

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Molitor Oil Co.**

9517 SW 80th Ave.
Spivey, KS 67142

ATTN: Max Lovely

31-29s-8w Kingman,KS

Cross #3

Start Date: 2011.07.17 @ 04:31:35

End Date: 2011.07.17 @ 12:03:50

Job Ticket #: 042516 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Molitor Oil Co.

Cross #3

31-29s-8w Kingman,KS

DST # 1

Larsing Dennis

2011.07.17



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Molitor Oil Co.

9517 SW 80th Ave.
Spivey, KS 67142

ATTN: Max Lovely

Cross #3

31-29s-8w Kingman, KS

Job Ticket: 042516

DST#: 1

Test Start: 2011.07.17 @ 04:31:35

GENERAL INFORMATION:

Formation: Lansing Dennis

Deviated: No Whipstock ft (KB)

Time Tool Opened: 06:08:50

Time Test Ended: 12:03:50

Test Type: Conventional Bottom Hole

Tester: Gary Pevoteaux

Unit No: 58

Interval: 3793.00 ft (KB) To 3810.00 ft (KB) (TVD)

Total Depth: 3810.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1570.00 ft (KB)

1560.00 ft (CF)

KB to GRVCF: 10.00 ft

Serial #: 8167

Inside

Press@RunDepth: 111.15 psig @ 3794.00 ft (KB)

Start Date: 2011.07.17

End Date:

2011.07.17

Start Time: 04:31:40

End Time:

12:03:49

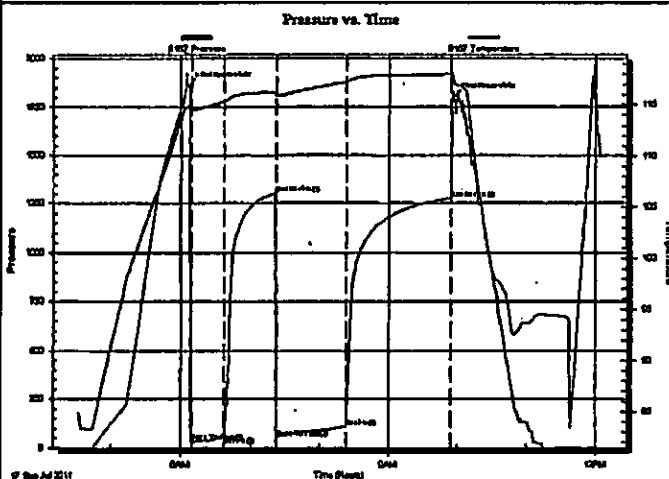
Capacity: 8000.00 psig

Last Calib.: 2011.07.17

Time On Btm: 2011.07.17 @ 06:06:05

Time Off Btm: 2011.07.17 @ 09:56:20

TEST COMMENT: IP: Strong blow. B.O.B. in 90 secs. GTS in 28 mins.
IS: Weak blow. 1/2" Dead in 15 mins.
FP: Strong blow. (see gas flow report)
FS: Weak blow. 1/2" - 2".



PRESSURE SUMMARY

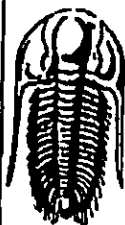
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1861.78	114.91	Initial Hydro-static
3	30.83	114.65	Open To Flow (1)
31	55.79	115.36	Shut-In (1)
76	1304.64	116.26	End Shut-In (1)
76	49.58	115.99	Open To Flow (2)
137	111.15	117.27	Shut-In (2)
229	1278.05	118.01	End Shut-In (2)
231	1806.54	117.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	OCMV 6%o 8% m 86% w	0.30
122.00	GM&WCO 23%g 9% m 12% w 46% o	1.16
85.00	GOOM 45%g 21% o 34% m	1.19

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcfd)
First Gas Rate	0.25	3.00	27.60
Last Gas Rate	0.25	2.00	26.02
Max. Gas Rate	0.25	3.50	28.40



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Molitor Oil Co.

