



DRILL STEM TEST REPORT

Prepared For: **Energy Partners LLC**

8918 W 21st St N #200-304
Wichita, KS 67205

ATTN: Brad Rine

VanZant #1

23-34S-01W Sumner,KS

Start Date: 2019.04.10 @ 00:18:00

End Date: 2019.04.10 @ 10:21:47

Job Ticket #: 64961 DST #: 1

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

Printed: 2019.04.15 @ 15:25:30



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Energy Partners LLC
 8918 W 21st St N #200-304
 Wichita, KS 67205
 ATTN: Brad Rine

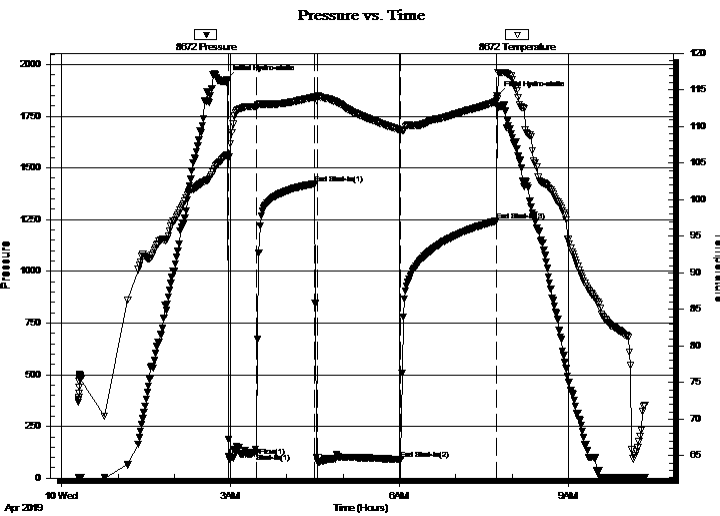
23-34S-01W Sumner,KS
VanZant #1
 Job Ticket: 64961 **DST#: 1**
 Test Start: 2019.04.10 @ 00:18:00

GENERAL INFORMATION:

Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 02:58:02 Tester: Leal Cason
 Time Test Ended: 10:21:47 Unit No: 74
 Interval: **3865.00 ft (KB) To 3907.00 ft (KB) (TVD)** Reference Elevations: 1161.00 ft (KB)
 Total Depth: 3907.00 ft (KB) (TVD) 1152.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 9.00 ft

Serial #: 8672 Inside
 Press@RunDepth: 121.79 psig @ 3866.00 ft (KB) Capacity: psig
 Start Date: 2019.04.10 End Date: 2019.04.10 Last Calib.: 2019.04.10
 Start Time: 00:18:01 End Time: 10:21:47 Time On Btm: 2019.04.10 @ 02:55:17
 Time Off Btm: 2019.04.10 @ 07:43:47

TEST COMMENT: IF: Strong Blow , BOB in 45 seconds, GTS in 10 minutes, Gauged Gas
 IS: No Blow Back
 FF: Strong Blow , BOB & GTS Immediate, Gauged Gas
 FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1924.83	106.03	Initial Hydro-static
3	104.30	105.83	Open To Flow (1)
33	121.79	112.77	Shut-In(1)
95	1423.51	114.02	End Shut-In(1)
97	79.74	114.00	Open To Flow (2)
187	91.43	109.50	End Shut-In(2)
289	1243.89	113.48	End Shut-In(3)
289	1847.15	113.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	GTS	0.00
63.00	SGCM 2%G 98%M	0.31

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.25	31.00	72.00
Last Gas Rate	0.38	44.00	161.18
Max. Gas Rate	0.38	52.00	190.49



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Energy Partners LLC
8918 W 21st St N #200-304
Wichita, KS 67205
ATTN: Brad Rine

23-34S-01W Sumner,KS
VanZant #1
Job Ticket: 64961 **DST#: 1**
Test Start: 2019.04.10 @ 00:18:00

Tool Information

Drill Pipe:	Length: 3685.00 ft	Diameter: 3.80 inches	Volume: 51.69 bbl	Tool Weight:	2100.00 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: 183.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose:	90000.00 lb
			<u>Total Volume: 52.59 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial	74000.00 lb
Depth to Top Packer:	3865.00 ft			Final	lb
Depth to Bottom Packer:	ft				
Interval between Packers:	42.00 ft				
Tool Length:	68.00 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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Shut In Tool	5.00			3844.00	
Hydraulic tool	5.00			3849.00	
Jars	5.00			3854.00	
Safety Joint	2.00			3856.00	
Packer	5.00			3861.00	26.00 Bottom Of Top Packer
Packer	4.00			3865.00	
Stubb	1.00			3866.00	
Recorder	0.00	8672	Inside	3866.00	
Recorder	0.00	6751	Outside	3866.00	
Perforations	5.00			3871.00	
Change Over Sub	1.00			3872.00	
Drill Pipe	31.00			3903.00	
Change Over Sub	1.00			3904.00	
Bullnose	3.00			3907.00	42.00 Bottom Packers & Anchor

Total Tool Length: 68.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Energy Partners LLC

23-34S-01W Sumner,KS

8918 W 21st St N #200-304
Wichita, KS 67205

VanZant #1

Job Ticket: 64961

DST#: 1

ATTN: Brad Rine

Test Start: 2019.04.10 @ 00:18:00

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: 40.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 12.95 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	GTS	0.000
63.00	SGCM 2%G 98%M	0.310

Total Length: 63.00 ft Total Volume: 0.310 bbl

Num Fluid Samples: 0

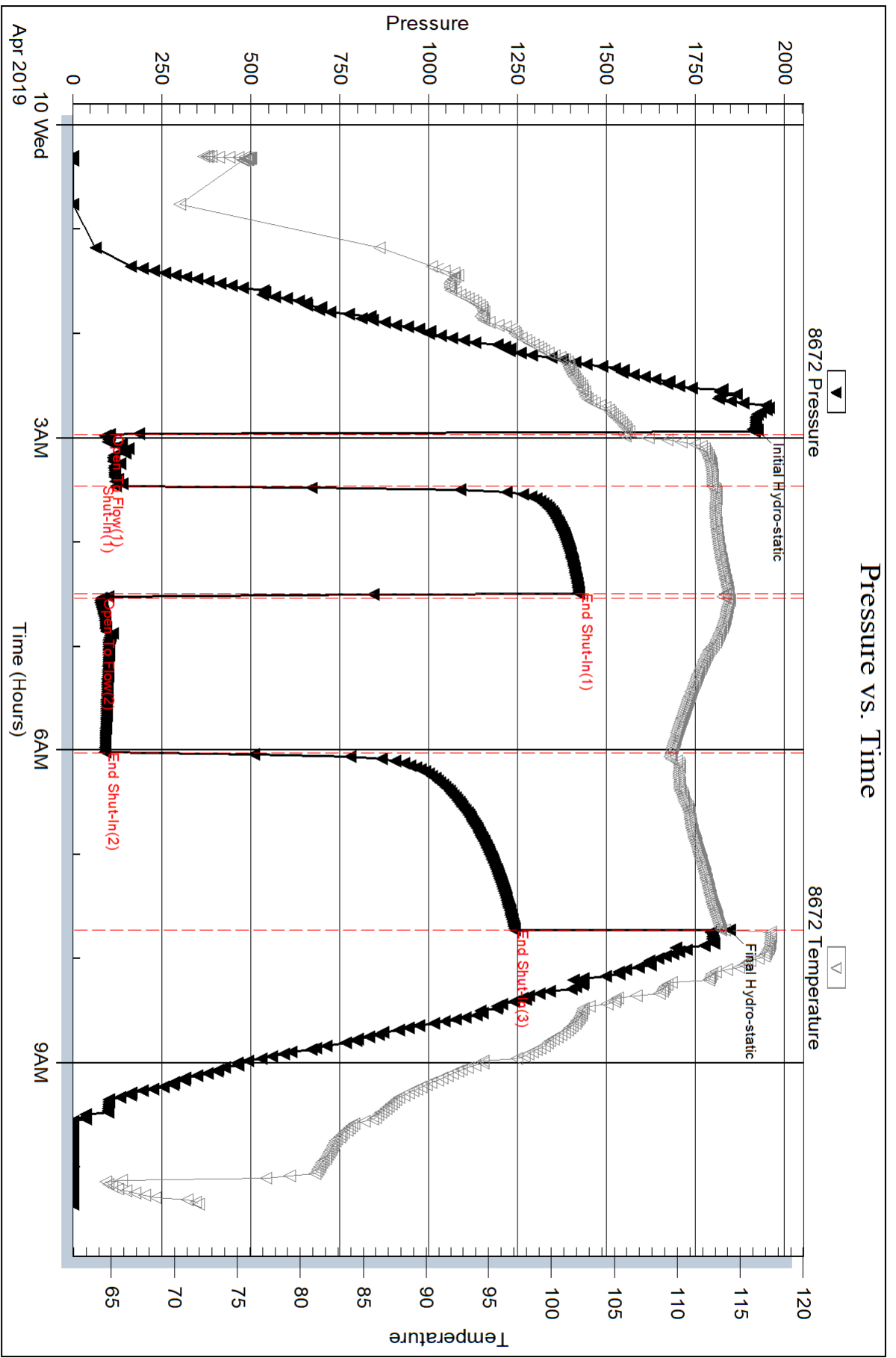
Num Gas Bombs: 0

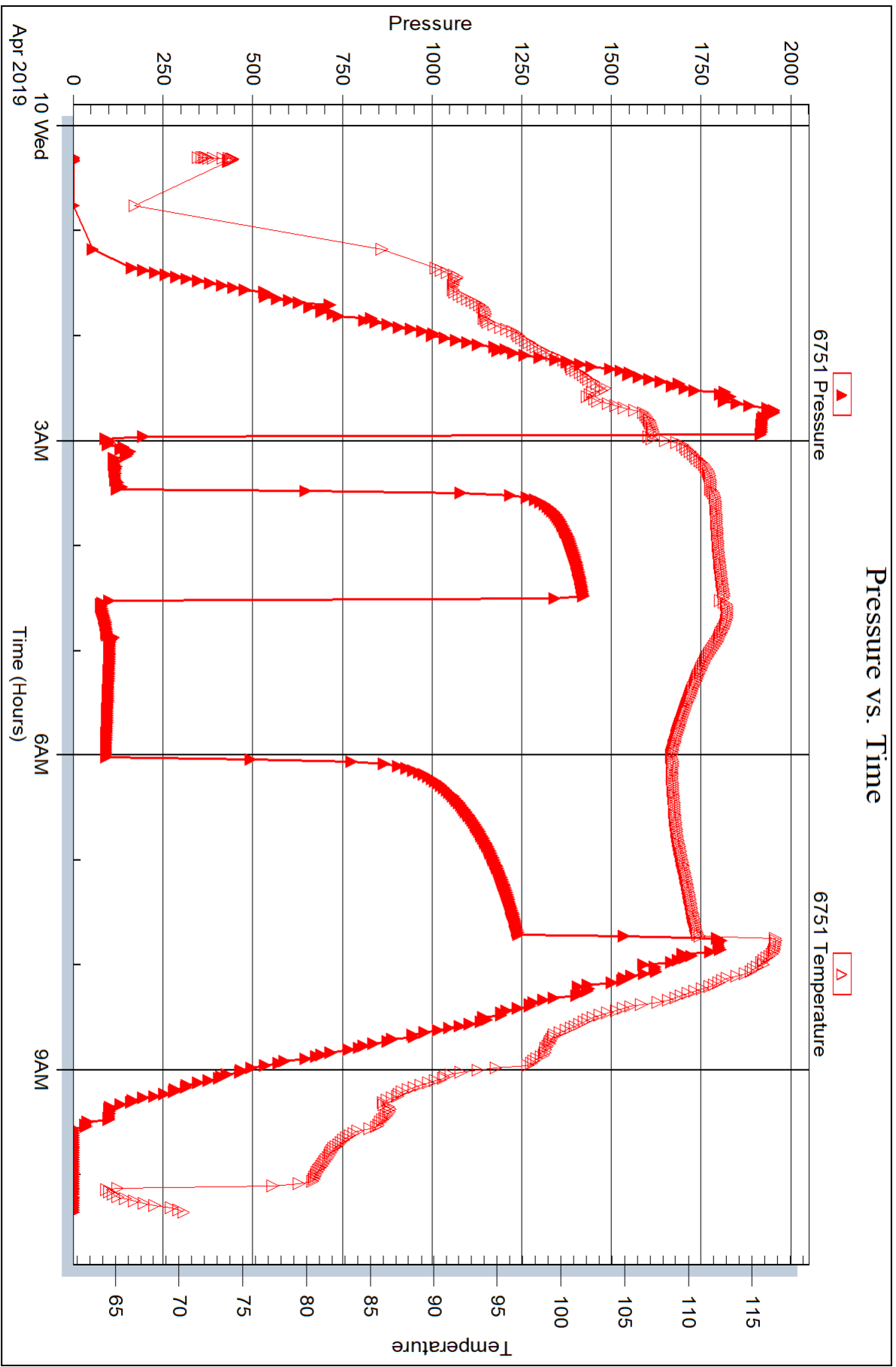
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Energy Partners LLC**

