

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	Jaspar Co.
Well Name	D.G. HANSEN 2
Doc ID	1654773

All Electric Logs Run

MICRO LOG
SONIC LOG
COMPENSATED DENSITY/NEUTRON LOG
DUAL RECEIVER CEMENT BOND



Scale 1:240 Imperial

Well Name: D.G. HANSEN #2
Surface Location: W2, NE, SW, NE, Sec. 11, T6S, R20W
Bottom Location:
API: 15-163-24448
License Number: 34903
Spud Date: 2/19/2022 Time: 12:30 PM
Region: ROOKS CO.
Drilling Completed: 3/1/2022 Time: 4:00 AM
Surface Coordinates: 330' FNL & 1810' FEL
Bottom Hole Coordinates:
Ground Elevation: 2084.00ft
K.B. Elevation: 2091.00ft
Logged Interval: 3000.00ft To: 3571.00ft
Total Depth: 3571.00ft
Formation: LKC, REAGAN SAND
Drilling Fluid Type: CHEMICAL MUD

OPERATOR

Company: JASPAR CO. INC.
Address: P.O. BOX 1120

Contact Geologist: SHANE VEHIGE
Contact Phone Nbr: 785-623-6982
Well Name: D.G. HANSEN #2
Location: W2, NE, SW, NE, Sec. 11, T6S, R20W
API: 15-163-24448
Pool: Field: EDGAR
State: KS Country:

SURFACE CO-ORDINATES

Well Type: Vertical
Longitude: -99.51537
Latitude: 39.55246
N/S Co-ord: 330' FNL
E/W Co-ord: 1810' FEL

LOGGED BY

Company:
Address: 2511 E 19TH
HAYS, KS 67601
Phone Nbr: (785) 639-0721
Logged By: Geologist Name: CAMERON BRIN

CONTRACTOR

Contractor: STP DRILLING
Rig #: 1
Rig Type: MUD ROTARY
Spud Date: 2/19/2022 Time: 12:30 PM
TD Date: 3/1/2022 Time: 4:00 AM
Rig Release: 3/2/2022 Time: 8:00 AM

ELEVATIONS

K.B. Elevation: 2091.00ft Ground Elevation: 2084.00ft
K.B. to Ground: 7.00ft

NOTES

DUE TO POSTIVE RESULTS IN DST #5 & #6 DECISION WAS MADE TO RUN 5 1/2' PRODUCTION CASING TO FURTHER EVALUATE THE D.G. HANSEN #2 WELL.

TOPS COMPARISON

FORMATION	D.G. HANSEN #1								D&A 12/5/78				HANSEN ESTATE #1				P&A 2/18/1983				
	JASPAR CO INC								BRANDT OIL				AMES ENERGY EXPL.				GEODESSA CORP				
	SE, NW, NE, NE, Sec. 11-6-20								W2, SE, NW, NE, Sec. 11-6-20				N2, SE, SW, SE, Sec. 2-6-20				NW, SE, SE, SW, Sec. 2-6-20				
	LOG TOPS		SAMPLE TOPS		LOG		SMPL.		COMP. CARD		LOG		SMPL.		LOGS		COMP. CARD		LOG		SMPL.
DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	LOG CORR.	SMPL. CORR.	DEPTH	DATUM	LOG CORR.	SMPL. CORR.	DEPTH	DATUM	LOG CORR.	SMPL. CORR.	DEPTH	DATUM	LOG CORR.	SMPL. CORR.		
ANHYDRITE TOP	1673	418	1674	417	1673	416	+ 2	+ 1	1699	416	+ 2	+ 1	1666	416	+ 2	+ 1					
BASE	1704	387	1706	385	1705	384	+ 3	+ 1					1695	387	+ 0	- 2					
TOPEKA	3076	-985	3080	-989	3071	-982	- 3	- 7	3099	-984	- 1	- 5	3070	-988	+ 3	- 1					
HEEBNER SHALE	3275	-1184	3279	-1188	3265	-1176	- 8	- 12	3297	-1182	- 2	- 6	3266	-1184	+ 0	- 4	3310	-1181	- 3	- 7	
TORONTO	3297	-1206	3301	-1210	3288	-1199	- 7	- 11	3319	-1204	- 2	- 6	3289	-1207	+ 1	- 3	3334	-1205	- 1	- 5	
LKC	3311	-1220	3314	-1223	3301	-1212	- 8	- 11	3333	-1218	- 2	- 5	3304	-1222	+ 2	- 1	3349	-1220	+ 0	- 3	
BKC	3506	-1415	3511	-1420	3495	-1406	- 9	- 14	3531	-1416	+ 1	- 4	3500	-1418	+ 3	- 2	3545	-1416	+ 1	- 4	
GORHAM SAND			3558	-1467													3586	-1457		- 10	
REAGAN SAND			3562	-1471									3554	-1472		+ 1	3596	-1467		- 4	
GRANITE					3532	-1443			3581	-1466							3619	-1490			
TOTAL DEPTH	3569	-1478	3571	-1480	3534	-1445	- 33	- 35	3596	-1481	+ 3	+ 1	3557	-1475	- 3	- 5	3642	-1513	+ 35	+ 33	

