

**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc**

9915 W 21st Street North
Ste B
Wichita KS 67205

ATTN: Jeff Mowry

Virginia K #18-1

18-14s-19w Ellis,KS

Start Date: 2012.03.05 @ 10:30:34

End Date: 2012.03.05 @ 18:49:28

Job Ticket #: 46260 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

ORIGINAL

Printed: 2012.03.09 @ 15:35:16

IA Operating Inc

18-14s-19w Ellis,KS

Virginia K #18-1

DST # 1

LKC C-D

2012.03.05



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc

18-14s-19w Ellis,KS

9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

Virginia K #18-1

Job Ticket: 46260 DST#: 1

Test Start: 2012.03.05 @ 10:30:34

Tool Information

Drill Pipe:	Length: 3515.00 ft	Diameter: 3.80 inches	Volume: 49.31 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: 30.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 49.31 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	3535.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	62.00 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			3515.00	
Shut In Tool	5.00			3520.00	
Hydraulic tool	5.00			3525.00	
Packer	5.00			3530.00	21.00 Bottom Of Top Packer
Packer	5.00			3535.00	
Stubb	1.00			3536.00	
Perforations	5.00			3541.00	
Recorder	0.00	6625	Inside	3541.00	
Recorder	0.00	8700	Outside	3541.00	
Blank Spacing	32.00			3573.00	
Bullnose	3.00			3576.00	41.00 Bottom Packers & Anchor

Total Tool Length: 62.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc

18-14s-19w Ellis,KS

9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

Virginia K #18-1

Job Ticket: 46260

DST#: 1

Test Start: 2012.03.05 @ 10:30:34

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

126000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.74 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Gas to surface	0.000
1280.00	CO	17.534
120.00	SOCMW 4%O10%M86%W	1.683

Total Length: 1400.00 ft Total Volume: 19.217 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .06@65F



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

IA Operating Inc
 9915 W 21st Street North
 Ste B
 Wichita KS 67205
 ATTN: Jeff Mowry

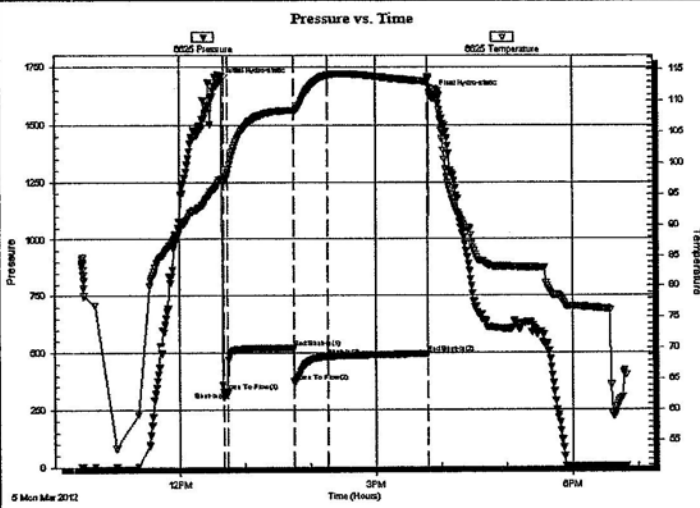
18-14s-19w Ellis,KS
Virginia K #18-1
 Job Ticket: 46260 DST#: 1
 Test Start: 2012.03.05 @ 10:30:34

GENERAL INFORMATION:

Formation: **LKC C-D**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:40:29
 Time Test Ended: 18:49:28
 Interval: **3535.00 ft (KB) To 3576.00 ft (KB) (TVD)**
 Total Depth: **3576.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ray Schwager
 Unit No: 42
 Reference Elevations: 2223.00 ft (KB)
 2215.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 6625 Inside
 Press@RunDepth: 484.25 psig @ 3541.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.03.05 End Date: 2012.03.05 Last Calib.: 2012.03.05
 Start Time: 10:30:34 End Time: 18:49:28 Time On Btm: 2012.03.05 @ 12:37:59
 Time Off Btm: 2012.03.05 @ 15:52:28

TEST COMMENT: 5-IFP-strg bl thru-out
 60-ISIP-strg bl bk
 30-FFP-strg bl GTS in 10 min, to w k to gauge
 90-FSIP-strg bl bk



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1686.93	97.35	Initial Hydro-static
3	331.98	97.17	Open To Flow (1)
7	329.94	98.60	Shut-In(1)
67	522.86	108.49	End Shut-In(1)
68	374.91	108.46	Open To Flow (2)
98	484.25	114.07	Shut-In(2)
189	496.05	113.05	End Shut-In(2)
195	1631.13	110.38	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
0.00	Gas to surface	0.00
1280.00	CO	17.53
120.00	SOCMV 4%O10%M86%W	1.68

