

**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **Mak J Energy**

1600 N Broadway Ste 1740  
Denver CO 80202

ATTN: Keith Reavis

**28 16S 27W Lane KS**

**WR Hall # 1**

Start Date: 2008.05.27 @ 18:50:05

End Date: 2008.05.27 @ 23:52:14

Job Ticket #: 2997

**CONFIDENTIAL**

**KCC  
JUN 17 2008  
CONFIDENTIAL**

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Mak J Energy

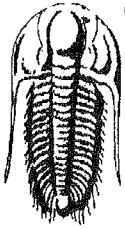
WR Hall # 1

28 16S 27W Lane KS

DST # 1

LSG

2008.05.27



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202

**WR Hall # 1**

**28 16S 27W Lane KS**

Job Ticket: 29971

**DST#: 1**

ATTN: Keith Reavis

Test Start: 2008.05.27 @ 18:50:05

## GENERAL INFORMATION:

Formation: **LSG**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:32:15

Time Test Ended: 23:52:14

Test Type: Conventional Bottom Hole

Tester: Brandon Domsch

Unit No: 35

**Interval: 4042.00 ft (KB) To 4089.00 ft (KB) (TVD)**

Total Depth: 4089.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2718.00 ft (KB)

2712.00 ft (CF)

KB to GR/CF: 6.00 ft

**Serial #: 6769**

**Inside**

Press@RunDepth: psig @ 4043.00 ft (KB)

Start Date: 2008.05.27

End Date:

2008.05.27

Capacity: 7000.00 psig

Last Calib.: 2008.05.28

Start Time: 18:50:05

End Time:

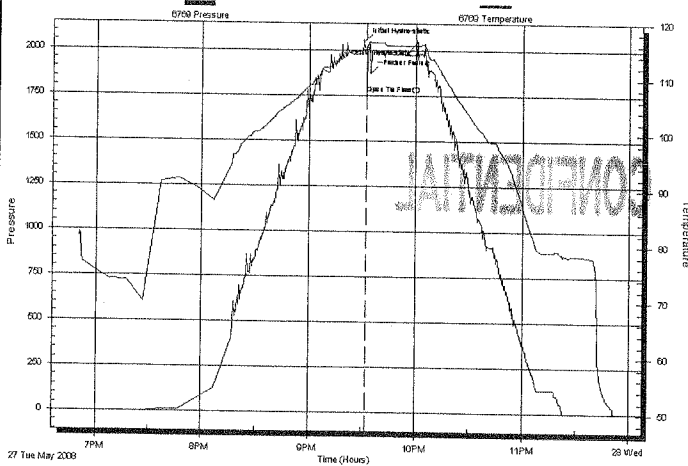
23:52:14

Time On Btm: 2008.05.27 @ 21:30:45

Time Off Btm: 2008.05.27 @ 22:00:45

TEST COMMENT: Packer failure

Pressure vs. Time



## PRESSURE SUMMARY

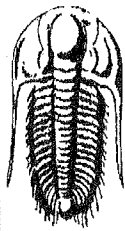
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2046.16	115.24	Initial Hydro-static
2	1756.24	115.10	Open To Flow (1)
4	1871.71	116.68	--Packer Failure
30	2043.00	115.96	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
190.00	100%M	0.03

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202

**WR Hall # 1**  
**28 16S 27W Lane KS**

ATTN: Keith Reavis

Job Ticket: 29971      **DST#: 1**  
Test Start: 2008.05.27 @ 18:50:05

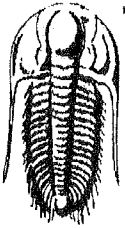
### Tool Information

Drill Pipe:	Length: 3758.00 ft	Diameter: 2.80 inches	Volume: 28.62 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 184.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 90.00 ft	Diameter: 2.25 inches	Volume: 0.44 bbl	Weight to Pull Loose: 45000.00 lb
		<u>Total Volume:</u>	<u>29.06 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	4042.00 ft			Final 43000.00 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	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4016.00	
Shut In Tool	5.00			4021.00	
Hydraulic tool	5.00			4026.00	
Jars	5.00			4031.00	
Safety Joint	2.00			4033.00	
Packer	5.00			4038.00	27.00      Bottom Of Top Packer
Packer	4.00			4042.00	
Stubb	1.00			4043.00	
Recorder	0.00	6769	Inside	4043.00	
Recorder	0.00	6772	Outside	4043.00	
Perforations	8.00			4051.00	
Change Over Sub	1.00			4052.00	
Drill Pipe	31.00			4083.00	
Change Over Sub	1.00			4084.00	
Bullnose	5.00			4089.00	47.00      Bottom Packers & Anchor

**Total Tool Length: 74.00**



**TRILOBITE**  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 29971      **DST#: 1**  
Test Start: 2008.05.27 @ 18:50:05

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.12 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2900.00 ppm			
Filter Cake: 1.00 inches			

