

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
---	---	------------------------------------

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:	
----------------	-------	---------	------------	--

T10H 82

BASIC

energy services, L.P.

TREATMENT REPORT

Customer WOOLSEY OPER.	Lease No.	Date 2-1-2018	
Lease KILGORE	Well # 1		
Field Order # 112268	Station PRATT, KS.	Casing 10 3/4" ID	Depth 3600'
Type Job 10 3/4" ERT Surface	Formation	County KIOWA	State KS
		Legal Description 20-285-19W	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size 10 3/4"	Tubing Size 32.75"	Shots/Ft CMT -	Acid 315SKS 60/40POZ	Pre Pad @ 1.21 CUFT ³	Rate	Press	ISIP	
Depth 354'	Depth	From	To	Pad	Max		5 Min.	
Volume 35 BBL	Volume	From	To	Frac	Min		10 Min.	
Max Press 500	Max Press	From	To		Avg		15 Min.	
Well Connection S.V.	Annulus Vol.	From	To	Flush 33 BBL	HHP Used		Annulus Pressure	
Plug Depth 334'	Packer Depth	From	To		Gas Volume		Total Load 42	

Customer Representative ALAN DICK	Station Manager J. WESTERMAN	Treater K. LESLEY
Service Units 86531 20900 19918 STOPS	21010	
Driver Names LESLEY MCGRAW RENT HAND RLEY		

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
1:00 pm	1-31-18				ON LOCATION - SAFETY MEETING RUN 8 JTS - 10 3/4" CSG CSG ON BOTTOM HOOK UP TO CSG / BREAK CIRC. W/ RIG
11:20 am	200		3 to	6	H ₂ O AHEAD
	200		68	6	MIX 315 SKS 60/40POZ @ 14.8 PPG
			0	4	START DISPLACEMENT
	100		10	3	SLOW RATE
	100		33	3	CMT. @ DESIRED DEPTH CIRC. THRU JOB CIRC. 0 BBL TO PIT
					Run 2 Joints 1"
4:00 pm	200		26	2	MIX 1255K JOB COMPLETE, THANKS - KEVEN LESLEY

Customer <i>Woolsey Operations, LLC</i>	Lease No.	Date <i>2/21/2018</i>	
Lease <i>Kilgore</i>	Well # <i>1</i>		
Field Order # <i>16178</i>	Station <i>Pratt, KS</i>	Casing <i>8 5/8</i>	Depth <i>960</i>
Type Job <i>242/8 5/8 Intermediate Casing</i>	Formation <i>TD-960'</i>	County <i>Kiowa</i>	State <i>KS</i>
		Legal Description <i>20-285-19W</i>	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size <i>8 5/8</i>	Tubing Size	Shots/Ft		Acid		RATE	PRESS	ISIP
Depth <i>960</i>	Depth	From	To	Pre Pad	Max			5 Min.
Volume <i>57</i>	Volume	From	To	Pad	Min			10 Min.
Max Press	Max Press	From	To	Frac	Avg			15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used			Annulus Pressure
Plug Depth <i>8 5/8</i>	Packer Depth	From	To	Flush <i>Water</i>	Gas Volume			Total Load

Customer Representative <i>Allen Dick</i>	Station Manager <i>Justin Westerman</i>	Treater <i>Darin Franklin</i>
--	--	----------------------------------

Service Units	<i>92911</i>	<i>84961</i>	<i>19843</i>	<i>70955</i>	<i>19862</i>				
Driver Names	<i>Darin</i>	<i>Ed</i>	<i>Ed</i>	<i>Clymer</i>	<i>Clymer</i>				

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>5:30pm</i>					<i>on location / 159 per meeting</i>
					<i>1255K Common Cement, 2% Calcium Chloride, 2% Gypsum, 0.25 pps Cellulose, 15.6 pps, 1.22 ve. 12, 5.30 water</i>
<i>9:00pm</i>					<i>Pipe on bottom & break circulation</i>
<i>9:30pm</i>	<i>300</i>		<i>3</i>	<i>3</i>	<i>Pump 3 bbls water</i>
	<i>300</i>		<i>27</i>	<i>3</i>	<i>mix 1255K Cement</i>
					<i>Shut down</i>
					<i>Release plug</i>
	<i>200</i>		<i>0</i>	<i>3</i>	<i>Start displacement</i>
	<i>700</i>		<i>32</i>	<i>2</i>	<i>Slow rate</i>
	<i>900</i>			<i>2</i>	<i>Bump plug</i>
<i>10:00pm</i>					<i>Shut in</i>
					<i>Job Complete / Darin & crew</i>
					<i>Thank you!!!</i>

Customer <i>Woolsey OPERATING</i>	Lease No.	Date <i>2-12-18</i>	
Lease <i>KILGORE</i>	Well # <i>1</i>		
Field Order # <i>10270</i>	Station <i>PRATT, KS.</i>	Casing	Depth
Type Job <i>PTA</i>	Formation	County <i>KIOWA</i>	State <i>KS</i>
		Legal Description <i>20-285-19W</i>	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft	<i>CMT-</i>	Acid <i>220SK 60/40 P02</i>	RATE	PRESS	ISIP	
Depth	Depth	From	To	Pre Pad <i>@ 1.43 CU FT</i>	Max		5 Min.	
Volume	Volume	From	To	Pad	Min		10 Min.	
Max Press	Max Press	From	To	Frac	Avg		15 Min.	
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure	
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load	

