



DRILL STEM TEST REPORT

Prepared For: **Woolsey Petl.Corp.**

125 N.Market Ste.1000
Wichita Ks. 67202

ATTN: Mike Maune

8-35s-16w Comanche

McMoran #3

Start Date: 2001.04.26 @ 08:41:00

End Date: 2001.04.26 @ 19:54:00

Job Ticket #: 14016 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

Woolsey Petl. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14016

DST#: 1

Test Start: 2001.04.26 @ 08:41:00

GENERAL INFORMATION:

Formation: **Lans. A**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:37:46

Time Test Ended: 19:54:00

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **4600.00 ft (KB) To 4612.00 ft (KB) (TVD)**

Total Depth: 4612.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1930.00 ft (KB)

1921.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 2342 Inside

Press@RunDepth: 17.53 psig @ 4601.00 ft (KB)

Start Date: 2001.04.26

End Date:

2001.04.26

Start Time: 08:41:17

End Time:

19:54:46

Capacity: 7000.00 psig

Last Calib.: 2001.01.04

Time On Btm: 2001.04.26 @ 11:36:16

Time Off Btm: 2001.04.26 @ 18:13:46

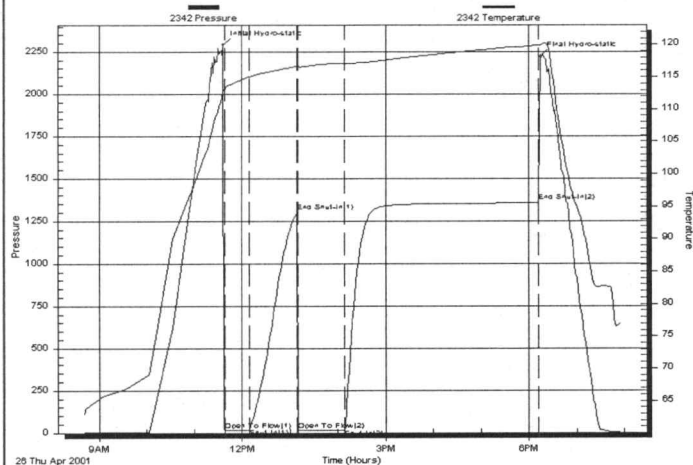
TEST COMMENT: IF: Fair to strong blow . B.O.B. in 17 mins.

IS: No blow .

FF: Strong blow . B.O.B. in 5 secs.

FS: No blow .

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2290.97	112.69	Initial Hydro-static
2	12.58	113.15	Open To Flow (1)
33	21.39	115.01	Shut-In(1)
93	1299.78	116.64	End Shut-In(1)
93	11.24	116.64	Open To Flow (2)
152	17.53	117.13	Shut-In(2)
396	1355.15	119.92	End Shut-In(2)
398	2220.81	120.00	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	1400 ft. of gas in pipe.	0.00
20.00	Drilg. mud	0.28

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Petr. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14016

DST#: 1

Test Start: 2001.04.26 @ 08:41:00

Tool Information

Drill Pipe:	Length: 4597.00 ft	Diameter: 3.80 inches	Volume: 64.48 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 66000.00 lb
			<u>Total Volume: 64.48 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4595.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	12.00 ft			
Tool Length:	39.00 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			4569.00	
S.I. Tool	5.00			4574.00	
HMV	5.00			4579.00	
Jars	5.00			4584.00	
Safety Joint	2.00			4586.00	
Packer	4.00			4590.00	27.00 Bottom Of Top Packer
Packer	5.00			4595.00	
Stubb	1.00			4596.00	
Recorder	0.00	2342	Inside	4596.00	
Perforations	6.00			4602.00	
Recorder	0.00	10248	Outside	4602.00	
Bullnose	5.00			4607.00	12.00 Bottom Packers & Anchor
Total Tool Length:		39.00			



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14016

DST#: 1

ATTN: Mike Maune

Test Start: 2001.04.26 @ 08:41:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil APt:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

8000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.49 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	1400 ft. of gas in pipe.	0.000
20.00	Drilg.mud	0.281

Total Length: 20.00 ft

Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

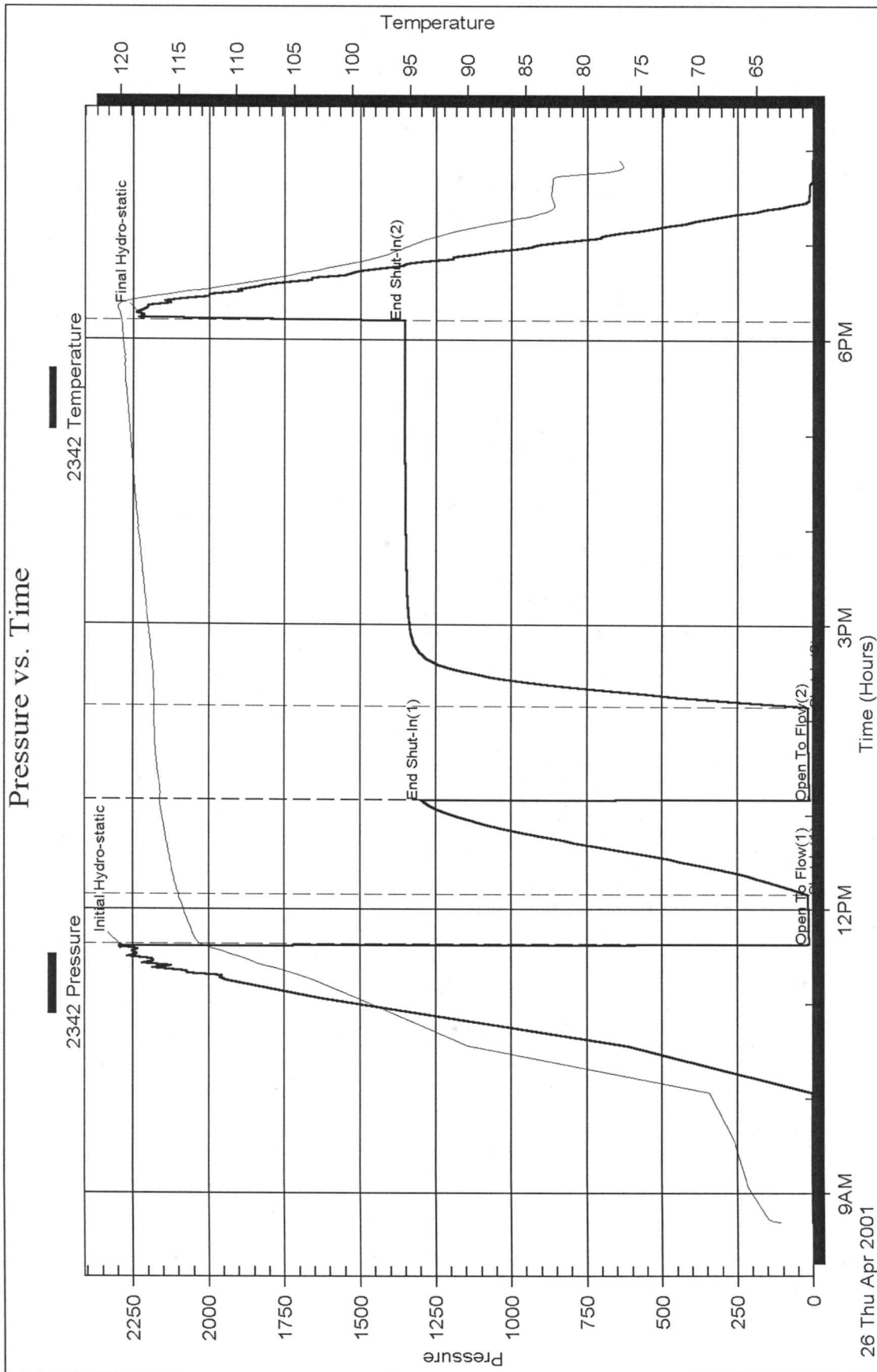
Serial #: none

Laboratory Name: Caraw ay

Laboratory Location: Liberal KS

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Woolsey Petl.Corp.**

125 N.Market Ste.1000
Wichita Ks. 67202

ATTN: Mike Maune

8-35s-16w Comanche

McMoran #3

Start Date: 2001.04.27 @ 06:04:00

End Date: 2001.04.27 @ 17:48:00

Job Ticket #: 14017 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

Woolsey Petl. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14017

DST#: 2

Test Start: 2001.04.27 @ 06:04:00

GENERAL INFORMATION:

Formation: **Lans.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:03:46

Time Test Ended: 17:48:00

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **4630.00 ft (KB) To 4645.00 ft (KB) (TVD)**

Total Depth: 4630.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1930.00 ft (KB)

1921.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 2342 Inside

Press@RunDepth: 196.13 psig @ 4631.00 ft (KB)

Start Date: 2001.04.27

End Date:

2001.04.27

Start Time: 06:04:17

End Time:

17:48:46

Capacity: 7000.00 psig

Last Calib.: 2001.01.04

Time On Btm: 2001.04.27 @ 09:01:46

Time Off Btm: 2001.04.27 @ 15:40:46

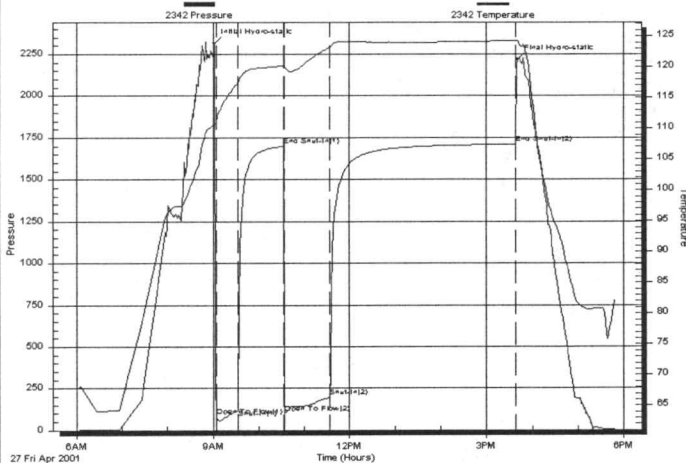
TEST COMMENT: IF: Strong blow . GTS in 5 mins. (see gas volume report)

IS: Weak blow .

