



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1155223  
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: \_\_\_\_\_



1155223

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
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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> _____ _____
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Form	ACO1 - Well Completion
Operator	Cobalt Energy LLC
Well Name	VonLehe 'A' 1-27
Doc ID	1155223

Tops

Name	Top	Datum
Anhydrite	1537	736
Base Anhydrite	1573	700
Topeka	3354	-1081
Heebner	3653	-1380
Lansing	3695	-1422
BKC	3989	-1716
Pawnee	4113	-1840
Ft Scott	4194	-1921
Cherokee	4217	-1944
Mississippian	4303	-2030

# ALLIED OIL & GAS SERVICES, LLC 060552

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999  
SOUTHLAKE, TEXAS 76092

SERVICE POINT:  
Great Bend, KS

DATE <u>7-5-13</u>	SEC. <u>27</u>	TWP. <u>18S</u>	RANGE <u>24W</u>	CALLED OUT	ON LOCATION	JOB START <u>7:00 AM</u>	JOB FINISH <u>7:40 AM</u>
LEASE <u>VonLehe A</u>		WELL# <u>1-27</u>		LOCATION <u>Ness Uby 2w Ninto</u>		COUNTY <u>Ness</u>	STATE <u>KS</u>
OLD OR <input checked="" type="radio"/> NEW (Circle one)							

CONTRACTOR Southwind Drilling # 70  
 TYPE OF JOB Surf Core  
 HOLE SIZE 12 1/4 T.D.  
 CASING SIZE 6 5/8 DEPTH 267.40  
 TUBING SIZE DEPTH  
 DRILL PIPE 4 1/2 DEPTH  
 TOOL DEPTH  
 PRES. MAX MINIMUM  
 MEAS. LINE SHOE JOINT  
 CEMENT LEFT IN CSG. 15F  
 PERFS.  
 DISPLACEMENT 16.07 bbls Freshwater

OWNER  
 CEMENT  
 AMOUNT ORDERED 200 sks Class A  
34cc 24 gel  
 COMMON 200 @ 17.90 3580.00  
 POZMIX @  
 GEL 4 @ 23.40 93.60  
 CHLORIDE 7 @ 64.00 448.00  
 ASC @  
 @  
 @  
 @  
 @  
 @  
 @  
 @  
 @  
 HANDLING 216.46 @ 2.48 537.81  
 MILEAGE 9.88 x 4 x 2.60 102.28  
 TOTAL 4.741.65

**EQUIPMENT**

PUMP TRUCK CEMENTER Dustin Chambers  
 # 366 HELPER Mike Scott  
 BULK TRUCK  
 # 609-241 DRIVER Mike Eldridge  
 BULK TRUCK  
 # DRIVER

**REMARKS:**

Break circulation with Rig mud  
Pump 5 bbls Freshwater A Lows  
with 200 sks class A 34cc 24 gel  
Displace 16.07 bbls Freshwater & shut in  
Cemented Prod circulation  
plug down - 3515 ph  
Run Down -

**SERVICE**

DEPTH OF JOB  
 PUMP TRUCK CHARGE 1512.30  
 EXTRA FOOTAGE @  
 MILEAGE Hum 4 @ 7.70 30.80  
 MANIFOLD @  
Hum 4 @ 4.45 17.69  
 @

TOTAL 1.560.65

CHARGE TO: Cobalt Energy  
 STREET  
 CITY STATE ZIP

**PLUG & FLOAT EQUIPMENT**

@  
 @  
 @  
 @  
 @

TOTAL

To: Allied Oil & Gas Services, LLC.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)  
 TOTAL CHARGES 6.332.31  
1.580.52  
 DISCOUNT 4.741.73  
 LE PAID IN 30 DAYS

PRINTED NAME X Sam Simpus  
 SIGNATURE X Sam S  
Thank You!!



Services, Inc.

CHARGE TO: Cobalt  
ADDRESS  
CITY, STATE, ZIP CODE

TICKET No 24507

PAGE 1 OF 2

1. SERVICE LOCATIONS	WELL/PROJECT NO. 1-27	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
	Hub City KS	Vehicle	Ness	KS	Hub City	13 Jul 13	
2.	TICKET TYPE	CONTRACTOR	RIG NAME/NO.	SHIPPED VIA	DELIVERED TO	ORDER NO.	
	<input type="checkbox"/> SERVICE						
	<input type="checkbox"/> SALES						
3.	WELL TYPE	WELL CATEGORY	JOB PURPOSE	WELL PERMIT NO.	WELL LOCATION		
	011	Southwind	2 stage long string		07-18-21		
4.	REFERRAL LOCATION	INVOICE INSTRUCTIONS					

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	UM	QTY.	UM	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575					MILEAGE TRAV 114	10	mi			6.00	60.00
579					Pump charge	1	ea			2000.00	2000.00
403					Cement Basket	52	in		2 ea	285.00	5200.00
407					Insert Pilot shoe w/ AUTO FILL	52	in		1 ea	375.00	375.00
408					DV tool	52	in		10 ea	3300.00	3300.00
409					turbolizers	52	in		10 ea	90.00	900.00
417					DV tool latch down plug & bottle	52	in		1 ea	200.00	200.00
580					ADDITIONAL HOURS	2	ea			200.00	400.00

**LEGAL TERMS:** Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY**, and **LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

DATE SIGNED: 05/30/13  AM  P.M.

WIFI OPERATOR: [Signature]

APPROVAL: [Signature]

**REMIT PAYMENT TO:**  
 SWIFT SERVICES, INC.  
 P.O. BOX 466  
 NESS CITY, KS 67560  
 785-798-2300

**SURVEY**

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?	AGREE	UN-DECIDED	DIS-AGREE
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB SATISFACTORILY?			
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND			

PAGE TOTAL 1  
 7805.00  
 924.00  
 17050.00

TAX 6.15%  
 835.79

TOTAL 17,885.79

Thank You!

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES: The customer hereby acknowledges receipt of the materials and services listed on this ticket.



PO Box 466  
Ness City, KS 67560  
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 24507

PRICE REFERENCE	SECONDARY REFERENCE / PART NUMBER	ACCOUNTING CODE	TIME	CUSTOMER	DESCRIPTION	WELL		DATE	UNIT PRICE	AMOUNT			
						QTY	UM						
330				Cobalt	SMD cement	200	SK	1890113	17.00	3400.00			
335					STANDARD cement (for 8-2)	175	SK		14.00	2450.00			
284					Calseal	800	LB		35.00	2800.00			
283					Salt	900	LB		0.20	180.00			
286					brhd-1	100	LB		8.00	800.00			
276					Fluore	100	LB		2.00	200.00			
281					mudflush	500	gal		1.35	675.00			
221					RCL Pigrod	4	gal		25.00	100.00			
290					D-air	5	gal		42.00	210.00			
582					Drygas (min)	1	cu		250.00	250.00			
581					Service Charge				2.00	758.00			
				MILEAGE CHARGE		TOTAL WEIGHT		LOADED MILES		CUBIC FEET		TON MILES	
				38208		375		1 cu					
CONTINUATION TOTAL										9245.00			

JOB LOG

SWIFT Services, Inc.

DATE 13 Jul 13 PAGE NO. 1

CUSTOMER Cobalt WELL NO. 1-27 LEASE VonLehe JOB TYPE 2 stage cement long string TICKET NO. 24507

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
								17.5sk EA-2 cement w/ 1/4" floccle
								200sk SMD cement w/ 1/4" floccle
								5 1/2" casing 15.5" set @ 4104' shoejt 42.11'
								Centralizers 1, 2, 3, 4, 5, 6, 7, 8, 10, 6, 8 Basket 2, 6, 8
								DV tool "69 - 1504' 2 joints out
	1630							on loc TRK 114
	1812							start 5 1/2" x 15.5" casing in well
	2235							Drop ball - circulate
	2310		12					Pump 500 gal mud flush
			20					Pump 20 bbl RCL flush
	2315	4 1/2	42			200		mix EA-2 cement 17.5sk @ 15.3 ppg
								Drop 1st stage plug
								wash out pump & line
	2355	6				200		Displace plug w/ H <sub>2</sub> O
		6	70			600		pump mud
14 Jul	0015	6	104			1500		Land 1st stage plug
								Release pressure to truck - dried up
								Drop bomb
								wash truck
	0630		1			1100		open DV tool
	0035							circulate well
	0345		20			100		Pump 20 bbl RCL flush
	0350		7					Plug RH - <del>170</del> 30sk = <del>20sk</del>
	0420	4 3/4	100			150		mix SMD cement <del>17.5sk</del> @ 11.2 ppg
								Drop 2nd stage plug
		5				100		Displace plug
		5	30			400		— cement to surface —
	0450	5	35			1500		land 2nd stage plug
								Release pressure to truck - dried up
	0500							wash truck
								170 sk mixed 30sk top it
								Rack up
	0525							Job complete
								Thru Blow, Flirt, & SAG

