

TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt, Inc.**

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047

ATTN: Brad Rine

10-22-19 PawneeKS

J-P UNIT #1

Start Date: 2009.08.27 @ 02:38:00

End Date: 2009.08.27 @ 07:57:20

Job Ticket #: 36503 DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 36503

DST#: 1

Test Start: 2009.08.27 @ 02:38:00

GENERAL INFORMATION:

Formation: **Herington, Krider**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:47:20

Time Test Ended: 07:57:20

Test Type: Conventional Bottom Hole

Tester: Jake Fahrenbruch

Unit No: 43

Interval: **2161.00 ft (KB) To 2218.00 ft (KB) (TVD)**

Total Depth: 2218.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2090.00 ft (KB)

2085.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8352

Inside

Press@RunDepth: 51.66 psig @ 2162.00 ft (KB)

Start Date: 2009.08.27

End Date:

2009.08.27

Start Time: 02:38:02

End Time:

07:57:19

Capacity: 7000.00 psig

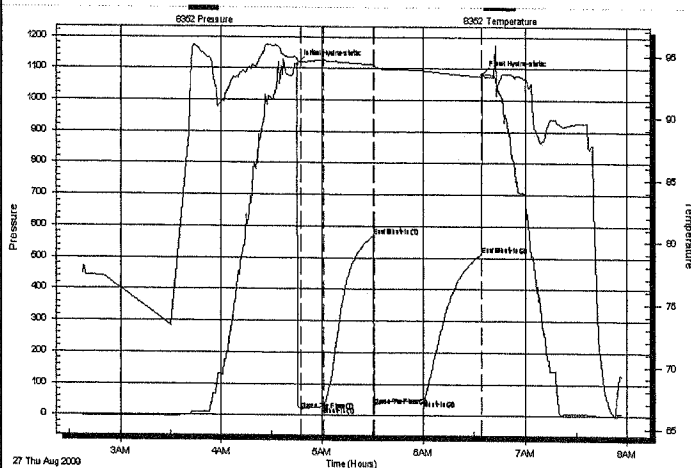
Last Calib.: 2009.08.27

Time On Btm: 2009.08.27 @ 04:45:30

Time Off Btm: 2009.08.27 @ 06:34:40

TEST COMMENT: IF: Fair blow, built to BOB in 10.75 minutes.
ISl: No blow back.
FF: Fair blow, built to BOB in 30 minutes.
FSl: No blow back.

Pressure vs. Time



PRESSURE SUMMARY

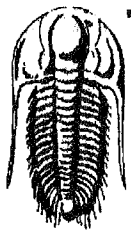
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1111.50	94.73	Initial Hydro-static
2	18.00	94.41	Open To Flow(1)
16	28.19	94.57	Shut-In(1)
45	568.85	94.25	End Shut-In(1)
46	30.32	94.21	Open To Flow(2)
75	51.66	93.78	Shut-In(2)
109	512.42	93.31	End Shut-In(2)
110	1082.29	93.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	Drilling Mud 100% m	0.44
0.00	Did not smell any gas in pipe.	0.00

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 36503

DST#: 1

Test Start: 2009.08.27 @ 02:38:00

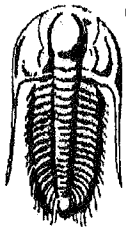
Tool Information

Drill Pipe:	Length: 1913.00 ft	Diameter: 3.80 inches	Volume: 26.83 bbl	Tool Weight: 3000.00 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: 250.00 ft	Diameter: 2.25 inches	Volume: 1.23 bbl	Weight to Pull Loose: 40000.00 lb
		Total Volume: 28.06 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	2161.00 ft			Final 36000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	57.00 ft			
Tool Length:	85.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			2138.00	
Hydraulic tool	5.00			2143.00	
Jars	5.00			2148.00	
Safety Joint	3.00			2151.00	
Packer	5.00			2156.00	28.00 Bottom Of Top Packer
Packer	5.00			2161.00	
Stubb	1.00			2162.00	
Recorder	0.00	8352	Inside	2162.00	
Recorder	0.00	6799	Inside	2162.00	
Perforations	18.00			2180.00	
Blank Spacing	33.00			2213.00	
Bullnose	5.00			2218.00	57.00 Bottom Packers & Anchor

Total Tool Length: 85.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 36503

DST#: 1

Test Start: 2009.08.27 @ 02:38:00

Mud and Cushion Information

Mud Type: Water

Mud Weight: 11.00 lb/gal

Viscosity: 36.00 sec/qt

Water Loss: in³

Resistivity: ohm.m

Salinity: ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	Drilling Mud 100% m	0.443
0.00	Did not smell any gas in pipe.	0.000

Total Length: 90.00 ft Total Volume: 0.443 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

