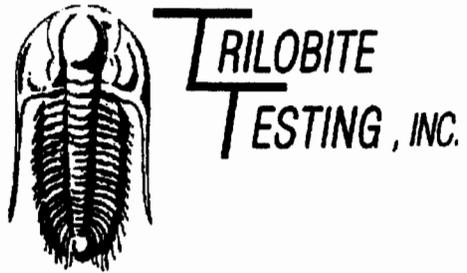


15-025-21457



DRILL STEM TEST REPORT

Prepared For: **Diversified Operating Corporation**

15000 W 6th Ave #102
Golden CO 80401

ATTN:

9 3/2 S 21W CLark KS

Hardin # 9A3-5

Start Date: 2008.05.26 @ 20:48:40

End Date: 2008.05.27 @ 03:07:34

Job Ticket #: 31752 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Diversified Operating Corporation

Hardin # 9A3-5

9 3/2 S 21W CLark KS

DST # 1

Morrow

2008.05.26



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Diversified Operating Corporation

Hardin # 9A3-5

15000 W 6th Ave #102
Golden CO 80401

9 31S 21W CLark KS

Job Ticket: 31752

DST#: 1

ATTN:

Test Start: 2008.05.26 @ 20:48:40

GENERAL INFORMATION:

Formation: **Morrow**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 23:46:20

Time Test Ended: 03:07:34

Test Type: Conventional Bottom Hole

Tester: Kevin Taylor

Unit No: 39

Interval: **5160.00 ft (KB) To 5195.00 ft (KB) (TVD)**

Total Depth: 5195.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1983.00 ft (KB)

1970.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 8357 Inside

Press@RunDepth: psig @ 5161.00 ft (KB)

Start Date: 2008.05.26

End Date:

2008.05.27

Start Time: 20:48:40

End Time:

03:07:34

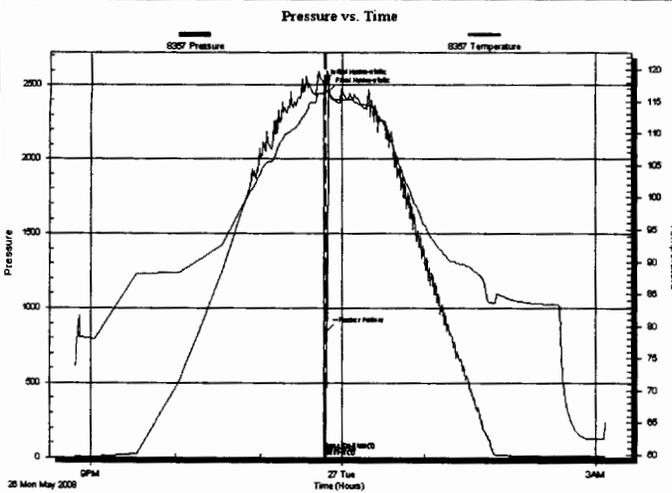
Capacity: 7000.00 psig

Last Calib.: 2008.05.27

Time On Btrm: 2008.05.26 @ 23:46:05

Time Off Btrm: 2008.05.26 @ 23:49:35

TEST COMMENT: Packer Failure



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2518.39	116.27	Initial Hydro-static
1	51.40	115.25	Open To Flow (1)
1	60.38	116.03	Shut-In(1)
2	91.37	116.71	Shut-In(2)
2	843.28	118.45	--Packer Failure
4	2454.98	119.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
450.00	Mud	5.27

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Diversified Operating Corporation

Hardin # 9A3-5

15000 W 6th Ave #102
Golden CO 80401

9 31S 21W CLark KS

Job Ticket: 31752

DST#: 1

ATTN:

Test Start: 2008.05.26 @ 20:48:40

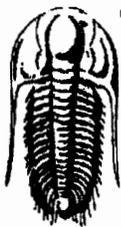
Tool Information

Drill Pipe:	Length: 4962.00 ft	Diameter: 3.88 inches	Volume: 72.57 bbl	Tool Weight: 3100.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.75 inches	Volume: 1.32 bbl	Weight to Pull Loose: 3100.00 lb
		Total Volume:	73.89 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	5160.00 ft			Final 79000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	66.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			5130.00	
Shut In Tool	5.00			5135.00	
Sampler	3.00			5138.00	
Hydraulic tool	5.00			5143.00	
Jars	5.00			5148.00	
Safety Joint	3.00			5151.00	
Packer	4.00			5155.00	31.00 Bottom Of Top Packer
Packer	5.00			5160.00	
Stubb	1.00			5161.00	
Recorder	0.00	8167	inside	5161.00	
Recorder	0.00	8357	inside	5161.00	
Perforations	29.00			5190.00	
Bullnose	5.00			5195.00	35.00 Bottom Packers & Anchor

Total Tool Length: 66.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Diversified Operating Corporation

Hardin # 9A3-5

15000 W 6th Ave #102
Golden CO 80401

9 31S 21W CLark KS

Job Ticket: 31752

DST#: 1

ATTN:

Test Start: 2008.05.26 @ 20:48:40

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: 44.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
450.00	Mud	5.271

Total Length: 450.00 ft

Total Volume: 5.271 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

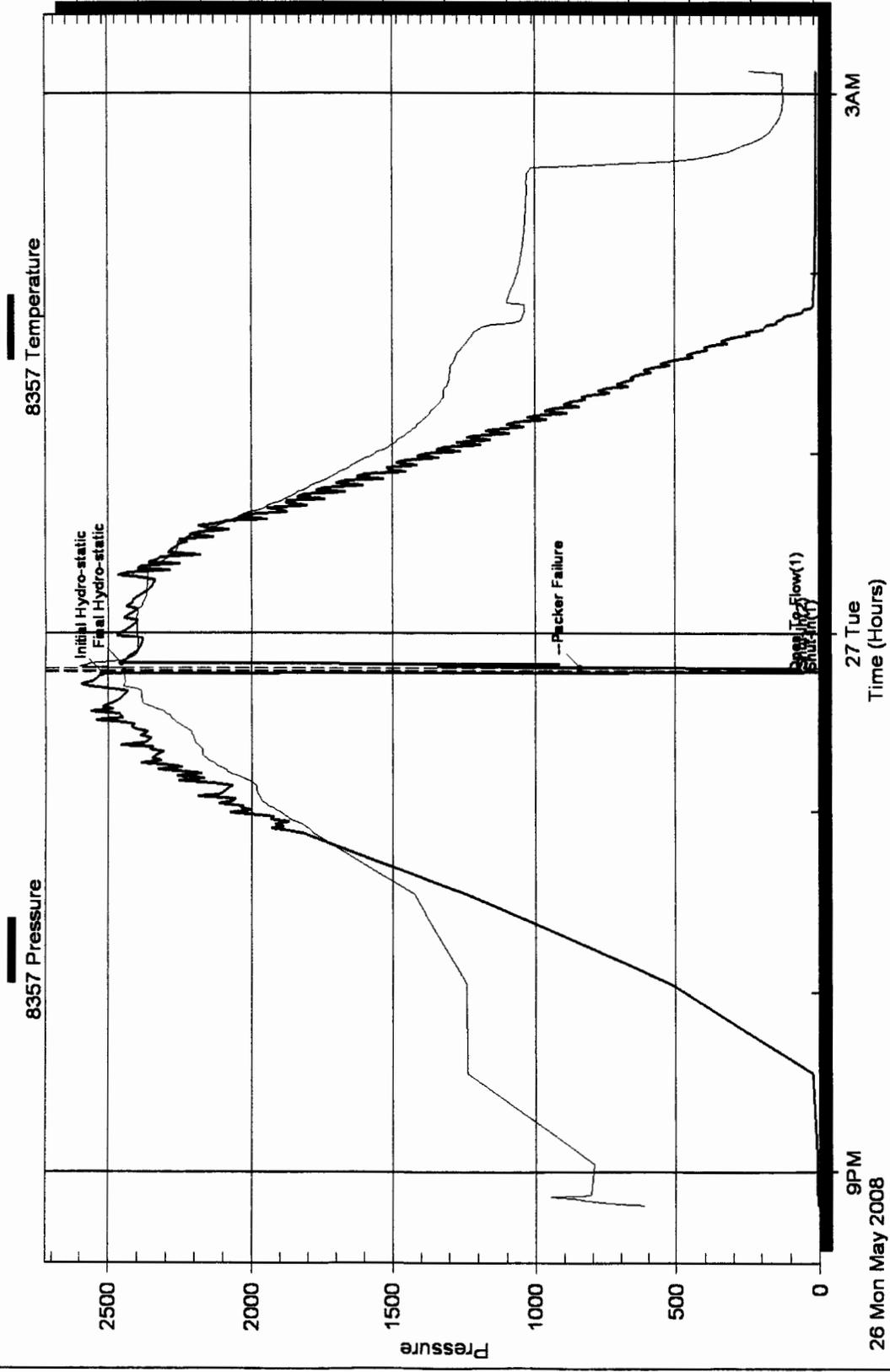
Serial #:

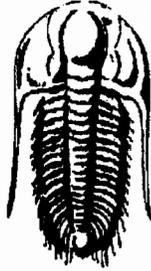
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Diversified Operating Corporation**

15000 W 6th Ave #102
Golden CO 80401

ATTN:

9 31S 21W CLark KS

Hardin # 9A3-5

Start Date: 2008.05.27 @ 03:14:17

End Date: 2008.05.27 @ 08:59:02

Job Ticket #: 31753 DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Diversified Operating Corporation

Hardin # 9A3-5

9 31S 21W CLark KS

DST # 2

Morrow

2008.05.27



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Diversified Operating Corporation

Hardin # 9A3-5

15000 W 6th Ave #102
Golden CO 80401

9 31S 21W CLark KS

Job Ticket: 31753

DST#: 2

ATTN:

Test Start: 2008.05.27 @ 03:14:17

GENERAL INFORMATION:

Formation: **Morrow**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 08:59:02

Test Type: Conventional Bottom Hole

Tester: Kevin Taylor

Unit No: 39

Interval: **5172.00 ft (KB) To 5195.00 ft (KB) (TVD)**

Total Depth: 5195.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1983.00 ft (KB)

1970.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 8357

Inside

Press@RunDepth: psig @ 5173.00 ft (KB)

Start Date: 2008.05.27

End Date: 2008.05.27

Start Time: 03:14:22

End Time: 08:59:01

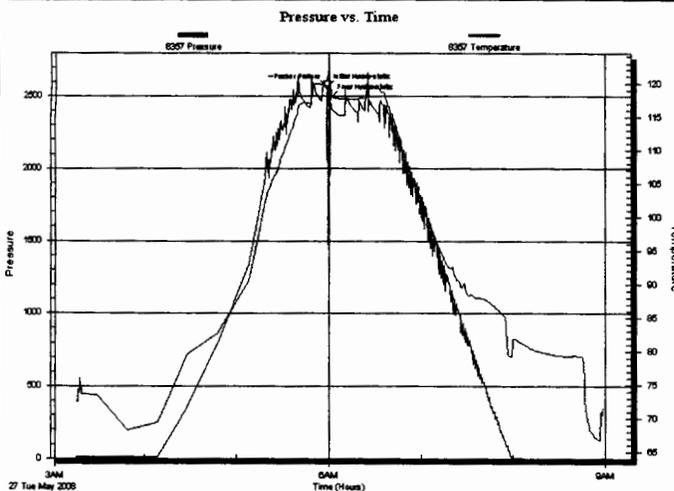
Capacity: 7000.00 psig

Last Calib.: 2008.05.27

Time On Btr: 2008.05.27 @ 05:58:17

Time Off Btr: 2008.05.27 @ 06:00:32

TEST COMMENT: Packer Failure



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2562.36	120.36	Initial Hydro-static
1	2558.47	120.37	--Packer Failure
3	2484.15	119.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
350.00	Mud	3.81

