

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 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
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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				

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	STONE POST "A" 1-7
Doc ID	1431816

Tops

Name	Top	Datum
ANHY	1360	880
HEEBNER	3777	-1537
LANSING	3845	-1605
HUSH	4147	-1907
BKC	4203	-1963
PAWNEE	4306	-2066
FT SCOTT	4372	-2132
CHEROKEE	4395	-2155
MISS	4451	-2211



HURRICANE SERVICES INC

Customer: Cobalt Energy		Location & Well: Stone Post A #1-7		Date: 3/28/2018	
Service District: Medicine Lodge		County & State: Hodgeman, Ks		Job #: ICT1413	
Well Type: Surface		New Well? <input type="checkbox"/> YES <input type="checkbox"/> NO		Ticket #: ICT1413	
Job Safety Analysis - A Discussion of Hazards & Safety Procedures					
Equipment #		Operator		Safety Checklist	
231 Reeves, R		<input checked="" type="checkbox"/> Hard hat		<input type="checkbox"/> Lockout/Tagout	
242 Martinez, D		<input type="checkbox"/> Q/S Monitor		<input type="checkbox"/> Warning Signs & Flagging	
74 Retherford, R		<input checked="" type="checkbox"/> Safety Footwear		<input type="checkbox"/> Fall Protection	
		<input checked="" type="checkbox"/> PPE/Protective Clothing		<input checked="" type="checkbox"/> Specific Job Sequence/Expectations	
		<input type="checkbox"/> Hearing Protection		<input checked="" type="checkbox"/> Overhead Hazards	
		<input checked="" type="checkbox"/> Fire Extinguisher		<input checked="" type="checkbox"/> Master Point/Medical Locations	
		<input type="checkbox"/> Respiratory Protection		<input checked="" type="checkbox"/> Additional concerns or issues noted below	
		<input type="checkbox"/> Additional Chemical/Acid PPE			
Comments					
Dark so harder to see be aware of each other and surroundings					
Product Service					
Code	Description	Unit of Measure	Quantity	Net Amount	
C001	Heavy Equip. One Way	mi	60.00	\$168.75	
C002	Light Equip. One Way	mi	30.00	\$38.25	
C003	Ton Mileage - One way	mi	261.00	\$288.41	
C018	Cement Pump	ea	1.00	\$807.50	
CP004	Regular - Class A Cement	sack	178.00	\$2,417.19	
CP016	Bentonite Gel	lb	300.00	\$78.60	
CP017	Calcium - Chloride	lb	600.00	\$426.00	
CP027	Pheno Seal	lb	80.00	\$116.60	
C014	Cement Head Manifold	job	1.00	\$233.78	
Customer Section: On the following scale how would you rate Hurricane Services Inc?				Net: \$4,567.94	
Based on this job, how likely is it you would recommend HSI to a colleague? <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <small>Extremely Likely</small>				Total Taxable \$ - Tax Rate: <input type="checkbox"/>	
				State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.	
				Sale Tax: \$ -	
				Total: \$ 4,567.94	
				HSI Representative: Robert Retherford	

TERMS: Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 1/2% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to effect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. **DISCLAIMER NOTICE:** Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results from the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well information in determining taxable services.

X _____

CUSTOMER AUTHORIZATION SIGNATURE

TREATMENT REPORT



HURRICANE SERVICES INC

Customer:	Cobalt Energy	Date:	9/28/2018	Ticket #:	ICT1413
Field Rep:	Mike Kerrns				
Address:	P.O. Box 8037				
City, State:	Wichita				KS
County, Zip:	Sedgwick				67208

Field Order No.:		Open Hole:	12 1/4
Well Name:	Stone Post A 1-7	Casing Depth:	217
Location:	Hanston, Ka	Casing Size:	8 5/8 24#
Formation:		Tubing Depth:	
Type of Service:	Cement	Tubing Size:	
Well Type:	Oil & Gas	Liner Depth:	
Age of Well:		Liner Size:	
Packer Type:		Liner Top:	
Packer Depth:		Liner Bottom:	
Treatment Via:		Total Depth:	

Perf Depths (ft)		Perfs
Cement left in Casing	20 Ft	
Total Perfs		0

TIME	INJECTION RATE		PRESSURE		REMARKS	PROP (bbl)	HCL (gals)	FLUID (bbl)
	FLUID	N2/CO2	STP	ANNULUS				
12:00 AM					Arrive on Location			
12:15 AM					Spot trucks and rig up			
3:20 AM	3.5		100.0		Break circulation and pump spacer			15.00
3:25 AM	4.0		100.0		Mix 175 sk A at 14.8 PPG			44.00
4:00 AM	4.0		150.0		Displace			12.50
4:05 AM					Wash up			15.00
					TOTAL:	-	-	86.50

SUMMARY			
Max Fl. Rate	Avg Fl. Rate	Max PSI	Avg PSI
4.0	3.8	150.0	116.7

PRODUCTS USED
 175 SK Class A with 2% Gel, 3% CaCl, 1/4 lb Pheno Mixed @ 14.8 PPG with 6.8 gal h2o per sack yielding 1.41 cuft per sack

Treater: _____

Customer:



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

PO Box 8037
Wichita, KS 67208

ATTN: Jeff Christian

Stone Post A #1-17

7-23S-22W Hodgeman,KS

Start Date: 2018.10.02 @ 03:15:03

End Date: 2018.10.02 @ 10:21:05

Job Ticket #: 63827 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.10.08 @ 11:45:01



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy

7-23S-22W Hodgeman, KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63827

DST#: 1

ATTN: Jeff Christian

Test Start: 2018.10.02 @ 03:15:03

GENERAL INFORMATION:

Formation: **Ft Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:47:50

Time Test Ended: 10:21:05

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 74

Interval: 4358.00 ft (KB) To 4400.00 ft (KB) (TVD)

Reference Elevations: 2240.00 ft (KB)

Total Depth: 4400.00 ft (KB) (TVD)

2233.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8875

Inside

Press@RunDepth: 16.83 psig @ 4359.00 ft (KB)

Capacity: psig

Start Date: 2018.10.02

End Date:

2018.10.02

Last Calib.:

2018.10.02

Start Time: 03:15:04

End Time:

10:21:05

Time On Btm:

2018.10.02 @ 05:47:05

Time Off Btm:

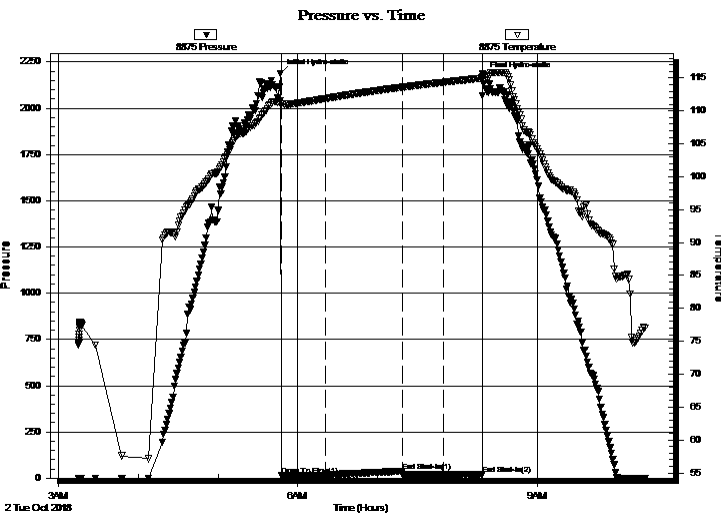
2018.10.02 @ 08:19:20

TEST COMMENT: IF: Weak Blow , Built to .75 inch

IS: No Blow Back

FF: No Blow

FS: No Blow Back



PRESSURE SUMMARY

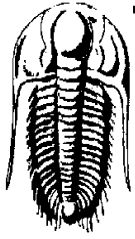
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2188.56	111.54	Initial Hydro-static
1	15.75	111.11	Open To Flow (1)
34	16.97	111.87	Shut-In(1)
92	37.01	113.59	End Shut-In(1)
92	17.20	113.61	Open To Flow (2)
123	16.83	114.35	Shut-In(2)
152	21.50	115.01	End Shut-In(2)
153	2169.13	115.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud	0.03

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy

PO Box 8037
Wichita, KS 67208

ATTN: Jeff Christian

7-23S-22W Hodgeman, KS

Stone Post A #1-17

Job Ticket: 63827

DST#: 1

Test Start: 2018.10.02 @ 03:15:03

GENERAL INFORMATION:

Formation: **Ft Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:47:50

Time Test Ended: 10:21:05

Test Type: Conventional Bottom Hole (Initial)

Tester: Leal Cason

Unit No: 74

Interval: 4358.00 ft (KB) To 4400.00 ft (KB) (TVD)

Reference Elevations: 2240.00 ft (KB)

Total Depth: 4400.00 ft (KB) (TVD)

2233.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6749 Outside

Press@RunDepth: psig @ 4359.00 ft (KB)

Capacity: psig

Start Date: 2018.10.02 End Date: 2018.10.02

Last Calib.: 2018.10.02

Start Time: 03:15:55 End Time: 10:21:56

Time On Btm:

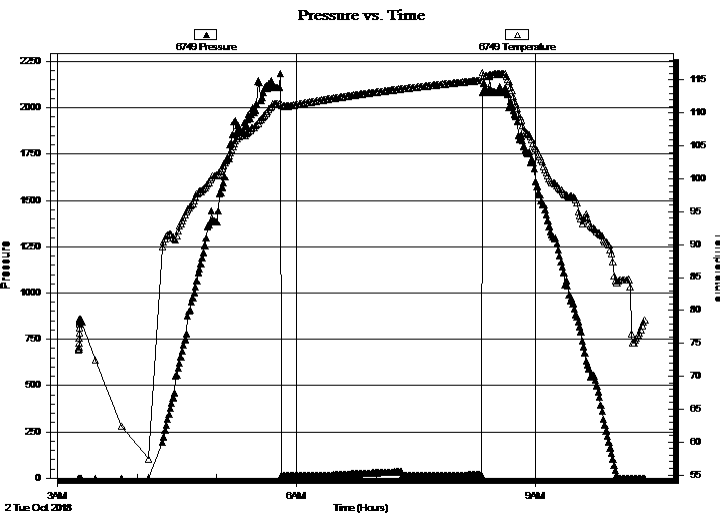
Time Off Btm:

TEST COMMENT: IF: Weak Blow, Built to .75 inch

IS: No Blow Back

FF: No Blow

FS: No Blow Back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud	0.03

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63827

DST#: 1

ATTN: Jeff Christian

Test Start: 2018.10.02 @ 03:15:03

Tool Information

Drill Pipe:	Length: 4356.00 ft	Diameter: 3.80 inches	Volume: 61.10 bbl	Tool Weight: 2100.00 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: 75000.00 lb
			<u>Total Volume: 61.10 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4358.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	42.00 ft			
Tool Length:	61.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4344.00	
Hydraulic tool	5.00			4349.00	
Packer	5.00			4354.00	19.00 Bottom Of Top Packer
Packer	4.00			4358.00	
Stubb	1.00			4359.00	
Recorder	0.00	8875	Inside	4359.00	
Recorder	0.00	6749	Outside	4359.00	
Perforations	38.00			4397.00	
Bullnose	3.00			4400.00	42.00 Bottom Packers & Anchor
Total Tool Length:	61.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63827

DST#: 1

ATTN: Jeff Christian

Test Start: 2018.10.02 @ 03:15:03

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: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.96 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5700.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud	0.028

Total Length: 2.00 ft Total Volume: 0.028 bbl

Num Fluid Samples: 0

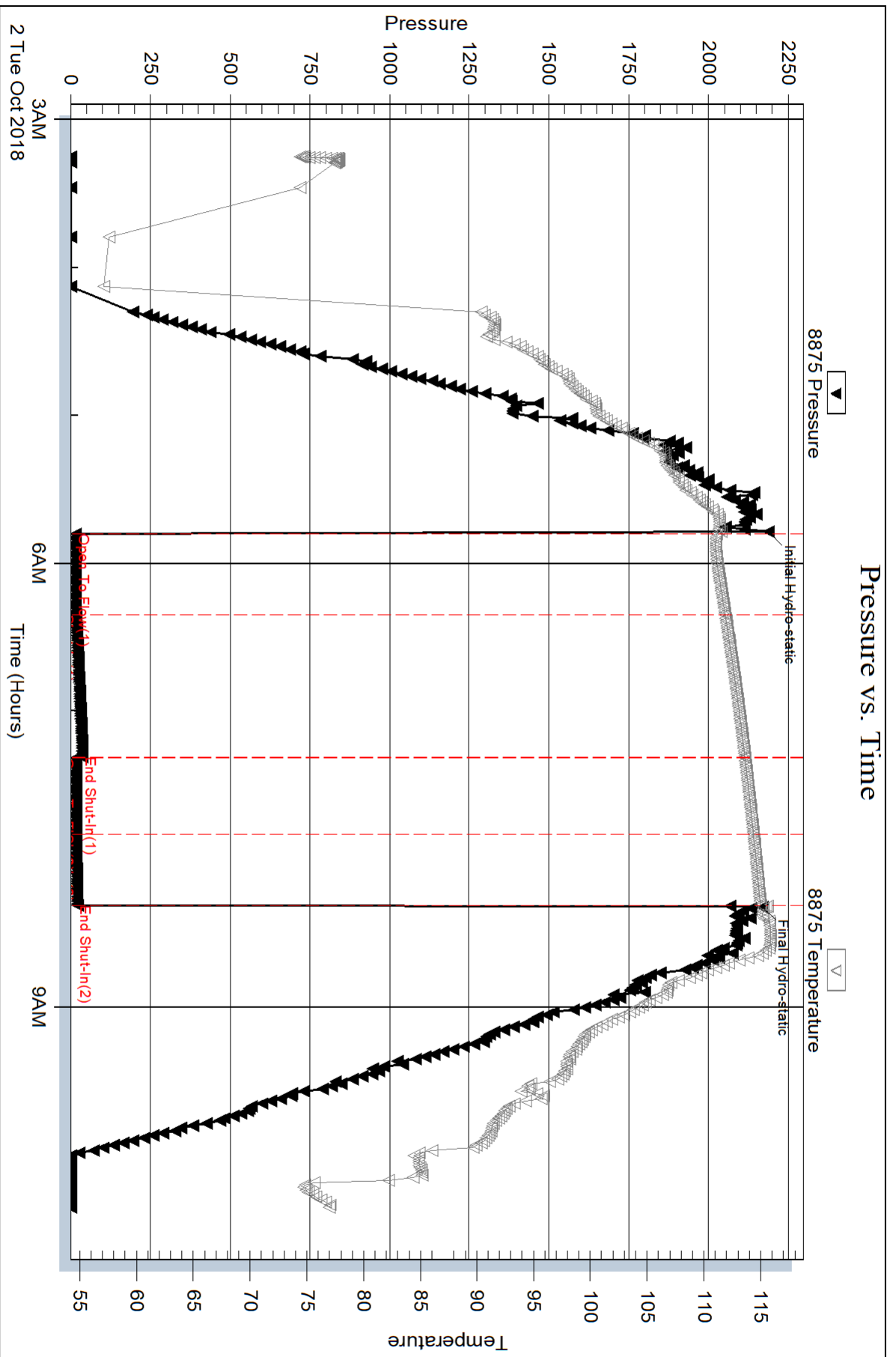
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

