

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
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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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Max R. Lovely

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY: Ritchie Exploration
LEASE #1 Luebbers 30C Unit
FIELD: Wildcat
LOCATION: 516 FSL 1258 FWL

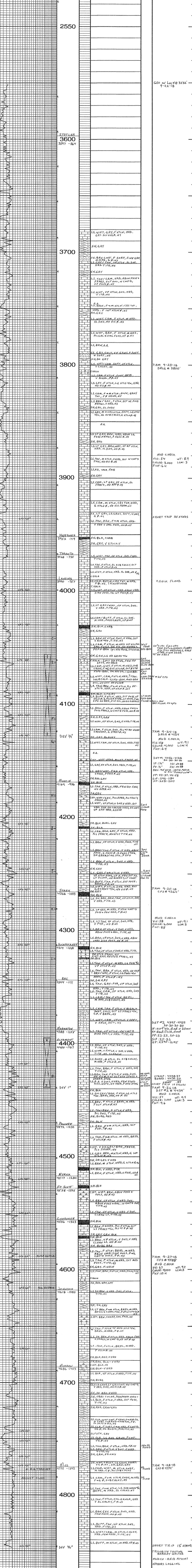
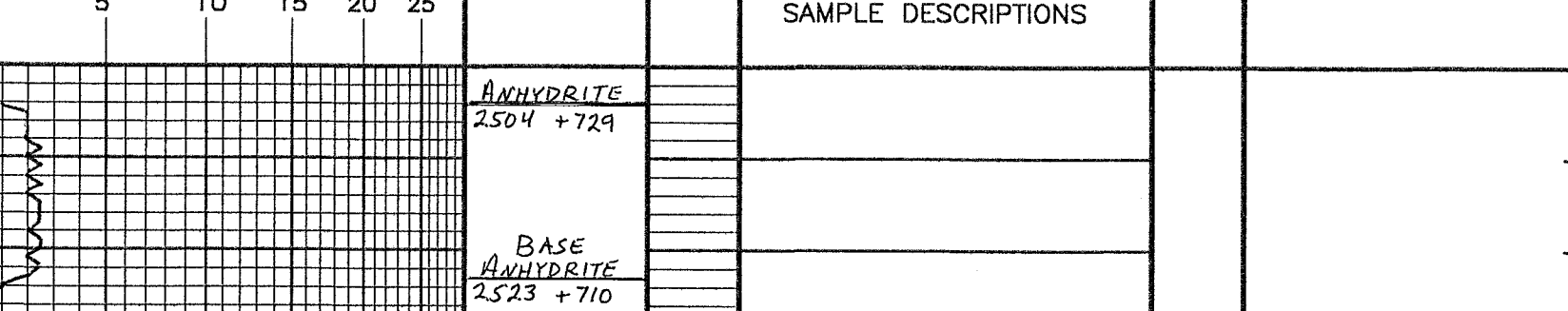
CONTRACTOR: W.W. #12
WELL: 9-19-18 CM 9-28-18
MUD UP: 3479 TYPE MUD Chem

Table with columns: FORMATION, SAMPLE NO., ELECTRIC LOG NO., STRATIGRAPHIC POSITION, and various depth measurements.

REFERENCE WELLS FOR STRUCUTRE:
a Palatino #1 Harold Michalek 605 FENL 1710 FWL 30-15-38W
b Palatino #1 Dicks 2474 FSL 614 FWL 25-15-38W
c Ritchie #1 Beasley 240 595 FSL 1180 FWL 24-15-38W

REMARKS

LEGEND



REMARKS: TRILOBITE TESTING BRADLEY WATER MUD CO - REID ATKINS NABORS LOGGING



#1 Luebbers 30C Unit

516' FSL & 1,258' FWL

144' S & 62' W of S/2 SW Section 30-15S-35W

Logan County, Kansas

API# 15-109-21572-0000

Elevation: GL: 3,225', KB: 3,233'