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

August 14, 2013

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

Re: ACO1  
API 15-135-25629-00-00  
VonLehe 'A' 1-27  
NE/4 Sec.27-18S-24W  
Ness 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





## DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

115 S Belmont #12  
Wichita KS 67208

ATTN: Larry Nicholson

**Von Lehe 'A' #1-27**

**27-18s-24w Ness,KS**

Start Date: 2013.07.11 @ 04:45:37

End Date: 2013.07.11 @ 10:31:37

Job Ticket #: 53989                      DST #: 1

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

Printed: 2013.07.16 @ 13:47:31



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Cobalt Energy LLC

**27-18s-24w Ness, KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

Job Ticket: 53989

**DST#: 1**

ATTN: Larry Nicholson

Test Start: 2013.07.11 @ 04:45:37

## GENERAL INFORMATION:

Formation: **Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:11:37

Time Test Ended: 10:31:37

Test Type: Conventional Bottom Hole (Initial)

Tester: Tate Lang

Unit No: 54

**Interval: 4182.00 ft (KB) To 4212.00 ft (KB) (TVD)**

Reference Elevations: 2273.00 ft (KB)

Total Depth: 4212.00 ft (KB) (TVD)

2261.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

**Serial #: 8789 Outside**

Press @ Run Depth: 19.73 psig @ 4184.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.11

End Date:

2013.07.11

Last Calib.:

2013.07.11

Start Time: 04:45:39

End Time:

10:31:37

Time On Btm:

2013.07.11 @ 07:11:22

Time Off Btm:

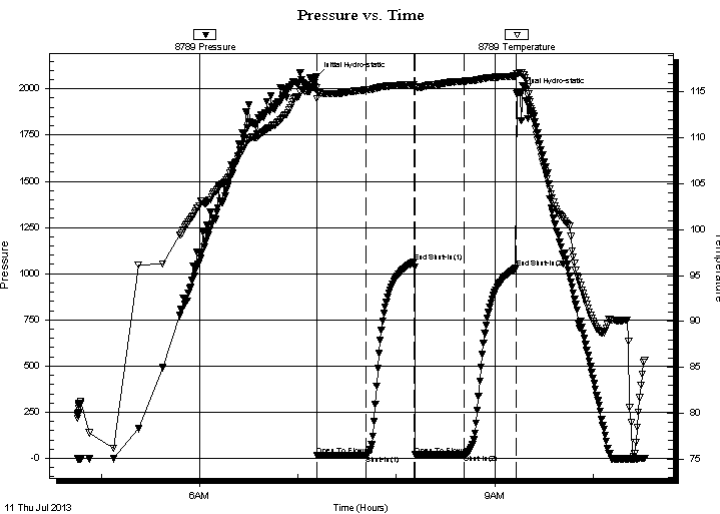
2013.07.11 @ 09:13:37

**TEST COMMENT:** Weak surface blow died @ 20 mins.

Dead no blow back

Dead no blow

Dead no blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2065.44	115.52	Initial Hydro-static
1	16.98	114.32	Open To Flow (1)
31	17.34	115.21	Shut-In(1)
60	1064.68	115.82	End Shut-In(1)
61	19.27	115.53	Open To Flow (2)
90	19.73	116.16	Shut-In(2)
122	1028.51	116.72	End Shut-In(2)
123	1979.34	117.00	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	100%M	0.14

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Cobalt Energy LLC

**27-18s-24w Ness, KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

ATTN: Larry Nicholson

Job Ticket: 53989

**DST#: 1**

Test Start: 2013.07.11 @ 04:45:37

## GENERAL INFORMATION:

Formation: **Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:11:37

Time Test Ended: 10:31:37

**Interval: 4182.00 ft (KB) To 4212.00 ft (KB) (TVD)**

Total Depth: 4212.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Initial)

Tester: Tate Lang

Unit No: 54

Reference Elevations: 2273.00 ft (KB)

2261.00 ft (CF)

KB to GR/CF: 12.00 ft

**Serial #: 6668 Inside**

Press @ Run Depth: psig @ 4184.00 ft (KB)

Start Date: 2013.07.11 End Date: 2013.07.11

Start Time: 04:45:35 End Time: 10:31:33

Capacity: 8000.00 psig

Last Calib.: 2013.07.11

Time On Btm:

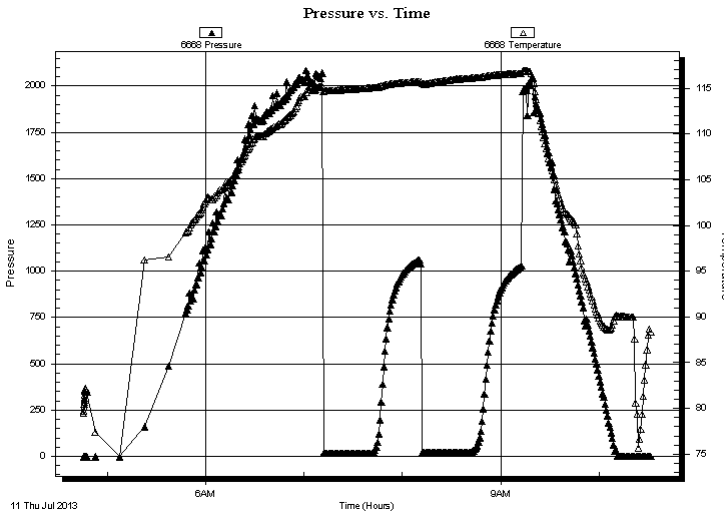
Time Off Btm:

**TEST COMMENT:** Weak surface blow died @ 20 mins.

Dead no blow back

Dead no blow

Dead no blow back



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	100%M	0.14

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Cobalt Energy LLC

**27-18s-24w Ness, KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

Job Ticket: 53989

**DST#: 1**

ATTN: Larry Nicholson

Test Start: 2013.07.11 @ 04:45:37

## Tool Information

Drill Pipe:	Length: 4160.00 ft	Diameter: 3.80 inches	Volume: 58.35 bbl	Tool Weight: 22000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 58.35 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4182.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	58.00 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			4155.00	
Shut In Tool	5.00			4160.00	
Hydraulic tool	5.00			4165.00	
Jars	5.00			4170.00	
Safety Joint	2.00			4172.00	
Packer	5.00			4177.00	28.00 Bottom Of Top Packer
Packer	5.00			4182.00	
Stubb	1.00			4183.00	
Perforations	1.00			4184.00	
Recorder	0.00	6668	Inside	4184.00	
Recorder	0.00	8789	Outside	4184.00	
Perforations	25.00			4209.00	
Bullnose	3.00			4212.00	30.00 Bottom Packers & Anchor

**Total Tool Length: 58.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Cobalt Energy LLC

**27-18s-24w Ness,KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

Job Ticket: 53989

**DST#: 1**

ATTN: Larry Nicholson

Test Start: 2013.07.11 @ 04:45:37

## 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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 4500.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	100%M	0.140

