

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) (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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DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating, Inc.**

PO Box 86
Plainville, KS 67663

ATTN: Marc Downing

Richmeier #2-1

2-9s-25w Graham,KS

Start Date: 2016.02.21 @ 05:20:50

End Date: 2016.02.21 @ 12:17:20

Job Ticket #: 64844 DST #: 1

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

Printed: 2016.02.23 @ 09:18:55



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

H&C Oil Operating, Inc.

2-9s-25w Graham,KS

PO Box 86
Plainville, KS 67663

Richmeier #2-1

Job Ticket: 64844

DST#: 1

ATTN: Marc Downing

Test Start: 2016.02.21 @ 05:20:50

GENERAL INFORMATION:

Formation: **LKC "C&D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:32:20

Time Test Ended: 12:17:20

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan Lonsdale

Unit No: 73

Interval: 3849.00 ft (KB) To 3900.00 ft (KB) (TVD)

Reference Elevations: 2534.00 ft (KB)

Total Depth: 3900.00 ft (KB) (TVD)

2526.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 6651

Inside

Press@RunDepth: 21.94 psig @ 3897.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.02.21

End Date:

2016.02.21

Last Calib.:

2016.02.21

Start Time: 05:20:51

End Time:

12:17:20

Time On Btm:

2016.02.21 @ 08:31:50

Time Off Btm:

2016.02.21 @ 10:38:20

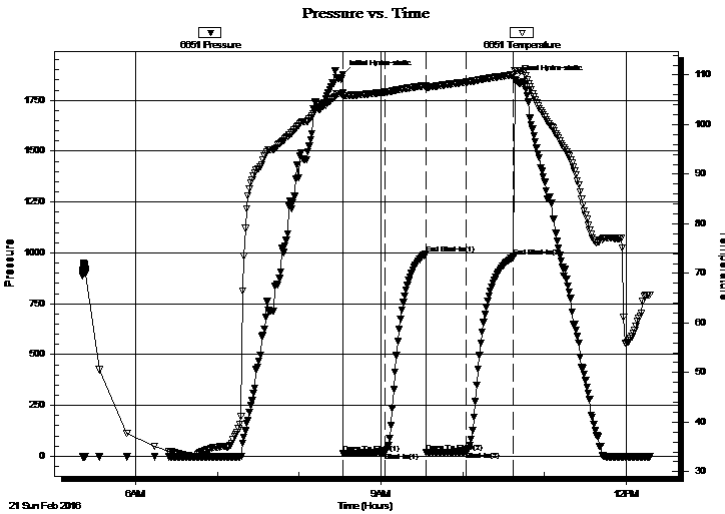
TEST COMMENT: 30- IF- Built very slow ly to 1 1/2"

30- IS- No blow

30- FF- No blow

30- FSI- No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1876.04	106.33	Initial Hydro-static
1	13.56	105.73	Open To Flow (1)
31	18.32	106.52	Shut-In(1)
61	995.92	107.89	End Shut-In(1)
62	19.04	107.36	Open To Flow (2)
91	21.94	108.57	Shut-In(2)
126	981.10	110.04	End Shut-In(2)
127	1850.46	110.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
32.00	SWM, 10%W 90%M	0.24

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating, Inc.

2-9s-25w Graham,KS

PO Box 86
Plainville, KS 67663

Richmeier #2-1

Job Ticket: 64844

DST#: 1

ATTN: Marc Downing

Test Start: 2016.02.21 @ 05:20:50

Tool Information

Drill Pipe:	Length: 3535.00 ft	Diameter: 3.82 inches	Volume: 50.11 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 311.00 ft	Diameter: 2.75 inches	Volume: 2.28 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: 64000.00 lb
			<u>Total Volume: 52.39 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 49000.00 lb
Depth to Top Packer:	3849.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 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			3830.00	
Shut In Tool	5.00			3835.00	
Hydraulic tool	5.00			3840.00	
Packer	5.00			3845.00	20.00 Bottom Of Top Packer
Packer	4.00			3849.00	
Stubb	1.00			3850.00	
Perforations	13.00			3863.00	
Change Over Sub	1.00			3864.00	
Drill Pipe	32.00			3896.00	
Change Over Sub	1.00			3897.00	
Recorder	0.00	6651	Inside	3897.00	
Recorder	0.00	6839	Outside	3897.00	
Bullnose	3.00			3900.00	51.00 Bottom Packers & Anchor

Total Tool Length: 71.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating, Inc.

