

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](mailto:kcc-well-logs@kcc.ks.gov). Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

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

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

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

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5) (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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# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 3351

Date	11-13-22	Sec.	19	Twp.	17	Range	14	County	Barton	State	Ks	On Location		Finish	8:00 PM
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Lease **Axman** Well No. **1** Location **281 + 4 Jct - 2N, 4 W, S/Inte**  
 Owner **East to well**

Contractor **Southwind #1**  
 Type Job **Surface**  
 To Quality Oilwell Cementing, Inc.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Hole Size **12 1/4"** T.D. **908'** Charge To **Charter Energy**  
 Csg. **8 5/8"** Depth **907'** Street

Tbg. Size Depth City State

Tool Depth The above was done to satisfaction and supervision of owner agent or contractor.  
 Cement Left in Csg. **42.61'** Shoe Joint **42.61'** Cement Amount Ordered **375 60/40 4% CC**

Meas Line Displace **55 BUS** **2% Gel**  
 EQUIPMENT Common **225**

Pumptrk	18	No.	Cement Helper	<b>Dave</b>	Poz. Mix	<b>150</b>
Bulktrk	21	No.	Driver	<b>Corey Bryant</b>	Gel.	<b>7</b>
Bulktrk	<b>p.u.</b>	No.	Driver	<b>Rick</b>	Calcium	<b>17</b>

JOB SERVICES & REMARKS  
 Remarks: **Cement did Circulate**

Rat Hole Flowseal  
 Mouse Hole Kol-Seal

Centralizers Mud CLR 48  
 Baskets CFL-117 or CD110 CAF 38

D/V or Port Collar Sand  
 Handling **399**

Mileage

FLOAT EQUIPMENT  
~~Guide Shoe~~ **Rubber plug**

Centralizer  
 Baskets

~~AEU Inserts~~ **Baffle plate**  
 Float Shoe

Latch Down

Pumptrk Charge **Long Surface**

Mileage **19**

Signature **Franky Rowe** Tax  
 Discount  
 Total Charge

*Thanks*



CHARGE TO: Charter Energy  
 ADDRESS \_\_\_\_\_  
 CITY, STATE, ZIP CODE \_\_\_\_\_

TICKET **35649**  
 PAGE 1 OF 2

SERVICE LOCATIONS  
 1. Halls, KS  
 2. Ness City, KS  
 3. \_\_\_\_\_  
 4. \_\_\_\_\_

WELL/PROJECT NO. #1  
 TICKET TYPE  SERVICE  SALES  
 CONTRACTOR Southern Drilling  
 WELL TYPE Di  
 WELL CATEGORY Development  
 JOB PURPOSE Cement Long String

LEASE Arman  
 COUNTY/PARISH Barton  
 RIG NAME/NO. Rig 2  
 STATE KS  
 CITY \_\_\_\_\_  
 SHIPPED VIA CT  
 DELIVERED TO Location  
 WELL PERMIT NO. \_\_\_\_\_

DATE 11/20/22  
 ORDER NO. same  
 OWNER \_\_\_\_\_

WELL LOCATION \_\_\_\_\_

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.			UNIT PRICE	AMOUNT
		LOC	ACCT	DF		UM	UM	UM		
575					MILEAGE #113	50	mi		7.00	350.00
578					Pump Charge - Long String	1	EA		1600.00	1600.00
250					A-Dir	3	gal		42.00	126.00
402					Centralizer 5 1/2"	10	EA		85.00	510.00
403					Cement Basket 5 1/2"	1	EA		300.00	300.00
405					Formation Parker/Basket shoe 5 1/2"	1	EA		1400.00	1400.00
406					Latch Down Plug + Baffle 5 1/2"	1	EA		250.00	250.00
281					Mud Flush	500	gal		2.00	1000.00
221					Liquid KCL	25	gal		2.00	50.00

**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.

**REMIT PAYMENT TO:**  
 SWIFT SERVICES, INC.  
 P.O. BOX 466  
 NESS CITY, KS 67560  
 785-798-2300

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

DATE SIGNED \_\_\_\_\_ TIME SIGNED \_\_\_\_\_  
 A.M.  P.M.

**SURVEY**

OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?  YES  NO

WE UNDERSTOOD AND MET YOUR NEEDS?  YES  NO

OUR SERVICE WAS PERFORMED WITHOUT DELAY?  YES  NO

WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?  YES  NO

ARE YOU SATISFIED WITH OUR SERVICE?  YES  NO

Customer

PAGE TOTAL	5,586.00
PAGE 2	5,307.68
Sub total	10,953.68
TOTAL	11,508.34

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

SWIFT OPERATOR [Signature] APPROVAL \_\_\_\_\_

Thank You!



Swanton, Inc.

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

TICKET CONTINUATION

TICKET No. 35649

CUSTOMER  
Charger Energy

WELL  
Asman #1

DATE  
11/20/22

PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			TIME	DESCRIPTION	WELL				UNIT PRICE	AMOUNT		
		LOC	ACCT	DE			QTY	U/M	QTY	U/M				
325		2				Standard Cement	175	SKS			15	40	2625	00
284		2				Calseal	16	SKS			50	00	800	00
283		2				SALT	950	lbs			0.25	00	237	50
252		2				Hydrol 322	85	lbs			9	00	765	00
276		2				Flocele	44	lbs			3	00	132	00
581		2									2	00	350	00
583		2									1	00	458	18

SERVICE CHARGE  
MILEAGE CHARGE  
TOTAL WEIGHT  
18327  
Cement  
LOADED MILES  
50  
TON MILES  
175 SKS  
458.18

CONTINUATION TOTAL 5,367.68

CUSTOMER

Charter Energy

WELL NO.

#1

LEASE

Axman

JOB TYPE

Long String

TICKET NO.

35649

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0950							On location w/ Float Equipment
								TD - 3625 Total Pipe - 3492' of 5 1/2" x 14 # Shoe It - 31.07' Centralizers - 3, 5, 8, 11, 14, 17 Basket ~ 4,
	1115							Start Casing w/ FE
	1250							Break Circulation on Bottom Hook up to Swift Plug Rathole w/ 3D srs Plug Mousehole w/ 15 srs 350 Pump Mudflush 350 Pump KCL Spacer 1320 4 350 Start Cement, mix at 15.5 ppg 4 VAL Finish Cement, Shut Down Drop Plug Wash out Pump + Lines
	1345	7 1/2						Start Displacement
		6 1/4	55				350	Catch Cement
		6	83				900	Lift PSI
	1400	6					1500	Land Plug Release Truck, Dry Washup Rackup
	1420							Job Complete
								Thanks Jan, Joe, + Brett
								Brett unhooked Pressurized Bulk Cement Line, Got Cement in eyes. Washed out w/ water, Says he's good to go.

**OPERATOR**

Company: Charter Energy Inc.  
 Address: PO Box 252  
 Great Bend, KS 67530

Contact Geologist: Jim Musgrove  
 Contact Phone Nbr: 620-786-0839  
 Well Name: Axman #1  
 Location: 19-17s14w SE-NE-NW-NW  
 API: 15-0009-26373-00-00  
 Pool:  
 State: Kansas

Field: Axman  
 Country: USA

**CHARTER ENERGY, INC.**

P.O. BOX 252  
 GREAT BEND, KS 67530  
 (820) 793-9090



Scale 1:240 Imperial

Well Name: Axman #1  
 Surface Location: 19-17s14w SE-NE-NW-NW  
 Bottom Location:  
 API: 15-0009-26373-00-00  
 License Number: 9090  
 Spud Date: 11/12/2022 Time: 12:00 AM  
 Region: Barton  
 Drilling Completed: 11/20/2022 Time: 12:00 AM  
 Surface Coordinates: 350' FNL & 1000' FWL  
 Bottom Hole Coordinates:  
 Ground Elevation: 1901.00ft  
 K.B. Elevation: 1911.00ft  
 Logged Interval: 2800.00ft To: 3625.00ft  
 Total Depth: 3625.00ft  
 Formation: Arbuckle  
 Drilling Fluid Type: Chemical/Fresh Water Gel

**CASING SUMMARY**

	Surface	Intermediate	Main		
Bit Size					
Hole Size					
	Size	Set At	Type	# of Joints	Drilled Out At
Surf Casing	8 5/8" in	907' ft			
Int Casing					
Prod Casing	5 1/2" in	3475' ft			

**CASING SEQUENCE**

Type	Hole Size	Casing Size	At
	0.00 in	0.00	0.00 ft

**OPEN HOLE LOGS**

Logging Company: ELI  
 Logging Engineer:  
 Truck #:  
 Logging Date: Time Spent:  
 # Logs Run: 0 # Logs Run Successful: 0

**LOGS RUN**

Tool	Logged Interval	Logged Interval	Hours	Remarks	Run #
	0.00ft	0.00ft	0.00		0

**LOGGING OPERATION SUMMARY**

Date	From	To	Description Of Operation
12/5/2007	0.00ft	0.00ft	

**SURFACE CO-ORDINATES**

Well Type: Vertical  
 Longitude:  
 Latitude:  
 N/S Co-ord: 350' FNL  
 E/W Co-ord: 1000' FWL

**LOGGED BY**



Company: James C Musgrove Petroleum LLC  
 Address: 212 Main Street/PO Box 215  
 Claflin, KS 67525

Phone Nbr: 620-588-4250 620-786-0839  
 Logged By: KLG #307

Name: James C Musgrove

**CONTRACTOR**

Contractor: Southwind Drilling Inc.  
 Rig #: 1  
 Rig Type: mud rotary  
 Spud Date: 11/12/2022  
 TD Date: 11/20/2022  
 Rig Release:

Time: 12:00 AM  
 Time: 12:00 AM  
 Time:

**ELEVATIONS**

K.B. Elevation: 1911.00ft  
 K.B. to Ground: 10.00ft  
 Ground Elevation: 1901.00ft

**NOTES**

Remarks:

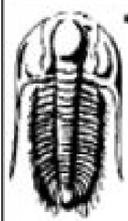
5 1/2" production casing/disposal was set and cemented on the Charter Energy Inc.; Axman #1.