Sample Tops			Ref. Well
Anhydrite	2505	+728	+4
B/Anhydrite	2524	+709	+3
Stotler	3598	-364	-5
Heebner	3952	-719	-3
Toronto	3968	-735	+4
Lansing	3990	-757	+14
Muncie	4169	-936	Flat
Stark	4266	-1033	-1
Hush	4314	-1081	-6
BKC	4344	-1111	+1
Marmaton	4388	-1155	-3
Altamont	4400	-1167	-1
Pawnee	4472	-1239	+3
Myrick	4517	-1284	+2
Ft. Scott	4528	-1295	+8
Cherokee	4556	-1323	+7
Johnson	4618	-1385	+5
Morrow	4686	-1453	+7
Mississippian	4756	-1523	+12
RTD	4847	-1614	



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

11730
 11612

TICKET NUMBER 55898
 LOCATION Oakley, KS
 FOREMAN Jerry Y

FIELD TICKET & TREATMENT REPORT
 CEMENT

Invoice # 814261 KS

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
9-29-18	7173	Leubbers 30 all unit #1	30	15S	35W	Logan
CUSTOMER Ritchie Exp.			Russell's pro			
MAILING ADDRESS P.O. Box 783188			St. D. Koks			
CITY Wichita	STATE KS	ZIP CODE 67278-3188	TRUCK #	DRIVER	TRUCK #	DRIVER
			753	Cory W		
			70	Neil W		
			585	Jerry Y		

JOB TYPE Plug HOLE SIZE 7 7/8 HOLE DEPTH 4347 CASING SIZE & WEIGHT _____
 CASING DEPTH _____ DRILL PIPE 4 1/2 TUBING _____ OTHER _____
 SLURRY WEIGHT 13.8 SLURRY VOL. 1.42 WATER gal/sk _____ CEMENT LEFT in CASING _____
 DISPLACEMENT _____ DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety meeting & rig up on well 12 plug as ordered with 240 sks
60/40 48 1/4 #5 sks
50 sks @ 2515'
100 sks @ 1375'
50 sks @ 280'
10 sks @ 40' with 8 5/8 wiper plug
30 sks RH

Thank you
 Jerry Y

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
CE051	1	PUMP CHARGE	1900.00	1900.00
CE002	40	MILEAGE	7.15	286.00
CE0710	10.32	ton mileage delivery	1.75	722.40
CC5829	240 sks	lite blend V	16.00	3840.00
CC6075	60 #L	Flt seal	3.00	180.00
CP8228	1	8 5/8 wood plug	165.00	165.00
			Subtotal	7093.40
			-256	1773.35
			Subtotal	5320.05
			SALES TAX	251.10
			ESTIMATED TOTAL	5571.15

AUTHORIZATION [Signature] TITLE Toolpusher DATE 9-29-18

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.



DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration, Inc.**

PO Box 783188
Wichita, Ks 67278

ATTN: Max Lovely

Luebbers 30C Unit #1

30 15s 35w Logan,KS

Start Date: 2018.09.24 @ 09:37:00

End Date: 2018.09.24 @ 16:51:45

Job Ticket #: 64335 DST #: 1

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

Printed: 2018.10.01 @ 16:49:46

Ritchie Exploration, Inc.

30 15s 35w Logan,KS

Luebbers 30C Unit #1

DST # 1

LKC- D-E-F

2018.09.24



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

30 15s 35w Logan, KS

PO Box 783188
Wichita, Ks 67278

Luebbers 30C Unit #1

ATTN: Max Lovely

Job Ticket: 64335

DST#: 1

Test Start: 2018.09.24 @ 09:37:00

GENERAL INFORMATION:

Formation: **LKC- D-E-F**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:53:45

Time Test Ended: 16:51:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 78

Interval: 4056.00 ft (KB) To 4128.00 ft (KB) (TVD)

Reference Elevations: 3233.00 ft (KB)

Total Depth: 4128.00 ft (KB) (TVD)

3225.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8522 Outside

Press@RunDepth: 57.74 psig @ 4057.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.09.24

End Date:

2018.09.24

Last Calib.: 2018.09.24

Start Time: 09:37:05

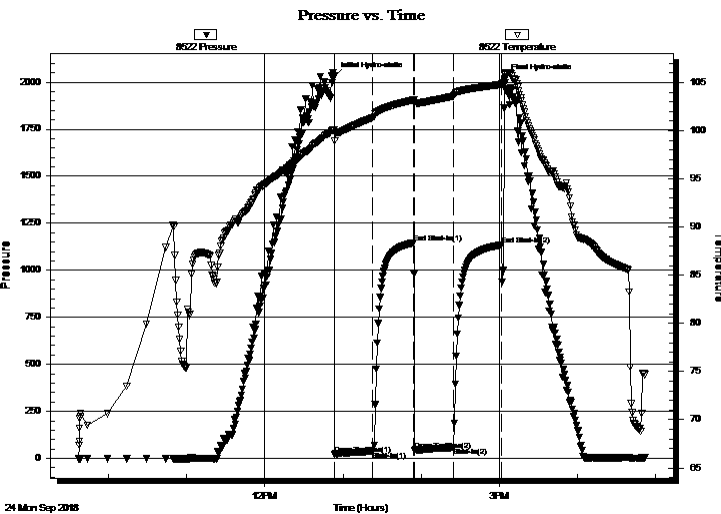
End Time:

16:51:44

Time On Btm: 2018.09.24 @ 12:53:30

Time Off Btm: 2018.09.24 @ 15:04:15

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



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2031.16	100.08	Initial Hydro-static
1	23.26	98.99	Open To Flow (1)
30	37.26	101.37	Shut-In(1)
61	1145.50	103.19	End Shut-In(1)
62	44.45	102.92	Open To Flow (2)
92	57.74	103.59	Shut-In(2)
129	1134.24	104.81	End Shut-In(2)
131	2017.30	105.81	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
90.00	w cm 10w 90m (oil puddle on top)	0.44

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration, Inc.

30 15s 35w Logan,KS

PO Box 783188
Wichita, Ks 67278

Luebbers 30C Unit #1

Job Ticket: 64335

DST#: 1

ATTN: Max Lovely

Test Start: 2018.09.24 @ 09:37:00

Tool Information

Drill Pipe:	Length: 3858.00 ft	Diameter: 3.80 inches	Volume: 54.12 bbl	Tool Weight:	2500.00 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: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 55.01 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial	49000.00 lb
Depth to Top Packer:	4056.00 ft			Final	49000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	72.00 ft				
Tool Length:	99.00 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			4030.00	
Shut In Tool	5.00			4035.00	
Hydraulic tool	5.00			4040.00	
Jars	5.00			4045.00	
Safety Joint	2.00			4047.00	
Packer	5.00			4052.00	27.00 Bottom Of Top Packer
Packer	4.00			4056.00	
Stubb	1.00			4057.00	
Recorder	0.00	8319	Inside	4057.00	
Recorder	0.00	8522	Outside	4057.00	
Perforations	4.00			4061.00	
Change Over Sub	1.00			4062.00	
Drill Pipe	62.00			4124.00	
Change Over Sub	1.00			4125.00	
Bullnose	3.00			4128.00	72.00 Bottom Packers & Anchor

Total Tool Length: 99.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration, Inc.

30 15s 35w Logan,KS

PO Box 783188
Wichita, Ks 67278

Luebbers 30C Unit #1

Job Ticket: 64335

DST#: 1

ATTN: Max Lovely

Test Start: 2018.09.24 @ 09:37:00

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: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
90.00	w cm 10w 90m (oil puddle on top)	0.443

