



## DRILL STEM TEST REPORT

Prepared For: **Val Energy Inc.**

125 N. Market St. STE 1110  
Wichita, KS 67202

ATTN: Tim Priest

### **Crumrine #1-4**

#### **4-8s-36w Thomas,KS**

Start Date: 2019.08.04 @ 09:23:00

End Date: 2019.08.04 @ 17:04:30

Job Ticket #: 64695                      DST #: 1

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2019.08.07 @ 11:05:47



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Val Energy Inc.  
125 N. Market St. STE 1110  
Wichita, KS 67202  
ATTN: Tim Priest

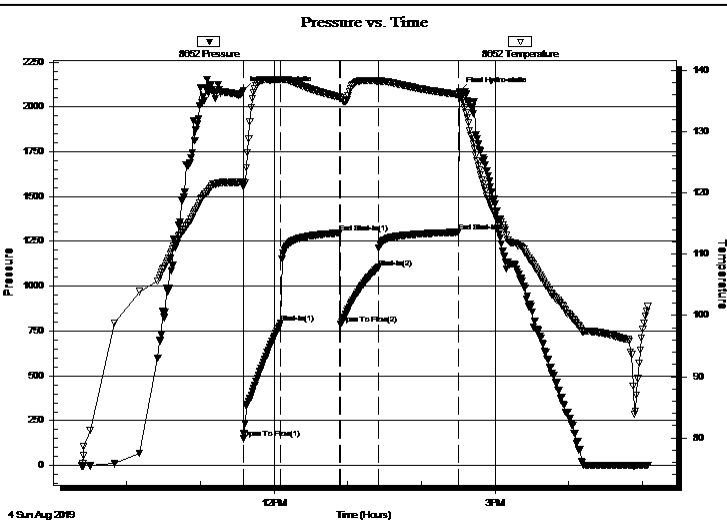
**4-8s-36w Thomas,KS**  
**Crumrine #1-4**  
Job Ticket: 64695 **DST#: 1**  
Test Start: 2019.08.04 @ 09:23:00

## GENERAL INFORMATION:

Formation: **LKC "H - K"**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 11:35:00  
Time Test Ended: 17:04:30  
Interval: **4274.00 ft (KB) To 4400.00 ft (KB) (TVD)**  
Total Depth: 4400.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: James Winder  
Unit No: 83  
Reference Elevations: 3330.00 ft (KB)  
3325.00 ft (CF)  
KB to GR/CF: 5.00 ft

**Serial #: 8652 Outside**  
Press@RunDepth: 1104.82 psig @ 4275.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2019.08.04 End Date: 2019.08.04 Last Calib.: 2019.08.04  
Start Time: 09:23:05 End Time: 17:04:29 Time On Btm: 2019.08.04 @ 11:34:45  
Time Off Btm: 2019.08.04 @ 14:31:15

**TEST COMMENT:** 30 - IF: Blow built to BOB (11") at 1 3/4 min., built to 183 1/2"  
45 - IS: No blow back  
30 - FF: Blow built to BOB at 2 min., built to 128"  
60 - FS: No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2092.65	121.78	Initial Hydro-static
1	149.32	121.00	Open To Flow (1)
31	793.30	138.46	Shut-In(1)
79	1297.12	135.59	End Shut-In(1)
80	790.45	135.48	Open To Flow (2)
110	1104.82	138.20	Shut-In(2)
176	1301.28	136.04	End Shut-In(2)
177	2083.65	135.73	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1780.00	SMCW 96%w, 4%m	23.86
550.00	MCW 75%w, 25%m	7.72

## Gas Rates

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



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Val Energy Inc.  
125 N. Market St. STE 1110  
Wichita, KS 67202  
ATTN: Tim Priest

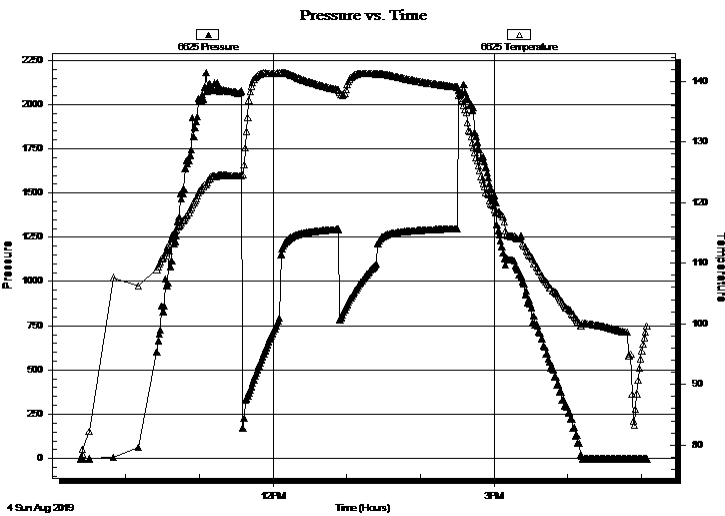
**4-8s-36w Thomas,KS**  
**Crumrine #1-4**  
Job Ticket: 64695      **DST#: 1**  
Test Start: 2019.08.04 @ 09:23:00

**GENERAL INFORMATION:**

Formation: **LKC "H - K"**  
Deviated: No Whipstock:    ft (KB)      Test Type: Conventional Bottom Hole (Initial)  
Time Tool Opened: 11:35:00      Tester: James Winder  
Time Test Ended: 17:04:30      Unit No: 83  
**Interval: 4274.00 ft (KB) To 4400.00 ft (KB) (TVD)**      Reference Elevations: 3330.00 ft (KB)  
Total Depth: 4400.00 ft (KB) (TVD)      3325.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Fair      KB to GR/CF: 5.00 ft

**Serial #: 6625      Inside**  
Press@RunDepth:    psig @ 4275.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2019.08.04      End Date: 2019.08.04      Last Calib.: 2019.08.04  
Start Time: 09:23:05      End Time: 17:04:59      Time On Btm:  
Time Off Btm:

**TEST COMMENT:** 30 - IF: Blow built to BOB (11") at 1 3/4 min., built to 183 1/2"  
45 - IS: No blow back  
30 - FF: Blow built to BOB at 2 min., built to 128"  
60 - FS: No blow back



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

**Recovery**

Length (ft)	Description	Volume (bbl)
1780.00	SMCW 96%w, 4%m	23.86
550.00	MCW 75%w, 25%m	7.72