DST #1 3378'-3404' (LKC E-F)



TRILOBITE TESTING, INC

Jaspar Co **11-6-20w**

PO Box 1120 **DG Hansen #2**

Hays, KS 67601

Job Ticket: 59479 **DST#: 1**

ATTN: Shane Vege

Test Start: 2022.02.26 @ 09:50:00

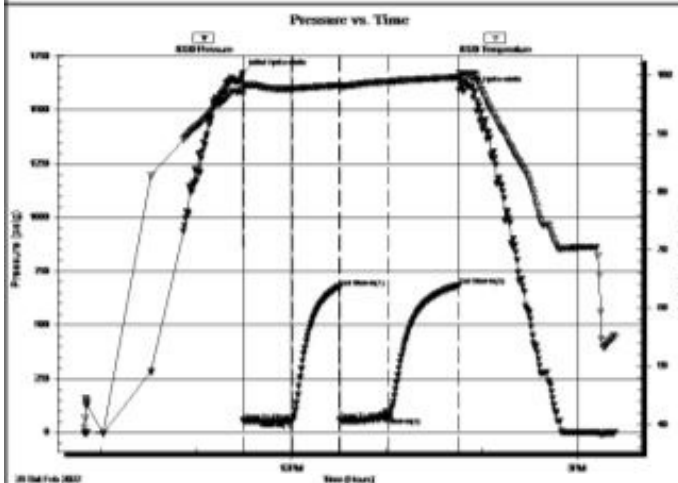
GENERAL INFORMATION:

Formation: **Lansing e-f**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 11:30:00
 Time Test Ended: 15:24:00
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Terry
 Unit No: 75
 Interval: **3378.00 ft (KB) To 3404.00 ft (KB) (TVD)**
 Total Depth: 3404.00 ft (KB) (TVD)
 Reference Elevations: 2091.00 ft (KB)
 2084.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: KB to GR/CF: 7.00 ft

Serial #: 8320

Press@RunDepth: 69.43 psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2022.02.26 End Date: 2022.02.26 Last Calib.: 1899.12.30
 Start Time: 09:50:05 End Time: 15:23:59 Time On Btm: 2022.02.26 @ 11:29:45
 Time Off Btm: 2022.02.26 @ 13:46:00

TEST COMMENT: if-5 inches died to 1 inch
 isi-no return
 ff- no blow
 fsi-no blow



PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1672.31	97.68	Initial Hydro-static
1	53.32	96.82	Open To Flow (1)
31	51.84	97.77	Shut-in(1)
61	675.16	98.33	End Shut-in(1)
61	56.63	98.07	Open To Flow (2)
92	69.43	98.98	Shut-in(2)
136	684.22	99.73	End Shut-in(2)
137	1592.26	100.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	100% mud with a few oil spots in tool	0.39

Gas Rates

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

Trilobite Testing, Inc

Ref. No: 59479

Printed: 2022.02.26 @ 16:19:42

DST #2 3451'-3510' (LKC I-K)