Cross #3

9517 SW80th Ave.
Spivey, KS 67142

31-29s-8w Kingman, KS

Job Ticket: 042516

DST#: 1

ATTN: Max Lovely

Test Start: 2011.07.17 @ 04:31:35

Tool Information

Drill Pipe:	Length: 3657.00 ft	Diameter: 3.80 inches	Volume: 51.30 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 69000.00 lb
			Total Volume: 51.89 bbl	Tool Chased: 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 57000.00 lb
Depth to Top Packer:	3793.00 ft			Final 58000.00 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
C.O. Sub	1.00			3768.00	
Shut in tool	5.00			3771.00	
HMV	5.00			3776.00	
Jars	5.00			3781.00	
Safety Joint	3.00			3784.00	
Packer	4.00			3788.00	28.00 Bottom Of Top Packer
Packer	5.00			3793.00	
Stubb	1.00			3794.00	
Recorder	0.00	8167	Inside	3794.00	
Recorder	0.00	8370	Outside	3794.00	
Perforations	11.00			3805.00	
Bullnose	5.00			3810.00	17.00 Bottom Packers & Anchor

Total Tool Length: 45.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Monitor Oil Co.

Cross #3

9517 SW80th Ave.
Spivey, KS 67142

31-299-8w Kingman, KS

Job Ticket: 042516

DST#: 1

ATTN: Max Lovely

Test Start: 2011.07.17 @ 04:31:35

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: 81000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbf

Water Loss: 11.17 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
60.00	OCM/V6%o 8%m 86%w	0.296
122.00	GM&WCO 23%g 8%m 12%w 46%o	1.165
85.00	GOOM45%g 21%o 34%m	1.192

Total Length: 267.00 ft

Total Volume: 2.652 bbf

Num Fluid Samples: 0

Num Gas Bombs: 1

Serial #: gp-1

Laboratory Name: Caraway

Laboratory Location:

Recovery Comments: Rw .062 @ 107



TRILOBITE
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DRILL STEM TEST REPORT

GAS RATES

Molitor Oil Co.

Cross #3

9517 SW 80th Ave.
Spivey, KS 67142

31-29s-8w Kingman, KS

Job Ticket: 042516

DST#: 1

ATTN: Max Lovely

Test Start: 2011.07.17 @ 04:31:35

Gas Rates Information

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

Gas Rates Table

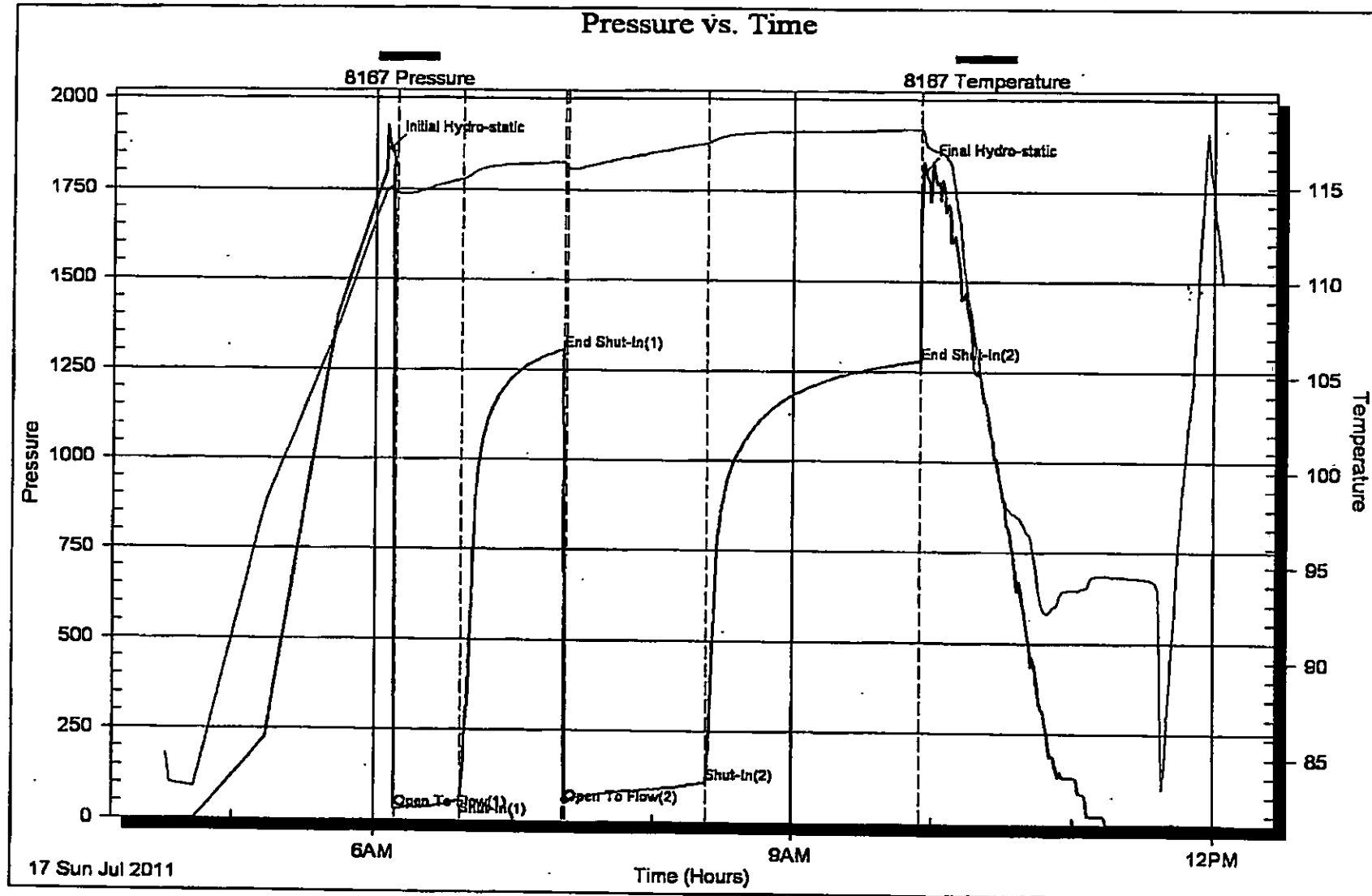
Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
2	10	0.25	3.00	27.60
2	10	0.25	3.00	27.60
2	10	0.25	3.00	27.60
2	20	0.25	3.50	28.40
2	30	0.25	3.00	27.60
2	40	0.25	2.00	26.02