Customer Representative <i>ALAN DICK</i>	Station Manager <i>J. WESTERMAN</i>	Treater <i>K. LESLEY</i>
Service Units <i>16531 84980 20920 19959 19918</i>		
Driver Names <i>LESLEY MARRQUEZ CLYMER</i>		

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>8:15 AM</i>					<i>ON LOCATION - SAFETY MEETING</i>
<i>12:00 PM</i>					<i>*1ST PLUG @ 1260' w/50SKS @ 13.8 PPG</i>
<i>12:04 PM</i>	<i>200</i>		<i>15</i>	<i>4</i>	<i>H2O AHEAD</i>
<i>12:08 PM</i>	<i>200</i>		<i>12.5</i>	<i>4</i>	<i>MIX 50 SKS @ 13.8 PPG</i>
<i>12:11 PM</i>	<i>150</i>		<i>5</i>	<i>4</i>	<i>H2O BEHIND CMT.</i>
<i>12:12 PM</i>	<i>50</i>		<i>9</i>	<i>4</i>	<i>MUD BEHIND CMT.</i>
<i>12:27 PM</i>					<i>*2ND PLUG @ 900' w/50SKS</i>
<i>12:30 PM</i>	<i>150</i>		<i>5</i>	<i>4</i>	<i>H2O AHEAD</i>
<i>12:31 PM</i>	<i>150</i>		<i>12.5</i>	<i>4</i>	<i>MIX 50 SKS @ 13.8 PPG</i>
<i>12:34 PM</i>	<i>50</i>		<i>9.5</i>	<i>4</i>	<i>H2O BEHIND</i>
<i>12:38 PM</i>					<i>*3RD PLUG @ 350' w/50 SKS</i>
<i>12:35 PM</i>	<i>50</i>		<i>5</i>	<i>4</i>	<i>H2O AHEAD</i>
<i>12:47 PM</i>	<i>50</i>		<i>12.5</i>	<i>4</i>	<i>MIX 50 SKS @ 13.8 PPG</i>
<i>12:50 PM</i>	<i>0</i>		<i>1.5</i>	<i>4</i>	<i>H2O BEHIND CMT.</i>
					<i>4TH PLUG @ 160' w/20SKS</i>
<i>1:20 PM</i>	<i>0</i>		<i>5</i>	<i>3</i>	<i>CMT TO SURFACE</i>
<i>2:00 PM</i>	<i>0</i>		<i>7.5</i>		<i>PLUG R.H. & M.H.</i>
					<i>JOB COMPLETE,</i>
					<i>THANKS -</i>
					<i>KEVEN LESLEY</i>



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Woolsey Operating Company, LLC

20-28S-19W Kiowa, KS

125 N. Market
Ste. 1000
Wichita, KS 67202
ATTN: Bill Klaver

Kilgore #1

Job Ticket: 63401

DST#: 1

Test Start: 2018.02.08 @ 20:41:30

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:31:06

Time Test Ended: 05:28:05

Test Type: Conventional Bottom Hole (Initial)

Tester: Brannan Lonsdale

Unit No: 73

Interval: 4910.00 ft (KB) To 4950.00 ft (KB) (TVD)

Reference Elevations: 2320.00 ft (KB)

Total Depth: 4950.00 ft (KB) (TVD)

2308.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 12.00 ft

Serial #: 8524 Outside

Press@RunDepth: 43.73 psig @ 4913.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.08

End Date:

2018.02.09

Last Calib.:

2018.02.09

Start Time: 20:41:31

End Time:

05:28:05

Time On Btm:

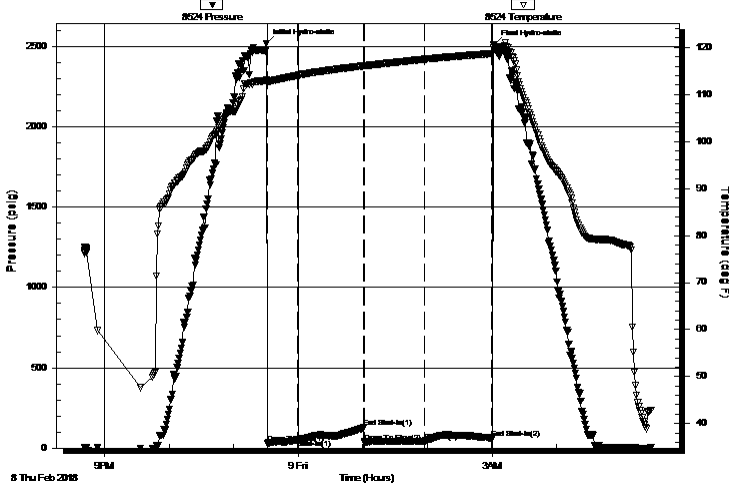
2018.02.08 @ 23:30:36

Time Off Btm:

2018.02.09 @ 03:02:21

TEST COMMENT: 30- IF- Weak blow built slowly to .5"
60- IS- No blow
60- FF- 2" surge slowly built to 5"
60- FSI- Surface blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2518.78	113.08	Initial Hydro-static
1	31.24	112.60	Open To Flow (1)
29	52.62	114.06	Shut-In(1)
90	127.05	116.08	End Shut-In(1)
91	38.46	116.09	Open To Flow (2)
147	43.73	117.48	Shut-In(2)
209	63.42	118.66	End Shut-In(2)
212	2509.53	120.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	M	0.07
0.00	45' GIP	0.00