FF: Strong blow . (see gas volume report)

FSI: Weak blow . (1 - 3")

Pressure vs. Time



PRESSURE SUMMARY

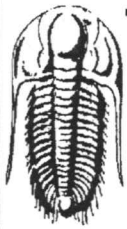
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2313.63	110.69	Initial Hydro-static
2	81.15	110.97	Open To Flow (1)
31	117.57	117.56	Shut-In (1)
91	1698.19	120.19	End Shut-In (1)
92	98.19	120.11	Open To Flow (2)
152	196.13	123.19	Shut-In (2)
397	1709.63	124.27	End Shut-In (2)
399	2217.70	124.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas in all fluid free pipe.	0.00
30.00	Drilg. mud	0.42
120.00	MW 25% m 75% w	1.68
190.00	Salt water. Rw 0.057 ohms @ 76 deg. F. 2.67	

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	9.00	37.12
Last Gas Rate	0.38	15.00	107.70
Max. Gas Rate	0.25	34.00	76.78



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Petl. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14017

DST#: 2

Test Start: 2001.04.27 @ 06:04:00

Tool Information

Drill Pipe:	Length: 4628.00 ft	Diameter: 3.80 inches	Volume: 64.92 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 66000.00 lb
			<u>Total Volume: 64.92 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4625.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	42.00 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			4599.00	
S.I. Tool	5.00			4604.00	
HMV	5.00			4609.00	
Jars	5.00			4614.00	
Safety Joint	2.00			4616.00	
Packer	4.00			4620.00	27.00 Bottom Of Top Packer
Packer	5.00			4625.00	
Stubb	1.00			4626.00	
Recorder	0.00	2342	Inside	4626.00	
Perforations	9.00			4635.00	
Recorder	0.00	10248	Outside	4635.00	
Bullnose	5.00			4640.00	15.00 Bottom Packers & Anchor
Total Tool Length:		42.00			



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Petr. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14017

DST#: 2

ATTN: Mike Maune

Test Start: 2001.04.27 @ 06:04:00

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:

147000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.48 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Gas in all fluid free pipe.	0.000
30.00	Drig. mud	0.421
120.00	MW 25% m 75% w	1.683
190.00	Salt water. Rw 0.057 ohms @ 76 deg.F.	2.665

Total Length: 340.00 ft

Total Volume: 4.770 bbl

Num Fluid Samples: 1

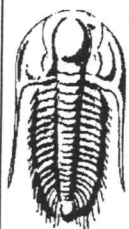
Num Gas Bombs: 1

Serial #: gp

Laboratory Name: Caraway

Laboratory Location: Liberal KS

Recovery Comments:



TRILOBITE
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DRILL STEM TEST REPORT

GAS RATES

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14017

DST#: 2

ATTN: Mike Maune

Test Start: 2001.04.27 @ 06:04:00

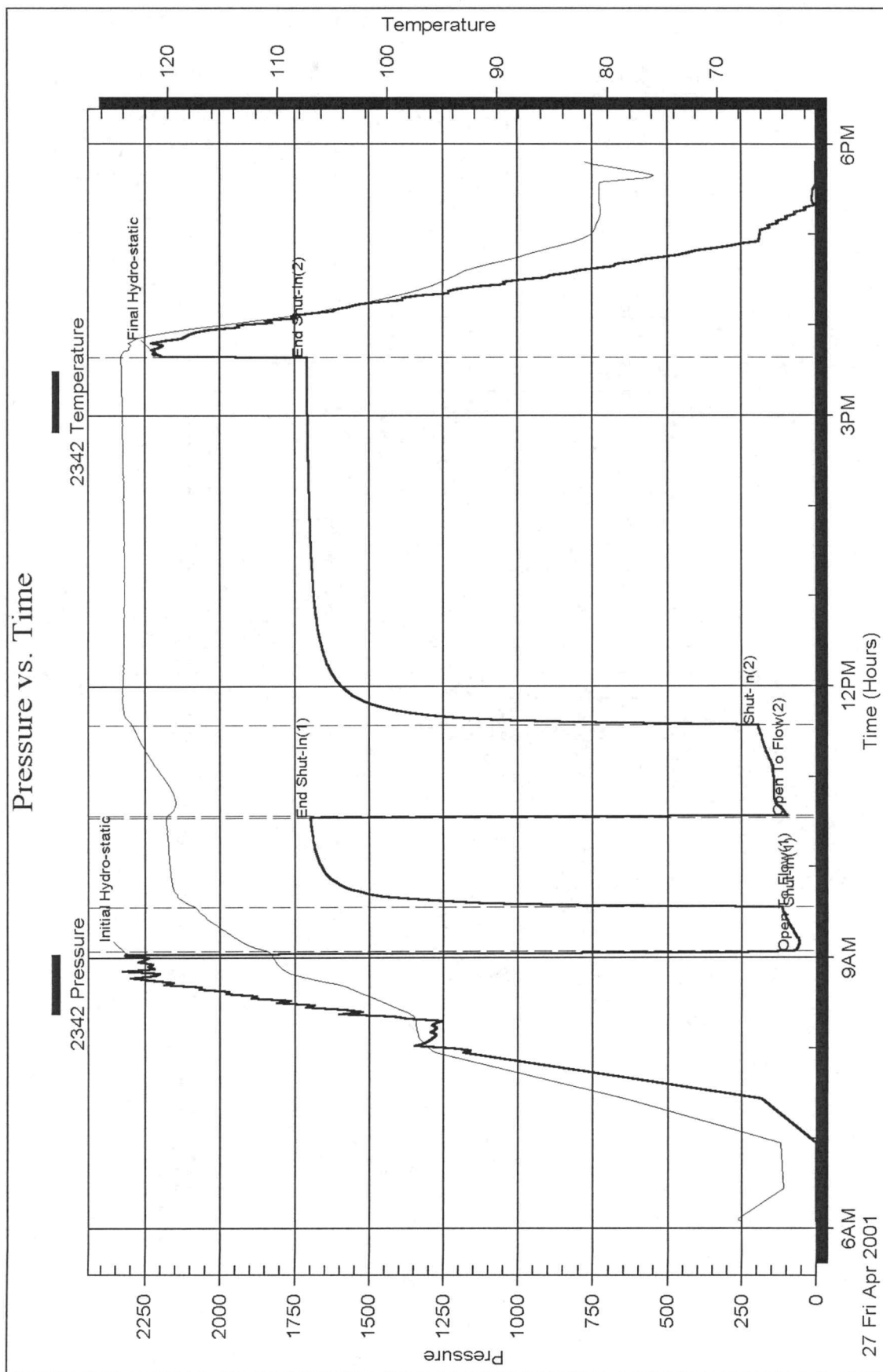
Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m³/d)
1	10	0.25	9.00	37.12
1	10	0.25	9.00	37.12
1	15	0.25	18.00	51.40
1	20	0.25	25.00	62.50
1	25	0.25	30.00	70.44
1	30	0.25	34.00	76.78
2	5	0.25	24.00	60.92
2	10	0.38	25.00	144.33
2	15	0.38	22.00	133.34
2	20	0.38	16.00	111.36
2	25	0.38	14.00	104.04
2	30	0.38	11.00	93.05
2	35	0.38	7.00	78.39
2	40	0.25	11.00	40.30
2	45	0.25	13.00	43.47
2	50	0.25	14.00	45.05
2	55	0.38	15.00	107.70

Pressure vs. Time



NATURAL GAS ANALYSIS REPORT

Sampled by:

Trilobite Testing, L. L. C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 875-625-5620

Analyzed by:

Caraway Analytical, Inc
P. O. Box 2137
Liberal, Kansas 67905
Phone: 620-624-5389
Fax: 620-626-7108

Lab Number: 20012255**Analyzed: 05/04/01****Sample From:** McMoran 3 DST 2**Pressure:****Producer:** Woolsey Petroleum**Temperature:****Date: Location: 8-35-16****Time:****County:** Comanche**Sampler:****State:** Kansas**Source:****Formation:** Lans B

	Mole %	GPM
Helium	He: 0.206	0.000
Hydrogen	H2: 0.000	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 6.840	0.000
Carbon Dioxide	CO2: 0.011	0.000
Methane	C1: 84.028	0.000
Ethane	C2: 5.140	1.375
Propane	C3: 2.137	0.589
Iso Butane	iC4: 0.265	0.087
Normal Butane	nC4: 0.660	0.208
Iso Pentane	iC5: 0.175	0.064
Normal Pentane	nC5: 0.210	0.076
Hexanes Plus	C6+: 0.328	0.143

TOTAL: 100.000 2.542**Z Fact: 0.9976****SP.GR.: 0.6585****BTU (SAT): 1042.3 @ 14.73 psia****BTU (DRY): 1060.7 @ 14.73 psia****OCTANE RATING: 117.8****COMMENTS:**

0.000



DRILL STEM TEST REPORT

Prepared For: **Woolsey Petl.Corp.**

125 N.Market Ste.1000
Wichita Ks. 67202

ATTN: Mike Maune

8-35s-16w Comanche

McMoran #3

Start Date: 2001.04.29 @ 09:09:00

End Date: 2001.04.29 @ 20:07:00

Job Ticket #: 14018 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

Woolsey Petr. Corp.
125 N. Market Ste. 1000
Wichita Ks. 67202
ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14018

DST#: 3

Test Start: 2001.04.29 @ 09:09:00

GENERAL INFORMATION:

Formation: **Lans. I**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:26:58

Time Test Ended: 20:07:00

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **4916.00 ft (KB) To 4963.00 ft (KB) (TVD)**

Total Depth: 4963.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1930.00 ft (KB)

1921.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 2342

Inside

Press@RunDepth: 72.34 psig @ 4917.00 ft (KB)

Start Date: 2001.04.29

End Date:

2001.04.29

Start Time: 09:09:59

End Time:

20:07:28

Capacity: 7000.00 psig

Last Calib.: 2001.01.04

Time On Btm: 2001.04.29 @ 11:25:28

Time Off Btm: 2001.04.29 @ 18:02:58

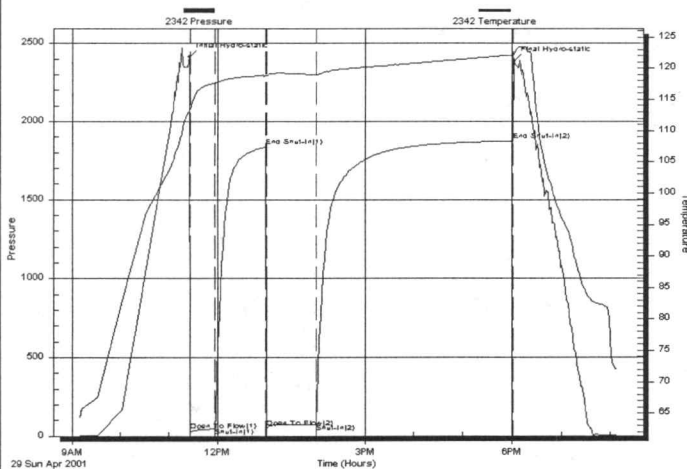
TEST COMMENT: IF: Strong blow . B.O.B. in 40 secs. (see gas volume report)

IS: No blow .

FF: Strong blow . (see gas volume report)

FS: No blow .

