

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 Recompletion Date \_\_\_\_\_ 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)</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	White Exploration, Inc.
Well Name	YOUNGERS 1
Doc ID	1501951

All Electric Logs Run

Compensated Density/Neutron
Dual Induction
Micro Log
Sonic Log





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

**Well Name:** Youngers #1  
**API:** 15-007-24356  
**Location:** 22-31S-12W  
**License Number:**  
**Spud Date:** 08/16/19  
**Surface Coordinates:** 1780' FNL, 1925' FEL

**Region:** Barber Co., KS  
**Drilling Completed:** 08/24/19

**Bottom Hole  
Coordinates:**  
**Ground Elevation (ft):** 1605      **K.B. Elevation (ft):** 1612  
**Logged Interval (ft):** 3400      **To:** 4731      **Total Depth (ft):** 4731  
**Formation:**  
**Type of Drilling Fluid:** Chemical

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

**OPERATOR**

**Company:** White Exploration, Inc.  
**Address:** 1635 N. Waterfront Pkwy  
Ste. 100  
Wichita, KS, 67206

**GEOLOGIST**

**Name:** Andrew White  
**Company:** White Exploration, Inc.  
**Address:**

**Remarks**

**Due to DST and Sample evaluation, the decision was made to run casing on the Youngers #1 to evaluate the Mississippi**

### General Info

**Drilling Contractor: Pickrell Drilling, Rig #10**

**Logs: ELI Wireline Services**  
**Compensated Density/Neutron, Dual, Micro, Sonic, Frac Finder**

**Drilling Mud: Mudco/Service Mud, Inc.**

**DST: Trilobite**

**Gas Detector: Bluestem**

**Surveys: 391'-.75, 4310'-.5, 4731'-1**

### Daily Status

**08/16/19: Spud @ 2:30 p.m., drill to 391'. Ran 9 joints of 8-5/8" 23# Casing. Set @ 391', cemented with 235 sacks of 60/40 Poz Mix with 2% gel and 2%CC.**

**08/17/19: Waiting on Cement**

**08/18/19: Drilling ahead @ 1345'**

**08/19/19: Drilling ahead @ 2266'**

**08/20/19: Drilling ahead @ 3090'**

**08/21/19: Drilling ahead @ 3700'**

**08/22/19: Drilling ahead @ 4190'**

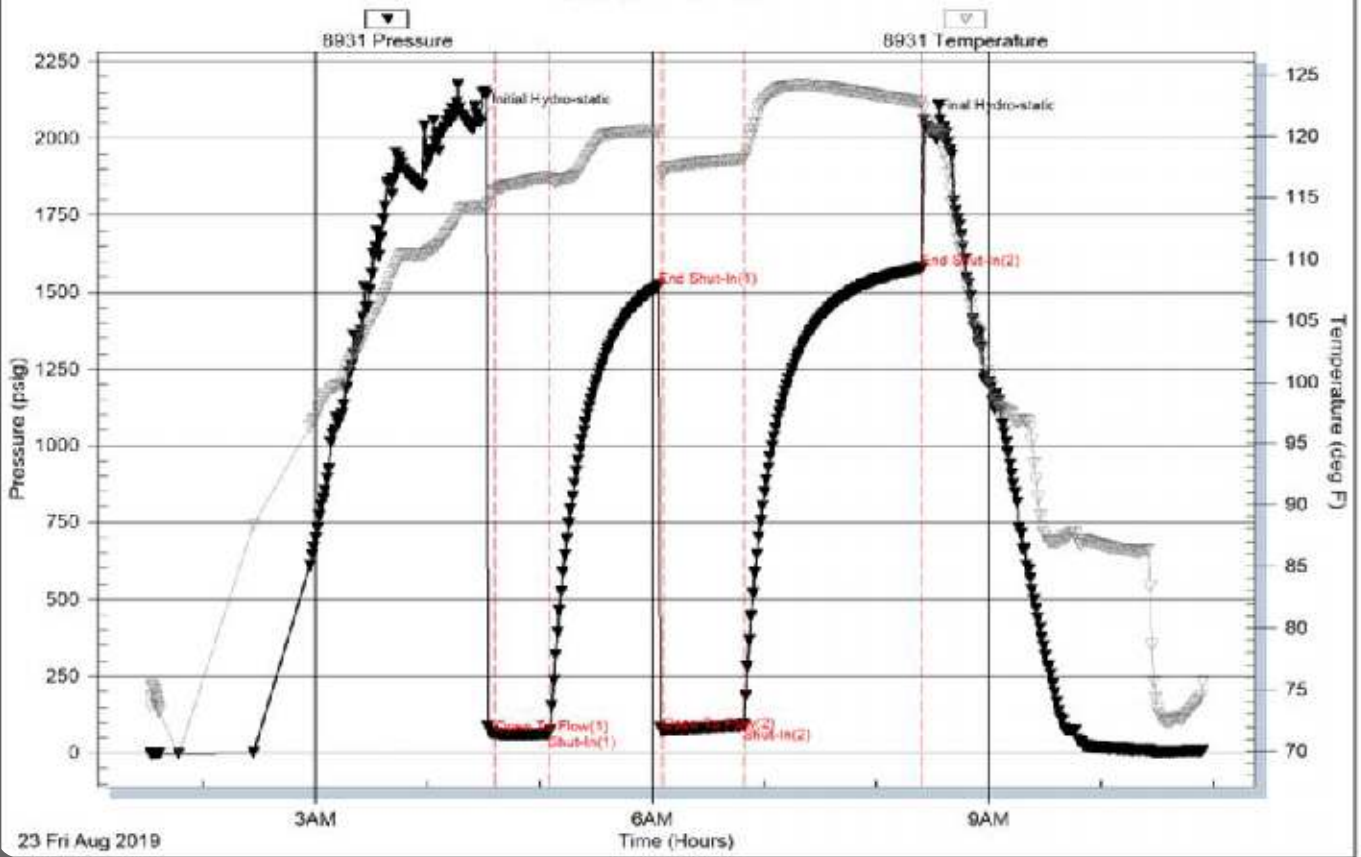
**08/23/19: Coming out of hole for DST #1 @4320'**

**08/24/19: Drilling ahead @ 4520"**

**08/25/19: Going back in hole after logs**

	White Ex			O.A. Sutton		White		Texas Energies	
	Youngers #1			Youngers #1		Cargill #1		Pike #1-22	
	22-31S-12W			22-31S-12W		15-31S-12W		22-31S-12W	
	1760' FNL, 1830' FEL			3300' FSL, 1980' FEL		1980' FSL, 1980' FEL		330' FNL, 990' FEL	
	KB:1612			KB: 1616		KB: 1630		KB: 1648	
	Sample	Log	Datum	Relationship		Relationship		Relationship	
Heebner	3558	3558	-1946	-2		-7		-9	
Lansing	3764	3765	-2153	-6		-1		3	
Stark	4107	4107	-2495	-1		-6		-6	
Miss	4310	4310	-2698	-21		-27		-24	
Kind	4456	4459	-2847	N/A		-19		N/A	
Viola	4590	4587	-2975	N/A		-13		N/A	
Simp	4680	4680	-3068	N/A		-27		N/A	

