

Confidentiality Requested:

Yes  No

**KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

**Form must be Typed**

**Form must be Signed**

**All blanks must be Filled**

**WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

New Well  Re-Entry  Workover

Oil  WSW  SWD

Gas  DH  EOR

OG  GSW

CM (Coal Bed Methane)

Cathodic  Other (Core, Expl., etc.): \_\_\_\_\_

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

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

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

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or \_\_\_\_\_ Date Reached TD \_\_\_\_\_ Completion Date or  
Recompletion Date \_\_\_\_\_ Recompletion Date \_\_\_\_\_

API No.: \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE  NW  SE  SW

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

Datum:  NAD27  NAD83  WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

*(Data must be collected from the Reserve Pit)*

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

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

Submitted Electronically

**KCC Office Use ONLY**

Confidentiality Requested

Date: \_\_\_\_\_

Confidential Release Date: \_\_\_\_\_

Wireline Log Received  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

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

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to [kcc-well-logs@kcc.ks.gov](mailto: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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**WESLEY D. HANSEN Consulting Petroleum Geologist**

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Cellular 316.772.6188  
whansen4651@sbcglobal.net

KGS  
AAPG #799479  
Kansas License #418

## LITHOLOGY STRIP LOG

### WellSight Systems

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

Well Name: VAL Energy, Inc. #1-23 Schmaderer

API: 15-153-21239

Location: 1983' FNL, 969' FEL of Section 23-4S-32W

License Number: 5822

Region: Rawlins County, Kansas

Spud Date: 8-30-2019

Drilling Completed: 9-05-2019

Surface Coordinates: 1983' FNL, 969' FEL of Section 23-4S-32W

Bottom Hole Vertical hole

Coordinates:

Ground Elevation (ft): 2944'

K.B. Elevation (ft): 2949'

Logged Interval (ft): 3500

To: RTD

Total Depth (ft): 4600'

Formation: Mississippian at RTD

Type of Drilling Fluid: Chemical - displaced at 3519'

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

## OPERATOR

Company: VAL Energy, Inc.

Address: 125 N. Market

Suite 1110

Wichita, KS 67202-1728

## GEOLOGIST

Name: Wesley D. Hansen

Company: Wesley D. Hansen - Consulting Petroleum Geologist

Address: 212 N. Market, Suite 257

Wichita, KS 67202

Cellular: 316-772-6188

## COMMENTS

Contractor: WW Drilling Rig 10  
Pusher: Ricky Hilgers

Surface Casing: 8 5/8" set at 292' w/220 sx  
Production Casing: P&A

Mud by: MudCo - Reid Atkins was the engineer.

DST's by: Trilobite - Shawn Wheelbarger was the tester.

Logs by: Pioneer Wireline (DIL, CN-CD, MEL) - Justin Henrickson was the engineer.

Deviation Surveys: 1/4 deg. @292'; 1/4 deg. @1011'; 3/4 deg. @1455'; 1/2 deg. @1955'; 1/2 deg. @2472'; 3/4 deg. @2980'; 1/2 deg. @4000'; 1/2 deg. @4600'

## BIT RECORD

Bit #	Size	MFG	Type	Depth Out	Footage Cut	Hours on bit
1	12 1/4"	STC	Tooth	292'	292'	2.5
2	7 7/8"	STC	F27IY	4600'	4308'	88 3/4

## FORMATION TOPS AND STRUCTURAL COMPARISON

FORMATION	SAMPLE TOPS		LOG TOPS		COMPARISON WELL Samuel Gary #1-19 Schmidt 1750' FNL, 330' FWL of 19-4-31W 2814' KB
	Depth	Datum	Depth	Datum	
	2949'	KB	2949'	KB	
Anhydrite	2682'	+267	2684'	+265	2568' +246
B/Anhydrite	2719'	+230	2718'	+231	2600' +214
Topeka	3770'	-821	3772'	-823	3658' -844
Heebner Shale	3889'	-940	3888'	-939	3778' -964
Lansing	3932'	-983	3934'	-985	3823' -1009
Muncie Creek Sh.	4036'	-1087	4038'	-1089	3927' -1113
Stark Shale	4108'	-1159	4106'	-1157	3995' -1181
Hushpuckney Sh.	4141'	-1192	4138'	-1189	4025' -1211
BKC	not picked		4162'	-1213	4050' -1236
Pawnee	4286'	-1337	4284'	-1335	4160' -1346
Fort Scott	4312'	-1363	4312'	-1363	4198' -1384
Cherokee Shale	4340'	-1391	4338'	-1389	4218' -1404
Mississippian Chert	4488'	-1539	4492'	-1543	4378' -1564
Mississippian Lime	4516'	-1567	4516'	-1567	4398' -1584
RTD					
LTD	4600'	-1651	4600'	-1651	

# DRILL STEM TESTS

DST No. 1 Lansing "C" and "D"  
Interval: 3950'-4000'  
Times: 30-45-30-60  
Recovery: 91' OSM (3%o, 97%r)  
FP: 18-37/41-51 SIP: 1124-1118  
HP: 1974-1904 BHT: 126 deg. F

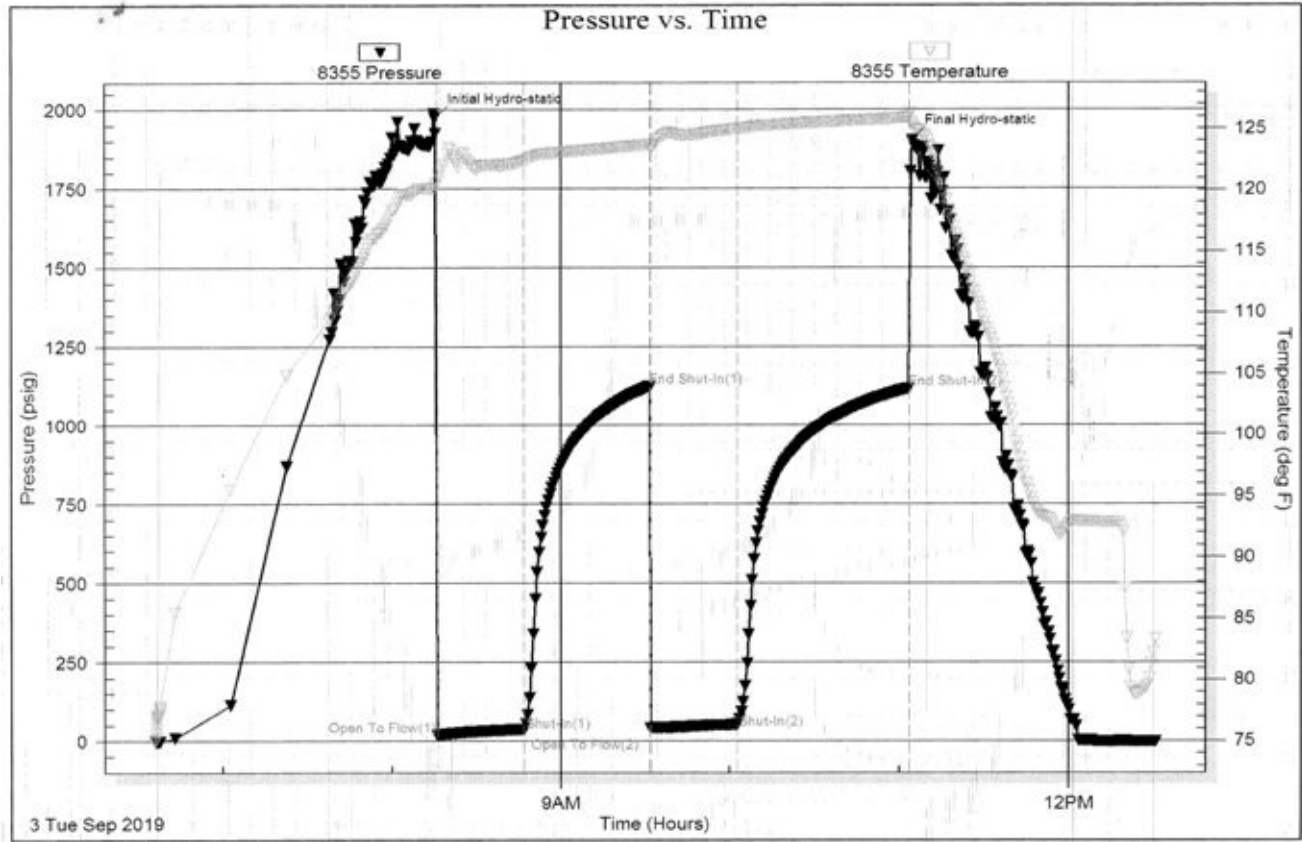
IFP: weak blow built to 1 1/4 inches  
ISIP: no return blow  
FFP: weak surface blow, built to 1/4 inch  
FSIP: no return blow

