

Confidentiality Requested:

Yes No

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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 Geologist Report / Mud Logs <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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Cobalt Energy LLC
Well Name	JAMISON UNIT "A" 1-5
Doc ID	1355051

All Electric Logs Run

DUAL INDUCTION
NEUTRON-DENSITY
MICRO
SONIC

Form	ACO1 - Well Completion
Operator	Cobalt Energy LLC
Well Name	JAMISON UNIT "A" 1-5
Doc ID	1355051

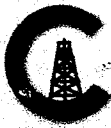
Tops

Name	Top	Datum
ANHY	2021	556
HEEBNER	3719	-1142
LANSING	3756	-1179
STARK	3988	-1411
BKC	4039	-1462
PAWNEE	4197	-1620
CHEROKEE	4270	-1761
MISSISSIPPIAN	4338	-1761

Form	ACO1 - Well Completion
Operator	Cobalt Energy LLC
Well Name	JAMISON UNIT "A" 1-5
Doc ID	1355051

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
		250g, 20% MCA	4357
		250g, 20% MCA, 2% MS	4357
		750g, 20% NE/FE, 2% MS	4357



CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

7861
7758

TICKET NUMBER 51753
LOCATION Oakley, KS
FOREMAN Walt Diakal

FIELD TICKET & TREATMENT REPORT
CEMENT

Invoice # 809945

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
3-27-17	2180	Jamison unit A 1-5	5	14S	27W	Gove
CUSTOMER Colbalt Energy			Park			
MAILING ADDRESS P.O. Box 8037			18S			
CITY Wichita			1E			
STATE KS			1N			
ZIP CODE 67208			E1/2			
		TRUCK #	DRIVER	TRUCK #	DRIVER	
		753	Miles Shaw			
		772-7129	Steven Diakal			

JOB TYPE Surface HOLE SIZE 12 1/4 HOLE DEPTH 255' CASING SIZE & WEIGHT 8 5/8 23#
 CASING DEPTH 255 DRILL PIPE _____ TUBING _____ OTHER _____
 SLURRY WEIGHT 15.2 SLURRY VOL _____ WATER gal/sk _____ CEMENT LEFT in CASING 15'-20'
 DISPLACEMENT 15 DISPLACEMENT PSI _____ MIX PSI _____ RATE 5 BPM

REMARKS: Safety Meeting, Rig up on Murfin #21, Circ Casing on Bottom
Mix 175 SKS Com, 3% BCC, Displace 15 BBL H2O, Shut

Cement Did Circ
Approx 2 BBL to PT

Thank You
Walt Diakal

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
Ceo471	1	PUMP CHARGE	1,150.00	1,150.00
Ceo002	30	MILEAGE	7.15	214.50
Ceo711	8.23	Tax Mileage Delivery	1.75	660.00
CC5800A	17.5 SKS	Class A Cement	20.00	3,500.00
CC5325	495#	Calcium Chloride	1.00	495.00
				6,019.50
		Less	35%	2,106.83
				3,912.67
		SALES TAX		220.73
		ESTIMATED TOTAL		4,133.40

Ravin 3737

AUTHORIZATION Juan Diakal TITLE _____ DATE _____

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



CHARGE TO: **Colbalt Energy**

ADDRESS

CITY, STATE, ZIP CODE

TICKET 29893

PAGE 1 OF 2

1. SERVICE LOCATIONS Ness City KS	WELL/PROJECT NO. #15	LEASE Jamison Unit "A"	COUNTY/PARISH Cove	STATE KS	CITY Pendennis	DATE 4-7-17	OWNER Same
2. TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR Murfin Drilling Co.		RIG NAME/NO.	SHIPPED VIA CT	DELIVERED TO Location	ORDER NO.	
3. WELL TYPE Oil	WELL CATEGORY Development	JOB PURPOSE Cement 5 1/2" Longstring	WELL PERMIT NO.		WELL LOCATION Pendennis - Aug 15, 16, N into		
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M		UNIT PRICE	AMOUNT	
		LOC	ACCT	DF								
575		1			MILEAGE			60	mi	5 ⁰⁰	300	⁰⁰
579		1			Pump Charge - Two-Stage			5 1/2	in	1700 ⁰⁰	1700	⁰⁰
402		1			Centralizer			10	ea	60 ⁰⁰	600	⁰⁰
403		1			Cement Basket			2	ea	250 ⁰⁰	500	⁰⁰
405		1			Formation Packer Shoe			1	ea	1300 ⁰⁰	1300	⁰⁰
408		1			D.V. Tool + Plug Set			1	ea	3250 ⁰⁰	3250	⁰⁰
417		1			D.V. Latch Down Plug + Baffle			1	ea	200 ⁰⁰	200	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

x *Reuben Popp*

DATE SIGNED **4-7-17** TIME SIGNED **1900**

A.M. P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.
 P.O. BOX 466
 NESS CITY, KS 67560
 785-798-2300

SURVEY	AGREE	UN-DECIDED	DIS-AGREE	PAGE TOTAL #1	7850 ⁰⁰
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				PAGE TOTAL #2	9734 ⁰⁰
WE UNDERSTOOD AND MET YOUR NEEDS?					
OUR SERVICE WAS PERFORMED WITHOUT DELAY?					17584 ⁰⁰
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				<i>Goveco.</i>	
ARE YOU SATISFIED WITH OUR SERVICE?	<input type="checkbox"/> YES <input type="checkbox"/> NO			TAX 8.5%	1316 ¹⁴
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND				TOTAL	18900 ¹⁴



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

TICKET CONTINUATION

TICKET No. 29893

CUSTOMER Colbalt Energy
WELL Jamison Unit "A" 1-5
DATE 4-7-17
PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY		U/M		UNIT PRICE		AMOUNT			
		LOC	ACCT	DF			QTY	U/M	QTY	U/M	UNIT PRICE	AMOUNT				
325		1				Standard Cement (EA-2)			175	sk	12	25	2143	75		
284		1				Cal Seal	5	%	8	sk	30	00	240	00		
283		1				Salt	10	%	900	lbs	00	20	180	00		
292		1				Halad 322	1/2	%	100	lbs	8	00	800	00		
276		1				Flocele	1/4	lb	100	lbs	2	25	225	00		
330		1				SMD Cement			235	sk	15	75	3701	25		
290		1				D-Air			4	gal	42	00	168	00		
221		1				Liquid HCL			4	gal	25	00	100	00		
281		1				Mud Flush			500	gal	1	25	625	00		
581		1				SERVICE CHARGE							1	50	615	00
583						MILEAGE CHARGE							00	75	936	00

CUBIC FEET 410
TON MILES 1248
LOADED MILES 60
TOTAL WEIGHT 41540

CONTINUATION TOTAL 9734.00

JOB LOG.

SWIFT Services, Inc.

DATE 4-7-17 PAGE NO. 1

CUSTOMER Colbelt Energy WELL NO. 1-5 LEASE Jamison Unit "A" JOB TYPE Cement 5 1/2" Longstring TICKET NO. 29893

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1315							on Location 5 1/2" 15.5* RTD - 4356' TP - 4359' Set PK shoe - 4343' SS. #1 42.41 D.V. - #53 2058 out. #101 Cement - #1 #2 #3 #8 #9 #10 #11 #12 #54 #55 Basket - #52 #53
	1345							Start 5 1/2" 15.5* casing in well
	1610							Circulate Packer Shoe 14' off Bottom e. 4343'
1655	1605	1 1/2	12				2000	set Shoe
	1705	4 1/2	12				300	Pump 500 gal mud flush
		4 1/2	20				300	Pump 20 bbl 14CL flush
	1710	4 1/2	42					Mix 175 sks EA-2 @ 15.5 ppg Wash out Pump + Lines - Release Latch Down Plug
	1730	6 1/2	0				100	Start Displacement
		6 1/2	54				300	Pump Mud (49 bbls)
		6 1/2	80				400	Lift Pressure
	1750	6 1/2	103				1500	Land Latch Down Plug Release * Hold *
	1755							Drop Bomb
	1805	0	1				1300	Open D.V. Tool
	1810	6 1/2	20				200	Pump 20 bbl 14CL flush
			7-11					Plug RH - MH (30-20)
	1815	5 1/2	130				200	Mix 235 sks SMD @ 11.2 ppg Wash out Pump + Lines - Release Top Plug
	1850	6 1/2	0				100	Start Displacement
		6 1/2	15				300	Lift Pressure
		6 1/2	29				400	Circulate Cement to surface * 40 sks *
	1900	6 1/2	49				2000	Land Top Plug - Close D.V. * Release Hold
								wash up truck
	1930							Job Complete

Thank You
Dave Preston Wayne



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037
Wichita KS 67208

ATTN: Corey Baker

Jamison Unit A #1-15

5-14s27w Gove,KS

Start Date: 2017.04.02 @ 08:48:42

End Date: 2017.04.02 @ 16:15:27

Job Ticket #: 63709 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2017.04.07 @ 10:20:12



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

ATTN: Corey Baker

Job Ticket: 63709

DST#: 1

Test Start: 2017.04.02 @ 08:48:42

GENERAL INFORMATION:

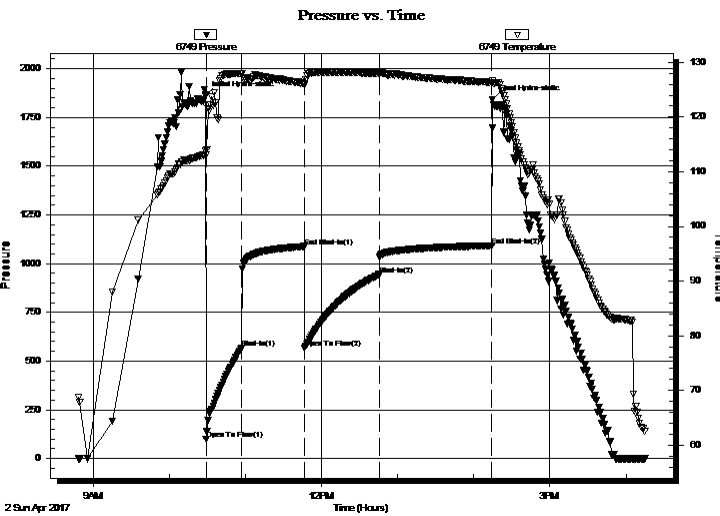
Formation: **E-F**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:29:12
 Time Test Ended: 16:15:27
 Interval: **3822.00 ft (KB) To 3870.00 ft (KB) (TVD)**
 Total Depth: 3870.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Mike Roberts
 Unit No: 81
 Reference Elevations: 2577.00 ft (KB)
 2567.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 6749