### Pressure vs. Time



### ROCK TYPES

#### LITHOLOGY

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Congl

- Dol
- Gyp
- Igne
- Lmst
- Meta
- Mrlst
- Salt
- Shale

- Shcol
- Shgy
- Sltst
- Ss
- Till

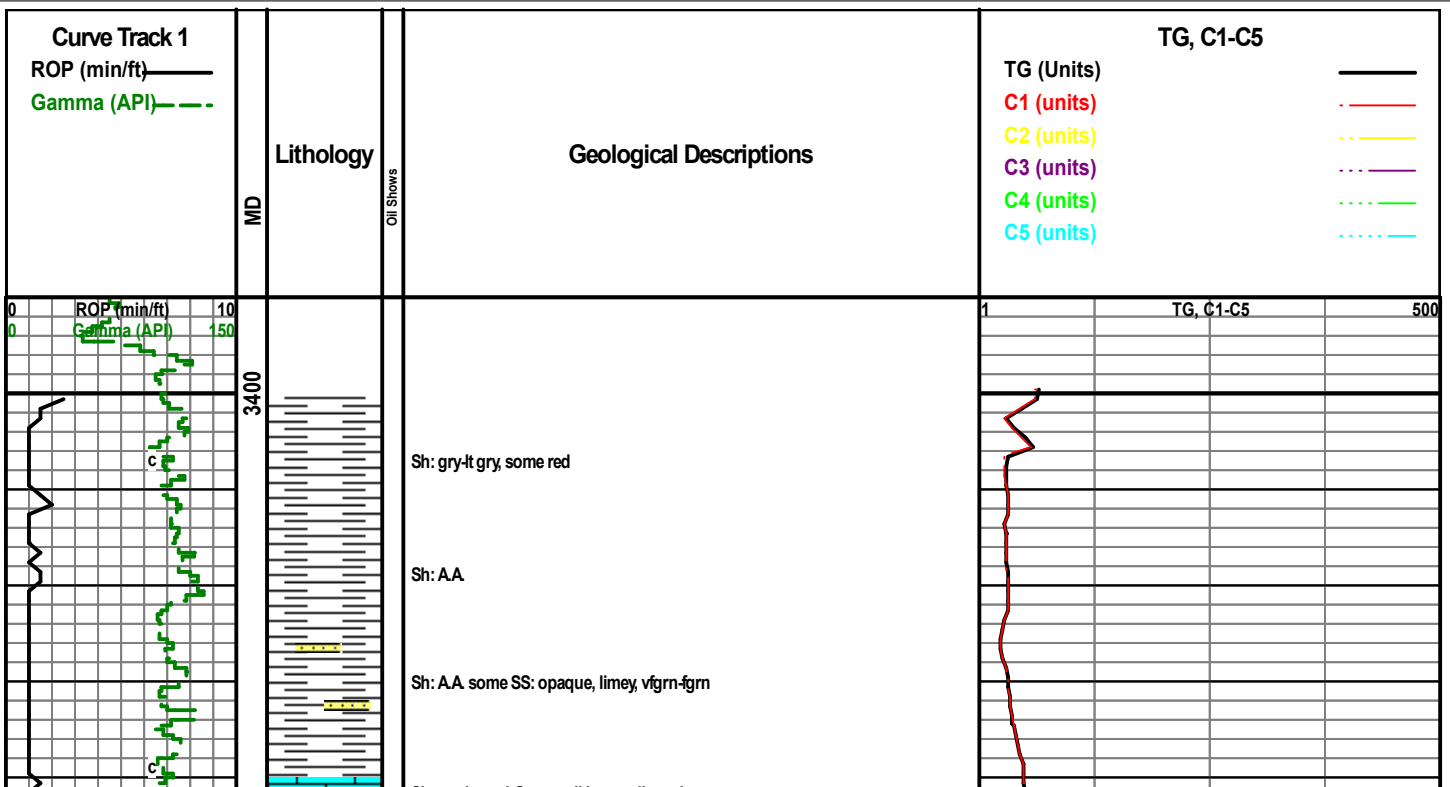
- STRINGER**
- Anhy

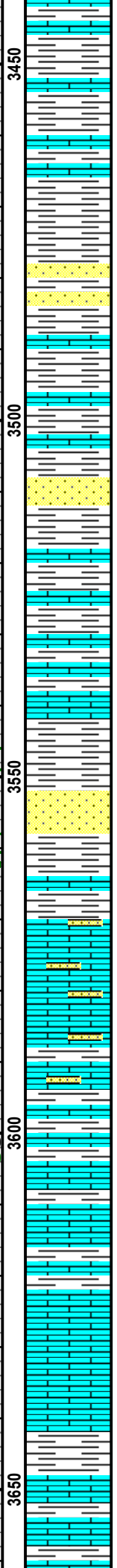
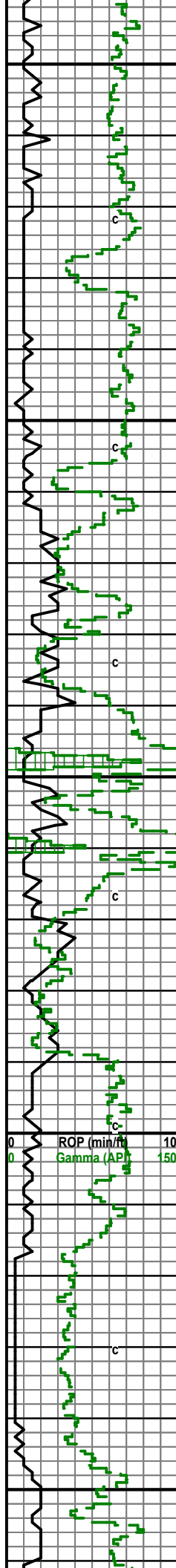
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg

- Ssstrg

#### OIL SHOW

- Even
- Spotted
- Ques
- Dead





Sh: gry-lt gry, LS: crm, sli brwn, sli sandy

AA

Sh: lt gry-gry, some LS: crm-tan, mcrxln, sli sandy

Sh: gry-lt gry

Sh: gry-lt gry, SS: opaque-brwn, sli clear, f-vfgrn, limey

Sh: gry-lt gry, LS: crm-tan, sli sandy

Sh: lt gry-gry, some LS: crm/gry, sli tan, mcrxln, sli sandy

SS: opaque, vfgrn, some fgfrn, limey, Sh: lt gry

AA some LS: crm, mcrxln

Sh: gry-lt gry, some SS: gry, silty-vfgrn, LS: crm-tan, mcrxln

AA

SS: gry, silty-vfgrn, Sh: lt gry-gry

Sh: lt gry-gry, Silt: lt gry

LS: brwn-gry, mcrxln, some SS: clear-opaque, some silt, Sh: gry-lt gry, some blick

LS: gry-crm, sli tan, mcrxln, cherty, some SS: AA

LS: crm-gry, sli tan, mcrxln, some SS: clear-opaque, silty, Sh: gry-lt gry

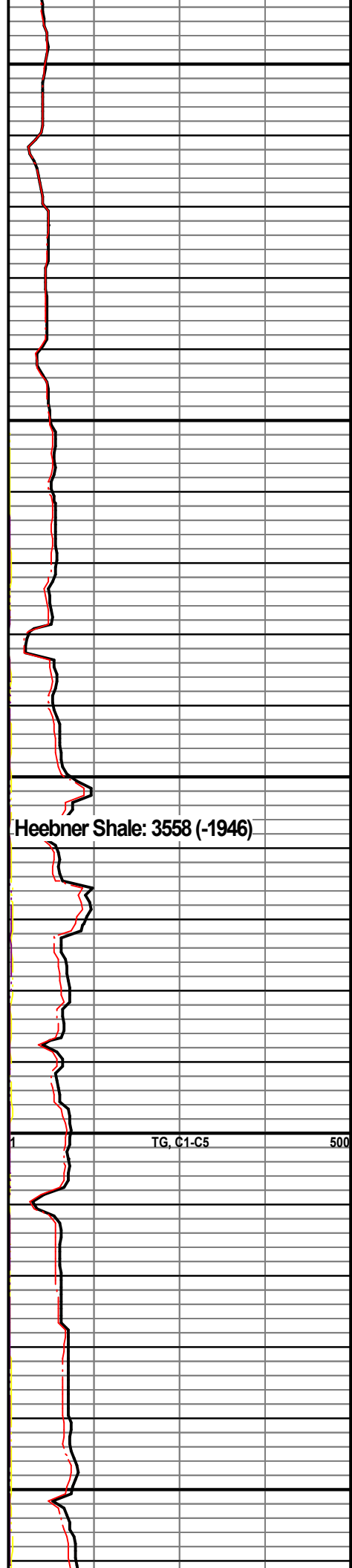
LS: crm, sli gry-tan, mcrxln, Sh: gry-lt gry

