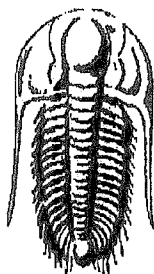


15-145-21607

16-20s-20w

IND



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co.**

PO Box 362
Hays Ks ,67601

ATTN: Marc Downing

16 20S 20W Pawnee KS

Shean #1-16

Start Date: 2010.06.18 @ 01:00:12

End Date: 2010.06.18 @ 08:00:57

Job Ticket #: 37362 DST #: 1

Trilobite Testing, Inc

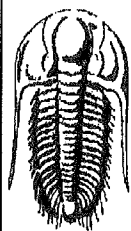
PO Box 1733 Hays, KS 67601

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

RECEIVED

JUL 29 2010

KCC WICHITA



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Dow ning Nelson Oil Co.

Shean #1-16

PO Box 362
Hays Ks ,67601

16 20S 20W Pawnee KS

ATTN: Marc Dow ning

Job Ticket: 37362

DST#: 1

Test Start: 2010.06.18 @ 01:00:12

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:24:27

Time Test Ended: 08:00:57

Test Type: Conventional Bottom Hole

Tester: Mike Slemp

Unit No: 28

Interval: 4220.00 ft (KB) To 4266.00 ft (KB) (TVD)

Reference Elevations: 2184.00 ft (KB)

Total Depth: 4266.00 ft (KB) (TVD)

2179.00 ft (CF)

Hole Diameter: 7.78 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8356

Inside

Press@RunDepth: 52.36 psig @ 4222.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.18

End Date:

2010.06.18

Last Calib.: 2010.06.18

Start Time: 01:00:13

End Time:

08:00:57

Time On Btm: 2010.06.18 @ 03:22:27

Time Off Btm: 2010.06.18 @ 06:26:27

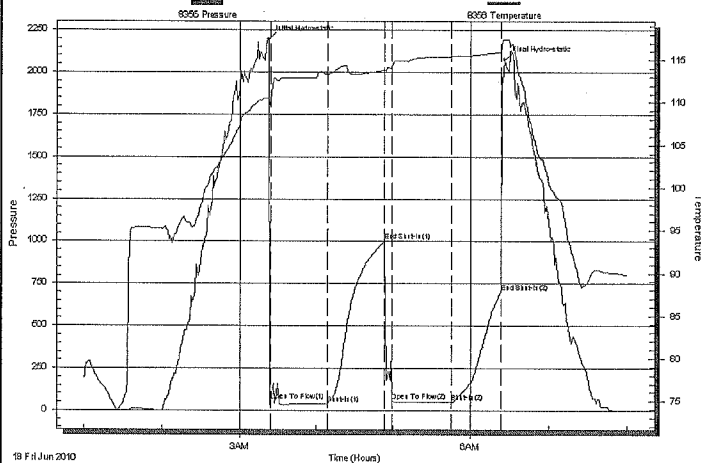
TEST COMMENT: IF- Weak blow , 4 inches in 45 min

ISI- No blow back

FF- Weak surface blow

FSI- No blow back

Pressure vs. Time



PRESSURE SUMMARY

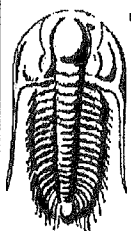
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2194.11	110.50	Initial Hydro-static
2	55.63	110.32	Open To Flow (1)
46	39.86	113.30	Shut-In(1)
91	1002.72	113.78	End Shut-In(1)
97	55.04	114.25	Open To Flow (2)
143	52.36	115.43	Shut-In(2)
181	701.76	115.97	End Shut-In(2)
184	2074.82	117.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	OCM 50%oil50%mud	0.70

Gas Rates

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



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

TOOL DIAGRAM

Dow ning Nelson Oil Co.