Outside

Press@RunDepth: 943.46 psig @ 3860.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.04.02 End Date: 2017.04.02 Last Calib.: 2017.04.02
 Start Time: 08:48:42 End Time: 16:15:27 Time On Btm: 2017.04.02 @ 10:28:57
 Time Off Btm: 2017.04.02 @ 14:14:57

TEST COMMENT: IF:BOB in 2 min.
 IS:No return blow
 FF:BOB in 2 min.
 FS:No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1861.63	113.92	Initial Hydro-static
1	99.65	113.12	Open To Flow (1)
29	566.72	127.89	Shut-In(1)
78	1087.95	126.12	End Shut-In(1)
78	565.83	125.85	Open To Flow (2)
137	943.46	127.98	Shut-In(2)
226	1091.93	126.33	End Shut-In(2)
226	1840.70	126.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1178.00	sw 100%sw	14.30
620.00	mcw 30%m 70%sw	8.70

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

ATTN: Corey Baker

Job Ticket: 63709

DST#: 1

Test Start: 2017.04.02 @ 08:48:42

Tool Information

Drill Pipe:	Length: 3569.00 ft	Diameter: 3.80 inches	Volume: 50.06 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: 20000.00 lb
Drill Collar:	Length: 244.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 51.26 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3822.00 ft			Final 80000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.00 ft			
Tool Length:	71.00 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			3800.00	
Shut In Tool	5.00			3805.00	
Hydraulic tool	5.00			3810.00	
Safety Joint	3.00			3813.00	
Packer	5.00			3818.00	23.00 Bottom Of Top Packer
Packer	4.00			3822.00	
Stubb	1.00			3823.00	
Perforations	4.00			3827.00	
Change Over Sub	1.00			3828.00	
Drill Pipe	31.00			3859.00	
Change Over Sub	1.00			3860.00	
Recorder	0.00	8672	Inside	3860.00	
Recorder	0.00	6749	Outside	3860.00	
Perforations	5.00			3865.00	
Bullnose	5.00			3870.00	48.00 Bottom Packers & Anchor

Total Tool Length: 71.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

Job Ticket: 63709

DST#: 1

ATTN: Corey Baker

Test Start: 2017.04.02 @ 08:48:42

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

33000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.72 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1178.00	sw 100%sw	14.302
620.00	mcw 30%m 70%sw	8.697

Total Length: 1798.00 ft Total Volume: 22.625 bbl

Num Fluid Samples: 0

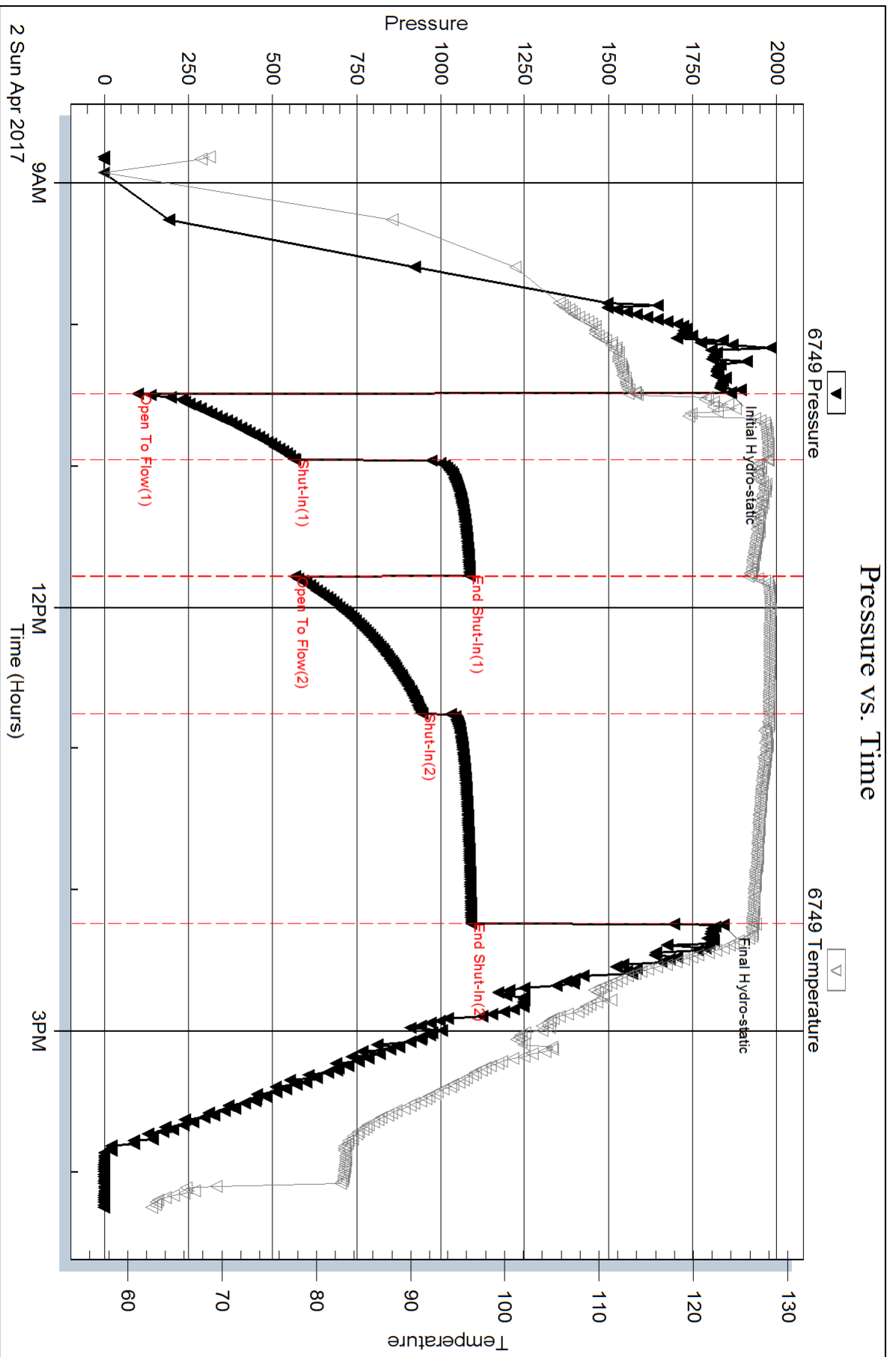
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .231@ 71.8= 33,000 ppm





DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037
Wichita KS 67208

ATTN: Corey Baker

Jamison Unit A #1-15

5-14s27w Gove,KS

Start Date: 2017.04.03 @ 01:48:15

End Date: 2017.04.03 @ 09:02:45

Job Ticket #: 63710 DST #: 2

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

Printed: 2017.04.07 @ 10:19:47



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

ATTN: Corey Baker

Job Ticket: 63710

DST#: 2

Test Start: 2017.04.03 @ 01:48:15

GENERAL INFORMATION:

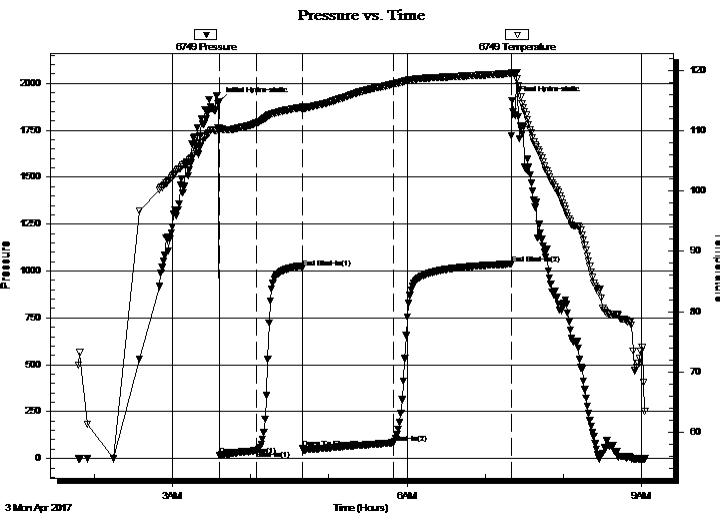
Formation: **H**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 03:36:00
 Time Test Ended: 09:02:45
 Interval: **3894.00 ft (KB) To 3930.00 ft (KB) (TVD)**
 Total Depth: 3930.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Mike Roberts
 Unit No: 81
 Reference Elevations: 2577.00 ft (KB)
 2567.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 6749

Outside

Press@RunDepth: 83.71 psig @ 3895.00 ft (KB)
 Start Date: 2017.04.03 End Date: 2017.04.03
 Start Time: 01:48:15 End Time: 09:02:45
 Capacity: 8000.00 psig
 Last Calib.: 2017.04.03
 Time On Btm: 2017.04.03 @ 03:35:45
 Time Off Btm: 2017.04.03 @ 07:20:30

TEST COMMENT: IF: Built to 1 1/2" blow
 IS: No return blow
 FF: Built to 2" blow
 FS: No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1904.75	110.55	Initial Hydro-static
1	16.65	110.10	Open To Flow (1)
29	41.80	111.30	Shut-In(1)
64	1017.30	113.90	End Shut-In(1)
65	52.34	113.54	Open To Flow (2)
134	83.71	117.73	Shut-In(2)
224	1037.20	119.49	End Shut-In(2)
225	1907.11	119.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	ocm 40%o 60%m	0.30
122.00	ocm 5%o 95%m	0.60

* 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

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

ATTN: Corey Baker

Job Ticket: 63710

DST#: 2

Test Start: 2017.04.03 @ 01:48:15

Tool Information

Drill Pipe:	Length: 3639.00 ft	Diameter: 3.80 inches	Volume: 51.05 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: 25000.00 lb
Drill Collar:	Length: 244.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 52.25 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3894.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	36.00 ft			
Tool Length:	59.00 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			3872.00	
Shut In Tool	5.00			3877.00	
Hydraulic tool	5.00			3882.00	
Safety Joint	3.00			3885.00	
Packer	5.00			3890.00	23.00 Bottom Of Top Packer
Packer	4.00			3894.00	
Stubb	1.00			3895.00	
Recorder	0.00	8672	Inside	3895.00	
Recorder	0.00	6749	Outside	3895.00	
Perforations	30.00			3925.00	
Bullnose	5.00			3930.00	36.00 Bottom Packers & Anchor