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Diversified Operating Corporation

Hardin # 9A3-5

15000 W 6th Ave #102
Golden CO 80401

9 31S 21W CLark KS

Job Ticket: 31753

DST#: 2

ATTN:

Test Start: 2008.05.27 @ 03:14:17

Tool Information

Drill Pipe:	Length: 4993.00 ft	Diameter: 3.88 inches	Volume: 73.02 bbl	Tool Weight: 3100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.75 inches	Volume: 1.32 bbl	Weight to Pull Loose: 80000.00 lb
		Total Volume:	74.34 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	5172.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	23.00 ft			
Tool Length:	50.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			5146.00	
Shut In Tool	5.00			5151.00	
Sampler	3.00			5154.00	
Hydraulic tool	5.00			5159.00	
Jars	5.00			5164.00	
Safety Joint	3.00			5167.00	
Packer	5.00			5172.00	27.00 Bottom Of Top Packer
Stubb	1.00			5173.00	
Recorder	0.00	8167	Inside	5173.00	
Recorder	0.00	8357	Inside	5173.00	
Perforations	17.00			5190.00	
Bullnose	5.00			5195.00	23.00 Anchor Tool

Total Tool Length: 50.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Diversified Operating Corporation

Hardin # 9A3-5

15000 W 6th Ave #102
Golden CO 80401

9 31S 21W CLark KS

Job Ticket: 31753

DST#: 2

ATTN:

Test Start: 2008.05.27 @ 03:14:17

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: 44.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 6000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
350.00	Mud	3.808

