



DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

Box 352
Russell KS 67665

ATTN: John O Farmer

States A #1

15-5s-20w Phillips,KS

Start Date: 2012.06.17 @ 15:15:22

End Date: 2012.06.17 @ 21:28:52

Job Ticket #: 47926 DST #: 1

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

Printed: 2012.06.26 @ 09:31:45

John O Farmer
15-5s-20w Phillips,KS
States A #1
DST # 1
Lansing C
2012.06.17



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

15-5s-20w Phillips,KS

Box 352
Russell KS 67665

States A #1

Job Ticket: 47926

DST#: 1

ATTN: John O Farmer

Test Start: 2012.06.17 @ 15:15:22

Tool Information

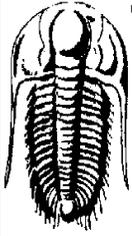
Drill Pipe:	Length: 3187.00 ft	Diameter: 3.80 inches	Volume: 44.71 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 43000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3306.00 ft			Final 39000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	46.00 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			3287.00	
Shut In Tool	5.00			3292.00	
Hydraulic tool	5.00			3297.00	
Packer	5.00			3302.00	20.00 Bottom Of Top Packer
Packer	4.00			3306.00	
Stubb	1.00			3307.00	
Perforations	2.00			3309.00	
Recorder	0.00	8354	Inside	3309.00	
Recorder	0.00	8520	Outside	3309.00	
Perforations	20.00			3329.00	
Bullnose	3.00			3332.00	26.00 Bottom Packers & Anchor

Total Tool Length: 46.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

15-5s-20w Phillips,KS

Box 352
Russell KS 67665

States A #1

Job Ticket: 47926

DST#: 1

ATTN: John O Farmer

Test Start: 2012.06.17 @ 15:15:22

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

62000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
495.00	muddy w ater 95% w 5% m	5.850
5.00	clean oil	0.070
0.00	60' gas in pipe	0.000

Total Length: 500.00 ft Total Volume: 5.920 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Rw .106 @ 86= 62000

