

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
--	---

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 _____
---	--	--

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:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	LB Exploration, Inc.
Well Name	CV FARMS 22 1
Doc ID	1800229

All Electric Logs Run

Borehole Compensated Sonic
Dual Induction
Dual Compensated Porosity
Microresistivity



**OPERATOR**

Company: LB Exploration, Inc.  
 Address: 2135 2nd Rd  
 Holyrood, KS 67450

Contact Geologist: Jim Musgrove  
 Contact Phone Nbr: 620-786-0839  
 Well Name: CV Farms 22 #1  
 Location: 22-15s-8w N2-NE-SW-SW  
 API: 15-053-21393-00-00  
 Pool:  
 State: Kansas

Field: Grubb  
 Country: USA

**Scale 1:240 Imperial**

Well Name: CV Farms 22 #1  
 Surface Location: 22-15s-8w N2-NE-SW-SW  
 Bottom Location:  
 API: 15-053-21393-00-00  
 License Number: 33186  
 Spud Date: 5/14/2024 Time: 12:00 AM  
 Region: Ellsworth  
 Drilling Completed: 5/21/2024 Time: 12:00 AM  
 Surface Coordinates: 1050' FSL & 4290' FEL  
 Bottom Hole Coordinates:  
 Ground Elevation: 1579.00ft  
 K.B. Elevation: 1587.00ft  
 Logged Interval: 0.00ft To: 3080.00ft  
 Total Depth: 3080.00ft  
 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	250 ft			
Int Casing					
Prod Casing	5 1/2" in	0.00 ft			

**CASING SEQUENCE**

Type	Hole Size	Casing Size	At
	0.00 in	0.00	0.00 ft

**OPEN HOLE LOGS**

Logging Company: Midwest Wireline  
 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: 1050' FSL

**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: Duke Drilling  
Rig #: 2  
Rig Type: mud rotary  
Spud Date: 5/14/2024  
TD Date: 5/21/2024  
Rig Release:

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

**ELEVATIONS**

K.B. Elevation: 1587.00ft  
K.B. to Ground: 8.00ft

Ground Elevation: 1579.00ft

**NOTES**

Remarks:

5 1/2" production casing was set and cemented on LB Exploration Inc, CV Farms 22 #1.

Respectfully Submitted,

James C Musgrove  
Petroleum Geologist



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

LB Exploration

**22-15S-8W/ Ellsworth**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms 22-1**

ATTN: Jim Musgrove

Job Ticket: 72002 **DST#: 1**

Test Start: 2024.05.16 @ 13:26:00

**GENERAL INFORMATION:**

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:47:40

Time Test Ended: 18:24:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Richie Samora

Unit No: 66

Interval: 1056.00 ft (KB) To 1210.00 ft (KB) (TVD)

Reference Elevations: 1582.00 ft (KB)

Total Depth: 1210.00 ft (KB) (TVD)

1577.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8355** Inside

Press@RunDepth: 152.37 psig @ 1192.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2024.05.16 End Date: 2024.05.16

Last Calib.: 1899.12.30

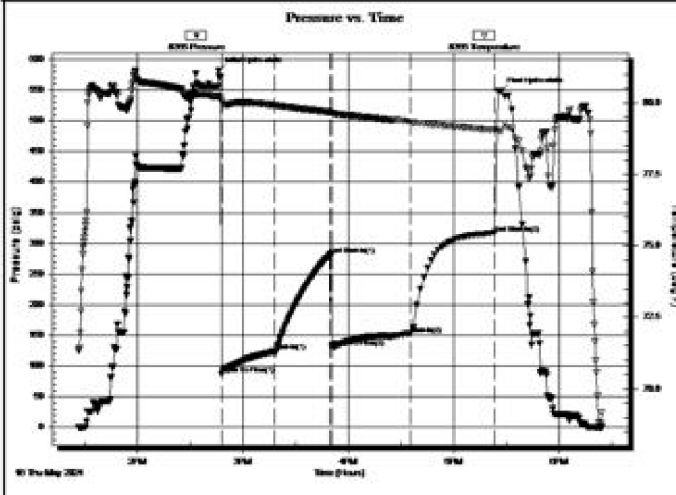
Start Time: 13:26:10 End Time: 18:24:30

Time On Btm: 2024.05.16 @ 14:46:00

Time Off Btm: 2024.05.16 @ 17:27:00

**TEST COMMENT:** 30-IF: Strong blow BOB in 5 minutes built to 42.86"  
30-ISI: No Returns

45-FF: Strong blow BOB ion 3 minutes 30 seconds reached 162.5"  
 45-FSt: Weak blow built to 1.62"



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	582.06	80.23	Initial Hydro-static
2	86.37	80.05	Open To Flow (1)
32	123.71	79.92	Shut-In(1)
64	281.99	79.68	End Shut-In(1)
65	131.12	79.64	Open To Flow (2)
109	152.37	79.32	Shut-In(2)
157	316.75	79.04	End Shut-In(2)
161	548.89	79.01	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
180.00	MUD 100%M	0.95

**Gas Rates**

	Choke (inches)	Pressure (psig)	Gas Rate (Mcfd)



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
 Holyrood KS 67450

**CV Farms #22-1**

ATTN: Jim Musgrove

Job Ticket: 72003

**DST#: 2**

Test Start: 2024.05.17 @ 15:21:00

**GENERAL INFORMATION:**

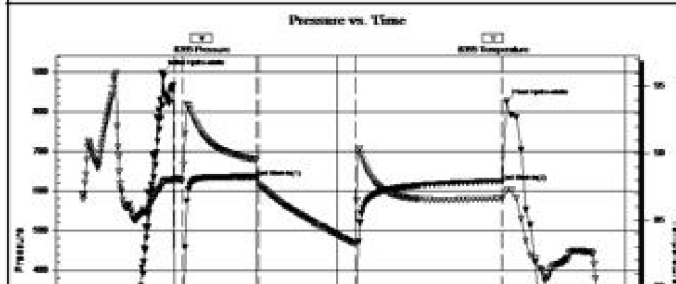
Formation: **Grand Haven**  
 Deviated: No Whipstock ft (KB)  
 Time Tool Opened: 16:18:10  
 Time Test Ended: 20:52:15  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Richie Samora  
 Unit No: 66  
 Interval: **1793.00 ft (KB) To 1826.00 ft (KB) (TVD)**  
 Reference Elevations: 1582.00 ft (KB)  
 Total Depth: 1826.00 ft (KB) (TVD)  
 1577.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Good  
 KB to GR/CF: 5.00 ft

**Serial #: 8355**

Inside

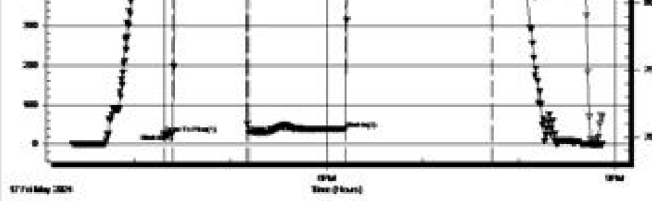
Press@RunDepth: 38.13 psig @ 1799.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2024.05.17 End Date: 2024.05.17 Last Calib.: 1899.12.30  
 Start Time: 15:21:10 End Time: 20:52:15 Time On Btm: 2024.05.17 @ 16:10:40  
 Time Off Btm: 2024.05.17 @ 19:46:00

**TEST COMMENT:** 5-IF: Strong blow BOB in 1 minute 20 seconds built to 137.77"  
 45-ISI: No Returns  
 60-FF: BOB immediate GTS 4 minutes into flow. Gas gauged and samples caught reached 30.25psi  
 90-FSt: Weak blow built to .68" then died off 30 minutes into shut-in



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	898.38	87.59	Initial Hydro-static
8	26.62	87.85	Open To Flow (1)
13	26.80	87.93	Shut-In(1)
59	635.79	89.53	End Shut-In(1)
61	29.42	87.66	Open To Flow (2)
121	38.13	83.25	Shut-In(2)
161	635.67	86.60	End Shut-In(2)



213 623.67 86.60 End Shut-in(2)  
216 824.51 87.23 Final Hydro-static

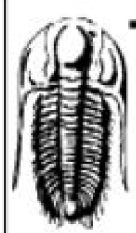
**Recovery**

Length (ft)	Description	Volume (bbl)
10.00	MUD 100%M	0.05

\* Recovery from multiple tests

**Gas Rates**

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	8.24	82.94
Last Gas Rate	0.38	13.97	103.93
Max. Gas Rate	0.25	28.24	67.64



**TRILOBITE TESTING, INC.**

**DRILL STEM TEST REPORT**

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72004

**DST#: 3**

ATTN: Jim Musgrove

Test Start: 2024.05.18 @ 11:10:00

**GENERAL INFORMATION:**

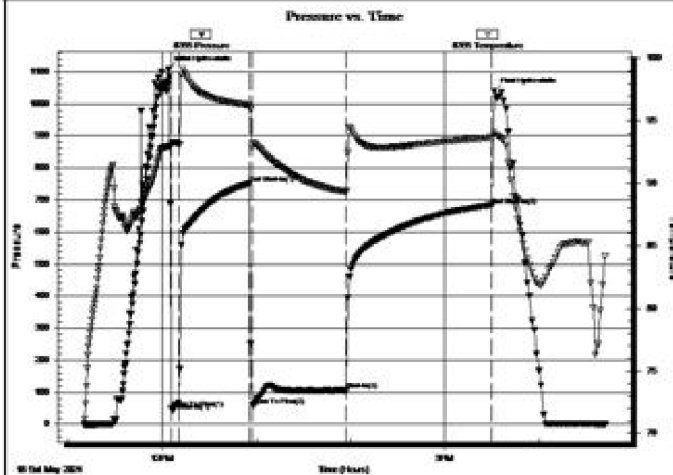
Formation: **Servery**  
 Deviated: No Whipstock ft (KB)  
 Time Tool Opened: 12:05:40  
 Time Test Ended: 16:43:00  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Richie Samora  
 Unit No: 66  
 Interval: **2144.00 ft (KB) To 2185.00 ft (KB) (TVD)**  
 Reference Elevations: 1582.00 ft (KB)  
 Total Depth: 2185.00 ft (KB) (TVD)  
 1577.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 KB to GRVCF: 5.00 ft

**Serial #: 8355**

**Inside**

Press@RunDepth: 106.36 psig @ 2150.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2024.05.18 End Date: 2024.05.18 Last Calib.: 1899.12.30  
 Start Time: 11:10:10 End Time: 16:43:00 Time On Btm: 2024.05.18 @ 12:04:10  
 Time Off Btm: 2024.05.18 @ 15:31:30

**TEST COMMENT:** 5-IF: Strong blow BOB in 20 seconds GTS in 2 minutes 45 seconds reached 30psi  
 45-ISI: Weak blow reached 6"  
 60-FF: BOB immediate Gas gauged and samples caught reached 75psi  
 90-FSI: Weak blow reached 2"



**PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1108.69	92.94	Initial Hydro-static
2	49.29	93.04	Open To Flow (1)
7	68.16	93.14	Shut-In(1)
52	750.79	96.26	End Shut-In(1)
54	60.15	92.86	Open To Flow (2)
114	106.36	89.37	Shut-In(2)
206	683.80	93.67	End Shut-In(2)
208	1039.43	94.05	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
125.00	MUD 5%G 95%M	0.61


**Gas Rates**

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	51.46	241.26
Last Gas Rate	0.38	45.27	218.59



Max. Gas Rate	0.38	51.46	241.26
---------------	------	-------	--------

\* Recovery from multiple tests

	<b>DRILL STEM TEST REPORT</b>
	LB Exploration <span style="float: right;"><b>22-15S-8W Ellsworth,KS</b></span>
	2135 2nd Rd <span style="float: right;"><b>CV Farms #22-1</b></span> Holyrood KS 67450 <span style="float: right;">Job Ticket: 72005 <b>DST#: 4</b></span> ATTN: Jim Musgrove <span style="float: right;">Test Start: 2024.05.19 @ 16:51:00</span>

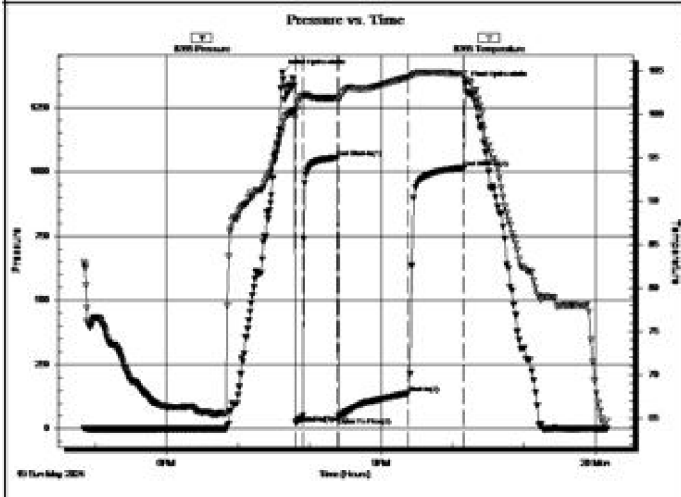
**GENERAL INFORMATION:**

Formation: **LKC**  
 Deviated: No Whipstock ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 19:48:20 Tester: Richie Samora  
 Time Test Ended: 00:10:30 Unit No: 66  
 Interval: **2659.00 ft (KB) To 2684.00 ft (KB) (TVD)** Reference Elevations: 1582.00 ft (KB)  
 Total Depth: 2684.00 ft (KB) (TVD) 1577.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