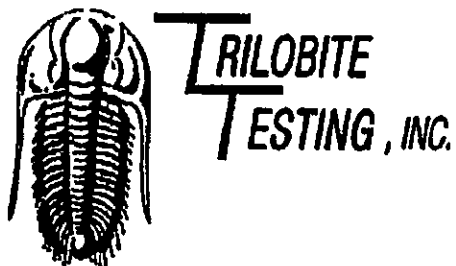
Serial #: 8167

Inside Molitor Oil Co.

31-29a-8w Kingman,KS

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Molitor Oil Co.**

9517 SW 80th Ave.
Spivey, KS 67142

ATTN: Max Lovely

31-29s-8w Kingman,KS

Cross #3

Start Date: 2011.07.17 @ 23:43:52

End Date: 2011.07.18 @ 10:46:37

Job Ticket #: 042517 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
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DRILL STEM TEST REPORT

Molitor Oil Co.

9517 SW 80th Ave.
Spivey, KS 67142

ATTN: Max Lovely

Cross #3

31-29s-8w Kingman, KS

Job Ticket: 042517

DST#: 2

Test Start: 2011.07.17 @ 23:43:52

GENERAL INFORMATION:

Formation: Hertha

Deviated: No Whipstock ft (KB)

Time Tool Opened: 01:36:07

Time Test Ended: 10:46:37

Test Type: Conventional Bottom Hole

Tester: Gary Pavoteaux

Unit No: 56

Interval: 3849.00 ft (KB) To 3875.00 ft (KB) (TVD)

Total Depth: 3875.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1570.00 ft (KB)

1560.00 ft (CF)

KB to GR/CF: 10.00 ft

Serial #: 8167

Inside

Press@RunDepth: 471.93 psig @ 3850.00 ft (KB)

Start Date: 2011.07.17

End Date:

2011.07.18

Start Time: 23:43:57

End Time:

10:46:37

Capacity:

8000.00 psig

Last Calib.:

2011.07.18

Time On Btm:

2011.07.18 @ 01:32:52

Time Off Btm:

2011.07.18 @ 06:14:07

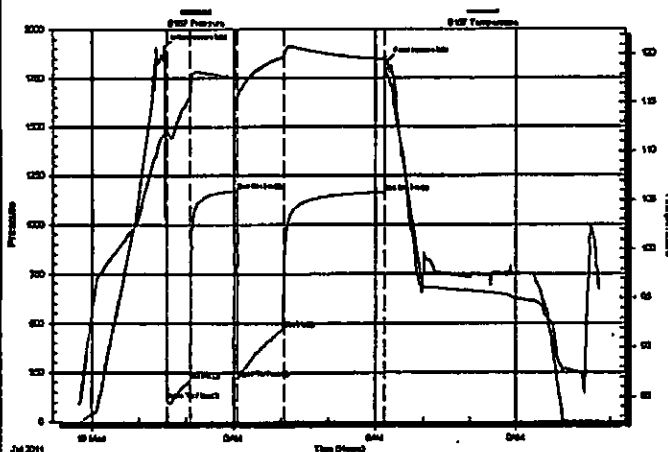
TEST COMMENT: IFP: Strong blow. B.O.B. in 10 secs. GTS in 4 1/2 mins.