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2413.34	113.30	Initial Hydro-static
2	29.53	113.57	Open To Flow (1)
32	49.26	117.67	Shut-In(1)
93	1836.16	118.90	End Shut-In(1)
95	50.52	118.81	Open To Flow (2)
154	72.34	118.99	Shut-In(2)
396	1874.60	122.14	End Shut-In(2)
398	2384.80	122.37	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas in all fluid free pipe.	0.00
95.00	Drilg. mud	1.33

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	4.00	6.89
Last Gas Rate	0.25	13.00	43.47
Max. Gas Rate	0.25	13.00	43.47



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14018

DST#: 3

ATTN: Mike Maune

Test Start: 2001.04.29 @ 09:09:00

Tool Information

Drill Pipe:	Length: 4908.00 ft	Diameter: 3.80 inches	Volume: 68.85 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 62000.00 lb
			Total Volume: 68.85 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4911.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	47.00 ft			
Tool Length:	74.00 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			4885.00	
S.I. Tool	5.00			4890.00	
HMV	5.00			4895.00	
Jars	5.00			4900.00	
Safety Joint	2.00			4902.00	
Packer	4.00			4906.00	27.00 Bottom Of Top Packer
Packer	5.00			4911.00	
Stubb	1.00			4912.00	
Recorder	0.00	2342	Inside	4912.00	
Perforations	8.00			4920.00	
C.O. Sub	1.00			4921.00	
Blank Spacing	31.00			4952.00	
C.O. Sub	1.00			4953.00	
Recorder	0.00	10248	Outside	4953.00	
Bullnose	5.00			4958.00	47.00 Bottom Packers & Anchor

Total Tool Length: 74.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14018

DST#: 3

ATTN: Mike Maune

Test Start: 2001.04.29 @ 09:09:00

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:

6000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.28 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Gas in all fluid free pipe.	0.000
95.00	Drlg. mud	1.333

Total Length: 95.00 ft

Total Volume: 1.330 bbl

Num Fluid Samples: 1

Num Gas Bombs: 1

Serial #: gp

Laboratory Name: Caraw ay

Laboratory Location: Liberal KS

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14018

DST#: 3

ATTN: Mike Maune

Test Start: 2001.04.29 @ 09:09:00

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m³/d)
1	30	0.13	4.00	6.89
1	30	0.13	4.00	6.89
2	5	0.25	12.00	41.88
2	10	0.25	13.00	43.47
3	15	0.25	13.00	43.47
2	20	0.25	13.00	43.47
2	30	0.25	13.00	43.47
2	40	0.25	13.00	43.47
2	50	0.25	13.00	43.47

Serial #: 2342

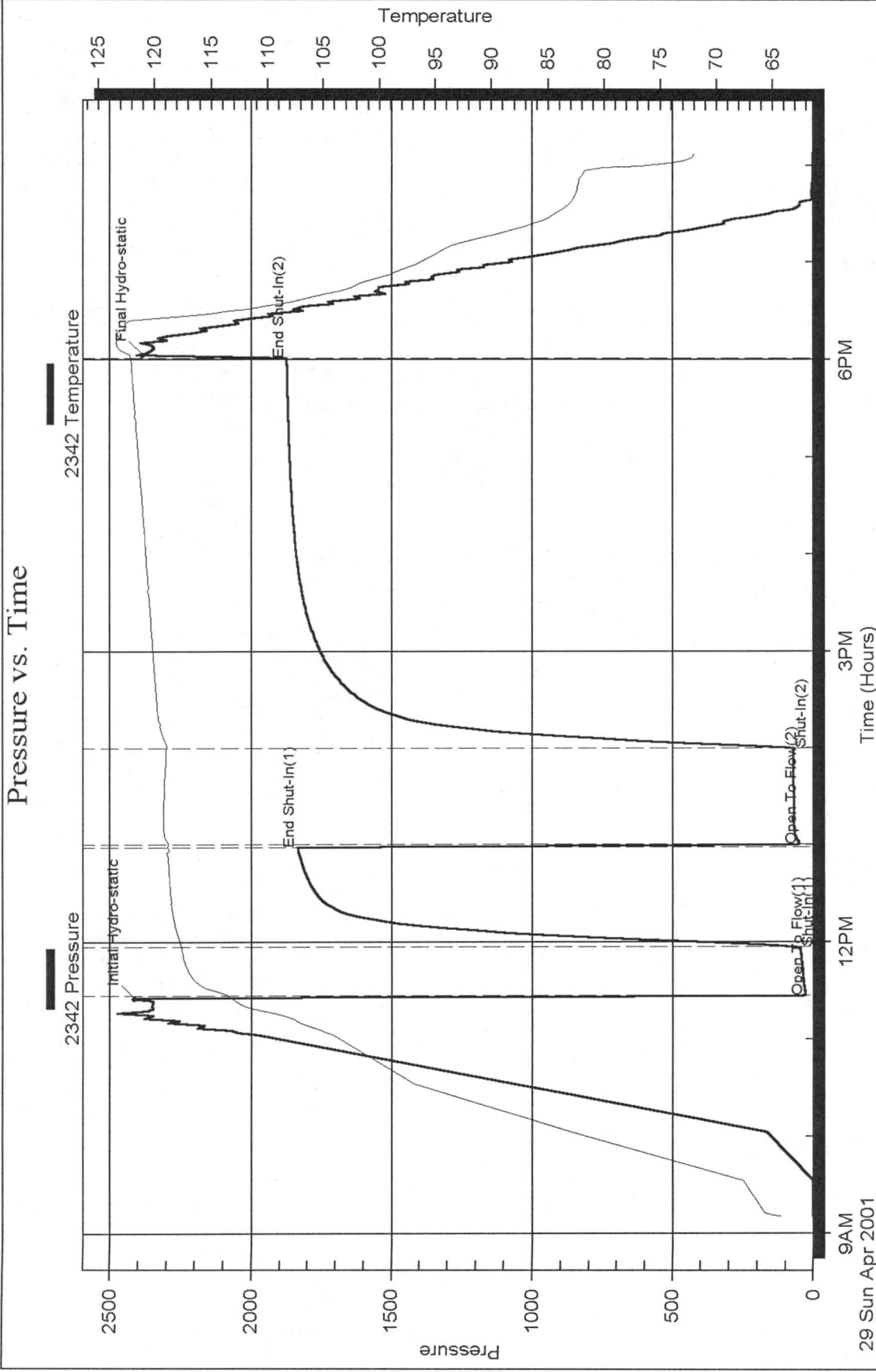
Inside

Woolsey Pet. Corp.

8-35s-16w Comanche

DST Test Number: 3

Pressure vs. Time



NATURAL GAS ANALYSIS REPORT

Sampled by:

Trilobite Testing, L. L. C.
Hays, Kansas
Scott City, Kansas
Phone: 800-728-5369
Fax: 875-625-5620

Analyzed by:

Caraway Analytical, Inc
P. O. Box 2137
Liberal, Kansas 67905
Phone: 620-624-5389
Fax: 620-626-7108

Lab Number: 20012256

Analyzed: 05/04/01

Sample From: McMoran 3 DST 3

Pressure:

Producer: Woolsey Petroleum

Temperature:

Date: Location: 8-35-16

Time:

County: Comanche

Sampler:

State: Kansas

Source:

Formation: Lans I

	Mole %	GPM
Helium	He: 0.075	0.000
Hydrogen	H2: 0.004	0.000
Oxygen	O2: 0.000	0.000
Nitrogen	N2: 1.013	0.000
Carbon Dioxide	CO2: 0.011	0.000
Methane	C1: 90.037	0.000
Ethane	C2: 4.203	1.124
Propane	C3: 2.361	0.651
Iso Butane	iC4: 0.333	0.109
Normal Butane	nC4: 0.916	0.289
Iso Pentane	iC5: 0.234	0.086
Normal Pentane	nC5: 0.291	0.105
Hexanes Plus	C6+: 0.522	0.228

TOTAL: 100.000 2.591

Z Fact: 0.9974

SP.GR.: 0.6453

BTU (SAT): 1117.5 @ 14.73 psia

BTU (DRY): 1137.3 @ 14.73 psia

OCTANE RATING: 125.3

COMMENTS:

0.000



DRILL STEM TEST REPORT

Prepared For: **Woolsey Petl.Corp.**

125 N.Market Ste.1000
Wichita Ks. 67202

ATTN: Mike Maune

8-35s-16w Comanche

McMoran #3

Start Date: 2001.04.30 @ 07:14:00

End Date: 2001.04.30 @ 18:30:00

Job Ticket #: 14019 DST #: 4

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Petr. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14019

DST#: 4

Test Start: 2001.04.30 @ 07:14:00

GENERAL INFORMATION:

Formation: **Swope**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:50:45

Time Test Ended: 18:30:00

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **4966.00 ft (KB) To 5000.00 ft (KB) (TVD)**

Total Depth: 5000.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1930.00 ft (KB)

1921.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 2342 Inside

Press@RunDepth: 43.97 psig @ 4967.00 ft (KB)

Start Date: 2001.04.30

End Date:

2001.04.30

Start Time: 07:14:16

End Time:

18:30:45

Capacity: 7000.00 psig

Last Calib.: 2001.01.04

Time On Btm: 2001.04.30 @ 09:49:45

Time Off Btm: 2001.04.30 @ 16:26:45

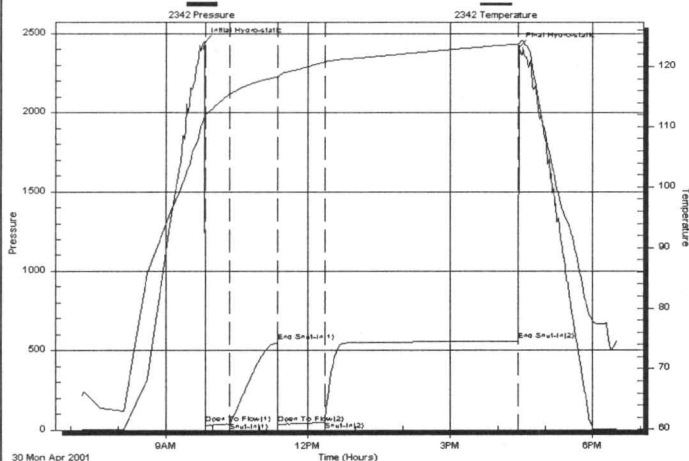
TEST COMMENT: IF: Weak to fair blow . (slow increase to 8" in H2O)

IS: No blow .

FF: Strong blow . B.O.B. in 10 secs.

FS: No blow .

