

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

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

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

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

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

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

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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

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

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

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

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

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

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

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</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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Form	ACO1 - Well Completion
Operator	Carmen Schmitt, Inc.
Well Name	ER TRUST 1
Doc ID	1427710

Tops

Name	Top	Datum
Anhydrite	1453	892
Heebner	3966	-1621
Brown Lime	4039	-1694
Lansing	4049	-1704
B/KC	4366	-2021
Marmaton	4372	-2027
Pawnee	4474	-2129
Ft. Scott	4542	-2197
Cherokee	4567	-2222
Mississippian	4604	-2259

GRESSEL OIL FIELD SERVICE

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

Invoice

Page: 1

BURRTON, KS ♦ GREAT BEND, KS ♦ HAYS, KS ♦
 (620) 463-5161 (620) 793-3366 (785) 628-3220

INVOICE NUMBER:
C46206-IN

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

LEASE: ER TRUST #1

DATE	ORDER	SALESMAN	ORDER DATE	PURCHASE ORDER	SPECIAL INSTRUCTIONS	
11/09/2018	C46206		11/03/2018		NET 30	
QUANTITY	U/M	ITEM NO./DESCRIPTION		D/C	PRICE	EXTENSION
		NEW WELL				
40.00	MI	MILEAGE CEMENT PUMP TRUCK		25.25	4.00	119.60
40.00	MI	MILEAGE PICKUP		25.25	2.00	59.80
1.00	EA	PUMP CHARGE-SURFACE		25.20	1,100.00	822.80
190.00	SK	60/40 POZ MIX 2% GEL		25.20	10.75	1,527.79
11.00	SK	CALCIUM CHLORIDE		25.20	30.00	246.84
201.00	EA	BULK CHARGE		25.25	1.25	187.81
345.60	MI	BULK TRUCK - TON MILES		25.20	1.10	284.36
		<i>7/10/43</i> <i>19481.0001</i> <i>Well file</i> <i>Surface Cement</i>				
REMIT TO: P.O. BOX 438 HAYSVILLE, KS 67060		COP		Net Invoice:		3,249.00
RECEIVED BY _____		NET 30 DAYS		HODCO Sales Tax:		135.76
				Invoice Total:		<u>3,384.76</u>

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

Gressel Oil Field Service reserves a security interest in the goods sold until the same are paid for in full and reserve all the rights of a secured party under the Uniform Commercial Code.



NEW WELL

FIELD ORDER N° C 46206

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

DATE 11/3/18 20__

IS AUTHORIZED BY: Carmen Schmitt (NAME OF CUSTOMER)

Address _____ City _____ State _____

To Treat Well As Follows: Lease ER Trust Well No. 1 Customer Order No. _____

Sec. Twp. Range _____ 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

Well Owner or Operator

By

Agent

CODE	QUANTITY	DESCRIPTION	UNIT COST	AMOUNT	
2	40	mileage pump truck	4. ⁰⁰ / ₁	160.00	NT
2	40	mileage pickup	2. ⁰⁰ / ₁	80.00	NT
2	1	Pump Charge - Surface		1,100.00	NT
2	190	plus per. 2% sel.	10. ⁷⁵ / ₁	2,042.50	T
2	11	Calcium Chloride	30. ⁰⁰ / ₁	330.00	T
2	201	Bulk Charge	1. ²⁵ / ₁	251.25	NT
2		Bulk Truck Miles $8.647 \times 40 = 345.67 \times 1.00/1$	1. ⁰⁰ / ₁	345.67	NT
		Process License Fee on Gallons		4343.91	
TOTAL BILLING					

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.

Price as agreed 3,249.00

Copeland Representative Nathan

Station G.B

Sarthwind

Well Owner, Operator or Agent

Remarks _____

NET 30 DAYS



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



Invoice

DATE	INVOICE #
11/14/2018	31912

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	#1	E.R. Trust	Hodgeman	Southwind Rig #8	Oil	Development	Rotary Plug	Gideon

PRICE REF.	DESCRIPTION	QTY	UM	UNIT PRICE	AMOUNT
575D	Mileage - 1 Way	65	Miles	5.00	325.00
576D-P	Pump Charge - PTA	1	Job	875.00	875.00
328-4	60/40 Pozmix (4% Gel)	220	Sacks	10.60	2,332.00T
290	D-Air	3	Gallon(s)	42.00	126.00T
276	Flocele	50	Lb(s)	2.50	125.00T
581D	Service Charge Cement	220	Sacks	1.75	385.00
583D	Drayage	629.2	Ton Miles	0.85	534.82
	Subtotal				4,702.82
	Sales Tax Hodgeman County			7.65%	197.60

710/43
 19481.0001
 Well Mte
 Cement to Plug

We Appreciate Your Business!	Total	\$4,900.42
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CHARGE TO: Carmen Schmitt

ADDRESS

CITY, STATE, ZIP CODE

1. SERVICE LOCATIONS <u>Ness City, KS</u>	WELL/PROJECT NO. <u>1</u>	LEASE <u>E.R. Trust</u>	COUNTY/PARISH <u>Hodgeman</u>	STATE <u>KS</u>	CITY <u>Burdette</u>
2.	TICKET TYPE <input checked="" type="checkbox"/> SERVICE <input type="checkbox"/> SALES	CONTRACTOR <u>Southwind</u>	RIG NAME/NO. <u>8</u>	SHIPPED VIA <u>OT</u>	DELIVERED TO <u>Location</u>
3.	WELL TYPE <u>Oil</u>	WELL CATEGORY <u>Development</u>	JOB PURPOSE <u>Rotary Plug</u>	WELL PERMIT NO.	
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS				

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	U/M	QTY.
		LOC	ACCT	DF				
<u>575</u>		<u>1</u>			MILEAGE <u>Trk #112</u>			<u>65</u>
<u>576 P</u>		<u>1</u>			<u>Pump Charge - PTH</u>			<u>1</u>
<u>328-4</u>		<u>1</u>			<u>60/40 Pozmix 4% Gel</u>			<u>220</u>
<u>290</u>		<u>1</u>			<u>D-Air</u>			<u>3</u>
<u>276</u>		<u>1</u>			<u>Flocek</u>			<u>50</u>
<u>581</u>		<u>1</u>			<u>Service Charge Cement</u>			<u>220</u>
<u>583</u>		<u>1</u>			<u>Drayage</u>	<u>19,360</u>	<u>lbs</u>	<u>629.2</u>

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

DATE SIGNED 11/14/2013 TIME SIGNED 6:30 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? <input type="checkbox"/> YES <input type="checkbox"/> NO		
<input type="checkbox"/> CUSTOMER DID NOT WISH TO RESPOND		

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

SWIFT OPERATOR Gideon Fuchs

APPROVAL [Signature]

JOB LOG

SWIFT Services, Inc.

DATE 11/14/2008	PAGE NO. 1
TICKET NO. 031912	

CUSTOMER Carmen Schmitt	WELL NO. 1	LEASE E.R. Trust	JOB TYPE Plug
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CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1330							On Location 4 1/2" DP 7 7/8" hole TD: 4665 8 5/8"
	1600		13					1st Plug: Mix 50 sks of 60/40 Poz @ 1470 ft Displace Cement
	1645		13 4					2nd Plug: Mix 50 sks @ 630 ft Displace Cement
	1705		13 1 1/4					3rd Plug: Mix 50 sks of Cement @ 270' Displace Cement
	1740		5 1/4					4th Plug: Mix 20 sks @ 60'
	1750		8					RH Plug: Mix 30 sks in Rathole
F	1755		5 1/4					MH Plug: Mix 20 sks in Mousehole
	1800							Wash up Truck
	1830							Job Complete 220 sks of 60/40 Poz mix 4% gel used
								Thank You,
								Gideon, Wayne, Preston, Kirby



DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt Inc**

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

ER Trust #1

12-23S-21W Hodgeman,KS

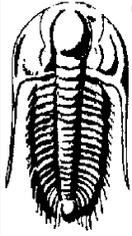
Start Date: 2018.11.09 @ 22:03:00

End Date: 2018.11.10 @ 03:33:02

Job Ticket #: 64554 DST #: 1

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

Printed: 2018.11.13 @ 13:37:07



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Carmen Schmitt Inc
 PO Box 47
 Great Bend, KS 67530+0047
 ATTN: Brad Rine

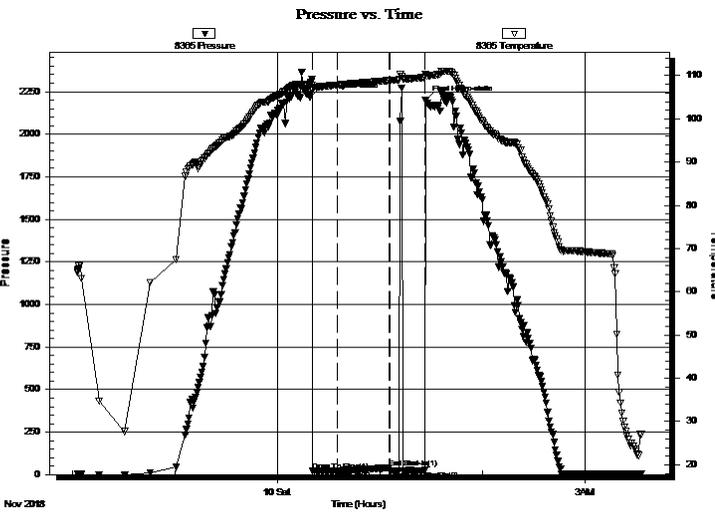
12-23S-21W Hodgeman,KS
ER Trust #1
 Job Ticket: 64554 **DST#: 1**
 Test Start: 2018.11.09 @ 22:03:00

GENERAL INFORMATION:

Formation: **Ft. Scott**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 00:20:47 Tester: Ken Swinney
 Time Test Ended: 03:33:02 Unit No: 72
 Interval: **4531.00 ft (KB) To 4574.00 ft (KB) (TVD)** Reference Elevations: 2345.00 ft (KB)
 Total Depth: 4531.00 ft (KB) (TVD) 2335.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

Serial #: 8365 Inside
 Press@RunDepth: 22.94 psig @ 4532.00 ft (KB) Capacity: psig
 Start Date: 2018.11.09 End Date: 2018.11.10 Last Calib.: 2018.11.10
 Start Time: 22:03:01 End Time: 03:33:02 Time On Btm: 2018.11.10 @ 00:19:17
 Time Off Btm: 2018.11.10 @ 01:26:47

TEST COMMENT: IFP 15 Minutes Blow built to 1"
 ISI 30 Minutes No blow back
 FFP 15 Minutes Dead no blow - Flush tool - Surface blow for 3 minutes - pull test



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2217.64	107.86	Initial Hydro-static
2	22.13	106.94	Open To Flow (1)
16	22.94	107.83	Shut-In(1)
46	39.68	108.85	End Shut-In(1)
47	21.12	108.86	Open To Flow (2)
67	24.02	109.59	Shut-In(2)
68	2199.59	110.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud 100%	0.03

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS
ER Trust #1
Job Ticket: 64554 **DST#: 1**
Test Start: 2018.11.09 @ 22:03:00

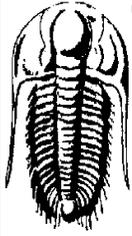
Tool Information

Drill Pipe:	Length: 4512.00 ft	Diameter: 3.80 inches	Volume: 63.29 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 63.29 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4531.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	70.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut-In Tool	5.00			4509.00	
Hydraulic tool	5.00			4514.00	
Jars	5.00			4519.00	
Safety Joint	2.00			4521.00	
Top Packer	5.00			4526.00	
Packer	5.00			4531.00	27.00 Bottom Of Top Packer
Recorder	1.00	8365	Inside	4532.00	
Recorder	1.00	6752	Outside	4533.00	
Anchor	38.00			4571.00	
Bullnose	3.00			4574.00	43.00 Anchor Tool
Total Tool Length:	70.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS
ER Trust #1
Job Ticket: 64554 **DST#: 1**
Test Start: 2018.11.09 @ 22:03:00

Mud and Cushion Information

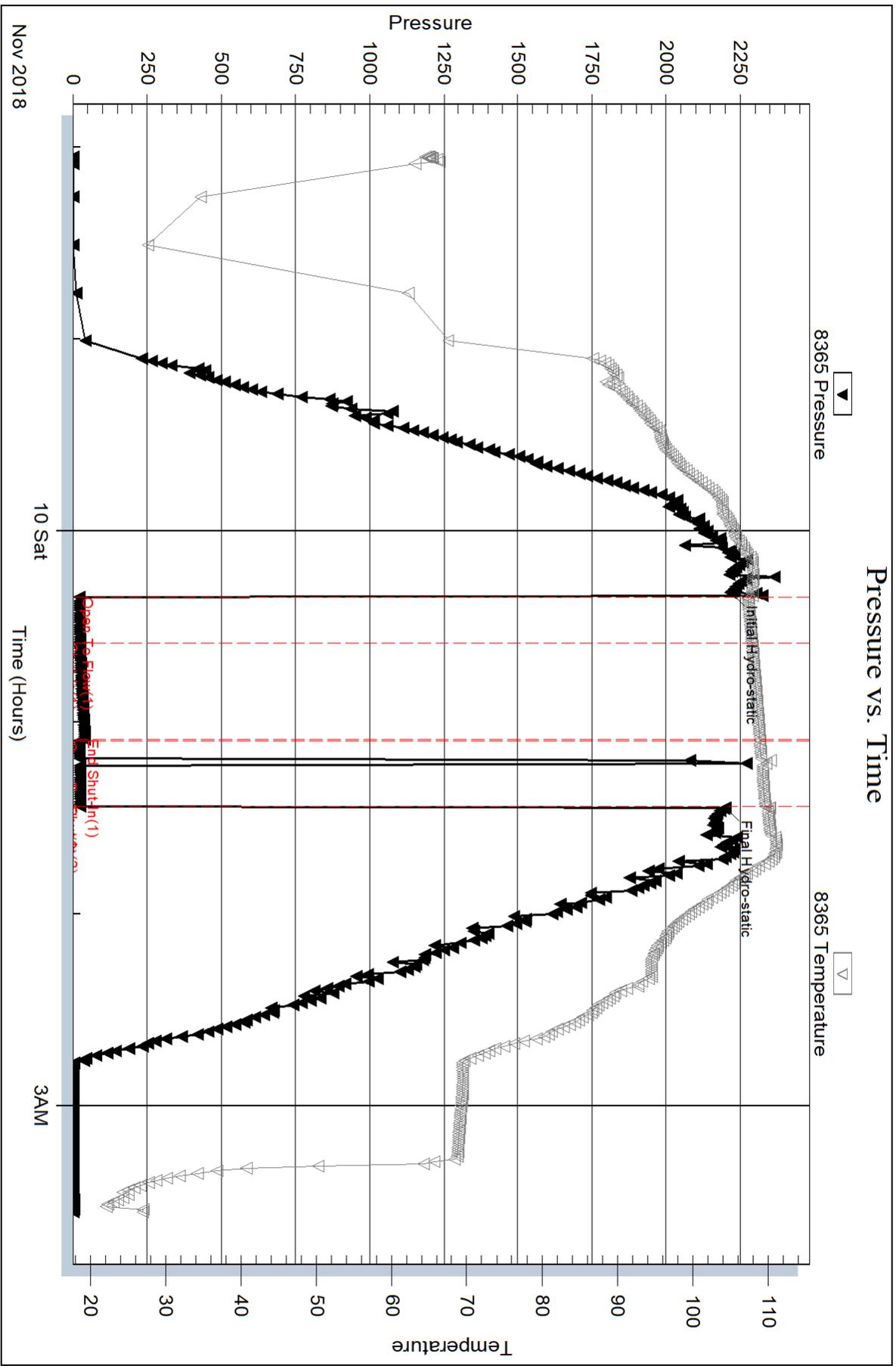
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.56 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 5300.00 ppm			
Filter Cake: 1.00 inches			