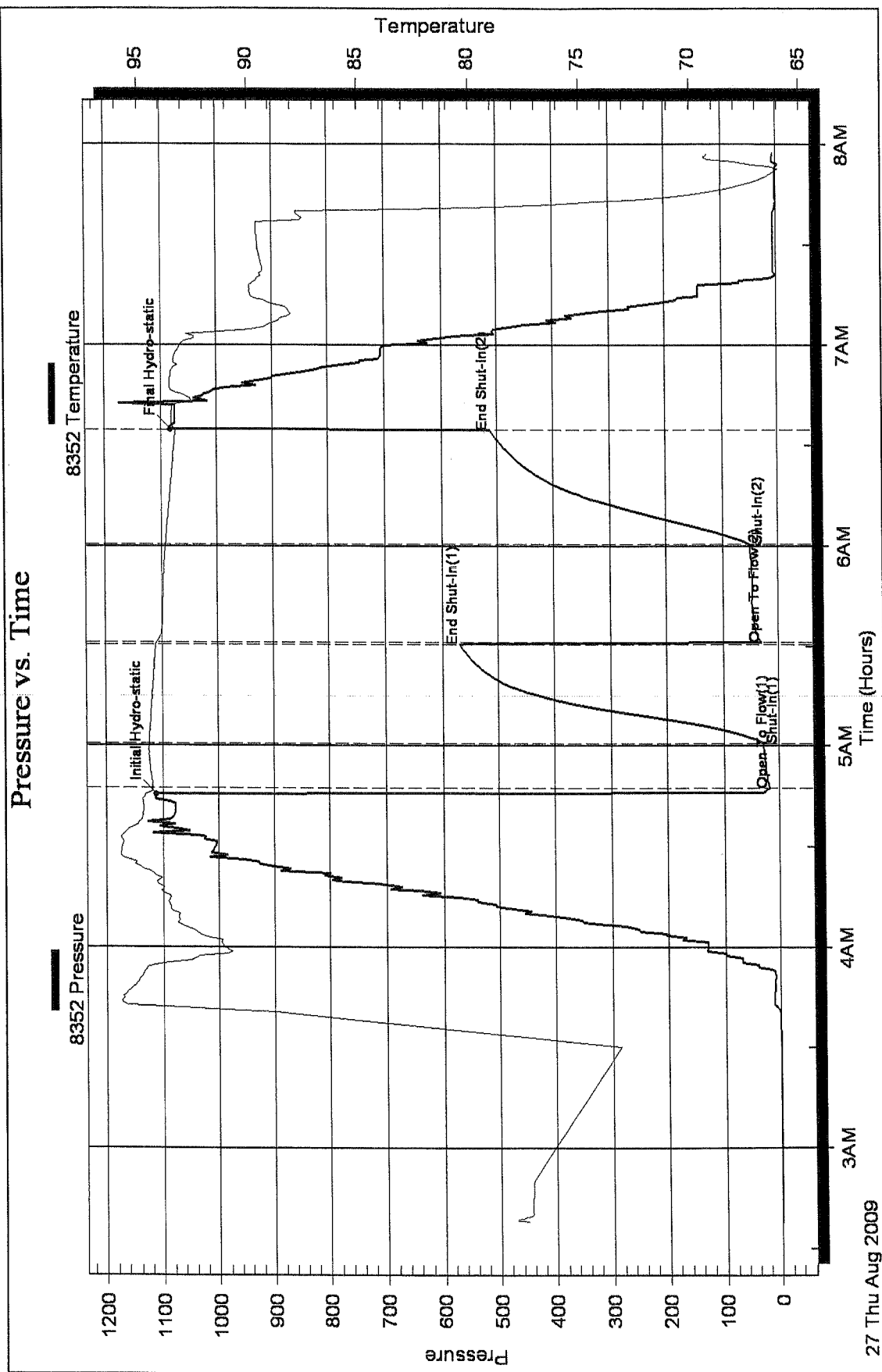
DST Test Number: 1

10-22-19 Paw neeks

Inside Carmen Schmitt, Inc.

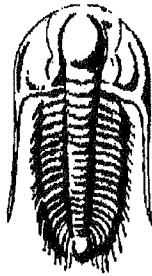
Serial #: 8352

Pressure vs. Time



Ref. No: 36503

Trilobite Testing, Inc



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt, Inc.**

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047

ATTN: Brad Rine

10-22-19 PawneeKS

J-P UNIT #1

Start Date: 2009.08.27 @ 17:43:50

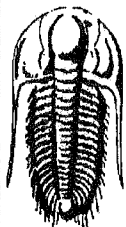
End Date: 2009.08.27 @ 21:57:50

Job Ticket #: 35241 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

Carmen Schmitt, Inc.

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

J-P UNIT #1

10-22-19 PawneeKS

Job Ticket: 35241

DST#: 2

Test Start: 2009.08.27 @ 17:43:50

GENERAL INFORMATION:

Formation: **Towanda**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:40:50

Time Test Ended: 21:57:50

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: 2323.00 ft (KB) To 2340.00 ft (KB) (TVD)

Total Depth: 2340.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2090.00 ft (KB)

2085.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8360

Inside

Press@RunDepth: 49.97 psig @ 2327.00 ft (KB)

Start Date: 2009.08.27

End Date:

2009.08.27

Start Time: 17:43:52

End Time:

21:57:50

Capacity: 7000.00 psig

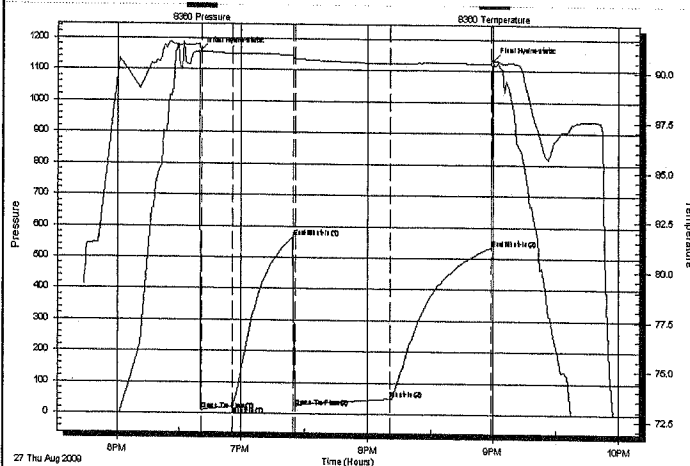
Last Calib.: 2009.08.27

Time On Btm: 2009.08.27 @ 18:39:50

Time Off Btm: 2009.08.27 @ 20:59:50

TEST COMMENT: IFF-Strong Blow, BOB in 4 Min.
ISI-Dead
FFP-Good Blow, BOB in 18 Min.
FSI-Dead

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1154.07	91.36	Initial Hydro-static
1	10.88	91.01	Open To Flow (1)
16	23.38	90.89	Shut-In (1)
45	564.18	90.85	End Shut-In (1)
46	22.71	90.67	Open To Flow (2)
91	49.97	90.43	Shut-In (2)
139	533.83	90.46	End Shut-In (2)
140	1132.25	90.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	Muddy Water-50%W-50%M	0.44

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 35241

DST#: 2

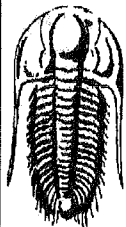
Test Start: 2009.08.27 @ 17:43:50

Tool Information

Drill Pipe:	Length: 2067.00 ft	Diameter: 3.80 inches	Volume: 28.99 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 42000.00 lb
		Total Volume: 30.21 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 39000.00 lb
Depth to Top Packer:	2323.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	17.00 ft			
Tool Length:	38.00 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			2303.00	
Shut In Tool	5.00			2308.00	
Hydraulic tool	5.00			2313.00	
Packer	5.00			2318.00	21.00 Bottom Of Top Packer
Packer	5.00			2323.00	
Stubb	1.00			2324.00	
Perforations	3.00			2327.00	
Recorder	0.00	8360	Inside	2327.00	
Recorder	0.00	6755	Inside	2327.00	
Perforations	10.00			2337.00	
Bullnose	3.00			2340.00	17.00 Bottom Packers & Anchor