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Operating Company, LLC

20-28S-19W Kiowa, KS

125 N. Market
Ste. 1000
Wichita, KS 67202
ATTN: Bill Klaver

Kilgore #1

Job Ticket: 63401

DST#: 1

Test Start: 2018.02.08 @ 20:41:30

GENERAL INFORMATION:

Formation: **Miss**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:31:06
Time Test Ended: 05:28:05
Interval: **4910.00 ft (KB) To 4950.00 ft (KB) (TVD)**
Total Depth: 4950.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches
Hole Condition: Poor
Test Type: Conventional Bottom Hole (Initial)
Tester: Brannan Lonsdale
Unit No: 73
Reference Elevations: 2320.00 ft (KB)
2308.00 ft (CF)
KB to GR/CF: 12.00 ft

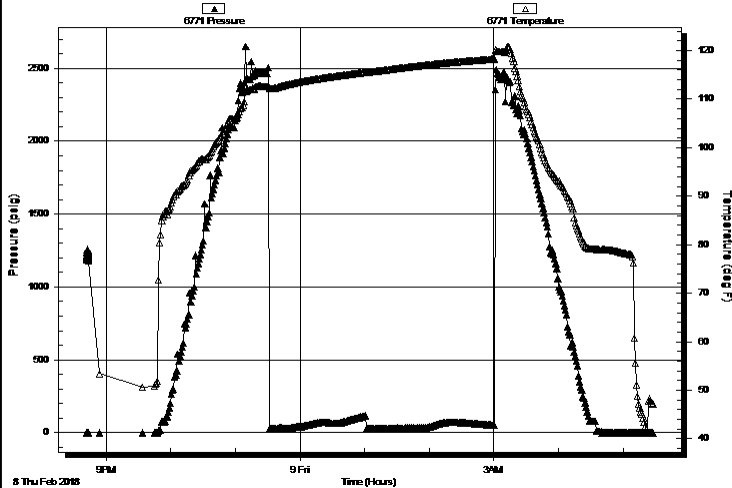
Serial #: 6771

Inside

Press@RunDepth: psig @ 4913.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2018.02.08 End Date: 2018.02.09 Last Calib.: 2018.02.09
Start Time: 20:41:46 End Time: 05:28:05 Time On Btm:
Time Off Btm:

TEST COMMENT: 30- IF- Weak blow built slow ly to .5"
60- IS- No blow
60- FF- 2" surge slow ly built to 5"
60- FS- Surface blow

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
15.00	M	0.07
0.00	45' GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Company, LLC

20-28S-19W Kiowa, KS

125 N. Market
Ste. 1000
Wichita, KS 67202
ATTN: Bill Klaver

Kilgore #1

Job Ticket: 63401

DST#: 1

Test Start: 2018.02.08 @ 20:41:30

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 52.00 sec/qt

Water Loss: 8.79 in³

Resistivity: ohm.m

Salinity: 4500.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	M	0.074
0.00	45' GIP	0.000

