KOLAR Document ID: 1416791

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 # 6569
Name: Carmen Schmitt, Inc.
Address 1: PO BOX 47
Address 2:
City: GREAT BEND State: KS Zip: 67530 + 0047
Contact Person: Matt Suchy
Phone: (620) 793-5100
CONTRACTOR: License # 33350
Name: Southwind Drilling, Inc.
Wellsite Geologist: Brad Rine
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 #:

7/2/2018	7/16/2018	7/16/2018
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-083-21951-00-00
Spot Description:
NW SW SE NW Sec. 13 Twp. 23 S. R. 21 ☐ East ☑ West
2309 Feet from ☑ North / ☐ South Line of Section
1395 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☑ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Hodgeman
Lease Name: HORACEK A Well #: 3
Field Name:
Producing Formation: NA
Elevation: Ground: 2316 Kelly Bushing: 2316
Total Vertical Depth: 5102 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 223 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: 22600 ppm Fluid volume: 825 bbls
Dewatering method used: Evaporated
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: 07/27/2018
☐ **Confidential Release Date:** 07/26/2020
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** Karen Ritter **Date:** 08/06/2018

Operator Name: Carmen Schmitt, Inc. Lease Name: HORACEK A Well #: 3

Sec. 13 Twp. 23 S. R. 21 ☐ East ☑ West County: Hodgeman

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 *(Attach Additional Sheets)*	☑ Yes	☐ No
Samples Sent to Geological Survey	☐ Yes	☑ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☑ Yes	☐ No

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	224	60/40	200	2%gel, 3%gel
Production	7.875	5.5	14	4977	SMD	650	Flocele

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ 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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Carmen Schmitt, Inc.
Well Name	HORACEK A 3
Doc ID	1416791

All Electric Logs Run

Sonic
Gamma Ray
Dual Induction
Dual Comp Porosity
Micro

Form	ACO1 - Well Completion
Operator	Carmen Schmitt, Inc.
Well Name	HORACEK A 3
Doc ID	1416791

Tops

Name	Top	Datum
Anhydrite	1436	890
Heebner	3937	-1611
Brown Lime	4006	1680
Lansing	4021	-1695
B/KC	4335	-2009
Marmaton	4341	-2015
Pawnee	4448	-2122
Ft.Scott	4516	-2190
Cherokee	4538	-2212
Mississippian	4579	-2253
Viola	4760	-2434
Arbuckle	4963	-2637

Form	ACO1 - Well Completion
Operator	Carmen Schmitt, Inc.
Well Name	HORACEK A 3
Doc ID	1416791

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	224	60/40	200	2%gel, 3%gel
Production	7.875	5.5	14	4977	SMD	650	Flocele

DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt Inc.**

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

Horacek A #3

13-23S-21W Hodgeman,KS

Start Date: 2018.07.11 @ 07:21:00
End Date: 2018.07.11 @ 12:39:02
Job Ticket #: 63883 DST #: 1

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

Printed: 2018.07.13 @ 09:58:42

DRILL STEM TEST REPORT

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63883 **DST#: 1**

Test Start: 2018.07.11 @ 07:21:00

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:44:32
Time Test Ended: 12:39:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 72

Interval: 4540.00 ft (KB) To 4590.00 ft (KB) (TVD)
Total Depth: 4590.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

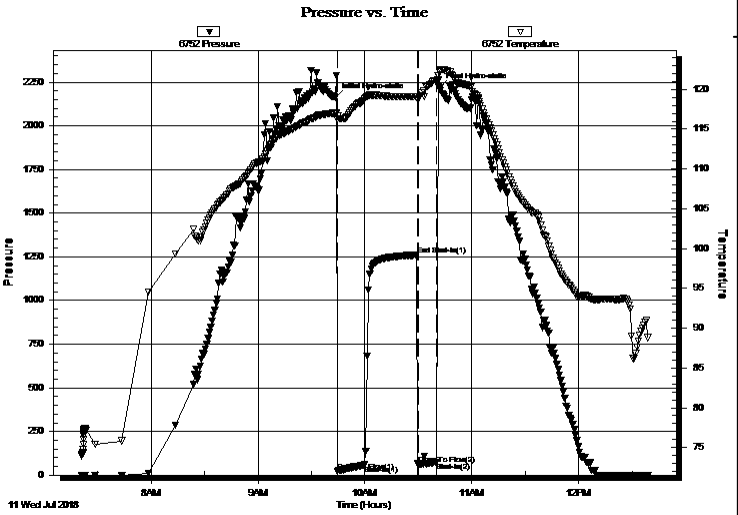
Reference Elevations: 2326.00 ft (KB)
2313.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6752 **Outside**

Press@RunDepth: 57.99 psig @ 4542.00 ft (KB)
Start Date: 2018.07.11 End Date: 2018.07.11
Start Time: 07:21:01 End Time: 12:39:02

Capacity: psig
Last Calib.: 2018.07.11
Time On Btm: 2018.07.11 @ 09:43:17
Time Off Btm: 2018.07.11 @ 10:42:02

TEST COMMENT: IFP 15 Minutes Few bubbles at open then dead
ISI 30 Minutes No blow back
FFP 10 Minutes Few bubbles at open then dead - Flush tool few bubbles then dead - Pull test



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2162.82	117.00	Initial Hydro-static
2	22.55	116.24	Open To Flow (1)
17	57.99	118.78	Shut-In(1)
46	1259.82	119.04	End Shut-In(1)
47	61.16	118.87	Open To Flow (2)
57	74.34	120.87	Shut-In(2)
59	2218.72	122.32	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Light oil cut mud/ Oil 2% Mud 98%	1.68

Gas Rates

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

DRILL STEM TEST REPORT

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63883 **DST#: 1**

Test Start: 2018.07.11 @ 07:21:00

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 09:44:32
Time Test Ended: 12:39:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 72

Interval: 4540.00 ft (KB) To 4590.00 ft (KB) (TVD)
Total Depth: 4590.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

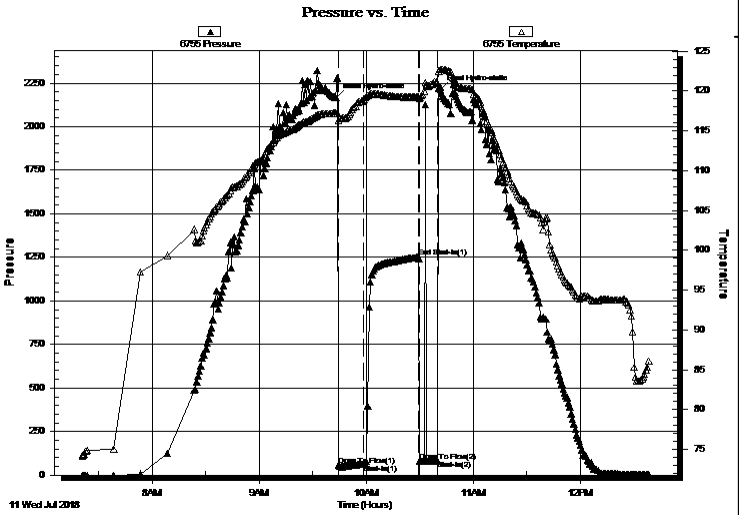
Reference Elevations: 2326.00 ft (KB)
2313.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6755 **Inside**

Press@RunDepth: 1250.66 psig @ 4541.00 ft (KB)
Start Date: 2018.07.11 End Date: 2018.07.11
Start Time: 07:21:01 End Time: 12:39:02

Capacity: psig
Last Calib.: 2018.07.11
Time On Btm: 2018.07.11 @ 09:43:17
Time Off Btm: 2018.07.11 @ 10:41:47

TEST COMMENT: IFP 15 Minutes Few bubbles at open then dead
ISI 30 Minutes No blow back
FFP 10 Minutes Few bubbles at open then dead - Flush tool few bubbles then dead - Pull test



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2165.88	117.22	Initial Hydro-static
2	54.89	116.33	Open To Flow (1)
16	63.80	119.00	Shut-In(1)
46	1250.66	119.22	End Shut-In(1)
47	78.84	119.07	Open To Flow (2)
57	84.13	121.06	Shut-In(2)
59	2213.45	122.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	Light oil cut mud/ Oil 2% Mud 98%	1.68

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63883 **DST#: 1**

Test Start: 2018.07.11 @ 07:21:00

Tool Information

Drill Pipe:	Length:	4543.00 ft	Diameter:	3.80	inches	Volume:	63.73	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
						Total Volume:	63.73	bbl	

Drill Pipe Above KB:	31.00 ft
Depth to Top Packer:	4540.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	49.80 ft
Tool Length:	77.80 ft
Number of Packers:	2
Diameter:	6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		20000.00 lb
Weight to Pull Loose:		80000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	55000.00 lb
	Final	55000.00 lb

Tool Comments: Split shale packer

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut-In Tool	5.00			4517.00		
Hydraulic tool	5.00			4522.00		
Jars	6.00			4528.00		
Safety Joint	2.00			4530.00		
Packer - Shale	5.00			4535.00		
Packer	5.00			4540.00	28.00	Bottom Of Top Packer
Recorder	1.00	6755	Inside	4541.00		
Recorder	1.00	6752	Outside	4542.00		
Anchor	11.00			4553.00		
Change Over Sub	1.00			4554.00		
Drill Pipe	31.80			4585.80		
Change Over Sub	1.00			4586.80		
Bullnose	3.00			4589.80	49.80	Anchor Tool
Total Tool Length:	**77.80**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63883 **DST#: 1**

Test Start: 2018.07.11 @ 07:21:00

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:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.98 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	5700.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	Light oil cut mud/ Oil 2% Mud 98%	1.683

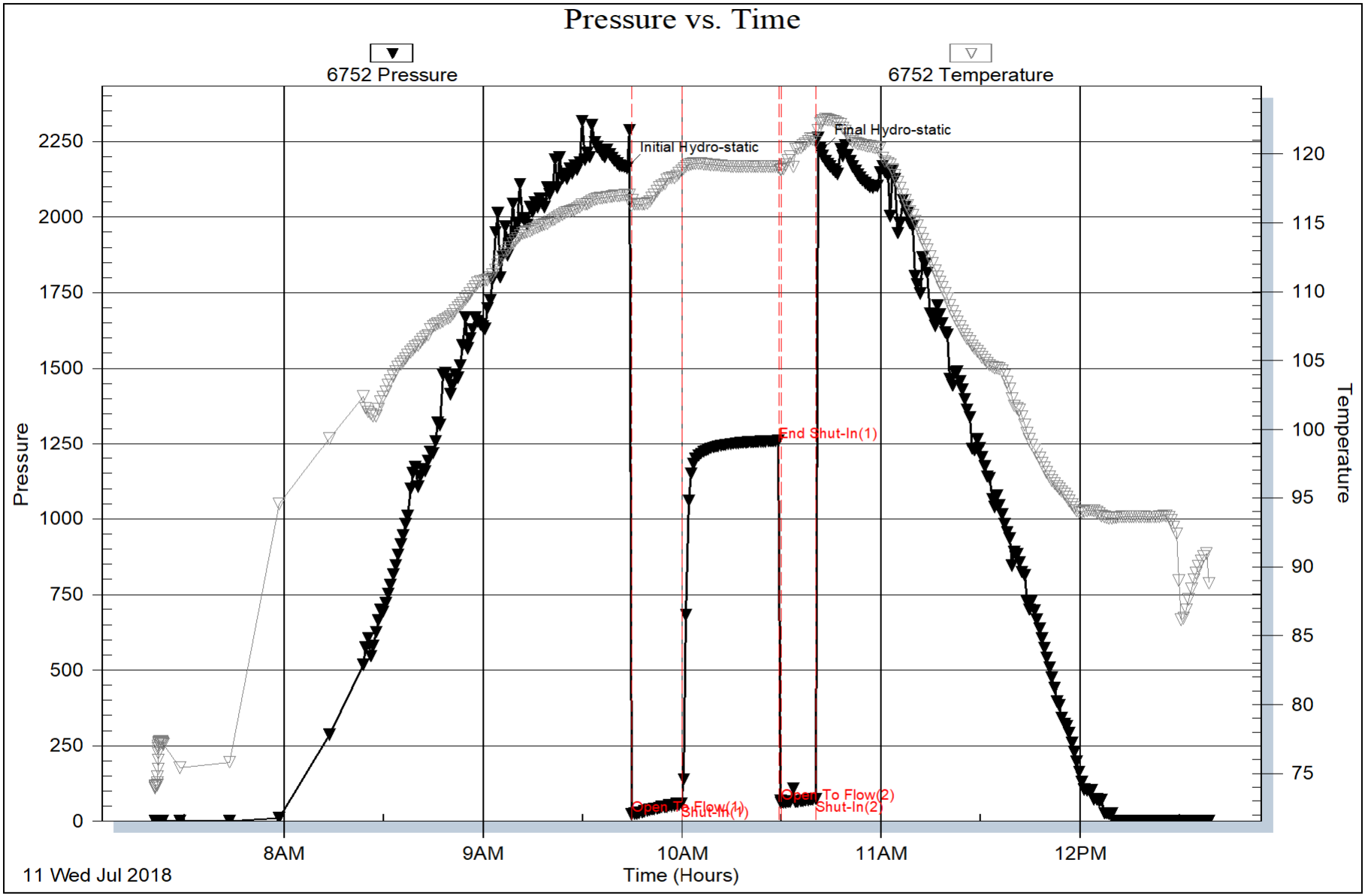
Total Length: 120.00 ft Total Volume: 1.683 bbl