Respectfully Submitted,

James C Musgrove  
 Petroleum Geologist

**well comparison sheet**

w	AXMAN #1 CHARTER ENERGY CORP SE-NE-NW-NW 19-17s-14w				AXMAN #2 ABERCROMBIE DRLG INC. SE-NE-NW 19-17s-14w				KOCH BRACK BEN F NW-NW-NW 19-17s-14w			
	1911 KB				1891 KB		Relationship		1906 KB		Structural Relationship	
	Log	Sub-Sea	Sample	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Anhydrite	908	1003			876	1015		-12				
Base Anhydrite	939	972			907	984		-12				
Topeka	2860	-949										
Heebner	3093	-1182			3071	-1180		-2				
Toronto	3105	-1194			3085	-1194		0				
Douglas	3121	-1210										
Brown Lime	3154	-1243			3134	-1243		0				
Lansing	3171	-1260			3148	-1257		-3	3176	-1270		10
Base Kansas City	3380	-1469			3357	-1466		-3				
Conglomerate Sand	3390	-1479										
Arbuckle	3392	-1481			3377	-1486		5	3394	-1488		7
Reagan Sand	3566	-1655										
Granite Wash	3578	-1667										
Granite	3617	-1706										
Rotary Total Depth	3625	-1714			3391	-1500		-214				

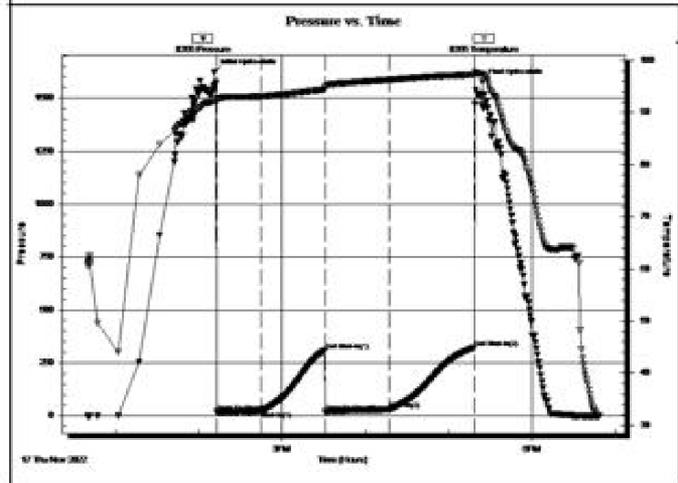
 <b>TRILOBITE TESTING, INC.</b>	<b>DRILL STEM TEST REPORT</b>	
	Charter Energy PO Box 252 Great Bend, KS 67530  ATTN: Jim Musgrove	<b>19-17S-14W/ Barton,KS</b>  <b>Axman #1</b> Job Ticket: 69382 <b>DST#: 1</b> Test Start: 2022.11.17 @ 12:40:05

**GENERAL INFORMATION:**

Formation: <b>LKC A</b>		
Deviated: No Whipstock:	ft (KB)	Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 14:13:00		Tester: Richard Samora
Time Test Ended: 18:48:14		Unit No: 66
Interval: <b>3157.00 ft (KB) To 3182.00 ft (KB) (TVD)</b>		Reference Elevations: 1901.00 ft (KB)
Total Depth: 3182.00 ft (KB) (TVD)		1896.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Good	KB to GR/CF: 5.00 ft

<b>Serial #: 8355</b>	<b>Outside</b>				
Press@RunDepth: 29.83 psig @ 3163.02 ft (KB)		Capacity: 8000.00 psig			
Start Date: 2022.11.17	End Date: 2022.11.17	Last Calib.: 1899.12.30			
Start Time: 12:40:05	End Time: 18:48:14	Time On Btm: 2022.11.17 @ 14:11:15			
		Time Off Btm: 2022.11.17 @ 17:23:59			

**TEST COMMENT:** 30-IF: Fair blow built to 3.89"  
 45-IS: No blow back  
 45-FF: Fair blow built to 3.9"  
 60-FS: No blow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1623.61	92.34	Initial Hydro-static
2	18.54	92.33	Open To Flow (1)
34	24.12	93.12	Shut-In(1)
80	308.28	94.44	End Shut-In(1)
80	17.96	94.80	Open To Flow (2)
126	29.83	96.28	Shut-In(2)
187	321.33	97.26	End Shut-In(2)
193	1577.77	97.42	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
30.00	OSMW 5%O 15%W 80%M	0.42

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

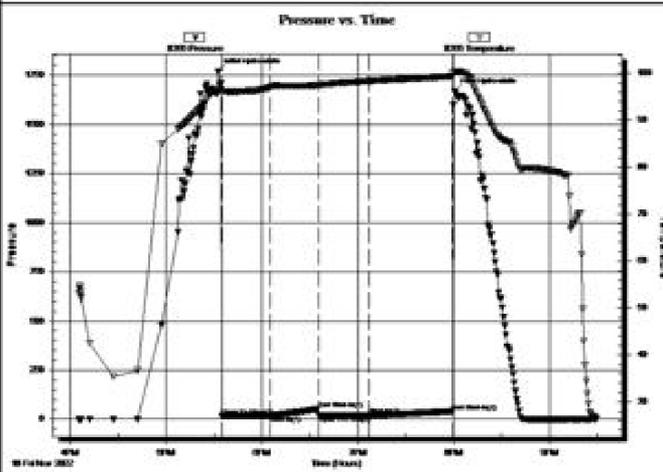
 <b>TRILOBITE TESTING, INC.</b>	<b>DRILL STEM TEST REPORT</b>	
	Charter Energy PO Box 252 Great Bend, KS 67530  ATTN: Jim Musgrove	<b>19-17S-14W/ Barton,KS</b>  <b>Axman #1</b> Job Ticket: 69383 <b>DST#: 2</b> Test Start: 2022.11.18 @ 16:05:00

**GENERAL INFORMATION:**

Formation: **LKC**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 17:35:00  
 Time Test Ended: 21:29:30  
 Interval: **3375.00 ft (KB) To 3400.00 ft (KB) (TVD)**  
 Total Depth: 3400.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Richard Samora  
 Unit No: 66  
 Reference Elevations: 1901.00 ft (KB)  
 1896.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8355 Outside**  
 Press@RunDepth: 19.18 psig @ 3381.02 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2022.11.18 End Date: 2022.11.18 Last Calib.: 1899.12.30  
 Start Time: 16:05:05 End Time: 21:29:29 Time On Btm: 2022.11.18 @ 17:32:45  
 Time Off Btm: 2022.11.18 @ 20:00:45

**TEST COMMENT:** 30-IF: Weak blow built to .86"  
 30-IST: No blow back  
 30-FF: No blow  
 45-FSt: No blow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1769.88	96.19	Initial Hydro-static
3	17.07	96.17	Open To Flow (1)
33	18.49	97.10	Shut-In(1)
63	52.66	97.51	End Shut-In(1)
63	19.00	97.62	Open To Flow (2)
94	19.18	98.39	Shut-In(2)
147	40.54	99.38	End Shut-In(2)
148	1666.93	100.35	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	OSM 5% O 95% M	0.07

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

\* Recovery from multiple tests



**DRILL STEM TEST REPORT**

Charter Energy **19-17S-14W/ Barton,KS**  
 PO Box 252 **Axman #1**  
 Great Bend, KS 67530 Job Ticket: 69384 **DST#: 3**  
 ATTN: Jim Musgrove Test Start: 2022.11.19 @ 04:40:00

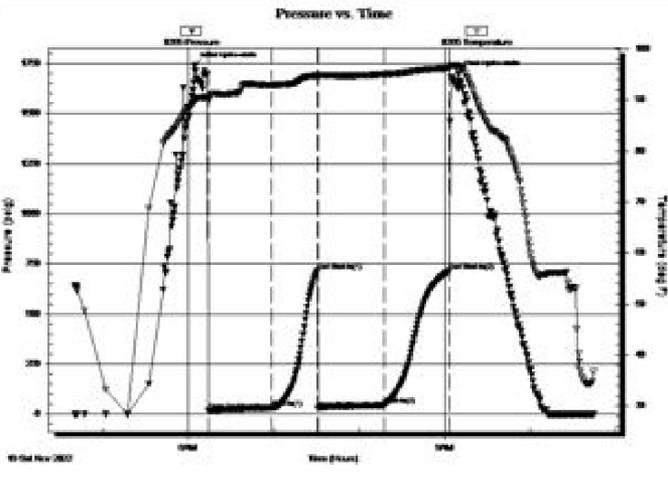
**GENERAL INFORMATION:**

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 06:13:45  
 Time Test Ended: 10:44:45  
 Interval: **3376.00 ft (KB) To 3410.00 ft (KB) (TVD)**  
 Total Depth: 3182.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Richard Samora  
 Unit No: 66  
 Reference Elevations: 1901.00 ft (KB)  
 1896.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8355 Outside**  
 Press@RunDepth: 16.69 psig @ 3383.02 ft (KB) Capacity: 8000.00 psig

Press @ run Depth: 46.69 psig @ 3362.02 ft (KB) Capacity: 0000.00 psig  
 Start Date: 2022.11.19 End Date: 2022.11.19 Last Callb.: 1899.12.30  
 Start Time: 04:40:05 End Time: 10:44:44 Time On Btm: 2022.11.19 @ 08:04:30  
 Time Off Btm: 2022.11.19 @ 09:09:30