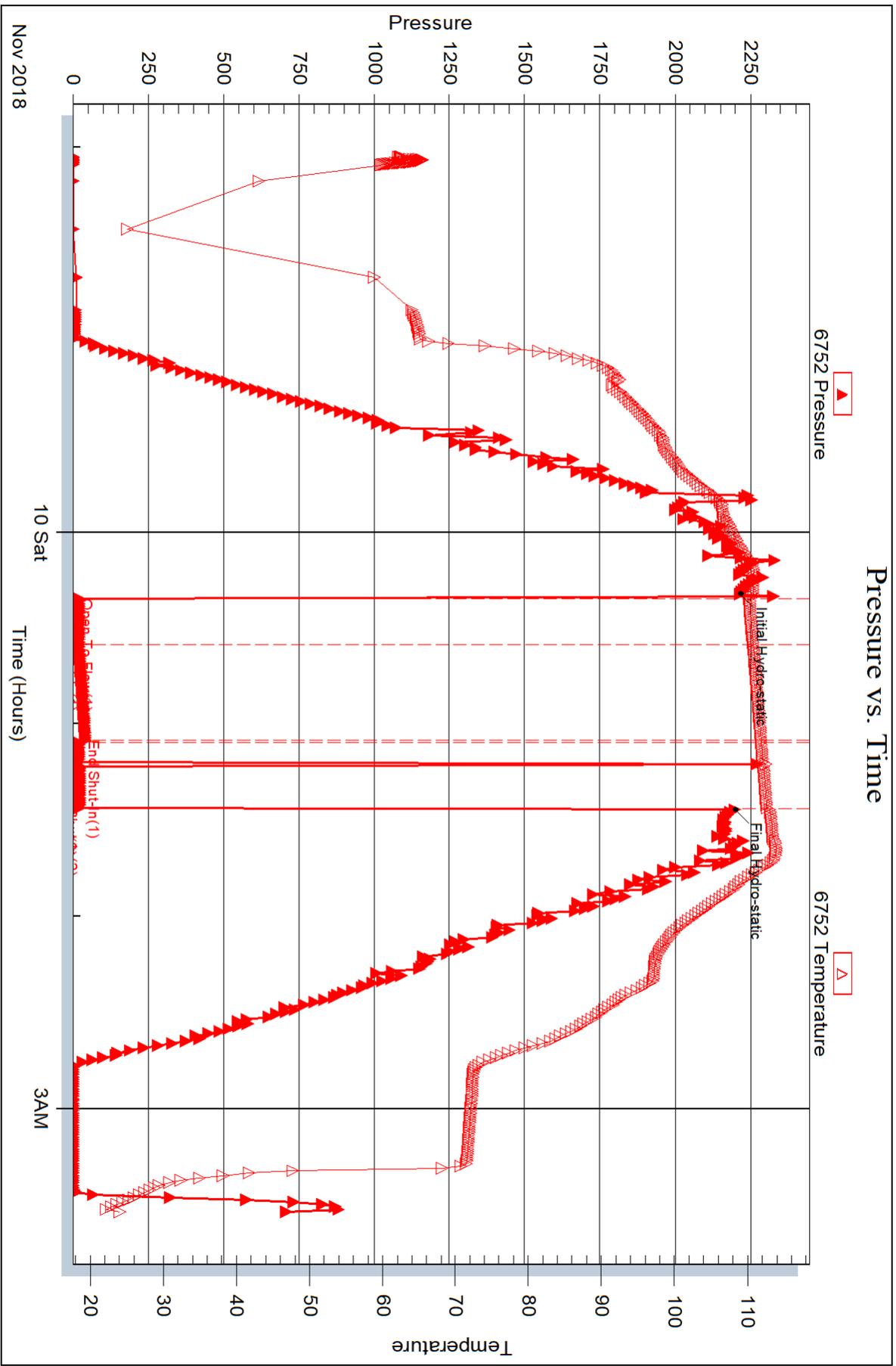
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud 100%	0.028

Total Length: 2.00 ft Total Volume: 0.028 bbl
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt Inc**

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

ER Trust #1

12-23S-21W Hodgeman,KS

Start Date: 2018.11.10 @ 15:41:00

End Date: 2018.11.10 @ 22:55:02

Job Ticket #: 64555 DST #: 2

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

Printed: 2018.11.13 @ 13:36:41



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS

ER Trust #1

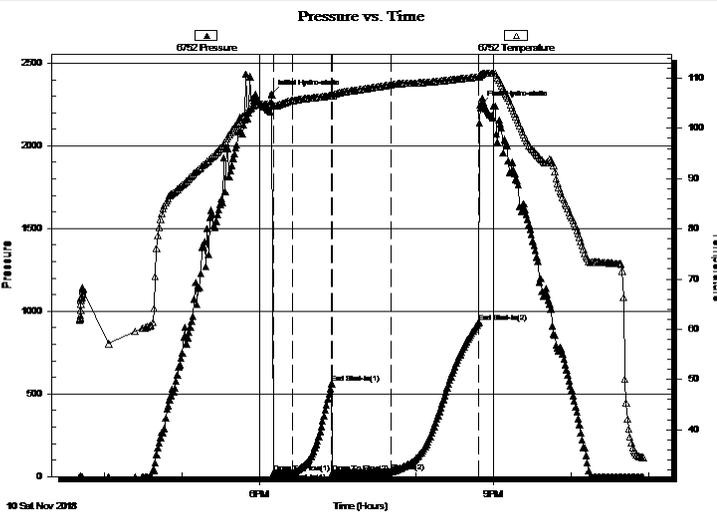
Job Ticket: 64555 **DST#: 2**
Test Start: 2018.11.10 @ 15:41:00

GENERAL INFORMATION:

Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:10:32
Time Test Ended: 22:55:02
Interval: **4564.00 ft (KB) To 4612.00 ft (KB) (TVD)**
Total Depth: 4612.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 72
Reference Elevations: 2345.00 ft (KB)
2335.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6752 Outside
Press@RunDepth: 930.87 psig @ 4566.00 ft (KB) Capacity: psig
Start Date: 2018.11.10 End Date: 2018.11.10 Last Calib.: 2018.11.10
Start Time: 15:41:01 End Time: 22:56:02 Time On Btm: 2018.11.10 @ 18:08:47
Time Off Btm: 2018.11.10 @ 20:49:47

TEST COMMENT: IFP 15 Minutes Blow built to 3/4"
ISI 30 Minutes No blow back
FFP 45 Minutes Blow built to 1 1/2"
FSI 60 Minutes No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2313.37	104.97	Initial Hydro-static
2	23.86	104.57	Open To Flow (1)
17	23.50	105.58	Shut-In(1)
47	562.88	106.55	End Shut-In(1)
47	25.65	106.42	Open To Flow (2)
93	27.51	108.72	Shut-In(2)
160	930.87	110.31	End Shut-In(2)
161	2246.90	110.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Oil cut Mud/ Oil 5% Mud 95%	0.42

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS
ER Trust #1
Job Ticket: 64555 **DST#: 2**
Test Start: 2018.11.10 @ 15:41:00

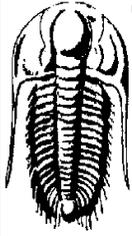
Tool Information

Drill Pipe:	Length: 4570.00 ft	Diameter: 3.80 inches	Volume: 64.11 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 64.11 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	33.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4564.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	48.00 ft				
Tool Length:	75.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Shut-In Tool	5.00			4542.00	
Hydraulic tool	5.00			4547.00	
Jars	5.00			4552.00	
Safety Joint	2.00			4554.00	
Top Packer	5.00			4559.00	
Packer	5.00			4564.00	27.00 Bottom Of Top Packer
Recorder	1.00	8365	Inside	4565.00	
Recorder	1.00	6752	Outside	4566.00	
Anchor	43.00			4609.00	
Bullnose	3.00			4612.00	48.00 Anchor Tool
Total Tool Length:	75.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS
ER Trust #1
Job Ticket: 64555 **DST#: 2**
Test Start: 2018.11.10 @ 15:41:00

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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.17 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6500.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

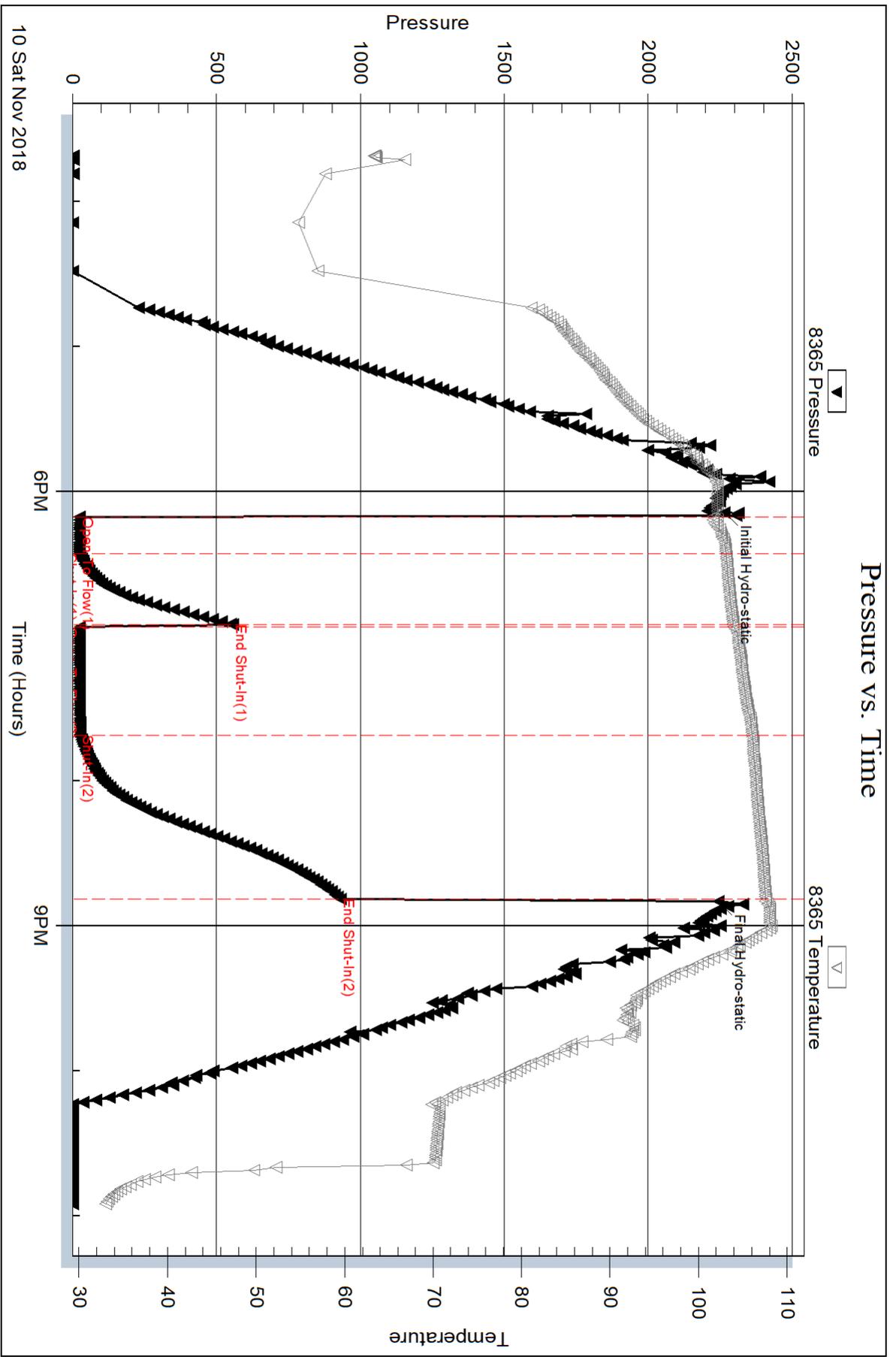
Length ft	Description	Volume bbl
30.00	Oil cut Mud/ Oil 5% Mud 95%	0.421

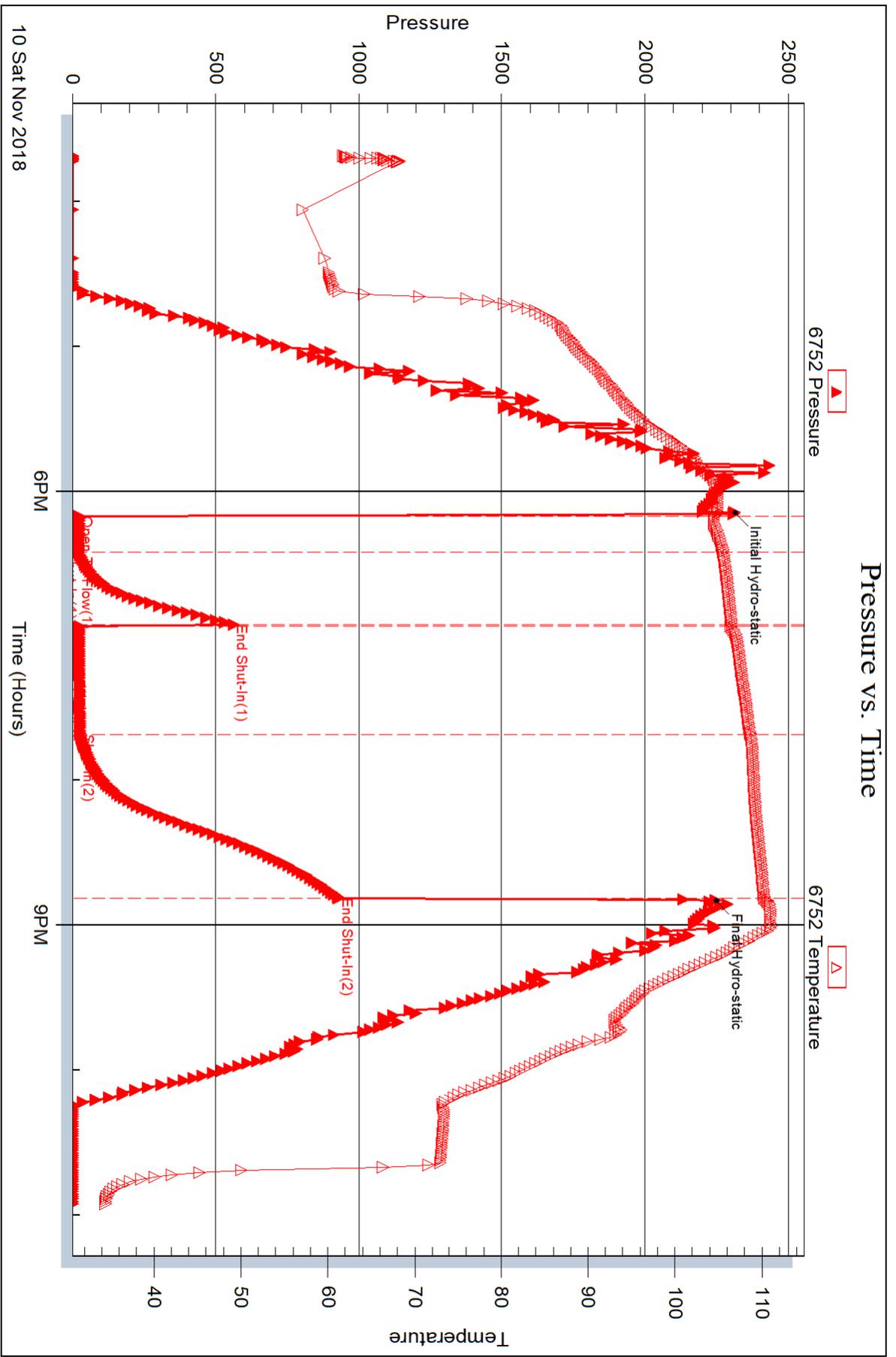
Total Length: 30.00 ft Total Volume: 0.421 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:







DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt Inc**

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

ER Trust #1

12-23S-21W Hodgeman,KS

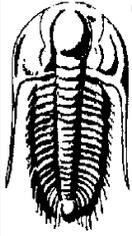
Start Date: 2018.11.11 @ 08:34:00

End Date: 2018.11.11 @ 16:04:02

Job Ticket #: 64556 DST #: 3

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

Printed: 2018.11.13 @ 13:35:53



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Carmen Schmitt Inc
 PO Box 47
 Great Bend, KS 67530+0047
 ATTN: Brad Rine

12-23S-21W Hodgeman,KS

ER Trust #1

Job Ticket: 64556 **DST#: 3**
 Test Start: 2018.11.11 @ 08:34:00

GENERAL INFORMATION:

Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:31:17
 Time Test Ended: 16:04:02
 Interval: **4611.00 ft (KB) To 4617.00 ft (KB) (TVD)**
 Total Depth: 4617.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 72
 Reference Elevations: 2345.00 ft (KB)
 2335.00 ft (CF)
 KB to GR/CF: 10.00 ft

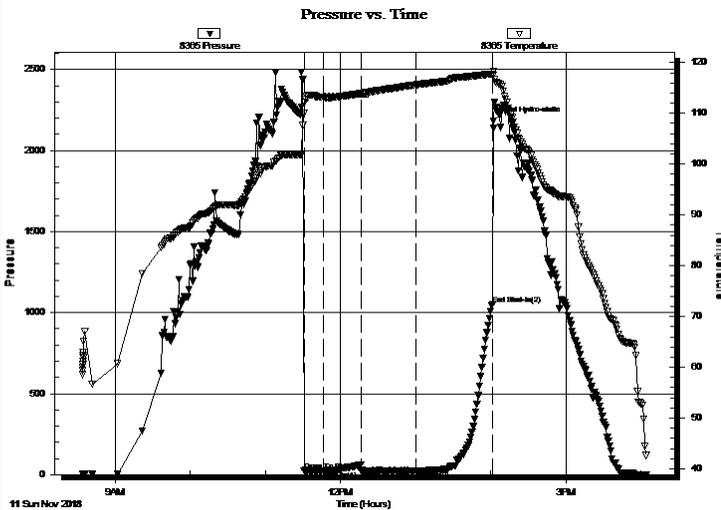
Serial #: 8365

Inside

Press@RunDepth: 23.12 psig @ 4612.00 ft (KB) Capacity: psig
 Start Date: 2018.11.11 End Date: 2018.11.11 Last Calib.: 2018.11.11
 Start Time: 08:34:01 End Time: 16:04:02 Time On Btm: 2018.11.11 @ 11:28:32
 Time Off Btm: 2018.11.11 @ 14:02:02

TEST COMMENT: IFP 15 Minutes Blow built to 1"
 ISI 30 Minutes No blow back
 FFP 45 Minutes Very slow build to 1/4"
 FSI 60 Minutes No blow back

PRESSURE SUMMARY



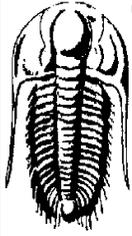
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2270.31	101.82	Initial Hydro-static
3	24.98	112.10	Open To Flow (1)
18	24.29	113.15	Shut-In(1)
48	62.06	113.93	End Shut-In(1)
48	23.82	113.95	Open To Flow (2)
92	23.12	115.61	Shut-In(2)
153	1051.68	117.75	End Shut-In(2)
154	2181.25	117.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w/oil spot in tool/ Mud 100%	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Carmen Schmitt Inc
 PO Box 47
 Great Bend, KS 67530+0047
 ATTN: Brad Rine

12-23S-21W Hodgeman,KS

ER Trust #1

Job Ticket: 64556 **DST#: 3**

Test Start: 2018.11.11 @ 08:34:00

GENERAL INFORMATION:

Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:31:17
 Time Test Ended: 16:04:02
 Interval: **4611.00 ft (KB) To 4617.00 ft (KB) (TVD)**
 Total Depth: 4617.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 72
 Reference Elevations: 2345.00 ft (KB)
 2335.00 ft (CF)
 KB to GR/CF: 10.00 ft

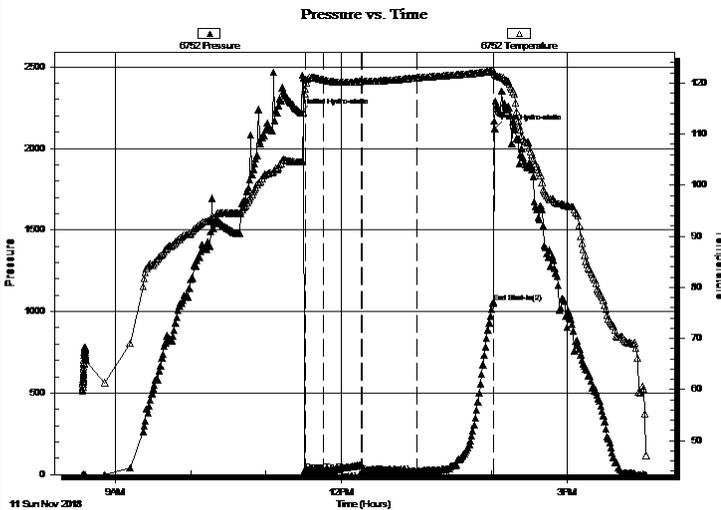
Serial #: 6752

Outside

Press@RunDepth: 1058.19 psig @ 4613.00 ft (KB) Capacity: psig
 Start Date: 2018.11.11 End Date: 2018.11.11 Last Calib.: 2018.11.11
 Start Time: 08:34:01 End Time: 16:03:02 Time On Btm: 2018.11.11 @ 11:27:32
 Time Off Btm: 2018.11.11 @ 14:02:32

TEST COMMENT: IFP 15 Minutes Blow built to 1"
 ISI 30 Minutes No blow back
 FFP 45 Minutes Very slow build to 1/4"
 FSI 60 Minutes No blow back

PRESSURE SUMMARY



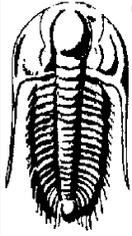
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2218.48	104.61	Initial Hydro-static
4	24.61	118.76	Open To Flow (1)
19	25.10	120.59	Shut-In(1)
49	63.50	120.30	End Shut-In(1)
49	24.82	120.30	Open To Flow (2)
93	24.17	121.03	Shut-In(2)
154	1058.19	122.34	End Shut-In(2)
155	2117.66	121.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w/oil spot in tool/ Mud 100%	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS
ER Trust #1
Job Ticket: 64556 **DST#: 3**
Test Start: 2018.11.11 @ 08:34:00

Tool Information

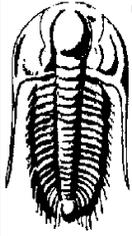
Drill Pipe:	Length: 4603.00 ft	Diameter: 3.80 inches	Volume: 64.57 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 75000.00 lb
		Total Volume: 64.57 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4611.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	6.00 ft			
Tool Length:	33.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Shut-In Tool	5.00			4589.00	
Hydraulic tool	5.00			4594.00	
Jars	5.00			4599.00	
Safety Joint	2.00			4601.00	
Packer - Shale	5.00			4606.00	
Packer	5.00			4611.00	27.00 Bottom Of Top Packer
Recorder	1.00	8365	Inside	4612.00	
Recorder	1.00	6752	Outside	4613.00	
Anchor	1.00			4614.00	
Bullnose	3.00			4617.00	6.00 Anchor Tool
Total Tool Length:	33.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS
ER Trust #1
Job Ticket: 64556 **DST#: 3**
Test Start: 2018.11.11 @ 08:34:00

Mud and Cushion Information

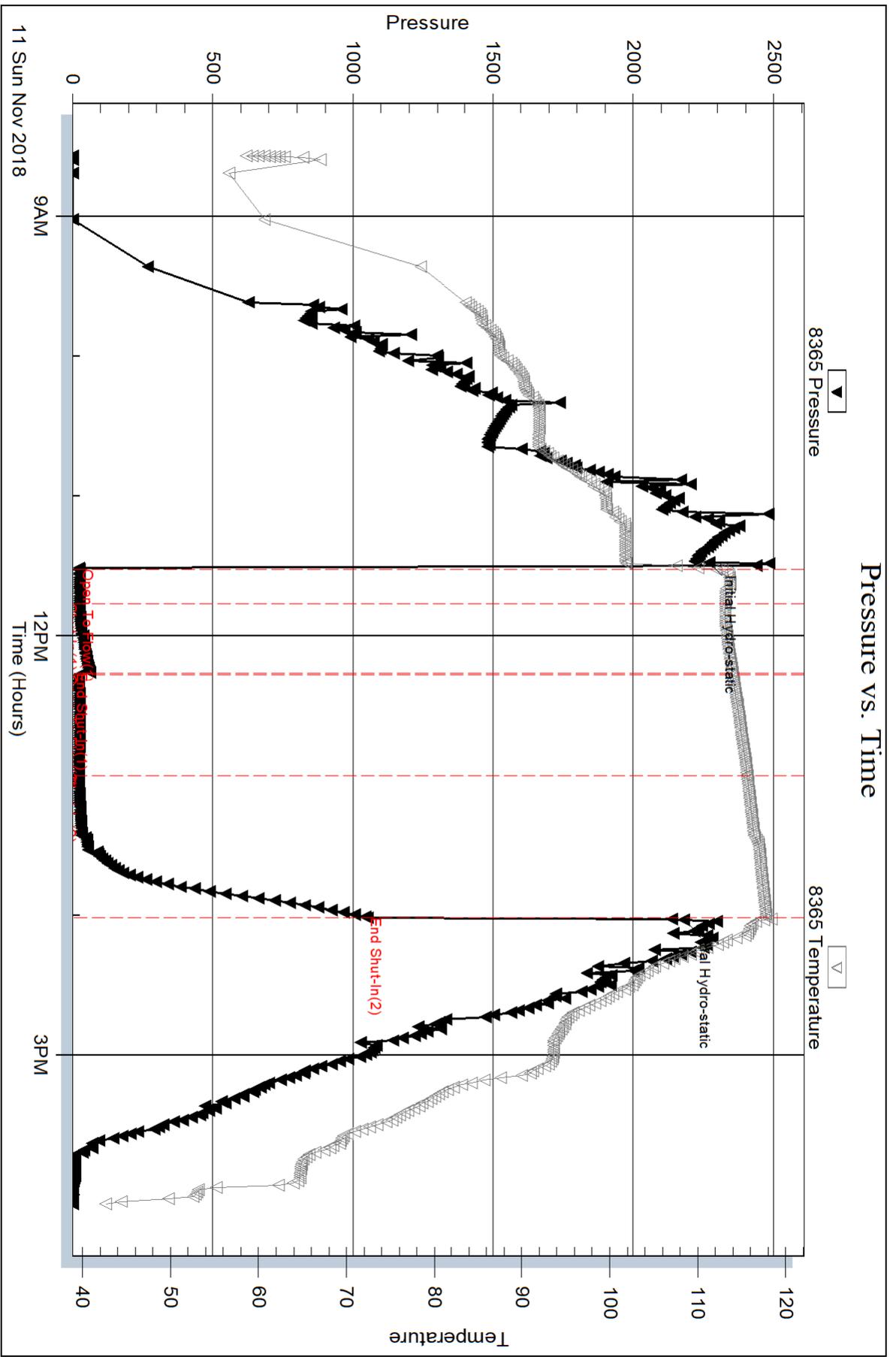
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 74.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.77 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7400.00 ppm			
Filter Cake: 1.00 inches			