8918 W 21st St N #200-304
Wichita, KS 67205

ATTN: Brad Rine

VanZant #1

23-34S-01W Sumner,KS

Start Date: 2019.04.10 @ 23:42:00

End Date: 2019.04.11 @ 08:26:02

Job Ticket #: 64962 DST #: 2

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

Printed: 2019.04.15 @ 15:22:38



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Energy Partners LLC
 8918 W 21st St N #200-304
 Wichita, KS 67205
 ATTN: Brad Rine

23-34S-01W Sumner,KS
VanZant #1
 Job Ticket: 64962 **DST#: 2**
 Test Start: 2019.04.10 @ 23:42:00

GENERAL INFORMATION:

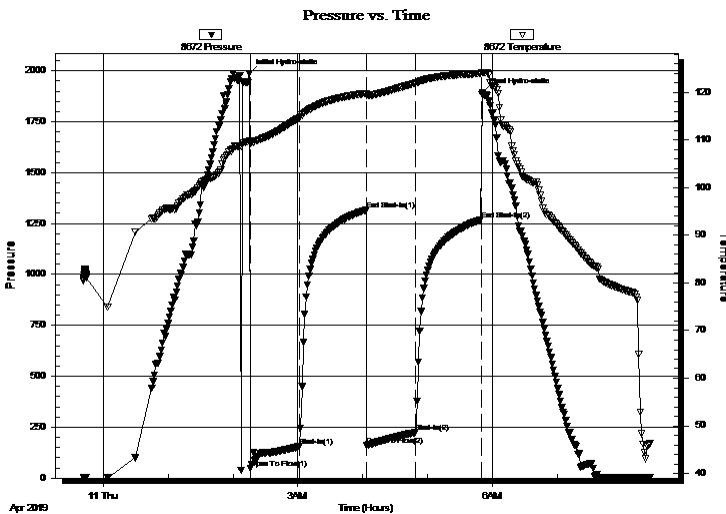
Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 02:16:02 Tester: Leal Cason
 Time Test Ended: 08:26:02 Unit No: 74
 Interval: **3928.00 ft (KB) To 3970.00 ft (KB) (TVD)** Reference Elevations: 1161.00 ft (KB)
 Total Depth: 3970.00 ft (KB) (TVD) 1152.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 9.00 ft

Serial #: 8672 Inside
 Press@RunDepth: 224.56 psig @ 3929.00 ft (KB) Capacity: psig
 Start Date: 2019.04.10 End Date: 2019.04.11 Last Calib.: 2019.04.11
 Start Time: 23:42:01 End Time: 08:26:02 Time On Btm: 2019.04.11 @ 02:15:02
 Time Off Btm: 2019.04.11 @ 05:50:32

TEST COMMENT: IF: Fair Blow , BOB in 31 minutes , Built to 16"
 IS: No Blow Back
 FF: Fair Blow , BOB in 18 minutes , Built to 28"
 FS: No Blow Back

PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1985.20	109.75	Initial Hydro-static
1	48.83	109.28	Open To Flow (1)
47	156.28	114.75	Shut-In(1)
108	1315.79	119.76	End Shut-In(1)
109	161.68	119.43	Open To Flow (2)
154	224.56	121.93	Shut-In(2)
215	1269.30	123.97	End Shut-In(2)
216	1890.90	124.10	Final Hydro-static



Recovery

Length (ft)	Description	Volume (bbl)
0.00	62 GIP	0.00
183.00	Water	0.90
127.00	MCW 24%M 76%W	1.78
186.00	SOCM 2%O 98%M	2.61

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Energy Partners LLC
8918 W 21st St N #200-304
Wichita, KS 67205
ATTN: Brad Rine

23-34S-01W Sumner,KS
VanZant #1
Job Ticket: 64962 **DST#: 2**
Test Start: 2019.04.10 @ 23:42:00

Tool Information

Drill Pipe:	Length: 3749.00 ft	Diameter: 3.80 inches	Volume: 52.59 bbl	Tool Weight: 2100.00 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: 183.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 53.49 bbl</u>	Tool Chased 3.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	3928.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	68.00 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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Shut In Tool	5.00			3907.00	
Hydraulic tool	5.00			3912.00	
Jars	5.00			3917.00	
Safety Joint	2.00			3919.00	
Packer	5.00			3924.00	26.00 Bottom Of Top Packer
Packer	4.00			3928.00	
Stubb	1.00			3929.00	
Recorder	0.00	8672	Inside	3929.00	
Recorder	0.00	6751	Outside	3929.00	
Perforations	5.00			3934.00	
Change Over Sub	1.00			3935.00	
Drill Pipe	31.00			3966.00	
Change Over Sub	1.00			3967.00	
Bullnose	3.00			3970.00	42.00 Bottom Packers & Anchor

Total Tool Length: 68.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Energy Partners LLC

23-34S-01W Sumner,KS

8918 W 21st St N #200-304
Wichita, KS 67205

VanZant #1

Job Ticket: 64962

DST#: 2

ATTN: Brad Rine

Test Start: 2019.04.10 @ 23:42:00

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:

78000 ppm

Viscosity: 40.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	62 GIP	0.000
183.00	Water	0.900
127.00	MCW 24%M 76%W	1.781
186.00	SOCM 2%O 98%M	2.609

