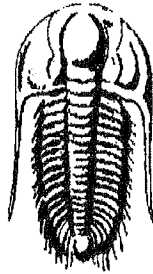


15-065-23539

11-7s-24w

ND



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **A&A Production**

PO Box 100

Hill City, KS 67612

CONFIDENTIAL

FEB 16 2009

ATTN: Herb Deines

KCO

11 7s 24w Graham KS

Anderson #11-2

Start Date: 2009.04.07 @ 01:00:00

End Date: 2009.04.07 @ 09:28:00

Job Ticket #: 34499

DST #: 1

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

A&A Production

Anderson #11-2

11 7s 24w Graham KS

DST # 1

Toronto - LKC "F"

2009.04.07



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

A&A Production

PO Box 100
Hill City, KS 67642

ATTN: Herb Deines

Anderson #11-2

11 7s 24w Graham KS

Job Ticket: 34499

DST#: 1

Test Start: 2009.04.07 @ 01:00:00

GENERAL INFORMATION:

Formation: **Toronto - LKC "F"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:16:30

Time Test Ended: 09:28:00

Interval: **3726.00 ft (KB) To 3842.00 ft (KB) (TVD)**

Total Depth: 3842.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 36

Reference Elevations: 2448.00 ft (KB)

2443.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8366

Inside

Press@RunDepth: 266.94 psig @ 3727.00 ft (KB)

Start Date: 2009.04.07

End Date: 2009.04.07

Start Time: 01:00:05

End Time: 09:27:59

Capacity: 7000.00 psig

Last Calib.: 2009.04.07

Time On Btm: 2009.04.07 @ 04:15:00

Time Off Btm: 2009.04.07 @ 06:53:59

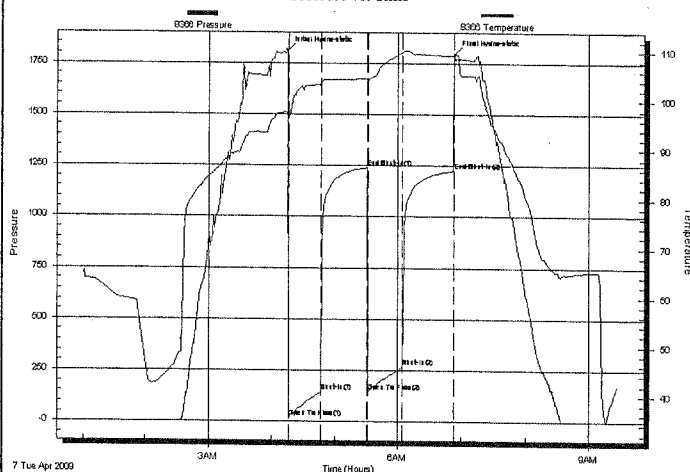
TEST COMMENT: IF: Blow built to BOB in 9 min.

ISI: Bled off, No blow back

FF: Blow built to BOB in 10 min.

FSI: Bled off, No blow back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1809.54	97.75	Initial Hydro-static
2	22.18	97.15	Open To Flow (1)
32	144.95	103.51	Shut-In (1)
76	1239.78	104.53	End Shut-In (1)
77	149.03	104.20	Open To Flow (2)
110	266.94	109.96	Shut-In (2)
158	1224.56	109.26	End Shut-In (2)
159	1794.49	108.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Muddy Water 52%w, 48%w	0.42
280.00	MCW 84%w, 16%w	3.93
180.00	Watery Mud 62%w, 38%w	2.52
45.00	Mud 100%	0.63
0.00	RW = .193 ohms @ 48.6 deg F	0.00
0.00	Chlorides = 59,000 ppm	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

