

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1373788
OIL & GAS CONSERVATION DIVISION

Form ACO-1

November 2016

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: _____

1373788



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 TCores aken <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 <table style="width:100%; border: none;"> <tr> <td style="width:70%; border: none;">Name</td> <td style="width:15%; border: none;">Top</td> <td style="width:15%; border: none;">Datum</td> </tr> </table>	Name	Top	Datum
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:	
----------------	-------	---------	------------	--

BASIC

energy services, L.P.

TREATMENT REPORT

Customer <i>Woolsey Operating Co.</i>		Lease No.		Date	
Lease <i>Pinkney</i>		Well # <i>1</i>		<i>11/6/17</i>	
Field Order # <i>16131A</i>	Station <i>Pratt KS</i>	Casing <i>9 5/8</i>	Depth <i>334</i>	County <i>Kiowa</i>	State <i>KS</i>
Type Job <i>9 5/8 Surface Pipe</i>	Formation <i>242</i>		Legal Description		

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size <i>9 5/8</i>	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth <i>334</i>	Depth	From	To	Pre Pad	Max		5 Min.
Volume <i>26.2858</i>	Volume	From	To	Pad	Min		10 Min.
Max Press <i>300</i>	Max Press	From	To	Frac	Avg		15 Min.
Well Connection <i>9 5/8</i>	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative <i>Allen Dick</i>			Station Manager <i>Justin Westerman</i>			Treater <i>Scott G.</i>		
Service Units	<i>38950</i>	<i>78982</i>	<i>86779</i>	<i>19903</i>	<i>78768</i>			
Driver Names	<i>Scott Eddy</i>	<i>—</i>	<i>Piley</i>	<i>—</i>				

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
<i>4:15</i>					<i>On Location Safety Meeting Rig up</i>
					<i>Break Circulation Chair down</i>
<i>7:00</i>	<i>180</i>			<i>4</i>	<i>Pump H₂O spacer</i>
<i>7:00</i>	<i>180</i>		<i>3</i>	<i>4</i>	<i>Start Cement 60/40 P02 170 sacks</i>
<i>7:02</i>	<i>0</i>		<i>36.63</i>	<i>0</i>	<i>Shut down</i>
<i>7:15</i>	<i>0</i>			<i>0</i>	<i>Release Plug</i>
<i>7:14</i>	<i>100</i>		<i>1</i>	<i>4</i>	<i>Start Displacement</i>
<i>7:18</i>	<i>150</i>		<i>17.5</i>	<i>4</i>	<i>Cement Circulated to Pit</i>
<i>7:20</i>	<i>100</i>		<i>8</i>	<i>0</i>	<i>Shut down</i>
	<i>100</i>			<i>0</i>	<i>Shut in wellhead</i>
	<i>0</i>				<i>Release line pressure</i>
					<i>Job Complete</i>



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Operating Co
 125 N Market Ste 1000
 Wichita, KS 67202
 ATTN: Joel Gearhart

34-27S-20W Kiowa, KS

Pinkney #1

Job Ticket: 63629

DST#: 1

Test Start: 2017.11.14 @ 23:44:56

GENERAL INFORMATION:

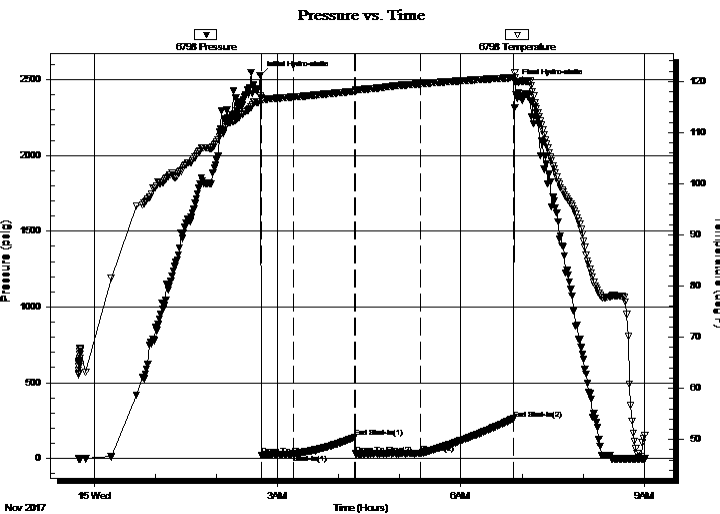
Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:44:11
 Time Test Ended: 09:01:11
 Interval: **4850.00 ft (KB) To 4888.00 ft (KB) (TVD)**
 Total Depth: 4888.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Leal Cason
 Unit No: 74
 Reference Elevations: 2297.00 ft (KB)
 2285.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 6798

Inside

Press@RunDepth: 34.45 psig @ 4851.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2017.11.14 End Date: 2017.11.15 Last Calib.: 2017.11.15
 Start Time: 23:44:57 End Time: 09:01:11 Time On Btm: 2017.11.15 @ 02:42:56
 Time Off Btm: 2017.11.15 @ 06:53:26

TEST COMMENT: IF: Weak Blow , Built to 1 inch
 IS: No Blow Back
 FF: Weak Blow , Built to 1 1/2 inches
 FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2525.23	117.13	Initial Hydro-static
2	21.58	116.79	Open To Flow (1)
33	31.71	116.97	Shut-In(1)
93	139.70	118.07	End Shut-In(1)
94	31.73	118.29	Open To Flow (2)
157	34.45	119.51	Shut-In(2)
249	263.42	120.73	End Shut-In(2)
251	2476.14	120.73	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	GCM 5%G 95%M	0.10

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co
125 N Market Ste 1000
Wichita, KS 67202
ATTN: Joel Gearhart

34-27S-20W Kiowa, KS
Pinkney #1
Job Ticket: 63629 **DST#: 1**
Test Start: 2017.11.14 @ 23:44:56

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: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5100.00 ppm			
Filter Cake: 0.02 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	GCM 5%G 95%M	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