**TEST COMMENT:** 45-IF: Fair blow built to 4.34"  
 30-ISI: No blow back  
 45-FF: Fair blow built to 3.28"  
 45-FSI: No blow back



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1741.99	90.00	Initial Hydro-static
10	18.93	90.00	Open To Flow (1)
54	31.95	92.90	Shut-In(1)
86	713.44	94.70	End Shut-In(1)
87	29.85	94.66	Open To Flow (2)
133	46.69	95.01	Shut-In(2)
179	715.56	96.22	End Shut-In(2)
185	1698.34	96.65	Final Hydro-static

Length (ft)	Description	Volume (bbl)
63.00	MCO 70%M 30%O	0.88
7.00	OM 50%O 50%M	0.10

\* Recovery from multiple tests

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

Triobite Testing, Inc Ref. No: 69384 Printed: 2022.11.21 @ 16:57:32

### ROCK TYPES

	Dolprim		shale, grn		shale, red		Igne
	Dolsec		shale, gry		Ss		Meta
	Lmst fw7>		Carbon Sh		Sltst		

### ACCESSORIES

**STRINGER**

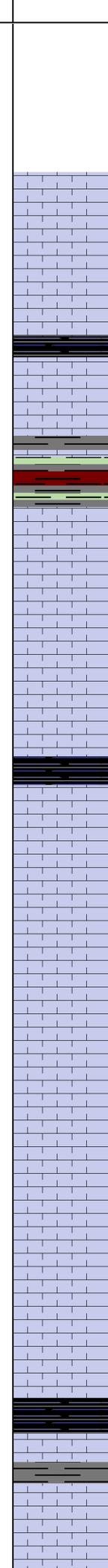
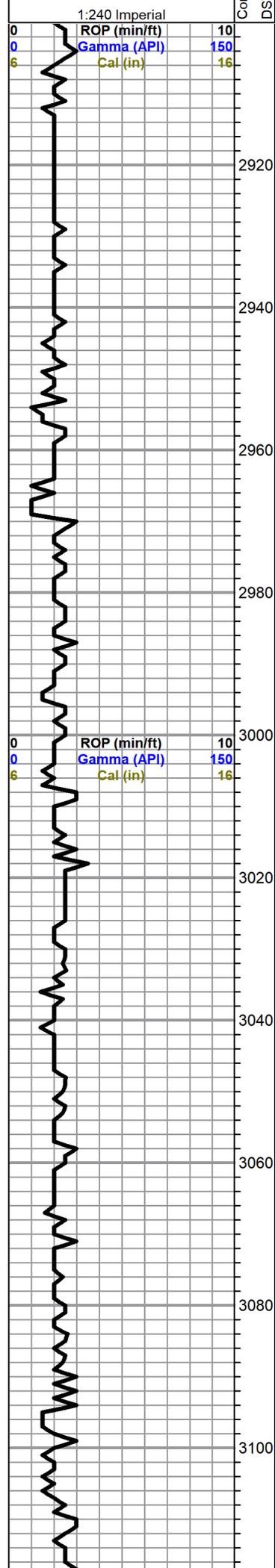
- Conglomerate

### OTHER SYMBOLS

<b>Oil Show</b> ● Good Show ● Fair Show ○ Poor Show ○ Spotted or Trace ○ Questionable Stn D Dead Oil Stn ■ Fluorescence * Gas	<b>DST</b> ■ DST Int ■ DST alt ■ Core    tail pipe
---	--

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)

Curve Track #1	Depth   Intervals	DST	Lithology	Oil Show	Geological Descriptions	TG, C1 - C5
ROP (min/ft) ——— Gamma (API) ——— Cal (in) - - - -	red Interval T Interval					Total Gas (units) ——— C1 (units) ——— C2 (units) ——— C3 (units) ——— C4 (units) ——— C5 (units) ———



Shale,black carbonaceous

Limestone,white,gray,granular,chalky,poor visible porosity

varied colored shales

Limestone,white,slightly foss,chalky,with trace white Chert

Shale,black carbonaceous

Limestone,gray,foss,chalky no shows

Limestone,gray,foss,chalky,trace gray,dark brown to black spotted stain,no free oil and no odor

Limestone,cream,white,fxln,chalky in part,no shows

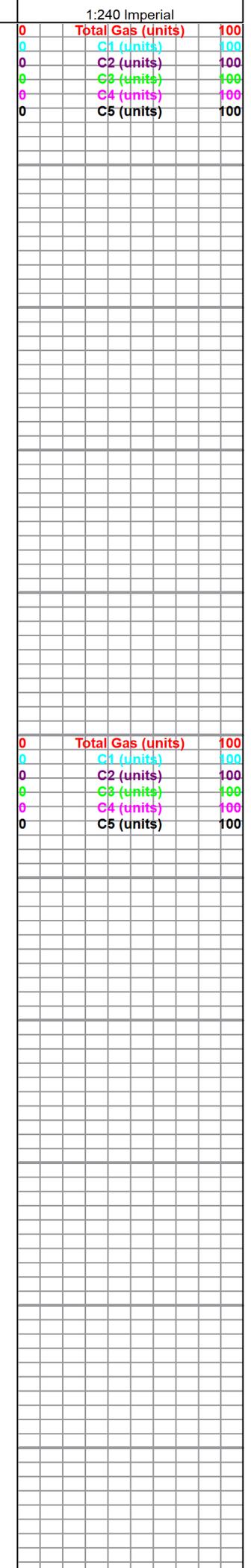
Limestone as above with gray boney Chert

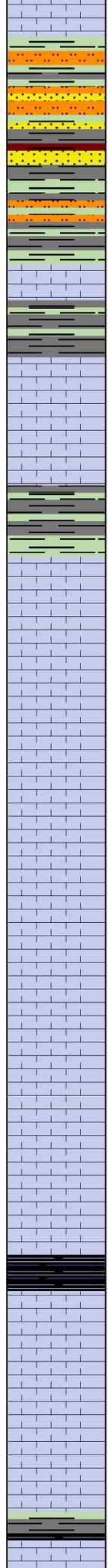
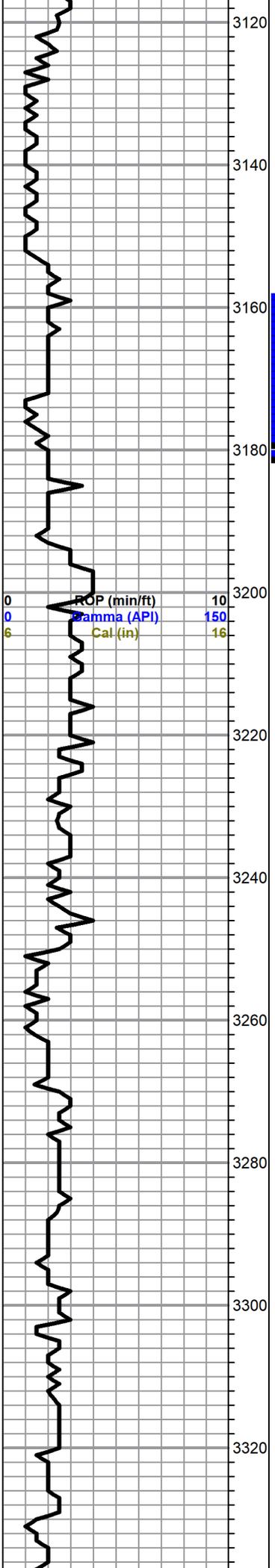
**HEEBNER 3094(-1183)**

Shale,black carbonaceous

**TORONTO 3107(-1196)**

Limestone,white,tan,chalky,poor visible porosity,no shows





**DOUGLAS 3132(-1211)**

Shale,gry,grayish green,rusty brown,silty

trace Sand,grayish green,vfg,micaeous,silty with shale as above

**BROWN LIME 3154(-1243)**

Limestone,tan,brown,gray,chalky,dense

**LANSING 3168(-1257)**

Limestone,white,cream,oolitic,suboomoldic,fair porosity,light brown stain,show of free oil and questionable odor

Shale,gray,green,black

Limestone,white,cream,few oolitic,chalky,dense,poor porosity

Limestone,white,cream,chalky,poor porosity

Limestone,tan,white,oolitic,chalky,trace brown spotty stain,no free oil and no odor with tan,amber Chert

Limestone,gray,oolitic,dense

Limestone,white,tan,oomoldic,fair oomoldic porosity,trace spotty brown stain,no free oil and no odor

Limestone,white,gray,dense

as above,dense

Shale,black carbonaceous

Limestone,gray,slightly foss,with dark gray,opaque chert

Limestone,white,gray,oolitic,scattered porosity,black and brown stain and saturation,show of free oil and no odor

DST#1 3157-3182

30-45-45-60

Blow,fair(3.89")

2nd open,fair(3.9")