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2440.86	111.76	Initial Hydro-static
1	32.56	112.00	Open To Flow (1)
32	38.68	115.44	Shut-In(1)
93	548.46	118.32	End Shut-In(1)
93	37.42	118.33	Open To Flow (2)
152	43.97	120.77	Shut-In(2)
396	554.75	123.76	End Shut-In(2)
397	2414.18	123.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	110 ft. of gas in pipe.	0.00
70.00	Drig. mud	0.98

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14019

DST#: 4

ATTN: Mike Maune

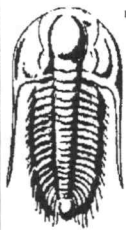
Test Start: 2001.04.30 @ 07:14:00

Tool Information

Drill Pipe:	Length: 4970.00 ft	Diameter: 3.80 inches	Volume: 69.72 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 62000.00 lb
			Total Volume: 69.72 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	36.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4961.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	61.00 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			4935.00	
S.I. Tool	5.00			4940.00	
HMV	5.00			4945.00	
Jars	5.00			4950.00	
Safety Joint	2.00			4952.00	
Packer	4.00			4956.00	27.00 Bottom Of Top Packer
Packer	5.00			4961.00	
Stubb	1.00			4962.00	
Recorder	0.00	2342	Inside	4962.00	
Perforations	28.00			4990.00	
Recorder	0.00	10248	Outside	4990.00	
Bullnose	5.00			4995.00	34.00 Bottom Packers & Anchor
Total Tool Length:		61.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14019

DST#: 4

ATTN: Mike Maune

Test Start: 2001.04.30 @ 07:14:00

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:

6000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.50 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	110 ft. of gas in pipe.	0.000
70.00	Drig. mud	0.982

Total Length: 70.00 ft Total Volume: 0.980 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

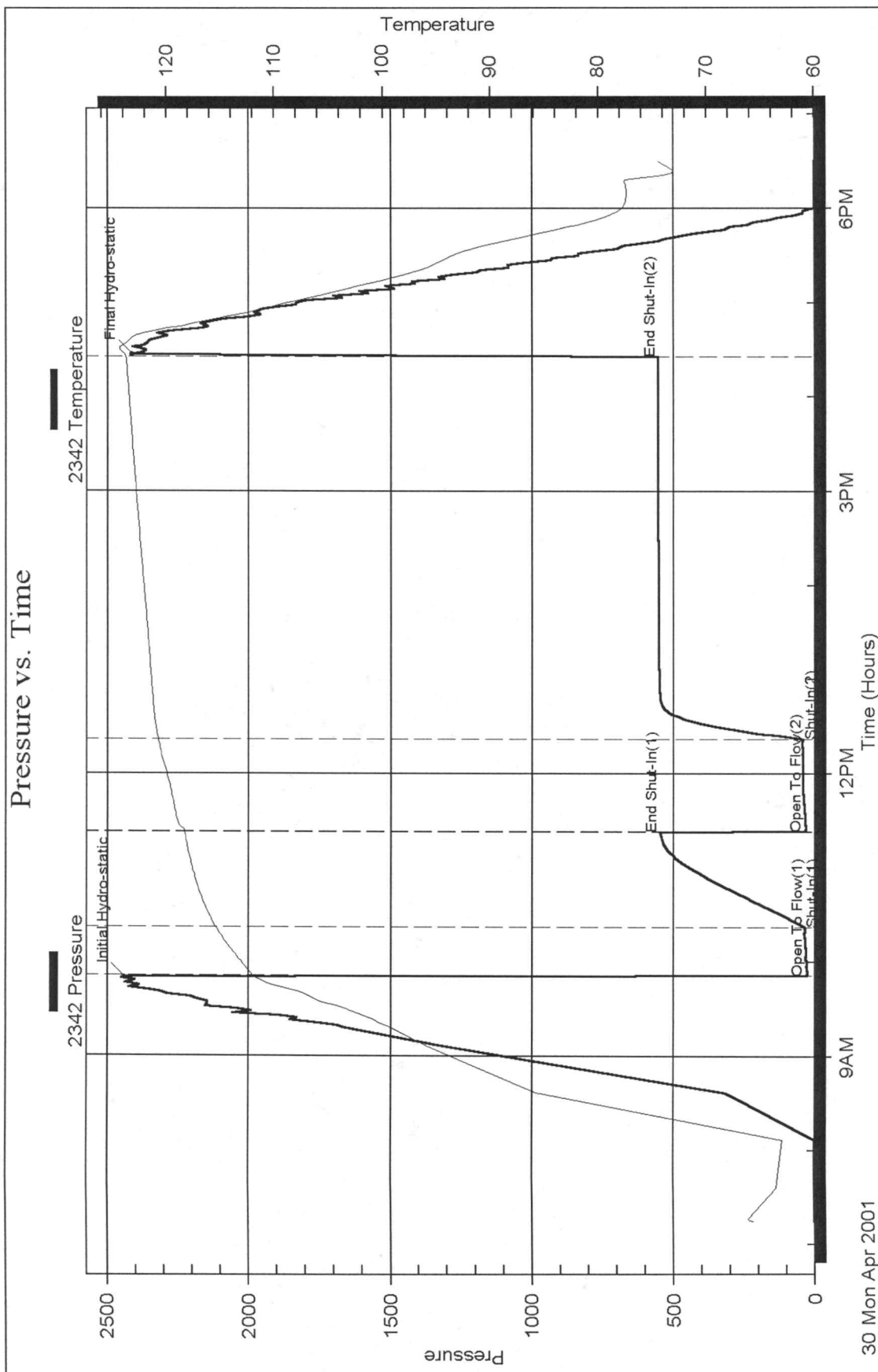
Serial #:

Laboratory Name: Caraway

Laboratory Location: Liberal KS

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Woolsey Petl.Corp.**

125 N.Market Ste.1000
Wichita Ks. 67202

ATTN: Mike Maune

8-35s-16w Comanche

McMoran #3

Start Date: 2001.05.01 @ 06:40:00

End Date: 2001.05.01 @ 18:20:00

Job Ticket #: 14020 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Petl. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14020

DST#: 5

Test Start: 2001.05.01 @ 06:40:00

GENERAL INFORMATION:

Formation: **Hertha**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:18:24

Time Test Ended: 18:20:00

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **5004.00 ft (KB) To 5050.00 ft (KB) (TVD)**

Total Depth: 5050.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1930.00 ft (KB)

1921.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 2342 Inside

Press@RunDepth: 110.02 psig @ 5005.00 ft (KB)

Start Date: 2001.05.01 End Date: 2001.05.01

Start Time: 06:40:25 End Time: 18:20:54

Capacity: 7000.00 psig

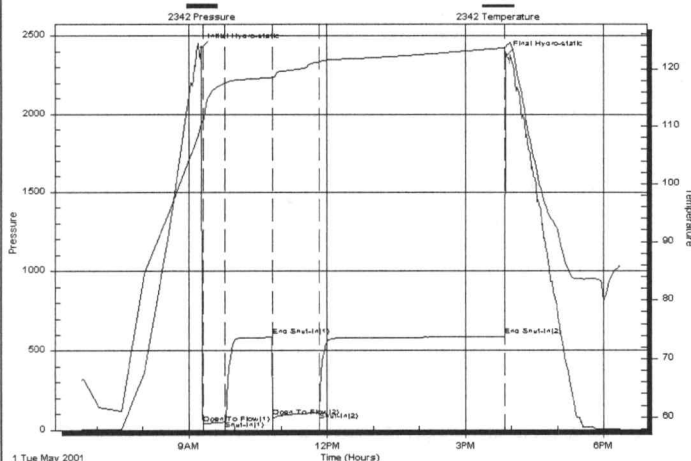
Last Calib.: 2001.01.04

Time On Btm: 2001.05.01 @ 09:16:24

Time Off Btm: 2001.05.01 @ 15:53:24

TEST COMMENT: IF: Strong blow . B.O.B. in 75 secs.
IS: Weak blow . (1/4")
FF: Strong blow . GTS in 30 secs. (see gas volume report)
FSI: No blow .

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2424.41	110.51	Initial Hydro-static
2	36.16	110.97	Open To Flow (1)
31	51.86	117.51	Shut-In (1)
92	585.39	118.54	End Shut-In (1)
93	75.78	118.53	Open To Flow (2)
153	110.02	121.16	Shut-In (2)
395	585.56	123.59	End Shut-In (2)
397	2376.24	123.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas in all fluid free pipe.	0.00
160.00	Drilg. mud	2.24

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	2.00	6.14
Last Gas Rate	0.13	15.00	11.00
Max. Gas Rate	0.13	15.00	11.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Petr. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14020

DST#: 5

Test Start: 2001.05.01 @ 06:40:00

Tool Information

Drill Pipe:	Length: 5002.00 ft	Diameter: 3.80 inches	Volume: 70.16 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 70.16 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 57000.00 lb
Depth to Top Packer:	4999.00 ft			Final 59000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.00 ft			
Tool Length:	73.00 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			4973.00	
S.I. Tool	5.00			4978.00	
HMV	5.00			4983.00	
Jars	5.00			4988.00	
Safety Joint	2.00			4990.00	
Packer	4.00			4994.00	27.00 Bottom Of Top Packer
Packer	5.00			4999.00	
Stubb	1.00			5000.00	
Recorder	0.00	2342	Inside	5000.00	
Perforations	8.00			5008.00	
C.O. Sub	1.00			5009.00	
Blank Spacing	30.00			5039.00	
C.O. Sub	1.00			5040.00	
Recorder	0.00	10248	Outside	5040.00	
Bullnose	5.00			5045.00	46.00 Bottom Packers & Anchor

Total Tool Length: 73.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Petl.Corp.