Total Length: 496.00 ft

Total Volume: 5.290 bbl

Num Fluid Samples: 0

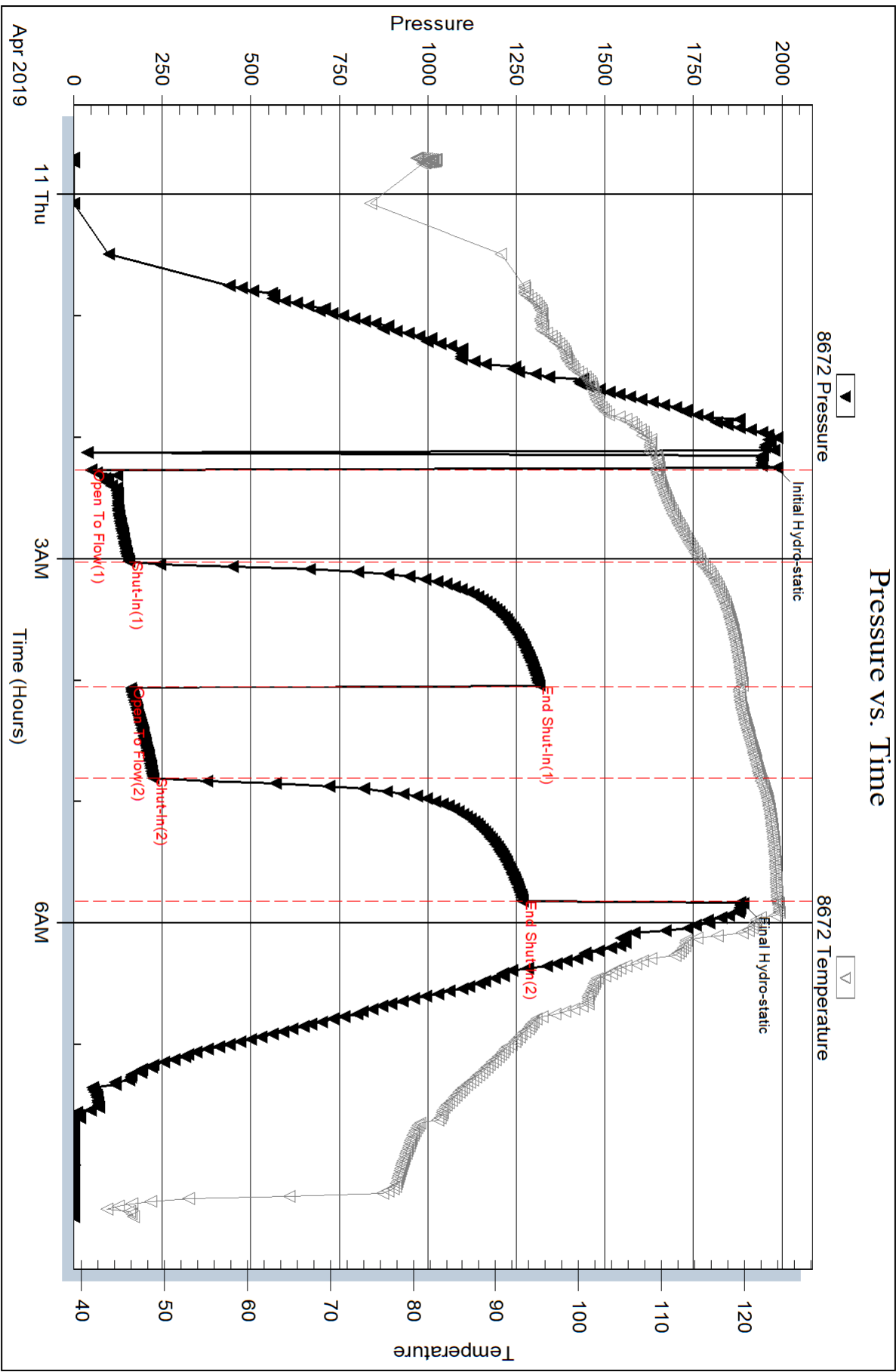
Num Gas Bombs: 0

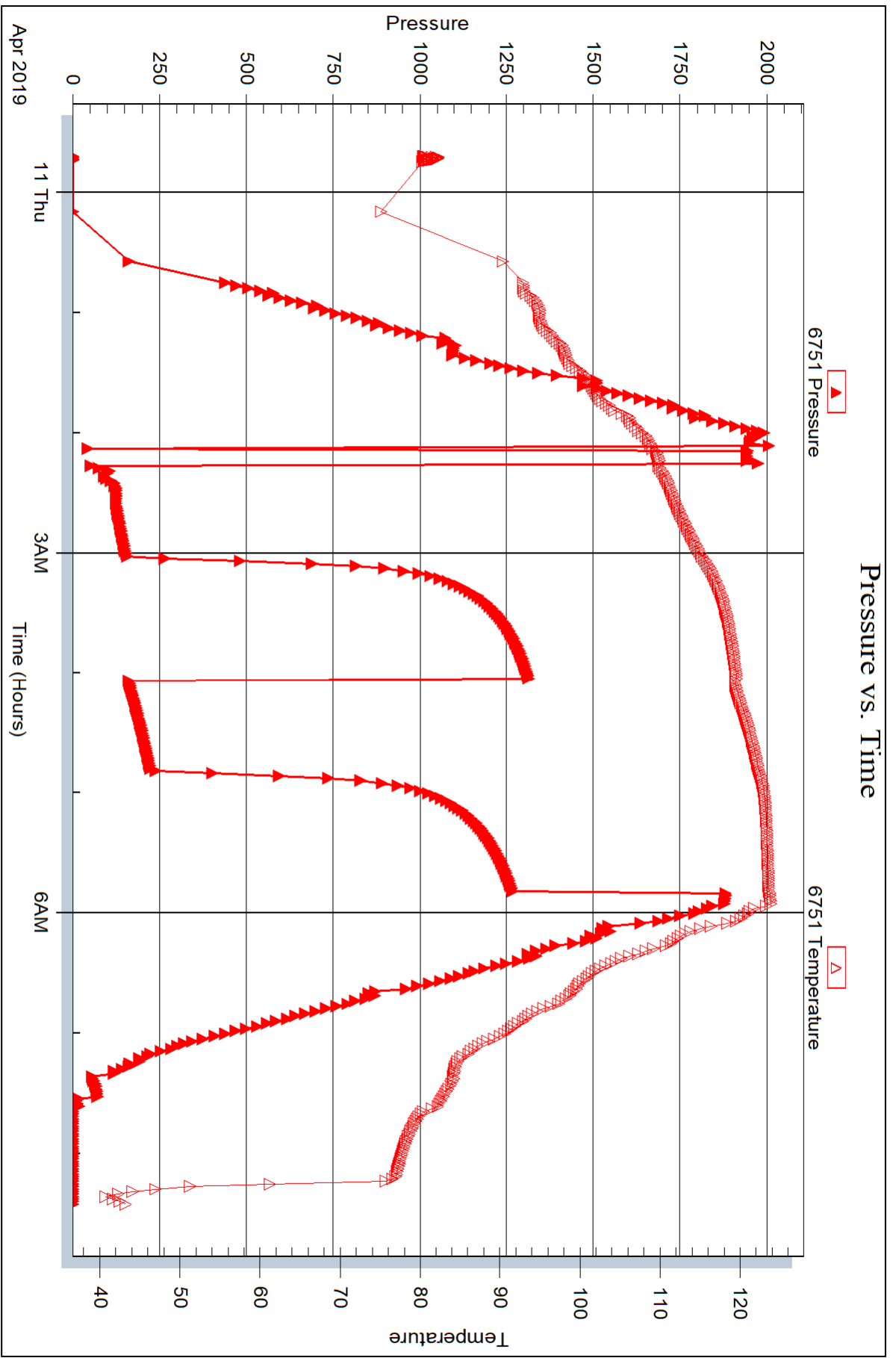
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .15 @ 47 degrees







DRILL STEM TEST REPORT

Prepared For: **Energy Partners LLC**

8918 W 21st St N #200-304
Wichita, KS 67205

ATTN: Brad Rine

VanZant #1

23-34S-01W Sumner,KS

Start Date: 2019.04.12 @ 19:55:00

End Date: 2019.04.13 @ 03:33:02

Job Ticket #: 64963 DST #: 3

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

Printed: 2019.04.15 @ 15:22:08



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Energy Partners LLC
8918 W 21st St N #200-304
Wichita, KS 67205
ATTN: Brad Rine

23-34S-01W Sumner,KS
VanZant #1
Job Ticket: 64963 **DST#: 3**
Test Start: 2019.04.12 @ 19:55:00

Tool Information

Drill Pipe:	Length: 4033.00 ft	Diameter: 3.80 inches	Volume: 56.57 bbl	Tool Weight: 2100.00 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: 183.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 57.47 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 76000.00 lb
Depth to Top Packer:	4238.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	44.00 ft			
Tool Length:	70.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Shale Packer on top

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4217.00	
Hydraulic tool	5.00			4222.00	
Jars	5.00			4227.00	
Safety Joint	2.00			4229.00	
Packer - Shale	5.00			4234.00	
Packer	4.00			4238.00	26.00 Bottom Of Top Packer
Stubb	1.00			4239.00	
Recorder	0.00	8672	Inside	4239.00	
Recorder	0.00	6751	Outside	4239.00	
Perforations	7.00			4246.00	
Change Over Sub	1.00			4247.00	
Drill Pipe	31.00			4278.00	
Change Over Sub	1.00			4279.00	
Bullnose	3.00			4282.00	44.00 Anchor Tool

Total Tool Length: 70.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Energy Partners LLC

23-34S-01W Sumner,KS

8918 W 21st St N #200-304
Wichita, KS 67205

VanZant #1

Job Ticket: 64963

DST#: 3

ATTN: Brad Rine

Test Start: 2019.04.12 @ 19:55:00

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: 41.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

