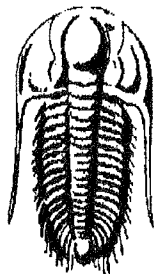


15-179-21221

25-9s-26w

IND



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **A&A Production**

P O Box 100
Hill City, Ks 67642

ATTN: Andy Anderson

25-9s-26w Sheridan

Breedan #1

Start Date: 2009.01.25 @ 05:32:24

End Date: 2009.01.25 @ 13:17:18

Job Ticket #: 36276 DST #: 1

KCC
MAR 13 2009
CONFIDENTIAL

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

A&A Production

Breedan #1

25-9s-26w Sheridan

DST # 1

Toronto

2009.01.25



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

A&A Production

Breedan #1

P O Box 100
Hill City, Ks 67642

25-9s-26w Sheridan

Job Ticket: 36276

DST#: 1

ATTN: Andy Anderson

Test Start: 2009.01.25 @ 05:32:24

GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:47:49

Time Test Ended: 13:17:18

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 42

Interval: **3837.00 ft (KB) To 3875.00 ft (KB) (TVD)**

Reference Elevations: 2624.00 ft (KB)

Total Depth: 3875.00 ft (KB) (TVD)

2619.00 ft (CF)

Hole Diameter: 7.85 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8365 Inside

Press@RunDepth: 56.75 psig @ 3848.01 ft (KB)

Capacity: 7000.00 psig

Start Date: 2009.01.25

End Date: 2009.01.25

Last Calib.: 2009.01.25

Start Time: 05:32:24

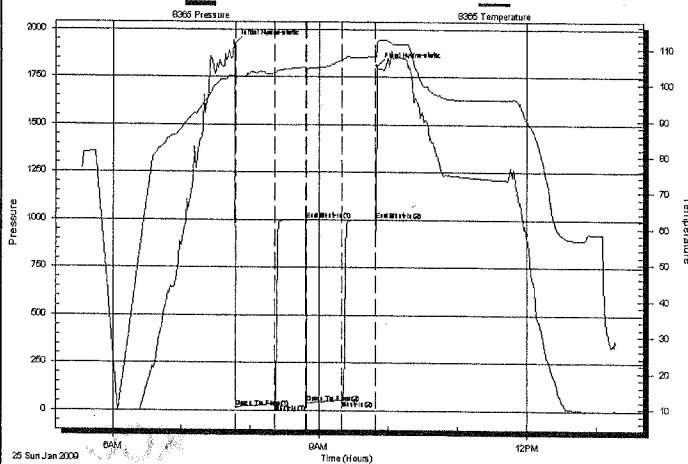
End Time: 13:17:18

Time On Btm: 2009.01.25 @ 07:46:49

Time Off Btm: 2009.01.25 @ 09:50:18

TEST COMMENT: IFP-wk bl thru-out 1/2" to 2 1/4" bl
FFP-wk bl thru-out surface to 1/4" bl
Times 30-30-30-30

Pressure vs. Time



PRESSURE SUMMARY

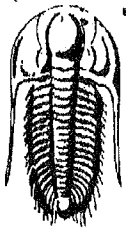
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1923.62	102.77	Initial Hydro-static
1	13.71	101.47	Open To Flow (1)
35	37.46	103.13	Shut-In (1)
62	1001.11	104.82	End Shut-In (1)
62	38.03	104.39	Open To Flow (2)
93	56.75	106.86	Shut-In (2)
123	1000.45	107.81	End Shut-In (2)
124	1808.60	109.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	MW 10% M90% W w/show of oil in tool	1.12