Recovery,30'slightly oil and gas cut watery mud(5% oil,15%water,80%

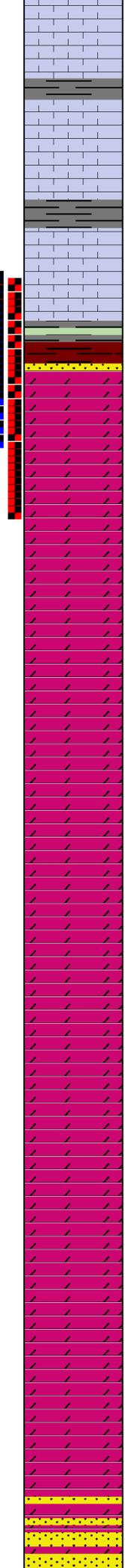
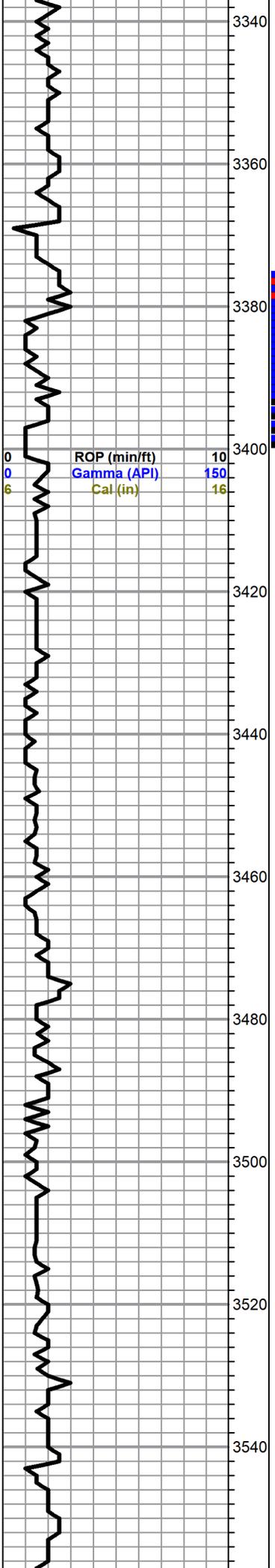
BHP 309-321 psi

FP 19-24,18-30 psi

HSH 1624-1578 psi

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100
0	C5 (units)	100

Mud-Co Mud  
chk  
@ 3000 ft.  
0000 hrs.  
0/0/13  
Vis. 50 Wt.  
9.2  
PV 18 YP 32  
WL 11.2  
Cake 1/32,  
pH 9.0  
CHL 6000  
ppm  
Ca 160 ppm  
Sol 6.1 LCM  
10#  
DMC \$0  
CMC \$0



Limestone, white, fxl, oolitic, chalky, trace poor spotty stain, weak show of free oil and questionable odor in fresh samples

Limestone, white, gray, foss, chalky, poor visible porosity, trace poor brown edge stain, no free oil and no odor

Limestone, gray, white, chalky few cherty, dense

**BASE KANSAS CITY 3380(-1469)**

Shale, gray, green, red

CONGLOMERATE SAND 3390-1479

sand, clear, quartzitic, subrounded, friable, fair porosity, brown stain and saturation, show of free oil and faint odor

**ARBUCKLE 3392(-1481)**

Dolomite, white, cream, medium crystalline, fair intercrystalline porosity, golden brown stain, show of free oil and good odor

Dolomite, white, cream, medium and coarse crystalline, good intercrystalline and vuggy type porosity, good stain and saturation, good show of free oil and good odor

Dolomite, as above with tan, oolitic chert, brown stain, fair show free oil and good odor

Dolomite, gray, white, fine to medium crystalline fair intercrystalline porosity, brown stain, show of free oil and no odor

as above, with white, cherty dolomite and white chert

as above sandy in part, trace iron pyrite, black and brown stain, trace of free oil and faint odor

Dolomite, white, gray, cream, fine and medium crystalline, couple coarse crystalline, good intercrystalline and vuggy type porosity, trace brown stain, show of free oil and faint odor

Dolomite, white, cream, fine and medium crystalline, cherty, glauconitic. no shows

Dolomite, tan, gray, pink, fine and medium crystalline, sandy, fair porosity, no shows

Dolomite as above, poor visible porosity..no shows

Dolomite, gray, white, fxl, cherty, poor porosity

Dolomite, white, pink, gray, highly sandy, few glauconitic

**DST #2 3375-3400**

30-30-30-45

Blow, weak

Recovery, 5' oil specked mud

BHP 53-41 psi

FP 17-18, 19-19 psi

HSH 1770-1667 psi

**DST#3 3376-3410**

45-30-45-45

Blow; fair (4.34")

2nd Open fair (3.28')

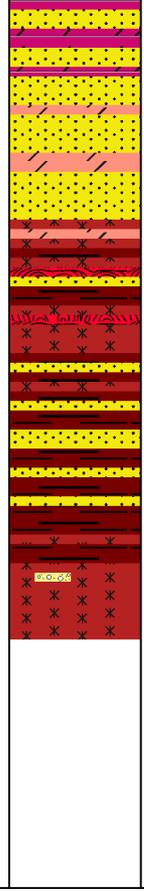
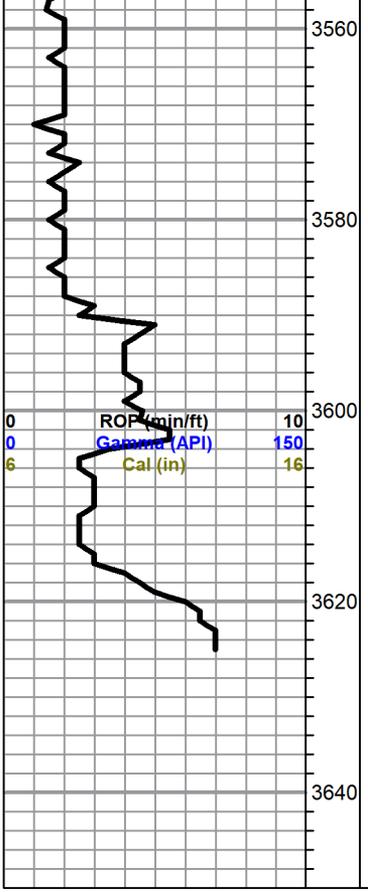
Recovery 63' Heavily

oil cut mud (70% mud, 30% oil). 7' muddy oil (50% oil, 50% water)

BHP 713-716 psi

FP 19-32, 30-47 psi

HSH 1742-1698 psi



as above

### REAGAN SAND 3566(-1655)

sand, white, clear, vfg, friable, trace angular quartz

### GRANITE WASH 3578(-1667)

Weathered pink, orange feldspar, with sand, white, clear angular and yellow to clear quartz with red, brick red blocky to soft shales(washes red)

as above

### GRANITE 3617(-1706)

as above with increase pink/red feldspar..trace black shale and green shales ???

### ROTARY TOTAL DEPTH 3625

0	Total Gas (units)	100
0	C1 (units)	100
0	C2 (units)	100
0	C3 (units)	100
0	C4 (units)	100
0	C5 (units)	100



## DRILL STEM TEST REPORT

Prepared For: **Charter Energy**  
PO Box 252  
Great Bend, KS 67530

ATTN: Jim Musgrove

### **Axman #1**

### **19-17S-14W/ Barton,KS**

Start Date: 2022.11.17 @ 12:40:05

End Date: 2022.11.17 @ 18:48:14

Job Ticket #: 69382                      DST #: 1

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2022.11.21 @ 17:08:03



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Charter Energy  
PO Box 252  
Great Bend, KS 67530  
ATTN: Jim Musgrove

**19-17S-14W/ Barton,KS**  
**Axman #1**  
Job Ticket: 69382      **DST#: 1**  
Test Start: 2022.11.17 @ 12:40:05

## GENERAL INFORMATION:

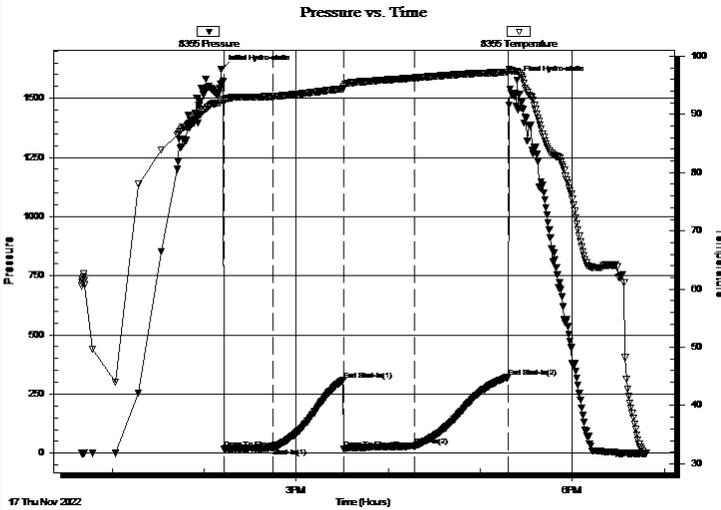
Formation: **LKC A**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 14:13:00  
Time Test Ended: 18:48:14  
Interval: **3157.00 ft (KB) To 3182.00 ft (KB) (TVD)**  
Total Depth: 3182.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Good  
Reference Elevations: 1901.00 ft (KB)  
1896.00 ft (CF)  
KB to GR/CF: 5.00 ft  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Richard Samora  
Unit No: 66

## Serial #: 8355 Outside

Press@RunDepth: 29.83 psig @ 3163.02 ft (KB) Capacity: 8000.00 psig  
Start Date: 2022.11.17 End Date: 2022.11.17 Last Calib.: 1899.12.30  
Start Time: 12:40:05 End Time: 18:48:14 Time On Btm: 2022.11.17 @ 14:11:15  
Time Off Btm: 2022.11.17 @ 17:23:59

TEST COMMENT: 30-IF: Fair blow built to 3.89"  
45-ISI: No blow back  
45-FF: Fair blow built to 3.9"  
60-FSI: No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1623.61	92.34	Initial Hydro-static
2	18.54	92.33	Open To Flow (1)
34	24.12	93.12	Shut-In(1)
80	308.28	94.44	End Shut-In(1)
80	17.96	94.80	Open To Flow (2)
126	29.83	96.28	Shut-In(2)
187	321.33	97.26	End Shut-In(2)
193	1577.77	97.42	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	OSMW 5%O 15%W 80%M	0.42