A&A Production

Anderson #11-2

PO Box 100
Hill City, KS 67642

11 7s 24w Graham KS

Job Ticket: 34499

DST#:1

ATTN: Herb Deines

Test Start: 2009.04.07 @ 01:00:00

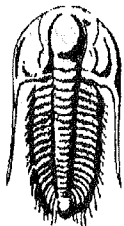
Tool Information

Drill Pipe:	Length: 3732.00 ft	Diameter: 3.80 inches	Volume: 52.35 bbl	Tool Weight:	1500.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	52000.00 lb
		Total Volume:	52.35 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial	48000.00 lb
Depth to Top Packer:	3726.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	116.00 ft				
Tool Length:	136.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
S.I. Tool	5.00			3711.00	
HYD S.I. Tool	5.00			3716.00	
Packer	5.00			3721.00	20.00 Bottom Of Top Packer
Packer	5.00			3726.00	
Stubb	1.00			3727.00	
Recorder	0.00	8366	Inside	3727.00	
Recorder	0.00	8320	Inside	3727.00	
Perforations	10.00			3737.00	
Blank Spacing	95.00			3832.00	
Perforations	7.00			3839.00	
Bullnose	3.00			3842.00	116.00 Bottom Packers & Anchor

Total Tool Length: 136.00



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

A&A Production

Anderson #11-2

PO Box 100
Hill City, KS 67642

11 7s 24w Graham KS

Job Ticket: 34499

DST#: 1

ATTN: Herb Deines

Test Start: 2009.04.07 @ 01:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 47.00 sec/qt

Water Loss: 9.57 in³

Resistivity: ohm.m

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

Oil API:

deg API

Water Salinity: 59000 ppm

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Muddy Water 52%m, 48%w	0.421
280.00	MCW 84%w, 16%m	3.928
180.00	Watery Mud 62%m, 38%w	2.525
45.00	Mud 100%	0.631
0.00	RVV = .193 ohms @ 48.6 deg F	0.000
0.00	Chlorides = 59,000 ppm	0.000