Serial #: 8355

Val Energy Inc

Schmaderer #1-23

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 66030

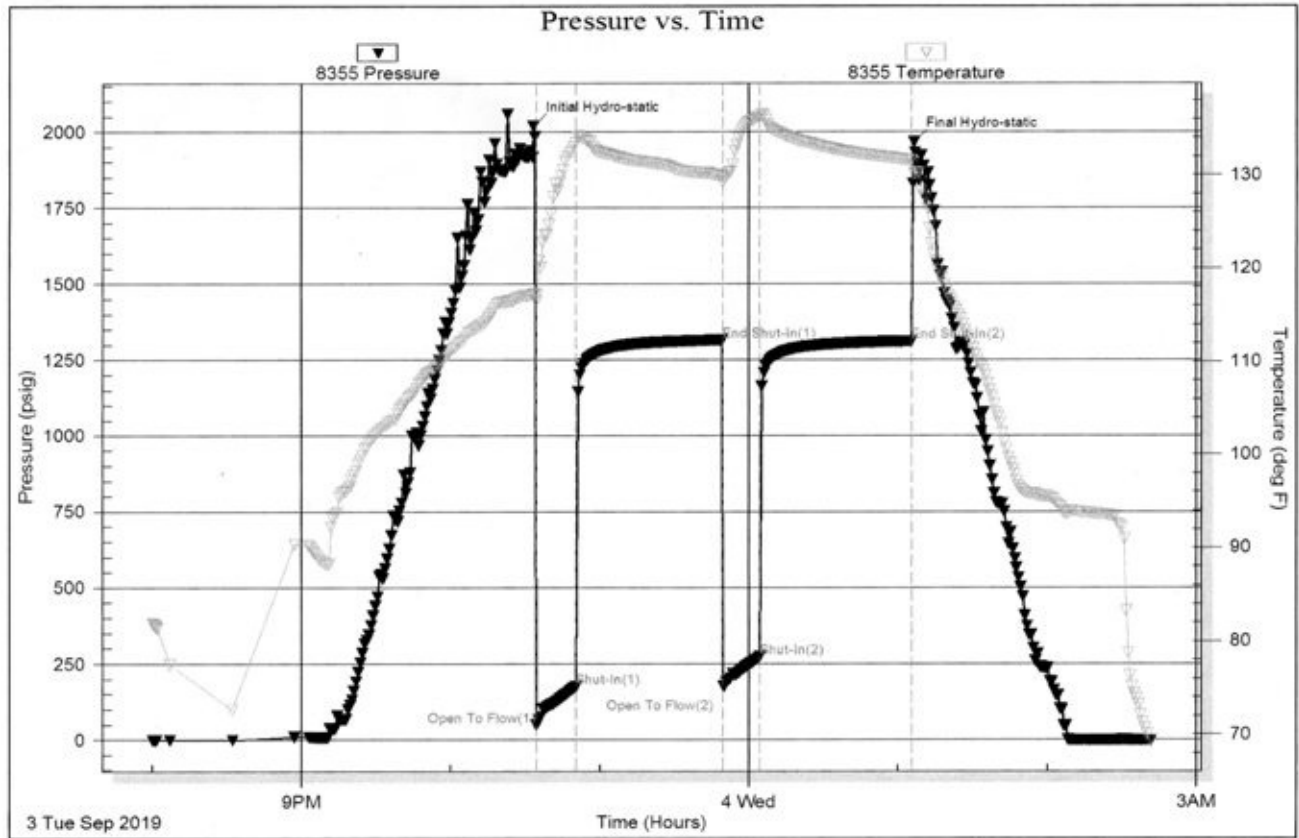
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# DRILL STEM TESTS

DST No. 2 Lansing "F" and "G"  
 Interval: 3996'-4050'  
 Times: 15-60-15-60  
 Recovery: 172' HWCW (30w, 70m); 376' SWCW  
 (9m, 91w), chl. 23,000  
 FP: 49-175/178-272 SIP: 1315-1312  
 HP: 2018-1965 BHT: 130 deg. F

IFP: 1 inch blow at open, BOB in 7 minutes, built to 24 1/4 inches  
 ISIP: no return blow  
 FFP: BOB in 7 minutes 45 seconds, built to 19 1/2 inches  
 FSIP: no return blow

Serial #: 8355      Outside      Val Energy Inc      Schmaderer #1-23      DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 66031

Printed: 2019.09.04 @ 03:20:06

## ROCK TYPES

	Congl		Lmst		Carb sh		Sltstn
	Igne		Salt		Dol		Shlyslts
	Anhy		Shale		Dtd		Sndy/siltyshale
	Cht		Shcol		Grayshale		Silty dolo
	Coal		Siltstone		Sandylms		Shy dolo
	Congl		red sst		Redshale		Shaly ls
	Gyp		Sst		Greenshale		Dolomite

### ACCESSORIES

#### FOSSIL

- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant

- Strom
- Fuss
- Oomold

#### MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp

- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Sltly

- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsb
- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- red shale
- green shale
- Sltstn

#### STRINGER

- Anhy
- Arg

### OTHER SYMBOLS

#### INTERVALS

- Core
- Dst
- Dst

#### EVENTS

- Rft
- Dst top & bottom

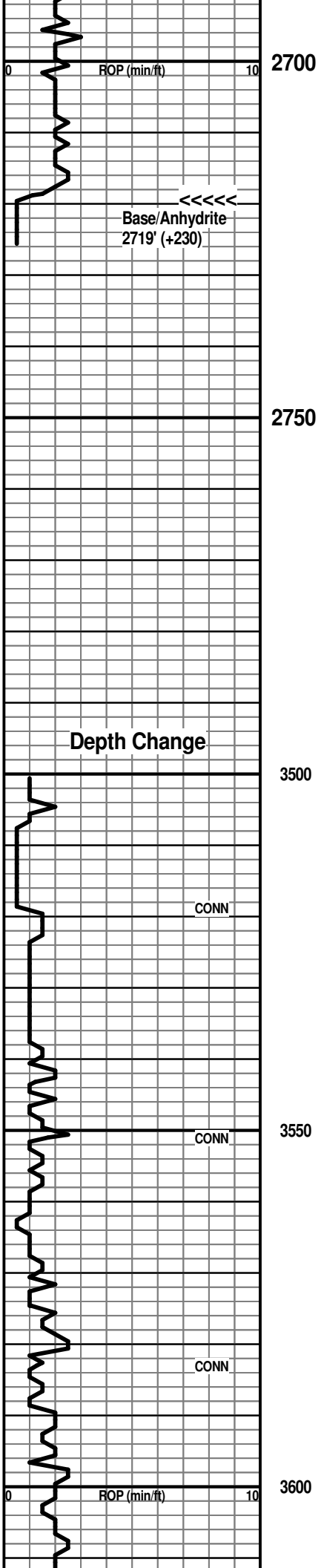
#### OIL SHOWS

- Even
- Spotted
- Quest.

- Trace
- Dead
- Gas show

Curve Track 1 ROP (min/ft)	Depth	Lithology	Geological Descriptions	Remarks
	2650			<p><b>Report Depth and Activity</b>            8-30-2019 MIRT, Spud @ 3:00 PM            8-31 Drlg. @ 884'; plug down at 7:00 PM on 8-30; drilled out at 3:00 AM on 8-31            9-1 Drlg. @ 2536'            9-2 Drlg. @ 3582'            9-3 TIH for DST #1 @ 4000'            9-4 CFS @ 4070'; post DST #2            9-5 Drlg. @ 4535'            9-6 RTD @ 4600', P&amp;A</p>
<p style="text-align: right;">&lt;&lt;&lt;&lt;&lt; Anhydrite 2682' (+267)</p>				<p style="text-align: center;"><b>Anhydrite 2682' (+267)</b></p>

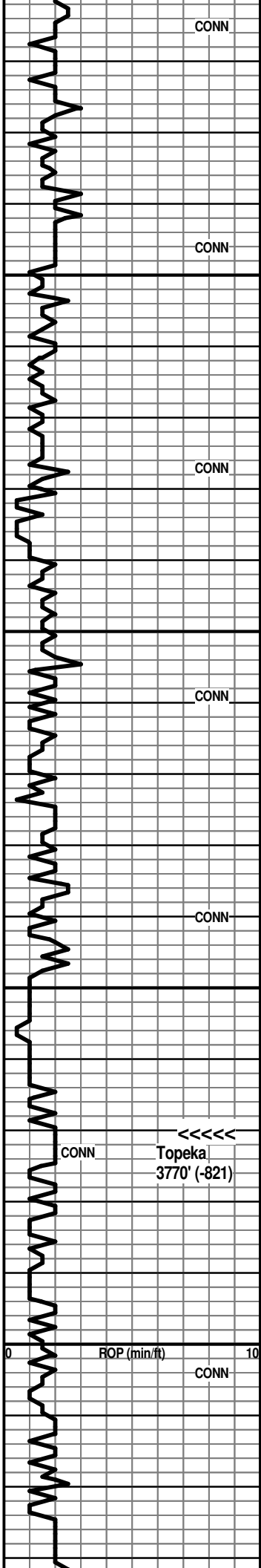




Base/Anhydrite 2719' (+230)

Geologist on location at 3180'

7:00 AM at 3582' on 9-2-2019  
 MudCo Mud Check at 3584'  
 7:30 AM on 9-2-2019  
 wt vis wl pH chl  
 8.7 50 8.8 11.5 500  
 PV YP GelS lcm solids  
 13 15 6/18 2# 3.6%

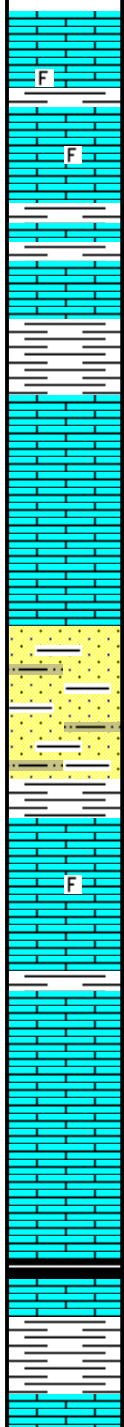


3650

3700

3750

3800



Ls: offwhite micxn, subchalky; tan mic-fnxln with some ppt and inter-particle por.; some tan gran/foss with inter-particle por., N.S.; Sh: interbedded gray and red

Ls: tan, lt brn foss/gran with some por. AA; lesser lt brn vfxln dense; Sh: incr. % AA

Ls: influx lt brn vf-cryptoxln, NVP; scatt. gray, med brn cryptoxln; some pink tinted shaly, dense; Sh: beds AA

Ls: various tan, lt gray, lt brn vf-cryptoxln; some gran with poor-NVP, N.S.; Sh: incr.% red

Ls: mix AA, occ white chalky; Sh: AA

Ls: offwhite, tan, some lt brn mic-vfxln dense; some tan gran with poor inter-particle por., N.S.; Sh: red-brn silty IP

Ls: various dense AA; Sh: streaks lt to med gray, red, red-brn

Sst: influx offwhite, lt gray vfg, sl micac.; red-brn silty shale and sandy siltst; Sh: dark red-brn, gray, lt green

very shaly mix AA with some new lt brn cryptoxln Ls

decr. Sh %; Ls: good influx tan, lt brn gran/foss with some inter-particle por.; lesser lt to med brn cryptoxln and occ white chalky, N.S.