Total Tool Length: 38.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 35241

DST#: 2

Test Start: 2009.08.27 @ 17:43:50

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 32.00 sec/qt

Water Loss: in³

Resistivity: ohm.m

Salinity: 98000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

Water Salinity:

deg API

50000 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	Muddy Water-50%W-50%M	0.443

Total Length: 90.00 ft

Total Volume: 0.443 bbl

Num Fluid Samples: 0

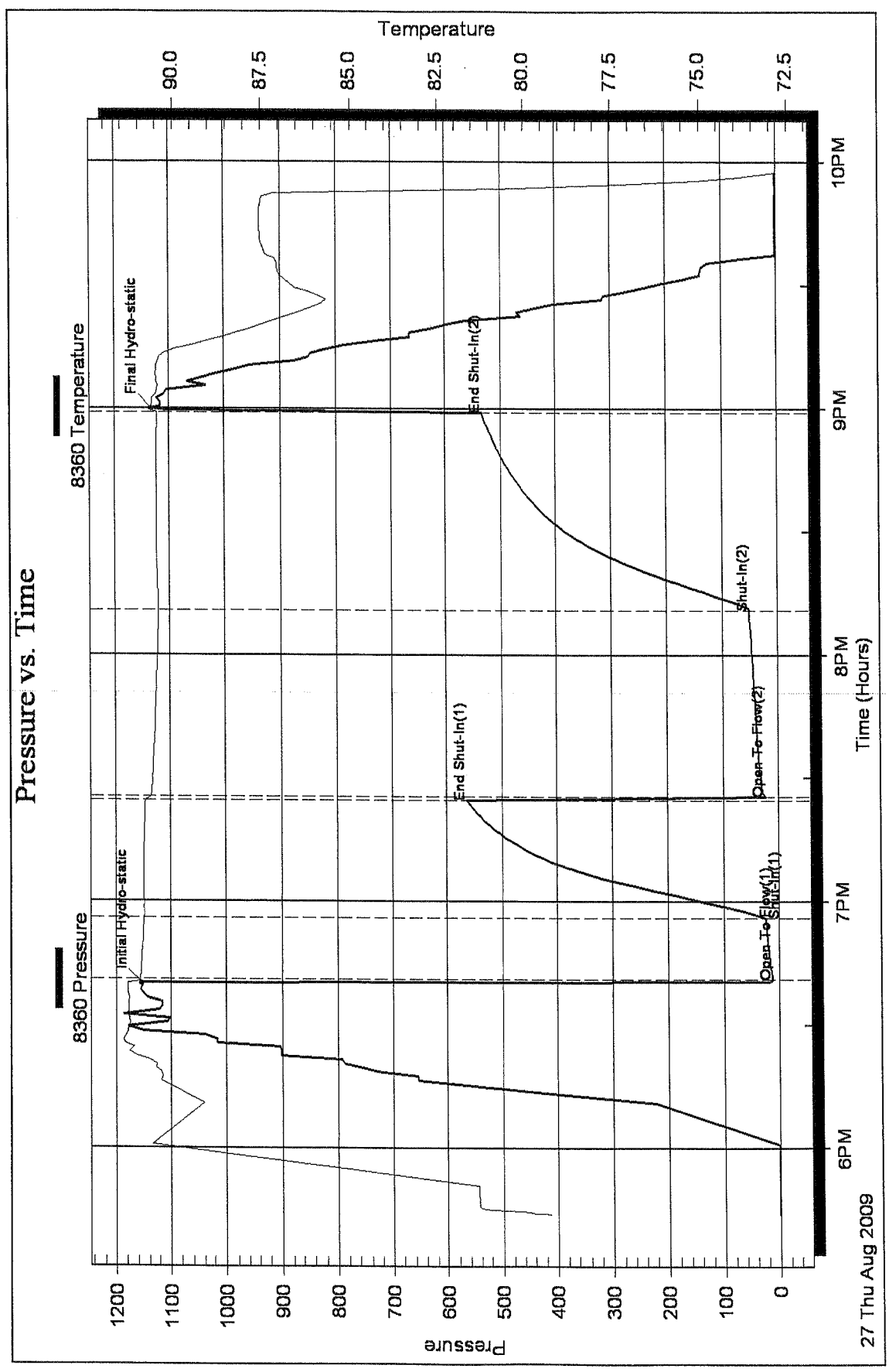
Num Gas Bombs: 0

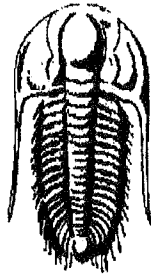
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .145 @ 70F = 50000 ppm chlorides





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt, Inc.**

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047

ATTN: Brad Rine

10-22-19 PawneeKS

J-P UNIT #1

Start Date: 2009.08.28 @ 03:40:54

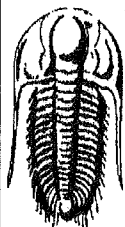
End Date: 2009.08.28 @ 08:36:18

Job Ticket #: 35213 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

Carmen Schmitt, Inc.