**Gas Rates**

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Val Energy Inc.  
125 N. Market St. STE 1110  
Wichita, KS 67202  
ATTN: Tim Priest

**4-8s-36w Thomas,KS**  
**Crumrine #1-4**  
Job Ticket: 64695      **DST#: 1**  
Test Start: 2019.08.04 @ 09:23:00

**Tool Information**

Drill Pipe:	Length: 4157.00 ft	Diameter: 3.80 inches	Volume: 58.31 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 82000.00 lb
			<u>Total Volume: 58.91 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4274.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	126.00 ft			
Tool Length:	147.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Change Over Sub	1.00			4254.00	
Shut In Tool	5.00			4259.00	
Hydraulic tool	5.00			4264.00	
Packer	5.00			4269.00	21.00      Bottom Of Top Packer
Packer	5.00			4274.00	
Packer - Shale	0.00			4274.00	
Stubb	1.00			4275.00	
Recorder	0.00	6625	Inside	4275.00	
Recorder	0.00	8652	Outside	4275.00	
Perforations	25.00			4300.00	
Blank Spacing	97.00			4397.00	
Bullnose	3.00			4400.00	126.00      Bottom Packers & Anchor

**Total Tool Length: 147.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Val Energy Inc.

**4-8s-36w Thomas,KS**

125 N. Market St. STE 1110  
Wichita, KS 67202

**Crumrine #1-4**

Job Ticket: 64695

**DST#: 1**

ATTN: Tim Priest

Test Start: 2019.08.04 @ 09:23:00

## 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:

27000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2700.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1780.00	SMCW 96%w , 4%m	23.857
550.00	MCW 75%w , 25%m	7.715

Total Length: 2330.00 ft      Total Volume: 31.572 bbl

Num Fluid Samples: 0

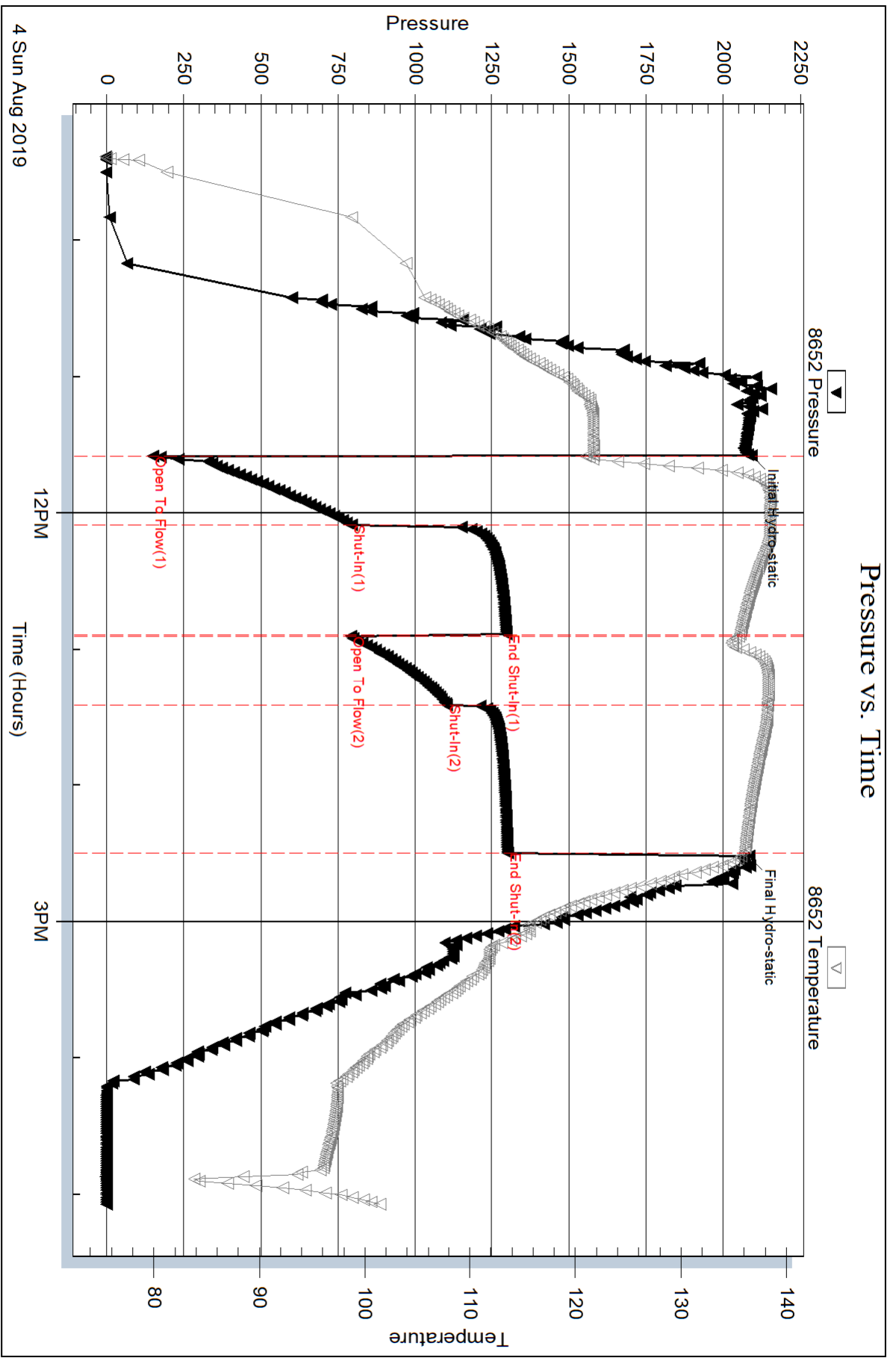
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .186 ohms @ 98 deg F Chlorides = 27,000 ppm