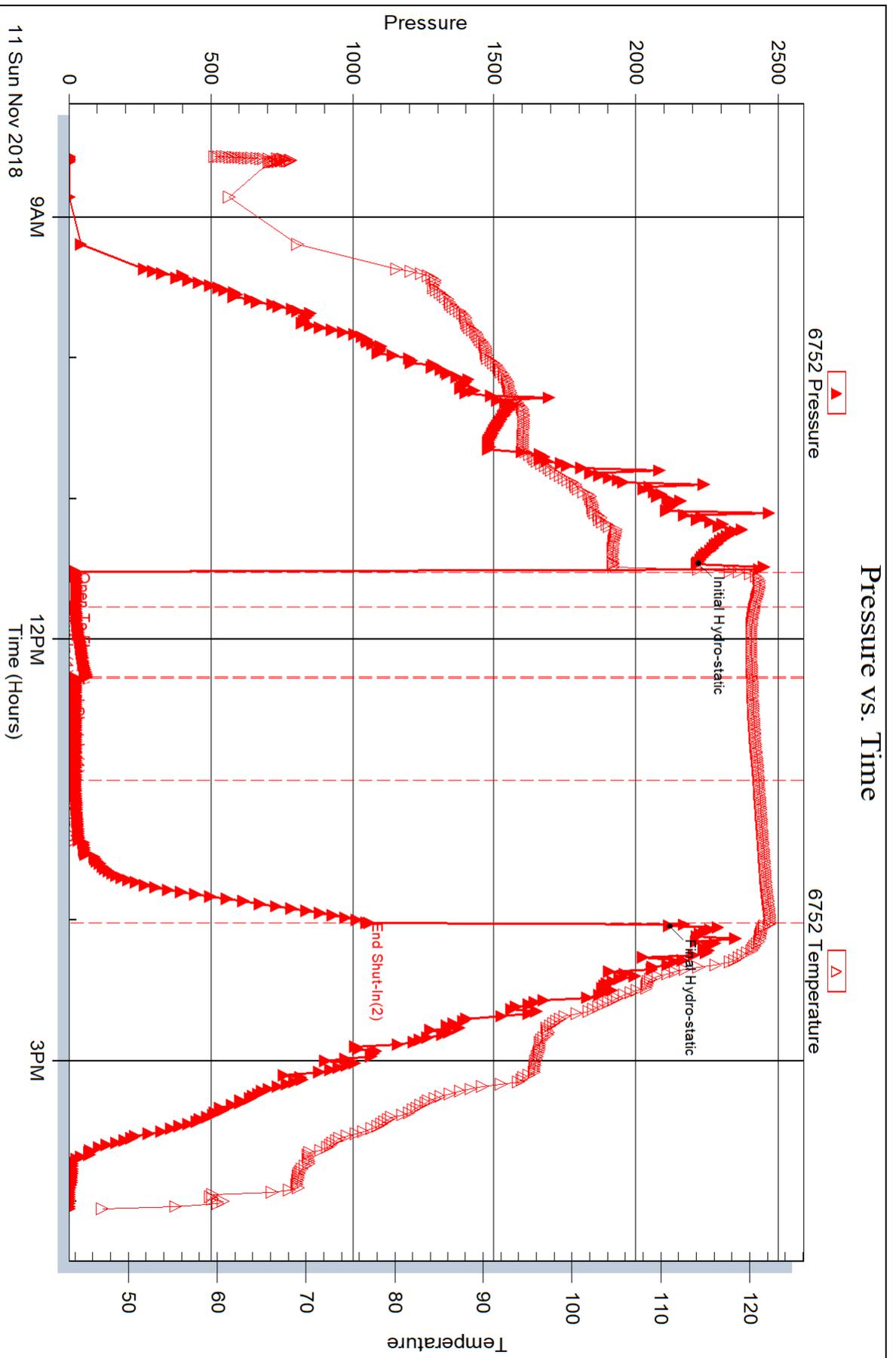
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud w /oil spot in tool/ 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:







DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt Inc**

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

ER Trust #1

12-23S-21W Hodgeman,KS

Start Date: 2018.11.12 @ 05:13:00

End Date: 2018.11.12 @ 11:19:02

Job Ticket #: 64557 DST #: 4

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

Printed: 2018.11.13 @ 13:35:03



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Carmen Schmitt Inc
 PO Box 47
 Great Bend, KS 67530+0047
 ATTN: Brad Rine

12-23S-21W Hodgeman,KS

ER Trust #1

Job Ticket: 64557

DST#: 4

Test Start: 2018.11.12 @ 05:13:00

GENERAL INFORMATION:

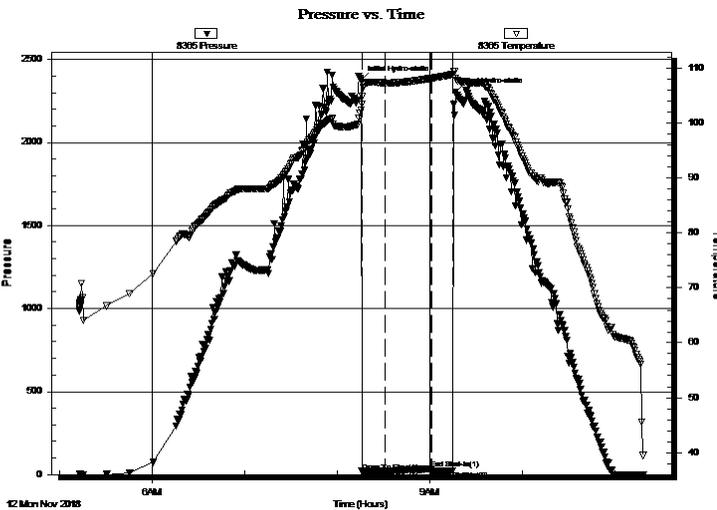
Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:16:02
 Time Test Ended: 11:19:02
 Interval: **4617.00 ft (KB) To 4626.00 ft (KB) (TVD)**
 Total Depth: 4626.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 72
 Reference Elevations: 2345.00 ft (KB)
 2335.00 ft (CF)
 KB to GR/CF: 10.00 ft

Serial #: 8365

Inside

Press@RunDepth: 19.32 psig @ 4618.00 ft (KB) Capacity: psig
 Start Date: 2018.11.12 End Date: 2018.11.12 Last Calib.: 2018.11.12
 Start Time: 05:13:01 End Time: 11:19:02 Time On Btm: 2018.11.12 @ 08:15:32
 Time Off Btm: 2018.11.12 @ 09:17:02

TEST COMMENT: IFP 15 Minutes Blow built to 1/4"
 ISI 30 Minutes No blow back
 FFP 15 Minutes Few bubbles at open then dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2373.45	102.40	Initial Hydro-static
1	20.17	103.49	Open To Flow (1)
16	19.32	107.36	Shut-In(1)
46	33.99	108.20	End Shut-In(1)
46	20.24	108.21	Open To Flow (2)
60	21.33	108.93	Shut-In(2)
62	2302.93	108.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Light oil spot Mud/ Mud 100%	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS

ER Trust #1

Job Ticket: 64557 **DST#: 4**
Test Start: 2018.11.12 @ 05:13:00

GENERAL INFORMATION:

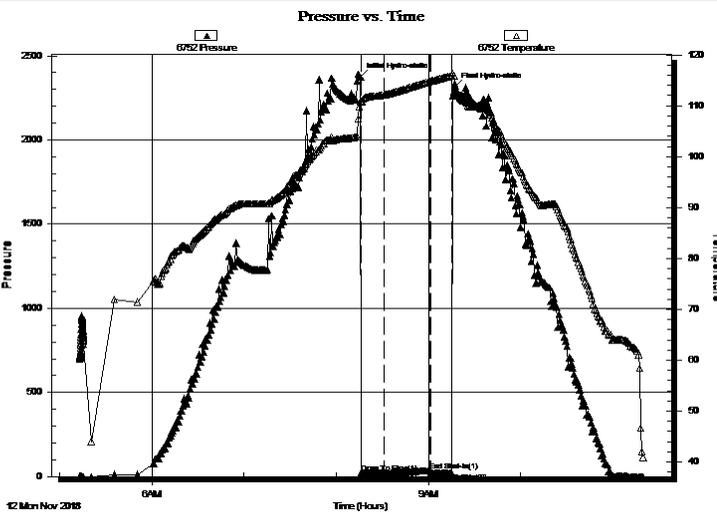
Formation: **Mississippi**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:16:02
Time Test Ended: 11:19:02
Interval: **4617.00 ft (KB) To 4626.00 ft (KB) (TVD)**
Total Depth: 4626.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Initial)
Tester: Ken Swinney
Unit No: 72
Reference Elevations: 2345.00 ft (KB)
2335.00 ft (CF)
KB to GR/CF: 10.00 ft

Serial #: 6752

Outside

Press@RunDepth: 35.24 psig @ 4619.00 ft (KB) Capacity: psig
Start Date: 2018.11.12 End Date: 2018.11.12 Last Calib.: 2018.11.12
Start Time: 05:13:01 End Time: 11:20:02 Time On Btm: 2018.11.12 @ 08:15:47
Time Off Btm: 2018.11.12 @ 09:17:02

TEST COMMENT: IFP 15 Minutes Blow built to 1/4"
ISI 30 Minutes No blow back
FFP 15 Minutes Few bubbles at open then dead



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2371.97	110.85	Initial Hydro-static
1	21.32	110.81	Open To Flow (1)
16	20.69	112.13	Shut-In(1)
46	35.24	114.79	End Shut-In(1)
46	21.58	114.83	Open To Flow (2)
60	22.54	115.92	Shut-In(2)
62	2315.22	114.36	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Light oil spot Mud/ Mud 100%	0.07

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS
ER Trust #1
Job Ticket: 64557 **DST#: 4**
Test Start: 2018.11.12 @ 05:13:00

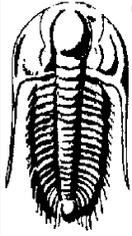
Tool Information

Drill Pipe:	Length: 4603.00 ft	Diameter: 3.80 inches	Volume: 64.57 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 90000.00 lb
			<u>Total Volume: 64.57 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	13.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4617.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	36.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
-------------------------	--------------------	-------------------	-----------------	-------------------	-----------------------

Shut-In Tool	5.00			4595.00	
Hydraulic tool	5.00			4600.00	
Jars	5.00			4605.00	
Safety Joint	2.00			4607.00	
Top Packer	5.00			4612.00	
Packer	5.00			4617.00	27.00 Bottom Of Top Packer
Recorder	1.00	8365	Inside	4618.00	
Recorder	1.00	6752	Outside	4619.00	
Anchor	4.00			4623.00	
Bullnose	3.00			4626.00	9.00 Anchor Tool
Total Tool Length:	36.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS
ER Trust #1
Job Ticket: 64557 **DST#: 4**
Test Start: 2018.11.12 @ 05:13:00

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: 74.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7400.00 ppm			
Filter Cake: 1.00 inches			