Total Length: 10.00 ft      Total Volume: 0.140 bbl

Num Fluid Samples: 0

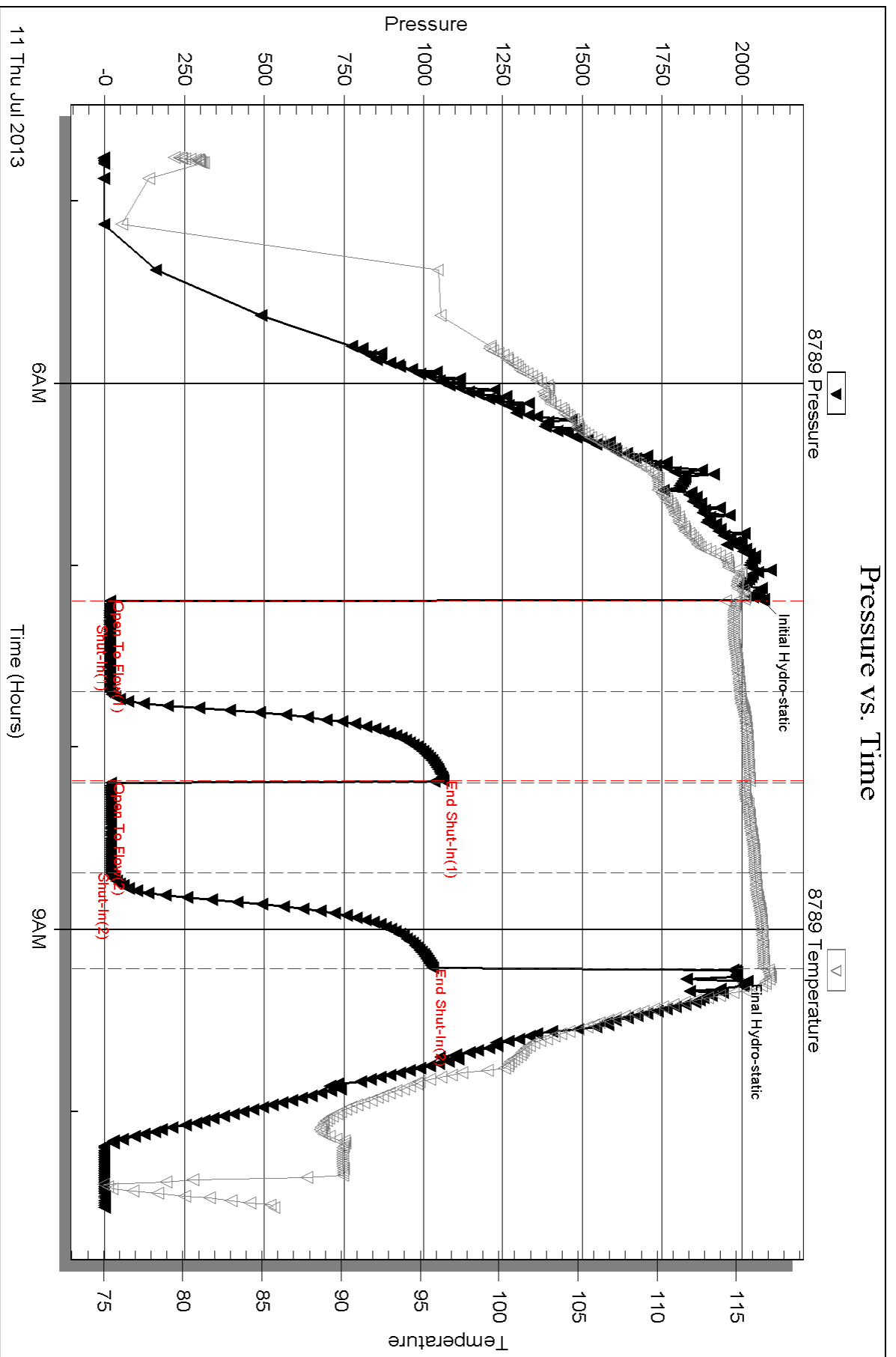
Num Gas Bombs: 0

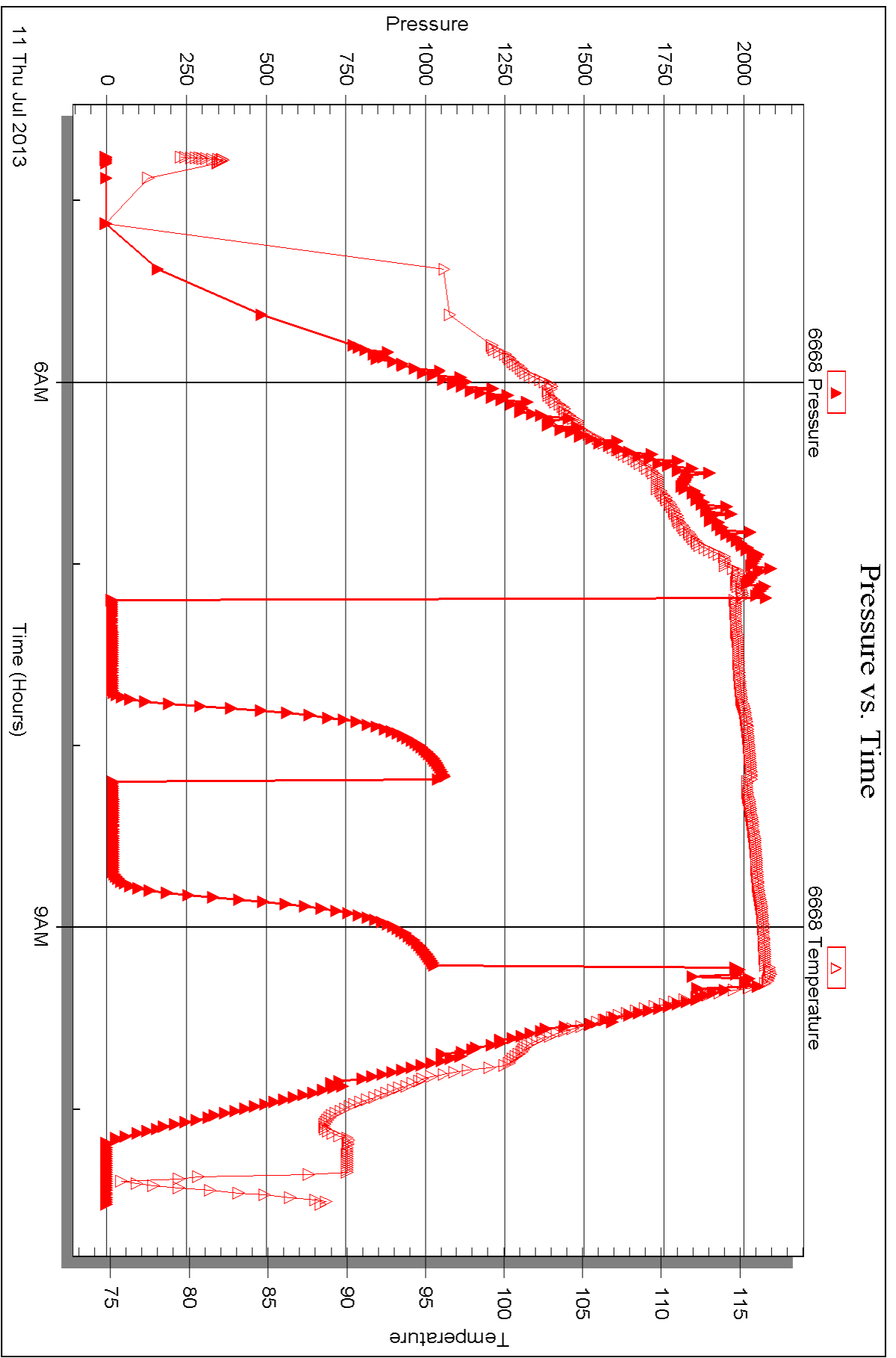
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







## DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

115 S Belmont #12  
Wichita KS 67208

ATTN: Larry Nicholson

**Von Lehe 'A' #1-27**

**27-18s-24w Ness,KS**

Start Date: 2013.07.11 @ 22:22:50

End Date: 2013.07.12 @ 04:31:35

Job Ticket #: 53990                      DST #: 2

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

Printed: 2013.07.16 @ 13:32:04





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Cobalt Energy LLC

**27-18s-24w Ness,KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

ATTN: Larry Nicholson

Job Ticket: 53990

**DST#: 2**

Test Start: 2013.07.11 @ 22:22:50

## GENERAL INFORMATION:

Formation: **Miss.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:30:20

Time Test Ended: 04:31:35

Test Type: Conventional Bottom Hole (Reset)

Tester: Tate Lang

Unit No: 54

**Interval: 4256.00 ft (KB) To 4305.00 ft (KB) (TVD)**

Reference Elevations: 2273.00 ft (KB)

Total Depth: 4305.00 ft (KB) (TVD)

2261.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

**Serial #: 8789 Outside**

Press @ Run Depth: 18.13 psig @ 4259.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2013.07.11

End Date:

2013.07.12

Last Calib.:

2013.07.12

Start Time: 22:22:52

End Time:

04:31:35

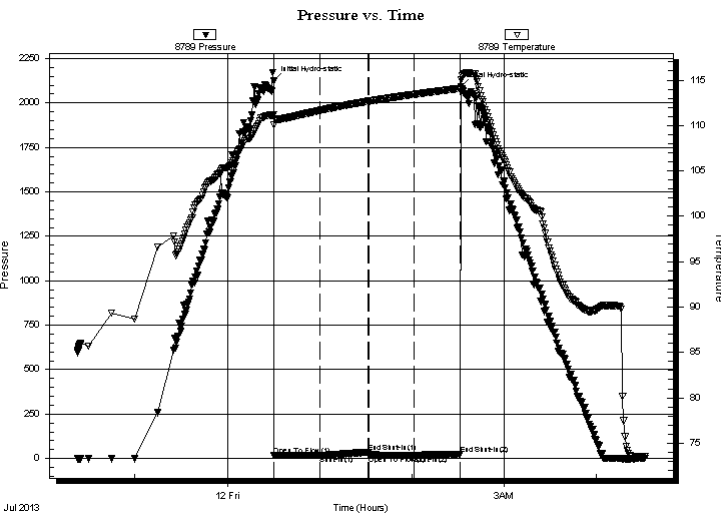
Time On Btm:

2013.07.12 @ 00:30:05

Time Off Btm:

2013.07.12 @ 02:31:50

**TEST COMMENT:** Weak surface blow  
Dead no blow back  
Dead no blow  
Dead no blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2123.68	111.21	Initial Hydro-static
1	17.36	110.02	Open To Flow (1)
31	17.80	111.66	Shut-In(1)
62	35.18	112.67	End Shut-In(1)
62	19.43	112.67	Open To Flow (2)
92	18.13	113.43	Shut-In(2)
121	24.71	114.09	End Shut-In(2)
122	2092.37	115.00	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2.00	100%M Thick Heavy Mud w ith skim oil	0.03

