



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

115 S Belmont #12
Wichita, KS 67208

ATTN: Corey Baker

Binns A #1-32

32 15s 33w Logan,KS

Start Date: 2016.08.20 @ 18:29:00

End Date: 2016.08.21 @ 03:14:30

Job Ticket #: 65544 DST #: 1

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

Printed: 2016.08.29 @ 09:33:26



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65544

DST#: 1

ATTN: Corey Baker

Test Start: 2016.08.20 @ 18:29:00

GENERAL INFORMATION:

Formation: **Lwr Topeka - Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:46:30

Time Test Ended: 03:14:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 69

Interval: 3878.00 ft (KB) To 3980.00 ft (KB) (TVD)

Reference Elevations: 3056.00 ft (KB)

Total Depth: 3980.00 ft (KB) (TVD)

3045.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8845

Outside

Press@RunDepth: 552.92 psig @ 3879.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.20

End Date:

2016.08.21

Last Calib.:

2016.08.21

Start Time: 18:29:05

End Time:

03:14:30

Time On Btm:

2016.08.20 @ 20:46:00

Time Off Btm:

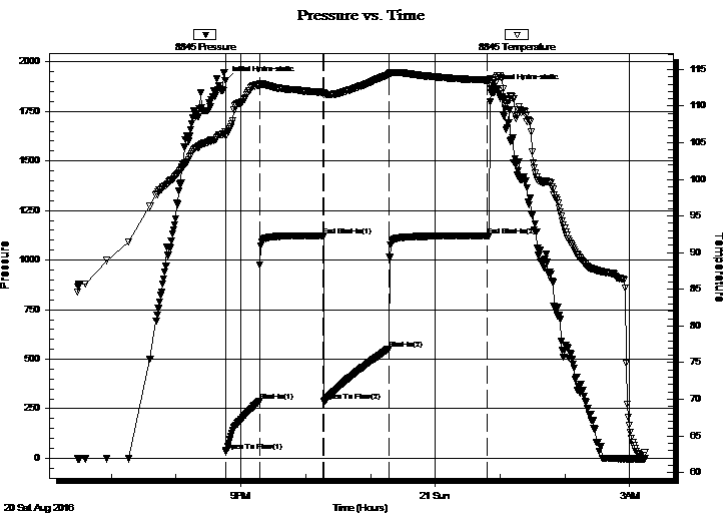
2016.08.21 @ 00:52:00

TEST COMMENT: IF: BOB @ 7 min.

IS: No return.

FF: BOB @ 10 min.

FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1903.97	106.48	Initial Hydro-static
1	35.16	106.00	Open To Flow (1)
32	288.96	112.86	Shut-In(1)
90	1123.96	111.84	End Shut-In(1)
92	289.34	111.53	Open To Flow (2)
152	552.92	114.27	Shut-In(2)
242	1123.26	113.53	End Shut-In(2)
246	1865.56	112.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1070.00	mcw 10m 90w (oil spots)	12.52

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65544

DST#: 1

ATTN: Corey Baker

Test Start: 2016.08.20 @ 18:29:00

Tool Information

Drill Pipe:	Length: 3585.00 ft	Diameter: 3.80 inches	Volume: 50.29 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 273.00 ft	Diameter: 2.25 inches	Volume: 1.34 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3878.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	102.00 ft			
Tool Length:	129.00 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			3852.00	
Shut In Tool	5.00			3857.00	
Hydraulic tool	5.00			3862.00	
Jars	5.00			3867.00	
Safety Joint	2.00			3869.00	
Packer	5.00			3874.00	27.00 Bottom Of Top Packer
Packer	4.00			3878.00	
Stubb	1.00			3879.00	
Recorder	0.00	8365	Inside	3879.00	
Recorder	0.00	8845	Outside	3879.00	
Perforations	2.00			3881.00	
Change Over Sub	0.50			3881.50	
Drill Pipe	95.00			3976.50	
Change Over Sub	0.50			3977.00	
Bullnose	3.00			3980.00	102.00 Bottom Packers & Anchor

Total Tool Length: 129.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65544

DST#: 1

ATTN: Corey Baker

Test Start: 2016.08.20 @ 18:29:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

39000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1070.00	mcw 10m 90w (oil spots)	12.522

Total Length: 1070.00 ft Total Volume: 12.522 bbl

Num Fluid Samples: 0

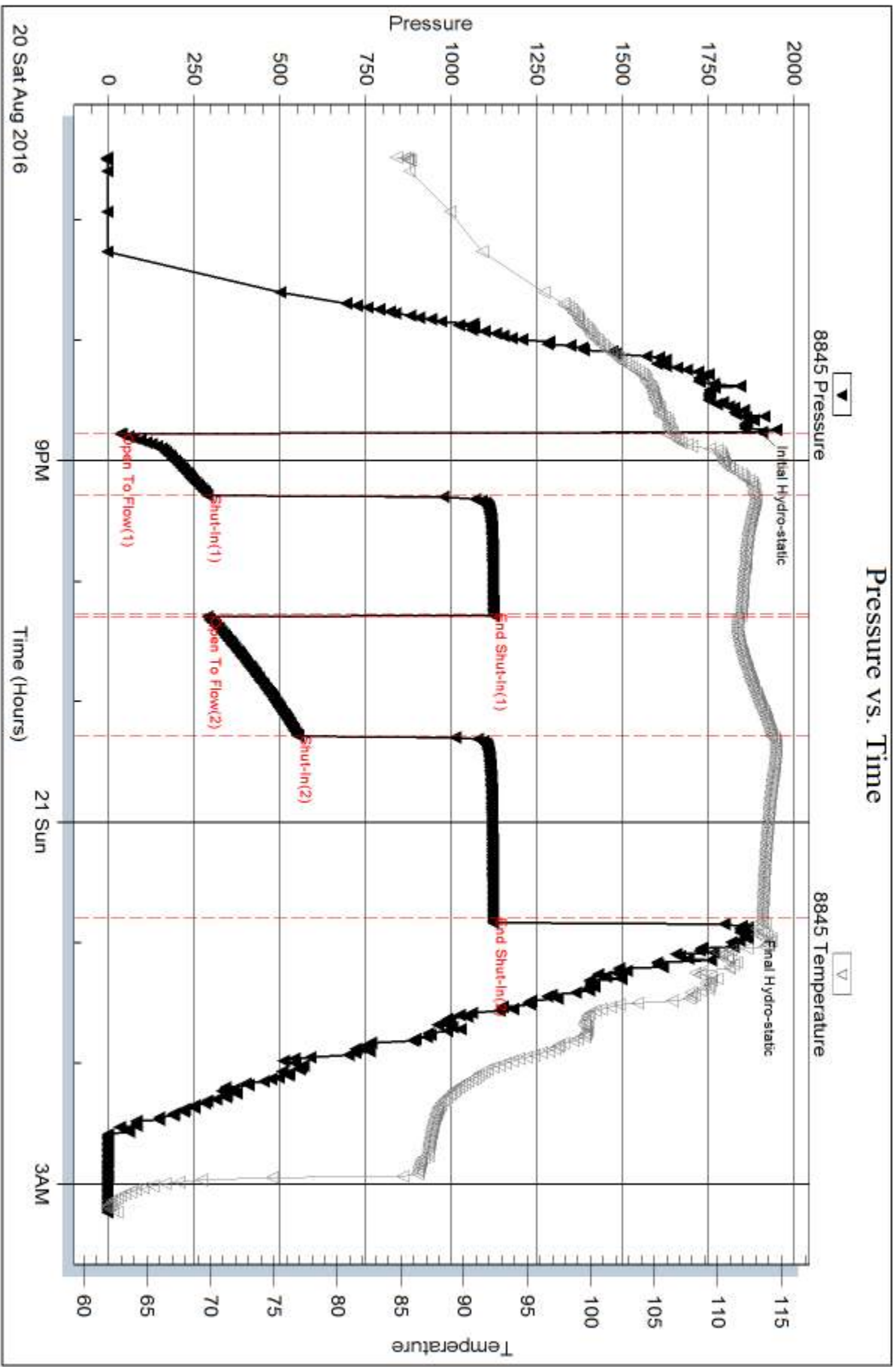
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .159 @ 69f = 39000ppm



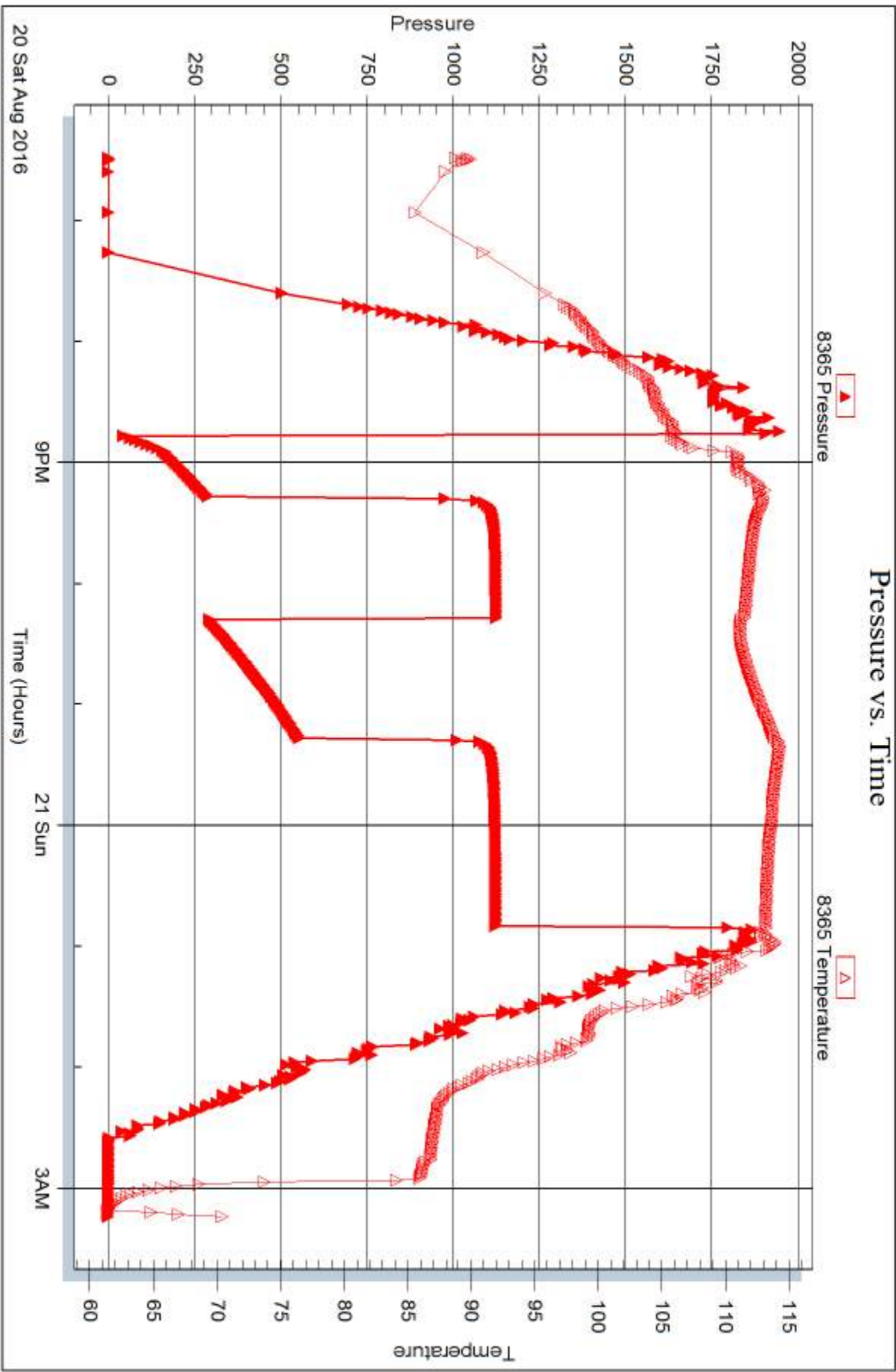
Serial #: 8365

Inside

Cobalt Energy

Binns A #1-32

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 65544

Printed: 2016.08.29 @ 09:33:28



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

115 S Belmont #12
Wichita, KS 67208

ATTN: Corey Baker

Binns A #1-32

32 15s 33w Logan,KS

Start Date: 2016.08.21 @ 15:00:00

End Date: 2016.08.21 @ 23:58:45

Job Ticket #: 65545 DST #: 2

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

Printed: 2016.08.29 @ 09:32:42



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65545

DST#: 2

ATTN: Corey Baker

Test Start: 2016.08.21 @ 15:00:00

GENERAL INFORMATION:

Formation: **LKC C - F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:40:30

Time Test Ended: 23:58:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4016.00 ft (KB) To 4100.00 ft (KB) (TVD)

Reference Elevations: 3056.00 ft (KB)

Total Depth: 4100.00 ft (KB) (TVD)

3045.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8845 Outside

Press@RunDepth: 329.10 psig @ 4017.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.21

End Date:

2016.08.21

Last Calib.:

2016.08.21

Start Time: 14:50:05

End Time:

23:48:45

Time On Btm:

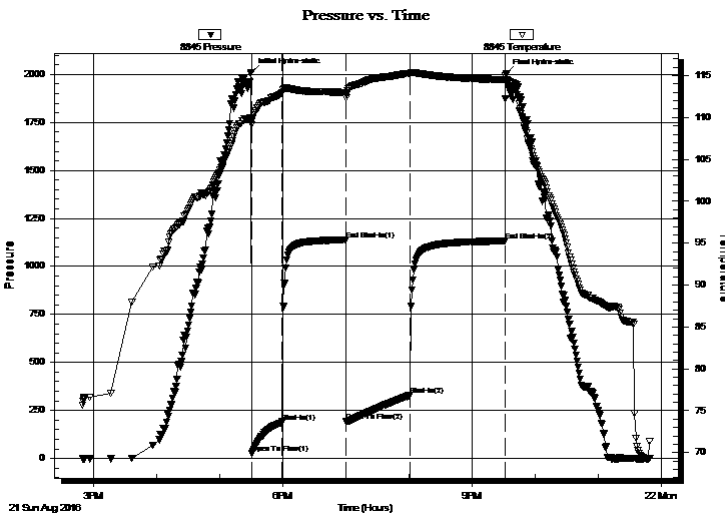
2016.08.21 @ 17:30:15

Time Off Btm:

2016.08.21 @ 21:32:45

TEST COMMENT: IF: BOB @ 21 min.
IS: No return.
FF: BOB @ 21 min.
FS: No return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2010.60	110.00	Initial Hydro-static
1	24.53	109.16	Open To Flow (1)
30	186.44	112.94	Shut-In(1)
90	1138.43	112.98	End Shut-In(1)
91	191.83	112.40	Open To Flow (2)
151	329.10	115.26	Shut-In(2)
242	1132.47	114.52	End Shut-In(2)
243	2006.12	114.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
630.00	mcw 15m 85w (oil spots in tool)	6.35