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

Laboratory Name: Laboratory Location:

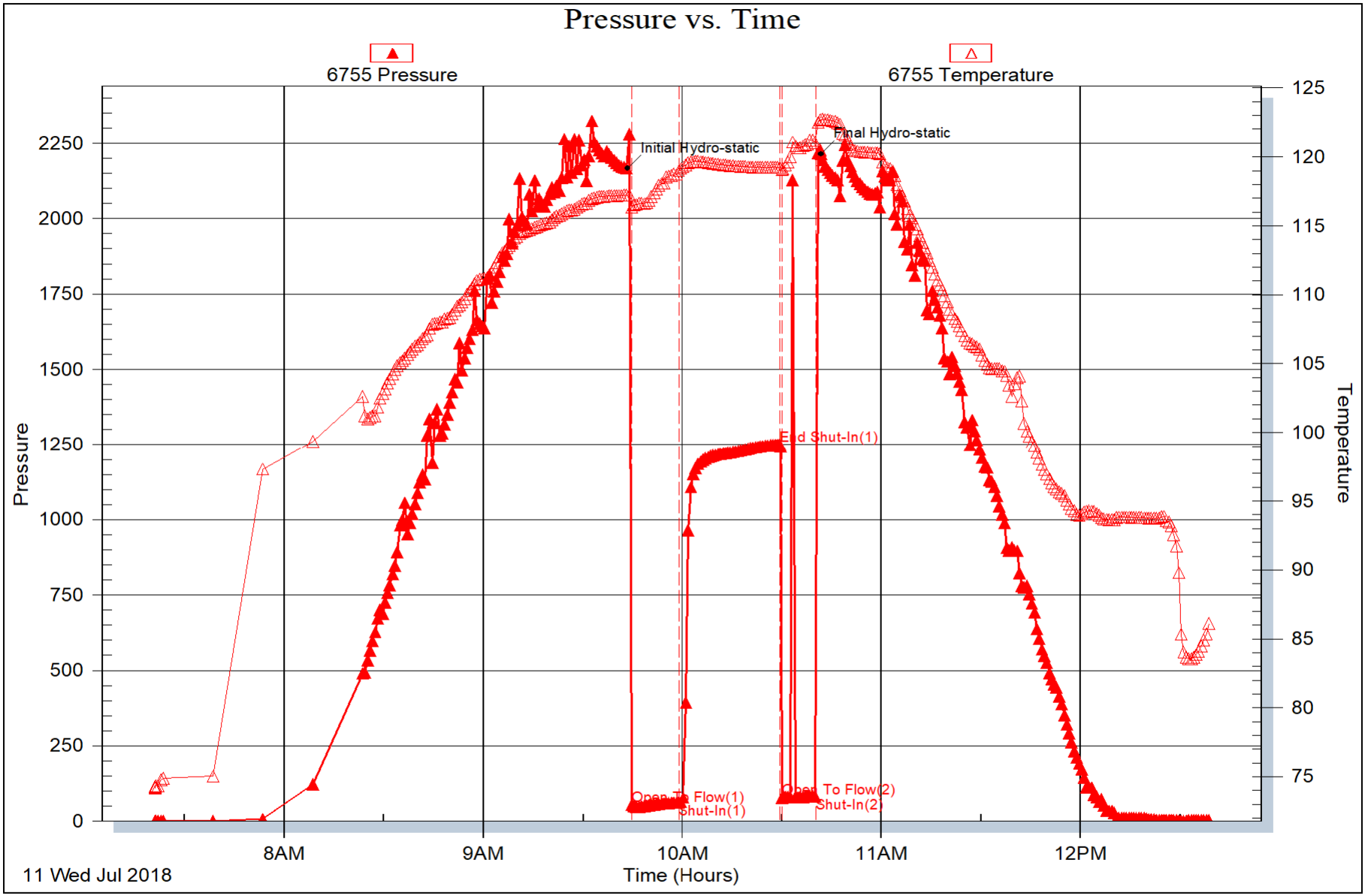
Recovery Comments:

Serial #: 6752 **Outside** Carmen Schmitt Inc. Horacek A #3 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 63883 Printed: 2018.07.13 @ 09:58:42

Serial #: 6755 **Inside** Carmen Schmitt Inc. Horacek A #3 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 63883 Printed: 2018.07.13 @ 09:58:43

DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt Inc.**

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

Horacek A #3

13-23S-21W Hodgeman,KS

Start Date: 2018.07.11 @ 20:59:00
End Date: 2018.07.12 @ 04:27:02
Job Ticket #: 63884 DST #: 2

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

Printed: 2018.07.13 @ 09:57:53

DRILL STEM TEST REPORT

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63884 **DST#: 2**

Test Start: 2018.07.11 @ 20:59:00

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:02:47
Time Test Ended: 04:27:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 72

Interval: 4540.00 ft (KB) To 4595.00 ft (KB) (TVD)
Total Depth: 4595.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

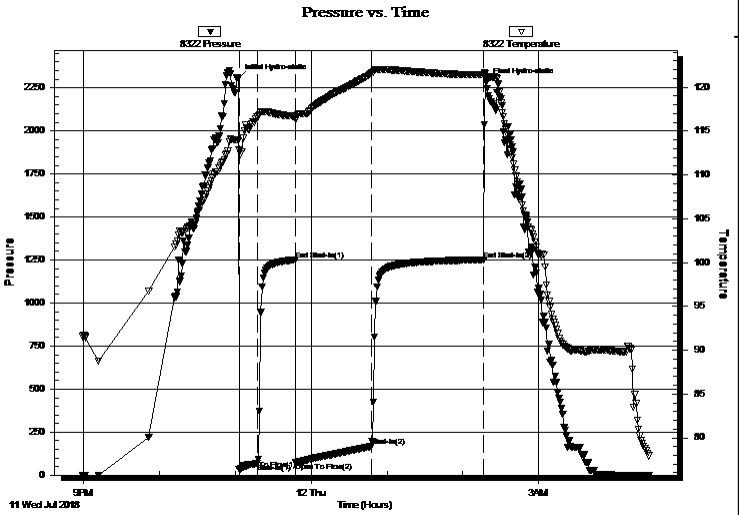
Reference Elevations: 2326.00 ft (KB)
2313.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 8322 **Inside**

Press@RunDepth: 167.88 psig @ 4541.00 ft (KB)
Start Date: 2018.07.11 End Date: 2018.07.12
Start Time: 20:59:01 End Time: 04:27:02

Capacity: psig
Last Calib.: 2018.07.12
Time On Btm: 2018.07.11 @ 23:02:02
Time Off Btm: 2018.07.12 @ 02:18:32

TEST COMMENT: IFP 15 Minutes Blow built to 8"
ISI 30 Minutes No blow back
FFP 60 Minutes Blow built to BOB in 21 minutes
FSI 90 Minutes 3" blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2303.64	113.86	Initial Hydro-static
1	32.91	112.85	Open To Flow (1)
16	68.20	116.64	Shut-In(1)
46	1250.69	116.67	End Shut-In(1)
46	73.77	116.38	Open To Flow (2)
106	167.88	121.60	Shut-In(2)
195	1251.38	121.42	End Shut-In(2)
197	2279.45	121.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Clean oil	0.42
62.00	Oil cut Mud/ Oil 5% Mud 95%	0.87
62.00	Oil spot Muddy Water/ Mud 25% Water 75%	0.87
186.00	Oil cut Watery Mud/ O 20% W 30% M 50%	2.61

Gas Rates

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

DRILL STEM TEST REPORT

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63884 **DST#: 2**

Test Start: 2018.07.11 @ 20:59:00

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 23:02:47
Time Test Ended: 04:27:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 72

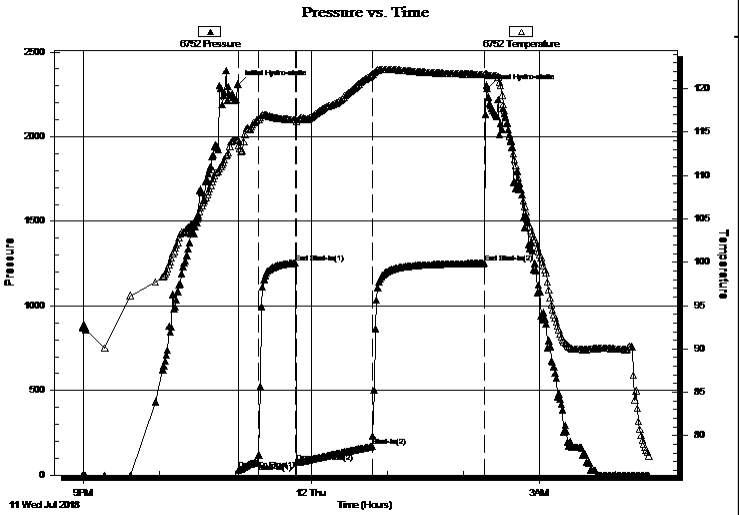
Interval: 4540.00 ft (KB) To 4595.00 ft (KB) (TVD)
Total Depth: 4595.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2326.00 ft (KB)
2313.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6752 **Outside**
Press@RunDepth: 1252.08 psig @ 4542.00 ft (KB)
Start Date: 2018.07.11 End Date: 2018.07.12
Start Time: 20:59:01 End Time: 04:27:02

Capacity: psig
Last Calib.: 2018.07.12
Time On Btm: 2018.07.11 @ 23:01:47
Time Off Btm: 2018.07.12 @ 02:18:32

TEST COMMENT: IFP 15 Minutes Blow built to 8"
ISI 30 Minutes No blow back
FFP 60 Minutes Blow built to BOB in 21 minutes
FSI 90 Minutes 3" blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2307.19	114.06	Initial Hydro-static
1	31.53	113.45	Open To Flow (1)
16	72.42	116.46	Shut-In(1)
46	1253.48	116.42	End Shut-In(1)
47	73.77	116.27	Open To Flow (2)
106	170.26	121.63	Shut-In(2)
195	1252.08	121.68	End Shut-In(2)
197	2282.83	121.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Clean oil	0.42
62.00	Oil cut Mud/ Oil 5% Mud 95%	0.87
62.00	Oil spot Muddy Water/ Mud 25% Water 7%	0.87
186.00	Oil cut Watery Mud/ O 20% W 30% M 50%	2.61

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63884 **DST#: 2**

Test Start: 2018.07.11 @ 20:59:00

Tool Information

Drill Pipe:	Length:	4543.00 ft	Diameter:	3.80	inches	Volume:	63.73	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
						Total Volume:	63.73	bbl	

Drill Pipe Above KB:	31.00 ft
Depth to Top Packer:	4540.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	54.80 ft
Tool Length:	82.80 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		20000.00 lb
Weight to Pull Loose:		75000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	55000.00 lb
	Final	55000.00 lb

Tool Comments: Split shale packer

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut-In Tool	5.00			4517.00		
Hydraulic tool	5.00			4522.00		
Jars	6.00			4528.00		
Safety Joint	2.00			4530.00		
Packer - Shale	5.00			4535.00		
Packer	5.00			4540.00	28.00	Bottom Of Top Packer
Recorder	1.00	8322	Inside	4541.00		
Recorder	1.00	6752	Outside	4542.00		
Anchor	16.00			4558.00		
Change Over Sub	1.00			4559.00		
Drill Pipe	31.80			4590.80		
Change Over Sub	1.00			4591.80		
Bullnose	3.00			4594.80	54.80	Anchor Tool
Total Tool Length:	**82.80**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63884 **DST#: 2**

Test Start: 2018.07.11 @ 20:59:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	38 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	24000 ppm
Viscosity:	53.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.97 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	5700.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Clean oil	0.421
62.00	Oil cut Mud/ Oil 5% Mud 95%	0.870
62.00	Oil spot Muddy Water/ Mud 25% Water 75%	0.870
186.00	Oil cut Watery Mud/ O 20% W 30% M 50%	2.609