Shean #1-16

PO Box 362
Hays Ks ,67601

16 20S 20W Pawnee KS

Job Ticket: 37362

DST#: 1

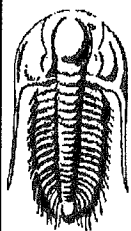
ATTN: Marc Dow ning

Test Start: 2010.06.18 @ 01:00:12

Tool Information

Drill Pipe:	Length: 4137.00 ft	Diameter: 3.80 inches	Volume: 58.03 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: 25000.00 lb
Drill Collar:	Length: 62.00 ft	Diameter: 2.25 inches	Volume: 0.30 bbl	Weight to Pull Loose: 50000.00 lb
		Total Volume: 58.33 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4220.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval betw een 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
Change Over Sub	1.00			4194.00	
Shut In Tool	5.00			4199.00	
Hydraulic tool	5.00			4204.00	
Jars *	5.00			4209.00	
Safety Joint *	2.00			4211.00	
Packer	5.00			4216.00	27.00 Bottom Of Top Packer
Packer	4.00			4220.00	
Stubb	1.00			4221.00	
Perforations	1.00			4222.00	
Recorder	0.00	8356	Inside	4222.00	
Recorder	0.00	8678	Inside	4222.00	
Perforations	8.00			4230.00	
Change Over Sub	1.00			4231.00	
Drill Pipe	31.00			4262.00	
Change Over Sub	1.00			4263.00	
Bullnose	3.00			4266.00	46.00 Bottom Packers & Anchor
Total Tool Length:	73.00				



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co.

Shean #1-16

PO Box 362
Hays Ks ,67601

16 20S 20W Pawnee KS

Job Ticket: 37362

DST#: 1

ATTN: Marc Downing

Test Start: 2010.06.18 @ 01:00:12

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.33 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	OCM 50%oil50%mud	0.698

Total Length: 90.00 ft

Total Volume: 0.698 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

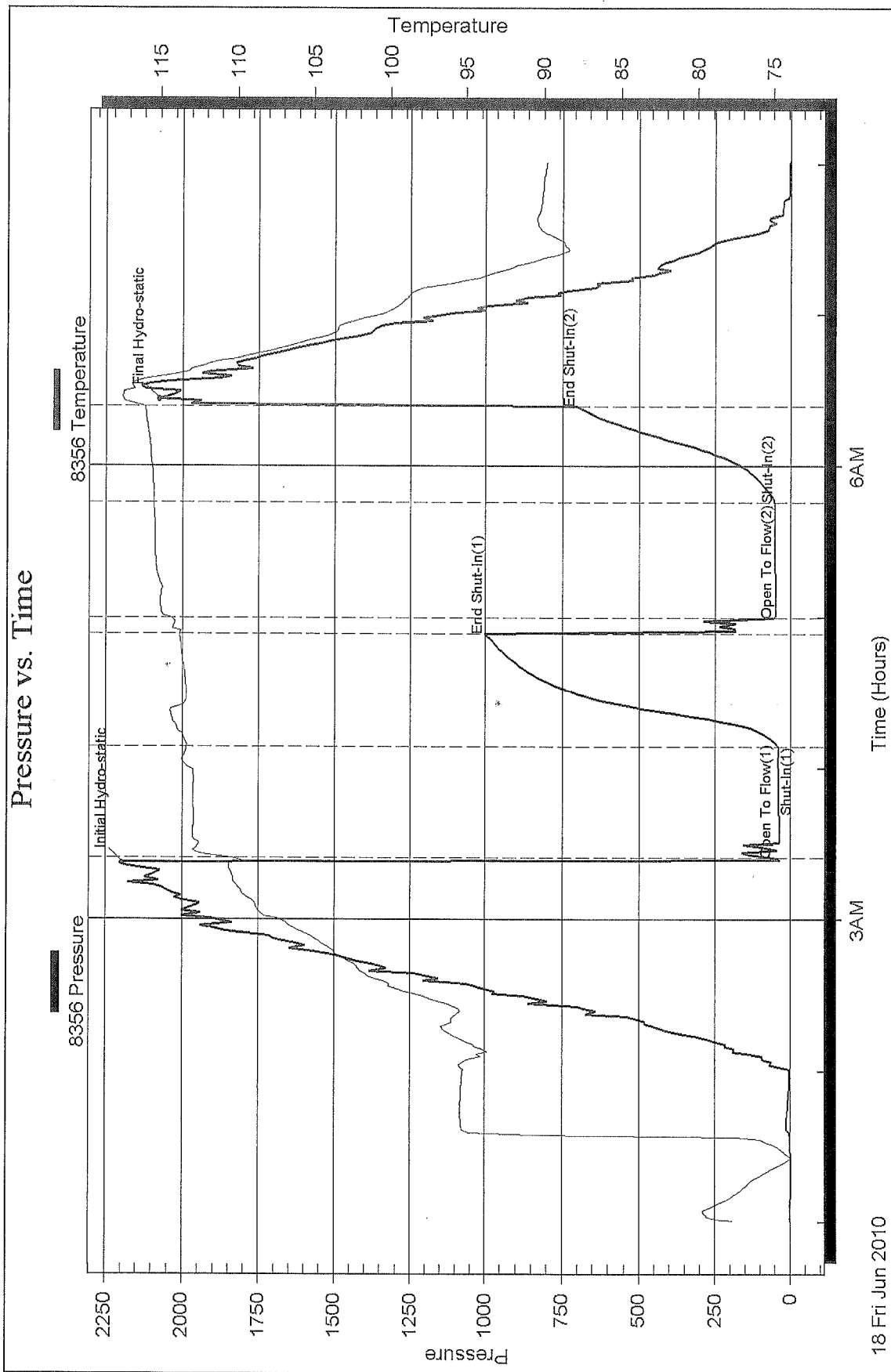
Serial #:

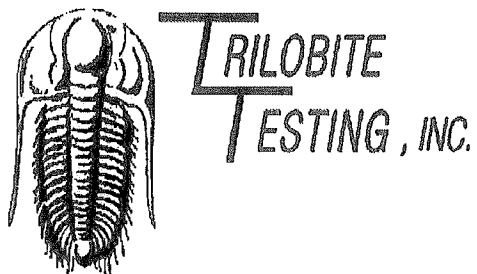
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co.**

PO Box 362
Hays Ks ,67601

ATTN: Marc Downing

16 20S 20W Pawnee KS

Shean #1-16

Start Date: 2010.06.18 @ 14:15:51

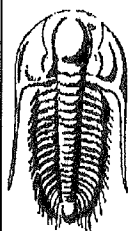
End Date: 2010.06.18 @ 21:40:06

Job Ticket #: 37363 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

Dow ning Nelson Oil Co.

Shean #1-16

PO Box 362
Hays Ks ,67601

16 20S 20W Pawnee KS

Job Ticket: 37363

DST#: 2

ATTN: Marc Dow ning

Test Start: 2010.06.18 @ 14:15:51

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:55:06

Time Test Ended: 21:40:06

Test Type: Conventional Bottom Hole

Tester: Mike Slemp

Unit No: 28

Interval: **4220.00 ft (KB) To 4282.00 ft (KB) (TVD)**

Reference Elevations: 2184.00 ft (KB)

Total Depth: 4282.00 ft (KB) (TVD)

2179.00 ft (CF)

Hole Diameter: 7.78 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8356 Inside

Press@RunDepth: 77.01 psig @ 4222.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2010.06.18

End Date: 2010.06.18

Last Calib.: 2010.06.18

Start Time: 14:15:52

End Time: 21:40:06

Time On Btm: 2010.06.18 @ 16:53:06

Time Off Btm: 2010.06.18 @ 19:32:06

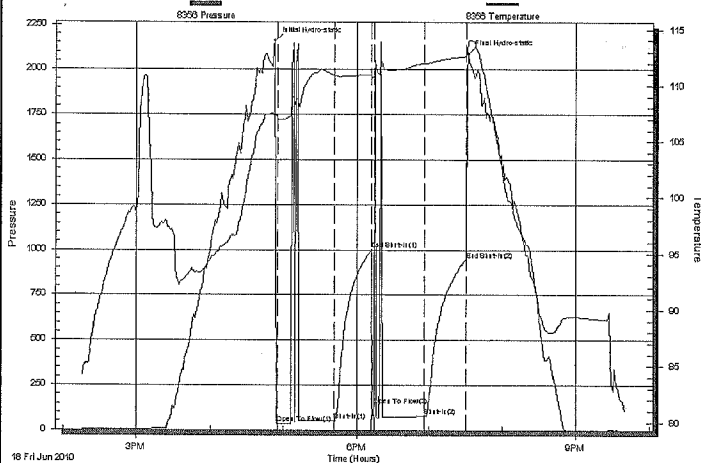
TEST COMMENT: IF- Weak blow died in 30 sec, flushed tool , no blow

