



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1098059  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

*(Data must be collected from the Reserve Pit)*

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



1098059

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
---	--

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
--	--	---

Form	ACO1 - Well Completion
Operator	Cobalt Energy LLC
Well Name	Toman Unit 'A' 1-36
Doc ID	1098059

Tops

Name	Top	Datum
Topeka	2337	-654
Heebner	2596	-917
Douglas	2629	-917
Lansing	2725	-1042
35' zone porosity	2761	-1078
90' zone porosity	2826	-1143
Muncie Creek	2877	-1194
LTD	2946	-1263

Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Mark Sievers, Chairman  
Thomas E. Wright, Commissioner  
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

October 19, 2012

Nicholas D. Hess  
Cobalt Energy LLC  
115 S. BELMONT #12  
PO BOX 8037  
WICHITA, KS 67208

Re: ACO1  
API 15-053-21278-00-00  
Toman Unit 'A' 1-36  
NW/4 Sec.36-15S-09W  
Ellsworth County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
Nicholas D. Hess

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 5338

Date	10-13-12	Sec.	36	Twp.	15	Range	9	County	Ellsworth	State	KS	On Location	11:00 PM	
Lease	Taman unit A		Well No.		1-36		Location						14 + 156 Hwy Jct, IN to K Rd, SW to	
Contractor	Southwind #4						Owner						14th Rd, 25 down winding Rd to Gate	
Type Job	Plug						To Quality Oilwell Cementing, Inc.						You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
Hole Size	7 7/8"		T.D.		2950'		Charge To						Cobalt Energies	
Csg.			Depth		950'		Street							
Tbg. Size	4 1/2" D.P.		Depth				City						State	
Tool			Depth				The above was done to satisfaction and supervision of owner agent or contractor.							
Cement Left in Csg.			Shoe Joint				Cement Amount Ordered						160 5x 60/40 4% Gel. 4 H.F.S.	
Meas Line			Displace		H2O									

**EQUIPMENT**

Pumptrk	5	No.	Cementer	Beth	Helper	Common
Bulktrk	1	No.	Driver	Levy		Poz. Mix
Bulktrk	p.u.	No.	Driver	Rock		Gel.

**JOB SERVICES & REMARKS**

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
950' -	355x
650' -	355x
290' -	355x
60' -	255x
Rathole -	305x

**FLOAT EQUIPMENT**

Cement did Circulate.	Guide Shoe
	Centralizer
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down
	Pumptrk Charge
	Mileage
	Tax
	Discount
	Total Charge

X Signature

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

No. 749

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

Date	10-6-12	Sec.	36	Twp.	B	Range	9	County	Ellsworth	State	KS	On Location		Finish	1:00 PM
Lease	Tama Unit			Well No.	1-36			Location Ellsworth 156th & 14th Rd NW to Eardleys							
Contractor	Southwood Big 4							Owner To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.							
Type Job	Surface							Charge To Coburn Energy							
Hole Size	12 1/4			T.D.	250			Depth 250.4							
Csg.	5 7/8			Depth				Street							
Tbg. Size				Depth				City							
Tool				Depth				State							
Cement Left in Csg.	20ft			Shoe Joint	20ft			The above was done to satisfaction and supervision of owner agent or contractor.							
Meas Line				Displace	14.5 BBL			Cement Amount Ordered 170 590 lb 40 gal							

**EQUIPMENT**

Pumptrk	No. 16	Cement Helper	1 Matt	Common
Bulktrk	No. 2	Driver	2 Tony	Poz. Mix
Bulktrk	No. 1	Driver	1 Cody	Gel.

**JOB SERVICES & REMARKS**

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
Cement did Granulate	Sand
	Handling
	Mileage

**FLOAT EQUIPMENT**

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Pumptrk Charge	
Mileage	

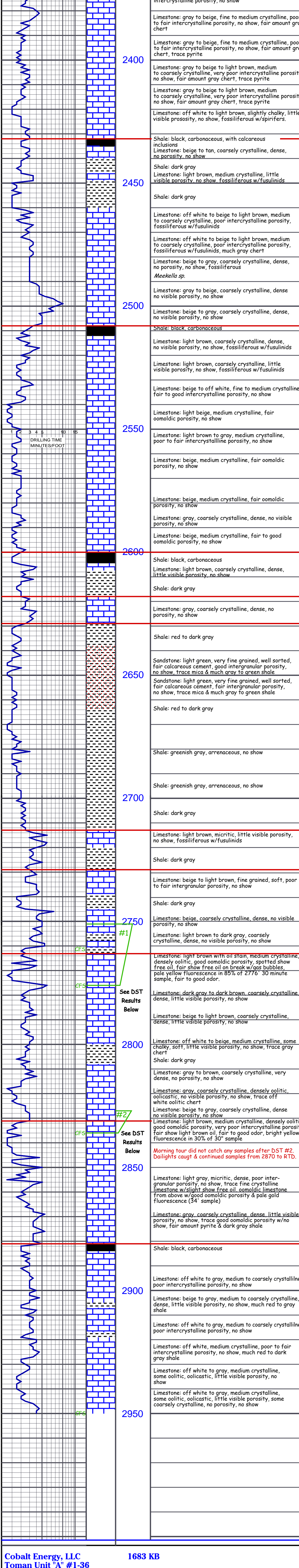
Signature	<i>Jay D. Rowe</i>	Tax	
		Discount	
		Total Charge	