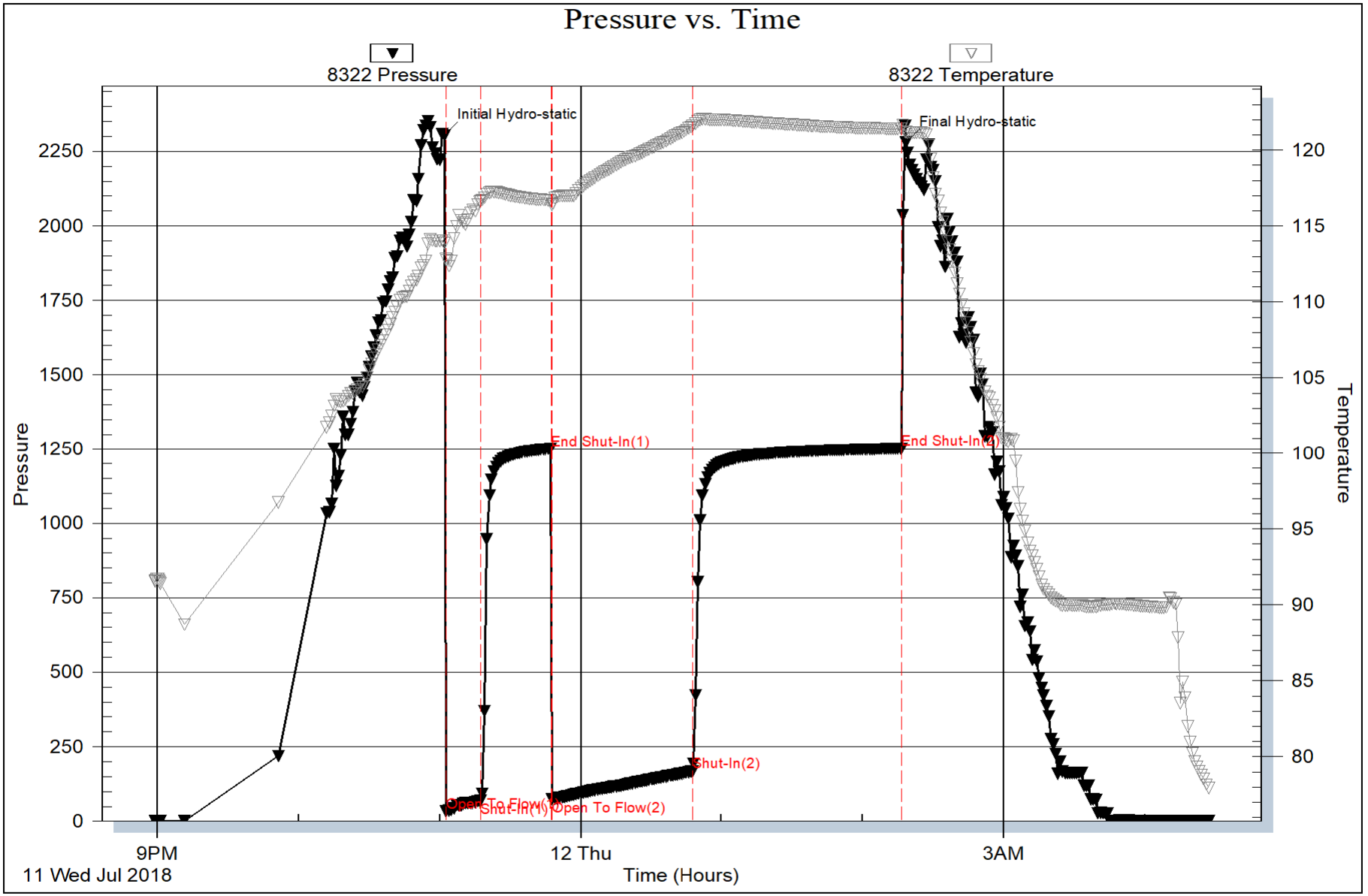
Total Length: 340.00 ft Total Volume: 4.770 bbl

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

Laboratory Name: Laboratory Location:

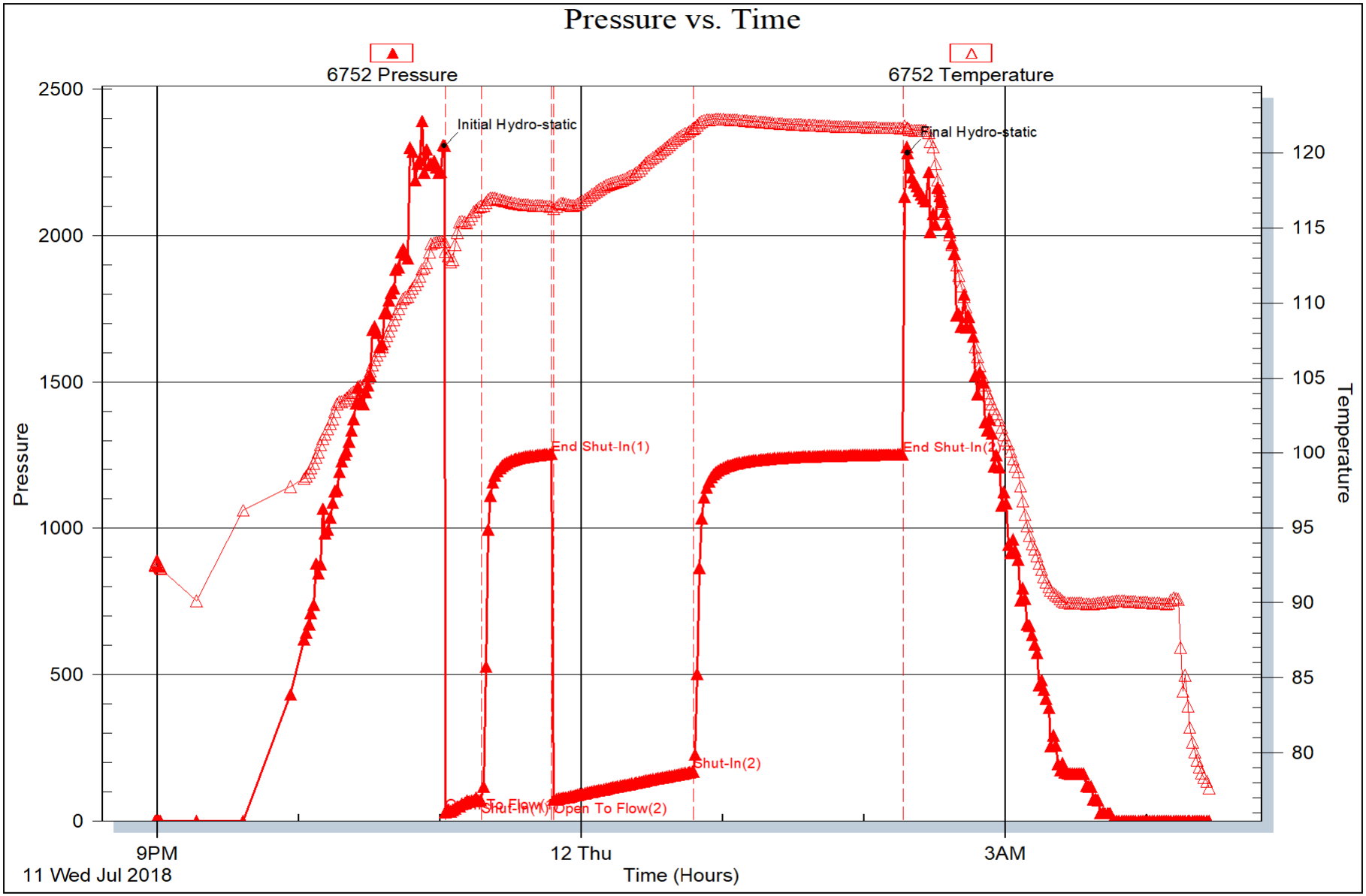
Recovery Comments: recovery resistivity .268 ohms @73 deg

Serial #: 8322 **Inside** Carmen Schmitt Inc. Horacek A #3 DST Test Number: 2

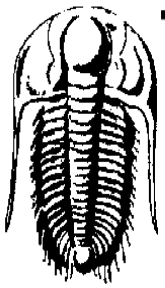


Trilobite Testing, Inc Ref. No: 63884 Printed: 2018.07.13 @ 09:57:53

Serial #: 6752 **Outside** Carmen Schmitt Inc. Horacek A #3 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 63884 Printed: 2018.07.13 @ 09:57:54



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt Inc.**

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

Horacek A #3

13-23S-21W Hodgeman,KS

Start Date: 2018.07.12 @ 17:33:00

End Date: 2018.07.12 @ 22:55:02

Job Ticket #: 63885 DST #: 3

Trilobite Testing, Inc

1515 Commerce Parkway Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2018.07.13 @ 09:57:31

DRILL STEM TEST REPORT

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63885 **DST#: 3**

Test Start: 2018.07.12 @ 17:33:00

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:51:32
Time Test Ended: 22:55:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 72

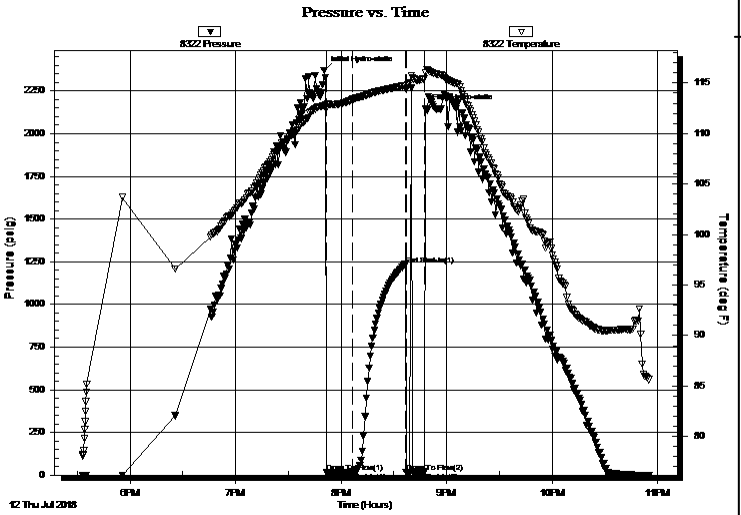
Interval: 4595.00 ft (KB) To 4615.00 ft (KB) (TVD)
Total Depth: 4615.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2326.00 ft (KB)
2313.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 8322 **Inside**
Press@RunDepth: 18.35 psig @ 4596.00 ft (KB)
Start Date: 2018.07.12 End Date: 2018.07.12
Start Time: 17:33:01 End Time: 22:55:02

Capacity: psig
Last Calib.: 2018.07.12
Time On Btm: 2018.07.12 @ 19:50:17
Time Off Btm: 2018.07.12 @ 20:48:02

TEST COMMENT: IFP 15 Minutes Intermittent surface blow for 10 minutes then dead
ISI 30 Minutes No blow back
FFP 10 Minutes Dead/ Flush tool no help Pull test



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2371.34	112.70	Initial Hydro-static
2	16.90	112.50	Open To Flow (1)
16	18.35	113.36	Shut-In(1)
46	1233.58	114.75	End Shut-In(1)
47	17.91	114.36	Open To Flow (2)
58	19.02	115.46	Shut-In(2)
58	2148.94	116.01	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100%	0.07

Gas Rates

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

DRILL STEM TEST REPORT

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63885 **DST#: 3**

Test Start: 2018.07.12 @ 17:33:00

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:51:32
Time Test Ended: 22:55:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 72

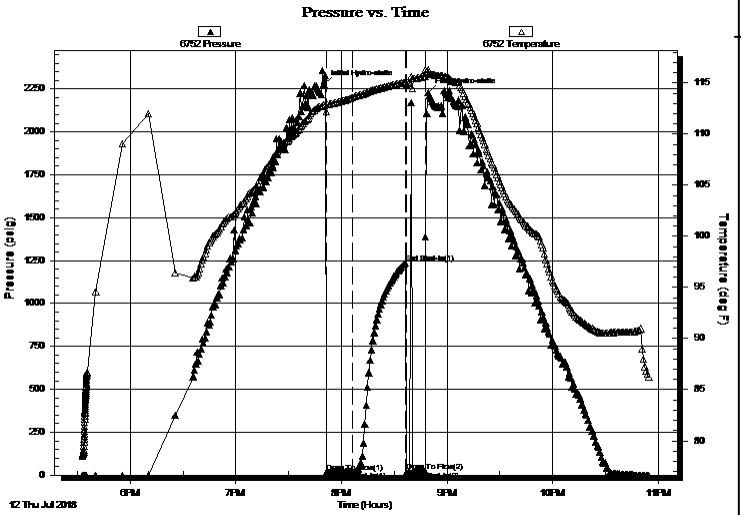
Interval: 4595.00 ft (KB) To 4615.00 ft (KB) (TVD)
Total Depth: 4615.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2326.00 ft (KB)
2313.00 ft (CF)
KB to GR/CF: 13.00 ft

Serial #: 6752 **Outside**
Press@RunDepth: 1236.59 psig @ 4597.00 ft (KB)
Start Date: 2018.07.12 End Date: 2018.07.12
Start Time: 17:33:01 End Time: 22:55:02

Capacity: psig
Last Calib.: 2018.07.12
Time On Btm: 2018.07.12 @ 19:50:02
Time Off Btm: 2018.07.12 @ 20:49:17

TEST COMMENT: IFP 15 Minutes Intermittent surface blow for 10 minutes then dead
ISI 30 Minutes No blow back
FFP 10 Minutes Dead/ Flush tool no help Pull test



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2277.76	112.84	Initial Hydro-static
2	17.73	112.18	Open To Flow (1)
17	19.90	113.59	Shut-In(1)
47	1236.59	115.07	End Shut-In(1)
47	19.69	114.86	Open To Flow (2)
58	20.51	115.65	Shut-In(2)
60	2226.92	116.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100%	0.07

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63885 **DST#: 3**

Test Start: 2018.07.12 @ 17:33:00

Tool Information

Drill Pipe:	Length:	4575.00 ft	Diameter:	3.80	inches	Volume:	64.18	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
						Total Volume:	64.18	bbl	

Drill Pipe Above KB:	7.00 ft
Depth to Top Packer:	4595.00 ft
Depth to Bottom Packer:	ft
Interval betw een Packers:	20.00 ft
Tool Length:	47.00 ft
Number of Packers:	2 Diameter: 6.75 inches

Tool Weight:		2000.00 lb
Weight set on Packer:		20000.00 lb
Weight to Pull Loose:		65000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	56000.00 lb
	Final	56000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut-In Tool	5.00			4573.00		
Hydraulic tool	5.00			4578.00		
Jars	5.00			4583.00		
Safety Joint	2.00			4585.00		
Top Packer	5.00			4590.00		
Packer	5.00			4595.00	27.00	Bottom Of Top Packer
Recorder	1.00	8322	Inside	4596.00		
Recorder	1.00	6752	Outside	4597.00		
Anchor	15.00			4612.00		
Bullnose	3.00			4615.00	20.00	Anchor Tool
Total Tool Length:	**47.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt Inc.