Total Length: 90.00 ft Total Volume: 0.443 bbl

Num Fluid Samples: 0

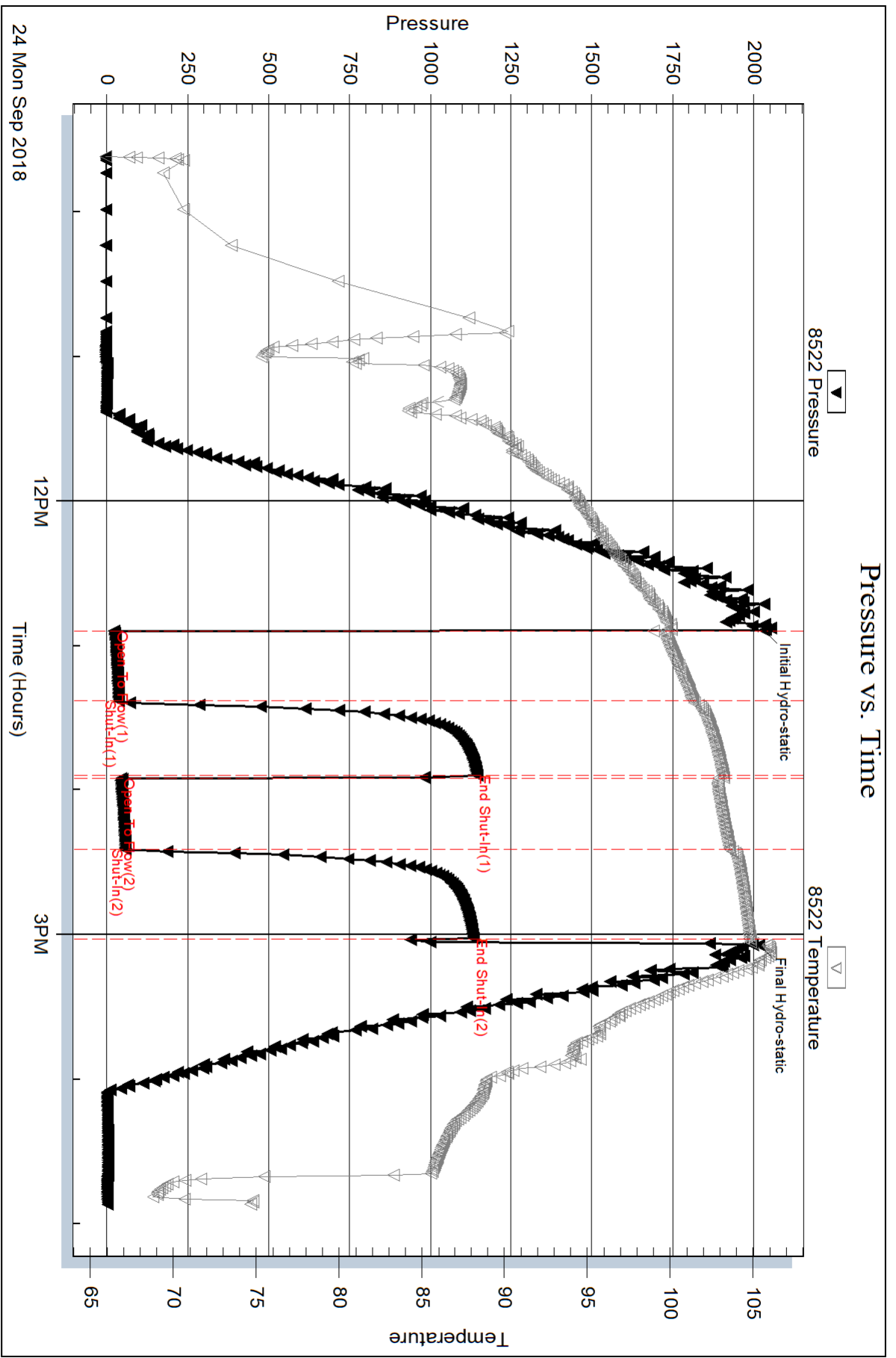
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





DRILL STEM TEST REPORT

Prepared For: **Ritchie Exploration, Inc.**

PO Box 783188
Wichita, Ks 67278

ATTN: Max Lovely

Luebbers 30C Unit #1

30 15s 35w Logan,KS

Start Date: 2018.09.26 @ 03:43:00

End Date: 2018.09.26 @ 10:32:15

Job Ticket #: 64336 DST #: 2

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

Printed: 2018.10.01 @ 16:49:20

Ritchie Exploration, Inc.

30 15s 35w Logan,KS

Luebbers 30C Unit #1

DST # 2

Altamont.