Total Length: 350.00 ft

Total Volume: 3.808 bbl

Num Fluid Samples: 0

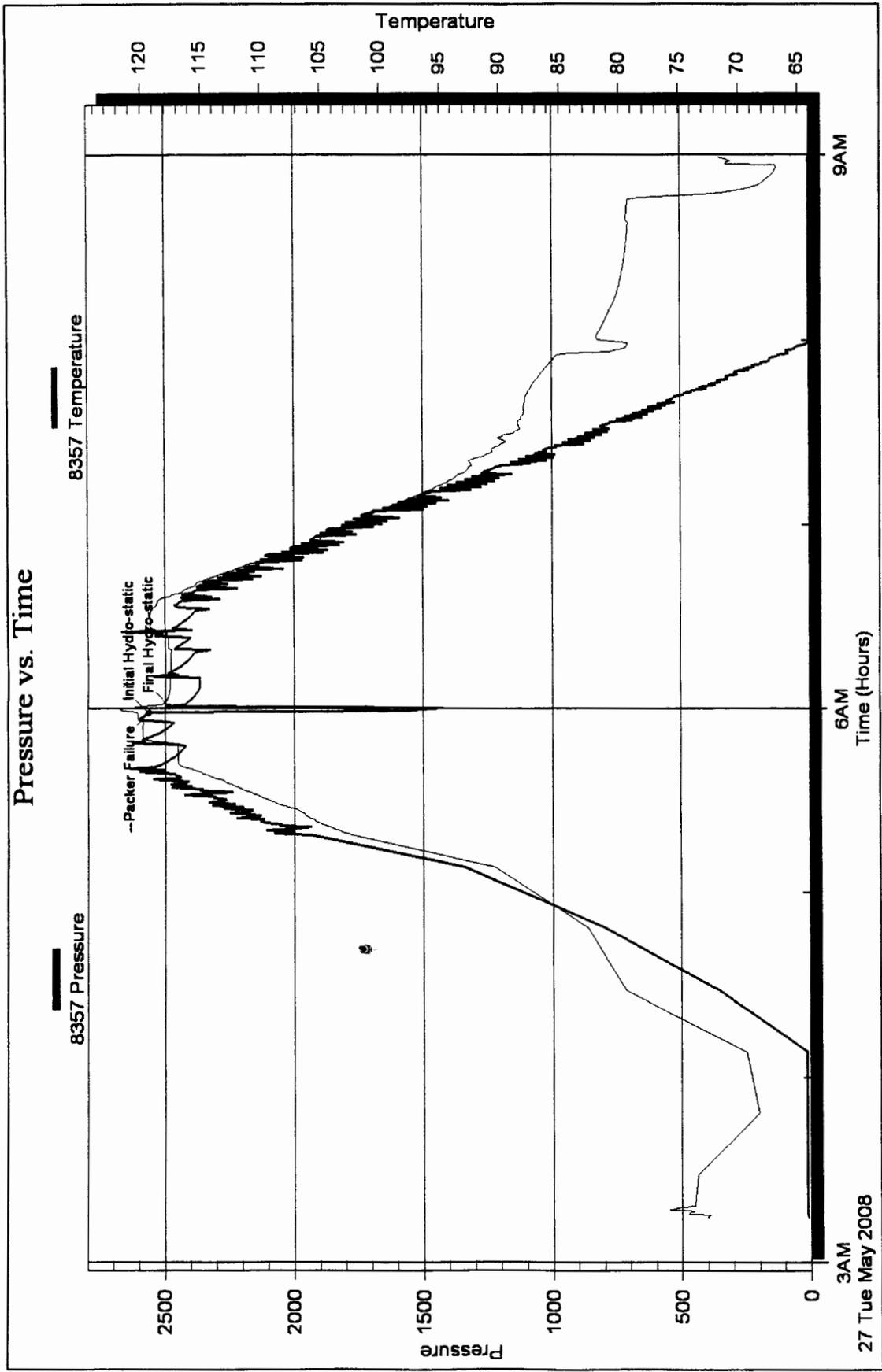
Num Gas Bombs: 0

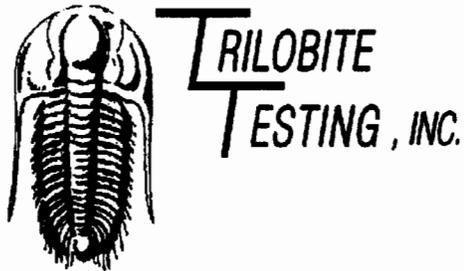
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Diversified Operating Corporation**

15000 W 6th Ave #102
Golden CO 80401

ATTN:

9 31S 21W CLark KS

Hardin # 9A3-5

Start Date: 2008.05.31 @ 14:49:53

End Date: 2008.05.31 @ 23:42:52

Job Ticket #: 30797 DST #: 3

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Diversified Operating Corporation

Hardin # 9A3-5

9 31S 21W CLark KS

DST # 3

Viola

2008.05.31



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Diversified Operating Corporation

Hardin # 9A3-5

15000 W 6th Ave #102
Golden CO 80401

9 31S 21W CLark KS

Job Ticket: 30797

DST#: 3

ATTN:

Test Start: 2008.05.31 @ 14:49:53

GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:05:22

Time Test Ended: 23:42:52

Test Type: Conventional Bottom Hole

Tester: Chris Hagman

Unit No: 34

Interval: **6278.00 ft (KB) To 6321.00 ft (KB) (TVD)**

Total Depth: 6321.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1983.00 ft (KB)

1970.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: **6753**

Inside

Press@RunDepth: 59.28 psig @ 6280.00 ft (KB)