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

13-23S-21W Hodgeman,KS

Horacek A #3

Job Ticket: 63885 **DST#: 3**

Test Start: 2018.07.12 @ 17:33:00

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:	60.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	7600.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

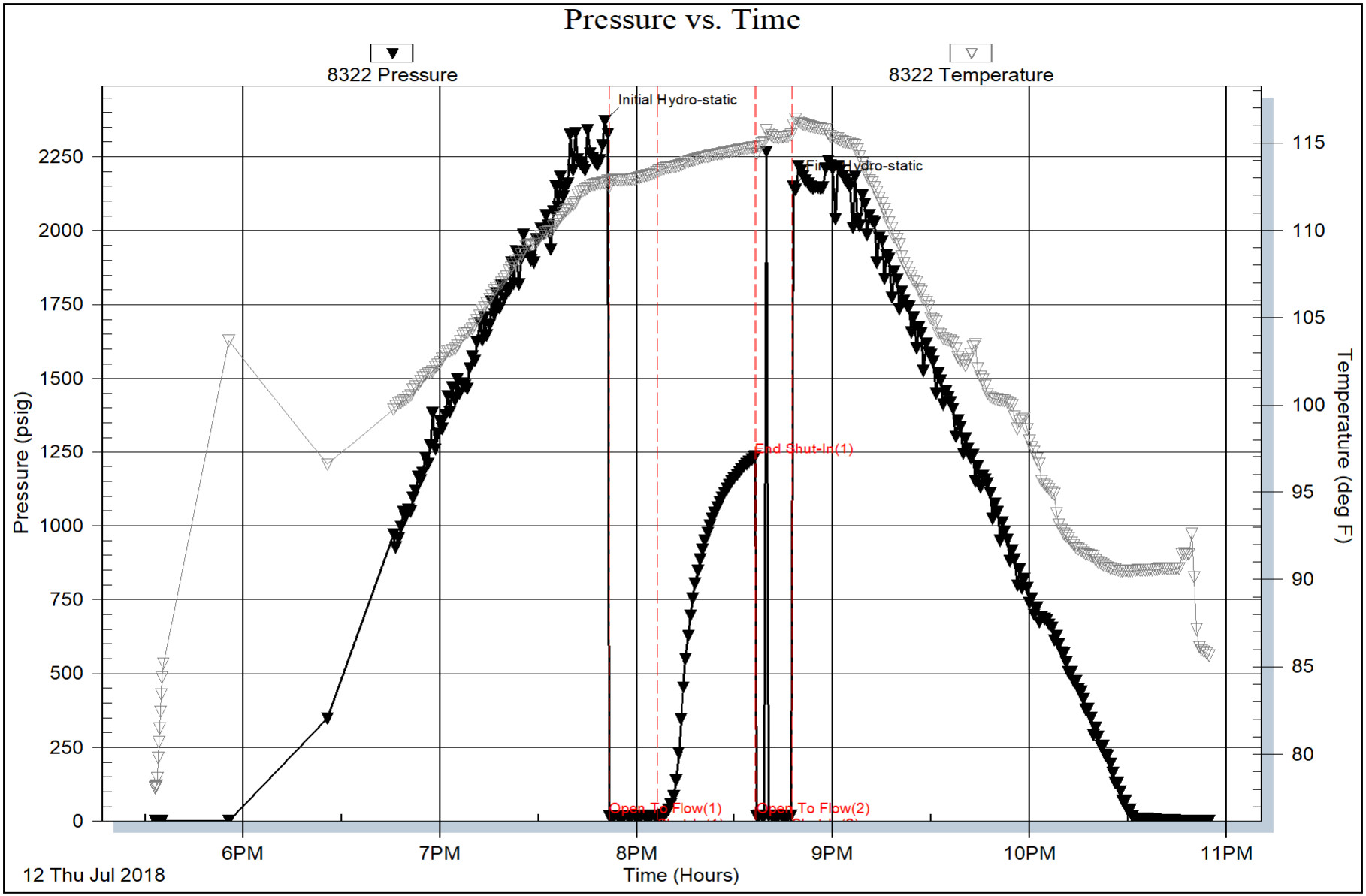
Recovery Table

Length ft	Description	Volume bbl
5.00	Mud 100%	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

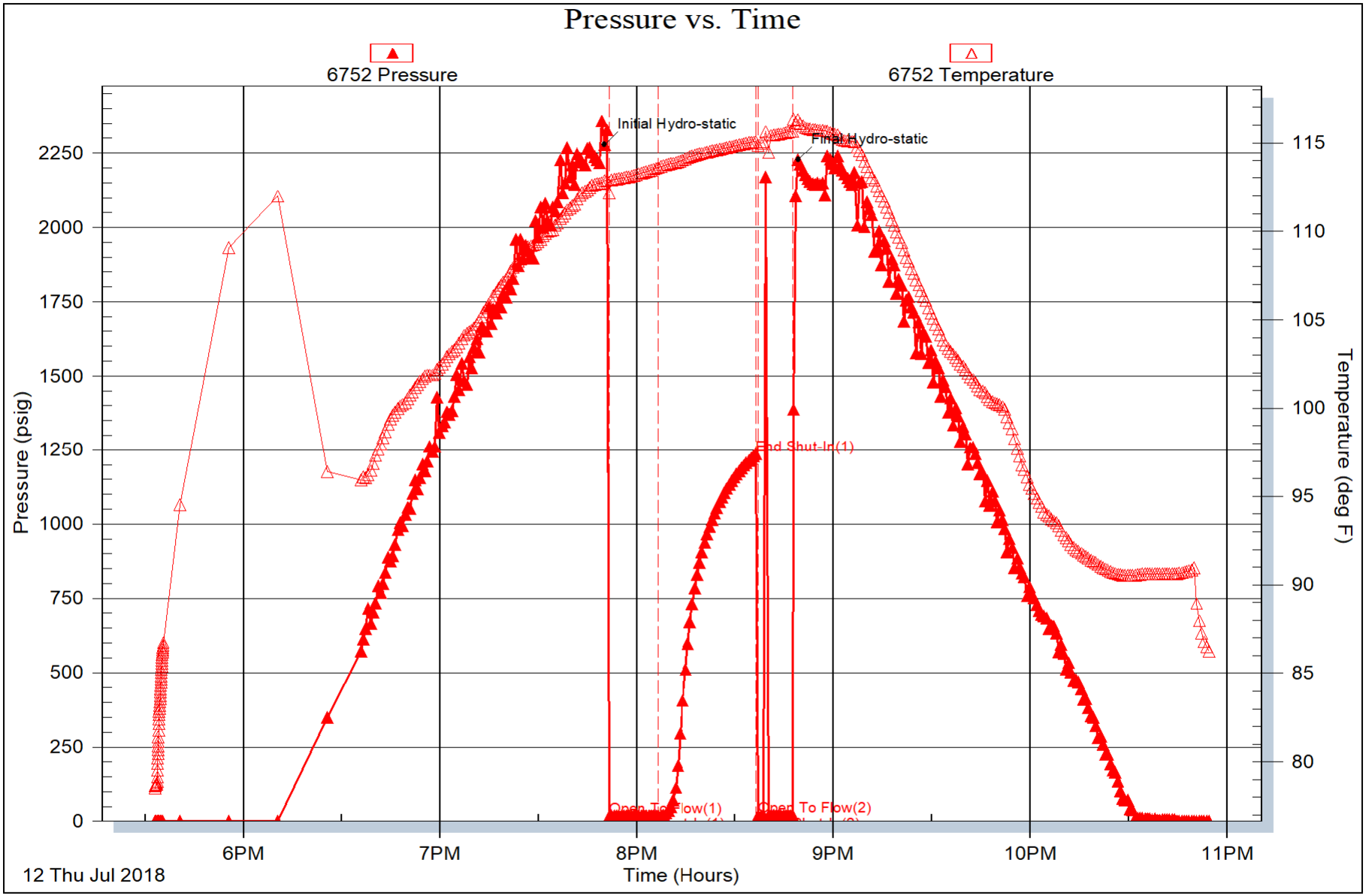
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8322 **Inside** Carmen Schmitt Inc. Horacek A #3 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 63885 Printed: 2018.07.13 @ 09:57:32

Serial #: 6752 **Outside** Carmen Schmitt Inc. Horacek A #3 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 63885 Printed: 2018.07.13 @ 09:57:32

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 63883

Well Name & No. Horacek A #3 Test No. 1 Date 11 Jul 18

Company Carmen Schmitt Inc. Elevation 2326 KB 2316 GL

Address PO Box 47 Great Bend Kansas 675304+0047

Co. Rep / Geo. Brad Rine Rig Southwind Rig 8

Location: Sec. 13 Twp 23S Rge. 21W Co. Hodgeman State KS

Interval Tested 4540-4590 Zone Tested Mississippi

Anchor Length 50 Drill Pipe Run 4543 Mud Wt. 9.35

Top Packer Depth 4535 Drill Collars Run — Vis 53

Bottom Packer Depth 4540 Wt. Pipe Run — WL 8.0

Total Depth 4590 Chlorides 5700 ppm System LCM 1#

Blow Description I.F. Few bubbles at open then dead

I.S.I No blow back

F.F. Few bubbles then dead / Flush tool / Few bubbles then dead pull test

Rec 120	Feet of Light oil cut mud	%gas	2 %oil	%water	98 %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 120 BHT 121 Gravity ____ API RW ____ @ ____ °F Chlorides ____ ppm

(A) Initial Hydrostatic	2162	☒ Test	1150
(B) First Initial Flow	22	☒ Jars	250
(C) First Final Flow	57	☒ Safety Joint	75
(D) Initial Shut-In	1259	☐ Circ Sub	
(E) Second Initial Flow	61	☐ Hourly Standby	
(F) Second Final Flow	74	☒ Mileage	116 116
(G) Final Shut-In	7	☐ Sampler	
(H) Final Hydrostatic	2218	☐ Straddle	
		☒ Shale Packer	250
Initial Open	15	☐ Extra Packer	
Initial Shut-In	30	☐ Extra Recorder	
Final Flow	10	☐ Day Standby	
Final Shut-In		☐ Accessibility	
		Sub Total	1841

T-On Location	6:10 am
T-Started	7:21 am
T-Open	9:43 am
T-Pulled	10:38 am
T-Out	12:41 pm
Comments	
☒ Ruined Shale Packer	350
☐ Ruined Packer	
☐ Extra Copies	
Sub Total	350
Total	2191
MP/DST Disc't	

Approved By Brad Rine Our Representative [signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 63884

Well Name & No. Horacek A #3 Test No. 2 Date 11 Jul 18

Company Carmen Schmitt Inc. Elevation 2326 KB 2316 GL

Address PO Box 47 Great Bend Kansas 67530

Co. Rep / Geo. Brad Rine Rig Southwind Rig 8

Location: Sec. 13 Twp 23S Rge. 21W Co. Hodgeman State KS

Interval Tested 4546-4595 Zone Tested Mississippi

Anchor Length 55 Drill Pipe Run 4543 Mud Wt. 9.35

Top Packer Depth 4535 Drill Collars Run — Vis 53

Bottom Packer Depth 4540 Wt. Pipe Run — WL 8.0

Total Depth 4595 Chlorides 5700 ppm System LCM 1#

Blow Description I.F. Blow built to 8 inches

I.S.I No blow back

F.F. Blow built to BOB in 21 minutes

F.S.I 3 inch blow back

Rec 30	Feet of Clean Oil	%gas	100 %oil	%water	%mud
Rec 62	Feet of Oil cut Mud	%gas	5 %oil	%water	95 %mud
Rec 62	Feet of Oil spotted Muddy Water	%gas	%oil	75 %water	25 %mud
Rec 186	Feet of Oil cut Watery Mud	%gas	20 %oil	30 %water	50 %mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 340 BHT 121 Gravity 38 API RW .268 @ 73 °F Chlorides 24,000 ppm

(A) Initial Hydrostatic	2303	☒ Test	1150	T-On Location	
(B) First Initial Flow	32	☒ Jars	250	T-Started	8:59 pm
(C) First Final Flow	68	☒ Safety Joint	75	T-Open	11:01 pm
(D) Initial Shut-In	1250	☐ Circ Sub		T-Pulled	2:16 am
(E) Second Initial Flow	73	☐ Hourly Standby		T-Out	4:27 am
(F) Second Final Flow	167	☒ Mileage	116 116	Comments	
(G) Final Shut-In	1251	☐ Sampler			
(H) Final Hydrostatic	2279	☒ Straddle		☒ Ruined Shale Packer	350
		☒ Shale Packer	250	☐ Ruined Packer	
Initial Open	15	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	30	☐ Extra Recorder		Sub Total	350
Final Flow	60	☐ Day Standby		Total	2191
Final Shut-In	90	☐ Accessibility		MP/DST Disc't	
		Sub Total	1841		