IS: Strong blow. B.O.B.

FP: Strong blow.

FSt: Strong blow. B.O.B.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1906.27	111.79	Initial Hydro-static
4	113.37	111.97	Open To Flow (1)
32	211.52	115.64	Shut-in (1)
92	1173.75	117.64	End Shut-in (1)
93	219.43	116.31	Open To Flow (2)
151	471.93	119.78	Shut-in (2)
279	1165.53	119.58	End Shut-in (2)
282	1834.85	118.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	SWW oil specs	0.59
1640.00	CGO 50%g 50%o	23.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mscf/d)
First Gas Rate	0.38	7.00	78.39
Last Gas Rate	0.25	3.00	27.60
Max. Gas Rate	0.38	10.00	89.38



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Molitor Oil Co.

Cross #3

9517 SW 80th Ave.
Spivey, KS 67142

31-29s-8w Kingman, KS

Job Ticket: 042517

DST#: 2

ATTN: Max Lovely

Test Start: 2011.07.17 @ 23:43:52

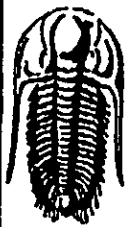
Tool Information

Drill Pipe:	Length: 3719.00 ft	Diameter: 3.80 inches	Volume: 52.17 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 71000.00 lb
			Total Volume: 52.76 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	3849.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	54.00 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			3822.00	
Shut in tool	5.00			3827.00	
HMV	5.00			3832.00	
Jars	5.00			3837.00	
Safety Joint	3.00			3840.00	
Packer	4.00			3844.00	26.00 Bottom Of Top Packer
Packer	5.00			3849.00	
Stubb	1.00			3850.00	
Recorder	0.00	8167	Inside	3850.00	
Recorder	0.00	8370	Outside	3850.00	
Perforations	20.00			3870.00	
Bullnose	5.00			3875.00	26.00 Bottom Packers & Anchor

Total Tool Length: 54.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Monitor Oil Co.

Cross #3

9517 SW 80th Ave.
Spivey, KS 67142

31-29s-8w Kingman, KS

Job Ticket: 042517

DST#: 2

ATTN: Max Lovely

Test Start: 2011.07.17 @ 23:43:52

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

41.3 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

84000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.17 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	SWW oil specs	0.590
1640.00	CGO 50%g 50%o	23.005

Total Length: 1760.00 ft

Total Volume: 23.595 bbl

Num Fluid Samples: 0

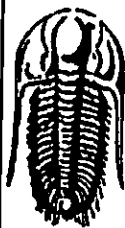
Num Gas Bombs: 0

Serial #: none

Laboratory Name:

Laboratory Location:

Recovery Comments: RW.065 @ 100



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DRILL STEM TEST REPORT

GAS RATES

Mobilitor Oil Co.