LS: crm-gry, mcrxln, some fxl, sli fos, sli chert, Sh: gry-lt gry

AA

LS: crm-gry, mcrxln, Sh: lt gry-gry, SS: opaque, f-vfgrn,

Sh: gry-lt gry: LS: AA and SS: AA

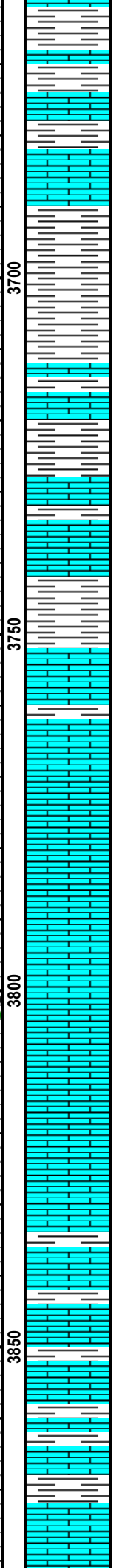
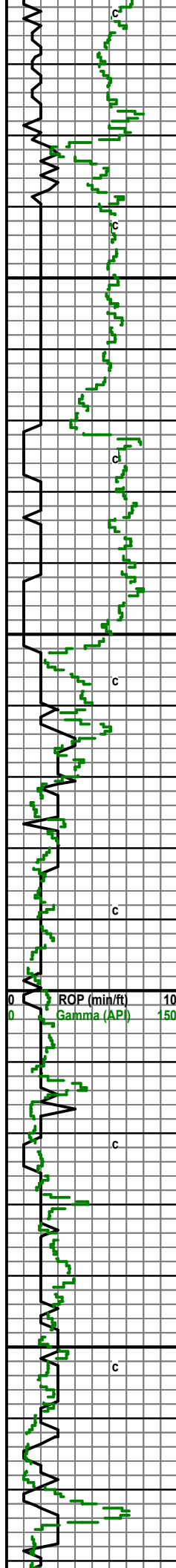


Heebner Shale: 3558 (-1946)

TG, C1-C5

500





AA

AA

Sh: lt gry, sli gry, some LS: crm-tan, mcrxln, sli fos, SS: opaque, vf-grn

AA

Sh: lt gry-gry, some LS: crm, sli tan, SS: opaque-gry, vf-grn to silt

AA

Sh: AA, SS:AA, LS: tan-brwn, sli crm, mcrxln, sli fos

LS: tan/brwn-crm, mcrxln, sli fldn, sli fos, sli cherty,

LS: AA sli chalky

LS: crm-tan, mcrxln, Sh: lt gry

LS: crm-tan, sli gry, mcrxln, sli fos

LS: AA some Sh: gry-lt gry

LS: crm-tan, mcrxln, sli fldn, sli fos, Sh: AA

LS: crm-gry, sli tan, mcr-fldn, fos, Sh: gry-drk gry/blck

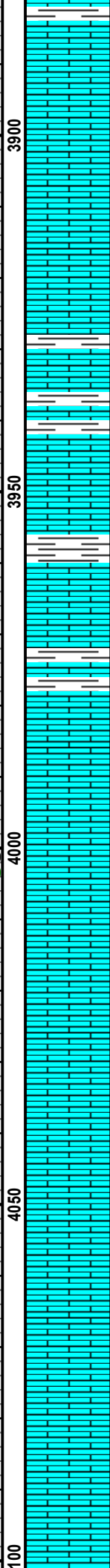
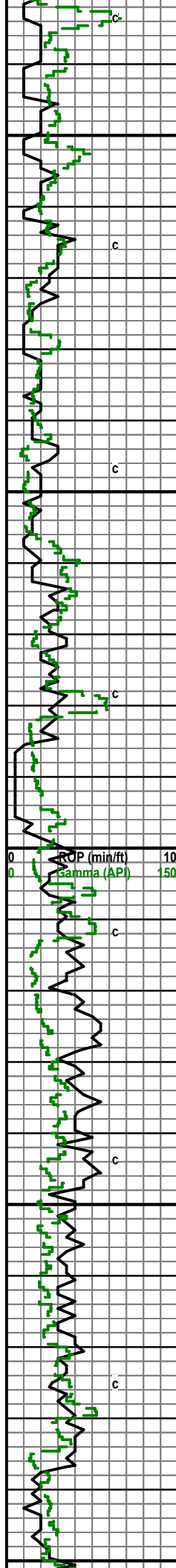
LS: crm-tan, sli gry, mcr-fldn, some mxln, sli fos, few chalky, pos sli stain no show

LS: crm-tan, mcrxln, fos, sli chalky Sh: gry-ld gry

Lansing: 3765 (-2153)