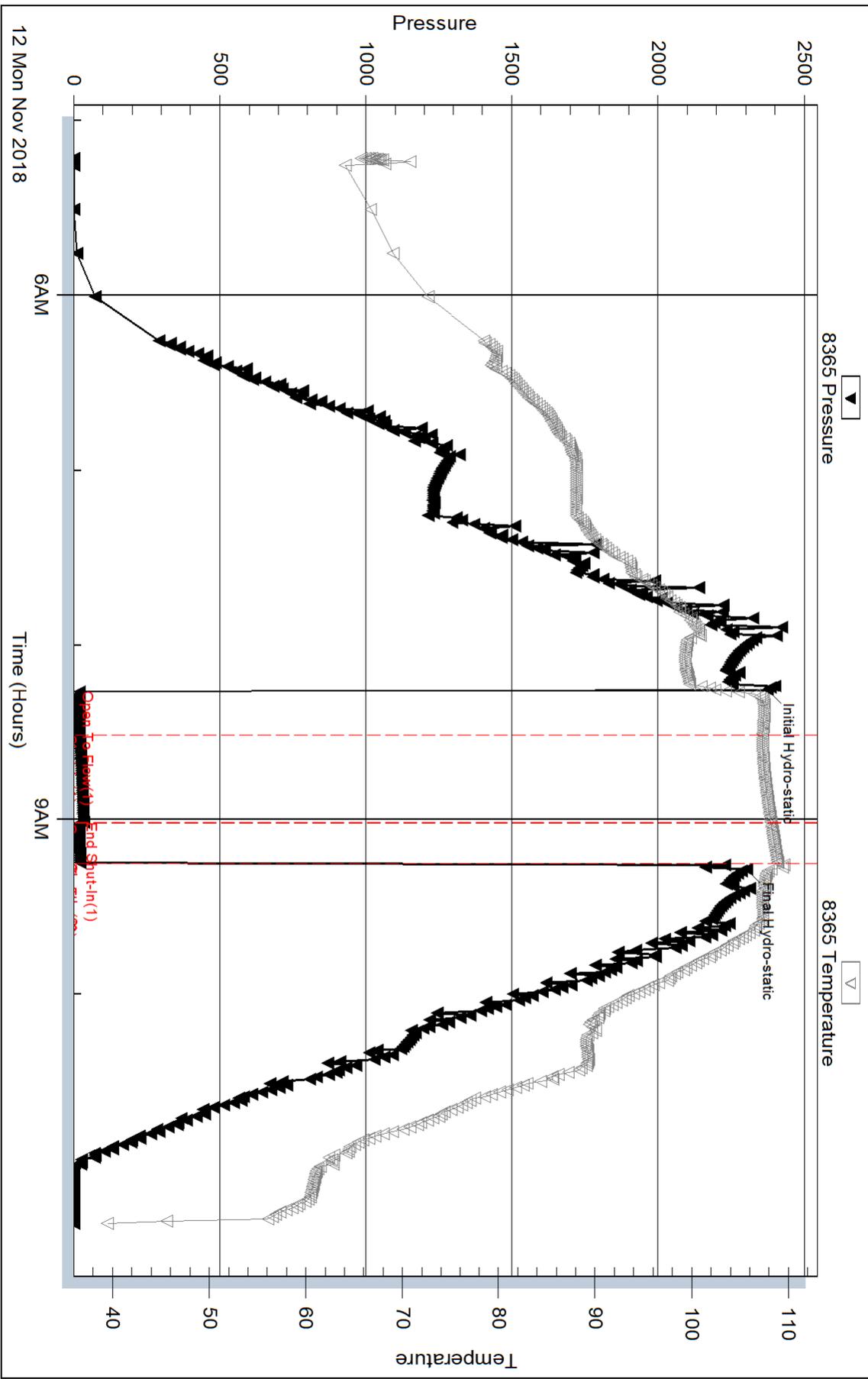
Recovery Information

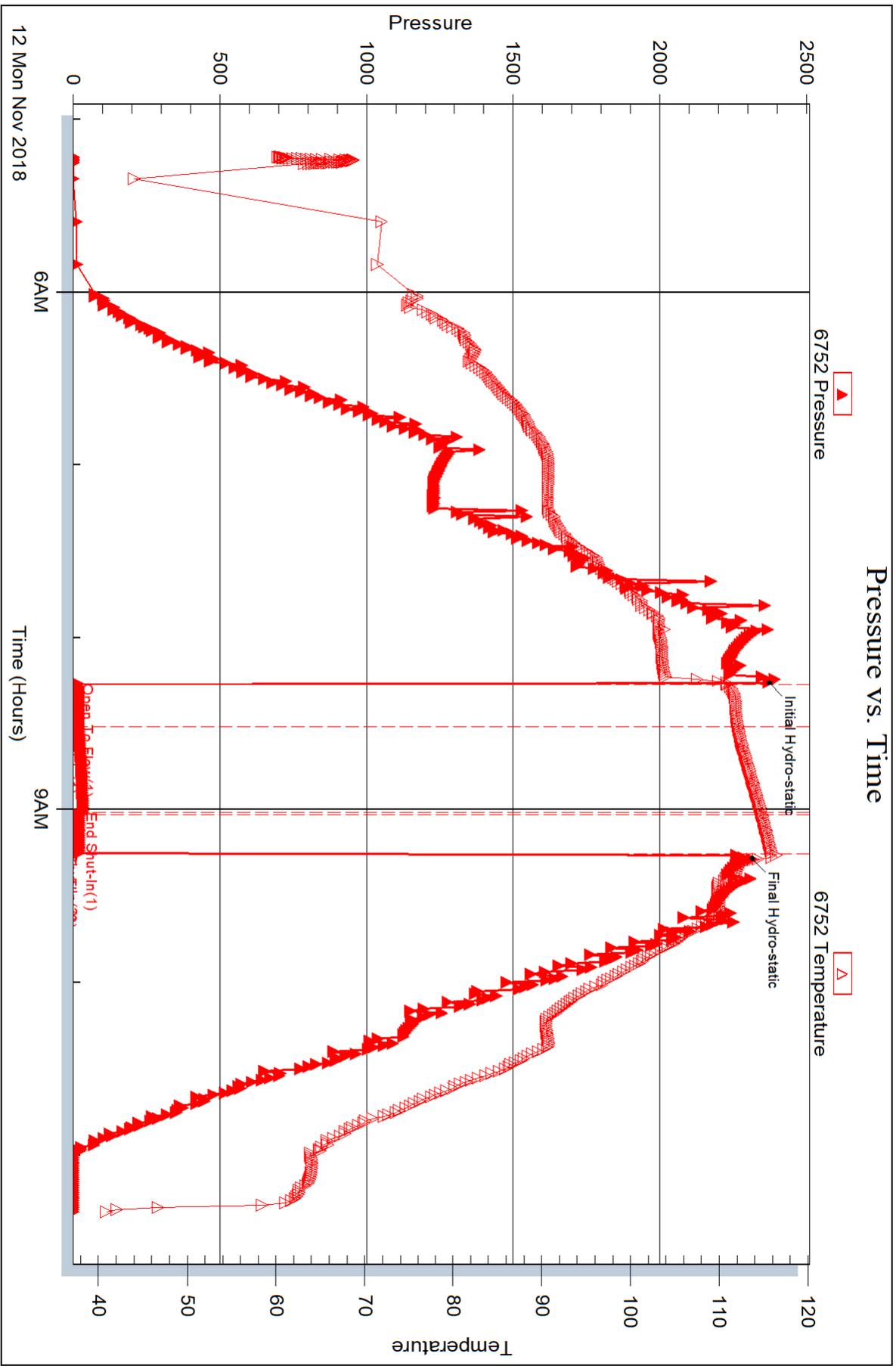
Recovery Table

Length ft	Description	Volume bbl
5.00	Light oil spot Mud/ 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:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Carmen Schmitt Inc**

PO Box 47
Great Bend, KS 67530+0047

ATTN: Brad Rine

ER Trust #1

12-23S-21W Hodgeman,KS

Start Date: 2018.11.12 @ 22:02:00

End Date: 2018.11.13 @ 08:27:47

Job Ticket #: 64558 DST #: 5

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

Printed: 2018.11.13 @ 13:28:58

Carmen Schmitt Inc
12-23S-21W Hodgeman,KS
ER Trust #1
DST # 5
Mississippi
2018.11.12



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Carmen Schmitt Inc
 PO Box 47
 Great Bend, KS 67530+0047
 ATTN: Brad Rine

12-23S-21W Hodgeman,KS

ER Trust #1

Job Ticket: 64558 **DST#: 5**

Test Start: 2018.11.12 @ 22:02:00

GENERAL INFORMATION:

Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 01:16:47
 Time Test Ended: 08:27:47
 Interval: **4626.00 ft (KB) To 4635.00 ft (KB) (TVD)**
 Total Depth: 4635.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 72
 Reference Elevations: 2345.00 ft (KB)
 2335.00 ft (CF)
 KB to GR/CF: 10.00 ft

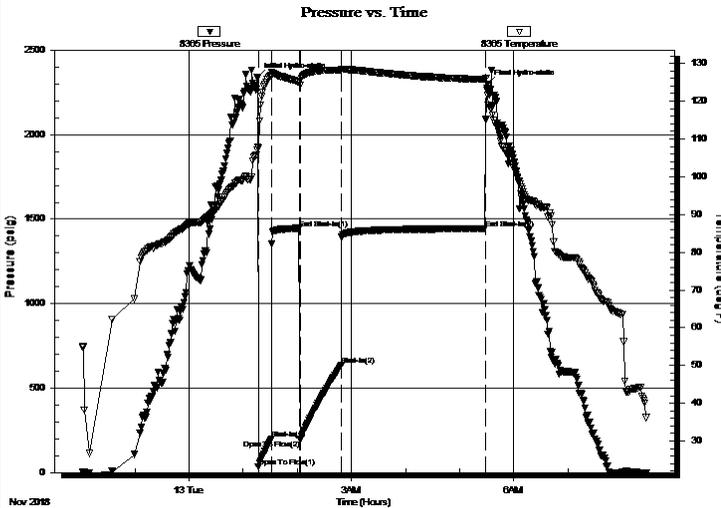
Serial #: 8365

Inside

Press@RunDepth: 634.55 psig @ 4627.00 ft (KB) Capacity: psig
 Start Date: 2018.11.12 End Date: 2018.11.13 Last Calib.: 2018.11.13
 Start Time: 22:02:01 End Time: 08:27:47 Time On Btm: 2018.11.13 @ 01:16:02
 Time Off Btm: 2018.11.13 @ 05:30:47

TEST COMMENT: IFP 15 Minutes Blow built to 1 1/2" - Loose hose connection
 ISI 30 Minutes No blow back
 FFP 45 Minutes Blow built to BOB in 5 minutes Total build 110"
 FSI 60 Minutes No blow back

PRESSURE SUMMARY



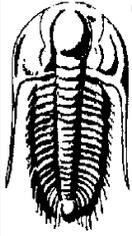
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2338.71	107.90	Initial Hydro-static
1	34.22	107.67	Open To Flow (1)
16	200.22	126.91	Shut-In(1)
47	1446.40	125.05	End Shut-In(1)
47	196.04	124.32	Open To Flow (2)
93	634.55	128.25	Shut-In(2)
253	1444.49	125.76	End Shut-In(2)
255	2299.34	121.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
325.00	Muddy Water/ Mud 30% Water 70%	4.56
992.00	Muddy Water/ Mud 5% Water 95%	13.92

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS
ER Trust #1
Job Ticket: 64558 **DST#: 5**
Test Start: 2018.11.12 @ 22:02:00

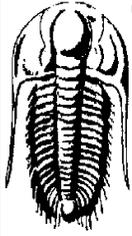
Tool Information

Drill Pipe:	Length: 4603.00 ft	Diameter: 3.80 inches	Volume: 64.57 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
		Total Volume: 64.57 bbl		Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4626.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	9.00 ft			
Tool Length:	36.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut-In Tool	5.00			4604.00	
Hydraulic tool	5.00			4609.00	
Jars	5.00			4614.00	
Safety Joint	2.00			4616.00	
Top Packer	5.00			4621.00	
Packer	5.00			4626.00	27.00 Bottom Of Top Packer
Recorder	1.00	8365	Inside	4627.00	
Recorder	1.00	6752	Outside	4628.00	
Anchor	4.00			4632.00	
Bullnose	3.00			4635.00	9.00 Anchor Tool
Total Tool Length:	36.00				



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Carmen Schmitt Inc
PO Box 47
Great Bend, KS 67530+0047
ATTN: Brad Rine

12-23S-21W Hodgeman,KS
ER Trust #1
Job Ticket: 64558 **DST#: 5**
Test Start: 2018.11.12 @ 22:02:00

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:	38000 ppm
Viscosity: 75.00 sec/qt	Cushion Volume: bbl		
Water Loss: 13.59 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 9300.00 ppm			
Filter Cake: 1.00 inches			

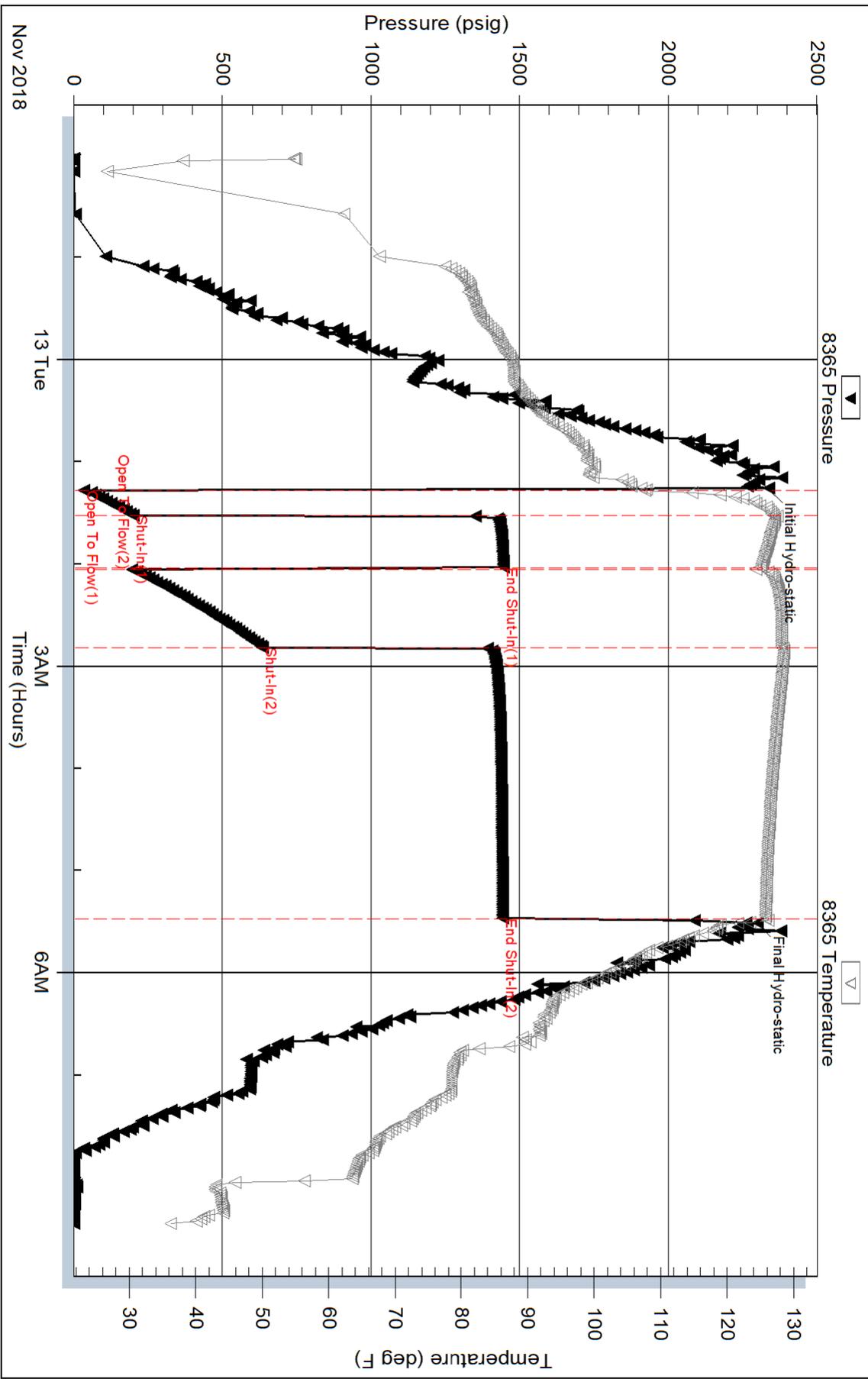
Recovery Information

Recovery Table

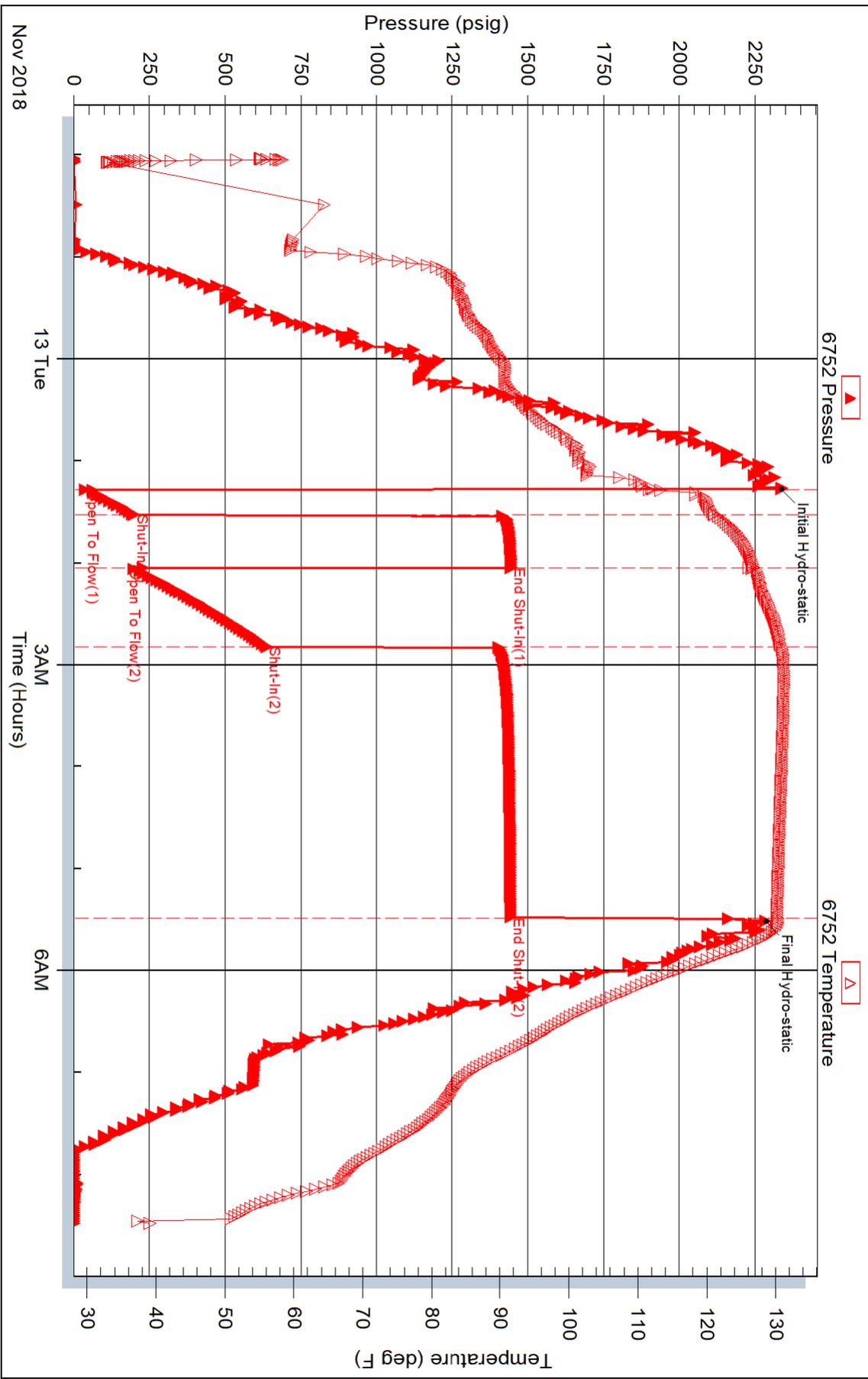
Length ft	Description	Volume bbl
325.00	Muddy Water/ Mud 30% Water 70%	4.559
992.00	Muddy Water/ Mud 5% Water 95%	13.915