* Recovery from multiple tests

Gas Rates

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



DRILL STEM TEST REPORT

Cobalt Energy

32 15s 33w Logan, KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65545

DST#: 2

ATTN: Corey Baker

Test Start: 2016.08.21 @ 15:00:00

GENERAL INFORMATION:

Formation: **LKC C - F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:40:30

Time Test Ended: 23:58:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4016.00 ft (KB) To 4100.00 ft (KB) (TVD)

Total Depth: 4100.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3056.00 ft (KB)

3045.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8365 Inside

Press@RunDepth: psig @ 4017.00 ft (KB)

Start Date: 2016.08.21

End Date:

2016.08.21

Start Time: 14:50:05

End Time:

23:48:00

Capacity: 8000.00 psig

Last Calib.:

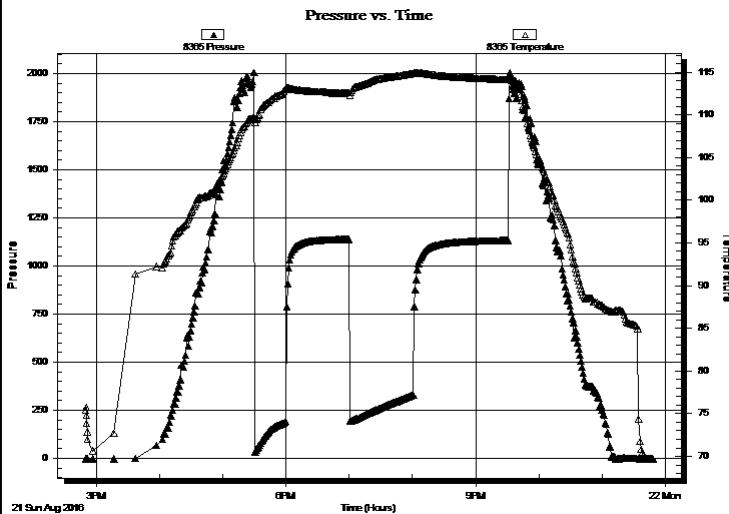
2016.08.21

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: BOB @ 21 min.
IS: No return.
FF: BOB @ 21 min.
FS: No return.

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
630.00	mcw 15m 85w (oil spots in tool)	6.35

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65545

DST#: 2

ATTN: Corey Baker

Test Start: 2016.08.21 @ 15:00:00

Tool Information

Drill Pipe:	Length: 3740.00 ft	Diameter: 3.80 inches	Volume: 52.46 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 273.00 ft	Diameter: 2.25 inches	Volume: 1.34 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	4016.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	84.00 ft			
Tool Length:	111.00 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			3990.00	
Shut In Tool	5.00			3995.00	
Hydraulic tool	5.00			4000.00	
Jars	5.00			4005.00	
Safety Joint	2.00			4007.00	
Packer	5.00			4012.00	27.00 Bottom Of Top Packer
Packer	4.00			4016.00	
Stubb	1.00			4017.00	
Recorder	0.00	8365	Inside	4017.00	
Recorder	0.00	8845	Outside	4017.00	
Perforations	15.00			4032.00	
Change Over Sub	1.00			4033.00	
Drill Pipe	63.00			4096.00	
Change Over Sub	1.00			4097.00	
Bullnose	3.00			4100.00	84.00 Bottom Packers & Anchor

Total Tool Length: 111.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65545

DST#: 2

ATTN: Corey Baker

Test Start: 2016.08.21 @ 15:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

24000 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
630.00	mcw 15m 85w (oil spots in tool)	6.350

Total Length: 630.00 ft Total Volume: 6.350 bbl

Num Fluid Samples: 0

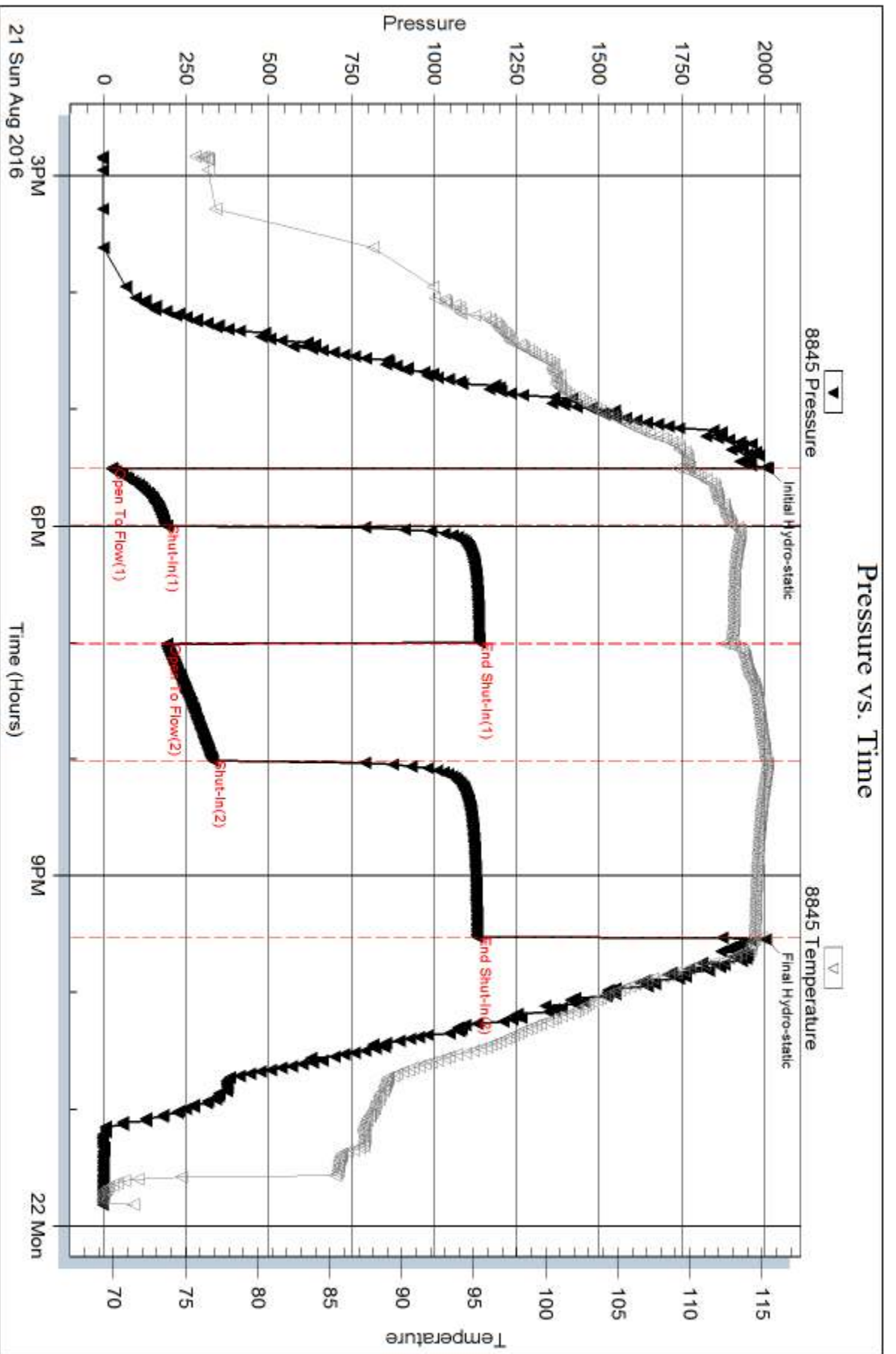
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .330 @ 63F = 24000ppm



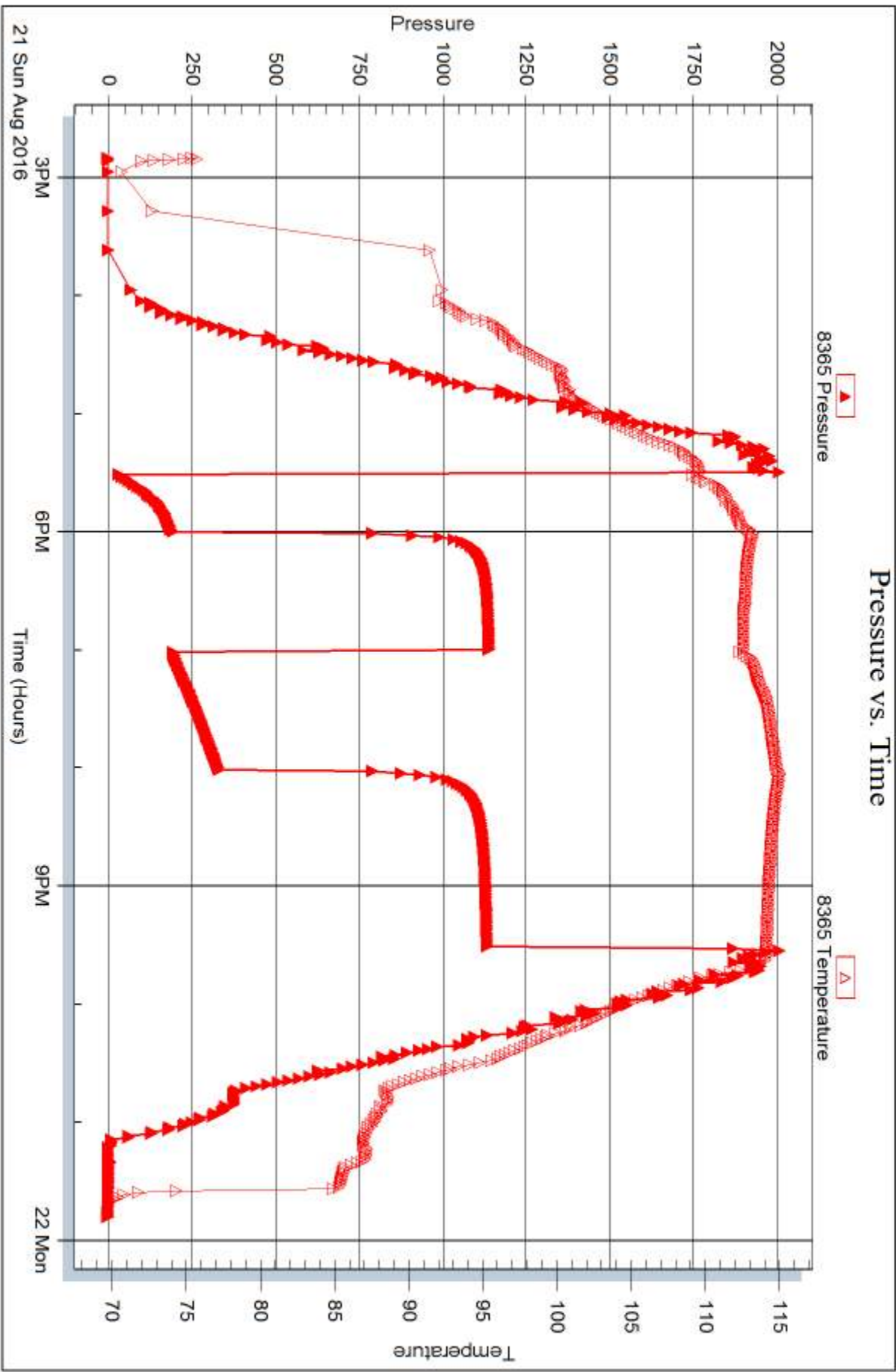
Serial #: 8365

Inside

Cobalt Energy

Binns A #1-32

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

115 S Belmont #12
Wichita, KS 67208

ATTN: Corey Baker

Binns A #1-32

32 15s 33w Logan,KS

Start Date: 2016.08.22 @ 13:43:00

End Date: 2016.08.22 @ 21:56:30

Job Ticket #: 65546 DST #: 3

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

Printed: 2016.08.29 @ 09:31:14



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65546

DST#: 3

ATTN: Corey Baker

Test Start: 2016.08.22 @ 13:43:00

GENERAL INFORMATION:

Formation: **LKC H-1**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:34:45

Time Test Ended: 21:56:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4144.00 ft (KB) To 4220.00 ft (KB) (TVD)

Reference Elevations: 3056.00 ft (KB)

Total Depth: 4220.00 ft (KB) (TVD)

3045.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8845 Outside

Press@RunDepth: 148.65 psig @ 4145.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.22

End Date: 2016.08.22

Last Calib.: 2016.08.22

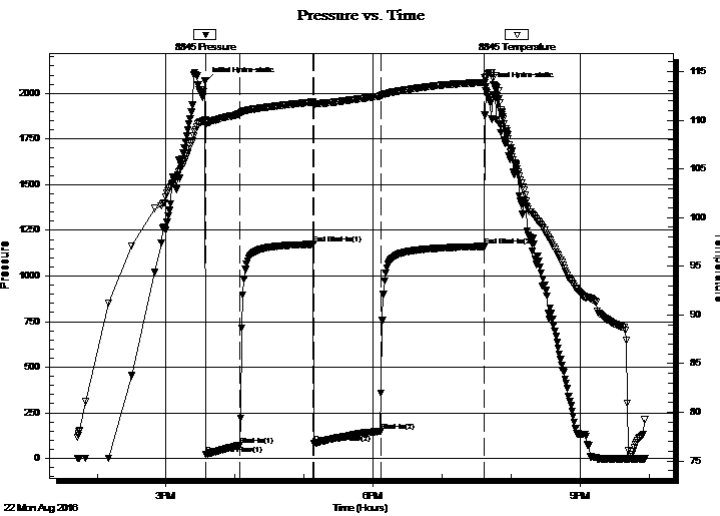
Start Time: 13:43:05

End Time: 21:56:29

Time On Btm: 2016.08.22 @ 15:34:00

Time Off Btm: 2016.08.22 @ 19:38:00

TEST COMMENT: IF: 1 1/2" blow .
IS: No return.
FF: 1" blow .
FS: No return..