Ls: tan, lt brn gran, poor-NVP; Sh: lt to med gray, red, red-brn (not abund)

Ls: flood offwhite, tan, lt gray mic-vfxln dense; lesser lt brn cryptoxln, N.S.

Ls: various dense AA; some gran with NVP; some white chalky

Ls: various dense AA with influx mottled med gray and med brn gran, NVP; Sh: scatt. black carb.

Ls: influx tan, offwhite, lt gray mic-vfxln dense; some white

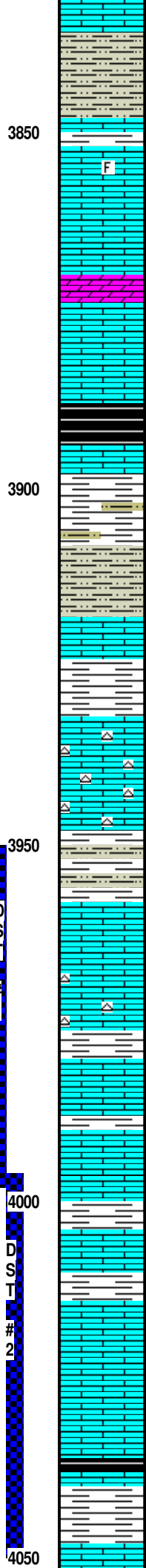
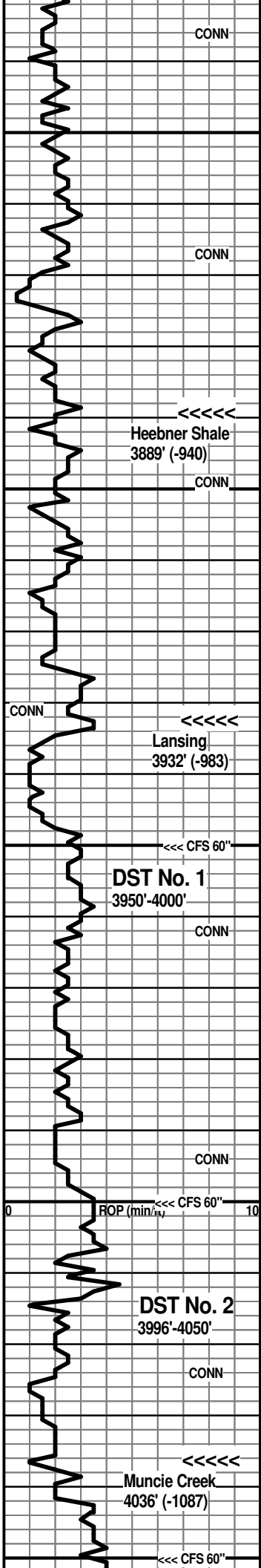
Start 10' wet and dry samples at 3700'

Topeka 3770' (-821)

vis 54 wt 8.8 lcm 2#

CONN  
Topeka  
3770' (-821)

ROP (min/ft)  
CONN



subchalky to chalky, N.S.

Ls: various dense AA; influx Sst/Siltst: offwhite, lt gray, tan vsl micac., calcar.; Sh: incr. red, red-brn

Ls: various tan, lt gray, lt brn vfxln, gran and foss IP, poor-NVP; some mottled lt brn gran/foss, NVP; decr. Siltst AA; Sh: gray, red

Ls: flood offwhite, tan mic-vfxln dense, subchalky IP; lesser mottled red-brn gran, NVP; some white chalky

Ls: tan mic-vfxln dense AA, some fnxln; Dolo: tan fn-vfxln with some interxln and ppt por., N.S.

Ls: tan, offwhite mic-vfxln dense, subchalky to chalky IP; sl influx white chalky; decr. Dolo AA

Sh: black carbon.

Ls: flood med to dark brn cryptoxln

Ls: AA; Sh: good influx vc gray, black, red, red-brn, some green with Siltst: lt gray

flood Siltst: lt brn, red-brn, shaly and vf sandy IP; Sh: med to dark gray

Ls: good influx tan, offwhite mic-vfxln dense, subchalky and sl influx tan, lt gray vf-cryptoxln with poor-NVP with black pred. gilsonitic to tarry stain, nfo, no odor, no fluor., does cut (as expected)

Sh: flood red, red-brn, vc gray, black, silty red-brn; Ls: tan, offwhite dense and gray cryptoxln

Ls: flood offwhite chalky; strong influx mottled orange chert; other tan, lt brn gran Ls with ppt and some inter-particle por.; one chip in 40" CFS sample with trace brn stain, nfo, no fluor., no odor

Ls: pred. lt gray, lt brn cryptoxln; Sh: incr. % red-brn, gray

Sh: influx red-brn with Siltst: gray, lt red; Ls: tan, offwhite dense; gray, brn cryptoxln; 2-3 chips tan vfxln with spotty dead stain, nfo, no odor; occ gray cryptoxln, NVP with spotty dead stain

Ls: good influx tan mic-vfxln and tan gran with spotty dark brn stain, trace dark brn listless oil, nfo, no odor, no fluor., some inter-particle and vug. por.

Ls: flood offwhite, tan mic-vfxln dense, subchalky IP; scatt. offwhite chert; much decr. shows AA

Ls: very pred. tan, lt gray, offwhite mic-vfxln dense, subchalky IP; some vf-cryptoxln, NVP, N.S.; sl influx red-brn, red, occ brn shales

Ls: mix AA with influx lt to med brn, gray cryptoxln NVP, N.S.; minor shale mix AA

Ls: various cryptoxln AA; 3-4 chips tan vf-cryptoxln with spotty brn stain, nfo, no odor

Sh: red, red-brn, med to dark gray, occ green; Ls: influx tan, offwhite gran with inter-particle and vug por. with brn oily stain, trace dark brn listless oil, no odor

Ls: offwhite vfxln, silty and tan, offwhite fn gran, poor-NVP; lesser white chalky, N.S.; Sh: mix AA, decr. %

Ls: flood white chalky and tan, offwhite mic-vfxln dense, N.S.

Ls: mix AA with influx lt to med brn, gray cryptoxln, NVP, N.S.; 3 chips tan gran with inter-particle and vug por. with dark brn oily stain, trace dark brn oil, quest. odor, (cavings?); Sh: some dark gray to black carbon.

Ls: mix AA with Sh: influx red, red-brn, soft to firm

Ls: lt gray, med brn cryptoxln and tan, offwhite mic-vfxln dense; Sh: AA, lt gray

**Heebner Shale 3889' (-940)**  
vis 51 wt 9.0 lcm 2#

**Lansing 3932' (-983)**

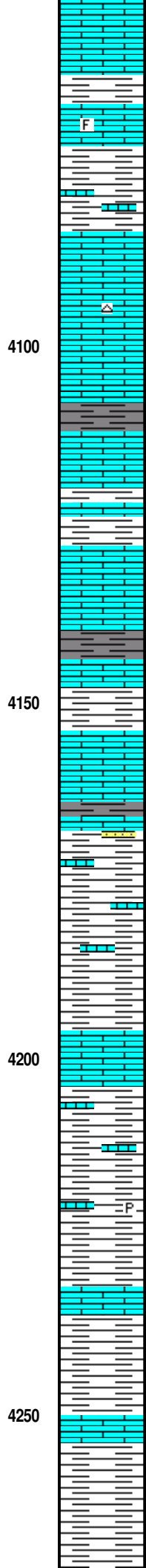
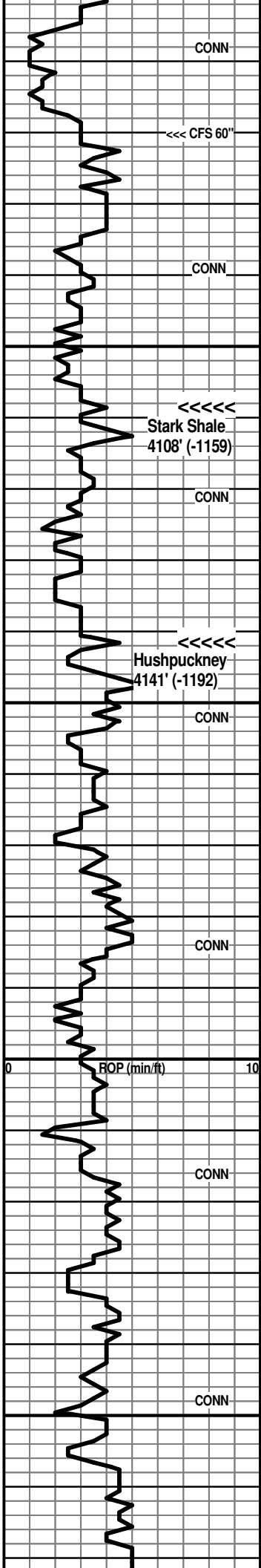
DST No. 1 Lansing "C" and "D"  
Interval: 3950'-4000'  
Times: 30-45-30-60  
IFP: weak blow built to 1 1/4 inches  
ISIP: no return blow  
FFP: weak surface blow, built to 1/4 inch  
FSIP: no return blow  
Recovery: 91' OSM (3%o, 97% m)  
FP: 18-37/41-51 SIP: 1124-1118  
HP: 1974-1904 BHT: 126 deg. F

Pipe strap at 4000' was .02' long to board  
7:00 AM at 4000' on 9-3-2019

**MudCo Mud Check at 4000'**  
8:00 AM on 9-3-2019  
wt vis wl pH chl  
9.0 54 8.0 11.0 1000  
PV YP GeIS lcm solids  
19 15 10/24 1# 4.6%

**Muncie Creek 4036' (-1087)**

DST No. 2 Lansing "F" and "G"  
Interval: 3996'-4050'  
Times: 15-60-15-60  
IFP: 1 inch blow at open, BOB in 7 minutes, built to 24 1/4 inches



Ls: flood tan vfxln dense and flood white chalky, N.S.; Sh: more dark gray

Ls: influx med brn cryptoxln

Ls: mix tan, offwhite mic-vfxln dense, occ foss.; lesser lt brn cryptoxln to gran IP, NVP, N.S.; Sh: dark red-brn, dark red-maroon

