. Ness State Ks
No. of Copies _____ Distribution Sheet (Y, N) _____ Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 4296 — 4390 Initial Str Wt./Lbs. 76,000 Unseated Str Wt./Lbs. 81,000
Anchor Length 94 Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 100,000
Top Packer Depth 4291 Tool Weight 2800
Bottom Packer Depth 4296 Hole Size 7 7/8" Rubber Size 6 3/4"
Total Depth 4390 Wt. Pipe Run _____ Drill Collar Run 247
Mud Wt. 9.3 LCM _____ Vis. 47 WL 7.2 Drill Pipe Size 4.5 XH Ft. Run 4095
Blow Description I.F. Strong - B.O.B. in 1 min 15 sec

Recovery - Total Feet 1550 GIP _____ Ft. in DC 247 Ft. in DP 1303
Rec. 1550 Feet of mdy wtr.
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
BHT 129 °F Gravity _____ °API D @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery _____ Chlorides _____ ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>2133</u>	PSI	<u>2357</u>	<u>800</u>
(B) First Initial Flow Pressure	<u>287</u>	PSI	(depth) <u>4299</u>	Elec. Rec. <u>X</u> <u>150</u>
(C) First Final Flow Pressure	<u>520</u>	PSI	Recorder No. <u>13254</u>	Jars <u>X</u> <u>200</u>
(D) Initial Shut-In Pressure	<u>1240</u>	PSI	(depth) <u>4363</u>	Safety Jt <u>X</u> <u>50</u>
(E) Second Initial Flow Pressure	<u>—</u>	PSI	Recorder No. _____	Circ Sub _____
(F) Second Final Flow Pressure	<u>—</u>	PSI	(depth) _____	Sampler _____
(G) Final Shut-In Pressure	<u>—</u>	PSI	Initial Opening <u>15</u>	Straddle _____
(Q) Final Hydrostatic Mud	<u>2112</u>	PSI	Initial Shut-In <u>15</u>	Ext. Packer _____

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Approved By [Signature]
Our Representative Dan Bangle

Final Flow _____
Final Shut-In _____
T-On Location 05:50
T-Started 06:25
T-Open 08:15
T-Pulled 08:45
T-Out 11:26
Shale Packer _____
Mileage 12 12
Sub Total: 1212
Std. By _____
Other _____
Total: _____

CHART PAGE

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

