



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Hartman Oil Co**

10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206

ATTN: Charlie Sturdavant

16-22s-33w Finney,KS

Ward #11 Twin

Start Date: 2011.04.23 @ 03:48:00

End Date: 2011.04.23 @ 13:02:45

Job Ticket #: 041205 DST #: 1

 **FILE**

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

ORIGINAL

Printed: 2011.05.03 @ 13:59:50 Page 1

Hartman Oil Co

Ward #11 Twin

16-22s-33w Finney,KS

DST # 1

Cherokee

2011.04.23



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Hartman Oil Co

10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206
ATTN: Charlie Sturdavant

Ward #11 Twin

16-22s-33w Finney, KS

Job Ticket: 041205 DST#: 1

Test Start: 2011.04.23 @ 03:48:00

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:20:00

Time Test Ended: 13:02:45

Test Type: Conventional Bottom Hole

Tester: Kevin Mack

Unit No: 48

Interval: **4465.00 ft (KB) To 4593.00 ft (KB) (TVD)**

Total Depth: 4593.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2905.00 ft (KB)

2895.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: **6669** Outside

Press@RunDepth: 53.69 psig @ 4588.00 ft (KB)

Start Date: 2011.04.23

End Date:

2011.04.23

Start Time: 03:48:15

End Time:

13:02:45

Capacity: 8000.00 psig

Last Calib.: 2011.04.23

Time On Btm: 2011.04.23 @ 07:19:00

Time Off Btm: 2011.04.23 @ 10:25:30

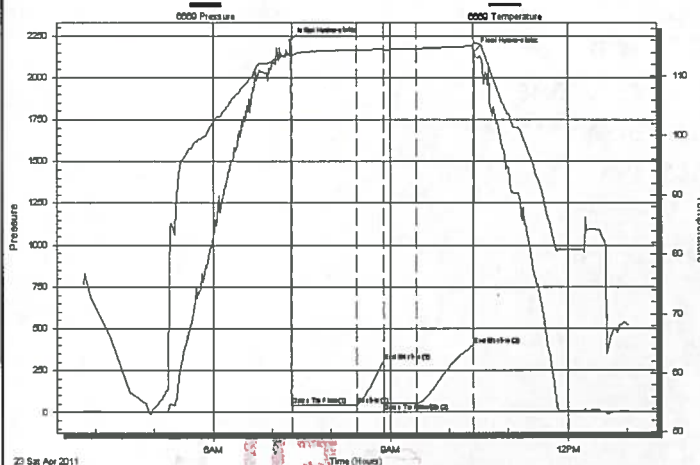
TEST COMMENT: IF: 1/2" blow built to 3/4", then died at 40 min.

IS: No Return

FF: No Blow

FS: No Return

Pressure vs. Time



PRESSURE SUMMARY

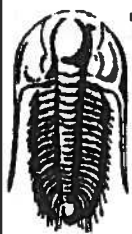
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2219.91	113.60	Initial Hydro-static
1	42.13	113.10	Open To Flow (1)
67	45.91	114.43	Shut-In(1)
95	303.16	114.59	End Shut-In(1)
95	55.03	114.49	Open To Flow (2)
128	53.69	114.61	Shut-In(2)
186	404.01	115.02	End Shut-In(2)
187	2156.96	115.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCWM 1%O 1%W 98%M	0.30

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Hartman Oil Co

Ward #11 Twin

10500 E Berkeley Sq Pkwy

16-22s-33w Finney, KS

Ste 100

Job Ticket: 041205

DST#: 1

Wichita, KS 67206

Test Start: 2011.04.23 @ 03:48:00

ATTN: Charlie Sturdavant

Tool Information

Drill Pipe:	Length: 4211.00 ft	Diameter: 3.80 inches	Volume: 59.07 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 90000.00 lb
		Total Volume:	60.25 bbl	Tool Chased ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 74000.00 lb
Depth to Top Packer:	4465.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	128.00 ft			
Tool Length:	156.00 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			4438.00	
Shut In Tool	5.00			4443.00	
Hydraulic tool	5.00			4448.00	
Jars	5.00			4453.00	
Safety Joint	3.00			4456.00	
Packer	5.00			4461.00	28.00 Bottom Of Top Packer
Packer	4.00			4465.00	
Stubb	1.00			4466.00	
Perforations	27.00			4493.00	
Change Over Sub	1.00			4494.00	
Drill Pipe	93.00			4587.00	
Change Over Sub	1.00			4588.00	
Recorder	0.00	8358	Outside	4588.00	
Recorder	0.00	6669	Outside	4588.00	
Bullnose	5.00			4593.00	128.00 Bottom Packers & Anchor

Total Tool Length: 156.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Hartman Oil Co