Mudco mdchk  
 Wt: 9.0 Vis: 47  
 pH: 11.0 Fil: 11.2  
 LCM: 1#

1 TG, C1-C5 500



LS: tan, sli crm, mcrxln, Sh: AA

LS: tan, mcr-foxln, some mxln, sli fos, cherty

LS: crm-tan, foxln, some mcrxln, fos, sli chalky

LS: tan-crm, sli brwn, mcr-foxln, fos, sli chalky, Sh: gry-lt gry

LS: crm-tan, sli gry, mcr-foxln, sli fos

LS: AA with Sh: lt gry-gry

LS: crm-tan, sli gry, mcrxln, few foxln, sli chalky, sli Sh: lt gry-gry

LS: brwn-tan, sli crm, granular-mxln, fos, sli cherty, sli chalky

LS: AA some oom

LS: crm, mcrxln, dense

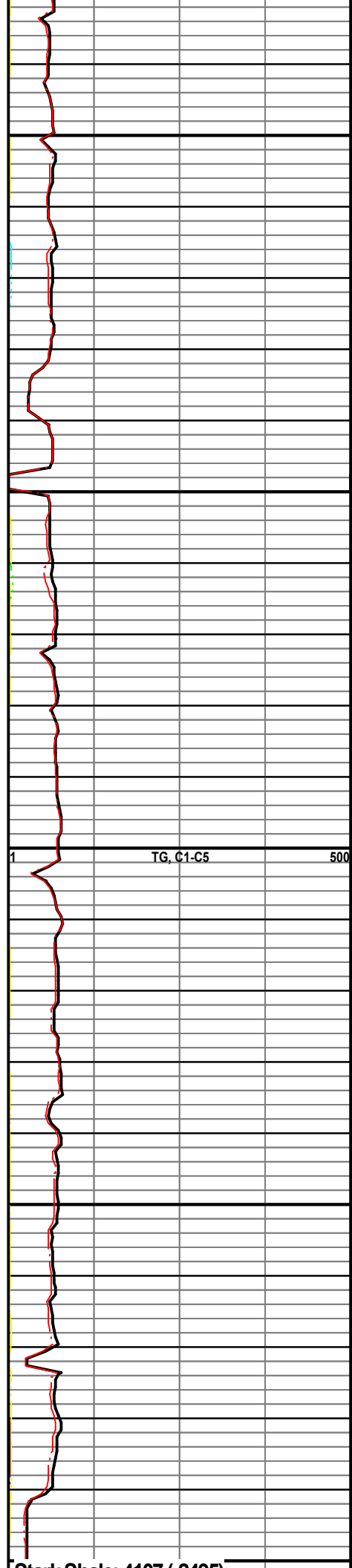
LS: crm-gry, mcrxln, sli cherty

LS: AA

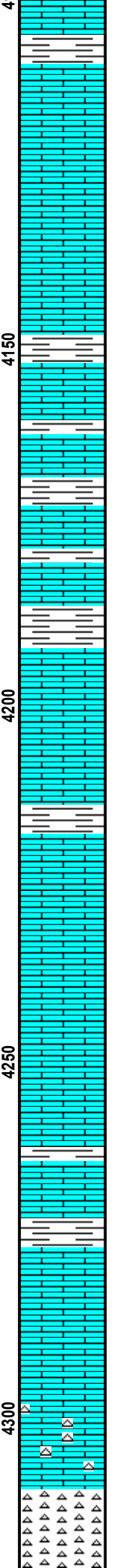
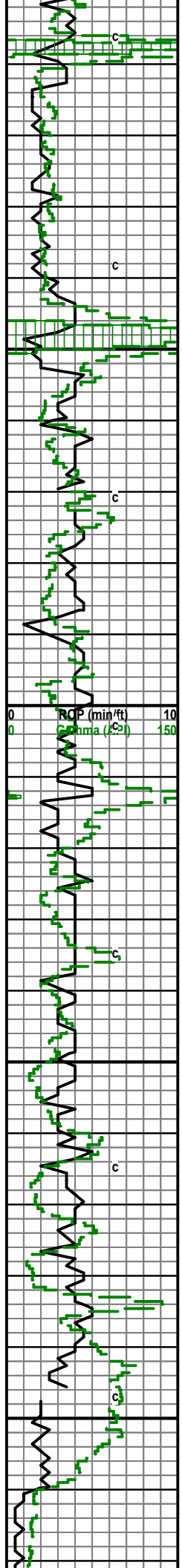
LS: crm-gry, mcrxln, sli cherty, sli chalky, some tan, dense, fos

LS: AA

LS: crm-gry, sli tan, mcr-foxln,



Stark Shale: 4107 (-2495)



LS: tan-gry, sli crm, mcrxln, some ool, Sh: gry, some drk gry-blck

LS: tan-brwn, sli gry-crm, mcr-fxl, sli cherty, sli chalky

LS: tan-gry, mcr-fxl, some mxln, chalky, sli chert, sli fos

LS: AA with Sh: drkgry-blck

LS: crm-gry, sli tan, mcrxln, Sh: gry-lt gry

LS: gry-crm, sli tan, mcrxln, some fxl, sli fos, sli chalky, Sh: gry-lt gry, some drk gry/blck

Sh: AA with LS: tan, sli crm, mcrxln, some fsli gran, sli fos, sli cherty

Sh: gry-lt gry-drk gry, some LS: AA

AA

Sh: gry-drk gry-lt gry, LS: crm, sli tan, mcrxln, sli fos

LS: gry-crm, sli tan, mcrxln,

LS: gry-crm-tan, mcrxln

LS: crm-gry, mcrxln

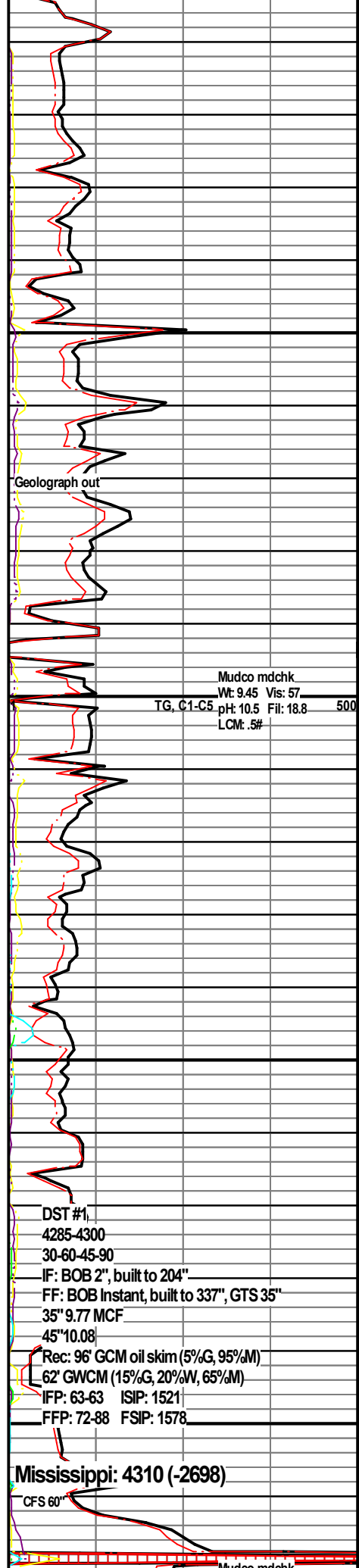
LS: crm-gry, mcrxln, some Sh: gry-lt gry-drk gry

LS: crm, sli gry, mcrxln, cherty, sli chalky

LS: crm-gry, mcrxln, some Chert trip, pos lt stain, pos dead oil, vrpr SFO, no odor, no fluor

LS: crm-tan, sli gry, mcrxln, some Chert: AA

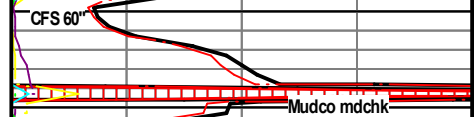
Chert: trip, gd stain, fr dull yellow fluor, no odor, SFO, dense in part, few friable pieces

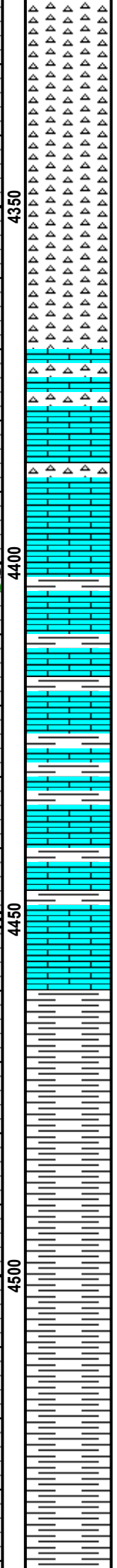
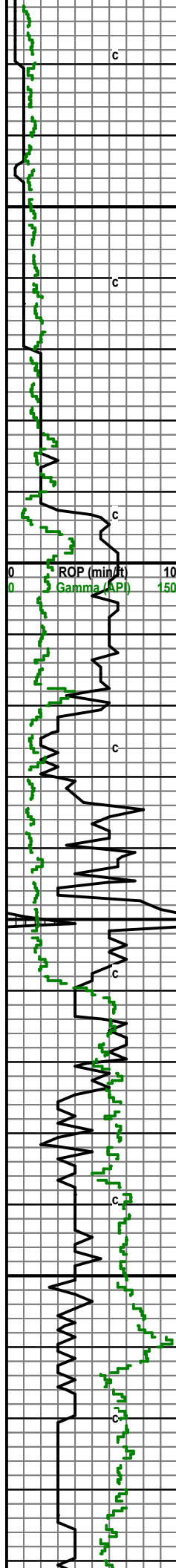


