

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

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

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

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

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

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

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

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

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

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

County: _____ Permit #: _____

AFFIDAVIT

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

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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

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

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

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

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

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

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

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

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top _____ Bottom _____
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Thoroughbred Associates L.L.C.
Well Name	BUERKLE FARMS 1-23
Doc ID	1567759

All Electric Logs Run

Dual Induction
Neutron
Micro
Sonic



Customer	Thoroughbred Associates LLC	Lease & Well #	Buerkle Trust 1-23	Date	3/15/2021
Service District	Oakley	County & State	Wichita, KS	Legals S/T/R	23-20S-35W
Job Type	8.625" surface	<input checked="" type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> SWD	Legals S/T/R	New Well?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> No
				Job #	
				Ticket #	WP1216

Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures					
78	Fennis	<input checked="" type="checkbox"/> Hard hat	<input checked="" type="checkbox"/> Gloves	<input type="checkbox"/> Lockout/Tagout	<input type="checkbox"/> Warning Signs & Flagging		
230	Mike	<input checked="" type="checkbox"/> H2S Monitor	<input checked="" type="checkbox"/> Eye Protection	<input type="checkbox"/> Required Permits	<input type="checkbox"/> Fall Protection		
205	Kale	<input checked="" type="checkbox"/> Safety Footwear	<input type="checkbox"/> Respiratory Protection	<input checked="" type="checkbox"/> Slip/Trip/Fall Hazards	<input checked="" type="checkbox"/> Specific Job Sequence/Expectations		
914	Jimmie	<input checked="" type="checkbox"/> FRC/Protective Clothing	<input type="checkbox"/> Additional Chemical/Acid PPE	<input type="checkbox"/> Overhead Hazards	<input checked="" type="checkbox"/> Muster Point/Medical Locations		
		<input checked="" type="checkbox"/> Hearing Protection	<input checked="" type="checkbox"/> Fire Extinguisher	<input checked="" type="checkbox"/> Additional concerns or issues noted below			

Comments
3rd party dozer operator, stay in line of site not between/ behind equipment and communicate. Muddy uneven walking surfaces 2 person lift communicate and watch hand/foot/body placement. . hospital Scott City KS phone # 620-872-5811 person in charge of head count Fennis muster entrance to location

Product/ Service Code	Description	Unit of Measure	Quantity	Net Amount
cp015	H-325	sack	210.00	\$3,570.00
cp120	Cello-flake	lb	60.00	\$89.25
m015	Light Equipment Mileage	mi	69.00	\$117.30
m010	Heavy Equipment Mileage	mi	69.00	\$234.60
m020	Ton Mileage	tm	671.00	\$855.53
d010	Depth Charge: 0'-500'	job	1.00	\$850.00

Customer Section: On the following scale how would you rate Hurricane Services Inc.?		Net:	\$5,716.68	
Based on this job, how likely is it you would recommend HSI to a colleague?		Total Taxable	\$ -	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Unlikely 1 2 3 4 5 6 7 8 9 10 Extremely Likely		Tax Rate:		
		State tax laws deem certain products and services used on new wells to be sales tax exempt. Hurricane Services relies on the customer provided well information above to make a determination if services and/or products are tax exempt.	Sale Tax:	\$ -
			Total:	\$ 5,716.68
HSI Representative: <i>Fennis Garduno</i>				

TERMS: Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 1/2% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts previously applied in arriving at net invoice price. Upon revocation, the full invoice price without discount is immediately due and subject to collection. Prices quoted are estimates only and are good for 30 days from the date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. **DISCLAIMER NOTICE:** Technical data is presented in good faith, but no warranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results from the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the customer guarantees proper operational care of all customer owned equipment and property while HSI is on location performing services. The authorization below acknowledges the receipt and acceptance of all terms/conditions stated above, and Hurricane has been provided accurate well information in determining taxable services.

x Ervinda Roberts

CUSTOMER AUTHORIZATION SIGNATURE



CEMENT TREATMENT REPORT

Customer: Thoroughbred Associates LLC
City, State:
Field Rep: Fennis Garduno

Well: Buerkle Trust 1-23
County: Wichita , KS
S-T-R: 23-20S-35W

Ticket: WP1216
Date: 3/15/2021
Service: 8.625" surface

Downhole Information table with fields: Hole Size (12.25 in), Hole Depth (310 ft), Casing Size (8 5/8 in), Casing Depth (307 ft), Tubing / Liner (in), Depth (ft), Tool / Packer, Tool Depth (ft), Displacement (18.3 bbls)

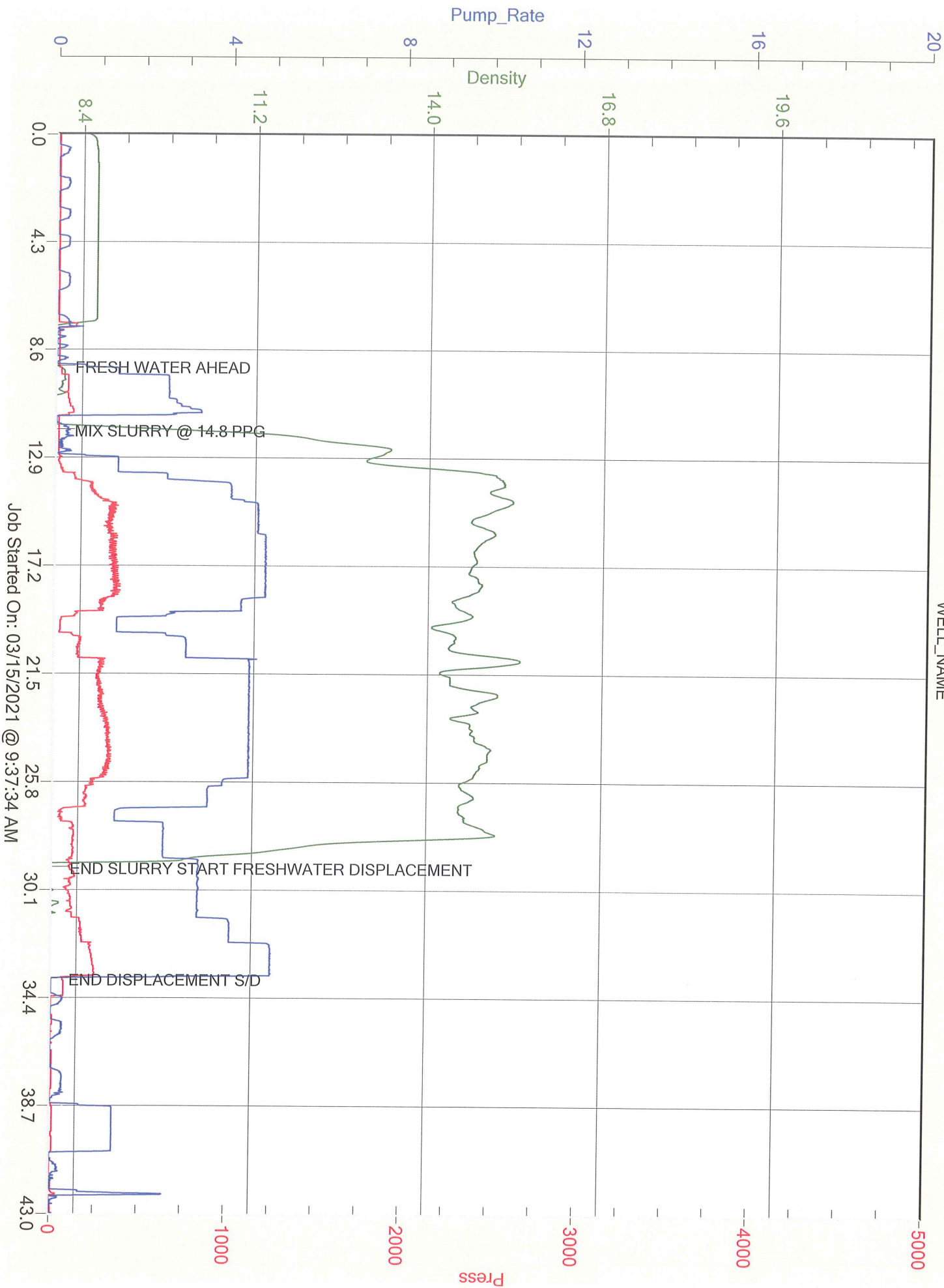
Calculated Slurry - Lead table with fields: Blend (H-325), Weight (14.8 ppg), Water / Sx (6.4 gal / sx), Yield (1.38 ft³ / sx), Annular Bbls / Ft. (0.0735 bbs / ft.), Depth (310 ft), Annular Volume (22.8 bbls), Excess (105%), Total Slurry (51.6 bbls), Total Sacks (210 sx)