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

J-P UNIT #1

10-22-19 PawneeKS

Job Ticket: 35213

DST#: 3

Test Start: 2009.08.28 @ 03:40:54

GENERAL INFORMATION:

Formation: **Ft. Riley**

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

Time Tool Opened: 05:10:19

Time Test Ended: 08:36:18

Test Type: **Conventional Bottom Hole**

Tester: **Brian Fairbank**

Unit No: **41**

Interval: **2370.00 ft (KB) To 2384.00 ft (KB) (TVD)**

Total Depth: **2384.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition:

Reference Elevations: **2090.00 ft (KB)**

2085.00 ft (CF)

KB to GR/CF: **5.00 ft**

Serial #: 8371

Inside

Press@RunDepth: **109.71 psig @ 2371.00 ft (KB)**

Start Date: **2009.08.28**

End Date:

2009.08.28

Start Time: **03:40:54**

End Time:

08:36:18

Capacity: **7000.00 psig**

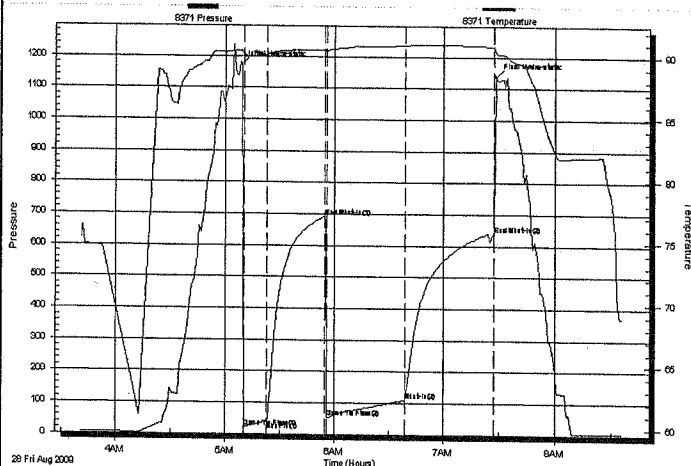
Last Calib.: **2009.08.28**

Time On Btm: **2009.08.28 @ 05:08:49**

Time Off Btm: **2009.08.28 @ 07:28:19**

TEST COMMENT: IFP - BOB 2 min.
ISI - no blow back
FFP - BOB 10 min.
FSI - 2" blow back - died 17 min. TIME - 15-30-45-45

Pressure vs. Time



PRESSURE SUMMARY

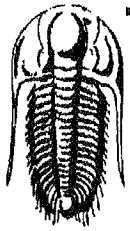
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1171.62	90.48	Initial Hydro-static
2	20.44	90.14	Open To Flow (1)
14	40.41	90.20	Shut-In (1)
46	691.15	90.60	End Shut-In (1)
47	53.22	90.40	Open To Flow (2)
90	109.71	90.94	Shut-In (2)
139	639.12	90.90	End Shut-In (2)
140	1137.55	90.44	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	MW 90%W, 10%M	0.61
90.00	GM 15%G, 85%M	0.44

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 35213

DST#: 3

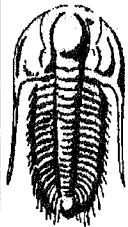
Test Start: 2009.08.28 @ 03:40:54

Tool Information

Drill Pipe:	Length: 2131.00 ft	Diameter: 3.80 inches	Volume: 29.89 bbl	Tool Weight:	2500.00 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: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose:	60000.00 lb
		Total Volume:	31.11 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	38000.00 lb
Depth to Top Packer:	2370.00 ft			Final	38000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	14.00 ft				
Tool Length:	34.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			2355.00	
Hydraulic tool	5.00			2360.00	
Packer	5.00			2365.00	20.00 Bottom Of Top Packer
Packer	5.00			2370.00	
Stubb	1.00			2371.00	
Recorder	0.00	8018	Inside	2371.00	
Recorder	0.00	8371	Inside	2371.00	
Perforations	10.00			2381.00	
Bullnose	3.00			2384.00	14.00 Bottom Packers & Anchor
Total Tool Length:	34.00				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 35213

DST#: 3

Test Start: 2009.08.28 @ 03:40:54

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 10.00 lb/gal

Viscosity: 32.00 sec/qt

Water Loss: in³

Resistivity: ohm.m

Salinity: 98000.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

deg API

Water Salinity: 92000 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	MMV 90%W, 10%M	0.615
90.00	GM 15%G, 85%M	0.443

Total Length: 215.00 ft Total Volume: 1.058 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .147 @ 56F = 92000 ppm chlorides