2-9s-25w Graham,KS

PO Box 86
Plainville, KS 67663

Richmeier #2-1

Job Ticket: 64844

DST#: 1

ATTN: Marc Downing

Test Start: 2016.02.21 @ 05:20:50

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
32.00	SWM, 10%W 90%M	0.235

Total Length: 32.00 ft Total Volume: 0.235 bbl

Num Fluid Samples: 0

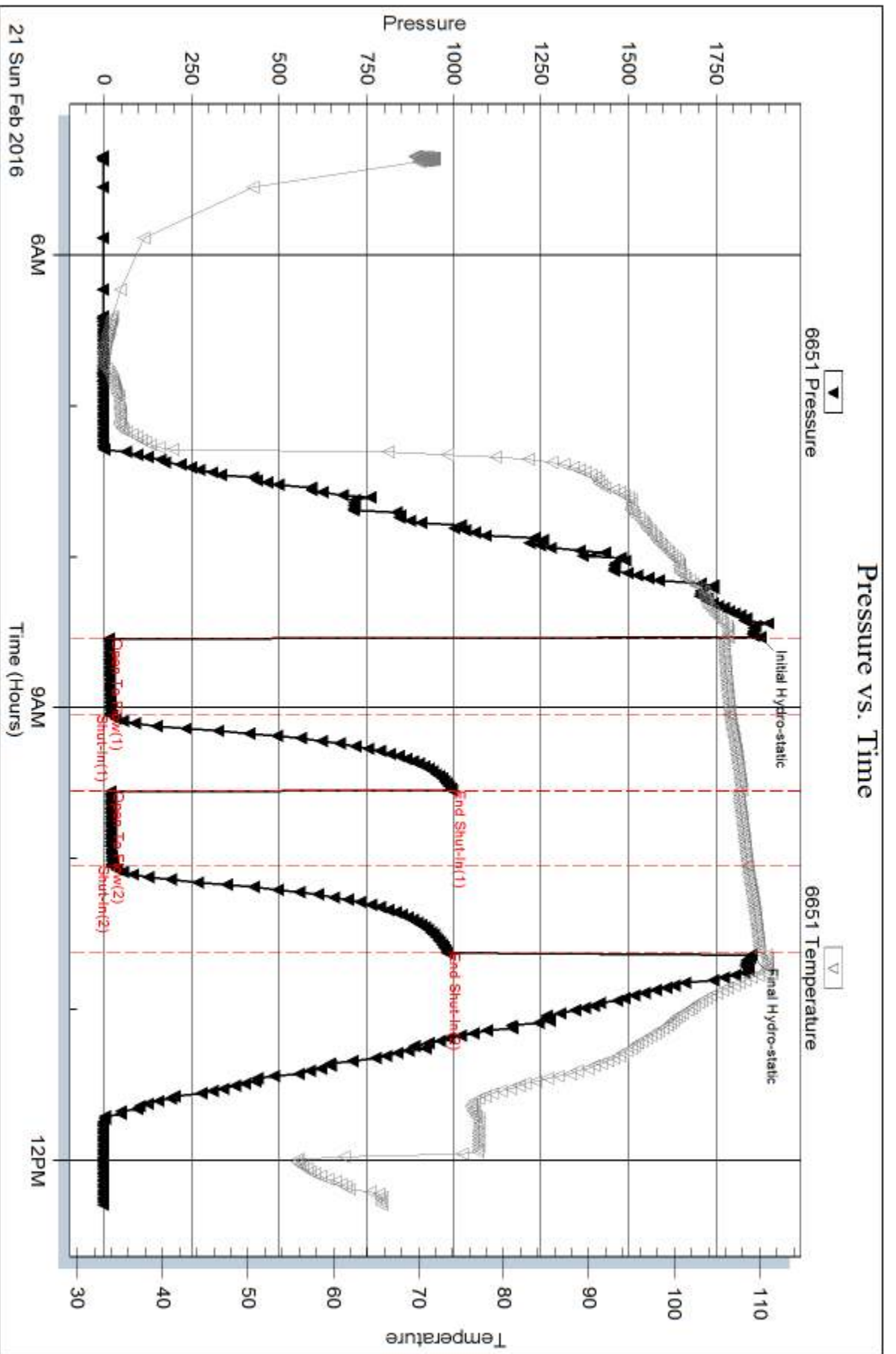
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