 TRILOBITE TESTING, INC	DRILL STEM TEST REPORT	
	Jasper Co PO Box 1120 Hays, KS 67601 ATTN: Shane Vege	11-6-20w DG Hansen #2 Job Ticket: 59480 DST#: 2 Test Start: 2022.02.27 @ 02:35:00

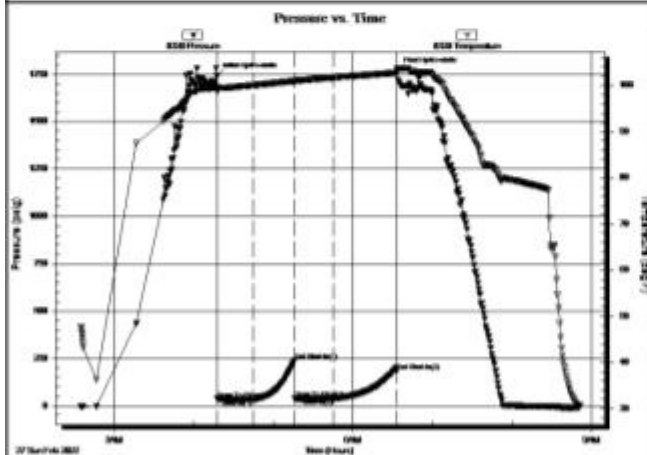
GENERAL INFORMATION:

Formation: **lansing j-k**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 04:17:45 Tester: Terry
 Time Test Ended: 08:50:45 Unit No: 75
 Interval: **3451.00 ft (KB) To 3510.00 ft (KB) (TVD)** Reference Elevations: 2091.00 ft (KB)
 Total Depth: 3404.00 ft (KB) (TVD) 2084.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: KB to GR/CF: 7.00 ft

Serial #: 8320

Press@RunDepth: 38.51 psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2022.02.27 End Date: 2022.02.27 Last Calib.: 1899.12.30
 Start Time: 02:35:05 End Time: 08:50:44 Time On Btm: 2022.02.27 @ 04:17:30
 Time Off Btm: 2022.02.27 @ 06:33:30

TEST COMMENT: if- 30 min -w eak blow
 is-30 min -no return
 ff- 30 min no blow
 fsi- 45 min - no blow



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1740.84	99.58	Initial Hydro-static
1	36.81	98.56	Open To Flow (1)
28	35.84	100.07	Shut-in(1)
59	238.23	100.99	End Shut-in(1)
59	40.14	100.91	Open To Flow (2)
88	38.51	101.75	Shut-in(2)
136	184.24	102.76	End Shut-in(2)
136	1772.42	103.49	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
5.00	mud	0.02

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

* Recovery from multiple tests

Trilobite Testing, Inc

Ref. No: 59480

Printed: 2022.02.27 @ 09:49:34

DST #3 3507'-3560' (GORHAM SAND)

 TRILOBITE TESTING, INC	DRILL STEM TEST REPORT	



TRILOBITE TESTING, INC

Jaspar Co
 PO Box 1120
 Hays, KS 67601
 ATTN: Shane Vege

11-6-20w
DG Hansen #2
 Job Ticket: 59481 **DST#: 3**
 Test Start: 2022.02.27 @ 17:45:14

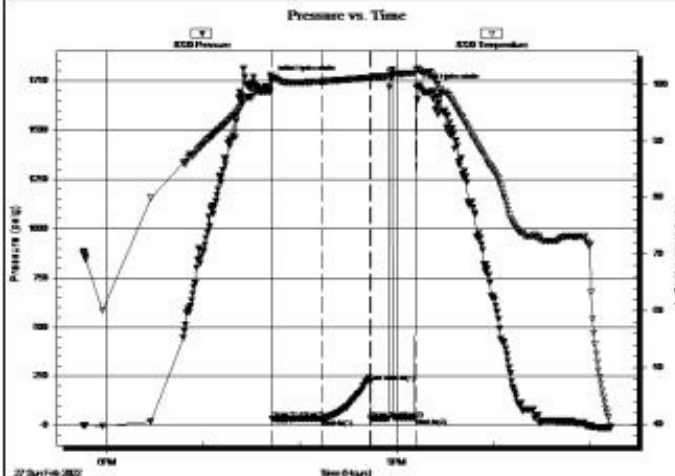
GENERAL INFORMATION:

Formation: **reagan sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:42:54
 Time Test Ended: 23:13:23
 Interval: **3507.00 ft (KB) To 3560.00 ft (KB) (TVD)**
 Total Depth: 3560.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Poor
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Terry
 Unit No: 75
 Reference Elevations: 2091.00 ft (KB)
 2084.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8320

Press@RunDepth: 35.24 psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2022.02.27 End Date: 2022.02.27 Last Calib.: 1899.12.30
 Start Time: 17:45:14 End Time: 23:13:23 Time On Btm: 2022.02.27 @ 19:42:39
 Time Off Btm: 2022.02.27 @ 21:12:09

TEST COMMENT: if-30- weak surface blow - died
 is- 30 -no return
 ff- 10 flushed tool tripped out



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1760.69	101.55	Initial Hydro-static
1	34.60	101.04	Open To Flow (1)
31	35.24	100.48	Shut-In(1)
61	221.05	101.12	End Shut-In(1)
62	35.84	101.11	Open To Flow (2)
89	40.39	101.95	Shut-In(2)
90	1714.80	102.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud	0.02

Gas Rates

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

* Recovery from multiple tests

Trilobite Testing, Inc

Ref. No: 59481

Printed: 2022.02.28 @ 07:03:48

DST #4 3506'-3566' (REAGAN SAND)



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Jaspar Co
 PO Box 1120
 Hays, KS 67601
 ATTN: Shane Vege

11-6-20w
DG Hansen #2
 Job Ticket: 59482 **DST#: 4**
 Test Start: 2022.02.28 @ 06:40:00

GENERAL INFORMATION:

Formation: **reagan sand**

Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:20:45
 Time Test Ended: 12:01:00

Test Type: Conventional Bottom Hole (Reset)
 Tester: Terry
 Unit No: 75

Interval: 3506.00 ft (KB) To 3560.00 ft (KB) (TVD)
 Total Depth: 3404.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 2091.00 ft (KB)
 2084.00 ft (CF)
 KB to GR/CF: 7.00 ft

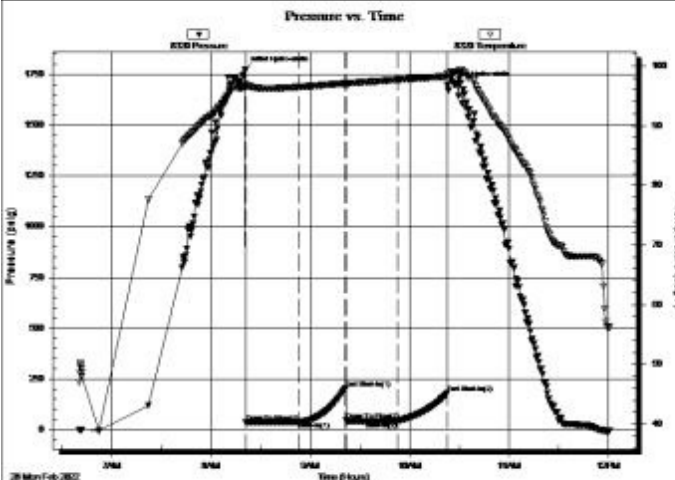
Serial #: 8320

Outside

Press@RunDepth: 43.32 psig @ 3514.00 ft (KB)
 Start Date: 2022.02.28 End Date: 2022.02.28
 Start Time: 06:40:05 End Time: 12:00:59

Capacity: 8000.00 psig
 Last Calib.: 2022.02.28
 Time On Btm: 2022.02.28 @ 08:20:30
 Time Off Btm: 2022.02.28 @ 10:23:00

TEST COMMENT: if-30-1/4 inch blow
 isi-30-no return
 ff-30-no return
 fsi-30- no return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1773.81	97.01	Initial Hydro-static
1	37.95	96.51	Open To Flow (1)
33	38.99	96.48	Shut-In(1)
61	203.72	97.09	End Shut-In(1)
61	43.94	97.02	Open To Flow (2)
93	43.32	97.69	Shut-In(2)
123	180.65	98.26	End Shut-In(2)
123	1700.31	98.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	ocm 10%oil 90%mud	0.05