Mudco mdchk  
Wt: 9.45 Vis: 57  
TG, C1-C5 pH: 10.5 Fil: 18.8 500  
LCM: .5#

DST #1  
4285-4300  
30-60-45-90  
IF: BOB 2", built to 204"  
FF: BOB Instant, built to 337", GTS 35"  
35" 9.77 MCF  
45" 10.08  
Rec: 96' GCM oil skim (5%G, 95%M)  
62' GWCM (15%G, 20%M, 65%M)  
IFP: 63-63 ISIP: 1521  
FFP: 72-88 FSIP: 1578

Mississippi: 4310 (-2698)





Chert: trip, some dense, stain, SFO, fr odor, dull yell fluor, some fresh

AA: increase in fresh chert

Chert: mostly fresh, some trip, with stain, no odor, dull yell fluor, dense, SFO

AA: some LS: crm, sli tan, mcrxln

Sh: gry-lt gry, LS: crm-tan, sli gry, mcrxln, sli fos, some Chert: fresh

Sample mostly Sh, few pieces LS and Chert: AA

AA

Sh: gry-drk gry-lt gry, Chert: fresh, few pieces LS: crm-tan, mcrxln

AA

LS: tan-gry, sli crm, mcrxln, dense, sli cherty, some Sh: gry-drk gry

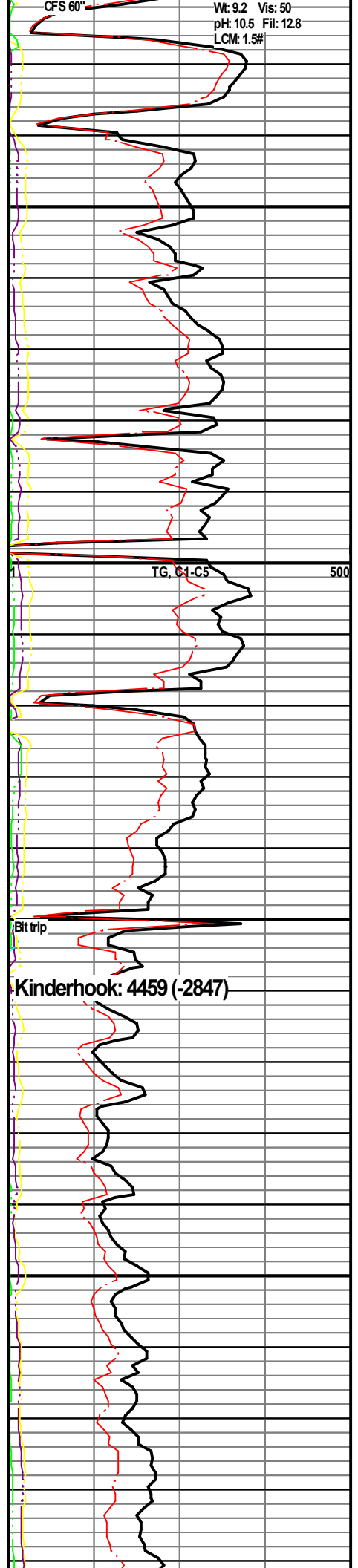
AA: poor sample

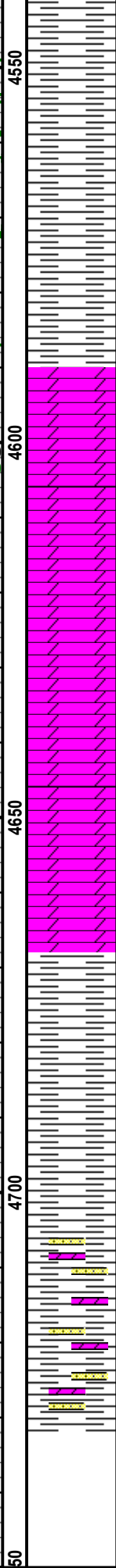
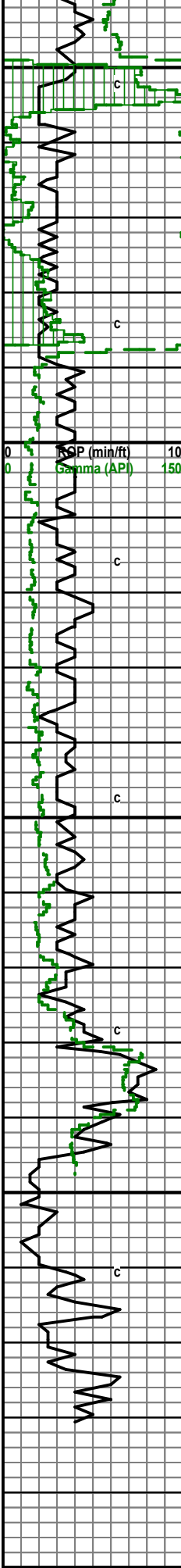
Sh: gry-drk gry, sli lt gry, LS: tan-gry, mcrxln

Sh: gry-drk gry

Sh: gry-drk gry

Sh: gry-drk gry





Sh: AA

Sh: gry-drk gry

Sh: AA some Dolo: tan-gry, sli crm, limey, some Chert

Sample mostly Sh: gry-drk gry

AA

Pr Sample, mostly Sh: AA some Dolo: gray-crm

AA

Mostly Sh: gry-drk gry, some Dolo: crm-gry, mcf

Sh: gry-drk gry, Dolo: gry, sli tan-crm

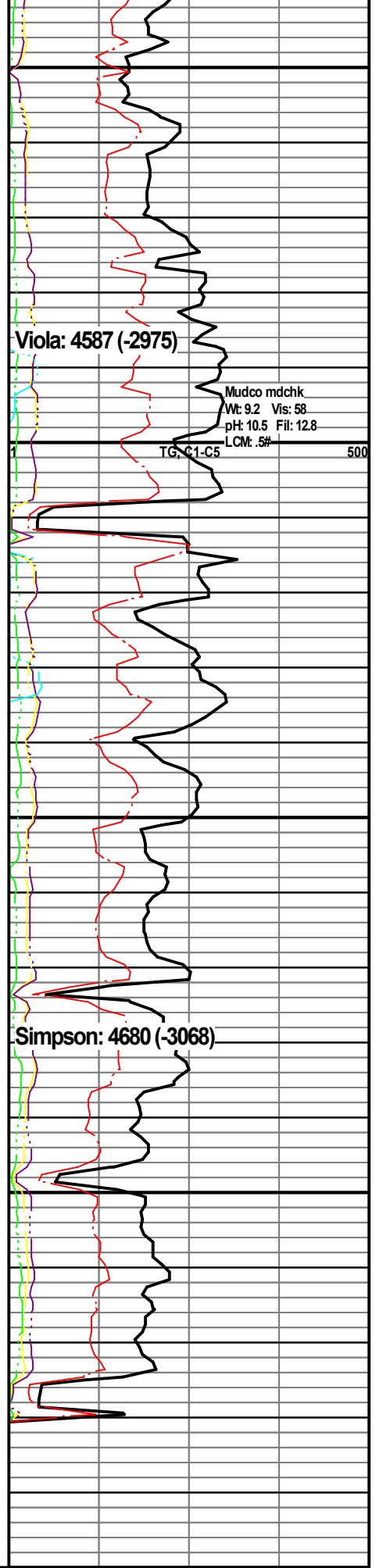
Sh: gry-drk gry

Sh: gry-drk gry, some lt gry, some Dolo: crm, sandy, some SS: opaque, dense, sub round, well sort no show