Calculated Slurry - Tail table with fields: Blend, Weight (ppg), Water / Sx (gal / sx), Yield (ft³ / sx), Annular Bbls / Ft. (bbs / ft.), Depth (ft), Annular Volume (0 bbls), Excess, Total Slurry (0.0 bbls), Total Sacks (0 sx)

Main log table with columns: TIME, RATE, PSI, STAGE BBLs, TOTAL BBLs, REMARKS. Contains entries for 10:00 AM to 2:00 PM including meeting notes, rig operations, and cement treatment details.

Summary table with columns: CREW, UNIT, SUMMARY. Includes crew names (Fennis, Mike, Kale, Jimmie), unit numbers (78, 230, 205, 914), and summary statistics (Average Rate: 4.0 bpm, Average Pressure: 168 psi, Total Fluid: 75 bbls).

Thoroughbred Associates
WELL_NAME



Job Started On: 03/15/2021 @ 9:37:34 AM



CEMENT TREATMENT REPORT

Customer:	Thoroughbred Associates	Well:	Buerkle Farms 1-23	Ticket:	WP 1235
City, State:		County:	Wichita Ks	Date:	3/24/2021
Field Rep:		S-T-R:	23-20-35W	Service:	PTA

Downhole Information	
Hole Size:	7.875 in
Hole Depth:	4920 ft
Casing Size:	in
Casing Depth:	ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	bbls

Calculated Slurry - Lead	
Blend:	H-PLUG
Weight:	13.8 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.42 ft ³ / sx
Annular Bbls / Ft.:	0.0406 bbs / ft.
Depth:	2260 ft
Annular Volume:	91.8 bbls
Excess:	
Total Slurry:	58.2 bbls
Total Sacks:	230 sx

Calculated Slurry - Tail	
Blend:	
Weight:	ppg
Water / Sx:	gal / sx
Yield:	ft ³ / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	0 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
730P			-	-	GOT TO LOCATION
735P				-	SAFETY MEETING
740P				-	RIGGED UP TRUCKS
				-	
1106P	3.0	200.0	5.0	5.0	H2O AHEAD
1108P	3.1	300.0	12.6	17.6	PUMPED 50 SKS OF H-PLUG @ 2260 FT
1112P	3.0	200.0	28.8	46.4	DISPLACED WITH H2O
1205A	4.0	300.0	20.2	66.6	PUMPED 80 SKS OF H-PLUG @ 1080 FT
1210A	3.0	200.0	10.5	77.1	DISPLACED WITH H2O
1249A	2.5	200.0	12.6	89.7	PUMPED 50 SKS OF H-PLUG @ 330 FT
1254A	3.0	200.0	1.4	91.1	DISPLACED WITH H2O
125A	2.1	50.0	5.0		PUMPED 20 SKS OF H-PLUG @ 60 FT
128A	2.1	50.0	7.5		PUMPED 30 SKS OF H-PLUG IN RH
130A					PLUG DOWN
135A					WASHED UP PUMP TRUCK
150A					RIGGED DOWN TRUCKS
210A					OFF LOCATION

CREW		UNIT		SUMMARY		
Cementer:	Josh		73	Average Rate	Average Pressure	Total Fluid
Pump Operator:	John		208	2.9 bpm	189 psi	104 bbls
Bulk #1:	Kale		205			
Bulk #2:						



DRILL STEM TEST REPORT

Prepared For: **Thoroughbred Associates LLC**

8100 E 22ND St Ste 600
Wichita, KS 67226

ATTN: Phil Askey

Buerkle Farms # 1-23

23-20-35W Wichita,KS

Start Date: 2021.03.21 @ 03:40:00

End Date: 2021.03.21 @ 13:03:30

Job Ticket #: 67510 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2021.03.24 @ 08:17:45



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Thoroughbred Associates LLC

23-20-35W Wichita,KS

8100 E 22ND St Ste 600
Wichita, KS 67226

Buerkle Farms # 1-23

ATTN: Phil Askey

Job Ticket: 67510

DST#: 1

Test Start: 2021.03.21 @ 03:40:00

GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:39:00

Time Test Ended: 13:03:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Martine Salinas

Unit No: 82

Interval: 4535.00 ft (KB) To 4565.00 ft (KB) (TVD)

Reference Elevations: 3113.00 ft (KB)

Total Depth: 4565.00 ft (KB) (TVD)

3101.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: 8734 Outside

Press@RunDepth: 201.88 psig @ 4536.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2021.03.21 End Date: 2021.03.21

Last Calib.: 2021.03.21

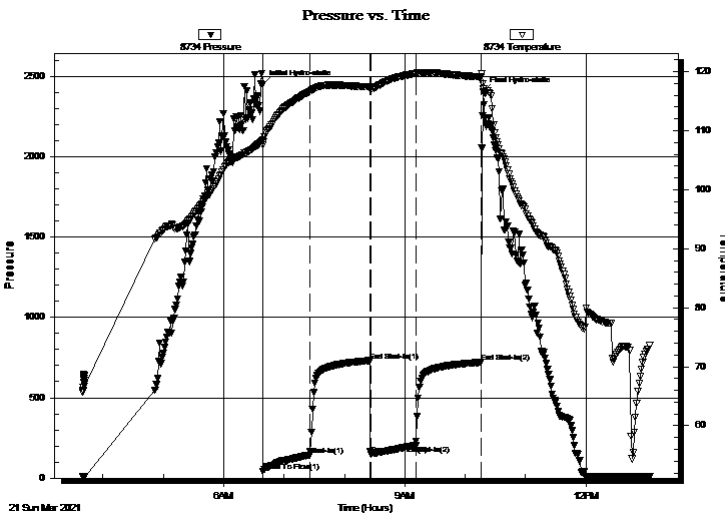
Start Time: 03:40:01 End Time: 13:03:30

Time On Btm: 2021.03.21 @ 06:38:50

Time Off Btm: 2021.03.21 @ 10:18:00

TEST COMMENT: 45-IF-B.O.B (11 inches) @ 25 mins (blow increased to 17 1/2")
60-ISI-Surface blow back built to 3/4" & decreased to 1/4"
45-FF-Blow built to 17 3/4"
60-FSI-Blow built to 3"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2448.89	108.38	Initial Hydro-static
1	41.17	107.54	Open To Flow (1)
47	143.68	116.63	Shut-In(1)
107	730.75	117.41	End Shut-In(1)
108	150.02	117.17	Open To Flow (2)
152	201.88	119.68	Shut-In(2)
218	720.53	119.10	End Shut-In(2)
220	2405.22	117.09	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
176.00	MCW W/ OIL scum 10%M, 90%W	0.87
184.00	GOSMCW 20%G,5%O,20%M,55%W	2.58
30.00	CGO 25%G, 75%O	0.42
0.00	180' GIP	0.00