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE TESTING, INC.**

## DRILL STEM TEST REPORT

Cobalt Energy LLC

**27-18s-24w Ness, KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

Job Ticket: 53990

**DST#: 2**

ATTN: Larry Nicholson

Test Start: 2013.07.11 @ 22:22:50

### GENERAL INFORMATION:

Formation: **Miss.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:30:20

Time Test Ended: 04:31:35

**Interval: 4256.00 ft (KB) To 4305.00 ft (KB) (TVD)**

Total Depth: 4305.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)

Tester: Tate Lang

Unit No: 54

Reference Elevations: 2273.00 ft (KB)

2261.00 ft (CF)

KB to GR/CF: 12.00 ft

**Serial #: 6668 Inside**

Press @ Run Depth: psig @ 4259.00 ft (KB)

Start Date: 2013.07.11

End Date: 2013.07.12

Capacity: 8000.00 psig

Last Calib.: 2013.07.12

Start Time: 22:22:25

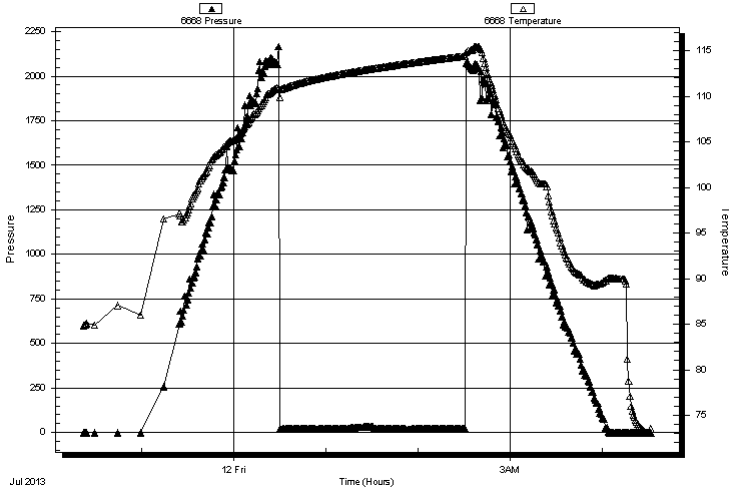
End Time: 04:31:38

Time On Btm:

Time Off Btm:

**TEST COMMENT:** Weak surface blow  
Dead no blow back  
Dead no blow  
Dead no blow back

Pressure vs. Time



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
2.00	100%M Thick Heavy Mud with skim oil	0.03

\* 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

**27-18s-24w Ness, KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

Job Ticket: 53990

**DST#: 2**

ATTN: Larry Nicholson

Test Start: 2013.07.11 @ 22:22:50

## Tool Information

Drill Pipe:	Length: 4252.00 ft	Diameter: 3.80 inches	Volume: 59.64 bbl	Tool Weight: 22000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 59.64 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4256.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	49.00 ft			
Tool Length:	77.00 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			4229.00	
Shut In Tool	5.00			4234.00	
Hydraulic tool	5.00			4239.00	
Jars	5.00			4244.00	
Safety Joint	2.00			4246.00	
Packer	5.00			4251.00	28.00 Bottom Of Top Packer
Packer	5.00			4256.00	
Stubb	1.00			4257.00	
Perforations	2.00			4259.00	
Recorder	0.00	6668	Inside	4259.00	
Recorder	0.00	8789	Outside	4259.00	
Change Over Sub	1.00			4260.00	
Drill Pipe	31.00			4291.00	
Change Over Sub	1.00			4292.00	
Perforations	10.00			4302.00	
Bullnose	3.00			4305.00	49.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>77.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Cobalt Energy LLC

**27-18s-24w Ness, KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

Job Ticket: 53990

**DST#: 2**

ATTN: Larry Nicholson

Test Start: 2013.07.11 @ 22:22:50

## 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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 5500.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	100%M Thick Heavy Mud w ith skim oil	0.028

Total Length: 2.00 ft      Total Volume: 0.028 bbl

Num Fluid Samples: 0

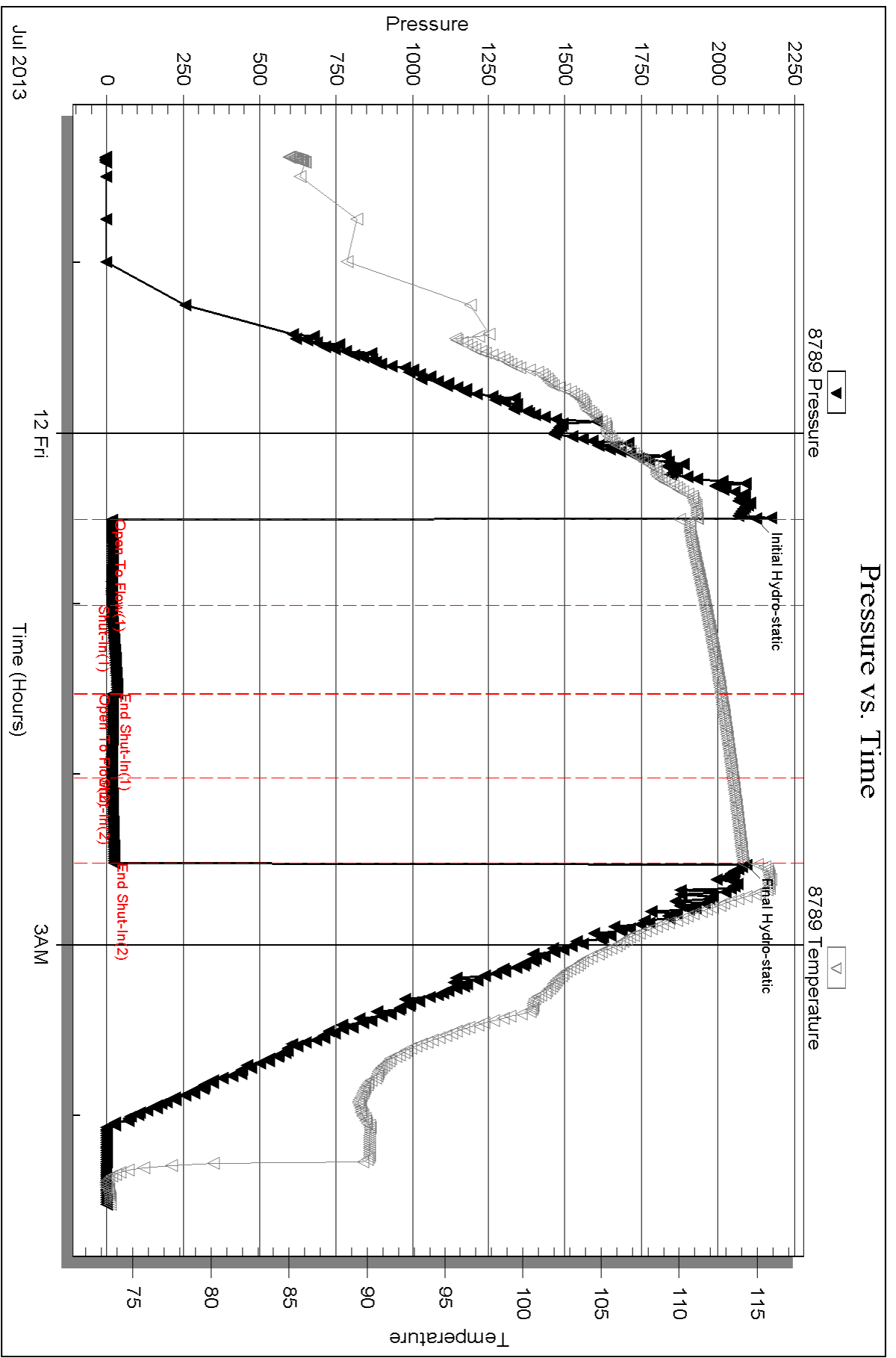
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