Sh: gry-drk gry-lt gry, some Dolo and SS: AA

**RTD 4731**

**LTD 4731**



**Viola: 4587 (-2975)**

Mudco mdchk  
 Wt: 9.2 Vis: 58  
 pH: 10.5 Fil: 12.8  
 LCM: 5#

TG, C1-C5 500

**Simpson: 4680 (-3068)**



## DRILL STEM TEST REPORT

Prepared For: **White Explortion Inc.**

1635 N Waterfront Pkwy  
Suite 100  
Wichita KS 67206

ATTN: Andrew White

### **Younger #1**

#### **22-31s-12w Barber,KS**

Start Date: 2019.08.23 @ 01:31:48

End Date: 2019.08.23 @ 10:54:03

Job Ticket #: 64939                      DST #: 1

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

Printed: 2019.08.26 @ 15:01:56



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

White Exploration Inc.  
1635 N Waterfront Pkwy  
Suite 100  
Wichita KS 67206  
ATTN: Andrew White

**22-31s-12w Barber, KS**

**Younger #1**

Job Ticket: 64939

**DST#: 1**

Test Start: 2019.08.23 @ 01:31:48

## GENERAL INFORMATION:

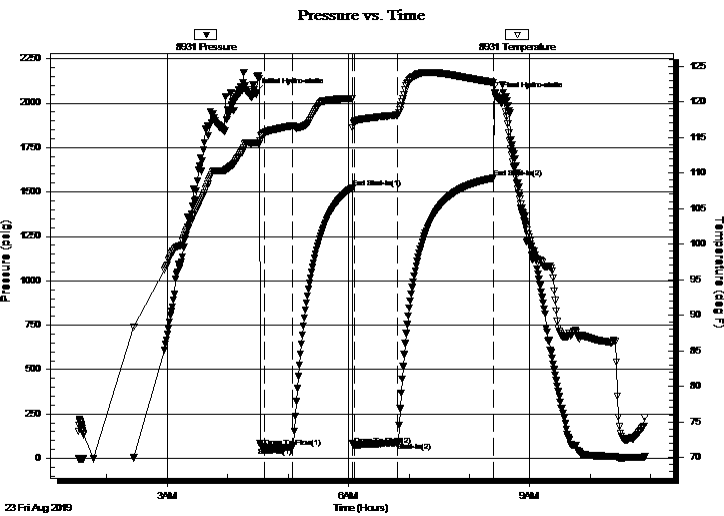
Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 04:36:03  
 Time Test Ended: 10:54:03  
 Interval: **4285.00 ft (KB) To 4320.00 ft (KB) (TVD)**  
 Total Depth: 4320.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Matt Smith  
 Unit No: 68  
 Reference Elevations: 1612.00 ft (KB)  
 1605.00 ft (CF)  
 KB to GR/CF: 7.00 ft

**Serial #: 8931**

**Inside**

Press@RunDepth: 88.34 psig @ 4286.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.08.23 End Date: 2019.08.23 Last Calib.: 2019.08.23  
 Start Time: 01:31:53 End Time: 10:54:03 Time On Btm: 2019.08.23 @ 04:27:03  
 Time Off Btm: 2019.08.23 @ 08:26:03

**TEST COMMENT:** IF: Strong Blow . BOB in 2 mins. Built to 204".  
 IS: No Blow .  
 FF: Strng Blow . BOB Immediately. Built to 337". G.T.S. in 37 mins. Gauged gas  
 FS: No Blow .



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2058.88	114.26	Initial Hydro-static
9	63.08	115.62	Open To Flow (1)
38	63.37	116.64	Shut-In(1)
97	1520.71	120.43	End Shut-In(1)
99	71.88	117.10	Open To Flow (2)
142	88.34	118.14	Shut-In(2)
237	1578.14	122.73	End Shut-In(2)
239	2038.41	121.12	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	GWCM 15%g 20%w 65% m	0.68
96.00	Oil Skim GM 5%g 95% m	1.35
0.00	GIP 100%g	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	11.70	9.77
Last Gas Rate	0.13	12.54	10.08



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

White Exploration Inc.  
1635 N Waterfront Pkwy  
Suite 100  
Wichita KS 67206  
ATTN: Andrew White

**22-31s-12w Barber, KS**

**Younger #1**

Job Ticket: 64939

**DST#: 1**

Test Start: 2019.08.23 @ 01:31:48

## GENERAL INFORMATION:

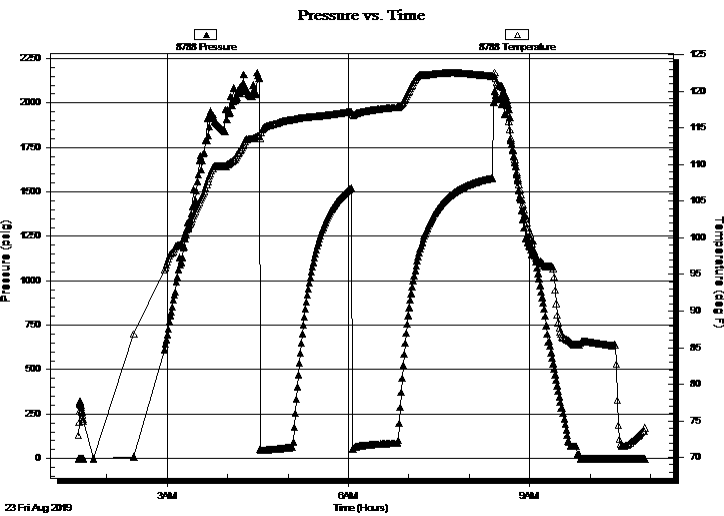
Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 04:36:03  
 Time Test Ended: 10:54:03  
 Interval: **4285.00 ft (KB) To 4320.00 ft (KB) (TVD)**  
 Total Depth: 4320.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Matt Smith  
 Unit No: 68  
 Reference Elevations: 1612.00 ft (KB)  
 1605.00 ft (CF)  
 KB to GR/CF: 7.00 ft

**Serial #: 8788**

**Outside**

Press@RunDepth: psig @ 4286.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.08.23 End Date: 2019.08.23 Last Calib.: 2019.08.23  
 Start Time: 01:32:03 End Time: 10:54:13 Time On Btm:  
 Time Off Btm:

TEST COMMENT: IF: Strong Blow . BOB in 2 mins. Built to 204".  
 IS: No Blow .  
 FF: Strng Blow . BOB Immediately. Built to 337". G.T.S. in 37 mins. Gauged gas  
 FS: No Blow .



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	GWCM 15%g 20%w 65%m	0.68
96.00	Oil Skim GM 5%g 95%m	1.35
0.00	GIP 100%g	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	11.70	9.77
Last Gas Rate	0.13	12.54	10.08





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

White Exploration Inc.  
1635 N Waterfront Pkwy  
Suite 100  
Wichita KS 67206  
ATTN: Andrew White

**22-31s-12w Barber, KS**  
**Younger #1**  
Job Ticket: 64939      **DST#: 1**  
Test Start: 2019.08.23 @ 01:31:48

**Tool Information**

Drill Pipe:	Length: 4254.00 ft	Diameter: 3.80 inches	Volume: 59.67 bbl	Tool Weight: 2100.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.80 inches	Volume: 0.23 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 59.90 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4285.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	63.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Requested shale Packer.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4258.00	
Shut In Tool	5.00			4263.00	
Hydraulic tool	5.00			4268.00	
Jars	5.00			4273.00	
Safety Joint	3.00			4276.00	
Packer	4.00			4280.00	28.00      Bottom Of Top Packer
Packer	5.00			4285.00	
Stubb	1.00			4286.00	
Recorder	0.00	8931	Inside	4286.00	
Recorder	0.00	8788	Outside	4286.00	
Perforations	31.00			4317.00	
Bullnose	3.00			4320.00	35.00      Bottom Packers & Anchor

**Total Tool Length: 63.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

White Exploration Inc.