**Serial #: 8355 Inside**

Press@RunDepth: 137.81 psig @ 2665.00 ft (KB)	Capacity: 8000.00 psig
Start Date: 2024.05.19 End Date: 2024.05.20	Last Calib.: 1899.12.30
Start Time: 16:51:10 End Time: 00:10:30	Time On Btm: 2024.05.19 @ 19:37:20
	Time Off Btm: 2024.05.19 @ 22:11:00

**TEST COMMENT:** 5-IF: Weak blow built to 3"  
 30-ISI: No Returns  
 60-FF: Fair blow BOB in 31 minutes built to 19.5"  
 45-FSt: No Returns



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1385.40	98.40	Initial Hydro-static
11	24.70	99.52	Open To Flow (1)
17	52.48	102.07	Shut-In(1)
46	1054.06	101.85	End Shut-In(1)
48	45.90	101.67	Open To Flow (2)
106	137.81	104.23	Shut-In(2)
153	1014.48	104.59	End Shut-In(2)
154	1339.35	104.00	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
200.00	MW 15%M 85%W	1.23
60.00	MCW 40%M 60%W	0.84

\* Recovery from multiple tests

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

	<b>DRILL STEM TEST REPORT</b>
	LB Exploration <span style="float: right;"><b>22-15S-8W/ Ellsworth</b></span>



GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:29:10

Time Test Ended: 13:20:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Richie Samora

Unit No: 66

Interval: 2603.00 ft (KB) To 2709.00 ft (KB) (TVD)

Total Depth: 2709.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 1582.00 ft (KB)

1577.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8355

Inside

Press@RunDepth: 51.17 psig @ 2699.00 ft (KB)

Start Date: 2024.05.20

End Date: 2024.05.20

Start Time: 08:31:10

End Time: 13:20:30

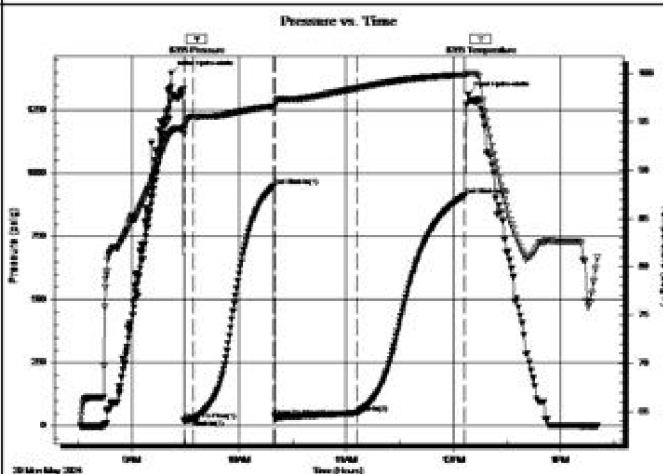
Capacity: 8000.00 psig

Last Calib.: 1899.12.30

Time On Btm: 2024.05.20 @ 09:22:10

Time Off Btm: 2024.05.20 @ 12:08:30

TEST COMMENT: 5-IF: Weak blow built to 3.5"  
45-ISI: No Returns  
45-FF: Fair blow BOB in 33 minutes built to 15"  
60-FSt: No Returns



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1396.17	93.96	Initial Hydro-static
7	22.04	93.67	Open To Flow (1)
13	26.78	95.55	Shut-In(1)
58	948.60	96.61	End Shut-In(1)
58	38.90	96.57	Open To Flow (2)
104	51.17	98.51	Shut-In(2)
165	914.52	99.87	End Shut-In(2)
167	1311.27	100.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	CCM 20%O 80%M	0.32

Gas Rates

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

\* Recovery from multiple tests

ROCK TYPES

Anhy vert	Dolsec	shale, grn	Shcol
Clystgy	Gyp	shale, gry	Ss
Clystcol	sdy lmst	Carbon Sh	Slst
Dolprim	Lmst fw7>	shale, red	

OTHER SYMBOLS

INTERVALS

- Core
- DST

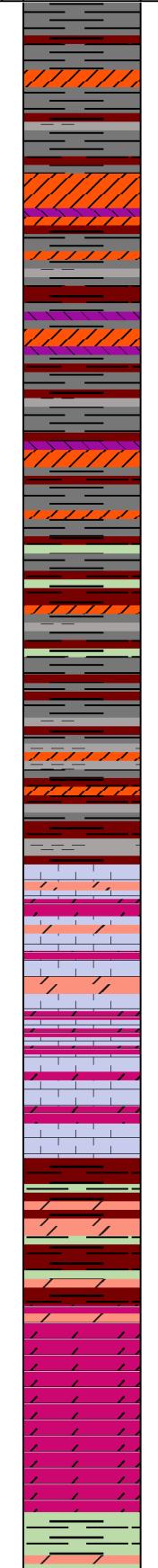
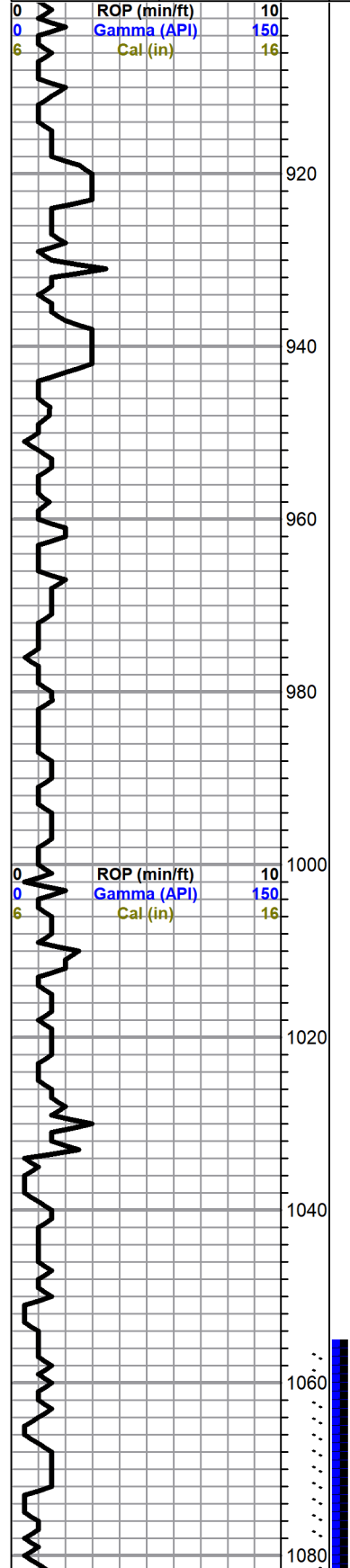
Oil Show

- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- D Dead Oil Stn
- Fluorescence
- \* Gas

DST

- DST Int
- DST alt
- Core
- || tail pipe

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



Varied colored shales with anhydrite and gypsum

as above

**Herington 999(+587)**

Limestone, tan, beige, dolomitic, scattered pinpoint porosity, no shows

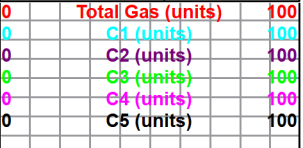
as above

Shale, maroon, rusty brown, green silty, soft, few dolomitic

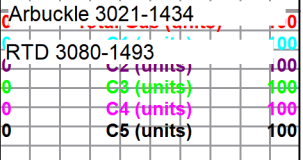
**WINFIELD 1051(+536)**

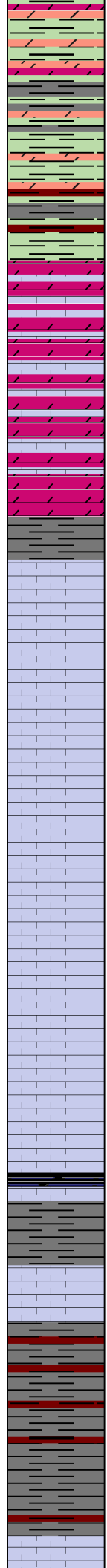
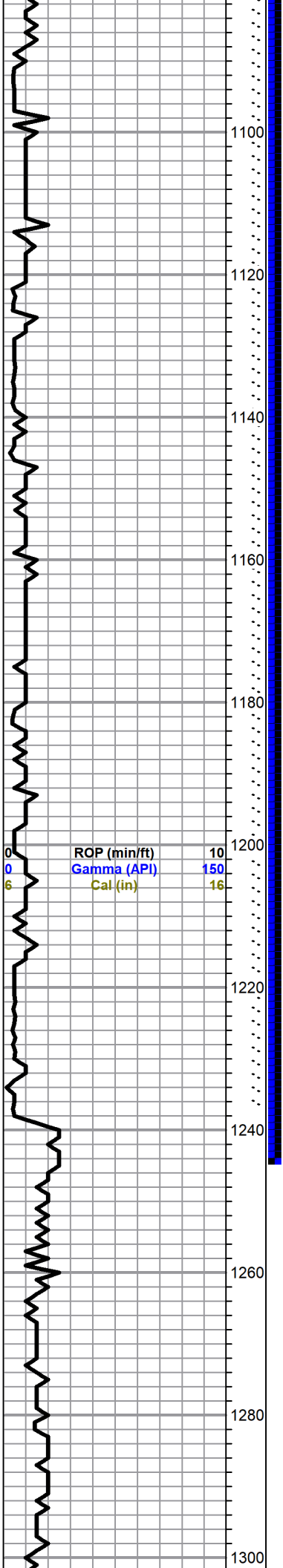
Dolomite, gray, light gray, fxl, sucrosic, fair pinpoint to fine vuggy type porosity,

Dolomite, tan, gray, sucrosic, scattered porosity as above



- ### LOG TOPS
- Herington 1003 +584
  - Winfield 1047 +540
  - Towanda 1118 +469
  - Ft. Riley 1157 +430
  - Neva 1495 +92
  - Red Eagle 1579 +8
  - Indian Cave 1725 -138
  - Grand Haven 1788 -201
  - 1st Tarkio Sand 1793-206
  - Dover 1816 -229
  - Tarkio Lime 1876-279
  - Willard 1899 -312
  - Elmont 1938-351
  - Howard 2085-498
  - Severy 2148-561
  - Topeka 2180 -593
  - Heebner 2438-851
  - Toronto 2459-872
  - Douglas 2473-886
  - Brown Lime 2560 -973
  - Lansing 2576-989
  - B KC 2889-1302
  - Simpson Sand 2980-1393





Shale,gray,green,dolomitic

**TOWANDA 1118(+469)**

Limestone,tan,beige, dolomitic,sucrosic,scattered porosity

as above

**FT.RILEY 1160(+427)**

Limestone,gray,white,fxln, highly fossiliferous, good vuggy and fossil cast porosity

ditto as above

Dolomitic in part

as above with gray, fossiliferous Chert

Shale,gray,rusty brown ,soft

DST #1 1056-1210

30-30-45-45

Blow, strong

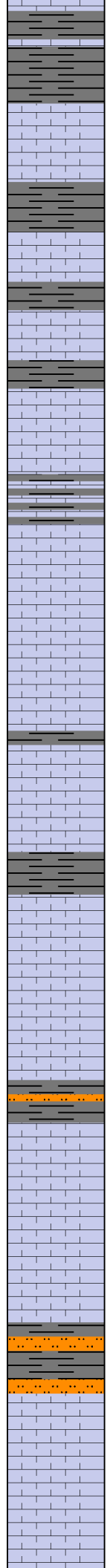
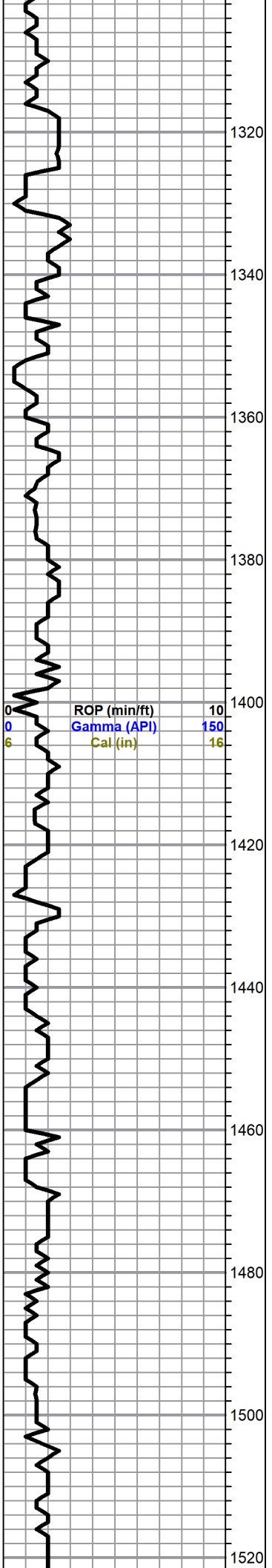
Recovery 180' slightly gas cut mud