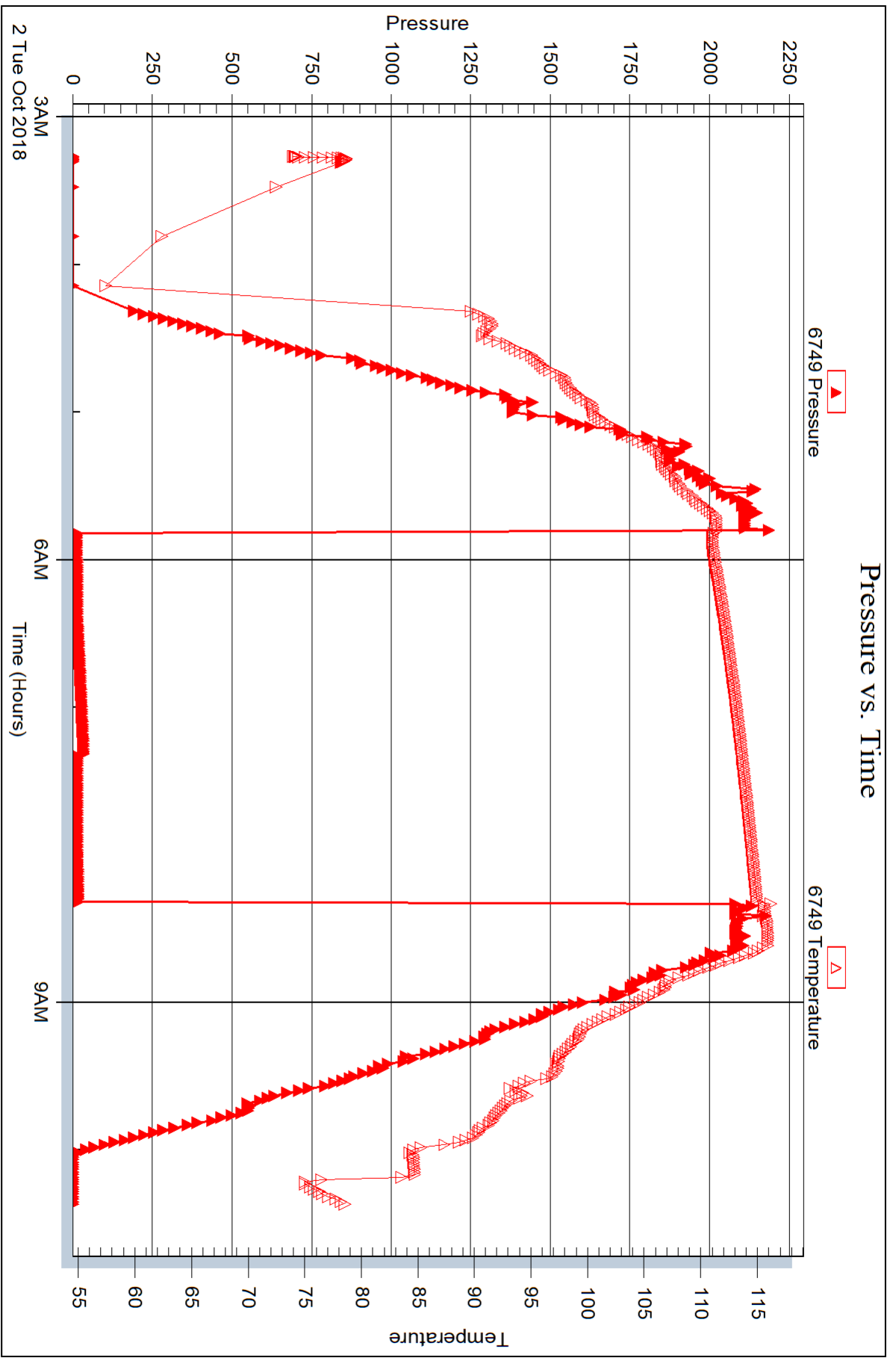


Serial #: 6749

Outside Cobalt Energy

Stone Post A #1-17

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 63827

Printed: 2018.10.08 @ 11:45:02



DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

PO Box 8037
Wichita, KS 67208

ATTN: Jeff Christian

Stone Post A #1-17

7-23S-22W Hodgeman,KS

Start Date: 2018.10.02 @ 21:55:26

End Date: 2018.10.03 @ 06:15:28

Job Ticket #: 63828 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.10.08 @ 11:44:37



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63828

DST#: 2

ATTN: Jeff Christian

Test Start: 2018.10.02 @ 21:55:26

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:16:13

Time Test Ended: 06:15:28

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

Interval: 4393.00 ft (KB) To 4441.00 ft (KB) (TVD)

Reference Elevations: 2240.00 ft (KB)

Total Depth: 4441.00 ft (KB) (TVD)

2233.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8875

Inside

Press@RunDepth: 283.66 psig @ 4394.00 ft (KB)

Capacity: psig

Start Date: 2018.10.02

End Date:

2018.10.03

Last Calib.:

2018.10.03

Start Time:

21:55:27

End Time:

06:15:28

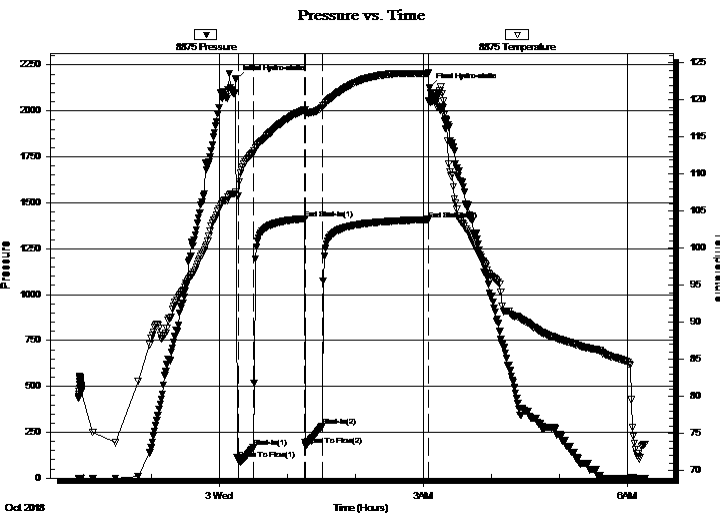
Time On Btm:

2018.10.03 @ 00:14:28

Time Off Btm:

2018.10.03 @ 03:05:28

TEST COMMENT: IF: Strong Blow , BOB in 90 seconds, Built to 135 inches
IS: Blow Back Built to 48 inches
FF: Strong Blow , BOB in 3 minutes, Built to 68 inches
FSI: Blow Back Built to 47 inches



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2172.80	107.58	Initial Hydro-static
2	102.45	107.06	Open To Flow (1)
16	169.21	112.89	Shut-In(1)
61	1413.48	118.63	End Shut-In(1)
62	177.55	118.34	Open To Flow (2)
77	283.66	118.96	Shut-In(2)
170	1409.39	123.53	End Shut-In(2)
171	2124.55	119.87	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	3353' GIP	0.00
908.00	GSY Oil 10%G 90%O	12.74

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Cobalt Energy

7-23S-22W Hodgeman, KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63828

DST#: 2

ATTN: Jeff Christian

Test Start: 2018.10.02 @ 21:55:26

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:16:13

Time Test Ended: 06:15:28

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

Interval: 4393.00 ft (KB) To 4441.00 ft (KB) (TVD)

Reference Elevations: 2240.00 ft (KB)

Total Depth: 4441.00 ft (KB) (TVD)

2233.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6749 Outside

Press@RunDepth: psig @ 4394.00 ft (KB)

Capacity: psig

Start Date: 2018.10.02 End Date: 2018.10.03

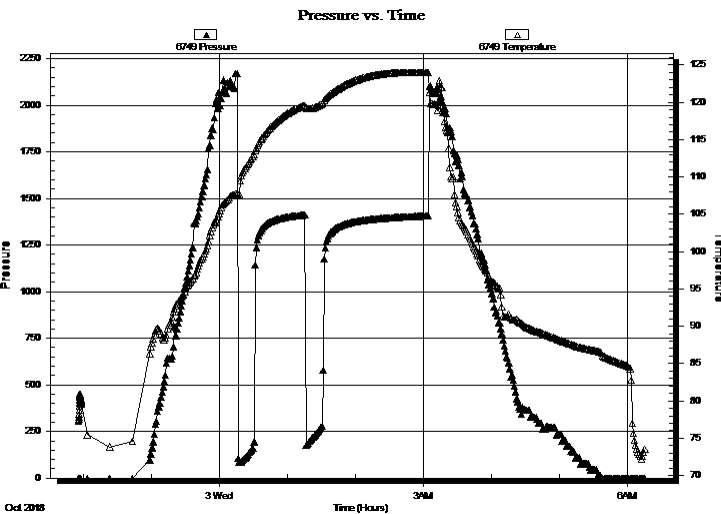
Last Calib.: 2018.10.03

Start Time: 21:55:25 End Time: 06:15:26

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Strong Blow , BOB in 90 seconds, Built to 135 inches
IS: Blow Back Built to 48 inches
FF: Strong Blow , BOB in 3 minutes, Built to 68 inches
FS: Blow Back Built to 47 inches



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	3353' GIP	0.00
908.00	GSY Oil 10%G 90%O	12.74

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63828

DST#: 2

ATTN: Jeff Christian

Test Start: 2018.10.02 @ 21:55:26

Tool Information

Drill Pipe:	Length: 4385.00 ft	Diameter: 3.80 inches	Volume: 61.51 bbl	Tool Weight: 2100.00 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: 80000.00 lb
			<u>Total Volume: 61.51 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	11.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4393.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.00 ft			
Tool Length:	67.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			4379.00	
Hydraulic tool	5.00			4384.00	
Packer	5.00			4389.00	19.00 Bottom Of Top Packer
Packer	4.00			4393.00	
Stubb	1.00			4394.00	
Recorder	0.00	8875	Inside	4394.00	
Recorder	0.00	6749	Outside	4394.00	
Perforations	9.00			4403.00	
Change Over Sub	1.00			4404.00	
Drill Pipe	32.00			4436.00	
Change Over Sub	2.00			4438.00	
Bullnose	3.00			4441.00	48.00 Bottom Packers & Anchor

Total Tool Length: 67.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63828

DST#: 2

ATTN: Jeff Christian

Test Start: 2018.10.02 @ 21:55:26

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

37.6 deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5800.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	3353' GIP	0.000
908.00	GSY Oil 10%G 90%O	12.737

Total Length: 908.00 ft Total Volume: 12.737 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

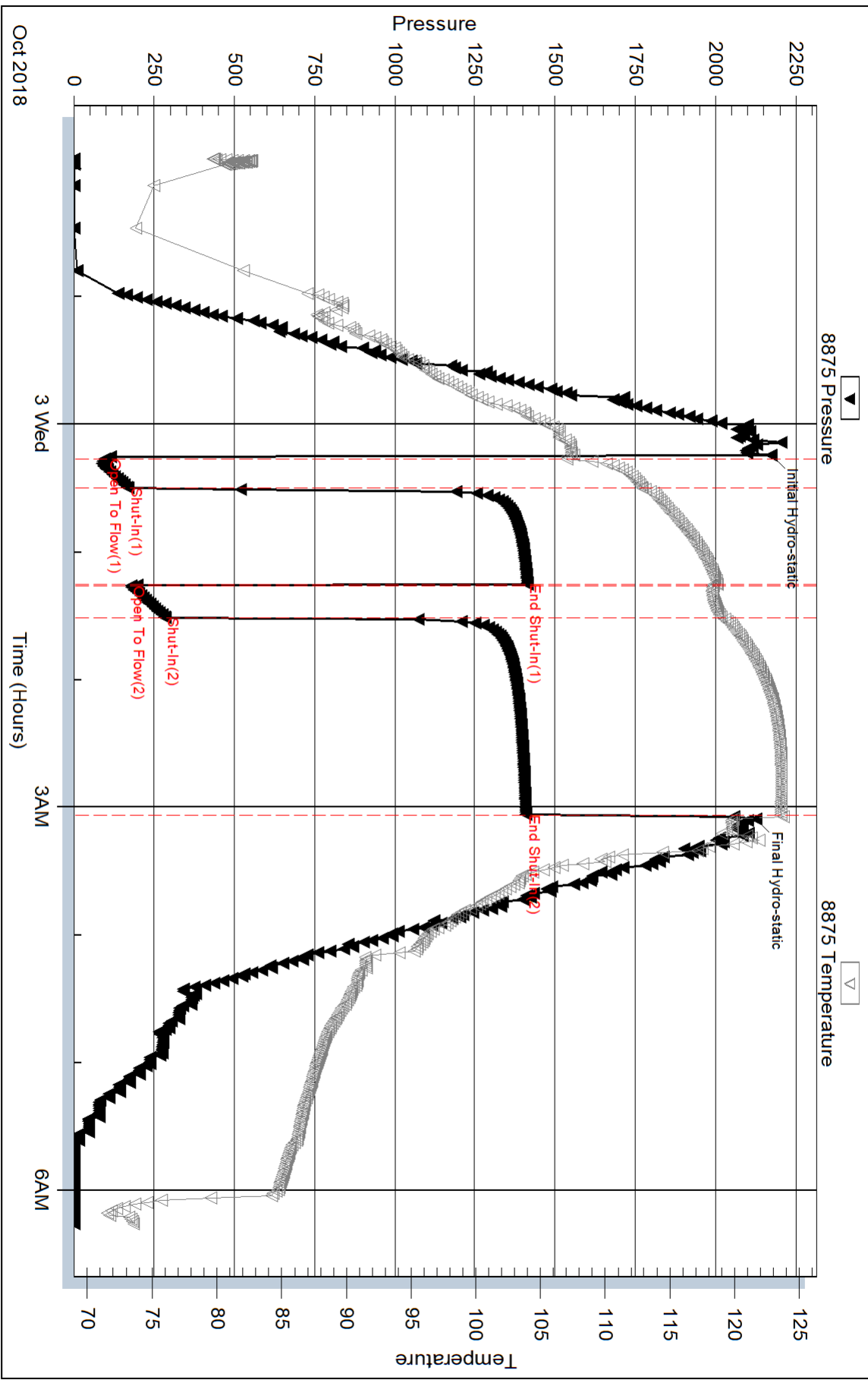
Serial #:

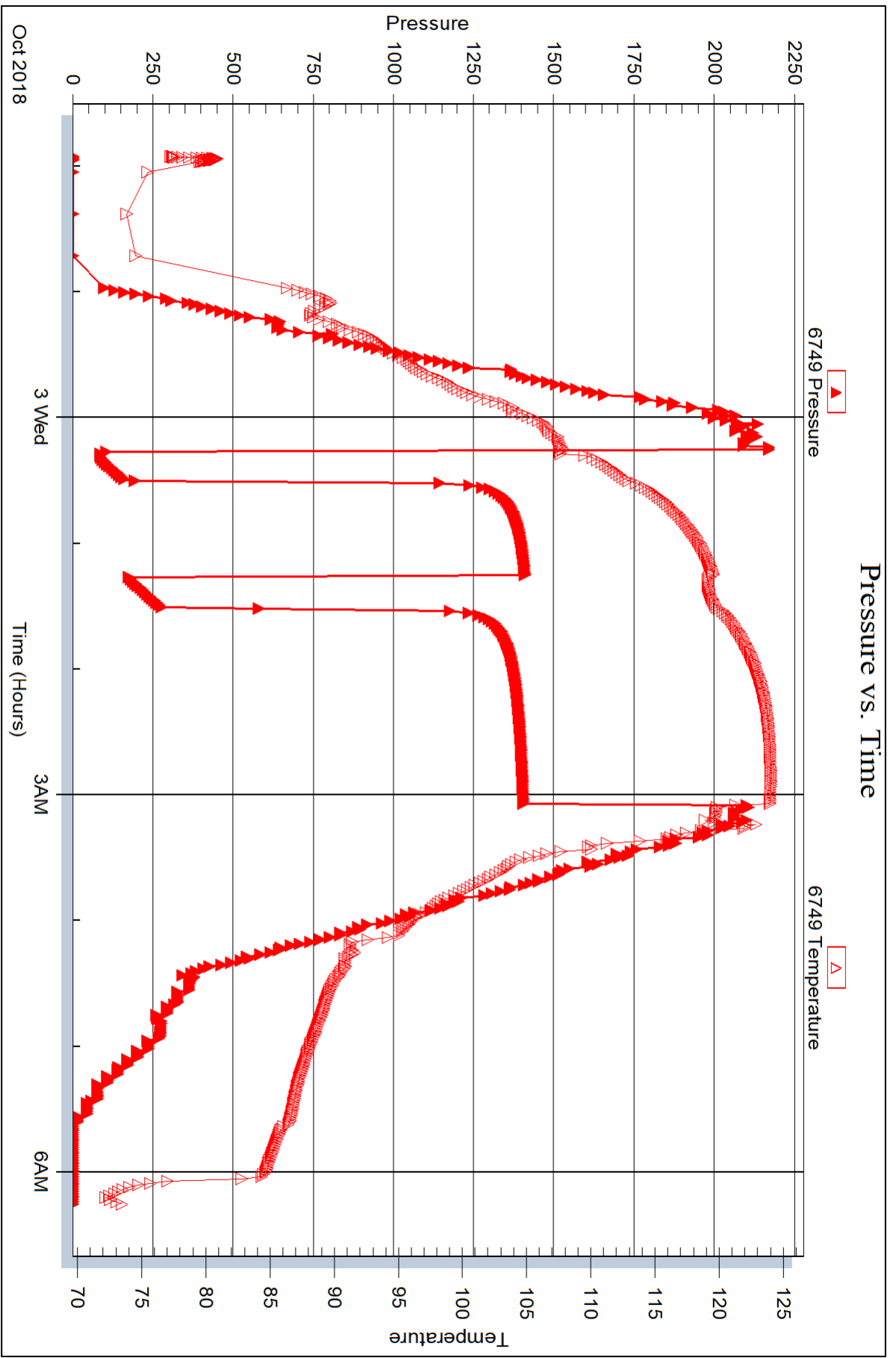
Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity w as 38.8 @ 72 degrees

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

PO Box 8037
Wichita, KS 67208

ATTN: Jeff Christian

Stone Post A #1-17

7-23S-22W Hodgeman,KS

Start Date: 2018.10.03 @ 18:42:47

End Date: 2018.10.03 @ 23:01:04

Job Ticket #: 63829 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.10.08 @ 11:44:14



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy

7-23S-22W Hodgeman, KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63829

DST#: 3

ATTN: Jeff Christian

Test Start: 2018.10.03 @ 18:42:47

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:42:34

Time Test Ended: 23:01:04

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

Interval: 4451.00 ft (KB) To 4461.00 ft (KB) (TVD)

Reference Elevations: 2240.00 ft (KB)

Total Depth: 4461.00 ft (KB) (TVD)

2233.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8875

Inside

Press@RunDepth: psig @ 4452.00 ft (KB)

Capacity: psig

Start Date: 2018.10.03

End Date:

2018.10.03

Last Calib.:

2018.10.03

Start Time: 18:42:48

End Time:

23:01:04

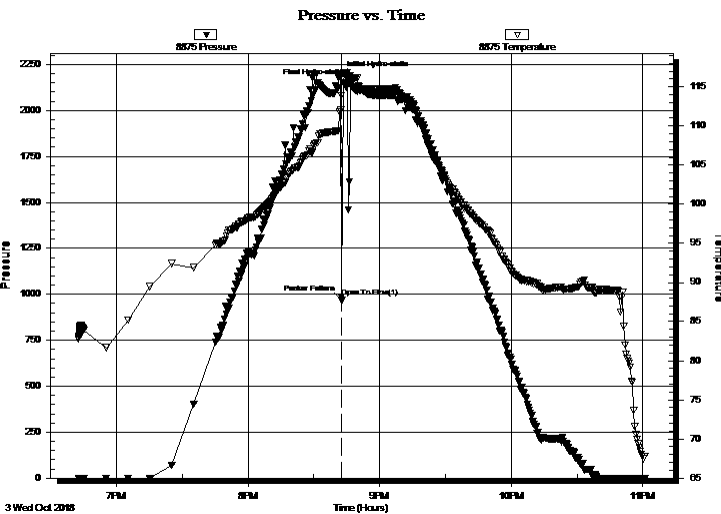
Time On Btm:

2018.10.03 @ 20:42:19

Time Off Btm:

2018.10.03 @ 20:46:34

TEST COMMENT: IF: Packer Failure, Tried to Reset, Failed Again, Pulled Tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2188.56	112.10	Initial Hydro-static
1	983.18	113.91	Open To Flow (1)
1	966.52	116.06	Packer Failure
5	2144.99	116.42	Final Hydro-static

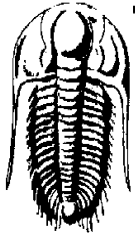
Recovery

Length (ft)	Description	Volume (bbl)
248.00	Mud	3.48

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy

7-23S-22W Hodgeman, KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63829 **DST#: 3**

ATTN: Jeff Christian

Test Start: 2018.10.03 @ 18:42:47

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:42:34

Time Test Ended: 23:01:04

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

Interval: **4451.00 ft (KB) To 4461.00 ft (KB) (TVD)**

Reference Elevations: 2240.00 ft (KB)

Total Depth: 4461.00 ft (KB) (TVD)

2233.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6749 Outside

Press@RunDepth: psig @ 4452.00 ft (KB)

Capacity: psig

Start Date: 2018.10.03

End Date: 2018.10.03

Last Calib.: 2018.10.03

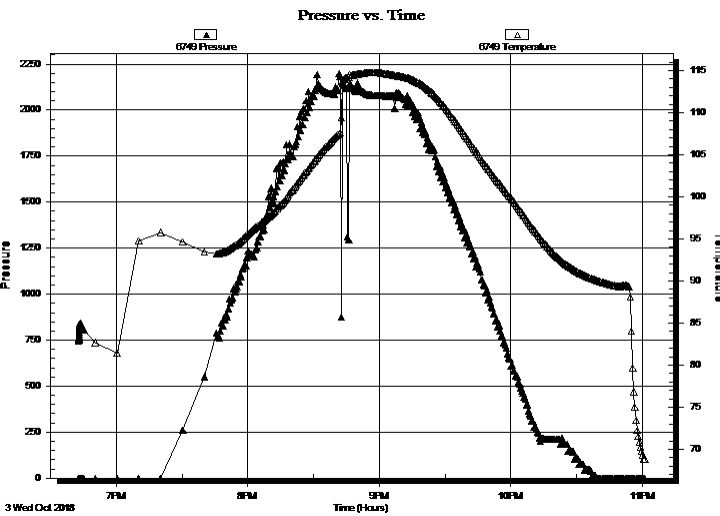
Start Time: 18:42:48

End Time: 23:01:04

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: Packer Failure, Tried to Reset, Failed Again, Pulled Tool



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
248.00	Mud	3.48

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63829

DST#: 3

ATTN: Jeff Christian

Test Start: 2018.10.03 @ 18:42:47

Tool Information

Drill Pipe:	Length: 4451.00 ft	Diameter: 3.80 inches	Volume: 62.44 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 50000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 62.44 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	4451.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	29.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4437.00	
Hydraulic tool	5.00			4442.00	
Packer	5.00			4447.00	19.00 Bottom Of Top Packer
Packer	4.00			4451.00	
Stubb	1.00			4452.00	
Recorder	0.00	8875	Inside	4452.00	
Recorder	0.00	6749	Outside	4452.00	
Perforations	6.00			4458.00	
Bullnose	3.00			4461.00	10.00 Bottom Packers & Anchor
Total Tool Length:	29.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63829

DST#: 3

ATTN: Jeff Christian

Test Start: 2018.10.03 @ 18:42:47

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8500.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
248.00	Mud	3.479

Total Length: 248.00 ft Total Volume: 3.479 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

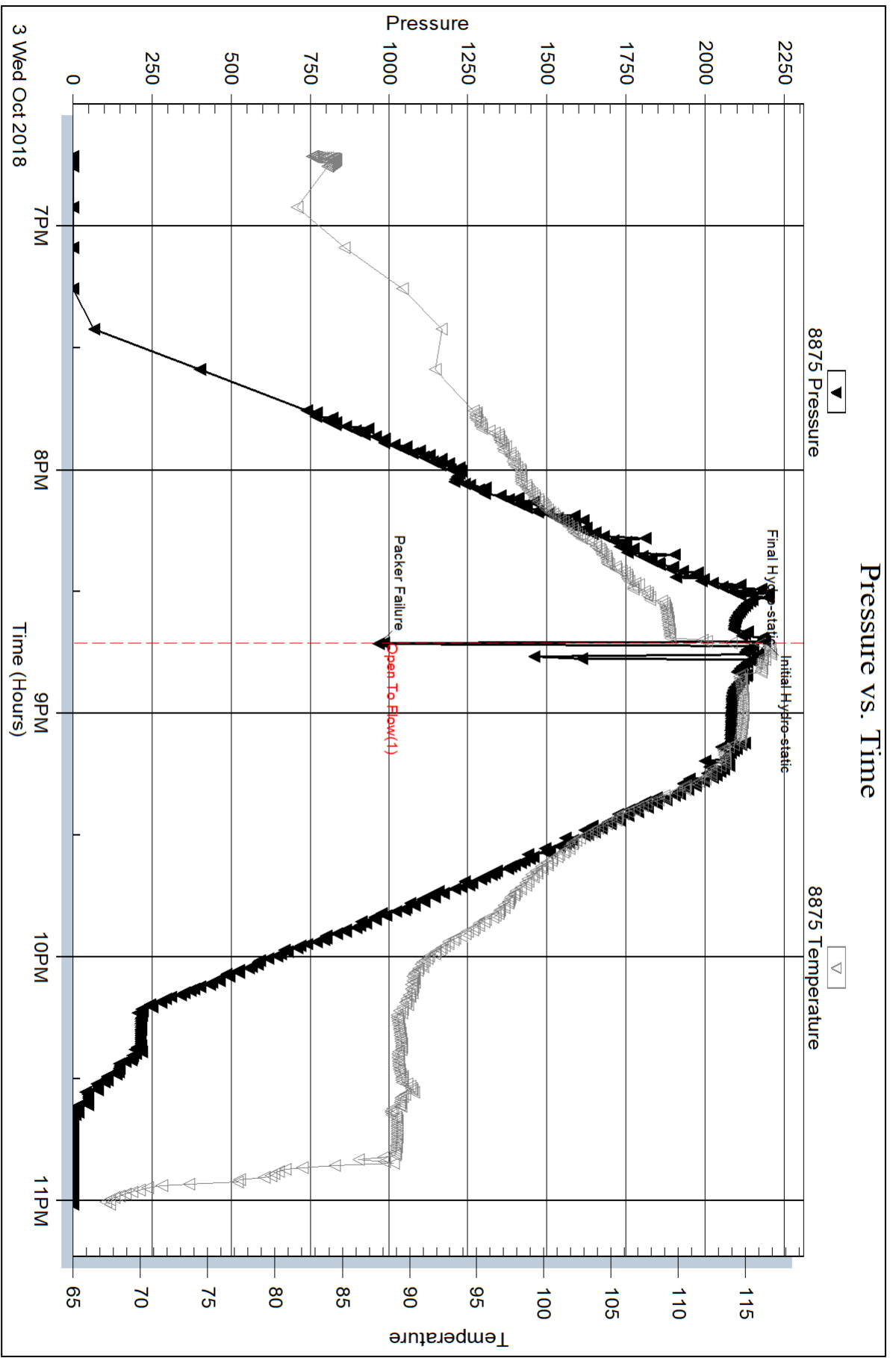
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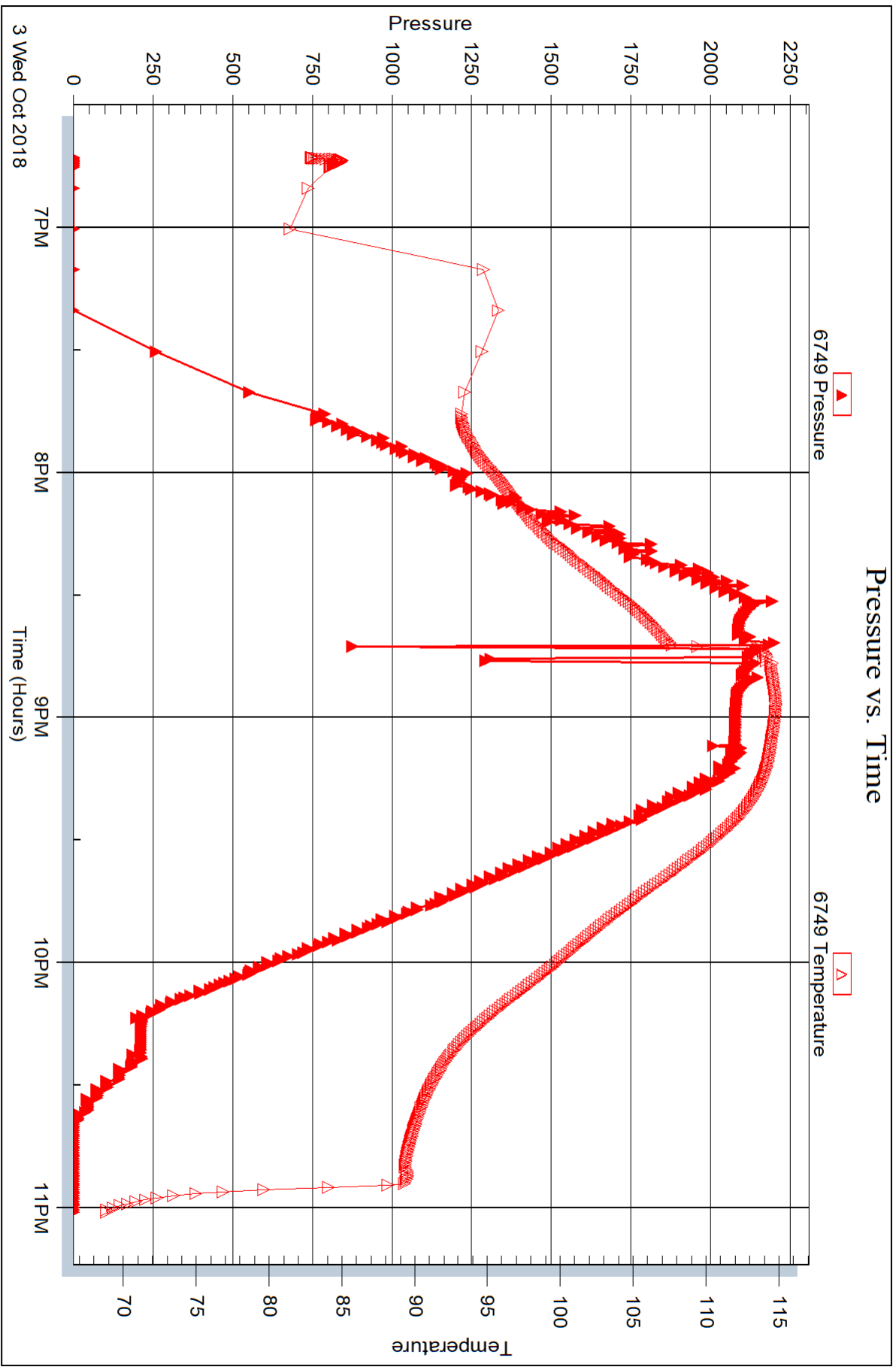
Inside