Total Length: 15.00 ft Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

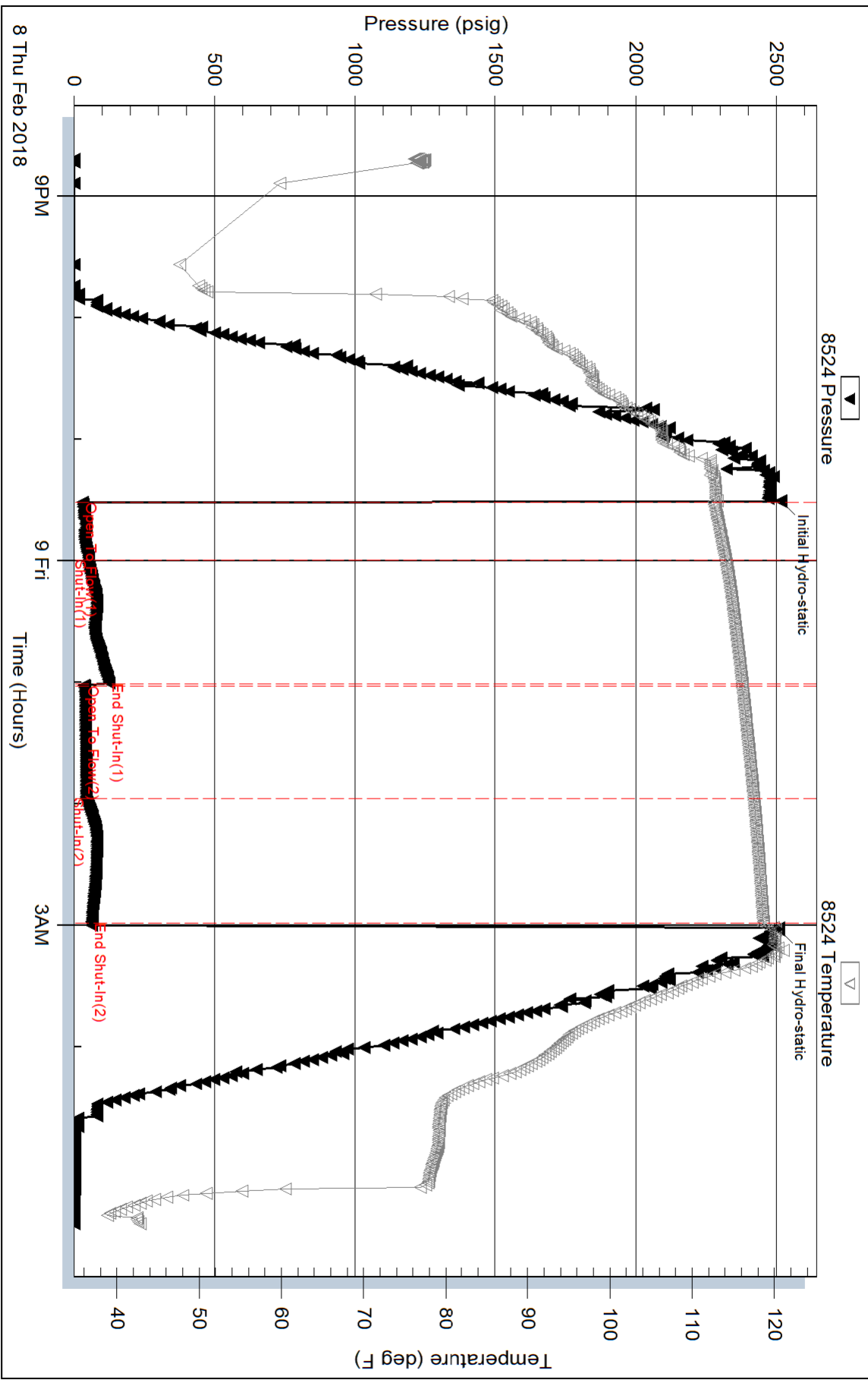
Serial #: 8524

Outside Woodsey Operating Company, LLC

Kilgore #1

DST Test Number: 1

Pressure vs. Time



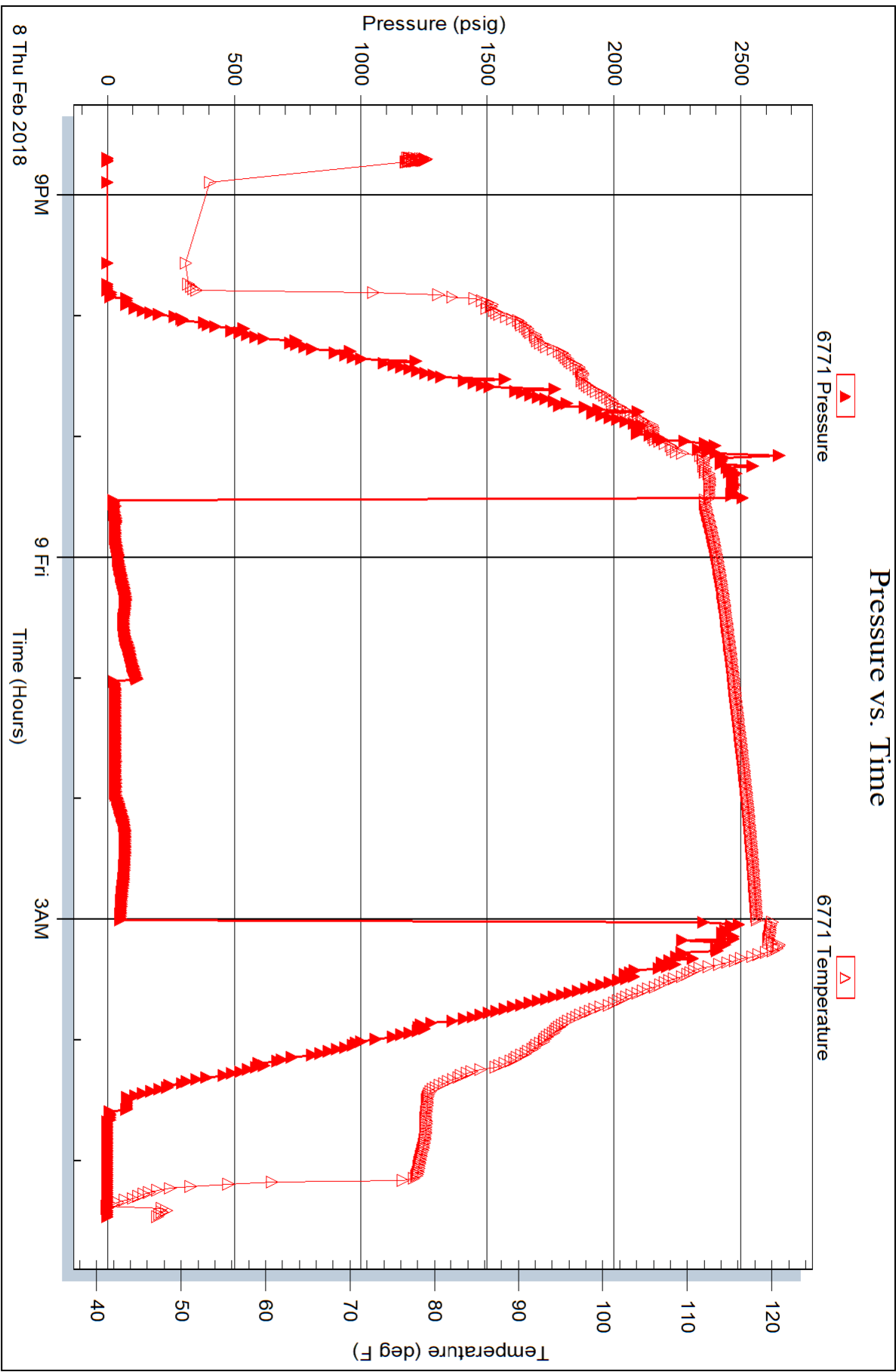
Serial #: 6771

Inside

Woodsey Operating Company, LLC

Kilgore #1

DST Test Number: 1





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Woolsey Operating Company, LLC