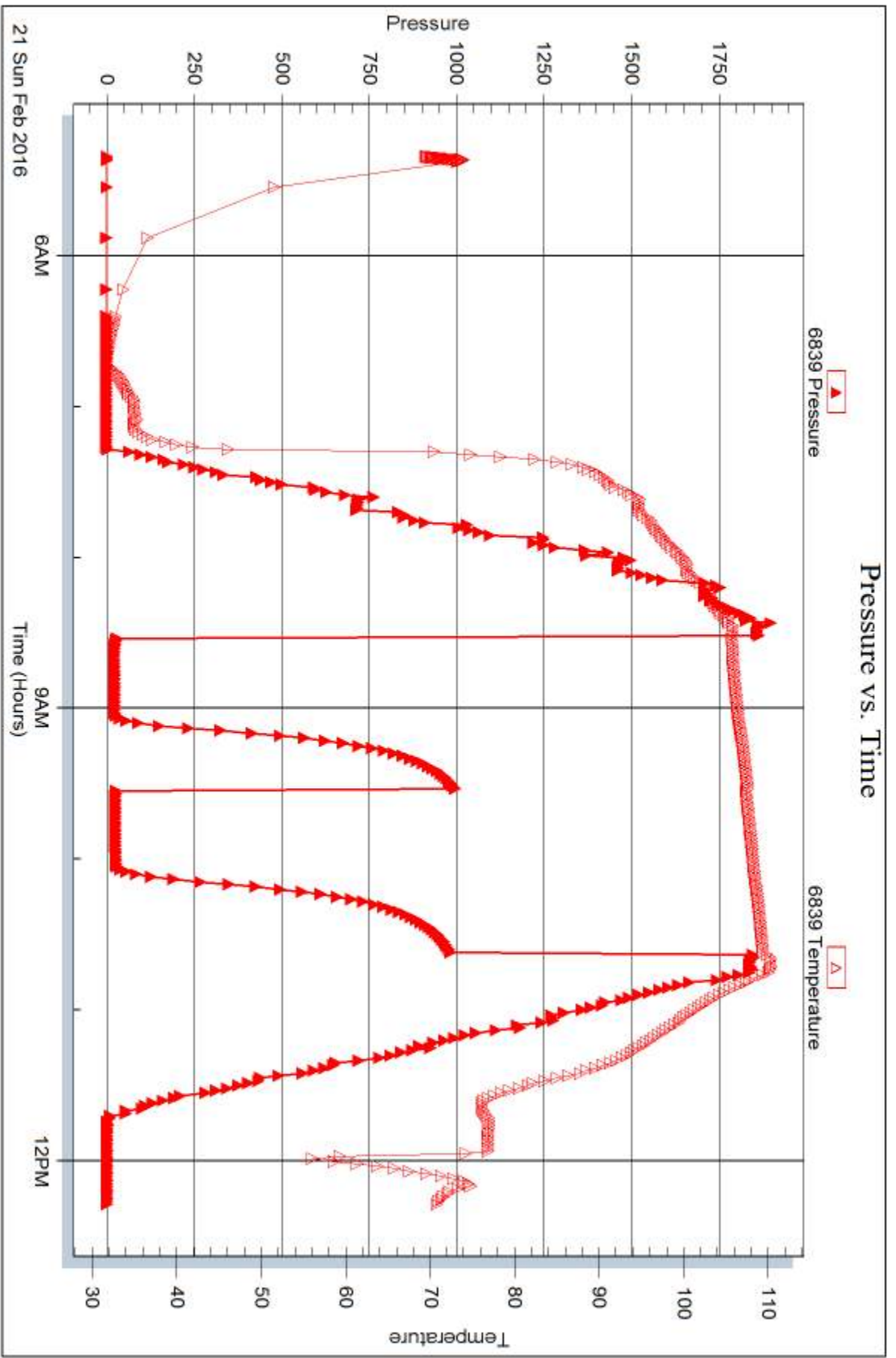


Serial #: 6839

Outside H&C Oil Operating, Inc.

Richmeier #2-1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 64844

Printed: 2016.02.23 @ 09:18:56



DRILL STEM TEST REPORT

Prepared For: **H&C Oil Operating, Inc.**

PO Box 86
Plainville, KS 67663

ATTN: Marc Downing

Richmeier #2-1

2-9s-25w Graham,KS

Start Date: 2016.02.22 @ 01:33:33

End Date: 2016.02.22 @ 07:59:03

Job Ticket #: 64845 DST #: 2

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

Printed: 2016.02.23 @ 09:18:08



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

H&C Oil Operating, Inc.