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2066.15	110.08	Initial Hydro-static
1	22.02	109.57	Open To Flow (1)
30	72.88	110.67	Shut-In(1)
94	1174.09	111.88	End Shut-In(1)
95	81.46	111.44	Open To Flow (2)
153	148.65	112.47	Shut-In(2)
243	1162.40	113.89	End Shut-In(2)
244	2036.62	114.50	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	vsomcw 1o 19m 80w	0.59
110.00	ow cm 10o 40w 50m	0.54
20.00	free oil	0.10

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65546

DST#: 3

ATTN: Corey Baker

Test Start: 2016.08.22 @ 13:43:00

Tool Information

Drill Pipe:	Length: 3866.00 ft	Diameter: 3.80 inches	Volume: 54.23 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 273.00 ft	Diameter: 2.25 inches	Volume: 1.34 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
				String Weight: Initial	65000.00 lb
Drill Pipe Above KB:	22.00 ft			Final	65000.00 lb
Depth to Top Packer:	4144.00 ft				
Depth to Bottom Packer:	ft				
Interval between Packers:	76.00 ft				
Tool Length:	103.00 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			4118.00	
Shut In Tool	5.00			4123.00	
Hydraulic tool	5.00			4128.00	
Jars	5.00			4133.00	
Safety Joint	2.00			4135.00	
Packer	5.00			4140.00	27.00 Bottom Of Top Packer
Packer	4.00			4144.00	
Stubb	1.00			4145.00	
Recorder	0.00	8365	Inside	4145.00	
Recorder	0.00	8845	Outside	4145.00	
Perforations	7.00			4152.00	
Change Over Sub	1.00			4153.00	
Drill Pipe	63.00			4216.00	
Change Over Sub	1.00			4217.00	
Bullnose	3.00			4220.00	76.00 Bottom Packers & Anchor

Total Tool Length: 103.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65546

DST#: 3

ATTN: Corey Baker

Test Start: 2016.08.22 @ 13:43:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

21 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

35000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4700.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	vsomcw 1o 19m 80w	0.590
110.00	ow cm 10o 40w 50m	0.541
20.00	free oil	0.098

Total Length: 250.00 ft Total Volume: 1.229 bbl

Num Fluid Samples: 0

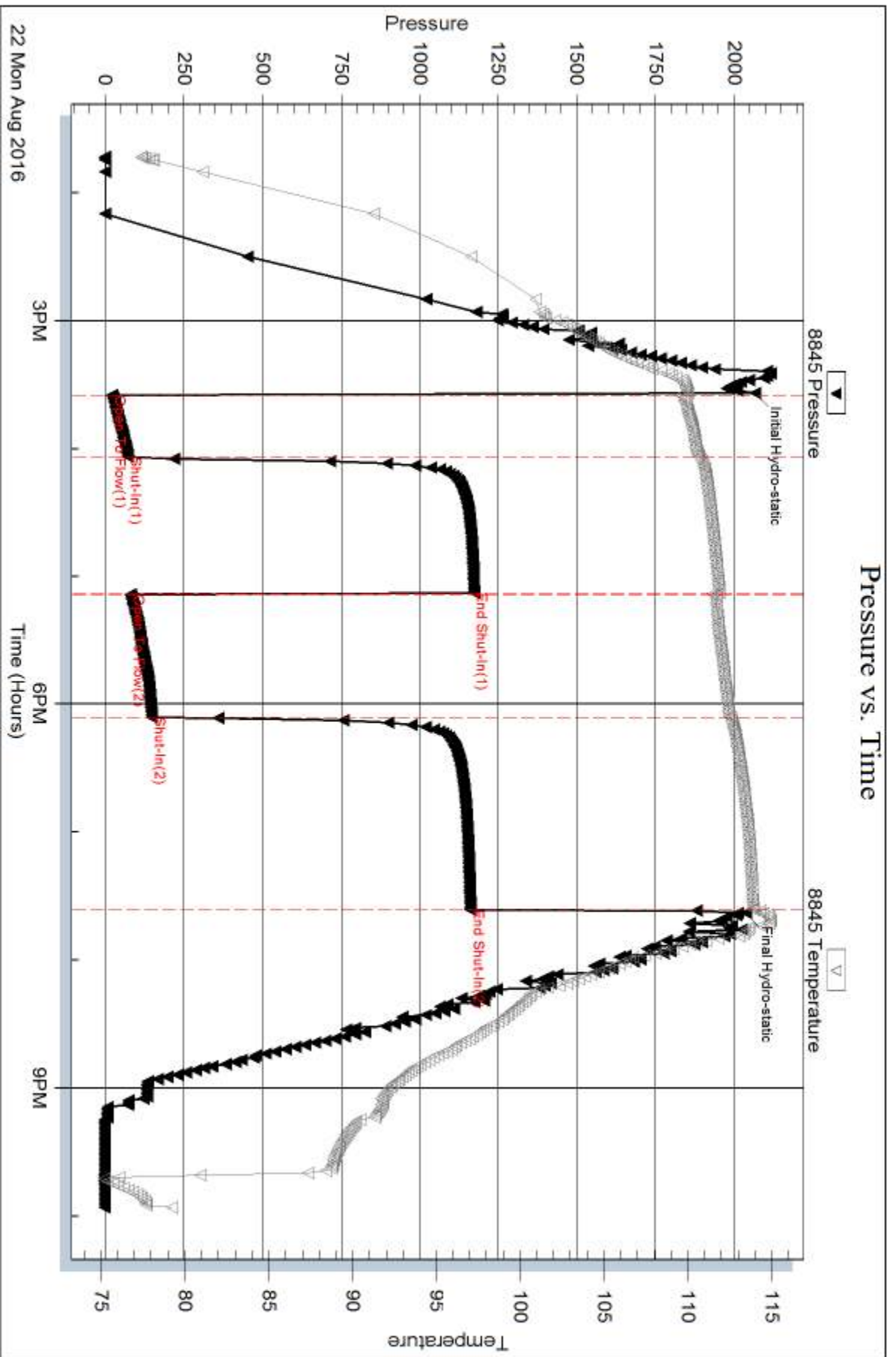
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .195 @ 71F = 35000ppm



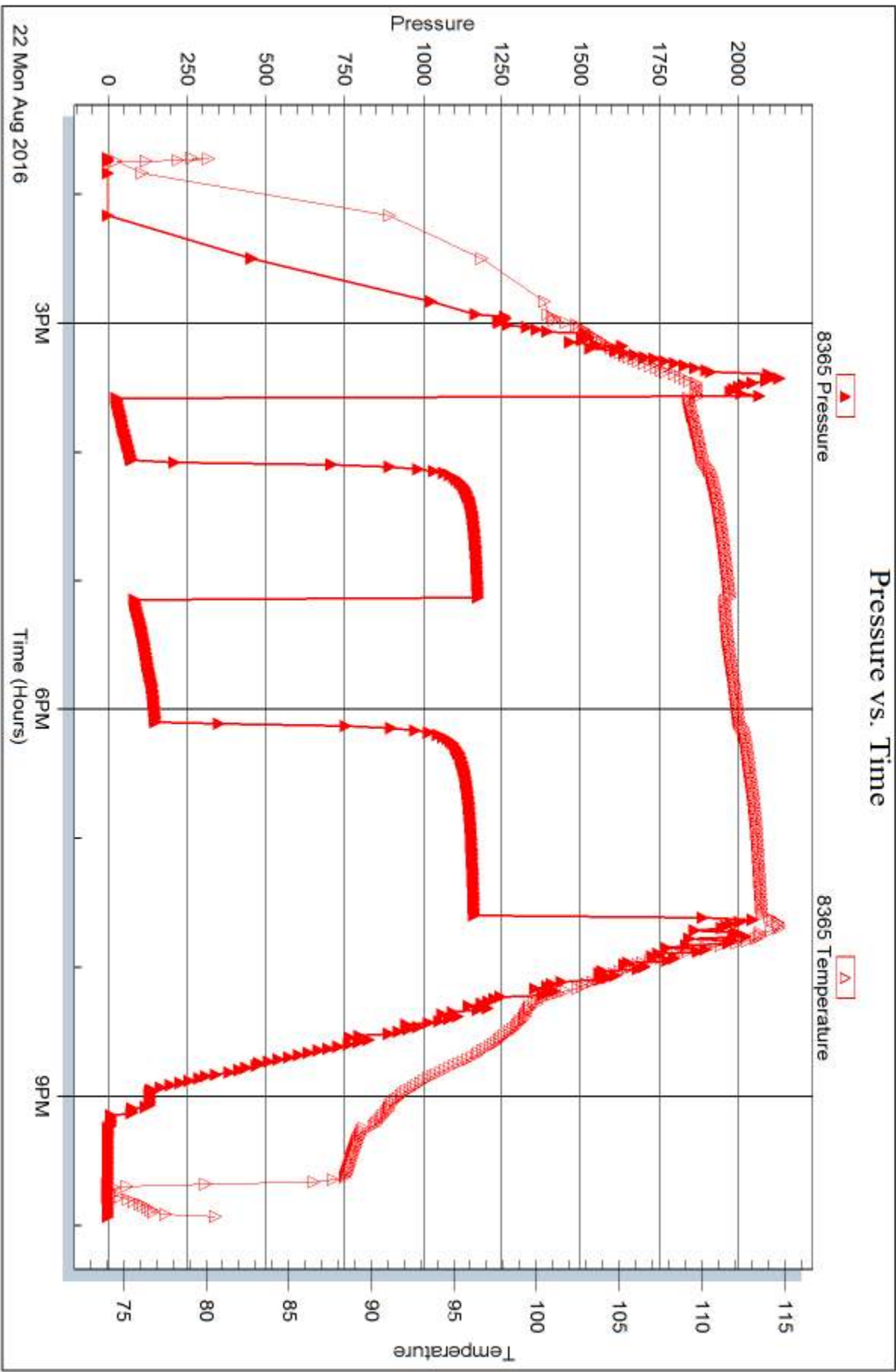
Serial #: 8365

Inside

Cobalt Energy

Binns A #1-32

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 65546

Printed: 2016.08.29 @ 09:31:16



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

115 S Belmont #12
Wichita, KS 67208

ATTN: Corey Baker

Binns A #1-32

32 15s 33w Logan,KS

Start Date: 2016.08.23 @ 11:20:00

End Date: 2016.08.23 @ 19:07:45

Job Ticket #: 65547 DST #: 4

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

Printed: 2016.08.29 @ 09:30:49



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Cobalt Energy

32 15s 33w Logan, KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65547

DST#: 4

ATTN: Corey Baker

Test Start: 2016.08.23 @ 11:20:00

GENERAL INFORMATION:

Formation: **LKC J - L**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:42:00

Time Test Ended: 19:07:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4230.00 ft (KB) To 4320.00 ft (KB) (TVD)

Reference Elevations: 3056.00 ft (KB)

Total Depth: 4320.00 ft (KB) (TVD)

3045.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8365

Inside

Press@RunDepth: 515.05 psig @ 4231.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.23

End Date:

2016.08.23

Last Calib.:

2016.08.23

Start Time: 11:20:05

End Time:

19:07:44

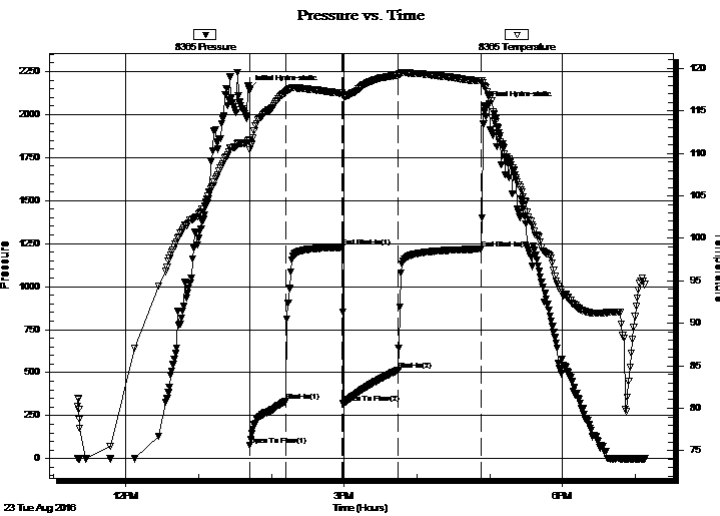
Time On Btm:

2016.08.23 @ 13:41:30

Time Off Btm:

2016.08.23 @ 16:55:15

TEST COMMENT: IF: BOB @ 7 min.
IS: No return
FF: BOB @ 10 min.
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2147.81	111.55	Initial Hydro-static
1	77.15	110.47	Open To Flow (1)
31	334.92	117.23	Shut-In(1)
77	1228.55	117.08	End Shut-In(1)
78	320.60	116.75	Open To Flow (2)
123	515.05	119.20	Shut-In(2)
192	1218.70	118.53	End Shut-In(2)
194	2050.26	117.96	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1100.00	mcw 5m 95w	12.94
0.00	oil specs on top and in tool	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

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65547

DST#: 4

ATTN: Corey Baker

Test Start: 2016.08.23 @ 11:20:00

Tool Information

Drill Pipe:	Length: 3963.00 ft	Diameter: 3.80 inches	Volume: 55.59 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 273.00 ft	Diameter: 2.25 inches	Volume: 1.34 bbl	Weight to Pull Loose:	78000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
			- bbl	String Weight: Initial	67000.00 lb
Drill Pipe Above KB:	33.00 ft			Final	70000.00 lb
Depth to Top Packer:	4230.00 ft				
Depth to Bottom Packer:	ft				
Interval between Packers:	90.00 ft				
Tool Length:	117.00 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			4204.00	
Shut In Tool	5.00			4209.00	
Hydraulic tool	5.00			4214.00	
Jars	5.00			4219.00	
Safety Joint	2.00			4221.00	
Packer	5.00			4226.00	27.00 Bottom Of Top Packer
Packer	4.00			4230.00	
Stubb	1.00			4231.00	
Recorder	0.00	8365	Inside	4231.00	
Recorder	0.00	8845	Outside	4231.00	
Perforations	22.00			4253.00	
Change Over Sub	0.50			4253.50	
Drill Pipe	63.00			4316.50	
Change Over Sub	0.50			4317.00	
Bullnose	3.00			4320.00	90.00 Bottom Packers & Anchor

Total Tool Length: 117.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65547

DST#: 4

ATTN: Corey Baker

Test Start: 2016.08.23 @ 11:20:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

57000 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbl

Water Loss: 9.59 in³

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 bbl
1100.00	mcw 5m 95w	12.943
0.00	oil specs on top and in tool	0.000