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

Serial #: 6625

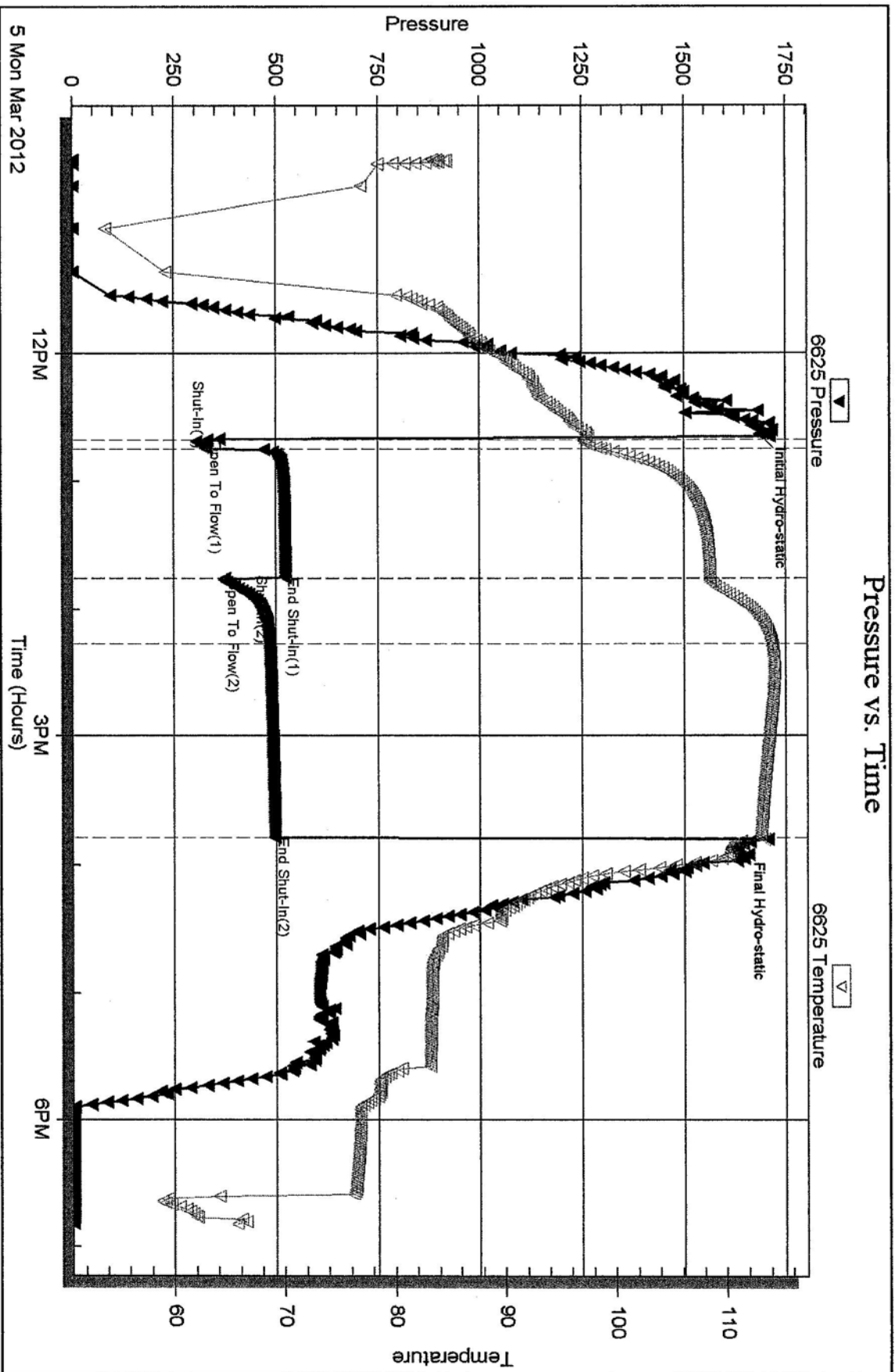
Inside

JA Operating Inc

Virginia K #18-1

DST Test Number: 1

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 46260

Printed: 2012.03.09 @ 15:35:19



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc**

9915 W 21st Street North
Ste B
Wichita KS 67205

ATTN: Jeff Mowry

Virginia K #18-1

18-14s-19w Ellis,KS

Start Date: 2012.03.06 @ 02:45:37

End Date: 2012.03.06 @ 11:09:01

Job Ticket #: 46261 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.03.09 @ 15:35:44

IA Operating Inc
18-14s-19w Ellis,KS
Virginia K #18-1
DST # 2
LKC F-G
2012.03.06



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc

18-14s-19w Ellis, KS

9915 W 21st Street North

Virginia K #18-1

Ste B

Job Ticket: 46261

DST#: 2

Wichita KS 67205

ATTN: Jeff Mowry

Test Start: 2012.03.06 @ 02:45:37

Tool Information

Drill Pipe:	Length: 3550.00 ft	Diameter: 3.80 inches	Volume: 49.80 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: 30.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
		Total Volume:	49.80 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3576.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	54.00 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
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Change Over Sub	1.00			3556.00	
Shut In Tool	5.00			3561.00	
Hydraulic tool	5.00			3566.00	
Packer	5.00			3571.00	21.00 Bottom Of Top Packer
Packer	5.00			3576.00	
Stubb	1.00			3577.00	
Perforations	1.00			3578.00	
Recorder	0.00	6625	Inside	3578.00	
Recorder	0.00	8700	Outside	3578.00	
Blank Spacing	33.00			3611.00	
Perforations	16.00			3627.00	
Bullnose	3.00			3630.00	54.00 Bottom Packers & Anchor