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Thoroughbred Associates LLC

23-20-35W Wichita,KS

8100 E 22ND St Ste 600
Wichita, KS 67226

Buerkle Farms # 1-23

Job Ticket: 67510

DST#: 1

ATTN: Phil Askey

Test Start: 2021.03.21 @ 03:40:00

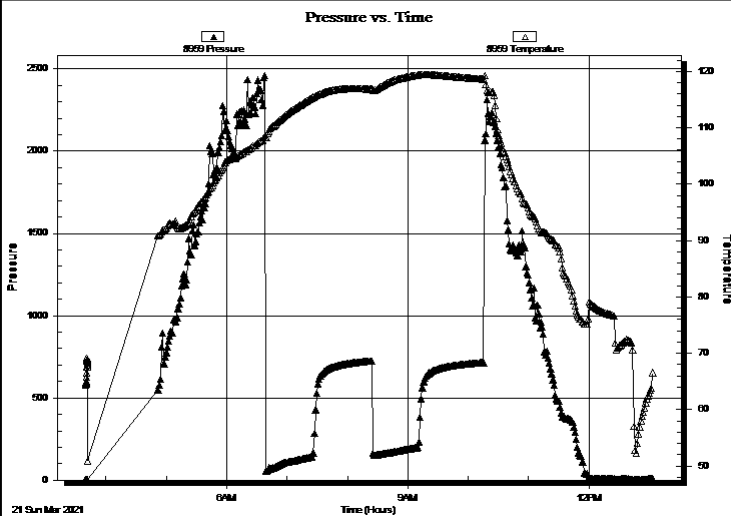
GENERAL INFORMATION:

Formation: **Pawnee**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 06:39:00
 Tester: Martine Salinas
 Time Test Ended: 13:03:30
 Unit No: 82
 Interval: **4535.00 ft (KB) To 4565.00 ft (KB) (TVD)**
 Reference Elevations: 3113.00 ft (KB)
 Total Depth: 4565.00 ft (KB) (TVD)
 3101.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Good
 KB to GR/CF: 12.00 ft

Serial #: 8959 Inside

Press@RunDepth: psig @ 4536.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2021.03.21 End Date: 2021.03.21 Last Calib.: 2021.03.21
 Start Time: 03:40:01 End Time: 13:03:30 Time On Btm:
 Time Off Btm:

TEST COMMENT: 45-IF-B.O.B (11 inches) @ 25 mins (blow increased to 17 1/2")
 60-ISI-Surface blow back built to 3/4" & decreased to 1/4"
 45-FF-Blow built to 17 3/4"
 60-FSI-Blow built to 3"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
176.00	MCW W/ OIL scum 10%M, 90%W	0.87
184.00	GOSMCW 20%G,5%O,20%M,55%W	2.58
30.00	CGO 25%G, 75%O	0.42
0.00	180' GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Thoroughbred Associates LLC

23-20-35W Wichita,KS

8100 E 22ND St Ste 600
Wichita, KS 67226

Buerkle Farms # 1-23

Job Ticket: 67510

DST#: 1

ATTN: Phil Askey

Test Start: 2021.03.21 @ 03:40:00

Tool Information

Drill Pipe:	Length: 4340.00 ft	Diameter: 3.80 inches	Volume: 60.88 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 176.00 ft	Diameter: 2.25 inches	Volume: 0.87 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 61.75 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4535.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	57.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Change Over Sub	1.00			4509.00	
Shut In Tool	5.00			4514.00	
Hydraulic tool	5.00	1113		4519.00	
EM Tool	4.00			4523.00	
Safety Joint	3.00	-001		4526.00	
Packer	5.00			4531.00	27.00 Bottom Of Top Packer
Packer	4.00			4535.00	
Stubb	1.00			4536.00	
Recorder	0.00	8959	Inside	4536.00	
Recorder	0.00	8734	Outside	4536.00	
Perforations	26.00			4562.00	
Bullnose	3.00			4565.00	30.00 Bottom Packers & Anchor

Total Tool Length: 57.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Thoroughbred Associates LLC

23-20-35W Wichita,KS

8100 E 22ND St Ste 600
Wichita, KS 67226

Buerkle Farms # 1-23

Job Ticket: 67510

DST#: 1

ATTN: Phil Askey

Test Start: 2021.03.21 @ 03:40:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33.2 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

35000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4600.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
176.00	MCW W/ OIL scum 10%M, 90%W	0.866
184.00	GOSMCW 20%G,5%O,20%M,55%W	2.581
30.00	CGO 25%G, 75%O	0.421
0.00	180' GIP	0.000

Total Length: 390.00 ft Total Volume: 3.868 bbl

Num Fluid Samples: 0

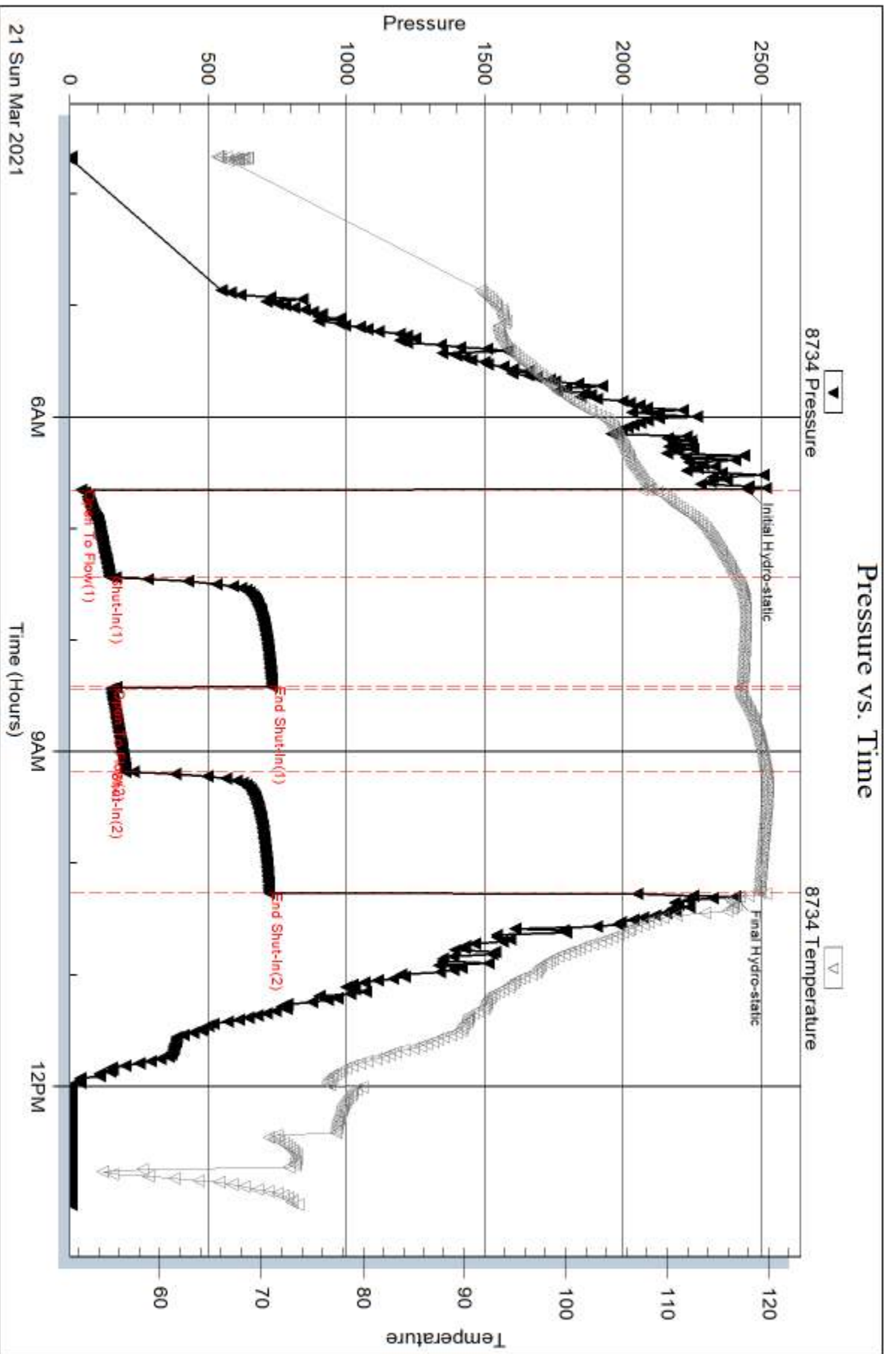
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity of oil = 33.8 @ 66 degs corrected to 33.2 @ 60 degs
RW=.242 @ 62.5 degs = 35,000PPM