Cobalt Energy

Stone Post A #1-17

DST Test Number: 3







DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

PO Box 8037
Wichita, KS 67208

ATTN: Jeff Christian

Stone Post A #1-17

7-23S-22W Hodgeman,KS

Start Date: 2018.10.03 @ 23:10:28

End Date: 2018.10.04 @ 05:50:30

Job Ticket #: 63830 DST #: 4

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.10.08 @ 11:43:52



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy

7-23S-22W Hodgeman, KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63830

DST#: 4

ATTN: Jeff Christian

Test Start: 2018.10.03 @ 23:10:28

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:44:30

Time Test Ended: 05:50:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

Interval: 4455.00 ft (KB) To 4461.00 ft (KB) (TVD)

Reference Elevations: 2240.00 ft (KB)

Total Depth: 4461.00 ft (KB) (TVD)

2233.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8875

Inside

Press@RunDepth: 16.60 psig @ 4456.00 ft (KB)

Capacity: psig

Start Date: 2018.10.03

End Date:

2018.10.04

Last Calib.:

2018.10.04

Start Time: 23:10:29

End Time:

05:50:30

Time On Btm:

2018.10.04 @ 00:44:15

Time Off Btm:

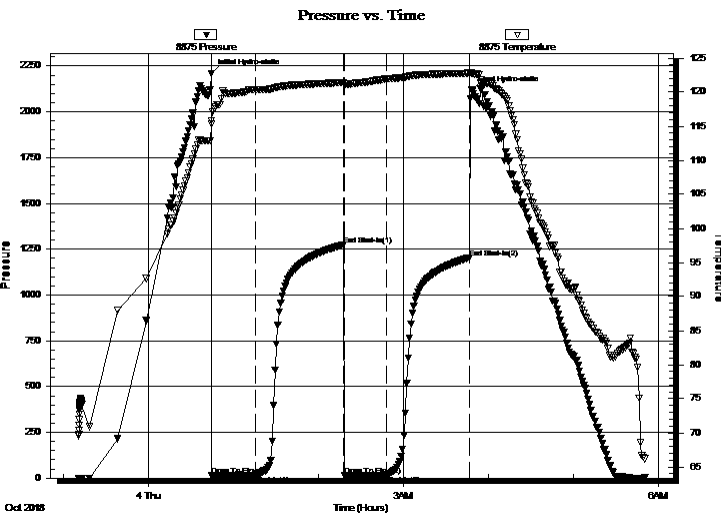
2018.10.04 @ 03:47:45

TEST COMMENT: IF: Weak Blow , Built to 0.5 inch

IS: No Blow Back

FF: No Blow

FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2210.04	115.28	Initial Hydro-static
1	13.62	115.80	Open To Flow (1)
31	14.08	120.40	Shut-In(1)
93	1273.76	121.38	End Shut-In(1)
94	15.09	121.17	Open To Flow (2)
124	16.60	121.95	Shut-In(2)
183	1204.22	122.80	End Shut-In(2)
184	2117.91	122.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	SOCM 5%O 95%M	0.07

* Recovery from multiple tests

Gas Rates

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



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy

7-23S-22W Hodgeman, KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63830 **DST#: 4**

ATTN: Jeff Christian

Test Start: 2018.10.03 @ 23:10:28

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:44:30

Time Test Ended: 05:50:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

Interval: 4455.00 ft (KB) To 4461.00 ft (KB) (TVD)

Reference Elevations: 2240.00 ft (KB)

Total Depth: 4461.00 ft (KB) (TVD)

2233.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6749 **Outside**

Press@RunDepth: psig @ 4456.00 ft (KB)

Capacity: psig

Start Date: 2018.10.03

End Date:

2018.10.04

Last Calib.:

2018.10.04

Start Time: 23:10:53

End Time:

05:50:54

Time On Btm:

Time Off Btm:

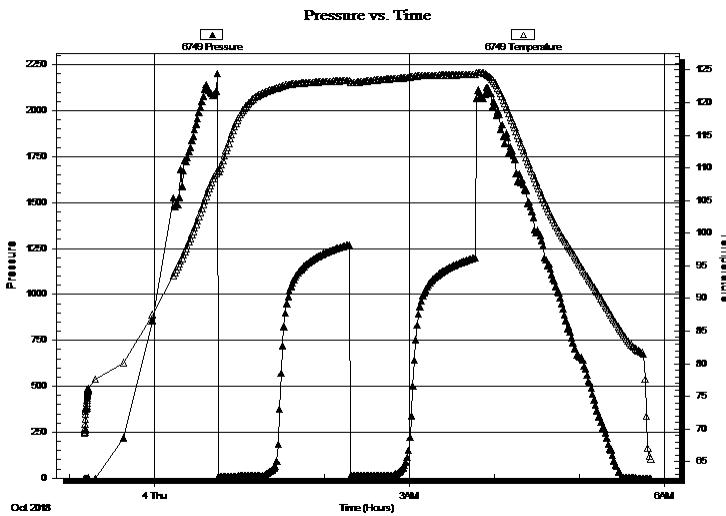
TEST COMMENT: IF: Weak Blow , Built to 0.5 inch

IS: No Blow Back

FF: No Blow

FS: No Blow Back

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	SOCM 5% O 95% M	0.07

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63830

DST#: 4

ATTN: Jeff Christian

Test Start: 2018.10.03 @ 23:10:28

Tool Information

Drill Pipe:	Length: 4451.00 ft	Diameter: 3.80 inches	Volume: 62.44 bbl	Tool Weight: 2100.00 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: 80000.00 lb
			<u>Total Volume: 62.44 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4455.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	6.00 ft			
Tool Length:	25.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Shale Packer on Bottom

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			4441.00	
Hydraulic tool	5.00			4446.00	
Packer	5.00			4451.00	19.00 Bottom Of Top Packer
Packer	4.00			4455.00	
Stubb	1.00			4456.00	
Recorder	0.00	8875	Inside	4456.00	
Recorder	0.00	6749	Outside	4456.00	
Perforations	2.00			4458.00	
Bullnose	3.00			4461.00	6.00 Bottom Packers & Anchor
Total Tool Length:	25.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63830

DST#: 4

ATTN: Jeff Christian

Test Start: 2018.10.03 @ 23:10:28

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: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.17 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8500.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	SOCM 5%O 95%M	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