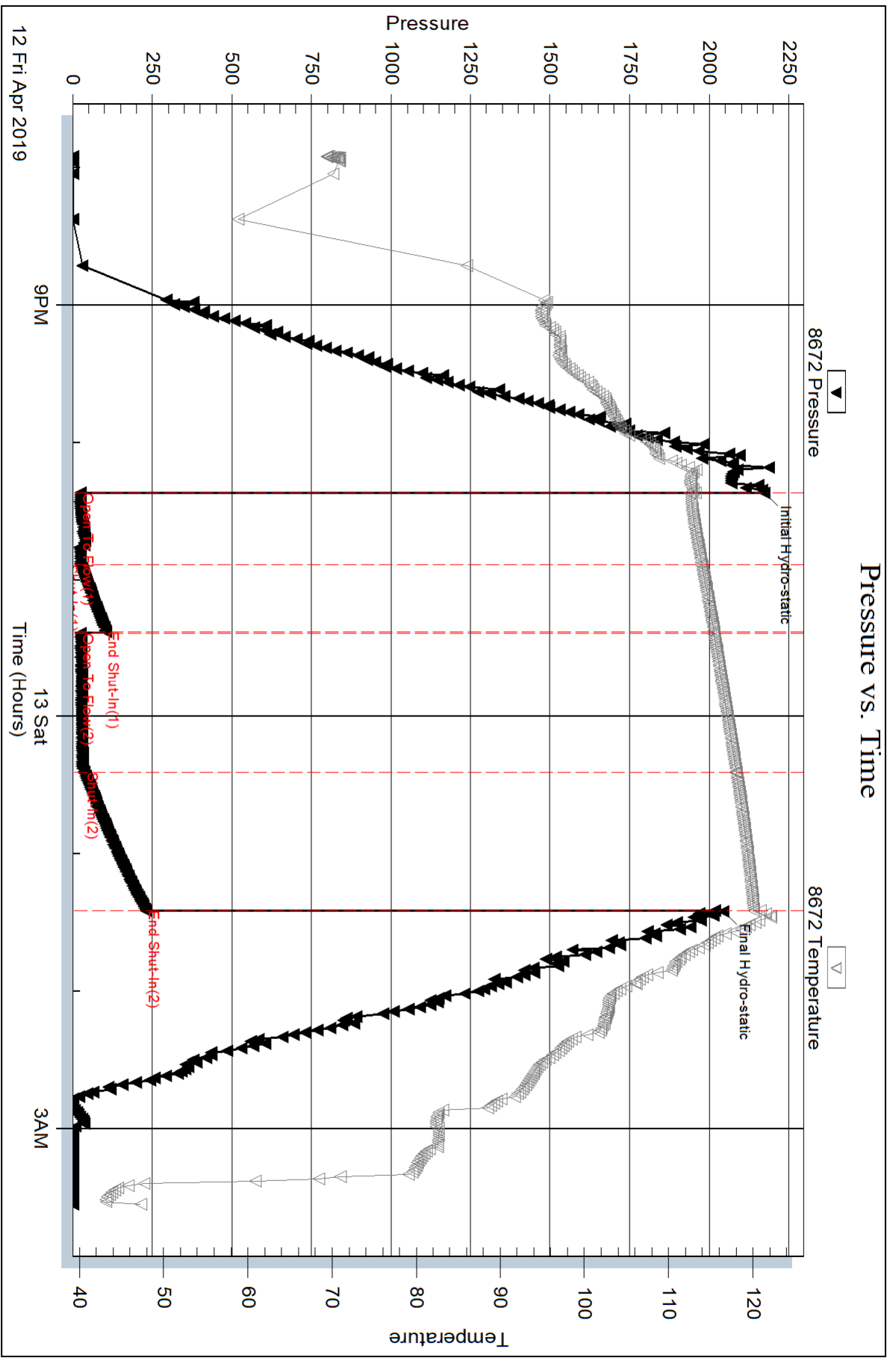
Num Gas Bombs: 0

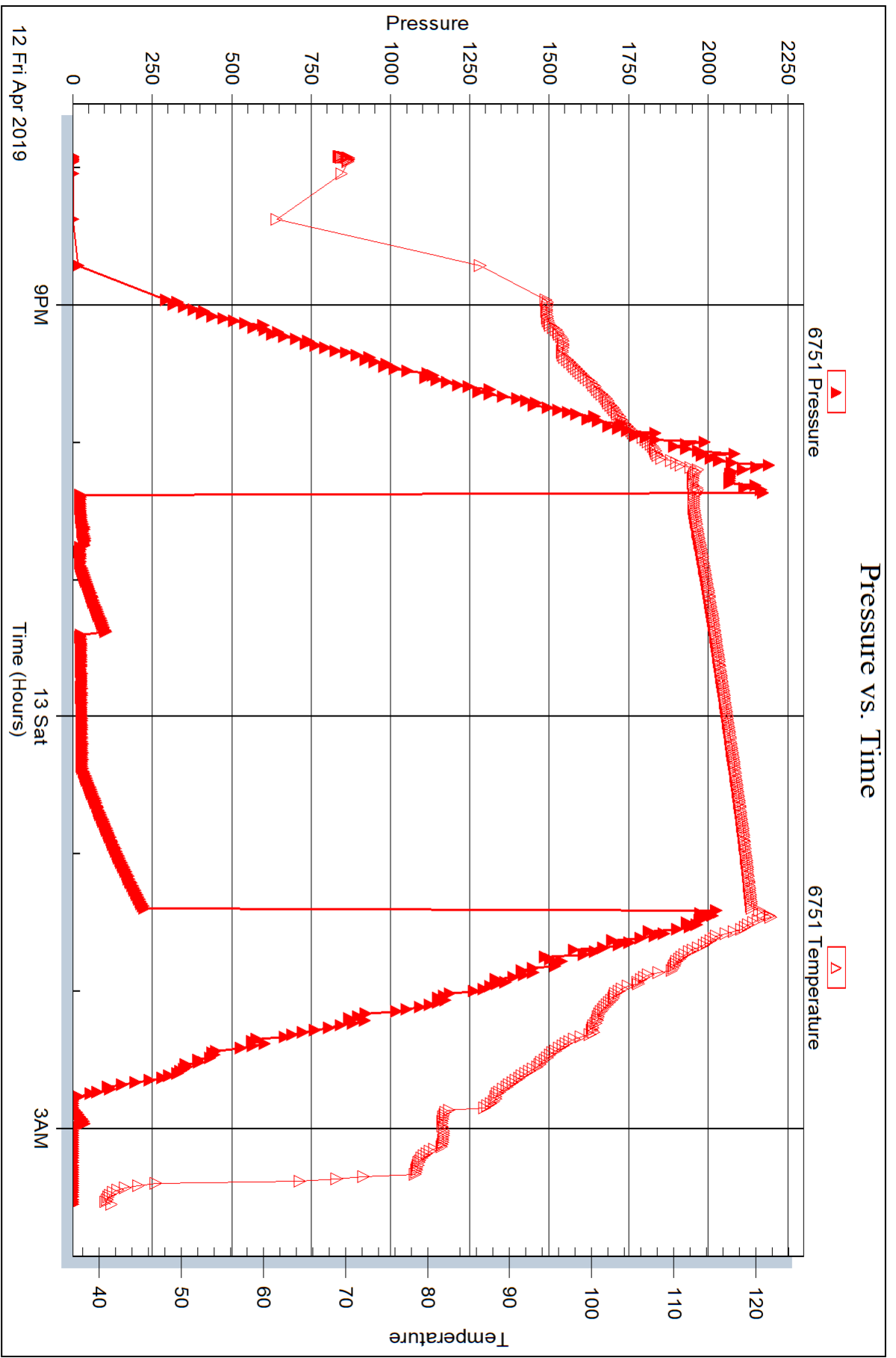
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Energy Partners LLC**

8918 W 21st St N #200-304
Wichita, KS 67205

ATTN: Brad Rine

VanZant #1

23-34S-01W Sumner,KS

Start Date: 2019.04.13 @ 13:25:00

End Date: 2019.04.13 @ 21:27:02

Job Ticket #: 64964 DST #: 4

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

Printed: 2019.04.15 @ 15:16:12



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Energy Partners LLC
 8918 W 21st St N #200-304
 Wichita, KS 67205
 ATTN: Brad Rine

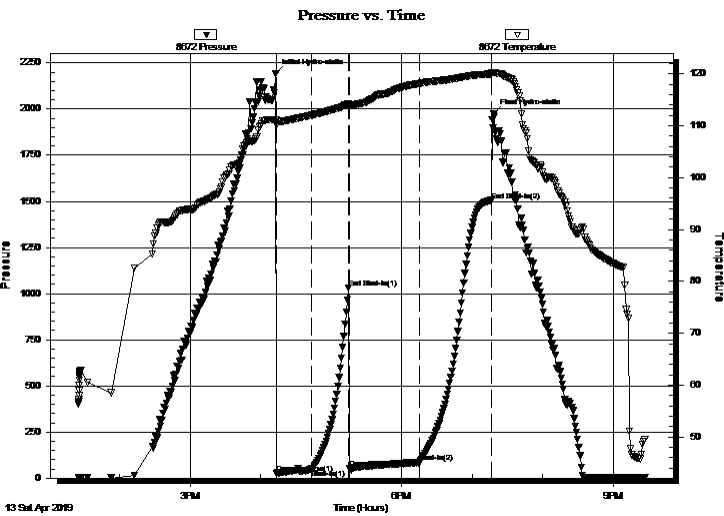
23-34S-01W Sumner,KS
VanZant #1
 Job Ticket: 64964 **DST#: 4**
 Test Start: 2019.04.13 @ 13:25:00

GENERAL INFORMATION:

Formation: **Simpson**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 16:13:47
 Tester: Leal Cason
 Time Test Ended: 21:27:02
 Unit No: 74
 Interval: **4238.00 ft (KB) To 4289.00 ft (KB) (TVD)**
 Reference Elevations: 1161.00 ft (KB)
 Total Depth: 4289.00 ft (KB) (TVD)
 1152.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 9.00 ft

Serial #: 8672 **Inside**
 Press@RunDepth: 86.71 psig @ 4239.00 ft (KB) Capacity: psig
 Start Date: 2019.04.13 End Date: 2019.04.13 Last Calib.: 2019.04.13
 Start Time: 13:25:01 End Time: 21:27:02 Time On Btm: 2019.04.13 @ 16:12:47
 Time Off Btm: 2019.04.13 @ 19:18:17

TEST COMMENT: IF: Weak Blow , Built to 6"
 IS: No Blow Back
 FF: Fair Blow , BOB in 8 minutes, Built to 45"
 FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2193.49	111.18	Initial Hydro-static
1	26.65	110.17	Open To Flow (1)
31	46.80	112.02	Shut-In(1)
62	1029.19	114.17	End Shut-In(1)
63	54.45	113.96	Open To Flow (2)
123	86.71	118.11	Shut-In(2)
184	1505.66	120.00	End Shut-In(2)
186	1975.31	120.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	868 GIP	0.00
126.00	SGOCM 2%G 2%O 96%M	0.62

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Energy Partners LLC
8918 W 21st St N #200-304
Wichita, KS 67205
ATTN: Brad Rine

23-34S-01W Sumner,KS
VanZant #1
Job Ticket: 64964 **DST#: 4**
Test Start: 2019.04.13 @ 13:25:00

Tool Information

Drill Pipe:	Length: 4034.00 ft	Diameter: 3.80 inches	Volume: 56.59 bbl	Tool Weight: 2100.00 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: 183.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 57.49 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	4238.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	77.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Shale Packer on Top

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4217.00	
Hydraulic tool	5.00			4222.00	
Jars	5.00			4227.00	
Safety Joint	2.00			4229.00	
Packer - Shale	5.00			4234.00	
Packer	4.00			4238.00	26.00 Bottom Of Top Packer
Stubb	1.00			4239.00	
Recorder	0.00	8672	Inside	4239.00	
Recorder	0.00	6751	Outside	4239.00	
Perforations	5.00			4244.00	
Change Over Sub	1.00			4245.00	
Drill Pipe	31.00			4276.00	
Change Over Sub	1.00			4277.00	
perforations	9.00			4286.00	
Bullnose	3.00			4289.00	51.00 Anchor Tool

Total Tool Length: 77.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Energy Partners LLC

23-34S-01W Sumner,KS

8918 W 21st St N #200-304
Wichita, KS 67205

VanZant #1

Job Ticket: 64964

DST#: 4

ATTN: Brad Rine

Test Start: 2019.04.13 @ 13:25:00

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: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 14.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	868 GIP	0.000
126.00	SGOCM 2%G 2%O 96%M	0.620

Total Length: 126.00 ft Total Volume: 0.620 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

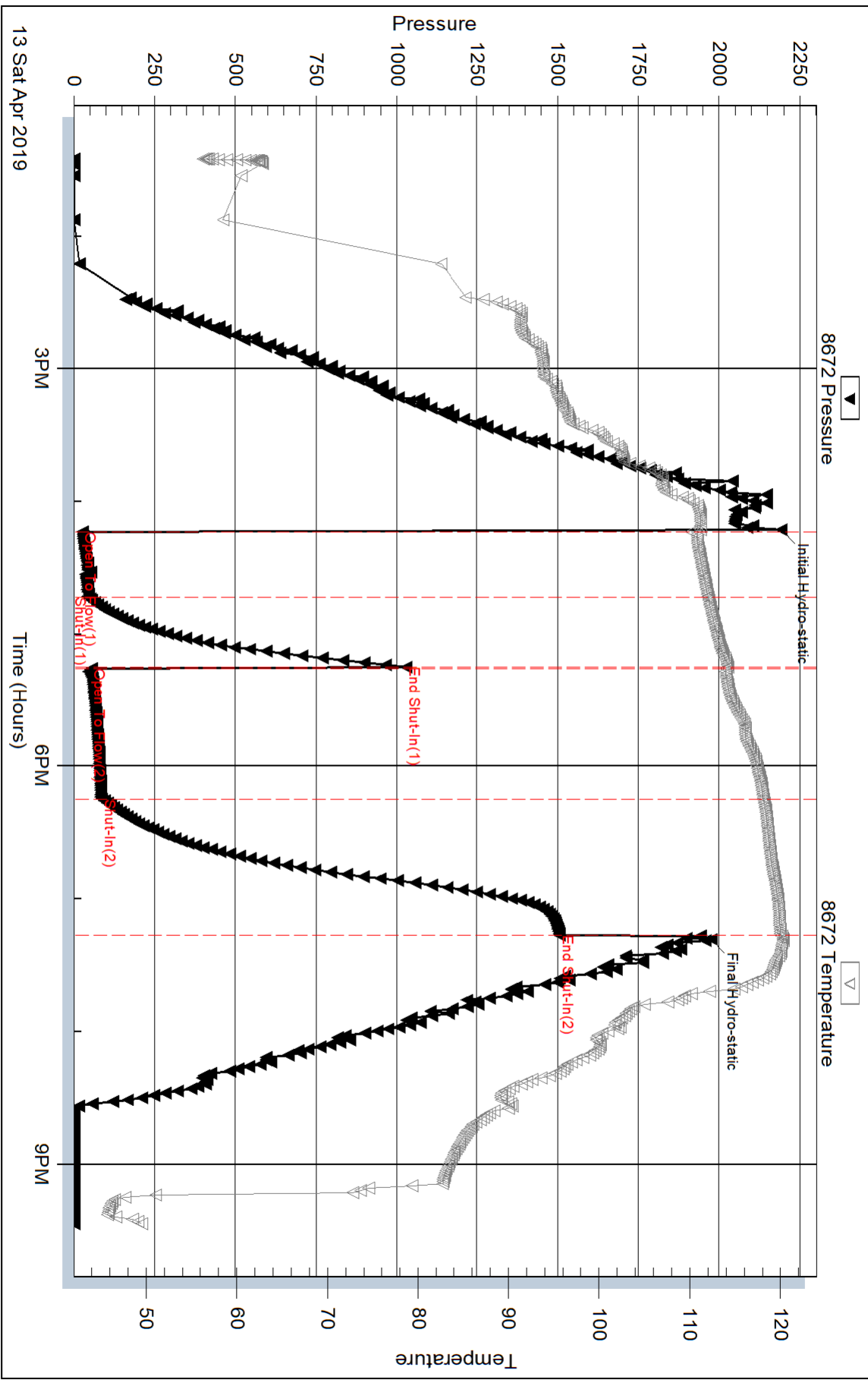
Serial #:

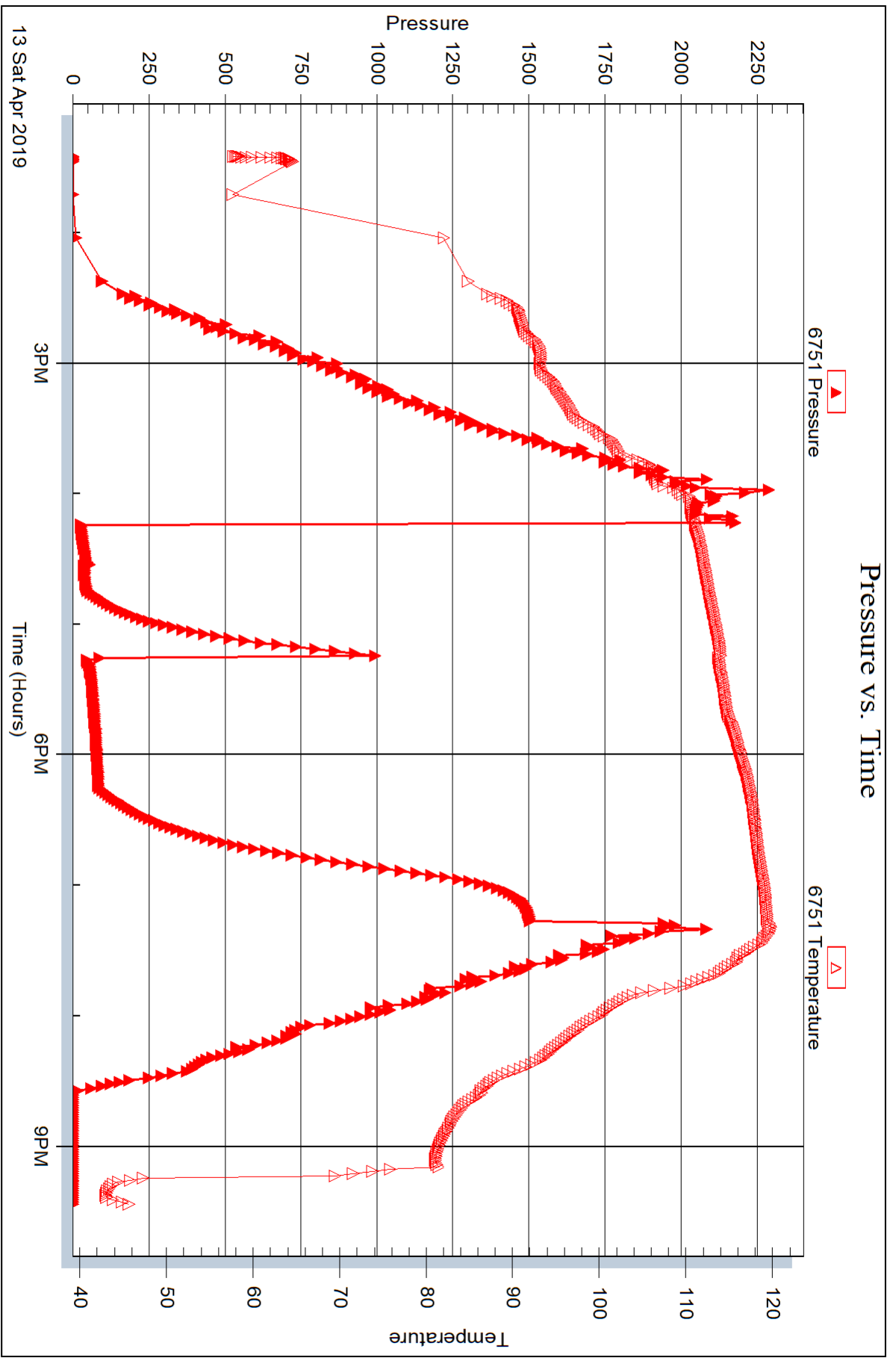
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Energy Partners LLC**

8918 W 21st St N #200-304
Wichita, KS 67205

ATTN: Brad Rine

VanZant #1

23-34S-01W Sumner,KS

Start Date: 2019.04.14 @ 05:15:00

End Date: 2019.04.14 @ 14:36:47

Job Ticket #: 64965 DST #: 5

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

Printed: 2019.04.15 @ 15:13:04



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Energy Partners LLC
 8918 W 21st St N #200-304
 Wichita, KS 67205
 ATTN: Brad Rine

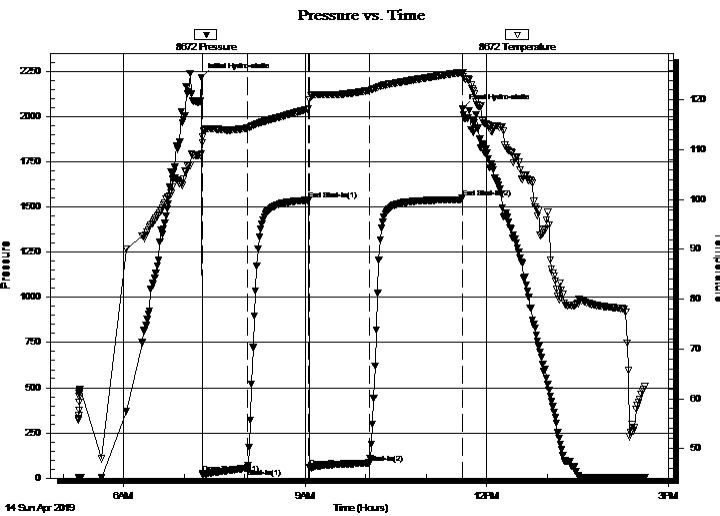
23-34S-01W Sumner,KS
VanZant #1
 Job Ticket: 64965 **DST#: 5**
 Test Start: 2019.04.14 @ 05:15:00

GENERAL INFORMATION:

Formation: **Simpson**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 07:17:47
 Tester: Leal Cason
 Time Test Ended: 14:36:47
 Unit No: 74
 Interval: **4289.00 ft (KB) To 4294.00 ft (KB) (TVD)**
 Reference Elevations: 1161.00 ft (KB)
 Total Depth: 4294.00 ft (KB) (TVD)
 1152.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 9.00 ft

Serial #: 8672 Inside
 Press@RunDepth: 84.05 psig @ 4290.00 ft (KB) Capacity: psig
 Start Date: 2019.04.14 End Date: 2019.04.14 Last Calib.: 2019.04.14
 Start Time: 05:15:01 End Time: 14:36:47 Time On Btm: 2019.04.14 @ 07:16:47
 Time Off Btm: 2019.04.14 @ 11:36:17

TEST COMMENT: IF: Fair Blow , BOB in 20 minutes, Built to 39"
 IS: No Blow Back
 FF: Fair Blow , BOB in 8 minutes, Built to 65"
 FS: 1/2" Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2214.28	109.22	Initial Hydro-static
1	25.04	111.44	Open To Flow (1)
46	56.39	114.41	Shut-In(1)
107	1536.87	118.23	End Shut-In(1)
108	58.16	120.08	Open To Flow (2)
167	84.05	121.95	Shut-In(2)
259	1549.82	125.54	End Shut-In(2)
260	2043.01	125.48	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	993 GIP	0.00
61.00	SOMCW 2%O 20%M 78%W	0.30
61.00	WMCO 20%W 30%M 50%O	0.30
63.00	WMCO 14%W 32%M 54%O	0.33

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Energy Partners LLC
8918 W 21st St N #200-304
Wichita, KS 67205
ATTN: Brad Rine

23-34S-01W Sumner,KS
VanZant #1
Job Ticket: 64965 **DST#: 5**
Test Start: 2019.04.14 @ 05:15:00

Tool Information

Drill Pipe:	Length: 4095.00 ft	Diameter: 3.80 inches	Volume: 57.44 bbl	Tool Weight: 2100.00 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: 183.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 58.34 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	4289.00 ft			Final 76000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	5.00 ft			
Tool Length:	31.00 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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Shut In Tool	5.00			4268.00	
Hydraulic tool	5.00			4273.00	
Jars	5.00			4278.00	
Safety Joint	2.00			4280.00	
Packer - Shale	5.00			4285.00	
Packer	4.00			4289.00	26.00 Bottom Of Top Packer
Stubb	1.00			4290.00	
Recorder	0.00	8672	Inside	4290.00	
Recorder	0.00	6751	Outside	4290.00	
Perforations	1.00			4291.00	
Bullnose	3.00			4294.00	5.00 Anchor Tool

Total Tool Length: 31.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Energy Partners LLC

23-34S-01W Sumner,KS

8918 W 21st St N #200-304
Wichita, KS 67205

VanZant #1

Job Ticket: 64965

DST#: 5

ATTN: Brad Rine

Test Start: 2019.04.14 @ 05:15:00

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:

96000 ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 14.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	993 GIP	0.000
61.00	SOMCW 2%O 20%M 78%W	0.300
61.00	WMCO 20%W 30%M 50%O	0.300
63.00	WMCO 14%W 32%M 54%O	0.328

Total Length: 185.00 ft Total Volume: 0.928 bbl

Num Fluid Samples: 0

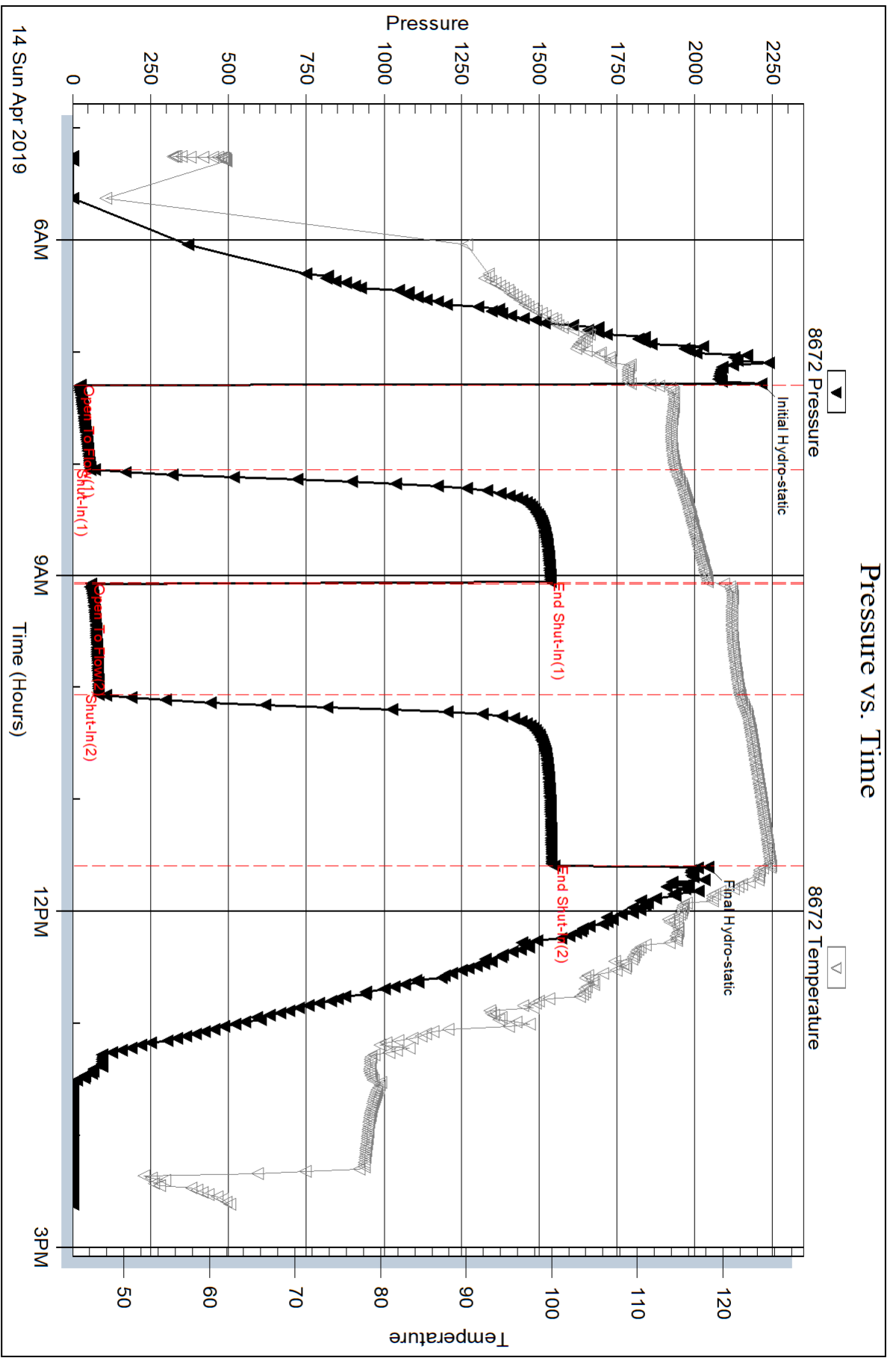
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .095 @ 60 degrees