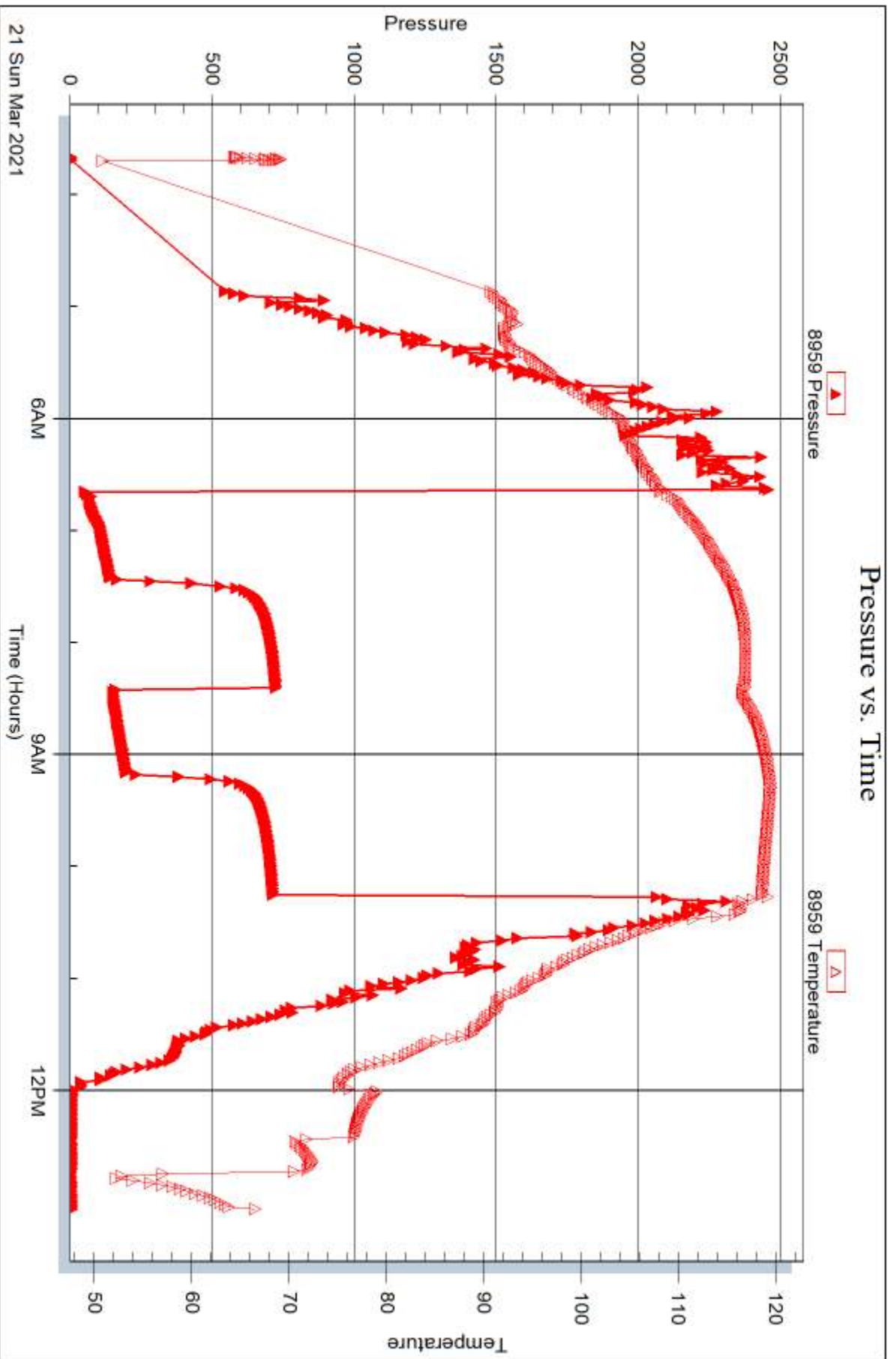
Serial #: 8959

Inside

Thoroughbred Associates LLC

Buerkle Farms # 1-23

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 67510

Printed: 2021.03.24 @ 08:17:46



DRILL STEM TEST REPORT

Prepared For: **Thoroughbred Associates LLC**

8100 E 22ND St Ste 600
Wichita, KS 67226

ATTN: Phil Askey

Buerkle Farms # 1-23

23-20-35W Wichita,KS

Start Date: 2021.03.23 @ 08:28:00

End Date: 2021.03.23 @ 17:39:49

Job Ticket #: 67511 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2021.03.24 @ 08:17:11



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Thoroughbred Associates LLC

23-20-35W Wichita, KS

8100 E 22ND St Ste 600
Wichita, KS 67226

Buerkle Farms # 1-23

Job Ticket: 67511

DST#: 2

ATTN: Phil Askey

Test Start: 2021.03.23 @ 08:28:00

GENERAL INFORMATION:

Formation: **Marmaton " A "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:50:20

Time Test Ended: 17:39:49

Test Type: Conventional Straddle (Reset)

Tester: Martine Salinas

Unit No: 82

Interval: 4470.00 ft (KB) To 4504.00 ft (KB) (TVD)

Reference Elevations: 3113.00 ft (KB)

Total Depth: 4926.00 ft (KB) (TVD)

3101.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: 8734 Outside

Press@RunDepth: 286.18 psig @ 4471.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2021.03.23