20-28S-19W Kiowa, KS

125 N. Market
Ste. 1000
Wichita, KS 67202
ATTN: Bill Klaver

Kilgore #1

Job Ticket: 63402

DST#: 2

Test Start: 2018.02.09 @ 14:35:15

GENERAL INFORMATION:

Formation: **Miss**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:36:21

Time Test Ended: 02:59:50

Test Type: Conventional Bottom Hole (Reset)

Tester: Brannan Lonsdale

Unit No: 73

Interval: 4950.00 ft (KB) To 4960.00 ft (KB) (TVD)

Reference Elevations: 2320.00 ft (KB)

Total Depth: 4960.00 ft (KB) (TVD)

2308.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

Serial #: 8524 Outside

Press@RunDepth: 557.20 psig @ 4957.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.02.09 End Date: 2018.02.10

Last Calib.: 2018.02.10

Start Time: 14:35:16 End Time: 02:59:50

Time On Btm: 2018.02.09 @ 18:34:36

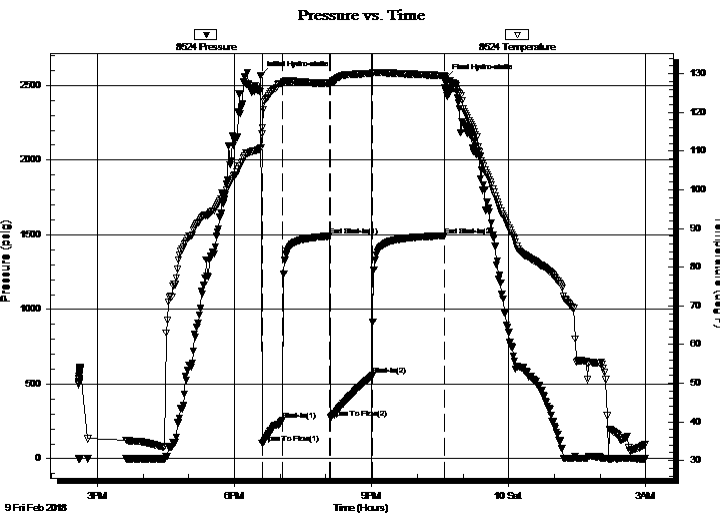
Time Off Btm: 2018.02.09 @ 22:36:36

TEST COMMENT: 30- IF- BOB instantly. Gas to surface 18mins(TSTM)

60- IS- BOB 27mins

60- FF- BOB instantly(TSTM)

90- FSI- Would not bleed off



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2566.98	110.93	Initial Hydro-static
2	101.50	116.09	Open To Flow (1)
29	258.83	127.50	Shut-In(1)
91	1490.91	127.48	End Shut-In(1)
92	273.96	127.35	Open To Flow (2)
147	557.20	130.02	Shut-In(2)
241	1493.52	129.47	End Shut-In(2)
242	2543.07	127.95	Final Hydro-static

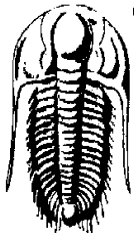
Recovery

Length (ft)	Description	Volume (bbl)
940.00	SMW, 5%M 95%W	9.45
126.00	GOCMW, 20%M 65%W 5%O 10%G	1.37
126.00	GWOCM, 50%M 15%W 25%O 10%G	1.37
126.00	GMCO, 35%M 55%O 10%G	1.37
0.00	Gas to surface(TSTM)	0.00

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Operating Company, LLC

20-28S-19W Kiowa, KS

125 N. Market
Ste. 1000
Wichita, KS 67202
ATTN: Bill Klaver

Kilgore #1
Job Ticket: 63402 **DST#: 2**
Test Start: 2018.02.09 @ 14:35:15

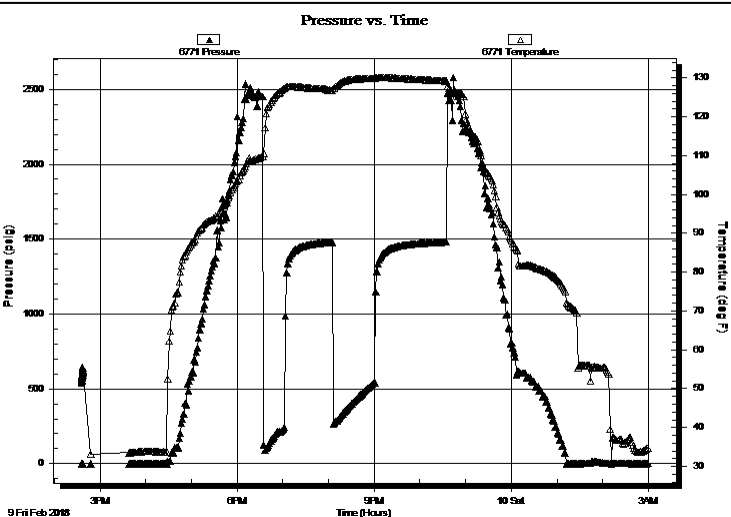
GENERAL INFORMATION:

Formation: Miss	Test Type: Conventional Bottom Hole (Reset)
Deviated: No Whipstock: ft (KB)	Tester: Brannan Lonsdale
Time Tool Opened: 18:36:21	Unit No: 73
Time Test Ended: 02:59:50	
Interval: 4950.00 ft (KB) To 4960.00 ft (KB) (TVD)	Reference Elevations: 2320.00 ft (KB)
Total Depth: 4960.00 ft (KB) (TVD)	2308.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair	KB to GR/CF: 12.00 ft

Serial #: 6771 Inside

Press@RunDepth: psig @ 4957.00 ft (KB)	Capacity: 8000.00 psig
Start Date: 2018.02.09 End Date: 2018.02.10	Last Calib.: 2018.02.10
Start Time: 14:35:44 End Time: 02:59:33	Time On Btm:
	Time Off Btm:

TEST COMMENT: 30- IF- BOB instantly. Gas to surface 18mins(TSTM)
 60- ISL- BOB 27mins
 60- FF- BOB instantly(TSTM)
 90- FSL- Would not bleed off



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
940.00	SMW, 5%M 95%W	9.45
126.00	GOCMW, 20%M 65%W 5%O 10%G	1.37
126.00	GWOCM, 50%M 15%W 25%O 10%G	1.37
126.00	GMCO, 35%M 55%O 10%G	1.37
0.00	Gas to surface(TSTM)	0.00

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Company, LLC

20-28S-19W Kiowa, KS

125 N. Market
Ste. 1000
Wichita, KS 67202
ATTN: Bill Klaver

Kilgore #1

Job Ticket: 63402

DST#: 2

Test Start: 2018.02.09 @ 14:35:15

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 72.00 sec/qt
Water Loss: 8.78 in³
Resistivity: ohm.m
Salinity: 5500.00 ppm
Filter Cake: inches

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

Oil API: 34 deg API
Water Salinity: 90000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
940.00	SMW, 5%M 95%W	9.453
126.00	GOCMW, 20%M 65%W 5%O 10%G	1.365
126.00	GWOCM, 50%M 15%W 25%O 10%G	1.365
126.00	GMCO, 35%M 55%O 10%G	1.365
0.00	Gas to surface(TSTM)	0.000

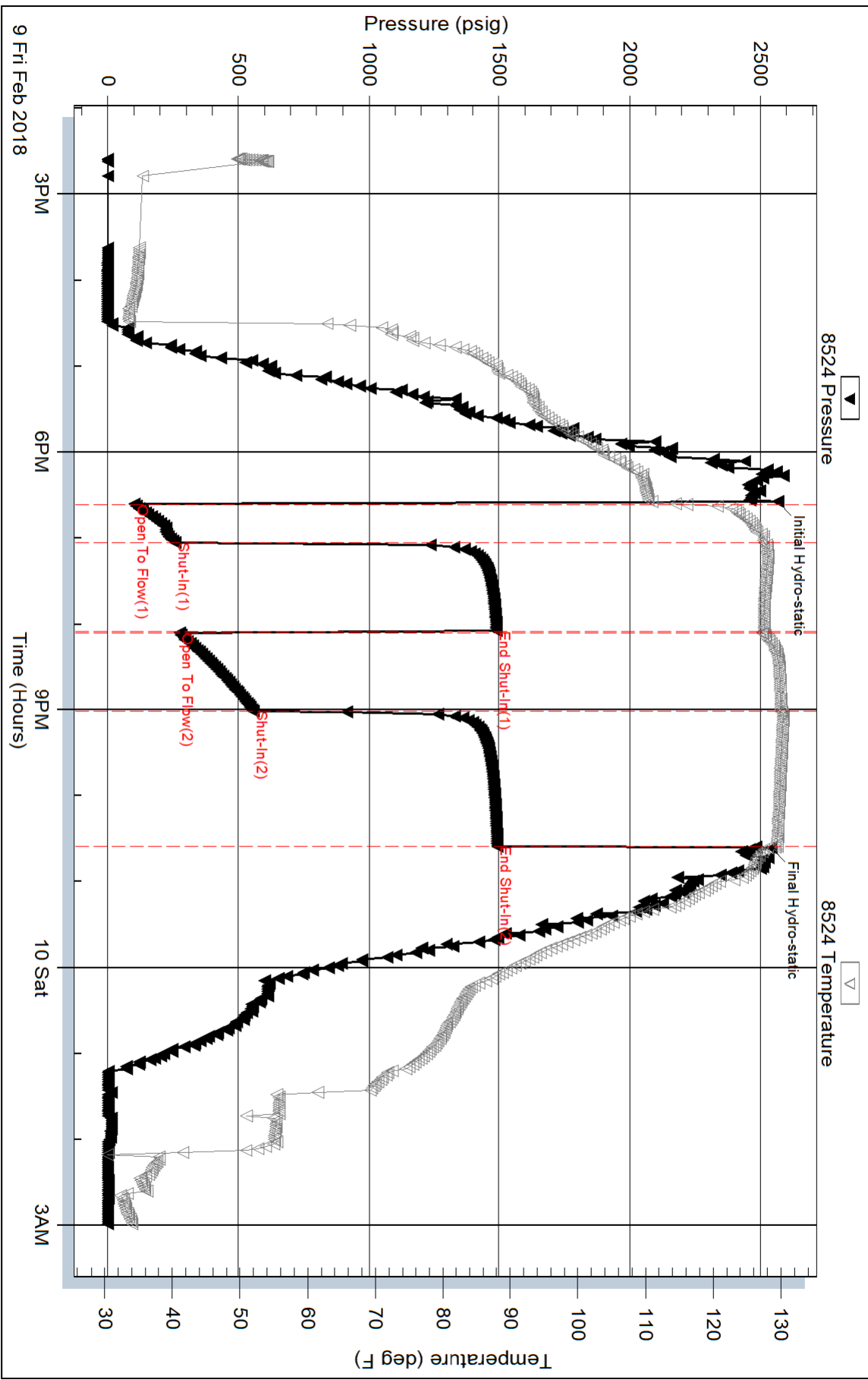
Total Length: 1318.00 ft Total Volume: 13.548 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW: .18@29deg