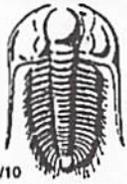
Total Length: 1317.00 ft Total Volume: 18.474 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: Recovery Resistivity .420 ohms @ 30 deg

Pressure vs. Time



Pressure vs. Time





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 64554

Well Name & No. ER Trust #1 Test No. #1 Date 9 NOV 18
 Company Carmen Schmitt Inc Elevation 2345 KB 2335 GL
 Address PO Box 47 Great Bend Kansas 67530+0047
 Co. Rep / Geo. Brad Rine Rig Southwind Rig 8
 Location: Sec. 12 Twp 23S Rge. 21W Co. Hodgeman State KS

Interval Tested 4531-4574 Zone Tested Fort Scott
 Anchor Length 43 Drill Pipe Run 4512 Mud Wt. 9.3
 Top Packer Depth 4526 Drill Collars Run — Vls 51
 Bottom Packer Depth 4531 Wt. Pipe Run — WL 9.6
 Total Depth 4574 Chlorides 5300 ppm System LCM 2#

Blow Description I.F. Blow built to 1 inch
I.S.I. No blow back
F.F. Dead no blow/Flush tool/surface blow for 3 minutes/Pull test

Rec	Feet of	%gas	%oil	%water	%mud
<u>2</u>	<u>mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2 BHT Gravity 1150 API RW 116 @ 116 °F Chlorides 5300 ppm

(A) Initial Hydrostatic 2217 Test 1150 T-On Location 7:24 pm
 (B) First Initial Flow 22 Jars 250 T-Started 10:03 pm
 (C) First Final Flow 22 Safety Joint 75 T-Open 12:19 am
 (D) Initial Shut-In 39 Circ Sub _____ T-Pulled 1:19 am
 (E) Second Initial Flow 21 Hourly Standby _____ T-Out 3:33 am
 (F) Second Final Flow 21 Mileage 116 116
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 2199 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1591

Initial Open 15
 Initial Shut-In 30
 Final Flow 15
 Final Shut-In —

Comments _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1591
 MP/DST Disc't _____

Approved By Brad Rine Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **64555**

Well Name & No. ER Trust #1 Test No. 2 Date 10 NOV 18
 Company Carmen Schmitt Inc Elevation 2345 KB 2335 GL
 Address PO Box 47 Great Bend Kansas 67530-0047
 Co. Rep / Geo. Brad Rine Rig Southwind Rig 8
 Location: Sec. 12 Twp 23S Rge. 21W Co. Hodgeman State KS

Interval Tested 4564-4612 Zone Tested Mississippi
 Anchor Length 48 Drill Pipe Run 4570 Mud Wt. 9.05
 Top Packer Depth 4559 Drill Collars Run — Vis 56
 Bottom Packer Depth 4564 Wt. Pipe Run — WL 9.2
 Total Depth 4612 Chlorides 6500 ppm System LCM 2# ~~500~~

Blow Description F.F. Blow built to 3/4 inch
I.S.I. No blow back
F.F. Blow built to 1 1/2 inch
F.S.I. No blow back

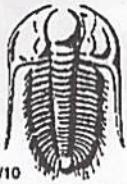
Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>0.1 cut Mud</u>		<u>5</u>		<u>95</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 30 BHT 107 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2265</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>2:25 pm</u>
(B) First Initial Flow <u>24</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>3:41 pm</u>
(C) First Final Flow <u>23</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>6:10 pm</u>
(D) Initial Shut-In <u>556</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>8:40 pm</u>
(E) Second Initial Flow <u>25</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>10:56 pm</u>
(F) Second Final Flow <u>26</u>	<input checked="" type="checkbox"/> Mileage <u>116</u> 116	Comments _____
(G) Final Shut-In <u>931</u>	<input type="checkbox"/> Sampler _____	_____
(H) Final Hydrostatic <u>2244</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>15</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>1591</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1591</u>	

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **64556**

4/10

Well Name & No. ER Trust #1 Test No. 3 Date 11 NOV 18
 Company Carmen Schmitt Inc. Elevation 2345 KB 2335 GL
 Address PO Box 417 Great Bend Kansas 67530 +00 47
 Co. Rep / Geo. Brad Rine Rig Southwind Rig 8
 Location: Sec. 12 Twp 23S Rge. 21W Co. Hodgeman State KS

Interval Tested 4611-4617 Zone Tested Mississippi
 Anchor Length 6 Drill Pipe Run 4603 Mud Wt. 9.45
 Top Packer Depth 4606 Drill Collars Run - Vis 74
 Bottom Packer Depth 4611 Wt. Pipe Run - WL 10.8
 Total Depth 4617 Chlorides 7400 ppm System LCM 2#

Blow Description I.F. Blow built to 1 inch
I.S.I. No blow back
F.F. Very slow build to 1/4 inch
F.S.I. No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud w/ oil spot in tool</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 107 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2270</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>6:52 am</u>
(B) First Initial Flow <u>24</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>8:34 am</u>
(C) First Final Flow <u>24</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>11:31 am</u>
(D) Initial Shut-In <u>62</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>2:01 pm</u>
(E) Second Initial Flow <u>23</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>4:04 pm</u>
(F) Second Final Flow <u>23</u>	<input checked="" type="checkbox"/> Mileage <u>116</u> 116	Comments _____
(G) Final Shut-In <u>1051</u>	<input type="checkbox"/> Sampler _____	_____
(H) Final Hydrostatic <u>2181</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>15</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>1841</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1841</u>	

Approved By Brad Rine Our Representative [Signature]
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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **64557**

4/10

Well Name & No. ER Trust #2 Test No. 4 Date 12 Nov 18
 Company Carmen Schmitt Inc Elevation 2345 KB 2335 GL
 Address PO Box 47 Great Bend Kansas 67530+0047
 Co. Rep / Geo. Brad Rine Rig Southwind Rig 8
 Location: Sec. 12 Twp 23S Rge. 21W Co. Hodgeman State KS

Interval Tested 4617-4626 Zone Tested Mississippi
 Anchor Length 9 Drill Pipe Run 4603 Mud Wt. 9.45
 Top Packer Depth 4612 Drill Collars Run — Vis 74
 Bottom Packer Depth 4617 Wt. Pipe Run — WL 10.8
 Total Depth 4626 Chlorides 7400 ppm System LCM 2#

Blow Description I.F. Blow built to 4 1/2 inch
I.S.I. No blow back
F.F. Few bubbles at open then dead / Pull test

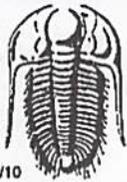
Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Light oil spot mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 5 BHT 108 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>2373</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>4:00 gm</u>
(B) First Initial Flow <u>20</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>5:13 gm</u>
(C) First Final Flow <u>19</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>8:16 gm</u>
(D) Initial Shut-In <u>33</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>9:16 gm</u>
(E) Second Initial Flow <u>20</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>11:20 gm</u>
(F) Second Final Flow <u>21</u>	<input checked="" type="checkbox"/> Mileage <u>116</u> 116	Comments _____
(G) Final Shut-In _____	<input type="checkbox"/> Sampler _____	_____
(H) Final Hydrostatic <u>2302</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>15</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>15</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Shut-In _____	<input type="checkbox"/> Day Standby _____	Total <u>1841</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>1841</u>	

Approved By Brad Rine Our Representative [Signature]

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **64558**

4/10

Well Name & No. CR Trust #1 Test No. 5 Date 12 NOV 18
 Company Carmen Schmitt Inc Elevation 2345 KB 2335 GL
 Address PO Box 47 Great Bend Kansas 67530-0047
 Co. Rep / Geo. Brad Rine Rig Southwind Rig 8
 Location: Sec. 17 Twp 23S Rge. 21W Co. Holgenan State KS

Interval Tested 4626-4635 Zone Tested Mississippi
 Anchor Length 9 Drill Pipe Run 4603 Mud Wt. 9.4
 Top Packer Depth 4621 Drill Collars Run - Vis 75
 Bottom Packer Depth 4626 Wt. Pipe Run - WL 13.6
 Total Depth 4635 Chlorides 9300 ppm System LCM 1 1/2 #

Blow Description I.F. Blow built to 1 1/2 inch / Loose hose connection
F.S.I. No blow back
FF Blow to BOB in 5 minutes / Total build 110 inches
F.S.I. No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>325</u>	<u>Muddy Water</u>			<u>70</u>	<u>30</u>
<u>992</u>	<u>Muddy Water</u>			<u>95</u>	<u>5</u>

Rec Total 1317 BHT 125 Gravity _____ API RW .420 @ 30 °F Chlorides 38000 ppm

(A) Initial Hydrostatic 2338 Test 1150 T-On Location _____
 (B) First Initial Flow 34 Jars 250 T-Started 10:02 pm
 (C) First Final Flow 200 Safety Joint 75 T-Open 1:17 am
 (D) Initial Shut-In 1446 Circ Sub _____ T-Pulled 5:30 am
 (E) Second Initial Flow 196 Hourly Standby _____ T-Out 8:28 am
 (F) Second Final Flow 634 Mileage 116 116 Comments 1 hr 45 min
 (G) Final Shut-In 1441 Sampler _____ Draw works Maint.
 (H) Final Hydrostatic 2229 Straddle _____ Final Shut
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Initial Open 15 Extra Packer _____
 Initial Shut-In 30 Extra Recorder _____
 Final Flow 45 Day Standby _____
 Final Shut-In 165 Accessibility _____
 Sub Total 1841 Sub Total _____
 Total 1841 MP/DST Disc't _____

Approved By Brad Rine Our Representative [Signature]

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M. Bradford Rine

Consulting Geologist

Licensed/Certified: Kansas, Wyoming, AAPG/DPA, SIPES

Phone: (316) 250-5941

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

Well Name: ER Trust #1 - Carmen Schmitt, Inc.
API: 15-083-21963-00-00
Location: SE-SW-NW-SE, Section 12-23S-21W
License Number: KCC #6569
Spud Date: November 02, 2018
Surface Coordinates: 1490' FSL & 2000' FEL,
of Section
Bottom Hole Vertical Wellbore
Coordinates:
Ground Elevation (ft): 2335 Ft. **K.B. Elevation (ft):** 2345 Ft.
Logged Interval (ft): 3800 Ft. **To:** 4665 Ft. **Total Depth (ft):** RTD 4665 Ft. LTD 4627 Ft.
Formation: Mississippian at Total Depth
Type of Drilling Fluid: Chemical

Region: Hodgeman Co, Ks.
Drilling Completed: November 14, 2018

Results: D & A
Field: Unnamed

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 plug and abandon the "ER Trust #1", on November 14, 2018.

Respectfully submitted,
M. Bradford Rine, geologist

Drilling Information

Rig: Southwind, #8
Pump: Emsco D-375 6x14
Drawworks: RMI 550
Collars: 464' 2-1/4 x 6-1/4
Drillpipe: 4-1/2" 16.6# XH
Toolpusher: James Pfaff

Mud: Mudco (Justin Whiting)
Gas Detector: None
Drill Stem Tests: Trilobite (Ken Swinney)
Logs: Pioneer (Dan Schmidt)
Water: Nearby pond northeast of location (pumped)
Company Representatives:
Office: Carmen Schmitt
Field: None

Daily Drilling Status

Date:	Operations/Depth/Comments
11-02-18	MIRT, RU, Spud @ 0'
11-03-18	Waiting on Cement @ 224'
11-04-18	Drilling @ 1459'
11-05-18	Drilling @ 2465'
11-06-18	Drilling @ 3081'
11-07-18	Drilling @ 3652'
11-08-18	Drilling @ 4097'
11-09-18	Drilling @ 4460'
11-10-18	Circulate to Condition Hole after DST #1 @ 4574'
11-11-18	Trip Out of Hole for DST #3 @ 4617'
11-12-18	Trip in Hole with DST #4 @ 4626'
11-13-18	Trip Out of Hole with DST #5 @ 4635'
11-14-18	Prepare to P&A at 4665'

	Results:	P&A		(Well A)	Oil	Well B)	Oil		
	Carmen Schmitt, Inc.			Carmen Schmitt, Inc.		Carmen Schmitt, Inc.			
	ER Trust #1			Horacek "A" #1		Gleason #1			
	1490' FSL & 2000' FEL			1820'FNL & 1000'FWL		1390' FNL & 330' FEL			
	Sec. 12-23S-21W			Sec. 13-23S-21W		Sec. 14-23S-21W			
		2345	KB	2316	KB	2334	KB	Well A	Well B
Formations	Sample	E-Log	Datum	E-Log	Datum	E-Log	Datum	Comparison(s)	
Anhydrite	1452	1453	892	1426	890	1441	893	2	-1
B/Anhydrite	1472	1473	872	1447	869	1462	872	3	0
Heebner Sh.	3966	3966	-1621	3921	-1605	3944	-1610	-16	-11
Brown Lime	4038	4039	-1694	3994	-1678	4019	-1685	-16	-9
Lansing	4049	4049	-1704	4008	-1692	4034	-1700	-12	-4
Stark Sh.	4279	4280	-1935	4232	-1916	4262	-1928	-19	-7
B/Kansas City	4365	4366	-2021	4320	-2004	4349	-2015	-17	-6
Marmaton	4372	4372	-2027	4327	-2011	4355	-2021	-16	-6
Pawnee	4474	4474	-2129	4434	-2118	4458	-2124	-11	-5
Ft. Scott	4542	4542	-2197	4502	-2186	4527	-2193	-11	-4
Cherokee Sh.	4565	4567	-2222	4525	-2209	4553	-2219	-13	-3
Mississippian	4606	4604	-2259	4567	-2251	4593	-2259	-8	0
Total Depth	4665	4627	-2282	4576	-2260	4599	-2265	-22	-17

* had approx 38 feet of fill on bottom, otherwise log tops conform to sample tops!

Casing Record, Bit Record, Deviation Surveys

CASING:

Conductor: None

Surface: Ran 211 ft 8-5/8" 23# casing, set @ 224'. (Copeland) Cement with 190 sx Common 60/40 POZ, 2% gel 3% CC. Cement did circulate.

Production: (Copeland) Plugged as follows: 170 sx of 60/40 Poz, 4%gel, 1/4# flo seal. 1st plug @ 1470' w/50 sx, 2nd plug @ 630 w/50 sx, 3rd plug @ 270 w/50 sx, 4th plug @ 60' w/20 sx. 30 sx rathole, 20 sx mousehole. Job complete 6:00PM 11/14/18.