2018.09.26



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration, Inc.

30 15s 35w Logan, KS

PO Box 783188
Wichita, Ks 67278

Luebbers 30C Unit #1

ATTN: Max Lovely

Job Ticket: 64336

DST#: 2

Test Start: 2018.09.26 @ 03:43:00

GENERAL INFORMATION:

Formation: **Altamont.**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:27:45

Time Test Ended: 10:32:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Bradley Walter

Unit No: 78

Interval: 4395.00 ft (KB) To 4439.00 ft (KB) (TVD)

Reference Elevations: 3233.00 ft (KB)

Total Depth: 4439.00 ft (KB) (TVD)

3225.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 8.00 ft

Serial #: 8522 Outside

Press@RunDepth: 23.17 psig @ 4396.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.09.26 End Date: 2018.09.26

Last Calib.: 2018.09.26

Start Time: 03:43:05 End Time: 10:32:14

Time On Btm: 2018.09.26 @ 06:27:15

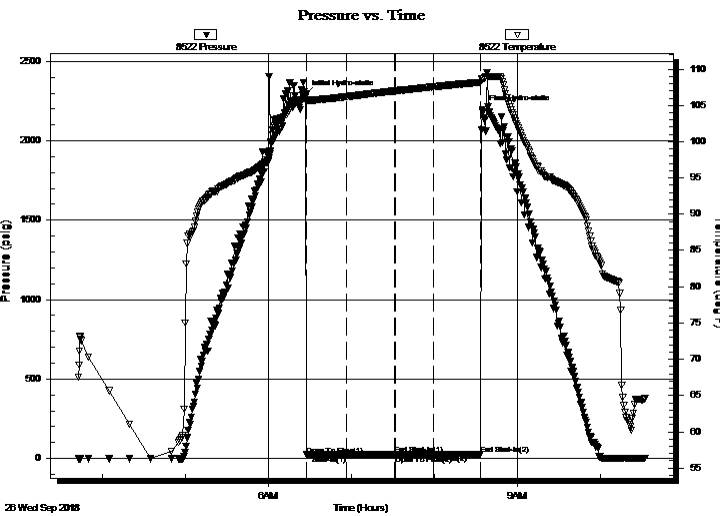
Time Off Btm: 2018.09.26 @ 08:35:00

TEST COMMENT: IF: Surface blow, Died @ 20 min.

IS: No return.

FF: No blow.

FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2289.87	106.15	Initial Hydro-static
1	22.12	105.55	Open To Flow (1)
30	21.77	106.20	Shut-In(1)
65	25.31	107.00	End Shut-In(1)
65	19.98	107.00	Open To Flow (2)
93	23.17	107.56	Shut-In(2)
127	26.21	108.17	End Shut-In(2)
128	2195.31	108.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	mud 100m (oil specs in tool)	0.05

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Ritchie Exploration, Inc.

30 15s 35w Logan,KS

PO Box 783188
Wichita, Ks 67278

Luebbers 30C Unit #1

Job Ticket: 64336

DST#: 2

ATTN: Max Lovely

Test Start: 2018.09.26 @ 03:43:00

Tool Information

Drill Pipe:	Length: 4204.00 ft	Diameter: 3.80 inches	Volume: 58.97 bbl	Tool Weight:	2500.00 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: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 59.86 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial	50000.00 lb
Depth to Top Packer:	4395.00 ft			Final	50000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	44.00 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			4369.00	
Shut In Tool	5.00			4374.00	
Hydraulic tool	5.00			4379.00	
Jars	5.00			4384.00	
Safety Joint	2.00			4386.00	
Packer	5.00			4391.00	27.00 Bottom Of Top Packer
Packer	4.00			4395.00	
Stubb	1.00			4396.00	
Recorder	0.00	8319	Inside	4396.00	
Recorder	0.00	8522	Outside	4396.00	
Perforations	7.00			4403.00	
Change Over Sub	1.00			4404.00	
Drill Pipe	31.00			4435.00	
Change Over Sub	1.00			4436.00	
Bullnose	3.00			4439.00	44.00 Bottom Packers & Anchor

Total Tool Length: 71.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Ritchie Exploration, Inc.