Total Tool Length: 75.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc

18-14s-19w Ellis,KS

9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

Virginia K #18-1

Job Ticket: 46261

DST#: 2

Test Start: 2012.03.06 @ 02:45:37

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 60.00 sec/qt

Water Loss: 7.75 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: 40 deg API

Water Salinity: 126000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	520'GIP	0.000
75.00	CO	0.631
535.00	O&GCMW 10%G4%O10%M76%W	7.505
190.00	Water	2.665

Total Length: 800.00 ft Total Volume: 10.801 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW.06@70F



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc
9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

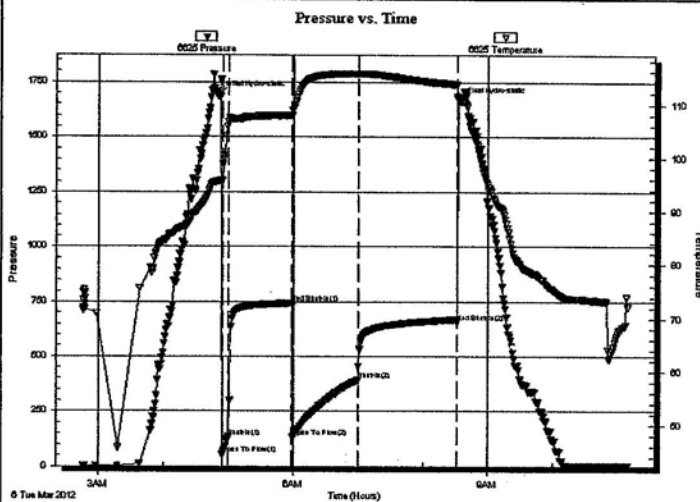
18-14s-19w Ellis,KS
Virginia K #18-1
Job Ticket: 46261 DST#: 2
Test Start: 2012.03.06 @ 02:45:37

GENERAL INFORMATION:

Formation: **LKC F-G**
Deviated: **No** Whipstock: ft (KB)
Time Tool Opened: 04:54:02
Time Test Ended: 11:09:01
Interval: **3576.00 ft (KB) To 3630.00 ft (KB) (TVD)**
Total Depth: **3630.00 ft (KB) (TVD)**
Hole Diameter: **7.88 inches** Hole Condition: **Fair**
Test Type: **Conventional Bottom Hole (Reset)**
Tester: **Ray Schwager**
Unit No: **42**
Reference Elevations: **2223.00 ft (KB)**
2215.00 ft (CF)
KB to GR/CF: **8.00 ft**

Serial #: 6625 **Inside**
Press@RunDepth: **393.83 psig @ 3578.00 ft (KB)** Capacity: **8000.00 psig**
Start Date: **2012.03.06** End Date: **2012.03.06** Last Calib.: **2012.03.06**
Start Time: **02:45:37** End Time: **11:09:01** Time On Btm: **2012.03.06 @ 04:51:02**
Time Off Btm: **2012.03.06 @ 08:34:01**

TEST COMMENT: 5-IFP-strg bl in 3 min
60-ISIP-no bl
60-FFP-strg bl in 7 min
90-FSIP-strg bl bk



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1689.74	95.68	Initial Hydro-static
3	54.83	95.71	Open To Flow (1)
9	133.75	106.81	Shut-In(1)
68	745.08	107.92	End Shut-In(1)
69	132.64	109.05	Open To Flow (2)
129	393.83	115.73	Shut-In(2)
220	659.15	113.73	End Shut-In(2)
223	1664.21	110.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	520'GIP	0.00
75.00	CO	0.63
535.00	O&GCMW 10%G4%O10%M76%W	7.50
190.00	Water	2.67