Approved By Brad Rine Our Representative

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

4/10

Test Ticket

NO. 63885

Well Name & No. Horacek A #3 Test No. 3 Date 12 Jul 18

Company Carmen Schmitt Inc. Elevation 2326 KB 2316 GL

Address PO Box 47 Great Bend Kansas 67530

Co. Rep / Geo. Brad Rine Rig Southwind Rig 8

Location: Sec. 13 Twp 23S Rge. 21W Co. Hodgeman State KS

Interval Tested 4595-4615 Zone Tested Mississippi

Anchor Length 20 Drill Pipe Run 4575 Mud Wt. 9.0

Top Packer Depth 4590 Drill Collars Run — Vis 60

Bottom Packer Depth 4595 Wt. Pipe Run — WL 8.8

Total Depth 4615 Chlorides 7600 ppm System LCM 1#

Blow Description I.F. Intermittent surface blow for 10 minutes then dead

I.S.I. No blow back

F.F. Dead Flush tool no help Pull test

Rec 5	Feet of Mud	%gas	%oil	%water	100 %mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 113 Gravity ____ API RW ____ @ ____ °F Chlorides ____ ppm

(A) Initial Hydrostatic 2371	☒ Test 1150	T-On Location	
(B) First Initial Flow 16	☒ Jars 250	T-Started 5:33 pm	
(C) First Final Flow 18	☒ Safety Joint 75	T-Open 7:50 pm	
(D) Initial Shut-In 1233	☐ Circ Sub	T-Pulled 8:45 pm	
(E) Second Initial Flow 17	☐ Hourly Standby	T-Out 10:57 pm	
(F) Second Final Flow 19	☒ Mileage 116 116	Comments	
(G) Final Shut-In 2	☐ Sampler		
(H) Final Hydrostatic 2148	☐ Straddle	☐ Ruined Shale Packer	
	☐ Shale Packer	☐ Ruined Packer	
Initial Open 15	☐ Extra Packer	☐ Extra Copies	
Initial Shut-In 30	☐ Extra Recorder	Sub Total 0	
Final Flow 10	☐ Day Standby	Total 1591	
Final Shut-In	☐ Accessibility	MP/DST Disc't	
	Sub Total 1591		

Approved By Brad Rine Our Representative

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

Well Name:	**Horacek "A" #3 - Carmen Schmitt, Inc.**
API:	**15-083-21951-00-00**
Location:	**NW-SW-SE-NW, Section 13-23S-21W**
License Number:	**KCC # 6569**
Region:	**Hodgeman County, Kar**
Spud Date:	**July 02, 2018**
Drilling Completed:	**July 15, 2018**
Surface Coordinates:	**2309' FNL & 1395' FWL, Of Section**
Results:	**5-1/2" Casing Set**
Bottom Hole Coordinates:	**Vertical Wellbore**
Field:	**Horacek**
Ground Elevation (ft):	**2316 Ft.**
K.B. Elevation (ft):	**2326 Ft.**
Logged Interval (ft):	**3800 Ft. To: 5102 Ft.**
Total Depth (ft):	*** RTD 5102 Ft. LTD 5036 Ft.**
Formation:	**Mississippian at Total Depth**
Type of Drilling Fluid:	**Chemical**

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

Operator

Company: Carmen Schmitt, Inc.
Address: PO Box 47
Great Bend, Kansas 67530-0047

Geologist

Name: M. Bradford Rine
Company: Consulting Geologist, Kansas Lic. #204, Wyo #189, AAPG Cert. #2647
Address: 100 South Main, Suite #320A
Wichita, Kansas 67202

Remarks

Based on sample observations, drill stem test results, and electric log evaluation, it was the decision of the Operator, to set production casing on the "Horacek 'A' #3", for further testing, on July 15, 2018.

Respectfully submitted,
M. Bradford Rine, geologist

Drilling Information

Rig: Southwind Drilling #8
Pump: Emsco D-375 6x14
Drawworks: RMI 550
Collars: 486' 2-1/4" x 6-1/4"
Drillpipe: 4-1/2" 16.6# XH
Toolpusher: Bill Sanders

Mud: Mudco (Jason Whiting)
Gas Detector: None
Drill Stem Tests: Trilobite (Ken Swinney)
Logs: Pioneer (J. Henrickson)
Water: Farm Pond in Section
Company Representatives:
Office: Carmen Schmitt
Field: Curtis Hitchmann

Daily Drilling Status

Date:	Operations/Depth/Comments
07-02-18	MIRT, RU, Spud @ 0'
07-03-18	Shut Down for Holiday @ 224'
07-04-18	Shut Down for Holiday @ 224'
07-05-18	Drill Out Plug @ 224'
07-06-18	Drilling @ 1439'
07-07-18	Drilling @ 2680'
07-08-18	Drilling @ 3365'
07-09-18	Drilling @ 4012'
07-10-18	Drilling @ 4412'
07-11-18	Trip Out of Hole for DST #1 @ 4590'
07-12-18	Trip Back in Hole after DST #2 @ 4595'
07-13-18	Drilling @ 4680'
07-14-18	Drilling @ 4977', Log PM @ 5040'
07-15-18	Laying down Drill Pipe @ 5102', Cement Casing, Release rig.

	Results:	Not Available		(Well A)	Oil	Well B)	Oil		
	Carmen Schmitt, Inc.			Carmen Schmitt, Inc.		Carmen Schmitt, Inc.			
	Horacek A #3			Horacek "A" #1		Horacek "A" #2			
	2309' FNL & 1395' FWL			1820'FNL & 1000'FWL		1695' FNL & 330' FWL			
	Sec. 13-23S-21W			Sec. 13-23S-21W		Sec. 13-23S-21W			
		2326	KB	2316	KB	2331	KB	Well A	Well B
Formations	Sample	E-Log	Datum	E-Log	Datum	E-Log	Datum	Comparison(s)	
Anhydrite	1439	1436	890	1426	890	1436	895	0	-5
B/Anhydrite	1458	1458	868	1447	869	1458	873	-1	-5
Heebner Sh.	3939	3937	-1611	3921	-1605	3932	-1601	-6	-10
Brown Lime	4010	4006	-1680	3994	-1678	4008	-1677	-2	-3
Lansing	4023	4021	-1695	4008	-1692	4022	-1691	-3	-4
Stark Sh.	4252	4248	-1922	4232	-1916	4251	-1920	-6	-2
B/Kansas City	4339	4335	-2009	4320	-2004	4337	-2006	-5	-3
Marmaton	4344	4341	-2015	4327	-2011	4339	-2008	-4	-7
Pawnee	4448	4448	-2122	4434	-2118	4444	-2113	-4	-9
Ft. Scott	4518	4516	-2190	4502	-2186	4510	-2179	-4	-11
Cherokee Sh.	4542	4538	-2212	4525	-2209	4536	-2205	-3	-7
Mississippian	4582	4579	-2253	4567	-2251	4580	-2249	-2	-4
Viola	4762	4760	-2434	NDE		NDE			
Simpson	4930	4926	-2600	NDE		NDE			
Arbuckle	4968	4963	-2637	NDE		NDE			
Total Depth *	5102	5036	-2710	4576	-2260	4590	-2259	-450	-451

* Decision made to drill to 5102 ft after logging at original RTD of 5040 ft.

Casing Record, Bit Record, Deviation Surveys

CASING:

Conductor: None

Surface: Ran 5 jts new 8-5/8" 23# casing, set @ 223'. (Copeland) Cement with 200 sx Common, 2% gel, 3% CC. Cement did circulate. Plug down at 8:15 PM, July 02, 2018.

Production: Ran 120 joints new 5-1/2" 14# casing, set @ 4977 ft with packer shoe. (Swift) Pumped 500 gal mud flush followed by 20 bbl KCL flush. Plugged Rat hole with 30 sx, plugged Mouse hole with 20 sx. Cement casing with 400 sx SMD @ 11.2 ppg, 100 sx @ 11.8 ppg, 75 sx @ 12.5 ppg, and 75 sx @ 14.5 ppg. Landed plug at 2200#, plug held. Circulated 50 sx to pit.

BITS:

No.	Size	Make	Model	Depth In	Depth Out	Hours
1	12-1/4	Jz	Retip	0	224	1.50
2	7-7/8	Varel	HE29H	224	5102	139.50

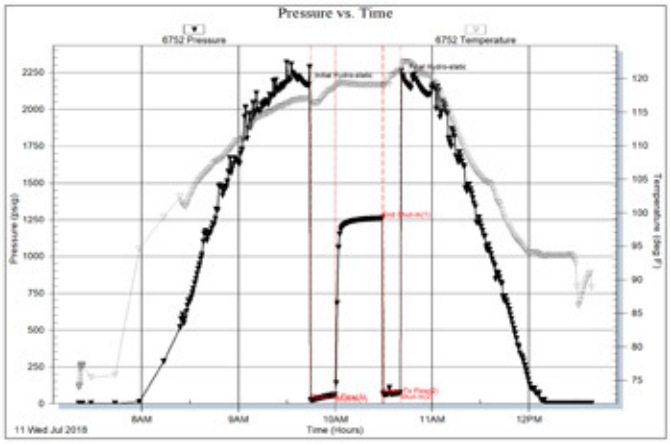
DEVIATION SURVEYS:

Deviation:	Depth:	Deviation:	Depth:
0.75*	224'	2.00*	5040'
0.50*	4590'		

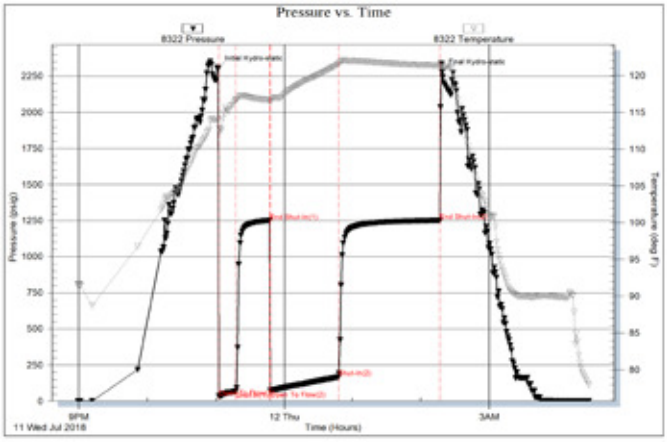
PIPE STRAPS:

Difference:	depth:
0.10' short	4590'

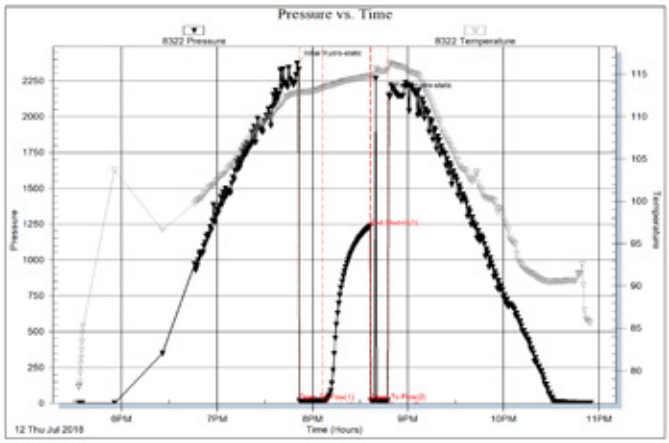
DST #1: 4540-4590 (Mississippi)
Times: 15-30-10-out
Initial Open: Few surface bubbles, then died
Final Open: Few surface bubbles,then died, flushed tool, no help
Rec: 120' SOCM: 02% oil 98% mud
IHP: 2162 FHP: 2218
IFP: 22-57 FFP: 61-74
ISIP: 1259 FSIP: NA
BHT: 121*F



DST #2: 4540-4595 (Mississippi)
Times: 15-30-60-90
Initial Open: Mod Blow, built to 8" i.b., No Return Blow
Final Open: Stg Blow, b.o.b. 21 min, Return Blow built to 3" i.b.
Rec: 340' Total Fluid
30' Clean Oil (API 38*)
62' SOCM: 05%o 95%m
62' MCW: 75%w 25%m
186' OWCM: 20%o 30%w 50%m
(Chl/Wtr 24,000 ppm Chl/Mud 5700 ppm)
IHP: 2303 FHP: 2279
IFP: 32-68 FFP: 73-167
ISIP: 1250 FSIP: 1251
BHT: 121*F



DST #3: 4595-4615 (Mississippi)
Times:15-30-10-out
Initial Open: Wk Intermittent Surf Blow, died in 10 min
Final Open: No Blow, flush tool no help
Rec: 5' mud
IHP: 2371 FHP: 2148
IFP: 16-18 FFP: 17-19
ISIP: 1233 FSIP: NA
BHT: 113*F



Rock Types

Congl granite wash
dol ls limey dol
New symbol
Dolom ls limey dol
New symbol
Anhy
Bent
Brec
Cht
Clyst
Black shale/coal
Congl
Dol
Gyp
Igne
Lmst
Meta
Mrlst
Salt
Shale
Shcol
Shgy
Sltst
Ss
Till
Sltysh
Shlysiltst
Sandyls

Accessories

MINERAL
Anhy
Arggrn
Arg
Bent
Bit
Brecfrag
Calc
Carb
Chtdk
Chtlt
Dol
Feldspar
Ferrpel
Ferr
Glau
Gyp
Hvymin
Kaol
Marl
Minxl
Nodule
Phos
Pyr
Salt
Sandy
Silt
Sil
Sulphur
Tuff