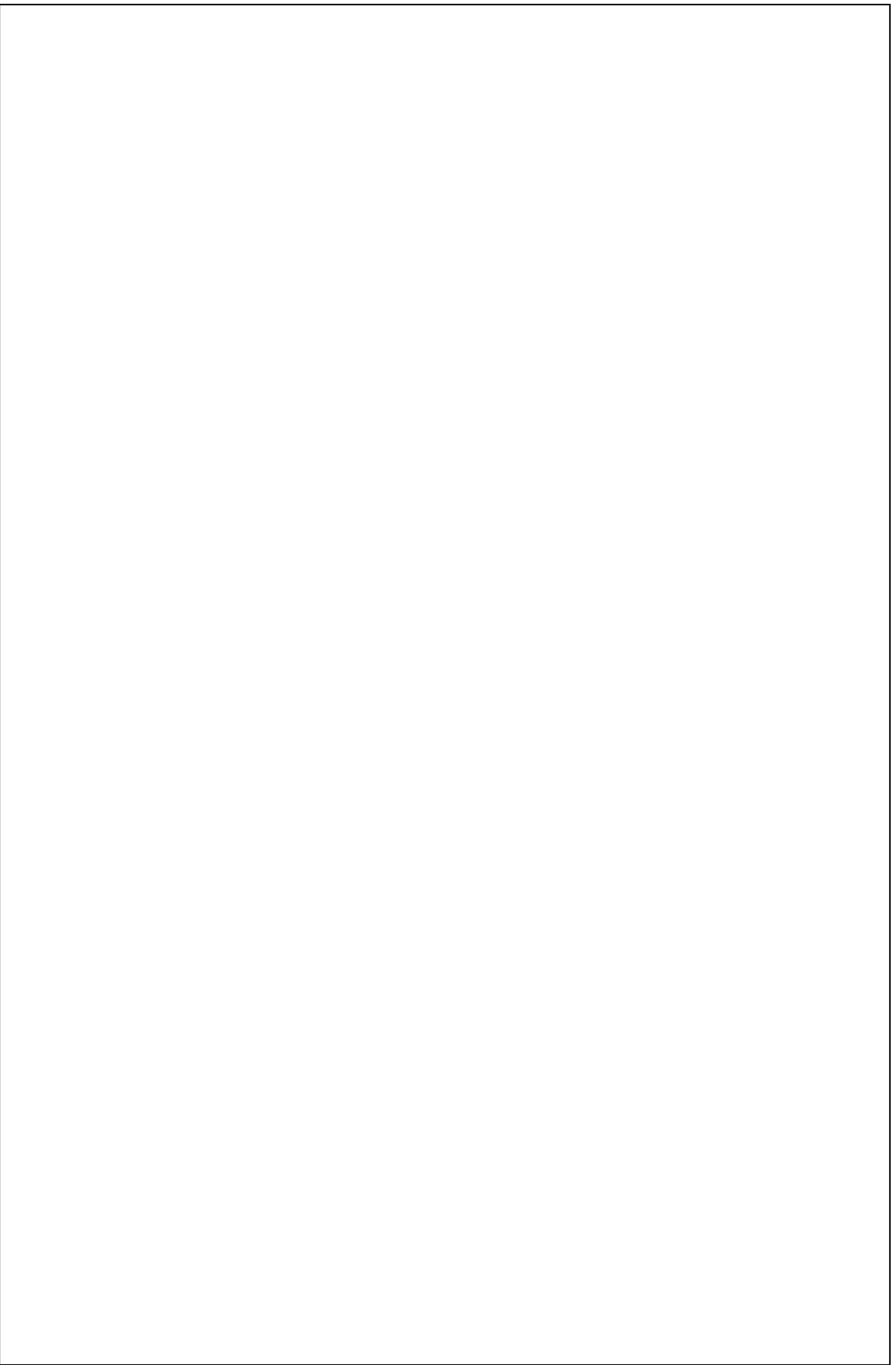
Serial #: 6798

Inside

Woodsey Operating Co

Pinkney #1

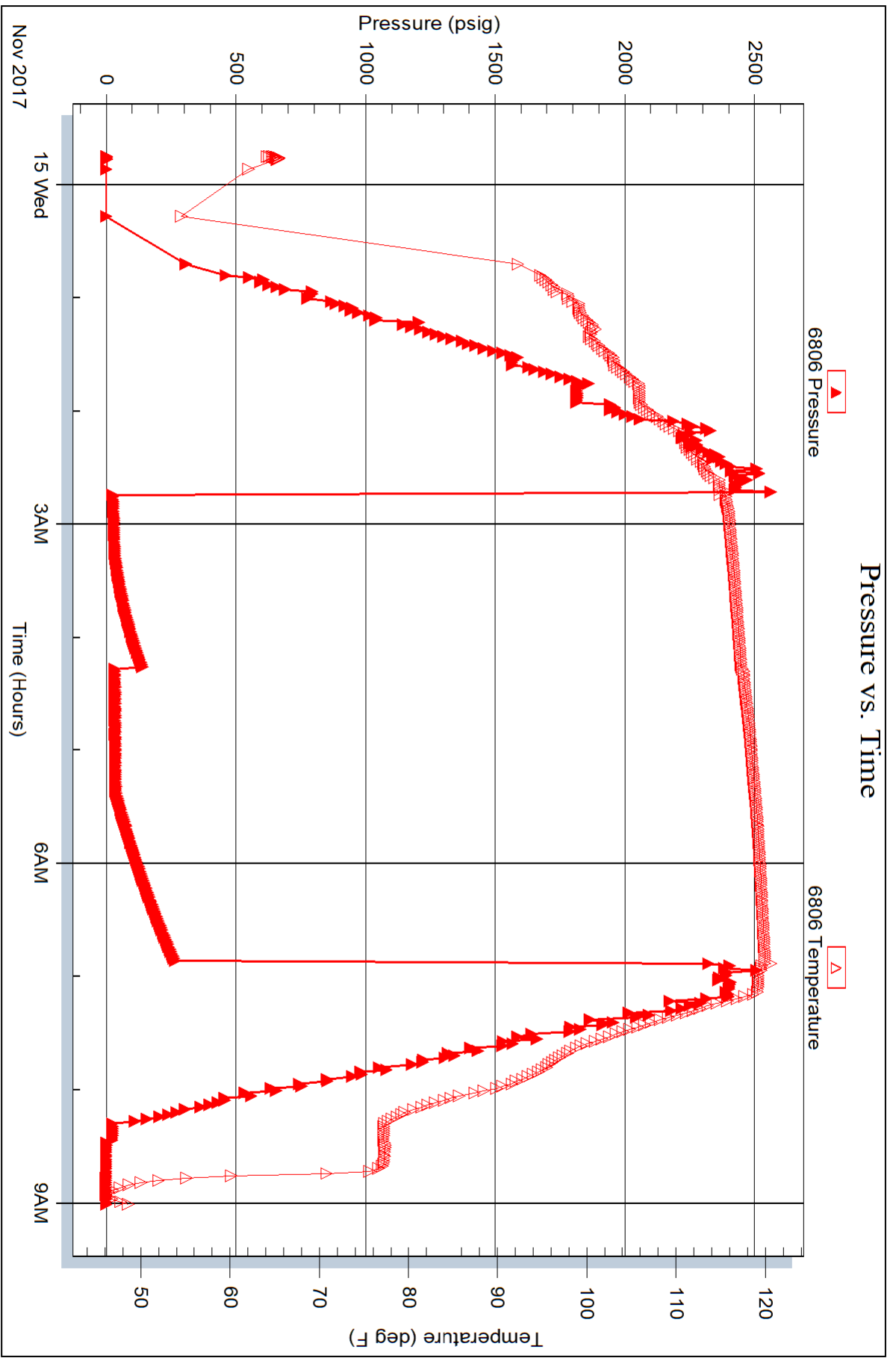
DST Test Number: 1



Triobite Testing, Inc

Ref. No: 63629

Printed: 2017.11.15 @ 09:21:04





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Woolsey Operating Co
 125 N Market Ste 1000
 Wichita, KS 67202
 ATTN: Joel Gearhart

34-27S-20W Kiow

Pinkney 1

Job Ticket: 63630

DST#: 2

Test Start: 2017.11.15 @ 18:16:21

GENERAL INFORMATION:

Formation: **Mississippi**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:34:21

Time Test Ended: 02:56:51

Test Type: Conventional Bottom Hole (Reset)

Tester: Leal Cason

Unit No: 74

Interval: 4882.00 ft (KB) To 4906.00 ft (KB) (TVD)

Reference Elevations: 2297.00 ft (KB)

Total Depth: 4906.00 ft (KB) (TVD)

2285.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: 6798

Inside

Press@RunDepth: 50.86 psig @ 4883.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.11.15

End Date:

2017.11.16

Last Calib.: 2017.11.16

Start Time: 18:16:22

End Time:

02:56:51

Time On Btm: 2017.11.15 @ 20:32:36

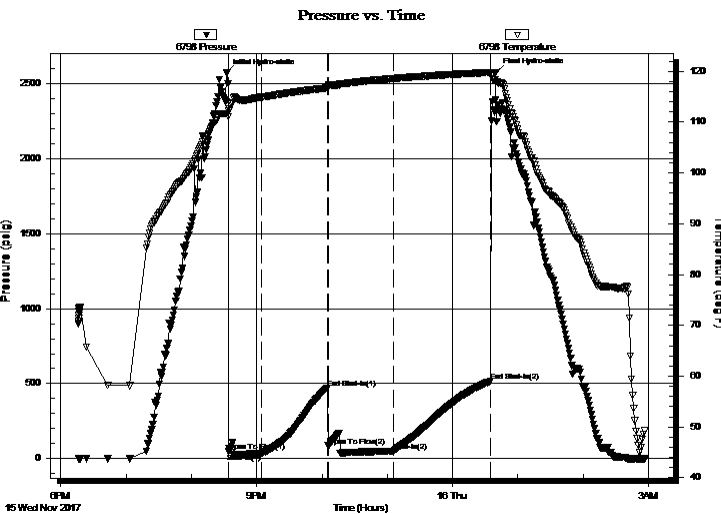
Time Off Btm: 2017.11.16 @ 00:39:51

TEST COMMENT: IF: Fair Blow , Built to 5 1/2 inches

IS: No Blow Back

FF: Fair Blow , Built to 6 inches

FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2572.37	111.62	Initial Hydro-static
2	47.31	112.15	Open To Flow (1)
32	33.95	114.90	Shut-In(1)
93	471.39	116.70	End Shut-In(1)
94	79.58	117.11	Open To Flow (2)
153	50.86	118.56	Shut-In(2)
243	515.38	119.77	End Shut-In(2)
248	2576.80	118.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	Mud	0.30

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Woolsey Operating Co
125 N Market Ste 1000
Wichita, KS 67202
ATTN: Joel Gearhart

34-27S-20W Kiow
Pinkney 1
Job Ticket: 63630 **DST#: 2**
Test Start: 2017.11.15 @ 18:16:21

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: bbl		
Water Loss: 8.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5100.00 ppm			
Filter Cake: 0.02 inches			