BHP 282-317 psi

FP 86-124,131-152 psi

HSH 582-549 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



Limestone, gry, white, fossiliferous in part, chalky

as above, trace, gray Chert

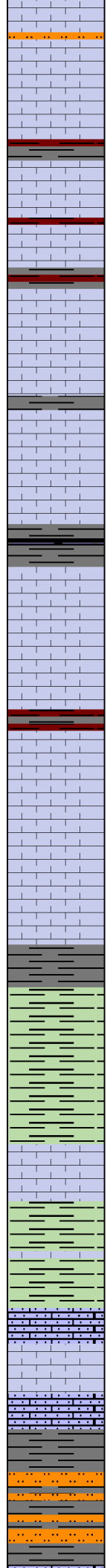
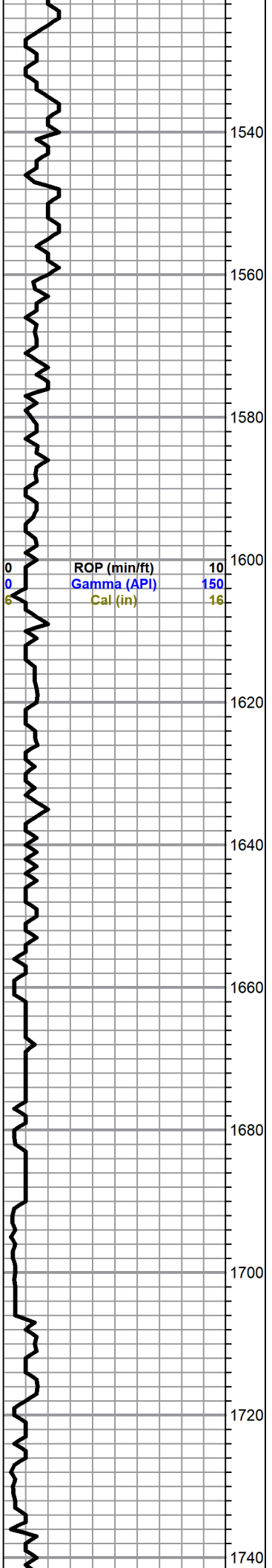
Limestone, gray, white, chalky with gray, dark gray Shales

as above

**NEVA 1496(+91)**

Limestone, gray, fossiliferous, fair porosity

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



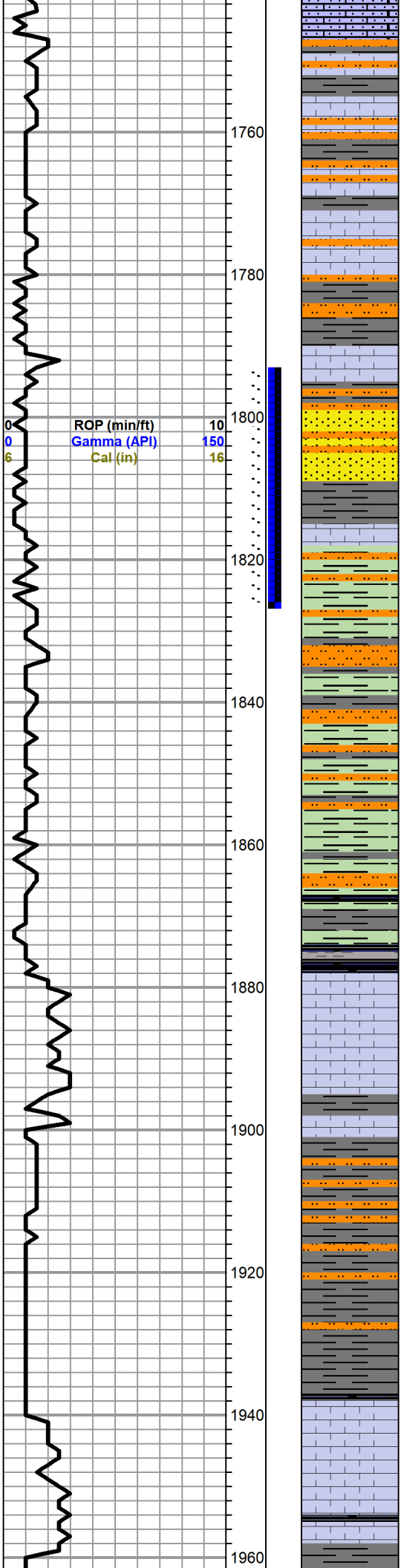
POOR SAMPLES 1500-1700

RED EAGLE 1580 (+7)

INDIAN CAVE 1726 (-139)

Shales, gray, grayish green, silty

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



as above

**GRAND HAVEN 1791(-204)**

Sand, gray, grayish green, vfg, micaeous, silty in part. friable, fair intergranular porosity, trace gas bubbles

**DOVER 1815(-228)**

Limestone, gray, white, chalky

Shales, gray, grayish green silty, soft

Dark gray silty shales

**TARKIO LIME 1878(-291)**

Limestone, gray, white, fossiliferous, chalky in part

**WILLARD 1900(-313)**

Shale, gray, dark gray, silty

**ELMONT 1940(-353)**

Limestone, white, cream, fine and medium crystalline, chalky

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

DST #2 1793-1826  
5-45-60-90

Blow, strong, gas to surface, 4 mins into ffp

Gas gauged as follows  
10 mins 82,940 cfgpd

20 mins 67,640

30 mins 106,340

40 mins 102,720 cfgpd

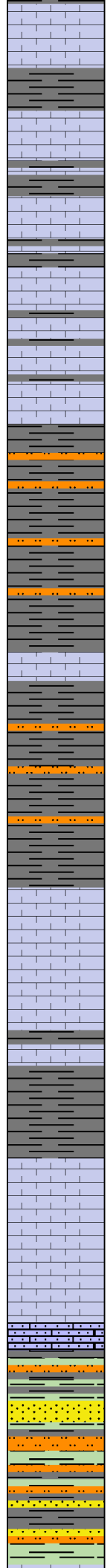
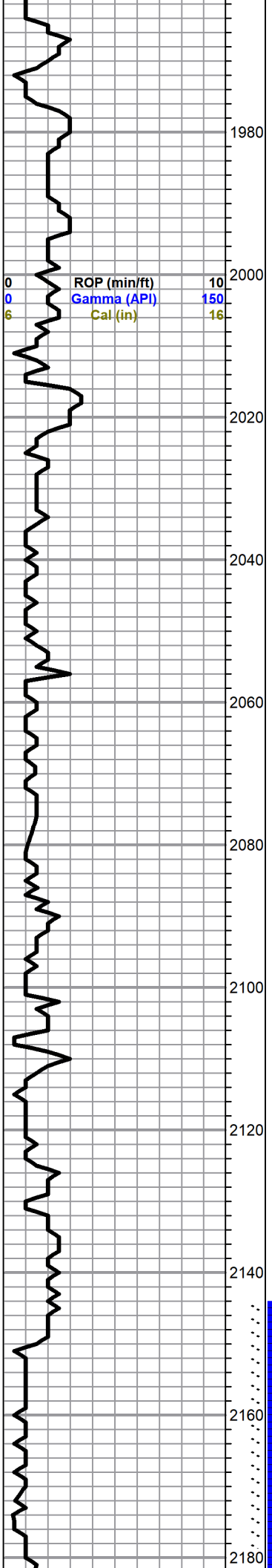
50 mins 103,930 cfgpd

Recovery, 10' Mud

BHP 636-624 psi

FP 27-27, 30-38 psi

HSH 898-825 psi



Limestone, as above, cherty in part

Shale,gray,soft

1980

2000

2020

2040

2060

2080

2100

2120

2140

2160

2180

Shale,gray,dark gray, soft, few silty with pyrite

as above

**HOWARD 2085(-498)**

Limestone,chalky,dense

Shales,gray green, soft

Limestone,white,tan,chalky,dense

**SEVERY 2149(-562)**

Sand,gray,light gray,vfg,micaceous,shaley in part,friable in part,fair intergranular porosity..

**GAS KICK 191 & 217 UNITS**

**TOPEKA 2182(-595)**

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

DST#3 2144-2185

5-45-60-90

Blow,Strong,gas to surface on opening of ffp,Gas gauged as follows

10 mins 241,260cfcpd

20 mins 230,930 cfcpd

30 mins 226,500 cfcpd

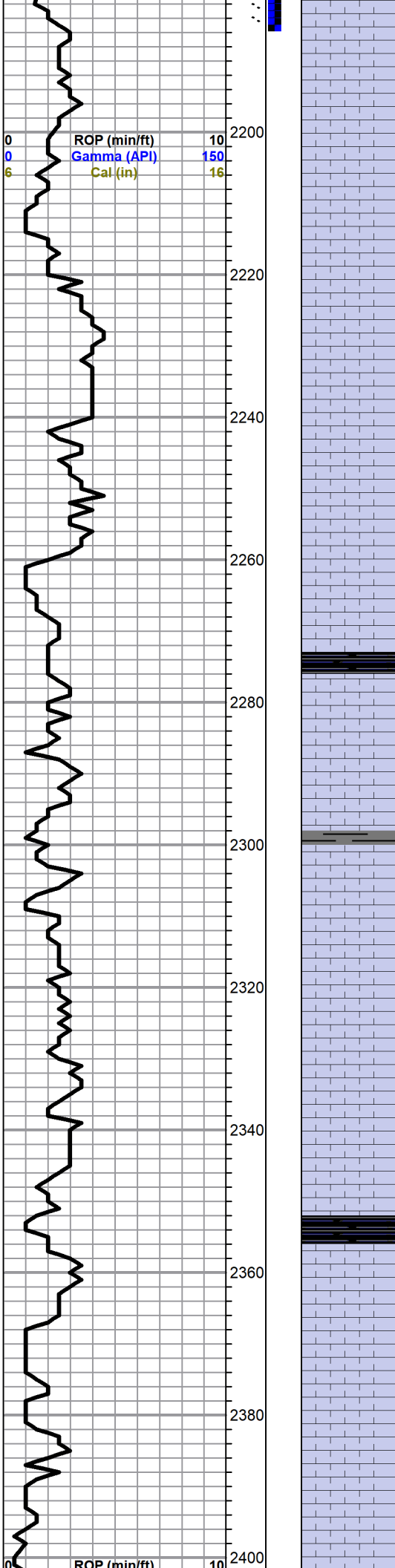
40 mins 222,100 cfcpd

50 mins 218,590 cfcpd

Recovery,125 mud

BHP 751-684 psi





Limestone,tan,fxln,chalky,poor porosity, no shows

FP 49-68,60-106 psi  
HSH 1108-1039 psi

Limestone,tan,fxln,granular,chalky, questionable discoloration,no stain, no free oil and no odor

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

as above, trace gray Chert

Limestone,gray,tan,foss,chalky in part

as above, fair to good porosity

Shale,black carbonaceous

Trace coal black Chert

Limestone,white,tan,gray,fxln,foss in part, poor visible porosity

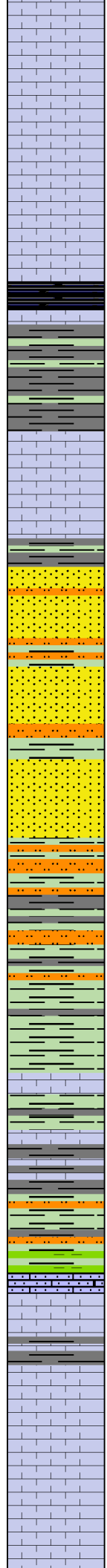
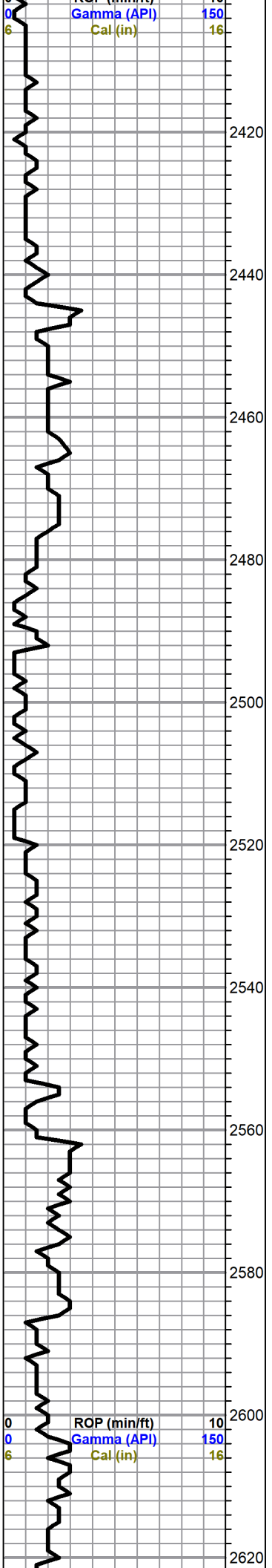
Limestone,as above, with white chalk