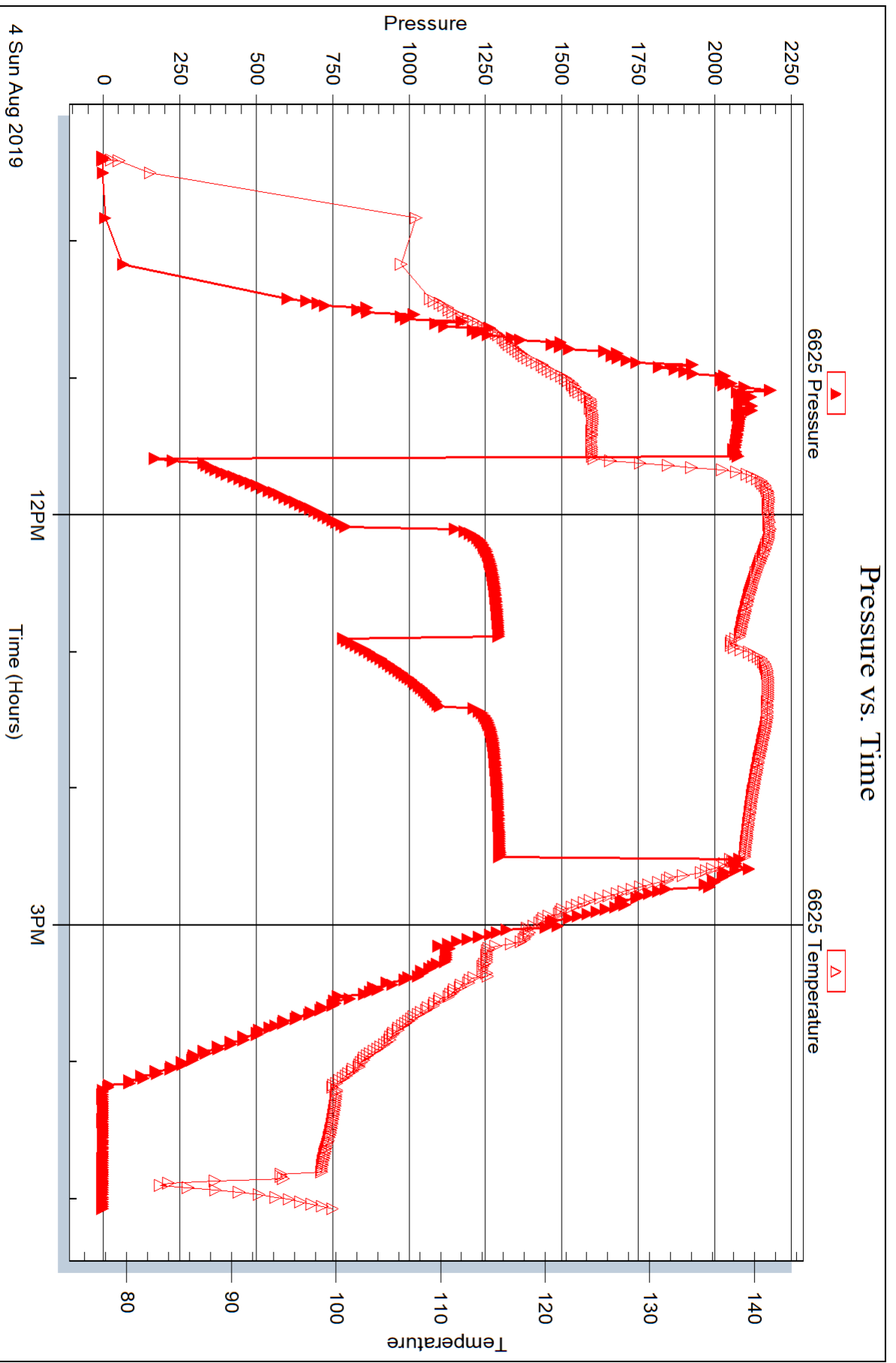
Serial #: 6625

Inside

Val Energy Inc.

Cumtine #1-4

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 64695

Printed: 2019.08.07 @ 11:05:48



## DRILL STEM TEST REPORT

Prepared For: **Val Energy Inc.**

125 N. Market St. STE 1110  
Wichita, KS 67202

ATTN: Tim Priest

### **Crumrine #1-4**

#### **4-8s-36w Thomas,KS**

Start Date: 2019.08.05 @ 17:54:00

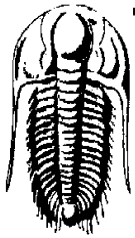
End Date: 2019.08.05 @ 22:42:30

Job Ticket #: 64696                      DST #: 2

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2019.08.07 @ 11:05:05





# TRILOBITE TESTING, INC.

## DRILL STEM TEST REPORT

Val Energy Inc.  
125 N. Market St. STE 1110  
Wichita, KS 67202  
ATTN: Tim Priest

**4-8s-36w Thomas,KS**  
**Crumrine #1-4**  
Job Ticket: 64696      **DST#: 2**  
Test Start: 2019.08.05 @ 17:54:00

### GENERAL INFORMATION:

Formation: **Cherokee**  
Deviated: No      Whipstock:      ft (KB)  
Time Tool Opened:  
Time Test Ended: 22:42:30

Test Type: Conventional Bottom Hole (Reset)  
Tester: James Winder  
Unit No: 83

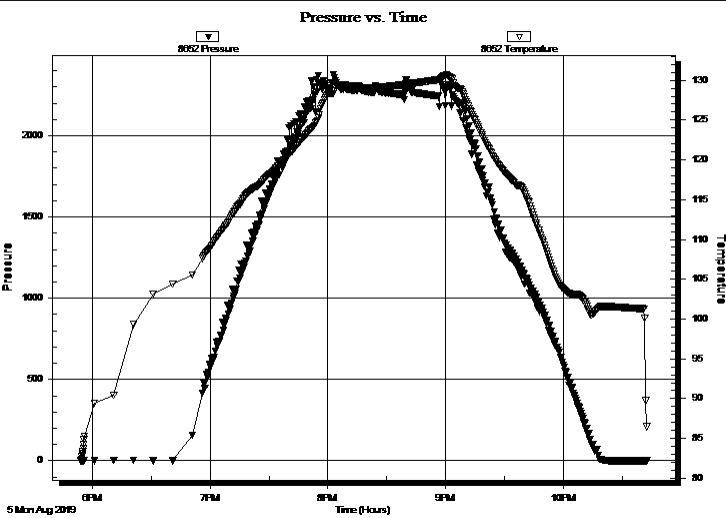
Interval: **4630.00 ft (KB) To 4655.00 ft (KB) (TVD)**  
Total Depth: 4655.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches      Hole Condition: Fair

Reference Elevations: 3330.00 ft (KB)  
3325.00 ft (CF)  
KB to GR/CF: 5.00 ft

### Serial #: 8652      Outside

Press@RunDepth:      psig @      4631.00 ft (KB)	Capacity:      8000.00 psig
Start Date:      2019.08.05      End Date:      2019.08.05	Last Calib.:      2019.08.05
Start Time:      17:54:05      End Time:      22:42:29	Time On Btm: Time Off Btm:

TEST COMMENT: Hydraulic Tool would not open  
Pulled tool



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

### Recovery

Length (ft)	Description	Volume (bbl)

\* Recovery from multiple tests

### Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Val Energy Inc.