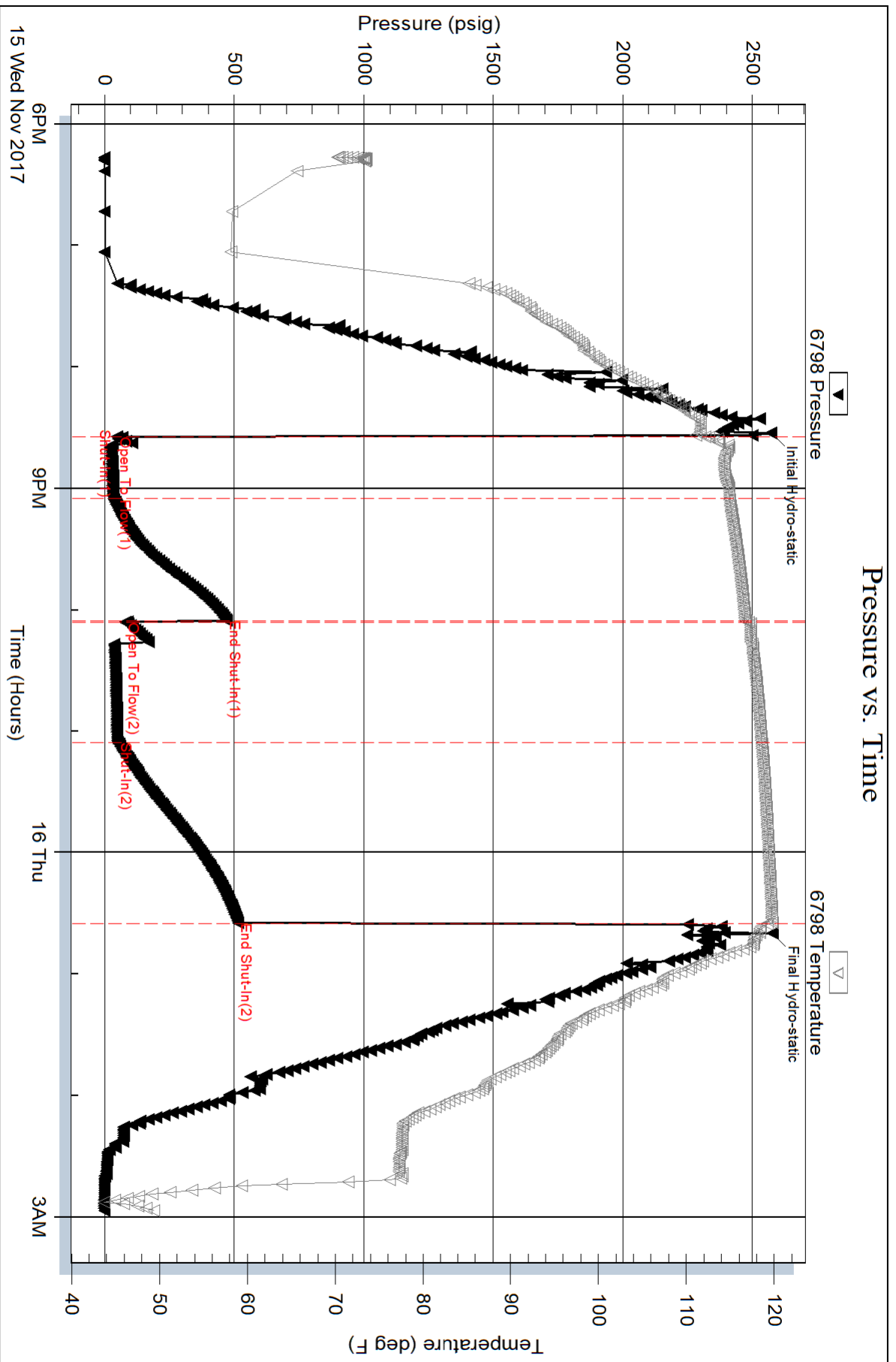
Recovery Information

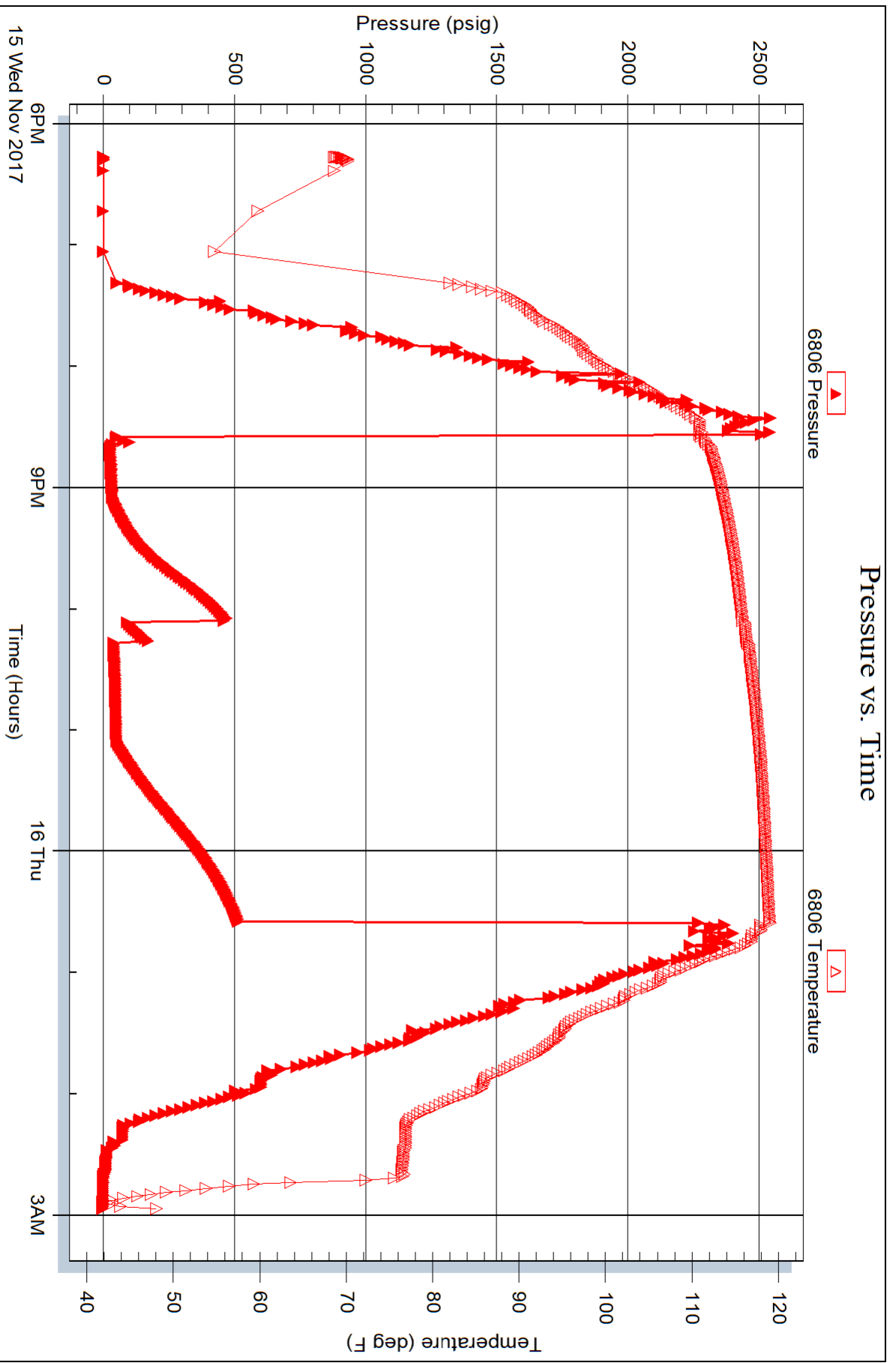
Recovery Table

Length ft	Description	Volume bbl
62.00	Mud	0.305

Total Length: 62.00 ft Total Volume: 0.305 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

Pressure vs. Time







Woolsey Operating Company, LLC

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Pinkney #1
API: 15-097-21830-0000
Location: Section 34 - Township 27 South - Range 20 West
License Number: Region: Kiowa County, Kansas
Spud Date: November 6, 2017 Drilling Completed: November 16, 2017
Surface Coordinates: N 1/2 NW SW SE
1000' FSL & 2310' FEL
Bottom Hole Coordinates:
Ground Elevation (ft): 2285' K.B. Elevation (ft): 2297'
Logged Interval (ft): 4060' To: TD Total Depth (ft): 5100'
Formation: Topeka >> Mississippian
Type of Drilling Fluid: Chemical Mud
Printed by MUD.LOG 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 Klaver, Joel Gearhart
Company: Woolsey Operating Co. LLC
Address: 125 N. Market, Wichita Kansas, 67202

COMMENTS

Surface Casing: Set 8 joints 8 5/8" x 24#/ft new surface casing at 334' KB (tally 322') w/170 sx 60/40 poz, 2% gel, 3% cc, 1/4# celoflake. Cement did circulate. Plug down 7 pm on 11/6/2017.