McMoran #3

125 N.Market Ste.1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14020

DST#: 5

ATTN: Mike Maune

Test Start: 2001.05.01 @ 06:40:00

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:

6000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.52 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Gas in all fluid free pipe.	0.000
160.00	Drlg.mud	2.244

Total Length: 160.00 ft

Total Volume: 2.240 bbl

Num Fluid Samples: 1

Num Gas Bombs: 3

Serial #: gp

Laboratory Name: Caraw ay

Laboratory Location: Liberal KS

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14020

DST#: 5

ATTN: Mike Maune

Test Start: 2001.05.01 @ 06:40:00

Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
2	10	0.13	2.00	6.14
2	15	0.13	5.00	7.26
2	20	0.13	6.00	7.63
2	25	0.13	6.00	7.63
2	30	0.13	8.00	8.38
2	35	0.13	9.00	8.76
2	40	0.13	10.00	9.13
2	45	0.13	12.00	9.88
2	50	0.13	13.00	10.26
2	55	0.13	14.00	10.63
2	60	0.13	15.00	11.00

Serial #: 2342

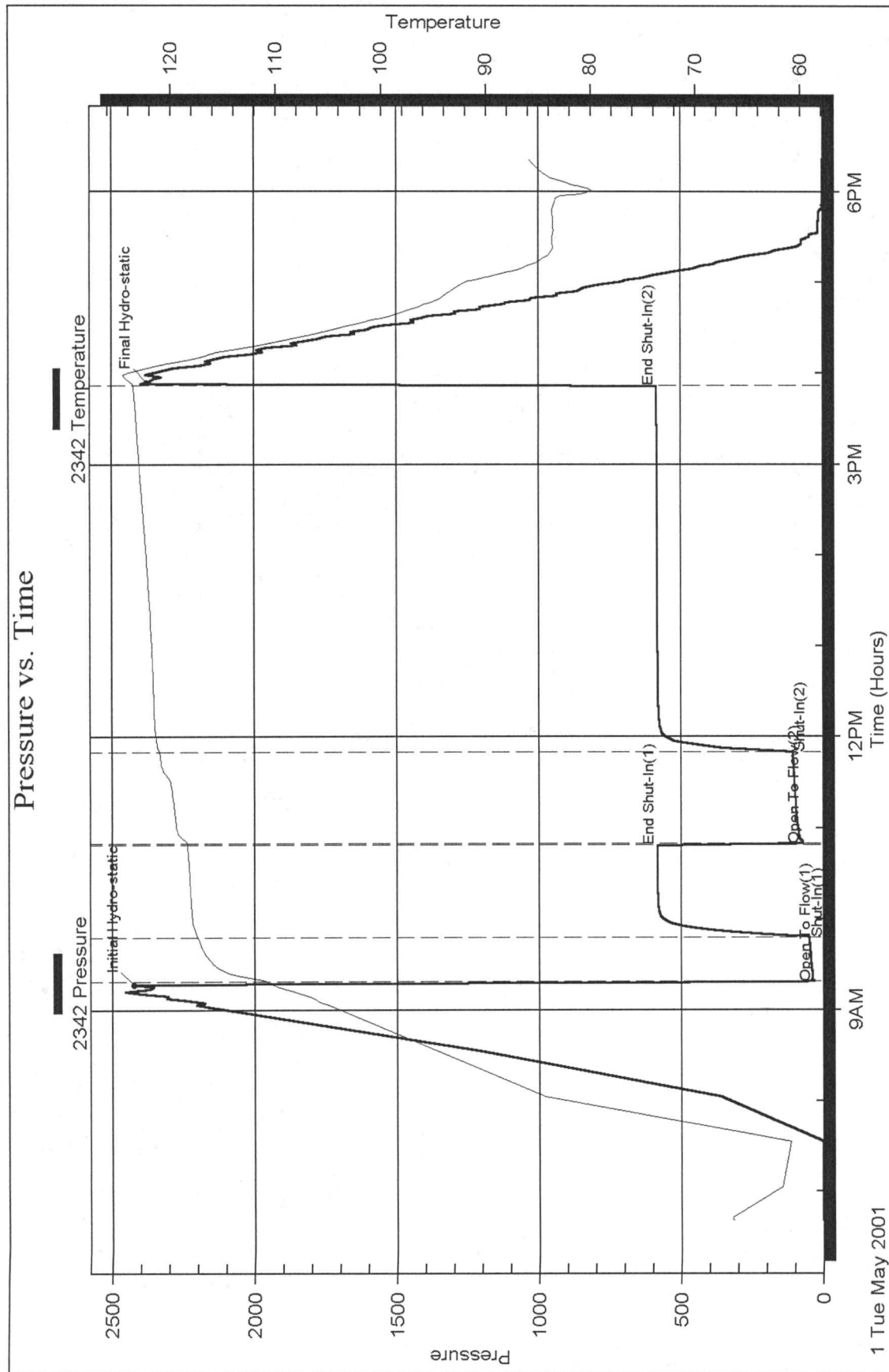
Inside

Woodsey Peti, Corp.

8-35s-16w Comanche

DST Test Number: 5

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Woolsey Petl.Corp.**

125 N.Market Ste.1000
Wichita Ks. 67202

ATTN: Mike Maune

8-35s-16w Comanche

McMoran #3

Start Date: 2001.05.03 @ 02:33:00

End Date: 2001.05.03 @ 14:29:00

Job Ticket #: 14021 DST #: 6

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Petl. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14021

DST#: 6

Test Start: 2001.05.03 @ 02:33:00

GENERAL INFORMATION:

Formation: **Miss.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:38:01

Time Test Ended: 14:29:00

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **5272.00 ft (KB) To 5325.00 ft (KB) (TVD)**

Total Depth: 5325.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1930.00 ft (KB)

1921.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 2342

Inside

Press@RunDepth: 30.88 psig @ 5273.00 ft (KB)

Start Date: 2001.05.03

End Date:

2001.05.03

Start Time: 02:33:32

End Time:

14:29:31

Capacity: 7000.00 psig

Last Calib.: 2001.01.04

Time On Btm: 2001.05.03 @ 05:32:31

Time Off Btm: 2001.05.03 @ 12:16:31

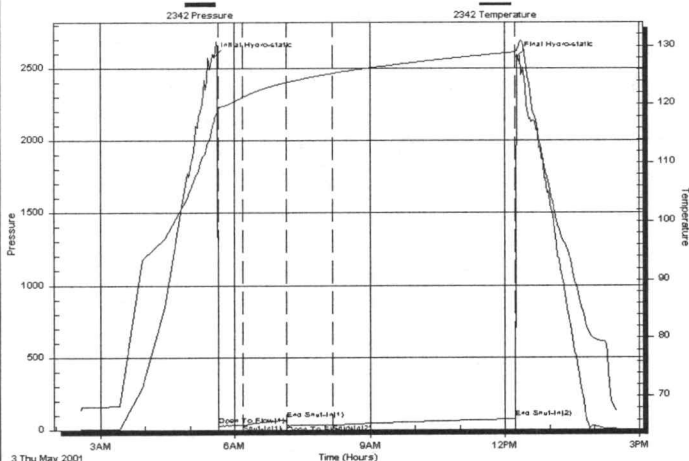
TEST COMMENT: IF: Weak blow . Slow increase to 5".

IS: No blow .

FF: Weak blow . 1 - 2".

FS: No blow .

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2582.03	117.22	Initial Hydro-static
6	25.93	119.32	Open To Flow (1)
38	29.70	121.21	Shut-In(1)
96	66.97	123.77	End Shut-In(1)
97	27.94	123.77	Open To Flow (2)
158	30.88	125.32	Shut-In(2)
402	71.67	128.93	End Shut-In(2)
404	2578.17	129.42	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Drig. mud.	0.21

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14021

DST#: 6

ATTN: Mike Maune

Test Start: 2001.05.03 @ 02:33:00

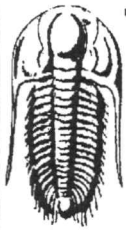
Tool Information

Drill Pipe:	Length: 5252.00 ft	Diameter: 3.80 inches	Volume: 73.67 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			Total Volume: 73.67 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	5267.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	53.00 ft			
Tool Length:	80.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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C.O. Sub	1.00			5241.00	
S.I. Tool	5.00			5246.00	
HMV	5.00			5251.00	
Jars	5.00			5256.00	
Safety Joint	2.00			5258.00	
Packer	4.00			5262.00	27.00 Bottom Of Top Packer
Packer	5.00			5267.00	
Stubb	1.00			5268.00	
Recorder	0.00	2342	Inside	5268.00	
Perforations	15.00			5283.00	
C.O. Sub	1.00			5284.00	
Blank Spacing	30.00			5314.00	
C.O. Sub	1.00			5315.00	
Recorder	0.00	10248	Outside	5315.00	
Bullnose	5.00			5320.00	53.00 Bottom Packers & Anchor

Total Tool Length: 80.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14021

DST#: 6

ATTN: Mike Maune

Test Start: 2001.05.03 @ 02:33:00

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:

5000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.94 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Drig. mud.	0.210

Total Length: 15.00 ft

Total Volume: 0.210 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #: none

Laboratory Name: Caraway

Laboratory Location: Liberal KS

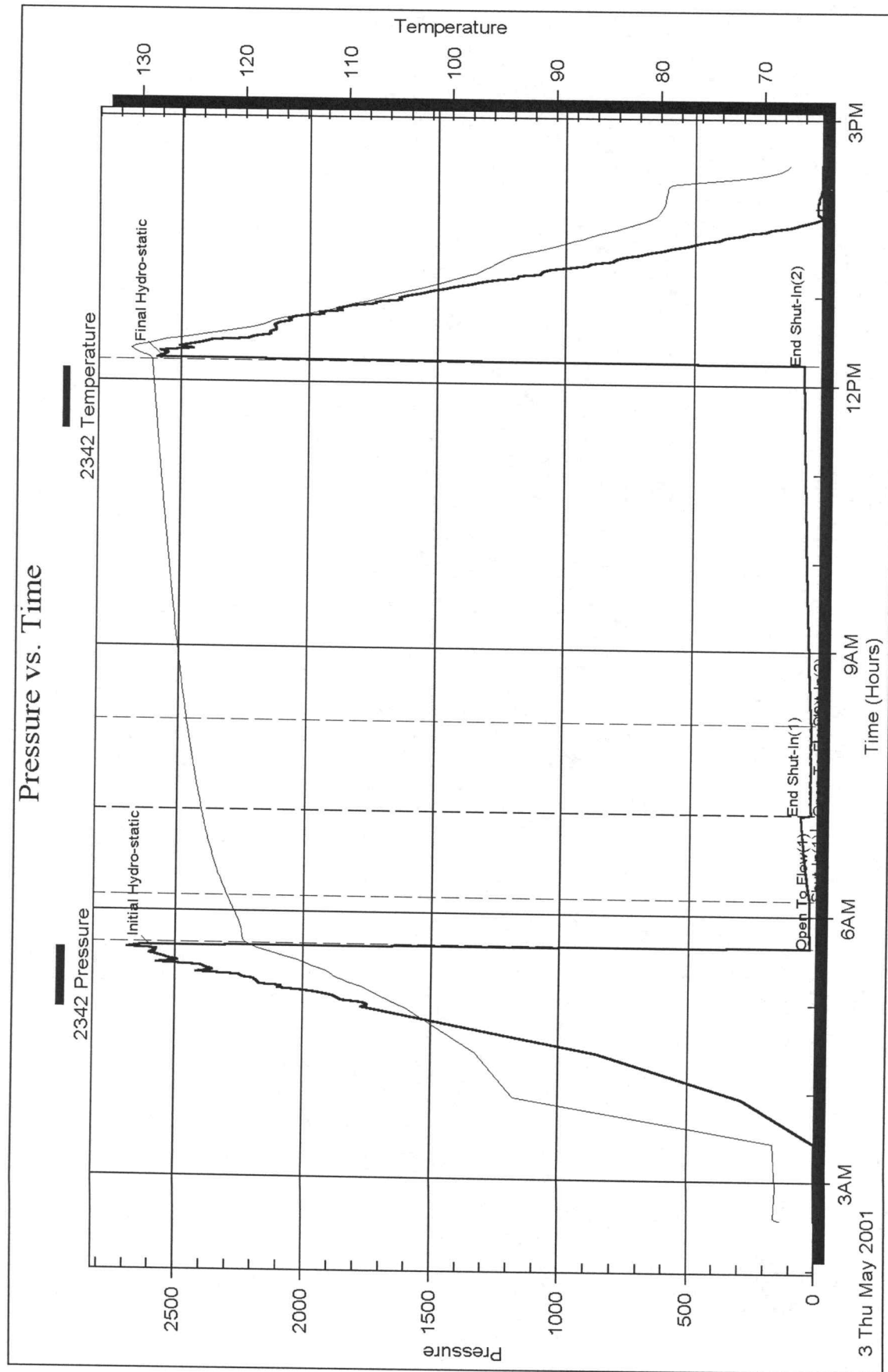
Recovery Comments:

Serial #: 2342

Inside Woolsey Petl. Corp.