Total Tool Length: 59.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

Job Ticket: 63710

DST#: 2

ATTN: Corey Baker

Test Start: 2017.04.03 @ 01:48:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.14 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	ocm 40%o 60%m	0.300
122.00	ocm 5%o 95%m	0.600

Total Length: 183.00 ft Total Volume: 0.900 bbl

Num Fluid Samples: 0

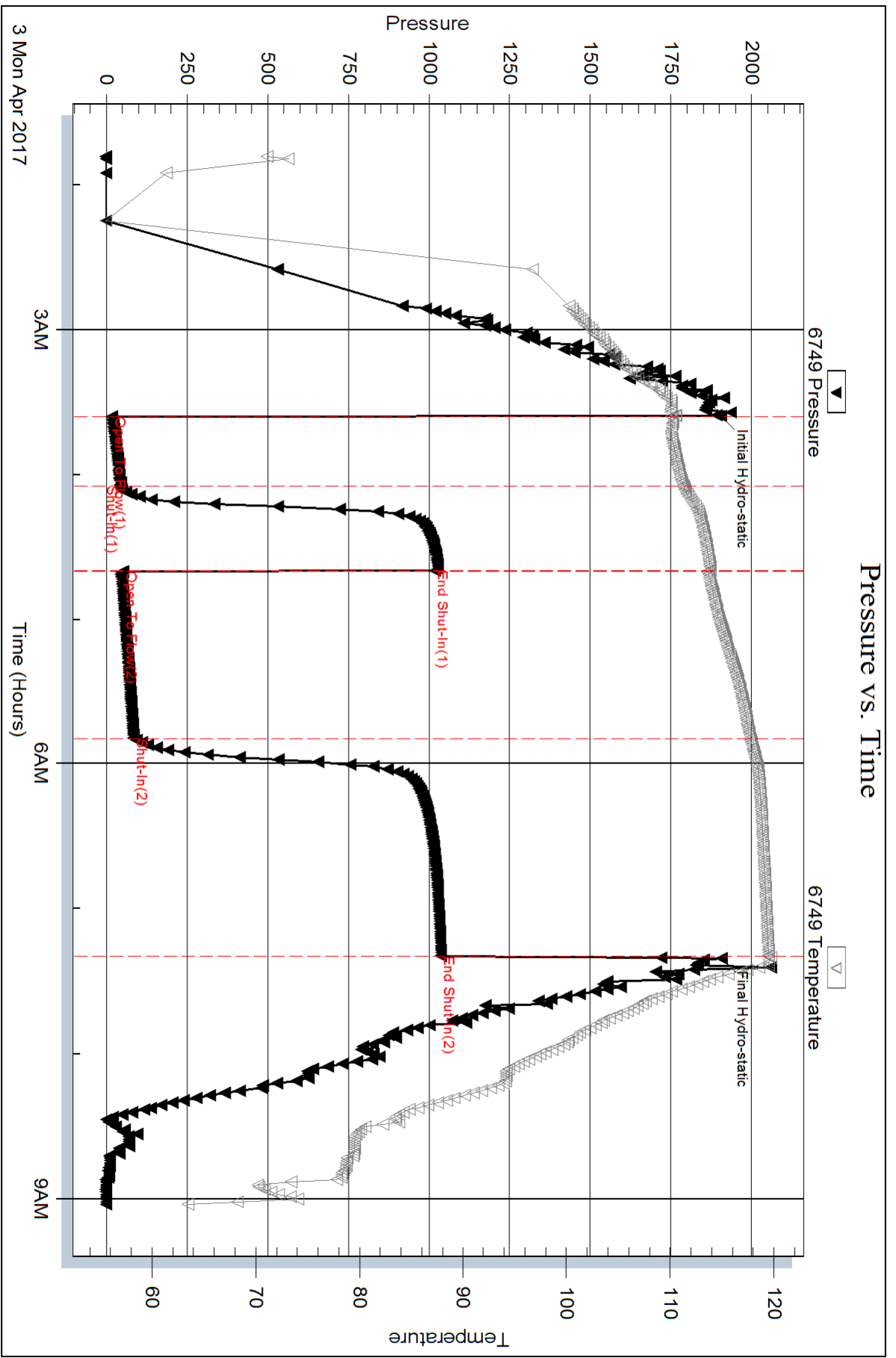
Num Gas Bombs: 0

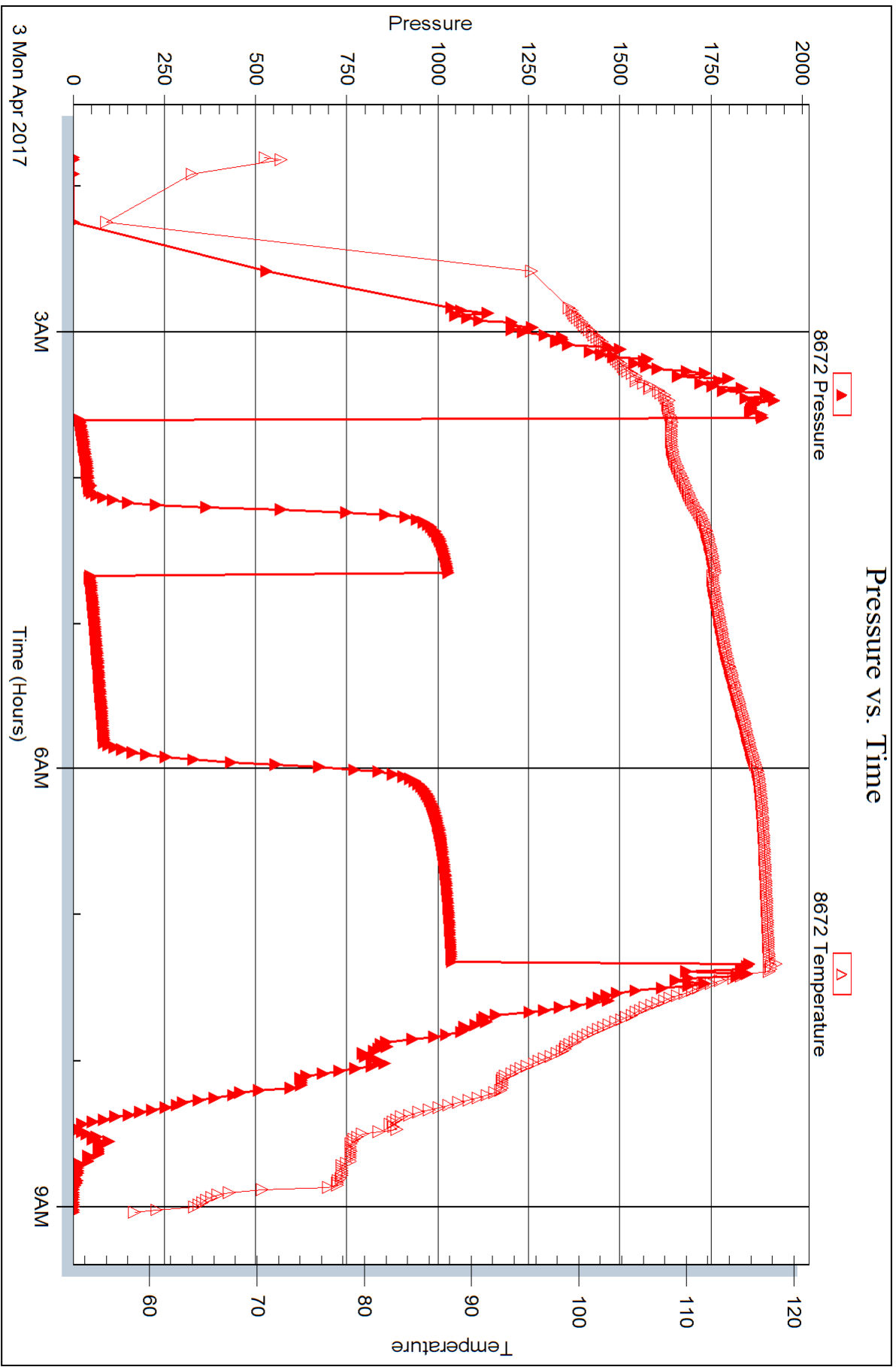
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037
Wichita KS 67208

ATTN: Corey Baker

Jamison Unit A #1-15

5-14s27w Gove,KS

Start Date: 2017.04.03 @ 16:09:15

End Date: 2017.04.03 @ 23:12:30

Job Ticket #: 63711 DST #: 3

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

Printed: 2017.04.07 @ 10:19:14



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

ATTN: Corey Baker

Job Ticket: 63711

DST#: 3

Test Start: 2017.04.03 @ 16:09:15

GENERAL INFORMATION:

Formation: **I**
 Deviated: **No** Whipstock: **ft (KB)** Test Type: **Conventional Bottom Hole (Reset)**
 Time Tool Opened: **17:49:15** Tester: **Mike Roberts**
 Time Test Ended: **23:12:30** Unit No: **81**
Interval: 3930.00 ft (KB) To 3965.00 ft (KB) (TVD) Reference Elevations: **2577.00 ft (KB)**
 Total Depth: **3965.00 ft (KB) (TVD)** **2567.00 ft (CF)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair** KB to GR/CF: **10.00 ft**

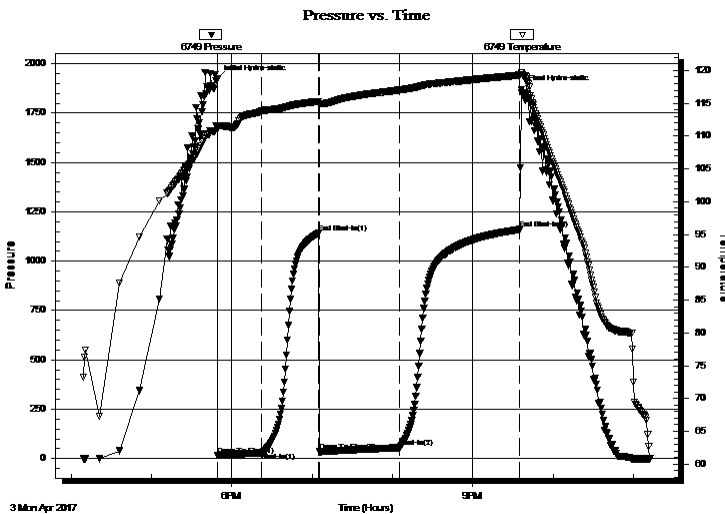
Serial #: 6749

Outside

Press@RunDepth: **54.64 psig @ 3931.00 ft (KB)** Capacity: **8000.00 psig**
 Start Date: **2017.04.03** End Date: **2017.04.03** Last Calib.: **2017.04.03**
 Start Time: **16:09:15** End Time: **23:12:30** Time On Btm: **2017.04.03 @ 17:49:00**
 Time Off Btm: **2017.04.03 @ 21:36:30**