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

STRINGER
Anhy
Shale
Bent
Coal/shale
Dol
Gyp
Ls
Mrst
Sltstrg
Ssstrg

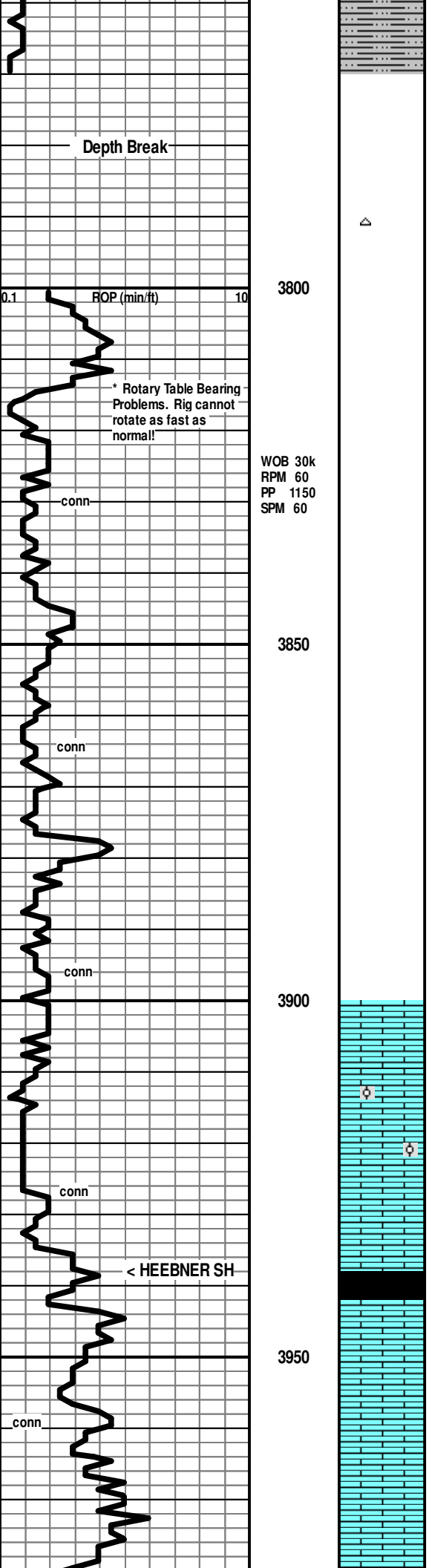
TEXTURE
Boundst
Chalky
Cryxln
Earthy
Finexln
Grainst
Lithogr
Microxln
Mudst
Packst
Wackest

Other Symbols

OIL SHOW
Oil & gas show
Gas show
Even
Spotted
Trace or questionable
Dead
Gas

INTERVAL
Core
Dst

ROP (min/ft)	Depth	Lithology	Shows	Geological Descriptions	Remarks
0.1 ROP (min/ft) 10	1400				
< ANHYDRITE	50			<---------- 1439 (+887) Anhydrite Interval, based on drill time only!	
< B/ANHYDRITE				<----------1458 (+868)	



3800

WOB 30k
RPM 60
PP 1150
SPM 60

3850

3900

Ls cr, fn xln, pr xln por, grainy text in pt, foss

Ls wh-cr-tan, fn xln, pr-fr xln por in pt, chalky in pt, scatt vugs, foss, ool in pt

<---------- 3939 (-1613)

Sh black, carb (first arrival in 3960' spl)

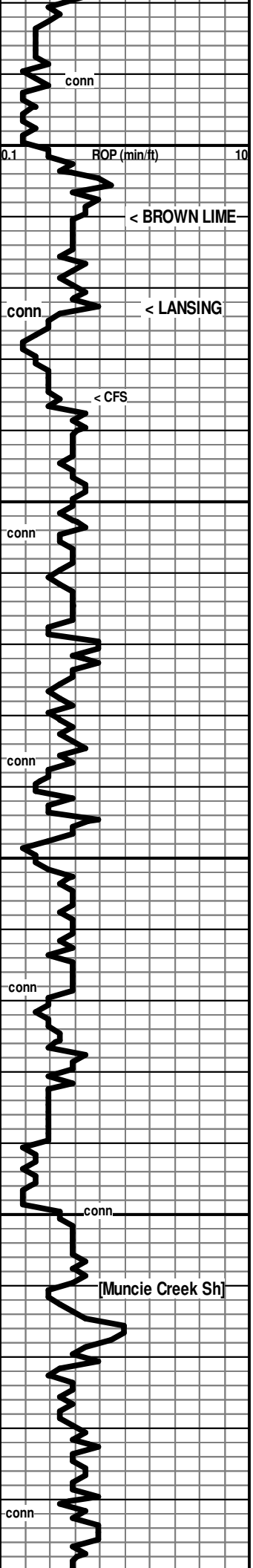
Ls cr-tan-gy, fn xln, dns, grainy text in pt, foss

3950

Siltstone wh-pl gy, calc to shaley & gy shale

Ls cr-tan-gy,fn xln, dns, foss in pt

* Displace & Mudup @3355'!



4000

WOB 30k
RPM 60
PP 1150
SPM 60

4050

4100

4150

Sh grn-gy, abund silty

Sh gy-dk gy

<---------- 4010 (-1684)

Ls cr, fn xln,dns to pr xln por

Sh gy

<---------- 4023 (-1697)

A

Ls wh-cr, fn xln, pr-fr-gd xln por, foss in pt, chert: fresh, wh-gy, transl to subop, foss in pt

Sh gy

B

Ls wh-cr-tan-gy, fn xln, mostly dns, some pr xln por, some chalky, foss, Chert: fresh, cr-gy

Sh gy-grnish

C

Ls wh-cr, fn xln, pr xln por to dns, chalky in pt, foss, chert: fresh, wh-pl gy, subtr-transl

Sh gy-grnish

D

Ls wh-cr,fn xln, pr xln por with tr of fr xln por, foss, some ool, chert: fresh, cr-tan-gy, transl-subopaque

Sh gy-grn

Ls cr, fn xln, fr xln por in pt, foss

E

Ls cr-tan, fn xln, dns, foss

Sh gy

F

Ls cr, fn xln, dns to pr xln por, foss

Sh gy

Ls wh-cr-tan, fn xln, pr-fr xln por, foss, ool in pt with fr interool por in pt, chalky in pt

Ls cr-tan,fn xln, dns

G

Ls cr-tan, fn xln, subchalky in pt, scatt vugs, ool & foss, chert: fresh, cr-tan, subtransl

Ls cr-tan, vfn xln, dns, cherty

Sh black, carb

Ls cr-tan, vfn-fn xln, dns, foss in pt

H

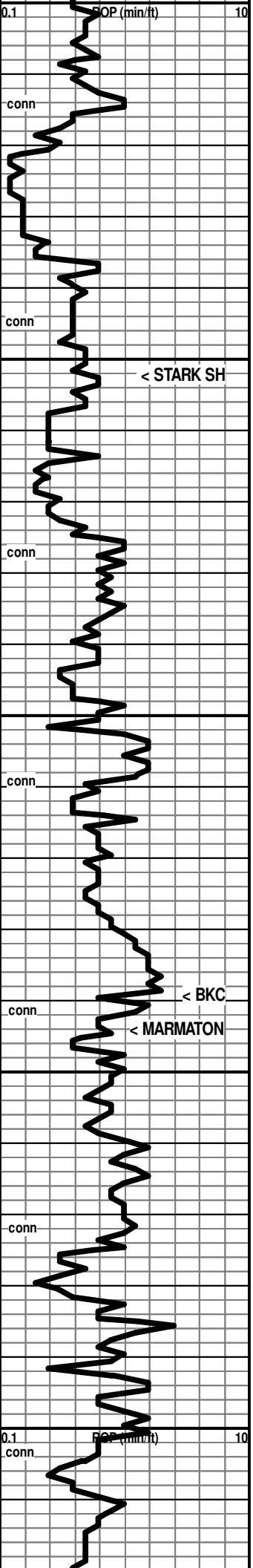
Ls wh-cr-tan, vfn-fn xln, mostly dns & firm, some softer & chalky, sli foss in pt

Sh gy-dk gy, silty text

7:00 AM, July 09,2018

Mud Check, Drlg @ 4041':

Vis	Wt	WL	LCM	PV	YP
49	9.0	8.8	1	15	12
Chl	Hd	pH	Solids		
5300	20	10.0	5.4		



4200

I

Ls wh-cr, fn xln, chalky in pt, pr xln por in pt, dns in pt, sli foss in pt

Sh gy-dk gy

Ls wh-cr, fn xln, pr-fr xln por in pt, packed ool & oom, fr oom por, scatt interool pores

J

Ls cr-tan,vfn-fn xln, dns, foss

4250

<---------- 4252 (-1926)

Sh gy-dk gy-black, sli carb in pt

Ls cr-tan, fn xln, pr-fr xln por in pt, scatt pp pores & sm vugs, abund foss, ool

K

Ls cr, fn xln, dns, foss

Ls wh-cr, fn xln, chalky in pt, dns & firm in pt, foss

Ls wh-cr, fn xln, chalky in pt, dns in pt, chert: fresh, gy, subopaq

4300

Sh black, carb

Sh dk grnish gy

Ls wh-cr-pl gy, fn xln, chalky in pt, dns to pr xln por in pt

L

WOB 35k
RPM 60
PP 1240
SPM 60

Ls wh-cr-tan,fn xln, chalky in pt, dns in pt, rr foss

<---------- 4339 (-2013)

<---------- 4344 (-2018)

4350

Ls wh-cr-tan, fn xln, subchalky in patches & pcs, mostly dns

Sh gy-grnish

Ls wh-cr, fn xln, dns, chert: fresh, wh, foss, op

Sh grn, silty in pt

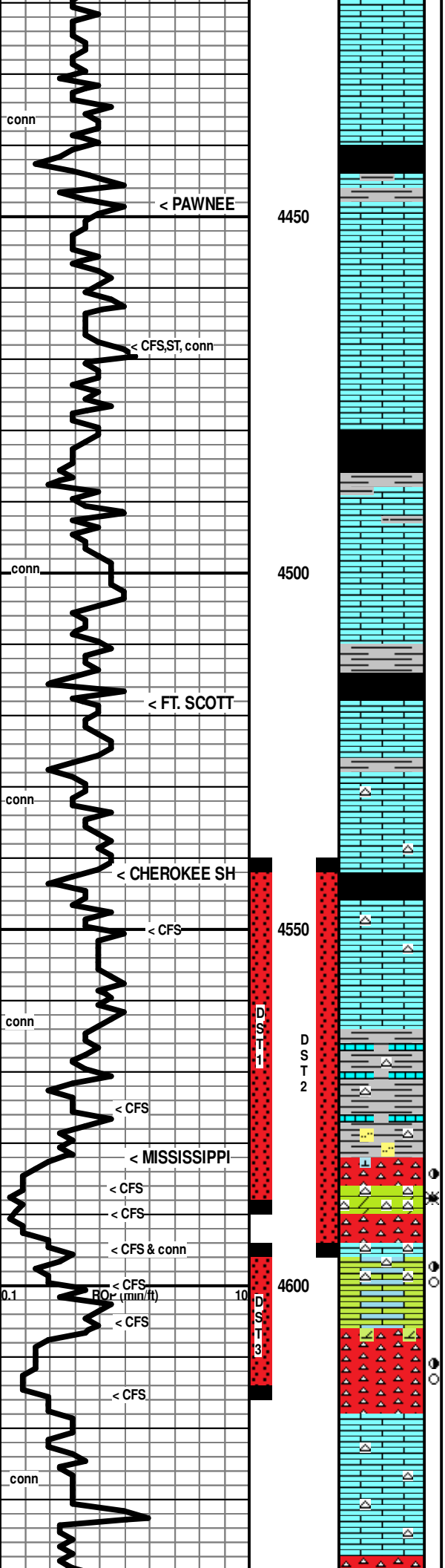
Ls cr-tan-pl gy, vfn-fn xln, mostly dns with scatt pp pores & sm vugs, foss

4400

Sh gy-dk gy-grnish

Ls wh-cr-tan-brn, vfn-fn xln,dns

7:00 AM, July 10, 2018



Ls cr-tan, vfn-fnxln, dns to pr vis xln por, foss

Ls cr, fn xln, dns, foss in pt

Sh black, carb (arrival in 4460' spl)

Sh dk gy-grnish

<---------- 4448 (-2122)

Ls wh-cr-tan, vfn-fn xln, mostly dns, chalky in pt, some pr xln por, scatt friable calcite patches, sli foss in pt

Ls cr-tan, vfn-fn xln, dns, scatt calcite patches

Sh black, carb

Ls cr-tan-gy, vfn xln, dns, sli foss; abund gy-grnish shale in spls

Ls wh-cr-tan-gy-grnish, fn-vfn xln, dns, some chalky patches & pcs

Ls cr-tan-gy, vfn-fn xln, dns, foss to abund foss

Sh black, carb, some gy-grn shale

<---------- 4518 (-2192)

Ls cr-tan-pl gy, vfn-fn xln, dns, foss, scatt pyrite inclusions

Sh gy-grnish

Ls cr-tan, vfn-fn xln, dns, chert: fresh, wh/gy marbled in pt, foss, opaq-subtransl

<---------- 4542 (-2216)

Sh black, carb
Sh dk gy-grnish-grn

Ls wh-cr-tan, fn xln,mostly dns & firm, some softer & subchalky, foss, abund chert: fresh, wh-gy, op-transl, foss

Ls wh-cr-tan, fn xln,mostly dns & firm, some softer & subchalky, foss

Sh gy-grn-red-yellow, earthy to subsilty text, scatt embedded Sd grns, scatt embedded pyrite; abund Ls in spls, some fresh transl chert-becomes more cherty at depth, some vfn grn grn siltstone

<---------- 4582 (-2256)

<4582-4586, Chert: fresh-devitrified-weathered to Rr tripolitic, wh-gy, opaq to transl, abund Ls and shales in spls

<4587-4590, Dol & chert: dol cr-tan-brn, vfn-fn xln, subsucr, possibly highly silicious, pr vis xln por with Rr pp pores, pr crush; Chert as above with some spiculitic

<4591-4595, 60% shales, abund Chert: mostly white, mix of fresh, devitrified, sli weathered, some ls in spls wh-grnish

<4596-4605, abund Chert: mostly white, mix of fresh, devitrified, sli weathered, some ls in spls wh-grnish, dns, some dol/dolom ls, dns-pr vis xln por, Rr pp pores, pr crush

<4605-4615, Mostly Chert: wh-cr, opaq-transl, much fresh, with some devitrified & sli weathered witt scatt pp pores & vugs, some dolom ls in spls, dns, hard

Ls wh-cr, fn xln, dns, abund chert: fresh, wh-cr, opaq-subtransl, spiculitic in pt

Mud Check, Drlg @ 4436' :

Vis	Wt	WL	LCM	PV	YP
45	9.3	9.6	1	13	11
Chl	Hd	pH	Solids		
4400	20	10.5	6.9		

* Ran 55-std Short Trip @ 4468 ft!