Shale,black carbonaceous

Limestone,tan,foss,sparry calcite cement, fair porosity, no shows

Limestone,gray,tan,foss, chalky

0	Total Gas (units)	100
---	-------------------	-----



Limestone,tan,fine to medium crystalline, granular, foss, trace gray,boney Chert

as above with white Chert

**HEEBNER 2440(-853)**  
Shale,black carbonaceous  
ls,tan,dense

Shale,gray,grayish green

**TORONTO 2462(-875)**  
Limestone,tan,fxln,granular,slightly dolomitic, no showa

**DOUGLAS 2476(-889)**  
Sand,gry,grayish grteen,vfg,micaeous,subrounded,well sorted,friable, fair intergranular porosity ,no shows

as above

sand, as above with pyrite

Shale,grayish green, micaeous silty

as above

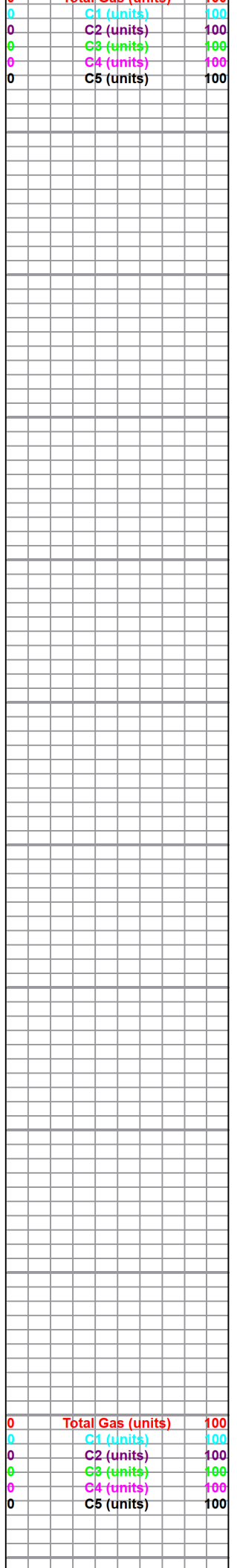
Ls,tan,dense

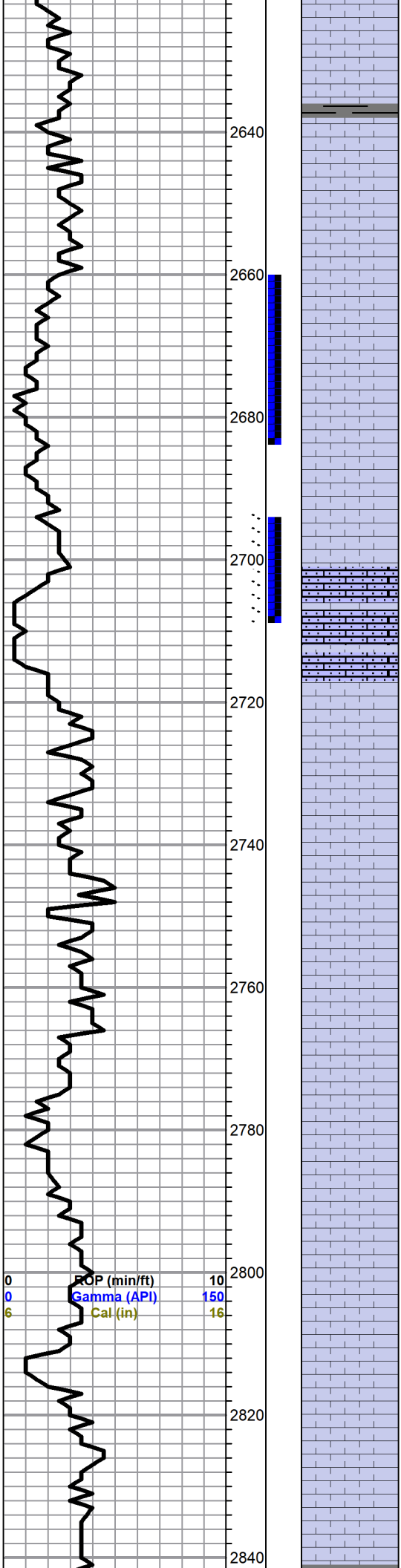
**BROWN LIME 2561(-974)**  
Limestone,tan,brown,dense

Shale,gray,grayish green, soft,silty

**LANSING 2578(-991)**  
Ls,white,gray,foss,chalky,sparry calcite cement, no shows

Ls,tan,dense





Ls,tan,oolitic,poorly developed porosity, no shows

Ls,gra,tan,slightly oolitic,dense

Ls,gray,highly oolitic,dense with gray Chert

Limestone,tan,cherty,fair pinpoint type porosity,trace brown stain,show of free oil and faint odor

Limestone,gray,oolitic,scattered porosity, no shows

Limestone,white,tan,oomoldic,oolitic,good oomoldic porosity,brown stain and saturation,show of free oil and faint to fair odor

Limestone,gray,dark gray,slightly cherty,dense

Limestone,tan,gray,fxln,dense

Limestone,gray,white,fxln,fossiliferous, chalky

Limestone,gray,fxln,fossiliferous,finely oomoldic, fair vuggy to oomoldic porosity..no shows

Limestone,white,gray,chalky, cherty,dense

Limestone,white,gray,fine and medium crystalline,fossiliferous,chalky,fair porosity. no shows

Limestone,tan,gray,dense

DST #4 2659-2684  
5-30-60-45

Blow, weak increasing to bob in 31 mins into ffp

Recovery, 260' muddy water

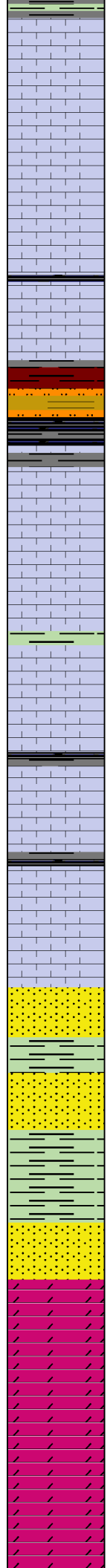
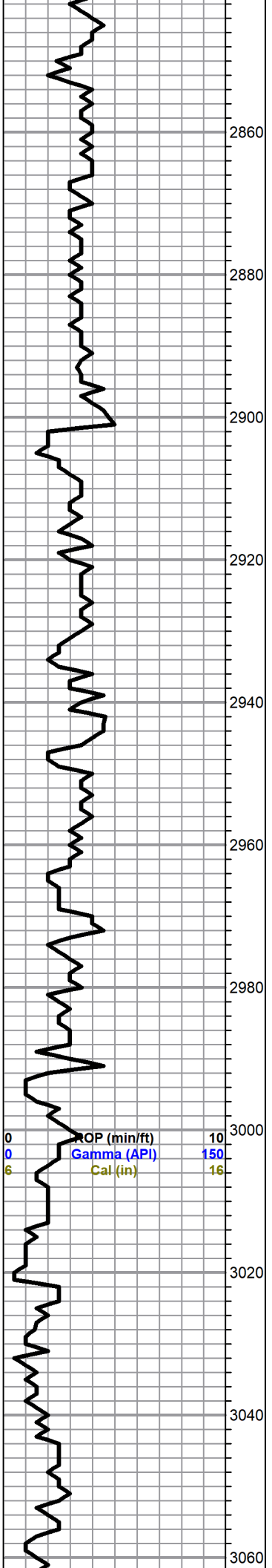
BHP 1054-1014 psi  
FP 25-52,46-138 psi  
HSH 1385-1339 PSI

DST #5 2693-2709  
5-45-45-60

Blow, weak increasing to bob in 33 mins into ffp

BHP 949-915psi  
FP 22-27,39-52 psi  
HSH1396-1311 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



Shale,gray,green,soft

Limestone,white,cream,chalky

Limestone,white,cream,chalky,poor porosity

Shale,black carbonaceous  
 trace coal black Chert

**BASE KANSAS CITY 2891(-1304)**

Shale,gray,rusty brown ,silty

Limestone,white,gray,chalky,dense

Shale,gray,green

Limestone,white,gray,fossiliferous,chalky

Limestone,pink, maroon tinted,sandy

as above

**SIMPSON SAND 2980(-1393)**

Sand,white,green tinted,vfg, friable,no shows

Sand,white,clear,quartzic,fine and medium  
 grained,surounded,rounded,friable, fair intergranular  
 porosity,fair sorting, no shows

Shae,gray,blue green ,yellow

Sand as above with pyrite inclusions

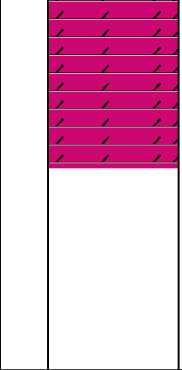
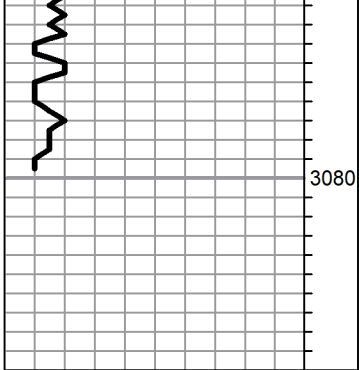
**ARBUCKLE 3021(-1434)**

Dolomite,tan,medium crystalline,fair intercrystalline porosity,  
 no shows

Dolomite,tan,gray,fine to medium crystalline,trace pyrite, no  
 shows with white Chert

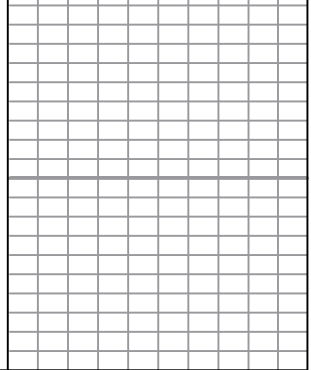
Dolomite,tan,pink,fxln,scattered vuggy porosity,with  
 white,boney to transcleunt Chert

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



Dolomite and Chert as above with tan ,gray, oolitic Chert

**ROTARY TOTAL DEPTH 3080(-1493)**





## DRILL STEM TEST REPORT

Prepared For: **LB Exploration**

2135 2nd Rd  
Holyrood KS 67450

ATTN: Jim Musgrove

### **CV Farms #22-1**

#### **22-15S-8W Ellsworth,KS**

Start Date: 2024.05.16 @ 13:26:00

End Date: 2024.05.16 @ 18:24:30

Job Ticket #: 72002                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2024.05.24 @ 10:40:51

LB Exploration

22-15S-8W Ellsworth,KS

CV Farms #22-1

DST # 1

Tarkio Sand

2024.05.16



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

LB Exploration

**22-15S-8W Ellsworth, KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72002

**DST#: 1**

ATTN: Jim Musgrove

Test Start: 2024.05.16 @ 13:26:00

## GENERAL INFORMATION:

Formation: **Tarkio Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:47:40

Time Test Ended: 18:24:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Richie Samora

Unit No: 66

**Interval: 1056.00 ft (KB) To 1210.00 ft (KB) (TVD)**

Reference Elevations: 1582.00 ft (KB)

Total Depth: 1210.00 ft (KB) (TVD)

1577.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8355**

**Inside**

Press@RunDepth: 152.37 psig @ 1192.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2024.05.16

End Date: 2024.05.16

Last Calib.: 1899.12.30

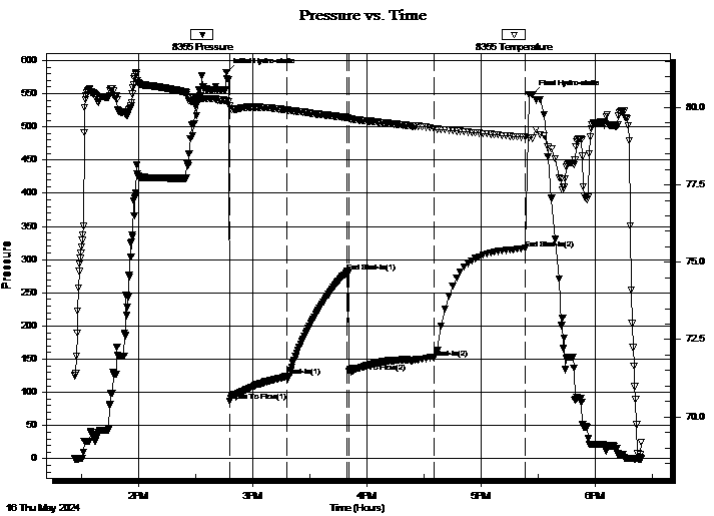
Start Time: 13:26:10

End Time: 18:24:30

Time On Btm: 2024.05.16 @ 14:46:00

Time Off Btm: 2024.05.16 @ 17:27:00

**TEST COMMENT:** 30-IF: Strong blow BOB in 5 minutes built to 42.86"  
30-ISI: No Returns  
45-FF: Strong blow BOB ion 3 minutes 30 seconds reached 162.5"  
45-FSI: Weak blow built to 1.62"



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	582.06	80.23	Initial Hydro-static
2	86.37	80.05	Open To Flow (1)
32	123.71	79.92	Shut-In(1)
64	281.99	79.68	End Shut-In(1)
65	131.12	79.64	Open To Flow (2)
109	152.37	79.32	Shut-In(2)
157	316.75	79.04	End Shut-In(2)
161	548.89	79.01	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
180.00	MUD 100%M	0.95