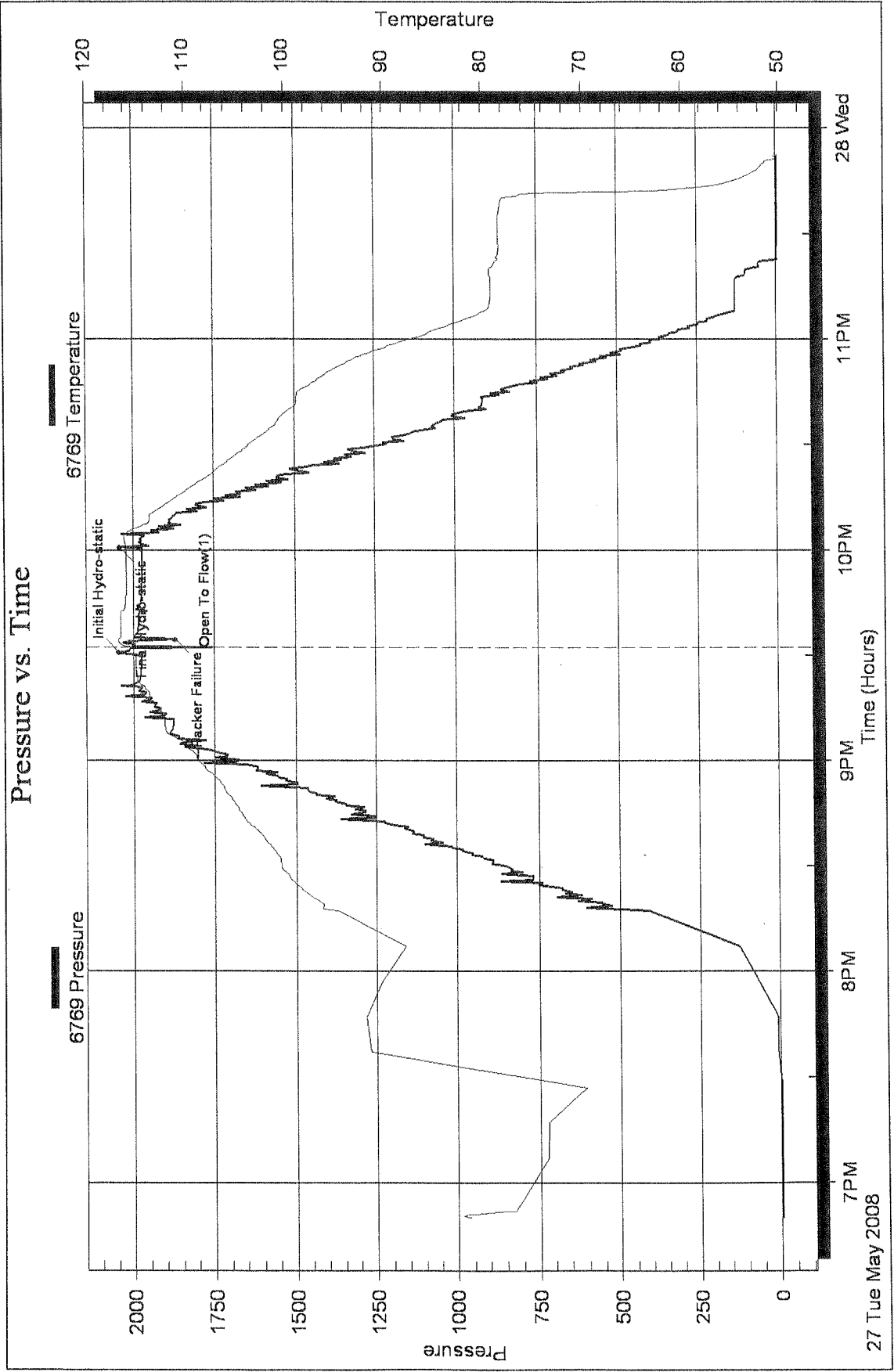
## Recovery Information

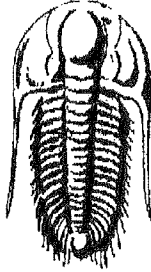
Recovery Table

Length ft	Description	Volume bbl
190.00	100%M	0.030

Total Length: 190.00 ft      Total Volume: 0.030 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Mak J Energy**

1600 N Broadway Ste 1740  
Denver CO 80202

ATTN: Keith Reavis

**28 16S 27W Lane KS**

**WR Hall # 1**

Start Date: 2008.05.28 @ 00:01:18

End Date: 2008.05.28 @ 05:32:27

Job Ticket #: 29972                      DST #: 2

**CONFIDENTIAL**

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Mak J Energy

WR Hall # 1

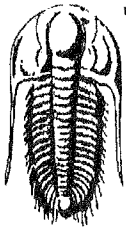
28 16S 27W Lane KS

DST # 2

LSG

2008.05.28





**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 29972      **DST#: 2**  
Test Start: 2008.05.28 @ 00:01:18

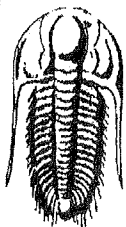
**Tool Information**

Drill Pipe:	Length: 3728.00 ft	Diameter: 2.80 inches	Volume: 28.39 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 184.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 90.00 ft	Diameter: 2.25 inches	Volume: 0.44 bbl	Weight to Pull Loose: 45000.00 lb
		Total Volume: 28.83 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	4012.00 ft			Final 43000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	77.00 ft			
Tool Length:	104.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			3986.00	
Shut In Tool	5.00			3991.00	
Hydraulic tool	5.00			3996.00	
Jars	5.00			4001.00	
Safety Joint	2.00			4003.00	
Packer	5.00			4008.00	27.00      Bottom Of Top Packer
Packer	4.00			4012.00	
Stubb	1.00			4013.00	
Recorder	0.00	6769	Inside	4013.00	
Recorder	0.00	6772	Outside	4013.00	
Perforations	7.00			4020.00	
Change Over Sub	1.00			4021.00	
Drill Pipe	62.00			4083.00	
Change Over Sub	1.00			4084.00	
Bullnose	5.00			4089.00	77.00      Bottom Packers & Anchor

**Total Tool Length: 104.00**



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# DRILL STEM TEST REPORT

FLUID SUMMARY

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 29972      DST#: 2  
Test Start: 2008.05.28 @ 00:01:18

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 52.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.13 in <sup>2</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 2900.00 ppm			
Filter Cake: 1.00 inches			