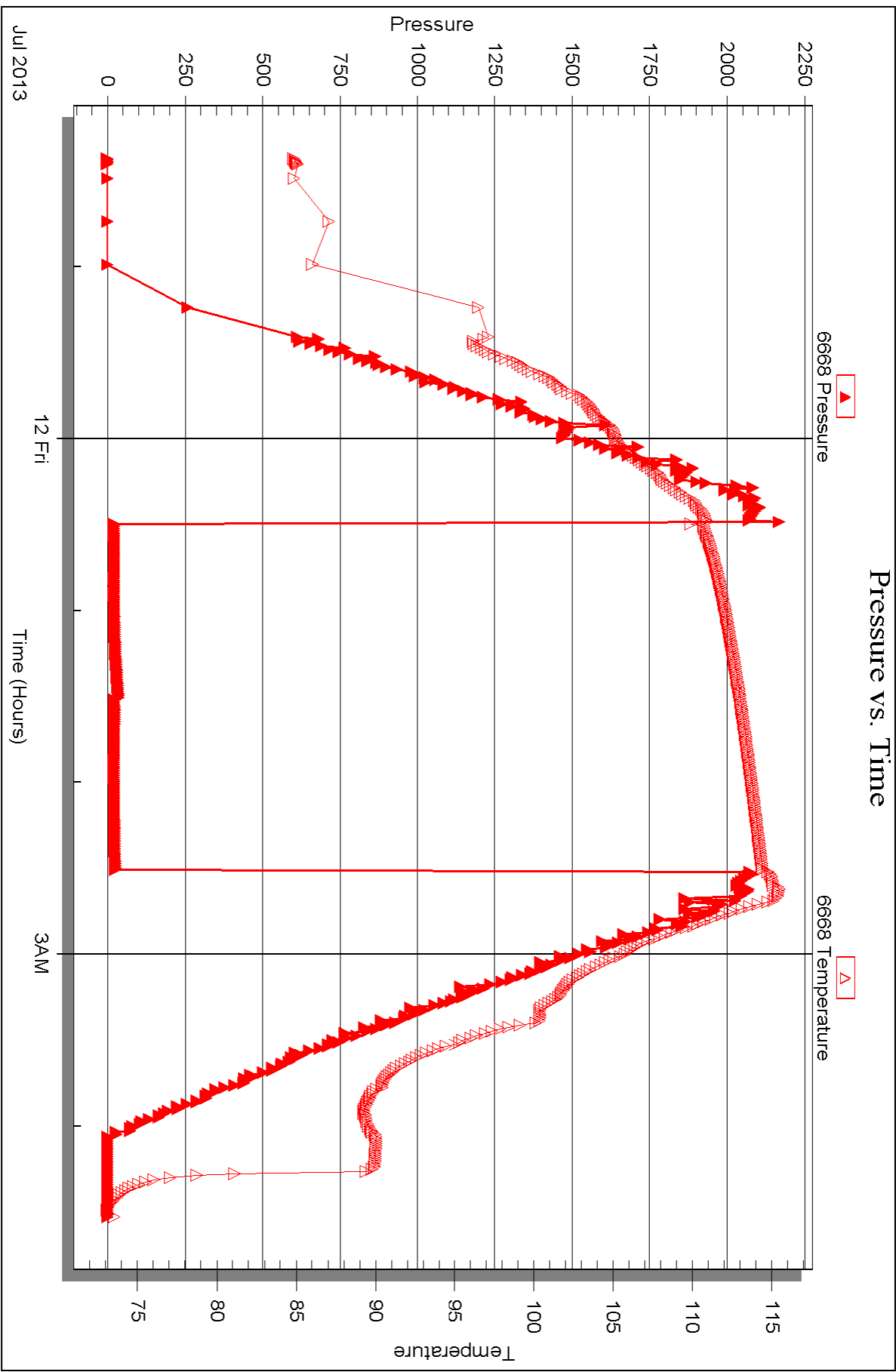
Serial #: 6668

Inside

Cobalt Energy LLC

Von Lehe 'A' #1-27

DST Test Number: 2





## DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

115 S Belmont #12  
Wichita KS 67208

ATTN: Larry Nicholson

**Von Lehe 'A' #1-27**

**27-18s-24w Ness,KS**

Start Date: 2013.07.12 @ 11:35:36

End Date: 2013.07.12 @ 21:53:21

Job Ticket #: 53991                      DST #: 3

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

Printed: 2013.07.16 @ 13:31:16



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cobalt Energy LLC

**27-18s-24w Ness, KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

ATTN: Larry Nicholson

Job Ticket: 53991

**DST#: 3**

Test Start: 2013.07.12 @ 11:35:36

## GENERAL INFORMATION:

Formation: **Miss**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 13:28:36  
 Time Test Ended: 21:53:21  
 Interval: **4295.00 ft (KB) To 4315.00 ft (KB) (TVD)**  
 Total Depth: 4315.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Tate Lang  
 Unit No: 54  
 Reference Elevations: 2273.00 ft (KB)  
 2261.00 ft (CF)  
 KB to GR/CF: 12.00 ft

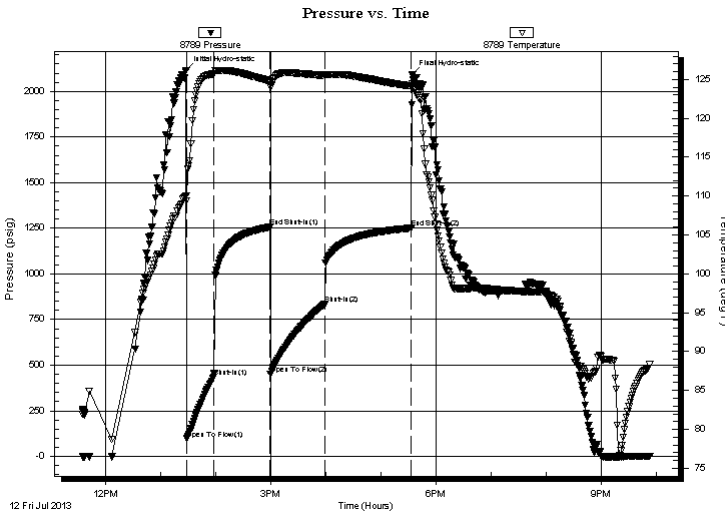
## Serial #: 8789

**Outside**

Press @ Run Depth: 833.06 psig @ 4297.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2013.07.12 End Date: 2013.07.12 Last Calib.: 2013.07.12  
 Start Time: 11:35:38 End Time: 21:53:21 Time On Btm: 2013.07.12 @ 13:28:06  
 Time Off Btm: 2013.07.12 @ 17:34:21

**TEST COMMENT:** B.O.B. in 2 mins  
 Strong surface blow back built to 10 in.  
 B.O.B. in 3 mins.  
 Weak surface blow back died in 15 mins.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2114.77	110.02	Initial Hydro-static
1	96.90	109.37	Open To Flow (1)
31	434.90	125.70	Shut-In(1)
92	1255.80	124.75	End Shut-In(1)
92	451.22	124.00	Open To Flow (2)
151	833.06	125.50	Shut-In(2)
245	1251.29	124.14	End Shut-In(2)
247	2092.11	124.12	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	2%G 78%W 20%M	1.68
2428.00	25%G 75%O	34.06
0.00	620 GIP	0.00

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

Cobalt Energy LLC

**27-18s-24w Ness, KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

ATTN: Larry Nicholson

Job Ticket: 53991

**DST#: 3**

Test Start: 2013.07.12 @ 11:35:36

**GENERAL INFORMATION:**

Formation: **Miss**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 13:28:36

Time Test Ended: 21:53:21

**Interval: 4295.00 ft (KB) To 4315.00 ft (KB) (TVD)**

Total Depth: 4315.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: **Good**

Test Type: **Conventional Bottom Hole (Reset)**

Tester: **Tate Lang**

Unit No: **54**

Reference Elevations: 2273.00 ft (KB)

2261.00 ft (CF)

KB to GR/CF: 12.00 ft

**Serial #: 6668** **Inside**

Press@RunDepth: **psig @ 4297.00 ft (KB)**

Start Date: 2013.07.12

End Date: 2013.07.12

Capacity: 8000.00 psig

Last Calib.: 2013.07.12

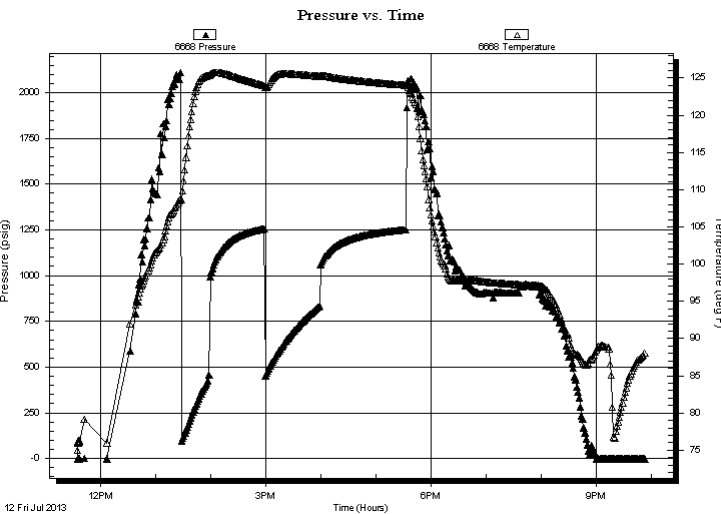
Start Time: 11:35:31

End Time: 21:53:14

Time On Btm:

Time Off Btm:

**TEST COMMENT:** B.O.B. in 2 mins  
Strong surface blow back built to 10 in.  
B.O.B. in 3 mins.  
Weak surface blow back died in 15 mins.