End Date: 2021.03.23

Last Calib.: 2021.03.23

Start Time: 08:28:01

End Time: 17:39:49

Time On Btm: 2021.03.23 @ 10:50:00

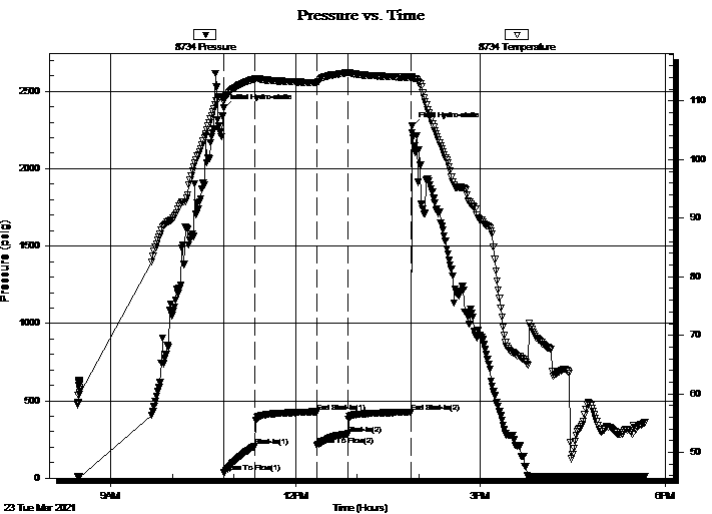
Time Off Btm: 2021.03.23 @ 13:53:20

TEST COMMENT: 30-IF-BOB (11 inches) @ 20 mins (blow increased to 15 1/2")

60-ISI-No blow back

30-FF-Surface blow built to 7 1/4"

60-FSI-No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2390.63	110.69	Initial Hydro-static
1	34.66	109.96	Open To Flow (1)
31	208.64	113.77	Shut-In(1)
91	428.65	113.12	End Shut-In(1)
91	211.95	112.99	Open To Flow (2)
121	286.18	114.85	Shut-In(2)
183	426.64	114.01	End Shut-In(2)
184	2274.56	114.01	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
560.00	MCW 10%M, 90%W	2.97

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Thoroughbred Associates LLC

23-20-35W Wichita, KS

8100 E 22ND St Ste 600
Wichita, KS 67226

Buerkle Farms # 1-23

Job Ticket: 67511

DST#: 2

ATTN: Phil Askey

Test Start: 2021.03.23 @ 08:28:00

GENERAL INFORMATION:

Formation: **Marmaton " A "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:50:20

Time Test Ended: 17:39:49

Test Type: Conventional Straddle (Reset)

Tester: Martine Salinas

Unit No: 82

Interval: 4470.00 ft (KB) To 4504.00 ft (KB) (TVD)

Total Depth: 4926.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3113.00 ft (KB)

3101.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 8959 Inside

Press@RunDepth: psig @ 4471.00 ft (KB)

Start Date: 2021.03.23

End Date: 2021.03.23

Start Time: 08:28:01

End Time: 17:39:49

Capacity: 8000.00 psig

Last Calib.: 2021.03.23

Time On Btm:

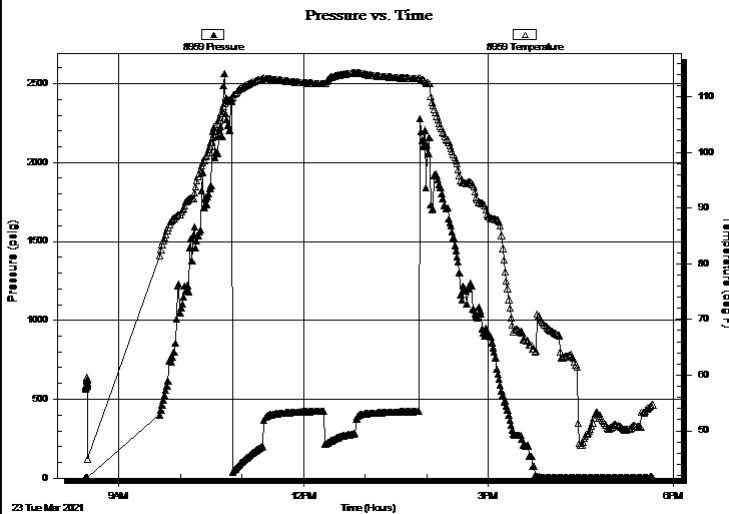
Time Off Btm:

TEST COMMENT: 30-IF-BOB (11 inches) @ 20 mins (blow increased to 15 1/2")

60-ISI-No blow back

30-FF-Surface blow built to 7 1/4"

60-FSI-No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
560.00	MCW 10%M, 90%W	2.97

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Thoroughbred Associates LLC

23-20-35W Wichita, KS

8100 E 22ND St Ste 600
Wichita, KS 67226

Buerkle Farms # 1-23

Job Ticket: 67511

DST#: 2

ATTN: Phil Askey

Test Start: 2021.03.23 @ 08:28:00

GENERAL INFORMATION:

Formation: **Marmaton " A "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:50:20

Time Test Ended: 17:39:49

Test Type: Conventional Straddle (Reset)

Tester: Martine Salinas

Unit No: 82

Interval: **4470.00 ft (KB) To 4504.00 ft (KB) (TVD)**

Total Depth: 4926.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3113.00 ft (KB)

3101.00 ft (CF)

KB to GR/CF: 12.00 ft

Serial #: 8520 Below (Straddle)

Press@RunDepth: psig @ 4505.00 ft (KB)

Start Date: 2021.03.23

End Date: 2021.03.23

Start Time: 08:28:01

End Time: 17:39:49

Capacity: 8000.00 psig

Last Calib.: 2021.03.23

Time On Btm:

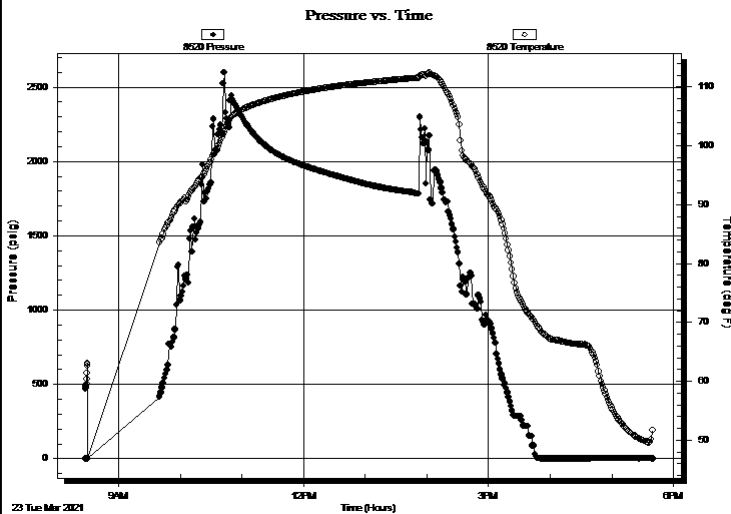
Time Off Btm:

TEST COMMENT: 30-IF-BOB (11 inches) @ 20 mins (blow increased to 15 1/2")

60-ISI-No blow back

30-FF-Surface blow built to 7 1/4"

60-FSI-No blow back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
560.00	MCW 10%M, 90%W	2.97