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

Breedan #1

P O Box 100
Hill City, Ks 67642

25-9s-26w Sheridan

Job Ticket: 36276

DST#: 1

ATTN: Andy Anderson

Test Start: 2009.01.25 @ 05:32:24

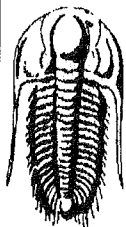
Tool Information

Drill Pipe:	Length: 3829.00 ft	Diameter: 3.80 inches	Volume: 53.71 bbl	Tool Weight:	2200.00 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: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	65000.00 lb
			<u>Total Volume: 53.71 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial	59000.00 lb
Depth to Top Packer:	3837.00 ft			Final	59000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	38.02 ft				
Tool Length:	59.02 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			3817.00	
Shut In Tool	5.00			3822.00	
Hydraulic tool	5.00			3827.00	
Packer	5.00			3832.00	21.00 Bottom Of Top Packer
Packer	5.00			3837.00	
Stubb	1.00			3838.00	
Perforations	10.00			3848.00	
Recorder	0.01	8365	Inside	3848.01	
Recorder	0.01	6625	Outside	3848.02	
Perforations	24.00			3872.02	
Bullnose	3.00			3875.02	38.02 Bottom Packers & Anchor

Total Tool Length: 59.02



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

FLUID SUMMARY

A&A Production

Breedan #1

P O Box 100
Hill City, Ks 67642

25-9s-26w Sheridan

Job Ticket: 36276

DST#: 1

ATTN: Andy Anderson

Test Start: 2009.01.25 @ 05:32:24

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 59.00 sec/qt

Water Loss: 8.71 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: 55000 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
80.00	MMV 10% M90% W w/show of oil in tool	1.122

Total Length: 80.00 ft

Total Volume: 1.122 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

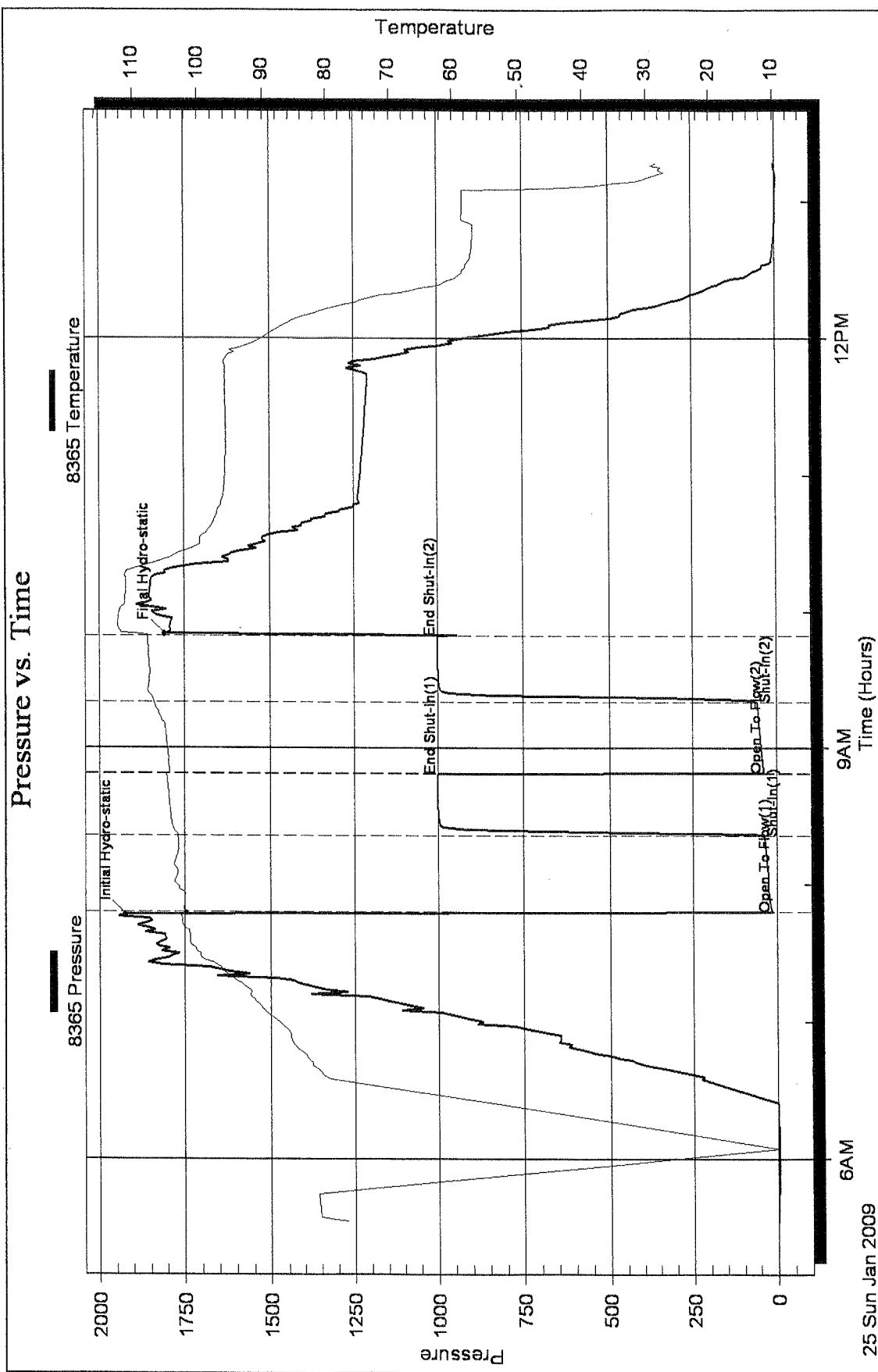
Serial #:

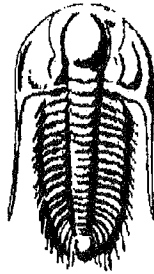
Laboratory Name:

Laboratory Location:

Recovery Comments: RW .21 @ 45F

Pressure vs. Time





TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **A&A Production**

P O Box 100
Hill City, Ks 67642

ATTN: Andy Anderson

25-9s-26w Sheridan

Breedan #1

Start Date: 2009.01.26 @ 03:40:23

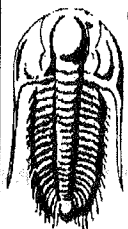
End Date: 2009.01.26 @ 11:18:47

Job Ticket #: 36277 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

P O Box 100
Hill City, Ks 67642

ATTN: Andy Anderson

Breedan #1

25-9s-26w Sheridan

Job Ticket: 36277

DST#: 2

Test Start: 2009.01.26 @ 03:40:23

GENERAL INFORMATION:

Formation: **LKC "C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:50:48

Time Test Ended: 11:18:47

Interval: **3895.00 ft (KB) To 3912.00 ft (KB) (TVD)**

Total Depth: 3912.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole

Tester: Ray Schwager

Unit No: 42

Reference Elevations: 2624.00 ft (KB)

2619.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8365

Inside

Press@RunDepth: 342.58 psig @ 3896.01 ft (KB)

Start Date: 2009.01.26

End Date:

2009.01.26

Start Time: 03:40:23

End Time:

11:18:47

Capacity: 7000.00 psig

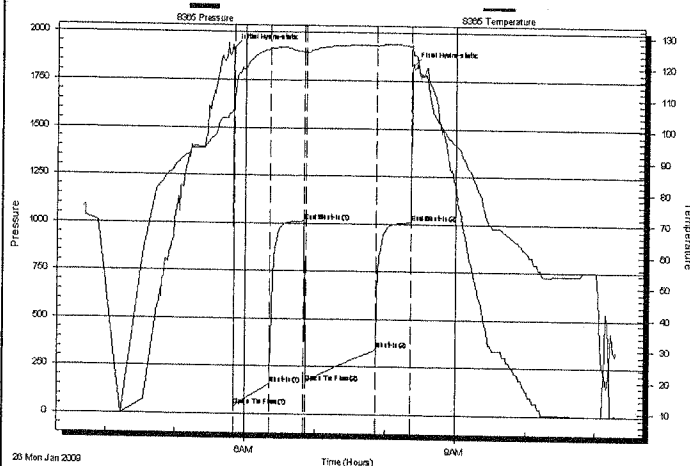
Last Calib.: 2009.01.26

Time On Btm: 2009.01.26 @ 05:49:48

Time Off Btm: 2009.01.26 @ 08:23:47

TEST COMMENT: IFF-strg bl in 3 min
FFP-strg bl in 6 min
Times 30-30-60-30
ISIP-3/4"bl bk, FSIP-3/4"bl bk