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Charter Energy

**19-17S-14W/ Barton,KS**

PO Box 252  
Great Bend, KS 67530

**Axman #1**

Job Ticket: 69382

**DST#: 1**

ATTN: Jim Musgrove

Test Start: 2022.11.17 @ 12:40:05

## Tool Information

Drill Pipe:	Length: 3135.96 ft	Diameter: 3.80 inches	Volume: 43.99 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 3.25 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: lb
			<u>Total Volume: 43.99 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.96 ft			String Weight: Initial 33000.00 lb
Depth to Top Packer:	3157.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.02 ft			
Tool Length:	51.02 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	4.00			3135.00	
Hydraulic tool	4.00			3139.00	
Sampler	4.00			3143.00	
EM	5.00			3148.00	
Safety Joint	2.00			3150.00	
Packer	4.00			3154.00	26.00 Bottom Of Top Packer
Packer	3.00			3157.00	
Stubb	1.00			3158.00	
Recorder Carrier	5.00			3163.00	
Recorder	0.01	6839	Inside	3163.01	
Recorder	0.01	8355	Outside	3163.02	
Perforations	16.00			3179.02	
Bullnose	3.00			3182.02	25.02 Bottom Packers & Anchor

**Total Tool Length: 51.02**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Charter Energy

**19-17S-14W/ Barton,KS**

PO Box 252  
Great Bend, KS 67530

**Axman #1**

Job Ticket: 69382

**DST#: 1**

ATTN: Jim Musgrove

Test Start: 2022.11.17 @ 12:40:05

## 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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	OSMW 5%O 15%W 80%M	0.421

Total Length: 30.00 ft      Total Volume: 0.421 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

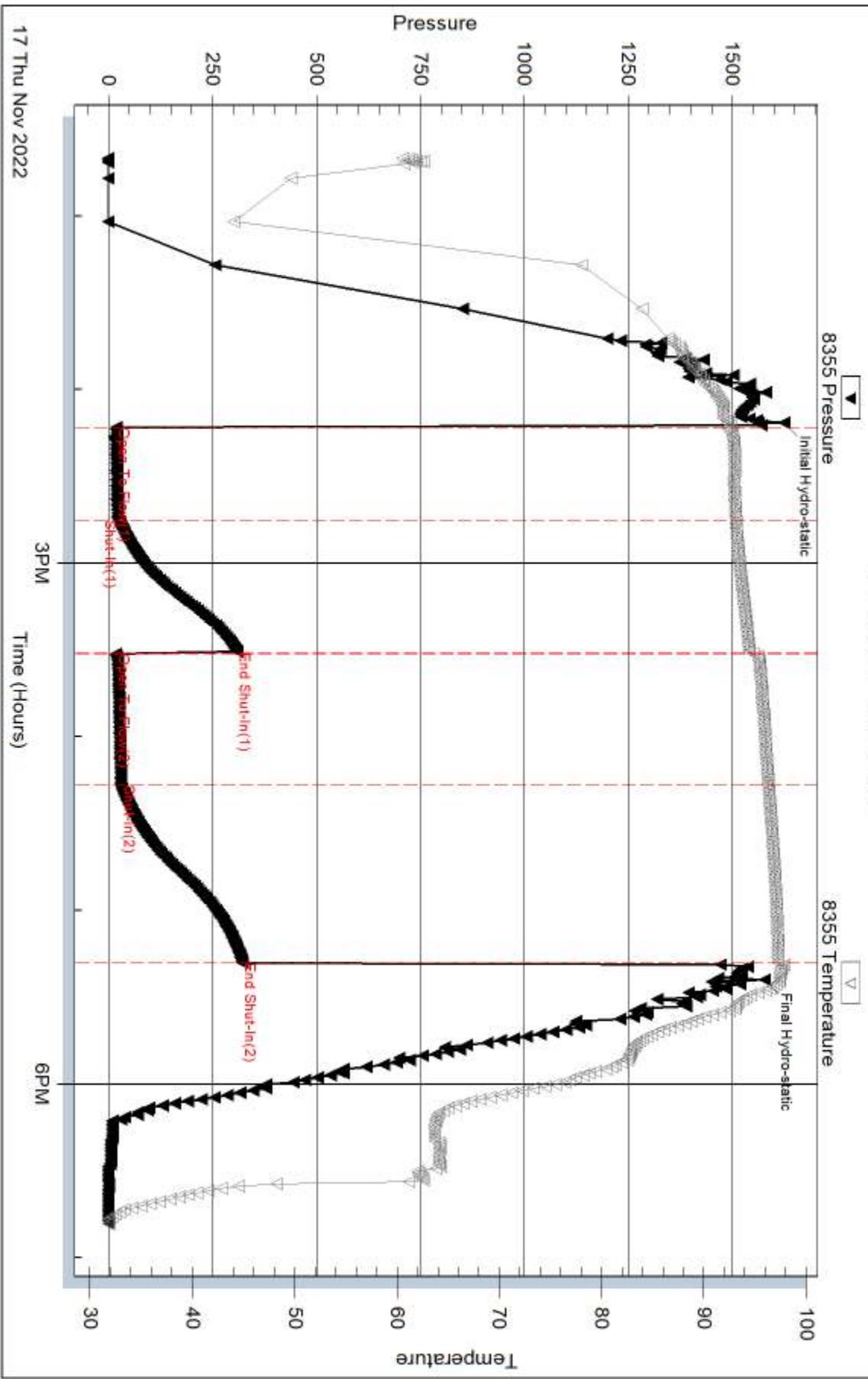
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time

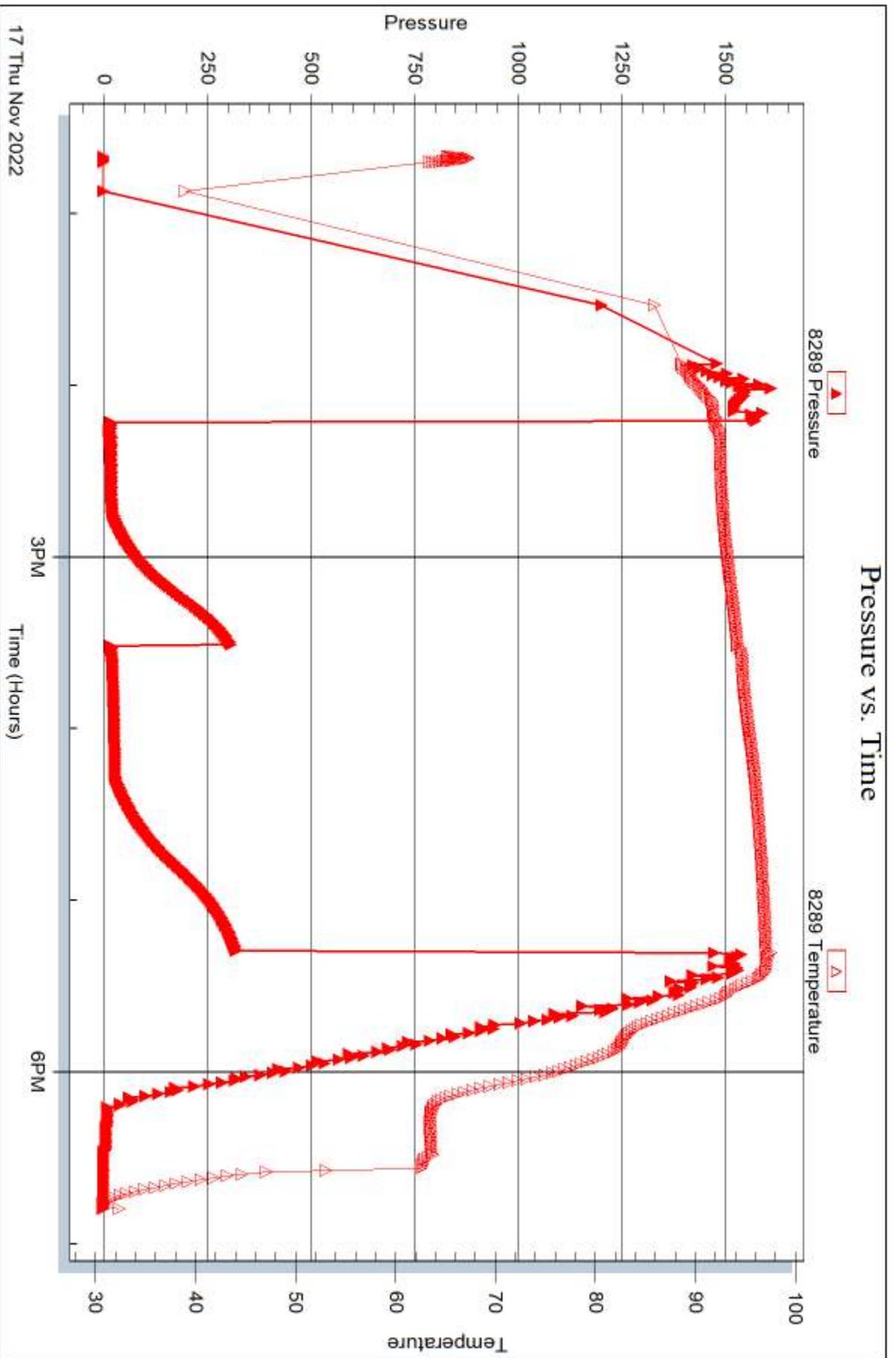


17 Thu Nov 2022

3PM

Time (Hours)

6PM



17 Thu Nov 2022



## DRILL STEM TEST REPORT

Prepared For: **Charter Energy**

PO Box 252  
Great Bend, KS 67530

ATTN: Jim Musgrove

**Axman #1**

**19-17S-14W/ Barton,KS**

Start Date: 2022.11.18 @ 16:05:00

End Date: 2022.11.18 @ 21:29:30

Job Ticket #: 69383                      DST #: 2

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2022.11.21 @ 16:58:39



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Charter Energy  
 PO Box 252  
 Great Bend, KS 67530  
 ATTN: Jim Musgrove