* Recovery from multiple tests

Gas Rates

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

Trilobite Testing, Inc

Ref. No: 59482

Printed: 2022.02.28 @ 13:47:05

DST #5 3505'-3569' (REAGAN SAND)



DRILL STEM TEST REPORT

Jaspar Co
 PO Box 1120
 Hays, KS 67601
 ATTN: Shane Vege

11-6-20w
 DG Hansen #2
 Job Ticket: 59483 DST#: 5
 Test Start: 2022.02.28 @ 17:35:00

GENERAL INFORMATION:

Formation:
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:25:15
 Time Test Ended: 01:06:15

Test Type: Conventional Bottom Hole (Reset)
 Tester: Terry
 Unit No: 75

Interval: 3505.00 ft (KB) To 3569.00 ft (KB) (TVD)
 Total Depth: 3404.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition:

Reference Elevations: 2091.00 ft (KB)
 2084.00 ft (CF)
 KB to GR/CF: 7.00 ft

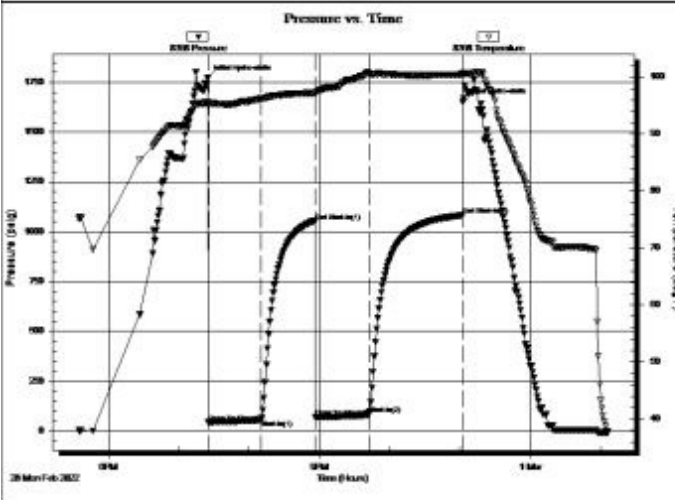
Serial #: 8368

Press@RunDepth: 85.64 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.02.28 End Date: 2022.03.01 Last Calib.: 2022.03.01
 Start Time: 17:35:05 End Time: 01:06:14 Time On Btm: 2022.02.28 @ 19:25:00
 Time Off Btm: 2022.02.28 @ 23:02:30

TEST COMMENT: If-45-21/2 inch blow
 IsI-45-no return
 ff-45-11/2 inch blow
 fsi-60-no return



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1770.55	95.67	Initial Hydro-static
1	41.77	94.86	Open To Flow (1)
45	55.13	96.29	Shut-In(1)
91	1050.02	97.26	End Shut-In(1)
92	67.91	96.87	Open To Flow (2)
138	85.64	100.54	Shut-In(2)
218	1082.62	100.47	End Shut-In(2)
218	1650.36	100.68	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
80.00	ocm	0.39

* Recovery from multiple tests


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

Trilobite Testing, Inc

Ref. No: 59483

Printed: 2022.03.01 @ 07:10:06

DST #6 3508'-3571' (REAGAN SAND)

 TRILOBITE TESTING, INC	DRILL STEM TEST REPORT	
	Jaspar Co PO Box 1120 Hays, KS 67601 ATTN: Shane Vege	11-6-20w DG Hansen #2 Job Ticket: 59484 DST#: 6 Test Start: 2022.03.01 @ 07:30:00

GENERAL INFORMATION:

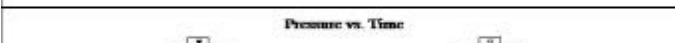
Formation: Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 09:10:45 Tester: Terry
 Time Test Ended: 14:12:00 Unit No: 75

Interval: 3508.00 ft (KB) To 3571.00 ft (KB) (TVD) Reference Elevations: 2091.00 ft (KB)
 Total Depth: 3404.00 ft (KB) (TVD) 2084.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 7.00 ft