Cross #3

9517 SW 80th Ave.
Spivey, KS 67142

31-29s-8w Kingman, KS

Job Ticket: 042517

DST#: 2

ATTN: Max Lovely

Test Start: 2011.07.17 @ 23:43:52

Gas Rates Information

Temperature: 59 deg C

Relative Density: 0.65

Z Factor: 0.8

Gas Rates Table

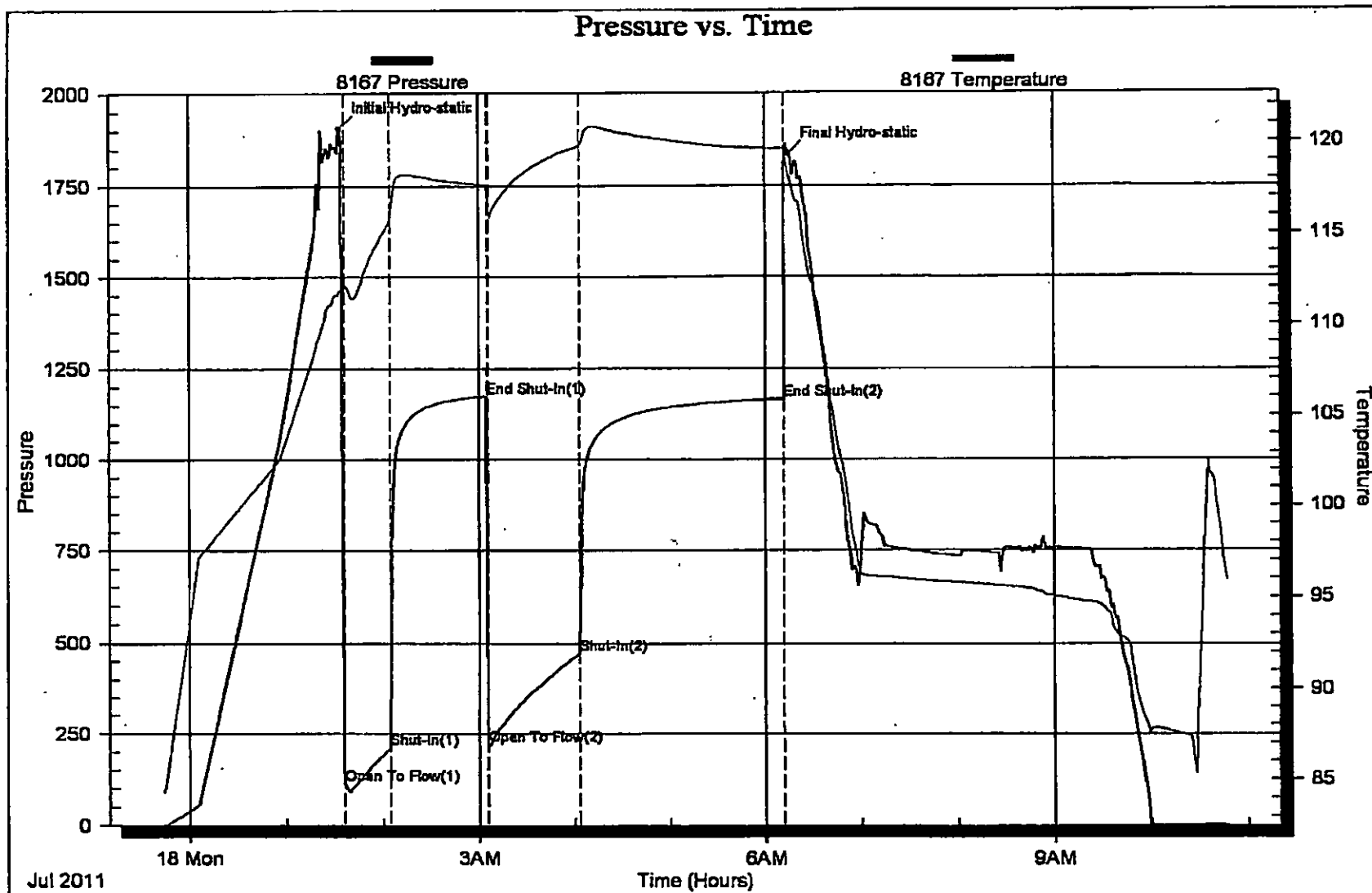
Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m ³ /d)
1	10	0.38	7.00	78.39
1	10	0.38	7.00	78.39
1	10	0.38	7.00	78.39
1	20	0.38	10.00	89.38
1	30	0.38	8.00	82.06
2	10	0.25	5.00	30.78
2	20	0.25	5.00	30.78
2	30	0.25	4.00	29.19
2	40	0.25	3.00	27.60

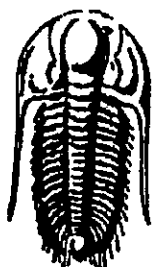
Serial #: 8167

Inside Mollitor Oil Co.

31-29s-8w Kingman, KS

DST Test Number: 2





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Molitor Oil Co.**

9517 SW 80th Ave.
Spivey, KS 67142

ATTN: Max Lovely

31-29s-8w Kingman, KS

Cross #3

Start Date: 2011.07.20 @ 12:19:19

End Date: 2011.07.20 @ 20:07:49

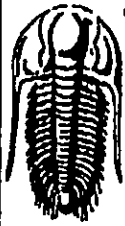
Job Ticket #: 42535

DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Mobil Oil Co.