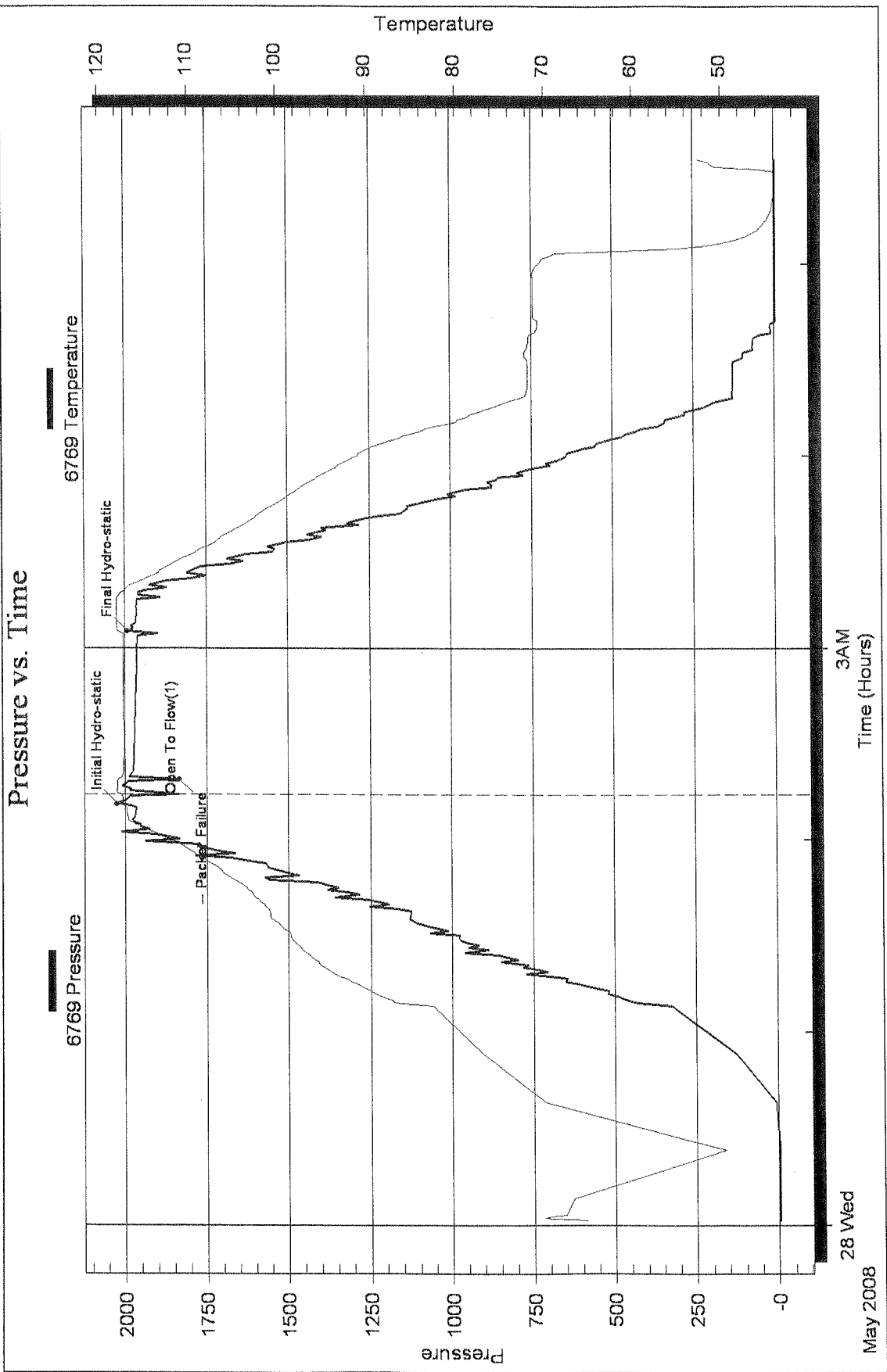
## Recovery Information

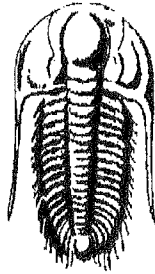
Recovery Table

Length ft	Description	Volume bbl
140.00	100%M	0.000

Total Length: 140.00 ft      Total Volume: bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time





**TRILOBITE**  
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## DRILL STEM TEST REPORT

Prepared For: **Mak J Energy**

1600 N Broadway Ste 1740  
Denver CO 80202

ATTN: Keith Reavis

**28 16S 27W Lane KS**

**WR Hall # 1**

Start Date: 2008.05.28 @ 21:08:05

End Date: 2008.05.29 @ 06:01:15

Job Ticket #: 29973                      DST #: 3

**CONFIDENTIAL**

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Mak J Energy

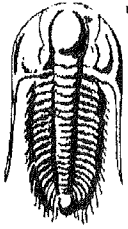
WR Hall # 1

28 16S 27W Lane KS

DST # 3

Lans H-1

2008.05.28



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

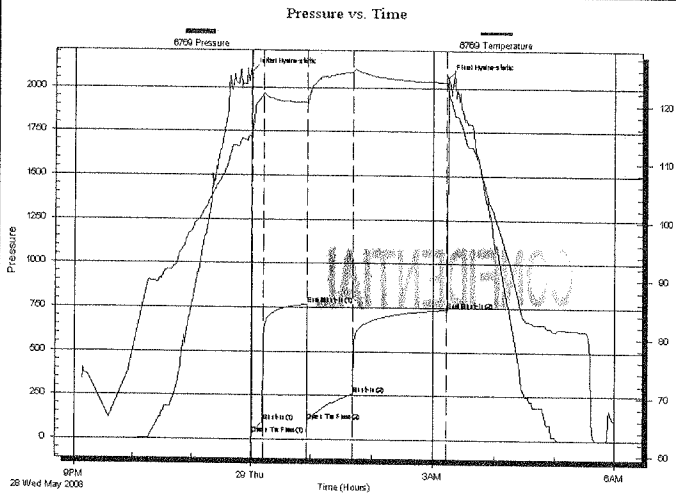
**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 29973      **DST#: 3**  
Test Start: 2008.05.28 @ 21:08:05

## GENERAL INFORMATION:

Formation: **Lans H-I**  
Deviated: **No** Whipstock: **ft (KB)**  
Time Tool Opened: 00:01:00  
Time Test Ended: 06:01:15  
Test Type: **Conventional Bottom Hole**  
Tester: **Brandon Domsch**  
Unit No: **35**  
Interval: **4142.00 ft (KB) To 4216.00 ft (KB) (TVD)**  
Total Depth: **4216.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
Reference Elevations: **2718.00 ft (KB)**  
**2712.00 ft (CF)**  
KB to GR/CF: **6.00 ft**

**Serial #: 6769**      **Inside**  
Press@RunDepth: **258.94 psig @ 4143.00 ft (KB)**      Capacity: **7000.00 psig**  
Start Date: **2008.05.28**      End Date: **2008.05.29**      Last Calib.: **2008.05.29**  
Start Time: **21:08:05**      End Time: **06:01:15**      Time On Btm: **2008.05.29 @ 00:00:30**  
Time Off Btm: **2008.05.29 @ 03:14:29**

TEST COMMENT: IF BOB in 9 1/2 mins.  
IS No return  
FF BOB in 14 mins.  
FS No return



## PRESSURE SUMMARY

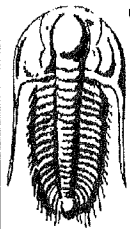
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2085.76	114.63	Initial Hydro-static
1	24.55	114.34	Open To Flow (1)
12	96.58	121.49	Shut-In(1)
56	766.47	120.49	End Shut-In(1)
56	101.37	120.18	Open To Flow (2)
101	258.94	125.60	Shut-In(2)
192	738.07	123.93	End Shut-In(2)
194	2060.17	122.57	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
90.00	100%M	0.00
384.00	MCW 85%W 15%M	1.64
124.00	WCM 30%W 70%M	0.94
0.00	GIP 0	0.00
0.00	RW .108@66F=70000	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

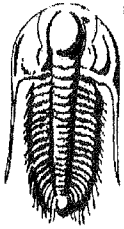
**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 29973      **DST#: 3**  
Test Start: 2008.05.28 @ 21:08:05

**Tool Information**

Drill Pipe:	Length: 3740.00 ft	Diameter: 2.80 inches	Volume: 28.48 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 184.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 210.00 ft	Diameter: 2.25 inches	Volume: 1.03 bbl	Weight to Pull Loose: 55000.00 lb
		Total Volume: 29.51 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	4142.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	74.00 ft			
Tool Length:	101.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4116.00	
Shut In Tool	5.00			4121.00	
Hydraulic tool	5.00			4126.00	
Jars	5.00			4131.00	
Safety Joint	2.00			4133.00	
Packer	5.00			4138.00	27.00      Bottom Of Top Packer
Packer	4.00			4142.00	
Stubb	1.00			4143.00	
Recorder	0.00	6769	Inside	4143.00	
Recorder	0.00	6772	Outside	4143.00	
Perforations	5.00			4148.00	
Change Over Sub	1.00			4149.00	
Drill Pipe	61.00			4210.00	
Change Over Sub	1.00			4211.00	
Bullnose	5.00			4216.00	74.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>		<b>101.00</b>			



**TRILOBITE**  
TESTING, INC

# DRILL STEM TEST REPORT

FLUID SUMMARY

Mak J Energy

WR Hall # 1

1600 N Broadway Ste 1740  
Denver CO 80202

28 16S 27W Lane KS

Job Ticket: 29973

DST#: 3

ATTN: Keith Reavis

Test Start: 2008.05.28 @ 21:08:05

## 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:

70000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.71 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3900.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	100%M	0.000
384.00	MCW 85%W 15%M	1.642
124.00	WCM 30%W 70%M	0.944
0.00	GIP 0	0.000
0.00	RW .108@66F=70000	0.000

Total Length: 598.00 ft

Total Volume:

2.586 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

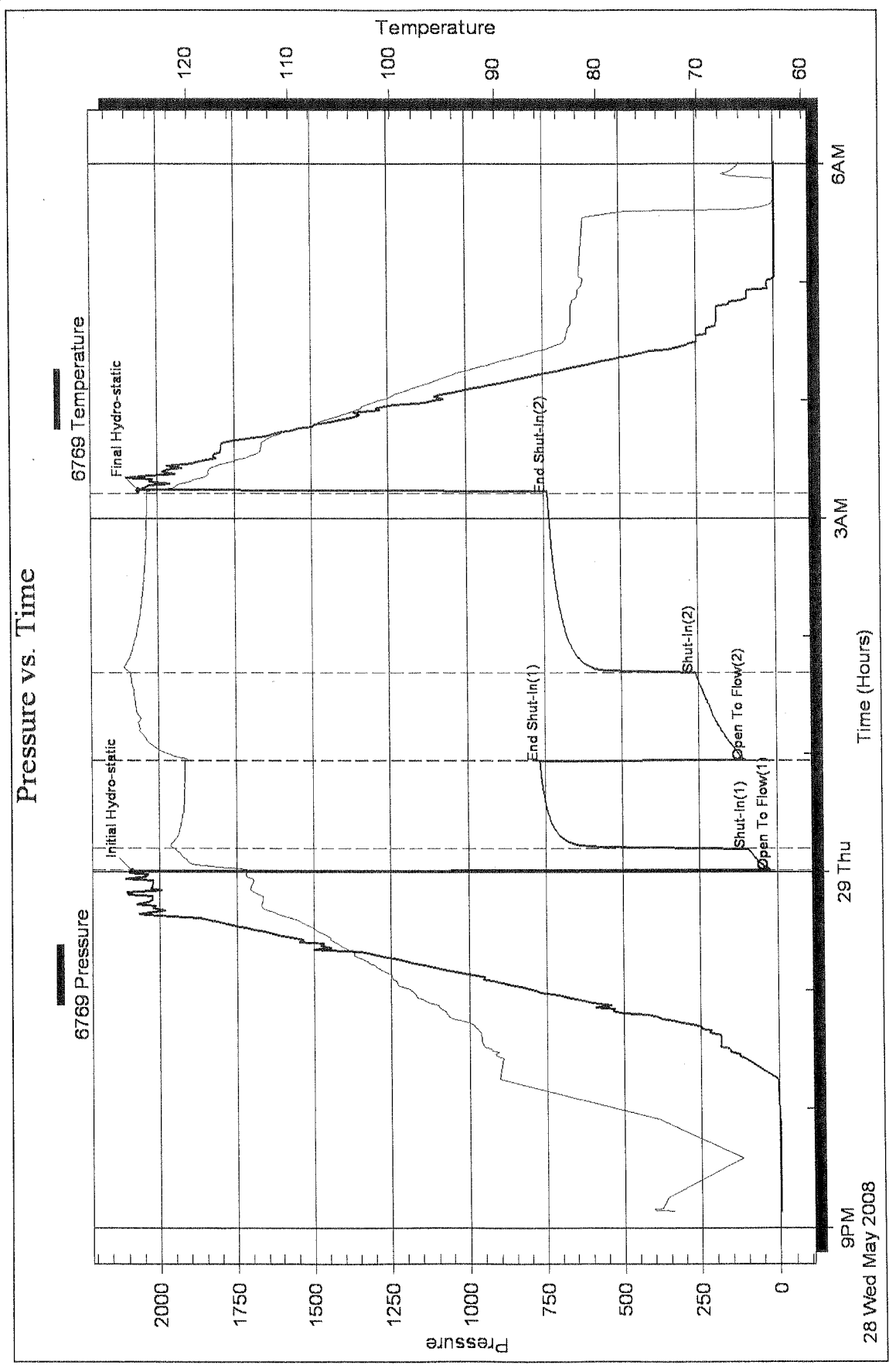
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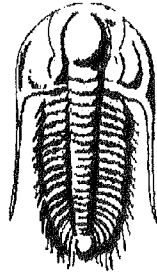
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Mak J Energy**

1600 N Broadway Ste 1740  
Denver CO 80202

ATTN: Keith Reavis

**28 16S 27W Lane KS**

**WR Hall # 1**

Start Date: 2008.05.29 @ 20:20:05

End Date: 2008.05.30 @ 01:20:14

Job Ticket #: 29974                      DST #: 4

**CONFIDENTIAL**

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Mak J Energy

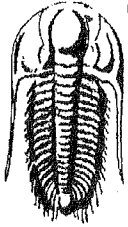
WR Hall # 1

28 16S 27W Lane KS

DST # 4

LSG

2008.05.29



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

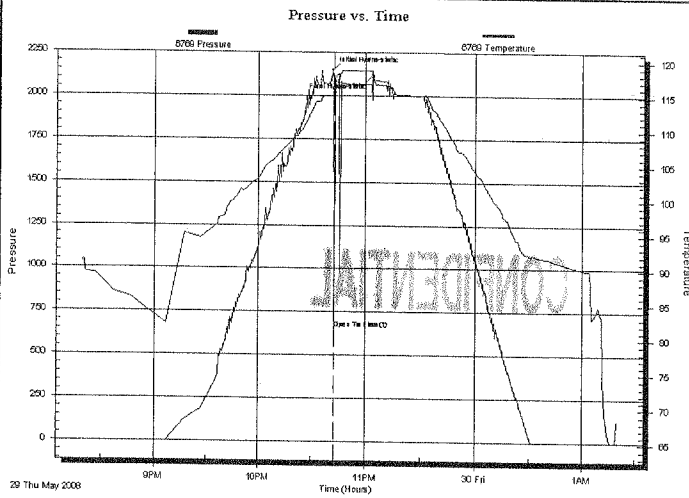
**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 29974      **DST#: 4**  
Test Start: 2008.05.29 @ 20:20:05

## GENERAL INFORMATION:

Formation: **LSG**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened: 22:42:45  
Time Test Ended: 01:20:14  
Interval: **4216.00 ft (KB) To 4270.00 ft (KB) (TVD)**  
Total Depth: 4270.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches      Hole Condition: Fair  
Test Type: Conventional Bottom Hole  
Tester: Brandon Domsch  
Unit No: 35  
Reference Elevations: 2718.00 ft (KB)  
2712.00 ft (CF)  
KB to GR/CF: 6.00 ft

**Serial #: 6769**      Inside  
Press@RunDepth:      psig @ 4217.00 ft (KB)      Capacity: 7000.00 psig  
Start Date: 2008.05.29      End Date: 2008.05.30      Last Calib.: 2008.05.30  
Start Time: 20:20:05      End Time: 01:20:14      Time On Btm: 2008.05.29 @ 22:41:30  
Time Off Btm: 2008.05.29 @ 23:03:45

TEST COMMENT: Ms-Run Wait on rain



## PRESSURE SUMMARY

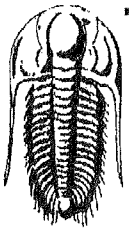
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2145.11	115.11	Initial Hydro-static
2	650.54	115.89	Open To Flow (1)
23	2118.87	118.23	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
250.00	100%M	0.32