Ls: more tan, lt gray gran, NVP

Ls: various tan, lt brn, gray cryptoxln to gran IP; Sh: mix AA with more dark red-maroon

Ls: pred. tan, lt gray mic-vfxln dense; lesser tan cryptoxln; 2-3 chips tan gran with spotty black dead stain, trace minute oil on break, no odor, nfo, tight; Sh: persistent red-brn dark red-maroon; scatt. offwhite opq chert

Ls: pred. tan vf-cryptoxln, NVP; 2-3 chips tan more fnxln, poor to NVP, with spotty brn stain, nfo, no odor (slough?); Sh: dark gray

Ls: mix tan, lt gray vf-cryptoxln; flood offwhite, tan mic-vfxln dense, N.S.; 2-3 chips with spotty brn stain, nfo, no odor, poor-NVP

Ls: mix lt gray, tan gran, NVP; lt gray, offwhite vfxln dense; 1-2 chips with spotty stain, nfo, no odor; Sh: dark red-brn, dark red-maroon, med to dark gray, grayish purple, silty dark red-brn

Ls: pred. tan, offwhite mic-vfxln; occ tan gran, poor-NVP; Sh: decr. % red-brn

Ls: dense AA; more tan, lt brn, lt gray gran, NVP, N.S.; occ med brn cryptoxln; Sh: incr. % med to dark gray, dark red-brn

Ls: various dense; more lt brn, gray cryptoxln

Ls: lt gray, tan gran, NVP; Sh: red-brn, lt gray, occ lt green; trace Sst: gray fg limy

Ls: offwhite, lt gray, tan gran and offwhite mic-vfxln dense; incr % Sh: red, dark red-brn, brn

pred. shale mix AA with various dense Ls's

Sh: red, red-brn, vc gray, silty IP, some pale green; Ls: beds of lt brn, lt gray cryptoxln; offwhite, tan mic-vfxln and some tan gran, N.S.

Ls: influx lt gray mic-vfxln dense; Sh: mix AA

predom. Sh: vc gray, red, red-brn with beds of various dense Ls's

shales with interbedded Ls's AA; some coarse gran dark brn Ls; occ shaly pyrite

flood Sh: vc gray, red, dark red-brn; decr. Ls %

Sh: red, red-brn, vc gray with Ls: beds of tan, gray cryptoxln to gran, N.S.

Sh: very pred. red, red-brn; lesser lt to med gray; Ls: minor med brn gran

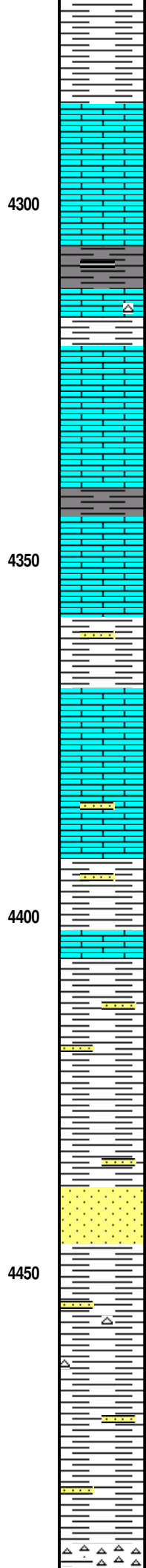
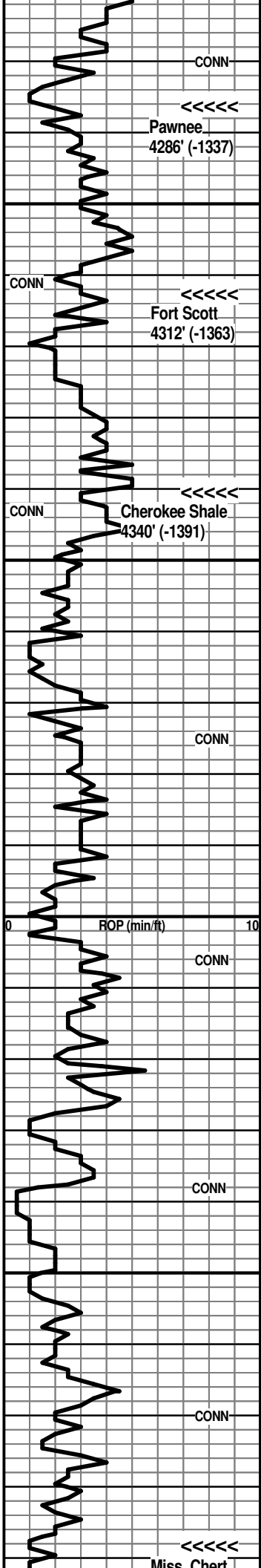
Sh: mix AA with some brn, yellow-brn; scatt. Ls's

ISIP: no return blow  
 FFP: BOB in 7 minutes 45 seconds, built to 19 1/2 inches  
 FSIP: no return blow  
 Recovery: 172' HWCM (30w, 70m); 376' SWCW (9m, 91w), chl. 23,000  
 FP: 49-175/178-272 SIP: 1315-1312  
 HP: 2018-1965 BHT: 130 deg. F

7:00 AM at 4070' on 9-4-2019  
 MudCo Mud Check at 4070'  
 8:20 AM on 9-4-2019  
 wt vis wl pH chl  
 9.2 67 9.6 10.0 1500  
 PV YP GelS lcm solids  
 21 17 11/38 1# 5.9%

**Stark Shale 4108' (-1159)**

**Hushpuckney 4141' (-1192)**



Sh: various AA; Ls: some tan, gray, lt brn dense

4300' spl - flood Ls: tan gran, poor-NVP; offwhite, tan mic-vfxln, white chalky; some tan fn gran with ppt por. N.S.; Sh: still common mix AA

Ls: mix tan, lt gray cryptoxln and offwhite, lt gray mic-vfxln dense, subchalky IP, occ chalky; Sh: lesser % med to dark gray, dark red-brn

Ls: mix AA; Sh: AA, some dark gray to black

Sh: more dark gray, black carbon., pale gray mushy; Ls: new dark brn and gray cryptoxln; other dense AA, more chalky; scatt. tan chert

Ls: various tan, gray, brn cryptoxln to gran IP; offwhite, tan dense; Sh: incr. % vc gray, lesser red-brn

pred. Ls: tan mic-vfxln dense; lesser various brn, gray mottled dense; decr. Sh: pred. lt to med gray

Ls: various tan, gray, brn gran IP, some cryptoxln, NVP; Sh: incr. med to dark gray, dark red-brn

Ls: pred. tan, offwhite mic-vfxln dense; lesser med to dark brn, gray-brn cryptoxln to gran IP, N.S.; trace Sst: lt brn med grnd clusters, tight, N.S.

still pred. various dense Ls's AA; Sh: vc gray, some splintery, some red-brn, dark red-maroon, trace yellow-brn; occ Sst: lt brn med grnd, NVP, N.S.

Ls: more tan, brn, gray cryptoxln with mix AA; Sh: vc gray, red-brn, trace lt green; Sst: lt gray med grnd, quartzitic, occ clusters AA, N.S.

Ls: mix offwhite, tan mic-vfxln dense and offwhite, tan, lt brn gran, poor-NVP; some white chalky, N.S.; occ lt gray Sst AA; Sh: mix AA, trace yellow/green

pred. Sh: vc gray, red-brn, red-maroon, soft mushy red-brn; Ls: new lt to med brn, lt gray cryptoxln

30' spl - flood Sh: multi-colored (red, red-brn, red-maroon, vc gray, grayish purple, lt green, some mottled); scatt. Sst: lt gray fg, sl glauc. with imbedded Ls clasts

Sh: flood vc gray, gray-green; lesser red-brn, red-maroon

Sh: strong influx red-brn, vc gray AA

Sh: flood multi-colored (red-brn, red-maroon, vc gray, gray-green, scatt. yellow and mottled yellow-purple); scatt. quartz grains, lt gray med to coarse

Sh: flood red-brn, red-maroon; Sst: trace wht vfg, soft; trace lt brn fn-med grnd subrnd-rnd, tight, shaly IP, N.S.

Sh: very pred. dark red-brn, dark red-maroon; scatt. qtz singletons; scatt. vari-colored chert

Sh: very pred. AA; lesser vc gray, gray-green; scatt. offwhite fg Sst, calcar., friable, N.S.

Sh: AA; trace dark yellow and mottled yellow/red

Sh: mix AA with trace white fg soft Sst; scatt. gray shaly fg Sst

20' spl - flood Chert: white, yellow, dark yellow fresh, some

**Pawnee 4286' (-1337)**

**Fort Scott 4312' (-1363)**

**Cherokee Shale 4340' (-1391)**

MudCo Mud Check at 4562'  
 7:30 AM on 9-5-2019  
 wt vis wl pH chl  
 9.5 58 8.0 10.0 2000  
 PV YP GelS lcn solids  
 14 18 12/42 1# 8.3%

**Miss Chert 4488' (-1539)**

Miss. Chert 4488' (-1539)

CONN

4500

white tripolitic with ppt por., N.S.; Sh: mix AA decr. %

Chert: mix AA with flood Sh: vc gray, grayish purple, some splintery, decr. red-brn

Sh: pred. red-brn; various cherts AA; occ Ls: tan, lt brn cryptoxln

Miss. Lime 4516' (-1567)

Miss. Lime 4516' (-1567)

CONN

Ls: incr. % tan vf-cryptoxln, occ gran; common shales and cherts AA

60' spl - Ls: influx tan, lt gray cryptoxln and offwhite gran, some inter-particle por., N.S.; Dolo: tan, lt gray medxln with interxln and vug. por., N.S.; common cherts and shales

7:00 AM at 4535' on 9-5-2019

4550

mix Ls's and Dolo AA, still cherty

Dolo: offwhite, gray, tan fnxln to cryptoxln; Ls: offwhite mic-vfxln dense

CONN

influx Ls: offwhite, tan mic-vfxln subchalky to occ chalky; lesser tan gran.; much decr. Dolo and chert

Ls: AA with scatt. Dolo and chert

Ls: pred offwhite, tan mic-vfxln dense, subchalky; some gran subchalky; scatt. offwhite opq chert and Dolo

4600

After review of samples, DST results and Elog evaluation, the decision was made to plug the #1-23 Schmaderer as a dry hole.