Production Casing:

Deviation Surveys: 1/4 at 335', 1/4 at 875', 3/4 at 1381', 1/4 at 1651', 1/2 at 2165', 1 at 2666', 3/4 at 3137', 1/4 at 3639', 1/4 at 4171', 3/4 at 4888', 1 at 5100'

Pipe Strap @

Fossil Drilling Rig 3 Bit Record:

- 1) 12 1/4" RR in at 0' out at 335', 3.5 hrs
- 2) 7 7/8" Varel V516 PX (PDC) in 335', out 4888', 120.75 hrs
- 3) 7/78" T60-5X in 4888', out 5100', 33 hrs

Gas Detector: Pason Gas Analyzer

Mud System: Mud-Co

DST: Triobite Testing - Leal Cason

DSTs

1: Miss (4850-4888) 30-60-60-90, (1) WB, (2) WB, 20' GCM, [140-264], FP 22-32/32-35, HP 2525-2476





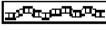



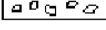



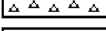
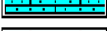
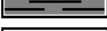

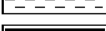
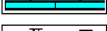



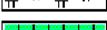


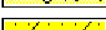


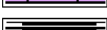

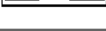


2: Miss (48852-4906) 30-60-60-90, (1) FB, (2) FB, 62' M, [471-515], FP 47-34/80-51, HP 2572-2576

CREWS

Fossil Drilling Rig 3











Tool Pusher: Rick Barringer
 Daylight: Pablo Luna
 Evening: Gary Axtell
 Morning: Chris Slaats





ROCK TYPES

	Anhy		Shy dolo		Sltst		Shale 3
	Bent		Dol		Ss		Silty dol
	Brec		Gyp		Black sh		Dol lmst
	Cht		Sdy lmst		Gry sh		Dol 2
	Clyst		Lmst		Shale		Granite wash
	Coal		Mrlst		Shysltst		Lmst
	Congl		Salt		Sltysht		Calc dol
	Sdy dolo		Shale		Ss 2		Shale 3