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Thoroughbred Associates LLC

23-20-35W Wichita,KS

8100 E 22ND St Ste 600
Wichita, KS 67226

Buerkle Farms # 1-23

Job Ticket: 67511

DST#: 2

ATTN: Phil Askey

Test Start: 2021.03.23 @ 08:28:00

Tool Information

Drill Pipe:	Length: 3935.00 ft	Diameter: 3.80 inches	Volume: 55.20 bbl	Tool Weight: 3000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 536.00 ft	Diameter: 2.25 inches	Volume: 2.64 bbl	Weight to Pull Loose: 105000.0 lb
			<u>Total Volume: 57.84 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 86000.00 lb
Depth to Top Packer:	4470.00 ft			Final 86000.00 lb
Depth to Bottom Packer:	4926.00 ft			
Interval between Packers:	456.00 ft			
Tool Length:	483.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description

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

Change Over Sub	1.00			4444.00	
Shut In Tool	5.00			4449.00	
Hydraulic tool	5.00	1113		4454.00	
EM Tool	4.00			4458.00	
Safety Joint	3.00	-001		4461.00	
Packer	5.00			4466.00	27.00 Bottom Of Top Packer
Packer	4.00			4470.00	
Stubb	1.00			4471.00	
Recorder	0.00	8959	Inside	4471.00	
Recorder	0.00	8734	Outside	4471.00	
Perforations	28.00			4499.00	
Blank Off Sub	1.00			4500.00	
Packer - Shale	4.00			4504.00	
Stubb	1.00			4505.00	
Recorder	0.00	8520	Below	4505.00	
Perforations	5.00			4510.00	
Change Over Sub	1.00			4511.00	
Drill Pipe	404.00			4915.00	
Change Over Sub	1.00			4916.00	
Perforations	7.00			4923.00	
Bullnose	3.00			4926.00	456.00 Bottom Packers & Anchor

Total Tool Length: 483.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Thoroughbred Associates LLC

23-20-35W Wichita,KS

8100 E 22ND St Ste 600
Wichita, KS 67226

Buerkle Farms # 1-23

Job Ticket: 67511

DST#: 2

ATTN: Phil Askey

Test Start: 2021.03.23 @ 08:28:00

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:

28000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6200.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
560.00	MCW 10%M, 90%W	2.973

Total Length: 560.00 ft Total Volume: 2.973 bbl

Num Fluid Samples: 0

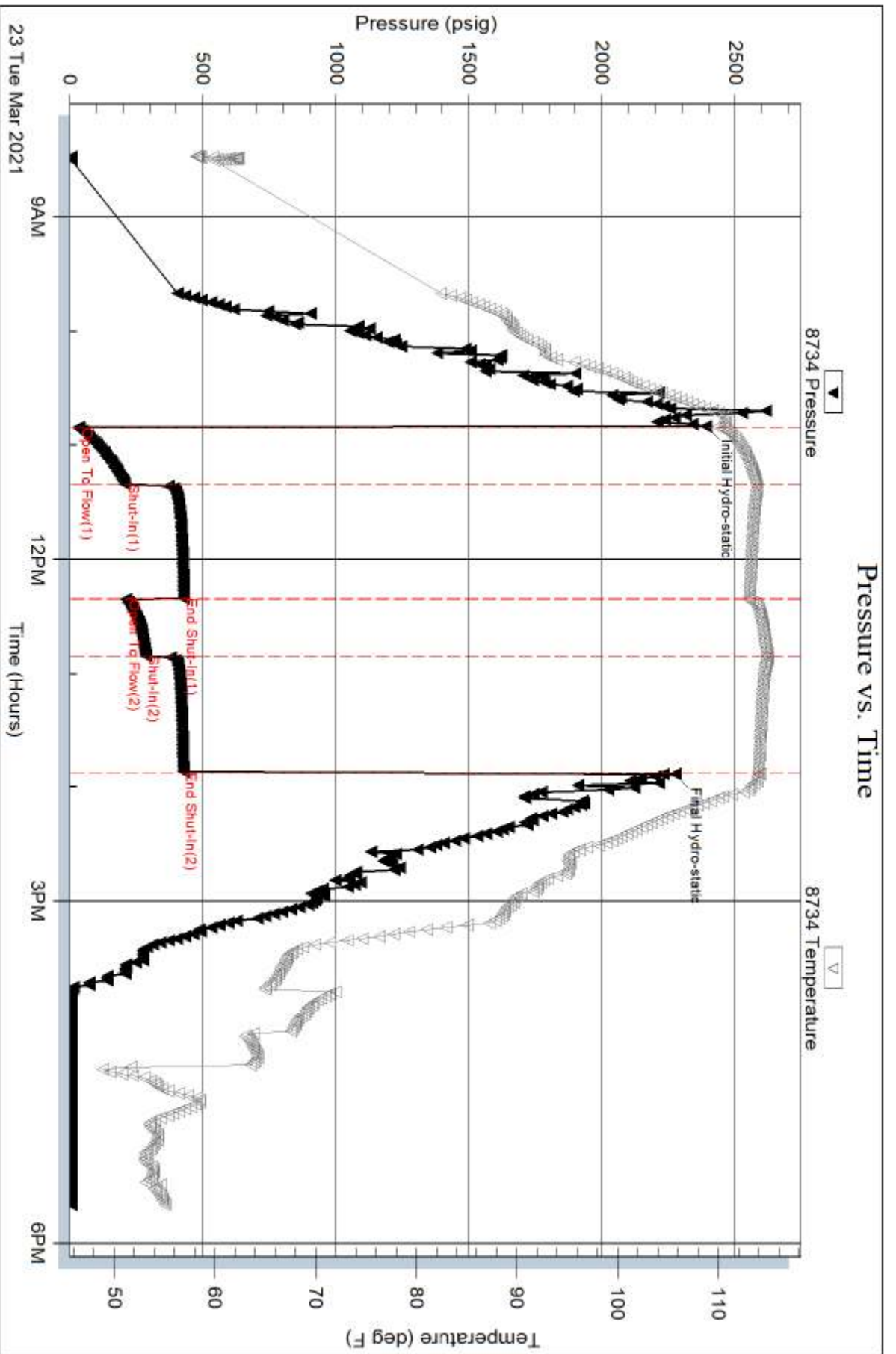
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .350 @ 52.5 degs = 28,000 ppm