BITS:

No.	Size	Make	Model	Depth In	Depth Out	Hours
1	12-1/4	Varel	rr	0	224	2.50
2	7-7/8	Varel	HE29H	224	4574	122.00
3	7-7/8	Varel	HE29rr	4574	4665	4.00

DEVIATION SURVEYS:

Deviation:	Depth:	Deviation:	Depth:
0.25*	224'	0.50*	4665'
0.50*	4574'		

PIPE STRAPS:

Difference:	depth:
1.1' long	3780'

DST #1: 4531-4574 (Ft. Scott)

Times: 15-30-15-out

Initial Open: Weak Blow, built to 1" i.b.

**Final Open: No Blow, flush tool,
had surf blow for 3 min, died**

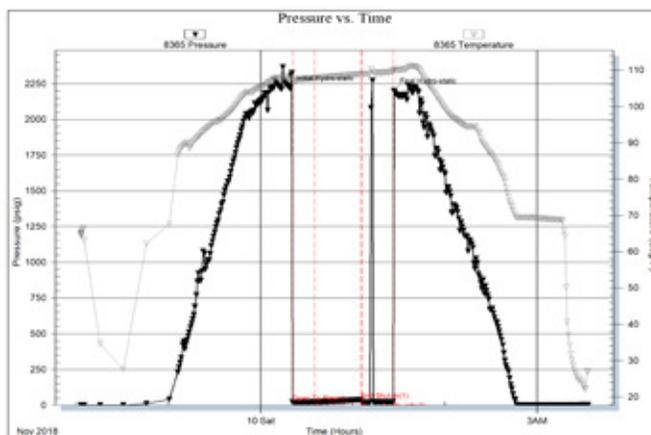
Rec: 2' mud

IHP: 2217 FHP: 2199

IFP: 22-22 FFP: 21-21

ISIP: 39 FSIP: NA

BHT: 110°F



DST #2: 4564-4612 (Mississippi)

Times: 15-30-45-60

Initial Open: Weak Blow, built to 3/4 Inch

Final Open: Weak Blow, built to 1-1/2 inches

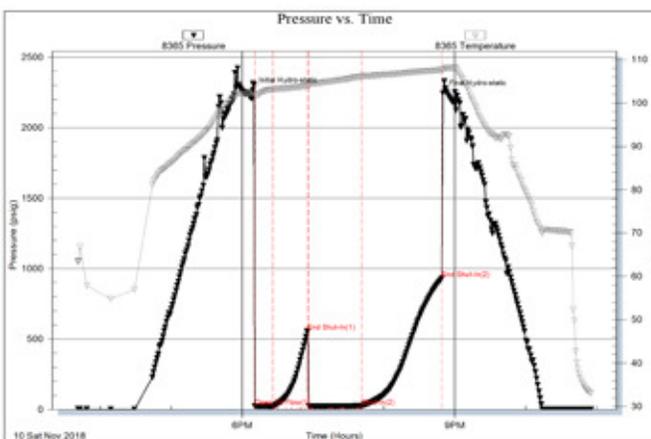
Rec: 30' OCM: 5% o 95% m

IHP: 2265 FHP: 2244

IFP: 24-23 FFP: 25-26

ISIP: 556 FSIP: 931

BHT: 107°F



DST #3: 4611-4617 (Mississippi)

Times: 15-30-45-60

Initial Open: Wk Blow, built to 1" i.b.

Final Open: Wk Blow, built to 1/4" i.b.

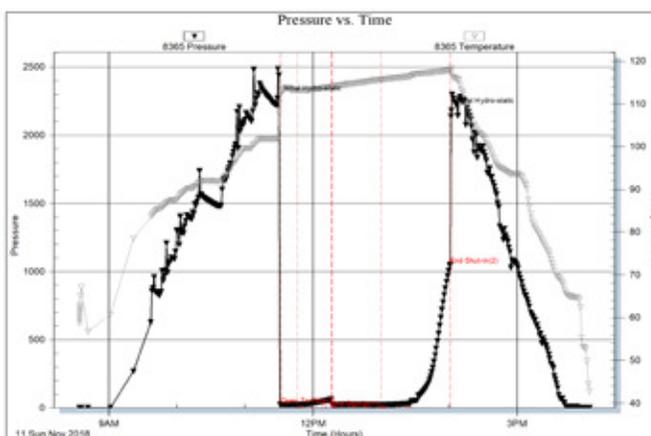
Rec: 5' mud with oil spots

IHP: 2270 FHP: 2181

IFP: 24-24 FFP: 23-23

ISIP: 62 FSIP: 1051

BHT: 107°F



DST #4: 4617-4626 (Mississippi)

Times: 15-30-15-out

Initial Open: Wk Blow, built to 1/4" i.b.

**Final Open: Rare intermit. bubble at surf.,
flush tool-no help**

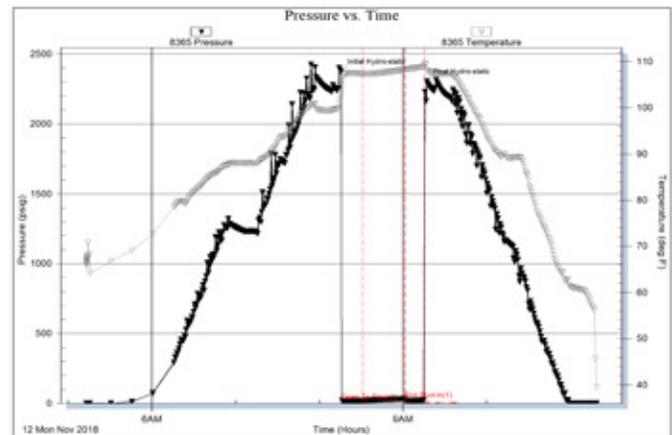
Rec: 5' mud with oil spots

IHP: 2373 FHP: 2302

IFP: 20-19 FFP: 20-21

ISIP: 33 FSIP: NA

BHT: 108°F



DST #5: 4626-4635 (Mississippi)

Times: 15-30-45-60

Initial Open: Wk Blow, built to 1-1/2" i.b.*

*** Found loose connection!**

**Final Open: Stg Blow, b.o.b. 5 min,
no return blow**

Rec: 1317' Total Fluid

325' MCW: 70%w 30%m

992' SMCW: 95%w 05%m

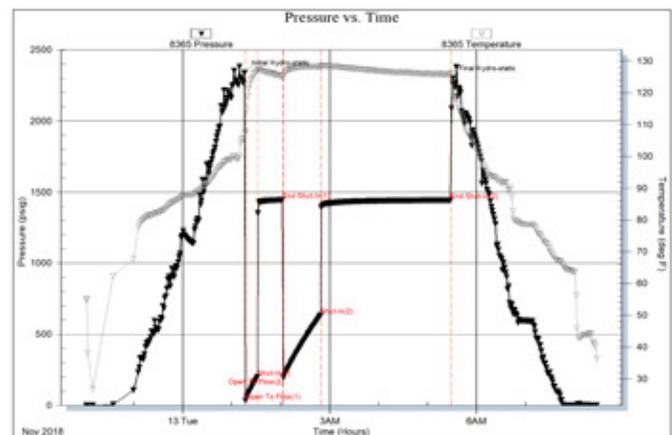
(Chl/Wtr: 38000 ppm)

IHP: 2338 FHP: 2299

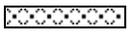
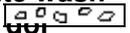
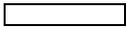
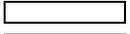
IFP: 34-200 FFP: 196-634

ISIP: 1446 FSIP: 1444

BHT: 125°F



Rock Types

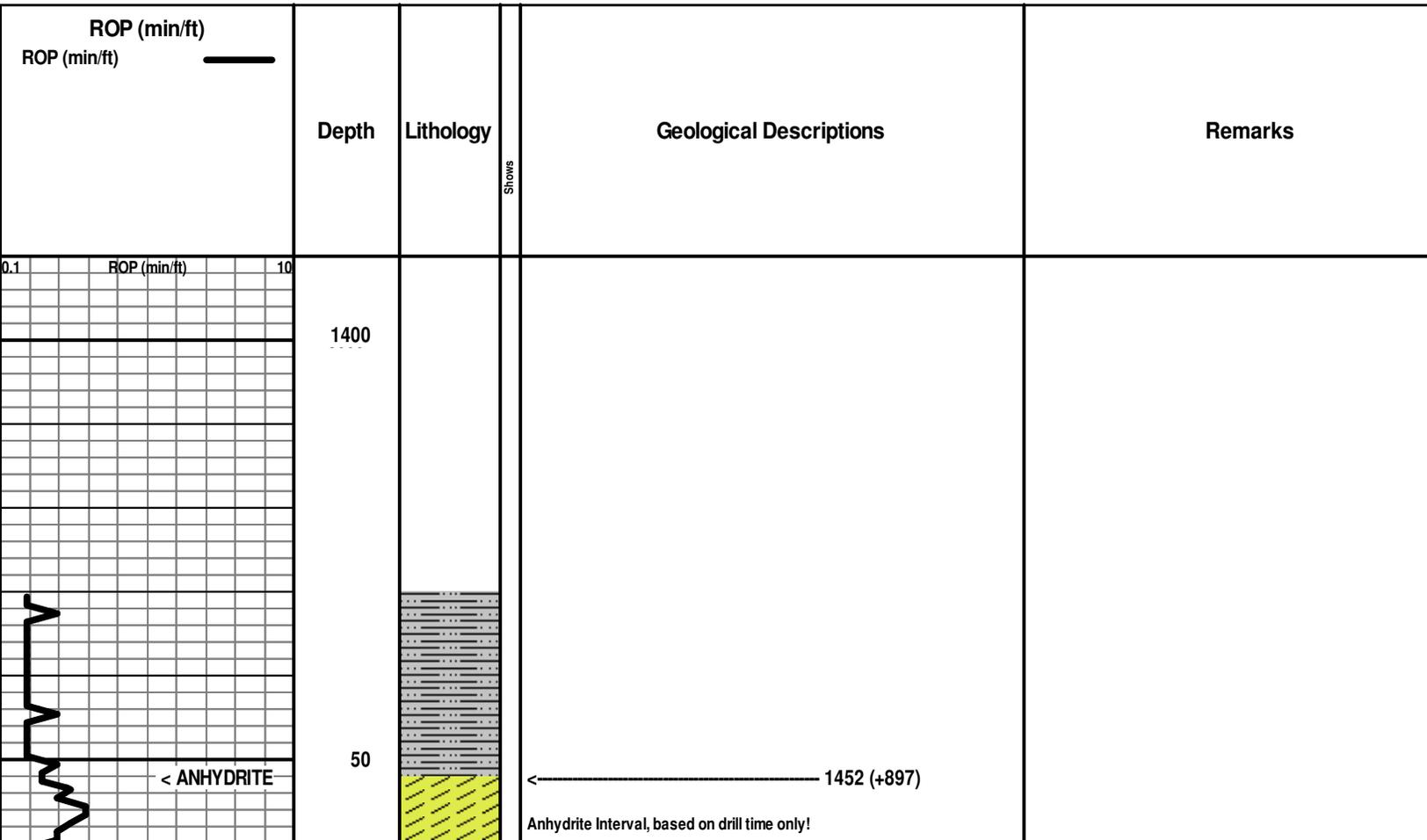
	Congl granite wash		Bent		Dol		Salt		Till
	dol ls limey		Brec		Gyp		Shale		Siltysh
	New symbol		Cht		Igne		Shcol		Shlysiltst
	Dolom ls limey		Clyst		Lmst		Shgy		Sandyls
	New symbol		Black shale		Meta		Siltst		
	Anhy		Congl		Mrlist		Ss		

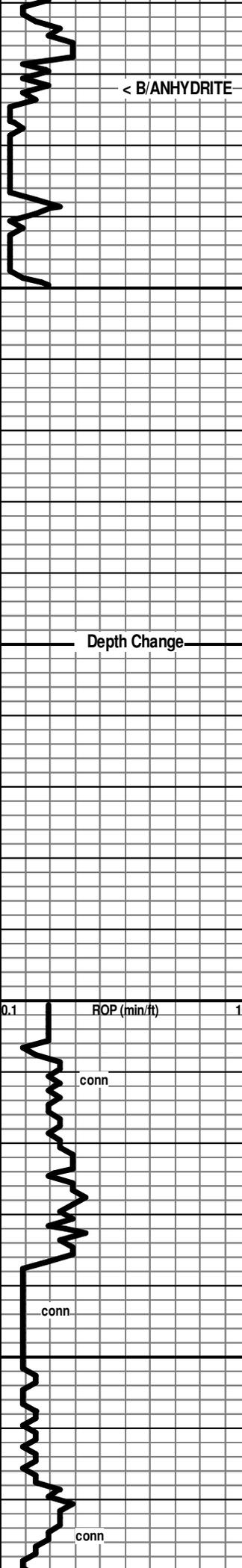
Accessories

MINERAL		Gyp	FOSSIL		Ostra		Siltstrg
	Anhy		Hvymin		Algae		Ssstrg
	Arggrn		Kaol		Amph		
	Arg		Marl		Belm		
	Bent		Minxl		Bioclst	TEXTURE	
	Bit		Nodule		Brach		Boundst
	Brecfrag		Phos		Bryozoa		Chalky
	Calc		Pyr		Cephal		Cryxln
	Carb		Salt		Coral		Earthy
	Chtdk		Sandy		Crin		Finexln
	Chtlt		Silt		Echin		Grainst
	Dol		Sil		Fish		Lithogr
	Feldspar		Sulphur		Foram		Microxln
	Ferrpel		Tuff		Fossil		Mudst
	Ferr				Gastro		Packst
	Glau				Oolite		Wackest
						STRINGER	
							Anhy
							Shale
							Bent
							Coal
							Dol
							Gyp
							Ls
							Mrst

Other Symbols

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





< B/ANHYDRITE

1500

Depth Change

3800

ROP (min/ft)

0.1

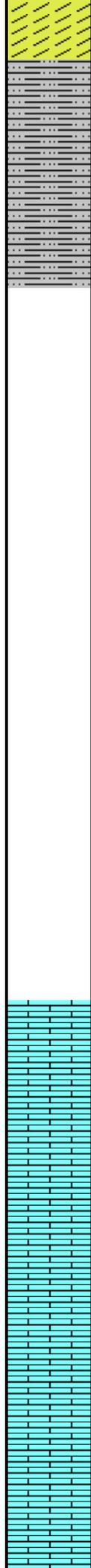
10

conn

conn

3850

conn



1472 (+881)

* Displace & Mud up @ 3366!