ACCESSORIES








MINERAL

	Anhy
	Arg
	Bent
	Bit
	Brecfrag
	Calc
	Carb
	Chtdk
	Chtt
	Dol



	Chlorite
	Dol
	Sand
	Sly

FOSSIL

	Algae
	Amph
	Belm
	Bioclst
	Brec




	Pelec
	Pellet
	Pisolite
	Plant
	Strom
	Fuss
	Oomoldic

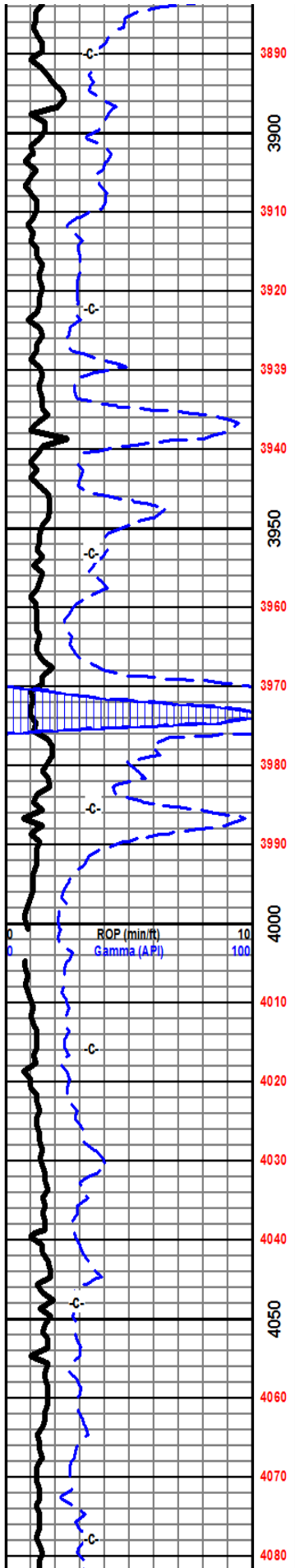
STRINGER

	Anhy
	Arg

	Grysh
	Grysit
	Lms
	Sandylms
	Sh
	Sltstn

TEXTURE

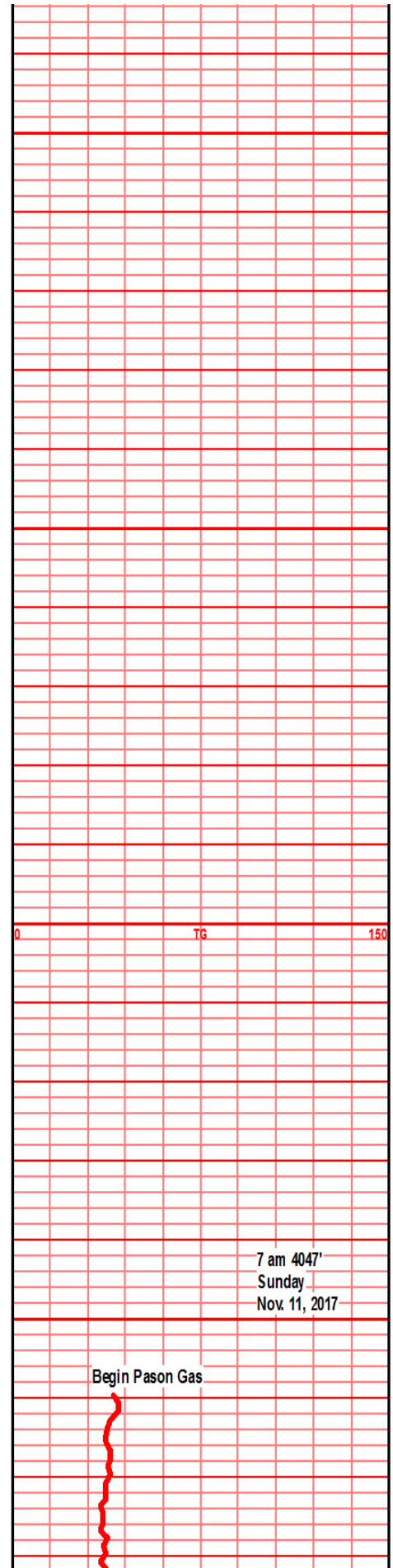
	Boundst
	Chalky
	Congl

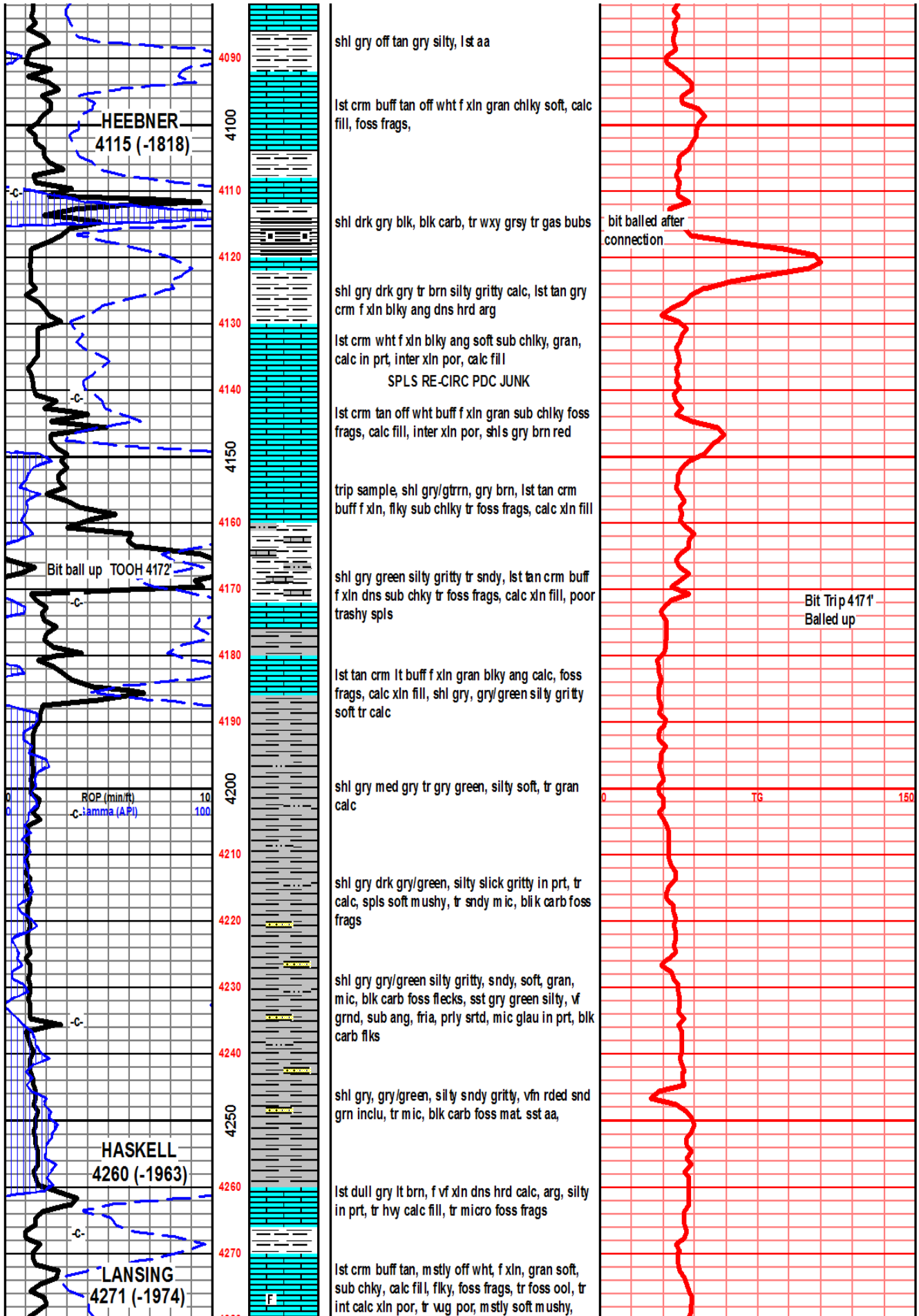


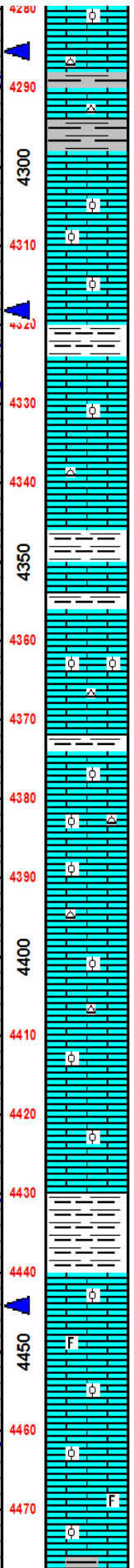
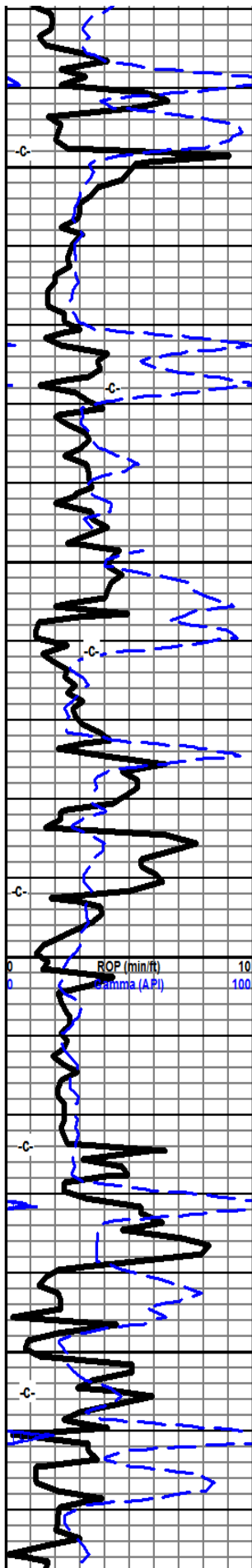
Daily Drilling Progress:
 November 3, 2017 MIRT
 November 6, 2017 Spud
 November 7, 2017 Under surface
 November 8, 2017 Drilling at 1475'
 November 9, 2017 Drilling at 2180'
 November 10, 2017 Drilling at 3026'
 November 11, 2017 Drilling at 3255'
 November 12, 2017 Drilling at 4047'
 November 13, 2017 Drilling at 4386'
 November 14, 2017 Drilling at 4769'
 November 15, 2017 HD: 4888', DST #1
 November 16, 2017 Drilling at 4921'

Formation	Sample	E-log
Heebner	4108 (-1811)	4111 (-1968)
Toronto	4130 (-1833)	4129 (-1834)
Douglas	4154 (-1857)	4150 (-1855)
Haskell	4260 (-1963)	4263 (-1968)
Lans A	4271 (-1974)	4274 (-1979)
Lans B	4298 (-2001)	4301 (-2006)
Stark	4542 (-2245)	4545 (-2250)
Swope	4551 (2254)	4558 (-2263)
Hush	4586 (-2289)	4589 (-2294)
Hertha	4594 (-2297)	4600 (-2305)
BKC	4664 (-2367)	4666 (-2371)
Pawnee	4756 (-2459)	4757 (-2462)
Ck Grp	4806 (-2509)	4806 (-2511)
Miss	4868 (-2571)	4871 (-2576)
Spergen	4868 (-2571)	4868 (-2571)
Warsaw	4876 (-2579)	4875 (-2580)

1st crm off wht lt buff f xln gran soft chlky crsly calc fill foss frags,







NS, 1-2 pcs gry smoky opa shrp frsh chrt

shl gry lt gry calc, 1st crm wht f xln soft gran sub chlky, foss frags tr ool, calc xln fill, msly chlky soft dns

1st crm tan off wht, buff f xln blk ang, sub chlky, calc xln fill, msly soft chlky, foss frags, calc xln fill, inter xln tr small vug por, tr foss ool/frags, chrt wht lt gry shrp frsh opa

1st buff tan crm f xln gran soft sub chlky, inter xln por, calc xln fill, foss frags, chrt wht lt gry shrp frsh opa

1st wht buff, cr/brn mott, f xln gran soft, sub chky calc xln fill, tr arg silty, inter xln por, foss frags, tr foss ool/frags,

1st crm buff drk tan f xln gran soft sub chlky foss frags, inter xln por, calc xln fill, chrt wht lt gry shrp frsh

shl gry, gry brn silty gritty calc, calc inclu, 1st aa

1st crm buff tan f xln gran soft, sub chlky, calc fill, inter xln por, foss mold por, msly soft/chlky, foss frags, tr ool, chrt wht lt gry shrp opa, foss inclu

1st crm buff tan, msly wht, f xln gran soft sub chlky foss frags, inter xln calc fill, pp foss mold por, chrt wht lt gry shrp frsh opa

1st crm buff tan lt gry f xln blk dns sub chlky foss frags, foss ool, inter xln por, calc xln fill, chrt lt gry tan shrp frsh opa

1st crm tan buff f xln gran sub chlky pp foss mold por, calc xln fill, chrt wht tan lt gry shrp frsh

1st crm tan lt brn f vf xln gran sub chlky, calc, sucr text, gd inter xln por, foss frags

1st crm tan lt brn f xln gran, crsly calc in prt, tr hrd sucr text, gd inter xln por, foss frags/calc filled vugs

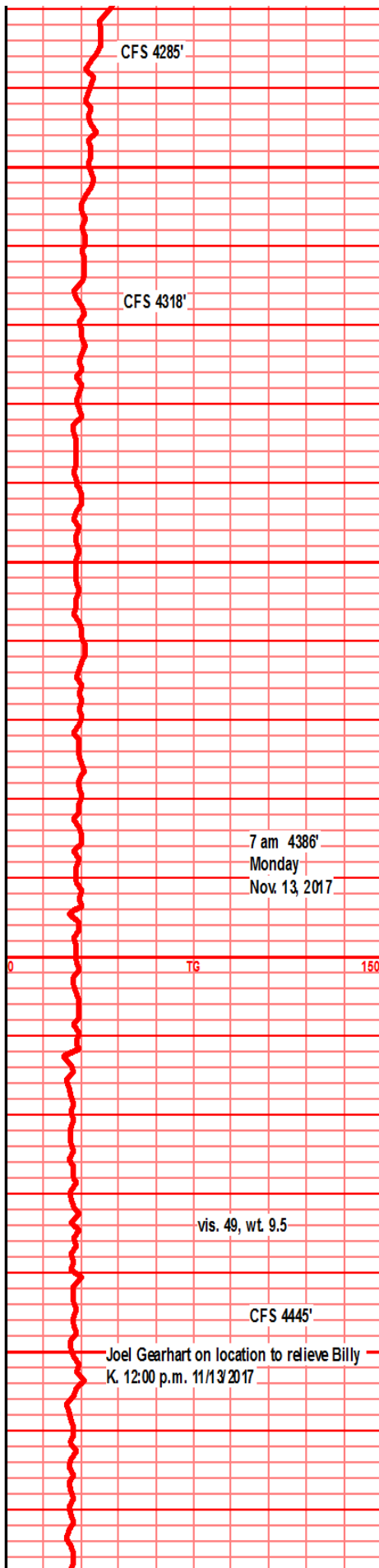
shl gry gry brn calc, gritty, silty, 1st tan brn f vf xln dns hrd blk ang arg silty

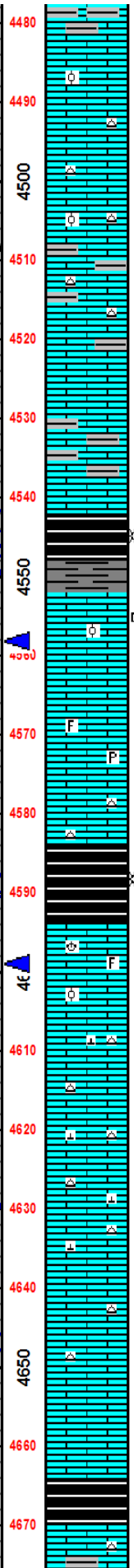
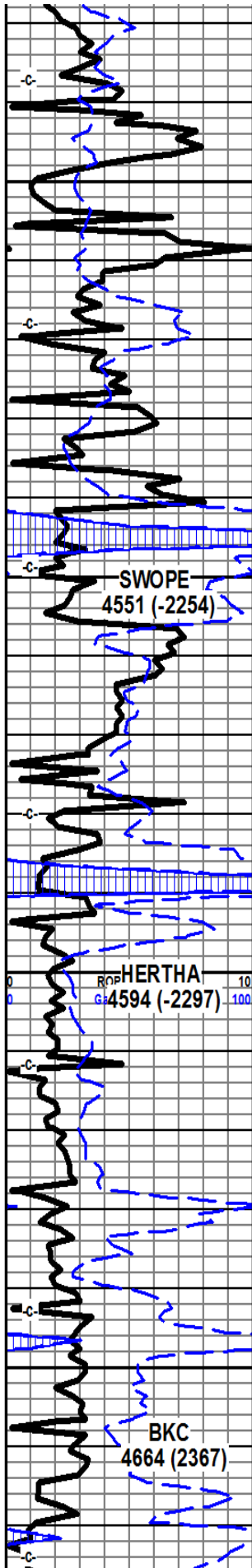
shl gry green brn ratty silty, 1st tan crm lt brn f sli med xln, blk ang dns, calc fill, foss ool, oom old por, inter oomold por, calc fill, sli chlky/gran.