2-9s-25w Graham,KS

PO Box 86
Plainville, KS 67663

Richmeier #2-1

Job Ticket: 64845

DST#: 2

ATTN: Marc Downing

Test Start: 2016.02.22 @ 01:33:33

GENERAL INFORMATION:

Formation: **LKC H-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:53:33

Time Test Ended: 07:59:03

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan Lonsdale

Unit No: 73

Interval: 3959.00 ft (KB) To 4029.00 ft (KB) (TVD)

Reference Elevations: 2534.00 ft (KB)

Total Depth: 4029.00 ft (KB) (TVD)

2526.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 6651

Inside

Press@RunDepth: 35.82 psig @ 4026.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.02.22

End Date:

2016.02.22

Last Calib.:

2016.02.22

Start Time: 01:33:34

End Time:

07:59:03

Time On Btm:

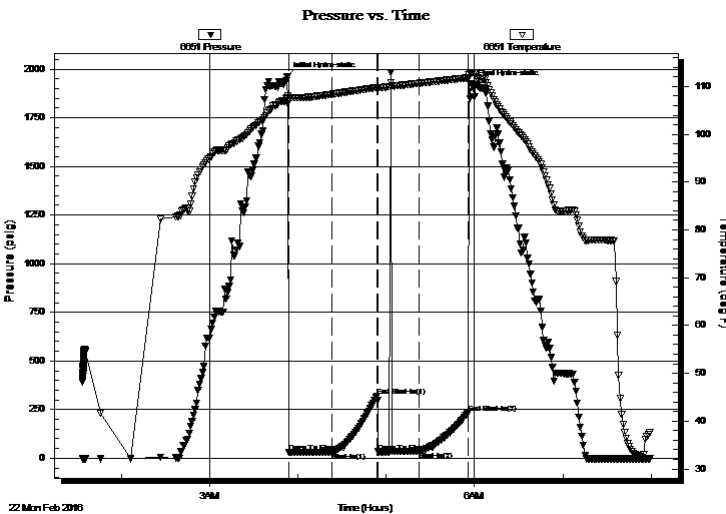
2016.02.22 @ 03:52:33

Time Off Btm:

2016.02.22 @ 05:57:33

TEST COMMENT: 30- IF- Surface blow built slowly to 1/4"
30- IS- No blow
30- FF- No blow Flushed tool Surface blow died in 3 mins
30- FS- No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1961.49	107.60	Initial Hydro-static
1	30.23	107.59	Open To Flow (1)
31	32.05	108.36	Shut-In(1)
61	318.89	109.78	End Shut-In(1)
62	32.53	109.72	Open To Flow (2)
90	35.82	110.65	Shut-In(2)
123	233.62	111.79	End Shut-In(2)
125	1922.78	112.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	M	0.33

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

H&C Oil Operating, Inc.

2-9s-25w Graham, KS

PO Box 86
Plainville, KS 67663

Richmeier #2-1

Job Ticket: 64845

DST#: 2

ATTN: Marc Downing

Test Start: 2016.02.22 @ 01:33:33

GENERAL INFORMATION:

Formation: **LKC H-J**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:53:33

Time Test Ended: 07:59:03

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan Lonsdale

Unit No: 73

Interval: **3959.00 ft (KB) To 4029.00 ft (KB) (TVD)**

Reference Elevations: 2534.00 ft (KB)

Total Depth: 4029.00 ft (KB) (TVD)

2526.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

Serial #: 6839 Outside

Press@RunDepth: psig @ 4026.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.02.22

End Date: 2016.02.22

Last Calib.: 2016.02.22

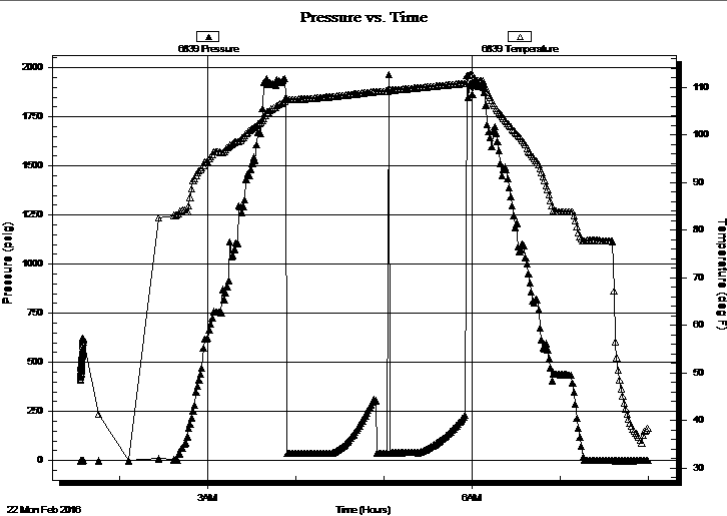
Start Time: 01:33:42

End Time: 07:59:11

Time On Btm:

Time Off Btm:

TEST COMMENT: 30- IF- Surface blow built slowly to 1/4"
30- IS- No blow
30- FF- No blow Flushed tool Surface blow died in 3 mins
30- FS- No blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
45.00	M	0.33

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

H&C Oil Operating, Inc.

2-9s-25w Graham,KS

PO Box 86
Plainville, KS 67663

Richmeier #2-1

Job Ticket: 64845

DST#: 2

ATTN: Marc Downing

Test Start: 2016.02.22 @ 01:33:33

Tool Information

Drill Pipe:	Length: 3695.00 ft	Diameter: 3.82 inches	Volume: 52.38 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 249.00 ft	Diameter: 2.75 inches	Volume: 1.83 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	60000.00 lb
			<u>Total Volume: 54.21 bbl</u>	Tool Chased	3.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial	53000.00 lb
Depth to Top Packer:	3959.00 ft			Final	53000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	70.00 ft				
Tool Length:	90.00 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			3940.00	
Shut In Tool	5.00			3945.00	
Hydraulic tool	5.00			3950.00	
Packer	5.00			3955.00	20.00 Bottom Of Top Packer
Packer	4.00			3959.00	
Stubb	1.00			3960.00	
Perforations	3.00			3963.00	
Change Over Sub	1.00			3964.00	
Drill Pipe	61.00			4025.00	
Change Over Sub	1.00			4026.00	
Recorder	0.00	6651	Inside	4026.00	
Recorder	0.00	6839	Outside	4026.00	
Bullnose	3.00			4029.00	70.00 Bottom Packers & Anchor

Total Tool Length: 90.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

H&C Oil Operating, Inc.

2-9s-25w Graham,KS

PO Box 86
Plainville, KS 67663

Richmeier #2-1

Job Ticket: 64845

DST#: 2

ATTN: Marc Downing

Test Start: 2016.02.22 @ 01:33:33

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: 63.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	M	0.331

Total Length: 45.00 ft Total Volume: 0.331 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 6651