9517 SW80th Ave.
Spivey, KS 67142

ATTN: Max Lovely

Cross #3

31-29s-8w Kingman, KS

Job Ticket: 42535

DST#: 3

Test Start: 2011.07.20 @ 12:19:19

GENERAL INFORMATION:

Formation: Simpson

Deviated: No Whipstock ft (KB)

Time Tool Opened: 14:10:19

Time Test Ended: 20:07:49

Test Type: Conventional Bottom Hole

Tester: Chris Staats

Unit No: 34

Interval: 4442.00 ft (KB) To 4449.00 ft (KB) (TVD)

Total Depth: 4449.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1570.00 ft (KB)

1560.00 ft (CF)

KB to GRVCF: 10.00 ft

Serial #: 8166

Outside

Press@RunDepth: 96.03 psig @ 4448.00 ft (KB)

Start Date: 2011.07.20

End Date:

2011.07.20

Start Time: 12:19:24

End Time:

20:07:48

Capacity: 8000.00 psig

Last Calib.: 2011.07.20

Time On Btm: 2011.07.20 @ 14:09:19

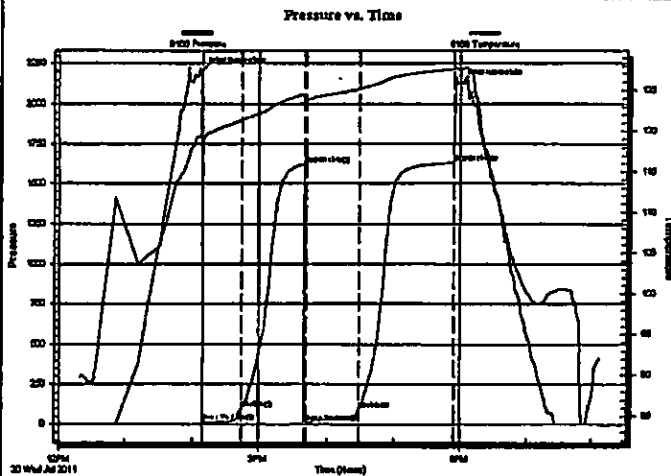
Time Off Btm: 2011.07.20 @ 18:00:34

TEST COMMENT: IF: Strong blow BOB 20 min

IS: No blow back

FF: Strong Blow BOB 2 sec

FS: No blow back



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	2208.71	119.47	Initial Hydro-static
1	18.19	118.91	Open To Flow (1)
36	100.95	121.37	Shut-In (1)
91	1623.50	124.48	End Shut-In (1)
93	11.95	123.94	Open To Flow (2)
139	96.03	125.16	Shut-In (2)
226	1634.62	127.61	End Shut-In (2)
232	2133.29	127.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	GWOM 50% gas 20% oil 20% mud 10% v.o.15	

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Mobil Oil Co.

Cross #3

9517 SW 80th Ave.
Spivey, KS 67142

31-29s-8w Kingman, KS

Job Ticket: 42535

DST#: 3

ATTN: Max Lovely

Test Start: 2011.07.20 @ 12:19:19

Tool Information

Drill Pipe:	Length: 4307.00 ft	Diameter: 3.80 inches	Volume: 60.42 bbl	Tool Weight:	2200.00 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: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	68000.00 lb
			<u>Total Volume: 61.01 bbl</u>	Tool Chased	2.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial	62000.00 lb
Depth to Top Packer:	4442.00 ft			Final	63000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	12.00 ft				
Tool Length:	36.00 ft				
Number of Packers:	2	Diameter: 6.25 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4419.00	
Shut In Tool	5.00			4424.00	
Hydraulic tool	5.00			4429.00	
Jars	5.00			4434.00	
Safety Joint	3.00			4437.00	
Packer	5.00			4442.00	24.00 Bottom Of Top Packer
Packer - Shale	5.00			4447.00	
Stubb	1.00			4448.00	
Recorder	0.00	6773	Outside	4448.00	
Recorder	0.00	8166	Outside	4448.00	
Perforations	3.00			4451.00	
Bullnose	3.00			4454.00	12.00 Anchor Tool

Total Tool Length: 36.00



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Cross #3

9517 SW 80th Ave.
Spivey, KS 67142

31-29s-8w Kingman, KS

Job Ticket: 42535

DST#: 3

ATTN: Max Lovely

Test Start: 2011.07.20 @ 12:19:19

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:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.58 in²

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
30.00	GVOM 50% gas 20% oil 20% mud 10% water	0.148

Total Length: 30.00 ft

Total Volume: 0.148 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