LS: lt brn-tan, fn xln, gr-gd oolcastic por, oomoldic, cal fill, fossil frags, sub ang, rounded, brittle, sm all chunks of brt wt chrt, vry granular, nsfo, nsg

LS: tan, fn xln, fr-gd oolmoldic por, oolcastic text, cal fill, fossil frags, sub ang, sub rnd, brittle, vry granular, nsfo, nsg

SH: lt-drk gry, tabular, ang tr poritic hrd nsfo nsg





ang, drk pyritic, hrd, nsfo, nsg

LS: tan-lt brn, micro-fn xln, crsly cal in part, trc foss frags, trc oolitic text, pr por, blkly, hrd, sub ang, nsfo, no flour, nsg

LS: tan-lt brn, micro-fn xln, crsly cal in part, trc foss frags, trc oolitic text, pr por, chrty, blkly, hrd, sub ang, nsfo, no flour, nsg CHT brt wt, weathered, blkly, sub ang, firm, nso&g

LS: drk tan-drk brn, fn xln, cal fill, trc oolitic text, pr por, little argill due to sh inclus, chrty, blkly, hrd, sub ang, nsfo, no flour, nsg CHT brt wt, weathered, blkly, sub ang, firm, nso&g SH: drk gry, silty, pyritic, dirty look, trc blk shl inclus, blkly, hrd, nsfo&g

LS: drk tan-drk brn, fn xln, cal fill, pr por, argill due to sh inclus, blkly, hrd, sub ang, nsfo, no flour, nsg SH: drk gry, silty, pyritic, dirty look, trc blk shl inclus, blkly, hrd, nsfo&g

SH: drk gry-blk, carb, silty/gritty text, tabular, sub ang, firm, nsfo, gas bubs on brk. SH: drk gry-lt gry, silty/gritty text, trc drk blk shl inclus, brt red shl inclus, tabular, firm, sub ang, nsfo, trc gas bubs on brk

LS: tan-drk brn, fn xln, gd oolitic text, pr-fr oolmoldic por, por interxln por, sli argill, drk gry shl, blkly, vry hrd, nsfo&g, gd show of drk blk tar dead stain

LS: lt brn-tan, fn xln, chrty, crsly cal in prt, trc gritty text, trc foss frags, trc of pyrite specks, blkly, sub ang, hrd, nsfo&g

LS: lt brn-tan, fn xln, chrty, sft brt wt weathered chrt, trc chiky edges, trc foss frags, blkly, sub ang, hrd, nsfo&g

SH: drk brn-blk, carb, trc pyrite, tabular, sub ang, firm, nsfo, gas bubs on brk

LS: lt tan-drk gry ls, pr oomoldic por, cal fill, fossil frags, brachiopod fossil cast, pr interxln por, trc argill, sub ang, blkly, hrd, nsfo&g

LS: tan-lt gry tan, micro-fn xln, trc cal fill, brt wt trans chrt, chiky edges, trc gritty text, blkly, vry hrd, nsfo&g CHT brt wt, fresh, trans, chrt and brt wt chiky, weathered look, sub ang, hrd, nsfo&g

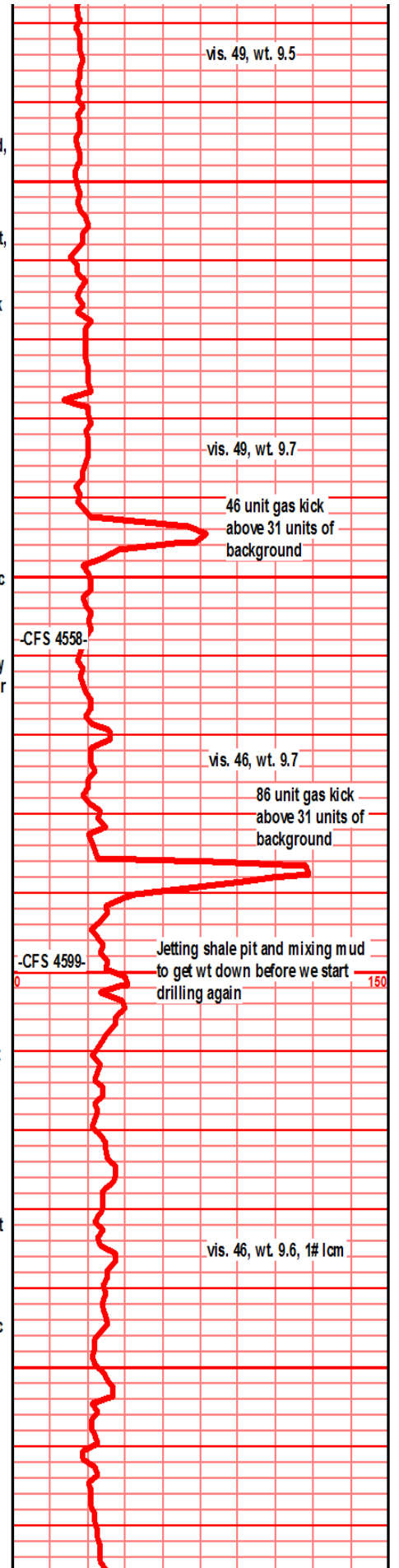
LS: tan-lt gry tan, micro-fn xln, crsly cal in part, trc brt wt trans chrt, chiky edges, blkly, vry hrd, nsfo&g CHT brt wt, fresh, trans, chrt and brt wt chiky, weathered look, sub ang, hrd, nsfo&g

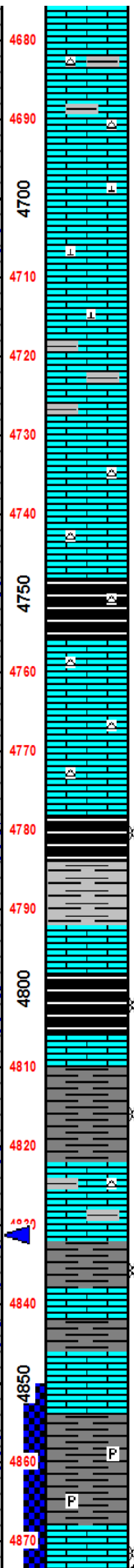
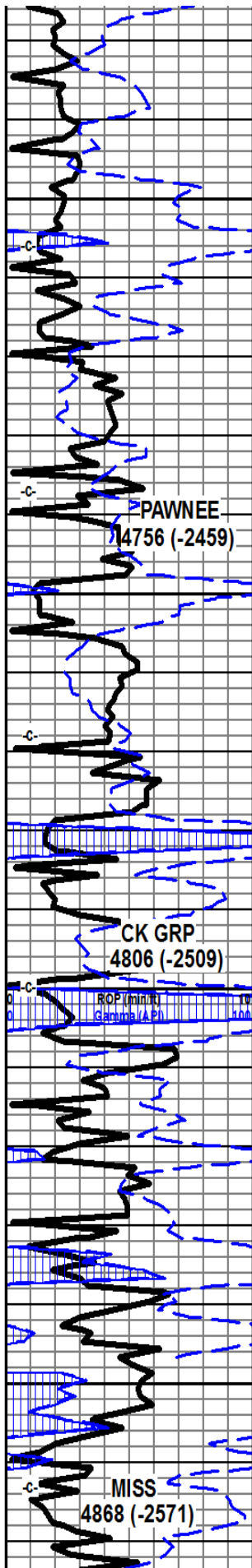
LS: tan-lt gry tan, micro-fn xln, trc brt wt trans chrt, chiky edges, blkly, vry hrd, nsfo&g CHT brt wt, fresh, trans, chrt and brt wt chiky, weathered look, sub ang, hrd, nsfo&g

LS: brn-drk gry, fn xln, dull look, sli gritty text, argill, drk gry silty shl, sub ang, brittle, nsfo&g

SH: drk gry-blk, silty, carb, tabular, sub ang, firm, nsfo&g

LS: brn-drk gry, fn xln, dull look, sli gritty text, argill, drk gry silty shl, brt wt lt brn trans chrt





argil, drk gry silty shl, brt wt brn trans chrt, chlky wt edges, sub ang, hrd, nsfo&g

LS: brn-drk gry, fn xln, dull look, sli gritty text, argil, drk gry silty shl, brt wt-lt brn trans chrt, chlky wt edges, sub ang, hrd, nsfo&g SH: drk gry-blk, carb, silty, tabular, brittle, nsfo&g

LS: lt tan-tan, mirco-fn xln, crsly cal in parts, chlky edges, blk, hrd, nsfo&g

LS: lt tan-tan, mirco-fn xln, crsly cal in parts, chlky edges, blk, hrd, nsfo&g

LS: brn-drk gry, fn xln, dull look, sli gritty text, argil, drk gry silty shl, sub ang, brittle, nsfo&g