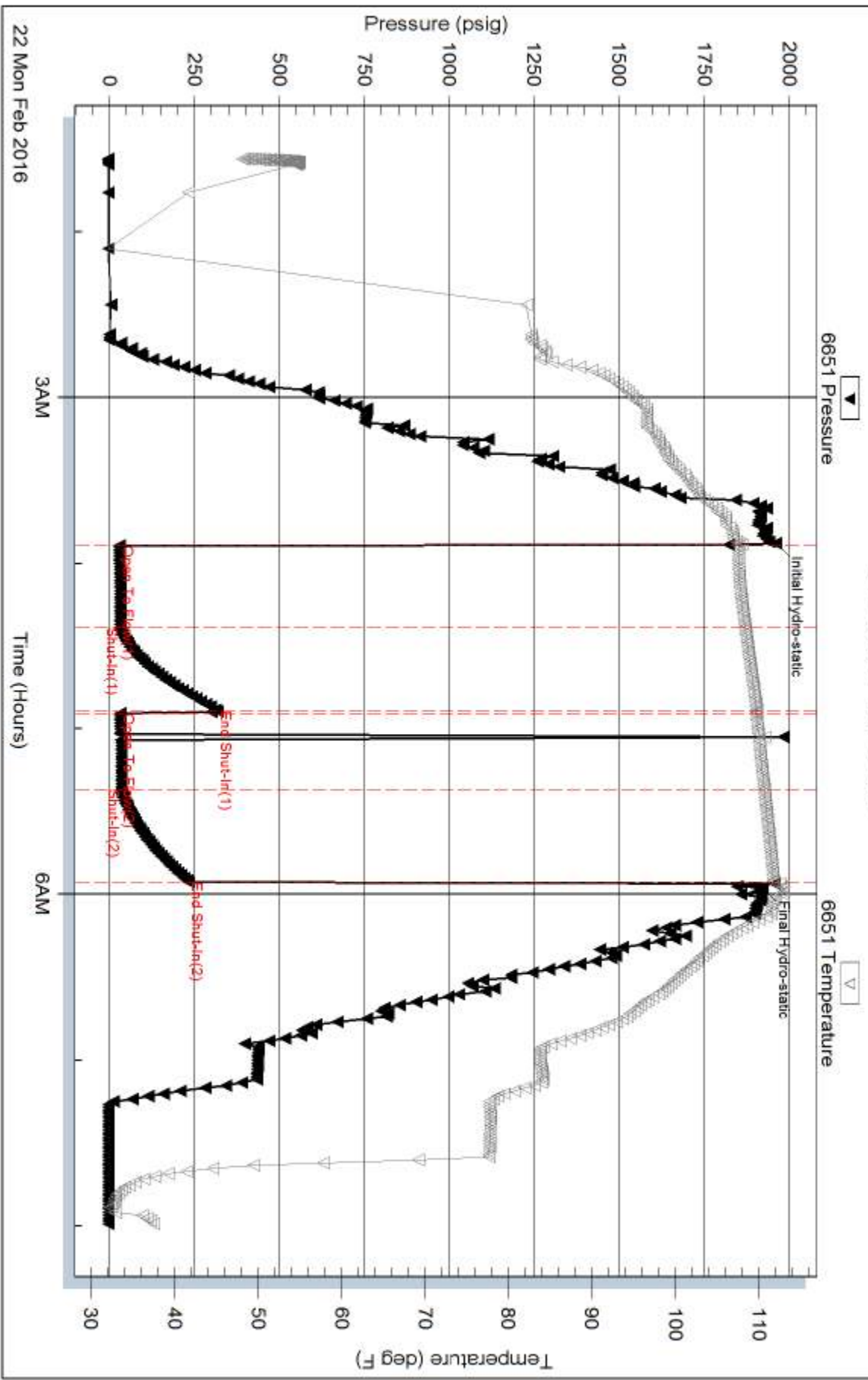
Inside

H&C Oil Operating, Inc.

