

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.

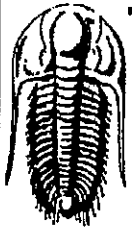
Cross #3

31-29s-8w Kingman,KS

DST # 1

Lansing Dennis

2011.07.17



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Mollitor 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:

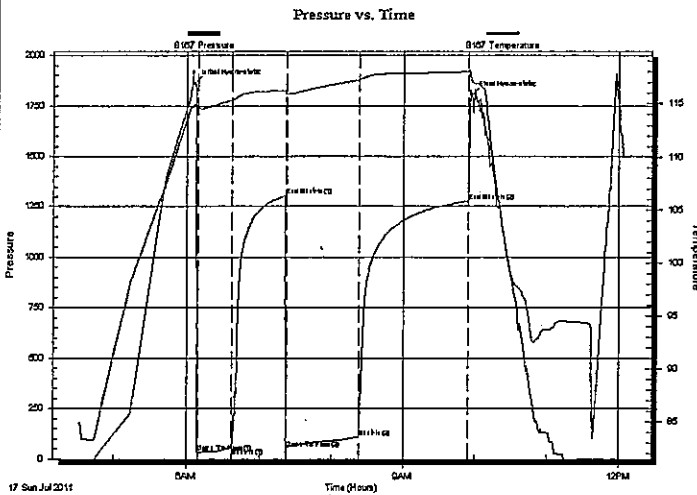
Formation: **Lansing Dennis**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 06:08:50
Time Test Ended: 12:03:50
Interval: **3793.00 ft (KB) To 3810.00 ft (KB) (TVD)**
Total Depth: **3810.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Poor**
Test Type: **Conventional Bottom Hole**
Tester: **Gary Fevotiaux**
Unit No: **56**
Reference Elevations: **1570.00 ft (KB)**
1560.00 ft (CF)
KB to GR/CF: **10.00 ft**

Serial #: 8167

Inside

Press@RunDepth: **111.15 psig @ 3794.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2011.07.17** End Date: **2011.07.17** Last Calib.: **2011.07.17**
Start Time: **04:31:40** End Time: **12:03:49** Time On Btm: **2011.07.17 @ 06:06:05**
Time Off Btm: **2011.07.17 @ 09:56:20**

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



PRESSURE SUMMARY

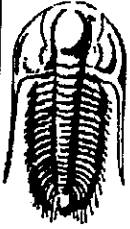
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1861.78	114.91	Initial Hydro-static
3	30.83	114.65	Open To Flow (1)
31	55.79	115.36	Shut-In(1)
76	1304.64	116.26	End Shut-In(1)
76	49.58	115.99	Open To Flow (2)
137	111.15	117.27	Shut-In(2)
229	1278.05	118.01	End Shut-In(2)
231	1806.54	117.29	Final 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	GOCM 45%g 21%o 34% m	1.19

Gas Rates

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



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TOOL DIAGRAM

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

Tool Information

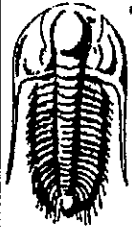
Drill Pipe: Length: 3657.00 ft	Diameter: 3.80 inches	Volume: 51.30 bbl	Tool Weight: 2400.00 lb
Heavy Wt. Pipe: Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar: Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 69000.00 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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
C.O. Sub	1.00			3766.00	
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



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FLUID SUMMARY

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

Mud and Cushion Information

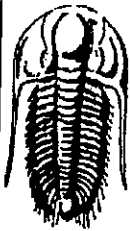
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	81000 ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 11.17 in ³	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4500.00 ppm			
Filter Cake: 0.20 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OCCMV6%o 8%m 86%w	0.295
122.00	GM&VCO 23%g 9%m 12%w 46%o	1.165
85.00	GOCM 45%g 21%o 34%m	1.192

Total Length: 267.00ft Total Volume: 2.652 bbl
 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