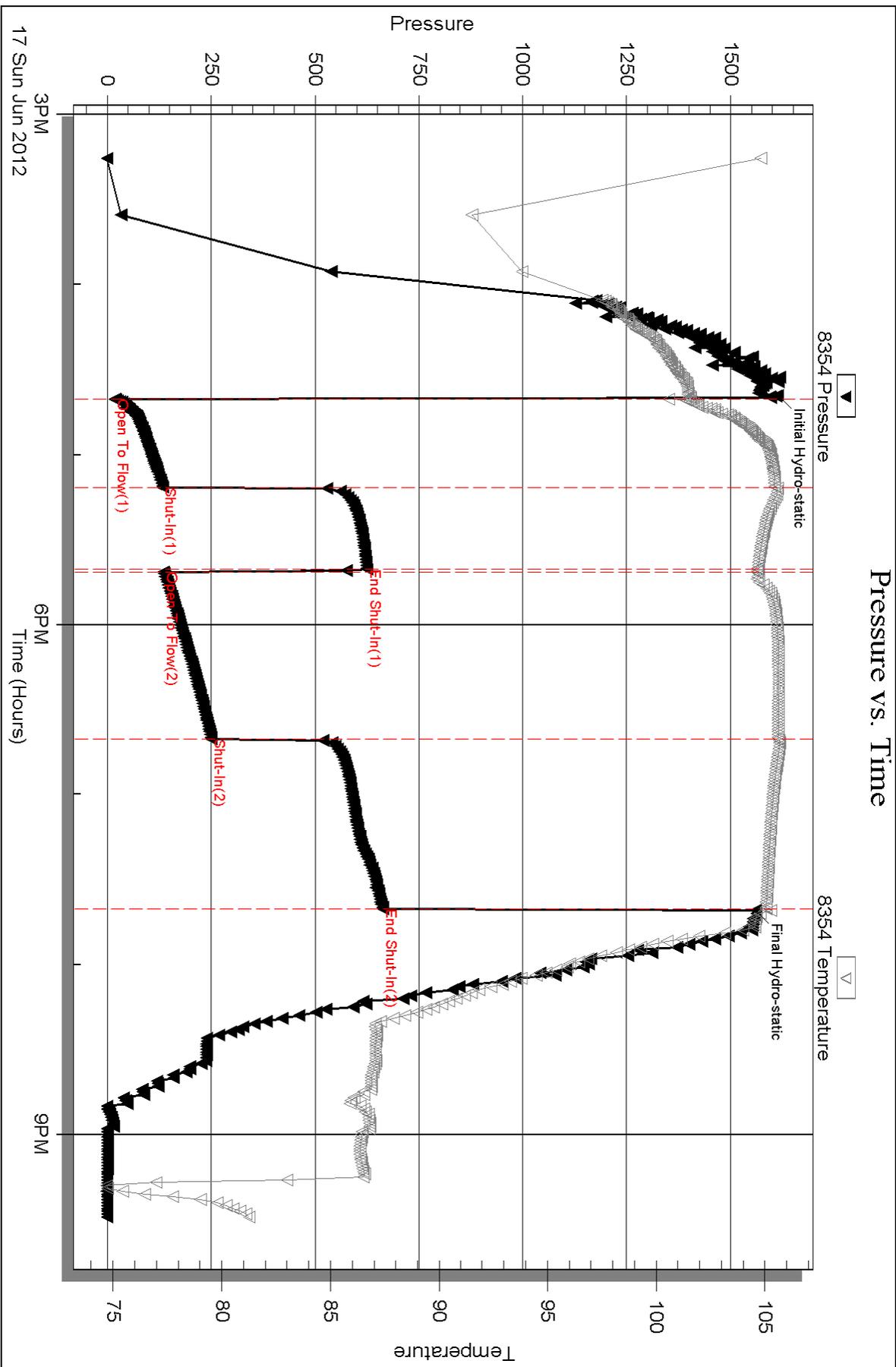
Serial #: 8354

Inside

John O Farmer

States A #1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 47926

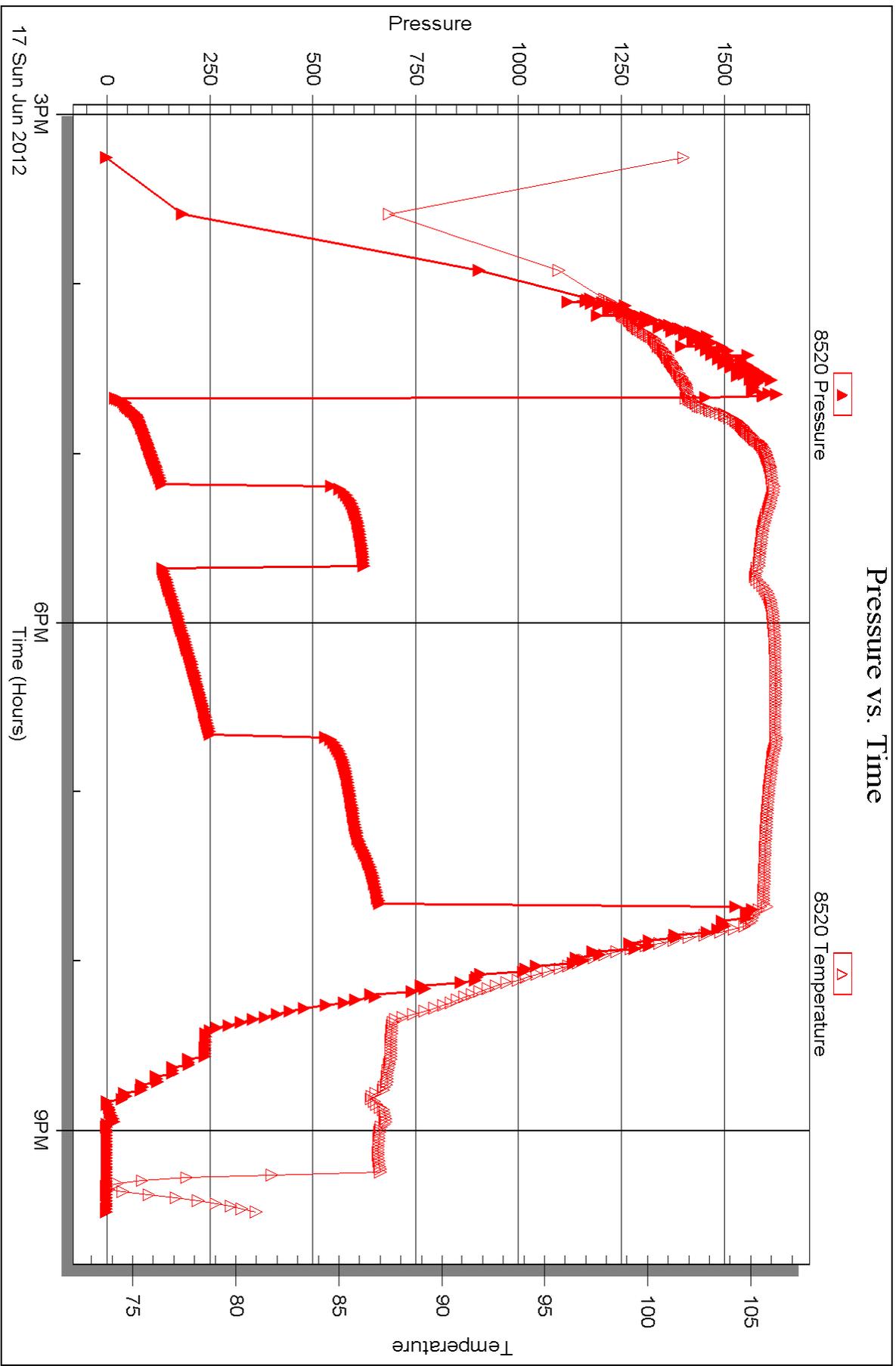
Printed: 2012.06.26 @ 09:31:47

Serial #: 8520

Outside John O Farmer

States A #1

DST Test Number: 1



17 Sun Jun 2012
3PM

6PM
Time (Hours)

9PM



DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

Box 352
Russell KS 67665

ATTN: John O Farmer

States A #1

15-5s-20w Phillips,KS

Start Date: 2012.06.18 @ 03:10:55

End Date: 2012.06.18 @ 08:46:25

Job Ticket #: 47953 DST #: 2

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

Printed: 2012.06.26 @ 09:31:03

John O Farmer
15-5s-20w Phillips,KS
States A #1
DST # 2
Lansing D
2012.06.18



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer
Box 352
Russell KS 67665
ATTN: John O Farmer

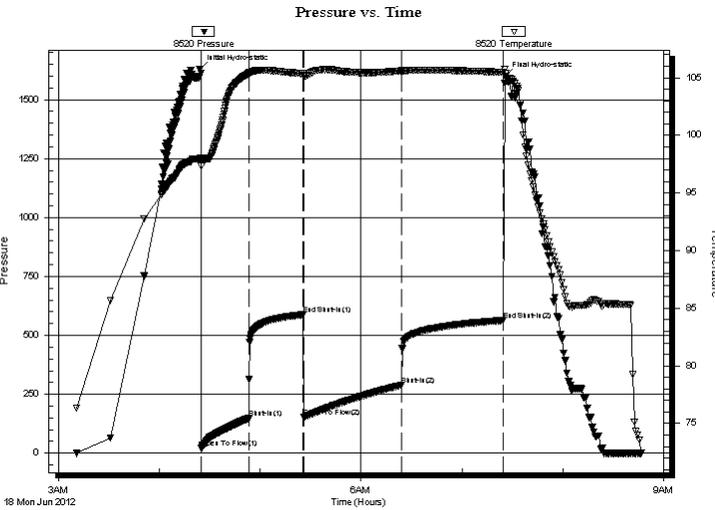
15-5s-20w Phillips,KS
States A #1
Job Ticket: 47953 **DST#: 2**
Test Start: 2012.06.18 @ 03:10:55

GENERAL INFORMATION:

Formation: **Lansing D**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:25:05
Time Test Ended: 08:46:25
Interval: **3329.00 ft (KB) To 3350.00 ft (KB) (TVD)**
Total Depth: 3350.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: Paul Simpson
Unit No: 38
Reference Elevations: 3135.00 ft (KB)
3130.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8520 Outside
Press @ Run Depth: 287.99 psig @ 3332.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.06.18 End Date: 2012.06.18 Last Calib.: 2012.06.18
Start Time: 03:10:55 End Time: 08:46:25 Time On Btm: 2012.06.18 @ 04:24:15
Time Off Btm: 2012.06.18 @ 07:25:55

TEST COMMENT: 30-tool slid 4' before opening 1" blow built to bottom of bucket in 11 minutes
30- weak surface blow
60- bottom of bucket in 15 minutes
60- no blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1630.13	97.97	Initial Hydro-static
1	20.24	97.38	Open To Flow (1)
29	147.81	105.36	Shut-In(1)
62	587.11	105.35	End Shut-In(1)
62	151.37	105.25	Open To Flow (2)
120	287.99	105.57	Shut-In(2)
181	563.45	105.48	End Shut-In(2)
182	1599.47	105.39	Final Hydro-static

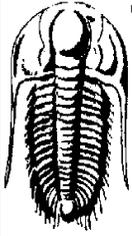
Recovery

Length (ft)	Description	Volume (bbl)
10.00	clean oil	0.05
560.00	muddy w ater 95% w ater 5% mud	6.85
0.00	50' gas in pipe	0.00

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

15-5s-20w Phillips,KS

Box 352
Russell KS 67665

States A #1

Job Ticket: 47953

DST#: 2

ATTN: John O Farmer

Test Start: 2012.06.18 @ 03:10:55

Tool Information

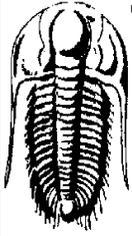
Drill Pipe:	Length: 3217.00 ft	Diameter: 3.80 inches	Volume: 45.13 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 43000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 34000.00 lb
Depth to Top Packer:	3329.00 ft			Final 36000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 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
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Change Over Sub	1.00			3310.00	
Shut In Tool	5.00			3315.00	
Hydraulic tool	5.00			3320.00	
Packer	5.00			3325.00	20.00 Bottom Of Top Packer
Packer	4.00			3329.00	
Stubb	1.00			3330.00	
Perforations	2.00			3332.00	
Recorder	0.00	8354	Inside	3332.00	
Recorder	0.00	8520	Outside	3332.00	
Perforations	15.00			3347.00	
Bullnose	3.00			3350.00	21.00 Bottom Packers & Anchor

Total Tool Length: 41.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

15-5s-20w Phillips,KS

Box 352
Russell KS 67665

States A #1

Job Ticket: 47953

DST#: 2

ATTN: John O Farmer

Test Start: 2012.06.18 @ 03:10:55

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

34 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

55000 ppm

Viscosity: 44.00 sec/qt

Cushion Volume:

bbbl

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	clean oil	0.049
560.00	muddy w ater 95% w ater 5% mud	6.853
0.00	50' gas in pipe	0.000

Total Length: 570.00 ft Total Volume: 6.902 bbl

Num Fluid Samples: 0

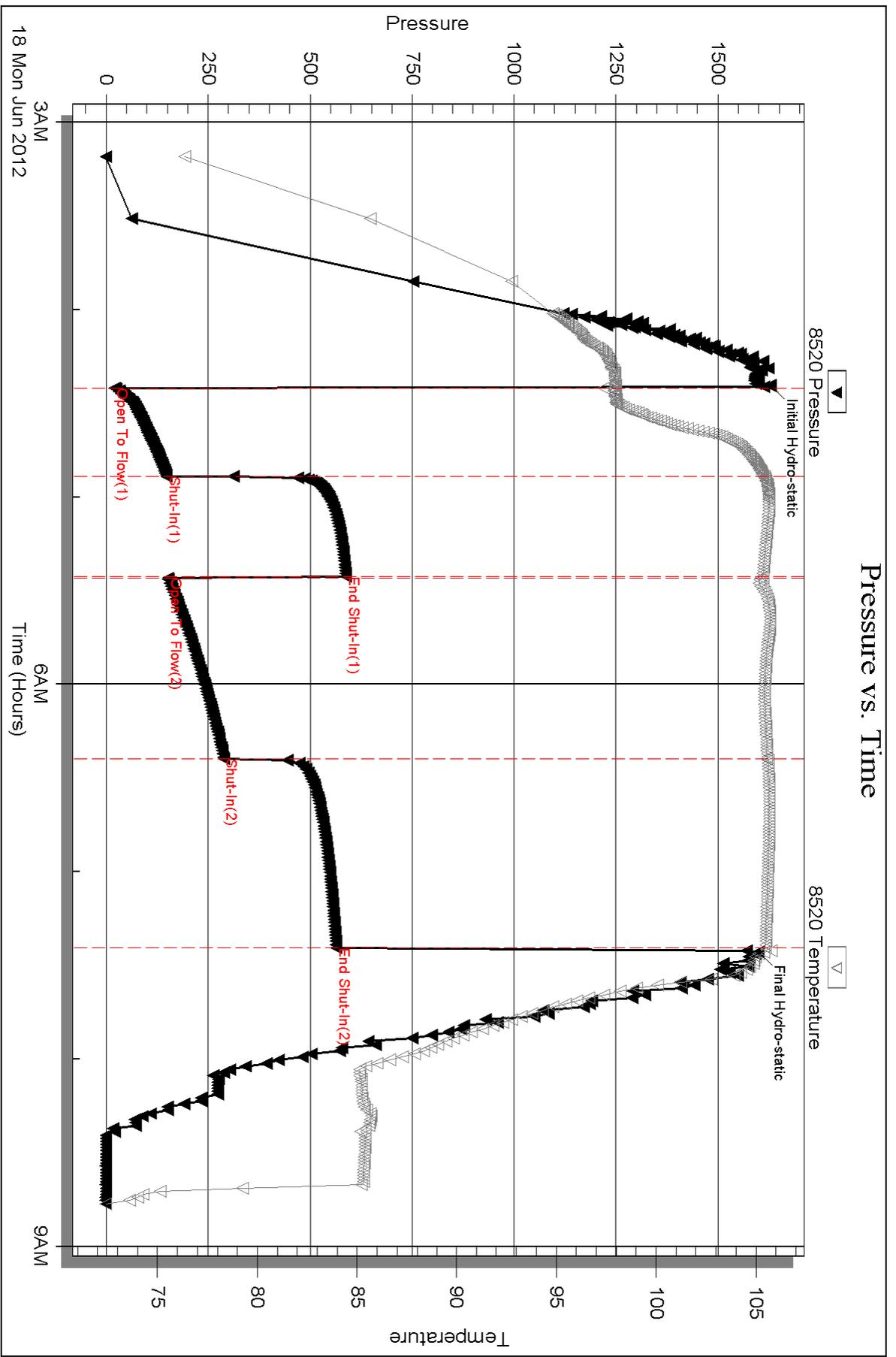
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Rw .126 @ 75 = 55,000ppm