Richmeier #2-1

DST Test Number: 2

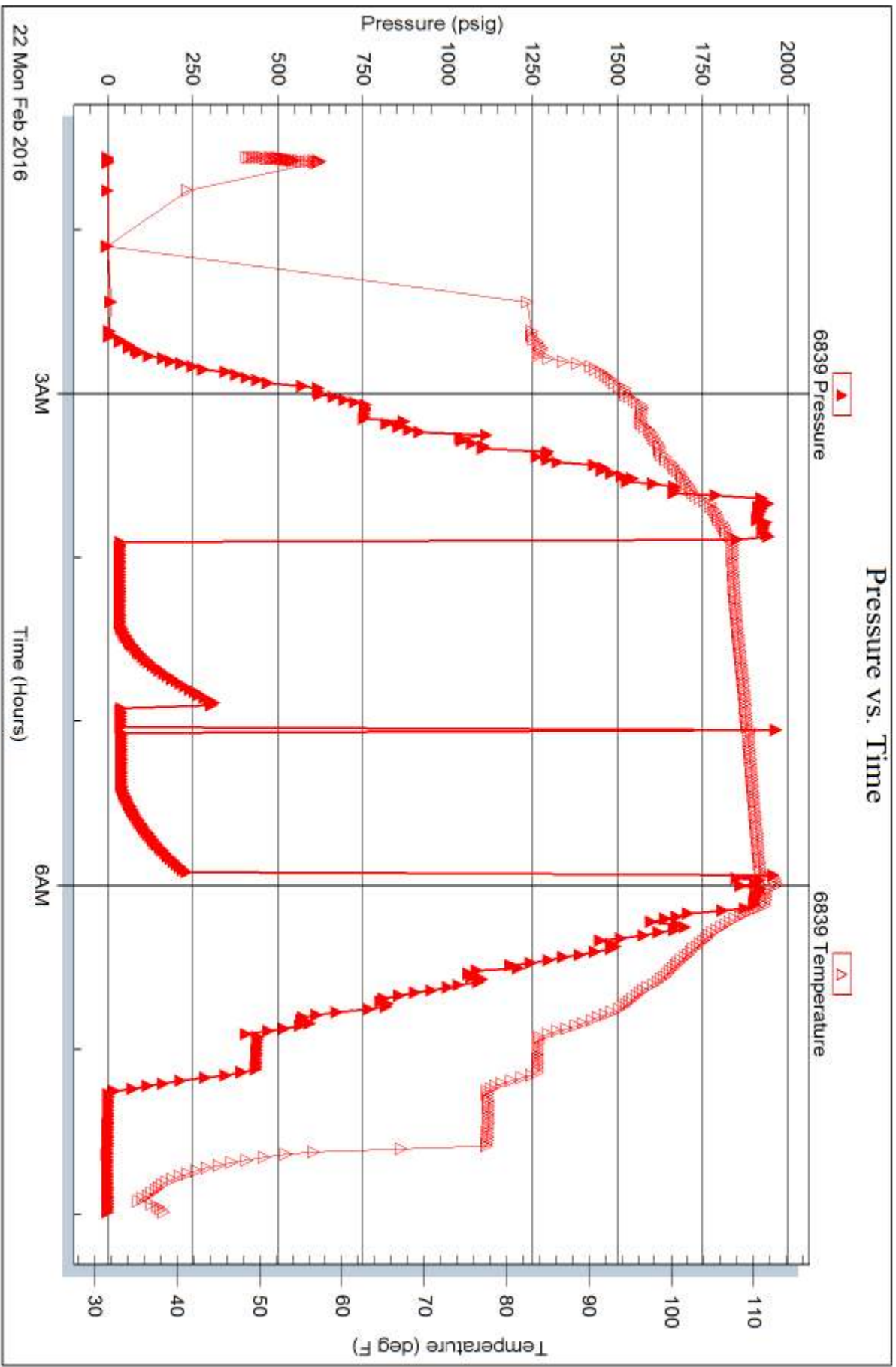
Pressure vs. Time

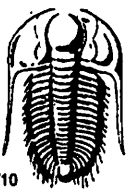


Trilobite Testing, Inc

Ref. No: 64845

Printed: 2016.02.23 @ 09:18:09





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 64844

Well Name & No. Richmeier #2-1 Test No. 1 Date 2/21/16
 Company HTC Oil Operating, Inc. Elevation 2534 KB 2526GL
 Address PO Box 86 Plainville, KS 67663
 Co. Rep / Geo. Marc Downing Rig Discovery #1
 Location: Sec. 2 Twp. 9 Rge. 25 W Co. Graham State KS

Interval Tested 3849-3900 Zone Tested LKC "C&D"
 Anchor Length 51' Drill Pipe Run 3535 Mud Wt. 8.6
 Top Packer Depth 3844 Drill Collars Run 311 Vis 60+
 Bottom Packer Depth 3849 Wt. Pipe Run — WL 7.2
 Total Depth 3900 Chlorides 1,500 ppm System LCM 3#

Blow Description IF - Slowly built to 1 1/2"
ISF - No blow
FF - No blow
FST - No blow

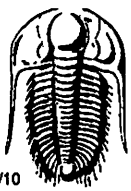
Rec	Feet of	%gas	%oil	%water	%mud
<u>32</u>	<u>SWM</u>			<u>10%</u>	<u>90%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 32' BHT 110° Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1876 Test 1050 T-On Location 0502
 (B) First Initial Flow 14 Jars _____ T-Started 0520
 (C) First Final Flow 18 Safety Joint _____ T-Open 0831
 (D) Initial Shut-In 996 Circ Sub _____ T-Pulled 1031
 (E) Second Initial Flow 19 Hourly Standby _____ T-Out 1216
 (F) Second Final Flow 22 Mileage 100 RT Comments _____
 (G) Final Shut-In 981 Sampler 124rt 93 _____
 (H) Final Hydrostatic 1850 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1143
 Accessibility _____ MP/DST Disc't _____
 Sub Total 1143

Approved By _____ Our Representative Brannan Lonsdale

Triobite 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. 64845

Well Name & No. Richmeier #2-1 Test No. 2 Date 2/22/16
 Company H+C Oil Operating, Inc. Elevation 2534 KB 2526GL
 Address PO Box 56 Plainville, KS 67663
 Co. Rep / Geo. Marc Downing Rig Discovery #1
 Location: Sec. 2 Twp. N 9 S Rge. 25 W Co. Graham State KS

