



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy, LLC**

115 S Belmont #12
Wichita, KS 67208

ATTN: Frank Mize

Pinnick "A" #1-33

33-9S-24W Graham, KS

Start Date: 2014.03.17 @ 20:13:22

End Date: 2014.03.18 @ 05:29:41

Job Ticket #: 57504 DST #: 1

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

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**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Cobalt Energy, LLC

33-9S-24W Graham, KS

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Job Ticket: 57504

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Test Start: 2014.03.17 @ 20:13:22

GENERAL INFORMATION:

Formation: **LKC "C&D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:52:32

Time Test Ended: 05:29:41

Test Type: Conventional Bottom Hole (Initial)

Tester: Tate Lang/Phillip Ga

Unit No: 49

Interval: 3876.00 ft (KB) To 3916.00 ft (KB) (TVD)

Reference Elevations: 2519.00 ft (KB)

Total Depth: 3916.00 ft (KB) (TVD)

2510.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 9.00 ft

Serial #: 8898 Outside

Press@RunDepth: 56.77 psig @ 3880.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.03.17

End Date:

2014.03.18

Last Calib.:

2014.03.18

Start Time: 20:13:23

End Time:

05:29:41

Time On Btm:

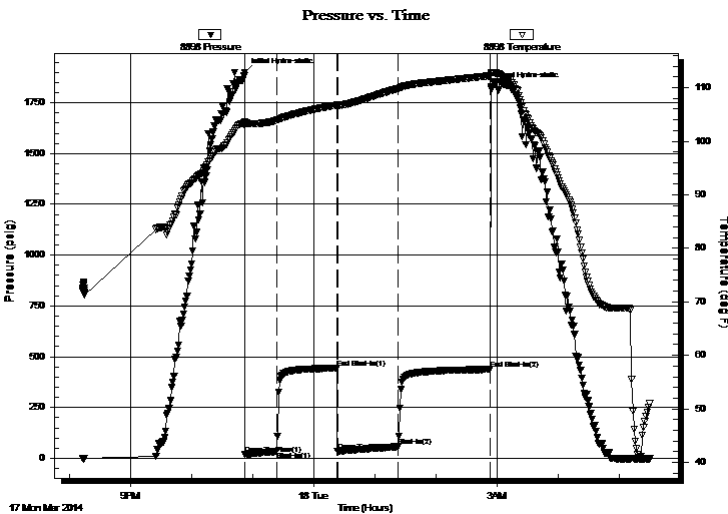
2014.03.17 @ 22:52:22

Time Off Btm:

2014.03.18 @ 02:54:01

TEST COMMENT: 30-IF-Built to 3"
60-IS-No Return
60-FF-Built to 3 1/2"
90-FSI-No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1899.47	103.69	Initial Hydro-static
1	17.96	102.87	Open To Flow (1)
32	34.63	103.92	Shut-In(1)
91	443.67	106.76	End Shut-In(1)
91	34.74	106.64	Open To Flow (2)
151	56.77	109.81	Shut-In(2)
241	437.56	112.21	End Shut-In(2)
242	1829.61	112.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	MW 50%w, 50%w	0.84
30.00	WM 30%w, 70%w, w ith oil spots	0.42

Gas Rates

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



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TOOL DIAGRAM

Cobalt Energy, LLC

33-9S-24W Graham, KS

115 S Belmont #12
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Test Start: 2014.03.17 @ 20:13:22

Tool Information

Drill Pipe:	Length: 3857.00 ft	Diameter: 3.80 inches	Volume: 54.10 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: 62000.00 lb
			<u>Total Volume: 54.10 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 43000.00 lb
Depth to Top Packer:	3876.00 ft			Final 43000.00 lb
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
Shut In Tool	5.00			3854.00	
Hydraulic tool	5.00			3859.00	
Jars	5.00			3864.00	
Safety Joint	2.00			3866.00	
Packer	5.00			3871.00	27.00 Bottom Of Top Packer
Packer	5.00			3876.00	
Stubb	1.00			3877.00	
Perforations	3.00			3880.00	
Recorder	0.00	8897	Inside	3880.00	
Recorder	0.00	8898	Outside	3880.00	
Change Over Sub	1.00			3881.00	
Drill Pipe	31.00			3912.00	
Change Over Sub	1.00			3913.00	
Bullnose	3.00			3916.00	40.00 Bottom Packers & Anchor

Total Tool Length: 67.00



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FLUID SUMMARY

Cobalt Energy, LLC

33-9S-24W Graham, KS

115 S Belmont #12
Wichita, KS 67208

Pinnick "A" #1-33

Job Ticket: 57504

DST#: 1

ATTN: Frank Mize

Test Start: 2014.03.17 @ 20:13:22

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 46.00 sec/qt
Water Loss: 7.19 in³
Resistivity: ohm.m
Salinity: 1800.00 ppm
Filter Cake: 1.00 inches

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

Oil API: deg API
Water Salinity: 19500 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	MW 50% _m , 50% _w	0.842
30.00	WM 30% _w , 70% _m , with oil spots	0.421

Total Length: 90.00 ft Total Volume: 1.263 bbl

Num Fluid Samples: 0

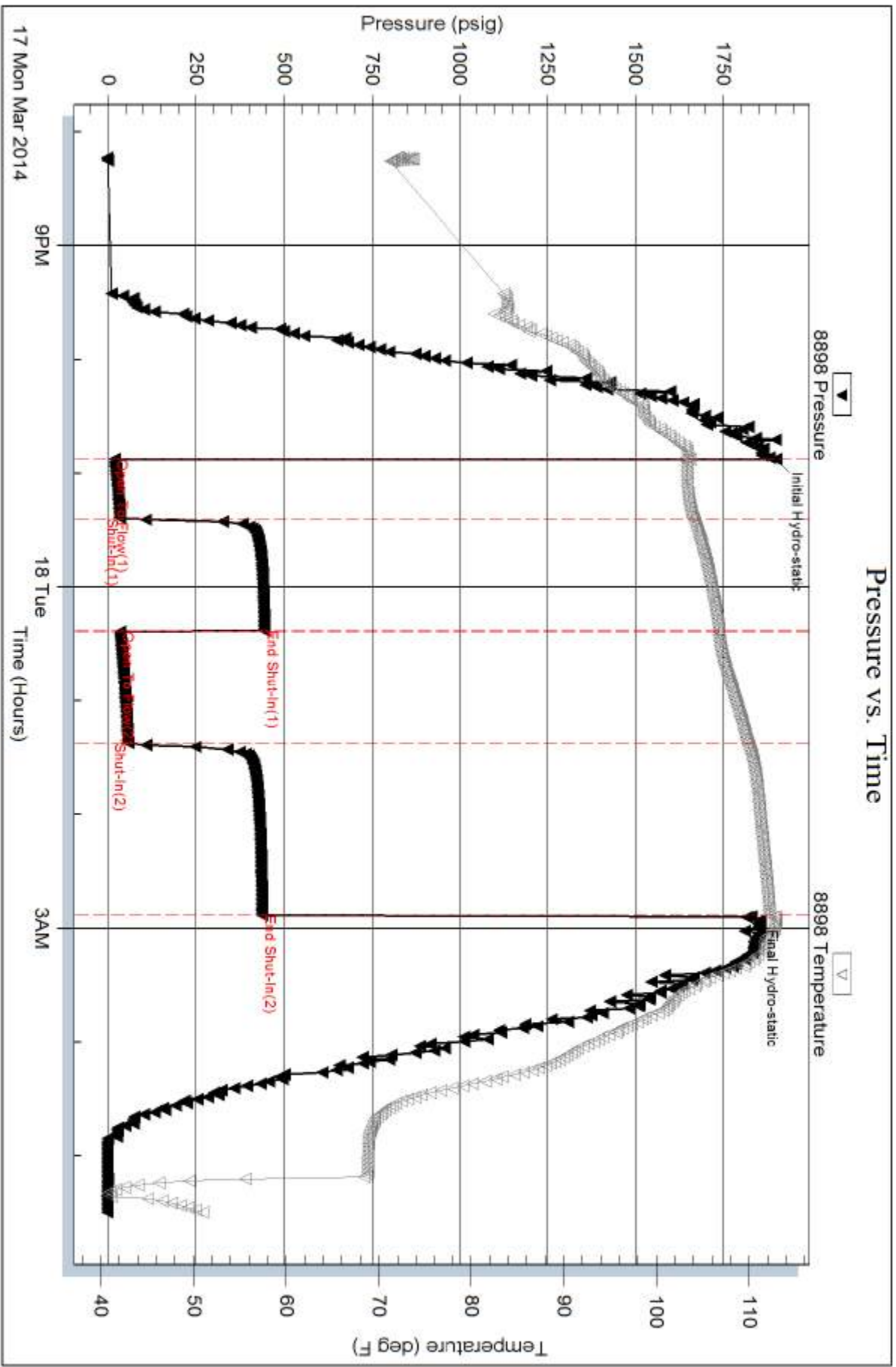
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Salinity : .675 at 37 degrees = 19,500



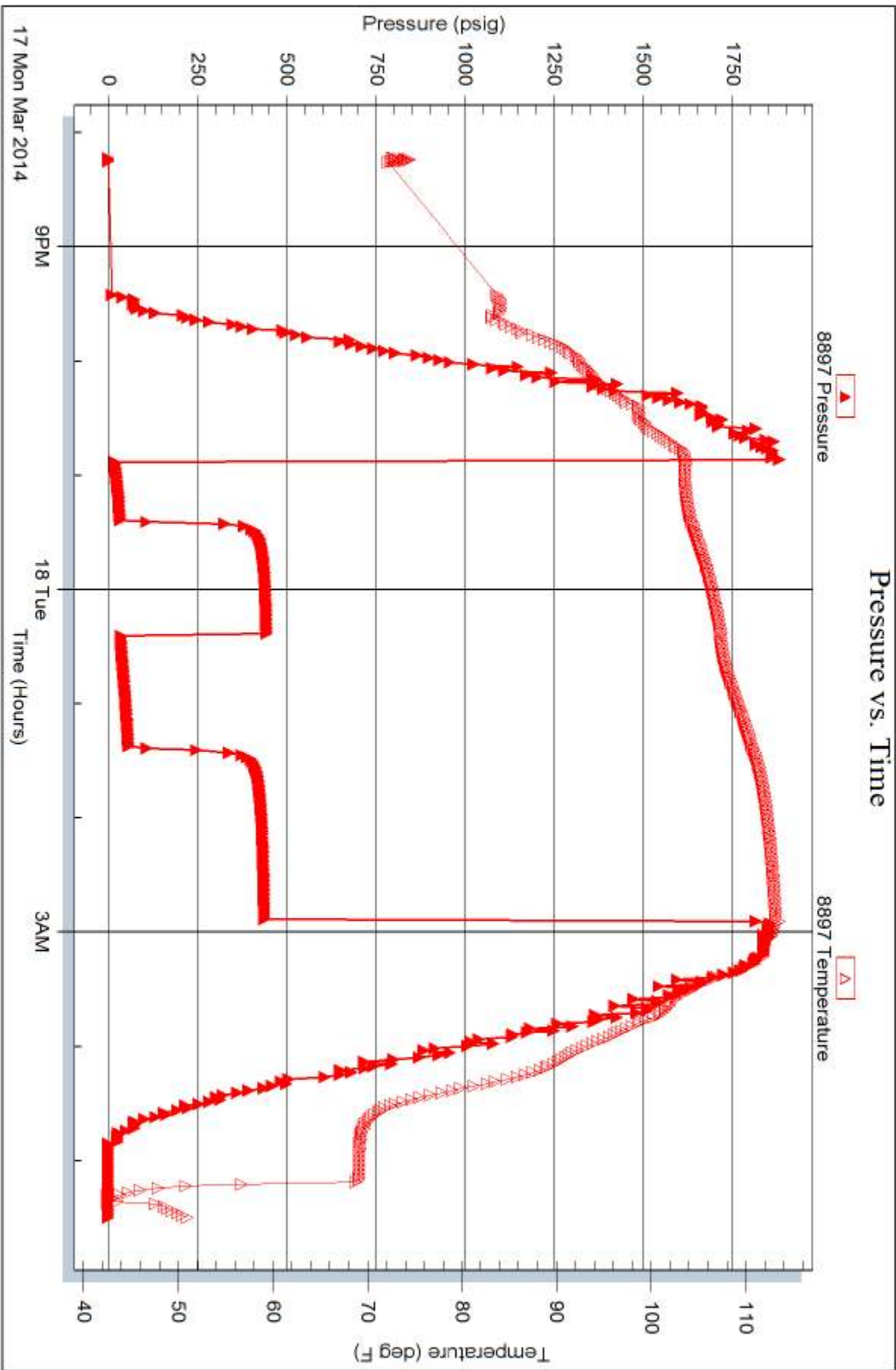
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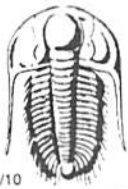
Inside

Cobalt Energy, LLC

Pinnick "A" #1-33

DST Test Number: 1





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 57504

Well Name & No. Pinnick "A" #1-33 Test No. 1 Date 3-17-14
 Company Cobalt Energy, LLC Elevation 2519 KB 2510 GL
 Address 115 S Belmont #12 Wichita, KS 67208
 Co. Rep / Geo. Frank Minze Rig Southwind Rig 8
 Location: Sec. 33 Twp. 9S Rge. 24W Co. Graham State KS

Interval Tested 3876-3916 Zone Tested LKC "C+D"
 Anchor Length 40 Drill Pipe Run 3857 Mud Wt. 9.0
 Top Packer Depth 3871 Drill Collars Run 0 Vis 46
 Bottom Packer Depth 3876 Wt. Pipe Run 0 WL 7.2
 Total Depth 3916 Chlorides 1,800 ppm System LCM 1
 Blow Description IF - Built to 3"
DS - No Return
FF - Built to 3 1/2"
FSI - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>60</u>	<u>MW</u>			<u>50</u>	<u>50</u>
<u>30</u>	<u>MW with oil spots</u>			<u>30</u>	<u>70</u>

Rec Total 90 BHT 113 Gravity — API RW 1675 @ 37 °F Chlorides 14,500 ppm

(A) Initial Hydrostatic 1899 Test 1150 T-On Location 18:10
 (B) First Initial Flow 17 Jars 250 T-Started 20:13
 (C) First Final Flow 34 Safety Joint 75 T-Open 22:52
 (D) Initial Shut-In 443 Circ Sub _____ T-Pulled 02:52
 (E) Second Initial Flow 34 Hourly Standby _____ T-Out 05:29
 (F) Second Final Flow 56 Mileage 116 RT 359.60 Comments _____
 (G) Final Shut-In 437 Sampler _____ loaded tools 3/18 18:30
 (H) Final Hydrostatic 1829 Straddle _____
 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 1834.60 Sub Total 0 Total 1834.60 MP/DST Disc't _____

Approved By _____ Our Representative [Signature]
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