ISI- No blow back

FF- No blow , Flushed tool , Manifold union loose , Weak blow 1 inch in 30 min

FSI- No blow back

Pressure vs. Time



PRESSURE SUMMARY

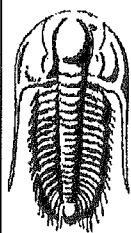
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2159.12	107.35	Initial Hydro-static
2	38.79	107.06	Open To Flow (1)
48	53.93	110.91	Shut-In (1)
79	1003.24	110.96	End Shut-In (1)
81	139.27	110.77	Open To Flow (2)
123	77.01	111.98	Shut-In (2)
157	945.20	112.62	End Shut-In (2)
159	2088.60	113.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	MCO85%oil15%mud	0.15
124.00	OOCV85%mud15%oil	1.45

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Co.

Shean #1-16

PO Box 362
Hays Ks ,67601

16 20S 20W Pawnee KS

Job Ticket: 37363

DST#: 2

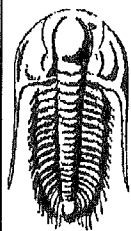
ATTN: Marc Downing

Test Start: 2010.06.18 @ 14:15:51

Tool Information

Drill Pipe:	Length: 4137.00 ft	Diameter: 3.80 inches	Volume: 58.03 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: 25000.00 lb
Drill Collar:	Length: 62.00 ft	Diameter: 2.25 inches	Volume: 0.30 bbl	Weight to Pull Loose: 60000.00 lb
			Total Volume: 58.33 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4220.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	62.00 ft			
Tool Length:	89.00 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			4194.00	
Shut In Tool	5.00			4199.00	
Hydraulic tool	5.00			4204.00	
Jars	5.00			4209.00	
Safety Joint	2.00			4211.00	
Packer	5.00			4216.00	27.00 Bottom Of Top Packer
Packer	4.00			4220.00	
Stubb	1.00			4221.00	
Perforations	1.00			4222.00	
Recorder	0.00	8356	Inside	4222.00	
Recorder	0.00	8678	Inside	4222.00	
Perforations	24.00			4246.00	
Change Over Sub	1.00			4247.00	
Drill Pipe	31.00			4278.00	
Change Over Sub	1.00			4279.00	
Bullnose	3.00			4282.00	62.00 Bottom Packers & Anchor
Total Tool Length:	89.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Dow ning Nelson Oil Co.

Shean #1-16

PO Box 362
Hays Ks ,67601

16 20S 20W Pawnee KS

Job Ticket: 37363

DST#: 2

ATTN: Marc Dow ning

Test Start: 2010.06.18 @ 14:15:51

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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 10.35 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	MCO85%oil15%mud	0.148
124.00	OCV85%mud15%oil	1.448