**4-8s-36w Thomas,KS**

125 N. Market St. STE 1110  
Wichita, KS 67202

**Crumrine #1-4**

Job Ticket: 64696

**DST#: 2**

ATTN: Tim Priest

Test Start: 2019.08.05 @ 17:54:00

## Tool Information

Drill Pipe:	Length: 4507.00 ft	Diameter: 3.80 inches	Volume: 63.22 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	35000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	65000.00 lb
			<u>Total Volume: 63.82 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4630.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	25.00 ft				
Tool Length:	46.00 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			4610.00	
Shut In Tool	5.00			4615.00	
Hydraulic tool	5.00			4620.00	
Packer	5.00			4625.00	21.00 Bottom Of Top Packer
Packer	5.00			4630.00	
Packer - Shale	0.00			4630.00	
Stubb	1.00			4631.00	
Recorder	0.00	6625	Inside	4631.00	
Recorder	0.00	8652	Outside	4631.00	
Perforations	21.00			4652.00	
Bullnose	3.00			4655.00	25.00 Bottom Packers & Anchor

**Total Tool Length: 46.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Val Energy Inc.

**4-8s-36w Thomas,KS**

125 N. Market St. STE 1110  
Wichita, KS 67202

**Crumrine #1-4**

Job Ticket: 64696

**DST#: 2**

ATTN: Tim Priest

Test Start: 2019.08.05 @ 17:54:00

### 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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl

Total Length:                      ft

Total Volume:                      bbl

Num Fluid Samples: 0

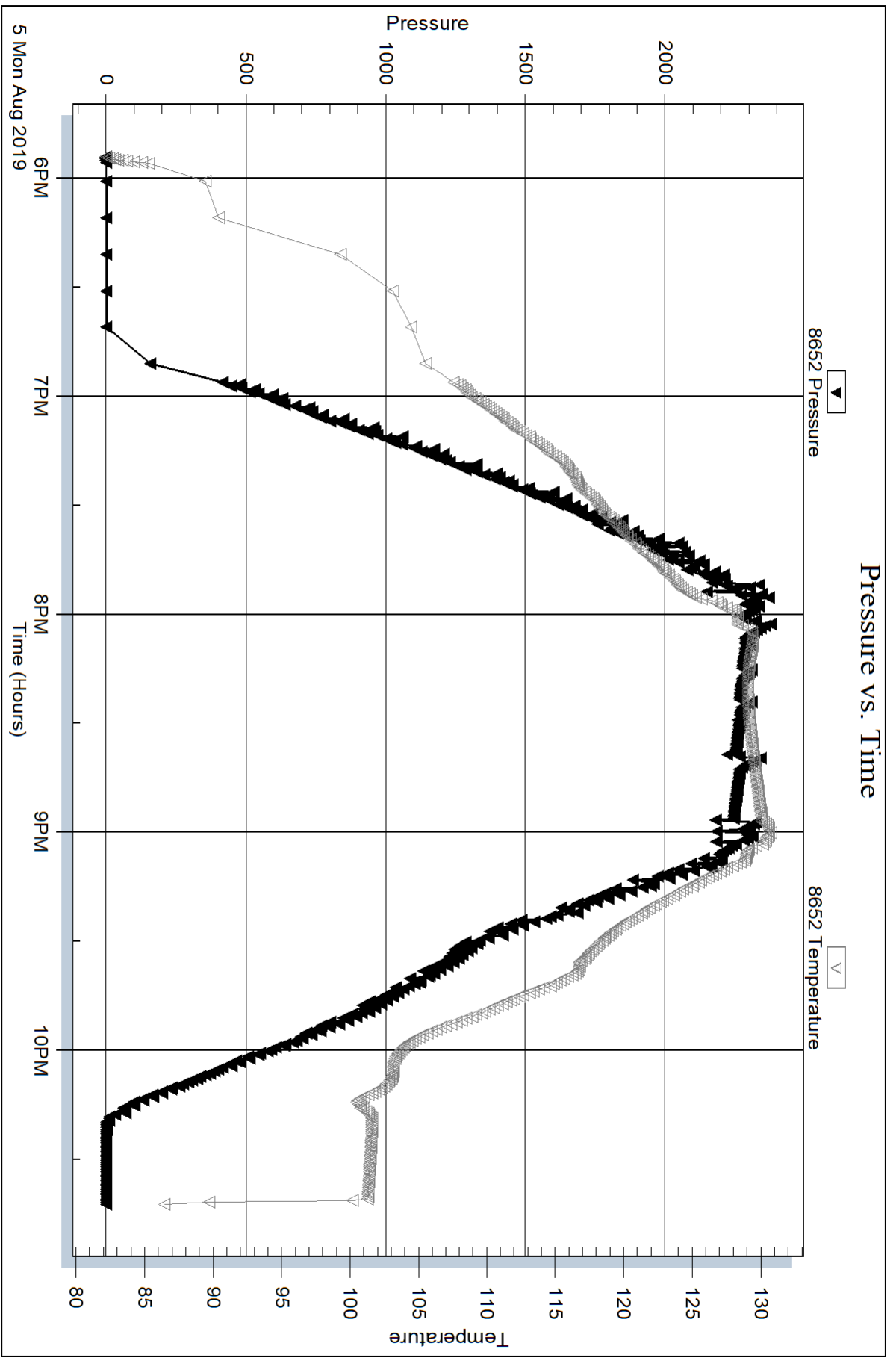
Num Gas Bombs: 0