COMPANY: Cobalt Energy, LLC  
LEASE: Toman Unit "A" #1-36  
FIELD: Wildcat  
LOCATION: 2,306 FNL & 2,296 FWL  
SEC: 36 TWP 9 S R 15 E  
COUNTY: Ellsworth STATE: Kansas  
CONTRACTOR: Southwind Drilling Rig #4  
SPUD: 10-8-12 COMP: 10-13-12  
SAMPLES SAVED FROM: 2300' TO RTD

FORMATION	SAMPLE	E LOG	DATUM	A. ELOG	B. ELOG	C. DT
Neva				+4	+10	
Wood Staling				-209	-295	
Grand Haven				-885	-279	
Severy Sh	2339	2336	-653	-635	-634	
Topoka	2600	2600	-914	-669	-666	
Heebner	2629	2629	-943	-921	-922	
Douglas	2710	2710	-1027	-951	-952	
Brown	2729	2729	-1042	-1030	-1032	
Lansing	2763	2763	-1143	-1047	-1047	
3S Forosity	2831	2831	-1144	-1076	-1076	
90 Forosity	2831	2831	-1144	-1144	-1150	
RTD	2950	2946	-1263		-1492	

DEPTH MEASURED FROM KB  
Log Drilling  
Surface 8.5/10.0 @ 250 w/150px  
Production NONE  
Elastic Log RAG



**Cobalt Energy, LLC 1683 KB**  
Toman Unit "A" #1-36  
2,306 FNL & 2,296 FWL 36-15S-9W  
Ellsworth County, Kansas

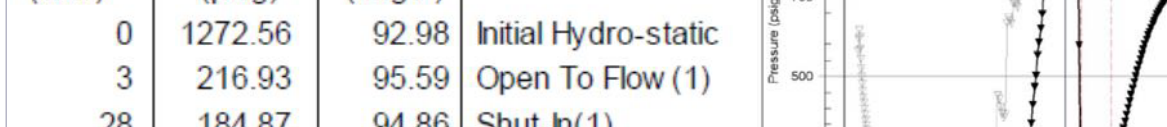
**Comments:**

**DST #1**  
Interval: 2751.00 ft (KB) To 2776.00 ft (KB) (TVD)  
Total Depth: 2776.00 ft (KB) (TVD)  
30-60-60-90

TEST COMMENT: IF: Strong blow BOB 15 min  
IS: no blow  
FF: Strong blow BOB 25 min  
FSI: No blow back

Length (ft)	Description	Volume (bbl)
0.00	310' GIP	0.00
130.00	Mud with oil spots	0.78

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1272.56	92.98	Initial Hydro-static
0	216.93	95.59	Open To Flow (1)
28	184.87	94.86	Shut-In(1)
94	825.76	95.24	End Shut-In(1)
96	138.20	95.67	Open To Flow (2)
153	117.75	96.69	Shut-In(2)
241	690.38	97.59	End Shut-In(2)
244	1244.56	97.33	Final Hydro-static



**DST #2**  
Interval: 2827.00 ft (KB) To 2836.00 ft (KB) (TVD)  
Total Depth: 2836.00 ft (KB) (TVD)  
30-60-60-90

TEST COMMENT: IF: Weak blow 3 1/4"  
IS: No blow back  
FF: Fair blow 7"  
FSI: No blow back

Length (ft)	Description	Volume (bbl)
60.00	MW Oil Spots	0.30

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1330.99	89.40	Initial Hydro-static
4	16.77	89.98	Open To Flow (1)
37	35.00	92.75	Shut-In(1)
90	870.42	95.10	End Shut-In(1)
92	20.63	95.08	Open To Flow (2)
151	35.84	97.01	Shut-In(2)
243	935.00	98.65	End Shut-In(2)
245	1302.63	98.93	Final Hydro-static



DST Results Provided By: **TRILOBITE TESTING, INC**



## DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037  
Wichita KS 67208

ATTN: Nicholas D Hess/ Fra

### **Toman Unit A #1-36**

### **36-15s-9w Ellsworth,KS**

Start Date: 2012.10.12 @ 03:11:04

End Date: 2012.10.12 @ 12:16:19

Job Ticket #: 49661                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.15 @ 16:25:37





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cobalt Energy LLC

**36-15s-9w Ellsworth, KS**

PO Box 8037  
Wichita KS 67208

**Toman Unit A #1-36**

ATTN: Nicholas D Hess/ Fra

Job Ticket: 49661

**DST#: 1**

Test Start: 2012.10.12 @ 03:11:04

## GENERAL INFORMATION:

Formation: **Lansing**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:12:34

Time Test Ended: 12:16:19

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Staats

Unit No: 47

**Interval: 2751.00 ft (KB) To 2776.00 ft (KB) (TVD)**

Reference Elevations: 1683.00 ft (KB)

Total Depth: 2776.00 ft (KB) (TVD)

1676.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6773 Outside**

Press @ RunDepth: 117.75 psig @ 2752.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.12 End Date: 2012.10.12