Total Length: 1100.00 ft Total Volume: 12.943 bbl

Num Fluid Samples: 0

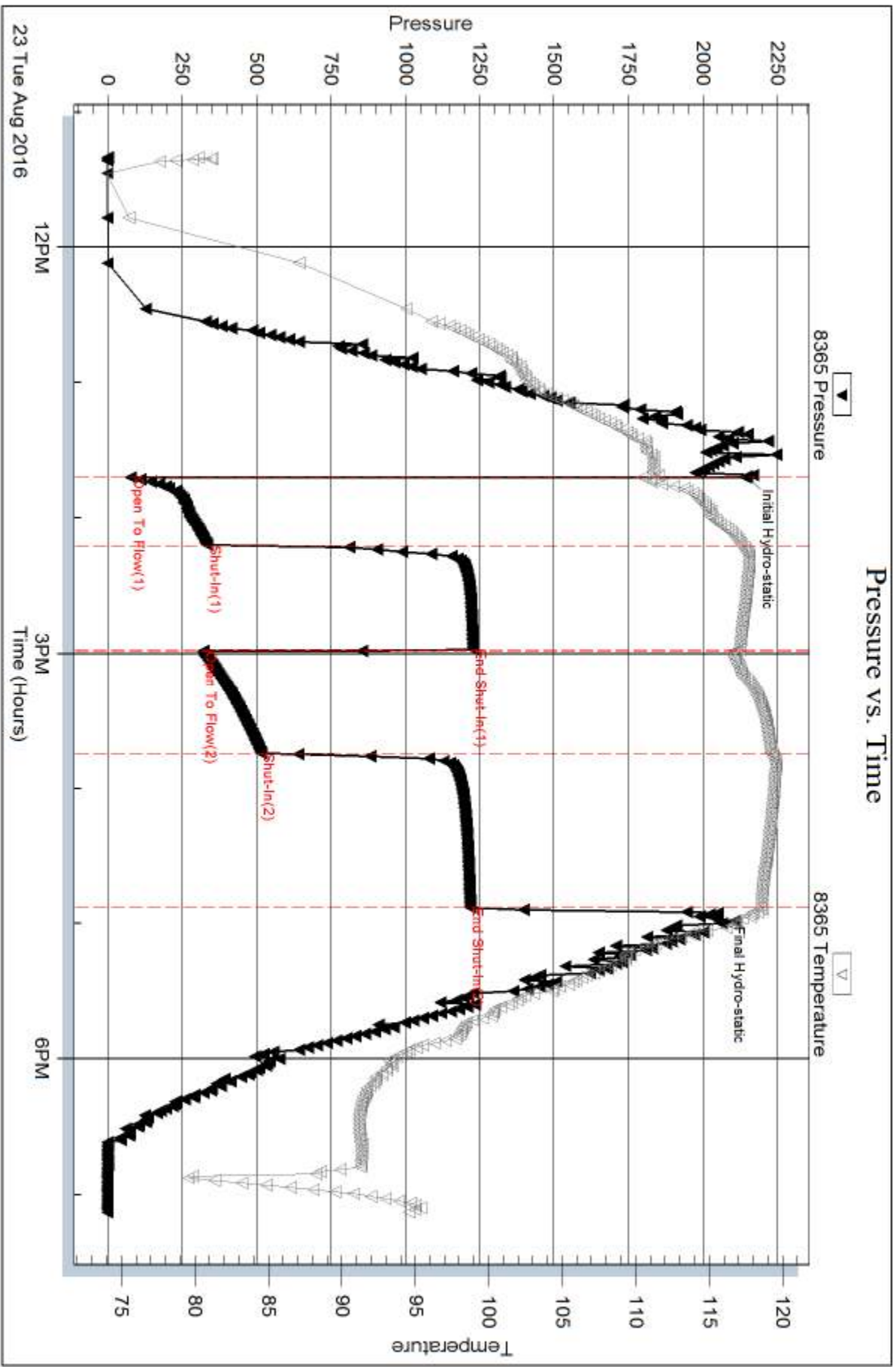
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .117 @ 81F = 57000

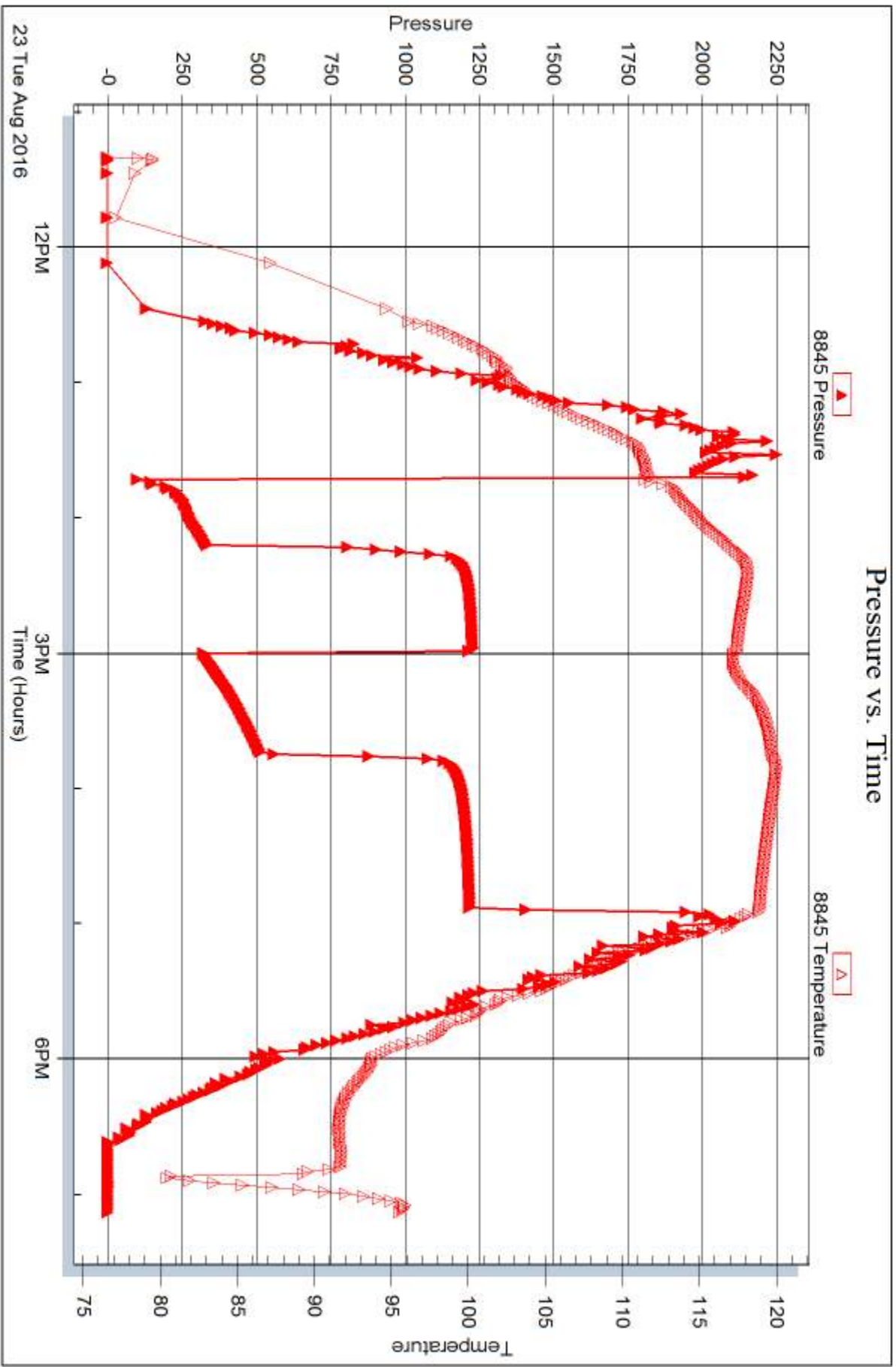


Serial #: 8845

Outside Cobalt Energy

Binns A #1-32

DST Test Number: 4



Trilobite Testing, Inc

Ref. No: 65547

Printed: 2016.08.29 @ 09:30:50



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

115 S Belmont #12
Wichita, KS 67208

ATTN: Corey Baker

Binns A #1-32

32 15s 33w Logan,KS

Start Date: 2016.08.24 @ 03:09:00

End Date: 2016.08.24 @ 11:51:15

Job Ticket #: 65549 DST #: 5

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

Printed: 2016.08.29 @ 09:30:25



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65549

DST#: 5

ATTN: Corey Baker

Test Start: 2016.08.24 @ 03:09:00

GENERAL INFORMATION:

Formation: **Pleasanton**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:08:00

Time Test Ended: 11:51:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4224.00 ft (KB) To 4350.00 ft (KB) (TVD)

Reference Elevations: 3056.00 ft (KB)

Total Depth: 4350.00 ft (KB) (TVD)

3045.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8365

Inside

Press@RunDepth: 293.40 psig @ 4325.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.24

End Date:

2016.08.24

Last Calib.:

2016.08.24

Start Time: 03:09:05

End Time:

11:51:15

Time On Btm:

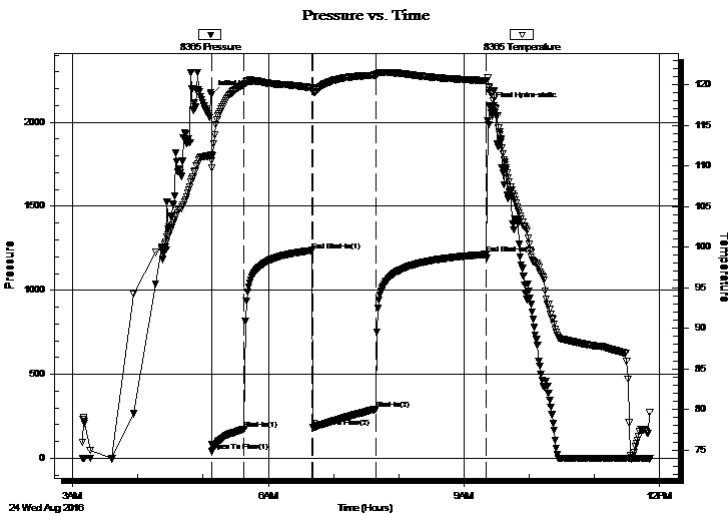
2016.08.24 @ 05:07:30

Time Off Btm:

2016.08.24 @ 09:23:00

TEST COMMENT: IF: BOB @ 12 min.
IS: 1/4" return died @ 40 minutes.
FF: BOB @ 30 min.
FSI 1/2" return, receded to a surface blow.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2165.76	111.31	Initial Hydro-static
1	40.98	110.64	Open To Flow (1)
31	173.55	119.97	Shut-In(1)
93	1236.65	119.62	End Shut-In(1)
94	181.80	119.20	Open To Flow (2)
152	293.40	121.16	Shut-In(2)
253	1213.47	120.47	End Shut-In(2)
256	2095.97	119.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
500.00	somcw 1o 15m 84w	4.53
150.00	go 25g 75o	2.10
0.00	369' GIP	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

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65549

DST#: 5

ATTN: Corey Baker

Test Start: 2016.08.24 @ 03:09:00

Tool Information

Drill Pipe:	Length: 4055.00 ft	Diameter: 3.80 inches	Volume: 56.88 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 273.00 ft	Diameter: 2.25 inches	Volume: 1.34 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume:</u> - bbl	Tool Chased	0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial	65000.00 lb
Depth to Top Packer:	4324.00 ft			Final	65000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	26.00 ft				
Tool Length:	53.00 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			4298.00	
Shut In Tool	5.00			4303.00	
Hydraulic tool	5.00			4308.00	
Jars	5.00			4313.00	
Safety Joint	2.00			4315.00	
Packer	5.00			4320.00	27.00 Bottom Of Top Packer
Packer	4.00			4324.00	
Stubb	1.00			4325.00	
Recorder	0.00	8365	Inside	4325.00	
Recorder	0.00	8845	Outside	4325.00	
Perforations	22.00			4347.00	
Bullnose	3.00			4350.00	26.00 Bottom Packers & Anchor

Total Tool Length: 53.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65549

DST#: 5

ATTN: Corey Baker

Test Start: 2016.08.24 @ 03:09:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 10.00 lb/gal
Viscosity: 56.00 sec/qt
Water Loss: 8.79 in³
Resistivity: ohm.m
Salinity: 5500.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 23 deg API
Water Salinity: 41000 ppm

Recovery Information

Recovery Table

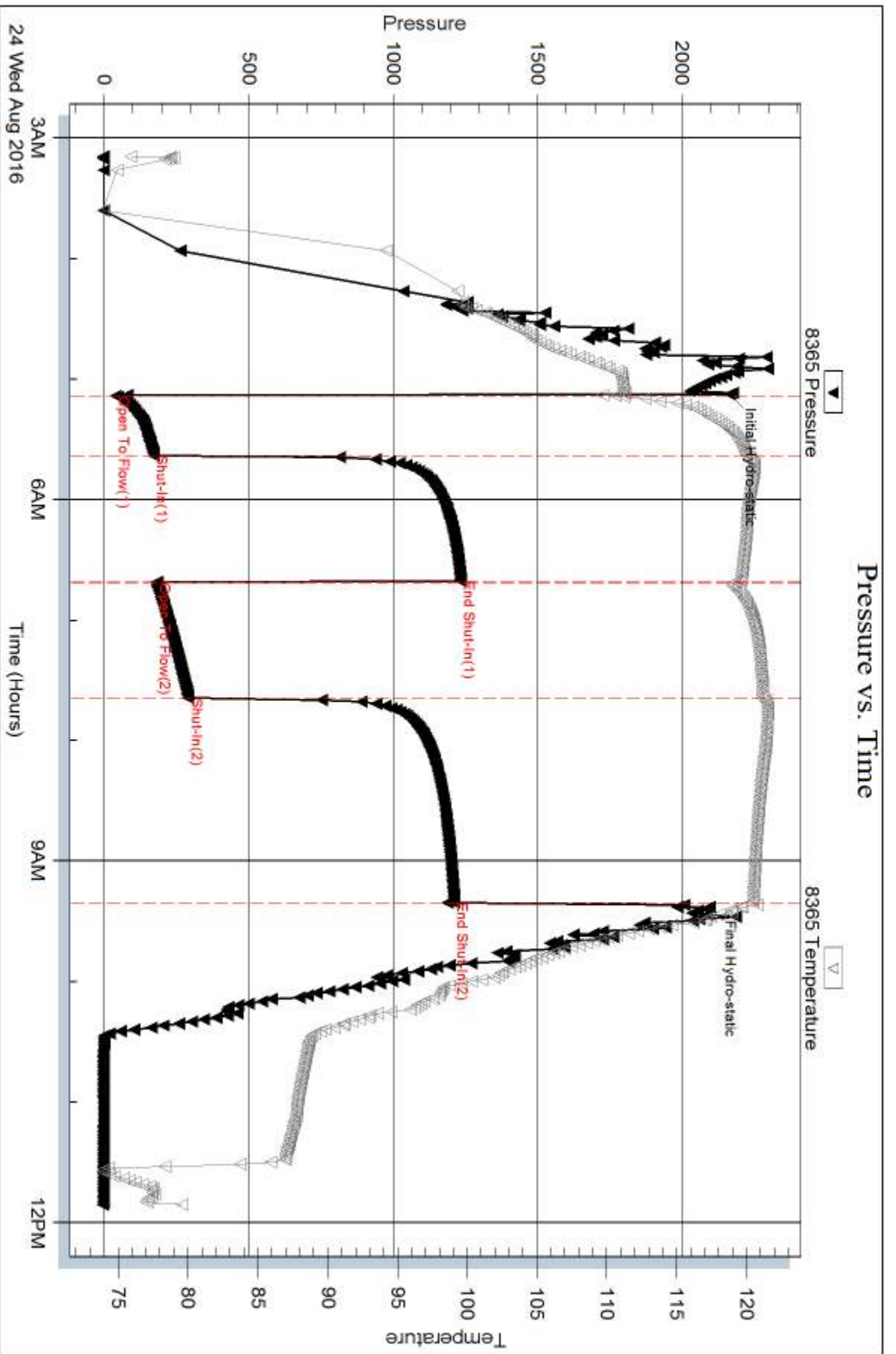
Length ft	Description	Volume bbl
500.00	somcw 1o 15m 84w	4.527
150.00	go 25g 75o	2.104
0.00	369' GIP	0.000