Total Length: 154.00 ft

Total Volume: 1.596 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

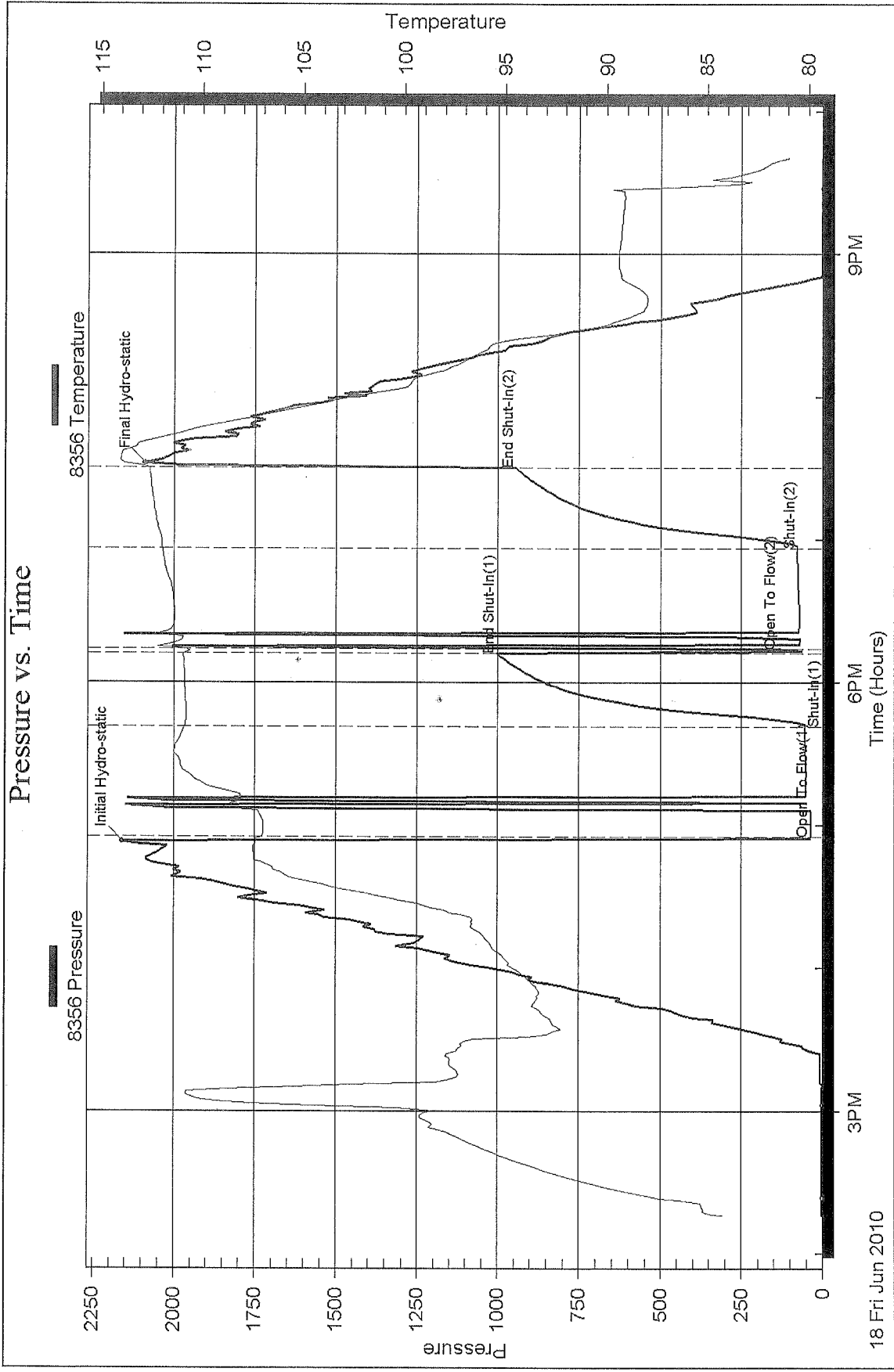
Serial #:

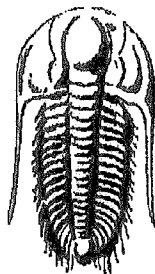
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Downing Nelson Oil Co.**

PO Box 362
Hays Ks ,67601

ATTN: Marc Downing

16 20S 20W Pawnee KS

Shean #1-16

Start Date: 2010.06.19 @ 03:30:57

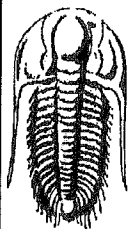
End Date: 2010.06.19 @ 10:13:57

Job Ticket #: 37364 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

Dow ning Nelson Oil Co.

PO Box 362
Hays Ks ,67601

ATTN: Marc Dow ning

Shean #1-16

16 20S 20W Pawnee KS

Job Ticket: 37364

DST#: 3

Test Start: 2010.06.19 @ 03:30:57

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:19:12

Time Test Ended: 10:13:57

Test Type: Conventional Bottom Hole

Tester: Mike Slomp

Unit No: 28

Interval: 4279.00 ft (KB) To 4293.00 ft (KB) (TVD)

Total Depth: 4293.00 ft (KB) (TVD)

Hole Diameter: 7.78 inches Hole Condition: Fair

Reference Elevations: 2184.00 ft (KB)

2179.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8356 Inside

Press@RunDepth: 386.72 psig @ 4281.00 ft (KB)