RTD reached at 9:45 AM on 9-5-2019  
CFS 60" - short trip - CTCH 1.5 hours  
Drop survey - TOFL

Respectfully submitted,

Wesley D. Hansen  
Petroleum Geologist  
Kansas License No. 418

RTD 4600' (-1651)  
LTD 4600' (-1651)

ROP (min/ft) <<< CFS 60" 10



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Val Energy Inc  
 125 N Market St STE 1110 Wichita KS 67202  
 ATTN: Wes Hansen

**23/4s/32w Rawlins KS**  
**Schmaderer #1-23**  
 Job Ticket: 66030 **DST#: 1**  
 Test Start: 2019.09.03 @ 06:36:00

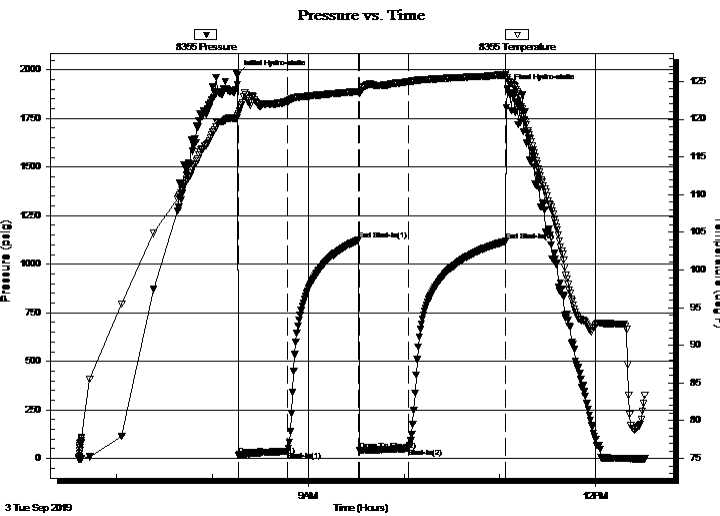
## GENERAL INFORMATION:

Formation: **Lansing C-D**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 08:16:10  
 Time Test Ended: 12:31:20  
 Interval: **3950.00 ft (KB) To 4000.00 ft (KB) (TVD)**  
 Total Depth: 4000.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Shawn Wheelbarger  
 Unit No: 76  
 Reference Elevations: 2949.00 ft (KB)  
 2944.00 ft (CF)  
 KB to GR/CF: 5.00 ft

## Serial #: 8355

Press@RunDepth: 51.36 psig @ ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.09.03 End Date: 2019.09.03 Last Calib.: 2019.09.03  
 Start Time: 06:36:01 End Time: 12:31:20 Time On Btm: 2019.09.03 @ 08:15:20  
 Time Off Btm: 2019.09.03 @ 11:04:39

TEST COMMENT: 30-IF-1/4" Blow @ open Built to 1 1/4"  
 45-ISI-No blow back  
 30-FF-Weak surface blow built to 1/4"  
 60-FSI- No blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1973.67	120.23	Initial Hydro-static
1	18.37	120.71	Open To Flow (1)
32	36.99	122.39	Shut-In(1)
77	1124.17	123.68	End Shut-In(1)
77	40.88	123.35	Open To Flow (2)
108	51.36	124.98	Shut-In(2)
169	1118.22	125.87	End Shut-In(2)
170	1903.74	125.47	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
91.00	OSM, 3%O, 97%M	0.45

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Val Energy Inc  
125 N Market St STE 1110 Wichita KS 67202  
ATTN: Wes Hansen

**23/4s/32w Rawlins KS**  
**Schmaderer #1-23**  
Job Ticket: 66030      **DST#: 1**  
Test Start: 2019.09.03 @ 06:36:00

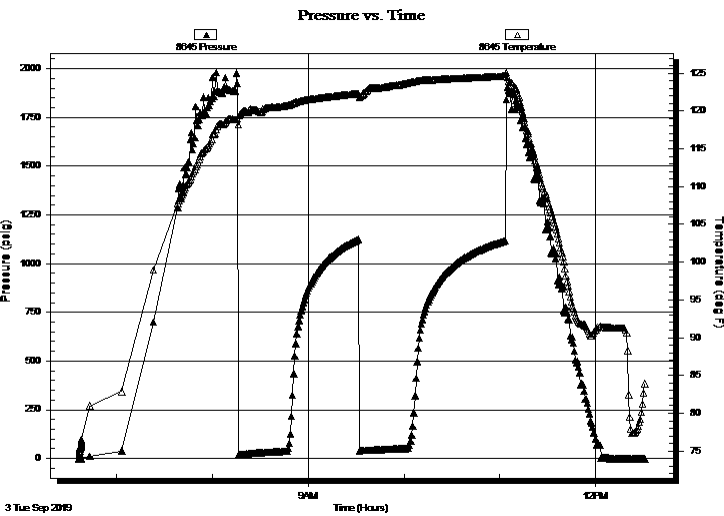
## GENERAL INFORMATION:

Formation: **Lansing C-D**  
Deviated: No Whipstock:                      ft (KB)  
Time Tool Opened: 08:16:10  
Time Test Ended: 12:31:20  
Interval: **3950.00 ft (KB) To 4000.00 ft (KB) (TVD)**  
Total Depth: 4000.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Shawn Wheelbarger  
Unit No: 76  
Reference Elevations: 2949.00 ft (KB)  
2944.00 ft (CF)  
KB to GR/CF: 5.00 ft

## Serial #: 8645

Press@RunDepth:                      psig @                      ft (KB)  
Capacity: 8000.00 psig  
Start Date: 2019.09.03      End Date: 2019.09.03      Last Calib.: 2019.09.03  
Start Time: 06:36:01      End Time: 12:30:50      Time On Btm:  
Time Off Btm:

TEST COMMENT: 30-IF-1/4" Blow @ open Built to 1 1/4"  
45-ISI-No blow back  
30-FF-Weak surface blow built to 1/4"  
60-FSI- No blow



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
91.00	OSM, 3%O, 97%M	0.45

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Val Energy Inc

**23/4s/32w Rawlins KS**

125 N Market St STE 1110 Wichita KS 67202

**Schmaderer #1-23**

Job Ticket: 66030

**DST#: 1**

ATTN: Wes Hansen

Test Start: 2019.09.03 @ 06:36:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
91.00	OSM, 3%O, 97%M	0.448