Ward #11 Twin

10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206
ATTN: Charlie Sturdavant

16-22s-33w Finney, KS

Job Ticket: 041205

DST#: 1

Test Start: 2011.04.23 @ 03:48:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 57.00 sec/qt

Water Loss: 7.19 in³

Resistivity: 0.00 ohm.m

Salinity: 1900.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OCVM 1%O 1%W 98%M	0.295

Total Length: 60.00 ft Total Volume: 0.295 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

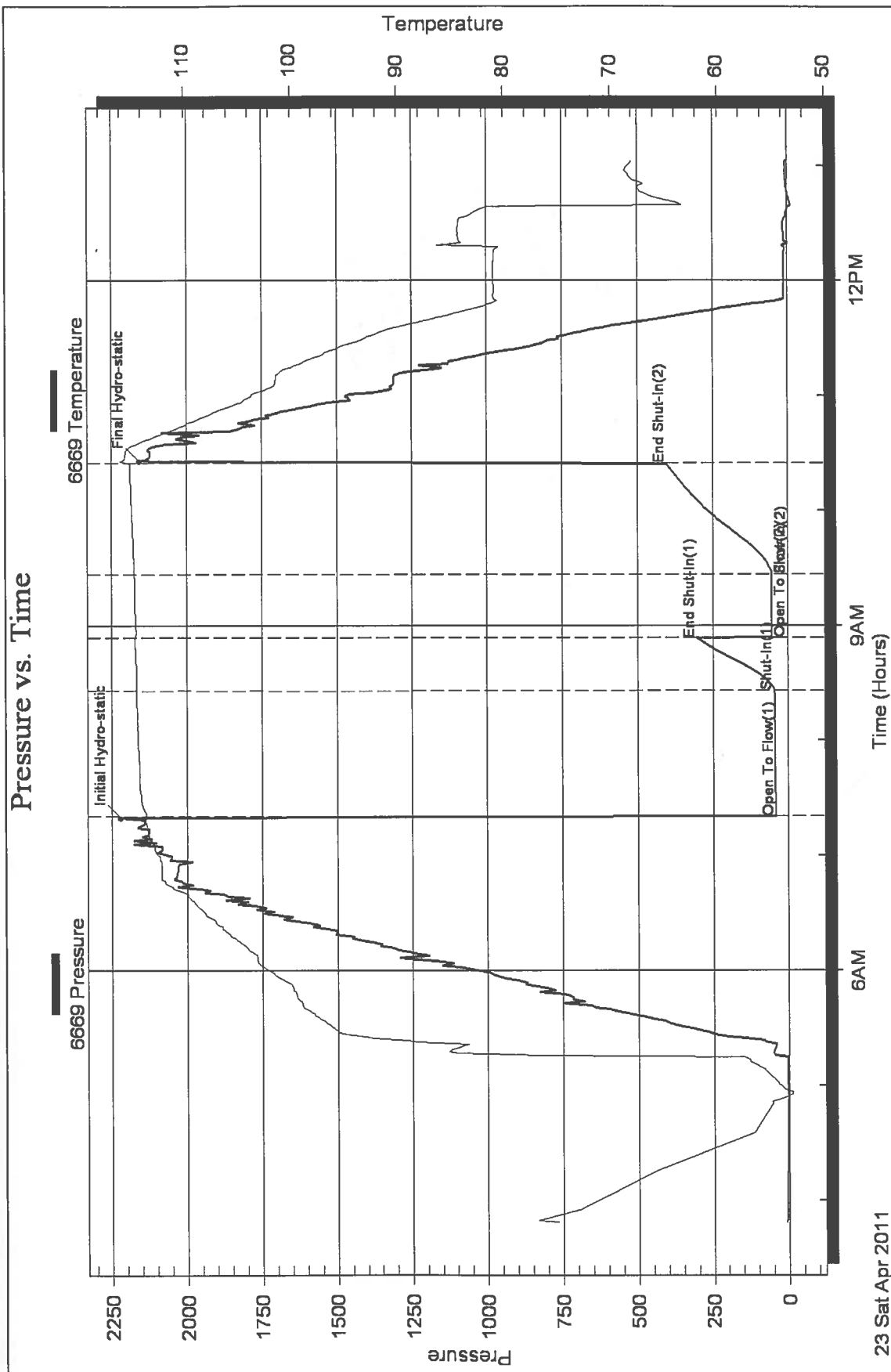
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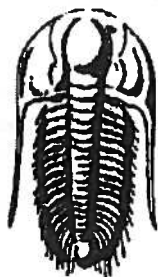
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





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10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206