Interval Tested 3959-4029 Zone Tested LKC "H-J"
 Anchor Length 20' Drill Pipe Run 3695 Mud Wt. 9.0
 Top Packer Depth 3954 Drill Collars Run 249 Vis 63
 Bottom Packer Depth 3959 Wt. Pipe Run — WL 7.2
 Total Depth 4029 Chlorides 1500 ppm System LCM 2¹
 Blow Description IF - Surface blow built slowly to 1/4"
ISI - No blow
FF - No blow Flashed tool surface blow died in 3mins
FST - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>45</u>	<u>M</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 45' BHT 112° Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>1961</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>0115</u>
(B) First Initial Flow <u>30</u>	<input type="checkbox"/> Jars _____	T-Started <u>0133</u>
(C) First Final Flow <u>32</u>	<input type="checkbox"/> Safety Joint _____	T-Open <u>0353</u>
(D) Initial Shut-In <u>319</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>0553</u>
(E) Second Initial Flow <u>33</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>0759</u>
(F) Second Final Flow <u>36</u>	<input checked="" type="checkbox"/> Mileage <u>180 RTx2</u>	Comments <u>Loaded tools</u>
(G) Final Shut-In <u>234</u>	<input type="checkbox"/> Sampler <u>186</u>	<u>10/22/16 2015</u>
(H) Final Hydrostatic <u>1923</u>	<input type="checkbox"/> Straddle _____	
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Ruined Packer _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby _____	Total <u>1336</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1336</u>	

Approved By _____ Our Representative Brian Lonsdale

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.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 1551

Sec. 2	Twp. 9	Range 25	County Graham	State KS	On Location	Finish 3:00 AM
Date 2-23-16			Location St Peter 5 N E 10 W			
Well No. 2-1			Owner			

Lease Richmeier
Contractor Discovery #1
To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish
cement and helper to assist owner or contractor to do work as listed.

Type Job Play
Hole Size 7 7/8
Csg. Drill Pipe
Tbg-Size
T.D. 4110
Depth
Depth
Depth
Charge H+C
To
Street
City
State
Cement Left in Csg. 255 67/40 490 Gal 1460

Meas Line Displace
EQUIPMENT
Pumptrk 20 No. Cementer Travis
Bulktrk 4 No. Driver Doug
Bulktrk 4 No. Driver Bren

JOB SERVICES & REMARKS
Remarks:
Rat Hole ~ 30 sk
Mouse Hole 15 sk
Centralizers
Baskets
DNV or Port Collar

Sand
Handling 264
Mileage 8 5/8 FLOAT EQUIPMENT
Guide Shoe
Centralizer
Baskets
AFU Inserts
Float Shoe
Latch Down
Wood Plug-1
Pumptrk Charge
Mileage 241 plug
Tax
Discount
Total Charge

Signature [Signature]

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

No. 1513

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

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

Date	2-17-16	Sec.	2	Twp.	9	Range	25	County	Caravan	State	KS	On Location		Finish	4:30pm
Well No.	2-1														
Location	St. Peter 7 1/2 W Pinto														

Lease Rich Meier
 Contractor Dissovent #
 Type Job Surface
 Hole Size 12 1/4
 Csg. 8 5/8

Owner AHC
 Charge To AHC
 Street AHC
 City AHC
 State AHC

To Quality Oilwell Cementing, Inc.
 You are hereby requested to rent cementing equipment and furnish
 cementer and helper to assist owner or contractor to do work as listed.

The above was done to satisfaction and supervision of owner agent or contractor.
 Cement Amount Ordered 150 80/20 3/4 2/1.6 FL

Cement Left in Csg. 15
 Meas Line Displace 133L

EQUIPMENT	
Pumptrk No.	<u>20</u>
Helper	<u>Brett</u>
Driver	<u>Brett</u>
Bulktrk No.	<u>3</u>
Driver	<u>Rick</u>
Bulktrk No.	<u>6</u>
Driver	<u>Rick</u>

JOB SERVICES & REMARKS

Remarks: 8 5/8 on bottom. Est. Circulation.
Milk 150SK & Displace.
Cement Circulator.

Rat Hole

Mouse Hole

Centralizers Mud CLR 48

Baskets CFL-117 or CD110 CAF 38

D/V or Port Collar Sand

Handling 159

Mileage FLOAT EQUIPMENT

Guide Shoe Centralizer

Centralizer Centralizer

Baskets Baskets

AFU Inserts AFU Inserts

Float Shoe Float Shoe

Latch Down Latch Down

Pumptrk Charge Surf face

Mileage 24

Tax

Discount

Total Charge

X Signature [Signature]