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72002

**DST#: 1**

ATTN: Jim Musgrove

Test Start: 2024.05.16 @ 13:26:00

## Tool Information

Drill Pipe:	Length: 883.00 ft	Diameter: 3.80 inches	Volume: 12.39 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: 20000.00 lb
Drill Collar:	Length: 173.00 ft	Diameter: 2.25 inches	Volume: 0.85 bbl	Weight to Pull Loose: 33000.00 lb
			<u>Total Volume: 13.24 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 32000.00 lb
Depth to Top Packer:	1056.00 ft			Final 32000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	154.00 ft			
Tool Length:	184.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

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

Change Over Sub	1.00			1027.00	
Shut In Tool	5.00			1032.00	
Hydraulic tool	8.00		Fluid	1040.00	
EM	4.00			1044.00	
Safety Joint	3.00			1047.00	
Packer	5.00			1052.00	30.00 Bottom Of Top Packer
Packer	4.00			1056.00	
Stubb	1.00			1057.00	
Perforations	2.00			1059.00	
Change Over Sub	1.00			1060.00	
Drill Pipe	126.00			1186.00	
Change Over Sub	1.00			1187.00	
Recorder Carrier	5.00			1192.00	
Recorder	0.00	8355	Inside	1192.00	
Recorder	0.00	8289	Outside	1192.00	
Perforations	15.00			1207.00	
Bullnose	3.00			1210.00	154.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>184.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72002

**DST#: 1**

ATTN: Jim Musgrove

Test Start: 2024.05.16 @ 13:26:00

### 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: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 0.20 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	MUD 100%M	0.949

Total Length: 180.00 ft      Total Volume: 0.949 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

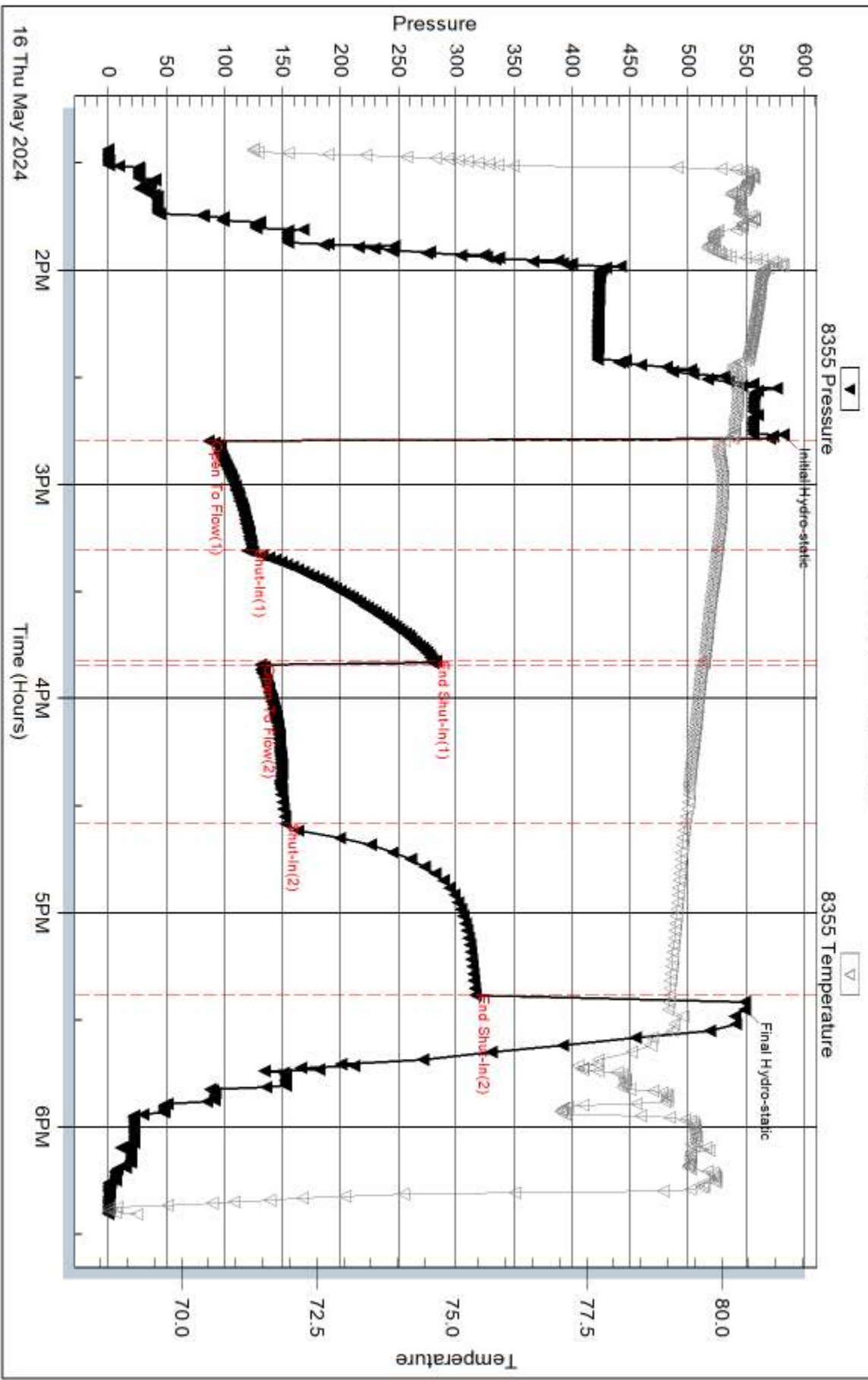
Serial #:

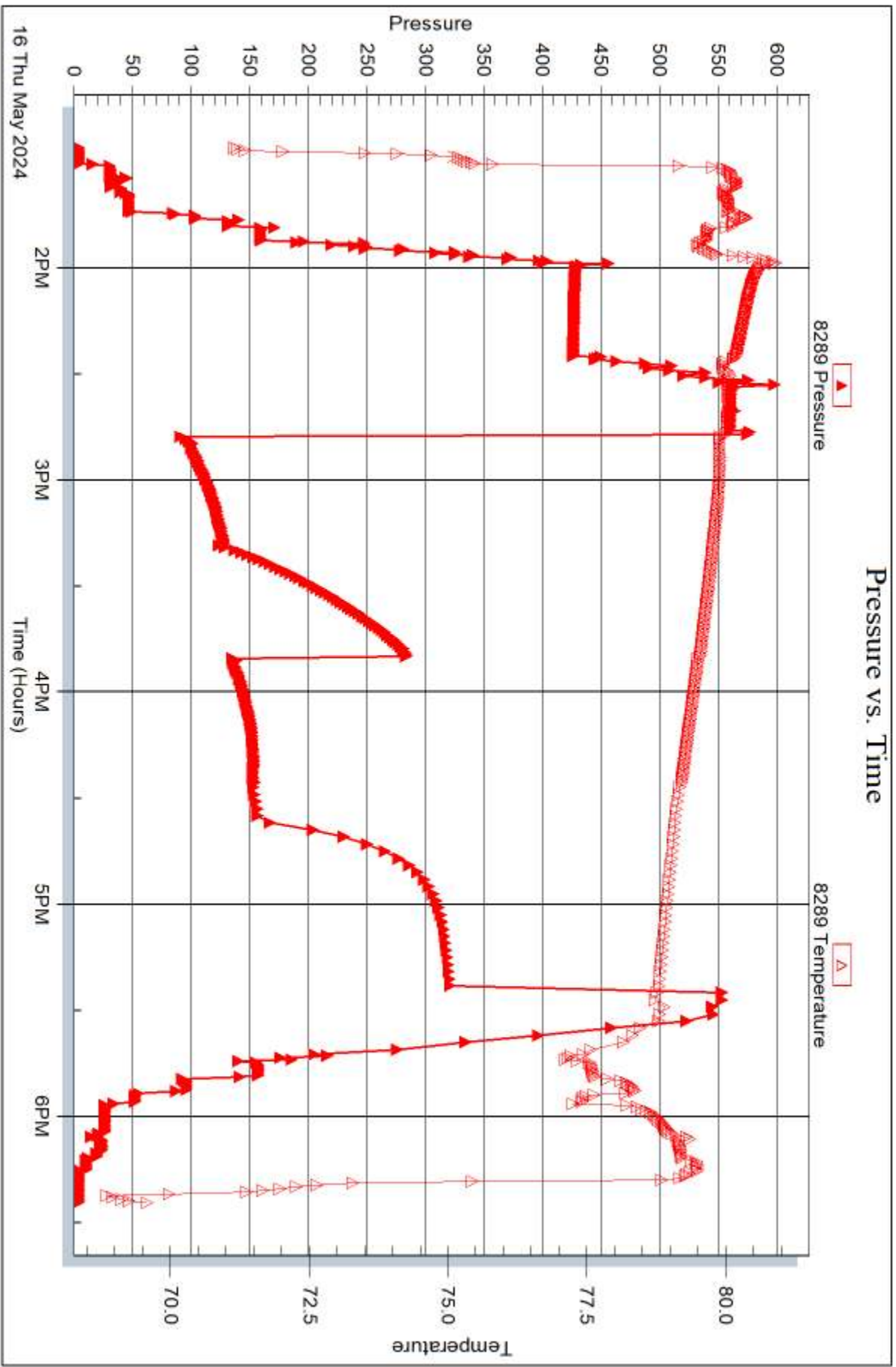
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time







## DRILL STEM TEST REPORT

Prepared For: **LB Exploration**

2135 2nd Rd  
Holyrood KS 67450

ATTN: Jim Musgrove

### **CV Farms #22-1**

### **22-15S-8W Ellsworth,KS**

Start Date: 2024.05.17 @ 15:21:00

End Date: 2024.05.17 @ 20:52:15

Job Ticket #: 72003                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2024.05.23 @ 09:24:22



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

LB Exploration

**22-15S-8W Ellsworth, KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72003

**DST#: 2**

ATTN: Jim Musgrove

Test Start: 2024.05.17 @ 15:21:00

## GENERAL INFORMATION:

Formation: **Grand Haven**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:18:10

Time Test Ended: 20:52:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Richie Samora

Unit No: 66

**Interval: 1793.00 ft (KB) To 1826.00 ft (KB) (TVD)**

Reference Elevations: 1582.00 ft (KB)

Total Depth: 1826.00 ft (KB) (TVD)

1577.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8355 Inside**

Press@RunDepth: 38.13 psig @ 1799.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2024.05.17 End Date: 2024.05.17

Last Calib.: 1899.12.30

Start Time: 15:21:10 End Time: 20:52:15

Time On Btm: 2024.05.17 @ 16:10:40

Time Off Btm: 2024.05.17 @ 19:46:00

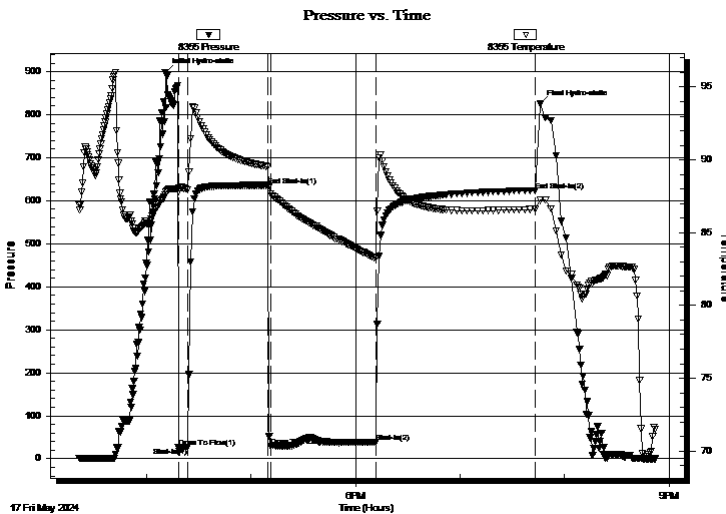
**TEST COMMENT:** 5-IF: Strong blow BOB in 1 minute 20 seconds built to 137.77"

45-ISI: No Returns

60-FF: BOB immediate GTS 4 minutes into flow . Gas gauged and samples caught reached 30.25psi

90-FSI: Weak blow built to .68" then died off 30 minutes into shut-in

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	898.38	87.59	Initial Hydro-static
8	26.62	87.85	Open To Flow (1)
13	26.80	87.93	Shut-In(1)
59	635.79	89.53	End Shut-In(1)
61	29.42	87.66	Open To Flow (2)
121	38.13	83.25	Shut-In(2)
213	623.67	86.60	End Shut-In(2)
216	824.51	87.23	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	MUD 100%M	0.05

\* Recovery from multiple tests

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	8.24	82.94
Last Gas Rate	0.38	13.97	103.93
Max. Gas Rate	0.25	28.24	67.64