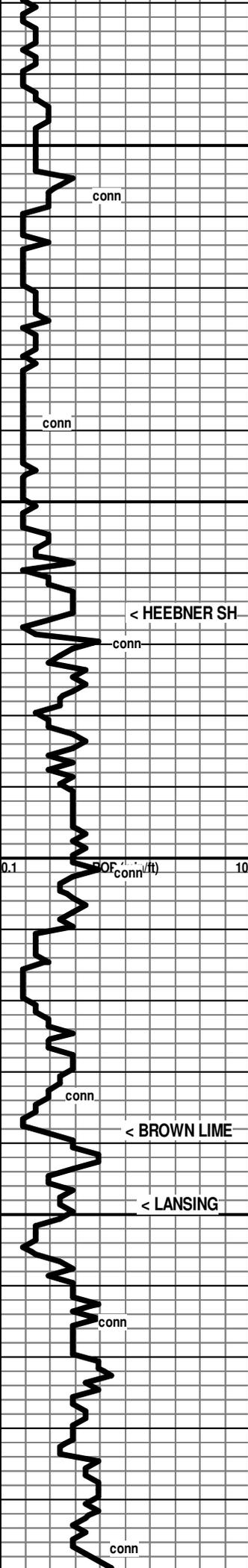
* At 3780' Ran bit trip up into surface casing to replace mud pump!

* Pipe Strap @ 3780 Ft: Strap 1.11' long!

Ls wh-gy, fn xln, mostly dns, some pr xln por with scatt pp pores, foss

Ls cr-tan-gy, fn xln, fr-gd xln por, chalky in pt, foss

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



3900

3950

4000

4050

4100

Ls wh-cr, fn xln, chalky in part, pr-fr xln por in pt, foss

Ls cr, fn xln, chalky-subchalky in pt, pr xln por in pt, foss

Ls cr, fn xln, chalky in pt, pr-fr xln por in pt, foss

Ls cr-tan, fn xln, dns, foss

← 3966 (1621)
Sh black-dk gy, carb in pt (poorly represented in samples)

Mix of shales & limestones; shales gy-black, Ls tan, vfn-fn xln, dns, foss

Ls cr-tan-gy, fn xln, dns to pr xln por

Sh gy-grnsh-gm, subsilty to silty in pt

Sh gy-dk gy-blk

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

Sh gy-gm
← 4038 (-1693)

← 4049 (-1704)

A

Ls cr-pl gy-gy, vfn-fn xln, pr xln por in pt, subchalky in pt, foss

B

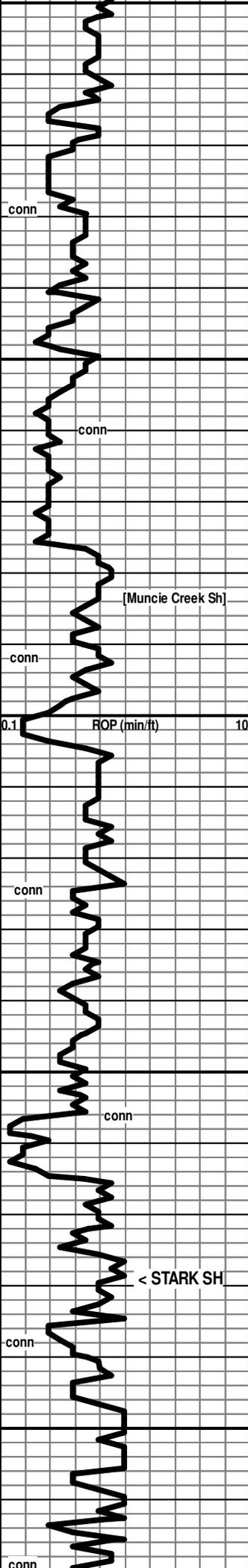
Ls wh-cr-gy, fn xln, chalky in pt, dns in pt, foss in pt, tr of tan, fresh chert, transl, foss

Sh gy

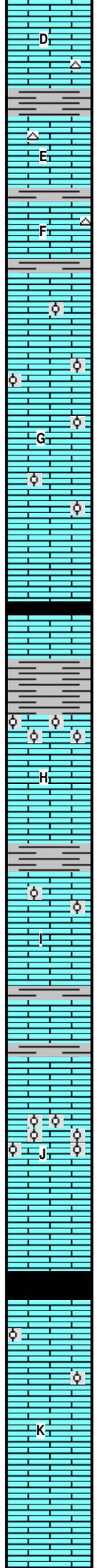
C

Ls cr, fn xln, mostly dns, some pr xln por, foss in pt, chert: fresh, cr, transl, foss

Sh gy



4100
4150
4200
4250
4300



D Ls cr-tan-brn, vfn-fn xln, dns, foss, chert: fresh, brn, subtr, foss

Sh gy-dk gy

E Ls cr-tan, fn xln, pr xln por to dns, foss, chert: fresh, wh-cr-gy, subtr-opaq

Sh gy

F Ls cr, fn xln, pr xln por, foss, cherty as above

Sh gy

Ls wh-cr-gy, fn xln, chalky in pt, dns in pt, ool in pt

G Ls wh-cr, fn xln, chalky in pt, dns in pt, scatt sm vugs & pp pores, ool in pt

Ls cr, vfn xln, dns

Sh black, carb

Sh gy-dk gy, scatt pyritic

H Ls wh-cr, fn xln, pr-fr xln por in pt, ool & oom on pt with scatt fr-gd oom por

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

Sh gy

Ls wh-cr, fn xln, pr xln por, ool in pt

I Ls wh-cr, fn xln, pr xln por to dns

J Ls wh-cr, fn xln, grainy text in pt, fr-gd xln por in pt, foss and ool in pt

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

Ls cr, fn xln, pr xln por, foss

← 4279 (-1934)

Sh gy-grn-black, carb in pt

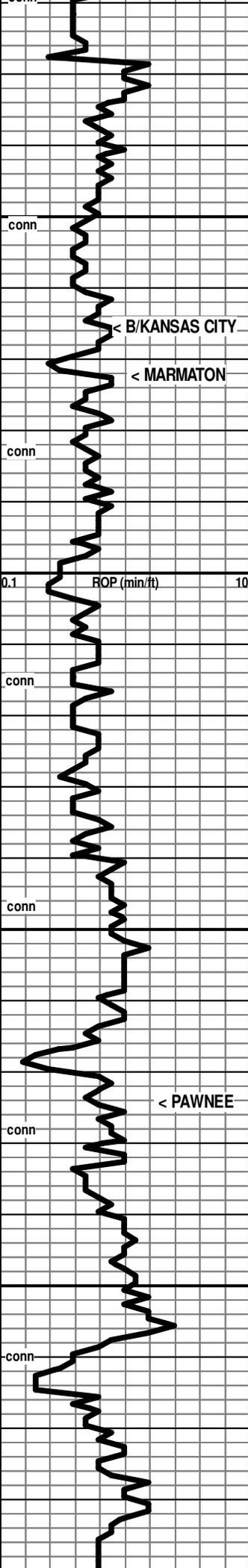
K Ls wh-cr-tan, vfn-fn xln, subchalky in pt, dns in pt, foss

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

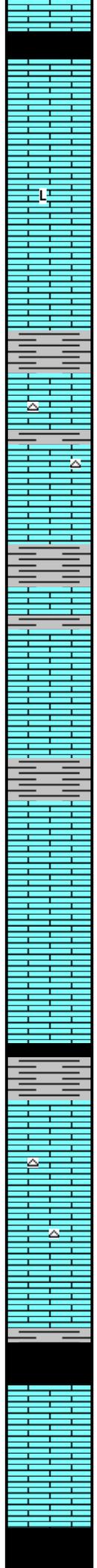
Mud Check: Drlg @ 4131':
 Vis Wt WL LCM PV YP
 49 9.0 7.2 2 15 16
 Chl Hd pH Solids
 5300 20 10.5 4.7

[Muncie Creek Sh]

< STARK SH



4350
4400
4450
4500



Sh dk gy-black, carb in pt

Ls wh-cr, fn lx, subchalky-chalky in pt, dns in pt, foss

Ls cr-tan-gy, vfn-fn xln, dns to pr xln por in pt, subchalky in pt, foss in pt

← 4365 (-2020)

← 4372 (-2027)

Ls wh-cr-tan, vfn-fn xln, subchalky in pt, dns in pt, foss in pt, trace of fresh white chert

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

Sh gmish-gy-black

Ls wh-cr-tan, vfn-fn xln, mostly dns with scatt patches of pr xln por, chalky in pt, foss in pt

Sh gy-gmish-dk gy

Ls wh-cr-tan, vfn-fn xln, mostly dns, some subchalky, foss in pt

Ls wh-cr-tan, vfn-fn xln, mostly dns, some subchalky, scatt transl calcite patches, foss in pt

7:00 AM, November 09, 2018

Sh gy-gm-dk gy, pyritic in pt (carb shale not repres in spls)

← 4474 (-2129)

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

Ls cr-tan, vfn-fn xln, dns, sli foss in pt, Chert: fresh, tan, transl

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

Sh dk gy-black, carb in pt, few pyrite pcs

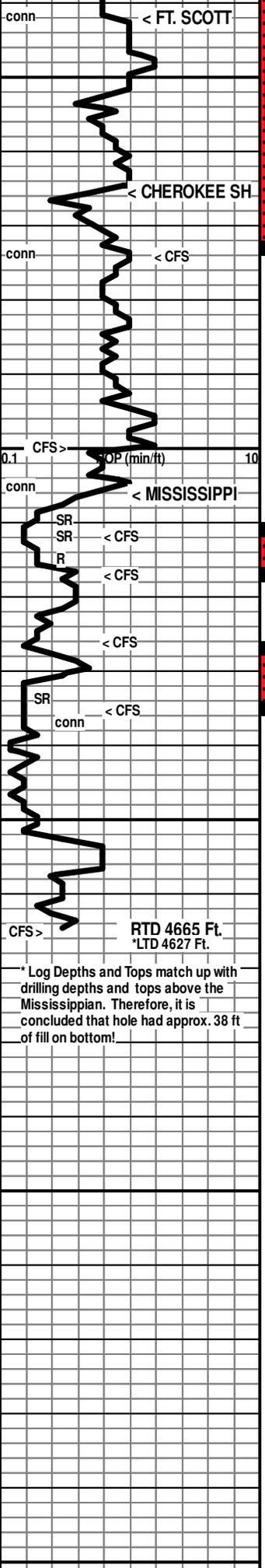
Ls wh-cr, vfn-fn xln, dns in pt, chalky in pt, foss in pt

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

Sh dk gy-black, abund carb

Mud Check: Drlg @ 4515':
 Vis Wt WL LCM PV YP
 51 9.3 9.6 2 16 17
 Chl Hd pH Solids
 5300 20 10.5 6.8

DST #1: 4531-4574 (Ft. Scott)
 Times: 15-30-15-out
 Initial Open: Wk Blow, built to 1" i.b.
 Final Open: No Blow, flush tool,



4542 (-2197)
Ls cr-tan, vfn xln, dns, foss

4550
Ls cr, fn xln, pr xln por, scatt pp pores & sm vugs, foss, chert: fresh, wh-cr, subtransl

[Mod Odor, Mod am't pcs with brt speckled flour, mod am't of pcs with spotty to patchy brn stn, Mod am't pcs with sli show of lt brn gassy FO, few pcs Fr shows of brn gassy FO]

4565 (-2220)
Sh black, carb

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

Ls cr-tan-gy, vfn xln, dns, foss, shales gy-dk gy-blk

Sh gy-dk gy-pl grn-reddish, silty-argill, mushy-soft-firm

4600
Abund Ls wh-cr, chalky to dns, some chert: fresh, tan, transl, foss, abund shale as above (washes reddish)

4606 (-2261)
4606-4617: Chert: mix fresh with scatt weath'd patches in pt, some even weathering & grainy text, opa-q-transl, wh-cr-tan-gy, scatt grn glauc specks; abund dns Ls/dolom ls in spls

Show Descr. ———>

4618-4626: Chert: wh-cr, abund fresh, mod am't of patchey weather'd with some even weath'd, spiculitic in pt; Some Ls wh, dns

Show Descr. ———>

4627-4635: Abund shale in spls; Abund Chert: mostly wh, some cr, mostly fresh, lower % with weathering, scatt vugs, spic in pt, few ool pcs, Rr scatt sm pyr specks, transl-opaq; Some Ls/dol ls, cr-tan, dns

Show Descr. ———>

4650
Abund Chert: mostly white, some cr, mostly fresh, low % with weathering, scatt vugs, spic in pt, few ool pcs, transl-opaq

[No Odor, Rr mod flour, Mostly barren porosity with some scatt tan stn]

Ls-Dol Ls-dol, wh-cr, fn xln, subsucrosic-sucrosic, pr vis xln por, cherty

had surf blow for 3 min, died
Rec: 2' mud
IHP: 2217 FHP: 2199
IFP: 22-22 FFP: 21-21
ISIP: 39 FSIP: NA
BHT: 110°F

Mud Check: Drlg @ 4581':
Vis Wt WL LCM PV YP
56 9.0 9.2 2 17 18
Chl Hd pH Solids
6500 20 10.5 5.4

7:00 AM, November 10, 2018

DST #2: 4564-4612 (Mississippi)
Times: 15-30-45-60
Initial Open: Wk Blow, built to 3/4" i.b.
Final Open: Wk Blow, built to 1-1/2" i.b.
Rec: 30' OCM: 5% o 95% m
IHP: 2265 FHP: 2244
IFP: 24-23 FFP: 25-26
ISIP: 556 FSIP: 931
BHT: 107°F

[4606-4617: Mild Odor, abund brt speckled-patchy-even flour, abund patchy lt brn stn, some even stn, where weathered mostly sli shows of gassy brn FO, fewer pcs with fr shows gassy oil]

7:00 AM, November 11, 2018
[4618-4626: Fnt Odor, abund mod-brt patchy-spe flour, Mod am't pcs with patchy brn stn with sli s of gassy brn FO]

7:00 AM, November 12, 2018
[4627-4635: Fnt Odor, where chert weather'd mix tan-lit brn-black stn, mostly sli shows FO in pt, few pcs with fr sh gassy FO, blk resid in pt, scatt mod flour]

7:00 AM, November 13, 2018

RTD @ 4665' at 2:00 pm,
November 13, 2018

DST #3: 4611-4617 (Mississippi)
Times: 15-30-45-60
Initial Open: Wk Blow, built to 1" i.b.
Final Open: Wk Blow, built to 1/4" i.b.
Rec: 5' mud with oil spots
IHP: 2270 FHP: 2181
IFP: 24-24 FFP: 23-23
ISIP: 62 FSIP: 1051
BHT: 107°F

DST #4: 4617-4626 (Mississippi)
Times: 15-30-15-out
Initial Open: Wk Blow, built to 1/4" i.b.
Final Open: Rare intermit. bubble at surf., flush tool-no help
Rec: 5' mud with oil spots
IHP: 2373 FHP: 2302
IFP: 20-19 FFP: 20-21
ISIP: 33 FSIP: NA
BHT: 108°F

Mud Check: CTCH after DST4 @ 4626':
Vis Wt WL LCM PV YP
76 9.4 13.6 1.5 25 24
Chl Hd pH Solids
9300 20 9.5 7.3
* added premix prior to DST5

DST #5: 4626-4635 (Mississippi)
Times: 15-30-45-60
Initial Open: Wk Blow, built to 1-1/2" i.b.*
* Found loose connection!
Final Open: Stq Blow. b.o.b. 5 min.