Last Calib.: 2012.10.12

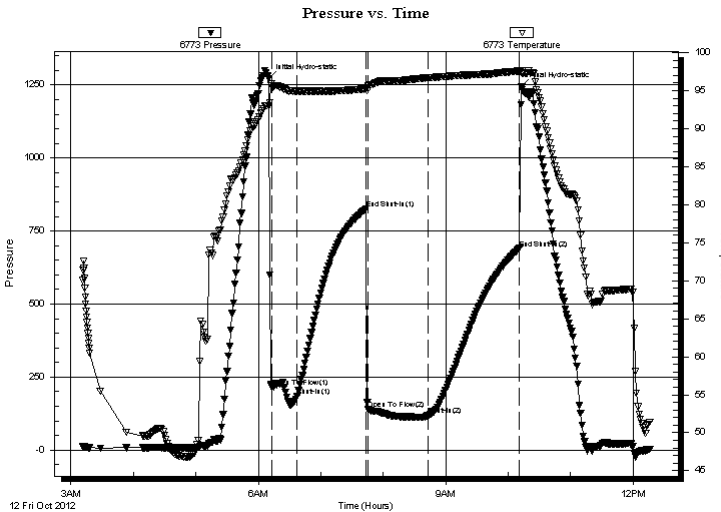
Start Time: 03:11:09 End Time: 12:16:19

Time On Btm: 2012.10.12 @ 06:09:49

Time Off Btm: 2012.10.12 @ 10:13:04

**TEST COMMENT:** IF: Strong blow BOB 15 min  
IS: no blow  
FF: Strong blow BOB 25 min  
FS: No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1272.56	92.98	Initial Hydro-static
3	216.93	95.59	Open To Flow (1)
28	184.87	94.86	Shut-In(1)
94	825.76	95.24	End Shut-In(1)
96	138.20	95.67	Open To Flow (2)
153	117.75	96.69	Shut-In(2)
241	690.38	97.59	End Shut-In(2)
244	1244.56	97.33	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	310' GIP	0.00
130.00	Mud w ith oil spots	0.78

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cobalt Energy LLC

**36-15s-9w Ellsworth, KS**

PO Box 8037  
Wichita KS 67208

**Toman Unit A #1-36**

ATTN: Nicholas D Hess/ Fra

Job Ticket: 49661

**DST#: 1**

Test Start: 2012.10.12 @ 03:11:04

## GENERAL INFORMATION:

Formation: **Lansing**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:12:34

Time Test Ended: 12:16:19

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Staats

Unit No: 47

**Interval: 2751.00 ft (KB) To 2776.00 ft (KB) (TVD)**

Reference Elevations: 1683.00 ft (KB)

Total Depth: 2776.00 ft (KB) (TVD)

1676.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6755 Inside**

Press @ Run Depth: psig @ 2752.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.12

End Date:

2012.10.12

Last Calib.:

2012.10.12

Start Time: 03:05:54

End Time:

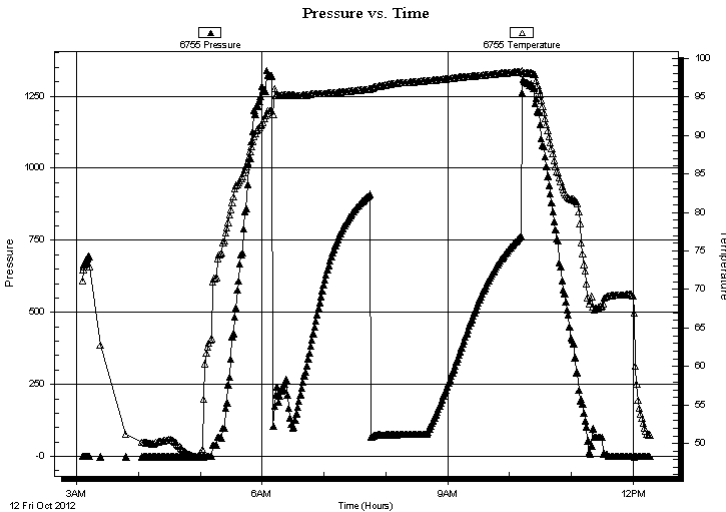
12:16:19

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF: Strong blow BOB 15 min  
IS: no blow  
FF: Strong blow BOB 25 min  
FS: No blow back

## PRESSURE SUMMARY



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

## Recovery

## Gas Rates

Length (ft)	Description	Volume (bbl)
0.00	310' GIP	0.00
130.00	Mud w ith oil spots	0.78

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Cobalt Energy LLC

**36-15s-9w Ellsworth,KS**

PO Box 8037  
Wichita KS 67208

**Toman Unit A #1-36**

Job Ticket: 49661

**DST#: 1**

ATTN: Nicholas D Hess/ Fra

Test Start: 2012.10.12 @ 03:11:04

## Tool Information

Drill Pipe:	Length: 2624.00 ft	Diameter: 3.80 inches	Volume: 36.81 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 115.00 ft	Diameter: 2.25 inches	Volume: 0.57 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 37.38 bbl</u>	Tool Chased 6.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 35000.00 lb
Depth to Top Packer:	2751.00 ft			Final 35000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 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			2724.00	
Shut In Tool	5.00			2729.00	
Hydraulic tool	5.00			2734.00	
Jars	5.00			2739.00	
Safety Joint	3.00			2742.00	
Packer	5.00			2747.00	28.00 Bottom Of Top Packer
Packer	4.00			2751.00	
Stubb	1.00			2752.00	
Recorder	0.00	6773	Outside	2752.00	
Recorder	0.00	6755	Inside	2752.00	
Perforations	21.00			2773.00	
Bullnose	3.00			2776.00	25.00 Bottom Packers & Anchor

**Total Tool Length: 53.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Cobalt Energy LLC

**36-15s-9w Ellsworth, KS**

PO Box 8037  
Wichita KS 67208

**Toman Unit A #1-36**

Job Ticket: 49661

**DST#: 1**

ATTN: Nicholas D Hess/ Fra

Test Start: 2012.10.12 @ 03:11:04

## 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: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	310' GIP	0.000
130.00	Mud with oil spots	0.776

