



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037
Wichita KS 67208

ATTN: Corey Baker

Reinecker " A " 1-17

17 11s 26w Gove,KS

Start Date: 2015.02.08 @ 18:01:00

End Date: 2015.02.09 @ 01:59:00

Job Ticket #: 61395 DST #: 1

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

Printed: 2015.02.12 @ 08:38:36



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Cobalt Energy LLC

17 11s 26w Gove,KS

PO Box 8037
Wichita KS 67208

Reinecker " A " 1-17

ATTN: Corey Baker

Job Ticket: 61395

DST#: 1

Test Start: 2015.02.08 @ 18:01:00

GENERAL INFORMATION:

Formation: **LKC " C "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:59:15

Time Test Ended: 01:59:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Jim Svaty

Unit No: 76

Interval: 3934.00 ft (KB) To 3960.00 ft (KB) (TVD)

Reference Elevations: 2665.00 ft (KB)

Total Depth: 3960.00 ft (KB) (TVD)

2657.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8289 Outside

Press@RunDepth: 56.54 psig @ 3937.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.02.08

End Date:

2015.02.09

Last Calib.:

2015.02.09

Start Time: 18:01:02

End Time:

01:58:11

Time On Btm:

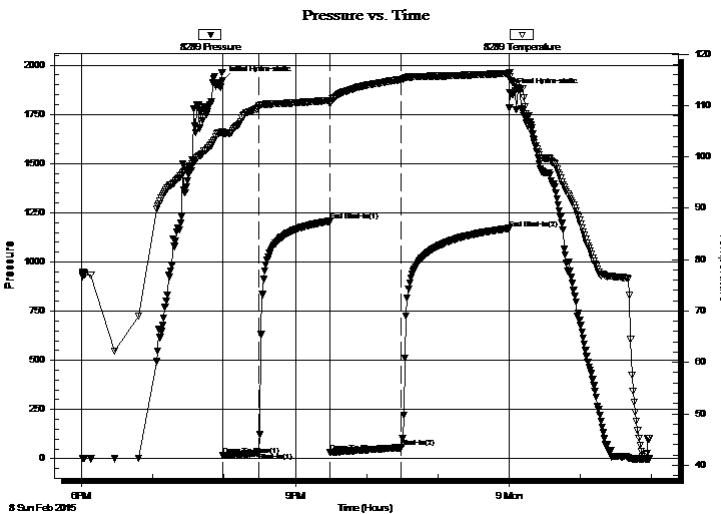
2015.02.08 @ 19:58:45

Time Off Btm:

2015.02.09 @ 00:00:30

TEST COMMENT: 30-IFP- Surface Blow Building to 3"
60-ISIP- No Blow
60-FFP- Surface Blow in 7min. Building to 3 1/4"
90-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1921.04	104.89	Initial Hydro-static
1	16.66	104.38	Open To Flow (1)
31	30.20	109.84	Shut-In(1)
91	1206.83	110.97	End Shut-In(1)
91	32.70	110.38	Open To Flow (2)
151	56.54	115.03	Shut-In(2)
241	1170.33	116.23	End Shut-In(2)
242	1861.14	115.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
85.00	MCW 10% m 90% w Show of Oil	1.19

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy LLC

17 11s 26w Gove,KS

PO Box 8037
Wichita KS 67208

Reinecker " A " 1-17

Job Ticket: 61395

DST#: 1

ATTN: Corey Baker

Test Start: 2015.02.08 @ 18:01:00

Tool Information

Drill Pipe:	Length: 3937.00 ft	Diameter: 3.80 inches	Volume: 55.23 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 55.23 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3934.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	26.00 ft			
Tool Length:	49.00 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			3912.00	
Shut In Tool	5.00			3917.00	
Hydraulic tool	5.00			3922.00	
Safety Joint	2.00			3924.00	
Packer	5.00			3929.00	23.00 Bottom Of Top Packer
Packer	5.00			3934.00	
Stubb	1.00			3935.00	
Perforations	2.00			3937.00	
Recorder	0.00	8789	Inside	3937.00	
Recorder	0.00	8289	Outside	3937.00	
Perforations	20.00			3957.00	
Bullnose	3.00			3960.00	26.00 Bottom Packers & Anchor

Total Tool Length: 49.00



**TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy LLC

17 11s 26w Gove,KS

PO Box 8037
Wichita KS 67208

Reinecker " A " 1-17

Job Ticket: 61395

DST#: 1

ATTN: Corey Baker

Test Start: 2015.02.08 @ 18:01:00

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:

36000 ppm

Viscosity: 49.00 sec/qt

Cushion Volume:

bbf

Water Loss: 5.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
85.00	MCW 10% m 90% w Show of Oil	1.192

Total Length: 85.00 ft Total Volume: 1.192 bbf

Num Fluid Samples: 0

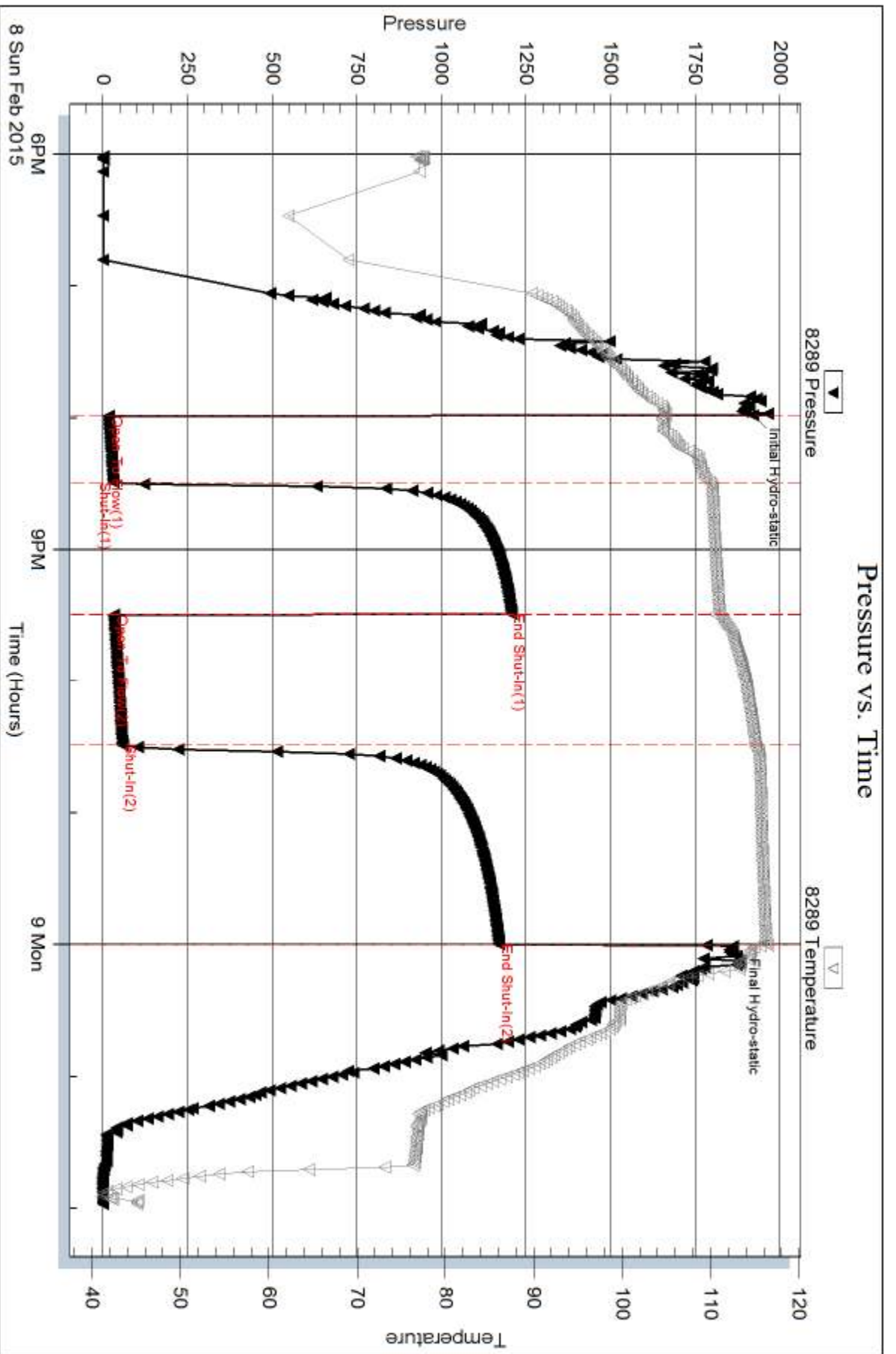
Num Gas Bombs: 0

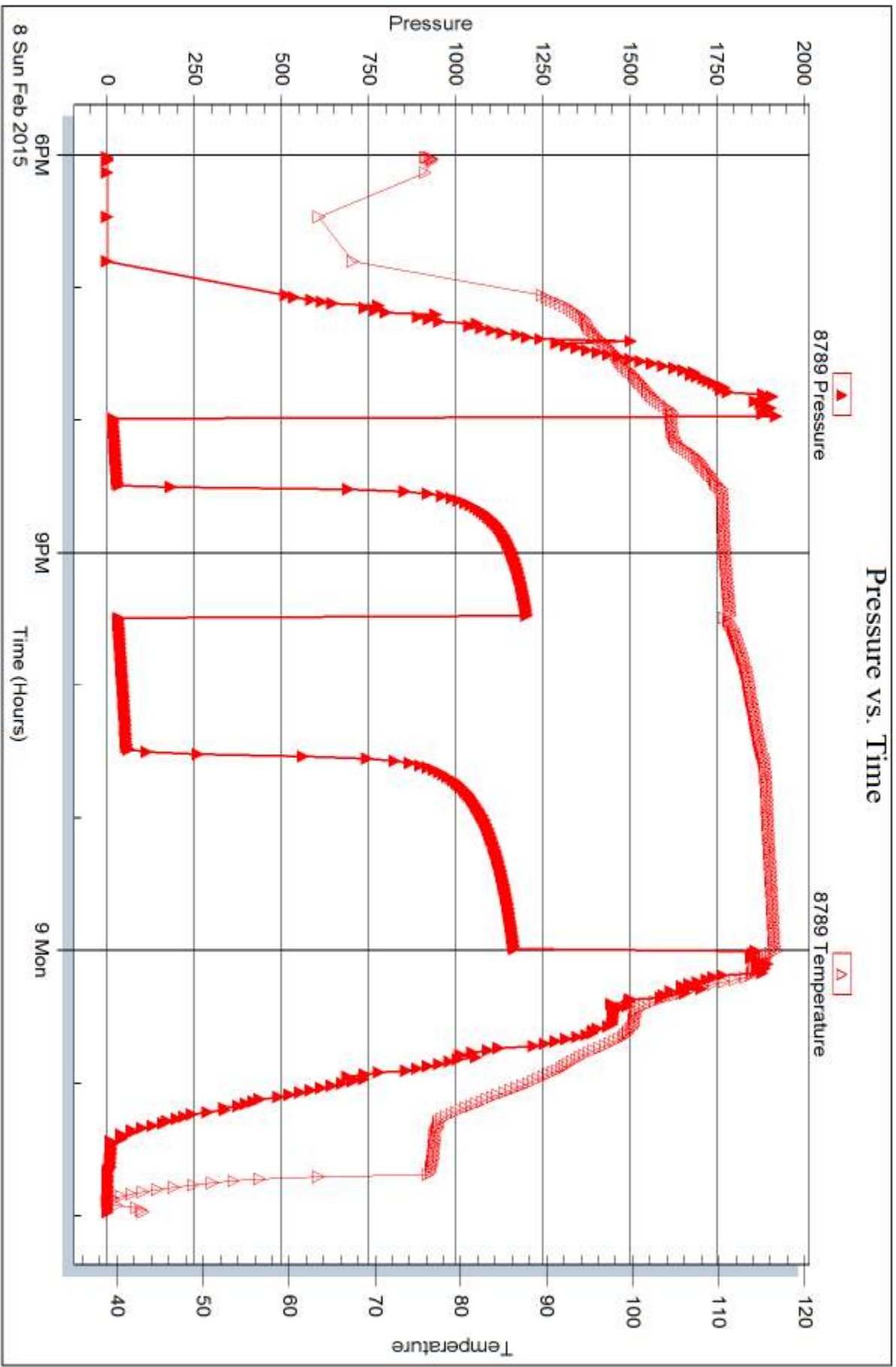
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .328 @ 42







DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037
Wichita KS 67208

ATTN: Corey Baker

Reinecker " A " 1-17

17 11s 26w Gove,KS

Start Date: 2015.02.09 @ 15:00:00

End Date: 2015.02.09 @ 22:05:00

Job Ticket #: 61396 DST #: 2

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

Printed: 2015.02.12 @ 08:37:56



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Cobalt Energy LLC

17 11s 26w Gove,KS

PO Box 8037
Wichita KS 67208

Reinecker " A " 1-17

ATTN: Corey Baker

Job Ticket: 61396

DST#: 2

Test Start: 2015.02.09 @ 15:00:00

GENERAL INFORMATION:

Formation: **LKC " H "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:15:45

Time Test Ended: 22:05:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jim Svaty

Unit No: 76

Interval: 4040.00 ft (KB) To 4072.00 ft (KB) (TVD)

Reference Elevations: 2665.00 ft (KB)

Total Depth: 4072.00 ft (KB) (TVD)

2657.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8289 Outside

Press@RunDepth: 79.17 psig @ 4044.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.02.09 End Date: 2015.02.09

Last Calib.: 2015.02.09

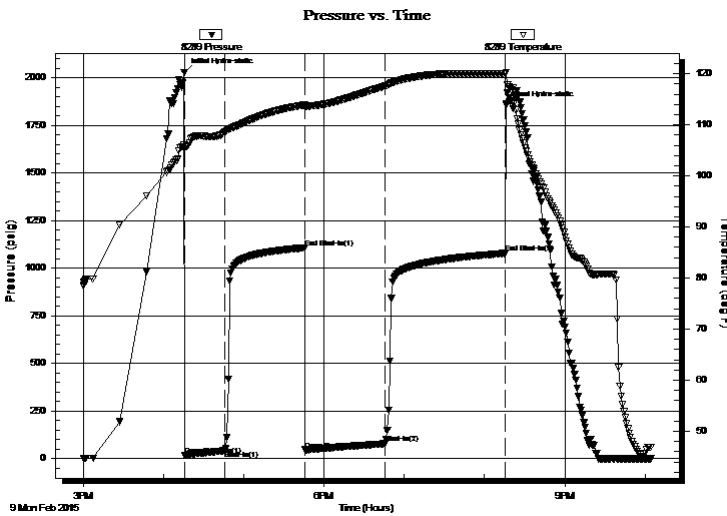
Start Time: 15:00:02 End Time: 22:04:45

Time On Btm: 2015.02.09 @ 16:15:30

Time Off Btm: 2015.02.09 @ 20:16:00

TEST COMMENT: 30-IFP- Surface Blow Building to 6"
60-ISIP- No Blow
60-FFP- Surface Blow Building to 6 1/4"
90-FSIP- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2027.25	106.19	Initial Hydro-static
1	18.68	105.30	Open To Flow (1)
31	42.32	108.61	Shut-In(1)
90	1107.48	113.88	End Shut-In(1)
91	46.93	113.47	Open To Flow (2)
150	79.17	117.58	Shut-In(2)
240	1078.22	120.02	End Shut-In(2)
241	1855.88	120.28	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	MCW 30% m 70% w	1.75
5.00	OWCM 10% o 40% w 50% m	0.07
2.00	CO 100%	0.03

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
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DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy LLC

17 11s 26w Gove,KS

PO Box 8037
Wichita KS 67208

Reinecker " A " 1-17

Job Ticket: 61396

DST#: 2

ATTN: Corey Baker

Test Start: 2015.02.09 @ 15:00:00

Tool Information

Drill Pipe:	Length: 4030.00 ft	Diameter: 3.80 inches	Volume: 56.53 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 56.53 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4040.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	32.00 ft			
Tool Length:	55.00 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			4018.00	
Shut In Tool	5.00			4023.00	
Hydraulic tool	5.00			4028.00	
Safety Joint	2.00			4030.00	
Packer	5.00			4035.00	23.00 Bottom Of Top Packer
Packer	5.00			4040.00	
Stubb	1.00			4041.00	
Perforations	3.00			4044.00	
Recorder	0.00	8789	Inside	4044.00	
Recorder	0.00	8289	Outside	4044.00	
Perforations	25.00			4069.00	
Bullnose	3.00			4072.00	32.00 Bottom Packers & Anchor

Total Tool Length: 55.00



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FLUID SUMMARY

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17 11s 26w Gove,KS

PO Box 8037
Wichita KS 67208

Reinecker " A " 1-17

Job Ticket: 61396

DST#: 2

ATTN: Corey Baker

Test Start: 2015.02.09 @ 15:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

21 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

39500 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: 3.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
125.00	MCW 30%m 70%w	1.753
5.00	OWCM 10%o 40%w 50%m	0.070
2.00	CO 100%	0.028

Total Length: 132.00 ft

Total Volume: 1.851 bbl

Num Fluid Samples: 0

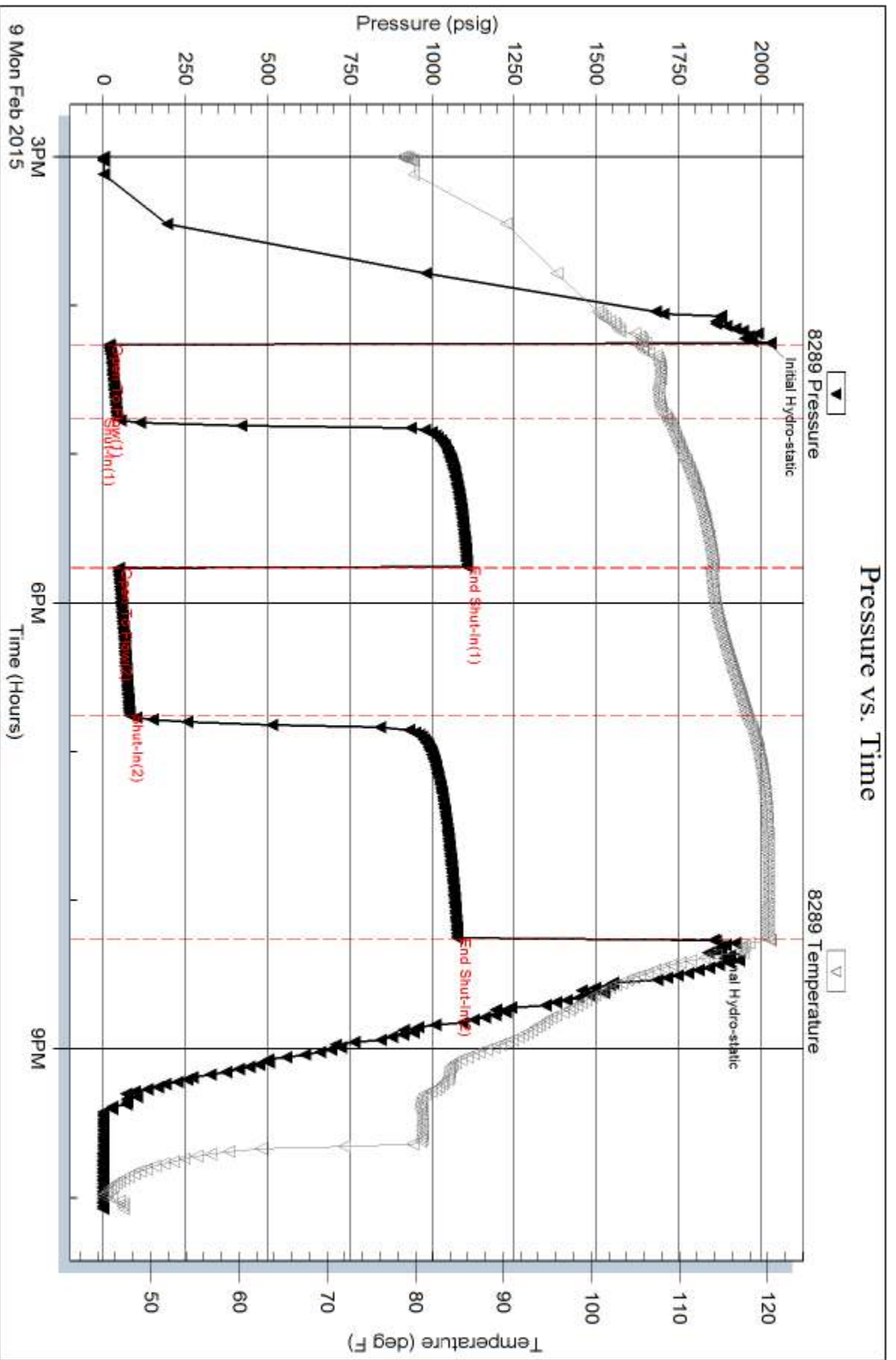
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .255 @ 52