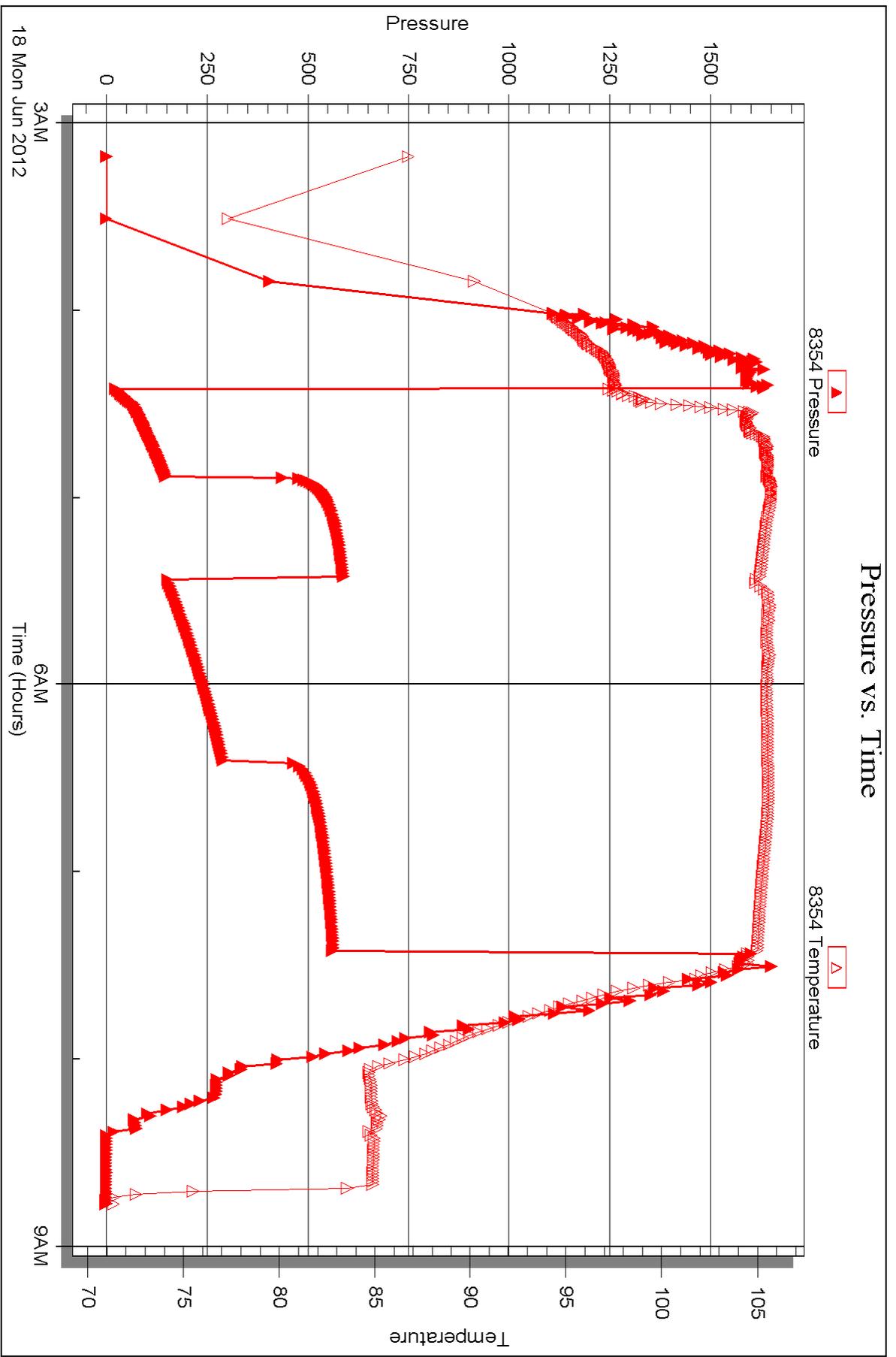
Serial #: 8354

Inside

John O Farmer

States A #1

DST Test Number: 2



18 Mon Jun 2012

Time (Hours)

Triobite Testing, Inc

Ref. No: 47953

Printed: 2012.06.26 @ 09:31:05



DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

Box 352
Russell KS 67665

ATTN: John O Farmer

States A #1

15-5s-20w Phillips,KS

Start Date: 2012.06.18 @ 13:58:25

End Date: 2012.06.18 @ 19:01:25

Job Ticket #: 47954 DST #: 3

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

Printed: 2012.06.26 @ 09:30:15



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer
Box 352
Russell KS 67665
ATTN: John O Farmer

15-5s-20w Phillips,KS

States A #1

Job Ticket: 47954

DST#: 3

Test Start: 2012.06.18 @ 13:58:25

GENERAL INFORMATION:

Formation: **Lansing E-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:34:55
 Time Test Ended: 19:01:25
 Interval: **3346.00 ft (KB) To 3368.00 ft (KB) (TVD)**
 Total Depth: 3368.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Paul Simpson
 Unit No: 38
 Reference Elevations: 3135.00 ft (KB)
 3130.00 ft (CF)
 KB to GR/CF: 5.00 ft

Serial #: 8653

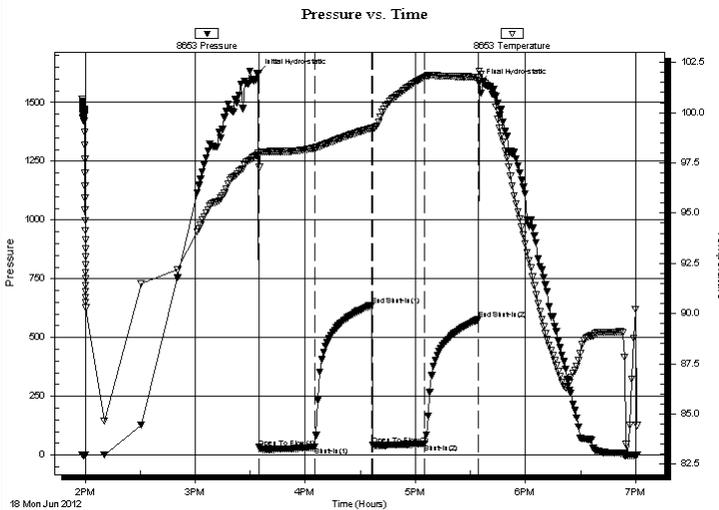
Inside

Press @ Run Depth: 48.76 psig @ 3350.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.06.18 End Date: 2012.06.18 Last Calib.: 2012.06.18
 Start Time: 13:58:26 End Time: 19:01:25 Time On Btm: 2012.06.18 @ 15:34:25
 Time Off Btm: 2012.06.18 @ 17:34:55

TEST COMMENT: 30- weak blow died in 30 minutes
 30 no blow
 30- no blow
 30- no blow