* Recovery from multiple tests

Gas Rates

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

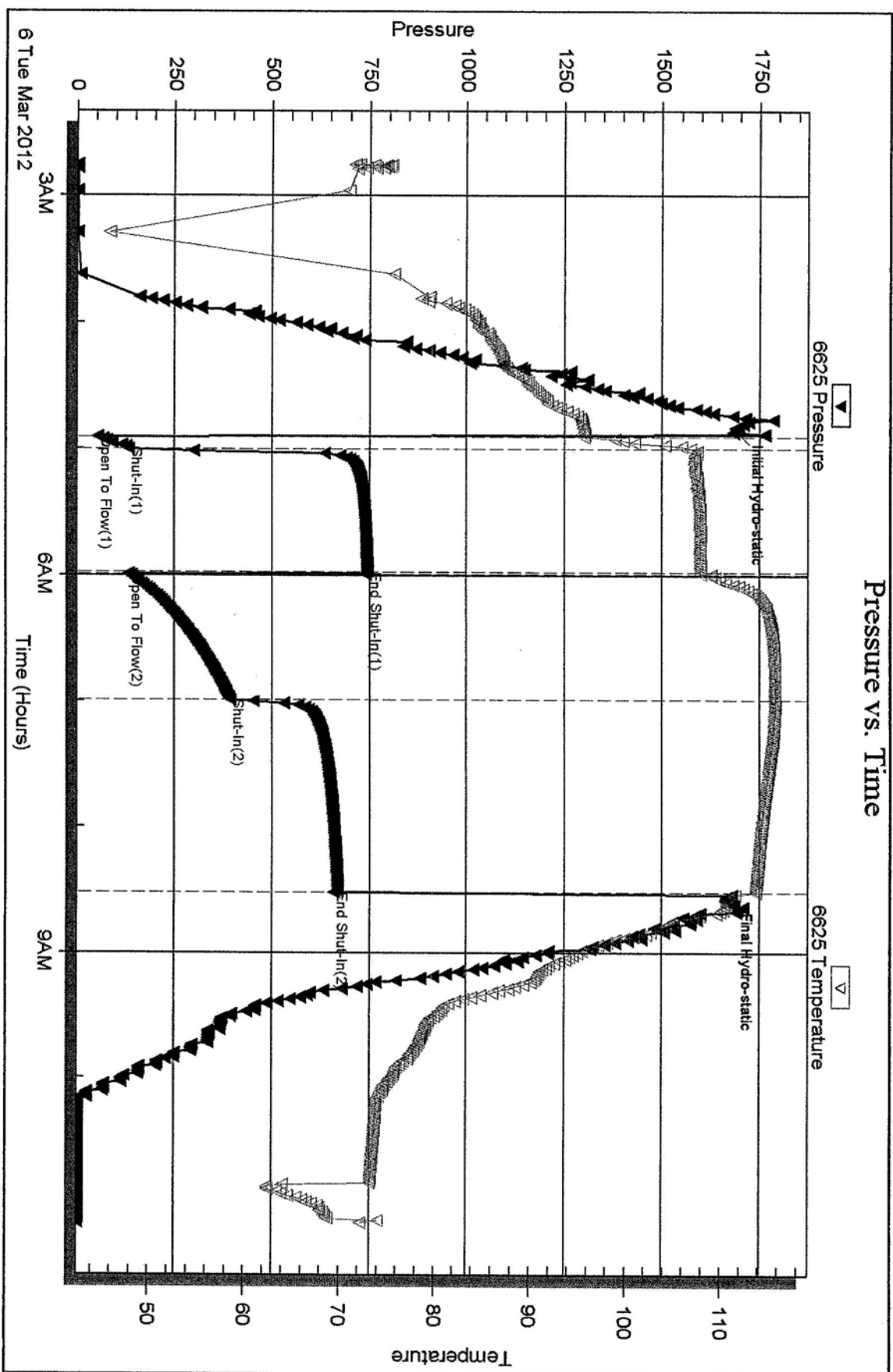
Serial #: 6625

Inside

IA Operating Inc

Virginia K #18-1

DST Test Number: 2

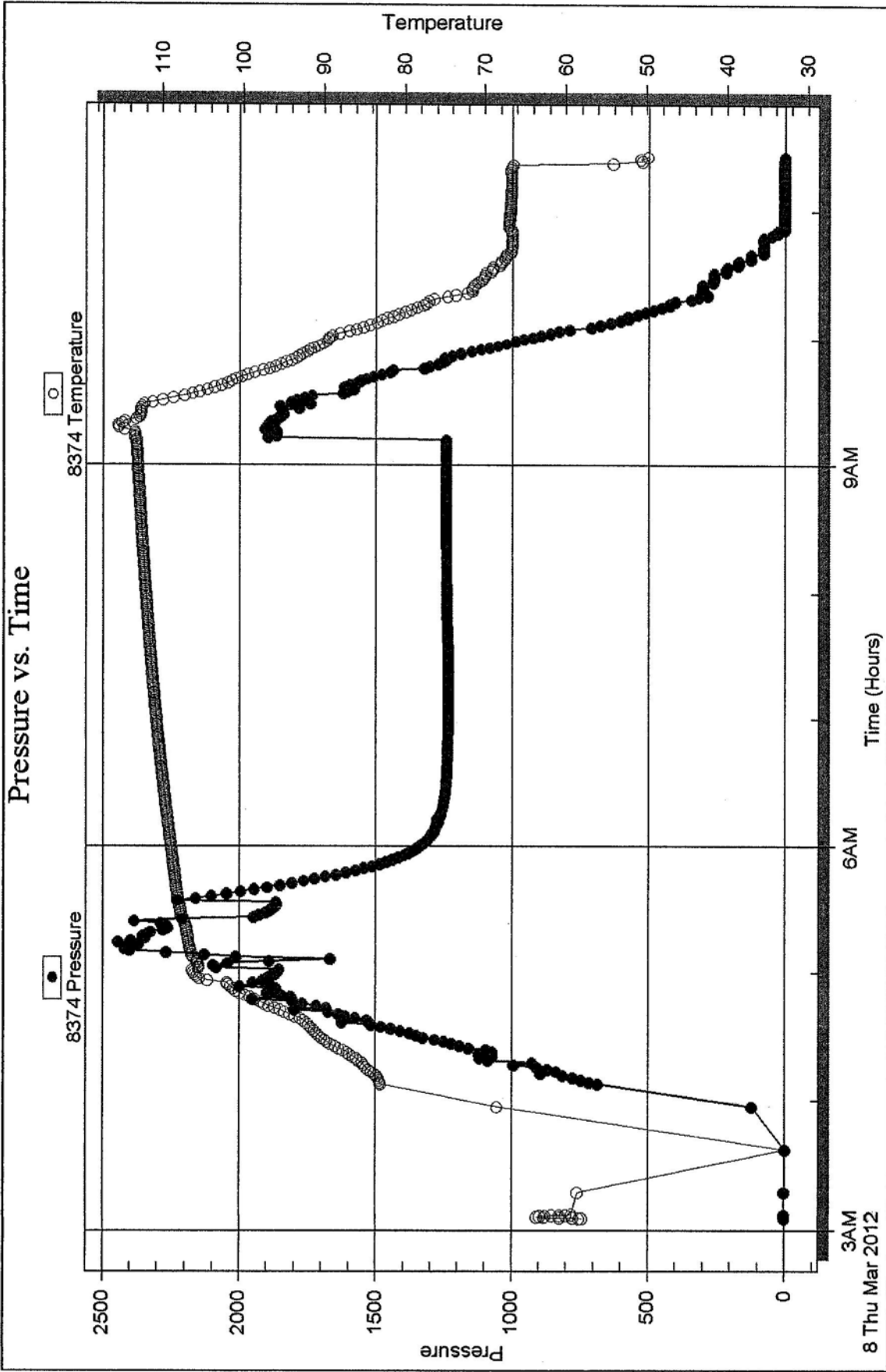


Serial #: 8374

Below (Strat) Operating Inc

Virginia K #18-1

DST Test Number: 4



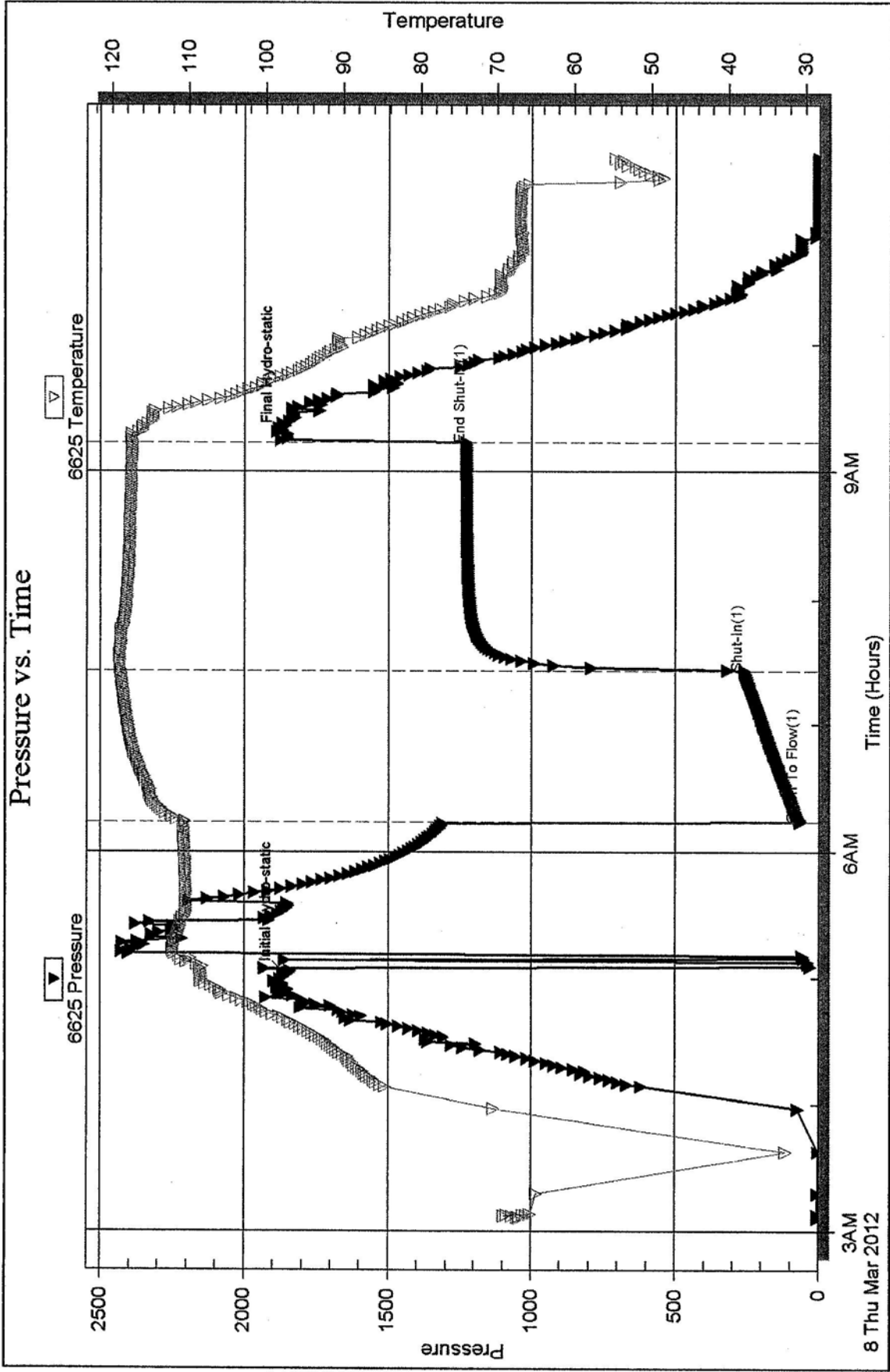
Serial #: 6625

Inside IA Operating Inc

Virginia K #18-1

DST Test Number: 4

Pressure vs. Time



Printed: 2012.03.09 @ 15:38:16

Ref. No: 46263

Trilobite Testing, Inc



DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc**

9915 W 21st Street North
Ste B
Wichita KS 67205

ATTN: Jeff Mowry

Virginia K #18-1

18-14s-19w Ellis,KS

Start Date: 2012.03.07 @ 01:05:28

End Date: 2012.03.07 @ 09:12:52

Job Ticket #: 46262 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.03.09 @ 15:37:15

IA Operating Inc
18-14s-19w Ellis,KS
Virginia K #18-1
DST # 3
LKC H-L
2012.03.07



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc
9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

18-14s-19w Ellis,KS
Virginia K #18-1
Job Ticket: 46262 **DST#: 3**