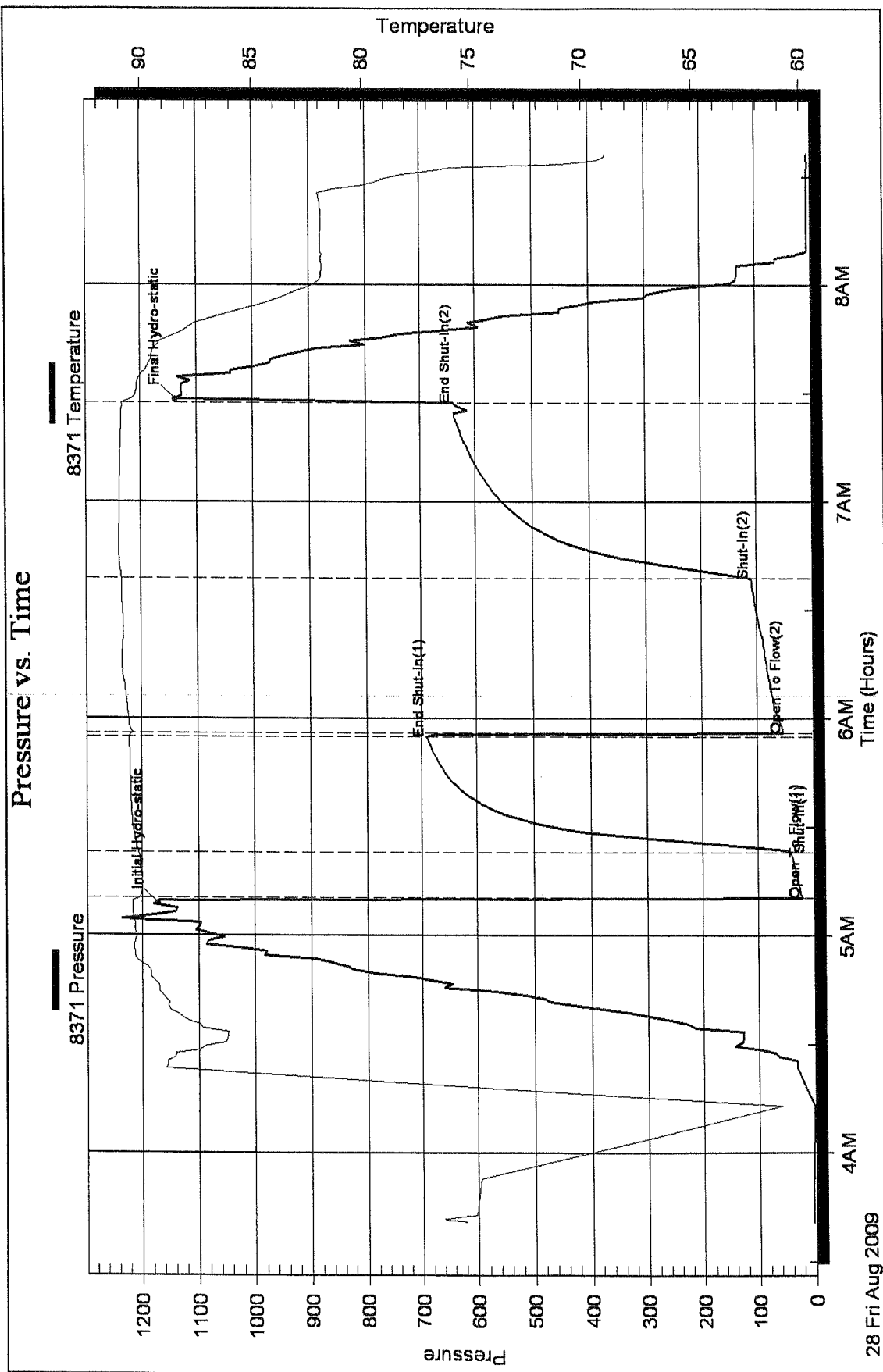
DST Test Number: 3

10-22-19 Paw neeks

Inside Carmen Schmitt, Inc.

Serial #: 8371

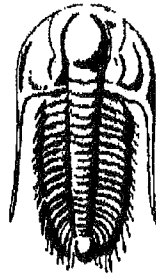
Pressure vs. Time



Ref. No: 35213

Trilobite Testing, Inc

Printed: 2009.09.03 @ 15:12:18 Page 5



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt, Inc.**

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047

ATTN: Brad Rine

10-22-19 PawneeKS

J-P UNIT #1

Start Date: 2009.08.31 @ 04:30:00

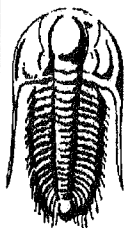
End Date: 2009.08.31 @ 09:48:30

Job Ticket #: 35242 DST #: 4

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Carmen Schmitt, Inc.

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

J-P UNIT #1

10-22-19 PawneeKS

Job Ticket: 35242

DST#: 4

Test Start: 2009.08.31 @ 04:30:00

GENERAL INFORMATION:

Formation: **Swope**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:54:00

Time Test Ended: 09:48:30

Interval: **3947.00 ft (KB) To 4005.00 ft (KB) (TVD)**

Total Depth: 4005.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Reference Elevations: 2090.00 ft (KB)

2085.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8360

Inside

Press@RunDepth: 114.11 psig @ 3949.00 ft (KB)

Start Date: 2009.08.31

End Date:

2009.08.31

Start Time: 04:30:02

End Time:

09:48:30

Capacity: 7000.00 psig

Last Calib.: 2009.08.31

Time On Btm: 2009.08.31 @ 05:53:30

Time Off Btm: 2009.08.31 @ 07:58:30

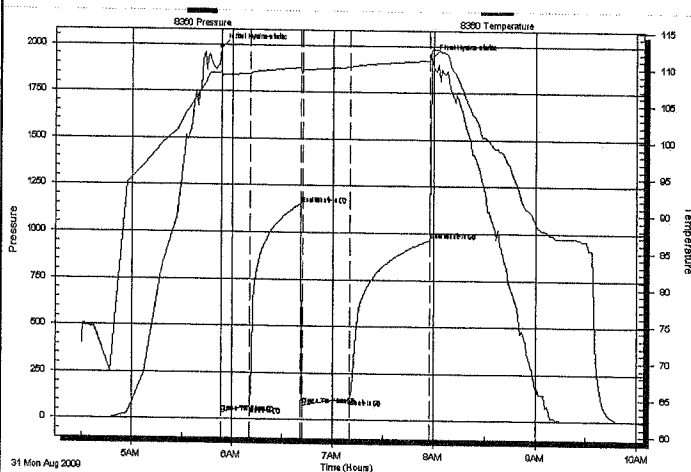
TEST COMMENT: IFP-Weak Surface Blow

ISI-Dead

FFP-Weak Blow, Built to 1-1/2"

FSI-Dead

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1983.97	109.37	Initial Hydro-static
1	35.31	108.57	Open To Flow (1)
17	70.75	109.08	Shut-In (1)
48	1150.04	109.96	End Shut-In (1)
49	78.90	109.64	Open To Flow (2)
77	114.11	110.09	Shut-In (2)
124	963.53	111.07	End Shut-In (2)
125	1936.08	112.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Muddy Water-70%W-39%M	0.59
60.00	Drilling Mud	0.30

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 35242

DST#: 4

Test Start: 2009.08.31 @ 04:30:00

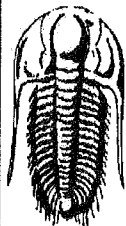
Tool Information

Drill Pipe:	Length: 3698.00 ft	Diameter: 3.80 inches	Volume: 51.87 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 60000.00 lb
		Total Volume: 53.09 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3947.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	79.00 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			3927.00	
Shut In Tool	5.00			3932.00	
Hydraulic tool	5.00			3937.00	
Packer	5.00			3942.00	21.00 Bottom Of Top Packer
Packer	5.00			3947.00	
Stubb	1.00			3948.00	
Perforations	1.00			3949.00	
Recorder	0.00	8360	Inside	3949.00	
Change Over Sub	1.00			3950.00	
Recorder	0.00	6755	Inside	3950.00	
Blank Spacing	31.00			3981.00	
Change Over Sub	1.00			3982.00	
Perforations	20.00			4002.00	
Bullnose	3.00			4005.00	58.00 Bottom Packers & Anchor

Total Tool Length: 79.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 35242

DST#: 4

Test Start: 2009.08.31 @ 04:30:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 77.00 sec/qt

Water Loss: 12.77 in³

Resistivity: ohm.m

Salinity: 5800.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

deg API

Water Salinity:

28000 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	Muddy Water-70%W-39%M	0.590
60.00	Drilling Mud	0.295

Total Length: 180.00 ft Total Volume: 0.885 bbl

Num Fluid Samples: 0

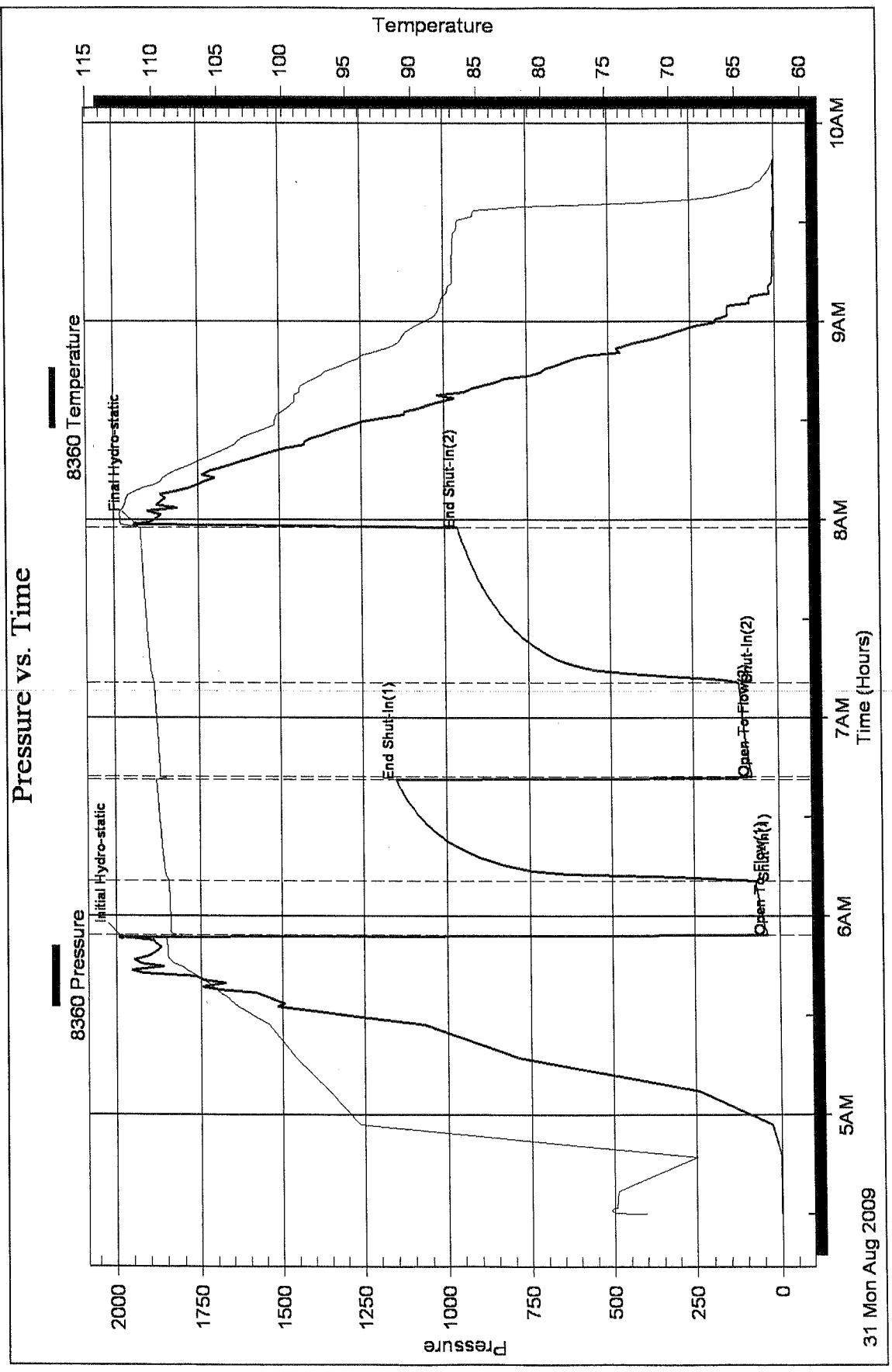
Num Gas Bombs: 0

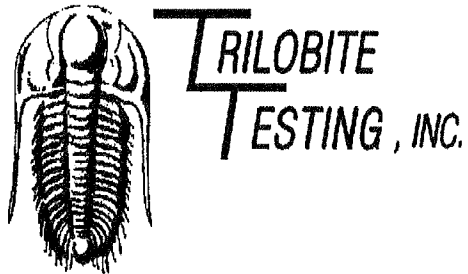
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .272 @ 56F = 28000 ppm chlorides





DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt, Inc.**

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047

ATTN: Brad Rine

10-22-19 PawneeKS

J-P UNIT #1

Start Date: 2009.09.01 @ 02:17:19

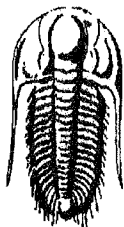
End Date: 2009.09.01 @ 08:52:49

Job Ticket #: 35243 DST #: 5

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Carmen Schmitt, Inc.

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

J-P UNIT #1

10-22-19 PawneeKS

Job Ticket: 35243

DST#: 5

Test Start: 2009.09.01 @ 02:17:19

GENERAL INFORMATION:

Formation: **Cherokee Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:11:19

Time Test Ended: 08:52:49

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Interval: **4188.00 ft (KB) To 4235.00 ft (KB) (TVD)**

Total Depth: 4235.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2090.00 ft (KB)

2085.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8360

Inside

Press@RunDepth: 780.70 psig @ 4190.00 ft (KB)

Start Date: 2009.09.01

End Date:

2009.09.01

Capacity: 7000.00 psig

Last Calib.: 2009.09.01

Start Time: 02:17:21

End Time:

08:52:49

Time On Btm: 2009.09.01 @ 04:10:49

Time Off Btm: 2009.09.01 @ 06:44:49

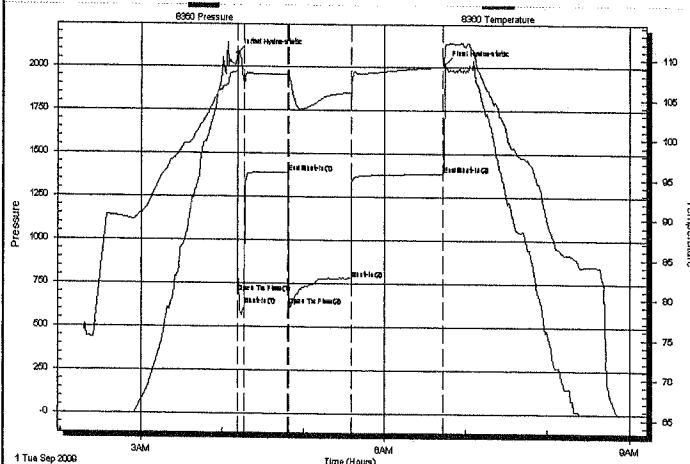
TEST COMMENT: IFP-Strong, BOB in 10 Sec. Gas To Surface in 35 Sec. Gauge Gas, Get Sample.