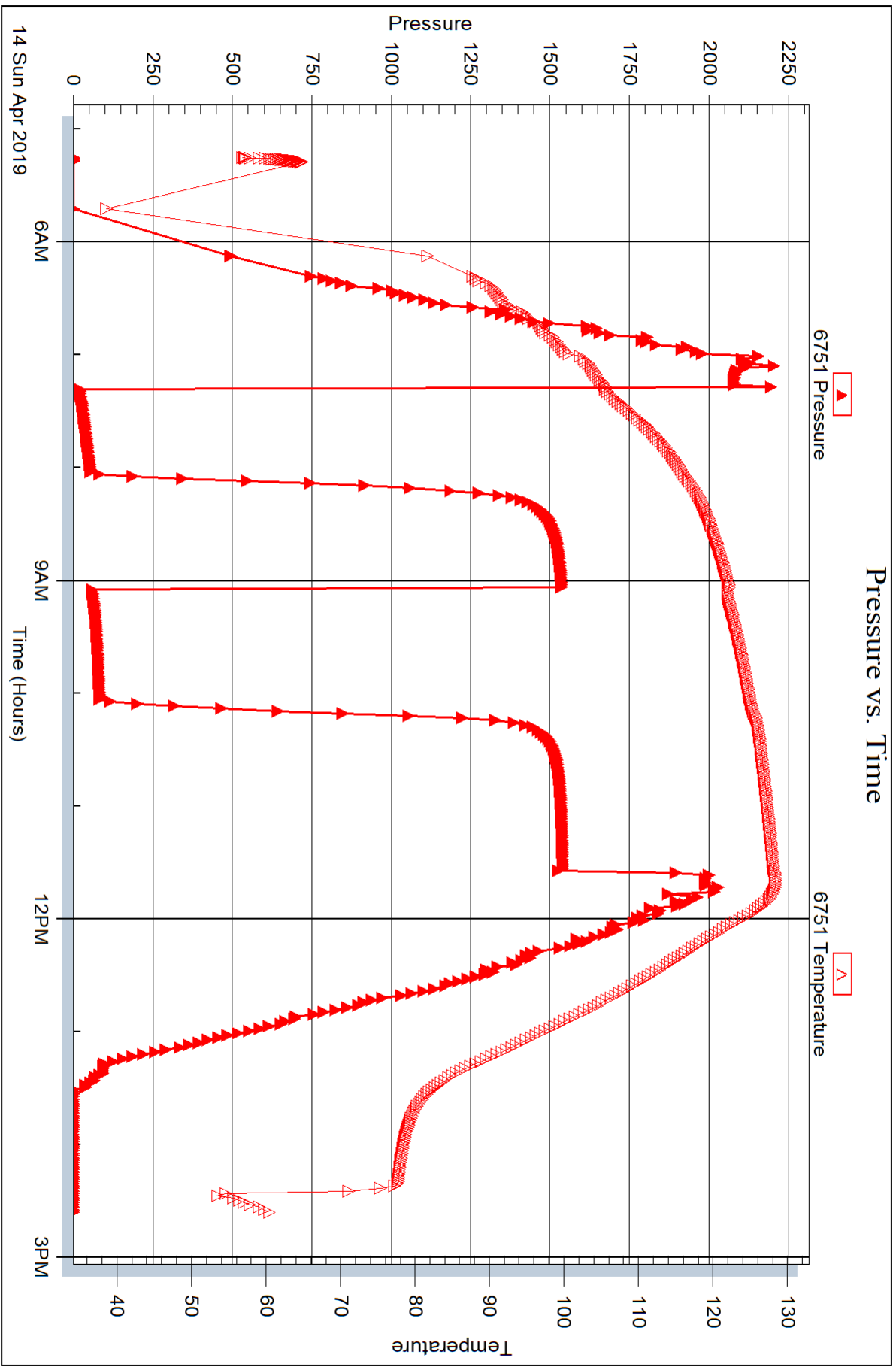


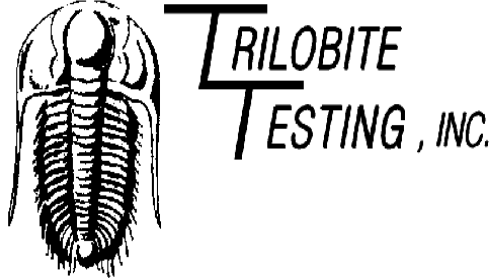
Serial #: 6751

Outside Energy Partners LLC

VanZant #1

DST Test Number: 5





DRILL STEM TEST REPORT

Prepared For: **Energy Partners LLC**

8918 W 21st St N #200-304
Wichita, KS 67205

ATTN: Brad Rine

VanZant #1

23-34S-01W Sumner,KS

Start Date: 2019.04.14 @ 23:20:00

End Date: 2019.04.15 @ 07:16:02

Job Ticket #: 64966 DST #: 6

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

Printed: 2019.04.15 @ 15:05:37



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Energy Partners LLC
8918 W 21st St N #200-304
Wichita, KS 67205
ATTN: Brad Rine

23-34S-01W Sumner,KS

VanZant #1

Job Ticket: 64966

DST#: 6

Test Start: 2019.04.14 @ 23:20:00

GENERAL INFORMATION:

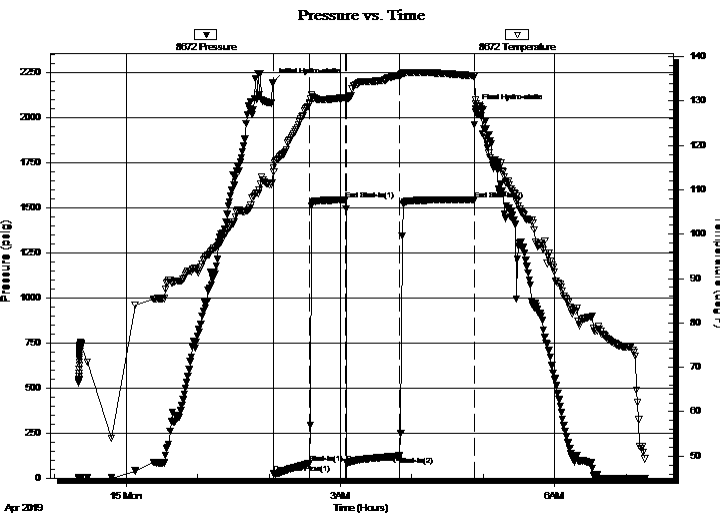
Formation: **Simpson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:04:02
 Time Test Ended: 07:16:02
 Interval: **4295.00 ft (KB) To 4302.00 ft (KB) (TVD)**
 Total Depth: 4302.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Leal Cason
 Unit No: 74
 Reference Elevations: 1161.00 ft (KB)
 1152.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 8672

Inside

Press@RunDepth: 123.93 psig @ 4296.00 ft (KB) Capacity: psig
 Start Date: 2019.04.14 End Date: 2019.04.15 Last Calib.: 2019.04.15
 Start Time: 23:20:01 End Time: 07:16:02 Time On Btm: 2019.04.15 @ 02:02:47
 Time Off Btm: 2019.04.15 @ 04:53:32

TEST COMMENT: IF: Weak Blow , Built to 4"
 IS: No Blow Back
 FF: Weak Blow , Built to 4 1/2"
 FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2193.88	111.55	Initial Hydro-static
2	23.95	114.07	Open To Flow (1)
32	81.91	129.52	Shut-In(1)
62	1543.63	130.72	End Shut-In(1)
63	84.04	130.10	Open To Flow (2)
108	123.93	135.78	Shut-In(2)
170	1544.67	135.62	End Shut-In(2)
171	2050.81	130.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
183.00	Water	0.90
10.00	MCW 50%M 50%W	0.14

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Energy Partners LLC
8918 W 21st St N #200-304
Wichita, KS 67205
ATTN: Brad Rine

23-34S-01W Sumner,KS

VanZant #1

Job Ticket: 64966

DST#: 6

Test Start: 2019.04.14 @ 23:20:00

GENERAL INFORMATION:

Formation: **Simpson**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 02:04:02
 Tester: Leal Cason
 Time Test Ended: 07:16:02
 Unit No: 74
 Interval: **4295.00 ft (KB) To 4302.00 ft (KB) (TVD)**
 Reference Elevations: 1161.00 ft (KB)
 Total Depth: 4302.00 ft (KB) (TVD)
 1152.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 9.00 ft

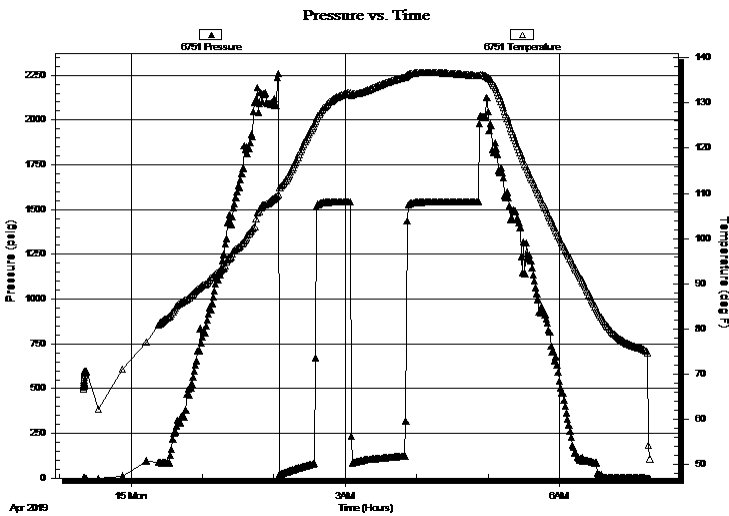
Serial #: 6751

Outside

Press@RunDepth: psig @ 4296.00 ft (KB) Capacity: psig
 Start Date: 2019.04.14 End Date: 2019.04.15 Last Calib.: 2019.04.15
 Start Time: 23:20:01 End Time: 07:16:02 Time On Btm:
 Time Off Btm:

TEST COMMENT: IF: Weak Blow , Built to 4"
 IS: No Blow Back
 FF: Weak Blow , Built to 4 1/2"
 FS: No Blow Back

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
183.00	Water	0.90
10.00	MCW 50%M 50%W	0.14

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Energy Partners LLC
8918 W 21st St N #200-304
Wichita, KS 67205
ATTN: Brad Rine