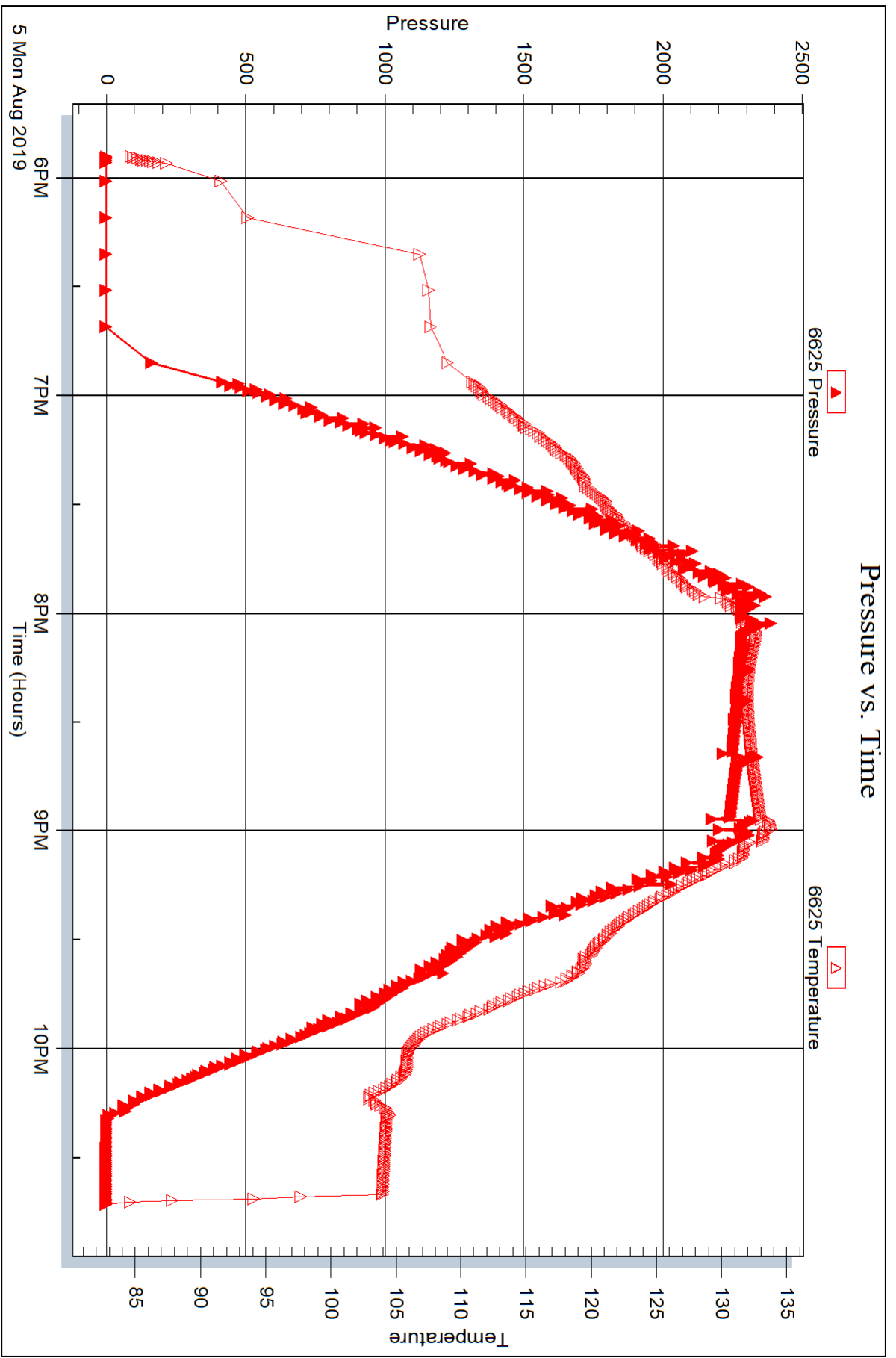
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Val Energy Inc.**

125 N. Market St. STE 1110  
Wichita, KS 67202

ATTN: Tim Priest

### **Crumrine #1-4**

#### **4-8s-36w Thomas,KS**

Start Date: 2019.08.05 @ 22:57:00

End Date: 2019.08.06 @ 04:09:45

Job Ticket #: 64697                      DST #: 3

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2019.08.07 @ 10:57:16

Val Energy Inc. 4-8s-36w Thomas,KS Crumrine #1-4 DST # 3 Cherokee 2019.08.05



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Val Energy Inc.  
125 N. Market St. STE 1110  
Wichita, KS 67202  
ATTN: Tim Priest

**4-8s-36w Thomas,KS**  
**Crumrine #1-4**  
Job Ticket: 64697 **DST#: 3**  
Test Start: 2019.08.05 @ 22:57:00

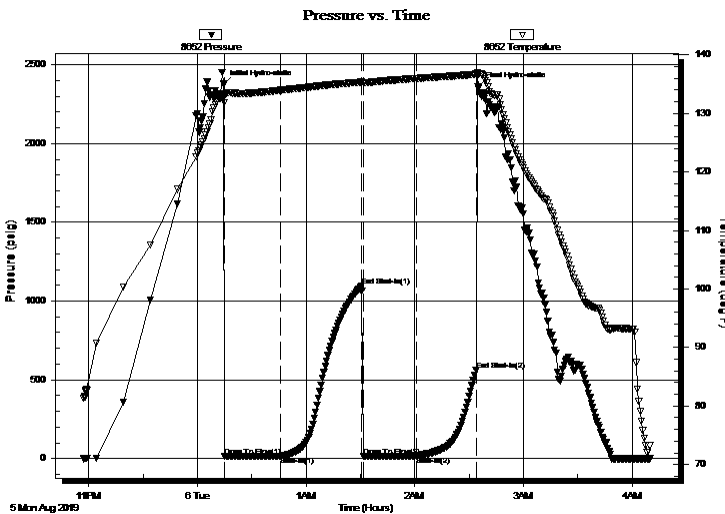
## GENERAL INFORMATION:

Formation: **Cherokee**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 00:14:45  
Time Test Ended: 04:09:45  
Interval: **4630.00 ft (KB) To 4655.00 ft (KB) (TVD)**  
Total Depth: 4655.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Reference Elevations: 3330.00 ft (KB)  
3325.00 ft (CF)  
KB to GR/CF: 5.00 ft  
Test Type: Conventional Bottom Hole (Reset)  
Tester: James Winder  
Unit No: 83

**Serial #: 8652 Outside**  
Press@RunDepth: 17.14 psig @ 4631.00 ft (KB) Capacity: 8000.00 psig  
Start Date: 2019.08.05 End Date: 2019.08.06 Last Calib.: 2019.08.06  
Start Time: 22:57:05 End Time: 04:09:44 Time On Btm: 2019.08.06 @ 00:14:30  
Time Off Btm: 2019.08.06 @ 02:35:00