ISI-Dead

FFP-Gauging Gas

FSI-Blow back Built to 1/2"

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2074.75	108.56	Initial Hydro-static
1	694.12	108.08	Open To Flow (1)
6	623.96	106.34	Shut-In (1)
38	1390.00	108.17	End Shut-In (1)
38	673.23	108.17	Open To Flow (2)
85	780.70	105.85	Shut-In (2)
153	1383.36	109.13	End Shut-In (2)
154	2017.86	111.61	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
280.00	Drilling Mud	1.67

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	62.00	2196.41
Last Gas Rate	1.00	120.00	3863.84
Max. Gas Rate	1.00	120.00	3863.84



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 35243

DST#: 5

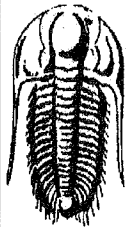
Test Start: 2009.09.01 @ 02:17:19

Tool Information

Drill Pipe:	Length: 3919.00 ft	Diameter: 3.80 inches	Volume: 54.97 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 56.19 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4188.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	47.00 ft			
Tool Length:	75.00 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			4161.00	
Shut In Tool	5.00			4166.00	
Hydraulic tool	5.00			4171.00	
Jars	5.00			4176.00	
Safety Joint	2.00			4178.00	
Packer	5.00			4183.00	28.00 Bottom Of Top Packer
Packer	5.00			4188.00	
Stubb	1.00			4189.00	
Perforations	1.00			4190.00	
Recorder	0.00	8360	Inside	4190.00	
Change Over Sub	1.00			4191.00	
Recorder	0.00	6755	Inside	4191.00	
Blank Spacing	30.00			4221.00	
Change Over Sub	1.00			4222.00	
Perforations	10.00			4232.00	
Bullnose	3.00			4235.00	47.00 Bottom Packers & Anchor
Total Tool Length:		75.00			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 35243

DST#: 5

Test Start: 2009.09.01 @ 02:17:19

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 65.00 sec/qt

Water Loss: 12.18 in³

Resistivity: ohm.m

Salinity: 6300.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: ppm

deg API

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
280.00	Drilling Mud	1.668

Total Length: 280.00 ft Total Volume: 1.668 bbl

Num Fluid Samples: 0

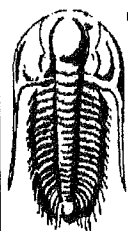
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