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1623.86	98.01	Initial Hydro-static
1	32.89	97.27	Open To Flow (1)
31	33.60	98.24	Shut-In(1)
62	637.71	99.22	End Shut-In(1)
63	44.73	99.18	Open To Flow (2)
91	48.76	101.77	Shut-In(2)
120	576.77	101.77	End Shut-In(2)
121	1583.60	102.07	Final Hydro-static



Recovery

Length (ft)	Description	Volume (bbl)
75.00	muddy water 60% water 40% mud	0.37

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

15-5s-20w Phillips,KS

Box 352
Russell KS 67665

States A #1

Job Ticket: 47954

DST#: 3

ATTN: John O Farmer

Test Start: 2012.06.18 @ 13:58:25

Tool Information

Drill Pipe:	Length: 3217.00 ft	Diameter: 3.80 inches	Volume: 45.13 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose:	45000.00 lb
			<u>Total Volume:</u>	Tool Chased	ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial	38000.00 lb
Depth to Top Packer:	3346.00 ft			Final	38000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	22.00 ft				
Tool Length:	42.00 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			3327.00	
Shut In Tool	5.00			3332.00	
Hydraulic tool	5.00			3337.00	
Packer	5.00			3342.00	20.00 Bottom Of Top Packer
Packer	4.00			3346.00	
Stubb	1.00			3347.00	
Perforations	3.00			3350.00	
Recorder	0.00	8653	Inside	3350.00	
Recorder	0.00	8520	Outside	3350.00	
Perforations	15.00			3365.00	
Bullnose	3.00			3368.00	22.00 Bottom Packers & Anchor

Total Tool Length: 42.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

15-5s-20w Phillips,KS

Box 352
Russell KS 67665

States A #1

Job Ticket: 47954

DST#: 3

ATTN: John O Farmer

Test Start: 2012.06.18 @ 13:58:25

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:

19000 ppm

Viscosity: 59.00 sec/qt

Cushion Volume:

bbf

Water Loss: in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
75.00	muddy water 60% water 40% mud	0.369

Total Length: 75.00 ft Total Volume: 0.369 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Rw .24 @ 97 =19,000

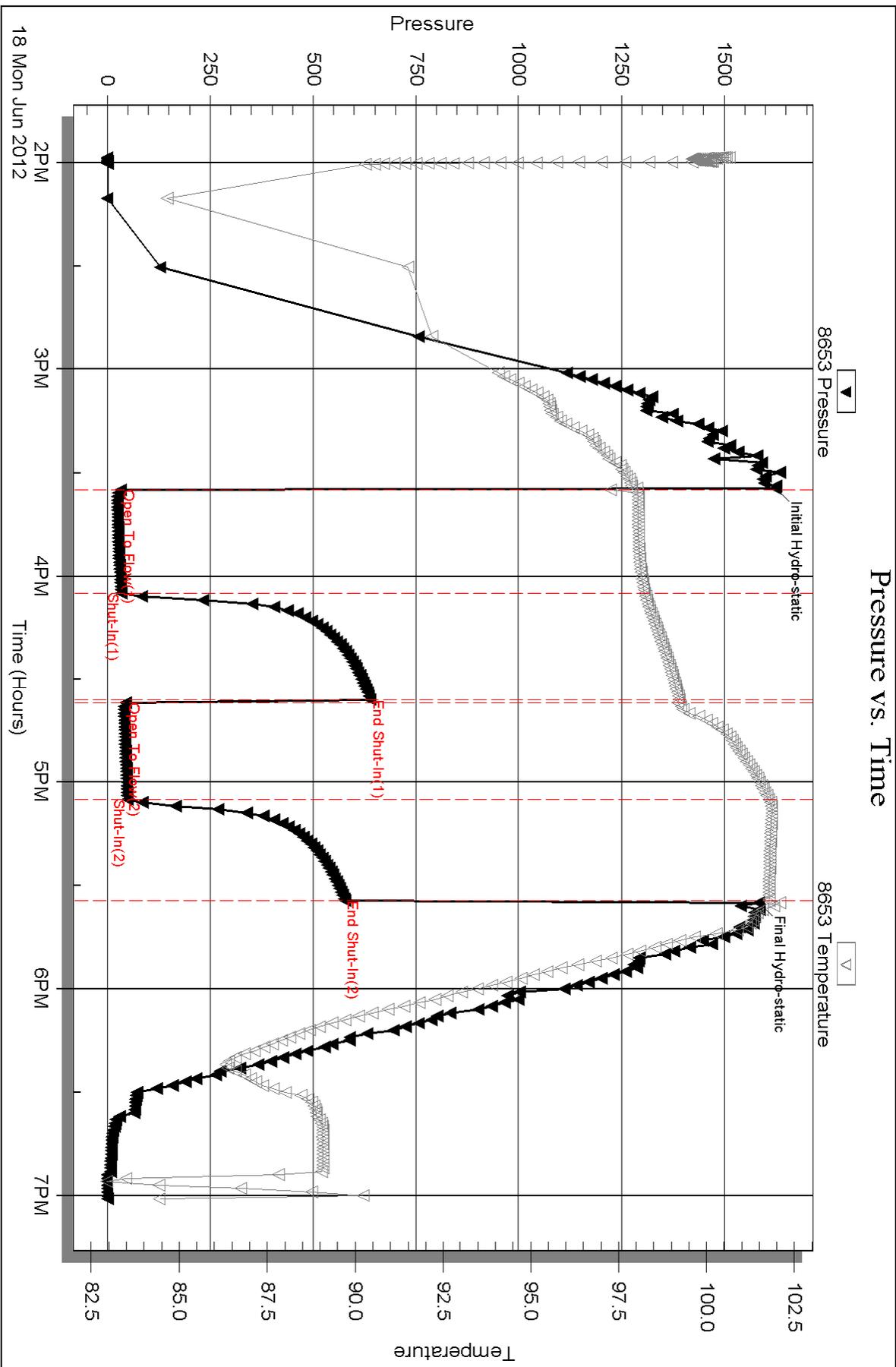
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Inside