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72003

**DST#: 2**

ATTN: Jim Musgrove

Test Start: 2024.05.17 @ 15:21:00

## Tool Information

Drill Pipe:	Length: 1613.00 ft	Diameter: 3.80 inches	Volume: 22.63 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:	20000.00 lb
Drill Collar:	Length: 173.00 ft	Diameter: 2.25 inches	Volume: 0.85 bbl	Weight to Pull Loose:	48000.00 lb
			<u>Total Volume: 23.48 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial	37000.00 lb
Depth to Top Packer:	1793.00 ft			Final	37000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	33.00 ft				
Tool Length:	63.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			1764.00	
Shut In Tool	5.00			1769.00	
Hydraulic tool	8.00		Fluid	1777.00	
EM	4.00			1781.00	
Safety Joint	3.00			1784.00	
Packer	5.00			1789.00	30.00 Bottom Of Top Packer
Packer	4.00			1793.00	
Stubb	1.00			1794.00	
Recorder Carrier	5.00			1799.00	
Recorder	0.00	8355	Inside	1799.00	
Recorder	0.00	8289	Outside	1799.00	
Perforations	24.00			1823.00	
Bullnose	3.00			1826.00	33.00 Bottom Packers & Anchor

**Total Tool Length: 63.00**





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72003

**DST#: 2**

ATTN: Jim Musgrove

Test Start: 2024.05.17 @ 15:21:00

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 0.20 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	MUD 100%M	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 1600' of GIP



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**GAS RATES**

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72003

**DST#: 2**

ATTN: Jim Musgrove

Test Start: 2024.05.17 @ 15:21:00

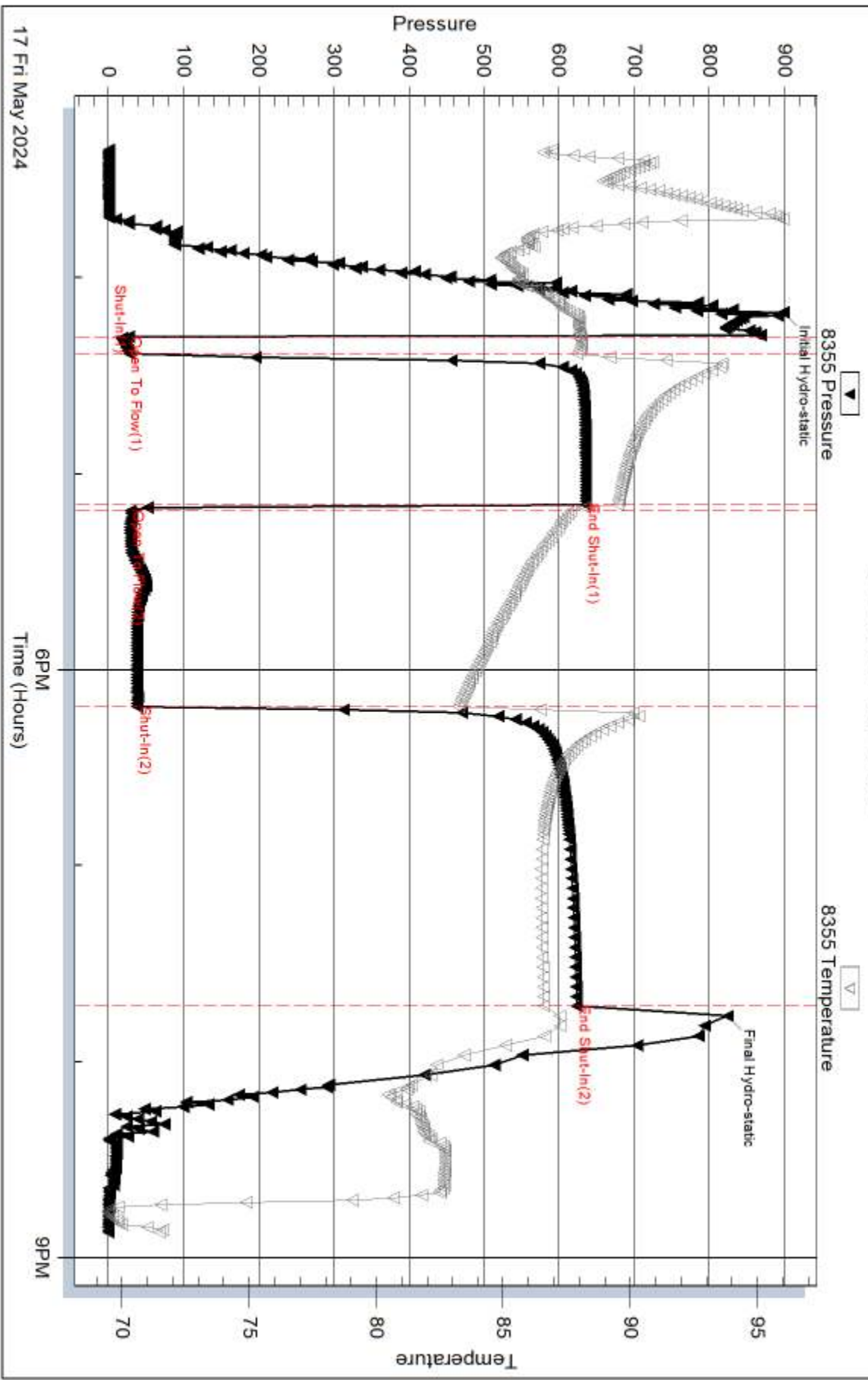
## Gas Rates Information

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	10	0.38	8.24	82.94
2	20	0.25	28.24	67.64
2	30	0.38	14.63	106.34
2	40	0.38	13.64	102.72
2	50	0.38	13.97	103.93

### Pressure vs. Time

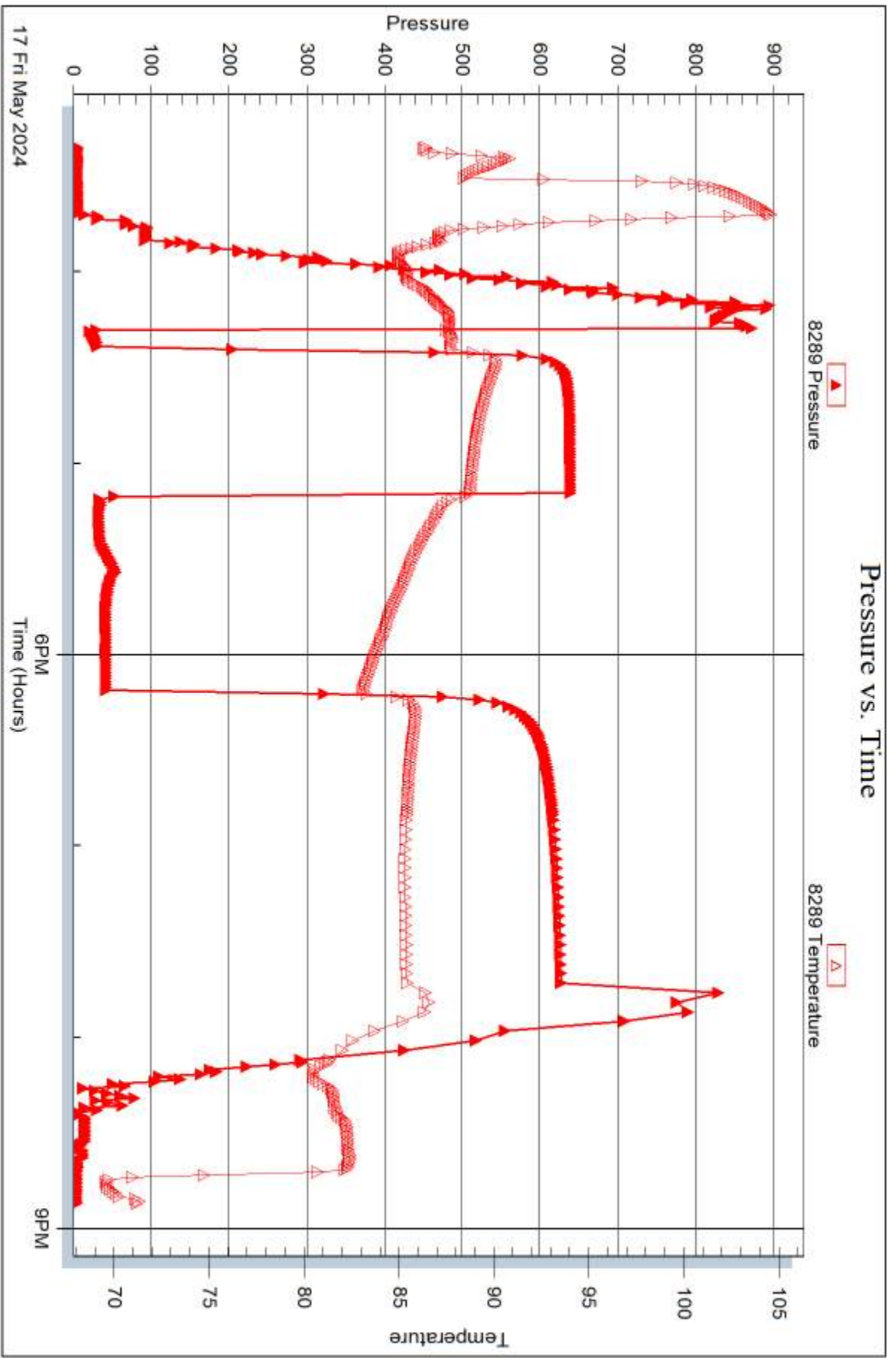


Serial #: 8289

Outside LB Exploration

CV Farms #22-1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 72003

Printed: 2024.05.23 @ 09:24:22



## DRILL STEM TEST REPORT

Prepared For: **LB Exploration**

2135 2nd Rd  
Holyrood KS 67450

ATTN: Jim Musgrove

### **CV Farms #22-1**

#### **22-15S-8W Ellsworth,KS**

Start Date: 2024.05.18 @ 11:10:00

End Date: 2024.05.18 @ 16:43:00

Job Ticket #: 72004                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2024.05.23 @ 09:26:06



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

LB Exploration

**22-15S-8W Ellsworth, KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72004

**DST#: 3**

ATTN: Jim Musgrove

Test Start: 2024.05.18 @ 11:10:00

## GENERAL INFORMATION:

Formation: **Servery**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:05:40

Time Test Ended: 16:43:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Richie Samora

Unit No: 66

**Interval: 2144.00 ft (KB) To 2185.00 ft (KB) (TVD)**

Reference Elevations: 1582.00 ft (KB)

Total Depth: 2185.00 ft (KB) (TVD)

1577.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8355 Inside**

Press@RunDepth: 106.36 psig @ 2150.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2024.05.18

End Date: 2024.05.18

Last Calib.: 1899.12.30

Start Time: 11:10:10

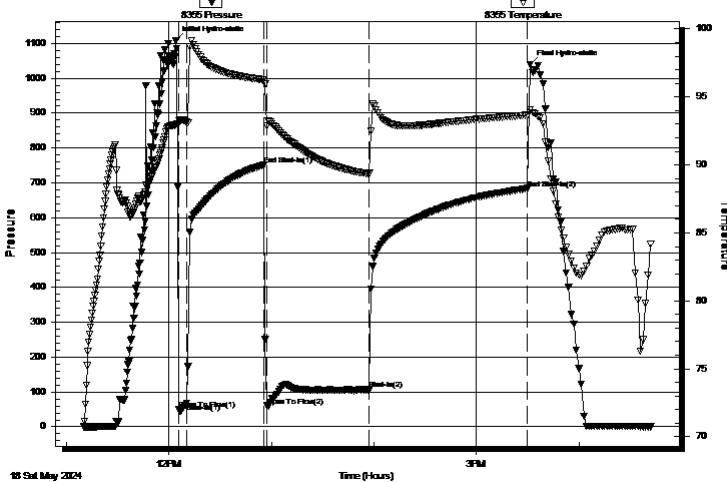
End Time: 16:43:00

Time On Btm: 2024.05.18 @ 12:04:10

Time Off Btm: 2024.05.18 @ 15:31:30

**TEST COMMENT:** 5-IF: Strong blow BOB in 20 seconds GTS in 2 minutes 45 seconds reached 30psi  
45-ISI: Weak blow reached .6"  
60-FF: BOB immediate Gas gauged and samples caught reached 75psi  
90-FSI: Weak blow reached 2"

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1108.69	92.94	Initial Hydro-static
2	49.29	93.04	Open To Flow (1)
7	68.16	93.14	Shut-In(1)
52	750.79	96.26	End Shut-In(1)
54	60.15	92.86	Open To Flow (2)
114	106.36	89.37	Shut-In(2)
206	683.80	93.67	End Shut-In(2)
208	1039.43	94.05	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
125.00	MUD 5%G 95%M	0.61

\* Recovery from multiple tests

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	51.46	241.26
Last Gas Rate	0.38	45.27	218.59
Max. Gas Rate	0.38	51.46	241.26