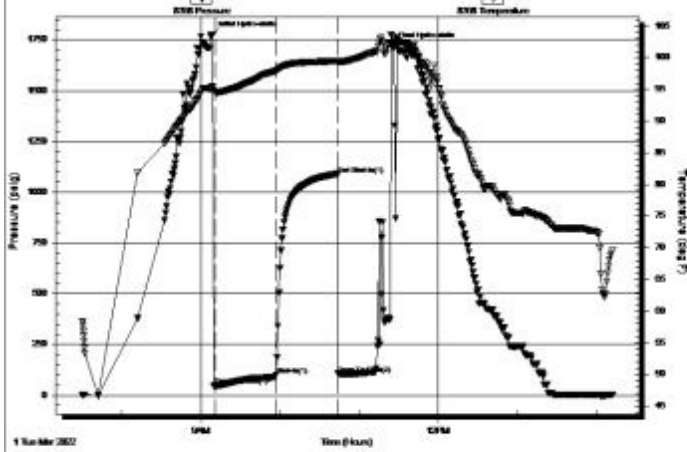
Serial #: 8368

Press@RunDepth: 100.89 psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2022.03.01 End Date: 2022.03.01 Last Calib.: 2022.03.01
 Start Time: 07:30:05 End Time: 14:11:59 Time On Btm: 2022.03.01 @ 09:09:00
 Time Off Btm: 2022.03.01 @ 11:25:00

TEST COMMENT: If-45-10 1/2 inches
 IsI-45-no return
 ff-9 inches then packer failure with about 10 minutes left (35 min in)



PRESSURE SUMMARY			
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Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1773.76	95.30	Initial Hydro-static
2	46.52	94.55	Open To Flow (1)
48	100.89	97.94	Shut-In(1)
95	1088.14	99.49	End Shut-In(1)
95	106.27	99.23	Open To Flow (2)
136	1717.77	103.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	ocm 10%oil 90%mud	2.43
550.00	ocm	7.84

* Recovery from multiple tests

Gas Rates

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

Trilobite Testing, Inc

Ref. No: 59484

Printed: 2022.03.01 @ 14:43:30

ANHYDRITE



ROCK TYPES

	Lmst fw7> shale, gry		Carbon Sh shale, red		Ss		SsPebblely
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ACCESSORIES

MINERAL

- ▲ Chert, dark
- Sandy

FOSSIL

- F Fossils < 20%
- φ Oolite

STRINGER

- red shale

TEXTURE

- C Chalky

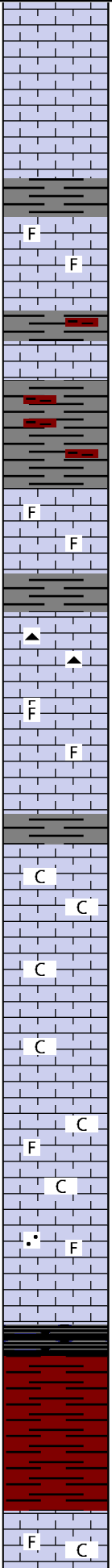
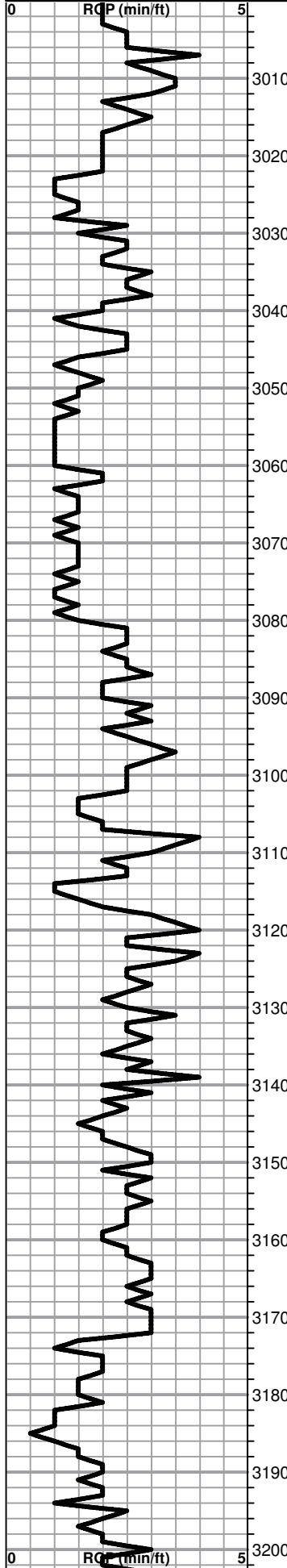
Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)