John O Farmer

States A #1

DST Test Number: 3



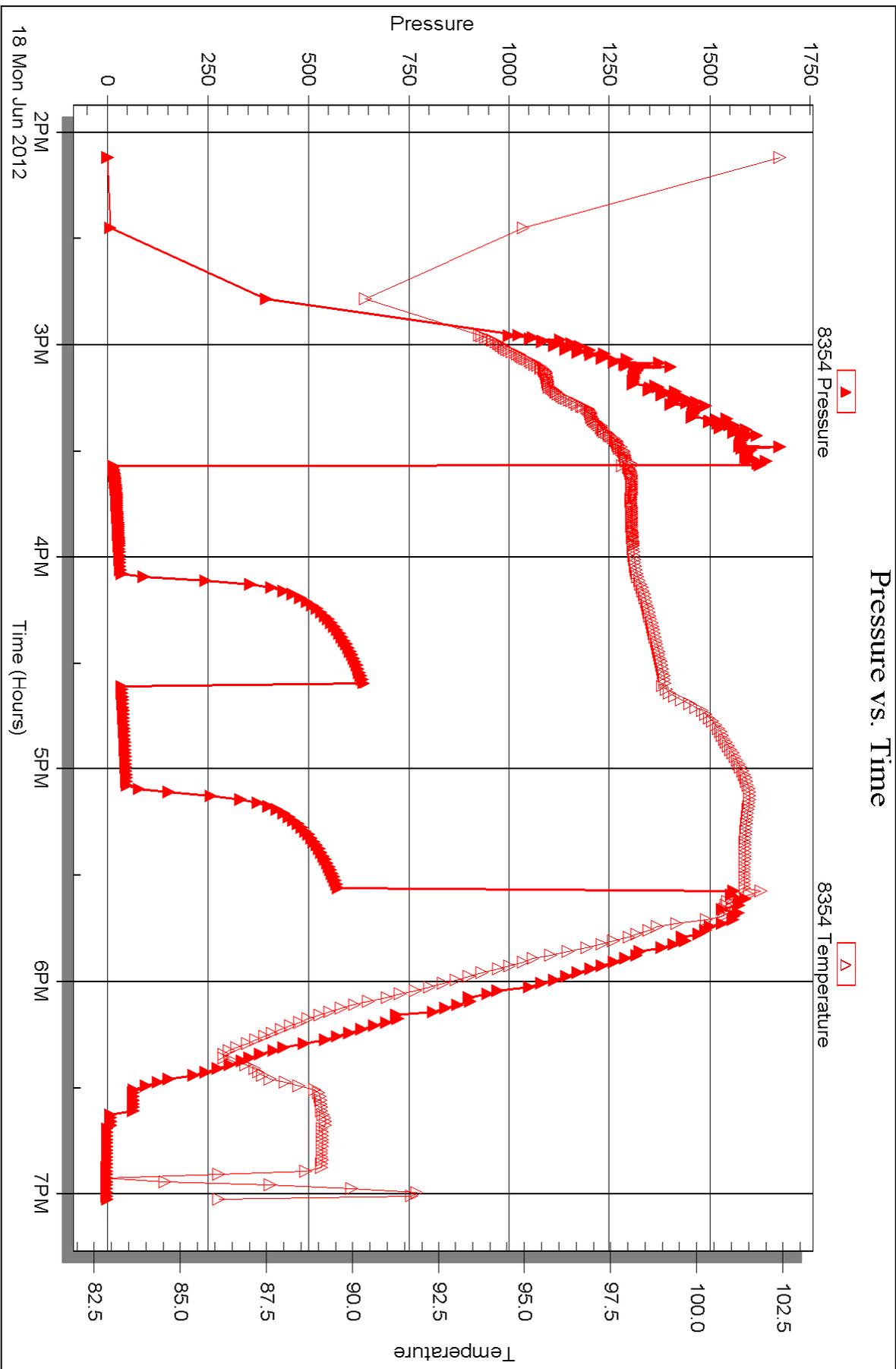
Serial #: 8354

Inside

John O Farmer

States A #1

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

Box 352
Russell KS 67665

ATTN: John O Farmer

States A #1

15-5s-20w Phillips,KS

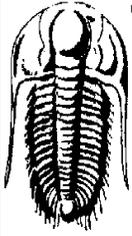
Start Date: 2012.06.19 @ 10:32:45

End Date: 2012.06.19 @ 16:20:45

Job Ticket #: 47955 DST #: 4

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

Printed: 2012.06.26 @ 09:29:09



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

John O Farmer
Box 352
Russell KS 67665
ATTN: John O Farmer

15-5s-20w Phillips,KS

States A #1

Job Ticket: 47955

DST#: 4

Test Start: 2012.06.19 @ 10:32:45

GENERAL INFORMATION:

Formation: **LKC "H-K"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 11:53:05
 Tester: Dustin Rash
 Time Test Ended: 16:20:45
 Unit No: 38
 Interval: **3387.00 ft (KB) To 3472.00 ft (KB) (TVD)**
 Reference Elevations: 3135.00 ft (KB)
 Total Depth: 3472.00 ft (KB) (TVD)
 3130.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 5.00 ft

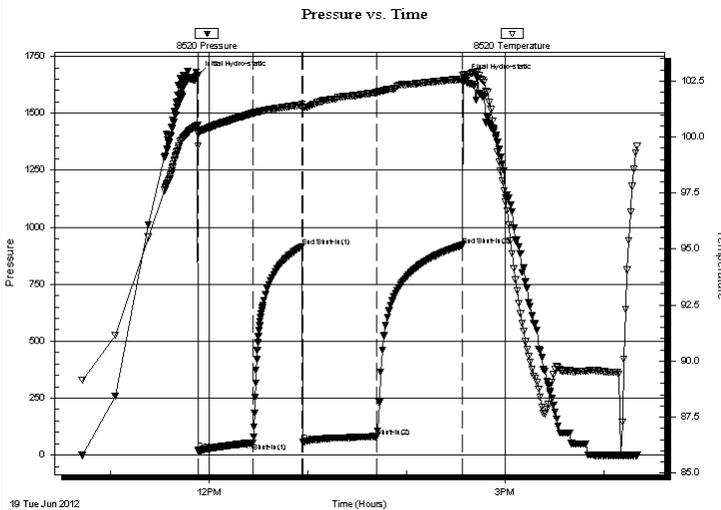
Serial #: 8520

Outside

Press @ Run Depth: 81.74 psig @ 3457.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.06.19 End Date: 2012.06.19 Last Calib.: 2012.06.19
 Start Time: 10:42:45 End Time: 16:20:45 Time On Btm: 2012.06.19 @ 11:52:55
 Time Off Btm: 2012.06.19 @ 14:35:15

TEST COMMENT: IF-Very weak building blow . Built to 1 & 3/4"
 IS- No Return.
 FF-Very weak building blow . Built to 1 & 1/2"
 FS- No Return.

PRESSURE SUMMARY



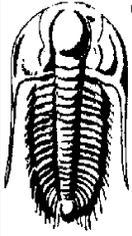
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1667.83	100.52	Initial Hydro-static
1	21.53	99.59	Open To Flow (1)
34	54.14	101.06	Shut-In(1)
64	915.13	101.45	End Shut-In(1)
64	58.37	101.26	Open To Flow (2)
109	81.74	101.98	Shut-In(2)
161	921.24	102.58	End Shut-In(2)
163	1656.16	102.79	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
135.00	2%Oil/98%Mud	0.80

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

15-5s-20w Phillips,KS

Box 352
Russell KS 67665

States A #1

Job Ticket: 47955

DST#: 4

ATTN: John O Farmer

Test Start: 2012.06.19 @ 10:32:45

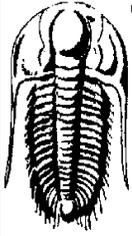
Tool Information

Drill Pipe:	Length: 3277.00 ft	Diameter: 3.80 inches	Volume: 45.97 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: 24000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 15000.00 lb
			Total Volume: 46.56 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3387.00 ft			Final 38000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	105.00 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			3368.00	
Shut In Tool	5.00			3373.00	
Hydraulic tool	5.00			3378.00	
Packer	5.00			3383.00	20.00 Bottom Of Top Packer
Packer	4.00			3387.00	
Stubb	1.00			3388.00	
Perforations	5.00			3393.00	
Change Over Sub	1.00			3394.00	
Drill Pipe	62.00			3456.00	
Change Over Sub	1.00			3457.00	
Recorder	0.00	8354	Inside	3457.00	
Recorder	0.00	8520	Outside	3457.00	
Perforations	12.00			3469.00	
Bullnose	3.00			3472.00	85.00 Bottom Packers & Anchor

Total Tool Length: 105.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

15-5s-20w Phillips,KS

Box 352
Russell KS 67665

States A #1

Job Ticket: 47955

DST#: 4

ATTN: John O Farmer

Test Start: 2012.06.19 @ 10:32:45

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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
135.00	2%Oil/98%Mud	0.801

Total Length: 135.00 ft Total Volume: 0.801 bbl

Num Fluid Samples: 0

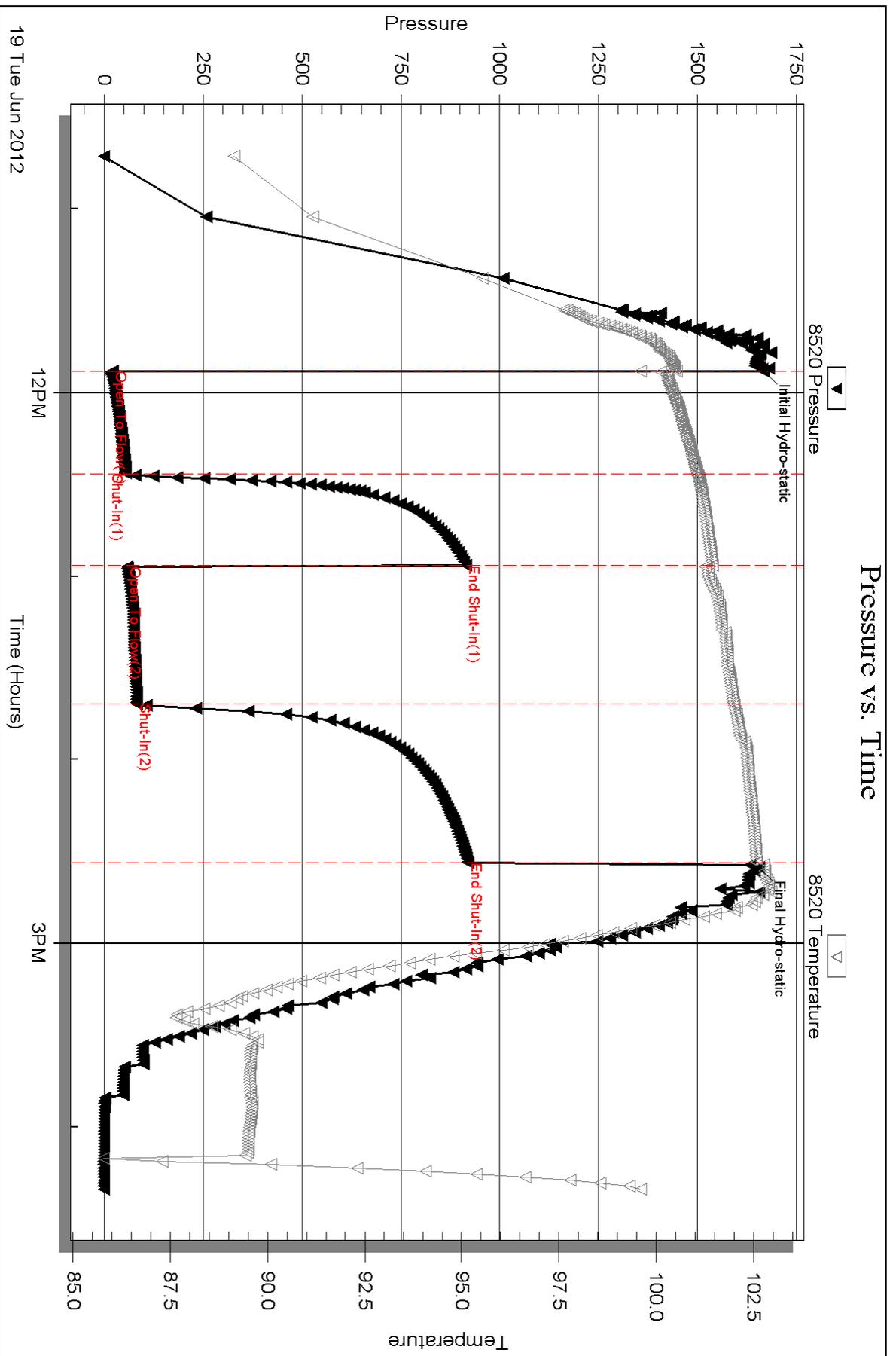
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **John O Farmer**