**22-31s-12w Barber,KS**

1635 N Waterfront Pkwy  
Suite 100  
Wichita KS 67206  
ATTN: Andrew White

**Younger #1**

Job Ticket: 64939

**DST#: 1**

Test Start: 2019.08.23 @ 01:31:48

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 10.00 lb/gal  
Viscosity: 57.00 sec/qt  
Water Loss: 9.99 in<sup>3</sup>  
Resistivity: 11000.00 ohm.m  
Salinity: ppm  
Filter Cake: 0.20 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: 24000 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	GWCM 15%g 20%w 65%m	0.677
96.00	Oil Skim GM 5%g 95%m	1.347
0.00	GIP 100%g	0.000

Total Length: 158.00 ft      Total Volume: 2.024 bbl

Num Fluid Samples: 1

Num Gas Bombs: 1

Serial #: Prat Matt

Laboratory Name:

Laboratory Location:

Recovery Comments: 4096 FT of G.I.P.

RW .30 @ 69 Degrees = 24000 Chlorides.



**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

**GAS RATES**

White Explortion Inc.

**22-31s-12w Barber,KS**

1635 N Waterfront Pkw y  
Suite 100  
Wichita KS 67206  
ATTN: Andrew White

**Younger #1**

Job Ticket: 64939

**DST#: 1**

Test Start: 2019.08.23 @ 01:31:48

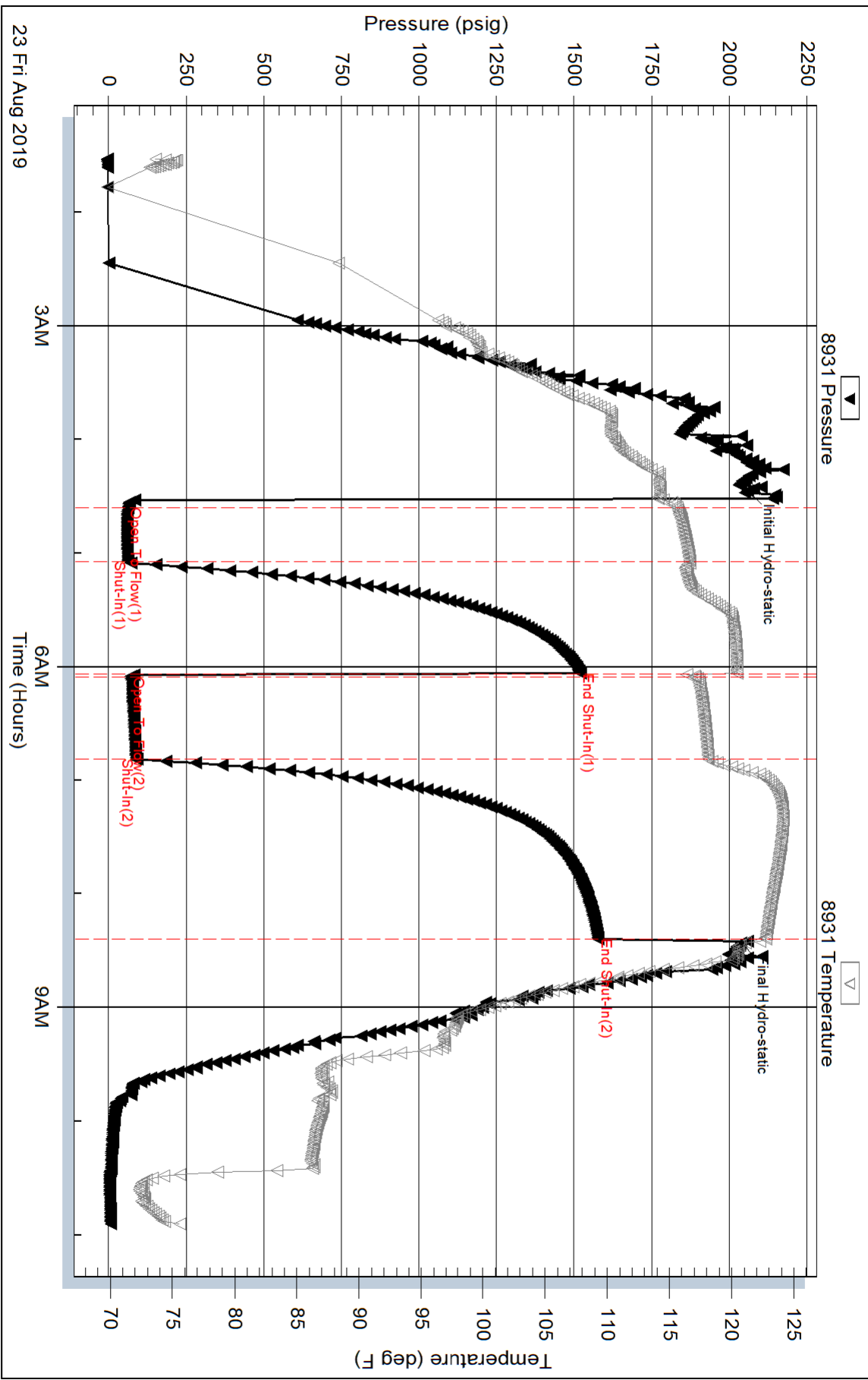
### Gas Rates Information

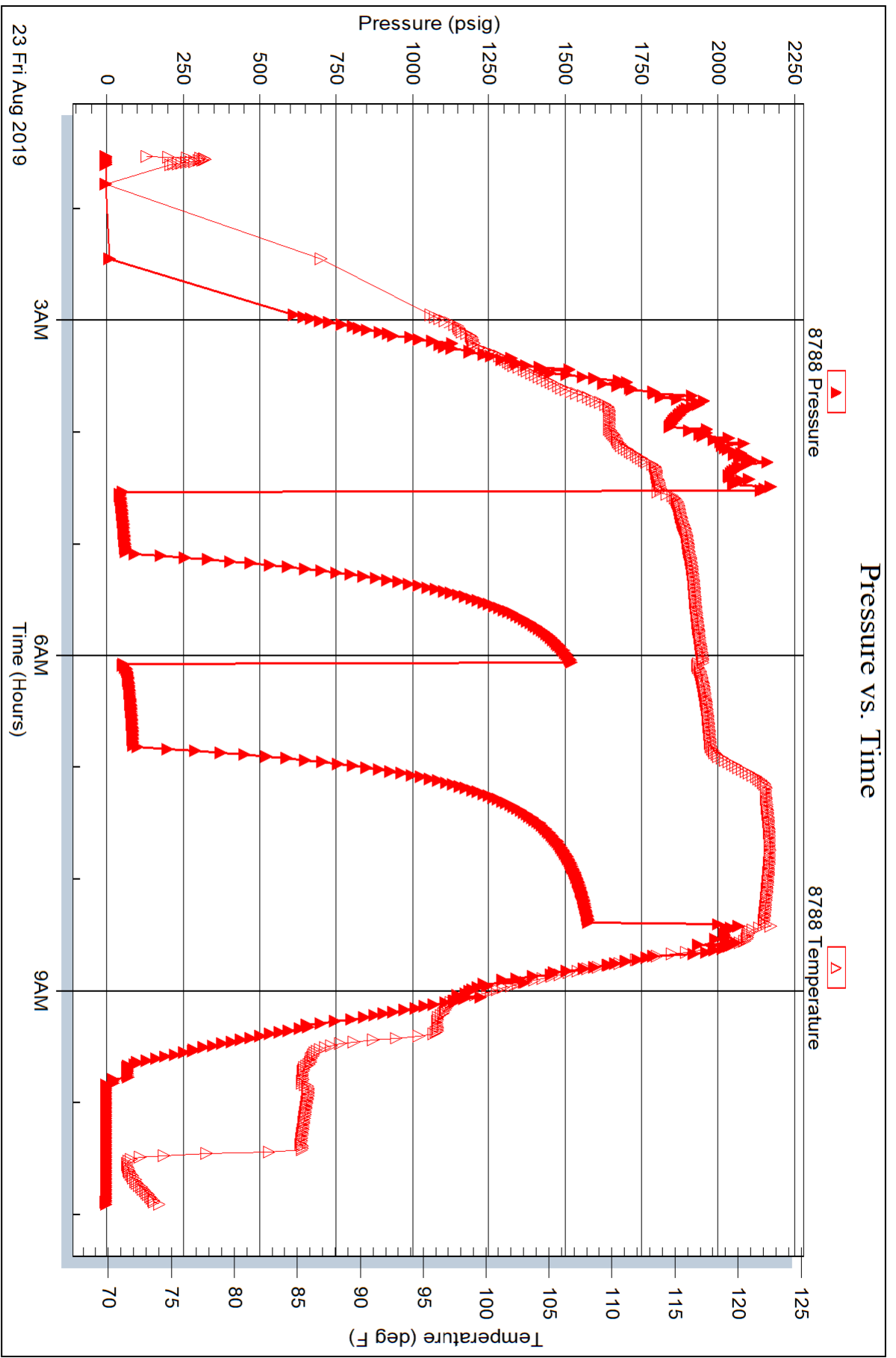
Temperature: 59 (deg F)  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	35	0.13	11.70	9.77
2	45	0.13	12.54	10.08

### Pressure vs. Time







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 64939

Well Name & No. Younger #1 Test No. 1 Date 8/23/19  
 Company White Exploration Inc. Elevation 1612 KB 1605 GL  
 Address 1635 N. Waterfront PKWY Suite 100 Wichita, KS. 67206  
 Co. Rep / Geo. Andrew White Rig Pickrell Drg #1  
 Location: Sec. 22 Twp 31S Rge. 12W Co. BARBER State KS.

Interval Tested 4285 - 4320 Zone Tested Mississippi  
 Anchor Length 35' Drill Pipe Run 4254 Mud Wt. 9.45  
 Top Packer Depth 4280 Drill Collars Run 30 Vis 57  
 Bottom Packer Depth 4285 Wt. Pipe Run 0 WL ~~18.8~~ (7) 10.0  
 Total Depth 4320 Chlorides 11,000 ppm System LCM 0.5

Blow Description FF: Strong Blow. B.O.B. in 2-mins. Built to 204"  
ISI: No Blow.  
FF: Strong Blow. B.O.B. immediately Built to 337.83. G.T.S. in 37 mins. Ganged Gas + Sample  
FSI: No Blow.

Rec	Feet of	%gas	%oil	%water	%mud
4096	G.I.P.	100%			
96	Oil skin Gm	5%			95%
62	GWCM	15%		20%	65%
		%gas	%oil	%water	%mud
		%gas	%oil	%water	%mud

Rec Total 158' Slud BHT 114° Gravity N/A API RW 30 @ 69 °F Chlorides 24000 ppm

(A) Initial Hydrostatic 2059  Test 1300 T-On Location 0048  
 (B) First Initial Flow 63  Jars 250 T-Started 0131  
 (C) First Final Flow 63  Safety Joint 75 T-Open 0436  