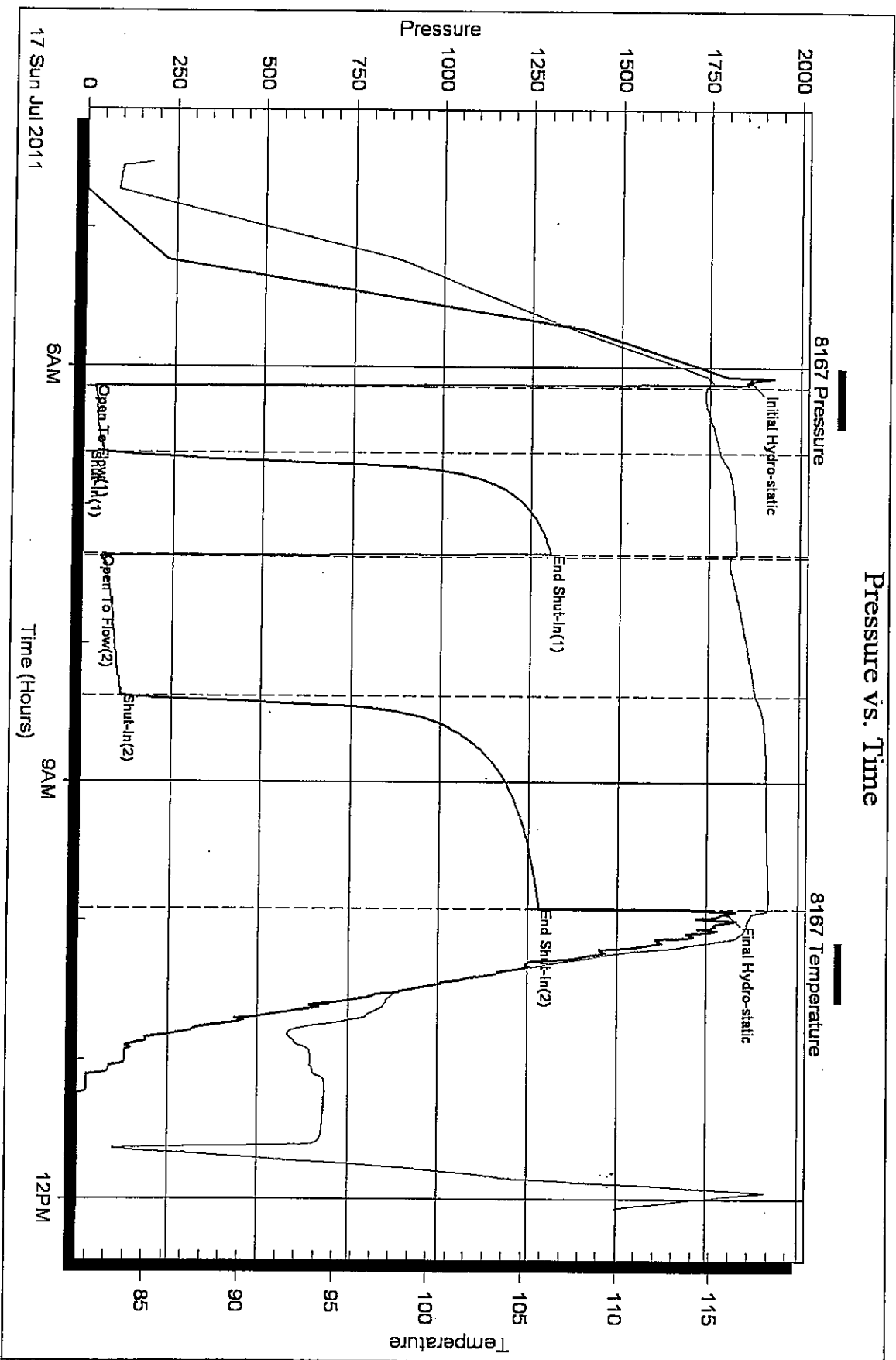
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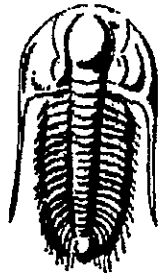
Molitor Oil Co.

31-299-8w Kingman, KS

DST Test Number: 1

Pressure vs. Time





**TRILOBITE
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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

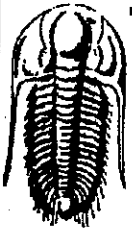
End Date: 2011.07.18 @ 10:46:37

Job Ticket #: 042517 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

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

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
			<u>Total Volume: 52.76 bbl</u>	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

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	28.00 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

Molitor Oil Co.

Cross #3

9517 SW80th 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:

bbbl

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: 1760.00ft 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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GAS RATES