Total Length: 130.00 ft      Total Volume: 0.776 bbl

Num Fluid Samples: 0

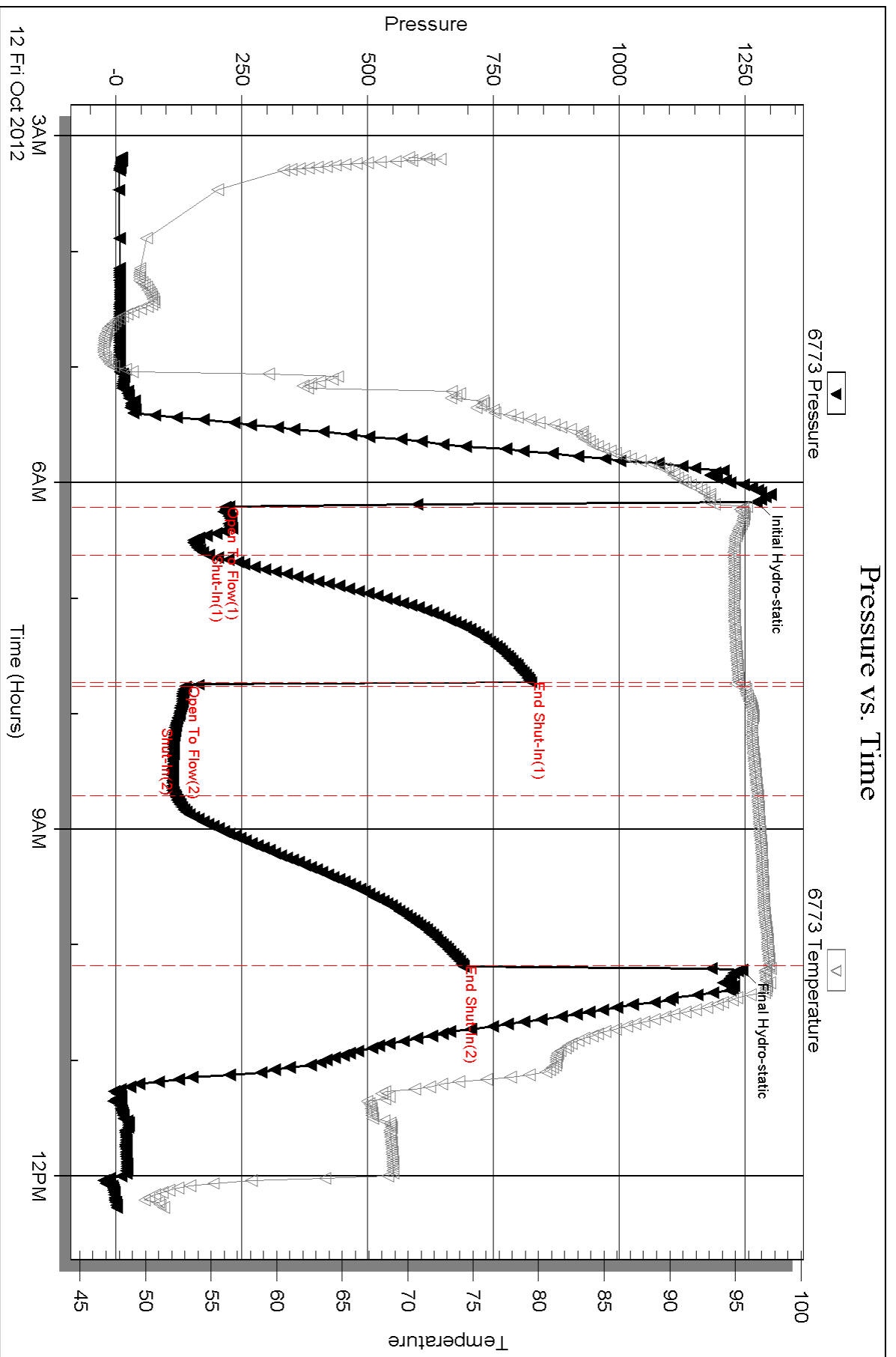
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