TEST COMMENT: IF: Built to 2 1/2" blow
 IS: No return blow
 FF: Built to 5" blow
 FS: No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1922.34	111.59	Initial Hydro-static
1	15.28	111.02	Open To Flow (1)
34	29.50	113.81	Shut-In(1)
76	1141.90	115.31	End Shut-In(1)
77	35.52	114.98	Open To Flow (2)
137	54.64	117.03	Shut-In(2)
227	1161.06	119.30	End Shut-In(2)
228	1867.88	119.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	gcmo 5%g 40%m 55%o (collar)	0.30
61.00	gcmo 2%g 48%m 50%o (collar)	0.30
0.00	GIP= 246 feet	0.00

* 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

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

Job Ticket: 63711

DST#: 3

ATTN: Corey Baker

Test Start: 2017.04.03 @ 16:09:15

Tool Information

Drill Pipe:	Length: 3668.00 ft	Diameter: 3.80 inches	Volume: 51.45 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: 25000.00 lb
Drill Collar:	Length: 244.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 52.65 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	3930.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	58.00 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			3908.00	
Shut In Tool	5.00			3913.00	
Hydraulic tool	5.00			3918.00	
Safety Joint	3.00			3921.00	
Packer	5.00			3926.00	23.00 Bottom Of Top Packer
Packer	4.00			3930.00	
Stubb	1.00			3931.00	
Recorder	0.00	8672	Inside	3931.00	
Recorder	0.00	6749	Outside	3931.00	
Perforations	29.00			3960.00	
Bullnose	5.00			3965.00	35.00 Bottom Packers & Anchor

Total Tool Length: 58.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

Job Ticket: 63711

DST#: 3

ATTN: Corey Baker

Test Start: 2017.04.03 @ 16:09:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.73 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	gcmo 5%g 40%m 55%o (collar)	0.300
61.00	gcmo 2%g 48%m 50%o (collar)	0.300
0.00	GIP= 246 feet	0.000

Total Length: 122.00 ft

Total Volume: 0.600 bbl

Num Fluid Samples: 0

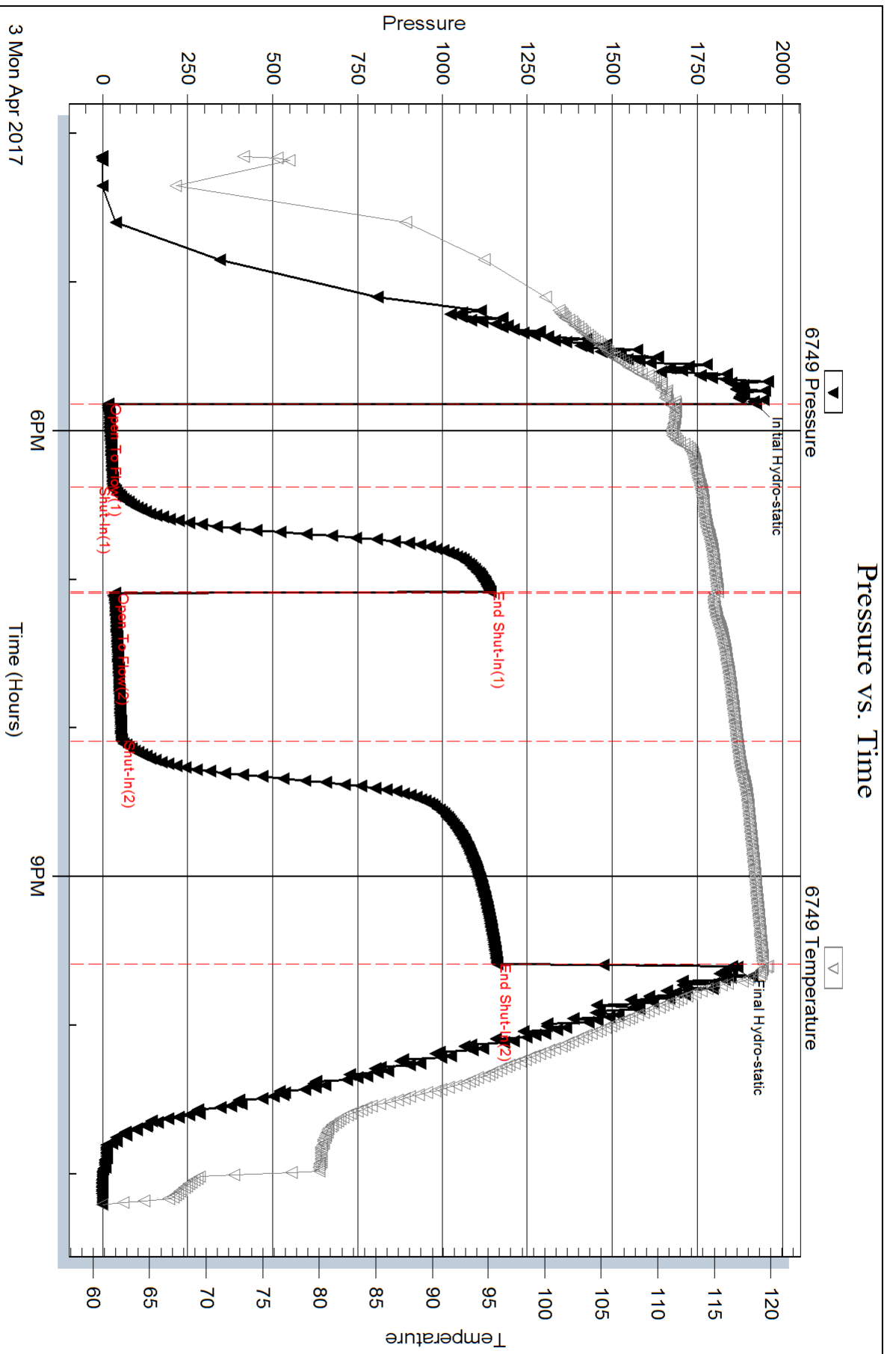
Num Gas Bombs: 0

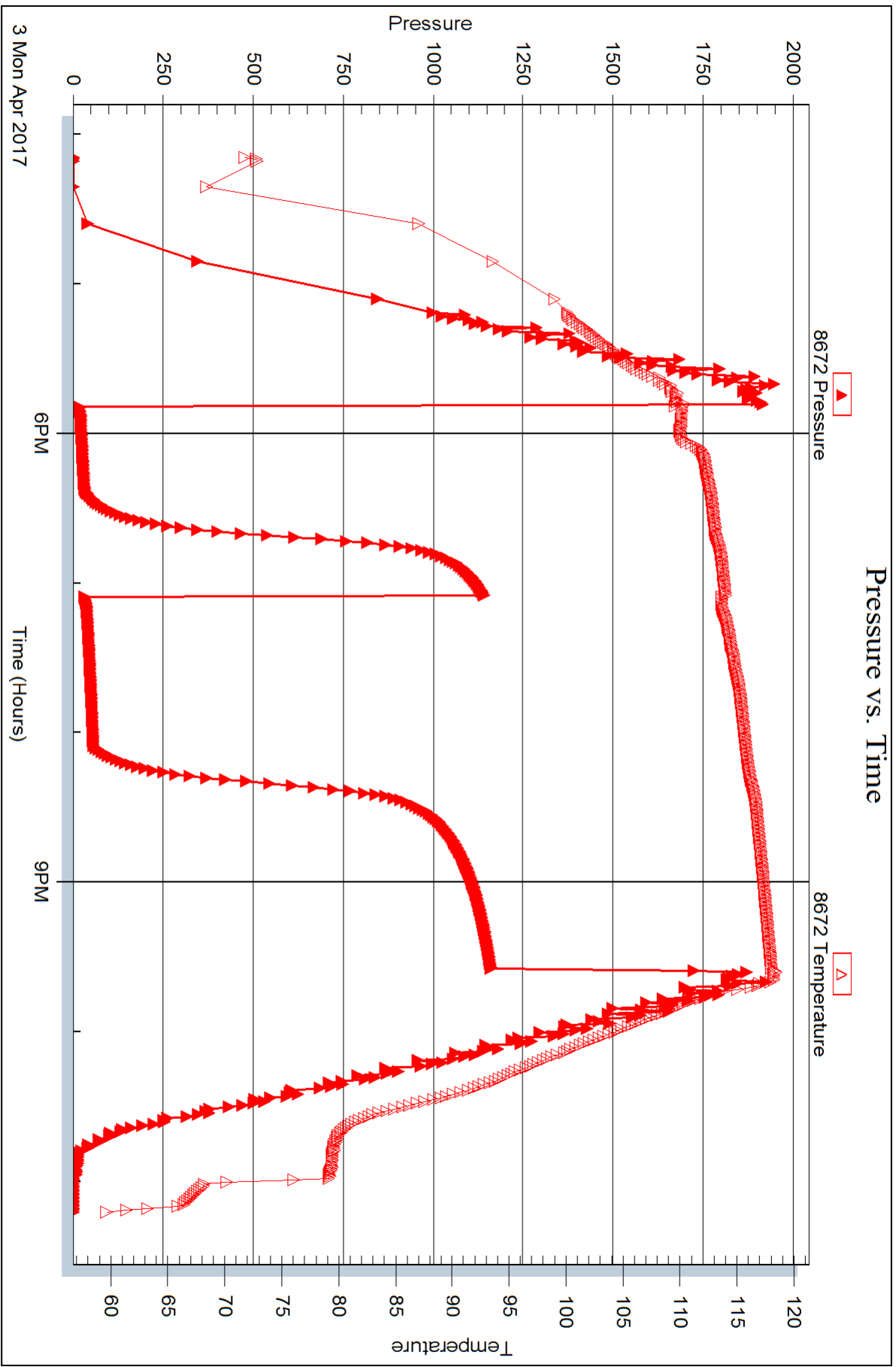
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037
Wichita KS 67208

ATTN: Corey Baker

Jamison Unit A #1-15

5-14s27w Gove,KS

Start Date: 2017.04.04 @ 11:41:15

End Date: 2017.04.04 @ 18:37:30

Job Ticket #: 637121 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2017.04.07 @ 10:18:52