Pressure vs. Time



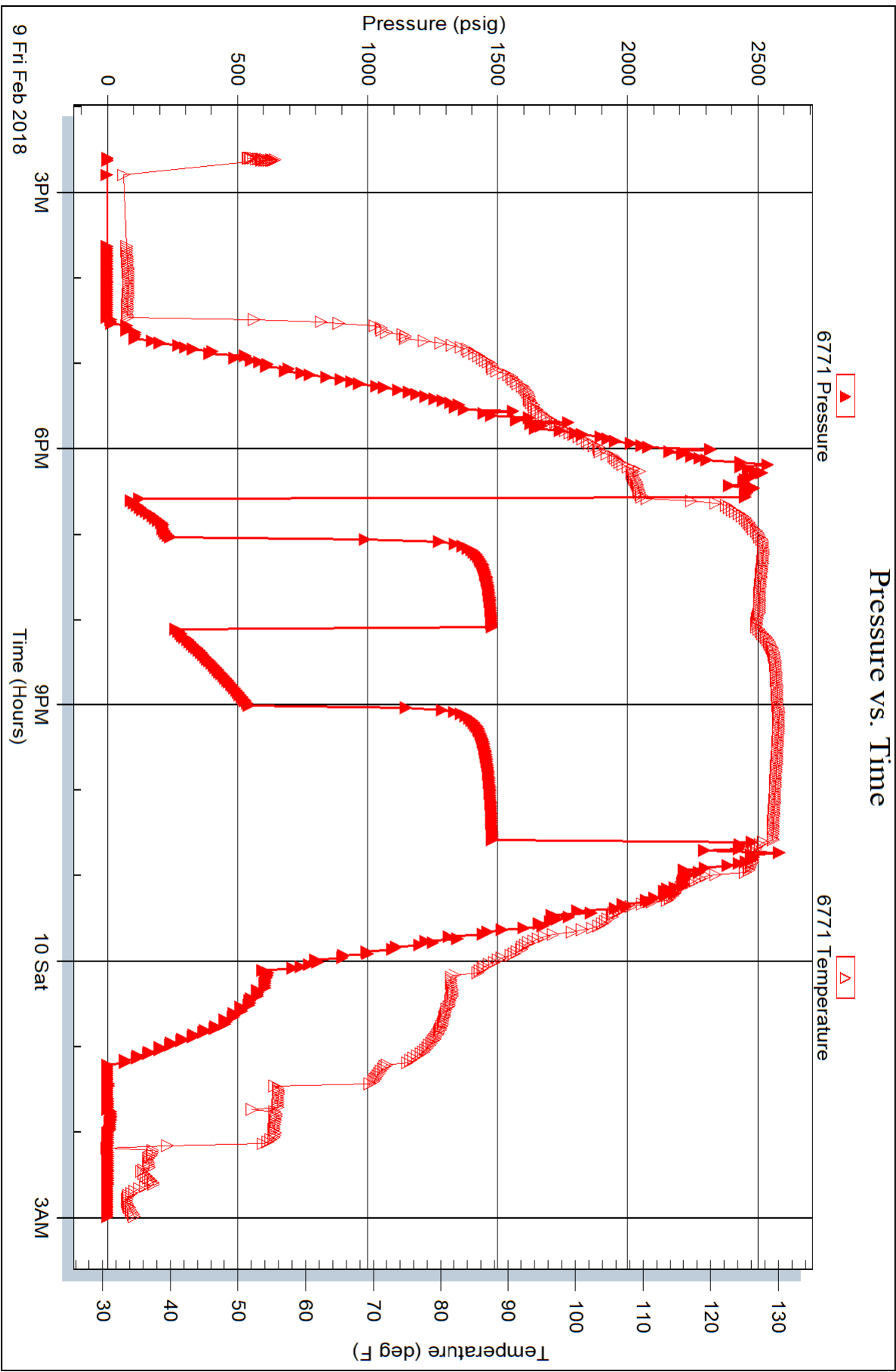
Serial #: 6771

Inside

Woodsey Operating Company, LLC

Kilgore #1

DST Test Number: 2



Woolsey Operating Company, LLC

Scale 1:240 (5'-10") Imperial
Measured Depth Log

Well Name: Kilgore #1
Location: Section 20 - Township 28 South - Range 19 West
License Number: 15-097-21636-00-00
Spud Date: February 1, 2014
Drilling Completed: February 12, 2018
Region: Kiowa County, Kansas
Surface Coordinates: 29° 40' N 84° 0' E of S 1/2 SW SW
470' FSL & 700' FWL
Bottom Hole Coordinates: 47° FSL & 700' FWL
Ground Elevation (ft): 2308' **K.B. Elevation (ft):** 2320'
Logged Interval (ft): 3500' **To:** 5100' **Total Depth (ft):** 5100'
Formation: Topeka >> Mississippian
Type of Drilling Fluid: Chemical Mud
Printed by MUDLOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Woolsey Operating Company, LLC
Address: 125 N. Market, Suite 1000
Wichita, KS 67202

GEOLOGIST

Name: Bill Klever
Company: Woolsey Operating Co. LLC
Address: 125 N. Market, Wichita Kansas, 67202

COMMENTS

Surface casing: set 8 joints 10 3/4" X 32ft at 353' KB (tally 383') w/ 315 ex 60/40 poz. 2% gel, 3% cc. Did not circ. 1" to surface w/ 125 sx common. Set 21 joints 8 5/8" X 24ft at 897' KB w/ 125 sx common, cement did not circ. Job by Basic.
Production Casing: None ran.
Deviation Surveys: 1 1/4 at 356', 3/4 at 854', 1 at 1379', 1 at 1819', 1 1/2 at 2382', 1 at 2883', 1/4 at 3385', 1 at 4314', 1/4 at 4950'
Pipe Strap @ 4315', BHP: 4326.86', Strap: 4330.16', strap 3.3' long.
Fossil Drilling Rig 3 Bit Record:
1) 14 3/4" Varel RT RR in 0' at 356', 6.5 hours
2) 7 7/8" Varel Utema 516M PDC in at 897', out at 3775'