Start Date: 2008.05.31

End Date: 2008.05.31

Start Time: 14:49:53

End Time: 23:42:52

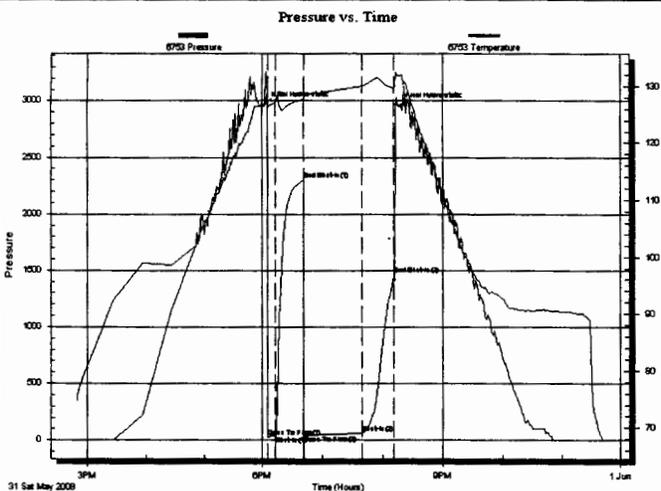
Capacity: 7000.00 psig

Last Calib.: 1899.12.30

Time On Btrm: 2008.05.31 @ 18:02:02

Time Off Btrm: 2008.05.31 @ 20:17:02

TEST COMMENT: IF Weak surface blow .5" in 5 min.
ISI No blow back
FF Weak surface blow died 10 min.
FSI No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2959.49	126.54	Initial Hydro-static
4	24.83	126.41	Open To Flow (1)
11	37.48	126.94	Shut-In (1)
39	2299.30	127.70	End Shut-In(1)
39	45.90	127.58	Open To Flow(2)
97	59.28	129.97	Shut-In(2)
130	1468.70	129.64	End Shut-In(2)
135	2954.08	131.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	WM 30%W 70%M	0.30

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Diversified Operating Corporation

Hardin # 9A3-5

15000 W 6th Ave #102
Golden CO 80401

9 31S 21W CLark KS

Job Ticket: 30797

DST#: 3

ATTN:

Test Start: 2008.05.31 @ 14:49:53

Tool Information

Drill Pipe:	Length: 6085.00 ft	Diameter: 3.80 inches	Volume: 85.36 bbl	Tool Weight: 2000.00 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: 181.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 105000.0 lb
		Total Volume:	86.25 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 87000.00 lb
Depth to Top Packer:	6278.00 ft			Final 87000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 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
Change Over Sub	1.00			6248.00	
Shut In Tool	5.00			6253.00	
Sampler	3.00			6256.00	
Hydraulic tool	5.00			6261.00	
Jars	5.00			6266.00	
Safety Joint	3.00			6269.00	
Packer	5.00			6274.00	31.00 Bottom Of Top Packer
Packer	4.00			6278.00	
Stubb	1.00			6279.00	
Perforations	1.00			6280.00	
Recorder	0.00	8322	Inside	6280.00	
Recorder	0.00	6753	Inside	6280.00	
Perforations	5.00			6285.00	
Change Over Sub	1.00			6286.00	
Drill Pipe	31.00			6317.00	
Change Over Sub	1.00			6318.00	
Bullnose	3.00			6321.00	43.00 Bottom Packers & Anchor
Total Tool Length:	74.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Diversified Operating Corporation

Hardin # 9A3-5

15000 W 6th Ave #102
Golden CO 80401

9 31S 21W CLark KS

Job Ticket: 30797

DST#: 3

ATTN:

Test Start: 2008.05.31 @ 14:49:53

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:

17000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 12.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	WM 30%W 70%M	0.305

Total Length: 62.00 ft Total Volume: 0.305 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