Box 352
Russell KS 67665

ATTN: John O Farmer

States A #1

15-5s-20w Phillips,KS

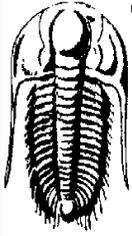
Start Date: 2012.06.20 @ 09:26:15

End Date: 2012.06.20 @ 15:38:45

Job Ticket #: 47956 DST #: 5

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

Printed: 2012.06.26 @ 09:28:19



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O Farmer

15-5s-20w Phillips,KS

Box 352
Russell KS 67665

States A #1

Job Ticket: 47956

DST#: 5

ATTN: John O Farmer

Test Start: 2012.06.20 @ 09:26:15

Tool Information

Drill Pipe:	Length: 3435.00 ft	Diameter: 3.80 inches	Volume: 48.18 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 26000.00 lb
Drill Collar:	Length: 120.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 15000.00 lb
			<u>Total Volume: 48.77 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 38000.00 lb
Depth to Top Packer:	3546.00 ft			Final 42000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	73.00 ft			
Tool Length:	93.00 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			3527.00	
Shut In Tool	5.00			3532.00	
Hydraulic tool	5.00			3537.00	
Packer	5.00			3542.00	20.00 Bottom Of Top Packer
Packer	4.00			3546.00	
Stubb	1.00			3547.00	
Recorder	0.00	8354	Inside	3547.00	
Recorder	0.00	8520	Outside	3547.00	
Perforations	21.00			3568.00	
Blank Spacing	1.00			3569.00	73.00 Tool Interval
Packer	4.00			3573.00	
Stubb	1.00			3574.00	
Perforations	10.00			3584.00	
Recorder	0.00	8653	Below	3584.00	
Drill Pipe	32.00			3616.00	
Bullnose	3.00			3619.00	100092.00 Bottom Packers & Anchor
Total Tool Length:	93.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

John O Farmer

15-5s-20w Phillips,KS

Box 352
Russell KS 67665

States A #1

Job Ticket: 47956

DST#: 5

ATTN: John O Farmer

Test Start: 2012.06.20 @ 09:26:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

29 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1140.00	25%Gas/70%Oil/5%Water	14.898
150.00	60%Gas/35%Oil/5%Water	2.104
0.00	150' G.I.P.	0.000