LS: tan-lt gry tan, micro-fn xln, trc brt wt trans chrt, chlky edges, blk, vry hrd, nsfo&g CH T trc brt wt, fresh, trans, chrt and brt wt chlky, weathered look, sub ang, hrd, nsfo&g

SH: drk gry-blk, silty, carb, tabular, sub ang, firm, nsfo&g

LS: tan-lt gry tan, micro-fn xln, trc brt wt trans chrt, chlky edges, blk, vry hrd, nsfo&g CH T brt wt-lt tan, fresh, sharp, trans, chrt and trc brt wt chlky, weathered look, sub ang, hrd, nsfo&g

SH: drk gry-blk, silty, gritty, trc pyrite, tabular, firm, sub ang, trc gas bubs on brk

SH: gry-drk gry, trc lt grn gry, silty, gritty, pyrite specks, nsfo&g

LS: lt tan-lt gry tan, fn xln, rough concoidal fractures, chlky, wt wthrd chrt, blk, sub ang, hrd, nsfo&g

SH: drk gry-blk, silty, gritty, trc pyrite, tabular, firm, sub ang, trc gas bubs on brk

SH: drk gry, silty, gritty, trc drk blk carb shl inclus, blk, firm, nsfo, trc gas bubs on brk

LS: lt gry-drk gry brn, fn xln, silty, gritty text, sli lt gry brn chrt inclus, blk, sub ang, brittle, nsfo&g

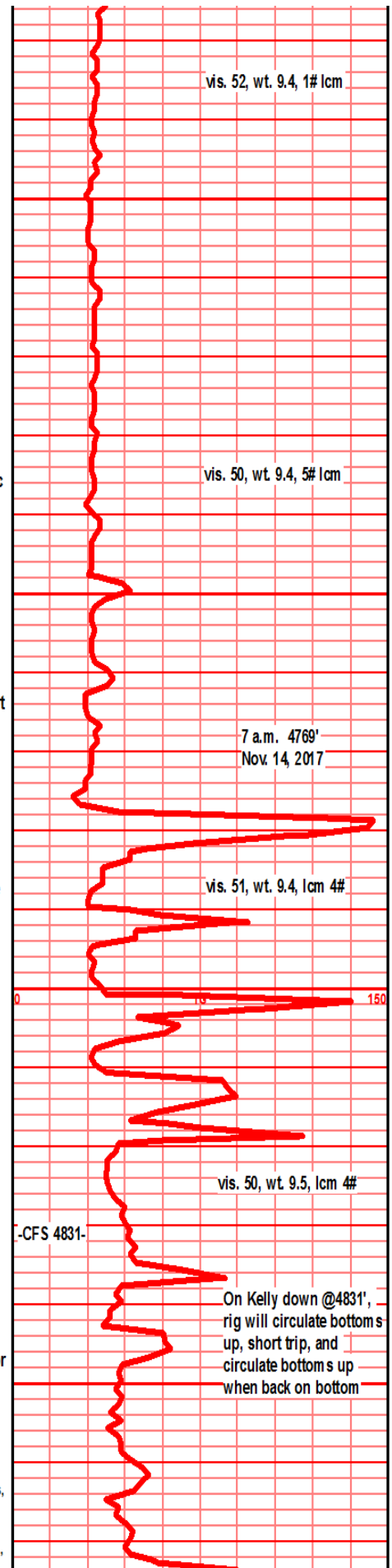
SH: drk gry, silty, gritty, trc drk blk carb shl inclus, blk, firm, nsfo, trc gas bubs on brk

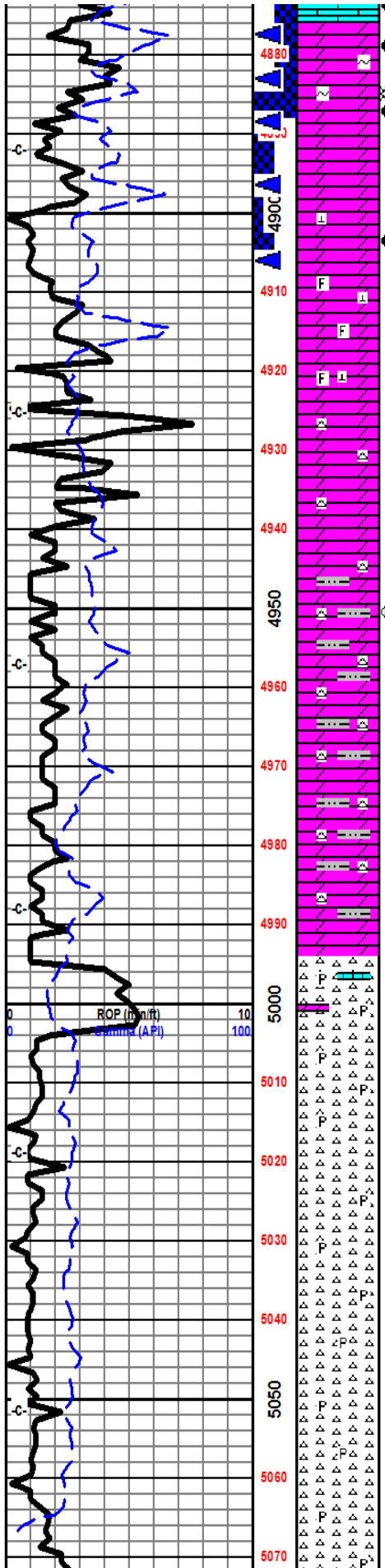
LS: tan-brn tan, fn xln, sli shlky edges, cal fill, pr interxln por, sub ang, blk, hrd, sli brittle, nsfo&g

SH: gry-drk gry, sli grn hue, trc red pcs, silty, gritty, drk blk shl inclus, small pyrite specks, tabular, firm, nsfo&g

SH: yellow, carb, silty-sli sndy, blk, trc drk gry shl inclus, blk, firm, nsfo&g

LS: lt tan, tan, crsly xnl cal, bt wt trc ch, wt xln cal, good odor, frin tex in por, rough weathered text, concoidal brk, blk, sub ang, sli odor, trc gas bubs on brk, good brm-drk





bm stain, sli show free oil, light rainbow show in sample water, lt yellow-ellow gm flour

DOL: lt tan-drk tan, fn xln, grainy/pitted text, crsly cal fill in part, grn glauc strks, pr vug por, fr interxln por, gd lt bm-bm even oil stain, blkly, hrd-brittle, sli odor, sli show free oil in sample wtr, no show gas

CF S 4888 DOL: lt tan-drk tan, fn xln, grainy text, sndy look, crsly cal fill in part, grn glauc strks, fr interxln por, gd lt bm even oil stain, blkly, hrd-brittle, sli odor, sli show free oil in sample wtr, trc gas bubs on brk, lt yellowy ellow gm flour

CF S 4898 DOL: some pieces as above, most pieces lt gry-frsty wt, fn xln, gritty/sndy text, powdered suger look, grainy, heavily cmntd, v pr interxln por, trcs grn strks, blkly, hrd, nsfo&g

CF S 4906 DOL: lt tan-tan, fn xln, trc cal fill, trc of pieces that look limey, p-fr vuggy por, pr interxln por, blkly, brittle, vry sli lt bm oil stain along interxln contact and vuggy pore edges, vry sli sfo on brk, rainbow show in sample wtr, no show gas, sli odor yellow gm flour

4910 DOL: lt gry-tan, fn xln, limey, trc crsly cal fill, trc foss frags, tite, no vis por, blkly, vry hrd, nsfo&g

4920 DOL: lt gry-tan, fn xln, limey, trc crsly cal fill, trc foss frags, tite, no vis por, blkly, vry hrd, nsfo&g

4930 DOL: lt gry-lt tan, fn xln, gritty text, foss frags, crsly silca xln in part, chrty, lg-sml chrt in clus, blkly, hrd, nsfo&g, CHRT: brt frsty wt-smoky wt, fresh, shrp, trans-opaque, blkly, sub ang, brittle, nsfo&g

4940 DOL: lt gry-lt tan, fn xln, silty/gritty text, foss frags, crsly silca xln in part, chrty, lg-sml chrt in clus, blkly, hrd, nsfo&g, CHRT: brt frsty wt-smoky wt, fresh, shrp, trans-opaque, blkly, sub ang, brittle, nsfo&g

4950 DOL: lt gry-lt tan, fn xln, silty/gritty text, foss frags, crsly silca xln in part, chrty, lg-sml chrt in clus, blkly, hrd, nsfo&g, CHRT: brt frsty wt-smoky wt, fresh, shrp, trans-opaque, blkly, sub ang, brittle, trc pr pitted por w/ spttd lt bm oil stain, nsfo&g

4960 DOL: lt fry-gry, fn xln, gritty, silty, trc drk gry shl inclus, chrty, blkly, sub ang, hrd, nsfo&g CHRT: frsty wt-smoky wt, fresh, sharp, trans, small pcs, blkly, brittle, nsfo&g

4970 DOL: lt fry-gry, fn xln, gritty, silty, trc drk gry shl inclus, chrty, blkly, sub ang, hrd, nsfo&g CHRT: frsty wt-smoky wt, fresh, sharp, trans, small pcs, blkly, brittle, nsfo&g