GAS RATES

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 35243

DST#: 5

Test Start: 2009.09.01 @ 02:17:19

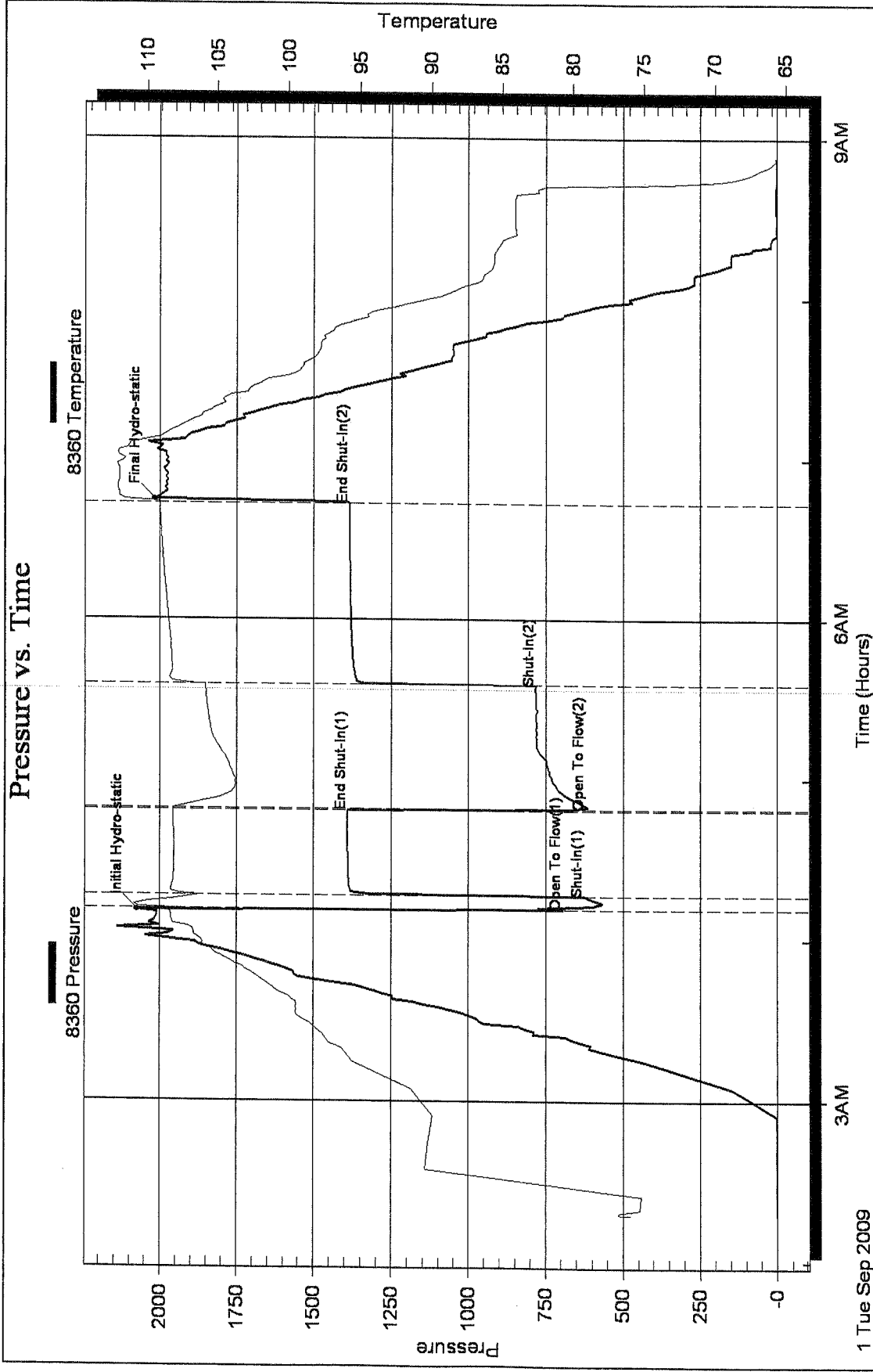
Gas Rates Information

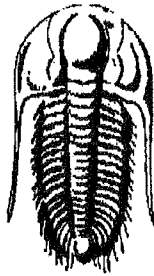
Temperature: 59 deg C
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (mm)	Pressure (kPaa)	Gas Rate (m³/d)
1	5	1.00	62.00	2196.41
2	10	1.00	105.00	3432.61
2	10	1.00	105.00	3432.61
2	20	1.00	110.00	3576.35
2	30	1.00	120.00	3863.84

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt, Inc.**

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047

ATTN: Brad Rine

10-22-19 PawneeKS

J-P UNIT #1

Start Date: 2009.09.01 @ 18:43:39

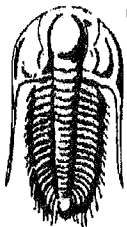
End Date: 2009.09.02 @ 02:32:09

Job Ticket #: 35244 DST #: 6

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Carmen Schmitt, Inc.

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

J-P UNIT #1

10-22-19 PawneeKS

Job Ticket: 35244

DST#: 6

Test Start: 2009.09.01 @ 18:43:39

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:47:39

Time Test Ended: 02:32:09

Interval: **4267.00 ft (KB) To 4280.00 ft (KB) (TVD)**

Total Depth: 4280.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 32

Reference Elevations: 2090.00 ft (KB)

2085.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8360

Inside

Press@RunDepth: 123.45 psig @ 4269.00 ft (KB)

Start Date: 2009.09.01

End Date:

2009.09.02

Start Time: 18:43:41

End Time:

02:32:09

Capacity: 7000.00 psig

Last Calib.: 2009.09.02

Time On Btm: 2009.09.01 @ 20:47:09

Time Off Btm: 2009.09.02 @ 00:47:09

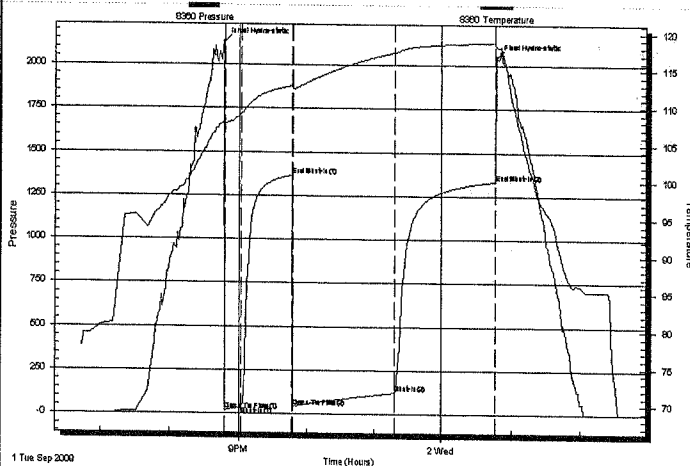
TEST COMMENT: IFF-Weak Blow,Built to 3"

ISI-Dead

FFP-Fair Blow,Built to 6"

FSI-Dead

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2128.05	108.22	Initial Hydro-static
1	19.72	107.52	Open To Flow (1)
15	38.92	109.08	Shut-In (1)
59	1365.97	112.84	End Shut-In (1)
60	43.01	112.44	Open To Flow (2)
152	123.45	117.36	Shut-In (2)
239	1333.53	118.69	End Shut-In (2)
240	2045.94	118.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Drilling Mud	0.15
180.00	Muddy Water-90%W-10%M	0.89

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 35244

DST#: 6

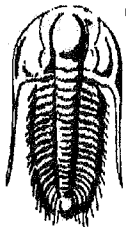
Test Start: 2009.09.01 @ 18:43:39

Tool Information

Drill Pipe:	Length: 4011.00 ft	Diameter: 3.80 inches	Volume: 56.26 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 248.00 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose:	60000.00 lb
		Total Volume:	57.48 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	4267.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	13.00 ft				
Tool Length:	41.00 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			4240.00	
Shut In Tool	5.00			4245.00	
Hydraulic tool	5.00			4250.00	
Jars	5.00			4255.00	
Safety Joint	2.00			4257.00	
Packer	5.00			4262.00	28.00 Bottom Of Top Packer
Packer	5.00			4267.00	
Stubb	1.00			4268.00	
Perforations	1.00			4269.00	
Recorder	0.00	8360	Inside	4269.00	
Recorder	0.00	6755	Inside	4269.00	
Perforations	8.00			4277.00	
Bullnose	3.00			4280.00	13.00 Bottom Packers & Anchor

Total Tool Length: 41.00



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt, Inc.

J-P UNIT #1

P.O. Box 47
915 Harrison
Great Bend, KS 67530-0047
ATTN: Brad Rine

10-22-19 PawneeKS

Job Ticket: 35244

DST#: 6

Test Start: 2009.09.01 @ 18:43:39

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 46.00 sec/qt

Water Loss: 10.38 in³

Resistivity: ohm.m

Salinity: 6400.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

deg API

Water Salinity: 47000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Drilling Mud	0.148
180.00	Muddy Water-90%W-10%M	0.885

Total Length: 210.00 ft Total Volume: 1.033 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .164 @ 64F = 47000 ppm chlorides

Pressure vs. Time