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

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

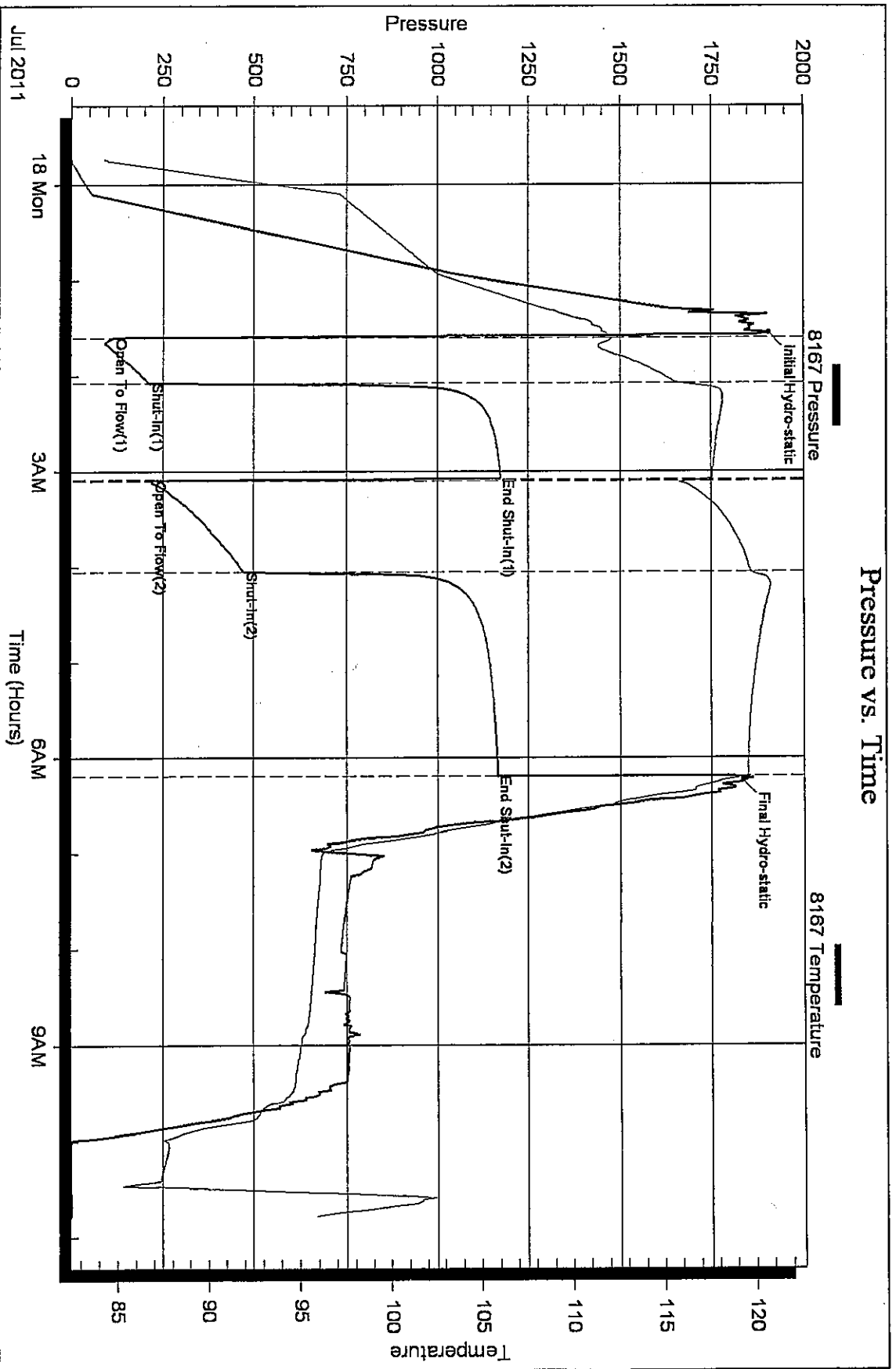
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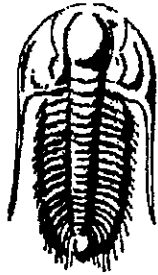
Inside

Mollitor Oil Co.

31-29s-8w Kingman, KS

DST Test Number 2





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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

Molitor Oil Co.

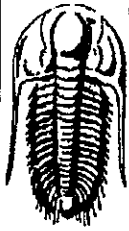
Cross #3

31-29s-8w Kingman,KS

DST # 3

Simpson

2011.07.20



**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: 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 GR/CF: **10.00 ft**

Serial #: 8166

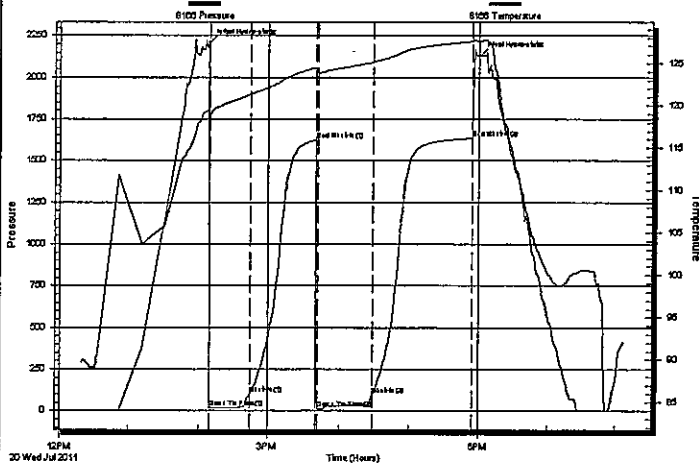
Outside

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 vs. Time



PRESSURE SUMMARY

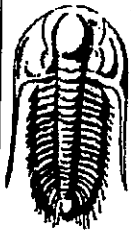
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2208.71	119.47	Initial Hydro-static
1	18.19	118.91	Open To Flow (1)
36	100.95	121.37	Shut-In(1)
91	1623.50	124.46	End Shut-In(1)
93	11.95	123.94	Open To Flow (2)
139	96.03	125.16	Shut-In(2)
226	1634.62	127.61	End Shut-In(2)
232	2133.29	127.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	GWOM 50%gas 20% oil20% mud 10% v0.15	

Gas Rates

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



**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: 42535

DST#: 3

ATTN: Max Lovely

Test Start: 2011.07.20 @ 12:19:19

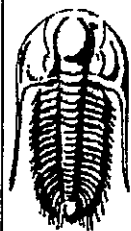
Tool Information

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
		Total Volume:	61.01 bbl	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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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: 46.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.58 in³

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 bbl
30.00	GWOM 50%gas 20% oil 20% mud 10% wate	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:

