



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037
Wichita KS 67208

ATTN: Robert Hendrix

13-16s-25w Ness,KS

Dietterich Trust Unit A #1-13

Start Date: 2012.05.01 @ 22:47:00

End Date: 2012.05.02 @ 04:43:09

Job Ticket #: 45843 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.05.04 @ 11:52:26



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Cobalt Energy LLC

Dietterich Trust Unit A #1-13

PO Box 8037
Wichita KS 67208

13-16s-25w Ness,KS

ATTN: Robert Hendrix

Job Ticket: 45843

DST#: 1

Test Start: 2012.05.01 @ 22:47:00

GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:24:40

Time Test Ended: 04:43:09

Test Type: Conventional Bottom Hole (Initial)

Tester: Will MacLean

Unit No: 40

Interval: 4469.00 ft (KB) To 4511.00 ft (KB) (TVD)

Reference Elevations: 2521.00 ft (KB)

Total Depth: 4511.00 ft (KB) (TVD)

2511.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8652 Inside

Press @ Run Depth: 18.54 psig @ 4470.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.05.01

End Date:

2012.05.02

Last Calib.: 2012.05.02

Start Time: 22:47:00

End Time:

04:43:09

Time On Btm: 2012.05.02 @ 00:24:25

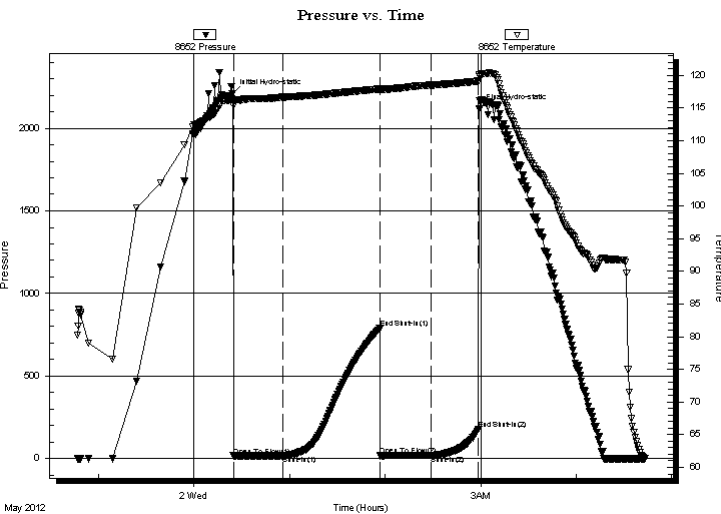
Time Off Btm: 2012.05.02 @ 02:59:10

TEST COMMENT: IF- 1/4" Blow Died Back to Weak Surface Blow

IS- No Blow

FF- No Blow

FS- No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2211.60	116.19	Initial Hydro-static
1	16.95	115.35	Open To Flow (1)
32	17.87	116.64	Shut-In(1)
93	789.51	117.91	End Shut-In(1)
93	18.38	117.57	Open To Flow (2)
125	18.54	118.49	Shut-In(2)
155	176.81	119.12	End Shut-In(2)
155	2118.40	120.14	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
8.00	OCM 1%oil 99%m (with Skim of Oil on	0.11

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy LLC

Dietterich Trust Unit A #1-13

PO Box 8037
Wichita KS 67208

13-16s-25w Ness,KS

Job Ticket: 45843

DST#: 1

ATTN: Robert Hendrix

Test Start: 2012.05.01 @ 22:47:00

Tool Information

Drill Pipe:	Length: 4462.00 ft	Diameter: 3.80 inches	Volume: 62.59 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 14000.00 lb
			<u>Total Volume: 62.59 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4469.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	64.00 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			4448.00	
Shut In Tool	5.00			4453.00	
Hydraulic tool	5.00			4458.00	
Safety Joint	2.00			4460.00	
Packer	5.00			4465.00	22.00 Bottom Of Top Packer
Packer	4.00			4469.00	
Stubb	1.00			4470.00	
Recorder	0.00	8652	Inside	4470.00	
Recorder	0.00	8322	Outside	4470.00	
Perforations	5.00			4475.00	
Change Over Sub	1.00			4476.00	
Drill Pipe	31.00			4507.00	
Change Over Sub	1.00			4508.00	
Bullnose	3.00			4511.00	42.00 Bottom Packers & Anchor

Total Tool Length: 64.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy LLC

Dietterich Trust Unit A #1-13

PO Box 8037
Wichita KS 67208

13-16s-25w Ness,KS

Job Ticket: 45843

DST#: 1

ATTN: Robert Hendrix

Test Start: 2012.05.01 @ 22:47:00

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: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.34 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
8.00	OCM 1%oil 99%m (with Skim of Oil on	0.112

Total Length: 8.00 ft Total Volume: 0.112 bbl

Num Fluid Samples: 0

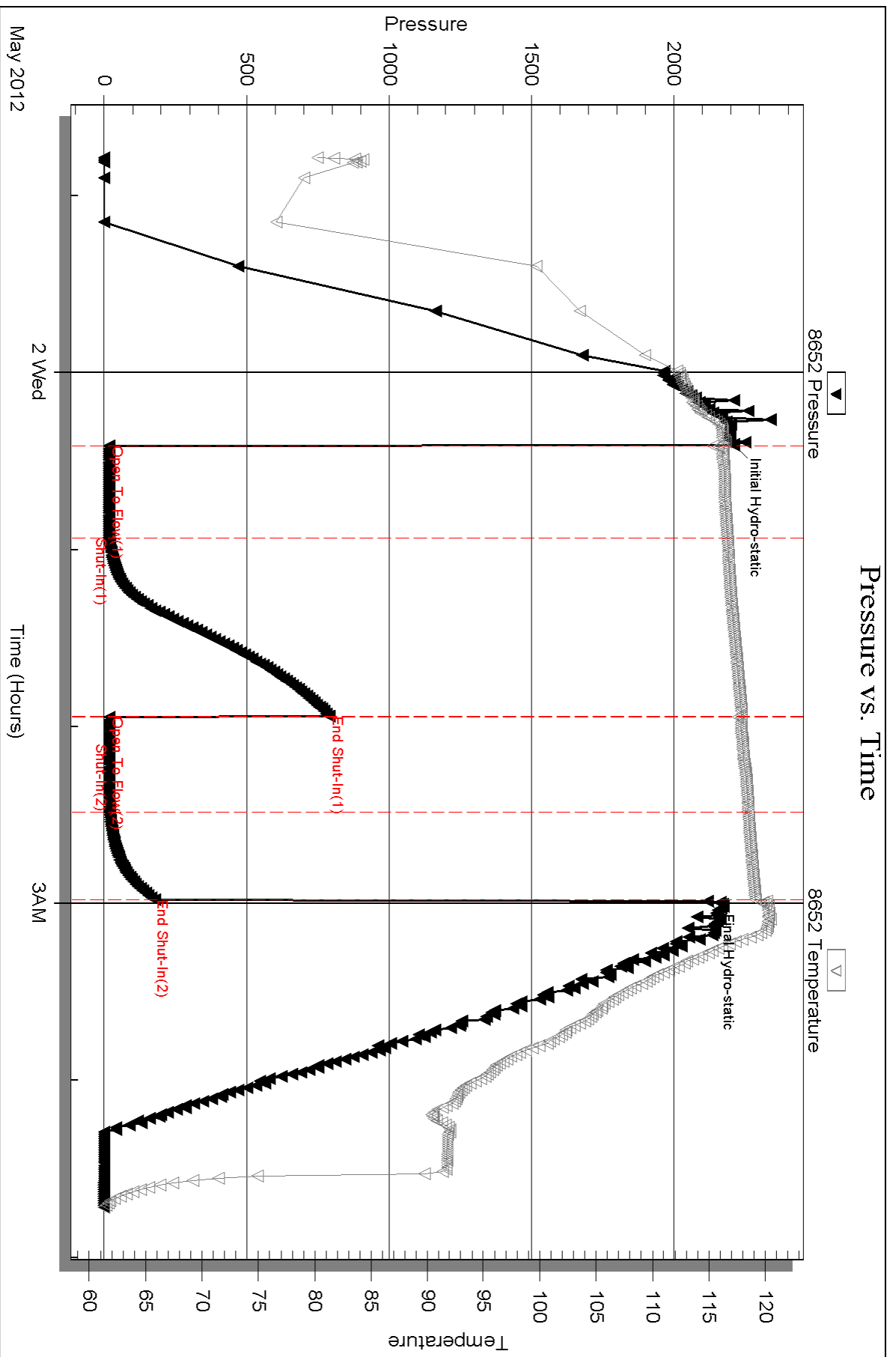
Num Gas Bombs: 0

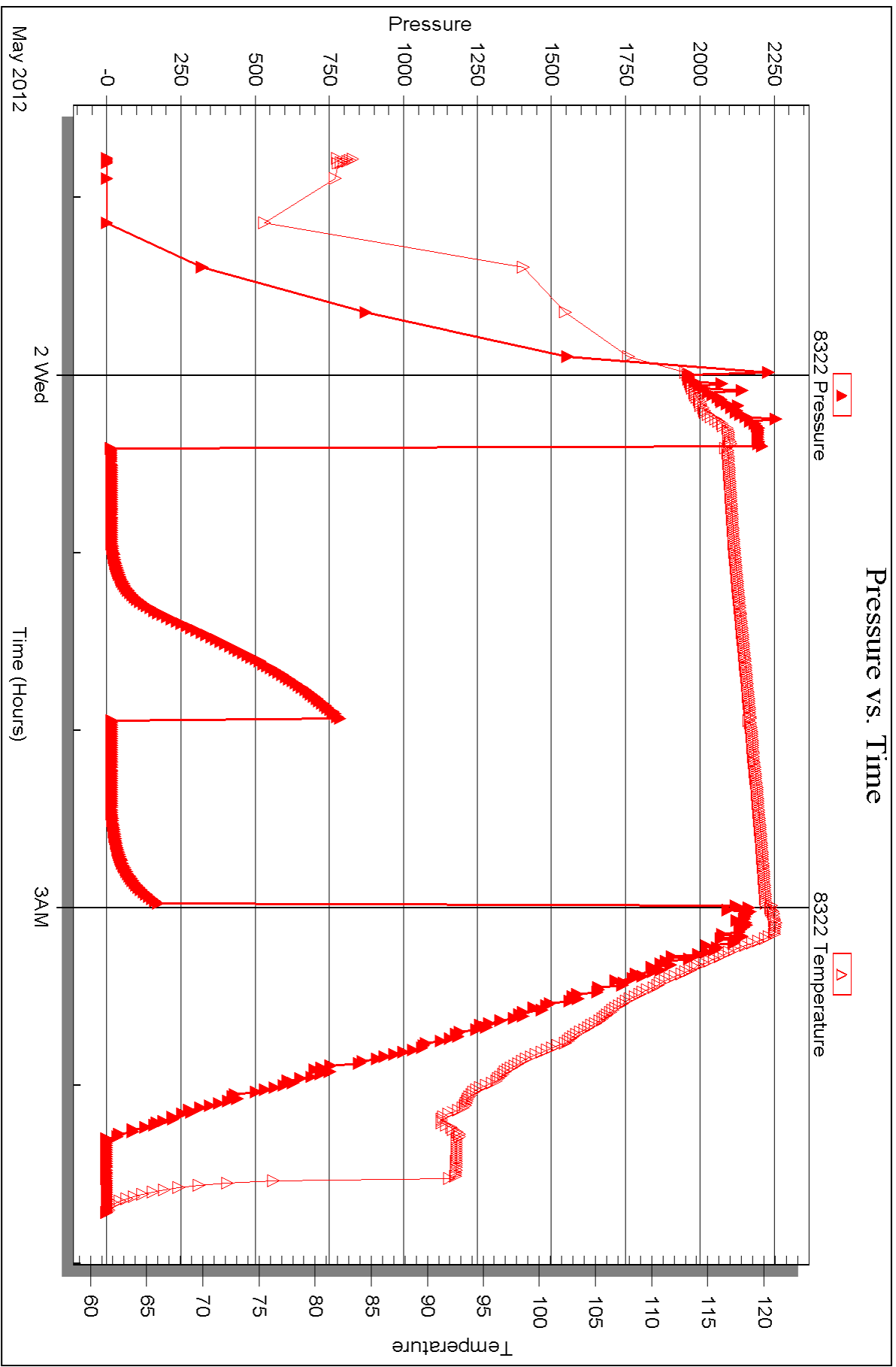
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037
Wichita KS 67208

ATTN: Robert Hendrix

13-16s-25w Ness,KS

Dietterich Trust Unit A #1-13

Start Date: 2012.05.02 @ 11:54:00

End Date: 2012.05.02 @ 18:24:39

Job Ticket #: 45844 DST #: 2

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

Printed: 2012.05.04 @ 11:50:51



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Cobalt Energy LLC

Dietterich Trust Unit A #1-13

PO Box 8037
Wichita KS 67208

13-16s-25w Ness,KS

ATTN: Robert Hendrix

Job Ticket: 45844

DST#: 2

Test Start: 2012.05.02 @ 11:54:00

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:07:55

Time Test Ended: 18:24:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 40

Interval: 4496.00 ft (KB) To 4521.00 ft (KB) (TVD)

Reference Elevations: 2521.00 ft (KB)

Total Depth: 4521.00 ft (KB) (TVD)

2511.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 10.00 ft

Serial #: 8652 Inside

Press @ RunDepth: 18.44 psig @ 4498.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.05.02

End Date:

2012.05.02

Last Calib.:

2012.05.02

Start Time: 11:54:00

End Time:

18:24:39

Time On Btm:

2012.05.02 @ 14:07:40

Time Off Btm:

2012.05.02 @ 16:39:54

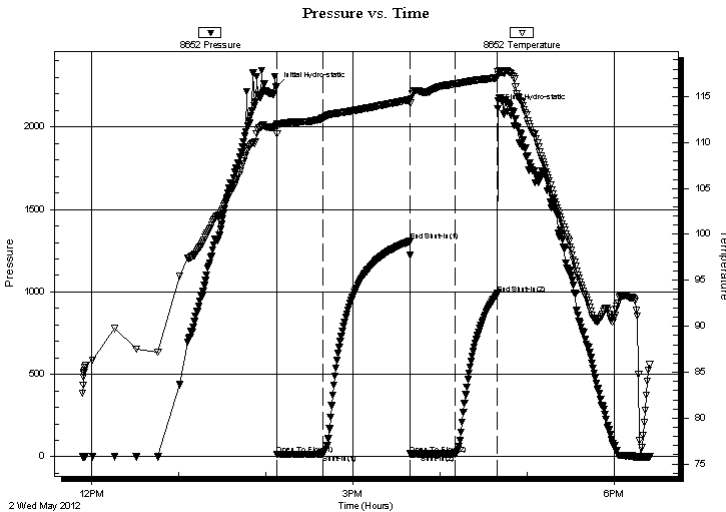
TEST COMMENT: IF- Weak Surface Blow

IS- No Blow

FF- No Blow

FS- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2246.14	112.01	Initial Hydro-static
1	15.45	110.99	Open To Flow (1)
32	17.18	112.65	Shut-In(1)
92	1306.63	114.67	End Shut-In(1)
92	17.85	114.31	Open To Flow (2)
123	18.44	116.38	Shut-In(2)
152	990.18	117.07	End Shut-In(2)
153	2113.07	117.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	100% m (Few Oil Spots in Tool)	0.07

* 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 LLC

Dietterich Trust Unit A #1-13

PO Box 8037
Wichita KS 67208

13-16s-25w Ness,KS

ATTN: Robert Hendrix

Job Ticket: 45844

DST#: 2

Test Start: 2012.05.02 @ 11:54:00

Tool Information

Drill Pipe:	Length: 4492.00 ft	Diameter: 3.80 inches	Volume: 63.01 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 22000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 12000.00 lb
			<u>Total Volume: 63.01 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	4496.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	47.00 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			4475.00	
Shut In Tool	5.00			4480.00	
Hydraulic tool	5.00			4485.00	
Safety Joint	2.00			4487.00	
Packer	5.00			4492.00	22.00 Bottom Of Top Packer
Packer	4.00			4496.00	
Stubb	1.00			4497.00	
Perforations	1.00			4498.00	
Recorder	0.00	8652	Inside	4498.00	
Recorder	0.00	8322	Outside	4498.00	
Perforations	20.00			4518.00	
Bullnose	3.00			4521.00	25.00 Bottom Packers & Anchor

Total Tool Length: 47.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy LLC

Dietterich Trust Unit A #1-13

PO Box 8037
Wichita KS 67208

13-16s-25w Ness,KS

Job Ticket: 45844

DST#: 2

ATTN: Robert Hendrix

Test Start: 2012.05.02 @ 11:54:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.36 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
5.00	100% _m (Few Oil Spots in Tool)	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

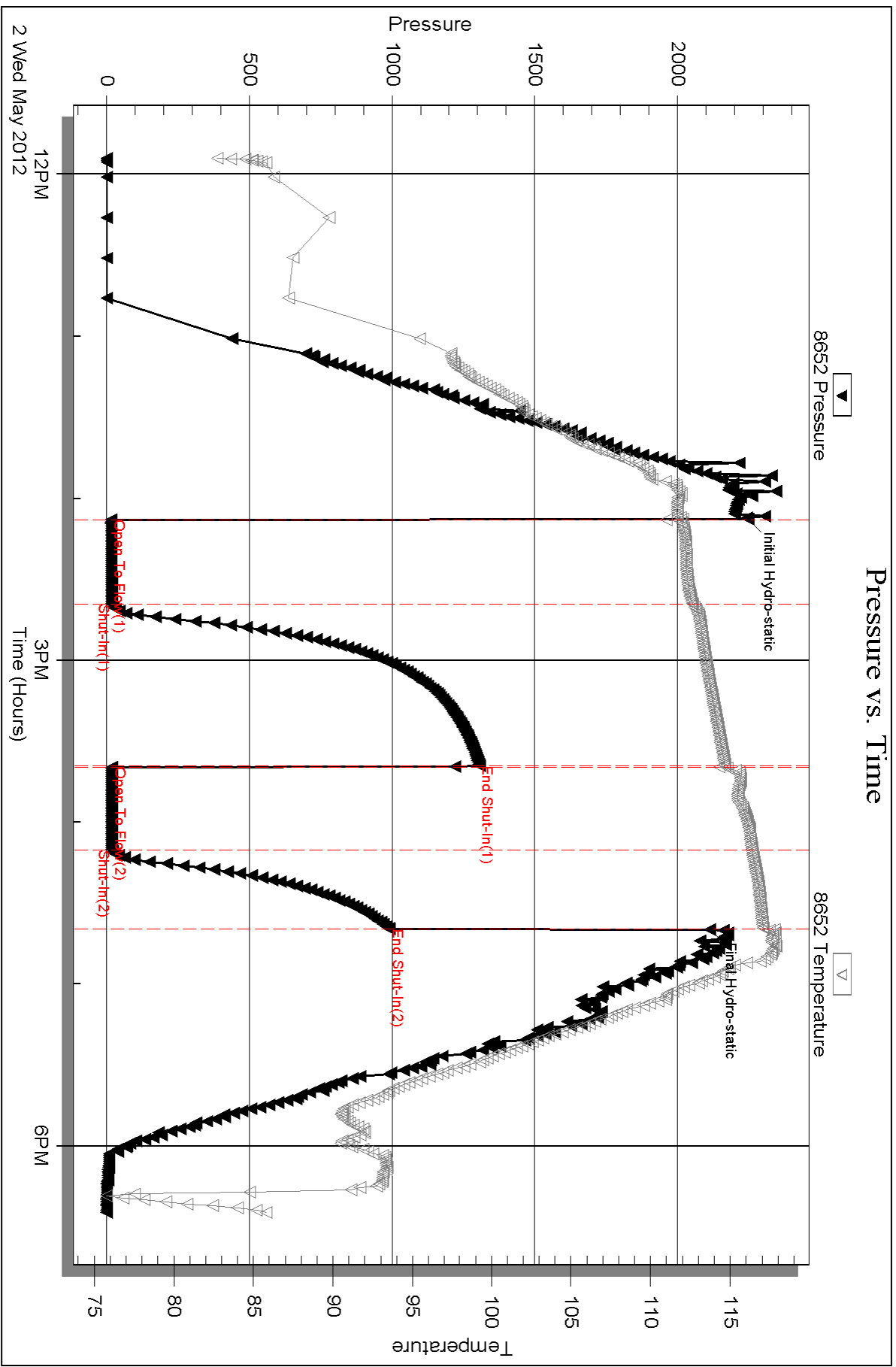
Serial #: 8652

Inside

Cobalt Energy LLC

13-16s-25w Ness, KS

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 45844

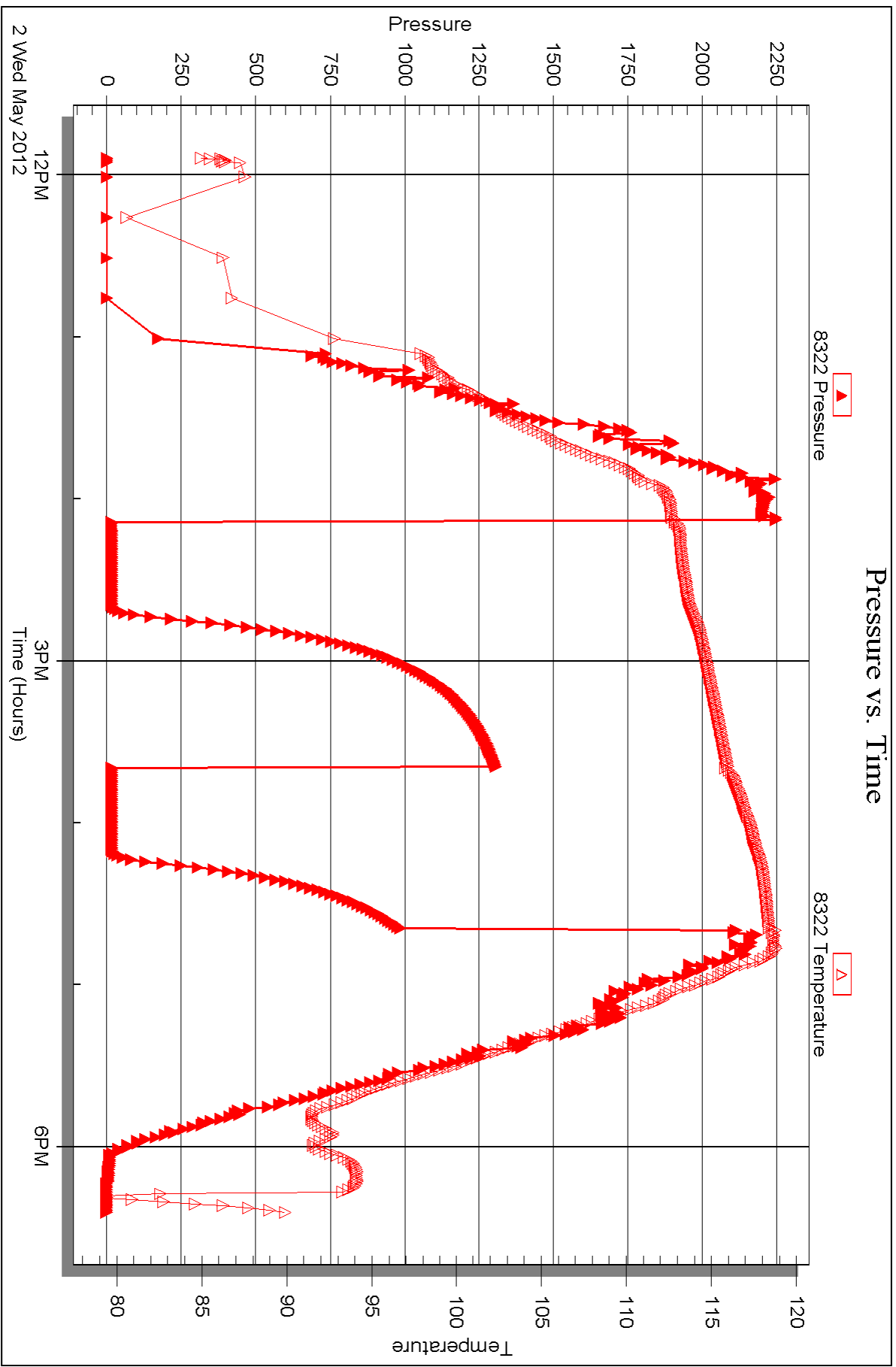
Printed: 2012.05.04 @ 11:50:53

Serial #: 8322

Outside Cobalt Energy LLC

13-16s-25w Ness, KS

DST Test Number: 2





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED Test Ticket

MAY 04 2012

NO. 45843

BY: _____

Well Name & No. Dietterich Trust Unit "A" #1-13 Test No. DST #1 Date 5-1-12
 Company Cobalt Energy LLC Elevation 2521 KB 2511 GL _____
 Address P.O. Box 8037 Wichita KS 67208
 Co. Rep / Geo. Robert Hendrix Rig Southwind Rigs #1
 Location: Sec. 13 Twp. 16S Rge. 25W Co. Ness State KS

Interval Tested 4469 - 4511 Zone Tested Mississippian
 Anchor Length 42' Drill Pipe Run 4462 Mud Wt. 9.4
 Top Packer Depth 4465 Drill Collars Run 0 Vis 47
 Bottom Packer Depth 4469 Wt. Pipe Run 0 WL 8.4
 Total Depth 4511 Chlorides 2800 ppm System LCM 116
 Blow Description IF - 1/4" Blow Died to Weak Surface Blow
ISI - No Blow
EF - No Blow
FSI - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>8</u>	<u>OCM (with 5Rim of Oil on Top)</u>		<u>1</u>		<u>99</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 8 BHT 115 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2211 Test 1250' T-On Location 22:10
 (B) First Initial Flow 16 Jars No Jars T-Started 22:47
 (C) First Final Flow 17 Safety Joint 75' T-Open 00:24
 (D) Initial Shut-In 789 Circ Sub N/C T-Pulled 2:59
 (E) Second Initial Flow 18 Hourly Standby T-Out 4:43
 (F) Second Final Flow 18 Mileage 118 R/T 182.90 Comments _____
 (G) Final Shut-In 176 Sampler _____
 (H) Final Hydrostatic 2118 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1507.90
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1507.90

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

Approved By [Signature] 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.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
MAY 04 2012
BY: _____

Test Ticket

NO. 45844

Well Name & No. Dietterich Trust Unit "A" #1-13 Test No. DST #2 Date 5-2-12
 Company Cobalt Energy LLC Elevation 2521 KB 2511 GL _____
 Address P.O. Box 8037 Wichita KS 67208
 Co. Rep / Geo. Robert Hendrix Rig Southwind Rig #1
 Location: Sec. 13 Twp. 16s Rge. 25w Co. Ness State KS

Interval Tested 4496 - 4521 Zone Tested Mississippi
 Anchor Length 25 Drill Pipe Run 4492 Mud Wt. 9.3
 Top Packer Depth 4492 Drill Collars Run 0 Vis 54
 Bottom Packer Depth 4496 Wt. Pipe Run 0 WL 8.4
 Total Depth 4521 Chlorides 2500 ppm System LCM 116

Blow Description IF - Weak Surface Blow
ISI - No Blow
FF - No Blow
FST - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud (Few Oil Spots in Tool)</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	Feet of	%gas	%oil	%water	%mud

Rec Total 5' BHT 113 Gravity API RW @ °F Chlorides ppm
 (A) Initial Hydrostatic 2246 Test 1250- T-On Location 10:32
 (B) First Initial Flow 15 Jars T-Started 11:54
 (C) First Final Flow 17 Safety Joint 75- T-Open 14:07
 (D) Initial Shut-In 1306 Circ Sub N/C T-Pulled 16:40
 (E) Second Initial Flow 17 Hourly Standby T-Out 18:24
 (F) Second Final Flow 18 Mileage 118 R/T 182.90 Comments _____
 (G) Final Shut-In 990 Sampler _____
 (H) Final Hydrostatic 2113 Straddle _____

Initial Open 30 Shale Packer _____
 Initial Shut-In 60 Shale Packer _____
 Final Flow 30 Extra Packer _____
 Final Shut-In 30 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1507.90 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1507.90
 MP/DST Disc't _____

Approved By Robert D Hendrix Our Representative William M...

Trilobite Testing Inc. shall not be liable for damages 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.