30 15s 35w Logan,KS

PO Box 783188
Wichita, Ks 67278

Luebbers 30C Unit #1

Job Ticket: 64336

DST#: 2

ATTN: Max Lovely

Test Start: 2018.09.26 @ 03:43:00

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: 56.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
10.00	mud 100m (oil specs in tool)	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbf

Num Fluid Samples: 0

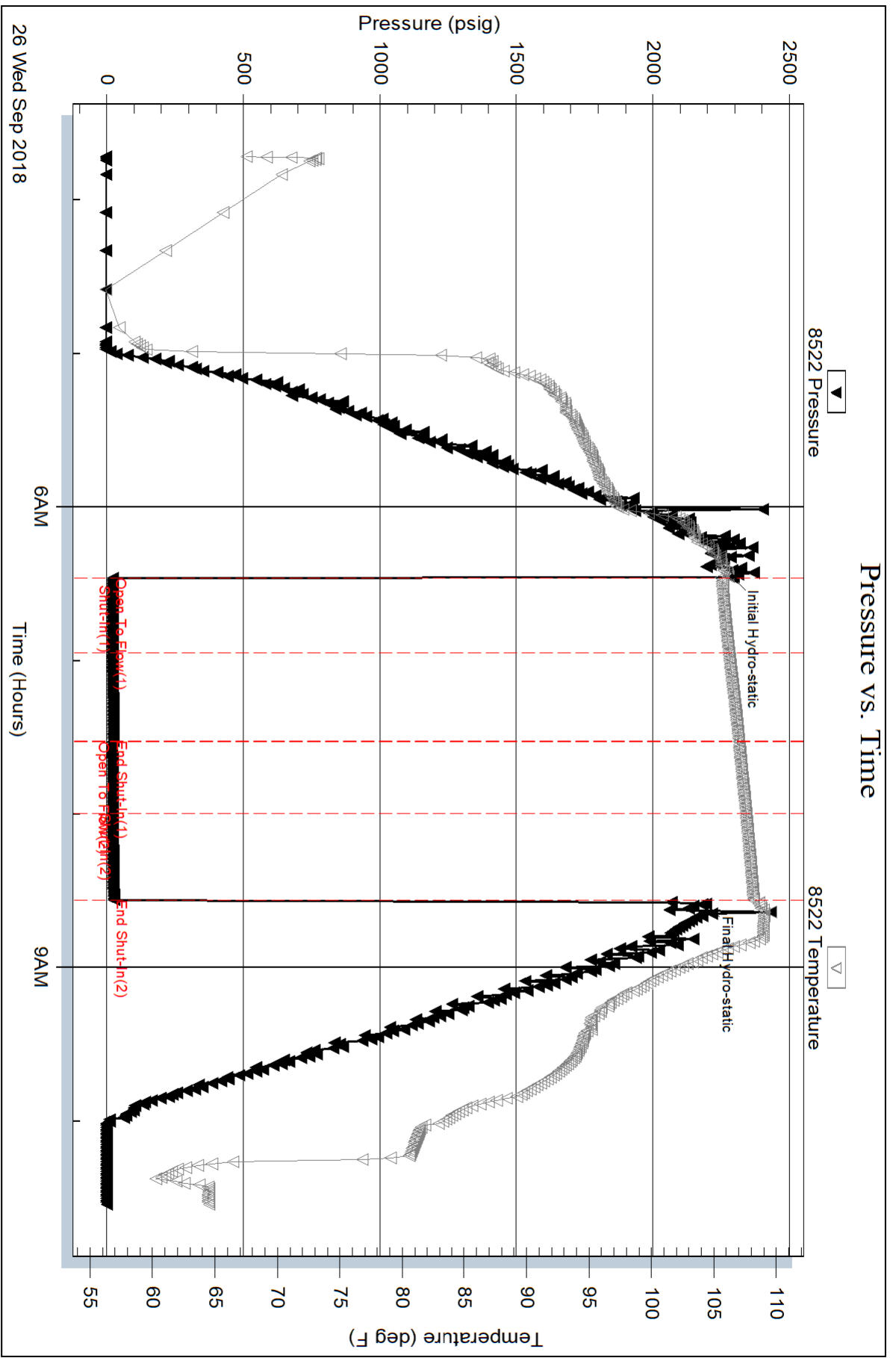
Num Gas Bombs: 0

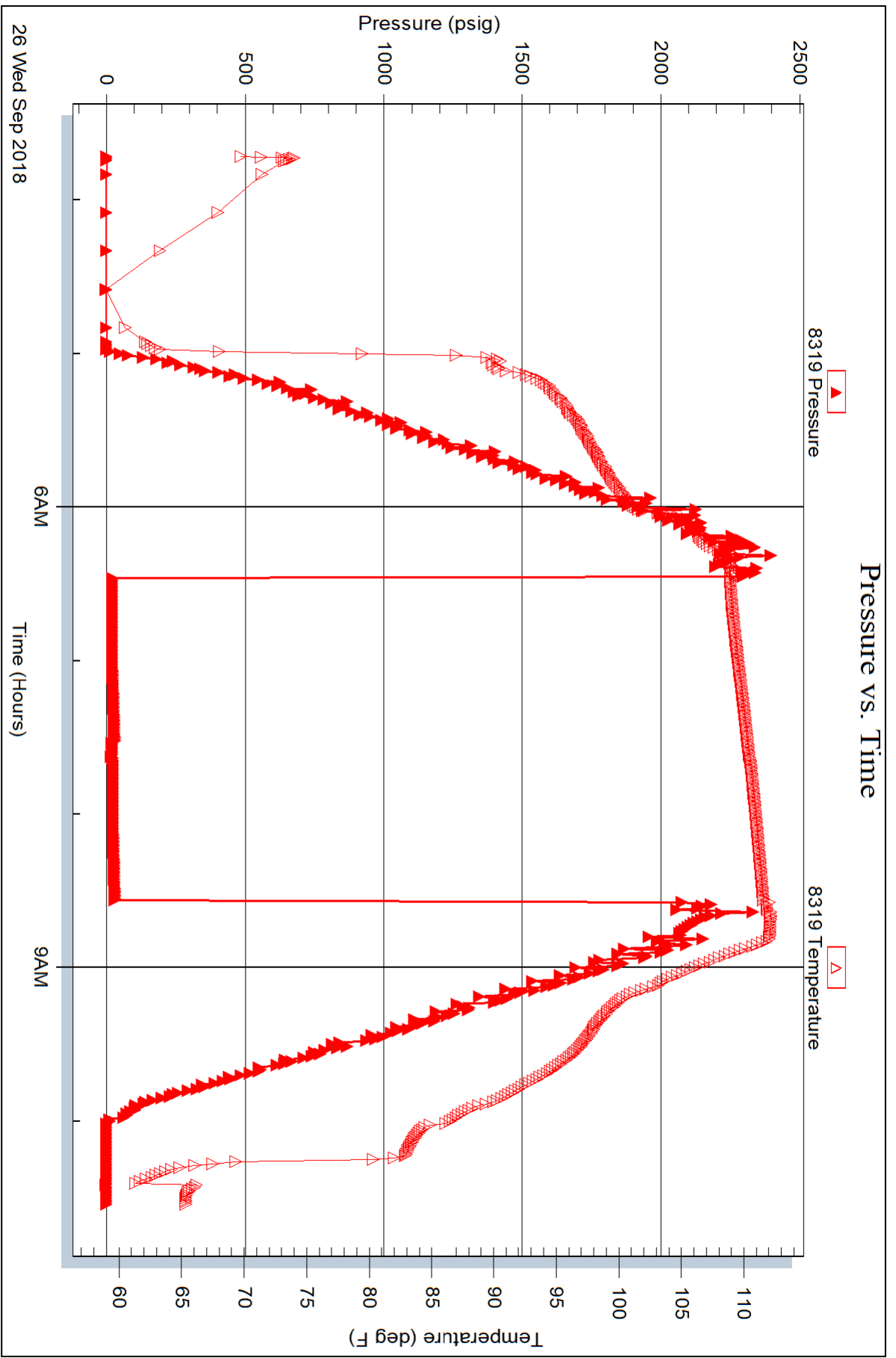
Serial #:

Laboratory Name:

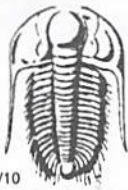
Laboratory Location:

Recovery Comments:





26 Wed Sep 2018



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **64335**

Well Name & No. Luebbers 30c Unit #1 Test No. 1 Date 9/24/2018
 Company Ritchie Exploration, Inc Elevation 3233 KB 3225 GL
 Address Box 783 188 Wichita, Ks 67278
 Co. Rep / Geo. Max Lovely Rig WW #12
 Location: Sec. 30 Twp. 15s Rge. 35w Co. Logan State Ks

Interval Tested 4056-4128 Zone Tested LKC D-E-F
 Anchor Length 72 Drill Pipe Run 3850 Mud Wt. 9.1
 Top Packer Depth 4051 Drill Collars Run 180 Vis 58
 Bottom Packer Depth 4056 Wt. Pipe Run 0 WL 6.4
 Total Depth 4128 Chlorides 4,000 ppm System LCM 4#
 Blow Description IF 1 1/2" blow
ISI No return.
FF 1/2" blow.
FSI No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>90</u>	<u>mcw</u>		<u>10</u>	<u>90</u>	
	<u>oil paddle on top</u>				

Rec Total 90 BHT 105 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2031</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1000</u>
(B) First Initial Flow <u>23</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0937</u>
(C) First Final Flow <u>37</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1253</u>
(D) Initial Shut-In <u>11 46</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>1453</u>
(E) Second Initial Flow <u>44</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1652</u>
(F) Second Final Flow <u>59</u>	<input checked="" type="checkbox"/> Mileage <u>104rt</u> <u>104</u>	Comments
(G) Final Shut-In <u>11 34</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2017</u>	<input type="checkbox"/> Straddle	
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>30</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
Final Flow <u>30</u>	<input type="checkbox"/> Accessibility	Total <u>1579</u>
Final Shut-In <u>30</u>	Sub Total <u>1579</u>	MP/DST Disc't

Approved By _____ Our Representative

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. **64336**

Well Name & No. Luebbers 30c Unit #1 Test No. 2 Date 9/26/2018
 Company Ritchie Exploration, Inc Elevation 3233 KB 3225 GL
 Address Box 783188 Wichita, Ks
 Co. Rep / Geo. Max Larely Rig WW #12
 Location: Sec. 30 Twp. 15s Rge. 35w Co. Logan State Ks

Interval Tested 4395-4439 Zone Tested Alfmont
 Anchor Length 44 Drill Pipe Run 180 Mud Wt. 9.1
 Top Packer Depth 4390 Drill Collars Run 3204 Vis 56
 Bottom Packer Depth 4395 Wt. Pipe Run 0 WL 8.8
 Total Depth 4395 Chlorides 6,000 ppm System LCM 3#
 Blow Description IF Surface blow died @ 20min.
1st No return
2nd No blow
3rd No return

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

Rec Total 10 BHT 105 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2290</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>0300</u>
(B) First Initial Flow <u>22</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>0343</u>
(C) First Final Flow <u>22</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0627</u>
(D) Initial Shut-In <u>25</u>	<input checked="" type="checkbox"/> Circ Sub <u>4/c</u>	T-Pulled <u>0827</u>
(E) Second Initial Flow <u>20</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>1032</u>
(F) Second Final Flow <u>23</u>	<input checked="" type="checkbox"/> Mileage <u>104 RT x 2</u> ¹⁰⁴⁺¹⁰⁴	Comments <u>PU Tools 9/29 0130</u>
(G) Final Shut-In <u>26</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2195</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>1600</u>
Final Flow <u>30</u>	<input checked="" type="checkbox"/> Day Standby <u>x2 2.5d 3hr</u>	Total <u>3283</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1683</u>	

Approved By _____ Our Representative [Signature]

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