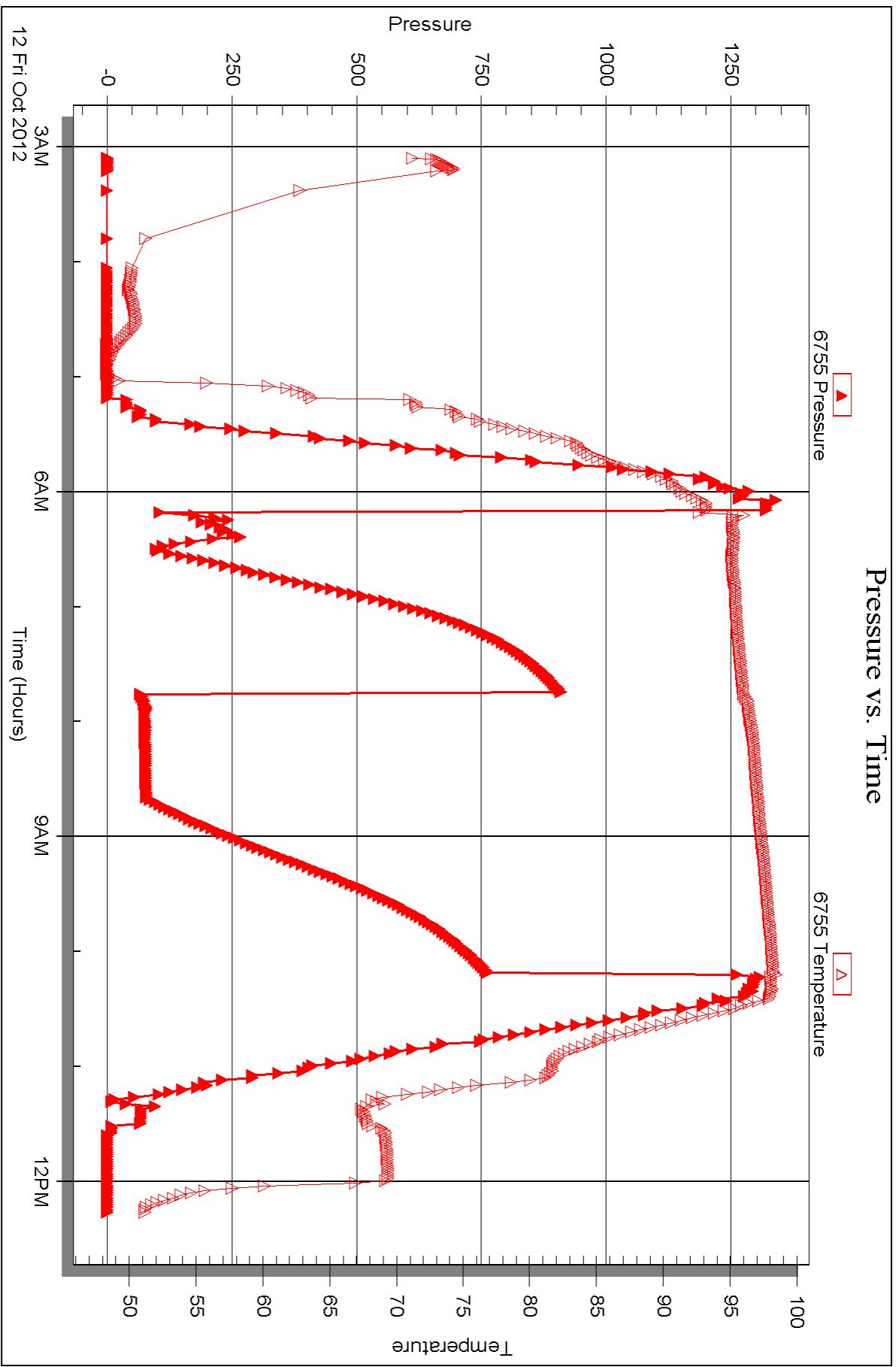
Serial #: 6755

Inside

Cobalt Energy LLC

Toman Unit A #1-36

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037  
Wichita KS 67208

ATTN: Nicholas D Hess/ Fra

### **Toman Unit A #1-36**

### **36-15s-9w Ellsworth,KS**

Start Date: 2012.10.12 @ 19:19:07

End Date: 2012.10.13 @ 02:41:07

Job Ticket #: 49662                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.10.15 @ 16:24:48



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cobalt Energy LLC

**36-15s-9w Ellsworth, KS**

PO Box 8037  
Wichita KS 67208

**Toman Unit A #1-36**

Job Ticket: 49662

**DST#: 2**

ATTN: Nicholas D Hess/ Fra

Test Start: 2012.10.12 @ 19:19:07

## GENERAL INFORMATION:

Formation: **Lansing**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:49:52

Time Test Ended: 02:41:07

Test Type: Conventional Bottom Hole (Reset)

Tester: Chris Staats

Unit No: 47

**Interval: 2827.00 ft (KB) To 2836.00 ft (KB) (TVD)**

Reference Elevations: 1683.00 ft (KB)

Total Depth: 2836.00 ft (KB) (TVD)

1676.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6755 Inside**

Press @ Run Depth: 35.84 psig @ 2828.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.12

End Date:

2012.10.13

Last Calib.: 2012.10.13

Start Time: 19:19:12

End Time:

02:41:06

Time On Btm: 2012.10.12 @ 20:46:37

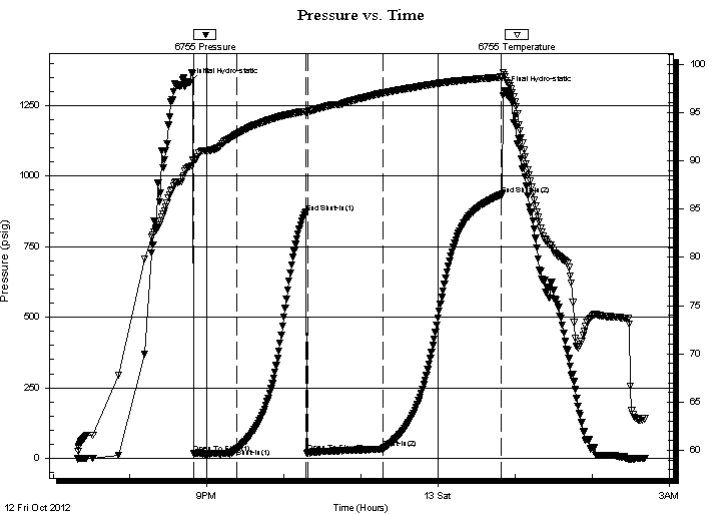
Time Off Btm: 2012.10.13 @ 00:51:37

TEST COMMENT: IF: Weak blow 3 1/4"

ISI: No blow back

FF: Fair blow 7"

FSI No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1330.99	89.40	Initial Hydro-static
4	16.77	89.98	Open To Flow (1)
37	35.00	92.75	Shut-In(1)
90	870.42	95.10	End Shut-In(1)
92	20.63	95.08	Open To Flow (2)
151	35.84	97.01	Shut-In(2)
243	935.00	98.65	End Shut-In(2)
245	1302.63	98.93	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	M,W Oil Spots	0.30