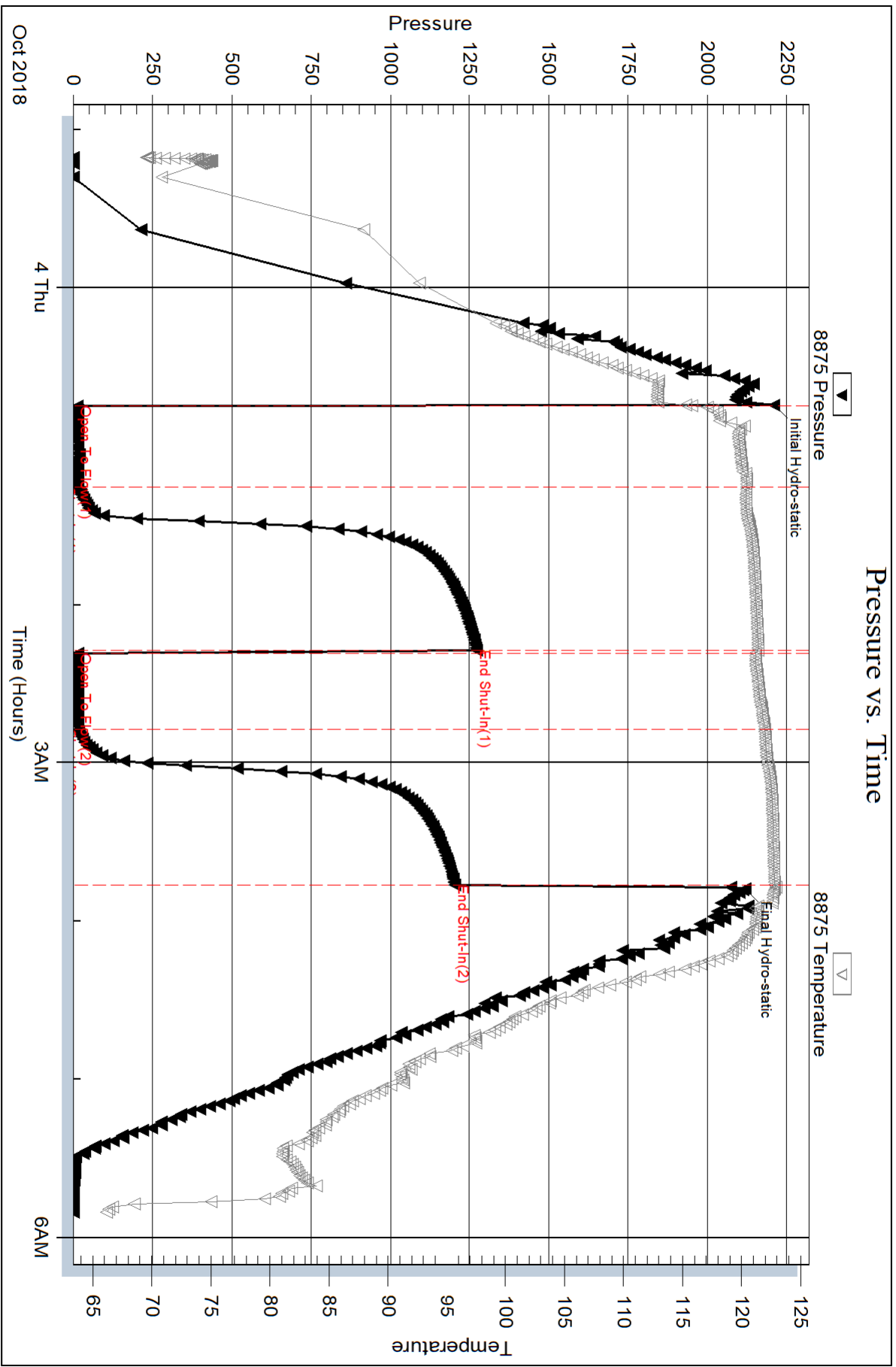
Num Gas Bombs: 0

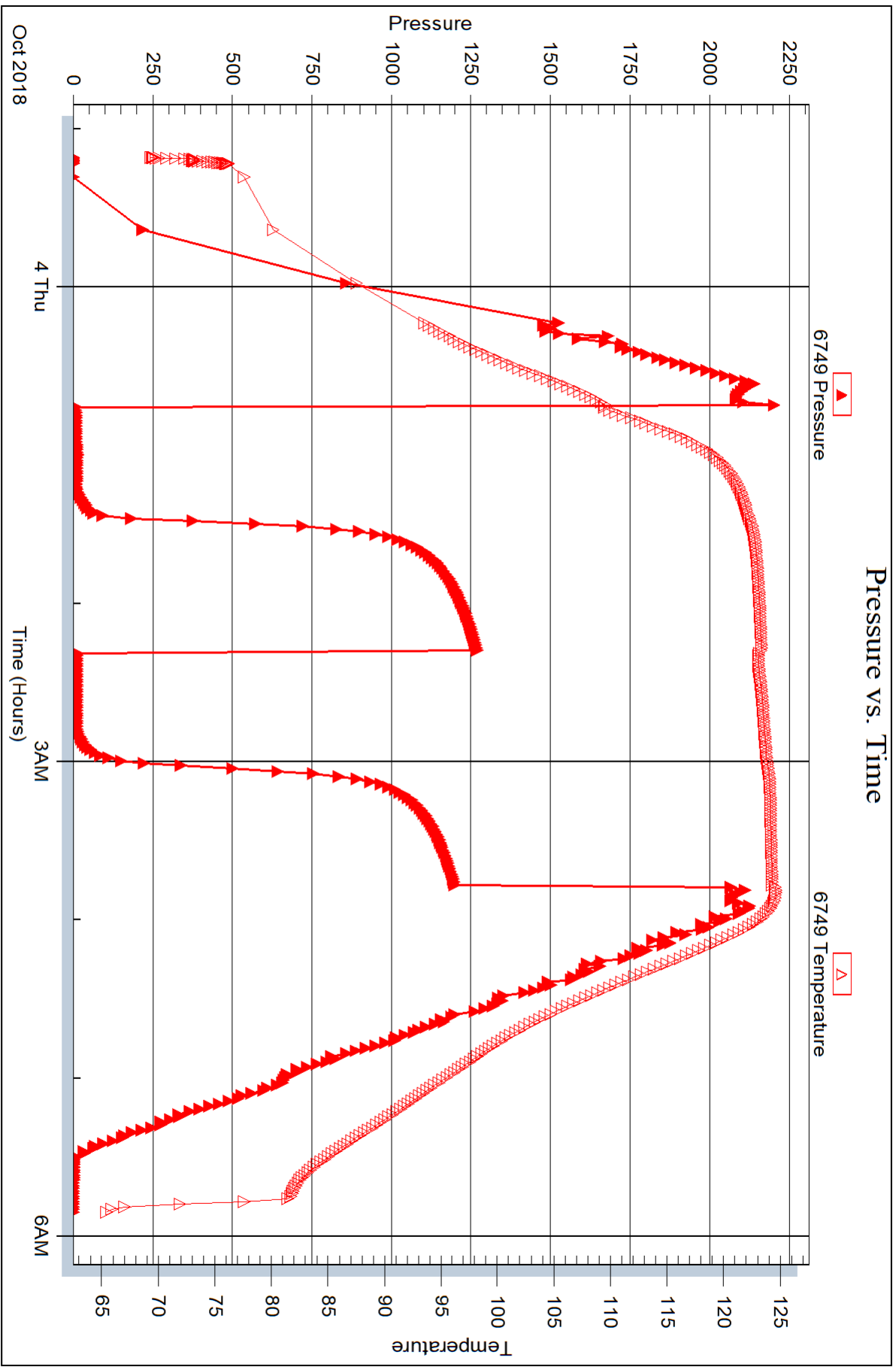
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

PO Box 8037
Wichita, KS 67208

ATTN: Jeff Christian

Stone Post A #1-17

7-23S-22W Hodgeman,KS

Start Date: 2018.10.04 @ 14:29:31

End Date: 2018.10.04 @ 22:13:33

Job Ticket #: 63831 DST #: 5

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.10.08 @ 11:43:22



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy

7-23S-22W Hodgeman, KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

ATTN: Jeff Christian

Job Ticket: 63831

DST#: 5

Test Start: 2018.10.04 @ 14:29:31

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:46:33

Time Test Ended: 22:13:33

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

Interval: 4461.00 ft (KB) To 4471.00 ft (KB) (TVD)

Reference Elevations: 2240.00 ft (KB)

Total Depth: 4471.00 ft (KB) (TVD)

2233.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8875

Inside

Press@RunDepth: 32.65 psig @ 4462.00 ft (KB)

Capacity: psig

Start Date: 2018.10.04

End Date:

2018.10.04

Last Calib.:

2018.10.04

Start Time: 14:29:32

End Time:

22:13:33

Time On Btm:

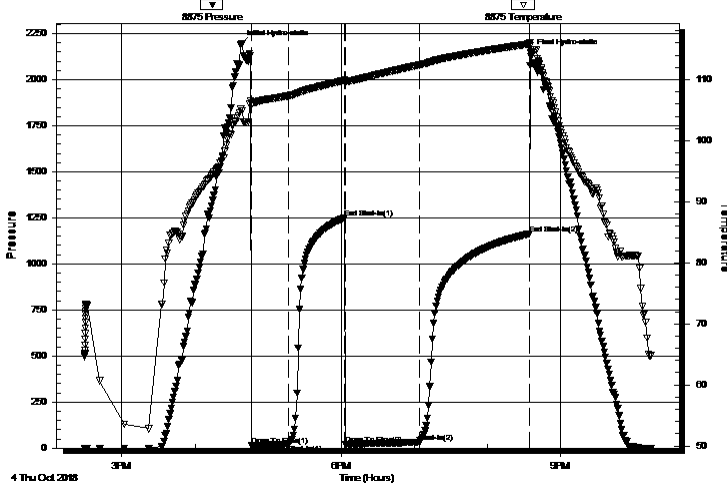
2018.10.04 @ 16:37:33

Time Off Btm:

2018.10.04 @ 20:35:03

TEST COMMENT: IF: Weak Blow , Built to 3.25 inches
IS: Weak Surface Blow Back
FF: Weak Blow , Built to 5.5 inches
FS: No Blow Back

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2189.48	105.18	Initial Hydro-static
9	14.82	105.97	Open To Flow (1)
39	19.68	107.35	Shut-In(1)
85	1250.95	109.89	End Shut-In(1)
86	20.73	109.70	Open To Flow (2)
146	32.65	112.39	Shut-In(2)
237	1163.99	115.83	End Shut-In(2)
238	2143.14	115.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	OCM 20%O 80%M	0.42

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63831

DST#: 5

ATTN: Jeff Christian

Test Start: 2018.10.04 @ 14:29:31

Tool Information

Drill Pipe:	Length: 4451.00 ft	Diameter: 3.80 inches	Volume: 62.44 bbl	Tool Weight: 2100.00 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: 80000.00 lb
			<u>Total Volume: 62.44 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial 72000.00 lb
Depth to Top Packer:	4461.00 ft			Final 72000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	29.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Shale Packer on Bottom

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4447.00	
Hydraulic tool	5.00			4452.00	
Packer	5.00			4457.00	19.00 Bottom Of Top Packer
Packer	4.00			4461.00	
Stubb	1.00			4462.00	
Recorder	0.00	8875	Inside	4462.00	
Recorder	0.00	6749	Outside	4462.00	
Perforations	6.00			4468.00	
Bullnose	3.00			4471.00	10.00 Bottom Packers & Anchor
Total Tool Length:	29.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63831

DST#: 5

ATTN: Jeff Christian

Test Start: 2018.10.04 @ 14:29:31

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	OCM 20%O 80%M	0.421

Total Length: 30.00 ft Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

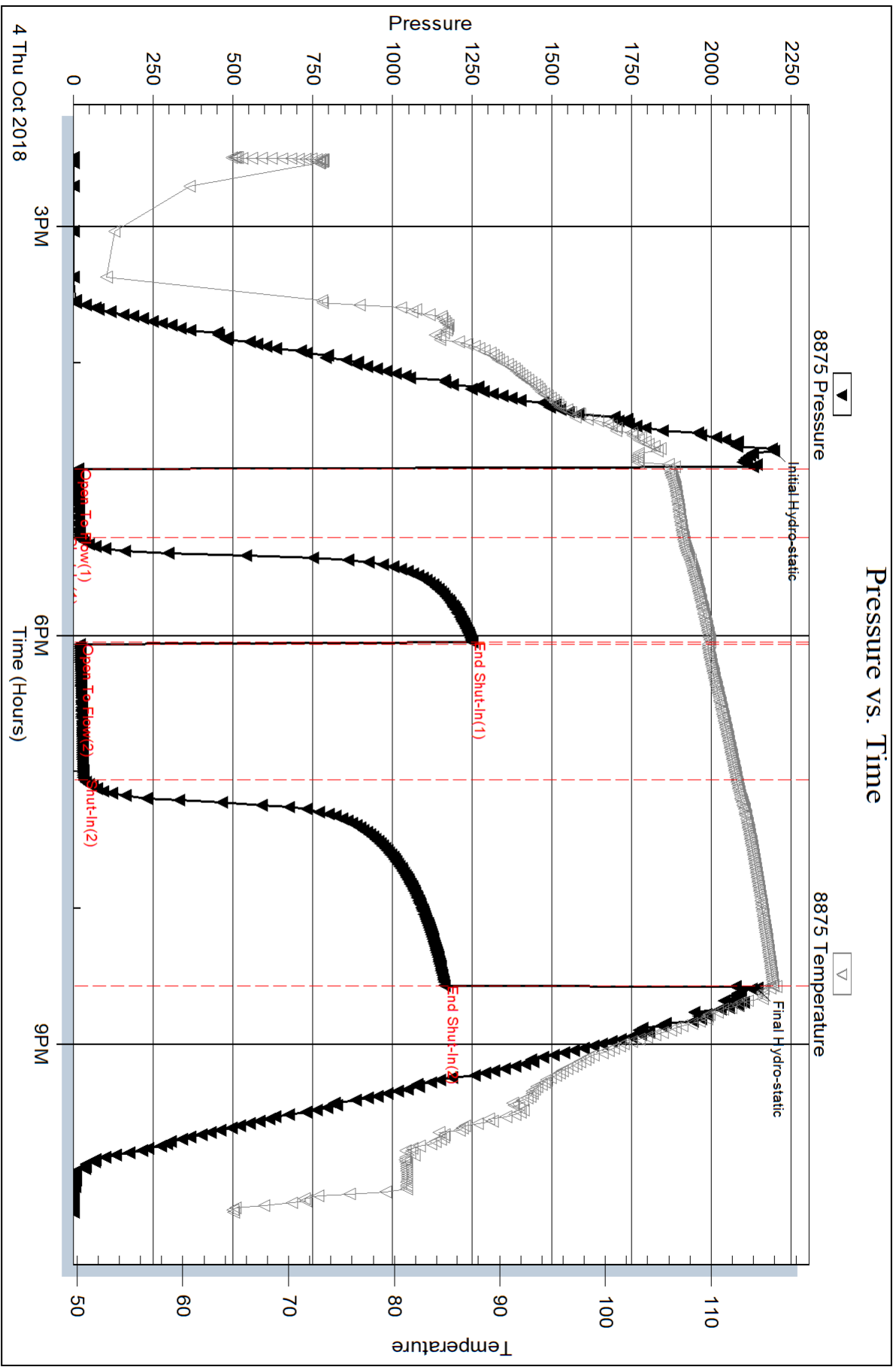
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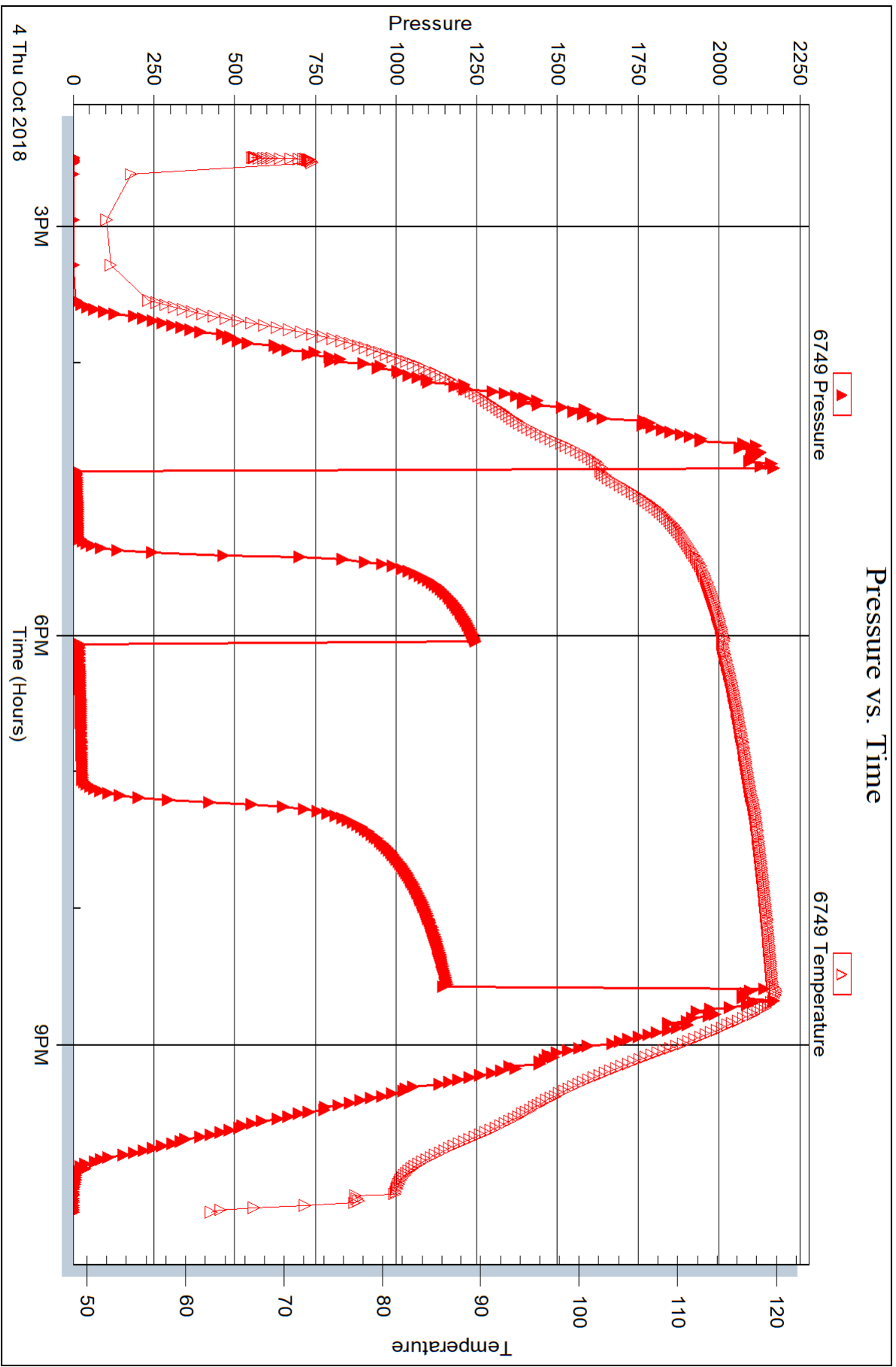
Inside