Test Start: 2012.03.07 @ 01:05:28

Tool Information

Drill Pipe:	Length: 3615.00 ft	Diameter: 3.80 inches	Volume: 50.71 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: 30.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume: 50.71 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial	56000.00 lb
Depth to Top Packer:	3641.00 ft			Final	56000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	129.00 ft				
Tool Length:	150.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3621.00	
Shut In Tool	5.00			3626.00	
Hydraulic tool	5.00			3631.00	
Packer	5.00			3636.00	21.00 Bottom Of Top Packer
Packer	5.00			3641.00	
Stubb	1.00			3642.00	
Perforations	5.00			3647.00	
Recorder	0.00	6625	Inside	3647.00	
Recorder	0.00	8700	Outside	3647.00	
Blank Spacing	96.00			3743.00	
Perforations	24.00			3767.00	
Bullnose	3.00			3770.00	129.00 Bottom Packers & Anchor

Total Tool Length: 150.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc
9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

18-14s-19w Ellis,KS
Virginia K #18-1
Job Ticket: 46262 DST#: 3
Test Start: 2012.03.07 @ 01:05:28

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: 60.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.74 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 3200.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	270'GIP	0.000
90.00	MGO 35%G35%O30%M	0.842
2.00	CO	0.028

Total Length: 92.00 ft Total Volume: 0.870 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

IA Operating Inc
9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

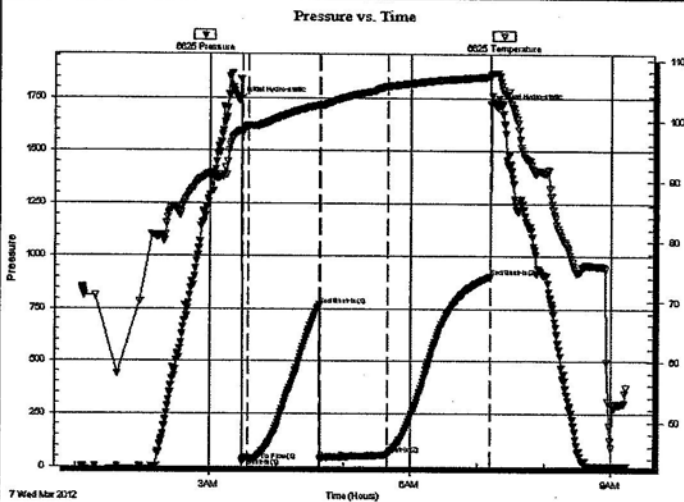
18-14s-19w Ellis,KS
Virginia K #18-1
Job Ticket: 46262 DST#: 3
Test Start: 2012.03.07 @ 01:05:28

GENERAL INFORMATION:

Formation: LKC H-L
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 03:28:53
Time Test Ended: 09:12:52
Interval: 3641.00 ft (KB) To 3770.00 ft (KB) (TVD)
Total Depth: 3770.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Ray Schwager
Unit No: 42
Reference Elevations: 2223.00 ft (KB)
2215.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 6625 Inside
Press@RunDepth: 60.82 psig @ 3647.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.03.07 End Date: 2012.03.07 Last Calib.: 2012.03.07
Start Time: 01:05:28 End Time: 09:12:52 Time On Btm: 2012.03.07 @ 03:26:23
Time Off Btm: 2012.03.07 @ 07:16:52