Total Length: 1290.00 ft

Total Volume: 17.002 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

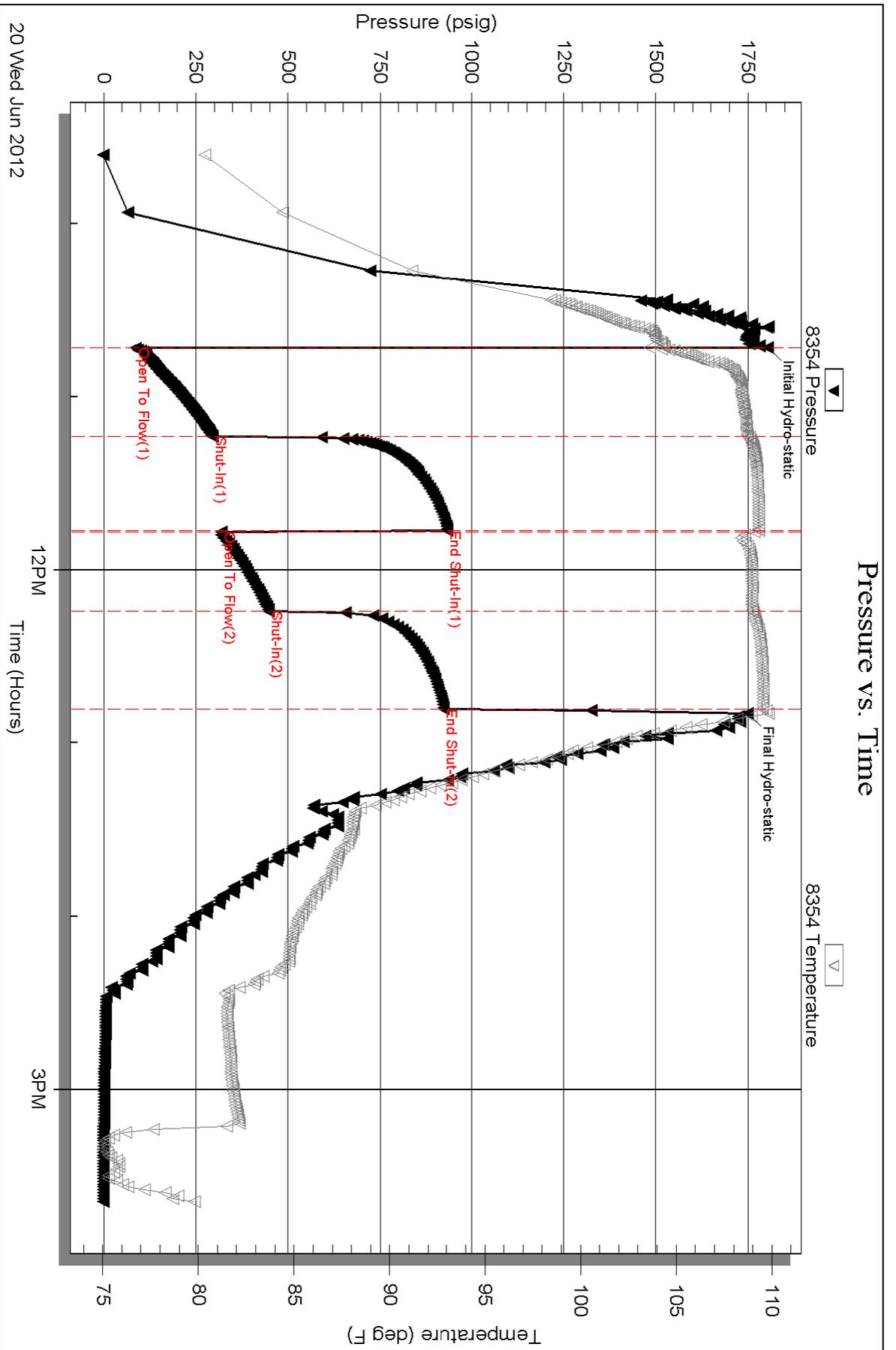
Serial #: 8354

Inside

John O Farmer

States A #1

DST Test Number: 5

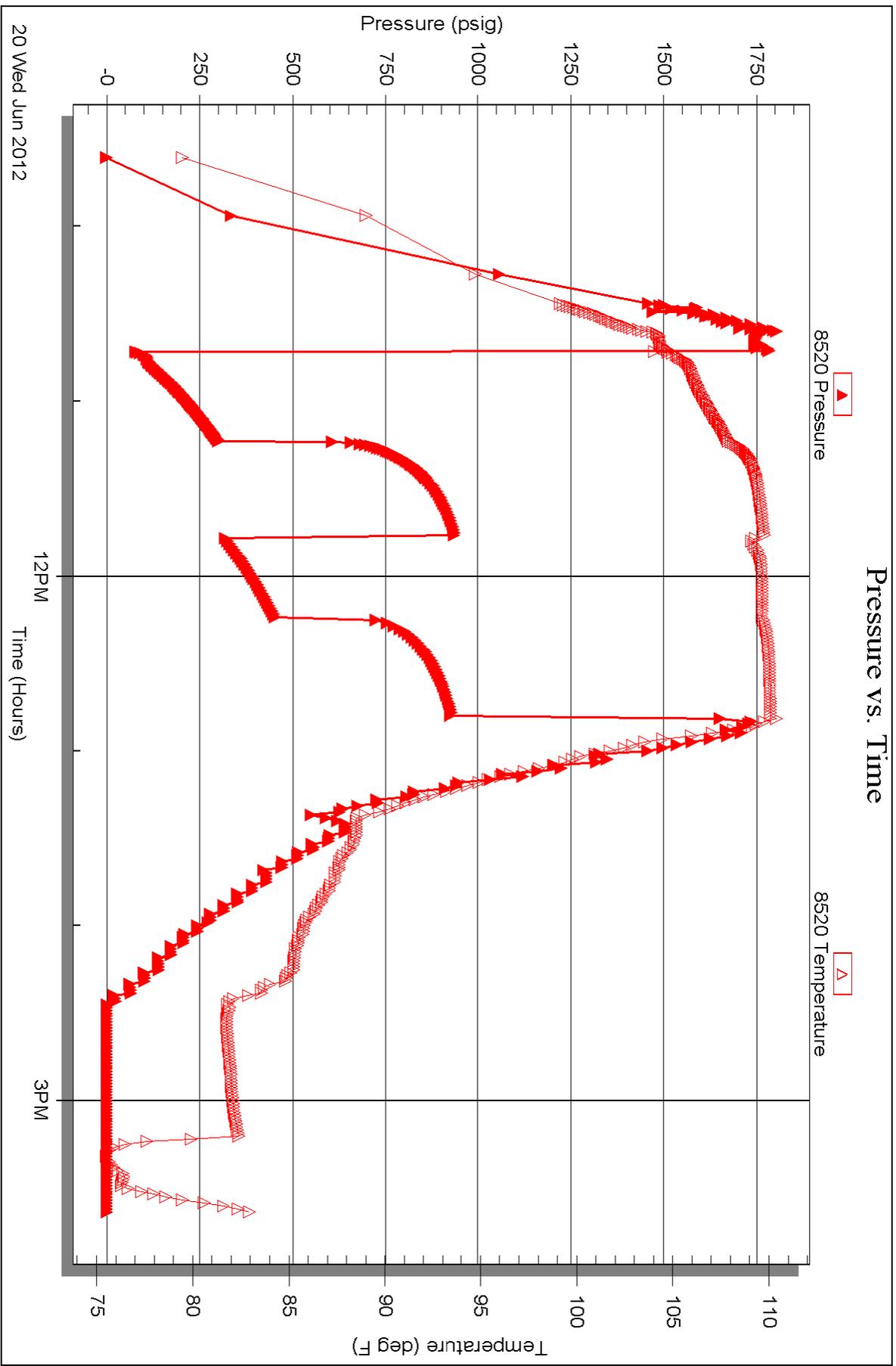


Serial #: 8520

Outside John O Farmer

States A #1

DST Test Number: 5

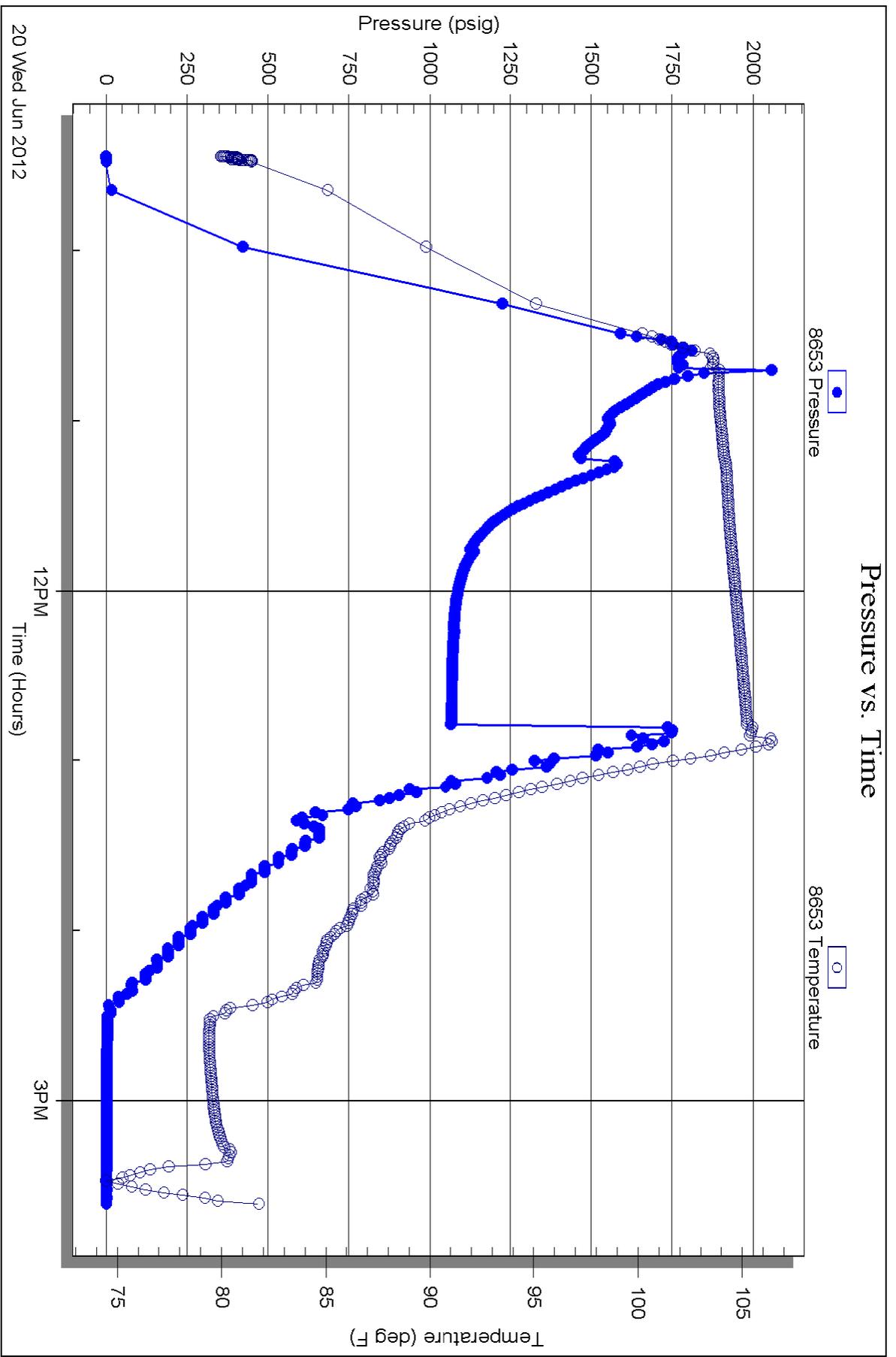


Serial #: 8653

Below (Straddled) Farmer

States A #1

DST Test Number: 5





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47926

Well Name & No. State A#1 Test No. 1 Date 6/10/12
 Company John G. Farmer Jr Elevation 2135 KB 2130 GL
 Address Box 352 Russell, KS
 Co. Rep / Geo. Austin Klaus Rig WW #6
 Location: Sec. 15 Twp. 5S Rge. 20W Co. Phillips State KS

Interval Tested 3306-3332 Zone Tested LKC C
 Anchor Length 26 Drill Pipe Run _____ Mud Wt. 9.0
 Top Packer Depth 3301 Drill Collars Run _____ Vis 32
 Bottom Packer Depth 3306 Wt. Pipe Run _____ WL 8.0
 Total Depth 3332 Chlorides _____ ppm System LCM _____

Blow Description 1" blow built to bottom of bucket in 20 minutes
ISI - no blow
FF - surface blow built to bottom of bucket in 24 minutes
SSI - no blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>495</u>	<u>MW</u>		<u>95</u>	<u>5</u>	
<u>5</u>	<u>cl g.</u>				
<u>60</u>	<u>Cross in pipe</u>				
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____

Rec Total 500 BHT _____ Gravity 34 API RW 1 @ 85 °F Chlorides 63,000 ppm

(A) Initial Hydrostatic 1613 Test 1150 T-On Location 1415
 (B) First Initial Flow 18 Jars _____ T-Started 1505
 (C) First Final Flow 133 Safety Joint _____ T-Open 1620
 (D) Initial Shut-In 629 Circ Sub _____ T-Pulled _____
 (E) Second Initial Flow 135 Hourly Standby _____ T-Out _____
 (F) Second Final Flow 249 Mileage 148rt 229.40 Comments _____
 (G) Final Shut-In 662 Sampler _____
 (H) Final Hydrostatic 1559 Straddle _____ Ruined Shale Packer _____