Cobalt Energy

Stone Post A #1-17

DST Test Number: 5







DRILL STEM TEST REPORT

Prepared For: **Cobalt Energy**

PO Box 8037
Wichita, KS 67208

ATTN: Jeff Christian

Stone Post A #1-17

7-23S-22W Hodgeman,KS

Start Date: 2018.10.05 @ 07:34:10

End Date: 2018.10.05 @ 16:04:12

Job Ticket #: 63832 DST #: 6

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.10.08 @ 11:42:51



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Cobalt Energy

7-23S-22W Hodgeman, KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

ATTN: Jeff Christian

Job Ticket: 63832

DST#: 6

Test Start: 2018.10.05 @ 07:34:10

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:51:12

Time Test Ended: 16:04:12

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

Interval: 4471.00 ft (KB) To 4491.00 ft (KB) (TVD)

Reference Elevations: 2240.00 ft (KB)

Total Depth: 4491.00 ft (KB) (TVD)

2233.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 8875

Inside

Press@RunDepth: 163.56 psig @ 4472.00 ft (KB)

Capacity: psig

Start Date: 2018.10.05 End Date: 2018.10.05

Last Calib.: 2018.10.05

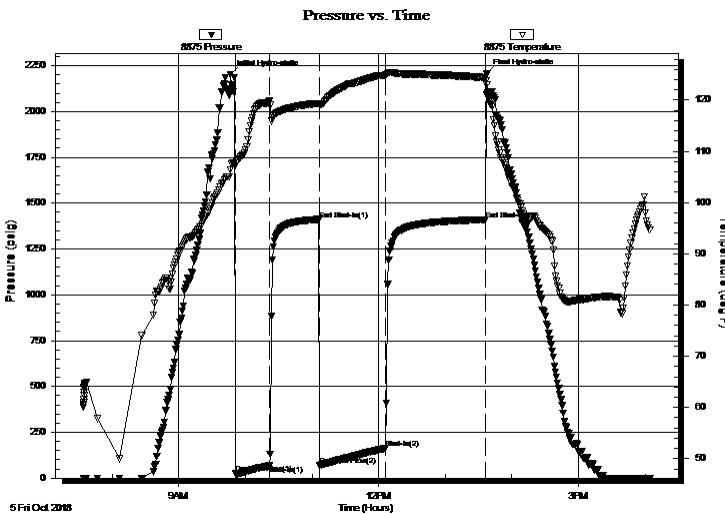
Start Time: 07:34:11 End Time: 16:04:12

Time On Btm: 2018.10.05 @ 09:46:12

Time Off Btm: 2018.10.05 @ 13:37:27

TEST COMMENT: IF: Weak Blow, Built to 4.75 inches
IS: No Blow Back
FF: Fair Blow, BOB in 17 minutes, Built to 36.75 inches
FS: No Blow Back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2200.27	106.45	Initial Hydro-static
5	23.46	107.21	Open To Flow (1)
36	70.45	119.83	Shut-In(1)
81	1411.59	119.30	End Shut-In(1)
81	71.84	119.00	Open To Flow (2)
141	163.56	124.86	Shut-In(2)
231	1410.23	124.36	End Shut-In(2)
232	2208.04	122.98	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	OMCW 10%O 24%M 66%W	1.74
206.00	Clean Oil	2.89

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63832

DST#: 6

ATTN: Jeff Christian

Test Start: 2018.10.05 @ 07:34:10

Tool Information

Drill Pipe:	Length: 4482.00 ft	Diameter: 3.80 inches	Volume: 62.87 bbl	Tool Weight:	2100.00 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:	80000.00 lb
			<u>Total Volume: 62.87 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	72000.00 lb
Depth to Top Packer:	4471.00 ft			Final	74000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	20.00 ft				
Tool Length:	39.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments: Shale Packer on Bottom

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			4457.00	
Hydraulic tool	5.00			4462.00	
Packer	5.00			4467.00	19.00 Bottom Of Top Packer
Packer	4.00			4471.00	
Stubb	1.00			4472.00	
Recorder	0.00	8875	Inside	4472.00	
Recorder	0.00	6749	Outside	4472.00	
Perforations	16.00			4488.00	
Bullnose	3.00			4491.00	20.00 Bottom Packers & Anchor
Total Tool Length:	39.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Cobalt Energy

7-23S-22W Hodgeman,KS

PO Box 8037
Wichita, KS 67208

Stone Post A #1-17

Job Ticket: 63832

DST#: 6

ATTN: Jeff Christian

Test Start: 2018.10.05 @ 07:34:10

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:

58000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 9000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
124.00	OMCW 10%O 24%M 66%W	1.739
206.00	Clean Oil	2.890

Total Length: 330.00 ft Total Volume: 4.629 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity was 38.2@ 82 degrees

RW was .1 @ 90 degrees

Serial #: 8875

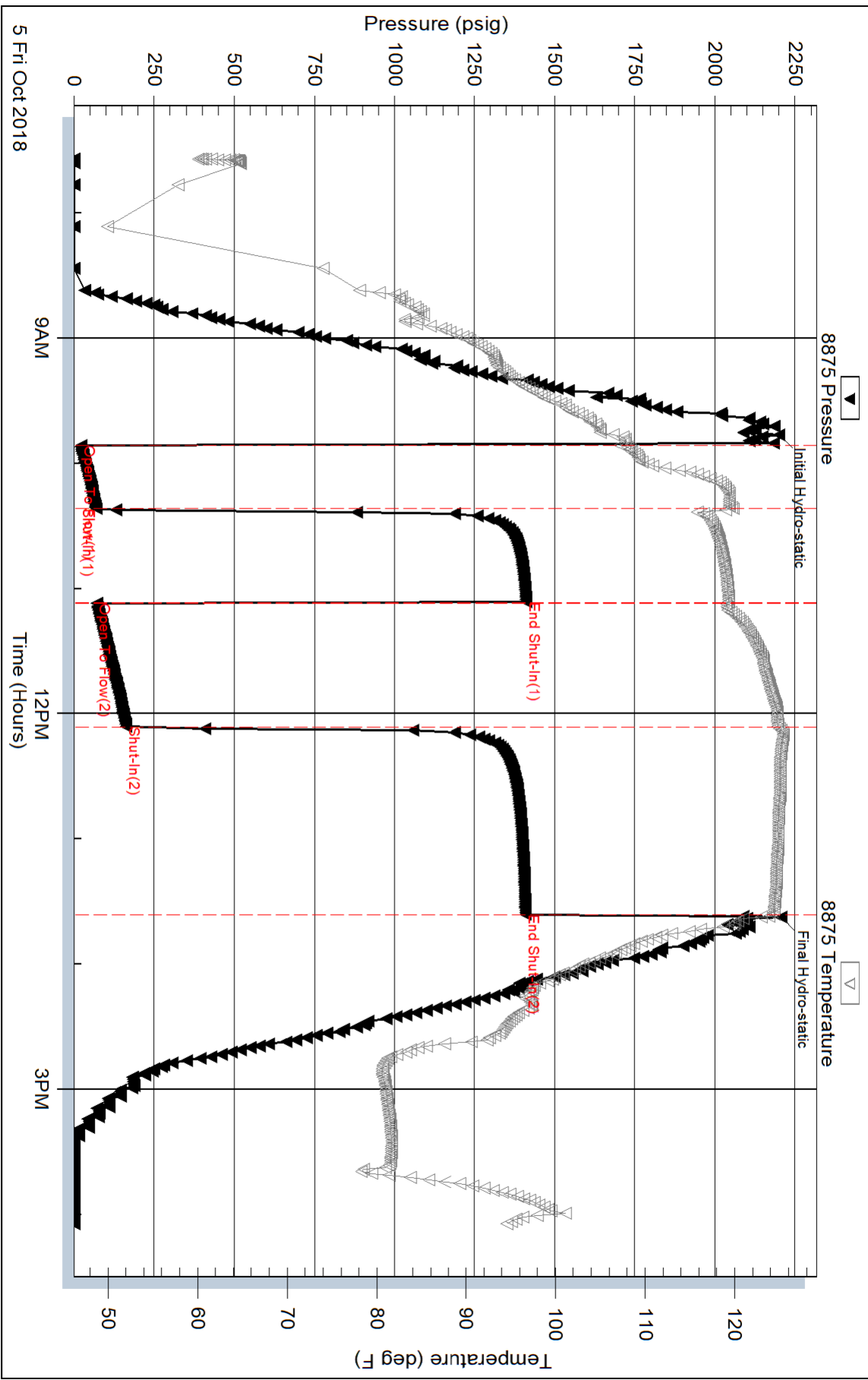
Inside

Cobalt Energy

Stone Post A #1-17

DST Test Number: 6

Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 63832

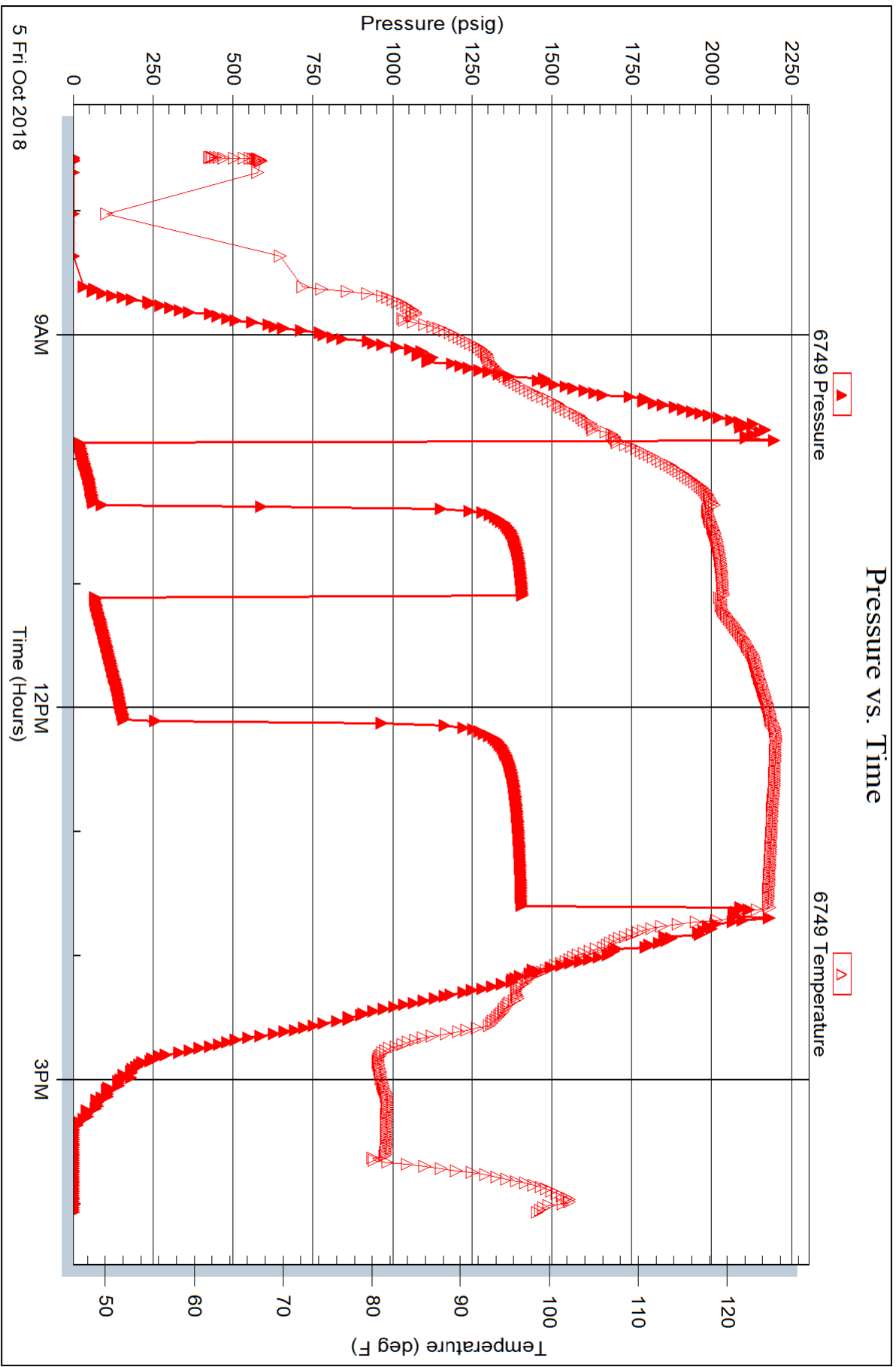
Printed: 2018.10.08 @ 11:42:52

Serial #: 6749

Outside Cobalt Energy

Stone Post A #1-17

DST Test Number: 6



Trilobite Testing, Inc

Ref. No: 63832

Printed: 2018.10.08 @ 11:42:52



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63827

Well Name & No. Stone Post A 1-7 Test No. 1 Date 10/02/18
 Company Cobalt Energy Elevation 2240 KB 2233 GL
 Address Po Box 8037 Wichita, KS 67208
 Co. Rep / Geo. Jeff Christian Rig Pickrell 10
 Location: Sec. 7 Twp 23S Rge. 22W Co. Hodgeman State KS

Interval Tested 4358 - 4400 Zone Tested FT scott
 Anchor Length 42 Drill Pipe Run 4356 Mud Wt. 9.3
 Top Packer Depth 4353 Drill Collars Run 0 Vis 60
 Bottom Packer Depth 4358 Wt. Pipe Run 0 WL 10.0
 Total Depth 4400 Chlorides 5700 ppm System LCM 1/2

Blow Description IF: Weak Blow, Built to 3/4 inch
ISI: NO BLOW BACK
FF: NO BLOW
FSI: NO BLOW BACK

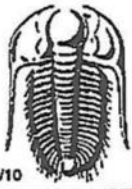
Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>Mud</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2 BHT 116 Gravity N/C API RW N/C @ N/C F Chlorides N/C ppm
 (A) Initial Hydrostatic 2188 Test 1150 T-On Location 01:30
 (B) First Initial Flow 16 Jars T-Started 03:15
 (C) First Final Flow 17 Safety Joint T-Open 05:47
 (D) Initial Shut-In 37 Circ Sub T-Pulled 08:18
 (E) Second Initial Flow 17 Hourly Standby T-Out 10:21
 (F) Second Final Flow 17 Mileage (140) 125rt Comments Ness City
 (G) Final Shut-In 21 Sampler House
 (H) Final Hydrostatic 2169 Straddle Ruined Shale Packer
 Shale Packer Ruined Packer
 Extra Packer Extra Copies
 Extra Recorder Sub Total 0
 Day Standby Total 1275
 Accessibility MP/DST Disc't
 Sub Total 1275