Start Date: 2010.06.19

End Date: 2010.06.19

Start Time: 03:30:58

End Time: 10:13:57

Capacity: 8000.00 psig

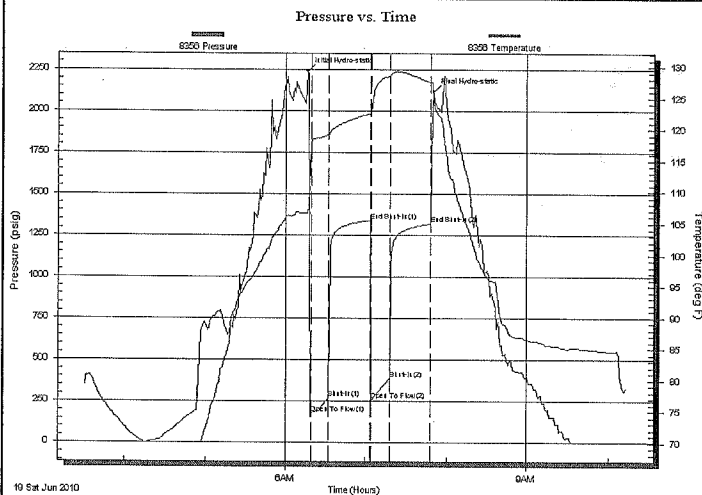
Last Calib.: 2010.06.19

Time On Btm: 2010.06.19 @ 06:16:12

Time Off Btm: 2010.06.19 @ 07:50:12

TEST COMMENT: IF- BOB in 3 min
ISI- 3 inches blow back
FF- BOB in 2 min
FSI- 1 inch blow back

PRESSURE SUMMARY



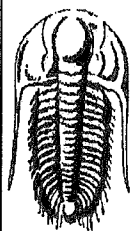
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2239.15	106.64	Initial Hydro-static
3	176.19	117.85	Open To Flow (1)
16	269.40	119.18	Shut-In(1)
47	1340.67	122.54	End Shut-In(1)
48	257.32	122.79	Open To Flow (2)
62	386.72	128.47	Shut-In(2)
92	1320.10	127.50	End Shut-In(2)
94	2117.02	124.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	GIP 248'	0.00
45.00	MCO 25%gas60%oil10%water10%mud	0.22
924.00	100% Oil	12.81

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Downing Nelson Oil Co.

Shean #1-16

PO Box 362
Hays Ks ,67601

16 20S 20W Pawnee KS

Job Ticket: 37364

DST#: 3

ATTN: Marc Downing

Test Start: 2010.06.19 @ 03:30:57

Tool Information

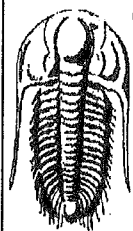
Drill Pipe:	Length: 4205.00 ft	Diameter: 3.80 inches	Volume: 58.99 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 62.00 ft	Diameter: 2.25 inches	Volume: 0.30 bbl	Weight to Pull Loose:	60000.00 lb
			Total Volume: 59.29 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	4279.00 ft			Final	58000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	14.00 ft				
Tool Length:	36.00 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			4258.00	
Shut In Tool	5.00			4263.00	
Hydraulic tool	5.00			4268.00	
Safety Joint	2.00			4270.00 *	
Packer	5.00		Fluid	4275.00 *	22.00 Bottom Of Top Packer
Packer	4.00			4279.00	
Stubb	1.00			4280.00	
Perforations	1.00			4281.00	
Recorder	0.00	8356	Inside	4281.00	
Recorder	0.00	8678	Inside	4281.00	
Perforations	9.00			4290.00	
Bullnose	3.00			4293.00	14.00 Bottom Packers & Anchor

Total Tool Length: 36.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Downing Nelson Oil Co.

Shean #1-16

PO Box 362
Hays Ks ,67601

16 20S 20W Pawnee KS

Job Ticket: 37364

DST#: 3

ATTN: Marc Downing

Test Start: 2010.06.19 @ 03:30:57

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbl

Water Loss: 11.16 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	GIP 248'	0.000
45.00	MCO 25%gas60%oil10%water10%mud	0.221
924.00	100% Oil	12.806

Total Length: 969.00 ft

Total Volume: 13.027 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