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
120.00	2%G 78%W 20%M	1.68
2428.00	25%G 75%O	34.06
0.00	620 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 LLC

**27-18s-24w Ness, KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

Job Ticket: 53991

**DST#: 3**

ATTN: Larry Nicholson

Test Start: 2013.07.12 @ 11:35:36

## Tool Information

Drill Pipe:	Length: 4282.00 ft	Diameter: 3.80 inches	Volume: 60.07 bbl	Tool Weight: 22000.00 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 60.07 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4295.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	20.00 ft			
Tool Length:	48.00 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			4268.00	
Shut In Tool	5.00			4273.00	
Hydraulic tool	5.00			4278.00	
Jars	5.00			4283.00	
Safety Joint	2.00			4285.00	
Packer	5.00			4290.00	28.00 Bottom Of Top Packer
Packer	5.00			4295.00	
Stubb	1.00			4296.00	
Perforations	1.00			4297.00	
Recorder	0.00	6668	Inside	4297.00	
Recorder	0.00	8789	Outside	4297.00	
Perforations	15.00			4312.00	
Bullnose	3.00			4315.00	20.00 Bottom Packers & Anchor

**Total Tool Length: 48.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Cobalt Energy LLC

**27-18s-24w Ness,KS**

115 S Belmont #12  
Wichita KS 67208

**Von Lehe 'A' #1-27**

Job Ticket: 53991

**DST#: 3**

ATTN: Larry Nicholson

Test Start: 2013.07.12 @ 11:35:36

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 10.00 lb/gal  
Viscosity: 60.00 sec/qt  
Water Loss: 9.99 in<sup>3</sup>  
Resistivity: 6400.00 ohm.m  
Salinity: ppm  
Filter Cake: 1.00 inches

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

Oil API: 37 deg API  
Water Salinity: 11000 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	2%G 78%W 20%M	1.683
2428.00	25%G 75%O	34.058
0.00	620 GIP	0.000

Total Length: 2548.00 ft      Total Volume: 35.741 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

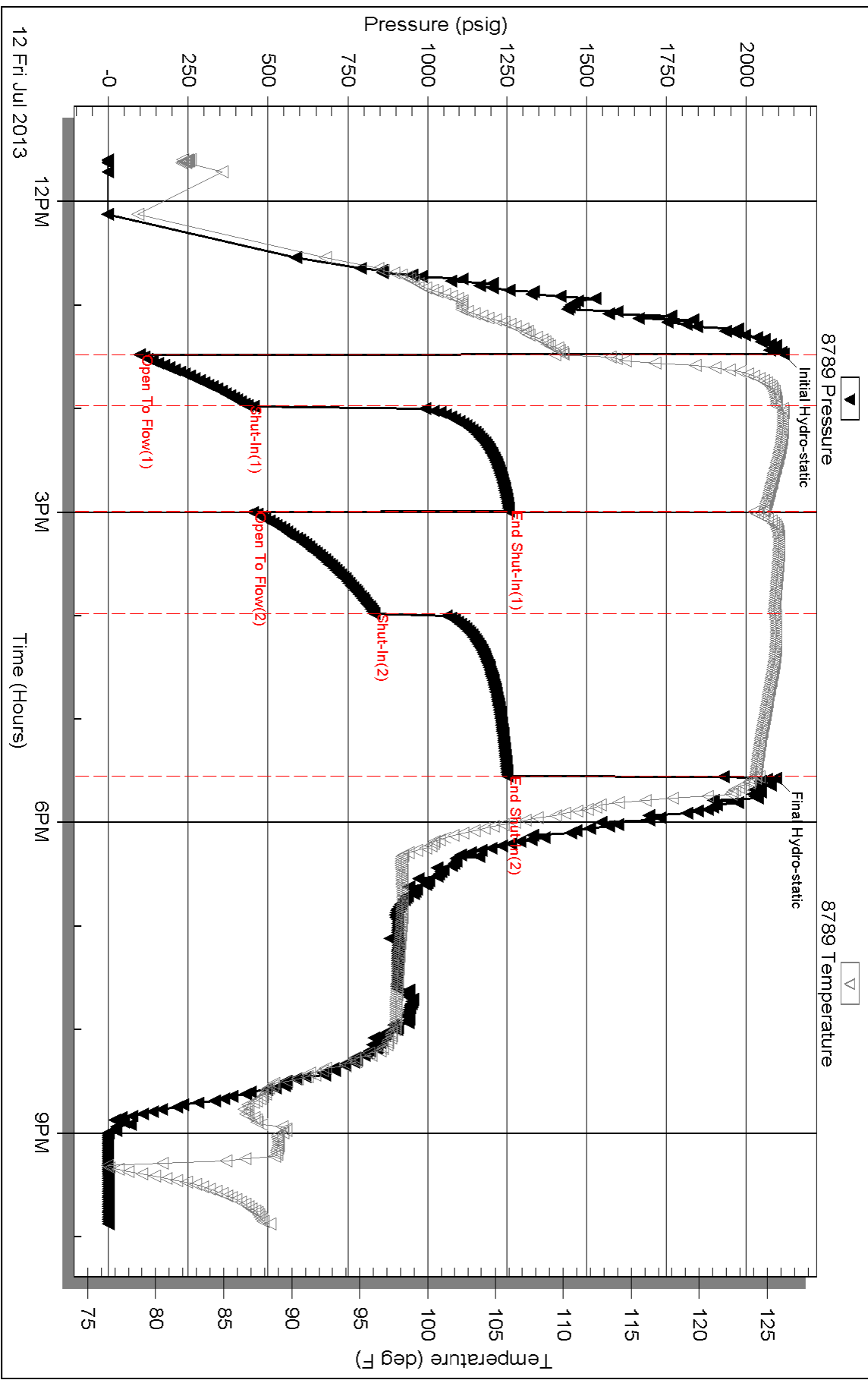
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time