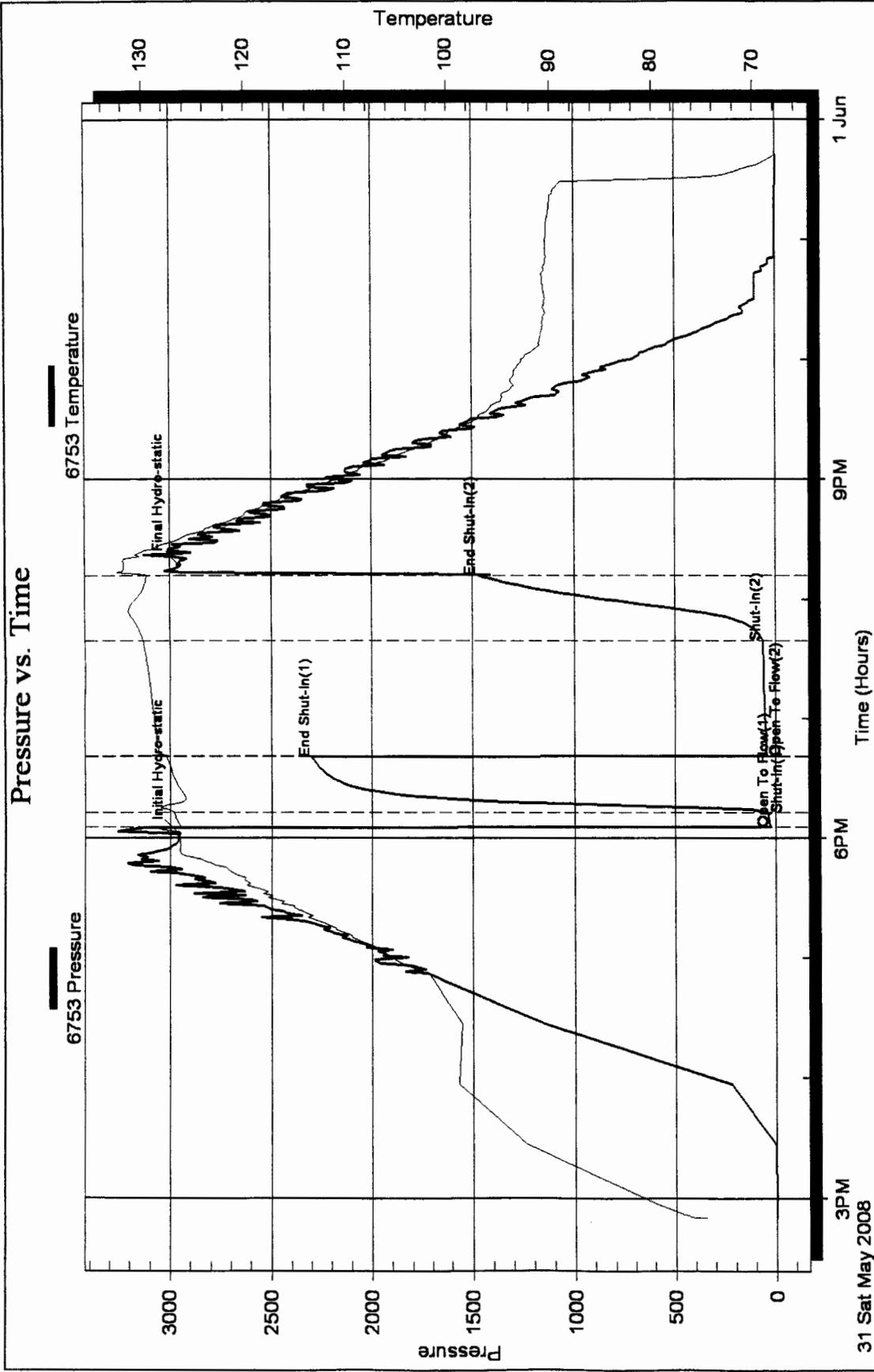
Laboratory Name:

Laboratory Location:

Recovery Comments: RW=.340@83F=17000ppm

Sampler=2800ml M 1200ml W @ 200psi

Pressure vs. Time



3 PM
31 Sat May 2008

6 PM

9 PM

1 Jun