8-35s-16w Comanche

DST Test Number: 6





DRILL STEM TEST REPORT

Prepared For: **Woolsey Petl.Corp.**

125 N.Market Ste.1000
Wichita Ks. 67202

ATTN: Mike Maune

8-35s-16w Comanche

McMoran #3

Start Date: 2001.05.05 @ 10:42:00

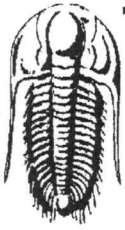
End Date: 2001.05.05 @ 23:19:00

Job Ticket #: 14022 DST #: 7

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Woolsey Petl. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14022

DST#: 7

Test Start: 2001.05.05 @ 10:42:00

GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:05:03

Time Test Ended: 23:19:00

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **5660.00 ft (KB) To 5720.00 ft (KB) (TVD)**

Total Depth: 5720.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1930.00 ft (KB)

1921.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 2342 Inside

Press@RunDepth: 1241.79 psig @ 5661.00 ft (KB)

Start Date: 2001.05.05 End Date: 2001.05.05

Start Time: 10:42:04 End Time: 23:19:03

Capacity: 7000.00 psig

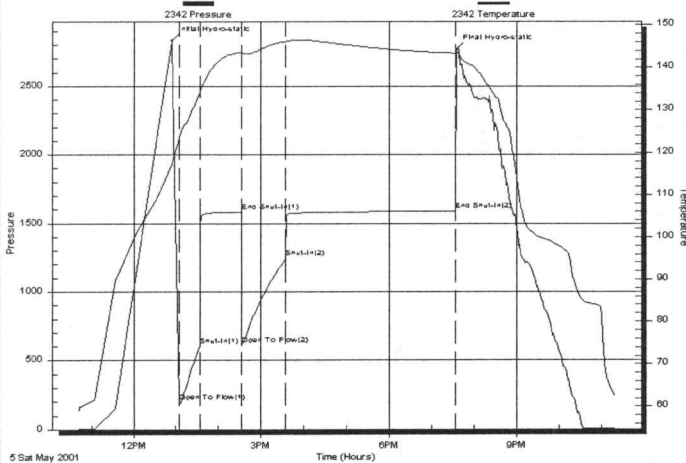
Last Calib.: 2001.01.04

Time On Btm: 2001.05.05 @ 12:54:03

Time Off Btm: 2001.05.05 @ 19:35:03

TEST COMMENT: IF: Strong blow . B.O.B. in 25 secs.
IS: Strong blow . GTS in 50 mins.
FF: Strong blow . B.O.B. in 110 secs. Gas was TSTM.
FS: Strong blow .

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2829.37	117.30	Initial Hydro-static
11	191.51	123.68	Open To Flow (1)
40	601.00	134.06	Shut-In(1)
99	1583.88	143.52	End Shut-In(1)
100	610.40	143.51	Open To Flow (2)
161	1241.79	146.10	Shut-In(2)
399	1585.64	143.34	End Shut-In(2)
401	2763.99	143.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas in all fluid free pipe.	0.00
150.00	Heavy Mud	2.10
120.00	MW 20% m 80% w	1.68
2230.00	Gassy salt water Rw .081 ohms @ 61 d	31.28

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Petr. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14022

DST#: 7

ATTN: Mike Maune

Test Start: 2001.05.05 @ 10:42:00

Tool Information

Drill Pipe:	Length: 5657.00 ft	Diameter: 3.80 inches	Volume: 79.35 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 86000.00 lb
			Total Volume: 79.35 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	5655.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	60.00 ft			
Tool Length:	87.00 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			5629.00	
S.I. Tool	5.00			5634.00	
HMV	5.00			5639.00	
Jars	5.00			5644.00	
Safety Joint	2.00			5646.00	
Packer	4.00			5650.00	27.00 Bottom Of Top Packer
Packer	5.00			5655.00	
Stubb	1.00			5656.00	
Recorder	0.00	2342	Inside	5656.00	
Perforations	22.00			5678.00	
C.O. Sub	1.00			5679.00	
Blank Spacing	30.00			5709.00	
C.O. Sub	1.00			5710.00	
Recorder	0.00	10248	Outside	5710.00	
Bullnose	5.00			5715.00	60.00 Bottom Packers & Anchor

Total Tool Length: 87.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Petr. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14022

DST#: 7

ATTN: Mike Maune

Test Start: 2001.05.05 @ 10:42:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity: 120000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.34 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Gas in all fluid free pipe.	0.000
150.00	Heavy Mud	2.104
120.00	MW 20% m 80% w	1.683
2230.00	Gassy salt water Rw .081 ohms @ 61 deg.F	31.281

Total Length: 2500.00 ft

Total Volume: 35.060 bbl

Num Fluid Samples: 1

Num Gas Bombs: 1

Serial #: gp4

Laboratory Name: Caraway

Laboratory Location: Liberal KS

Recovery Comments:

Serial #: 2342

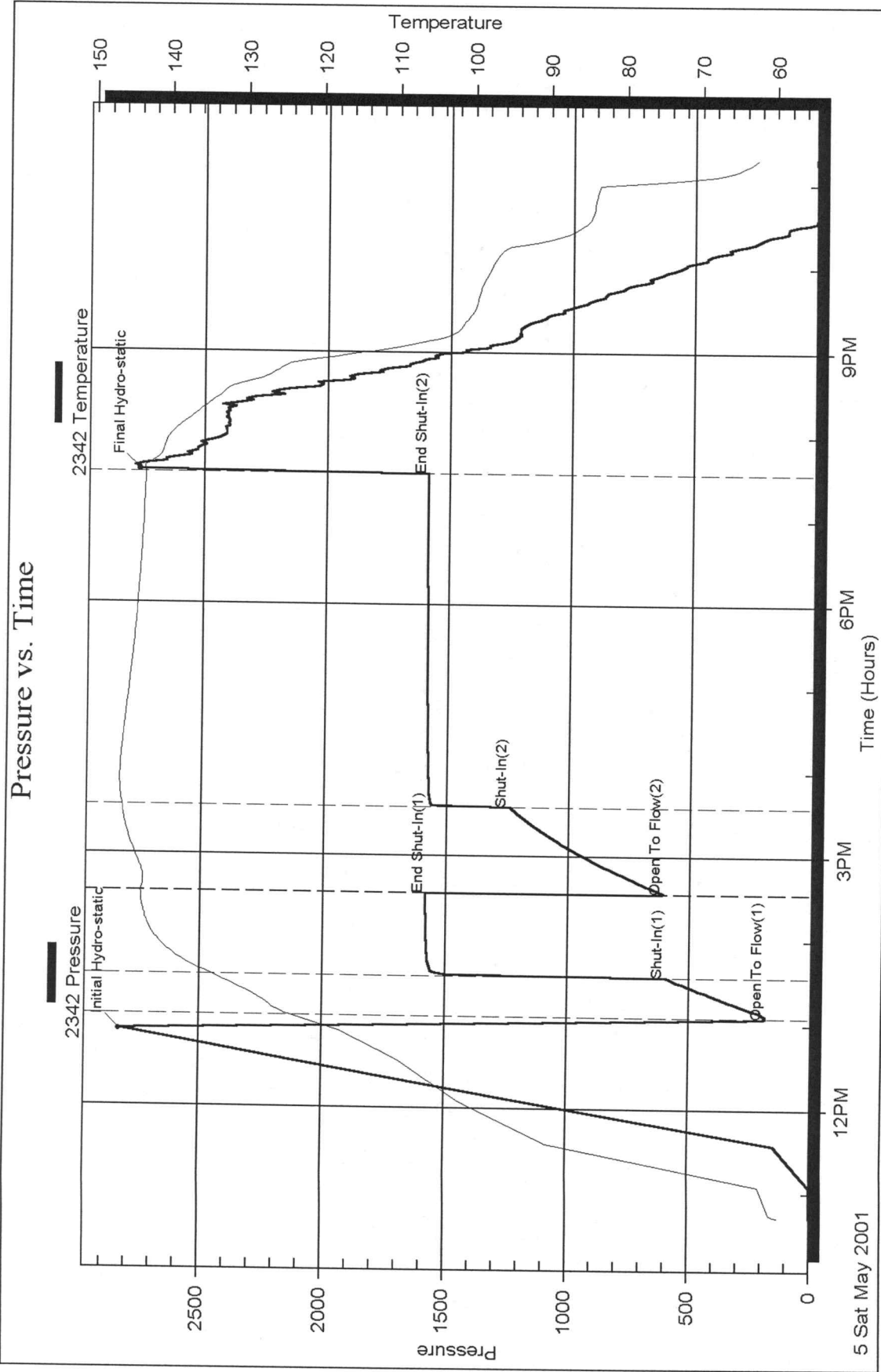
Inside

Woolsey Petl Corp.