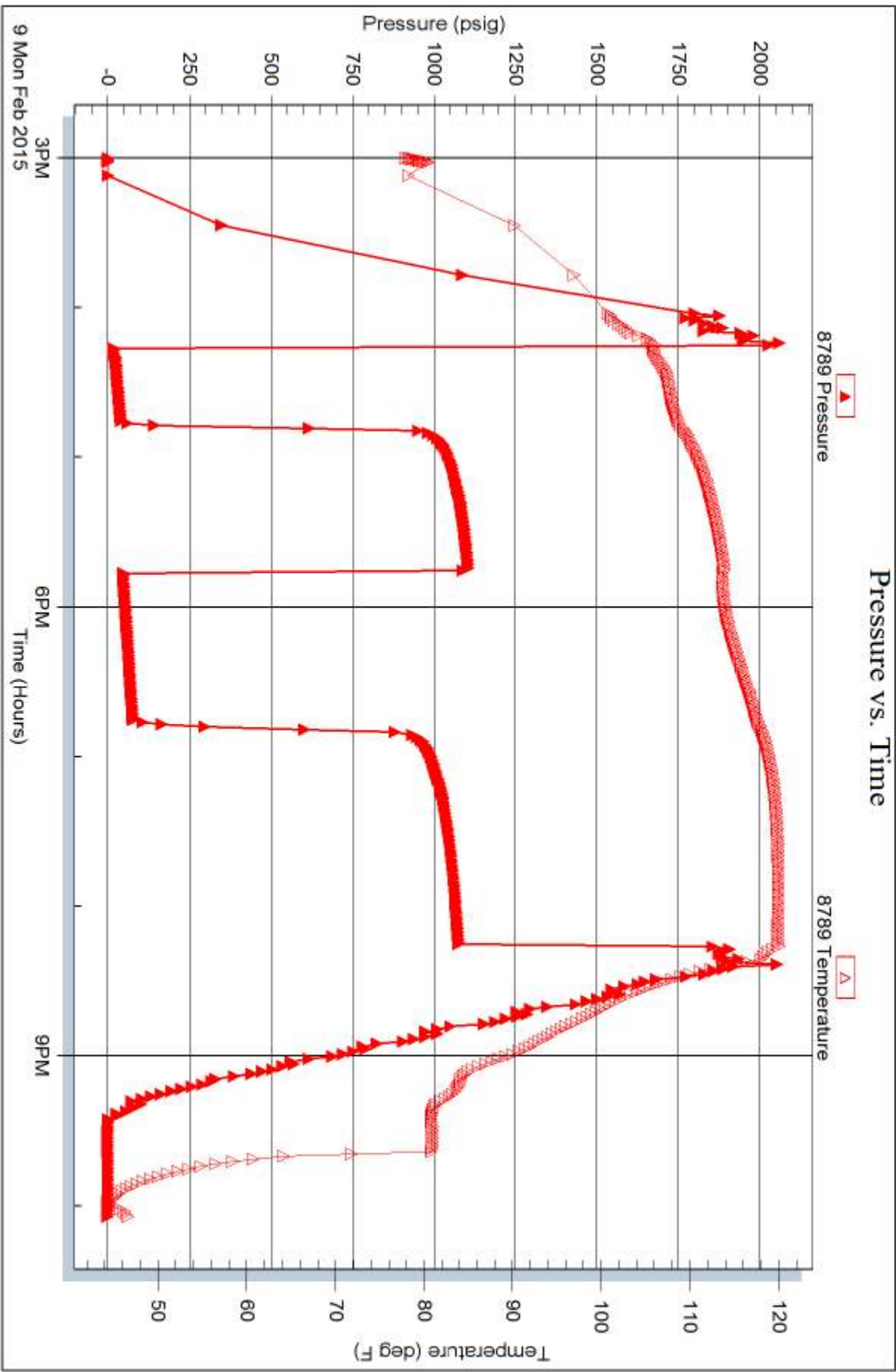
Serial #: 8789

Inside

Cobalt Energy LLC

Reinecker "A" 1-17

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 61396

Printed: 2015.02.12 @ 08:37:58



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 61395

Well Name & No. Reinecker "A" 1-17 Test No. 1 Date 2-8-15
 Company Cobalt Energy LLC Elevation 2665 KB 2657 GL
 Address 115 S. Belmont #12 Box 8037 Wichita KS 67208
 Co. Rep / Geo. Corey Baker Rig Pickrell #10
 Location: Sec. 17 Twp. 11^s Rge. 26^w Co. GOVE State KS