Total Length: 535.00 ft

Total Volume: 7.505 bbl

Num Fluid Samples: 0

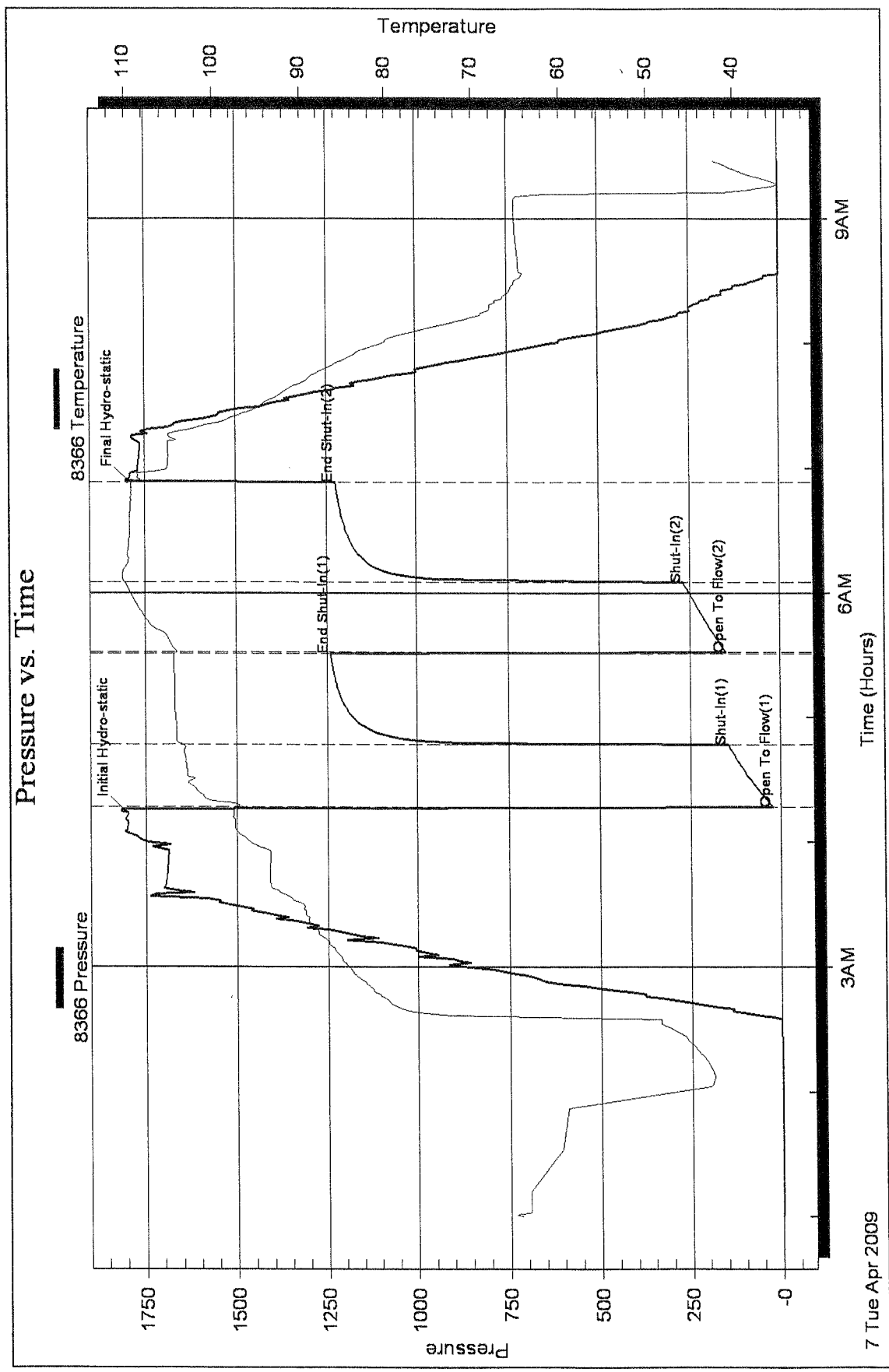
Num Gas Bombs: 0

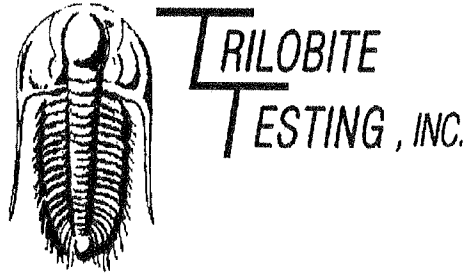
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **A&A Production**

PO Box 100
Hill City, KS 67642

ATTN: Herb Deines

11 7s 24w Graham KS

Anderson #11-2

Start Date: 2009.04.07 @ 21:46:00

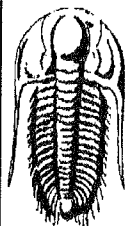
End Date: 2009.04.08 @ 06:15:30

Job Ticket #: 34500 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

A&A Production

PO Box 100
Hill City, KS 67642

ATTN: Herb Deines

Anderson #11-2

11 7s 24w Graham KS

Job Ticket: 34500

DST#: 2

Test Start: 2009.04.07 @ 21:46:00

GENERAL INFORMATION:

Formation: **LKC "I - J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:04:00

Time Test Ended: 06:15:30

Test Type: Conventional Bottom Hole

Tester: James Winder

Unit No: 36

Interval: 3893.00 ft (KB) To 3926.00 ft (KB) (TVD)

Total Depth: 3926.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2448.00 ft (KB)

2443.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8366

Inside

Press@RunDepth: 44.93 psig @ 3894.00 ft (KB)