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72004

**DST#: 3**

ATTN: Jim Musgrove

Test Start: 2024.05.18 @ 11:10:00

## Tool Information

Drill Pipe:	Length: 1961.00 ft	Diameter: 3.80 inches	Volume: 27.51 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: 173.00 ft	Diameter: 2.25 inches	Volume: 0.85 bbl	Weight to Pull Loose: 45000.00 lb
			<u>Total Volume: 28.36 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 40000.00 lb
Depth to Top Packer:	2144.00 ft			Final 41000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	41.00 ft			
Tool Length:	71.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2115.00	
Shut In Tool	5.00			2120.00	
Hydraulic tool	8.00		Fluid	2128.00	
EM	4.00			2132.00	
Safety Joint	3.00			2135.00	
Packer	5.00			2140.00	30.00 Bottom Of Top Packer
Packer	4.00			2144.00	
Stubb	1.00			2145.00	
Recorder Carrier	5.00			2150.00	
Recorder	0.00	8355	Inside	2150.00	
Recorder	0.00	8289	Outside	2150.00	
Perforations	32.00			2182.00	
Bullnose	3.00			2185.00	41.00 Bottom Packers & Anchor

**Total Tool Length: 71.00**





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72004

**DST#: 3**

ATTN: Jim Musgrove

Test Start: 2024.05.18 @ 11:10:00

### 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: 50.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: 0.20 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	MUD 5%G 95%M	0.615

Total Length: 125.00 ft      Total Volume: 0.615 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 1663' GIP



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**GAS RATES**

LB Exploration

**22-15S-8W Ellsworth, KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72004

**DST#: 3**

ATTN: Jim Musgrove

Test Start: 2024.05.18 @ 11:10:00

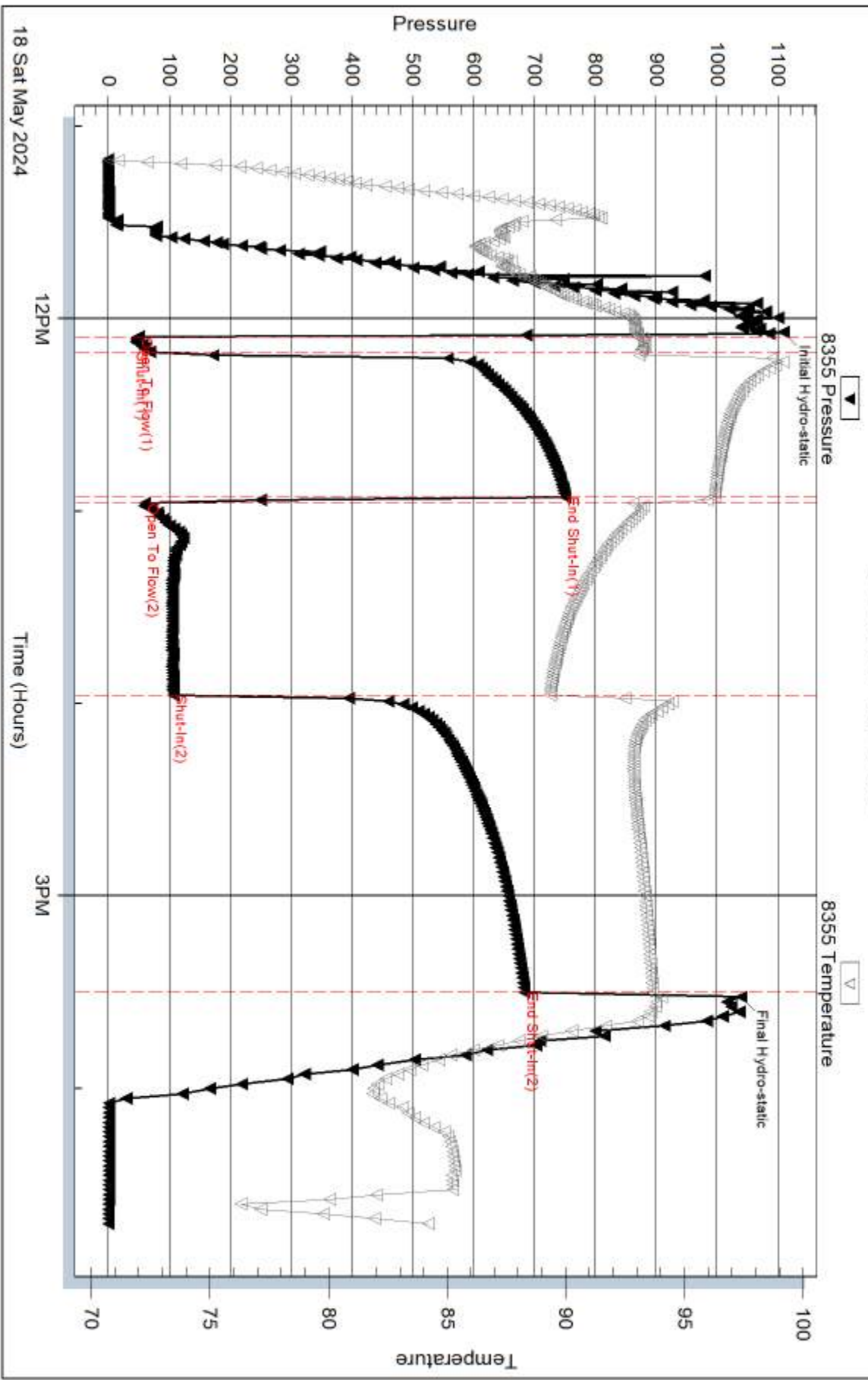
## Gas Rates Information

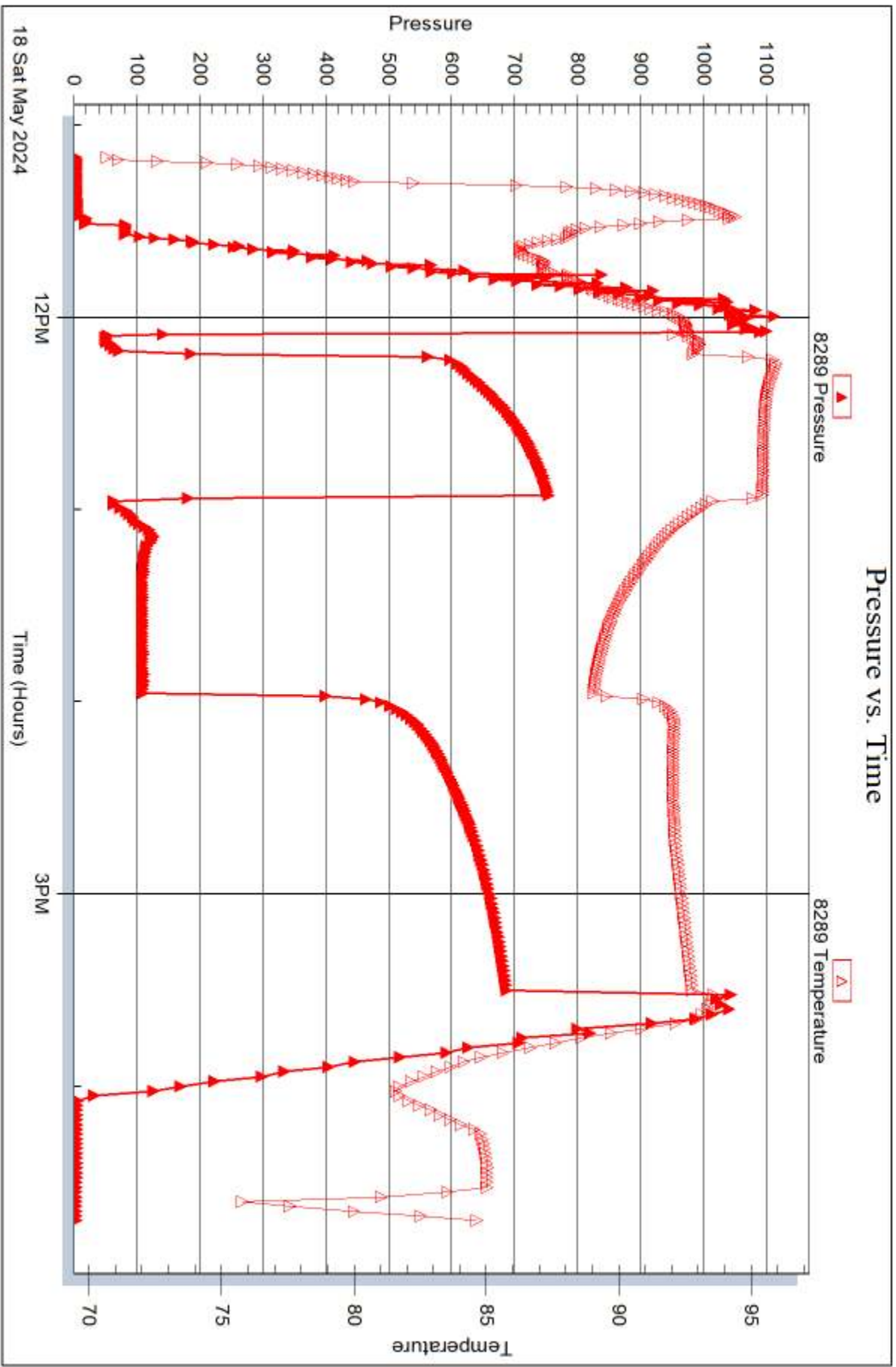
Temperature: 59 (deg F)  
Relative Density: 0.65  
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	10	0.38	51.46	241.26
2	20	0.38	48.64	230.93
2	30	0.38	47.43	226.50
2	40	0.38	46.23	222.10
2	50	0.38	45.27	218.59

### Pressure vs. Time







## DRILL STEM TEST REPORT

Prepared For: **LB Exploration**

2135 2nd Rd  
Holyrood KS 67450

ATTN: Jim Musgrove

### **CV Farms #22-1**

#### **22-15S-8W Ellsworth,KS**

Start Date: 2024.05.19 @ 16:51:00

End Date: 2024.05.20 @ 00:10:30

Job Ticket #: 72005                      DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2024.05.24 @ 10:40:23



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72005

**DST#: 4**

ATTN: Jim Musgrove

Test Start: 2024.05.19 @ 16:51:00

## GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 19:48:20

Time Test Ended: 00:10:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Richie Samora

Unit No: 66

**Interval: 2659.00 ft (KB) To 2684.00 ft (KB) (TVD)**

Reference Elevations: 1582.00 ft (KB)

Total Depth: 2684.00 ft (KB) (TVD)

1577.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8355**

**Inside**

Press@RunDepth: 137.81 psig @ 2665.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2024.05.19

End Date:

2024.05.20

Last Calib.: 1899.12.30

Start Time: 16:51:10

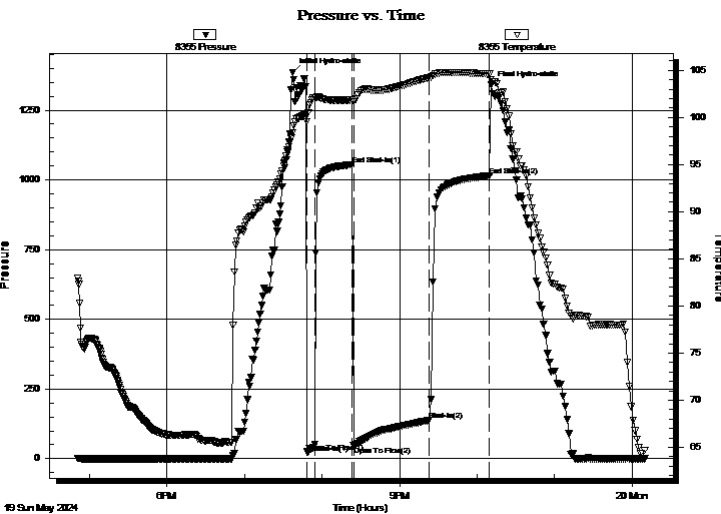
End Time:

00:10:30

Time On Btm: 2024.05.19 @ 19:37:20

Time Off Btm: 2024.05.19 @ 22:11:00

**TEST COMMENT:** 5-IF: Weak blow built to 3"  
30-ISI: No Returns  
60-FF: Fair blow BOB in 31 minutes built to 19.5"  
45-FSI: No Returns



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1385.40	98.40	Initial Hydro-static
11	24.70	99.52	Open To Flow (1)
17	52.48	102.07	Shut-In(1)
46	1054.06	101.85	End Shut-In(1)
48	45.90	101.67	Open To Flow (2)
106	137.81	104.23	Shut-In(2)
153	1014.48	104.59	End Shut-In(2)
154	1339.35	104.00	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
200.00	MW 15%M 85%W	1.23
60.00	MCW 40%M 60%W	0.84

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72005

**DST#: 4**

ATTN: Jim Musgrove

Test Start: 2024.05.19 @ 16:51:00

## Tool Information

Drill Pipe:	Length: 2466.00 ft	Diameter: 3.80 inches	Volume: 34.59 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: 173.00 ft	Diameter: 2.25 inches	Volume: 0.85 bbl	Weight to Pull Loose: 50000.00 lb
			<u>Total Volume: 35.44 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	2659.00 ft			Final 47000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	25.00 ft			
Tool Length:	55.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

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

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2630.00	
Shut In Tool	5.00			2635.00	
Hydraulic tool	8.00		Fluid	2643.00	
EM	4.00			2647.00	
Safety Joint	3.00			2650.00	
Packer	5.00			2655.00	30.00 Bottom Of Top Packer
Packer	4.00			2659.00	
Stubb	1.00			2660.00	
Recorder Carrier	5.00			2665.00	
Recorder	0.00	8355	Inside	2665.00	
Recorder	0.00	8289	Outside	2665.00	
Perforations	16.00			2681.00	
Bullnose	3.00			2684.00	25.00 Bottom Packers & Anchor