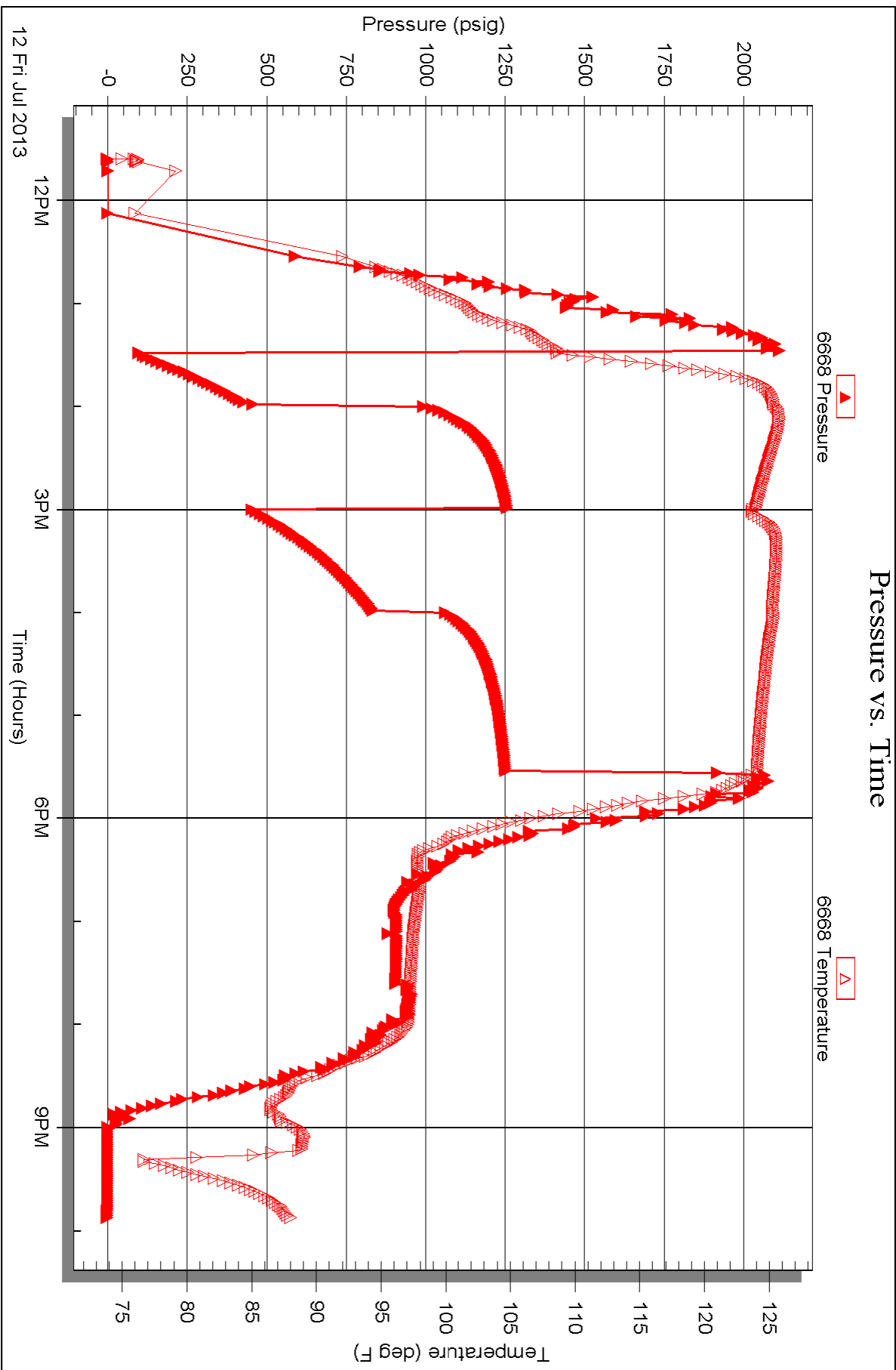
Serial #: 6668

Inside

Cobalt Energy LLC

Von Lehe 'A' #1-27

DST Test Number: 3





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 53989

Well Name & No. VonLehe 'A' #1-27 Test No. 1 Date 7-11-13  
 Company Cobalt Energy LLC Elevation 2273 KB 2261 GL  
 Address 115 S Belmont #12 Wichita KS 67208  
 Co. Rep / Geo. Larry Nicholson Rig Southwind Rig #70  
 Location: Sec. 27 Twp. 18 Rge. 24 Co. Ness State KS

Interval Tested 4182 4212 Zone Tested Ft. Scott  
 Anchor Length 30 Drill Pipe Run 4160 Mud Wt. 9.3  
 Top Packer Depth 4178 Drill Collars Run 0 Vis 48  
 Bottom Packer Depth 4182 Wt. Pipe Run 0 WL 9.2  
 Total Depth 4212 Chlorides 4500 ppm System LCM 20

Blow Description Weak surface blow died in 20 mins  
Dead no blow back  
Dead no blow  
Dead no blow back

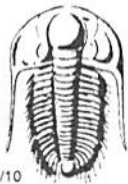
Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>100% Mud</u>				<u>100% mud</u>

Rec Total 10 BHT 117 Gravity — API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic 2065  Test 1250 T-On Location 03:50  
 (B) First Initial Flow 17  Jars 250 T-Started 04:45  
 (C) First Final Flow 17  Safety Joint 75 T-Open 07:13  
 (D) Initial Shut-In 1065  Circ Sub T-Pulled 09:13  
 (E) Second Initial Flow 19  Hourly Standby T-Out 10:32  
 (F) Second Final Flow 20  Mileage 201.50 130 R/M Comments \_\_\_\_\_  
 (G) Final Shut-In 1029  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1979  Straddle \_\_\_\_\_  
 Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 30  Day Standby \_\_\_\_\_ Total 1776.50  
 Final Flow 30  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 30 Sub Total 1776.50

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.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 53990

Well Name & No. VonLeche 'A' #1-27 Test No. 2 Date 7-1-13  
 Company Cobalt Energy LLC Elevation 2273 KB 2261 GL  
 Address \_\_\_\_\_  
 Co. Rep / Geo. Larry Nicholson Rig Southwind Rig # 70  
 Location: Sec. 27 Twp. 18 Rge. 24 Co. Ness State Ks

Interval Tested 4256 4305 Zone Tested Miss.  
 Anchor Length \_\_\_\_\_ 49' Drill Pipe Run 4252 Mud Wt. 9.13  
 Top Packer Depth \_\_\_\_\_ 4252 Drill Collars Run 0 Vis 48  
 Bottom Packer Depth \_\_\_\_\_ 4256 Wt. Pipe Run 0 WL 8.8  
 Total Depth \_\_\_\_\_ 4305 Chlorides 5500 ppm System LCM 0#

Blow Description Weak surface blow  
Dead no blow back  
Dead no blow back  
Dead no blow back

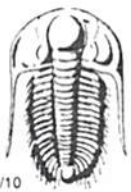
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>2</u>	Feet of <u>Heavy thick mud with skin of oil</u>	%gas	%oil	%water	<u>100</u> %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2 BHT 117 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>21.24</u>	<input checked="" type="checkbox"/> Test 1250	T-On Location <u>21:45</u>
(B) First Initial Flow <u>17</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>22:22</u>
(C) First Final Flow <u>18</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>00:30 (7-12)</u>
(D) Initial Shut-In <u>35</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>02:30 (7-12)</u>
(E) Second Initial Flow <u>19</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>04:30 (7-12)</u>
(F) Second Final Flow <u>18</u>	<input checked="" type="checkbox"/> Mileage <u>201.50</u> <u>130 R/T</u>	Comments _____
(G) Final Shut-In <u>25</u>	<input type="checkbox"/> Sampler	_____
(H) Final Hydrostatic <u>2092</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>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	Total <u>1776.50</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't _____
	Sub Total <u>1776.50</u>	

Approved By \_\_\_\_\_ Our Representative [Signature] Thanks

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. 53991

Well Name & No. VonLehe 'A' #1-27 Test No. 3 Date 7-12-13  
 Company Cobalt Energy LLC Elevation 2273 KB 261 GL  
 Address \_\_\_\_\_  
 Co. Rep / Geo. Larry Nicholson Rig Southwind Rig # 70  
 Location: Sec. 27 Twp. 18 Rge. 24 Co. Ness State KS

Interval Tested 4295 4315 Zone Tested Miss  
 Anchor Length \_\_\_\_\_ Drill Pipe Run 4282 Mud Wt. 9.5  
 Top Packer Depth \_\_\_\_\_ Drill Collars Run 0 Vis 60  
 Bottom Packer Depth \_\_\_\_\_ Wt. Pipe Run 0 WL 10.8  
 Total Depth \_\_\_\_\_ Chlorides 6400 ppm System LCM 0#

Blow Description B.O.B. in 2mins  
Strong surface blow back built to 10in.  
B.O.B. in 3mins.  
Weak surface blow back died in 15mins.

Rec	Feet of	%gas	%oil	%water	%mud
<u>620</u>	<u>GIP</u>	<u>100</u>			
<u>209</u>	<u>60</u>	<u>25</u>	<u>75</u>		
<u>120</u>	<u>MCGW</u>	<u>2</u>		<u>78</u>	<u>20</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	<u>437980</u>	%oil	%water
Rec Total	<u>2428</u>				

BHT 125 Gravity 37 API RW 35 @ 80 ° F Chlorides 11000 ppm  
 (A) Initial Hydrostatic 2115  Test 1150 T-On Location 10:55  
 (B) First Initial Flow 97  Jars 250 T-Started 11:35  
 (C) First Final Flow 435  Safety Joint 75 T-Open 13:28  
 (D) Initial Shut-In 1256  Circ Sub Dropped Bar 50 T-Pulled 17:28  
 (E) Second Initial Flow 451  Hourly Standby 1hr 100 T-Out 21:53  
 (F) Second Final Flow 823  Mileage 130 RT 201.50  
 (G) Final Shut-In 1251  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2092  Straddle \_\_\_\_\_

Initial Open 30  Shale Packer \_\_\_\_\_  
 Initial Shut-In 60  Shale Packer \_\_\_\_\_  
 Final Flow 60  Extra Packer \_\_\_\_\_  
 Final Shut-In 90  Extra Recorder \_\_\_\_\_  
 Sub Total 0  
 Total 1826.50  
 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative [Signature]  
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# GEOLOGICAL REPORT

## Larry A. Nicholson

COMPANY & WELL: Colbalt Energy, VonLehe "A" #1-27  
 LOCATION: 1885 FNL, 1030' FEL SW NW SE NE  
 SEC. 27 TWP. 18S RGE. 24W  
 COUNTY: Ness STATE: KS

COMPANY: Colbalt Energy, LLC  
 API #: 15-135-25629 FIELD: Wildcat  
 LEASE: VonLehe # "A" #1-27 WELL: "A" #1-27  
 LOCATION: SW NW SE NE  
 SECTION: 27 TWP: 18S RGE: 24W  
 COUNTY: Ness STATE: Kansas  
 CONTRACTOR: Southwind Drilling, Inc. Rig # 20  
 SPUD: 07-05-13 8:45 am  
 RTD: 4400' 8:30 am 07-13-13 LTD: 4404'  
 MUD TYPE: Chemical MudCo  
 SAMPLES SAVED: FROM 3300' TO RTD  
 DRILLING TIME: FROM 3300' TO RTD  
 SAMPLES EXAMINED: FROM 3300' TO RTD  
 GEOLOGICAL SUPERVISION: FROM 3300' TO RTD  
 WELLSITE GEOLOGIST: LARRY A. NICHOLSON