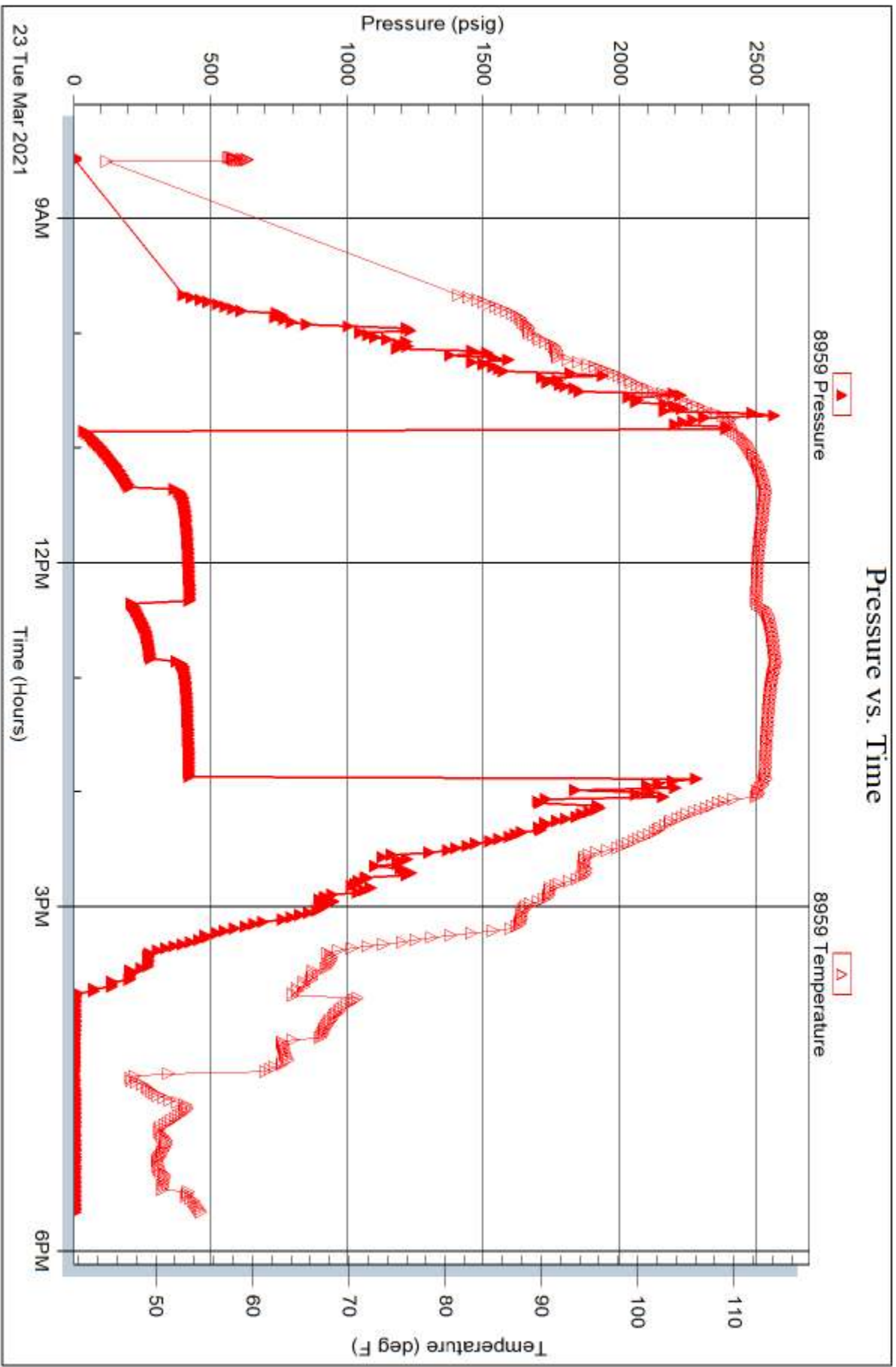
Serial #: 8959

Inside

Thoroughbred Associates LLC

Buerkle Farms # 1-23

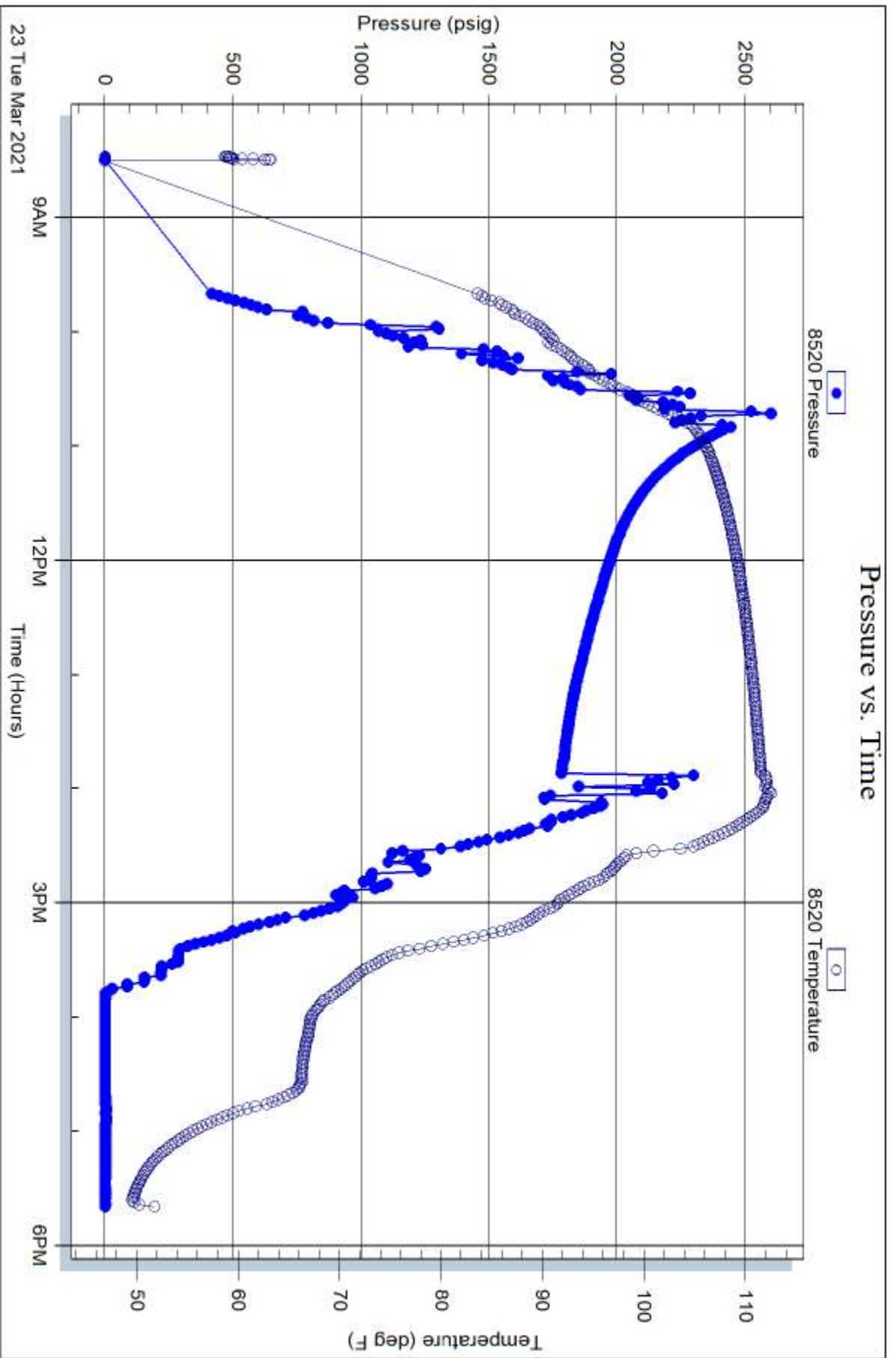
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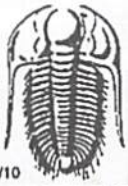


Trilobite Testing, Inc

Ref. No: 67511

Printed: 2021.03.24 @ 08:17:12





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **67510**

Well Name & No. Buerkle Farms #1-23 Test No. 1 Date 3-21-21
 Company Thoroughbred Associates, LLC Elevation 3113 KB 3101 GL
 Address 8100 E 22nd ST. STE 600 Wichita, KS - 67226
 Co. Rep / Geo. Phil Askey Rig Duke #4
 Location: Sec. 23 Twp 20 Rge. 35W. Co. Wichita, KS State KS.