23-34S-01W Sumner,KS
VanZant #1
Job Ticket: 64966 **DST#: 6**
Test Start: 2019.04.14 @ 23:20:00

Tool Information

Drill Pipe:	Length: 4095.00 ft	Diameter: 3.80 inches	Volume: 57.44 bbl	Tool Weight: 2100.00 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: 183.00 ft	Diameter: 2.25 inches	Volume: 0.90 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 58.34 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 75000.00 lb
Depth to Top Packer:	4295.00 ft			Final 75000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	7.00 ft			
Tool Length:	33.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Shale Packer on Top

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4274.00	
Hydraulic tool	5.00			4279.00	
Jars	5.00			4284.00	
Safety Joint	2.00			4286.00	
Packer - Shale	5.00			4291.00	
Packer	4.00			4295.00	26.00 Bottom Of Top Packer
Stubb	1.00			4296.00	
Recorder	0.00	8672	Inside	4296.00	
Recorder	0.00	6751	Outside	4296.00	
Perforations	3.00			4299.00	
Bullnose	3.00			4302.00	7.00 Anchor Tool

Total Tool Length: 33.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Energy Partners LLC

23-34S-01W Sumner,KS

8918 W 21st St N #200-304
Wichita, KS 67205

VanZant #1

Job Ticket: 64966

DST#: 6

ATTN: Brad Rine

Test Start: 2019.04.14 @ 23:20:00

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:

94000 ppm

Viscosity: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 14.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
183.00	Water	0.900
10.00	MCW 50%M 50%W	0.140

Total Length: 193.00 ft Total Volume: 1.040 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

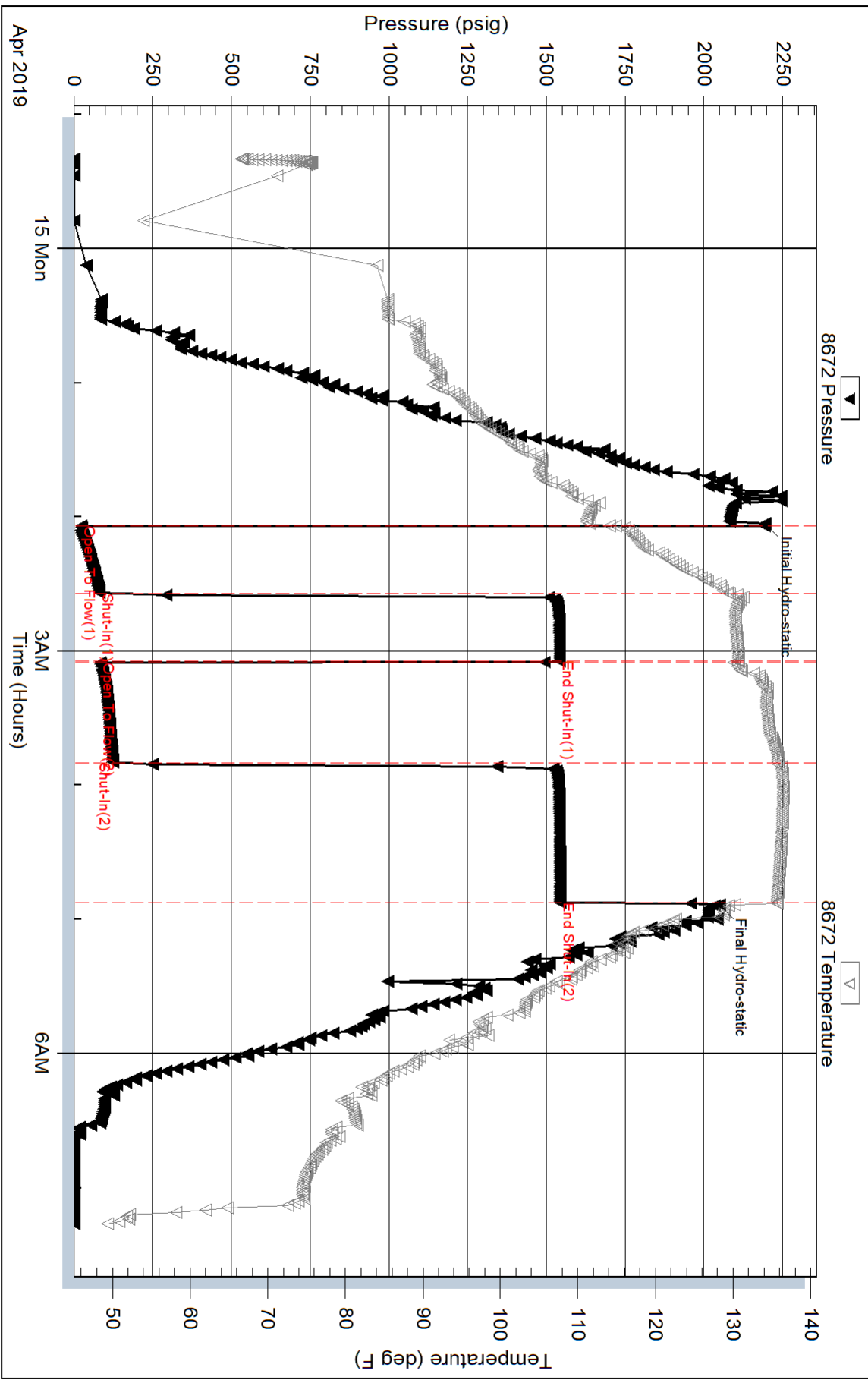
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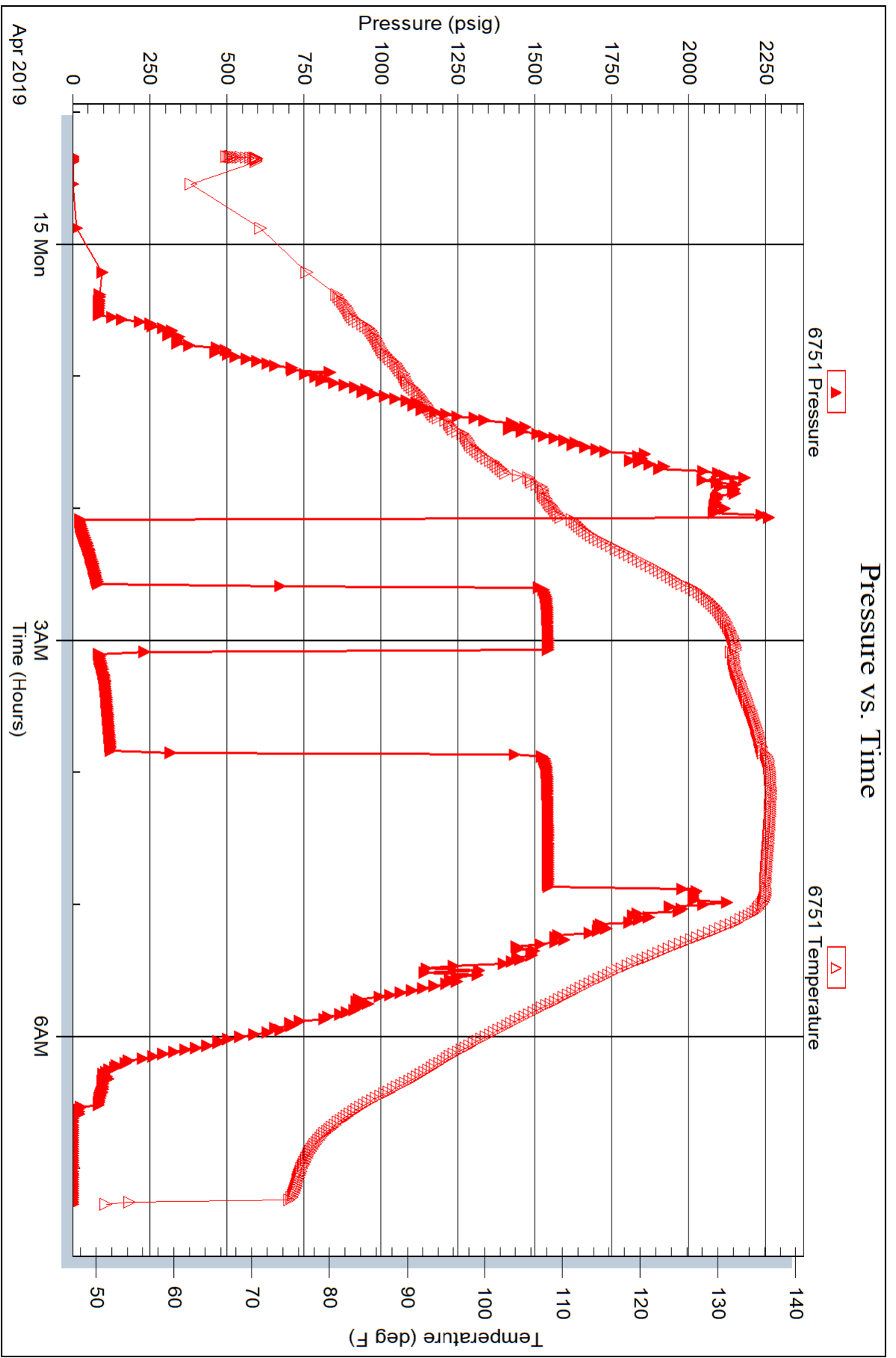
Laboratory Name:

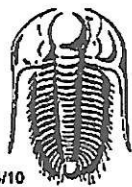
Laboratory Location:

Recovery Comments: RW was .13 @ 46 degrees

Pressure vs. Time







TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 64961

Well Name & No. Van Zant 1 Test No. 1 Date 04/09/19
 Company Energy Partners LLC Elevation 1161 KB 1152 GL
 Address 8918 W. 21st St N #200-304 Wichita, KS 67205
 Co. Rep / Geo. Brad Rine Rig C+G 2
 Location: Sec. 23 Twp 34S Rge. 01W Co. Sumner State KS

Interval Tested 3865 - 3907 Zone Tested Mississippi
 Anchor Length 42 Drill Pipe Run 3685 Mud Wt. 9.4
 Top Packer Depth 3860 Drill Collars Run 183 Vis 40
 Bottom Packer Depth 3865 Wt. Pipe Run 0 WL 13.0
 Total Depth 3907 Chlorides 2400 ppm System LCM 2

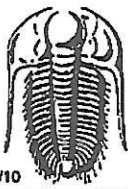
Blow Description IF: Strong Blow, BOB in 45 seconds, GTS in 10, Gauged Gas
ISI: NO ~~BOB~~ Blow Back
FF: Strong Blow, BOB & GTS Immediate, Gauged Gas
FSI: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>3805</u>	<u>GIP</u>				
<u>63</u>	<u>SGCM</u>	<u>2</u>			<u>98</u>
Rec Total	<u>63</u>	BHT <u>113</u>	Gravity <u>NIC</u>	API RW <u>NIC</u>	@ <u>NIC</u> F Chlorides <u>NIC</u> ppm

(A) Initial Hydrostatic 1925 Test 1200 T-On Location 22:15
 (B) First Initial Flow 104 Jars 250 T-Started 00:18
 (C) First Final Flow 122 Safety Joint 75 T-Open 02:58
 (D) Initial Shut-In 1423 Circ Sub _____ T-Pulled 07:43
 (E) Second Initial Flow 80 Hourly Standby _____ T-Out 10:21
 (F) Second Final Flow 91 Mileage (230) 230 Comments Motel
 (G) Final Shut-In 1244 Sampler _____
 (H) Final Hydrostatic 1847 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1755 MP/DST Disc't _____
 EM Tool _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1755