Total Length: 91.00 ft      Total Volume: 0.448 bbl

Num Fluid Samples: 0

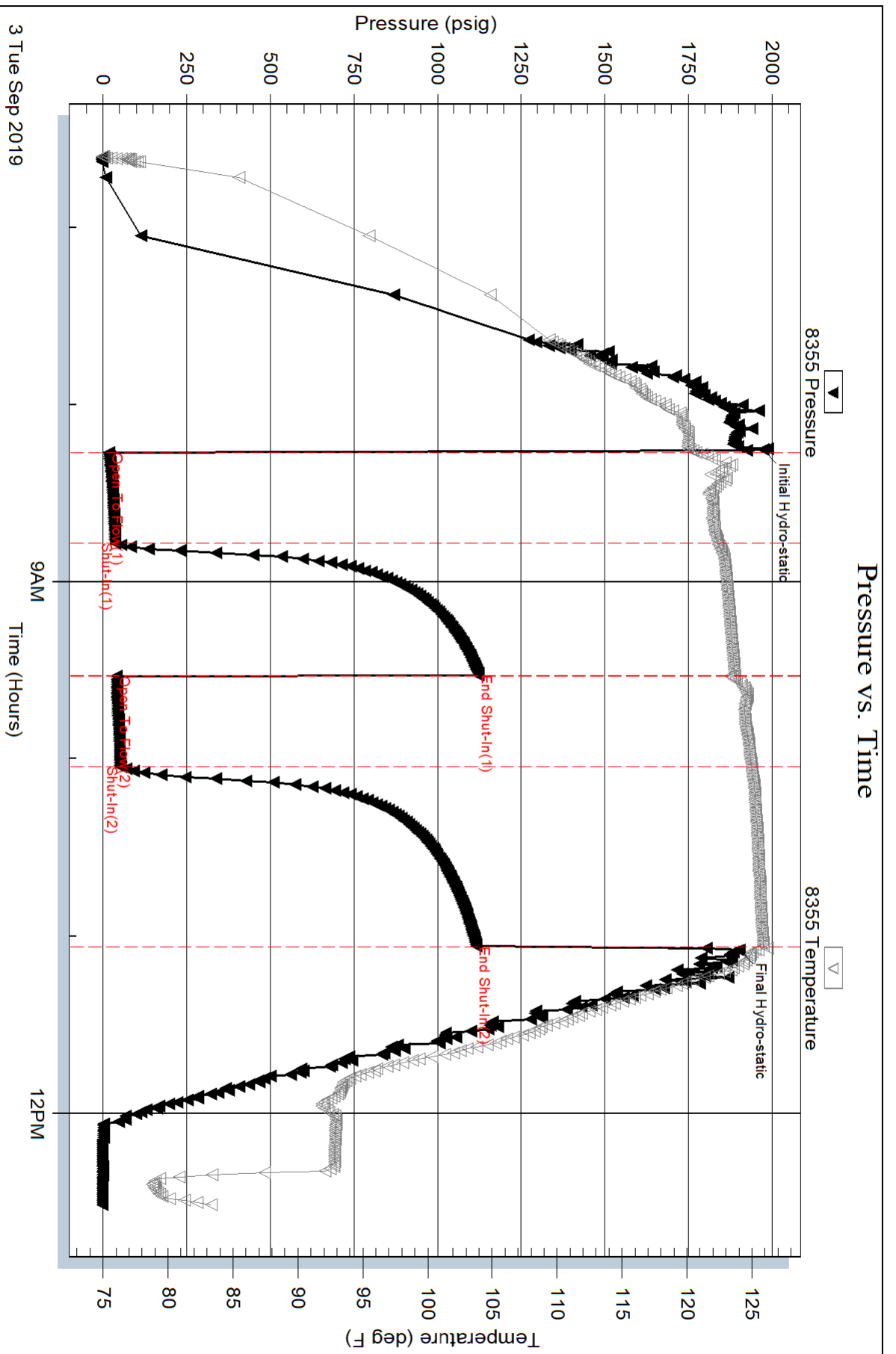
Num Gas Bombs: 0

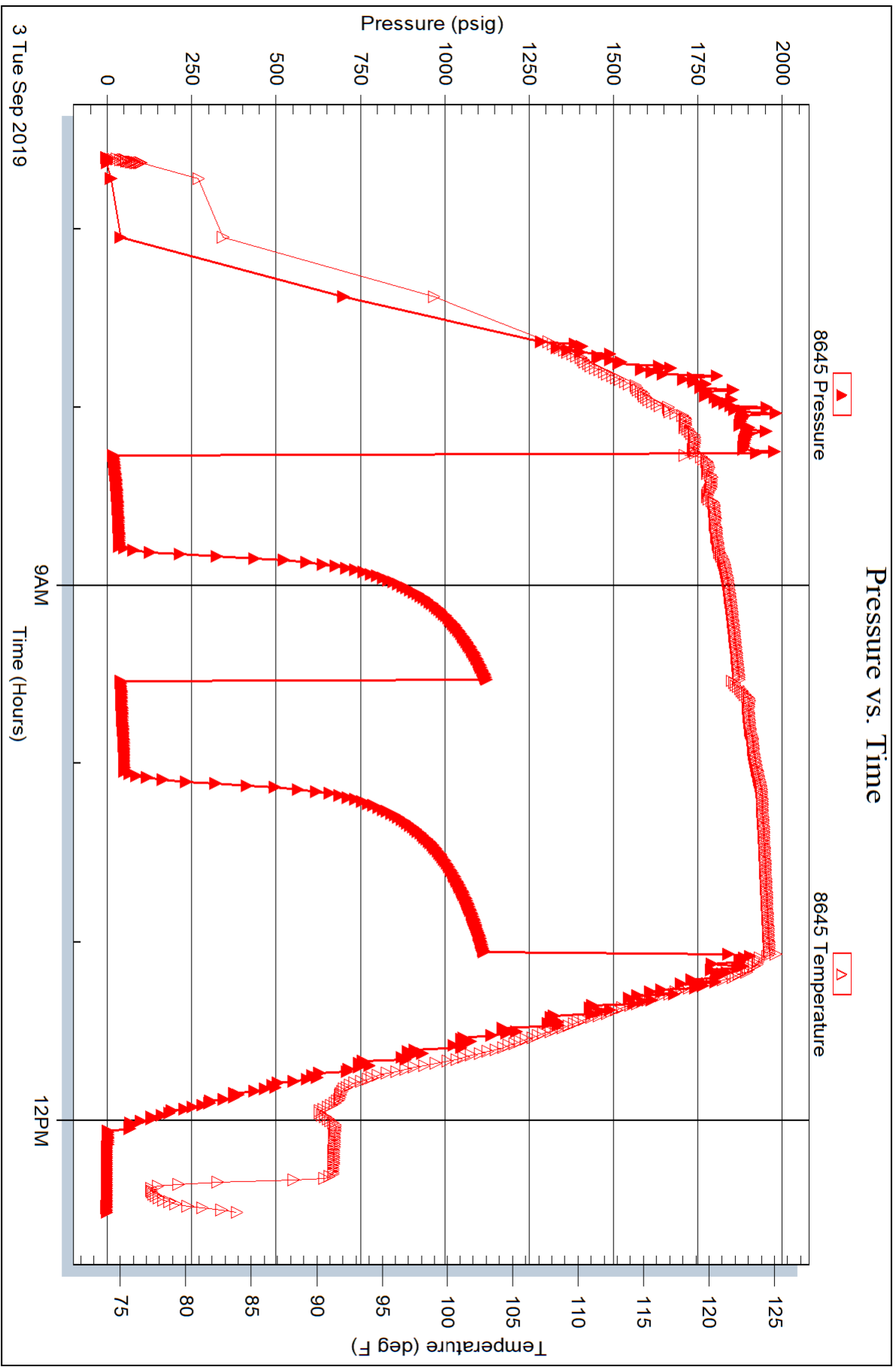
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Val Energy Inc  
 125 N Market St STE 1110 Wichita KS 67202  
 ATTN: Wes Hansen

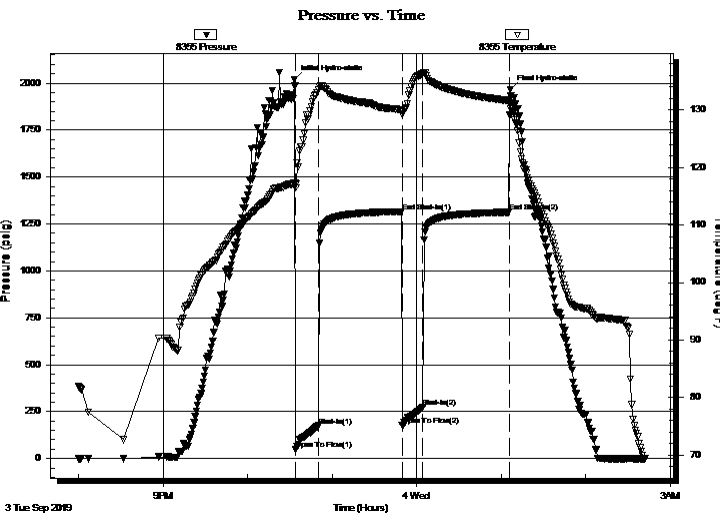
**23/4s/32w Rawlins KS**  
**Schmaderer #1-23**  
 Job Ticket: 66031 **DST#: 2**  
 Test Start: 2019.09.03 @ 20:00:00

## GENERAL INFORMATION:

Formation: **Lansing F-G**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 22:34:10  
 Time Test Ended: 02:41:50  
 Interval: **3996.00 ft (KB) To 4050.00 ft (KB) (TVD)**  
 Total Depth: 4050.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Shawn Wheelbarger  
 Unit No: 76  
 Reference Elevations: 2949.00 ft (KB)  
 2944.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8355 Outside**  
 Press@RunDepth: 272.39 psig @ 3997.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.09.03 End Date: 2019.09.04 Last Calib.: 2019.09.04  
 Start Time: 20:00:01 End Time: 02:41:50 Time On Btm: 2019.09.03 @ 22:33:10  
 Time Off Btm: 2019.09.04 @ 01:06:30

**TEST COMMENT:** 15-IF-1" Blow @ open BOB in 7 mins built to 24 1/4"  
 60-ISI-No blow back  
 15-FF-BOB in 7 mins 45 secs blow built to 19 1/2"  
 60-FSI-No blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2018.26	117.24	Initial Hydro-static
1	49.05	116.48	Open To Flow (1)
17	174.70	133.40	Shut-In(1)
77	1314.91	129.88	End Shut-In(1)
77	177.62	129.24	Open To Flow (2)
92	272.39	136.25	Shut-In(2)
153	1312.36	131.56	End Shut-In(2)
154	1964.86	130.09	Final Hydro-static

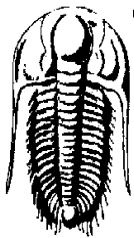
## Recovery

Length (ft)	Description	Volume (bbl)
376.00	SMCW, 91%W, 9%M	4.16
172.00	HWCM 30%W, 70%M	2.41

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Val Energy Inc  
 125 N Market St STE 1110 Wichita KS 67202  
 ATTN: Wes Hansen

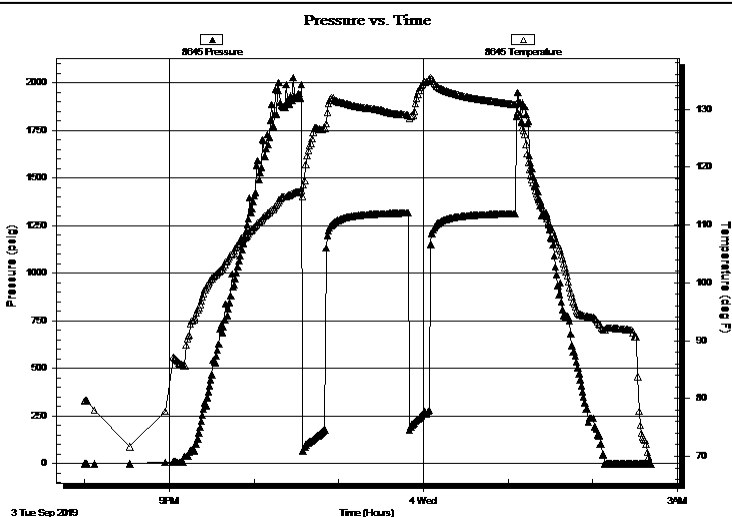
**23/4s/32w Rawlins KS**  
**Schmaderer #1-23**  
 Job Ticket: 66031 **DST#: 2**  
 Test Start: 2019.09.03 @ 20:00:00

### GENERAL INFORMATION:

Formation: **Lansing F-G**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 22:34:10  
 Time Test Ended: 02:41:50  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Shawn Wheelbarger  
 Unit No: 76  
 Interval: **3996.00 ft (KB) To 4050.00 ft (KB) (TVD)**  
 Total Depth: 4050.00 ft (KB) (TVD)  
 Reference Elevations: 2949.00 ft (KB)  
 2944.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 KB to GR/CF: 5.00 ft

**Serial #: 8645 Inside**  
 Press@RunDepth: psig @ 3997.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.09.03 End Date: 2019.09.04 Last Calib.: 2019.09.04  
 Start Time: 20:00:01 End Time: 02:41:30 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** 15-IF-1" Blow @ open BOB in 7 mins built to 24 1/4"  
 60-ISI-No blow back  
 15-FF-BOB in 7 mins 45 secs blow built to 19 1/2"  
 60-FSI-No blow