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Cobalt Energy LLC

**36-15s-9w Ellsworth, KS**

PO Box 8037  
Wichita KS 67208

**Toman Unit A #1-36**

ATTN: Nicholas D Hess/ Fra

Job Ticket: 49662 **DST#: 2**

Test Start: 2012.10.12 @ 19:19:07

**GENERAL INFORMATION:**

Formation: **Lansing**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:49:52

Time Test Ended: 02:41:07

Test Type: Conventional Bottom Hole (Reset)

Tester: Chris Staats

Unit No: 47

**Interval: 2827.00 ft (KB) To 2836.00 ft (KB) (TVD)**

Reference Elevations: 1683.00 ft (KB)

Total Depth: 2836.00 ft (KB) (TVD)

1676.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 7.00 ft

**Serial #: 6773 Outside**

Press @ Run Depth: psig @ 2828.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.10.12

End Date: 2012.10.13

Last Calib.: 2012.10.13

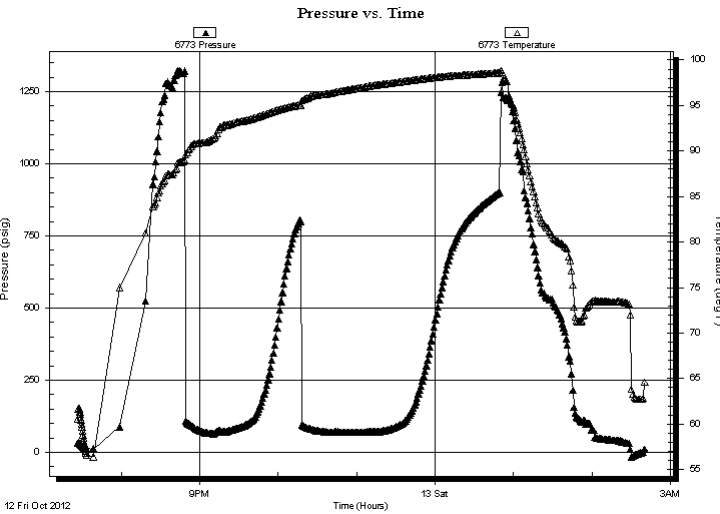
Start Time: 19:26:42

End Time: 02:41:06

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF: Weak blow 3 1/4"  
ISI: No blow back  
FF: Fair blow 7"  
FSI: No blow back



**PRESSURE SUMMARY**

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

**Recovery**

**Gas Rates**

Length (ft)	Description	Volume (bbl)
60.00	M,W Oil Spots	0.30

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Cobalt Energy LLC

**36-15s-9w Ellsworth,KS**

PO Box 8037  
Wichita KS 67208

**Toman Unit A #1-36**

Job Ticket: 49662

**DST#: 2**

ATTN: Nicholas D Hess/ Fra

Test Start: 2012.10.12 @ 19:19:07

## Tool Information

Drill Pipe:	Length: 2685.00 ft	Diameter: 3.80 inches	Volume: 37.66 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 115.00 ft	Diameter: 2.25 inches	Volume: 0.57 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 38.23 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	1.00 ft			String Weight: Initial 35000.00 lb
Depth to Top Packer:	2827.00 ft			Final 35000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	37.00 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			2800.00	
Shut In Tool	5.00			2805.00	
Hydraulic tool	5.00			2810.00	
Jars	5.00			2815.00	
Safety Joint	3.00			2818.00	
Packer	5.00			2823.00	28.00 Bottom Of Top Packer
Packer	4.00			2827.00	
Stubb	1.00			2828.00	
Recorder	0.00	6773	Outside	2828.00	
Recorder	0.00	6755	Inside	2828.00	
Perforations	5.00			2833.00	
Bullnose	3.00			2836.00	9.00 Bottom Packers & Anchor

**Total Tool Length: 37.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Cobalt Energy LLC

**36-15s-9w Ellsworth, KS**

PO Box 8037  
Wichita KS 67208

**Toman Unit A #1-36**

Job Ticket: 49662

**DST#: 2**

ATTN: Nicholas D Hess/ Fra

Test Start: 2012.10.12 @ 19:19:07

## 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: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5500.00 ppm

Filter Cake: 0.02 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	M,W Oil Spots	0.295