**ELEVATIONS**  
 K.B. 2273'  
 D.F. \_\_\_\_\_  
 G.L. 2261'  
 All measurements from K.B. 2273'

**CASING RECORD**  
 Conductor \_\_\_\_\_ of \_\_\_\_\_ ft  
 Surface 267' of 8-5/8" ID 200' ex  
 Production \_\_\_\_\_ of \_\_\_\_\_ ft

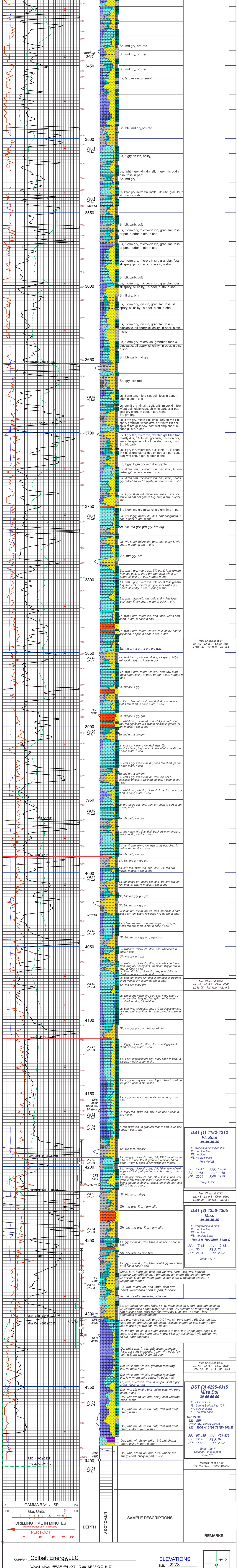
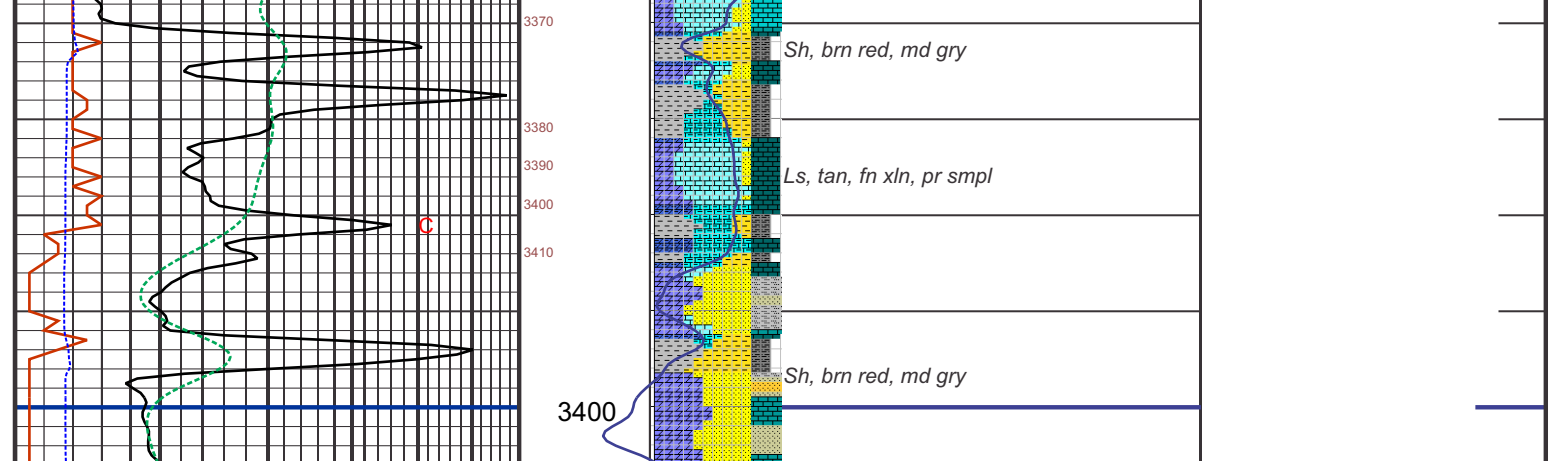
FORMATION TOPS & STRUCTURAL POSITION		ELEG LOC		REFERENCE WELL	
FORMATION	SAMPLE TOPS	TOPS	DATUM	A	B
Anydrile	1537 +736	1537 +736	1365 +894	1401 -867	
Base	1573 +700	1573 +700	1430 +850	1441 -827	
Topoka	3354 -1081	3354 -1081	3366 -1075	3348 -1080	
Heebner	3653 -1380	3653 -1380	3664 -1375	3656 -1388	
Lansing	3695 -1422	3695 -1422	3710 -1421	3698 -1430	
BKC	3989 -1716	3989 -1716	4001 -1712	3994 -1726	
Pawnee	4113 -1840	4113 -1840	4125 -1836	4120 -1852	
Fort Scott	4194 -1944	4194 -1944	4201 -2039	4202 -1934	
Cherokee	4217 -1944	4217 -1944	4226 -1937	4225 -1957	
Miss Dol	4303 -2030	4303 -2030	4298 -2009	4298 -2030	
Mts Dol	4308 -2035	4308 -2035			
RTD	4400 -2127	4400 -2127			
LTD	4404 -2131	4404 -2131			

A: COLBALT ENERGY, Miner Unit 'A' #1-27, 2428' FSL & 1756' FEL, Sec. 27-18S-24W KB 2289  
 B: Thunderbird Drilling, Stoppel #1 NW NE, Sec. 27-18S-24W KB 2268

**REMARKS & RECOMMENDATIONS:**  
 Based on positive Dst results and sample review 5 1/2 casing was set.

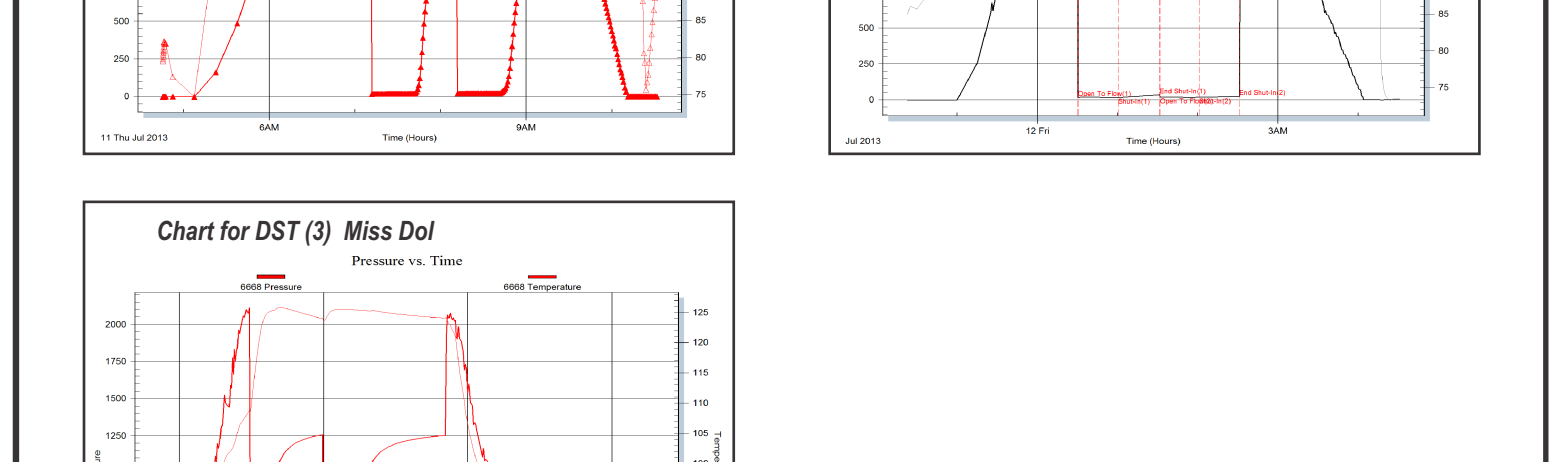
LAN 792, Modified 5/05, 11/11, 4/12 Hanover, KS 66645 1inch = 25.4mm 8.5 x 97.5 216 mm x 2460 mm

### LEGEND



COMPANY: Colbalt Energy, LLC  
 LEASE: VonLehe # "A" #1-27 SW NW SE NE  
 LOCATION: 1885 FNL, 1030' FEL SEC. 27 TWP. 18S RGE. 24W  
 COUNTY: Ness STATE: KS

**ELEVATIONS**  
 K.B. 2273'  
 D.F. \_\_\_\_\_  
 G.L. 2261'  
 All measurements from K.B. 2273'



COMPANY: Colbalt Energy, LLC  
 LEASE: VonLehe # "A" #1-27 SW NW SE NE  
 LOCATION: 1885 FNL, 1030' FEL SEC. 27 TWP. 18S RGE. 24W  
 COUNTY: Ness STATE: KS

**ELEVATIONS**  
 K.B. 2273'  
 D.F. \_\_\_\_\_  
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 All measurements from K.B. 2273'