Total Length: 650.00 ft Total Volume: 6.631 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW IS .170 @ 72f = 41000PPM

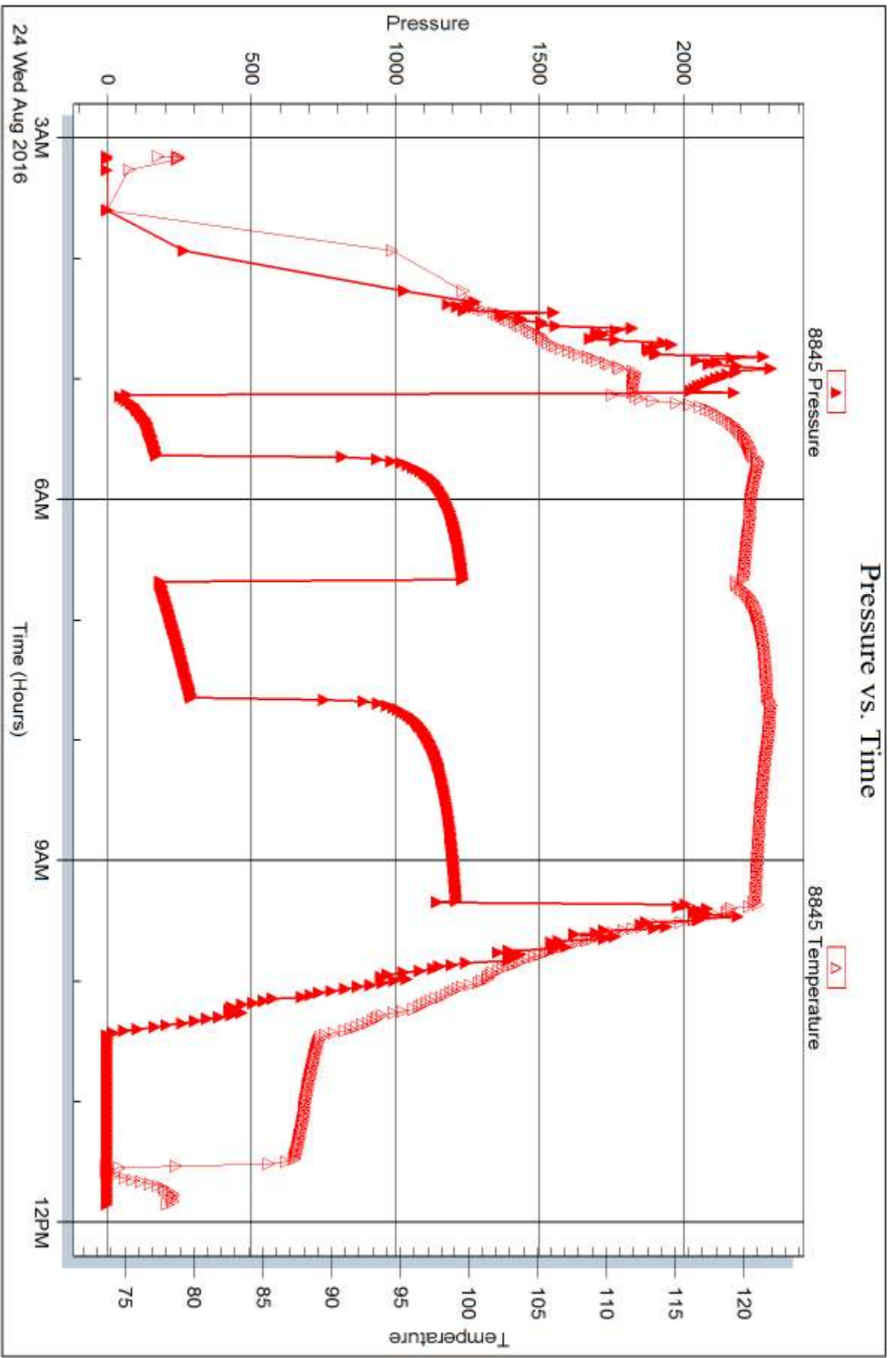


Serial #: 8845

Outside Cobalt Energy

Binns A #1-32

DST Test Number: 5





DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

115 S Belmont #12
Wichita, KS 67208

ATTN: Corey Baker

Binns A #1-32

32 15s 33w Logan,KS

Start Date: 2016.08.24 @ 21:44:00

End Date: 2016.08.25 @ 06:30:15

Job Ticket #: 65550 DST #: 6

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

Printed: 2016.08.29 @ 09:29:57



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Cobalt Energy

32 15s 33w Logan, KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65550

DST#: 6

ATTN: Corey Baker

Test Start: 2016.08.24 @ 21:44:00

GENERAL INFORMATION:

Formation: **Marmaton - Altamont**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:10:15

Time Test Ended: 06:30:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4370.00 ft (KB) To 4410.00 ft (KB) (TVD)

Reference Elevations: 3056.00 ft (KB)

Total Depth: 4410.00 ft (KB) (TVD)

3045.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8365

Inside

Press@RunDepth: 118.38 psig @ 4371.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.24

End Date:

2016.08.25

Last Calib.:

2016.08.25

Start Time: 21:44:05

End Time:

06:30:15

Time On Btm:

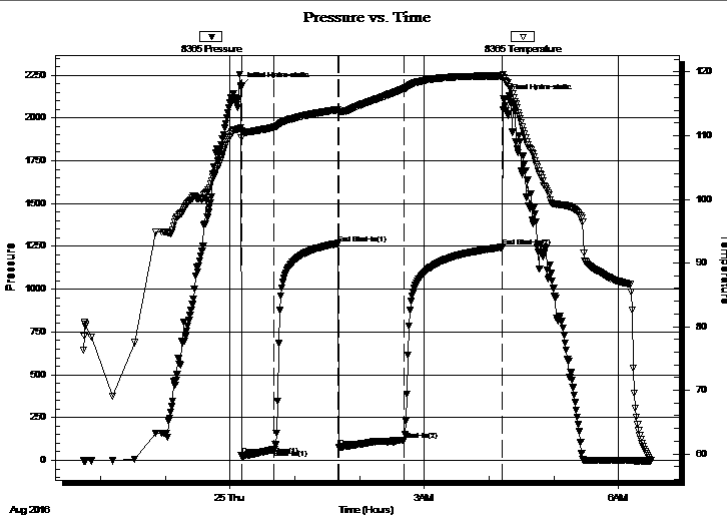
2016.08.25 @ 00:10:00

Time Off Btm:

2016.08.25 @ 04:13:30

TEST COMMENT: IF: 6" blow.
IS: No return.
FF: 5" blow.
FS: Surface return.

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2180.94	111.32	Initial Hydro-static
1	27.17	109.72	Open To Flow (1)
31	63.17	111.33	Shut-In(1)
90	1266.81	114.09	End Shut-In(1)
91	75.55	113.79	Open To Flow (2)
151	118.38	117.33	Shut-In(2)
242	1244.49	119.38	End Shut-In(2)
244	2110.68	119.10	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	gmco 20g 30m 50o	0.30
240.00	go 25g 75o	1.43
0.00	130' GIP	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65550

DST#: 6

ATTN: Corey Baker

Test Start: 2016.08.24 @ 21:44:00

Tool Information

Drill Pipe:	Length: 4088.00 ft	Diameter: 3.80 inches	Volume: 57.34 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 273.00 ft	Diameter: 2.25 inches	Volume: 1.34 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
				String Weight: Initial	65000.00 lb
Drill Pipe Above KB:	18.00 ft			Final	75000.00 lb
Depth to Top Packer:	4370.00 ft				
Depth to Bottom Packer:	ft				
Interval between Packers:	40.00 ft				
Tool Length:	67.00 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			4344.00	
Shut In Tool	5.00			4349.00	
Hydraulic tool	5.00			4354.00	
Jars	5.00			4359.00	
Safety Joint	2.00			4361.00	
Packer	5.00			4366.00	27.00 Bottom Of Top Packer
Packer	4.00			4370.00	
Stubb	1.00			4371.00	
Recorder	0.00	8365	Inside	4371.00	
Recorder	0.00	8845	Outside	4371.00	
Perforations	3.00			4374.00	
Change Over Sub	0.50			4374.50	
Drill Pipe	32.00			4406.50	
Change Over Sub	0.50			4407.00	
Bullnose	3.00			4410.00	40.00 Bottom Packers & Anchor

Total Tool Length: 67.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65550

DST#: 6

ATTN: Corey Baker

Test Start: 2016.08.24 @ 21:44:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

24 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	gmco 20g 30m 50o	0.295
240.00	go 25g 75o	1.426
0.00	130' GIP	0.000

Total Length: 300.00 ft Total Volume: 1.721 bbl

Num Fluid Samples: 0

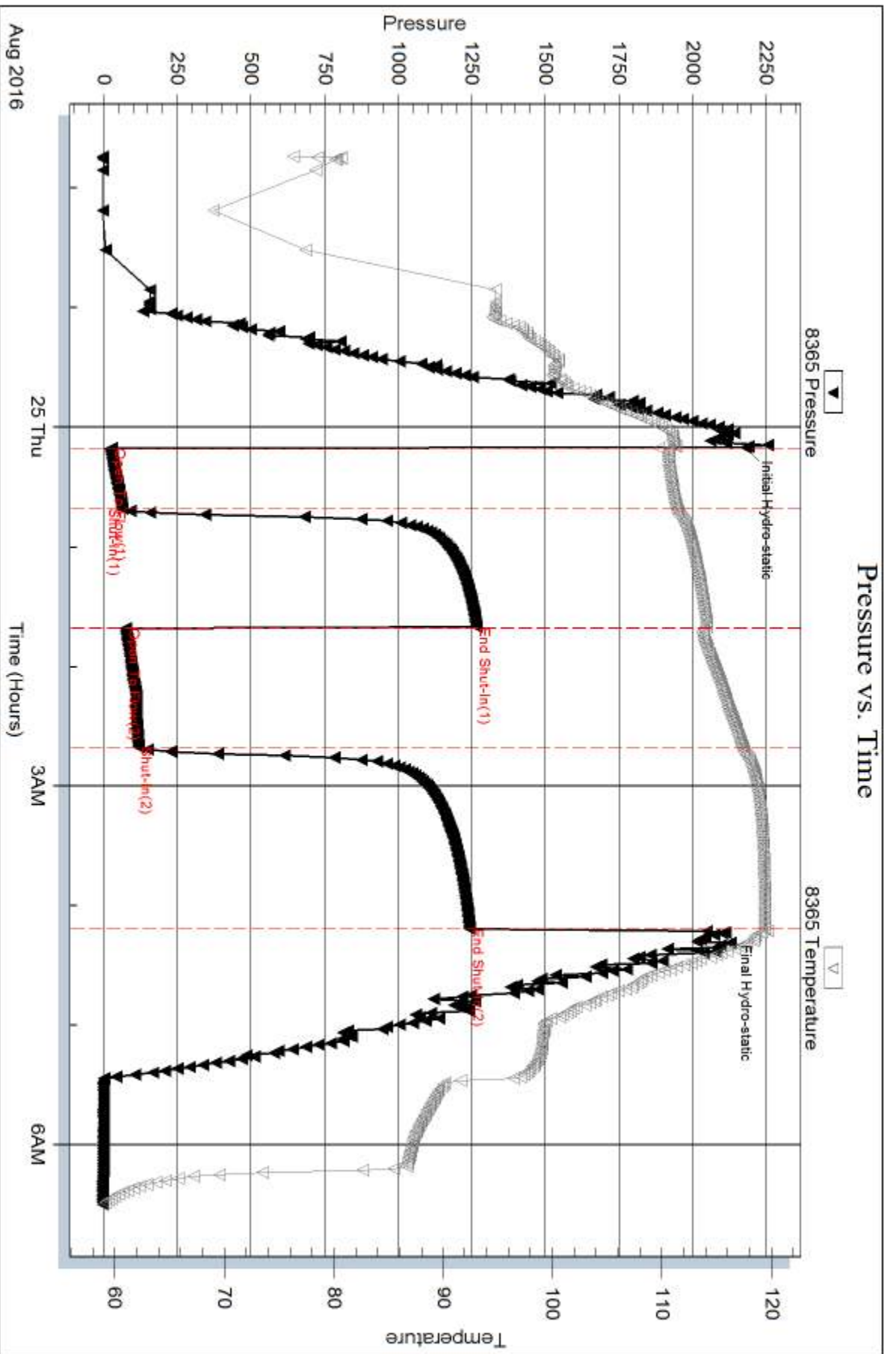
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

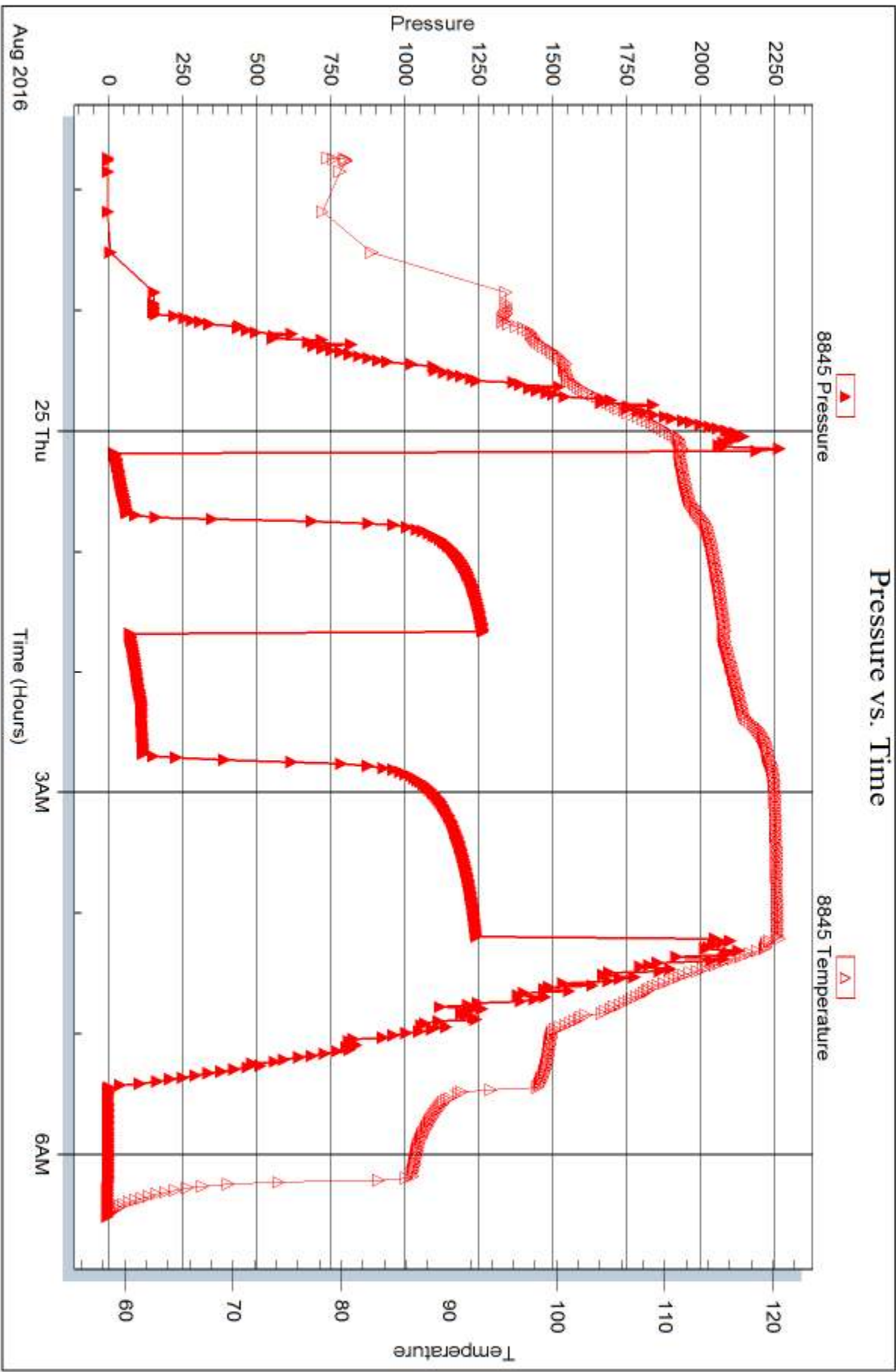


Serial #: 8845

Outside Cobalt Energy

Binns A #1-32

DST Test Number: 6



Trilobite Testing, Inc

Ref. No: 65550

Printed: 2016.08.29 @ 09:30:00



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

115 S Belmont #12
Wichita, KS 67208

ATTN: Corey Baker

Binns A #1-32

32 15s 33w Logan,KS

Start Date: 2016.08.25 @ 16:28:00

End Date: 2016.08.25 @ 22:31:45

Job Ticket #: 65551 DST #: 7

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

Printed: 2016.08.29 @ 09:29:33



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Cobalt Energy

32 15s 33w Logan, KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65551

DST#: 7

ATTN: Corey Baker

Test Start: 2016.08.25 @ 16:28:00

GENERAL INFORMATION:

Formation: **Altamont B-C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:30:00

Time Test Ended: 22:31:45

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4412.00 ft (KB) To 4460.00 ft (KB) (TVD)

Reference Elevations: 3056.00 ft (KB)

Total Depth: 4460.00 ft (KB) (TVD)

3045.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8365

Inside

Press@RunDepth: 18.91 psig @ 4413.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.25

End Date:

2016.08.25

Last Calib.:

2016.08.25

Start Time: 16:28:05

End Time:

22:31:44

Time On Btm:

2016.08.25 @ 18:29:00

Time Off Btm:

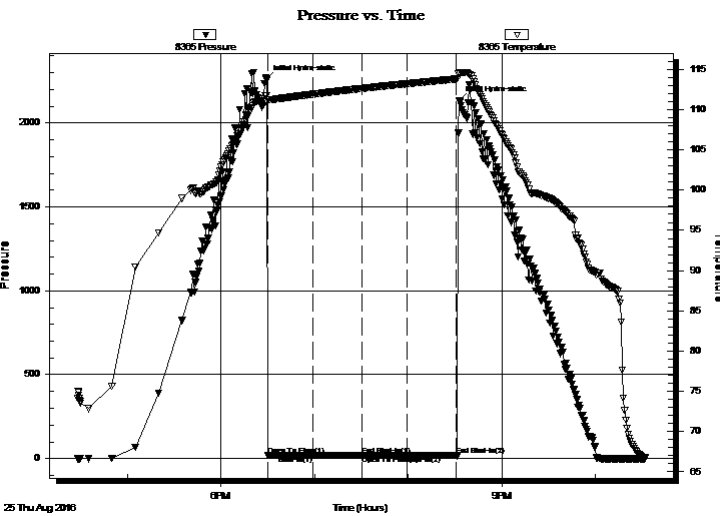
2016.08.25 @ 20:32:45

TEST COMMENT: IF: Surface blow, Died @ 15 minutes.

IS: No return.

FF: No blow.

FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2261.54	111.73	Initial Hydro-static
1	19.16	111.20	Open To Flow (1)
30	19.69	111.92	Shut-In(1)
61	20.42	112.62	End Shut-In(1)
62	18.75	112.63	Open To Flow (2)
90	18.91	113.22	Shut-In(2)
122	19.17	113.80	End Shut-In(2)
124	2134.00	114.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
3.00	Mud 100m (oil specs)	0.01

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65551

DST#: 7

ATTN: Corey Baker

Test Start: 2016.08.25 @ 16:28:00

Tool Information

Drill Pipe:	Length: 4120.00 ft	Diameter: 3.80 inches	Volume: 57.79 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 273.00 ft	Diameter: 2.25 inches	Volume: 1.34 bbl	Weight to Pull Loose:	79000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	68000.00 lb
Depth to Top Packer:	4412.00 ft			Final	68000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	48.00 ft				
Tool Length:	75.00 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			4386.00	
Shut In Tool	5.00			4391.00	
Hydraulic tool	5.00			4396.00	
Jars	5.00			4401.00	
Safety Joint	2.00			4403.00	
Packer	5.00			4408.00	27.00 Bottom Of Top Packer
Packer	4.00			4412.00	
Stubb	1.00			4413.00	
Recorder	0.00	8365	Inside	4413.00	
Recorder	0.00	8845	Outside	4413.00	
Perforations	11.00			4424.00	
Change Over Sub	0.50			4424.50	
Drill Pipe	32.00			4456.50	
Change Over Sub	0.50			4457.00	
Bullnose	3.00			4460.00	48.00 Bottom Packers & Anchor

Total Tool Length: 75.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65551

DST#: 7

ATTN: Corey Baker

Test Start: 2016.08.25 @ 16:28:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

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 bbl
3.00	Mud 100m (oil specs)	0.015

Total Length: 3.00 ft Total Volume: 0.015 bbl

Num Fluid Samples: 0

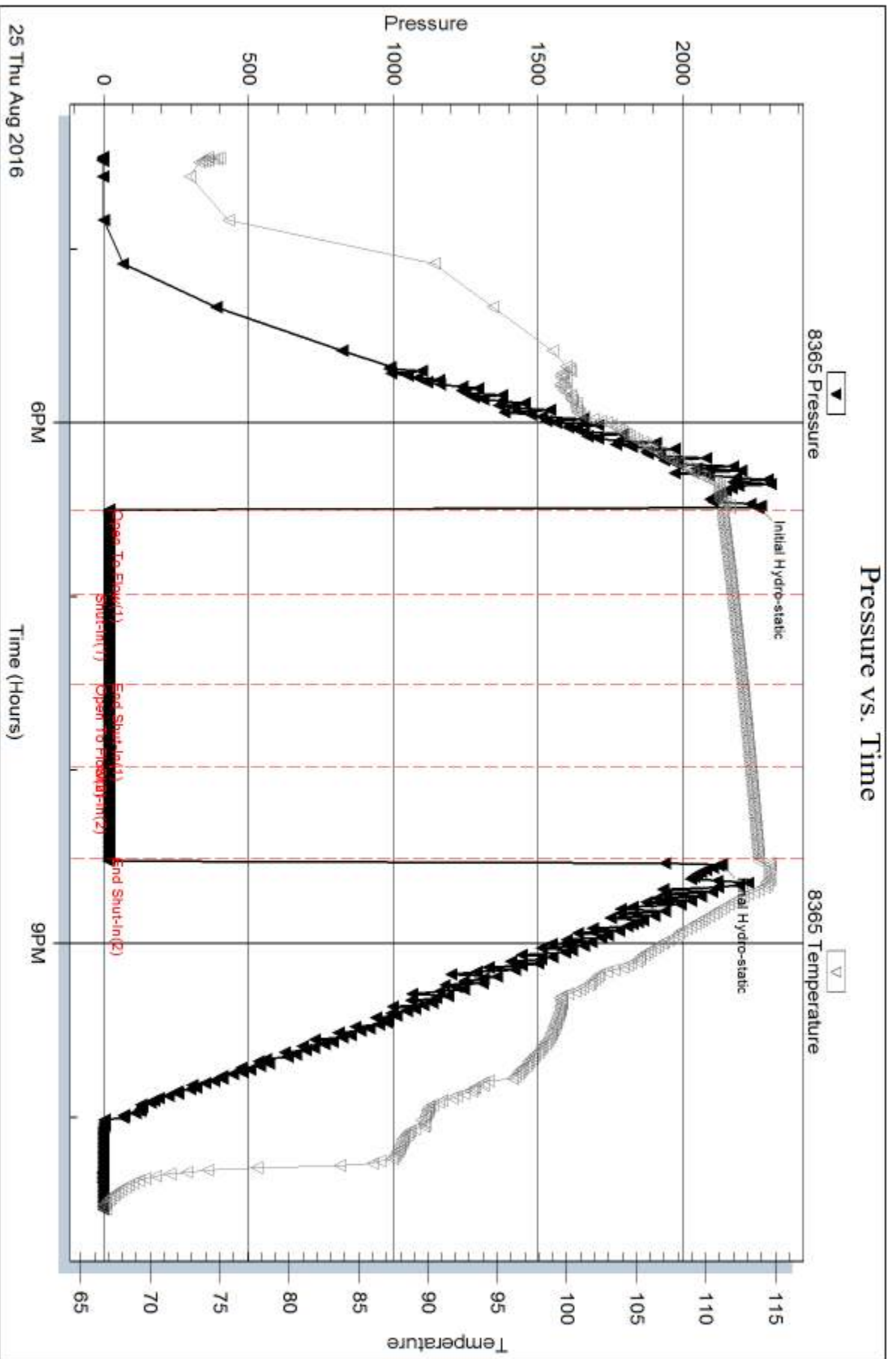
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

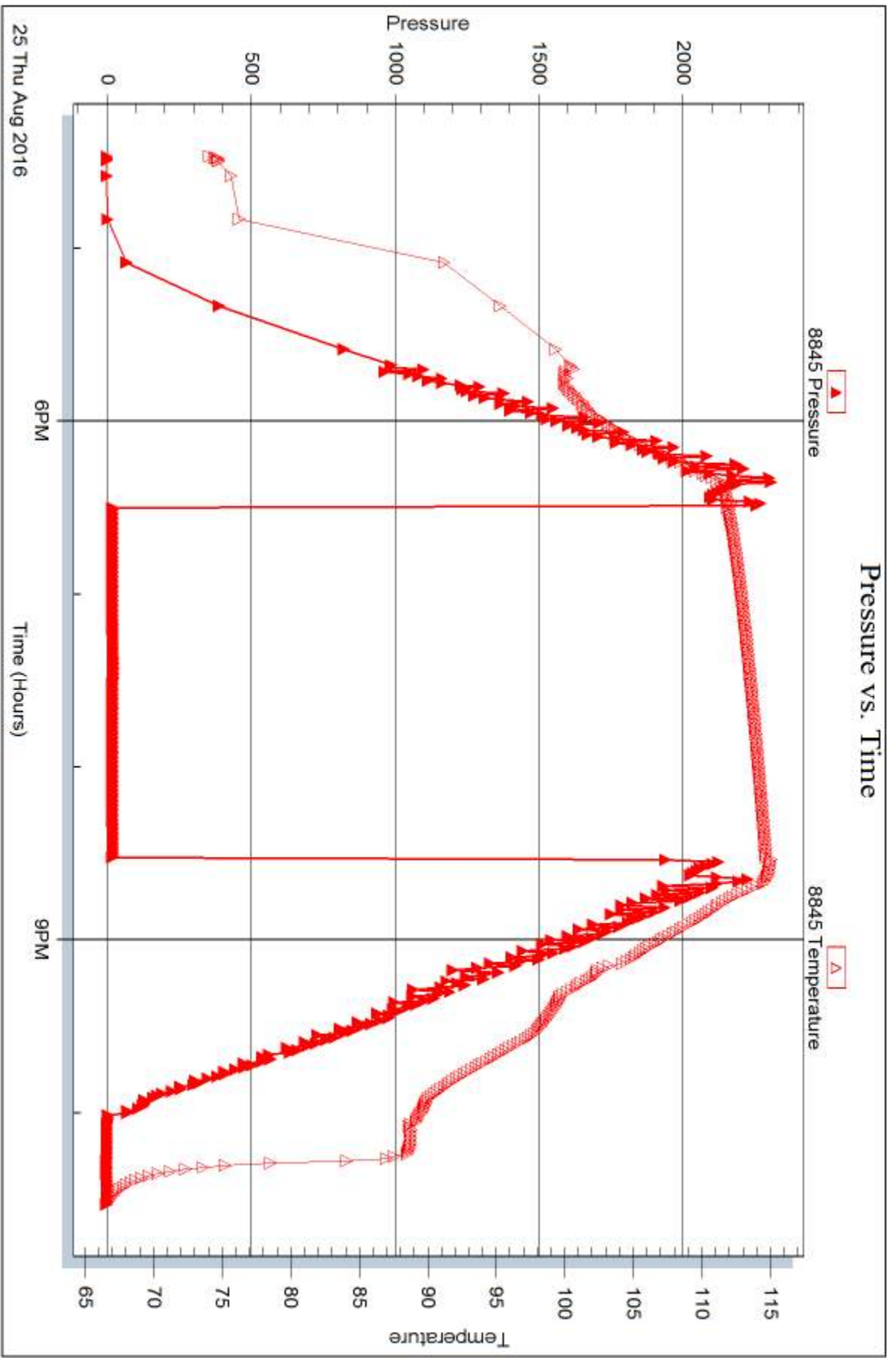


Serial #: 8845

Outside Cobalt Energy

Binns A #1-32

DST Test Number: 7



Triobite Testing, Inc

Ref. No: 65551

Printed: 2016.08.29 @ 09:29:35



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

115 S Belmont #12
Wichita, KS 67208

ATTN: Corey Baker

Binns A #1-32

32 15s 33w Logan,KS

Start Date: 2016.08.26 @ 17:30:00

End Date: 2016.08.27 @ 00:43:15

Job Ticket #: 65552 DST #: 8

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

Printed: 2016.08.29 @ 09:24:36



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy

32 15s 33w Logan, KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65552

DST#: 8

ATTN: Corey Baker

Test Start: 2016.08.26 @ 17:30:00

GENERAL INFORMATION:

Formation: **Cherokee Lime - John**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:18:30

Time Test Ended: 00:43:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4544.00 ft (KB) To 4655.00 ft (KB) (TVD)

Reference Elevations: 3056.00 ft (KB)

Total Depth: 4655.00 ft (KB) (TVD)

3045.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 11.00 ft

Serial #: 8365

Inside

Press@RunDepth: 43.22 psig @ 4545.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.08.26

End Date:

2016.08.27

Last Calib.:

2016.08.27

Start Time: 17:30:05

End Time:

00:43:14

Time On Btm:

2016.08.26 @ 20:18:15

Time Off Btm:

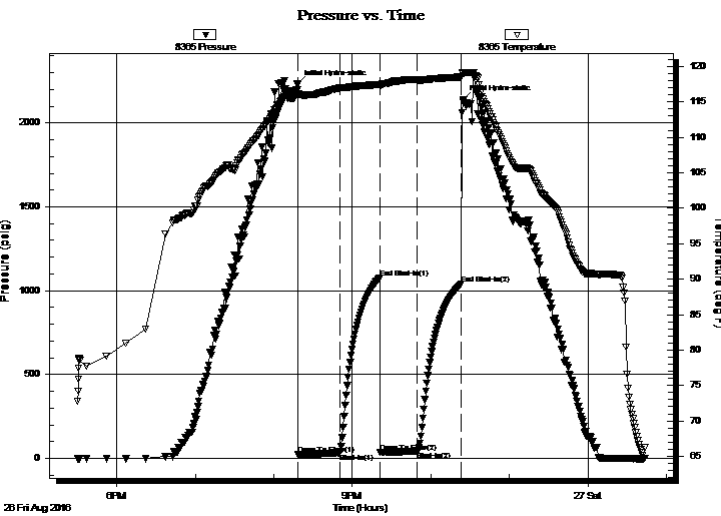
2016.08.26 @ 22:24:45

TEST COMMENT: IF: Surface blow, Died @ 15 min.

IS: No return.

FF: No blow.

FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2231.28	116.74	Initial Hydro-static
1	26.19	115.90	Open To Flow (1)
32	32.72	116.98	Shut-In(1)
63	1077.16	117.45	End Shut-In(1)
63	36.78	117.26	Open To Flow (2)
92	43.22	118.08	Shut-In(2)
125	1041.49	118.51	End Shut-In(2)
127	2138.87	119.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100m oil spots	0.10

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy

32 15s 33w Logan, KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

ATTN: Corey Baker

Job Ticket: 65552

DST#: 8

Test Start: 2016.08.26 @ 17:30:00

GENERAL INFORMATION:

Formation: **Cherokee Lime - John**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:18:30

Time Test Ended: 00:43:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 69

Interval: 4544.00 ft (KB) To 4655.00 ft (KB) (TVD)

Total Depth: 4655.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3056.00 ft (KB)

3045.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8845

Outside

Press@RunDepth: psig @ 4545.00 ft (KB)

Start Date: 2016.08.26

End Date:

2016.08.27

Start Time: 17:30:05

End Time:

00:45:59

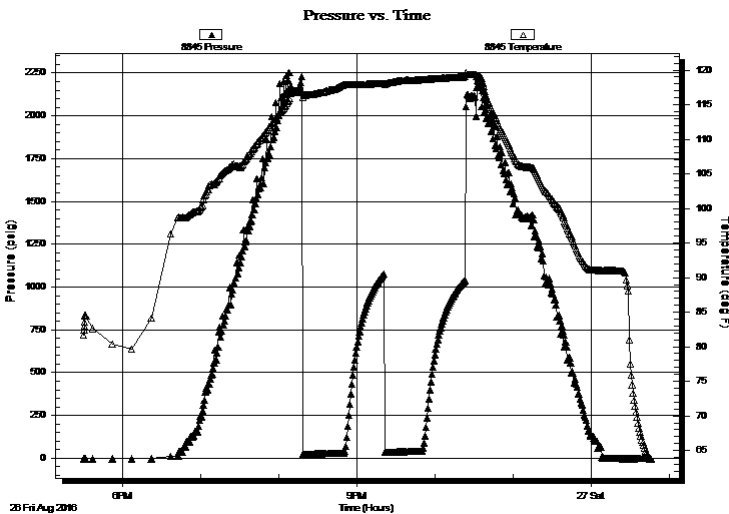
Capacity: 8000.00 psig

Last Calib.: 2016.08.27

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Surface blow , Died @ 15 min.
IS: No return.
FF: No blow .
FS: No return.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100m oil spots	0.10

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65552

DST#: 8

ATTN: Corey Baker

Test Start: 2016.08.26 @ 17:30:00

Tool Information

Drill Pipe:	Length: 4276.00 ft	Diameter: 3.80 inches	Volume: 59.98 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 273.00 ft	Diameter: 2.25 inches	Volume: 1.34 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 61.32 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4544.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	111.00 ft			
Tool Length:	138.00 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			4518.00	
Shut In Tool	5.00			4523.00	
Hydraulic tool	5.00			4528.00	
Jars	5.00			4533.00	
Safety Joint	2.00			4535.00	
Packer	5.00			4540.00	27.00 Bottom Of Top Packer
Packer	4.00			4544.00	
Stubb	1.00			4545.00	
Recorder	0.00	8365	Inside	4545.00	
Recorder	0.00	8845	Outside	4545.00	
Perforations	11.00			4556.00	
Change Over Sub	0.50			4556.50	
Drill Pipe	95.00			4651.50	
Change Over Sub	0.50			4652.00	
Bullnose	3.00			4655.00	111.00 Bottom Packers & Anchor

Total Tool Length: 138.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

32 15s 33w Logan,KS

115 S Belmont #12
Wichita, KS 67208

Binns A #1-32

Job Ticket: 65552

DST#: 8

ATTN: Corey Baker

Test Start: 2016.08.26 @ 17:30:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5300.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud 100m oil spots	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

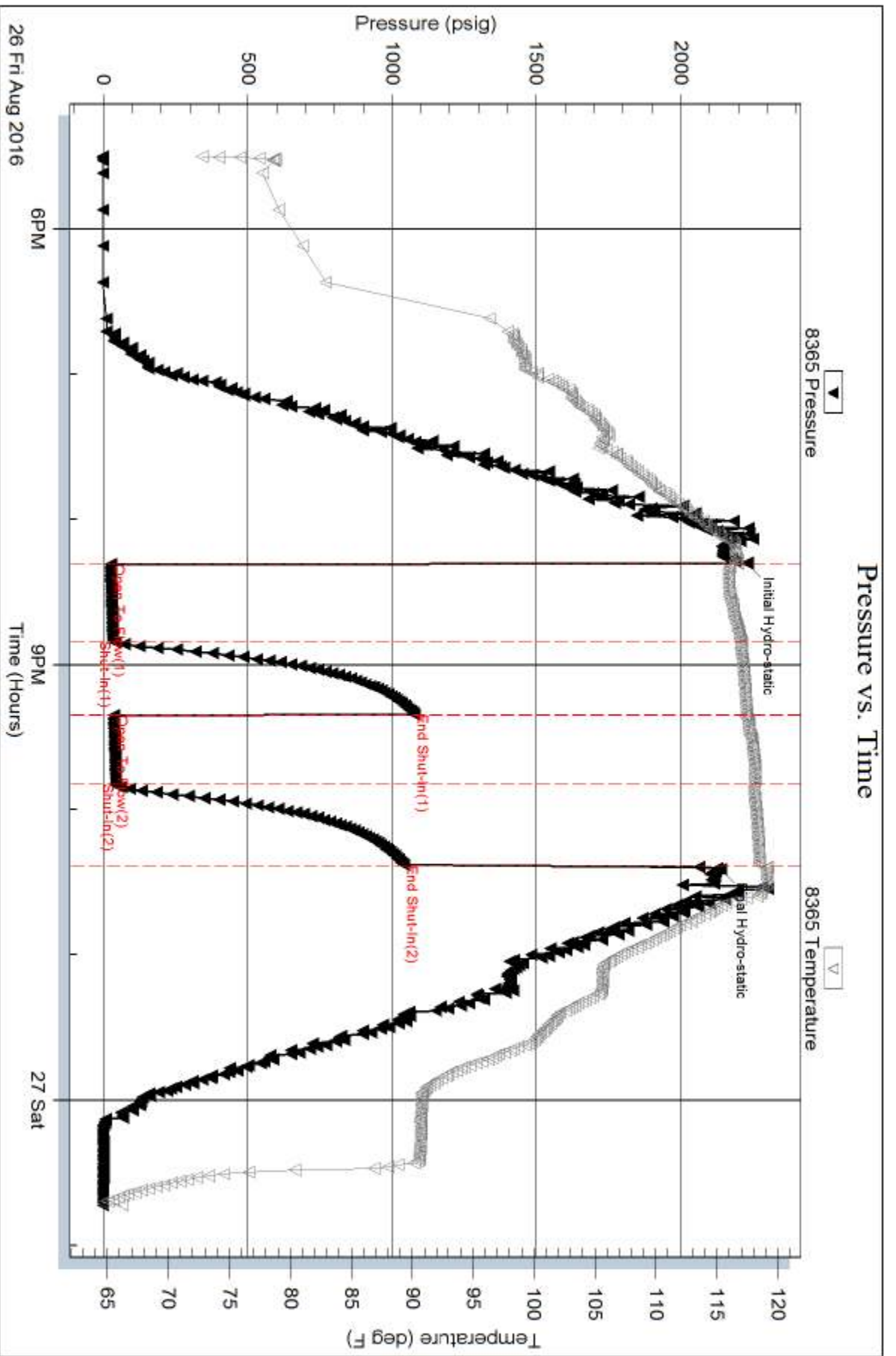
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

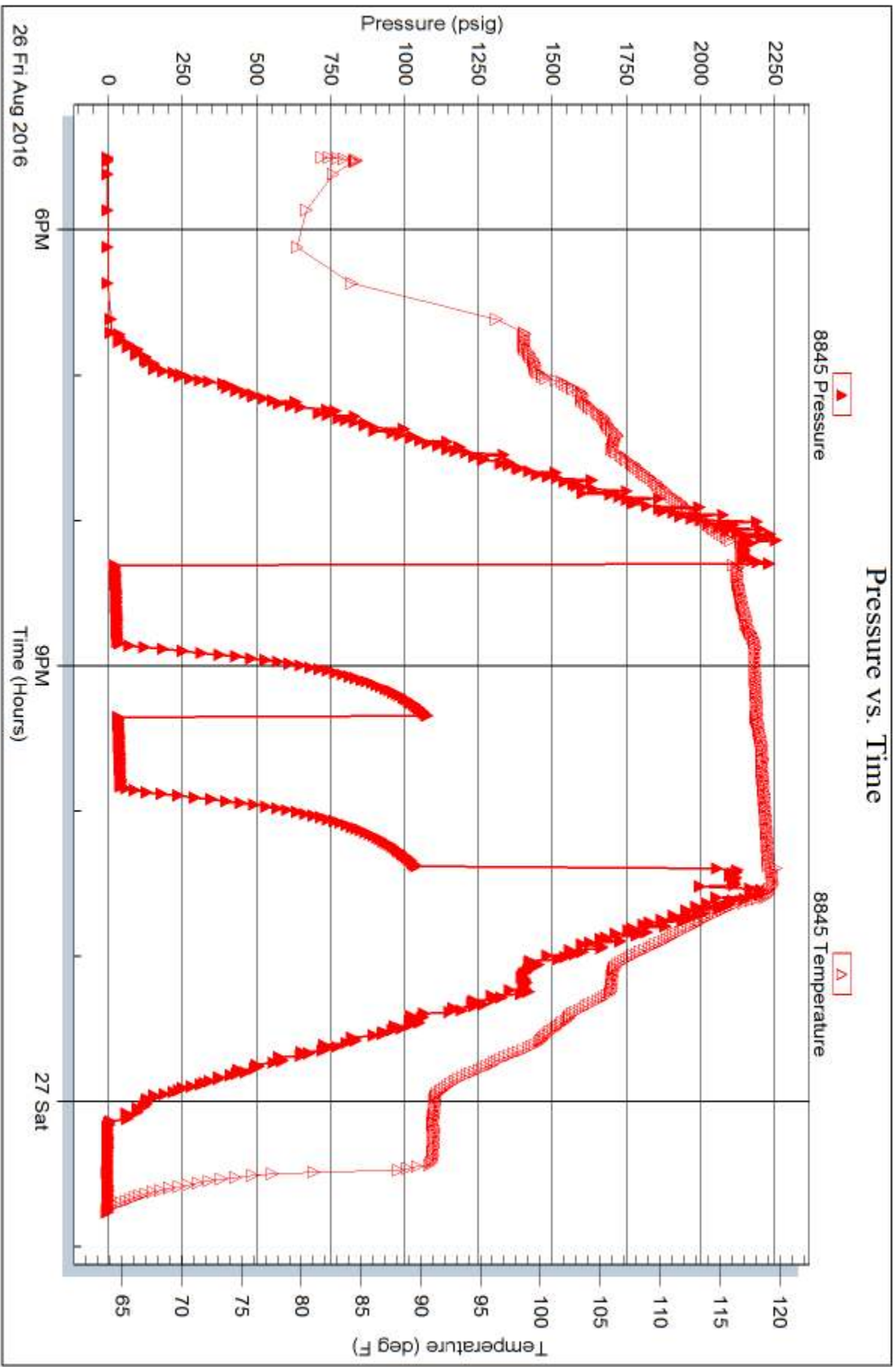


Serial #: 8845

Outside Cobalt Energy

Binns A #1-32

DST Test Number: 8



Trilobite Testing, Inc

Ref. No: 65552

Printed: 2016.08.29 @ 09:24:38



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65545**

Well Name & No. Bunns A 1-32 Test No. 1 Date 8/21/2016
 Company Cobalt Energy Elevation 3056 KB 3045 GL
 Address 115 S Belmont # 12 Wichita, KS 67208
 Co. Rep / Geo. Corey Baker Rig Muffin 21
 Location: Sec. 32 Twp. 15S Rge. 33w Co. Logan State KS

Interval Tested 3878-3980 Zone Tested Lwo Topoka - Toronto
 Anchor Length 102 Drill Pipe Run 3585 Mud Wt. 9.2
 Top Packer Depth 3873 Drill Collars Run 273 Vis 50
 Bottom Packer Depth 3878 Wt. Pipe Run Ø WL 7.2
 Total Depth 3980 Chlorides 2500 ppm System LCM 2[#]
 Blow Description IF BOB @ 7min.
ISI No return.
FF BOB @ 10min.
FSI No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>1070</u>	<u>MCW (OIL SPOTS)</u>			<u>90</u>	<u>10</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 1070 BHT 114 Gravity — API RW 159 @ 69 °F Chlorides 39000 ppm

(A) Initial Hydrostatic <u>1070 1904</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>1730</u>
(B) First Initial Flow <u>35</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1829</u>
(C) First Final Flow <u>289</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>2047</u>
(D) Initial Shut-In <u>1124</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>0047</u>
(E) Second Initial Flow <u>289</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0314</u>
(F) Second Final Flow <u>553</u>	<input checked="" type="checkbox"/> Mileage <u>45 RT 33.75</u>	Comments
(G) Final Shut-In <u>1123</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1866</u>	<input type="checkbox"/> Straddle	
Initial Open <u>30</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>60</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1408.75</u>
	Sub Total <u>1408.75</u>	MP/DST Disc't

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65546**

Well Name & No. Binns A 1-32 Test No. 2 Date 8/21/2016
 Company Cobalt Energy Elevation 3056 KB 3045 GL
 Address us s Belmont #12 Wichita, KS 67208
 Co. Rep / Geo. Corey Baker Rig Muckan 21
 Location: Sec. 32 Twp. 15s Rge. 33w Co. Logan State Ks

Interval Tested 4016 4100 Zone Tested LKC C-F
 Anchor Length 84 Drill Pipe Run 3740 Mud Wt. 9.3
 Top Packer Depth 4011 Drill Collars Run 273 Vis 58
 Bottom Packer Depth 4016 Wt. Pipe Run 0 WL 8.0
 Total Depth 4100 Chlorides 4000 ppm System LCM 4#

Blow Description IF: BOB @ 21 min
ISI: No return
FF: BOB @ 21 min.
FSI: No return.