TEST COMMENT: 30 - IF: Blow built to 1"  
45 - IS: No blow back  
30 - FF: No blow  
30 - FS: No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2377.26	133.06	Initial Hydro-static
1	12.90	131.91	Open To Flow (1)
32	14.50	133.98	Shut-In(1)
76	1093.88	135.37	End Shut-In(1)
77	16.22	135.31	Open To Flow (2)
107	17.14	135.98	Shut-In(2)
140	559.05	136.72	End Shut-In(2)
141	2359.24	136.86	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2.00	SMCO 85%o, 5%g, 10%m	0.01

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Val Energy Inc.  
 125 N. Market St. STE 1110  
 Wichita, KS 67202  
 ATTN: Tim Priest

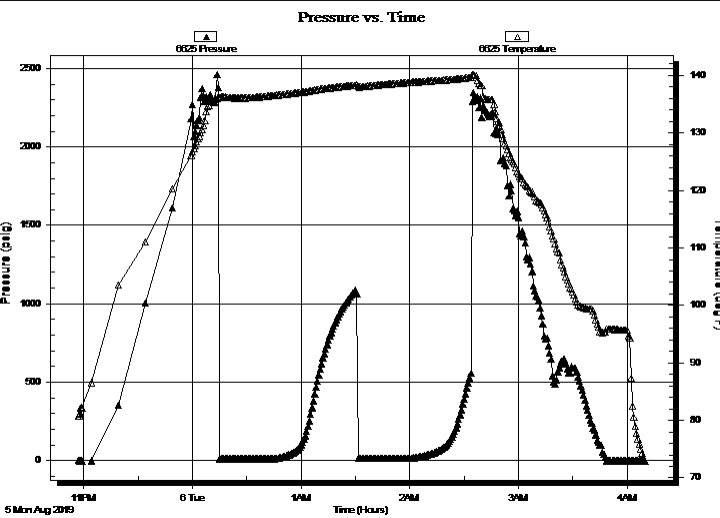
**4-8s-36w Thomas,KS**  
**Crumrine #1-4**  
 Job Ticket: 64697 **DST#: 3**  
 Test Start: 2019.08.05 @ 22:57:00

## GENERAL INFORMATION:

Formation: **Cherokee**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 00:14:45  
 Time Test Ended: 04:09:45  
 Interval: **4630.00 ft (KB) To 4655.00 ft (KB) (TVD)**  
 Total Depth: 4655.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: James Winder  
 Unit No: 83  
 Reference Elevations: 3330.00 ft (KB)  
 3325.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 6625 Inside**  
 Press@RunDepth: psig @ 4631.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.08.05 End Date: 2019.08.06 Last Calib.: 2019.08.06  
 Start Time: 22:57:05 End Time: 04:10:14 Time On Btm:  
 Time Off Btm:

TEST COMMENT: 30 - IF: Blow built to 1"  
 45 - IS: No blow back  
 30 - FF: No blow  
 30 - FS: No blow



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery		
Length (ft)	Description	Volume (bbl)
2.00	SMCO 85%o, 5%g, 10%m	0.01

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Val Energy Inc.  
125 N. Market St. STE 1110  
Wichita, KS 67202  
ATTN: Tim Priest

**4-8s-36w Thomas,KS**  
**Crumrine #1-4**  
Job Ticket: 64697      **DST#: 3**  
Test Start: 2019.08.05 @ 22:57:00

**Tool Information**

Drill Pipe:	Length: 4507.00 ft	Diameter: 3.80 inches	Volume: 63.22 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer:	35000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 63.82 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4630.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	25.00 ft				
Tool Length:	46.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Change Over Sub	1.00			4610.00	
Shut In Tool	5.00			4615.00	
Hydraulic tool	5.00			4620.00	
Packer	5.00			4625.00	21.00      Bottom Of Top Packer
Packer	5.00			4630.00	
Packer - Shale	0.00			4630.00	
Stubb	1.00			4631.00	
Recorder	0.00	6625	Inside	4631.00	
Recorder	0.00	8652	Outside	4631.00	
Perforations	21.00			4652.00	
Bullnose	3.00			4655.00	25.00      Bottom Packers & Anchor

**Total Tool Length: 46.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Val Energy Inc.

**4-8s-36w Thomas,KS**

125 N. Market St. STE 1110  
Wichita, KS 67202

**Crumrine #1-4**

Job Ticket: 64697

**DST#: 3**

ATTN: Tim Priest

Test Start: 2019.08.05 @ 22:57:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

24.8 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
2.00	SMCO 85%o, 5%g, 10%m	0.010