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

Approved By Jeff Christian Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63828

Well Name & No. Stone Post A 1-7 Test No. 2 Date 10/02/18
 Company Cobalt Energy Elevation 2240 KB 2233 GL
 Address PO Box 8037 Wichita, KS 67208
 Co. Rep / Geo. Jeff Christian Rig Pickrell 10
 Location: Sec. 7 Twp 23S Rge. 22W Co. Hodgeman State KS

Interval Tested 4393 - 4441 Zone Tested Cherokee
 Anchor Length 48 Drill Pipe Run 4385 Mud Wt. 9.5
 Top Packer Depth 4388 Drill Collars Run 0 Vis 53
 Bottom Packer Depth 4393 Wt. Pipe Run 0 WL 10.4
 Total Depth 4441 Chlorides 5806 ppm System LCM 1/2

Blow Description IF: Strong Blow, BOB in 90 seconds, Built to 135 inches
ISI: Blow Back Built to 48 inches
FF: Strong Blow, BOB in 3 minutes, Built to 68 inches
FSI: Blow Back Built to 47 inches

Rec	Feet of	%gas	%oil	%water	%mud
<u>3353</u>	<u>GIP</u>				
<u>908</u>	<u>GSY Oil</u>	<u>10</u>	<u>90</u>		

Rec Total 908 BHT 124 Gravity 37.6 API RW NIC @ NIC F Chlorides NIC ppm

(A) Initial Hydrostatic	<u>2173</u>
(B) First Initial Flow	<u>102</u>
(C) First Final Flow	<u>169</u>
(D) Initial Shut-In	<u>1413</u>
(E) Second Initial Flow	<u>178</u>
(F) Second Final Flow	<u>274</u>
(G) Final Shut-In	<u>1409</u>
(H) Final Hydrostatic	<u>2124</u>
Initial Open	<u>15</u>
Initial Shut-In	<u>45</u>
Final Flow	<u>15</u>
Final Shut-In	<u>90</u>

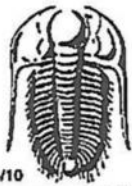
- Test 1150
- Jars
- Safety Joint
- Circ Sub
- Hourly Standby
- Mileage 140 125
- Sampler
- Straddle
- Shale Packer
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility
- Sub Total 1275

T-On Location 20:30
 T-Started 21:55
 T-Open 00:16
 T-Pulled 03:03
 T-Out 06:15
 Comments NESS CITY HOUSE

Ruined Shale Packer
 Ruined Packer
 Extra Copies
 Sub Total 0
 Total 1275
 MP/DST Disc't

Approved By Jeff Christian Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63829

Well Name & No. Stone Post A 1-7 Test No. 3 Date 10/03/18
 Company Cobalt Energy Elevation 2240 KB 2233 GL
 Address PO Box 8037 Wichita, KS 67208
 Co. Rep / Geo. Jeff Christian Rig Pickrell 10
 Location: Sec. 7 Twp 23S Rge. 22W Co. Hodgeman State KS

Interval Tested 4451 - 4461 Zone Tested Mississippi
 Anchor Length 10 Drill Pipe Run 4451 Mud Wt. 9.1
 Top Packer Depth 4446 Drill Collars Run 0 Vis 52
 Bottom Packer Depth 4451 Wt. Pipe Run 0 WL 11.2
 Total Depth 4461 Chlorides 8500 ppm System LCM 1
 Blow Description IF: Packer Failure, Tried to Reset, Failed again, Pulled Tool

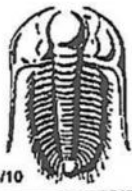
Rec	Feet of	%gas	%oil	%water	%mud
<u>248</u>	<u>Mud</u>				
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 248 BHT 116 Gravity N/C API RW N/C @ N/C °F Chlorides N/C ppm

(A) Initial Hydrostatic 2188 Test 950 T-On Location 17:30
 (B) First Initial Flow N/A Jars _____ T-Started 18:42
 (C) First Final Flow N/A Safety Joint _____ T-Open 20:42
 (D) Initial Shut-In N/A Circ Sub _____ T-Pulled 20:46
 (E) Second Initial Flow N/A Hourly Standby _____ T-Out 23:01
 (F) Second Final Flow N/A Mileage 140 125 Comments Packer Failure
 (G) Final Shut-In N/A Sampler _____ Ness City house
 (H) Final Hydrostatic 2145 Straddle _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1075 MP/DST Disc't _____

Approved By _____ 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. 63830

Well Name & No. Stone Post A1-7 Test No. 4 Date 10/03/18
 Company Cobalt Energy Elevation 2240 KB 2233 GL
 Address PO BOX 8037 WICHITA, KS 67208
 Co. Rep / Geo. Jeff Christian Rig Pickrell 10
 Location: Sec. 7 Twp 23S Rge. 22W Co. Hodgeman State KS

Interval Tested 4455 - 4461 Zone Tested Mississippi
 Anchor Length 6 Drill Pipe Run 4451 Mud Wt. 9.1
 Top Packer Depth 4450 Drill Collars Run 6 Vis 52
 Bottom Packer Depth 4455 Wt. Pipe Run 0 WL 11.2
 Total Depth 4461 Chlorides 8500 ppm System LCM 1

Blow Description IF: weak Blow, Built to 1/2 inch
ISI: NO Blow Back
FF: NO BLOW
FSE: NO BLOW BACK

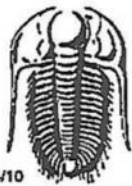
Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>50CM</u>	<u>5</u>		<u>95</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 123 Gravity NIC API RW NIC @ NIC °F Chlorides NIC ppm

(A) Initial Hydrostatic <u>2210</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>23:00</u>
(B) First Initial Flow <u>13</u>	<input type="checkbox"/> Jars	T-Started <u>23:10</u>
(C) First Final Flow <u>14</u>	<input type="checkbox"/> Safety Joint	T-Open <u>00:44</u>
(D) Initial Shut-In <u>1274</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>03:46</u>
(E) Second Initial Flow <u>15</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>05:50</u>
(F) Second Final Flow <u>17</u>	<input type="checkbox"/> Mileage	Comments <u>Stayed @ Rig</u>
(G) Final Shut-In <u>1204</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2118</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</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>60</u>	<input type="checkbox"/> Day Standby	Total <u>1400</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1400</u>	

Approved By Jeff Christian Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63831

Well Name & No. Stone Post A 1-7 Test No. 5 Date 10/04/18
 Company Cobalt Energy Elevation 2240 KB 2233 GL
 Address PO BOX 8037 Wichita, KS 67208
 Co. Rep / Geo. Jeff Christian Rig Pickrell 10
 Location: Sec. 2 Twp 23S Rge. 22W Co. Hodgeman State KS

Interval Tested 4461 - 4471 Zone Tested Mississippi
 Anchor Length 10 Drill Pipe Run 4451 Mud Wt. 9.1
 Top Packer Depth 4456 Drill Collars Run 0 Vis 54
 Bottom Packer Depth 4461 Wt. Pipe Run 0 WL 12.0
 Total Depth 4471 Chlorides 9000 ppm System LCM 1/2

Blow Description IF: weak Blow, Built to 3 1/2 inches
TSI: ~~NO BLOW BACK~~ weak Surface Blow Back
FF: weak Blow, Built to 5 1/2 inches
FSI: NO BLOW BACK

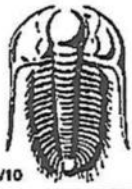
Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>OCM</u>	<u>20</u>		<u>80</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 30 BHT 116 Gravity NIC API RW NIC @ NIC °F Chlorides NIC ppm

(A) Initial Hydrostatic <u>2189</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>13:30</u>
(B) First Initial Flow <u>15</u>	<input type="checkbox"/> Jars	T-Started <u>14:29</u>
(C) First Final Flow <u>20</u>	<input type="checkbox"/> Safety Joint	T-Open <u>16:46</u>
(D) Initial Shut-In <u>1251</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>20:34</u>
(E) Second Initial Flow <u>21</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>22:13</u>
(F) Second Final Flow <u>33</u>	<input checked="" type="checkbox"/> Mileage <u>(140)</u> 125	Comments <u>mess City House</u>
(G) Final Shut-In <u>1164</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2143</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<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>1525</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1525</u>	

Approved By [Signature] Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63832

Well Name & No. Stone Post A 1-7 Test No. 6 Date 10/05/18
 Company Cobalt Energy Elevation 2240 KB 2223 GL
 Address PO BOX 8037 Wichita, KS 67208
 Co. Rep / Geo. Jeff Christian Rig Pickrell 10
 Location: Sec. 2 Twp 23S Rge. 22W Co. Hodgeman State KS

Interval Tested 4471 - 4491 Zone Tested Mississippi
 Anchor Length 20 Drill Pipe Run 4482 Mud Wt. 9.1
 Top Packer Depth 4466 Drill Collars Run 0 Vis 54
 Bottom Packer Depth 4471 Wt. Pipe Run 0 WL 12.0
 Total Depth 4491 Chlorides 9000 ppm System LCM 1/2

Blow Description IF: weak Blow, Built to 4 3/4 inch.
ISI: NO Blow Back

EF: Fair Blow, BOB in 17 minutes, Built to 36 3/4 inches

FST: NO Blow Back

Rec	Feet of	%gas	%oil	%water	%mud
<u>206</u>	<u>Oil</u>				
<u>124</u>	<u>OMCW</u>	<u>10</u>	<u>66</u>	<u>24</u>	

Rec Total 330 BHT 124 Gravity 36 API RW .1 @ 90 ° F Chlorides 58000 ppm

(A) Initial Hydrostatic 2200 Test 1150 T-On Location 06:45
 (B) First Initial Flow 23 Jars _____ T-Started 07:34
 (C) First Final Flow 70 Safety Joint _____ T-Open 09:51
 (D) Initial Shut-In 1412 Circ Sub _____ T-Pulled 13:36
 (E) Second Initial Flow 72 Hourly Standby _____ T-Out 16:04
 (F) Second Final Flow 164 Mileage 140A 125 Comments NESS City House
 (G) Final Shut-In 1410 Sampler _____
 (H) Final Hydrostatic 2208 Straddle _____

Ruined Shale Packer _____
 Ruined Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1525
 Sub Total 1525
 Sub Total 0
 Total 1525
 MP/DST Disc't _____

Approved By [Signature] Our Representative [Signature]

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CHARGE TO: **COBALT ENERGY LLC**
 ADDRESS:
 CITY, STATE, ZIP CODE:

SERVICE LOCATIONS: 1. **NESS CITY, KS**
 WELL/PROJECT NO.: **1-7** LEASE: **STONE POST "A"** COUNTY/PARISH: **HODGEMAN** STATE: **Ks** CITY: DATE: **10-6-18** OWNER: **SAME**
 2. TICKET TYPE: SERVICE SALES CONTRACTOR: **PICKRELL DRLG #10** RIG NAME/NO.: SHIPPED VIA: **LOCATION** DELIVERED TO: ORDER NO.:
 3. WELL TYPE: **OIL** WELL CATEGORY: **DEVELOPMENT** JOB PURPOSE: **5 1/2" 2-STAGE LONGSTRING** WELL PERMIT NO.: WELL LOCATION: **E/JETMORE, KS**
 4. REFERRAL LOCATION: INVOICE INSTRUCTIONS:

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.		U/M	QTY.		U/M	UNIT PRICE	AMOUNT
		LOC	ACCT	DF									
575		1			MILEAGE # 112	40		ME				5.00	200.00
579		1			PUMP CHARGE - 2 STAGE	1		JOB	4487		FT	1800.00	1800.00
221		1			LIQUID KCL	4		GAL				25.00	100.00
281		1			MUD FLUSH	500		GAL				1.50	750.00
403		1			CEMENT BASKET	2		EA	5 1/2"			275.00	550.00
407		1			INSERT FLOAT SHOE W/AUTO FILL	1		EA				325.00	325.00
408		1			DV TOOL - PLUG SET	1		EA	1397		FT	3375.00	3375.00
409		1			TURBOIZERS	5		EA				85.00	425.00
417		1			DV CATCH 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 *Ruby Papp*
 DATE SIGNED: **10-6-18** TIME SIGNED: **0400** A.M. P.M.

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

SURVEY	AGREE	UNDECIDED	DISAGREE	PAGE TOTAL	
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?				#1	7725.00
WE UNDERSTOOD AND MET YOUR NEEDS?				#2	8073.55
OUR SERVICE WAS PERFORMED WITHOUT DELAY?				<i>Hodgeman</i>	15798.55
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?				<i>7-6-18</i>	934.72
ARE YOU SATISFIED WITH OUR SERVICE? <input type="checkbox"/> YES <input type="checkbox"/> NO				TOTAL	16753.27
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND					

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.
 SWIFT OPERATOR: **WAYNE WILSON** APPROVAL: _____
 Thank You!



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

TICKET CONTINUATION

TICKET No. 031496

CUSTOMER CORALT ENERGY LLC	WELL STONE POST "A" 1-7	DATE 10-6-18	PAGE 2	OF 2
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PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	QTY	U/M	QTY	U/M	UNIT PRICE	AMOUNT	
		LOC	ACCT	DF									
325		1				STANDARD CEMENT EA-2	150	SBS			13.00	1950.00	
330		1				SWIFT MULTZ - DENSITY STANDARD	200	SBS			16.25	3250.00	
276		1				FLOCELE	100	LBS			2.50	250.00	
283		1				SALT	750	LBS			.20	150.00	
284		1				CALSEAL	7	SBS	700	LBS	35.00	245.00	
290		1				D-ADR	5	GAL			42.00	210.00	
292		1				HAVAD - 322	100	LBS			8.00	800.00	
581		1				SERVICE CHARGE				CUBIC FEET	350	1.75	612.50
583		1				MILEAGE CHARGE	TOTAL WEIGHT 35650	LOADED MILES 40		TON MILES	713	.85	606.05

CONTINUATION TOTAL **8073.55**

JOB LOG

SWIFT Services, Inc.