Total Length: 60.00 ft      Total Volume: 0.295 bbl

Num Fluid Samples: 0

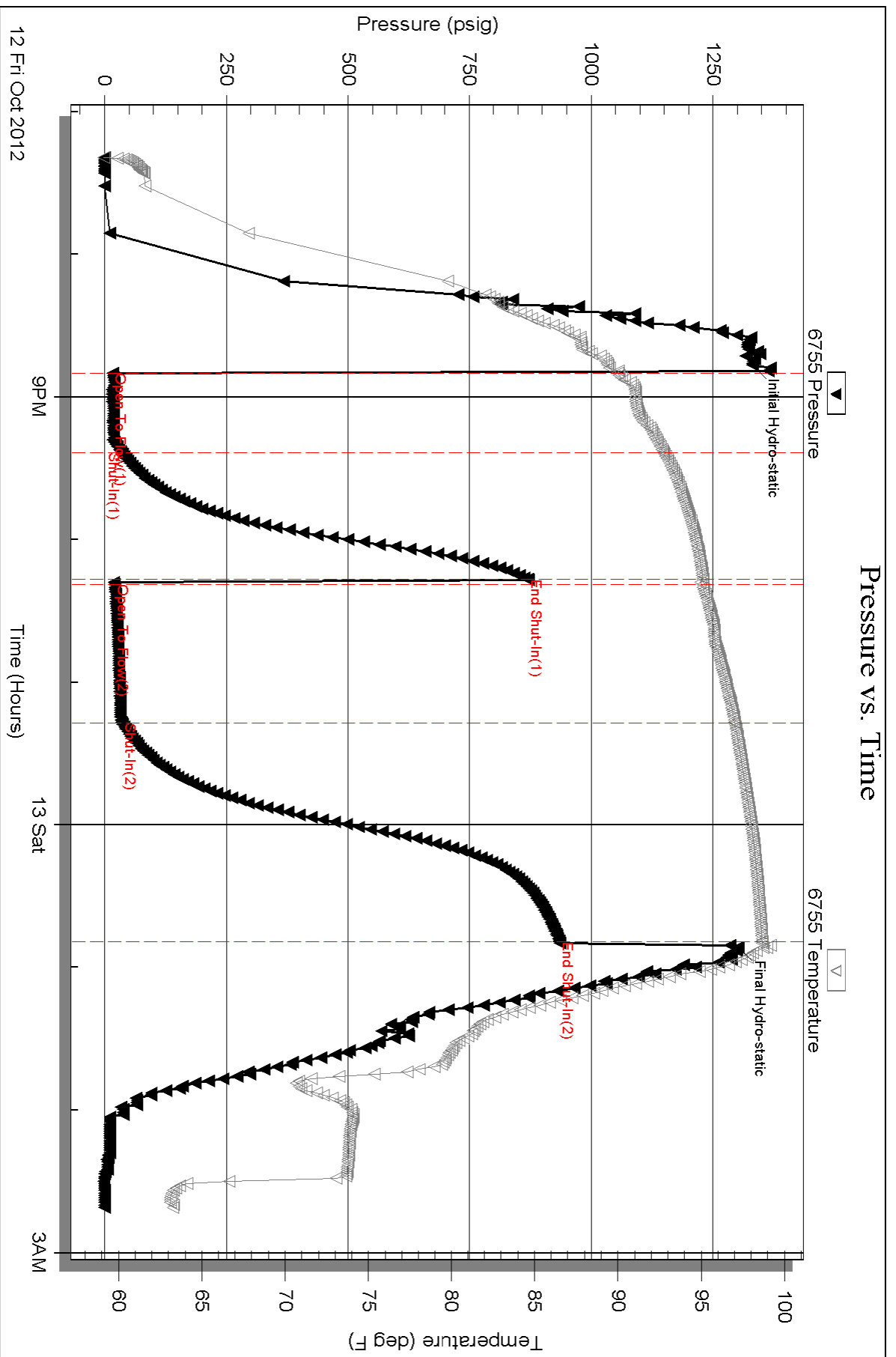
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