Total Length: 2.00 ft      Total Volume: 0.010 bbl

Num Fluid Samples: 0

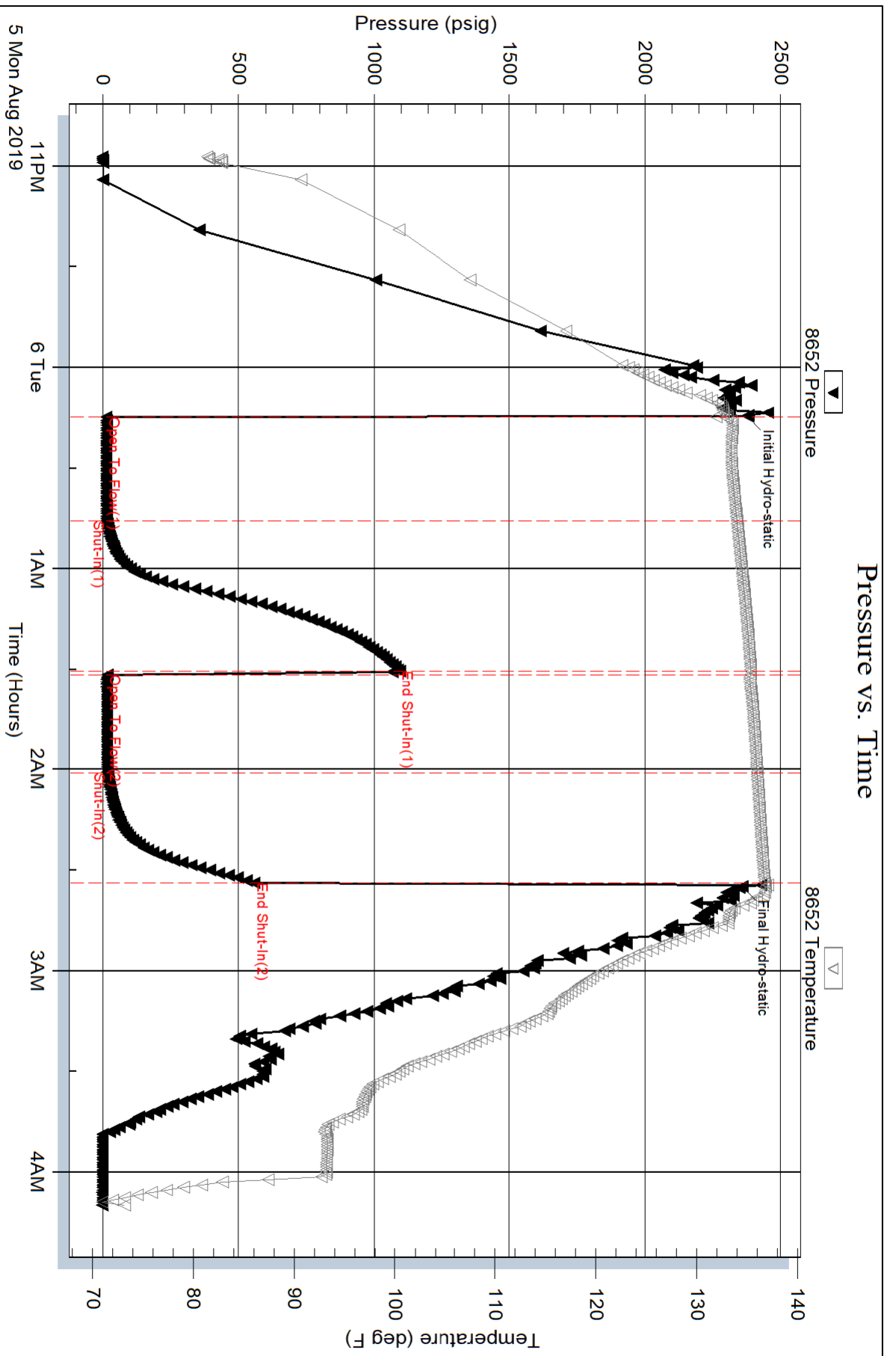
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 25.6 api @ 68 deg F Corrected Gravity = 24.8 api



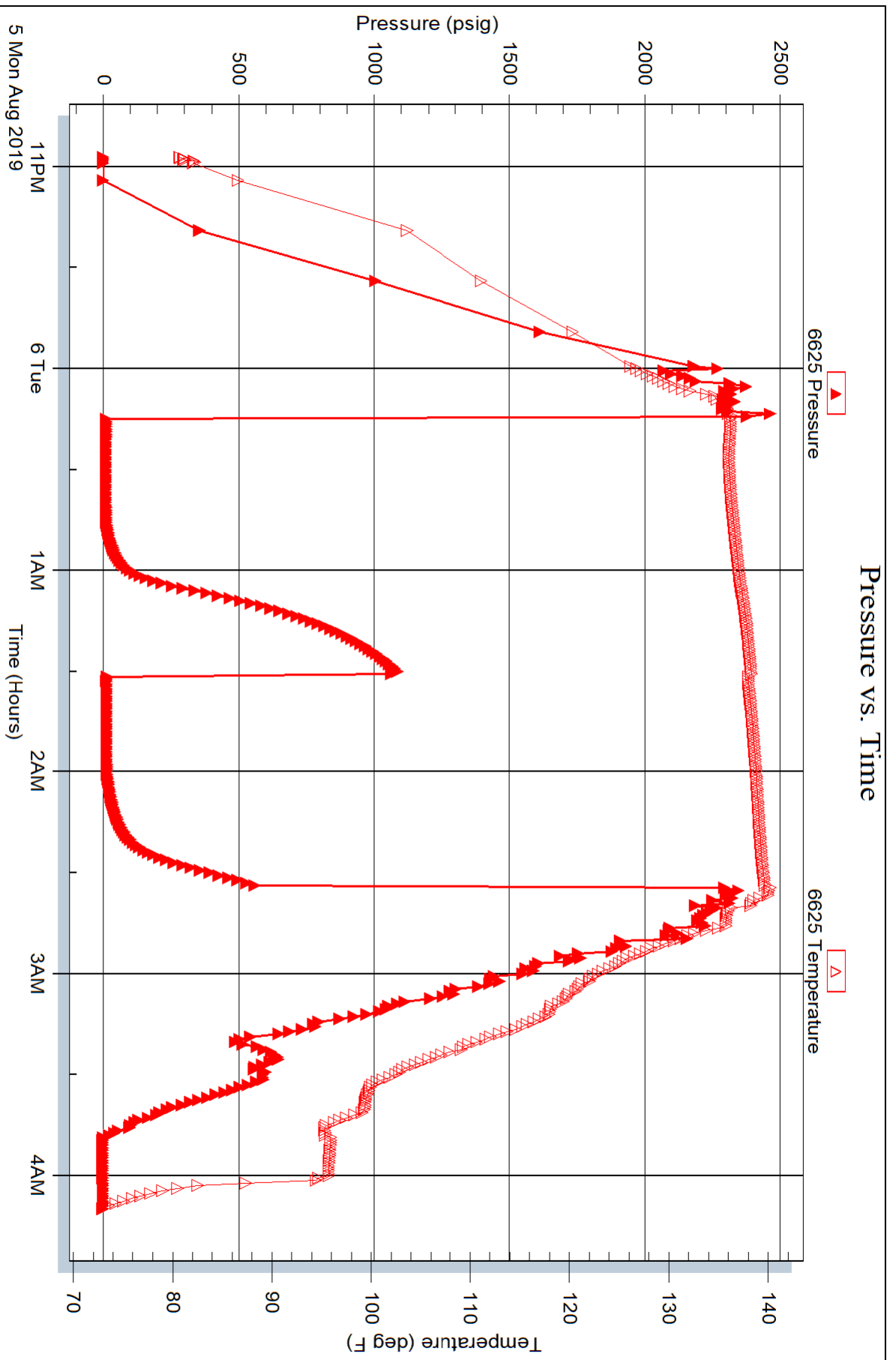
Serial #: 6625

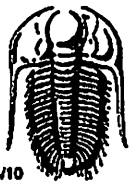
Inside

Val Energy Inc.