Cobalt Energy LLC
5-14s27w Gove,KS
Jamison Unit A #1-15
DST # 4
J-K-L
2017.04.04



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

ATTN: Corey Baker

Job Ticket: 637121

DST#: 4

Test Start: 2017.04.04 @ 11:41:15

GENERAL INFORMATION:

Formation: **J-K-L**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:14:00

Time Test Ended: 18:37:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 3960.00 ft (KB) To 4042.00 ft (KB) (TVD)

Reference Elevations: 2577.00 ft (KB)

Total Depth: 4042.00 ft (KB) (TVD)

2567.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749 Outside

Press@RunDepth: 57.75 psig @ 4037.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.04.04 End Date: 2017.04.04

Last Calib.: 2017.04.04

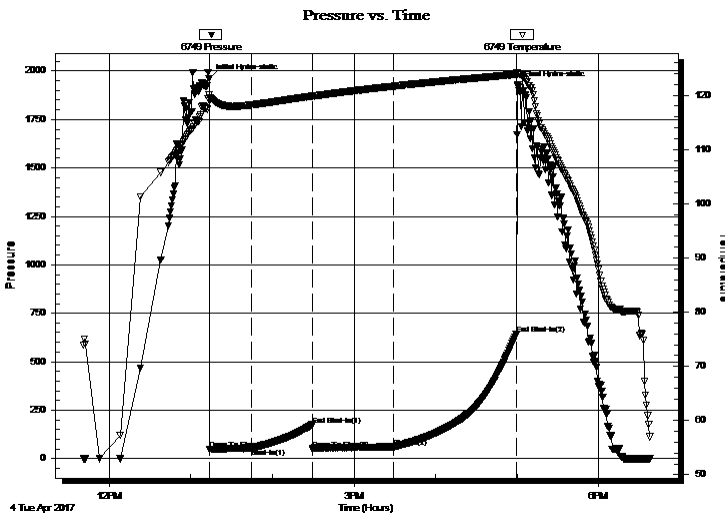
Start Time: 11:41:15 End Time: 18:37:30

Time On Btm: 2017.04.04 @ 13:13:45

Time Off Btm: 2017.04.04 @ 17:00:30

TEST COMMENT: IF: Built to 1/2" blow and died to weak surface blow
IS: No return blow
FF: Built to 1" blow and died to weak surface blow
FS: No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1961.22	120.02	Initial Hydro-static
1	46.70	119.02	Open To Flow (1)
32	53.61	118.22	Shut-In(1)
76	174.12	119.84	End Shut-In(1)
76	49.46	119.81	Open To Flow (2)
136	57.75	121.65	Shut-In(2)
226	643.57	123.85	End Shut-In(2)
227	1927.19	123.91	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	ocm 3%o 97%m	0.02

* 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

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

ATTN: Corey Baker

Job Ticket: 637121

DST#: 4

Test Start: 2017.04.04 @ 11:41:15

Tool Information

Drill Pipe:	Length: 3706.00 ft	Diameter: 3.80 inches	Volume: 51.99 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: 20000.00 lb
Drill Collar:	Length: 244.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 53.19 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3960.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	82.00 ft			
Tool Length:	105.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			3938.00	
Shut In Tool	5.00			3943.00	
Hydraulic tool	5.00			3948.00	
Safety Joint	3.00			3951.00	
Packer	5.00			3956.00	23.00 Bottom Of Top Packer
Packer	4.00			3960.00	
Stubb	1.00			3961.00	
Perforations	5.00			3966.00	
Change Over Sub	1.00			3967.00	
Drill Pipe	64.00			4031.00	
Change Over Sub	1.00			4032.00	
Perforations	5.00			4037.00	
Recorder	0.00	8672	Inside	4037.00	
Recorder	0.00	6749	Outside	4037.00	
Bullnose	5.00			4042.00	82.00 Bottom Packers & Anchor

Total Tool Length: 105.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

Job Ticket: 637121

DST#: 4

ATTN: Corey Baker

Test Start: 2017.04.04 @ 11:41:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.75 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	ocm 3%o 97%m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

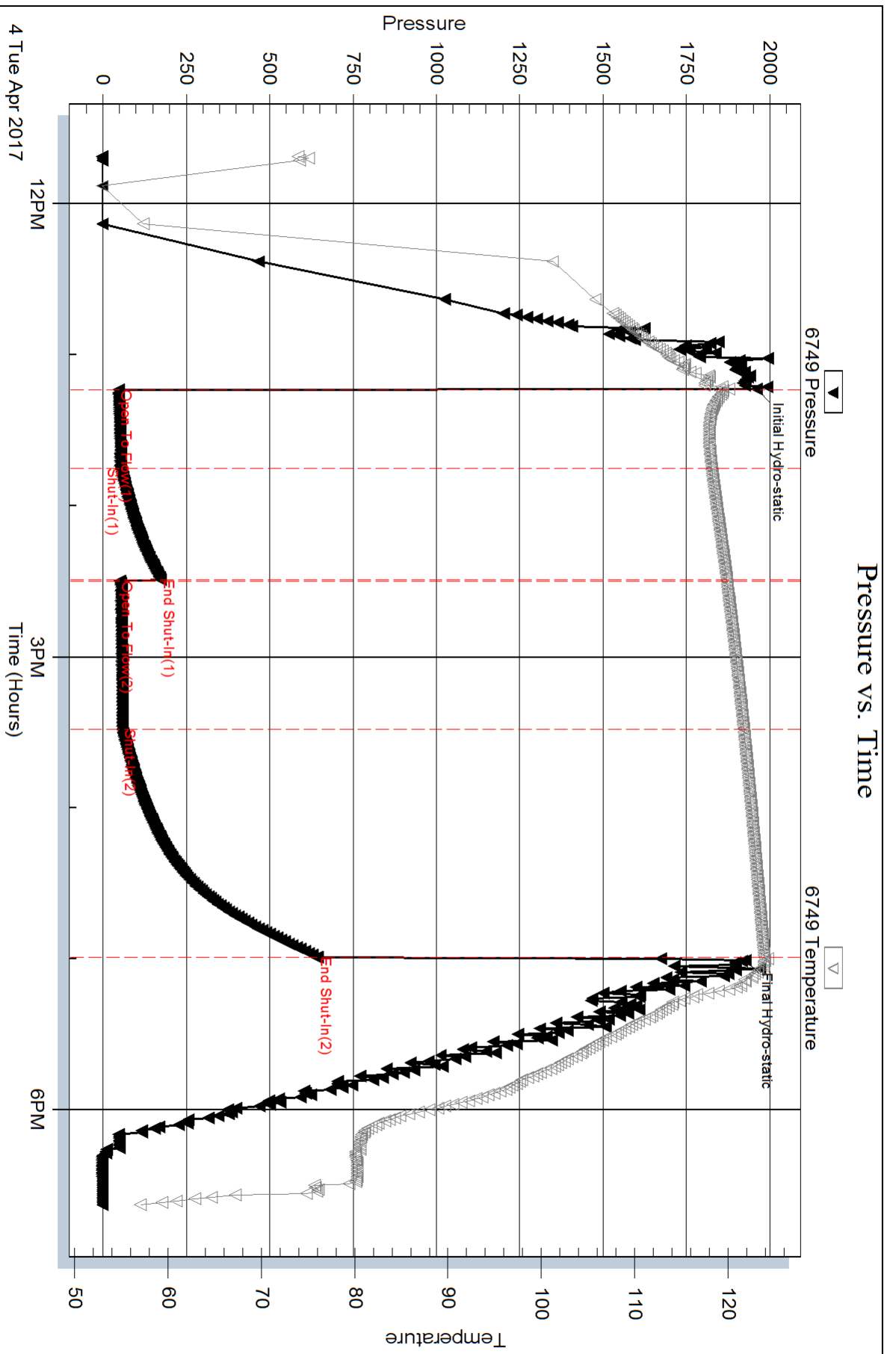
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037
Wichita KS 67208

ATTN: Corey Baker

Jamison Unit A #1-15

5-14s27w Gove,KS

Start Date: 2017.04.05 @ 20:08:15

End Date: 2017.04.06 @ 03:26:00

Job Ticket #: 63713 DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2017.04.07 @ 10:18:27



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

ATTN: Corey Baker

Job Ticket: 63713

DST#: 5

Test Start: 2017.04.05 @ 20:08:15

GENERAL INFORMATION:

Formation: **Ft.Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:44:00

Time Test Ended: 03:26:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4222.00 ft (KB) To 4280.00 ft (KB) (TVD)

Reference Elevations: 2577.00 ft (KB)

Total Depth: 4280.00 ft (KB) (TVD)

2567.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749 Outside

Press@RunDepth: 57.03 psig @ 4275.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.04.05

End Date:

2017.04.06

Last Calib.:

2017.04.06

Start Time:

20:08:15

End Time:

03:26:00

Time On Btm:

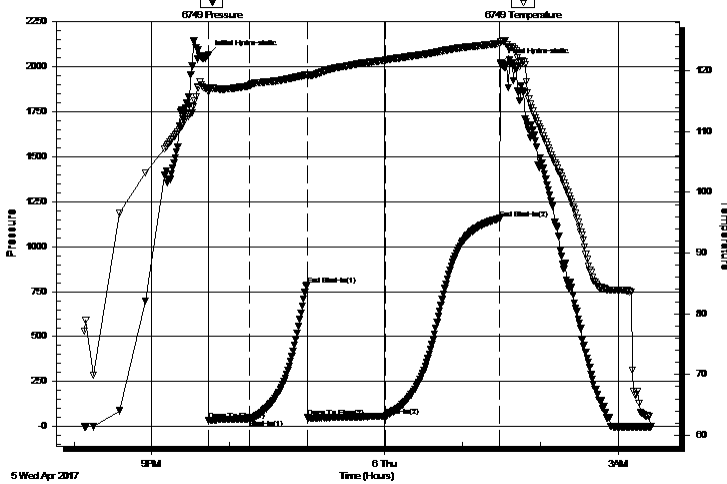
2017.04.05 @ 21:43:45

Time Off Btm:

2017.04.06 @ 01:29:45

TEST COMMENT: IF: Built to weak surface blow
IS: No return blow
FF: Built to 4" blow
FS: No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2068.80	117.23	Initial Hydro-static
1	32.79	116.44	Open To Flow (1)
32	41.51	117.54	Shut-In(1)
77	785.23	119.37	End Shut-In(1)
77	49.74	119.12	Open To Flow (2)
137	57.03	121.74	Shut-In(2)
225	1156.47	124.48	End Shut-In(2)
226	2024.64	124.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
61.00	ocgm 2%o 3%g 95%m (collar)	0.30
	GIP= 183 ft (collars)	0.90

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

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

ATTN: Corey Baker

Job Ticket: 63713

DST#: 5

Test Start: 2017.04.05 @ 20:08:15

Tool Information

Drill Pipe:	Length: 3983.00 ft	Diameter: 3.80 inches	Volume: 55.87 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: 25000.00 lb
Drill Collar:	Length: 244.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 57.07 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4222.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	58.00 ft			
Tool Length:	81.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4200.00	
Shut In Tool	5.00			4205.00	
Hydraulic tool	5.00			4210.00	
Safety Joint	3.00			4213.00	
Packer	5.00			4218.00	23.00 Bottom Of Top Packer
Packer	4.00			4222.00	
Stubb	1.00			4223.00	
Perforations	4.00			4227.00	
Change Over Sub	1.00			4228.00	
Drill Pipe	31.00			4259.00	
Change Over Sub	1.00			4260.00	
Perforations	15.00			4275.00	
Recorder	0.00	8672	Inside	4275.00	
Recorder	0.00	6749	Outside	4275.00	
Bullnose	5.00			4280.00	58.00 Bottom Packers & Anchor

Total Tool Length: 81.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

Job Ticket: 63713

DST#: 5

ATTN: Corey Baker

Test Start: 2017.04.05 @ 20:08:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.77 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
61.00	ocgm 2%o 3%g 95%m (collar)	0.300
	GIP= 183 ft (collars)	0.900

Total Length: 61.00 ft Total Volume: 1.200 bbl

Num Fluid Samples: 0

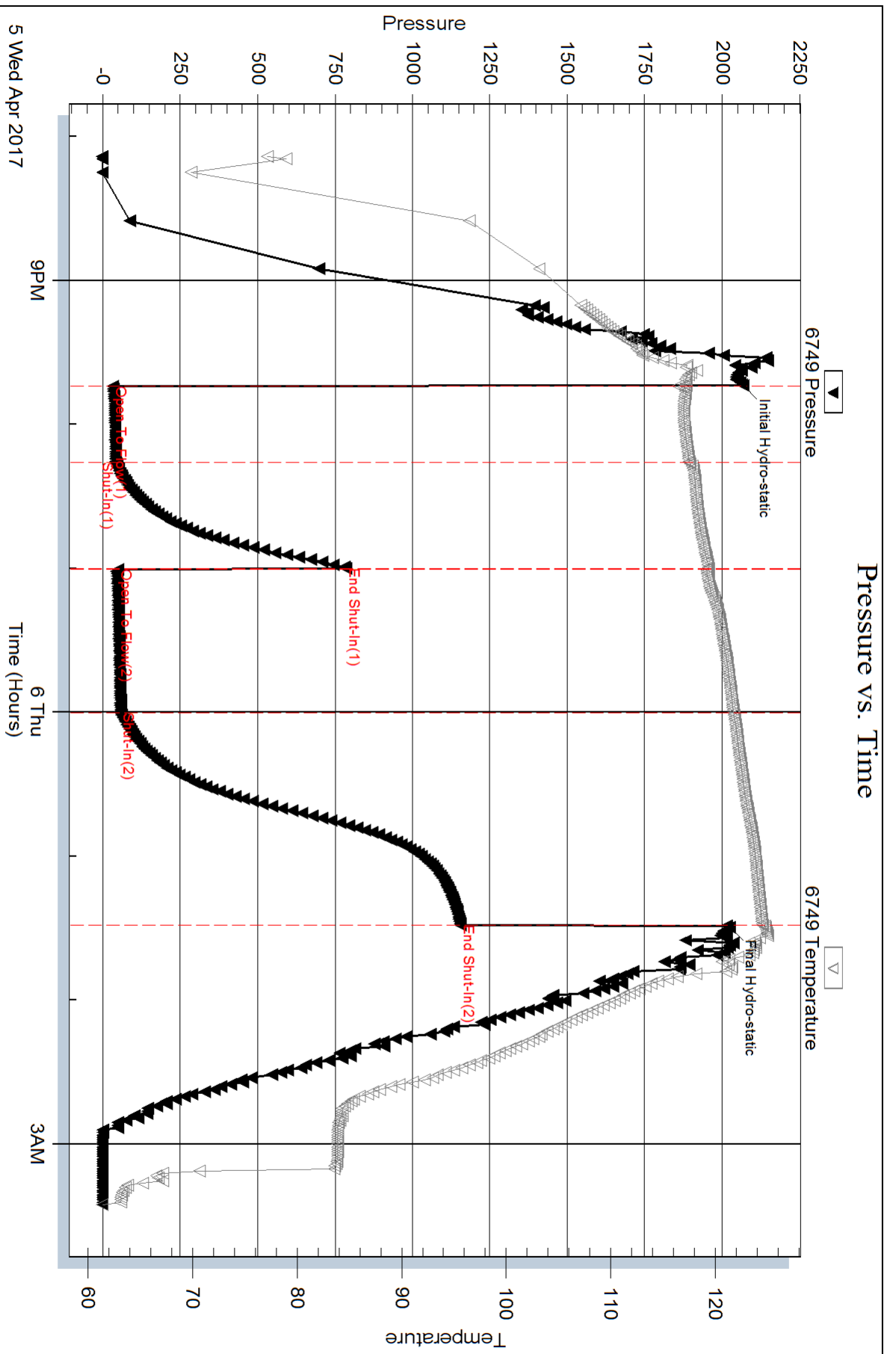
Num Gas Bombs: 0

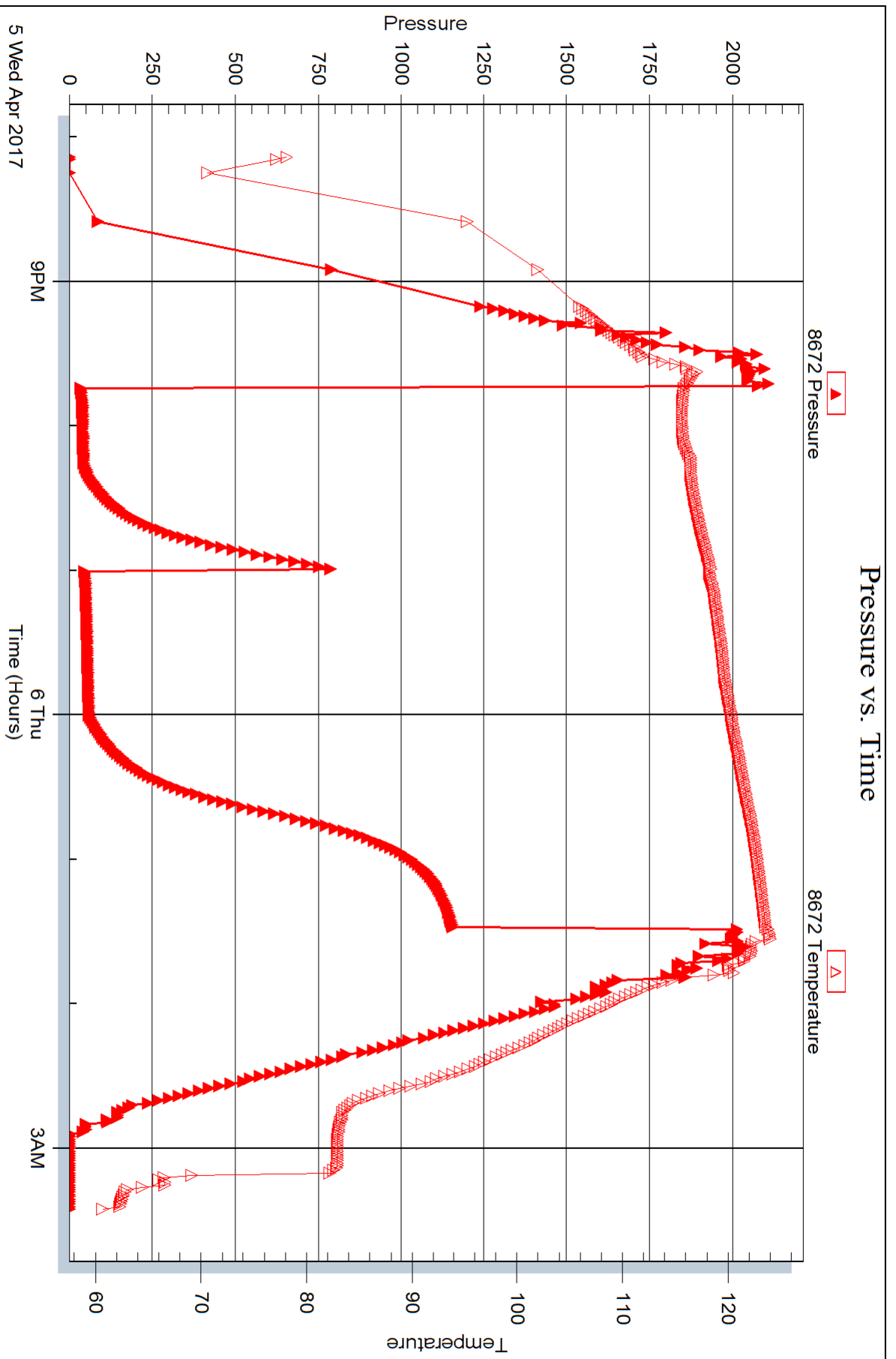
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy LLC**

PO Box 8037
Wichita KS 67208

ATTN: Corey Baker

Jamison Unit A #1-15

5-14s27w Gove,KS

Start Date: 2017.04.06 @ 13:58:15

End Date: 2017.04.06 @ 21:26:15

Job Ticket #: 63714 DST #: 6

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

Printed: 2017.04.07 @ 10:17:58



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

ATTN: Corey Baker

Job Ticket: 63714

DST#: 6

Test Start: 2017.04.06 @ 13:58:15

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:32:00

Time Test Ended: 21:26:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4294.00 ft (KB) To 4356.00 ft (KB) (TVD)

Reference Elevations: 2577.00 ft (KB)

Total Depth: 4356.00 ft (KB) (TVD)

2567.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

Serial #: 6749 Outside

Press@RunDepth: 306.74 psig @ 4351.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.04.06

End Date:

2017.04.06

Last Calib.:

2017.04.06

Start Time:

13:58:15

End Time:

21:26:15

Time On Btm:

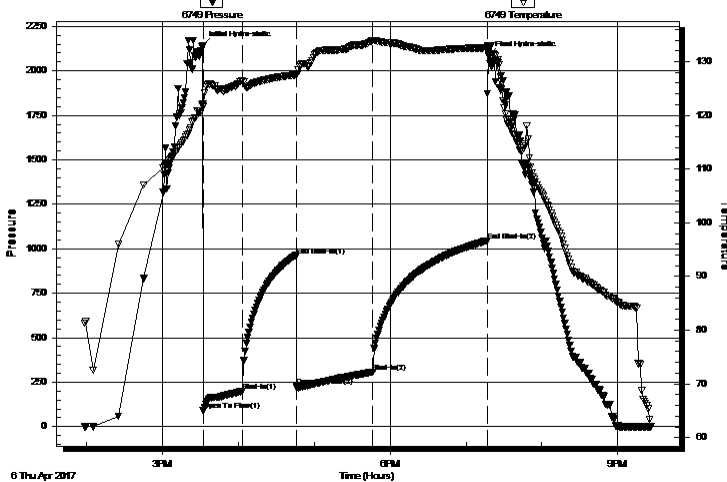
2017.04.06 @ 15:31:45

Time Off Btm:

2017.04.06 @ 19:18:00

TEST COMMENT: IF:BOB in 7 min.
IS:Weak surface blow
FF:BOB in 19 min
FS:No return blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2141.08	122.17	Initial Hydro-static
1	89.28	121.55	Open To Flow (1)
32	199.44	126.49	Shut-In(1)
74	959.36	127.55	End Shut-In(1)
75	226.88	127.37	Open To Flow (2)
135	306.74	133.90	Shut-In(2)
226	1044.62	132.58	End Shut-In(2)
227	2088.02	132.72	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
244.00	gco 20%g 80%o (collars)	1.20
124.00	gcom 20%g 40%o 40%m	1.74
124.00	gco 20%g 80%o	1.74
248.00	gco 30%g 70%o	3.48

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

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

ATTN: Corey Baker

Job Ticket: 63714

DST#: 6

Test Start: 2017.04.06 @ 13:58:15

Tool Information

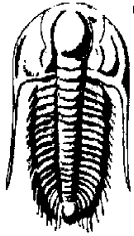
Drill Pipe:	Length: 4050.00 ft	Diameter: 3.80 inches	Volume: 56.81 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 244.00 ft	Diameter: 2.25 inches	Volume: 1.20 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 58.01 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4294.00 ft			Final 74000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	62.00 ft			
Tool Length:	85.00 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			4272.00	
Shut In Tool	5.00			4277.00	
Hydraulic tool	5.00			4282.00	
Safety Joint	3.00			4285.00	
Packer	5.00			4290.00	23.00 Bottom Of Top Packer
Packer	4.00			4294.00	
Stubb	1.00			4295.00	
Perforations	4.00			4299.00	
Change Over Sub	1.00			4300.00	
Drill Pipe	31.00			4331.00	
Change Over Sub	1.00			4332.00	
Perforations	19.00			4351.00	
Recorder	0.00	8672	Inside	4351.00	
Recorder	0.00	6749	Outside	4351.00	
Bullnose	5.00			4356.00	62.00 Bottom Packers & Anchor

Total Tool Length: 85.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy LLC

5-14s27w Gove,KS

PO Box 8037
Wichita KS 67208

Jamison Unit A #1-15

Job Ticket: 63714

DST#: 6

ATTN: Corey Baker

Test Start: 2017.04.06 @ 13:58:15

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

36 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.96 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
244.00	gco 20%g 80%o (collars)	1.200
124.00	gcom 20%g 40%o 40%m	1.739
124.00	gco 20%g 80%o	1.739
248.00	gco 30%g 70%o	3.479

Total Length: 740.00 ft Total Volume: 8.157 bbl

Num Fluid Samples: 0

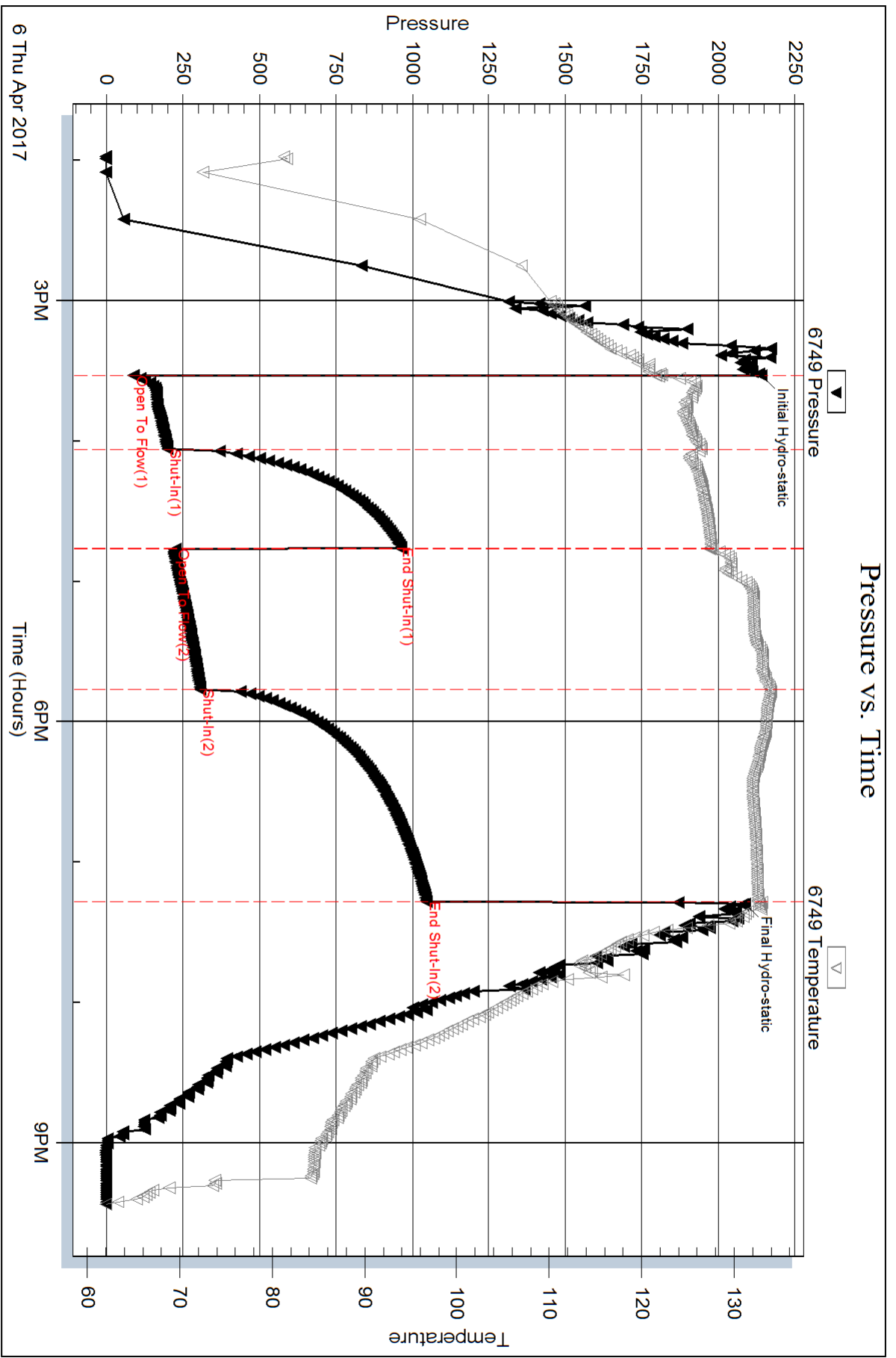
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API 36@ 60 corrected to 36





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **63709**

Well Name & No. Jamison Unit "A" ~~4~~ 1-5 Test No. 1 Date 4-2-17
 Company Cobalt Energy LLC Elevation 2577 KB 2567 GL
 Address 115 S. Belmont #12 P.O. Box 887 Wichita KS 67208
 Co. Rep / Geo. Corey Baker Rig Murfin 21
 Location: Sec. 5 Twp. 14s Rge. 27w Co. Grove State KS

Interval Tested 3822-3870 Zone Tested E+F
 Anchor Length 48 Drill Pipe Run ~~3574~~ 3569 Mud Wt. 9.0
 Top Packer Depth 3817 Drill Collars Run ~~285~~ 244 Vis 52
 Bottom Packer Depth 3822 Wt. Pipe Run 0 WL 6.8
 Total Depth 3870 Chlorides 2000 ppm System LCM 4
 Blow Description IF: BOB in 2 Min
IS: No Return Blow
FF: BOB in 2 Min
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>620</u>	<u>WCM</u>		<u>30</u>	<u>70</u>	
<u>1178</u>	<u>SW</u>		<u>100</u>		

Rec Total 1798 BHT 118 Gravity — API RW 231 @ 71.8° F Chlorides 33000 ppm
 (A) Initial Hydrostatic 1861 Test \$1050.00/- T-On Location 07:15
 (B) First Initial Flow 99 Jars NC T-Started 08:48
 (C) First Final Flow 566 Safety Joint \$75.00/- T-Open 10:30
 (D) Initial Shut-In 1087 Circ Sub _____ T-Pulled 14:15
 (E) Second Initial Flow 565 Hourly Standby _____ T-Out 16:15
 (F) Second Final Flow 943 Mileage 140 RT = \$105.00/- Comments _____
 (G) Final Shut-In 1091 Sampler _____
 (H) Final Hydrostatic 1840 Straddle _____

Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Initial Open 30
 Initial Shut-In 45
 Final Flow 60
 Final Shut-In 90
 Sub Total 0
 Total 1230
 MP/DST Disc't _____

Approved By Corey Baker Our Representative Mike Roberts
 Sub Total \$1230.00/-

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. **63710**

Well Name & No. Jamison Unit "A" #1-5 Test No. 2 Date 4-3-17
 Company Cobalt Energy LLC Elevation 2577 KB 2567 GL
 Address 115 S. Belmont #12 P.O. Box 8037 Wichita KS 67208
 Co. Rep / Geo. Corey Baker Rig Murfin 21
 Location: Sec. 5 Twp. 14s Rge. 27w Co Grove State KS