Initial Open 30 Shale Packer _____ Ruined Packer _____
 Initial Shut-In 30 Extra Packer _____ Extra Copies _____
 Final Flow 60 Extra Recorder _____ Sub Total 0
 Final Shut-In 60 Day Standby _____ Total 1379.40
 Accessibility _____ MP/DST Disc't _____

Approved By Austin B. Klaus Our Representative Paul Simpson
 Sub Total 1379.40

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47953

Well Name & No. Statey A #1 Test No. 2 Date 6/18/12
 Company John O farmer Elevation 213F KB 2130 GL
 Address _____
 Co. Rep / Geo. Austin Klars Rig W W #6
 Location: Sec. 15 Twp. 5S Rge. 20W Co. Phillips State K

Interval Tested 3329-3350 Zone Tested LKC 'D'
 Anchor Length 21 Drill Pipe Run 3217 Mud Wt. 8.9
 Top Packer Depth 3324 Drill Collars Run 170 Vis 44
 Bottom Packer Depth 3329 Wt. Pipe Run _____ WL _____
 Total Depth 3350 Chlorides _____ ppm System LCM
 Blow Description pool slid 4' before opening 1" blow
building to bottom of bucket in 11 minutes
Surface blower shut in ft - bottom of bucket in 15 minutes
FST no blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>560</u>	<u>MW</u>		<u>95</u>	<u>5</u>	
<u>10</u>	<u>clean oil</u>				
<u>50</u>	<u>gas in pipe</u>				
_____	_____				
_____	_____				

Rec Total 570 BHT _____ Gravity _____ API RW 13 @ 75 °F Chlorides 55,000 ppm
 (A) Initial Hydrostatic _____ Test 1150 T-On Location 0245
 (B) First Initial Flow _____ Jars _____ T-Started 0300
 (C) First Final Flow _____ Safety Joint _____ T-Open 0423
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled 0723
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 0848
 (F) Second Final Flow _____ Mileage 229.40 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic _____ Straddle _____
 Shale Packer _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1379.40

Initial Open 30
 Initial Shut-In 30
 Final Flow 60
 Final Shut-In 60

Approved By Austin B Klars Our Representative Paul Simpson

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47954

Well Name & No. States A #1 Test No. 3 Date 6/18/12
 Company John O Farmer Elevation 2135 KB 2130 GL
 Address _____
 Co. Rep / Geo. Austin Klevs Rig WW 6
 Location: Sec. 15 Twp. 5S Rge. 20W Co. Phillips State KS

Interval Tested 3346-3368 Zone Tested LICC E-F
 Anchor Length 22 Drill Pipe Run 320 Mud Wt. 8.8
 Top Packer Depth 3341 Drill Collars Run 120 Vis 59
 Bottom Packer Depth 3346 Wt. Pipe Run _____ WL _____
 Total Depth 3368 Chlorides _____ ppm System LCM _____
 Blow Description weak 1/8" blow died in 30 minutes

ff - no blow

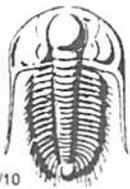
Rec	Feet of	%gas	%oil	%water	%mud
<u>70</u>	<u>WM w oil specks in tool</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 70 BHT 107 Gravity _____ API RW 24 @ 97 °F Chlorides 19,000 ppm

(A) Initial Hydrostatic 1623 Test 1150 T-On Location 1350
 (B) First Initial Flow 33 Jars _____ T-Started 1357
 (C) First Final Flow 33 Safety Joint _____ T-Open 1534
 (D) Initial Shut-In 638 Circ Sub _____ T-Pulled 1734
 (E) Second Initial Flow 45 Hourly Standby _____ T-Out 1901
 (F) Second Final Flow 49 Mileage 229.40 Comments _____
 (G) Final Shut-In 577 Sampler _____
 (H) Final Hydrostatic 1583 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 30 Day Standby _____ Total 1379.40
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 30 Sub Total 1379.40

Approved By _____ Our Representative Paul Simpson

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47955

Well Name & No. States A#1 Test No. 4 Date 6-19-12
 Company John O. Farnel, Inc. Elevation 2135 KB 2180 GL
 Address Box 352 Russell, KS
 Co. Rep / Geo. Austin Klaus Rig WW#6
 Location: Sec. 15 Twp. SS Rge. 20W Co. Phillips State KS

Interval Tested 3387-3472 Zone Tested LKC "H-K"
 Anchor Length 85' Drill Pipe Run _____ Mud Wt. 8.8
 Top Packer Depth 3382 Drill Collars Run 120.86 Vis 59
 Bottom Packer Depth 3387 Wt. Pipe Run 0 WL 8.8
 Total Depth 3472 Chlorides 2000 ppm System LCM 1#

Blow Description VF-Very weak building blow, Built to 1 3/4 inches,
VST-No Return.
FF-Very weak building blow, Built to 1 1/2 inches,
FST-No Return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>135</u>	<u>Mud w/ Oil Specs</u>	<u>2</u>		<u>98</u>	
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____

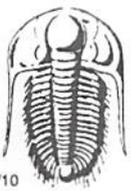
Rec Total 135 BHT 103 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 1668 Test 1150 T-On Location 1015
 (B) First Initial Flow 22 Jars _____ T-Started 1040
 (C) First Final Flow 54 Safety Joint _____ T-Open 1154
 (D) Initial Shut-In 915 Circ Sub _____ T-Pulled 1425
 (E) Second Initial Flow 58 Hourly Standby _____ T-Out 1620
 (F) Second Final Flow 82 Mileage 229.40 Comments BHT-1032
 (G) Final Shut-In 921 Sampler _____
 (H) Final Hydrostatic 1656 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 30 Extra Packer _____ Extra Copies _____
 Initial Shut-In 30 Extra Recorder _____ Sub Total 0
 Final Flow 45 Day Standby _____ Total 1379.40
 Final Shut-In 45 Accessibility _____ MP/DST Disc't _____
 Sub Total 1379.40

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 47956

Well Name & No. States A#1 Test No. 5 Date 6-20-12
 Company John O. Farmer, Inc. Elevation 2135 KB 2130 GL
 Address Box 352 Russell, KS
 Co. Rep / Geo. Austin Klaus Rig WW#6
 Location: Sec. 15 Twp. 05S Rge. 20W Co. Phillips State KS

Interval Tested 3546-3572 Zone Tested Aubuckle
 Anchor Length 26' 46' Tail Drill Pipe Run _____ Mud Wt. 8.9
 Top Packer Depth 3541 Drill Collars Run 120.36 Vis 60
 Bottom Packer Depth 3546 3572-SP Wt. Pipe Run 0 WL 8.8
 Total Depth 3618 Chlorides 2500 ppm System LCM 1#

Blow Description IF - Strong building blow. BOB in 2 minutes.
ISI - Return @ 1 minute 30 seconds. Built to 5 inches.
FF - Strong building blow. BOB in 4 minutes.
FBI - Return @ 2 minutes. Built to 3 inches.

Rec	Feet of	%gas	%oil	%water	%mud
<u>150</u>	<u>Watery Gassy Oil</u>	<u>60%</u>	<u>35%</u>	<u>5%</u>	
<u>1140</u>	<u>Watery Gassy Oil</u>	<u>25%</u>	<u>70%</u>	<u>5%</u>	
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of _____	%gas _____	%oil _____	%water _____	%mud _____
Rec _____	Feet of <u>150' G.I.P.</u>	%gas _____	%oil _____	%water _____	%mud _____

Rec Total 1290 BHT 110 Gravity 29 API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1803 Test 1150 T-On Location 0845
 (B) First Initial Flow 86 Jars _____ T-Started 0930
 (C) First Final Flow 295 Safety Joint _____ T-Open 1043
 (D) Initial Shut-In 934 Circ Sub _____ T-Pulled 1245
 (E) Second Initial Flow 320 Hourly Standby _____ T-Out 1545
 (F) Second Final Flow 448 Mileage 74X2 229.40 Comments BWT-0926
 (G) Final Shut-In 924 Sampler _____
 (H) Final Hydrostatic 1749 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 30 Extra Packer _____ Extra Copies _____
 Initial Shut-In 30 Extra Recorder _____ Sub Total 0
 Final Flow 30 Day Standby _____ Total 1979.40
 Final Shut-In 30 Accessibility _____ MP/DST Disc't _____
 Sub Total 1979.40

Approved By _____ Our Representative D. Katz

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