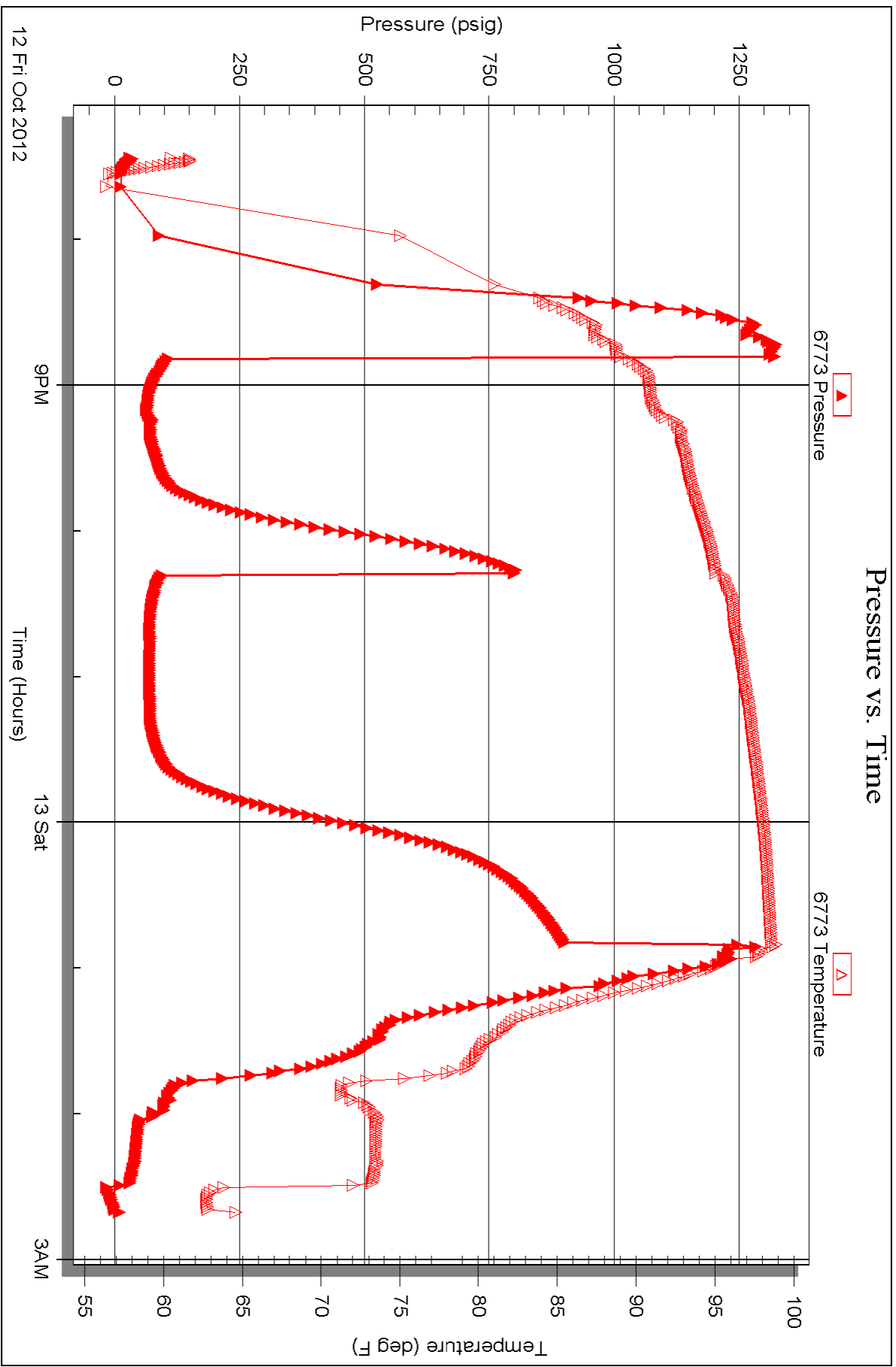


Serial #: 6773

Outside Cobalt Energy LLC

Toman Unit A #1-36

DST Test Number: 2





# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

## Test Ticket

NO. 49661

4/10

Well Name & No. Toman Unit 'A' #1-36 Test No. 1 Date 10-12-12  
 Company Cobalt Energy ~~#1234~~ Elevation 1683 KB 1676 GL  
 Address 1155 Belmont #12 PO box 8037 Wichita KS 67208  
 Co. Rep / Geo. Nicholas D Hess / Frank Mize Rig SOUTH WIND #4  
 Location: Sec. 36 Twp. 15S Rge. 9W Co. Ellsworth State KS

Interval Tested 2751 - 2776 Zone Tested Lansing  
 Anchor Length 25' Drill Pipe Run 2624 Mud Wt. 8.8  
 Top Packer Depth 2746 Drill Collars Run 115 Vis 47  
 Bottom Packer Depth 2751 Wt. Pipe Run 0 WL 8.8  
 Total Depth 2776 Chlorides 5500 ppm System LCM TR

Blow Description IF: Strong blow BOB 15 min  
LSI: NO blow back  
FF: Strong blow BOB 25 min  
FSD: NO blow back

Rec	Feet of	%gas	%oil	%water	%mud
	<u>310' GIP</u>				
Rec <u>130'</u>	Feet of <u>MUD with oil spots</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 130 BHT 95 Gravity - API RW - @ - °F Chlorides 5500 ppm

(A) Initial Hydrostatic 1272  Test 1150 T-On Location 2:45  
 (B) First Initial Flow 216  Jars 250 T-Started 3:11  
 (C) First Final Flow 184  Safety Joint 75 T-Open 6:12  
 (D) Initial Shut-In 825  Circ Sub T-Pulled 10:15  
 (E) Second Initial Flow 138  Hourly Standby T-Out 12:15  
 (F) Second Final Flow 117  Mileage 200 Miles ~~150rt 232.50~~ Comments \_\_\_\_\_  
 (G) Final Shut-In 690  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1244  Straddle \_\_\_\_\_

Initial Open 30  Shale Packer \_\_\_\_\_  
 Initial Shut-In 60  Shale Packer \_\_\_\_\_  
 Final Flow 60  Extra Packer \_\_\_\_\_  
 Final Shut-In 90  Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Sub Total 1707.50 MP/DST Disc't \_\_\_\_\_

Approved By Frank S. [Signature] Our Representative Chris [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

## Test Ticket

NO. 49662

4/10

Well Name & No. Toman Unit A' #1-36 Test No. 2 Date 10-12-12  
 Company Cobalt Energy Elevation 1683 KB 1676 GL  
 Address 115 S Belmont #12 Pobox 8037 Wichita KS 67208  
 Co. Rep / Geo. Nicholas D Hess / Frank Mize Rig South Wind #2  
 Location: Sec. 36 Twp. 15S Rge. 9W Co. Ellsworth State KS

Interval Tested 2827 - 2836 Zone Tested Lansing  
 Anchor Length 9' Drill Pipe Run 2685 Mud Wt. 8.8  
 Top Packer Depth 2822 Drill Collars Run 115 Vis 47  
 Bottom Packer Depth 2827 Wt. Pipe Run 0 WL 8.8  
 Total Depth 2836 Chlorides 5500 ppm System LCM TR

Blow Description FF: Weak blow 3 1/4"  
ISI: NO blow back  
FF: Fair blow 7"  
FSL: NO blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>60'</u>	<u>M, W OIL SPOTS</u>		<u>30</u>	<u>70</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 60 BHT 98 Gravity — API RW .17 @ 60 ° F Chlorides 20,000 ppm

(A) Initial Hydrostatic 1330  Test 1150 T-On Location 19:00  
 (B) First Initial Flow 16  Jars 250 T-Started 19:19  
 (C) First Final Flow 35  Safety Joint 75 T-Open 20:49  
 (D) Initial Shut-In 870  Circ Sub T-Pulled 1:00  
 (E) Second Initial Flow 20  Hourly Standby T-Out 2:45  
 (F) Second Final Flow 35  Mileage 20 miles 232.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 935  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1302  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Initial Open 30  Ruined Shale Packer \_\_\_\_\_  
 Initial Shut-In 60  Ruined Packer \_\_\_\_\_  
 Final Flow 60  Extra Copies \_\_\_\_\_  
 Final Shut-In 90 Sub Total 0  
 Total 1707.50  
 MP/DST Disc't \_\_\_\_\_

Approved By Frank S. [Signature] Sub Total 1707.50 Our Representative Chris [Signature]

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