DATE 10-6-18	PAGE NO. 1
TICKET NO. 031496	

CUSTOMER
COBALT ENERGY LLC

WELL NO.
1-17

LEASE
STONE POST 'A'

JOB TYPE 2-STAGE
5/2" LONGSTRENG

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0400							ON LOCATION - LD DRILL PIPE
	0845							START 5/2" CASING IN WELL
								TD-4488 SET c 4487
								TP-4492 5/2" # 15.5
								ST-43
								TURBOIZERS - 1, 2, 3, 4, 74
								CMT BSKTS - 72, 73
								DV TOOL c 1397 TOPJT # 73
	1110							DROP BALL - CIRCULATE
	1215	6	12		✓		450	PUMP 500 GAL MOD FLUSH
	1217	6	20		✓		450	PUMP 20 BBLs KCL - FLUSH
	1225	4 1/2	36		✓		250	MAX CEMENT - 150 SKS EA-2 c 15.5 PPG
	1235							WASH OUT PUMP - LINES
	1235							RELEASE 1 ST STAGE DV LATCH DOWN PLUG
	1240	7	0		✓			DISPLACE PLUG
	1255	5	105.9				1500	PLUG DOWN - PSE UP LATCH IN PLUG
	1300						OK	RELEASE PSE - HELD
	1305							DROP DV OPENING PLUG
	1315				✓			OPEN DV TOOL - CIRCULATE
	1345	6	20		✓		200	PUMP 20 BBLs KCL - FLUSH
	1355		7					PLUG RH 30 SKS
	1400	5	94		✓		150	MAX CEMENT - 170 SKS SMD c 11.2 PPG
	1420							WASH OUT PUMP - LINES
	1420							RELEASE DV CLOSING PLUG
	1425	6	0		✓			DISPLACE PLUG
	1430	3	33.2				1500	PLUG DOWN - PSE UP CLOSE DV TOOL
	1435						OK	RELEASE PSE - HELD
								CIRCULATED 20 SKS CEMENT TO PSE
								WASH TRUCK
	1530							JOB COMPLETE

THANK YOU
WAYNE, PRESTON, GIDEON

Jeff Christian
PETROLEUM GEOLOGIST
 Wichita, Kansas

GEOLOGISTS' REPORT
 DRILLING TIME AND SAMPLE LOGS

OPERATOR COBALT ENERGY, LLC
LEASE STONE POST 'A' # 1-7
LOCATION 2310 FNL & 2151' FEL
ELEVATIONS
 KB 2240'
 GEL 2233'

SEC. 7 **TWSP.** 23 S **RNG.** 22 W
COUNTY HODGEMAN **STATE** KANSAS

API 15-083-21960
CONTRACTOR PICORREL DRLG CO. **RIG NO.** 10
DRILLING STARTED 09/28/2018 **COMPLETED** 10/05/2018
MUD DISCHARGED 3900' **MUD TYPE** CHEMICAL
DRILLING TIME KEPT FROM 3600' **TO** RTD
SAMPLES SAVED FROM 3600' **TO** RTD
SAMPLES EXAMINED FROM 3600' **TO** RTD
GEOLOGICAL SUPERVISION FROM 3715' **TO** RTD

MEASUREMENTS FROM KB
CASING RECORD
 Conductor NONE

FIELD 15-083-21960
 Surface 8.5' @ 227'
 W/175 SX
 Production 9 1/2" @ 4487'
 W/190 SX

ELECTRICAL SURVES:
PIONEER:
 DIL
 CUL/CDL

FORMATION NAME LOG **SAMPLE DATE**
ANHYDRITE 1360' (-4890) 1357' (-4883)
HEEBNER 3776' (-1536) 3776' (-1536)
LANSSING 3845' (-1605) 3845' (-1605)
HUSHPUCKNEY 4147' (-1907) 4147' (-1907)
PAWNEE 4306' (-2066) 4310' (-2070)
FT. SCOTT 4371' (-2131) 4369' (-2129)
CHEROKEE 4396' (-2156) 4395' (-2155)
MISSISSIPPIAN 4452' (-2212) 4449' (-2209)
OSAGE 4483' (-2243) 4484' (-2244)
TOTAL DEPTH 4483' (-2243) 4491' (-2451)

7

DATE	7:00 AM DEPTH	REMARKS
9/25/18	MIRT	SPUD 8:15 pm
9/26/18	230'	WOC plug down @ 4:00 am Dev. 1/4 deg.
9/27/18	1275'	DRLG.
9/28/18	2205'	DRLG.
9/29/18	2930'	DRLG.
9/30/18	3585'	DRLG.
10/1/18	4160'	DRLG.
10/2/18	4400'	OB w/ DST # 1 dev 3/4 deg.
10/3/18	4441'	TIH after DST # 2
10/4/18	4461'	TIH after DST # 4
10/05/18	4491'	TOH for DST # 6 RTD 4491' @ 3:30 am Finish logging @ 9:00 pm.

Remarks

5 1/2" production casing set to further test the Cherokee and Mississippian formations.

Electric log measurements correlate about even to 2' high compared to rotary measurements.
 Sample tops adjusted to the Kansas log.

Samples delivered to the Kansas Geological Survey in Wichita, KS.

Respectfully Submitted,
Jeff Christian
 Jeff Christian

LITH	DRILL TIME (MIN/FT)	DEPTH (5M)	SAMPLE DESCRIPTIONS	REMARKS
		1300		
		1350		ANHYDRITE 1357' (+883) E Log 1360' (+890)
		1400		Base ANHYDRITE 1393' (+847) E Log 1396' (+844)
		3600	mostly Sh: gry-red-grn, sct Ls: crm-lt gry-lt brn, fn xln, dns, foss in part, pr vis por, ns	
			Same, sct Ls: w/ fr intrxn pp-por, ns	
			Ls: crm-lt gry, fn xln, dns, pr vis por, ns (vy shly)	
		3650	Sh: blk, carb Ls: crm-lt gry, fn xln, dns, pr vis por, ns (vy shly)	
			Ls: lt brn-lt gry, fn xln, foss in part, sct fr pp-intrxn por, ns	MudCo. 3687': 9/30/18 Wt. 8.7, Vis. 45, WL 8.8, Chl. 4,300, LCM. 1
			Ls: as above (smpls mostly sh)	
		3700	Ls: crm-lt brn-lt gry, fn xln, part dns, sli chily, sct sli foss-ool, pr-fr pp-intrxn por, ns	
			Ls: as above, trc asph stn	
			Same, ns	
		3750	Ls: lt brn-lt gry, fn xln, sli foss-ool, trc chrt, sct fr intrxn por, ns	
			Ls: crm-lt brn, fn xln, sli gnrlr, trc chrt, fr intrxn por, ns	
			Sh: blk, carb	
			Ls: lt gry, fn xln, dns, platy, foss	
			Sh: gry-red-gn	
		3800	Ls: lt gry-gry, fn xln, dns, sct crm-lt gry, fn-some med xln, sli gnrlr, fr intrxn por, ns	
			Sh: gry-red-some brn & gn	
			Same	
			Ls: crm-lt gry, fn xln, dns, sli foss, pr vis por, ns	
			Sh: gry-gn-red	
			Ls: crm-lt brn-lt gry, fn xln, part dns, chrt, sli foss, rare pp-vug por, ns	
			Ls: crm-lt brn-lt gry, fn xln, dns, chrt, sli foss, pr vis por, ns	
			Sh: gry, sli stly	
			Ls: crm-lt brn-lt gry, fn xln, dns, sli chrt, foss in part, pr vis por, ns	
			Ls: lt brn-lt gry, fn xln, part dns, part chily, chrt, pr-trc fr intrxn por, ns	
			Same	
			Ls: crm-lt brn, fn xln, part dns, sli chily, sli chrt, pr vis por, ns w/ Sh: gry-red	
			Ls: as above, foss-ool in part, pr trc fr vug por, ns	
		3950	Ls: crm-lt brn, fn xln, sli chily, sli chrt, sli foss, sct fr intrxn por, ns	
			Ls: crm-lt brn-lt gry, fn xln, dns, sli chily, chrt, rare intrxn por, ns	
			Ls: crm-lt brn, fn xln, sli chily, chrt, rare intrxn por, ns	
			Ls: crm-lt brn, fn xln, sli chily, chrt, trc ool, pr intrxn por, ns	
			Same	
		4000	Ls: lt gry-lt brn, fn xln, dns, sli foss, pr vis por, ns	MUNCIE CREEK 4011' (-1771) E Log 4009' (-1769)
			Sh: blk, carb	
			Ls: crm-lt gry, fn xln, part dns, part chily, pr vis por, ns	
			Ls: crm-lt brn, fn xln, part dns, part chily, chrt, sli foss, pr vis por, ns	
			Same	
			Sh: gry-some red & gn	
		4050	Ls: crm-lt brn-lt gry, fn xln, dns, part chily, chrt, sli foss, pr vis por, ns	
			Same	
			Ls: lt gry, fn xln, ool-oolid, sct fr oolid por, ns	
			Ls: lt brn-lt gry, fn xln, oolid-sli ool, oolid por, ns	
			Ls: crm-lt brn, fn xln, chily, part dns, pr vis por, ns	
			Sh: gry-gn/gry	STARK 4102' (-1862) E Log 4100' (-1860)
			Ls: crm-lt brn-lt gry, fn xln, part dns, part chily, sli foss-ool in part, pr vis por, ns	
			Ls: crm-lt brn, fn xln, dns, part chily, sli foss, pr vis por, ns	
			Ls: crm-lt brn, fn xln, part dns, part chily, sli foss, sli chrt, pr vis por, ns	
			Ls: crm-lt gry, fn xln, dns, sli chily, rare foss, pr vis por, ns	
			Sh: blk, carb	HUSHPUCKNEY 4148' (-1908) E Log 4147' (-1907)
			Sh: gry	
			Ls: crm-lt brn, fn xln, dns, part chily, sli chrt, sli foss-ool in part, pr vis por, ns	
			Ls: crm-lt gry, fn xln, part dns, part chily, rare foss, vy sct fr intrxn por, ns	
			Ls: crm-lt gry, fn xln, dns, part chily, pr vis por, ns	MudCo. 4200': 10/1/18 Wt. 9.3, Vis. 60, WL 10.0, Chl. 5,700, LCM. 5
			Sh: gry-some red	
			Ls: crm-lt gry, fn xln, dns, sli chily, sli foss, pr vis por, ns	
		4200	Sh: gry-drk gry-some red	BKC 4205' (-1965) E Log 4203' (-1963)
			Ls: crm-lt gry, fn xln, dns, part chily, foss-ool in part, pr vis por, ns	
			Sh: gry-some red w/ Ls: as above	
			Ls: crm-lt gry, fn xln, dns, foss in part, pr vis por, ns	
			Same	
			Sh: gry-some red	
			Ls & Sh: as above	
		4250	Ls: lt gry, fn xln, dns, foss-ool in part, pr vis por, ns	
			Ls: as above, some crm, chily ls	
			Ls: crm-lt brn-lt gry, fn xln, dns, part chily, part foss, pr vis por, ns	
			Sh: gry-drk gry	
			Ls: crm-lt brn-lt gry, fn xln, dns, rare foss, pr vis por, ns	
		4300	Ls: crm-lt gry, fn xln, dns, foss in part (abndnt byzoo), pr vis por, ? vy fnt odor, nso, few pcs fr flur, pr cut	
			Ls: as above, sli chily, sct chrt, faint odor, nso, trc flur, vy fr cut	
			Ls: crm-lt gry, fn xln, part dns, part chily, sct foss, pr vis por, ns, no odor	
			Same	
		4350	Ls: lt gry, fn xln, dns, some crm chily, rare foss, pr vis por, ns	
			Sh: drk gry, blk	
			Sh: blk, carb	FT. SCOTT 4373' (-2133) E Log 4371' (-2131)
			2 pcs Ls: crm, subchily, pr-fr pp-vug por, fsfo, sli odor, brn subsat stn	Pipe Strap @ 4400': 80' short to board Dev. 3/4 deg.
			Ls: crm-lt gry, few pcs fn xln, subchily, pr pp por, fsfo, fr odor, brn subsat stn	
		4400	Sh: blk, carb Ls: lt brn-lt gry, fn xln, dns, pr vis por, ns	CHEROKEE 4398' (-2158) E Log 4396' (-2156) MudCo. 4400': 10/2/18 Wt. 9.5, Vis. 55, WL 10.4, Chl. 5,800, LCM. 5
			Ls: lt gry, fn xln, part dns, blk, pr-fr vug por, fsfo, fr odor, brn sat stn	DST # 2 4393' to 4441' 30"-60"-30"-30" IF: BOW/15" ISI: BOW/4" FF: BOW/3" FSI: BOW/4" RECOVERY: 908' total fluid 3353' GP 908' CGO (10% G, 90% O) IFF: 102-169# ISIP: 1413# FFP: 178-204# FSIIP: 1409# IHP: 2184# FHP: 2124# BHT: 124 deg F Gravity: 37.6 deg.
			Sh: gry	
			Ls: lt gry, fn xln, fr vug-2 moldic por, fs drk fl, sli odor, drk brn-bk sat stn	
			Sh: vari-color	
			Ls: as above	
		4450	Ls: lt brn-lt gry, fn xln, dns, pr vis por, ns	
			Dolo: lt gry-lt gry, fn xln, sli suc, pr vis por, ns	
			Dolo: lt gry, fn xln, suc, vy sli glauc, sct pcs fr vug por, ssfo, sli-fr odor, brn subsat stn	
			Dolo: lt gry, fn xln, suc, few glauc, fr pp-vug-intrxn por, ssfo, sli-fr odor, brn sat stn	
			Dolo: lt gry, fn xln, suc, few glauc, pr-fr pp-vug por, ssfo, sli-fr odor, brn sat stn, sct Chrt: wt-lt gry, fresh-trc whnd, trc stn	
			Dolo: as above, wthd, sct Chrt: wt-lt gry, fresh-some wthnd, few trip, sli pyritic, trc pp-vug por, sptd stn, trc fl, sli odor	
		4500	Ls: lt brn-lt gry, fn xln, dns, pr vis por, ns	
			DST # 5 4461' to 4471' 30"-45"-60"-90" IF: Blow Built to 3.5" ISI: Surface Blow FF: Blow Built to 5.5" FSI: No return RECOVERY: 30' OCM (20%O, 80%M) IFF: 15-20# ISIP: 1251# FFP: 21-33# FSIIP: 1164# IHP: 2200# FHP: 2143# BHT: 116 deg F	
			DST # 6 4471' to 4491' 30"-45"-60"-90" IF: Blow Built to 4.75" ISI: No Return FF: BOW/17" FSI: No return RECOVERY: 330' total fluid 206' OI 124' OCMCW (10%O, 66%W, 24%M) IFF: 13-14# ISIP: 1274# FFP: 178-204# FSIIP: 1409# IHP: 2184# FHP: 2124# BHT: 124 deg F Gravity: 36 deg. Chl: 58,000	
		4550		
		4600		

Drill Stem Test Charts