* Add Premix, to prepare for testing and logging!

DST #1: 4540-4590 (Mississippi)
Times: 15-30-10-out
Initial Open: Few surface bubbles, then died
Final Open: Few surface bubbles,then died, flus
tool, no help
Rec: 120' SOCM: 02% oil 98% mud
IHP: 2162 FHP: 2218
IFP: 22-57 FFP: 61-74
ISIP: 1259 FSIP: NA
BHT: 121*F

Pipe Strap @ 4590 ft
.10 ft short!

Mud Check, TIH/DST1 @ 4590' :

Vis	Wt	WL	LCM	PV	YP
53	9.3	8.0	1	16	13
Chl	Hd	pH	Solids		
5700	20	10.5	7.5		

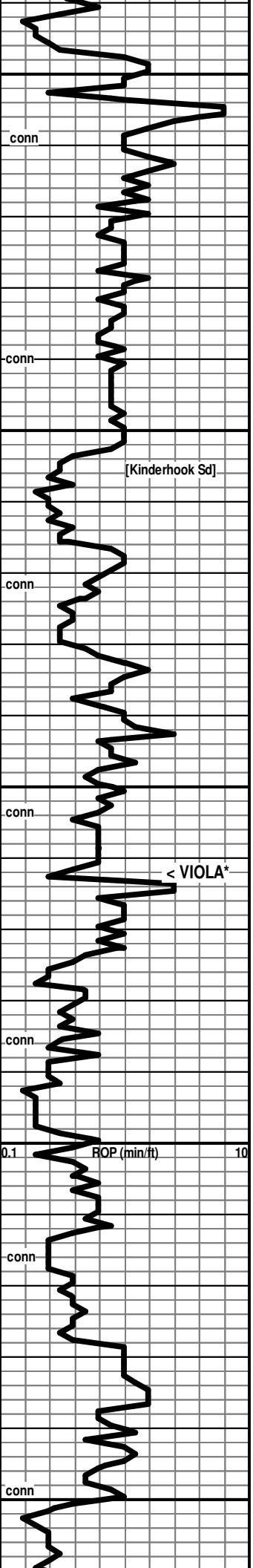
[4582-4586: No Odor, scatt spotty-patchy mod fl
spotty-patchy brn stn in chert where not fresh, s
sli shows of lt brn FO when crushed]

[4587-4590: No Odor, Abund patchy-even brt fluo
abund patchy to even brn stn in dol & chert, abu
gassy with abund sli shows of lt brn FO on crush

[4591-4595: No Odor, Mod am't pcs with brt patc
even fluor, scatt patchy-even brn stn where cher
fresh, Low% pcs with v sli shows lt brn FO]

[4596-4605: No Odor, Mod- am't chert & dolom p
with mod-brt patchy to even fluor, scatt patchy-R
even brn stn where chert not fresh, Low% pcs wi
sli shows lt brn FO & some stn'g in patches on d
overall less show than above]

[4605-4615: No Odor, Abund fluor when chert not



4650

4700

4750

4800

4850

Spls mostly chert: fresh, wh-cr, opaq-subtr, spic in pt; Low % spls Ls, wh, dns-pr xln por

(Spls 15% shales)

Ls cr, vfn-fn xln,dns, subsucrosic text in pt, possibly dolom., abund chert: fresh, wh-cr, mostly opaq, some transl

Ls wh-cr, fn xln, pr xln por to dns, some subrhombic-sucr patches & pcs, abund foss, pelletoid, pseudo-ool in chalky cement, Abund Chert: Fresh, wh-cr-tan-brn, opaq-transl

Ls & Dol Ls & Dol cr-tan-brnish orange-salmon, fn xln, sdy to sucrosic text, mostly pr xln por to dns, rr fr xln por, abund chert: fresh wh-pl gy-cr, subtr-transl-opaq

Sd wh, fn grn, gd sort, subanglr-subrd, pr-fr-gd intergrnlr por, pr-fr-gd fri, scatt patches pl grn glauc stn'g; abund chert as above in spls, chert from above?

Ls cr, fn xln, dns, foss in pt

High % Sd in spls: Sd wh-cr-gy, fn grn, gd sort, subanglr-subrd, pr-fr-gd intergrnlr por, pr-fr-gd fri, scatt patches pl grn glauc stn'g; some dns Ls

Spls remain a mix of Sd, chert, and Ls/Dol Ls as above

Dol Dol Ls wh-cr-tan, fn xln, subsucr-sucr, pr-fr xln por in pt, cherty: fresh, wh-gy, opaq-transl

Ls & Dol Ls wh-cr, fn xln, subsucr in pt, dns to pr xln por, foss in pt, abund chert: wh-cr-pl gy, opaq-transl

<---------- 4762 (-2436)

Ls & Dol Ls wh-cr, fn xln, subsucr in pt, dns to pr xln por, foss in pt, abund chert: wh-cr-pl gy, opaq-transl, some ool/pseudo ool Ls pcs

Ls & Dol Ls wh-cr, fn xln, subsucr in pt, dns to pr xln por, foss in pt, abund chert: wh-cr-pl gy, opaq-transl

Dol & Dol Ls wh-cr, fn xln, subsucr in pt, dns to pr xln por, foss in pt, abund chert: wh-cr-pl gy, opaq-transl

Ls & Dol Ls wh-cr, fn xln, subsucr in pt, dns to pr xln por, foss in pt, abund chert: wh-cr-pl gy, opaq-transl

Anund Chert: fresh in pt, weath'd in pt, scatt pp pores, wh-cr-tan, opaq-transl, ool in pt; Some Ls Dol Ls in spls

fresh, Rr faint stn in white light, abund show of fl
sm oil drops on crush under black light, Rr micro
drops brn FO in white light]

DST #2: 4540-4595 (Mississippi)
Times: 15-30-60-90
Initial Open: Mod Blow, built to 8" i.b.,
No Return Blow
Final Open: Stg Blow, b.o.b. 21 min,
Return Blow built to 3" i.b.
Rec: 340' Total Fluid
30' Clean Oil (API 38*)
62' SOCM: 05%o 95%m
62' MCW: 75%w 25%m
186' OWCM: 20%o 30%w 50%m
(Chl/Wtr 24,000 ppm Chl/Mud 5700 ppm)
IHP: 2303 FHP: 2279
IFP: 32-68 FFP: 73-167
ISIP: 1250 FSIP: 1251
BHT: 121*F

Mud Check, CTCH after DST2 @ 4595' :

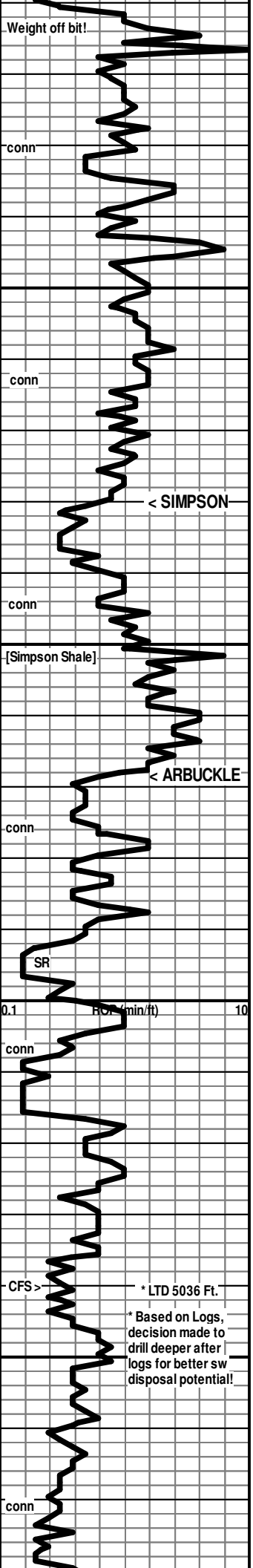
Vis	Wt	WL	LCM	PV	YP
60	9.0	8.8	1	17	13
Chl	Hd	pH	Solids		
7600	30	10.0	4.6		

DST #3: 4595-4615 (Mississippi)
Times:15-30-10-out
Initial Open: Wk Intermittent Surf Blow,
died in 10 min
Final Open: No Blow, flush tool no help
Rec: 5' mud
IHP: 2371 FHP: 2148
IFP: 16-18 FFP: 17-19
ISIP: 1233 FSIP: NA
BHT: 113*F

Mud Check, Drlg @ 4691' :

Vis	Wt	WL	LCM	PV	YP
63	9.0	9.6	2	14	15
Chl	Hd	pH	Solids		
8000	30	09.5	4.5		

* This geologist did not have on hand adequate comparitive information when picking the Top of the Viola. Therefore, this "pick" may be unreliable!



4900

4950

WOB 35k
RPM 60
PP 1100
SPM 60

5000

5050

Ls & Dol Ls wh-cr, fn xln, subsucr in pt, dns to pr xln por, foss in pt, abund chert: wh, opaq,mostly fresh-some weath'd

Ls & Dol Ls wh-cr, fn xln, subsucr in pt, dns to pr xln por, foss in pt, abund chert: wh-cr, opaq,mostly fresh

Ls wh-cr, sli dol in pt, vfn-fn xln, dns, cherty: fresh wh-cr, opaq-subtransl

<---------- 4930 (-2604)

Dol wh-cr, vfn-fn xln, pr vis xln por to dns, sucrosic, pr-fr-gd crush, still much chert and ls in spls

Low % pcs Shale, dk grn-gnrish dk gy

4970' spl, mix of: low % Shale, dk gy-grn, subsilty-subwaxy; Chert: fresh, wh-cr-gy, transl-opaque; Dol, wh-cr-gy-tan, fnxln, subsucr-sucr, pr vis xln por, pr-fr crush

4980' spl, trace of shale dk gy-grn; mostly Dol cr-tan-gy, fn xln, sucr, pr-fr crush, pr-fr xln por; Abund chert: fresh, wh-cr, opaq-subtransl

<---------- 4968 (-2642)

4990' spl: trace of grn waxy to brittle shale; abund Dol, fn-md xln, mix of sucr-subrhombic, pr vis xln por; abund chert

5000' spl, abund Dol, cr-salmon-tan, fn-md xln, sucr-rhombic, fr xln por in pt, scatt embedded sd grns, scatt vugs: trace of epidote grnwaxy/brittle shale with rr embedded pyrite

5010' spl, 90% Dol, cr-tan-pl salmon, fn-md xln, sucr-rhombic text, pr-fr-gd xln por, pr-fr-gd crush, sli cherty

5020' spl, 90% Dol, cr-tan-pl salmon, fn-md xln, sucr-rhombic text, pr-fr-gd xln por, scatt pp pores-vugs-ooms, ool in pt, pr-fr-gd crush, Tr of chert

5030' spl, Dol wh-cr-tan, mostly fn xln, some md xln, mostly subsucr-sucr, some subrhombic, much pr xln por, some fr xln por

5040' spl, Dol cr-tan-pl gy, mostly fn xln, some md xln, sucr to subrhombic text, dns in pt, pr-fr-gd xln por in pt, ool in pt, oom in pt, scatt vugs

5040' circ spl, Increase in dense Dol cr-tan, fn xln, subsucr, pr crush; along with some of above, tight intervals could be Limey?