TEST COMMENT: 5-IFP-w k bl 1/2" to 3" bl
60-ISIP-no bl
60-FFP-strg bl thru-out
90-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1737.15	98.22	Initial Hydro-static
3	27.08	98.08	Open To Flow (1)
8	41.43	99.13	Shut-In(1)
72	768.96	102.51	End Shut-In(1)
73	34.80	102.36	Open To Flow (2)
133	60.82	105.64	Shut-In(2)
225	904.75	107.25	End Shut-In(2)
231	1710.52	107.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	270'GIP	0.00
90.00	MGO 35%G35%O30%M	0.84
2.00	CO	0.03

* Recovery from multiple tests

Gas Rates

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

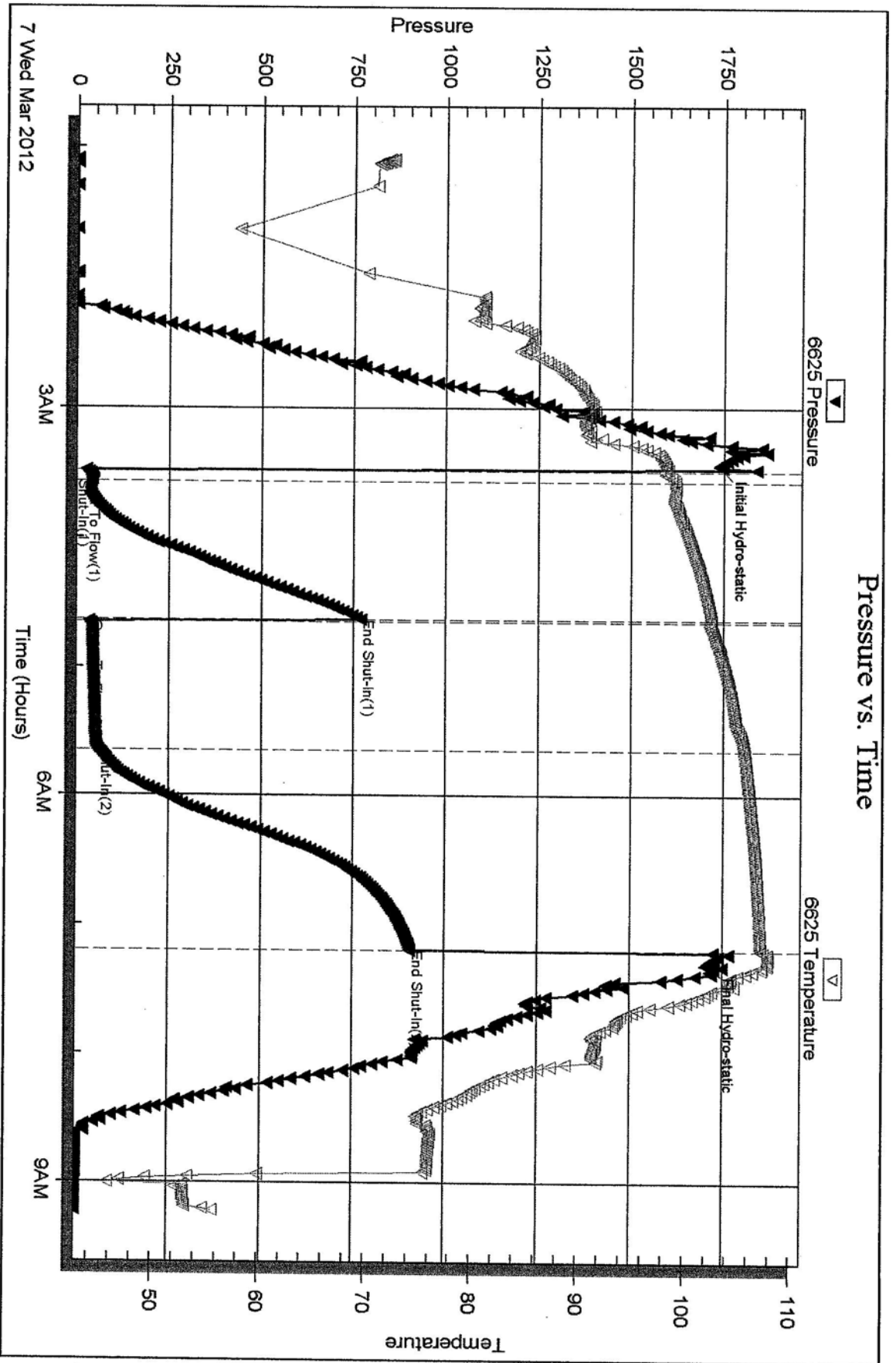
Serial #: 6625

Inside

IA Operating Inc

Virginia K #18-1

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 46262

Printed: 2012.03.09 @ 15:37:17



DRILL STEM TEST REPORT

Prepared For: **IA Operating Inc**

9915 W 21st Street North
Ste B
Wichita KS 67205

ATTN: Jeff Mowry

Virginia K #18-1

18-14s-19w Ellis,KS

Start Date: 2012.03.08 @ 03:06:01

End Date: 2012.03.08 @ 11:27:25

Job Ticket #: 46263 DST #: 4

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.03.09 @ 15:38:14

IA Operating Inc
18-14s-19w Ellis,KS
Virginia K #18-1
DST # 4
Arbuckle
2012.03.08