Interval Tested 3934 - 3960 Zone Tested LKC "C"
 Anchor Length 26 Drill Pipe Run 3937 Mud Wt. 8.9
 Top Packer Depth 3929 Drill Collars Run 0 Vis 49
 Bottom Packer Depth 3934 Wt. Pipe Run 0 WL 6.0
 Total Depth 3960 Chlorides 900 ppm System LCM 2

Blow Description IFP - Surface Blow Building to 3 in.
ISIP - No Blow
FFP - Surface Blow in 7 min. Building to 3 1/4 in.
FSIP - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>85</u>	<u>mcw show of Oil</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 Total 85 BHT 116 Gravity 1050 API RW 328 @ 42 °F Chlorides 36000 ppm

(A) Initial Hydrostatic <u>1921</u>	<input checked="" type="checkbox"/> Test <u>1050</u>	T-On Location <u>16:45</u>
(B) First Initial Flow <u>16</u>	<input type="checkbox"/> Jars	T-Started <u>18:01</u>
(C) First Final Flow <u>30</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>20:00</u>
(D) Initial Shut-In <u>1206</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>00:00</u>
(E) Second Initial Flow <u>32</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>01:59</u>
(F) Second Final Flow <u>56</u>	<input checked="" type="checkbox"/> Mileage <u>118 RT</u> 118	Comments
(G) Final Shut-In <u>1170</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1861</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer

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

Shale Packer
 Extra Packer
 Extra Recorder
 Day Standby
 Accessibility

Sub Total 0
 Total 1243
 MP/DST Disc't

Approved By _____ 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. 61396

Well Name & No. Reinecker "A" 1-17 Test No. 2 Date 2-9-15
 Company Cobalt Energy LLC Elevation 2665 KB 2657 GL
 Address 115 S. Belmont #12 Box 8037 Wichita KS 67208
 Co. Rep / Geo. Corey Baker Rig Picknell #10
 Location: Sec. 17 Twp. 11^s Rge. 26^w Co. Dove State KS

Interval Tested 4040-4072 Zone Tested LKC "H"
 Anchor Length 32 Drill Pipe Run 4030 Mud Wt. 9
 Top Packer Depth 4035 Drill Collars Run 0 Vis 60
 Bottom Packer Depth 4040 Wt. Pipe Run 0 WL 6.4
 Total Depth 4072 Chlorides 1100 ppm System LCM 3

Blow Description IFP - Surface Blow Building to 6 in.
ISIP - No Blow
FFP - Surface Blow Building to 6 1/4 in.
FSIP - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>125</u>	<u>mcw</u>		<u>70</u>	<u>30</u>	
<u>5</u>	<u>owcm</u>	<u>10</u>	<u>40</u>	<u>50</u>	
<u>2</u>	<u>CO</u>	<u>100</u>			

Rec Total 132 BHT 120 Gravity 21 API RW .255 @ 52 ° F Chlorides 39500 ppm

(A) Initial Hydrostatic <u>2027</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>14:40</u>
(B) First Initial Flow <u>18</u>	<input type="checkbox"/> Jars	T-Started <u>15:00</u>
(C) First Final Flow <u>42</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>16:16</u>
(D) Initial Shut-In <u>1107</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>20:16</u>
(E) Second Initial Flow <u>46</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>22:05</u>
(F) Second Final Flow <u>79</u>	<input checked="" type="checkbox"/> Mileage <u>X 2</u> <u>118+118</u>	Comments <u>Called to PU Tool</u>
(G) Final Shut-In <u>1078</u>	<input type="checkbox"/> Sampler	<u>14:10 - 2-11-15</u>
(H) Final Hydrostatic <u>1855</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>800</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby <u>1.5d 4h</u>	Total <u>2161</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1361</u>	

Approved By _____ 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.