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 29974      **DST#: 4**  
Test Start: 2008.05.29 @ 20:20:05

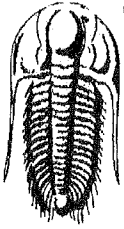
**Tool Information**

Drill Pipe:	Length: 3821.00 ft	Diameter: 2.80 inches	Volume: 29.10 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 184.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 210.00 ft	Diameter: 2.25 inches	Volume: 1.03 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 30.13 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	4216.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 ft			
Tool Length:	81.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4190.00	
Shut In Tool	5.00			4195.00	
Hydraulic tool	5.00			4200.00	
Jars	5.00			4205.00	
Safety Joint	2.00			4207.00	
Packer	5.00			4212.00	27.00      Bottom Of Top Packer
Packer	4.00			4216.00	
Stubb	1.00			4217.00	
Recorder	0.00	6769	Inside	4217.00	
Recorder	0.00	6772	Inside	4217.00	
Perforations	16.00			4233.00	
Change Over Sub	1.00			4234.00	
Drill Pipe	30.00			4264.00	
Change Over Sub	1.00			4265.00	
Bullhose	5.00			4270.00	54.00      Bottom Packers & Anchor

**Total Tool Length: 81.00**



**TRILOBITE**  
**TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Mak J Energy

**WR Hall # 1**

1600 N Broadway Ste 1740  
Denver CO 80202

**28 16S 27W Lane KS**

Job Ticket: 29974

**DST#: 4**

ATTN: Keith Reavis

Test Start: 2008.05.29 @ 20:20:05

## 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: bbl		
Water Loss: 8.73 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4500.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

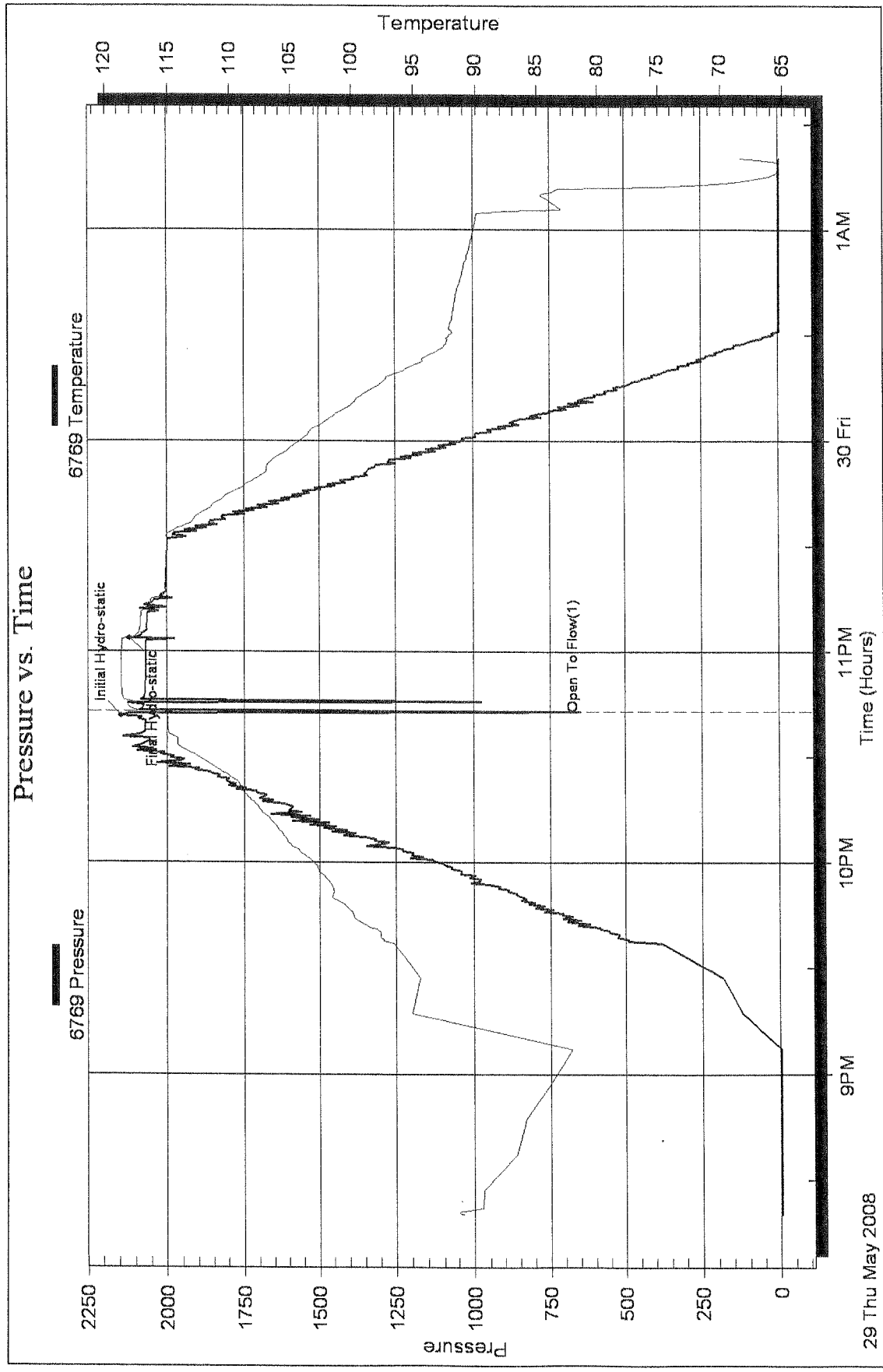
Length ft	Description	Volume bbl
250.00	100%M	0.325

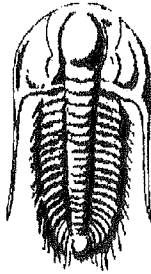
Total Length: 250.00 ft      Total Volume: 0.325 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments:





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Mak J Energy**

1600 N Broadway Ste 1740  
Denver CO 80202

ATTN: Keith Reavis

**28 16S 27W Lane KS**

**WR Hall # 1**

Start Date: 2008.05.30 @ 01:28:05

End Date: 2008.05.30 @ 14:31:45

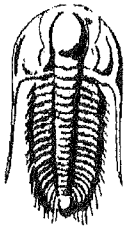
Job Ticket #: 29975                      DST #: 5

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Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

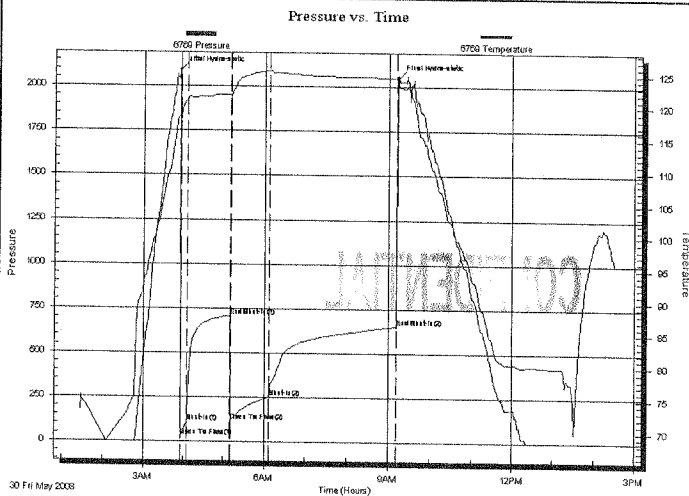
**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 29975      **DST#: 5**  
Test Start: 2008.05.30 @ 01:28:05