Interval Tested 3894-3930 Zone Tested H
 Anchor Length 36 Drill Pipe Run 3639 Mud Wt. 9.1
 Top Packer Depth 3889 Drill Collars Run 244 Vis 61
 Bottom Packer Depth 3894 Wt. Pipe Run _____ WL 7.2
 Total Depth 3930 Chlorides 3000 ppm System LCM 4
 Blow Description IF: Built to 1 1/2" Blow
IS: No Return Blow
FF: Built to 2" Blow
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>61</u>	<u>OCM</u>	<u>40</u>		<u>60</u>	
<u>122</u>	<u>OCM</u>	<u>5</u>		<u>95</u>	
____	____	____	____	____	____
____	____	____	____	____	____
____	____	____	____	____	____

Rec Total 183 BHT 121 Gravity _____ API RW _____ @ _____ ° F Chlorides _____ ppm

(A) Initial Hydrostatic 1904 Test \$1050.00/- T-On Location 01:20
 (B) First Initial Flow 16 Jars _____ T-Started 01:48
 (C) First Final Flow 41 Safety Joint \$75.00/- T-Open 03:36
 (D) Initial Shut-In 1017 Circ Sub NV T-Pulled 07:21
 (E) Second Initial Flow 52 Hourly Standby _____ T-Out 09:02
 (F) Second Final Flow 83 Mileage 140 RT = \$105.00/- Comments _____
 (G) Final Shut-In 1037 Sampler _____
 (H) Final Hydrostatic 1907 Straddle _____

Initial Open 30 Ruined Shale Packer _____
 Initial Shut-In 45 Ruined Packer _____
 Final Flow 60 Extra Packer _____
 Final Shut-In 90 Extra Recorder _____
 Sub Total 0
 Total 1230
 MP/DST Disc't _____

Approved By Corey Baker Our Representative Mike Roberts
 Sub Total \$1230.00/-

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **63711**

Well Name & No. Jamisona Unit 'A' 4-5 Test No. 3 Date 4-3-17
 Company Cobalt Energy LLC Elevation 2577 KB 2567 GL
 Address 115 S. Belmont #12 P.O. Box 8037 Wichita KS 67208
 Co. Rep / Geo. Corey Baker Rig Murfin
 Location: Sec. 5 Twp. 14s Rge. 27W Co. Grove State KS

Interval Tested 3930-3965 Zone Tested I
 Anchor Length 35 Drill Pipe Run 3668 Mud Wt. 9.0
 Top Packer Depth 3925 Drill Collars Run 244 Vis 54
 Bottom Packer Depth 3930 Wt. Pipe Run 6 WL 8.8
 Total Depth 3965 Chlorides 4000 ppm System LCM 3
 Blow Description IF: Built to 2 1/2" Blow
IS: No Return Blow
FF: Built to 5" Blow
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>Ø</u>	<u>GIP = 246'</u>				
<u>61</u>	<u>gcmo (collar)</u>	<u>2</u>	<u>50</u>	<u>48</u>	
<u>61</u>	<u>gcmo (collar)</u>	<u>5</u>	<u>55</u>	<u>40</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 122 BHT 120 Gravity — API RW — @ — °F Chlorides — ppm
 (A) Initial Hydrostatic 1922 Test \$1050.00/- T-On Location 15:50
 (B) First Initial Flow 15 Jars T-Started 16:09
 (C) First Final Flow 29 Safety Joint \$75.00/- T-Open 17:50
 (D) Initial Shut-In 1141 Circ Sub NC T-Pulled 21:35
 (E) Second Initial Flow 35 Hourly Standby T-Out 23:12
 (F) Second Final Flow 54 Mileage 140RT = \$105.00/- Comments _____
 (G) Final Shut-In 1161 Sampler _____
 (H) Final Hydrostatic 1867 Straddle _____

Initial Open 30 Shale Packer _____ Ruined Shale Packer _____
 Initial Shut-In 45 Extra Packer _____ Ruined Packer _____
 Final Flow 60 Extra Recorder _____ Extra Copies _____
 Final Shut-In 90 Day Standby _____ Sub Total 0
 Accessibility _____ Total 1230
 Sub Total \$1230.00/- MP/DST Disc't _____

Approved By Corey Baker Our Representative Mike Roberts

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **63712**

Well Name & No. Jamison Unit 'A' 1-5 Test No. 4 Date 4-4-17
 Company Cobalt Energy LLC Elevation 2577 KB 2567 GL
 Address 115 S. Belmont #12 P.O. Box 8037 Wichita KS 67208
 Co. Rep / Geo. Corey Baker Rig Martin 21
 Location: Sec. 5 Twp. 14s Rge. 27w Co Grove State KS

Interval Tested 3960-4042 Zone Tested J-K-L
 Anchor Length 82 Drill Pipe Run 3706 Mud Wt. 9.0
 Top Packer Depth 3955 Drill Collars Run 244 Vis 54
 Bottom Packer Depth 3960 Wt. Pipe Run Ø WL 8.8
 Total Depth 4042 Chlorides 4000 ppm System LCM 4
 Blow Description IF: Built to 1/2" Died to Weak Surface Blow
IS: No Return Blow
FF: Built to 1" Died to Weak Surface Blow
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>OCM</u>	<u>3</u>		<u>97</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 124 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>1961</u>	<input checked="" type="checkbox"/> Test <u>#1150.00/-</u>	T-On Location <u>11:14</u>
(B) First Initial Flow <u>46</u>	<input type="checkbox"/> Jars	T-Started <u>11:41</u>
(C) First Final Flow <u>53</u>	<input checked="" type="checkbox"/> Safety Joint <u>#75.00/-</u>	T-Open <u>13:15</u>
(D) Initial Shut-In <u>174</u>	<input checked="" type="checkbox"/> Circ Sub <u>NC</u>	T-Pulled <u>17:00</u>
(E) Second Initial Flow <u>49</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>18:37</u>
(F) Second Final Flow <u>57</u>	<input checked="" type="checkbox"/> Mileage <u>140 RT: #105.00/-</u>	Comments
(G) Final Shut-In <u>643</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1927</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>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	Total <u>1330</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>#1330.00/-</u>	

Approved By Corey Baker Our Representative Mike Roberts

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **63713**

Well Name & No. Jamison Unit 'A' #1-5 Test No. 5 Date 4-5-17
 Company Cobalt Energy LLC Elevation 2577 KB 2567 GL
 Address 115 S. Belmont #12 P.O. Box 8032 Wichita KS 67208
 Co. Rep / Geo. Cory Baker Rig Murfin 21
 Location: Sec. 5 Twp. 14s Rge. 27W Co. Grove State KS

Interval Tested 4222-4280 Zone Tested Ft. Scott
 Anchor Length ~~4222~~ 58' Drill Pipe Run 3983 Mud Wt. 9.3
 Top Packer Depth ~~4222~~ 4217 Drill Collars Run 244 Vis 58
 Bottom Packer Depth 4222 Wt. Pipe Run ∅ WL 8.8
 Total Depth 4280 Chlorides 4000 ppm System LCM 2
 Blow Description IF: Boiled to Weak Surface Blow
IS: No Return Blow
FF: Boiled to 4" Blow
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>61</u>	<u>0cgm</u>	<u>3</u>	<u>2</u>	<u>95</u>	
<u>61</u>	<u>GIP=183'</u>				

Rec Total 61 BHT 125 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2068</u>	<input checked="" type="checkbox"/> Test <u>\$1150.00/-</u>	T-On Location <u>16:50</u>
(B) First Initial Flow <u>32</u>	<input type="checkbox"/> Jars	T-Started <u>20:08</u>
(C) First Final Flow <u>41</u>	<input checked="" type="checkbox"/> Safety Joint <u>\$75.00/-</u>	T-Open <u>21:45</u>
(D) Initial Shut-In <u>785</u>	<input checked="" type="checkbox"/> Circ Sub <u>NC</u>	T-Pulled <u>01:30</u>
(E) Second Initial Flow <u>49</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>03:26</u>
(F) Second Final Flow <u>57</u>	<input checked="" type="checkbox"/> Mileage <u>140 RT = \$105.00/-</u>	Comments
(G) Final Shut-In <u>1156</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2024</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
	<input type="checkbox"/> Day Standby	Total <u>1330</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>\$1330.00/-</u>	

Initial Open 30
 Initial Shut-In 45
 Final Flow 60
 Final Shut-In 90

Approved By Cory Baker Our Representative Mike Roberts

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **63714**

Well Name & No. Jamison Unit 'A' #1-5 Test No. 6 Date 4-6-17
 Company Cobalt Energy LLC Elevation 2577 KB 2567 GL
 Address 115 S. Belmont #12 P.O. Box 8037 Wichita KS 67208
 Co. Rep / Geo. Coley Baker Rig Murfin 21
 Location: Sec. 5 Twp. 14s Rge. 27W Co. Gove State KS

Interval Tested 4294-4356 Zone Tested Miss
 Anchor Length 62 Drill Pipe Run 4050 Mud Wt. 9.2
 Top Packer Depth 4289 Drill Collars Run 244 Vis 54
 Bottom Packer Depth 4294 Wt. Pipe Run Ø WL 8.0
 Total Depth 4356 Chlorides 3500 ppm System LCM 3
 Blow Description IF: BOB in 7 Min
IS: Built to weak surface Blow
FF: BOB in 19 Min
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>248</u>	<u>900</u>	<u>30</u>	<u>70</u>		
<u>124</u>	<u>900</u>	<u>20</u>	<u>80</u>		
<u>124</u>	<u>800m</u>	<u>20</u>	<u>40</u>	<u>40</u>	
<u>244</u>	<u>900 (Collars)</u>	<u>20</u>	<u>80</u>		
	<u>GIP = 124'</u>	<u>100</u>			

Rec Total 740 BHT 133 Gravity 36 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2141 Test \$1150.00/- T-On Location 13:25
 (B) First Initial Flow 89 Jars T-Started 13:58
 (C) First Final Flow 199 Safety Joint \$75.00/- T-Open 15:32
 (D) Initial Shut-In 959 Circ Sub N/C T-Pulled 19:17
 (E) Second Initial Flow 226 Hourly Standby T-Out 21:26
 (F) Second Final Flow 306 Mileage 140 RT = \$105.00/- Comments _____
 (G) Final Shut-In 1044 Sampler _____
 (H) Final Hydrostatic 2088 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1330
 Accessibility _____ MP/DST Disc't _____

Sub Total 1330
 Approved By Coley Baker Our Representative M. Roberts

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