Rec	Feet of	Oil Spots In Tool	%gas	%oil	%water	%mud
<u>630</u>	<u>MCW</u>	<u>OIL spots in tool</u>		<u>85</u>	<u>15</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 630 BHT 115 Gravity ✓ API RW 133 @ 63 °F Chlorides 24,000 ppm
 (A) Initial Hydrostatic 2011 Test 1150 T-On Location 1445
 (B) First Initial Flow 25 Jars 250 T-Started 1500
 (C) First Final Flow 186 Safety Joint 75 T-Open 1730
 (D) Initial Shut-In 1138 Circ Sub N/C T-Pulled 2130
 (E) Second Initial Flow 192 Hourly Standby _____ T-Out 2348
 (F) Second Final Flow 329 Mileage 45 RT 33.75
 (G) Final Shut-In 1132 Sampler _____
 (H) Final Hydrostatic 2006 Straddle _____
 Shale Packer _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

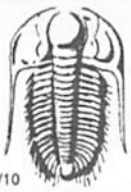
Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90

Sub Total 1408.75

MP/DST Disc't _____

Approved By _____ Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65547**

Well Name & No. Binns A 1-32 Test No. 3 Date 8/22/2016
 Company Cobalt Energy Elevation 3056 KB 3045 GL
 Address 115 S Belmont St #12 Wichita, Ks 67208
 Co. Rep / Geo. Corey Baker Rig Martin 21
 Location: Sec. 32 Twp. 15S Rge. 33W Co. Logan State Ks

Interval Tested 4144 - 4220 Zone Tested LKC H&I
 Anchor Length 76 Drill Pipe Run 3866 Mud Wt. 9.3
 Top Packer Depth 4139 Drill Collars Run 273 Vis 55
 Bottom Packer Depth 4144 Wt. Pipe Run Ø WL 8.8
 Total Depth 4220 Chlorides 4700 ppm System LCM 2#
 Blow Description IF: 1 1/2" blow.
ISI: No return
FF: 1" blow
FSI: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>OIL</u>	<u>100</u>			
<u>110</u>	<u>OWCM</u>	<u>10</u>	<u>40</u>	<u>50</u>	
<u>120</u>	<u>SOMCW</u>	<u>1</u>	<u>80</u>	<u>19</u>	

Rec Total 250 BHT 114 Gravity 21 API RW 195@ 71 °F Chlorides 35,000 ppm

(A) Initial Hydrostatic <u>2066</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1300</u>
(B) First Initial Flow <u>22</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1343</u>
(C) First Final Flow <u>73</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1534</u>
(D) Initial Shut-In <u>1174</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>1934</u>
(E) Second Initial Flow <u>81</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>2157</u>
(F) Second Final Flow <u>149</u>	<input checked="" type="checkbox"/> Mileage <u>45 AT</u> <u>33.75</u>	Comments
(G) Final Shut-In <u>1162</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2037</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	Total <u>1408.75</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1408.75</u>	

Approved By _____ Our Representative 

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65548**

Well Name & No. Binns A 1-32 Test No. 4 Date 8/23/2016
 Company Cobalt Energy Elevation 3056 KB 3045 GL
 Address 115 Belmont #12 Wichita, KS 67208
 Co. Rep / Geo. Corey Baker Rig Mudwin 21
 Location: Sec. 32 Twp. 15s Rge. 33w Co. Logan State Ks

Interval Tested 4230 4320 Zone Tested LKC J-L
 Anchor Length 90 Drill Pipe Run 3963 Mud Wt. 9.3
 Top Packer Depth 4225 Drill Collars Run 275 Vis 56
 Bottom Packer Depth 4230 Wt. Pipe Run Ø WL 9.6
 Total Depth 4320 Chlorides 5,000 ppm System LCM 1#

Blow Description IF: BOB @ 7 min
ISI: No return
PF: BOB @ 10 min
PSI: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>1100</u>	<u>MCAW</u>		<u>95</u>	<u>5</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of <u>Oil spots in Tool</u>	%gas	%oil	%water	%mud
Rec	Feet of <u>and on top</u>	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 1100 BHT 117 Gravity — API RW 117 @ 81 °F Chlorides 57000 ppm

(A) Initial Hydrostatic <u>2148</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1100</u>
(B) First Initial Flow <u>77</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1344 1120</u>
(C) First Final Flow <u>335</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1344</u>
(D) Initial Shut-In <u>1229</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>1644</u>
(E) Second Initial Flow <u>321</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1908</u>
(F) Second Final Flow <u>515</u>	<input checked="" type="checkbox"/> Mileage <u>45 RT</u> <u>33.75</u>	Comments
(G) Final Shut-In <u>1219</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2050</u>	<input type="checkbox"/> Straddle	
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1408.75</u>
	Sub Total <u>1408.75</u>	MP/DST Disc't

Approved By _____ Our Representative

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65549**

Well Name & No. Binns A 1-32 Test No. 5 Date 8/24/2016
 Company Cobalt Energy Elevation 3056 KB 3045 GL
 Address 115 Belmont #12 Wichita, KS 67208
 Co. Rep / Geo. Corey Baker Rig Modern 21
 Location: Sec. 32 Twp. 15S Rge. 33W Co. Logan State KS

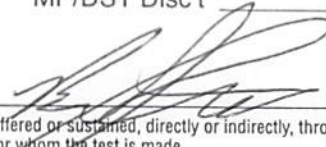
Interval Tested 4324 - 4350 Zone Tested Pleaseaton
 Anchor Length 26' Drill Pipe Run 4055 Mud Wt. 9.3
 Top Packer Depth 4319 Drill Collars Run 273 Vis 56
 Bottom Packer Depth 4324 Wt. Pipe Run 8 WL 8.8
 Total Depth 4350 Chlorides 5500 ppm System LCM 2#

Blow Description TF: BOB @ 12 min
ISI: 1/4 return died @ 40 min.
FF: BOB @ 30 min.
FSJ: 1/2 return, receded to a surface blow.

Rec	Feet of	%gas	%oil	%water	%mud
<u>150</u>	<u>60</u>	<u>25</u>	<u>75</u>		
<u>300</u>	<u>50 mcw</u>		<u>1</u>	<u>84</u>	<u>15</u>
	<u>360' GIP</u>				

Rec Total 650 BHT 117 Gravity 23 API RW 170 @ 71 °F Chlorides 41,000 ppm

(A) Initial Hydrostatic <u>2166</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>0230</u>
(B) First Initial Flow <u>41</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>309</u>
(C) First Final Flow <u>174</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0508</u>
(D) Initial Shut-In <u>1237</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>0908</u>
(E) Second Initial Flow <u>182</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1151</u>
(F) Second Final Flow <u>293</u>	<input checked="" type="checkbox"/> Mileage <u>46 RT</u> <u>33.75</u>	Comments
(G) Final Shut-In <u>1213</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2096</u>	<input type="checkbox"/> Straddle	
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1408.75</u>
	Sub Total <u>1408.75</u>	MP/DST Disc't

Approved By _____ Our Representative 

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65550**

Well Name & No. Binnas A 1-32 Test No. 6 Date 8/25/2016
 Company Cobalt Energy Elevation 3056 KB 3045 GL
 Address 115 Belmont #12 Wichita, KS 67208
 Co. Rep / Geo. Corey Baker Rig Martin 21
 Location: Sec. 32 Twp. 15s Rge. 33w Co. Logan State Ks

Interval Tested 4370 - 4410 Zone Tested Martaton Altamont A
 Anchor Length 40' Drill Pipe Run 4088 Mud Wt. 9.2
 Top Packer Depth 4365 Drill Collars Run 273 Vis 56
 Bottom Packer Depth 4370 Wt. Pipe Run Ø WL 8.8
 Total Depth 4410 Chlorides 5500 ppm System LCM 2#
 Blow Description IF: 6" blow
IST: No return.
FF: 5" blow
FST: Surface return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>240</u>	<u>60</u>	<u>25</u>	<u>75</u>		
<u>60</u>	<u>6 MCD</u>	<u>20</u>	<u>50</u>		<u>30</u>
	<u>130' @ IP</u>				

Rec Total 300 BHT 117 Gravity 24 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>2100</u>
(B) First Initial Flow	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>2144</u>
(C) First Final Flow	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0010</u>
(D) Initial Shut-In	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>0410</u>
(E) Second Initial Flow	<input type="checkbox"/> Hourly Standby	T-Out <u>0631</u>
(F) Second Final Flow	<input checked="" type="checkbox"/> Mileage <u>45 RT</u> <u>33.75</u>	Comments
(G) Final Shut-In	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1408.75</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1408.75</u>	

Approved By _____ 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. **65551**

Well Name & No. Binas A 1-32 Test No. 7 Date 8/25/2016
 Company Cobalt Energy Elevation 3056 KB 3045 GL
 Address US Belmont #12 Wichita, KS 67208
 Co. Rep / Geo. Corey Baker Rig Martin 21
 Location: Sec. 32 Twp. 15s Rge. 33w Co. Logan State KS

Interval Tested 4412 - 4460 Zone Tested Altamont B&C
 Anchor Length 48' Drill Pipe Run 4120 Mud Wt. 9.2
 Top Packer Depth 4407 Drill Collars Run 273 Vis 60
 Bottom Packer Depth 4412 Wt. Pipe Run 0 WL 7.6
 Total Depth 4460 Chlorides 5,000 ppm System LCM 2#

Blow Description IF: Surface blow, died @ 15 min.
ISI: No return.
FF: No blow
FSI: No return.

Rec	Feet of		%gas	%oil	%water	%mud
<u>3</u>	<u>MUD</u>	<u>OIL specks</u>			<u>100</u>	
Rec	Feet of		%gas	%oil	%water	%mud
Rec	Feet of		%gas	%oil	%water	%mud
Rec	Feet of		%gas	%oil	%water	%mud

Rec Total 3 BHT 114 Gravity — API RW — @ — F Chlorides — ppm

(A) Initial Hydrostatic 2262 Test 1150 T-On Location 1530
 (B) First Initial Flow 19 Jars 250 T-Started 1629
 (C) First Final Flow 20 Safety Joint 75 T-Open 1838
 (D) Initial Shut-In 20 Circ Sub N/C T-Pulled 2038
 (E) Second Initial Flow 19 Hourly Standby _____ T-Out 2232
 (F) Second Final Flow 19 Mileage 45 RT 33.75
 (G) Final Shut-In 19 Sampler _____
 (H) Final Hydrostatic 21 34 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____

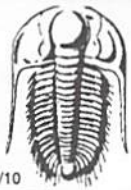
Sub Total 1408.75

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

Comments _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1408.75
 MP/DST Disc't _____

Approved By _____ Our Representative 

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **65552**

Well Name & No. Bugs A 1-32 Test No. 8 Date 8/24/2016
 Company Cobalt Energy Elevation 3056 KB 3045 GL
 Address 115 Belmont #12 Wichita, KS 67208
 Co. Rep / Geo. Corey Baker Rig Martin 21
 Location: Sec. 32 Twp. 15S Rge. 33W Co. Logan State KS

Interval Tested 4544 - 4655 Zone Tested Cherokee Lime - Johnson
 Anchor Length 111 Drill Pipe Run 4274 Mud Wt. 9.2
 Top Packer Depth 4539 Drill Collars Run 273 Vis 54
 Bottom Packer Depth 4544 Wt. Pipe Run 0 WL 8.0
 Total Depth 4655 Chlorides 5300 ppm System LCM 2#

Blow Description IF: Surface blow no ret. died @ 15 min.
ISI: No return.
FF: No blow
FBI: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>mud</u>			<u>100</u>	
	<u>OIL SPOTS</u>				

Rec Total 20 BHT 119 Gravity — API RW — @ — F Chlorides — ppm

(A) Initial Hydrostatic <u>2231</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1830</u>
(B) First Initial Flow <u>24</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1730</u>
(C) First Final Flow <u>33</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>2005</u>
(D) Initial Shut-In <u>1077</u>	<input checked="" type="checkbox"/> Circ Sub <u>4 1/2</u>	T-Pulled <u>2205</u>
(E) Second Initial Flow <u>37</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>0043</u>
(F) Second Final Flow <u>43</u>	<input checked="" type="checkbox"/> Mileage <u>45 RT</u> <u>33.75</u>	Comments
(G) Final Shut-In <u>1041</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2139</u>	<input type="checkbox"/> Straddle	
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Initial Open <u>30</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
Initial Shut-In <u>30</u>	<input type="checkbox"/> Accessibility	Total <u>1408.75</u>
Final Flow <u>30</u>	Sub Total <u>1408.75</u>	MP/DST Disc't
Final Shut-In <u>30</u>		

Approved By _____ Our Representative 

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