8-35s-16w Comanche

DST Test Number: 7

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Woolsey Petl.Corp.**

125 N.Market Ste.1000
Wichita Ks. 67202

ATTN: Mike Maune

8-35s-16w Comanche

McMoran #3

Start Date: 2001.05.07 @ 00:26:00

End Date: 2001.05.07 @ 12:13:00

Job Ticket #: 14023 DST #: 8

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Petl. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14023

DST#: 8

Test Start: 2001.05.07 @ 00:26:00

GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:11:04

Time Test Ended: 12:13:00

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **5852.00 ft (KB) To 5874.00 ft (KB) (TVD)**

Total Depth: 5874.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1930.00 ft (KB)

1921.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 2342 Inside

Press@RunDepth: 21.23 psig @ 5853.00 ft (KB)

Start Date: 2001.05.07

End Date:

2001.05.07

Start Time: 00:26:35

End Time:

12:13:04

Capacity: 7000.00 psig

Last Calib.: 2001.01.04

Time On Btm: 2001.05.07 @ 03:08:34

Time Off Btm: 2001.05.07 @ 09:42:34

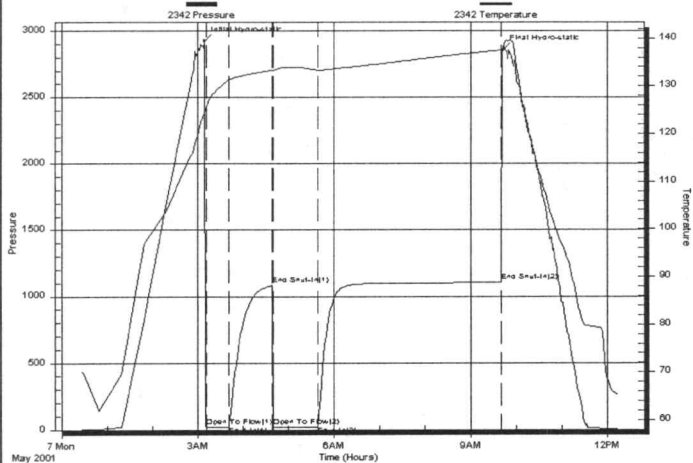
TEST COMMENT: IF: Strong blow . B.O.B. in 14 mins.

IS: No blow .

FF: Strong blow . B.O.B. in 5 secs. GTS in 55 mins. TSTM

FS: No blow .

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2922.95	124.51	Initial Hydro-static
3	17.20	125.64	Open To Flow (1)
33	22.48	131.27	Shut-In (1)
90	1081.40	133.29	End Shut-In (1)
91	16.61	133.29	Open To Flow (2)
150	21.23	133.25	Shut-In (2)
392	1103.03	137.46	End Shut-In (2)
394	2852.78	137.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas in all fluid free pipe.	0.00
30.00	Drilg. mud	0.42

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14023

DST#: 8

ATTN: Mike Maune

Test Start: 2001.05.07 @ 00:26:00

Tool Information

Drill Pipe:	Length: 5843.00 ft	Diameter: 3.80 inches	Volume: 81.96 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 90000.00 lb
			Total Volume: 81.96 bbl	Tool Chased 2.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	5847.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	22.00 ft			
Tool Length:	49.00 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			5821.00	
S.I. Tool	5.00			5826.00	
HMV	5.00			5831.00	
Jars	5.00			5836.00	
Safety Joint	2.00			5838.00	
Packer	4.00			5842.00	27.00 Bottom Of Top Packer
Packer	5.00			5847.00	
Stubb	1.00			5848.00	
Recorder	0.00	2342	Inside	5848.00	
Perforations	16.00			5864.00	
Recorder	0.00	10248	Outside	5864.00	
Bullnose	5.00			5869.00	22.00 Bottom Packers & Anchor

Total Tool Length: 49.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14023

DST#: 8

ATTN: Mike Maune

Test Start: 2001.05.07 @ 00:26:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil APt:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

5000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbl

Water Loss: 12.75 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Gas in all fluid free pipe.	0.000
30.00	Drlg. mud	0.421

Total Length: 30.00 ft

Total Volume: 0.420 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #: none

Laboratory Name: Caraway

Laboratory Location: Liberal KS

Recovery Comments:

Serial #: 2342

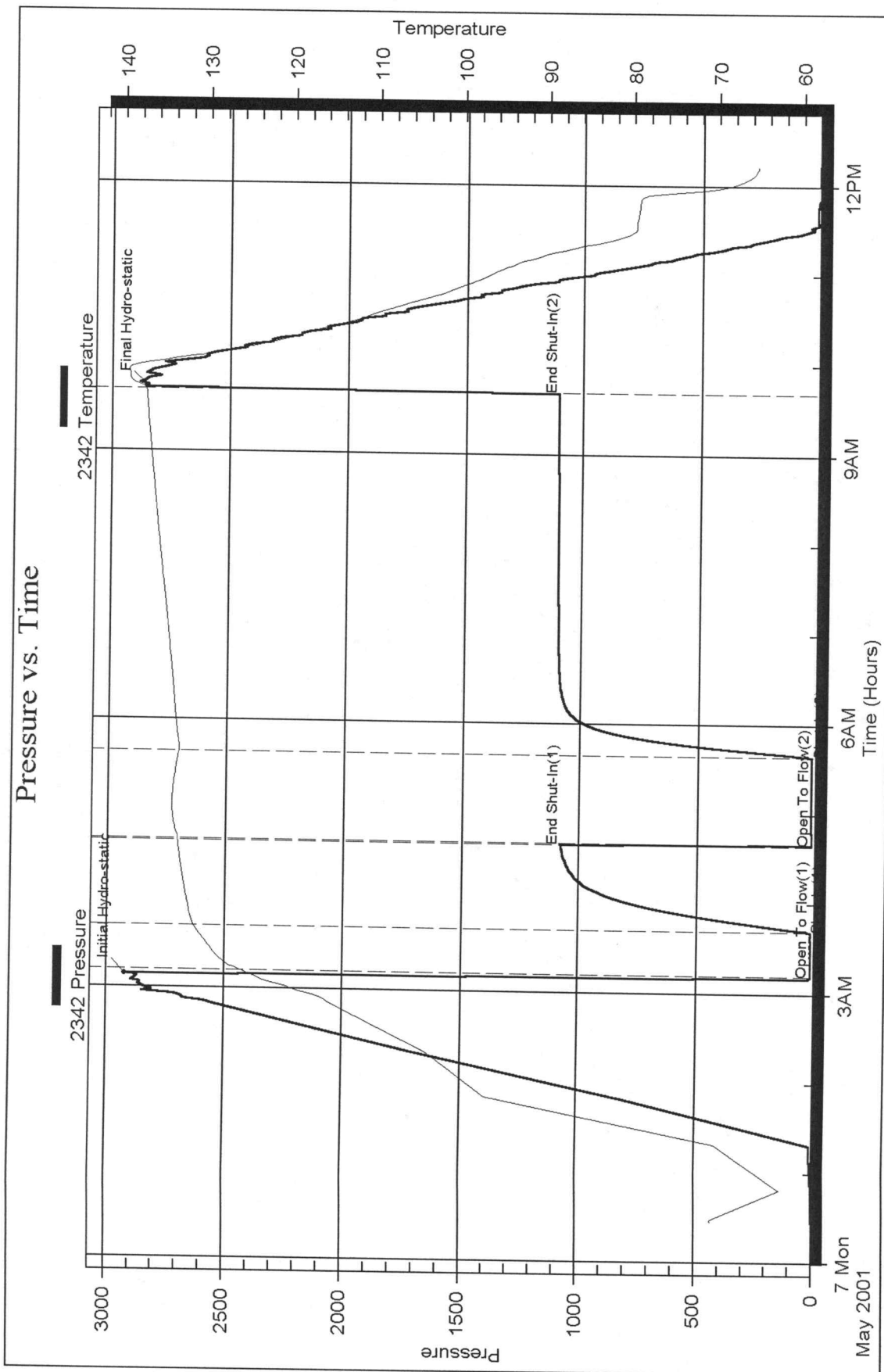
Inside

Woodsey Petl. Corp.

8-35s-16w Comanche

DST Test Number: 8

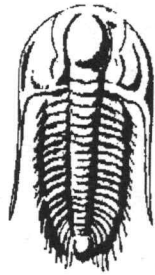
Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 14023

Printed: 2001.05.11 @ 08:55:26 Page 5



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Woolsey Petl.Corp.**

125 N.Market Ste.1000
Wichita Ks. 67202

ATTN: Mike Maune

8-35s-16w Comanche

McMoran #3

Start Date: 2001.05.08 @ 01:45:00

End Date: 2001.05.08 @ 13:52:00

Job Ticket #: 14024 DST #: 9

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Woolsey Petl.Corp.

McMoran #3

8-35s-16w Comanche

DST # 9

Simpson

2001.05.08



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Woolsey Petl. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14024

DST#: 9

Test Start: 2001.05.08 @ 01:45:00

GENERAL INFORMATION:

Formation: **Simpson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:17:46

Time Test Ended: 13:52:00

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **5886.00 ft (KB) To 5921.00 ft (KB) (TVD)**

Total Depth: 5921.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1930.00 ft (KB)

1921.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 2342 Inside

Press@RunDepth: 383.04 psig @ 5887.00 ft (KB)

Start Date: 2001.05.08

End Date:

2001.05.08

Start Time: 01:45:17

End Time:

13:52:46

Capacity: 7000.00 psig

Last Calib.: 2001.01.04

Time On Btm: 2001.05.08 @ 04:15:16

Time Off Btm: 2001.05.08 @ 10:53:16

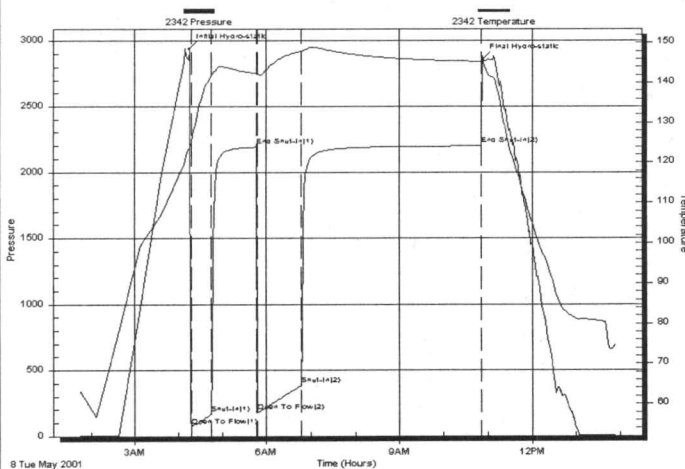
TEST COMMENT: IF: Strong blow . B.O.B. in 90 secs.

IS: Fair blow . 1 - 8".

FF: Strong blow . B.O.B. in 3.5 mins. GTS in 16 mins. (see gas volume report)

FS: Fair blow . 1 - 10".