## GENERAL INFORMATION:

Formation: **LSG**  
Deviated: **No** Whipstock:                      ft (KB)  
Time Tool Opened: 03:56:15  
Time Test Ended: 14:31:45  
Interval: **4200.00 ft (KB) To 4270.00 ft (KB) (TVD)**  
Total Depth: **4270.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
Test Type: **Conventional Bottom Hole**  
Tester: **Brandon Domsch**  
Unit No: **35**  
Reference Elevations: **2718.00 ft (KB)**  
**2712.00 ft (CF)**  
KB to GR/CF: **6.00 ft**

**Serial #: 6769**      **Inside**  
Press@RunDepth: **250.61 psig @ 4201.00 ft (KB)**      Capacity: **7000.00 psig**  
Start Date: **2008.05.30**      End Date: **2008.05.30**      Last Calib.: **2008.05.30**  
Start Time: **01:28:05**      End Time: **14:31:45**      Time On Btm: **2008.05.30 @ 03:54:45**  
Time Off Btm: **2008.05.30 @ 09:14:14**

TEST COMMENT: IF Built to 9 1/2 "  
IS No return  
FF BOB in 18 mins.  
FS No return



## PRESSURE SUMMARY

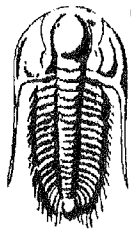
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2088.87	118.52	Initial Hydro-static
2	26.89	118.19	Open To Flow (1)
12	108.46	121.08	Shut-In(1)
75	704.31	121.85	End Shut-In(1)
76	115.17	121.61	Open To Flow(2)
132	250.61	125.58	Shut-In(2)
317	649.79	124.57	End Shut-In(2)
320	2050.56	123.42	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	M 100% <sub>m</sub>	0.00
312.00	SMCW 95% <sub>w</sub> 5% <sub>m</sub>	0.92
124.00	WCM 25% <sub>w</sub> 75% <sub>m</sub>	0.89
77.00	OWCM 5% <sub>O</sub> 5% <sub>W</sub> 90% <sub>M</sub>	0.59
15.00	100% <sub>O</sub>	0.11
0.00	RW .083@93F=70000	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 29975      **DST#: 5**  
Test Start: 2008.05.30 @ 01:28:05

### Tool Information

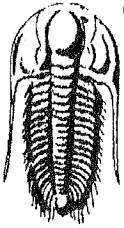
Drill Pipe:	Length: 3790.00 ft	Diameter: 2.80 inches	Volume: 28.86 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 184.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 210.00 ft	Diameter: 2.25 inches	Volume: 1.03 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 29.89 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	4200.00 ft			Final 52000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	70.00 ft			
Tool Length:	97.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4174.00	
Shut In Tool	5.00			4179.00	
Hydraulic tool	5.00			4184.00	
Jars	5.00			4189.00	
Safety Joint	2.00			4191.00	
Packer	5.00			4196.00	27.00 Bottom Of Top Packer
Packer	4.00			4200.00	
Stubb	1.00			4201.00	
Recorder	0.00	6769	Inside	4201.00	
Recorder	0.00	6772	Inside	4201.00	
Perforations	32.00			4233.00	
Change Over Sub	1.00			4234.00	
Drill Pipe	30.00			4264.00	
Change Over Sub	1.00			4265.00	
Bullnose	5.00			4270.00	70.00 Bottom Packers & Anchor

**Total Tool Length: 97.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Mak J Energy

**WR Hall # 1**

1600 N Broadway Ste 1740  
Denver CO 80202

**28 16S 27W Lane KS**

Job Ticket: 29975

**DST#: 5**

ATTN: Keith Reavis

Test Start: 2008.05.30 @ 01:28:05

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

70000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.74 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	M 100%m	0.000
312.00	SMCW 95%w 5%m	0.925
124.00	WCM 25%w 75%m	0.885
77.00	OWCM 5%O 5%W 90%M	0.586
15.00	100%O	0.114
0.00	RW .083@93F=70000	0.000
0.00	API 39@90F=36	0.000

Total Length: 588.00 ft

Total Volume: 2.510 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

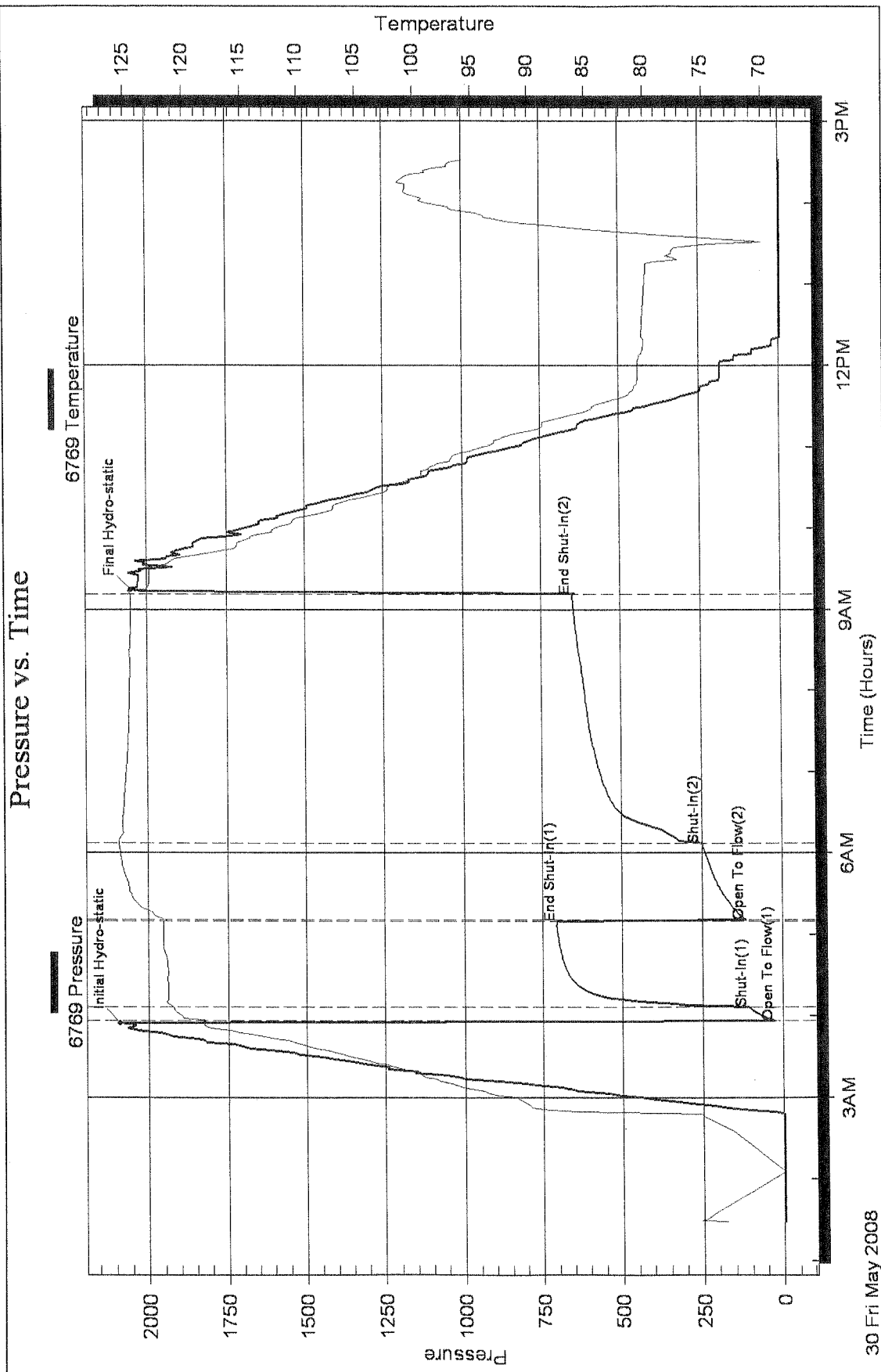
Serial #:

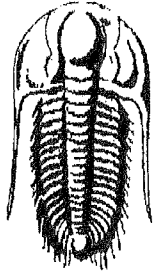
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time





**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Mak J Energy**

1600 N Broadway Ste 1740  
Denver CO 80202

ATTN: Keith Reavis

**28 16S 27W Lane KS**

**WR Hall # 1**

Start Date: 2008.05.31 @ 06:50:00

End Date: 2008.05.31 @ 16:08:00

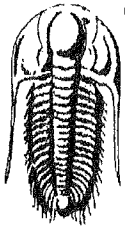
Job Ticket #: 30010                      DST #: 6

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

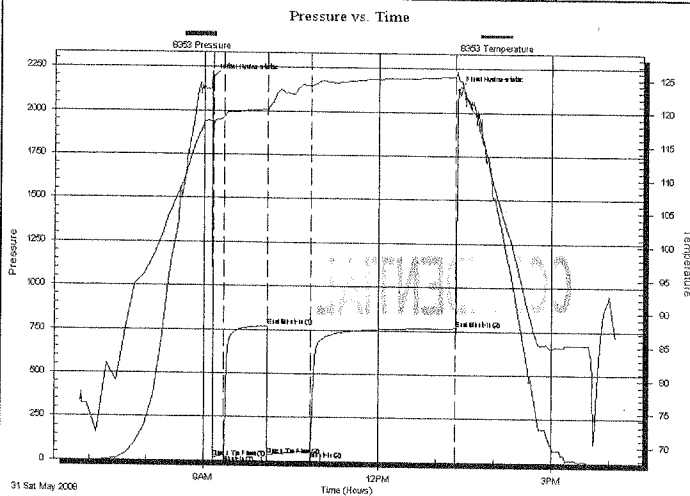
**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 30010 **DST#: 6**  
Test Start: 2008.05.31 @ 06:50:00

## GENERAL INFORMATION:

Formation: **KC - Altamont**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 09:08:30  
Time Test Ended: 16:08:00  
Interval: **4275.00 ft (KB) To 4365.00 ft (KB) (TVD)**  
Total Depth: 4365.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole  
Tester: Brandon Domsch  
Unit No: 25  
Reference Elevations: 2718.00 ft (KB)  
2712.00 ft (CF)  
KB to GR/CF: 6.00 ft

**Serial #: 8353** Inside  
Press@RunDepth: 60.70 psig @ 4276.00 ft (KB)  
Start Date: 2008.05.31 End Date: 2008.05.31 Capacity: 7000.00 psig  
Start Time: 06:50:05 End Time: 16:08:00 Last Calib.: 2008.05.31  
Time On Btm: 2008.05.31 @ 09:08:00  
Time Off Btm: 2008.05.31 @ 13:23:00

TEST COMMENT: IF Built to 1 1/2 "  
IS No return  
FF Built to 2 "  
FS No return



## PRESSURE SUMMARY

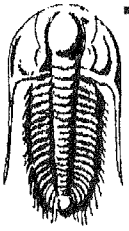
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2184.13	118.51	Initial Hydro-static
1	18.09	117.37	Open To Flow (1)
12	32.78	119.25	Shut-In(1)
57	769.83	120.32	End Shut-In(1)
57	34.60	120.13	Open To Flow (2)
102	60.70	123.92	Shut-In(2)
252	767.13	125.39	End Shut-In(2)
255	2129.64	125.06	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	WCM 55%W 45%M	0.00
0.00	RW .160@75F = 52000	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 30010      **DST#: 6**  
Test Start: 2008.05.31 @ 06:50:00

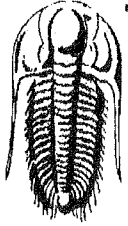
**Tool Information**

Drill Pipe:	Length: 3877.00 ft	Diameter: 2.80 inches	Volume: 29.53 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 184.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 210.00 ft	Diameter: 2.25 inches	Volume: 1.03 bbl	Weight to Pull Loose: 62000.00 lb
		<b>Total Volume:</b>	<b>30.56 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	4275.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	90.00 ft			
Tool Length:	117.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Stubb	1.00			4249.00	
Shut In Tool	5.00			4254.00	
Hydraulic tool	5.00			4259.00	
Jars	5.00			4264.00	
Safety Joint	2.00			4266.00	
Packer	5.00			4271.00	27.00 Bottom Of Top Packer
Packer	4.00			4275.00	
Stubb	1.00			4276.00	
Recorder	0.00	8353	Inside	4276.00	
Recorder	0.00	6741	Inside	4276.00	
Perforations	20.00			4296.00	
Change Over Sub	1.00			4297.00	
Drill Pipe	62.00			4359.00	
Change Over Sub	1.00			4360.00	
Bullnose	5.00			4365.00	90.00 Bottom Packers & Anchor

**Total Tool Length: 117.00**



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Mak J Energy  
1600 N Broadway Ste 1740  
Denver CO 80202  
ATTN: Keith Reavis

**WR Hall # 1**  
**28 16S 27W Lane KS**  
Job Ticket: 30010      **DST#: 6**  
Test Start: 2008.05.31 @ 06:50:00

**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:	52000 ppm
Viscosity: 47.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.98 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 3700.00 ppm			
Filter Cake: 1.00 inches			