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
376.00	SMCW, 91%W, 9%M	4.16
172.00	HWCW 30%W, 70%M	2.41

### Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Val Energy Inc

**23/4s/32w Rawlins KS**

125 N Market St STE 1110 Wichita KS 67202

**Schmaderer #1-23**

Job Ticket: 66031

**DST#: 2**

ATTN: Wes Hansen

Test Start: 2019.09.03 @ 20:00:00

### 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:

23000 ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
376.00	SMCW, 91%W, 9%M	4.163
172.00	HWCM 30%W, 70%M	2.413

Total Length: 548.00 ft      Total Volume: 6.576 bbl

Num Fluid Samples: 0

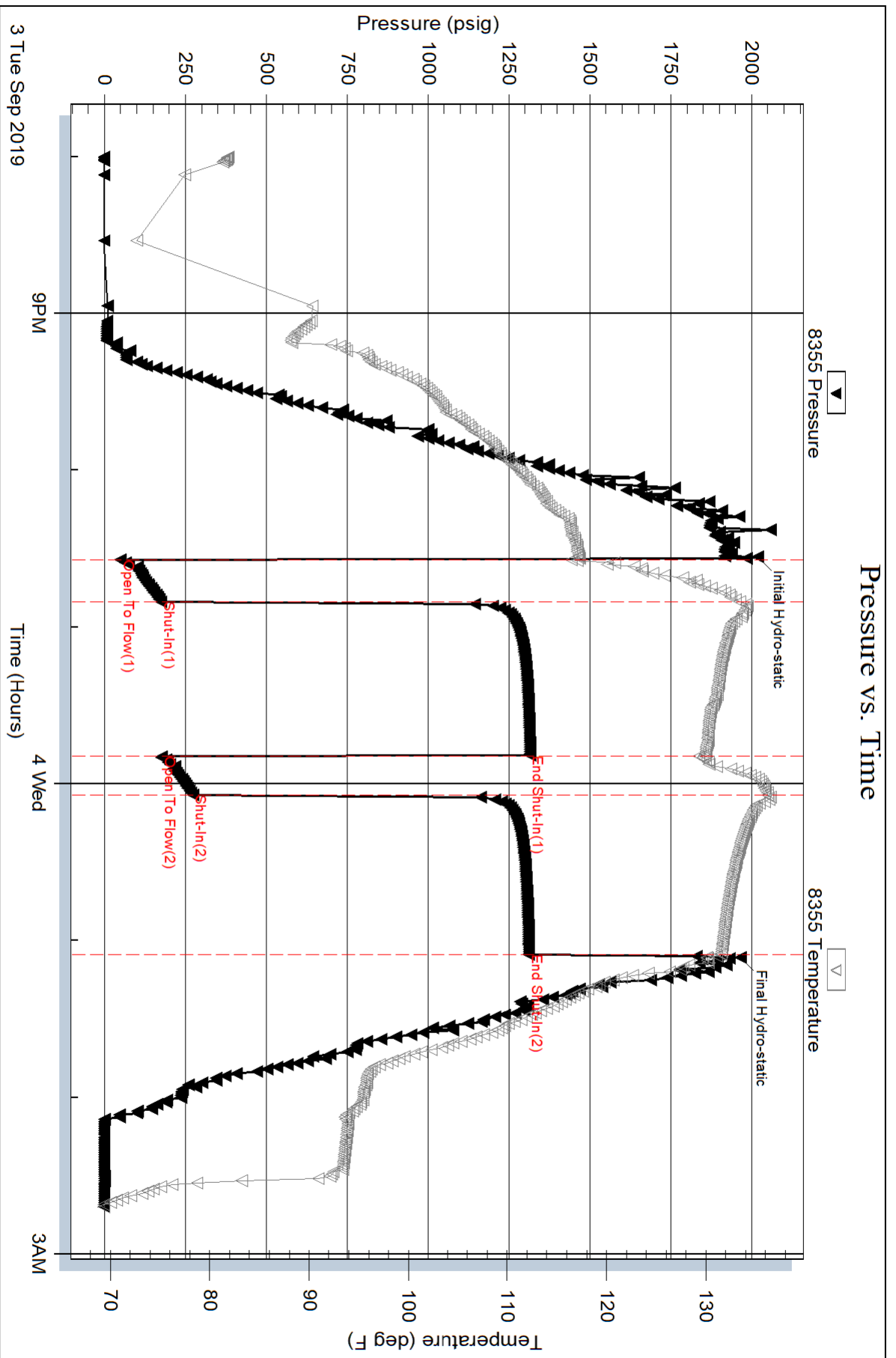
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .369@ 63 DEG F



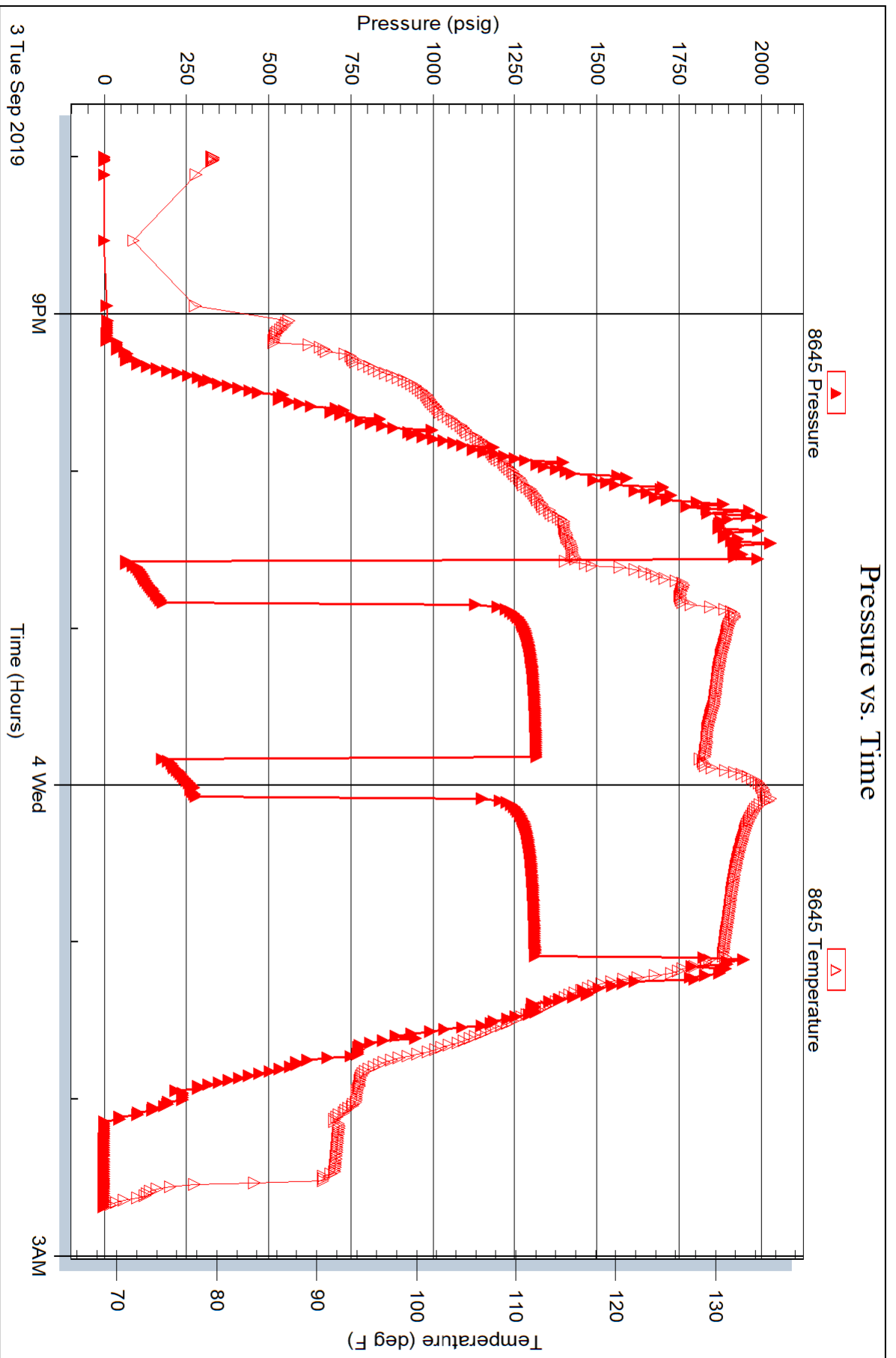
Serial #: 8645

Inside

Val Energy Inc

Schmaderer #1-23

DST Test Number: 2







**HURRICANE SERVICES INC**

Remit To: Hurricane Services, Inc.  
250 N. Water, Suite 200  
Wichita, KS 67202  
316-303-9515

Customer:  
VAL ENERGY, INC.  
125 N MARKET  
STE 1710  
Wichita, KS 67202

Invoice Date: 9/6/2019  
Invoice #: 0343629  
Lease Name: Schmaderer  
Well #: 1-23  
County: Rawlins  
Job Number: ICT2349

Date/Description	HRS/QTY	Rate	Total
Plug to Abandon	0.000	0.000	0.00
Cement Pump	1.000	637.500	637.50
Heavy Eq Mileage	45.000	3.400	153.00
Light Eq Mileage	45.000	1.700	76.50
H-Plug	240.000	11.050	2,652.00
Ton Mileage	480.000	1.275	612.00
Wooden plug 8 5/8"	1.000	127.500	127.50

Net Invoice	4,258.50
Sales Tax:	200.56
<b>Total</b>	<b>4,459.06</b>

**TERMS:** Net 30 days. Interest may be charged on past due invoice at rate of 1 ½% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice.

**SALES TAX:** Services performed on oil, gas and water wells in Kansas are subject to sales tax, with certain exceptions. HSI relies on the well information provided by the customer in identifying whether the services performed on wells qualify for exemption.