Pressure vs. Time



PRESSURE SUMMARY

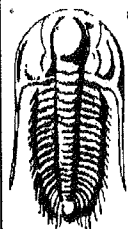
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1915.48	106.64	Initial Hydro-static
1	40.40	109.02	Open To Flow (1)
32	157.46	125.54	Shut-In (1)
61	1011.12	124.76	End Shut-In (1)
62	168.95	124.49	Open To Flow (2)
122	342.58	127.23	Shut-In (2)
153	1008.21	126.96	End Shut-In (2)
154	1832.70	124.22	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	255' GIP	0.00
105.00	CO	1.47
124.00	HO&GCM 20% G20% O50% M	1.74
186.00	O&GCMW 10% G10% O20% M60% W	2.61
248.00	SOCW 1% O99% W	3.48

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

Breedan #1

P O Box 100
Hill City, Ks 67642

25-9s-26w Sheridan

Job Ticket: 36277

DST#: 2

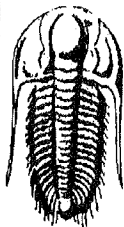
ATTN: Andy Anderson

Test Start: 2009.01.26 @ 03:40:23

Tool Information

Drill Pipe:	Length: 3888.00 ft	Diameter: 3.80 inches	Volume: 54.54 bbl	Tool Weight:	2200.00 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: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 54.54 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial	47000.00 lb
Depth to Top Packer:	3895.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	17.02 ft				
Tool Length:	38.02 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			3875.00	
Shut In Tool	5.00			3880.00	
Hydraulic tool	5.00			3885.00	
Packer	5.00			3890.00	21.00 Bottom Of Top Packer
Packer	5.00			3895.00	
Stubb	1.00			3896.00	
Recorder	0.01	8365	Inside	3896.01	
Recorder	0.01	6625	Outside	3896.02	
Perforations	13.00			3909.02	
Bullnose	3.00			3912.02	17.02 Bottom Packers & Anchor
Total Tool Length:	38.02				



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

A&A Production

Breedan #1

P O Box 100
Hill City, Ks 67642

25-9s-26w Sheridan

Job Ticket: 36277

DST#: 2

ATTN: Andy Anderson

Test Start: 2009.01.26 @ 03:40:23

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 59.00 sec/qt

Water Loss: 8.69 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:

33 deg API

Water Salinity:

58000 ppm

ft

bbl

psig

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	255' GIP	0.000
105.00	CO	1.473
124.00	HO&GCM 20%G20%O50%M	1.739
186.00	O&GCMW 10%G10%O20%M60%W	2.609
248.00	SOCW 1%O99%W	3.479