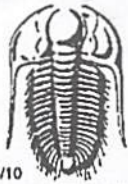
Interval Tested 4535 - 4565. Zone Tested Pawnee.
 Anchor Length 30 Drill Pipe Run 4340 Mud Wt. 9.3
 Top Packer Depth 4530 Drill Collars Run 176 Vis 62
 Bottom Packer Depth 4535 Wt. Pipe Run — WL 8.0
 Total Depth 4565 Chlorides 4600 ppm System LCM 2#
 Blow Description IF - B.O.B (11 inches) @ 25 mins. (blow increased to 17 1/2")
ISI - S. blowback built to 3/4 + decreased to 1/4"
FF - Blow built to 17 3/4"
FSI - Blow built to 3"

Rec	Feet of	%gas	%oil	%water	%mud
176	Feet of <u>MCW with oil scrub</u>		90	10	
184	Feet of <u>GOSMCW</u>	20	5	55	20
30	Feet of <u>CGO</u>	25	75		
	Feet of <u>180' GIP</u>				
	Feet of				

Rec Total 390 BHT 117 Gravity 33.2 API RW .242 @ 62.5 °F Chlorides 35,000 ppm
 (A) Initial Hydrostatic 2449 Test 1300 T-On Location 01:30
 (B) First Initial Flow 41 Jars _____ T-Started 03:40
 (C) First Final Flow 144 Safety Joint _____ T-Open 06:39
 (D) Initial Shut-In 731 Circ Sub _____ T-Pulled 10:10
 (E) Second Initial Flow 150 Hourly Standby _____ T-Out 13:04
 (F) Second Final Flow 202 Mileage 58 RT 72.50 Comments _____
 (G) Final Shut-In 721 Sampler _____
 (H) Final Hydrostatic 2405. Straddle _____ EM Tool 350
 Shale Packer _____ Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____ Extra Copies _____
 Day Standby _____ Sub Total 0
 Accessibility _____ Total 1372.50
 Sub Total 1372.50 MP/DST Disc't _____

Approved By Phil Askey Our Representative Phil Askey

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. 67511

Well Name & No. Buerkle Farms #123 Test No. 2 Date 3-23-21
 Company Thoroughbred Associates LLC Elevation 3113 KB 3101 GL
 Address 8100 E 22nd ST STE 600 Wichita, KS 67226
 Co. Rep / Geo. Phil Askey Rig Duke #4
 Location: Sec. 23 Twp 20 Rge. 35W. Co. Wichita State KS.

Interval Tested 4470-4501 Zone Tested Marmaton "A"
 Anchor Length 34' 422' T. Pipe. Drill Pipe Run 3935. Mud Wt. SS
 Top Packer Depth 4465-4470 Drill Collars Run 536 Vis 9.2
 Bottom Packer Depth 4504 (Shale) Wt. Pipe Run --- WL 8.8
 Total Depth 4926' LTD Chlorides 6200 ppm System LCM 3#
 Blow Description IF - S. blow built to B.O.R (11 inches) @ 20 mins (blow built to 15 1/2")
ISZ - No blowback
FF - S. blow built to 7 1/4"
FSE - No blowback

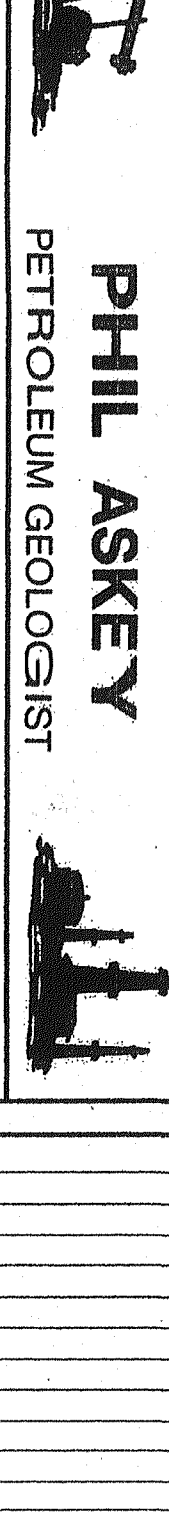
Rec	Feet of	%gas	%oil	%water	%mud
<u>560</u>	<u>MCW</u>		<u>90</u>	<u>10</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 560 BHT 114 Gravity --- API RW .350 @ 52.5 °F Chlorides 28,000 ppm
 (A) Initial Hydrostatic 2391 Test 1300 T-On Location 07:10
 (B) First Initial Flow 35 Jars _____ T-Started 08:28
 (C) First Final Flow 209 Safety Joint 75 T-Open 10:50
 (D) Initial Shut-In 429 Circ Sub _____ T-Pulled 13:50
 (E) Second Initial Flow 212 Hourly Standby _____ T-Out 17:40
 (F) Second Final Flow 286 Mileage 58 RT 72.50 Comments Tools loaded @ 18:00
 (G) Final Shut-In 427 Sampler _____
 (H) Final Hydrostatic 2275 Straddle 600 EM Tool 350
 Shale Packer 250 Ruined Shale Packer _____
 Extra Packer _____ Ruined Packer _____
 Extra Recorder _____ Extra Copies _____
 Initial Open 30 Day Standby _____ Sub Total 0
 Initial Shut-In 60 Accessibility _____ Total 2297.50
 Final Flow 30 Sub Total 2297.50 MP/DST Disc't _____
 Final Shut-In 60

Approved By _____

Our Representative [Signature]

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



PHIL ASKEY
PETROLEUM GEOLOGIST
GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY: Thoroughbred Associates, LLC
LEASE: Buertke Farms #1-23
LOCATION: SE-NW-NE SEC 23 TWP 20S R1G 35W

DRILLING TIME KEPT FROM 2:48:30 to 8:46:01
GEOLOGICAL SUPERVISION FROM 3:46:00 TO 8:10:00
GEOLOGIST ON WELL: Phil Askey, G.S.

FORMATION TONS table with columns for Formation, Tons, and Log. Includes entries like Anhydrite, Salt, Sandstone, Shale, Carb sh, Limestone, Coal, Lime, Chert, Dolomite.

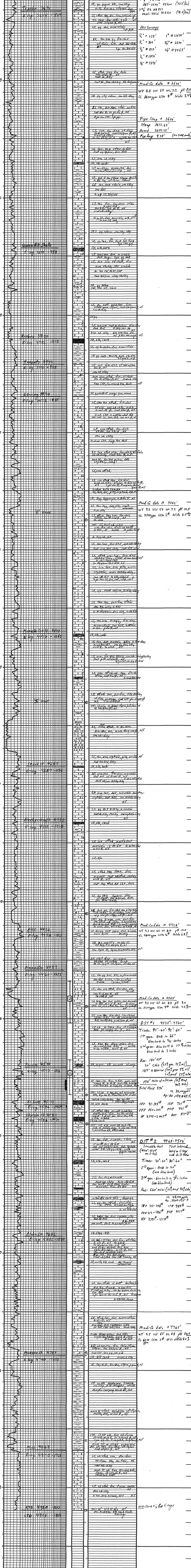
REMARKS: The Thoroughbred Association, Buertke Farms #1-23, has a structurally high on all directions to the effect well, Sunburst #1, Buertke #1. All samples were taken with non-commercial results. A sample for one to two inches was taken on a log reduction but not analyzed (see p. 2).

Therefore, after examination of all samples and logs, it was decided to plug and abandon this well.

Phil Askey

LEGEND table with symbols for Anhydrite, Salt, Sandstone, Shale, Carb sh, Limestone, Coal, Lime, Chert, Dolomite.

SCALE: 1 inch = 100 feet



COMPANY: Thoroughbred Associates, LLC
LEASE: Buertke Farms #1-23
LOCATION: SE-NW-NE SEC 23 TWP 20S R1G 35W
COUNTY: Wichita STATE: Kansas
ELEVATION: 3107 FB