**WE APPRECIATE YOUR BUSINESS!**

250 N. Water St., Suite #200  
Wichita, KS 67202



**HURRICANE SERVICES INC**

Customer	Val Energy	Lease & Well #	Schmaderer 1-23		Date	9/6/2019	
Service District	Oakley, KS	County & State	Rawlins, KS	Legals S/T/R	23-4s-32w		
Job Type	PTA	<input type="checkbox"/> PROD	<input type="checkbox"/> INJ	<input type="checkbox"/> SWD	New Well?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> No	
Equipment #	Driver	<b>Job Safety Analysis - A Discussion of Hazards &amp; Safety Procedures</b>					
73	Miles Shaw	<input type="checkbox"/> Hard hat	<input type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging		
208	Jimmel Cottrell	<input type="checkbox"/> H2S Monitor	<input type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection		
181/256	Jesse Jones	<input type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations		
		<input type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input type="checkbox"/> Overhead Hazards	<input type="checkbox"/> Muster Point/Medical Locations		
		<input type="checkbox"/> Hearing Protection	<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below			
<b>Comments</b>							
Product/ Service Code	Description	Unit of Measure	Quantity	List Price/Unit	Gross Amount	Item Discount	Net Amount
C010	Cement Pump	ea	1.00				\$637.50
M010	Heavy Equipment Mileage	mi	45.00				\$153.00
M015	Light Equipment Mileage	mi	45.00				\$76.50
CP055	H-Plug	sack	240.00				\$2,652.00
M020	Ton Mileage	tm	480.00				\$612.00
FE290	8 5/8" Wooden Plug	ea	1.00				\$127.50
							<b>Gross: \$4,258.50</b>
Customer Section: On the following scale how would you rate Hurricane Services Inc.?							<b>Net:</b>
							<b>\$4,258.50</b>
Based on this job, how likely is it you would recommend HSI to a colleague?							<b>Total Taxable</b>
<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <i>Extremely Likely</i>							<b>\$ -</b>
							<b>Tax Rate:</b>
							<b>\$ -</b>
							<b>Sale Tax:</b>
							<b>\$ -</b>
							<b>Total:</b>
							<b>\$ 4,258.50</b>
							<b>HSI Representative:</b>

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x *Rich [Signature]*

**CUSTOMER AUTHORIZATION SIGNATURE**



### CEMENT TREATMENT REPORT

Customer: <b>Val Energy</b>	Well: <b>Schmaderer 1-23</b>	Ticket: <b>ICT 2349</b>
City, State:	County: <b>Rawlins, KS</b>	Date: <b>9/6/2019</b>
Field Rep: <b>Rick WW 10 pusher</b>	S-T-R: <b>23-4s-32w</b>	Service: <b>PTA</b>

Downhole Information		Calculated Slurry		Product		
Hole Size:	<b>7 7/8" in</b>	Weight:	<b>13.8 # / sx</b>	Class A	% / #	#
Hole Depth:	<b>4600' ft</b>	Water / Sx:	<b>6.90 gal / sx</b>	Poz		
Casing Size:	<b>in</b>	Yield:	<b>1.41 ft<sup>3</sup> / sx</b>	Gel		
Casing Depth:	<b>ft</b>	Bbbls / Ft.:		CaCl		
Tubing / Liner:	<b>in</b>	Depth:	<b>ft</b>	Gypsum		
Depth:	<b>ft</b>	Annular Volume:	<b>0 bbls</b>	Metso		
Tool / Packer:		Excess:		Kol Seal		
Depth:	<b>ft</b>	Total Slurry:	<b>60.0 bbls</b>	Flo Seal		
Displacement:	<b>bbls</b>	Total Sacks:	<b>240 sx</b>	Salt (bww)		
				Total		<b>-</b>

TIME	RATE	PSI	BBLs	REMARKS
1030pm				Arrivial
1035pm				Safety meeting
1040pm				Rig up equip
1110pm	4.0	200.0	12.5	Mix 50sx @ 2700'
1125pm				Rig pull pipe
1150pm	5.0	200.0	25.0	Mix 100sx @ 1940'
12am				Rig pull pipe
1250am	5.0	10.0	12.5	Mix and displace 50sx @ 345'
1255am				Rig pull pipe
115am	3.0	100.0	7.5	Mix 30sx RH
120am	2.0		2.5	Mix 10sx @ 40' with plug
				240 sx 60/40 poz 4% gel 1/4# floseal
125am				Wash up equip
140am				Depart

CREW		UNIT	SUMMARY		
Cementer:	<b>Miles Shaw</b>	<b>73</b>	Average Rate	Average Pressure	Total Fluid
Pump Operator:	<b>Jimmei Cottrell</b>	<b>208</b>	<b>3.8 bpm</b>	<b>128 psi</b>	<b>60 bbls</b>
Bulk #1:	<b>Jesse Jones</b>	<b>181/256</b>			
Bulk #2:					

Hurricane Services, Inc.  
250 N. Water  
Wichita, KS 67202



## HURRICANE SERVICES INC

Remit To: Hurricane Services, Inc.  
250 N. Water, Suite 200  
Wichita, KS 67202  
316-303-9515

Customer:  
VAL ENERGY, INC.  
125 N MARKET  
STE 1710  
Wichita, KS 67202

Invoice Date: 8/30/2019  
Invoice #: 0343420  
Lease Name: Schmaderer  
Well #: 1-23 (New)  
County: Rawlins  
Job Number: ICT2323

Date/Description	HRS/QTY	Rate	Total
Surface	0.000	0.000	0.00
Heavy Eq Mileage	55.000	3.400	187.00
Light Eq Mileage	55.000	1.700	93.50
Ton Mileage	569.000	1.275	725.48
Cement pump 266	1.000	637.500	637.50
H-325	200.000	17.000	3,400.00

**Total** 5,043.48

**TERMS:** Net 30 days. Interest may be charged on past due invoice at rate of 1 ½% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice.

**SALES TAX:** Services performed on oil, gas and water wells in Kansas are subject to sales tax, with certain exceptions. HSI relies on the well information provided by the customer in identifying whether the services performed on wells qualify for exemption.

**WE APPRECIATE YOUR BUSINESS!**

250 N. Water St., Suite #200  
Wichita, KS 67202



**HURRICANE SERVICES INC**

Customer	Val Energy	Lease & Well #	Schmaderer 1-23		Date	8/30/2019				
Service District	Oakley KS	County & State	Rawlins KS	Legals S/T/R	24-4-32W	Job #				
Job Type	Surface	<input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> SWD	New Well?	<input type="checkbox"/> YES <input type="checkbox"/> No	Ticket #	ICT2323				
Equipment #	Driver	<b>Job Safety Analysis - A Discussion of Hazards &amp; Safety Procedures</b>								
266	Jesse	<input type="checkbox"/> Hard hat	<input type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging					
242	Kale	<input type="checkbox"/> H2S Monitor	<input type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection					
78	Dane	<input type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input type="checkbox"/> Slip/Trip/Fall Hazards	<input type="checkbox"/> Specific Job Sequence/Expectations					
	Kaleb	<input type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input type="checkbox"/> Overhead Hazards	<input type="checkbox"/> Muster Point/Medical Locations					
		<input type="checkbox"/> Hearing Protection	<input type="checkbox"/> Fire Extinguisher	<input type="checkbox"/> Additional concerns or issues noted below						
<b>Comments</b>										
All chemicals loaded out of Oakley KS										
Product/ Service Code	Description	Unit of Measure	Quantity			Net Amount				
M010	Heavy Equipment Mileage	mi	55.00			\$187.00				
M015	Light Equipment Mileage	mi	55.00			\$93.50				
M020	Ton Mileage	tm	569.00			\$725.48				
C010	Cement Pump	ea	1.00			\$637.50				
CP015	H-325	sack	200.00			\$3,400.00				
Customer Section: On the following scale how would you rate Hurricane Services Inc.?					Net: \$5,043.48					
Based on this job, how likely is it you would recommend HSI to a colleague? <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <span style="font-size: small;">Unlikely</span> <div style="text-align: center;"> <input type="checkbox"/> 1   <input type="checkbox"/> 2   <input type="checkbox"/> 3   <input type="checkbox"/> 4   <input type="checkbox"/> 5   <input type="checkbox"/> 6   <input type="checkbox"/> 7   <input type="checkbox"/> 8   <input type="checkbox"/> 9   <input checked="" type="checkbox"/> 10 <span style="font-size: small;">Extremely Likely</span> </div> </div>					Total Taxable	\$ -	Tax Rate:	-	Sale Tax:	\$ -
					State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.					Total:
HSI Representative: <i>Dane Retzloff</i>										

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X

**CUSTOMER AUTHORIZATION SIGNATURE**



**CEMENT TREATMENT REPORT**

Customer:	Val Energy	Well:	Schmaderer 1-23	Ticket:	ICT2323
City, State:	Oakley Ks	County:	Rawlins	Date:	8/30/2019
Field Rep:	Rickey	S-T-R:	24-4-32W	Service:	Surface

Downhole Information	
Hole Size:	12 1/4
Hole Depth:	290
Casing Size:	8 5/8
Casing Depth:	290
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Depth:	ft
Displacement:	17

Slurry	
Weight:	14.8 # / sx
Water / Sx:	6 7/8 gal / sx
Yield:	1 2/5 ft <sup>3</sup> / sx
Bbls / Ft.:	0.0637
Depth:	ft
Volume:	50 bbls
Excess:	120% %
Total Slurry:	52 bbls
Total Sacks:	200 sx

Cement Blend		
Product	%	#
Class A		
Gel		
CaCl		
Metso		
KolSeal		
PhenoSeal		
Salt		

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
6:00 PM				Arrive					
6:05 PM				Safety Meeting					
6:10 PM				Rig up					
6:30 PM				Mix 200 sks of H 325					
6:35 PM				Displace					
6:40 PM				Shut in well 300 psi					
6:45 PM				Wash up					
6:50 PM				Rig down					
6:55 PM				Depart					
				5 bbls to pit					

CREW		UNIT	SUMMARY		
Cementer:	Dane Retzloff	78.0	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Jesse Jones	266.0	#DIV/0! bpm	#DIV/0! psi	- bbls
Bulk #1:	Kale Ochs	242.0			
Bulk #2:					

Hurricane Services, Inc.  
 250 N. Water  
 Wichita, KS 67202