**Total Tool Length: 55.00**





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72005

**DST#: 4**

ATTN: Jim Musgrove

Test Start: 2024.05.19 @ 16:51:00

### 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:

80000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2600.00 ppm

Filter Cake: 0.20 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
200.00	MW 15%M 85%W	1.230
60.00	MCW 40%M 60%W	0.842

Total Length: 260.00 ft

Total Volume: 2.072 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

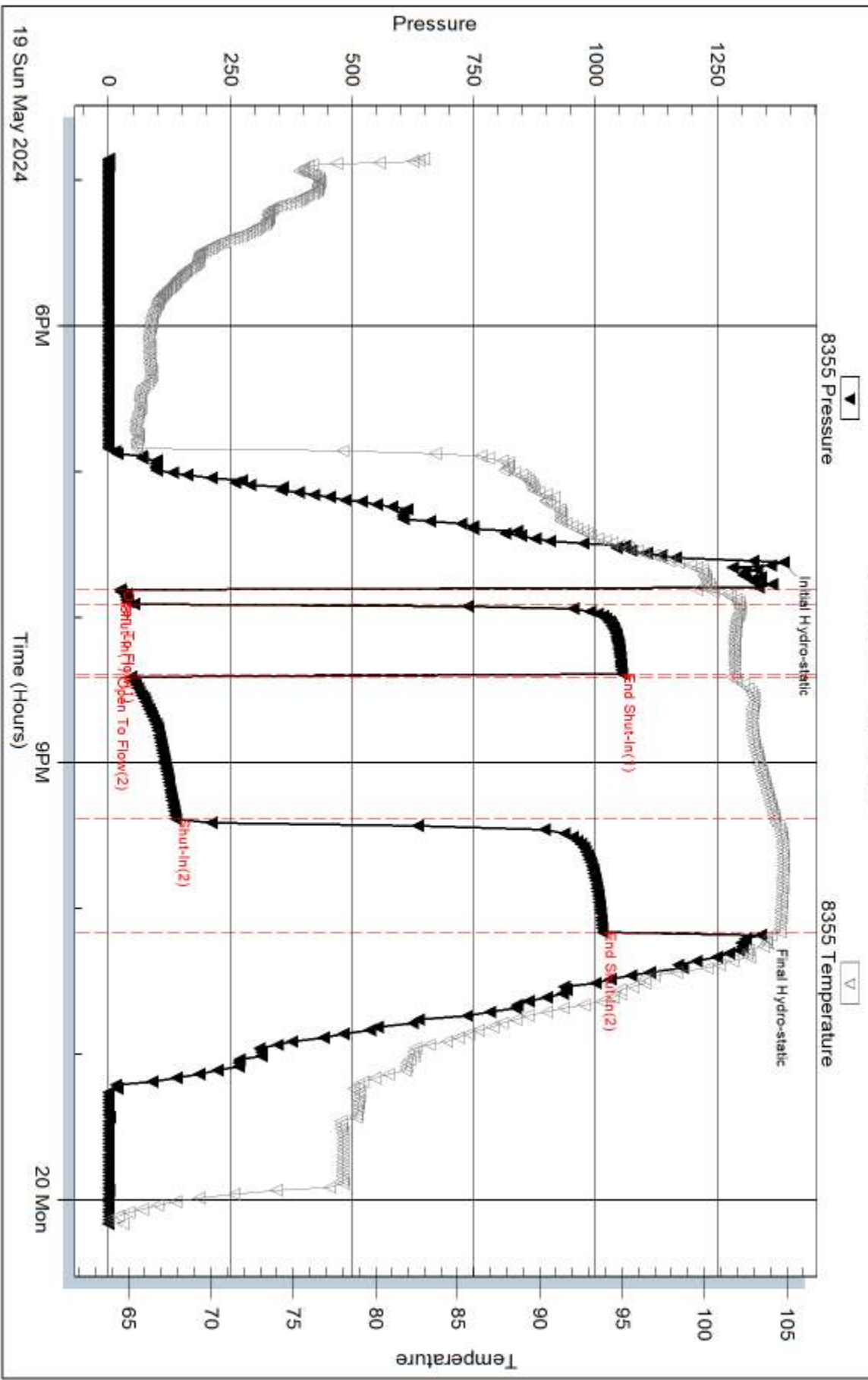
Serial #:

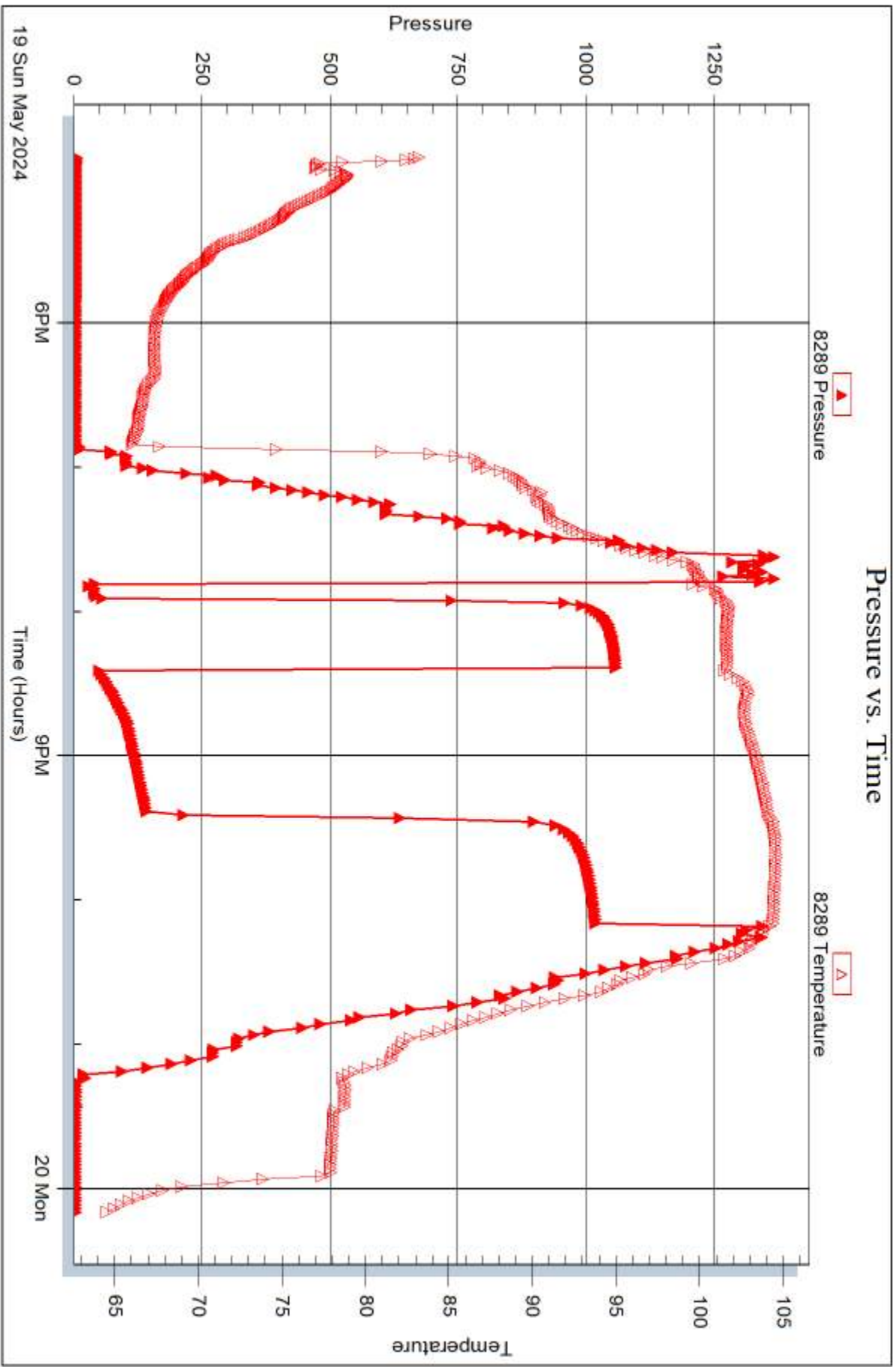
Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time







## DRILL STEM TEST REPORT

Prepared For: **LB Exploration**

2135 2nd Rd  
Holyrood KS 67450

ATTN: Jim Musgrove

### **CV Farms #22-1**

#### **22-15S-8W Ellsworth,KS**

Start Date: 2024.05.20 @ 08:31:00

End Date: 2024.05.20 @ 13:20:30

Job Ticket #: 72006                      DST #: 5

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2024.06.06 @ 11:41:27

LB Exploration

22-15S-8W Ellsworth,KS

CV Farms #22-1

DST # 5

LKC

2024.05.20



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72006

**DST#: 5**

ATTN: Jim Musgrove

Test Start: 2024.05.20 @ 08:31:00

## GENERAL INFORMATION:

Formation: **LKC**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:29:10

Time Test Ended: 13:20:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Richie Samora

Unit No: 66

**Interval: 2693.00 ft (KB) To 2709.00 ft (KB) (TVD)**

Reference Elevations: 1582.00 ft (KB)

Total Depth: 2709.00 ft (KB) (TVD)

1577.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8355 Inside**

Press@RunDepth: 51.17 psig @ 2699.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2024.05.20 End Date: 2024.05.20

Last Calib.: 1899.12.30

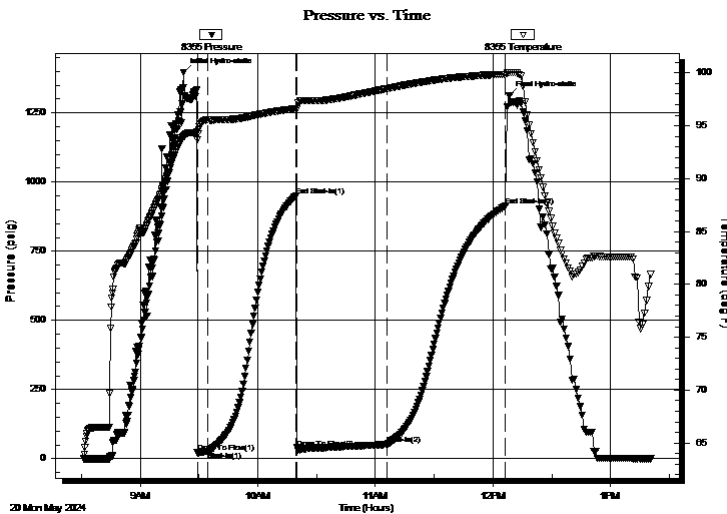
Start Time: 08:31:10 End Time: 13:20:30

Time On Btm: 2024.05.20 @ 09:22:10

Time Off Btm: 2024.05.20 @ 12:08:30

**TEST COMMENT:** 5-IF: Weak blow built to 3.5"  
45-ISI: No Returns  
45-FF: Fair blow BOB in 33 minutes built to 15"  
60-FSI: No Returns

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1396.17	93.96	Initial Hydro-static
7	22.04	93.67	Open To Flow (1)
13	26.78	95.55	Shut-In(1)
58	948.60	96.61	End Shut-In(1)
58	38.90	96.57	Open To Flow (2)
104	51.17	98.51	Shut-In(2)
165	914.52	99.87	End Shut-In(2)
167	1311.27	100.05	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	OCM 20%O 80%M	0.32

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72006

**DST#: 5**

ATTN: Jim Musgrove

Test Start: 2024.05.20 @ 08:31:00

## Tool Information

Drill Pipe:	Length: 2498.00 ft	Diameter: 3.80 inches	Volume: 35.04 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: 173.00 ft	Diameter: 2.25 inches	Volume: 0.85 bbl	Weight to Pull Loose: 47000.00 lb
			<u>Total Volume: 35.89 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 46000.00 lb
Depth to Top Packer:	2693.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	16.00 ft			
Tool Length:	46.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			2664.00	
Shut In Tool	5.00			2669.00	
Hydraulic tool	8.00		Fluid	2677.00	
EM	4.00			2681.00	
Safety Joint	3.00			2684.00	
Packer	5.00			2689.00	30.00 Bottom Of Top Packer
Packer	4.00			2693.00	
Stubb	1.00			2694.00	
Recorder Carrier	5.00			2699.00	
Recorder	0.00	8355	Inside	2699.00	
Recorder	0.00	8289	Outside	2699.00	
Perforations	7.00			2706.00	
Bullnose	3.00			2709.00	16.00 Bottom Packers & Anchor

**Total Tool Length: 46.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

LB Exploration

**22-15S-8W Ellsworth,KS**

2135 2nd Rd  
Holyrood KS 67450

**CV Farms #22-1**

Job Ticket: 72006

**DST#: 5**

ATTN: Jim Musgrove

Test Start: 2024.05.20 @ 08:31:00

## 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:

20000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.77 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 0.20 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
65.00	OCM 20%O 80%M	0.320

Total Length: 65.00 ft      Total Volume: 0.320 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 120' of GIP