Cumtine #1-4

DST Test Number: 3





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 64695

Well Name & No. Crumrine #1-4 Test No. 1 Date 8-4-19  
 Company Val Energy Inc Elevation 3330 KB 3325 GL  
 Address 125 N Market St STE 1110 Wichita, KS 67202  
 Co. Rep / Geo. Tim Priest Rig WW #10  
 Location: Sec. 4 Twp 8s Rge. 36w Co. Thomas State KS

Interval Tested 4274 - 4400 Zone Tested LKC "H-K"  
 Anchor Length 126 Drill Pipe Run 4157 Mud Wt. 9.4  
 Top Packer Depth 4269 Drill Collars Run 122 Vis 55  
 Bottom Packer Depth 4274 (Shale) Wt. Pipe Run - WL 7.2  
 Total Depth 4400 Chlorides 2700 ppm System LCM 1

Blow Description IF: Blow built to BOR (11") at 1 3/4 min., built to 183 1/2"  
IST: No blowback  
FF: Blow built to BOB at 2 min., built to 128"  
FSI: No blowback

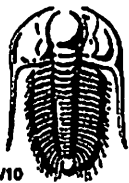
Rec	Feet of	%gas	%oil	%water	%mud
<u>550</u>	<u>MCW</u>			<u>75</u>	<u>25</u>
<u>1780</u>	<u>SMCW</u>			<u>96</u>	<u>4</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2330 BHT 136 Gravity \_\_\_\_\_ API RW 0.86 @ 98 °F Chlorides 27,000 ppm

(A) Initial Hydrostatic 2093  Test 1300 T-On Location 7:55  
 (B) First Initial Flow 149  Jars \_\_\_\_\_ T-Started 9:23  
 (C) First Final Flow 793  Safety Joint \_\_\_\_\_ T-Open 11:35  
 (D) Initial Shut-In 1297  Circ Sub \_\_\_\_\_ T-Pulled 14:30  
 (E) Second Initial Flow 790  Hourly Standby \_\_\_\_\_ T-Out 17:00  
 (F) Second Final Flow 1105  Mileage 156 RT 156 Comments \_\_\_\_\_  
 (G) Final Shut-In 1301  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2084  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer 250  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1706  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1706

Approved By \_\_\_\_\_ Our Representative James Vindler

TriLOBITE TESTING Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools test or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 64696

Well Name & No. Crumrine #1-4 Test No. 2 Date 8-5-19  
 Company Val Energy Inc. Elevation 3330 KB 3325 GL  
 Address 125 N. Market St. STE 110 Wichita, KS 67202  
 Co. Rep / Geo. Tim Priest Rig WW#10  
 Location: Sec. 4 Twp 8S Rge. 36W Co. Thomas State KS

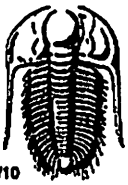
Interval Tested 4630-4655 Zone Tested Cherokee  
 Anchor Length 25 Drill Pipe Run 4507 Mud Wt. 9.4  
 Top Packer Depth 4625 Drill Collars Run 122 Vls 54  
 Bottom Packer Depth 4630 (shale) Wt. Pipe Run - WL 8.8  
 Total Depth 4655 Chlorides 5000 ppm System LCM 1  
 Blow Description ~~Hydraulic~~ Hydraulic Tool would not open  
Pulled tool

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	Feet of	%gas	%oil	%water	%mud

Rec Total \_\_\_\_\_ BHT \_\_\_\_\_ Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic \_\_\_\_\_  Test nc T-On Location 17:20  
 (B) First Initial Flow \_\_\_\_\_  Jars \_\_\_\_\_ T-Started 17:54  
 (C) First Final Flow \_\_\_\_\_  Safety Joint \_\_\_\_\_ T-Open \_\_\_\_\_  
 (D) Initial Shut-In \_\_\_\_\_  Circ Sub \_\_\_\_\_ T-Pulled 20:57  
 (E) Second Initial Flow \_\_\_\_\_  Hourly Standby \_\_\_\_\_ T-Out 22:40  
 (F) Second Final Flow \_\_\_\_\_  Mileage 156RT Comments \_\_\_\_\_  
 (G) Final Shut-In \_\_\_\_\_  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic \_\_\_\_\_  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Initial Open \_\_\_\_\_  Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Shut-In \_\_\_\_\_  Extra Recorder \_\_\_\_\_ Sub Total \_\_\_\_\_  
 Final Flow \_\_\_\_\_  Day Standby \_\_\_\_\_ Total \_\_\_\_\_  
 Final Shut-In \_\_\_\_\_  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative James White  
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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 64697

Well Name & No. Crumrine #1-4 Test No. 3 Date 8-5-19  
 Company Val Energy Inc Elevation 3330 KB 3325 GL  
 Address 125 N. Market St STE 1110 Wichita, KS 67202  
 Co. Rep / Geo. Tim Priest Rig WW #10  
 Location: Sec. 4 Twp 8s Rge. 36w Co. Thomas State KS

Interval Tested 4630 - 4655 Zone Tested Cherokee  
 Anchor Length 25 Drill Pipe Run 4507 Mud Wt. 9.4  
 Top Packer Depth 4625 Drill Collars Run 122 Vis 54  
 Bottom Packer Depth 4630 Wt. Pipe Run - WL 8.8  
 Total Depth 4655 Chlorides 5000 ppm System LCM 1

Blow Description IF: Blow built to 1"  
ISI: No blowback  
FF: No blow  
FSI: No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>SMCO</u>	<u>5</u>	<u>85</u>	<u>10</u>	<u>0</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2 BHT 137 Gravity 24.8 API RW @ °F Chlorides ppm  
 (A) Initial Hydrostatic 2377  Test 1300 T-On Location 22:50  
 (B) First Initial Flow 13  Jars \_\_\_\_\_ T-Started 22:57  
 (C) First Final Flow 15  Safety Joint \_\_\_\_\_ T-Open 00:14  
 (D) Initial Shut-In 1094  Circ Sub \_\_\_\_\_ T-Pulled 2:33  
 (E) Second Initial Flow 16  Hourly Standby \_\_\_\_\_ T-Out 4:15  
 (F) Second Final Flow 17  Mileage 156 RT Lead Tools 156 Comments \_\_\_\_\_  
 (G) Final Shut-In 559  Sampler \_\_\_\_\_ loaded 8/6 11:30  
 (H) Final Hydrostatic 2359  Straddle \_\_\_\_\_  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_

Initial Open 30  Extra Packer \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 45  Extra Recorder \_\_\_\_\_ Total 1706  
 Final Flow 36  Day Standby \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 30  Accessibility \_\_\_\_\_  
 Sub Total 1706

Approved By \_\_\_\_\_ Our Representative James White  
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