3) 7 7/8" Varel Utema 616S PDC in 3775' out at 5100'

Gas Detector: Pason Systems
Mud System: Mud-Co, Brad Brant, Mud Engineer
DSTs: Tröbrite Testing, Brandon Lonsdale, Tester
E-Logs: ELI, Mr. Jeff Leubbers

DSTs

DST #1 Mississippi, 4910'-4950', 30"-60"-60"-60"-60", Weak 5' below, Rec: 45' GIR 15' Mud, IHP 2519, FFP 31-53, KIP 127, FFP 38-44, FCP 63, FHP 2510, BHT 119 deg
DST #2 Mississippi, 4950'-4960', 30"-60"-60"-90", SB GTS in 18" TSTM, Rec: 1318' total fluid, 126' GCMO (10% G, 55% W, 35% M), 126' GOCWM (10% G, 25% O, 15% W, 50% M), 126' GOCWM (10% G, 5% O, 65% W, 20% M), 940' MFW (95% W, 5% M), API Rw 18 @ 29 deg F, chalks 90,000 ppm, IHP 2567, FFP 102-259, KIP 1491, FFP 274-557, FCP 1484, FHP 2543, BHT 130 deg.

CREWS

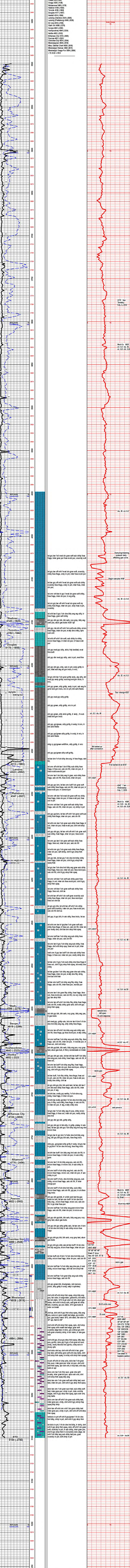
Rick Barringer, Tool Pusher
Chris Staats, Morning
Petelo Luna, Daylight
Gary Axtell, Evening

ROCK TYPES

Anhy	Shy dolo	Sstst	Shale 3
Brec	Dol	Ss	Sily dol
Cht	Gyn	Black sh	Dol lmst
Clyst	Sdy lmst	Gry sh	Dol 2
Coal	Lmst	Shale	Granite wash
Congl	Mrst	Shylst	Lmst
Sdy dolo	Salt	Sitysh	Calc dol
	Shale	Ss 2	Shale 3

ACCESSORIES

MINERAL Anhy Arg Bent Bit Brefrag Calc Carb Chrtk Chrt Dol Ferrpel Ferr Glaur Gyp Mart Nodule Phos Pyr Salt Sandy Silt	Chlorite Dol Sand Sily	FOSSIL Algae Amph Belm Bioclst Broch Bryozoa Cephal Coral Crin Echin Foram Fossil Gastro Oolite Ostra	PELLET Pellet Pisolate Plant Strom Fuss Oomoldic	TEXTURE Grysh Lms Sandyms Sh Sststn
--	--	---	---	---



Woolsey Operating Company, LLC
Kilgore #1
Sec. 20 Twp. 28 S - Rge 19 W
140' N & 47' E of S 1/2 SW SW
470' FSL & 700' FWL
Kiowa Station North
Kiowa County, Kansas
K.B. 2308' KB 2320'
API # 15-097-21636-00-00