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

IA Operating Inc
9915 W 21st Street North
Ste B
Wichita KS 67205
ATTN: Jeff Mowry

18-14s-19w Ellis, KS
Virginia K #18-1
Job Ticket: 46263 **DST#: 4**
Test Start: 2012.03.08 @ 03:06:01

Tool Information

Drill Pipe:	Length: 3800.00 ft	Diameter: 3.80 inches	Volume: 53.30 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: 30.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 53.30 bbl</u>	Tool Chased 15.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3820.00 ft			Final 61000.00 lb
Depth to Bottom Packer:	3856.00 ft			
Interval between Packers:	36.00 ft			
Tool Length:	129.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3800.00	
Shut In Tool	5.00			3805.00	
Hydraulic tool	5.00			3810.00	
Packer	5.00			3815.00	21.00 Bottom Of Top Packer
Packer	5.00			3820.00	
Stubb	1.00			3821.00	
Perforations	7.00			3828.00	
Recorder	0.00	6625	Inside	3828.00	
Recorder	0.00	8700	Outside	3828.00	
Perforations	24.00			3852.00	
Blank Spacing	3.00			3855.00	
Blank Off Sub	1.00			3856.00	36.00 Tool Interval
Packer	5.00			3861.00	
Stubb	1.00			3862.00	
Perforations	2.00			3864.00	
Recorder	0.00	8374	Below	3864.00	
Blank Spacing	64.00			3928.00	72.00 Bottom Packers & Anchor
Total Tool Length:	129.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

IA Operating Inc

18-14s-19w Ellis,KS

9915 W 21st Street North
Ste B
Wichita KS 67205

Virginia K #18-1

Job Ticket: 46263

DST#: 4

ATTN: Jeff Mow ry

Test Start: 2012.03.08 @ 03:06:01

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:

33000 ppm

Viscosity: 66.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.74 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
490.00	Water RW .24@60F	6.453
150.00	SOCMW 2%O30%M68%W	2.104

Total Length: 640.00 ft Total Volume: 8.557 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: slid tool approx 15' to bottom on 1st shut-in pulled
tool loose to add Jt of pipe, reset tool



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

IA Operating Inc
 9915 W 21st Street North
 Ste B
 Wichita KS 67205
 ATTN: Jeff Mowry

18-14s-19w Ellis, KS

Virginia K #18-1

Job Ticket: 46263

DST#: 4

Test Start: 2012.03.08 @ 03:06:01

GENERAL INFORMATION:

Formation: **Arbuckle**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:13:56

Time Test Ended: 11:27:25

Interval: **3820.00 ft (KB) To 3856.00 ft (KB) (TVD)**

Total Depth: 3924.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Straddle (Reset)

Tester: Ray Schwager

Unit No: 42

Reference Elevations: 2223.00 ft (KB)

2215.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: **6625**

Inside

Press@RunDepth: 259.86 psig @ 3828.00 ft (KB)

Start Date: 2012.03.08

End Date:

2012.03.08

Start Time: 03:06:01

End Time:

11:27:25

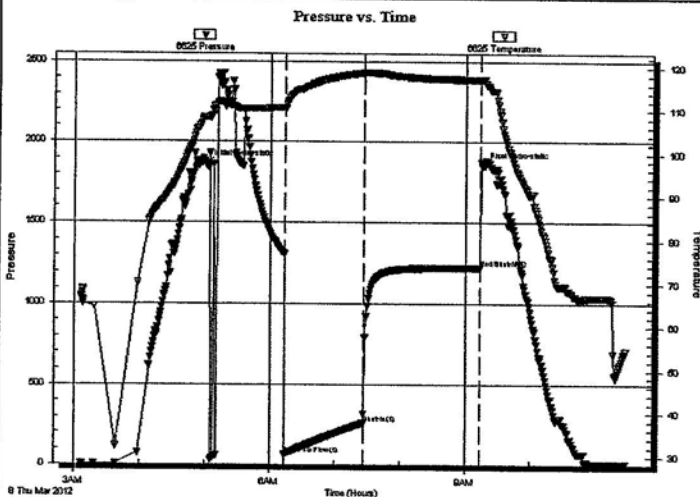
Capacity: 8000.00 psig

Last Calib.: 2012.03.08

Time On Btm: 2012.03.08 @ 05:01:26

Time Off Btm: 2012.03.08 @ 09:16:25

TEST COMMENT: 5-IFP-wk to a fr bl 1/2" to 5" bl
 60-ISIP-no bl
 60-FFP-wk to strg in 45 min
 90-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1853.34	108.44	Initial Hydro-static
73	66.45	110.43	Open To Flow (1)
145	259.86	118.81	Shut-In(1)
252	1225.83	117.30	End Shut-In(1)
255	1851.31	117.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
490.00	Water RW .24@60F	6.45
150.00	SOCMW 2%O30%M68%W	2.10

* Recovery from multiple tests

Gas Rates

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