 (D) Initial Shut-In 1521  Circ Sub T-Pulled 0835  
 (E) Second Initial Flow 72  Hourly Standby T-Out 1054  
 (F) Second Final Flow 88  Mileage (62)(7)(4) X 2 128 Comments P.U.T.T. 6:25pm  
 (G) Final Shut-In 1578  Sampler 8/24/19  
 (H) Final Hydrostatic 2038  Straddle  EM Tool  
 Ruined Shale Packer  
 Ruined Packer  
 Extra Copies  
 Initial Open 30  Extra Packer  
 Initial Shut-In 60  Extra Recorder  
 Final Flow 45  Day Standby  
 Final Shut-In 90  Accessibility  
 Sub Total 2003 Sub Total 2003 MB/DST Disc't

Approved By [Signature] Our Representative [Signature]

TriLOBITE Testing Inc. shall not be liable for damaged or 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.









# BASIC

energy services, L.P.

## TREATMENT REPORT

Customer <u>WHITE EXP., INC.</u>		Lease No. <u>25119</u>		Date <u>8-25-2019</u>	
Lease <u>WOUNGERS</u>		Well # <u>25119</u>			
Field Order # <u>18193</u>	Station <u>PRATT, KS</u>	Casing <u>5 1/2"</u>	Depth <u>4730'</u>	County <u>BARBER</u>	State <u>KS</u>
Type Job <u>5 1/2" CONFRING 123</u>			Formation	Legal Description <u>22-315-12W</u>	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size <u>5 1/2" x 15.5"</u>	Tubing Size	Shots/Ft	<u>CMT-</u>	<u>160 SKS AA2</u>	RATE	PRESS	ISIP	
Depth <u>4731'</u>	Depth	From	To	Pre Pad <u>@ 1.48 BUFT<sup>3</sup></u>	Max		5 Min.	
Volume <u>112 BBL</u>	Volume	From	To	Pad	Min		10 Min.	
Max Press <u>1500</u>	Max Press	From	To	Frac	Avg		15 Min.	
Well Connection <u>API</u>	Annulus Vol.	From	To		HHP Used		Annulus Pressure	
Plug Depth <u>4704.48'</u>	Packer Depth	From	To	Flush <u>112 BBL</u>	Gas Volume		Total Load	

Customer Representative TERRY BAIRD Station Manager J.W. Treater K. LESLEY

Service Units <u>910217</u>	Driver Names <u>ALLEN MARQUEZ</u>	Station Manager <u>J.W.</u>	Treater <u>K. LESLEY</u>
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Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
12:00 PM					ON LOCATION - SAFETY MEETING
4:00 PM					RUN 113 TB. 5 1/2" x 15.5" CSG.
					TURBO - 2, 4, 6, 8, 10, 11, 13
					BASKET - BOTTOM OF #2
					CSG. ON BOTTOM
6:45 PM					HOOK UP TO CSG. / BREAK CIRC. W/ RIG
					ROTATE CSG.
7:45 PM	400		5	6	H <sub>2</sub> O AHEAD
7:46 PM	400		12	6	MUD FLOW II
7:48 PM	400		5	6	H <sub>2</sub> O SPACER
7:49 PM	300		42	6	MIX 160 SKS AA2 CMT @ 14.8 PPG
7:50 PM					SHUT DOWN - CLEAR PUMP & LINES
7:59 PM					DROP I.D. PLUG
8:00 PM	0		0	6	START DISPLACEMENT
8:11 PM	200		85	5	LIFT PRESSURE
8:26 PM	500		100	4	SLOW RATE
8:30 PM	1500		112	3	PLUG DOWN - HELD
9:00 PM			7.5	2	PLUG R.H. & M.H.
					JOB COMPLETE,
					THANKS -
					KEVIN LESLEY