ATTN: Charlie Sturdavant

16-22s-33w Finney,KS

Ward #11 Twin

Start Date: 2011.04.24 @ 12:22:00

End Date: 2011.04.24 @ 20:33:15

Job Ticket #: 041206 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



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DRILL STEM TEST REPORT

Hartman Oil Co

10500 E Berkeley Sq Pkwy
Ste 100
Wichita, KS 67206
ATTN: Charlie Sturdavant

Ward #11 Twin

16-22s-33w Finney, KS

Job Ticket: 041206

DST#: 2

Test Start: 2011.04.24 @ 12:22:00

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:01:15

Time Test Ended: 20:33:15

Interval: **4698.00 ft (KB) To 4715.00 ft (KB) (TVD)**

Total Depth: **4715.00 ft (KB) (TVD)**

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

Test Type: Conventional Bottom Hole

Tester: Kevin Mack

Unit No: 48

Reference Elevations: 2905.00 ft (KB)

2895.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: **6669**

Outside

Press@RunDepth: 39.02 psig @ 4710.00 ft (KB)

Start Date: 2011.04.24

End Date: 2011.04.24

Start Time: 12:22:15

End Time: 20:33:15

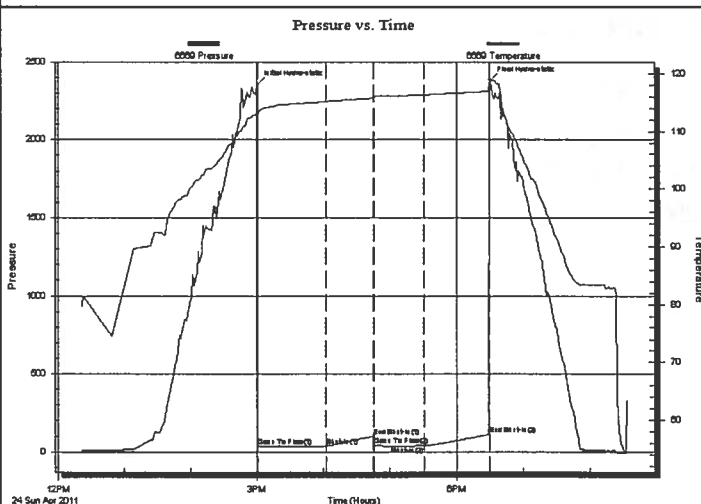
Capacity: 8000.00 psig

Last Calib.: 2011.04.24

Time On Btm: 2011.04.24 @ 15:01:00

Time Off Btm: 2011.04.24 @ 18:30:30

TEST COMMENT: IF: Surface blow built to
IS: No Return
FF: Surface blow started at 25 min built to 1/4"
FS: No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2356.16	113.36	Initial Hydro-static
1	34.20	113.02	Open To Flow (1)
62	38.44	115.18	Shut-In(1)
105	99.17	115.77	End Shut-In(1)
105	39.11	115.88	Open To Flow (2)
151	39.02	116.34	Shut-In(2)
209	110.58	116.97	End Shut-In(2)
210	2382.20	118.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	50' GIP	0.00
50.00	OCM 70M 30o	0.25

Gas Rates

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

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Ste 100
Wichita, KS 67206
ATTN: Charlie Sturdavant

16-22s-33w Finney, KS

Job Ticket: 041206

DST#: 2

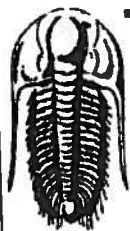
Test Start: 2011.04.24 @ 12:22:00

Tool Information

Drill Pipe:	Length: 4461.00 ft	Diameter: 3.80 inches	Volume: 62.58 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: 240.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 98000.00 lb
		Total Volume:	63.76 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	4698.00 ft			Final 77000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	17.00 ft			
Tool Length:	45.00 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			4671.00	
Shut In Tool	5.00			4676.00	
Hydraulic tool	5.00			4681.00	
Jars	5.00			4686.00	
Safety Joint	3.00			4689.00	
Packer	5.00			4694.00	28.00 Bottom Of Top Packer
Packer	4.00			4698.00	
Stubb	1.00			4699.00	
Perforations	11.00			4710.00	
Recorder	0.00	8358	Outside	4710.00	
Recorder	0.00	6669	Outside	4710.00	
Bullnose	5.00			4715.00	17.00 Bottom Packers & Anchor

Total Tool Length: 45.00



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ATTN: Charlie Sturdavant

16-22s-33w Finney, KS

Job Ticket: 041206

DST#: 2

Test Start: 2011.04.24 @ 12:22:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 58.00 sec/qt
Water Loss: 7.59 in³
Resistivity: 0.00 ohm.m
Salinity: 1600.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	50' GIP	0.000
50.00	OCM 70M 30o	0.246

Total Length: 50.00 ft Total Volume: 0.246 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