5060'spl, Dol wh-cr, vfn-fn xln, mostly dns to prvis xln por, some fr xln por, Rr fresh chert

Dol wh-cr-tan, fnxln, subsucr-sucr, dns in pt, pr xln por in pt, some fr xln por, chert: fresh, wh, opaq-subtr

Dol wh-cr fn-md xln, sucrosic to subrhombic text, fr-gd xln por in pt, cherty

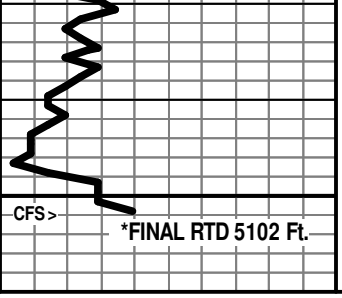
7:00 AM, July 14, 2018

Mud Check, Drlg @ 4989' :

Vis	Wt	WL	LCM	PV	YP
61	9.3	9.2	3	15	14
Chl	Hd	pH	Solids		
6400	30	09.2	6.8		

Original RTD 5040 Ft!

* Based on Logs, decision made to drill deeper after logs for better sw disposal potential!



*FINAL RTD 5102 Ft.

5100

Dol wh-cr-tan, fn-md xln, sucrosic to subrhombic text, fr-gd xln por in pt, cherty

RTD @ 5102 Ft, Reached at 2:30 AM, July 15, 2018

* Based on Logs, decision mad drill deeper after logs for bette disposal potential!

COPELAND
Acid & Cement

POST OFFICE BOX 438
HAYSVILLE, KS 67060
(316) 524-1225
(316) 524-1027 FAX

BURRTON, KS (620) 463-5161 FAX (620) 463-2104
GREAT BEND, KS (620) 793-3366 FAX (620) 793-3536

Invoice

INVOICE NUMBER:
C45403-IN

BILL TO:
CARMEN SCHMITT, INC.
PO BOX 47
GREAT BEND, KS 67530

LEASE: HORACEK A #3

DATE	ORDER	SALESMAN	ORDER DATE	PURCHASE ORDER	SPECIAL INSTRUCTIONS
07/17/2018	45403	–	07/02/2018		NET 30

QUANTITY	U/M	ITEM NO./DESCRIPTION	D/C	PRICE	EXTENSION
		NEW WELL			
20.00	MI	MILEAGE CEMENT PUMP TRUCK	24.30	4.00	60.56
1.00	EA	PUMP CHARGE SURFACE	24.30	1,100.00	832.70
190.00	SK	60/40 POZ MIX 2% GEL	24.30	10.75	1,546.17
10.00	SK	CALCIUM CHLORIDE	24.36	30.00	226.93
200.00	EA	BULK CHARGE	24.30	1.25	189.25
172.20	MI	BULK TRUCK - TON MILES	24.30	1.10	143.39

7/18/43
19126.0003
Well File
"Surface Cement"

REMIT TO:
P.O. BOX 438
HAYSVILLE, KS 67060

RECEIVED BY

COP

FUEL SURCHARGE IS NOT TAXABLE AND IS ADDED TO MILEAGE, PUMP AND OR DELIVERY CHARGES ONLY.

NET 30 DAYS

Net Invoice:	2,999.00
HODCO Sales Tax:	135.64
Invoice Total:	**3,134.64**

There will be a charge of 1.5% "per month" (18% annual rate) on all accounts over 30 days past due.

COPELAND Acid & Cement

NEW WELL

FIELD ORDER № C 45403

BOX 438 • HAYSVILLE, KANSAS 67060
316-524-1225

DATE 7-2 2018

IS AUTHORIZED BY: Carmen Schmitt (NAME OF CUSTOMER)

Address _____ City _____ State _____

To Treat Well As Follows: Lease Horacek A Well No. 3 Customer Order No. _____

Sec. Twp. Range 13-23s-21w County Hodgeman State Ks.

CONDITIONS: As a part of the consideration hereof it is agreed that Copeland Acid Service is to service or treat at owners risk, the hereinbefore mentioned well and is not to be held liable for any damage that may accrue in connection with said service or treatment. Copeland Acid Service has made no representation, expressed or implied, and no representations have been relied on, as to what may be the results or effect of the servicing or treating said well. The consideration of said service or treatment is payable. There will be no discount allowed subsequent to such date. 6% interest will be charged after 60 days. Total charges are subject to correction by our invoicing department in accordance with latest published price schedules.

The undersigned represents himself to be duly authorized to sign this order for well owner or operator.

THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED _____ By _____
Well Owner or Operator Agent

CODE	QUANTITY	DESCRIPTION	UNIT COST	AMOUNT	
2	20	Mileage Pump Trk	4.00	80.00	NT
2	1	Pump Charge Surface		1100.00	NT
2	190	60-40 Pozmix W/2% gel	10.75	2042.50	T
2	10	Calcium Chloride	30.00	300.00	T
2	200	Bulk Charge	1.25	250.00	NT
2		Bulk Truck Miles 8.61×20=172.20 x	1.10	189.42	NT
		Process License Fee on _____ Gallons			
		TOTAL BILLING		3961.92	

I certify that the above material has been accepted and used; that the above service was performed in a good and workmanlike manner under the direction, supervision and control of the owner, operator or his agent, whose signature appears below.

Copeland Representative Duane Braczek

Station Gt. Bend, Ks.

Carmen Schmitt
Well Owner, Operator or Agent

Approx 24.3% 962.92
2999.00

Remarks _____

NET 30 DAYS

COPELAND Acid & Cement

TREATMENT REPORT

Acid Stage No. .....

Date 7-2-18 District G.Bend F. O. No. 45403

Company CARMEN Schmitt

Well Name & No. HORACEK A 3

Location 13-23s-2W Field .....

County Hodgeman State Ks.

Casing: Size 8 5/8" Type & Wt. 23 Set at 224 ft.

Formation: ..... Perf. ..... to .....

Formation: ..... Perf. ..... to .....

Formation: ..... Perf. ..... to .....

Liner: Size ..... Type & Wt. ..... Top at ..... ft. Bottom at ..... ft.

Cemented: Yes/No. Perforated from ..... ft. to ..... ft.

Tubing: Size & Wt. ..... Swung at ..... ft.

Perforated from ..... ft. to ..... ft.

Open Hole Size ..... T.D. ..... ft. P.B. to ..... ft.

Type Treatment:	Amt.	Type Fluid	Sand Size	Pounds of Sand
Shdown	Bbl. /Gal.			
	Bbl. /Gal.			
	Bbl. /Gal.			
	Bbl. /Gal.			
Flush	Bbl. /Gal.			

Treated from ..... ft. to ..... ft. No. ft.

from ..... ft. to ..... ft. No. ft.

from ..... ft. to ..... ft. No. ft.

Actual Volume of Oil/Water to Load Hole: ..... Bbl. /Gal.

Pump Trucks. No. Used: Std. 300 Sp. ..... Twin .....

Auxiliary Equipment 360-308

Packer: ..... Set at ..... ft.

Auxiliary Tools DUANE Greg ARON

Plugging or Sealing Materials: Type ..... Gals. ..... lb.

Company Representative ..... Treater DUANE BROZEK

TIME a.m./p.m.	PRESSURES Tubing	PRESSURES Casing	Total Fluid Pumped	REMARKS
545				ON LOC.
750			5	BREAK CIR.
740			0	MIX CMT 190sx 60-40 POZ 22 Gel 3%CC.
758			47.72	CMT MIXED
755			0	START DISP
806		200	13.3	DISP. TO GOOD CMT RETURNS
				JOB COMPLETE

SWIFT Services, Inc.
P. O. Box 466
Ness City, KS 67560
Off: 785-798-2300

Invoice

DATE	INVOICE #
7/15/2018	31661

BILL TO

Carmen Schmitt, Inc.
P. O. Box 47
915 Harrison
Great Bend, KS 67530-0047

- Acidizing
- Cement
- Tool Rental

TERMS	Well No.	Lease	County	Contractor	Well Type	Well Category	Job Purpose	Operator
Net 30	#3	Horacek "A"	Hodgeman	Southwind Drillin...	SWD	Development	Cement 5 1/2 Lo...	David K.

PRICE REF.	DESCRIPTION	QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way	60	Miles	5.00	300.00
579D	Pump Charge - Two-Stage & Top To Bottom LongString	1	Job	1,800.00	1,800.00
409-5	5 1/2" Turbolizer	12	Each	85.00	1,020.00T
403-5	5 1/2" Cement Basket	3	Each	275.00	825.00T
406-5	5 1/2" Latch Down Plug & Baffle	1	Each	250.00	250.00T
405-5	5 1/2" Formation Packer Shoe	1	Each	1,350.00	1,350.00T
330	Swift Multi-Density Standard (MIDCON II)	650	Sacks	16.25	10,562.50T
276	Flocele	150	Lb(s)	2.50	375.00T
290	D-Air	7	Gallon(s)	42.00	294.00T
281	Mud Flush	500	Gallon(s)	1.50	750.00T
221	Liquid KCL (Clayfix)	2	Gallon(s)	25.00	50.00
581D	Service Charge Cement	650	Sacks	1.75	1,137.50
583D	Drayage	1,939.5	Ton Miles	0.85	1,648.58
	Subtotal				20,362.58
	SWD &/Or InJection Well, Exempt From Sales Tax			0.00%	0.00

7/0/43
19126.0003
Well File
Cement Long String

We Appreciate Your Business!

Total $20,362.58

SWIFT Services, Inc.

CHARGE TO: Carmen Schmitt Inc
ADDRESS
CITY, STATE, ZIP CODE

SERVICE LOCATIONS	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY
1. Ness City KS	#3	Horacek "A"	Hodgeman	KS	Hanston
2.	TICKET TYPE ☒ SERVICE ☐ SALES / CONTRACTOR: Southwind Drilling		RIG NAME/NO.: #8	SHIPPED VIA: CT	DELIVERED TO: Location
3.	WELL TYPE: Oil/Dispsl	WELL CATEGORY: Development	JOB PURPOSE: Cement 5½" Longstring		WELL PERMIT NO.
4					
REFERRAL LOCATION	INVOICE INSTRUCTIONS				

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING LOC	ACCT	DF	DESCRIPTION	QTY.	U/M	QTY.
575		1			MILEAGE Trk # 112	1		60
579		1			Pump Charge - Top to Bottom Longstring	1		1
409		1			Turbolizers	5½	in	12
403		1			Cement Basket	5½	in	3
406		1			Latch Down Plug & Baffle	5½	in	1
405		1			Formation Packer Shoe	5½	in	1

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY, and LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X Curtis Kittelmann

DATE SIGNED: 7-15-18 | TIME SIGNED: 1530 ☐ A.M. ☐ P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.
P.O. BOX 466
NESS CITY, KS 67560
785-798-2300

SURVEY	AGREE	UNDECIDED
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?		
WE UNDERSTOOD AND MET YOUR NEEDS?		
OUR SERVICE WAS PERFORMED WITHOUT DELAY?		
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?		

ARE YOU SATISFIED WITH OUR SERVICE? ☐ YES ☐ NO

☐ CUSTOMER DID NOT WISH TO RESPO

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and servic

SWIFT OPERATOR: David Hudson | APPROVAL

SWIFT Services, Inc.

PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

CUSTOMER: Carmen Schmitt Inc.

WELL: Herrick "A" #3

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING LOC	ACCT	DF	TIME	DESCRIPTION	QTY	U/M	QTY	U/M
330		1				SMD Cement			650	sk
276		1				Flocele	1/4	lb	150	lb
290		1				D-Air			7	gal
281		1				Mud Flush			500	gal
221		1				Liquid KCl			2	gal
581		1				SERVICE CHARGE			CUBIC FEET 650	
583		1				MILEAGE CHARGE TOTAL WEIGHT 64650 LOADED MILES 60			TON MILES 1939.5	

CO

JOB LOG

SWIFT Services, Inc.

DATE 7-15-18 | PAGE NO. 1

CUSTOMER: Carmen Schmitt Inc | WELL NO.: #3 | LEASE: Horacek "A" | JOB TYPE: 5½" Longstring | TICKET NO.: # 31661

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	0830							on location 5½" 14#
								RTD - 5102' LTD - 5036'
								TP - 4977' SJ #1 23.28'
								Sete 4985 (127' of Btm) out #48 #93 #120 121 122 123
								Turbos #4 #6 #8 #10 #12 #14 #16 #18 #20 #22 #84 #85
								Baskets - #2 #55 #83
	1015							Start 5½" 14# casing in well
	1215							circulate
	1315	Ø	Ø		✓		2200	Set Packer Shoe
	1320	6½	12		✓		400	Pump 500 gal Mud Flush
		6½	20		✓		400	Pump 20 bbl KCL Flush
			16-11					Plug RH - MH 30-20
	1345	6	195		✓		400	mix 400 sks SMD ¼# flo @ 11.2 ppg
		6	47		✓		300	mix 100 sks SMD ¼# flo @ 11.8 ppg
		6	29		✓		200	mix 25 sks SMD ¼# flo @ 12.5 ppg
		6	20		✓		100	mix 75 sks SMD ¼# flo @ 14.5 ppg
								Wash out Pump & lines
								Release Latch Down Plug
	1450	6½	Ø		✓		100	Start Displacement
		6½	52		✓		300	lift Pressure
		6½	92		✓		800	circulate cement to surface * 50 sks *
		6½	119		✓		1200	max lift Pressure
	1515	6½	120.5		✓		2200	Land Latch Down Plug
								Release Pressure * Plug Held *
								wash up Truck
	1545							Job Complete
								Thank You
								Dave Preston Gideon Kirby