Approved By Brad Rine Our Representative _____

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 lost 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. 64962

Well Name & No. Van Zant 1 Test No. 2 Date 04/10/19
 Company Energy Partners LLC Elevation 1161 KB 1152 GL
 Address 8918 W. 21st St N #200-304 Wichita, KS 67205
 Co. Rep / Geo. Brad Pine Rig C+G 2
 Location: Sec. 23 Twp 34S Rge. 01 W Co. Summer State KS

Interval Tested 3928 - 3970 Zone Tested Mississippi
 Anchor Length 42 Drill Pipe Run 3749 Mud Wt. 9.4
 Top Packer Depth 3923 Drill Collars Run 183 Vis 40
 Bottom Packer Depth 3928 Wt. Pipe Run 0 WL 12.0
 Total Depth 3970 Chlorides 2600 ppm System LCM 2

Blow Description FF: Fair Blow, BOB in 31 minutes, Built to 16 inches
ISI: NO BLOW BACK

EF: Fair Blow, BOB in 18 minutes, Built to 28 inches
FSI: NO BLOW BACK

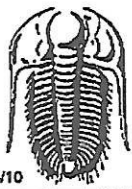
Rec	Feet of	%gas	%oil	%water	%mud
<u>62</u>	<u>GIP</u>				
<u>186</u>	<u>SOCM</u>		<u>2</u>		<u>98</u>
<u>127</u>	<u>MCW</u>			<u>76</u>	<u>24</u>
<u>183</u>	<u>water</u>				
Rec Total	<u>496</u>				

BHT 124 Gravity NIC API RW .15 @ 47 ° F Chlorides 78000 ppm

(A) Initial Hydrostatic <u>1985</u>	<input checked="" type="checkbox"/> Test <u>1200</u>	T-On Location <u>22:30</u>
(B) First Initial Flow <u>49</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>23:42</u>
(C) First Final Flow <u>156</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>02:16</u>
(D) Initial Shut-In <u>1316</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>05:49</u>
(E) Second Initial Flow <u>162</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>08:26</u>
(F) Second Final Flow <u>225</u>	<input checked="" type="checkbox"/> Mileage <u>230</u> <u>230</u>	Comments <u>MOTEL</u>
(G) Final Shut-In <u>1269</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1891</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> EM Tool
Initial Open <u>45</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1755</u>
	Sub Total <u>1755</u>	MP/DST Disc't

Approved By Brad Pine Our Representative [Signature]

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 lost 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. 64963

Well Name & No. Van Zant 1 Test No. 3 Date 04/12/19
 Company Energy Partners LLC Elevation 1161 KB 1152 GL
 Address 8918 W. 21st St N #200-304 Wichita, KS 67205
 Co. Rep / Geo. Brad Rine Rig C+G 2
 Location: Sec. 23 Twp 34S Rge. 01W Co. Sumner State KS

Interval Tested 4238 - 4282 Zone Tested Simpson
 Anchor Length 44 Drill Pipe Run 4033 Mud Wt. 9.2
 Top Packer Depth 4233 Drill Collars Run 183 Vis 41
 Bottom Packer Depth 4238 Wt. Pipe Run 0 WL 11.0
 Total Depth 4282 Chlorides 2500 ppm System LCM 2

Blow Description IF: weak Blow, Built to 1 1/2 inch
ISF: NO BLOW BACK
FF: WEAK BLOW, Built to 5 1/2 inches
FSF: NO BLOW BACK

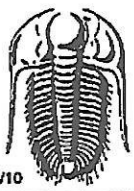
Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>Mud</u>				
<u>Ø</u>					

Rec Total 10 BHT 122 Gravity NIC API RW NIC @ NIC F Chlorides NIC ppm
 (A) Initial Hydrostatic 2173 Test 1300 T-On Location 18:30
 (B) First Initial Flow 24 Jars 250 T-Started 19:55
 (C) First Final Flow 25 Safety Joint 75 T-Open 22:22
 (D) Initial Shut-In 104 Circ Sub _____ T-Pulled 01:24
 (E) Second Initial Flow 24 Hourly Standby _____ T-Out 03:33
 (F) Second Final Flow 36 Mileage 230 230 Comments note
 (G) Final Shut-In 229 Sampler _____
 (H) Final Hydrostatic 2043 Straddle _____

EM Tool _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Initial Open 30
 Initial Shut-In 30
 Final Flow 60
 Final Shut-In 60
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 2005 MP/DST Disc't _____

Approved By Brad Rine Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 64964

Well Name & No. VanZant 1 Test No. 4 Date 04/13/19
 Company Energy Partners LLC Elevation 1161 KB 1152 GL
 Address 8918 W. 21st ST N #200-304 Wichita, KS 67205
 Co. Rep / Geo. Brad Rine Rig C+G 2
 Location: Sec. 23 Twp 34S Rge. 01 W Co. Sumner State KS

Interval Tested 4238 - 4289 Zone Tested Simpson
 Anchor Length 51 Drill Pipe Run 4034 Mud Wt. 9.2
 Top Packer Depth 4235 Drill Collars Run 183 Vis 46
 Bottom Packer Depth 4238 Wt. Pipe Run 0 WL 15.0
 Total Depth 4289 Chlorides 2400 ppm System LCM 2

Blow Description IF: Weak Blow, Built to 6 inches

ISI: NO Blow Back

FF: Fair Blow, ~~Bob~~ Bob in 8 minutes, Built to 45 inches

Rec	Feet of	%gas	%oil	%water	%mud
<u>968</u>	<u>GIP</u>				
<u>126</u>	<u>SGOCM</u>	<u>2</u>	<u>2</u>	<u>96</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 126 BHT 120 Gravity NIC API RW NIC @ NIC °F Chlorides NIC ppm

- (A) Initial Hydrostatic 2193
- (B) First Initial Flow 27
- (C) First Final Flow 47
- (D) Initial Shut-In 1029
- (E) Second Initial Flow 54
- (F) Second Final Flow 86
- (G) Final Shut-In 1506
- (H) Final Hydrostatic 1975

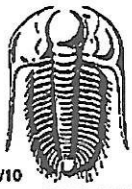
- Test 1300
- Jars 250
- Safety Joint 75
- Circ Sub
- Hourly Standby
- Mileage (230) 230
- Sampler
- Straddle
- Shale Packer 250
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility
- Sub Total 2105

- T-On Location 12:00
- T-Started 13:25
- T-Open 16:13
- T-Pulled 19:16
- T-Out 21:27
- Comments Motel
- EM Tool
- Ruined Shale Packer
- Ruined Packer
- Extra Copies
- Sub Total 0
- Total 2105
- MP/DST Disc't

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

Approved By Brad Rine Our Representative [Signature]

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 lost 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. 64965

Well Name & No. Van Zant 1 Test No. 5 Date 04/14/19
 Company Energy Partners LLC Elevation 1161 KB 1152 GL
 Address 8918 W. 21st STN #200-304 Wichita, KS 67205
 Co. Rep/Geo. Brad Rine Rig C+G 2
 Location: Sec. 25 Twp 34S Rge. 01W Co. Sumner State KS

Interval Tested 4289 - 4294 Zone Tested Simpson
 Anchor Length 5 Drill Pipe Run 4095 Mud Wt. 9.2
 Top Packer Depth 4284 Drill Collars Run 183 Vis 46
 Bottom Packer Depth 4289 Wt. Pipe Run 0 WL 15.0
 Total Depth 4294 Chlorides 2400 ppm System LCM 2

Blow Description IF: Fair Blow, BOB in 20 minutes, Built to 39 inches

ISI: NO Blow Back

FF: Fair Blow, BOB in 8 minutes, Built to 65 inches

FSD: 1/2 inch Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>993</u>	<u>GIP</u>				
<u>63</u>	<u>WMCO</u>		<u>54</u>	<u>14</u>	<u>32</u>
<u>61</u>	<u>WMCO</u>		<u>50</u>	<u>20</u>	<u>30</u>
<u>61</u>	<u>SOMCW</u>		<u>2</u>	<u>78</u>	<u>20</u>
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 185 BHT 125 Gravity NIC API RW 095 @ 60 °F Chlorides 96000 ppm

(A) Initial Hydrostatic 2214 Test 1300 T-On Location 04:30
 (B) First Initial Flow 25 Jars 250 T-Started 05:15
 (C) First Final Flow 56 Safety Joint 75 T-Open 07:17
 (D) Initial Shut-In 1537 Circ Sub _____ T-Pulled 11:35
 (E) Second Initial Flow 58 Hourly Standby _____ T-Out 14:36
 (F) Second Final Flow 84 Mileage 230 230 Comments MOTPI
 (G) Final Shut-In 1550 Sampler _____
 (H) Final Hydrostatic 2043 Straddle _____

Shale Packer 250 EM Tool _____
 Extra Packer _____ Ruined Shale Packer _____
 Extra Recorder _____ Ruined Packer _____
 Day Standby _____ Sub Total 0
 Accessibility _____ Total 2105
 Sub Total 2105 MP/DST Disc't _____

Approved By Brad Rine Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 64966

Well Name & No. Van Zant 1 Test No. 6 Date 04/14/19
 Company Energy Partners LLC Elevation 1161 KB 1152 GL
 Address 8918 W. 21st St N #200-304 Wichita, KS 67205
 Co. Rep / Geo. Brad Rine Rig C+G 2
 Location: Sec. 23 Twp 34S Rge. 01W Co. Sumner State KS

Interval Tested 4295 - 4302 Zone Tested Simpson
 Anchor Length 7 Drill Pipe Run 4095 Mud Wt. 9.2
 Top Packer Depth 4290 Drill Collars Run 183 Vis 47
 Bottom Packer Depth 4295 Wt. Pipe Run 0 WL 15.0
 Total Depth 4302 Chlorides 2400 ppm System LCM 2

Blow Description IF: weak blow, Built to 4 inches
ISI: NO Blow Back
FF: weak blow, Built to 4 1/2 inches
FSD: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>MCW</u>		<u>50</u>	<u>50</u>	
<u>183</u>	<u>water</u>				
Rec Total	<u>193</u>	BHT <u>2136</u>	Gravity <u>NIC</u>	API RW <u>1.13 @ 46</u>	F Chlorides <u>94000</u> ppm

(A) Initial Hydrostatic 2194 Test 1300 T-On Location 22:15
 (B) First Initial Flow 24 Jars 250 T-Started 23:20
 (C) First Final Flow 82 Safety Joint 75 T-Open 02:04
 (D) Initial Shut-In 1544 Circ Sub _____ T-Pulled 04:52
 (E) Second Initial Flow 84 Hourly Standby _____ T-Out 07:16
 (F) Second Final Flow 124 Mileage (230) 230 Comments MOTEL
 (G) Final Shut-In 1545 Sampler _____
 (H) Final Hydrostatic 2051 Straddle _____
 Shale Packer 250 EM Tool _____
 Extra Packer _____ Ruined Shale Packer _____
 Extra Recorder _____ Ruined Packer _____
 Day Standby _____ Sub Total 0
 Accessibility _____ Total 2105
 Sub Total 2105 MP/DST Disc't _____

Approved By Brad Rine Our Representative _____

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