**19-17S-14W/ Barton,KS**  
**Axman #1**  
 Job Ticket: 69383 **DST#: 2**  
 Test Start: 2022.11.18 @ 16:05:00

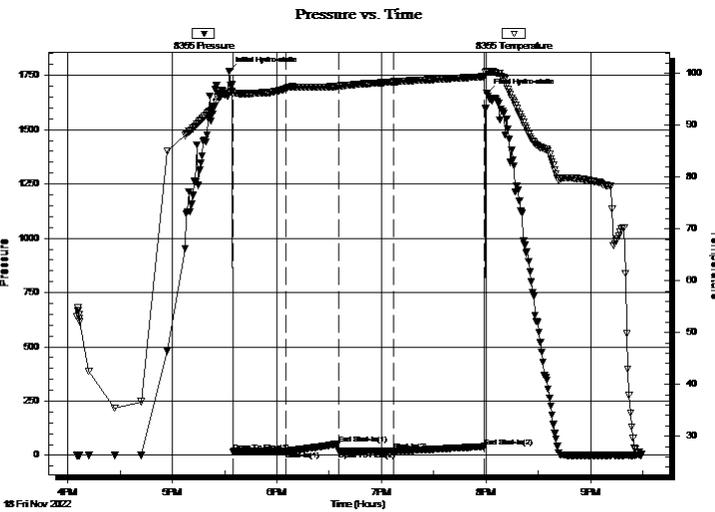
## GENERAL INFORMATION:

Formation: **LKC**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 17:35:00  
 Time Test Ended: 21:29:30  
 Interval: **3375.00 ft (KB) To 3400.00 ft (KB) (TVD)**  
 Total Depth: 3400.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Richard Samora  
 Unit No: 66  
 Reference Elevations: 1901.00 ft (KB)  
 1896.00 ft (CF)  
 KB to GR/CF: 5.00 ft

## Serial #: 8355 Outside

Press@RunDepth: 19.18 psig @ 3381.02 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2022.11.18 End Date: 2022.11.18 Last Calib.: 1899.12.30  
 Start Time: 16:05:05 End Time: 21:29:29 Time On Btm: 2022.11.18 @ 17:32:45  
 Time Off Btm: 2022.11.18 @ 20:00:45

TEST COMMENT: 30-IF: Weak blow built to .86"  
 30-IS: No blow back  
 30-FF: No blow  
 45-FS: No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1769.88	96.19	Initial Hydro-static
3	17.07	96.17	Open To Flow (1)
33	18.49	97.10	Shut-In(1)
63	52.66	97.51	End Shut-In(1)
63	19.00	97.62	Open To Flow (2)
94	19.18	98.39	Shut-In(2)
147	40.54	99.38	End Shut-In(2)
148	1666.93	100.35	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM 5%O 95%M	0.07

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Charter Energy

**19-17S-14W/ Barton,KS**

PO Box 252  
Great Bend, KS 67530

**Axman #1**

Job Ticket: 69383

**DST#: 2**

ATTN: Jim Musgrove

Test Start: 2022.11.18 @ 16:05:00

## Tool Information

Drill Pipe:	Length: 3359.00 ft	Diameter: 3.80 inches	Volume: 47.12 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 3.25 inches	Volume: 0.00 bbl	Weight set on Packer:	24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	lb
			<u>Total Volume: 47.12 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial	32000.00 lb
Depth to Top Packer:	3375.00 ft			Final	32000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	25.02 ft				
Tool Length:	51.02 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	4.00			3353.00	
Hydraulic tool	4.00			3357.00	
Sampler	4.00			3361.00	
EM	5.00			3366.00	
Safety Joint	2.00			3368.00	
Packer	4.00			3372.00	26.00 Bottom Of Top Packer
Packer	3.00			3375.00	
Stubb	1.00			3376.00	
Recorder Carrier	5.00			3381.00	
Recorder	0.01	6839	Inside	3381.01	
Recorder	0.01	8355	Outside	3381.02	
Perforations	16.00			3397.02	
Bullnose	3.00			3400.02	25.02 Bottom Packers & Anchor

**Total Tool Length: 51.02**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Charter Energy

**19-17S-14W/ Barton,KS**

PO Box 252  
Great Bend, KS 67530

**Axman #1**

Job Ticket: 69383

**DST#: 2**

ATTN: Jim Musgrove

Test Start: 2022.11.18 @ 16:05:00

## 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:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2900.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	OSM 5%O 95%M	0.070

Total Length: 5.00 ft      Total Volume: 0.070 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

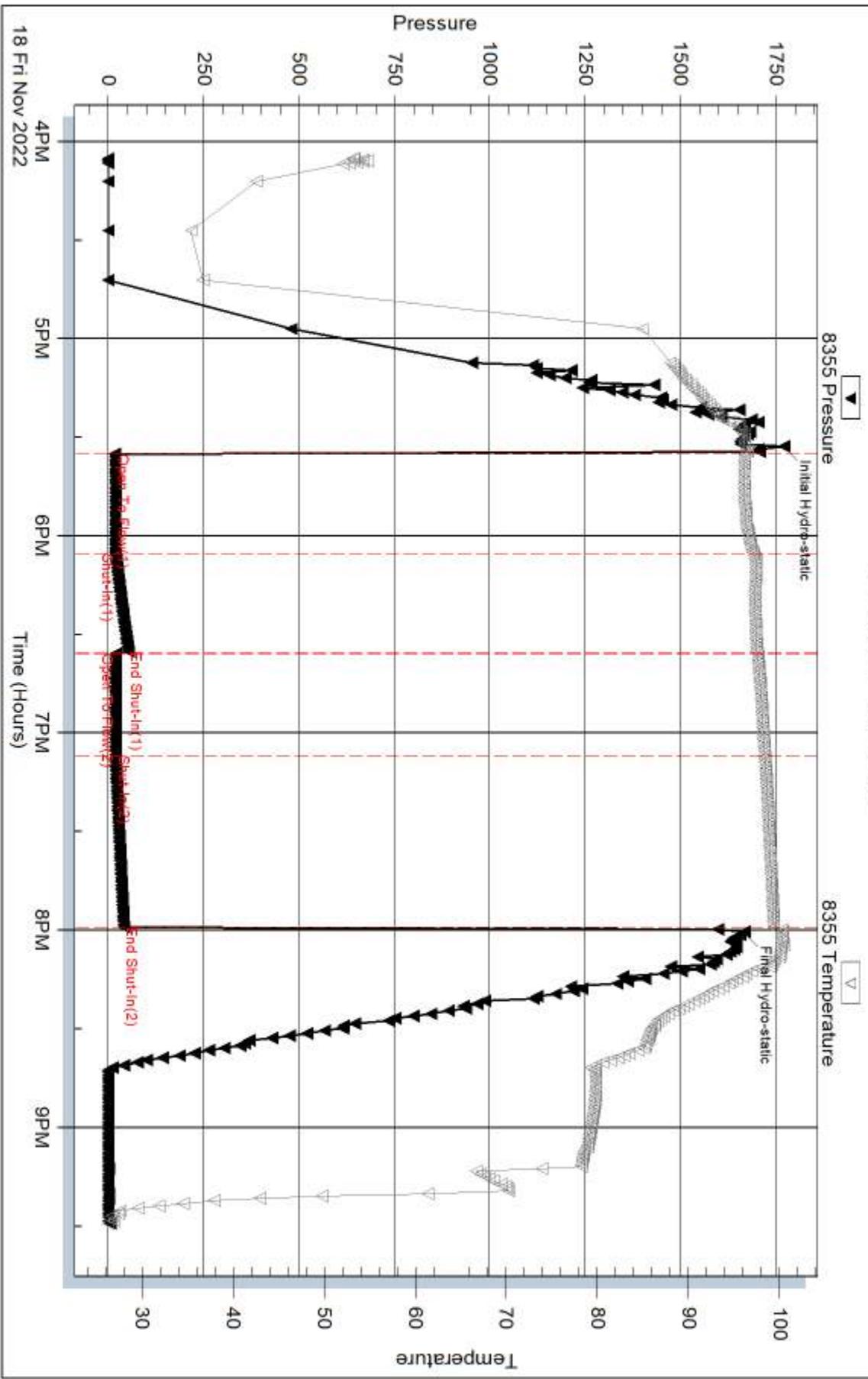
Serial #:

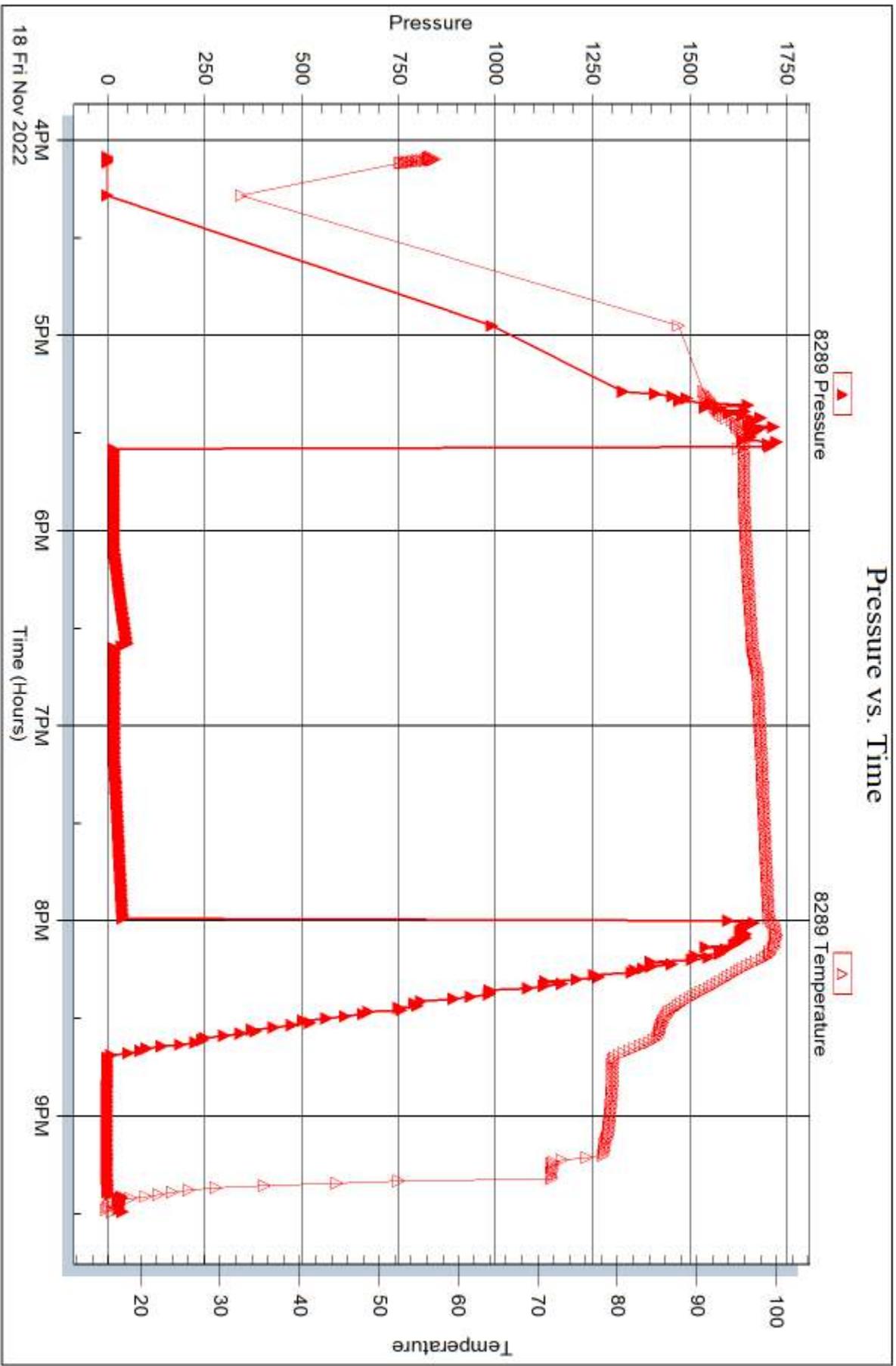
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time







## DRILL STEM TEST REPORT

Prepared For: **Charter Energy**

PO Box 252  
Great Bend, KS 67530

ATTN: Jim Musgrove

**Axman #1**

**19-17S-14W/ Barton,KS**

Start Date: 2022.11.19 @ 04:40:00

End Date: 2022.11.19 @ 10:44:45

Job Ticket #: 69384                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2022.11.21 @ 16:57:32







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Charter Energy

**19-17S-14W/ Barton,KS**

PO Box 252  
Great Bend, KS 67530

**Axman #1**

Job Ticket: 69384

**DST#: 3**

ATTN: Jim Musgrove

Test Start: 2022.11.19 @ 04:40:00

## Tool Information

Drill Pipe:	Length: 3359.00 ft	Diameter: 3.80 inches	Volume: 47.12 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 3.25 inches	Volume: 0.00 bbl	Weight set on Packer:	24000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	lb
			<u>Total Volume: 47.12 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	9.00 ft			String Weight: Initial	33000.00 lb
Depth to Top Packer:	3376.00 ft			Final	lb
Depth to Bottom Packer:	ft				
Interval between Packers:	34.02 ft				
Tool Length:	60.02 ft				
Number of Packers:	2	Diameter: 7.88 inches			

Tool Comments:

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

Shut In Tool	4.00			3354.00	
Hydraulic tool	4.00			3358.00	
Sampler	4.00			3362.00	
EM	5.00			3367.00	
Safety Joint	2.00			3369.00	
Packer	4.00			3373.00	26.00 Bottom Of Top Packer
Packer	3.00			3376.00	
Stubb	1.00			3377.00	
Recorder Carrier	5.00			3382.00	
Recorder	0.01	6839	Inside	3382.01	
Recorder	0.01	8355	Outside	3382.02	
Perforations	25.00			3407.02	
Bullnose	3.00			3410.02	34.02 Bottom Packers & Anchor

**Total Tool Length: 60.02**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Charter Energy

**19-17S-14W/ Barton,KS**

PO Box 252  
Great Bend, KS 67530

**Axman #1**

Job Ticket: 69384

**DST#: 3**

ATTN: Jim Musgrove

Test Start: 2022.11.19 @ 04:40:00

### 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:

bbbl

Water Loss: 6.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2900.00 ppm

Filter Cake: 0.20 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
63.00	MCO 70%M 30%O	0.884
7.00	OM 50%O 50%M	0.098

Total Length: 70.00 ft      Total Volume: 0.982 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

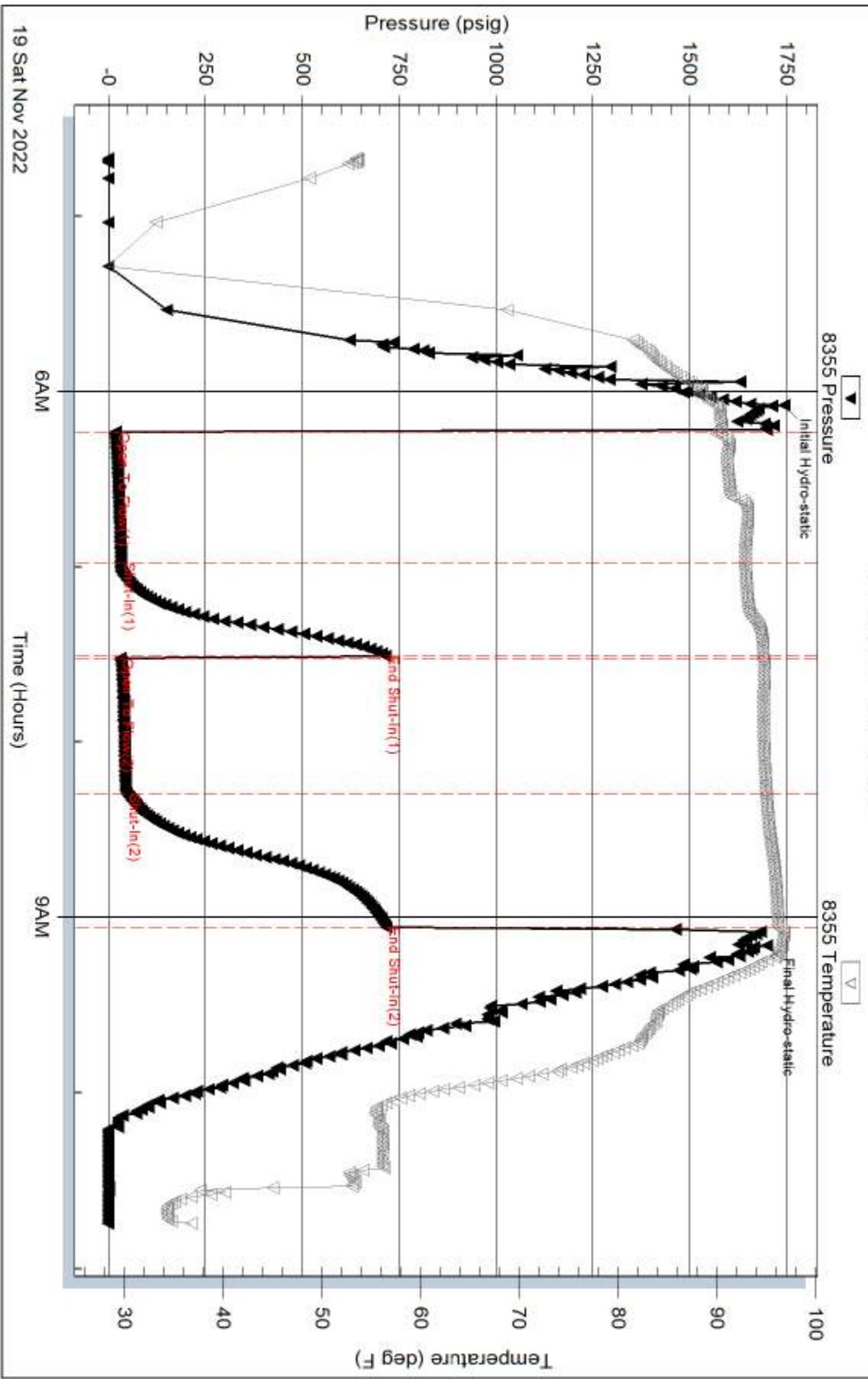
Serial #:

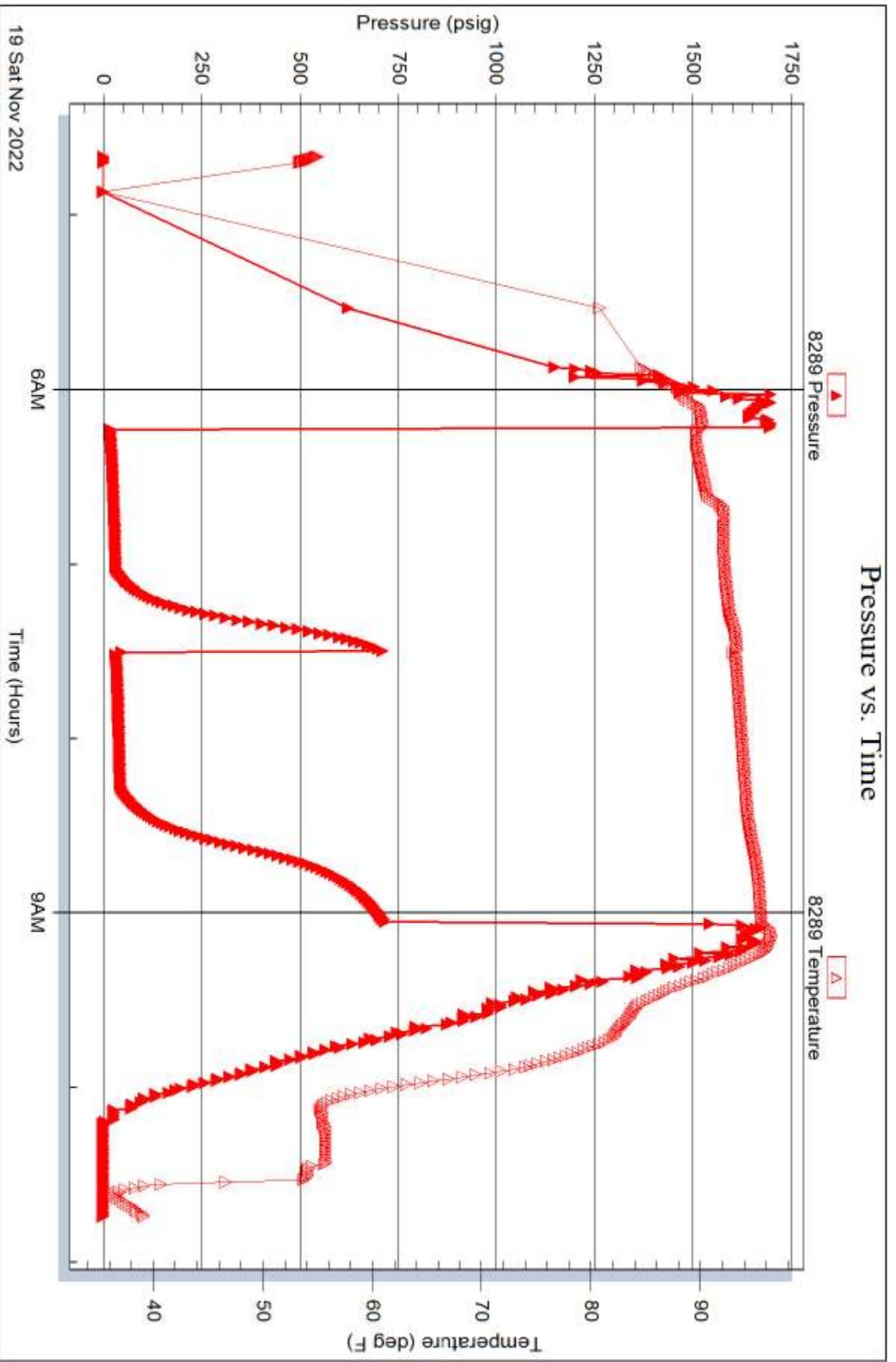
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 69382

Well Name & No. Axmen 1 Test No. 1 Date 11-17-22  
 Company Charter Energy Elevation 1901 KB 1896 GL  
 Address PO BOX 252 Great Bend KS 67530  
 Co. Rep / Geo. Jim Musgrove Rig Southwind 1  
 Location: Sec. 19 Twp 17S Rge. 14W Co. Benton State KS

Interval Tested 3157-3182 Zone Tested Causing A  
 Anchor Length 25' Drill Pipe Run 3135 Mud Wt. 8.9  
 Top Packer Depth 3153 Drill Collars Run 0 Vis 55  
 Bottom Packer Depth 3157 Wt. Pipe Run 0 WL 6.4  
 Total Depth 3182 Chlorides 2500 ppm System LCM 2#

Blow Description IF: Fair blow built to 3.89"  
IS1: No blow back  
FF: Fair blow built to 3.9"  
ES1: No blow back

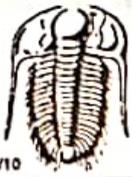
Rec	Feet of	%gas	%oil	%water	%mud
<u>30</u>	<u>0.5 Min</u>	<u>0</u>	<u>5</u>	<u>15</u>	<u>80</u>
<u>Tool</u>	<u>0.5 Min</u>	<u>0</u>	<u>10</u>	<u>50</u>	<u>40</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 30 BHT 97.8 Gravity NA API RW 872 @ 30.4 °F Chlorides 18,000 ppm  
 (A) Initial Hydrostatic 1624  Test 1800 T-On Location 11:30  
 (B) First Initial Flow 19  Jars \_\_\_\_\_ T-Started 12:40  
 (C) First Final Flow 24  Safety Joint \_\_\_\_\_ T-Open 14:14  
 (D) Initial Shut-In 308  Circ Sub \_\_\_\_\_ T-Pulled 17:17  
 (E) Second Initial Flow 18  Hourly Standby \_\_\_\_\_ T-Out 18:45  
 (F) Second Final Flow 30  Mileage (21) 36.75 Comments EM Tool  
 (G) Final Shut-In 321  Sampler \_\_\_\_\_ didn't work for most  
 (H) Final Hydrostatic 1578  Straddle \_\_\_\_\_ of dst

Initial Open 30  EM Tool -350  
 Initial Shut-In 45  Ruined Shale Packer \_\_\_\_\_  
 Final Flow 45  Ruined Packer \_\_\_\_\_  
 Final Shut-In 60  Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total -350  
 Day Standby \_\_\_\_\_ Total 1486.75  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1836.75

Approved By \_\_\_\_\_ Our Representative Richie Samora

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 69383

Well Name & No. Axmen 1 Test No. 2 Date 11-18-22  
 Company Charter Energy Elevation 1901 KB 1896 GL  
 Address PO Box 252 Great Bend KS 67530  
 Co. Rep / Geo. Jim Musgrave Rig Southwind 1  
 Location: Sec. 19 Twp 17S Rge. 14W Co. Barton State KS

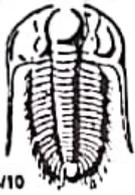
Interval Tested 3375-3400 Zone Tested Lansing + KC  
 Anchor Length 25' Drill Pipe Run 3359 Mud Wt. 9.0  
 Top Packer Depth 3370 Drill Collars Run 0 Vis 53  
 Bottom Packer Depth 3375 Wt. Pipe Run 0 WL 6.4  
 Total Depth 3400 Chlorides 2900 ppm System LCM 2#

Blow Description IF: Weak blow built to .85"  
IS1: No blow back  
FF: No blow  
FS1: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>0.5M</u>	<u>0</u>	<u>5</u>	<u>0</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 5 BHT 100.4 Gravity NA API RW NA @ NA F Chlorides NA ppm  
 (A) Initial Hydrostatic 1770  Test 1800 T-On Location 15:30  
 (B) First Initial Flow 17  Jars \_\_\_\_\_ T-Started 16:30  
 (C) First Final Flow 18  Safety Joint \_\_\_\_\_ T-Open 17:34  
 (D) Initial Shut-In 53  Circ Sub \_\_\_\_\_ T-Pulled 19:52  
 (E) Second Initial Flow 19  Hourly Standby \_\_\_\_\_ T-Out 21:20  
 (F) Second Final Flow 19  Mileage 10 36.75 Comments Batts on @ 11:05  
 (G) Final Shut-In 41  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1667  Straddle \_\_\_\_\_  EM Tool GOOD  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1836.75 MP/DST Disc't \_\_\_\_\_  
 Initial Open 30  
 Initial Shut-In 30  
 Final Flow 30  
 Final Shut-In 45

Approved By \_\_\_\_\_ Our Representative Bodie Samora  
 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

## Test Ticket

NO. 69384

Well Name & No. Axmen / Test No. 3 Date 11-19-22  
 Company Charter Energy Elevation 1901 KB 1896 GL  
 Address PO BOX 252 Great Bend KS 67530  
 Co. Rep / Geo. Jim Musgrave Rig Southwind 1  
 Location: Sec. 19 Twp 17S Rge. 14W Co. Barton State KS

Interval Tested 3376-3410 Zone Tested Arbuckle  
 Anchor Length 34' Drill Pipe Run 3359 Mud Wt. 9.0  
 Top Packer Depth 3371 Drill Collars Run 0 Vis 53  
 Bottom Packer Depth 3376 Wt. Pipe Run 0 WL 6.4  
 Total Depth 3410 Chlorides 2900 ppm System LCM Z

Blow Description IF: Fair blow built to 4.34"  
IS: No blow back  
FF: Fair blow built to 3.28"  
ES: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>7</u>	<u>OM</u>	<u>0</u>	<u>50</u>	<u>0</u>	<u>50</u>
<u>63</u>	<u>MO</u>	<u>0</u>	<u>30</u>	<u>0</u>	<u>70</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 70 BHT 98.7 Gravity 37.6 API RW 38 @ 46 °F Chlorides NA ppm  
 (A) Initial Hydrostatic 1742  Test 1800 T-On Location 03:50  
 (B) First Initial Flow 15  Jars \_\_\_\_\_ T-Started 05:00  
 (C) First Final Flow 32  Safety Joint \_\_\_\_\_ T-Open 06:11  
 (D) Initial Shut-In 713  Circ Sub \_\_\_\_\_ T-Pulled 09:00  
 (E) Second Initial Flow 30  Hourly Standby \_\_\_\_\_ T-Out 10:45  
 (F) Second Final Flow 47  Mileage 10 36.75 Comments Batts end 4:5  
 (G) Final Shut-In 716  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1698  Straddle \_\_\_\_\_

Initial Open 45  EM Tool Good  
 Initial Shut-In 30  Ruined Shale Packer \_\_\_\_\_  
 Final Flow 45  Ruined Packer \_\_\_\_\_  
 Final Shut-In 45  Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1836.75 Sub Total \_\_\_\_\_  
 Total 1836.75 Total \_\_\_\_\_

Approved By [Signature] Our Representative [Signature]

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