4980 DOL: lt fry-gry, fn xln, gritty, silty, trc drk gry shl inclus, chrty, blkly, sub ang, hrd, nsfo&g CHRT: frsty wt-smoky wt, fresh, sharp, trans, small pcs, blkly, brittle, nsfo&g

4990 DOL: lt fry-gry, fn xln, gritty, silty, trc drk gry shl inclus, chrty, blkly, sub ang, hrd, nsfo&g CHRT: frsty wt-smoky wt, fresh, sharp, trans, small pcs, blkly, brittle, nsfo&g

5000 CHT: smoky wt-brt frsty wt, micro xln, pyrite inclus, streaks of dolls in inclus, fresh, shrp edges, cubic form, vry hrd, nsfo&g

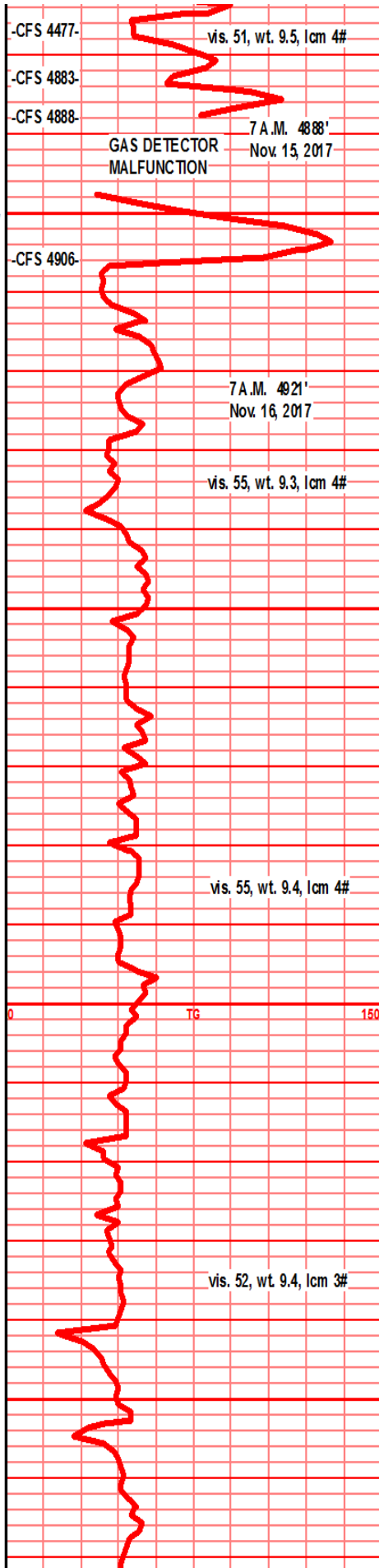
5010 CHT: brt wt-off wt, trans-sli opa, micro xln, fresh, sharp edges, tabular-blky conchoidal brks, trc pyrite, hrd-brittle, nsfo&g

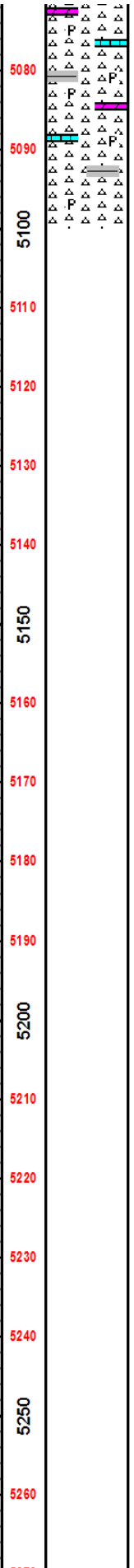
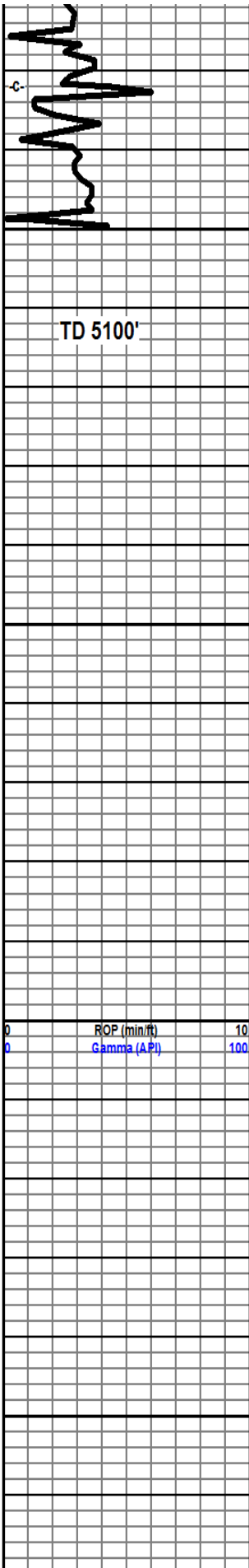
CHT: brt wt-off wt, trans, micro xln, fresh, sharp edges, trc wt weathered chert along the sharp edges of the fresh chrt, trc pyrite inclus, blkly, ang, brittle, nsfo&g

5030 CHT: brt wt-off wt, trans, micro xln, fresh, sharp edges, trc wt weathered chert along the sharp edges of the fresh chrt, blkky, ang, brittle, nsfo&g

5040 CHT: brt wt-off wt, trans, micro xln, fresh, sharp edges, trc wt weathered chert along the sharp edges of the fresh chrt, blkky, ang, brittle, nsfo&g

5050 CHT: brt wt-off wt, trans, micro xln, fresh, sharp edges, trc wt weathered chert along the sharp edges of the fresh chrt, trc pyrite inclus, blkly, ang, brittle, nsfo&g





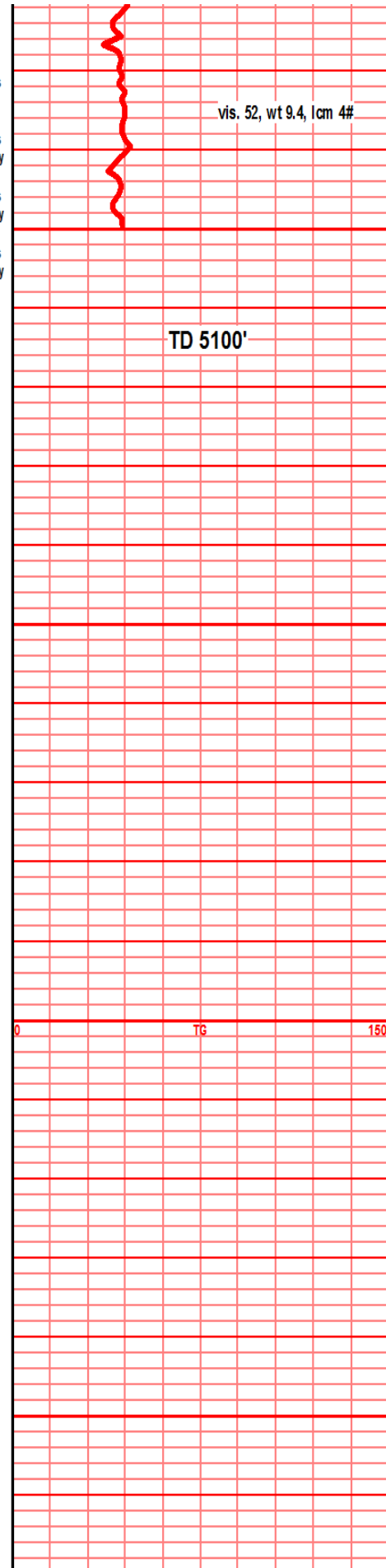
5060 CHT: brt wt-off wt, trans, micro xln, fresh, sharp edges, trc wt weathered chert along the sharp edges of the fresh chrt, trc pyrite inclus, blk, ang, brittle, nsfo&g

5070 CHT: lt gry-drk gry, micro xln, carb look, trc of dollis stringers, trc pyritie, cubic, ang, vry hrd, nsfo&g

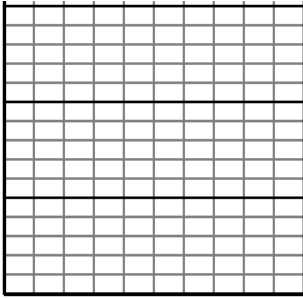
5080 CHT: lt gry-drk gry, micro xln, carb look, trc of dollis stringers, trc drk gry shl inclus, trc pyritie, cubic, ang, vry hrd, nsfo&g

5090 CHT: lt gry-drk gry, micro xln, carb look, trc of dollis stringers, trc drk gry shl inclus, trc pyritie, cubic, ang, vry hrd, nsfo&g

5100 CHT: lt gry-drk gry, micro xln, carb look, trc of dollis stringers, trc drk gry shl inclus, trc pyritie, cubic, ang, vry hrd, nsfo&g



vis. 52, wt 9.4, lcm 4#



5270

5280

5290

00

Sec 34 - Twp 27 S - Rge 20W
Kiowa County, Kansas
Fralick West Field
API # 15-097-21830
GL 2285' KB 2297'