Total Length: 663.00 ft

Total Volume: 9.300 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

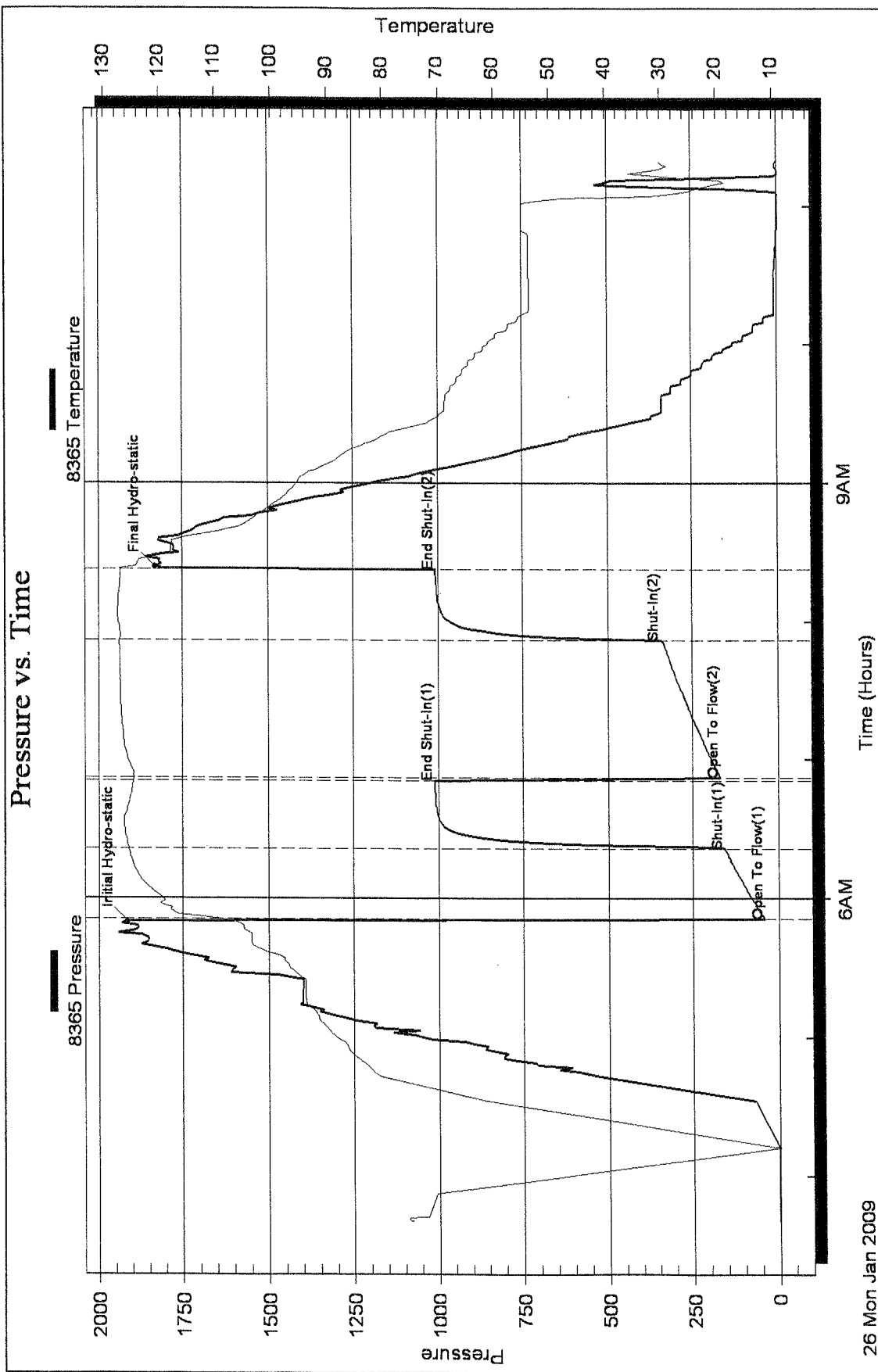
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW.13 @70F

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **A&A Production**

P O Box 100
Hill City, Ks 67642

ATTN: Andy Anderson

25-9s-26w Sheridan

Breedan #1

Start Date: 2009.01.27 @ 23:26:43

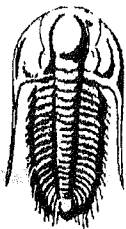
End Date: 2009.01.28 @ 08:20:08

Job Ticket #: 36278 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

A&A Production

Breedan #1

P O Box 100
Hill City, Ks 67642

25-9s-26w Sheridan

Job Ticket: 36278

DST#: 3

ATTN: Andy Anderson

Test Start: 2009.01.27 @ 23:26:43

GENERAL INFORMATION:

Formation: LKC H-Base

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:10:08

Time Test Ended: 08:20:08

Interval: 3990.00 ft (KB) To 4105.00 ft (KB) (TVD)

Total Depth: 4156.00 ft (KB) (TVD)

Hole Diameter: 7.85 inches Hole Condition: Fair

Test Type: Conventional Straddle

Tester: Ray Schwager

Unit No: 42

Reference Elevations: 2624.00 ft (KB)

2619.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8365

Inside

Press@RunDepth: 836.21 psig @ 3998.01 ft (KB)

Start Date: 2009.01.27

End Date:

2009.01.28

Start Time: 23:26:43

End Time:

08:20:08

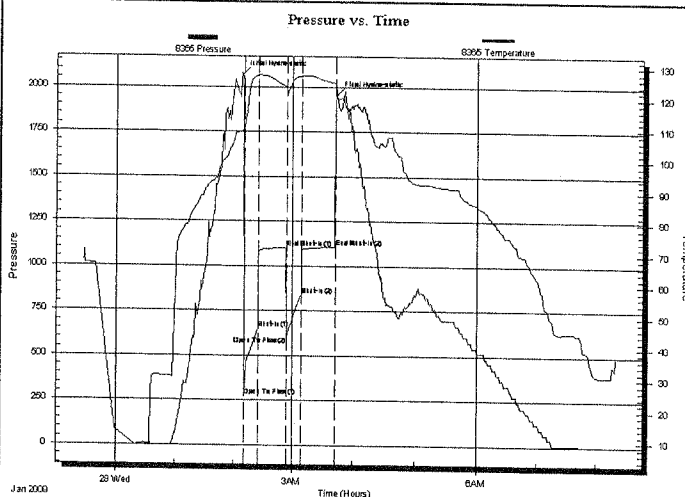
Capacity: 7000.00 psig

Last Calib.: 2009.01.28

Time On Btm: 2009.01.28 @ 02:08:38

Time Off Btm: 2009.01.28 @ 03:44:07

TEST COMMENT: IFP-strg bl thru-out
FFP-strg bl thru-out
Times 15-30-15-30
ISIP-strg bl bk in 9min, FSIP-strg bl bk in 3 min



PRESSURE SUMMARY

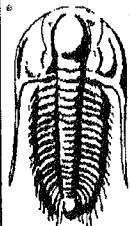
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2067.94	109.58	Initial Hydro-static
2	273.60	109.90	Open To Flow (1)
16	648.76	127.24	Shut-In (1)
45	1100.64	123.77	End Shut-In (1)
46	607.23	123.41	Open To Flow (2)
60	836.21	127.01	Shut-In (2)
94	1105.92	124.90	End Shut-In (2)
96	1953.93	121.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	1615' GIP	0.00
1860.00	CO	26.09
372.00	MGO 25%G10%M65%O	5.22

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

Breedan #1

P O Box 100
Hill City, Ks 67642

25-9s-26w Sheridan

Job Ticket: 36278

DST#: 3

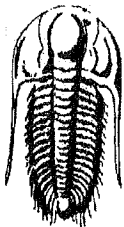
ATTN: Andy Anderson

Test Start: 2009.01.27 @ 23:26:43

Tool Information

Drill Pipe:	Length: 3982.00 ft	Diameter: 3.80 inches	Volume: 55.86 bbl	Tool Weight:	2200.00 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: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	65000.00 lb	
			Total Volume:	55.86 bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial	50000.00 lb	
Depth to Top Packer:	3990.00 ft			Final	58000.00 lb	
Depth to Bottom Packer:	4105.01 ft					
Interval between Packers:	115.01 ft					
Tool Length:	191.02 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			3970.00	
Shut In Tool	5.00			3975.00	
Hydraulic tool	5.00			3980.00	
Packer	5.00			3985.00	21.00 Bottom Of Top Packer
Packer	5.00			3990.00	
Stubb	1.00			3991.00	
Perforations	7.00			3998.00	
Recorder	0.01	8365	Inside	3998.01	
Blank Spacing	93.00			4091.01	
Perforations	10.00			4101.01	
Blank Off Sub	1.00			4102.01	
Blank Spacing	3.00			4105.01	115.01 Tool Interval
Packer	5.00			4110.01	
Stubb	1.00			4111.01	
Perforations	13.00			4124.01	
Recorder	0.01	6625	Below	4124.02	
Blank Spacing	33.00			4157.02	
Bullnose	3.00			4160.02	55.01 Bottom Packers & Anchor
Total Tool Length:		191.02			



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

A&A Production

Breedan #1

P O Box 100
Hill City, Ks 67642

25-9s-26w Sheridan

Job Ticket: 36278

DST#: 3

ATTN: Andy Anderson

Test Start: 2009.01.27 @ 23:26:43

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 51.00 sec/qt

Water Loss: 8.86 in³

Resistivity: ohm.m

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

39 deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	1615'GIP	0.000
1860.00	CO	26.091
372.00	MGO 25%G10%M65%O	5.218