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2943.09	123.89	Initial Hydro-static
3	68.56	125.01	Open To Flow (1)
30	168.52	141.84	Shut-In(1)
92	2191.51	142.29	End Shut-In(1)
93	177.33	142.26	Open To Flow (2)
152	383.04	147.84	Shut-In(2)
396	2198.68	145.30	End Shut-In(2)
398	2865.96	145.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Gas in all fluid free pipe.	0.00
125.00	SOCGM 2%o 30%g 68%m	1.75
120.00	GCMW with oil specs. 24%g 36%m 40%v	1.68
515.00	Gassy salt water Rw .11 ohms @ 76 deg	7.22

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	4.00	6.89
Last Gas Rate	0.13	8.00	8.38
Max. Gas Rate	0.13	8.00	8.38



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Petr. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14024

DST#: 9

ATTN: Mike Maune

Test Start: 2001.05.08 @ 01:45:00

Tool Information

Drill Pipe:	Length: 5875.00 ft	Diameter: 3.80 inches	Volume: 82.41 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 79000.00 lb
			<u>Total Volume: 82.41 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	5881.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	62.00 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			5855.00	
S.I. Tool	5.00			5860.00	
HMV	5.00			5865.00	
Jars	5.00			5870.00	
Safety Joint	2.00			5872.00	
Packer	4.00			5876.00	27.00 Bottom Of Top Packer
Packer	5.00			5881.00	
Stubb	1.00			5882.00	
Recorder	0.00	2342	Inside	5882.00	
Perforations	29.00			5911.00	
Recorder	0.00	10248	Outside	5911.00	
Bullnose	5.00			5916.00	35.00 Bottom Packers & Anchor
Total Tool Length:		62.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Petl. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14024

DST#: 9

ATTN: Mike Maune

Test Start: 2001.05.08 @ 01:45:00

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:

69000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Gas in all fluid free pipe.	0.000
125.00	SOCGM 2%o 30%g 68%m	1.753
120.00	GCMW with oil specs. 24%g 36%m 40%w	1.683
515.00	Gassy salt water Rw .11 ohms @ 76 deg F.	7.224

Total Length: 760.00 ft

Total Volume: 10.650 bbl

Num Fluid Samples: 1

Num Gas Bombs: 1

Serial #: gp5

Laboratory Name: Caraway

Laboratory Location: Liberal KS

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Woolsey Petr. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14024

DST#: 9

ATTN: Mike Maune

Test Start: 2001.05.08 @ 01:45:00

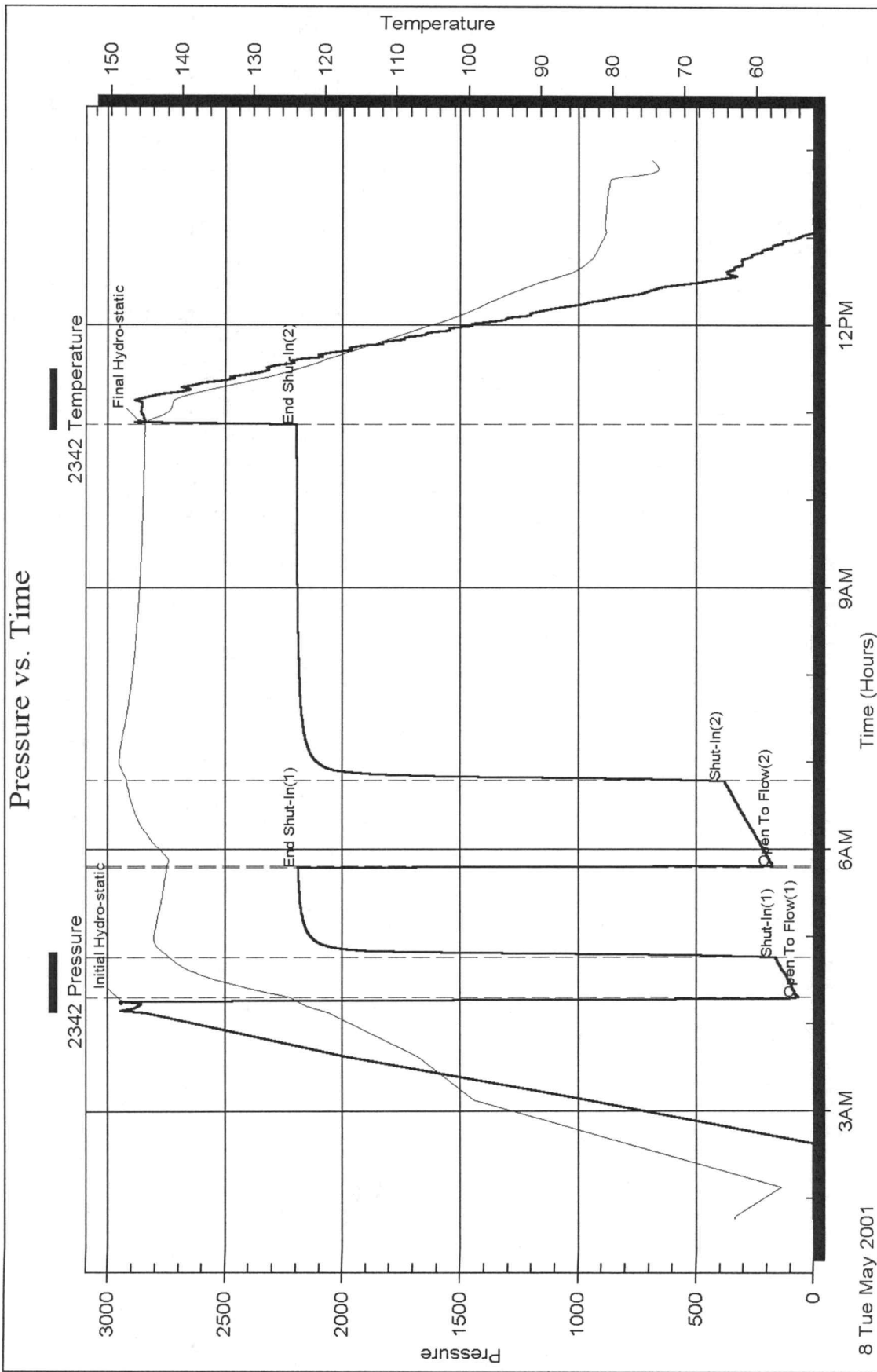
Gas Rates Information

Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
2	35	0.13	4.00	6.89
2	35	0.13	4.00	6.89
2	40	0.13	6.00	7.63
2	45	0.13	7.00	8.01
2	50	0.13	8.00	8.38
2	55	0.13	8.00	8.38

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Woolsey Petl.Corp.**

125 N.Market Ste.1000
Wichita Ks. 67202

ATTN: Mike Maune

8-35s-16w Comanche

McMoran #3

Start Date: 2001.05.09 @ 06:30:00

End Date: 2001.05.09 @ 18:25:00

Job Ticket #: 14025 DST #: 10

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Petl. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14025

DST#: 10

Test Start: 2001.05.09 @ 06:30:00

GENERAL INFORMATION:

Formation: **Simpson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:24:13

Time Test Ended: 18:25:00

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 13

Interval: **5954.00 ft (KB) To 5970.00 ft (KB) (TVD)**

Total Depth: 5970.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1930.00 ft (KB)

1921.00 ft (CF)

KB to GR/CF: 9.00 ft

Serial #: 2342 Inside

Press@RunDepth: 51.27 psig @ 5955.00 ft (KB)

Start Date: 2001.05.09

End Date:

2001.05.09

Start Time: 06:30:14

End Time:

18:25:13

Capacity: 7000.00 psig

Last Calib.: 2001.01.04

Time On Btm: 2001.05.09 @ 09:22:13

Time Off Btm: 2001.05.09 @ 15:57:43

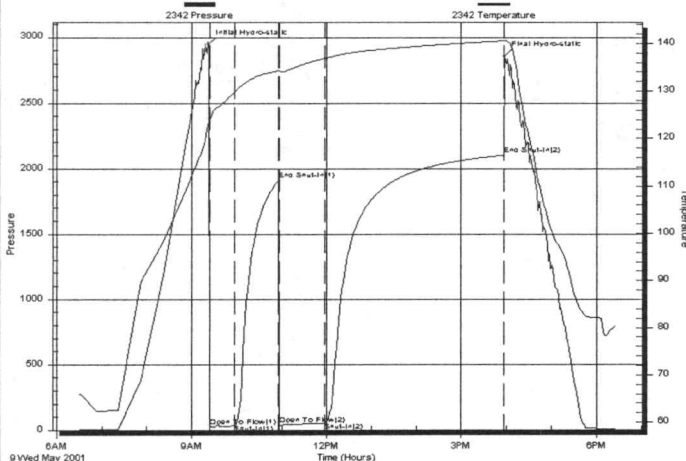
TEST COMMENT: IF: Weak to fair blow. Slow increase to 8".

IS: No blow.

FF: Weak blow. 1 - 3".

FS: No blow.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2947.03	123.04	Initial Hydro-static
2	21.98	124.03	Open To Flow (1)
35	33.73	129.86	Shut-In(1)
93	1911.78	134.25	End Shut-In(1)
94	36.42	134.19	Open To Flow (2)
155	51.27	136.84	Shut-In(2)
395	2102.38	140.55	End Shut-In(2)
396	2855.13	140.61	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Trace of gas in pipe.	0.00
75.00	MW with oil spots. 25% mud 75% water	1.05

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Woolsey Petl. Corp.

125 N. Market Ste. 1000
Wichita Ks. 67202

ATTN: Mike Maune

McMoran #3

8-35s-16w Comanche

Job Ticket: 14025

DST#: 10

Test Start: 2001.05.09 @ 06:30:00

Tool Information

Drill Pipe:	Length: 5936.00 ft	Diameter: 3.80 inches	Volume: 83.27 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: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 76000.00 lb
			Total Volume: 83.27 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 61000.00 lb
Depth to Top Packer:	5949.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	43.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		
Tool Comments:				

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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C.O. Sub	1.00			5923.00	
S.I. Tool	5.00			5928.00	
HMV	5.00			5933.00	
Jars	5.00			5938.00	
Safety Joint	2.00			5940.00	
Packer	4.00			5944.00	27.00 Bottom Of Top Packer
Packer	5.00			5949.00	
Stubb	1.00			5950.00	
Recorder	0.00	2342	Inside	5950.00	
Perforations	10.00			5960.00	
Recorder	0.00	10248	Outside	5960.00	
Bullnose	5.00			5965.00	16.00 Bottom Packers & Anchor

Total Tool Length: 43.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Petr. Corp.

McMoran #3

125 N. Market Ste. 1000
Wichita Ks. 67202

8-35s-16w Comanche

Job Ticket: 14025

DST#: 10

ATTN: Mike Maune

Test Start: 2001.05.09 @ 06:30:00

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:

68000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.58 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Trace of gas in pipe.	0.000
75.00	MW with oil spots. 25% mud 75% w water	1.052

Total Length: 75.00 ft Total Volume: 1.052 bbl

Num Fluid Samples: 1

Num Gas Bombs: 0

Serial #: none

Laboratory Name: Caraway

Laboratory Location: Liberal KS

Recovery Comments: Rw .14 @ 72

Serial #: 2342

Inside

Woodsey Petl. Corp.

8-35s-16w Comanche

DST Test Number: 10