Start Date: 2009.04.07

End Date: 2009.04.08

Start Time: 21:46:05

End Time: 06:15:29

Capacity: 7000.00 psig

Last Calib.: 2009.04.08

Time On Btm: 2009.04.08 @ 00:02:30

Time Off Btm: 2009.04.08 @ 03:35:59

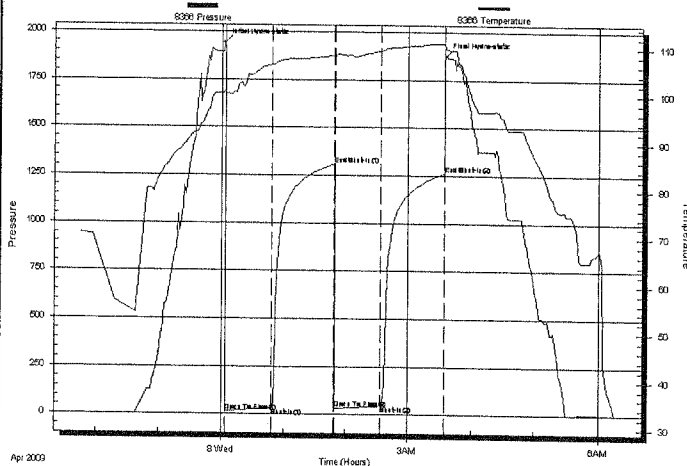
TEST COMMENT: IF: Blow built to 3"

IS: Bled off, No blow back

FF: Blow built to 1 1/2"

FS: Bled off, No blow back

Pressure vs. Time



PRESSURE SUMMARY

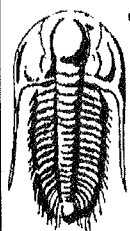
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1939.55	100.75	Initial Hydro-static
2	13.43	100.02	Open To Flow (1)
47	30.67	106.49	Shut-In (1)
107	1306.48	108.35	End Shut-In (1)
108	32.04	107.95	Open To Flow (2)
152	44.93	109.38	Shut-In (2)
213	1260.19	110.96	End Shut-In (2)
214	1875.35	109.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
68.00	Muddy Water 60%w, 40%m	0.95
0.00	RW = .820 ohms @ 32 deg F	0.00
0.00	Chlorides = 18,000 ppm	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

A&A Production

Anderson #11-2

PO Box 100
Hill City, KS 67642

11 7s 24w Graham KS

ATTN: Herb Deines

Job Ticket: 34500

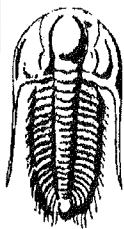
DST#: 2

Test Start: 2009.04.07 @ 21:46:00

Tool Information

Drill Pipe:	Length: 3888.00 ft	Diameter: 3.80 inches	Volume: 54.54 bbl	Tool Weight:	1500.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	52000.00 lb
			Total Volume: 54.54 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial	46000.00 lb
Depth to Top Packer:	3893.00 ft			Final	46000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	33.00 ft				
Tool Length:	53.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
S.I. Tool	5.00			3878.00		
HYD S.I. Tool	5.00			3883.00		
Packer	5.00			3888.00	20.00	Bottom Of Top Packer
Packer	5.00			3893.00		
Stubb	1.00			3894.00		
Recorder	0.00	8366	Inside	3894.00		
Recorder	0.00	8320	Inside	3894.00		
Perforations	29.00			3923.00		
Bullnose	3.00			3926.00	33.00	Bottom Packers & Anchor
Total Tool Length:	53.00					



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

A&A Production

Anderson #11-2

PO Box 100
Hill City, KS 67642

11 7s 24w Graham KS

Job Ticket: 34500

DST#: 2

ATTN: Herb Deines

Test Start: 2009.04.07 @ 21:46:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 47.00 sec/qt

Water Loss: 9.46 in³

Resistivity: ohm.m

Salinity: 3000.00 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: 18000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
68.00	Muddy Water 60%w, 40%m	0.954
0.00	RW = .820 ohms @ 32 deg F	0.000
0.00	Chlorides = 18,000 ppm	0.000

Total Length: 68.00 ft

Total Volume: 0.954 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8366

Inside A&A Production

11 7s 24w Graham KS

DST Test Number: 2

Pressure vs. Time