Total Length: 2232.00 ft

Total Volume: 31.309 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

DST Test Number: 3

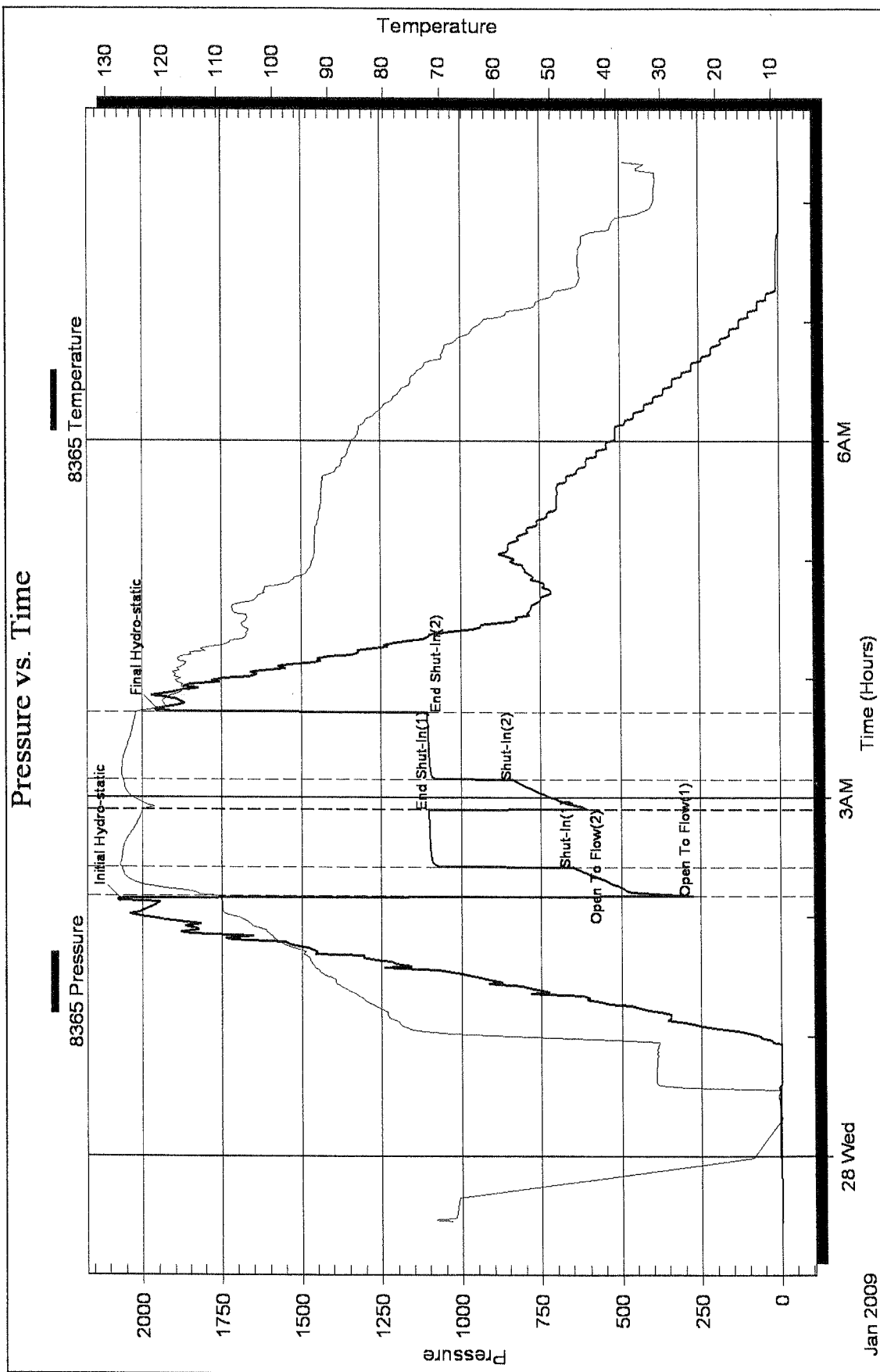
25-9s-26w Sheridan

A&A Production

Inside

Serial #: 8365

Pressure vs. Time



Ref. No: 36278

Trilobite Testing, Inc