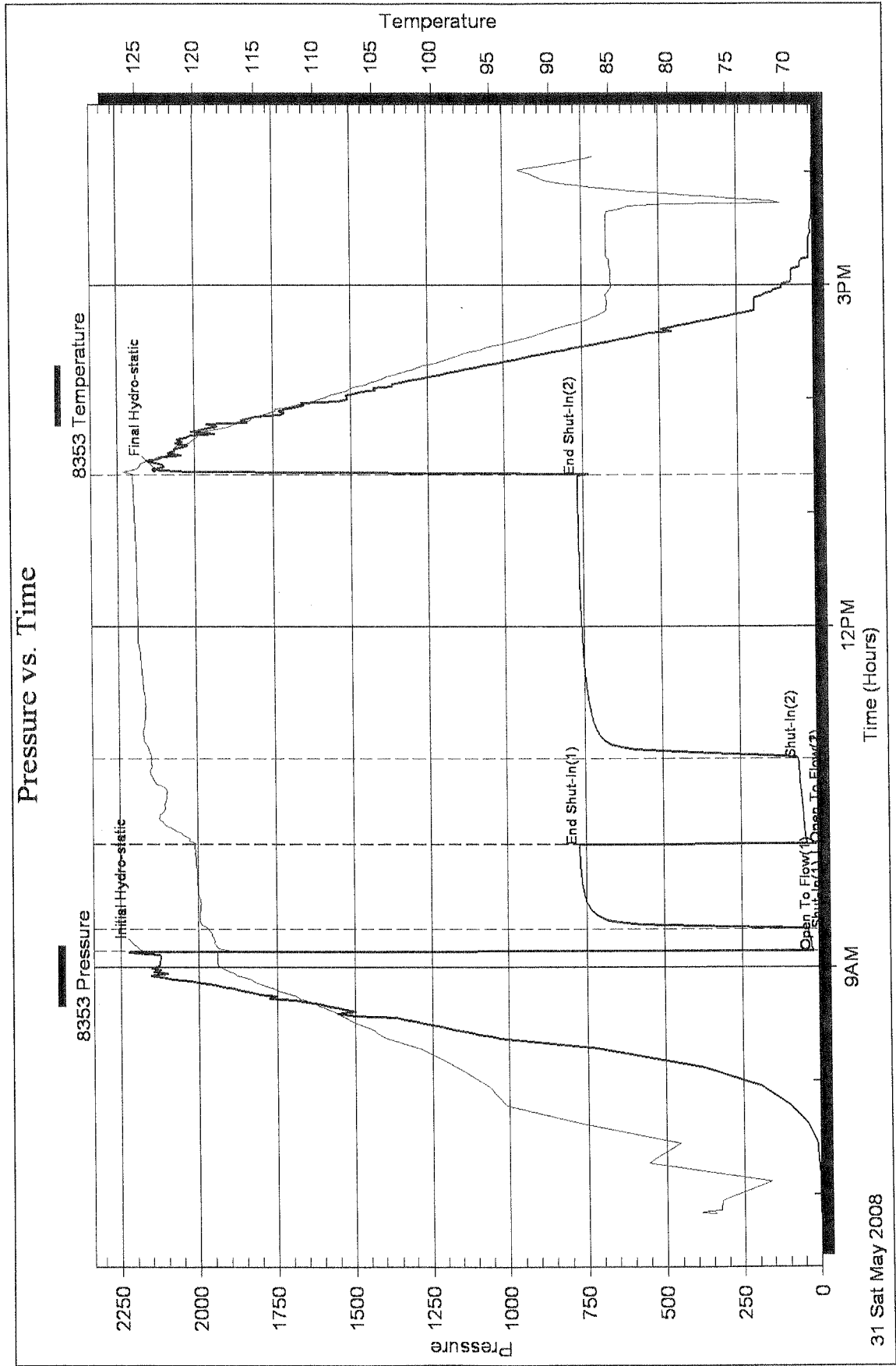
**Recovery Information**

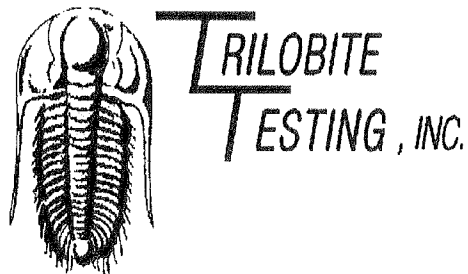
Recovery Table

Length ft	Description	Volume bbl
70.00	WCM 55%W 45%M	0.000
0.00	RW .160@75F = 52000	0.000

Total Length: 70.00 ft      Total Volume: bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time





## DRILL STEM TEST REPORT

Prepared For: **Mak J Energy**

1600 N Broadway Ste 1740  
Denver CO 80202

ATTN: Keith Reavis

**28 16S 27W Lane KS**

**WR Hall # 1**

Start Date: 2008.06.02 @ 15:11:05

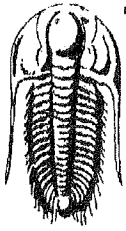
End Date: 2008.06.03 @ 01:45:30

Job Ticket #: 30011                      DST #: 7

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**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Mak J Energy

**WR Hall # 1**

1600 N Broadway Ste 1740  
Denver CO 80202

**28 16S 27W Lane KS**

Job Ticket: 30011

**DST#: 7**

ATTN: Keith Reavis

Test Start: 2008.06.02 @ 15:11:05

### Tool Information

Drill Pipe:	Length: 3795.00 ft	Diameter: 2.80 inches	Volume: 28.90 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 184.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 210.00 ft	Diameter: 2.25 inches	Volume: 1.03 bbl	Weight to Pull Loose: 60000.00 lb
		<b>Total Volume:</b>	<b>30.83 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4208.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	4235.00 ft			
Interval between Packers:	27.00 ft			
Tool Length:	482.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

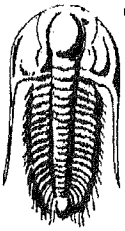
Tool Comments:

### Tool Description

**Length (ft) Serial No. Position Depth (ft) Accum. Lengths**

Change Over Sub	1.00			4182.00	
Shut In Tool	5.00			4187.00	
Hydraulic tool	5.00			4192.00	
Jars	5.00			4197.00	
Safety Joint	2.00			4199.00	
Packer	5.00			4204.00	27.00 Bottom Of Top Packer
Packer	4.00			4208.00	
Stubb	1.00			4209.00	
Recorder	0.00	8353	Inside	4209.00	
Perforations	22.00			4231.00	
Blank Off Sub	1.00			4232.00	
Top of Packer	3.00			4235.00	27.00 Tool Interval
Packer	1.00			4236.00	
Stubb	1.00			4237.00	
Change Over Sub	1.00			4238.00	
Drill Pipe	421.00			4659.00	
Change Over Sub	1.00			4660.00	
Recorder	0.00	6741	Outside	4660.00	
Bullnose	3.00			4663.00	428.00 Bottom Packers & Anchor

**Total Tool Length: 482.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Mak J Energy

**WR Hall # 1**

1600 N Broadway Ste 1740  
Denver CO 80202

**28 16S 27W Lane KS**

ATTN: Keith Reavis

Job Ticket: 30011

**DST#: 7**

Test Start: 2008.06.02 @ 15:11:05

## Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 61.00 sec/qt

Water Loss: 7.19 in<sup>3</sup>

Resistivity: 0.00 ohm.m

Salinity: 3200.00 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: 60000 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	M 100%m	0.148
341.00	MCW 70%w 30%m	1.677
62.00	WCM 10%W 90%M	0.410
1.00	SMCO 95%O 5%M	0.008
0.00	GIP 0	0.000
0.00	RW .123@76F=60000	0.000

Total Length: 434.00 ft

Total Volume: 2.243 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