Curve Track #1	Depth Intervals	DST	Lithology	Oil Show	Geological Descriptions	Curve Track #3
ROP (min/ft)						

Cored Interval
DST Interval

1:240 Imperial

1:240 Imperial



1' DRILL TIME FROM 1670'-1730' FOR ANHYDRITE
1' DRILL TIME FROM 3000'-RTD
10' WET/DRY SAMPLES FROM 3050'-RTD

Lm- crm, fnxln, scat foss

Sh- gray, muddy

Sh- gray-red, muddy red wash

Lm- gray-crm, v.fnxln, scat foss

Lm- gray-tan, v.fnxln, cherty in prt

Lm- A/A, few scat foss

Lm- crm-gray, v.fnxln, chalky in prt

Lm- A/A

Lm- A/A?, very poor sample quality

Lm- wt, v.fnxln, few scat foss, chalky in prt

Lm- tan, fnxln, foss, sandy in prt

Sh- blk, carb

Sh- gray-red, muddy red wash

Lm- wt, fnxln, scat foss chalky

TOPEKA: SPL 3080' (-989) LOG 3076' (-985)

GEO ON LOCATION @ 10 A.M. 2/22/22

8 5/8" SURFACE CASING SET @ 222'

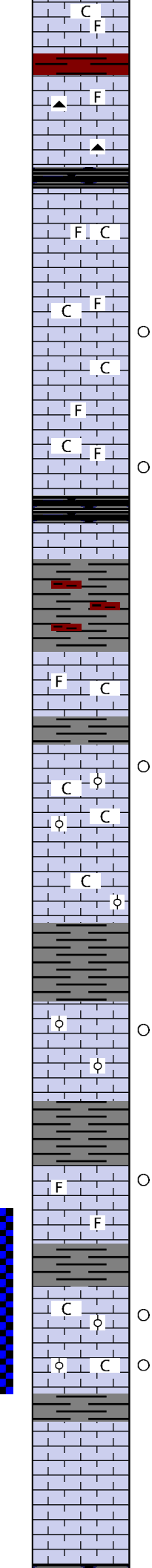
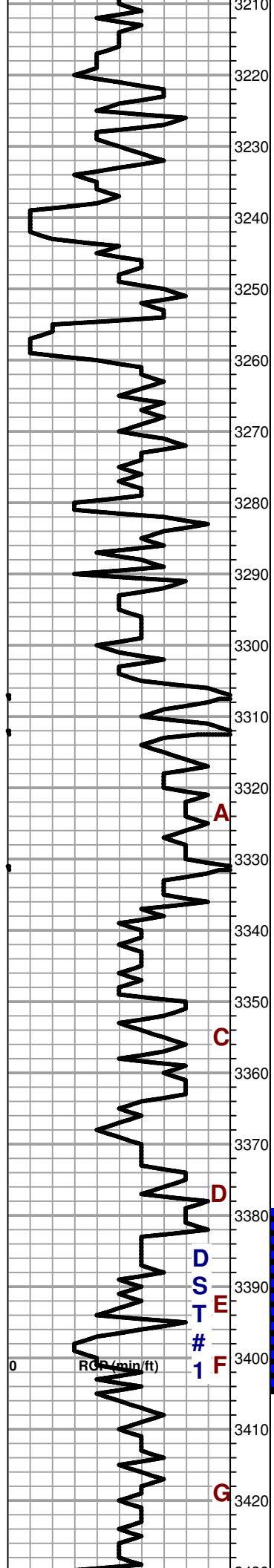
SURVEY @ 222' (1/2°)

DISPLACED @ 2681'

SHUT DOWN BECAUSE OF WEATHER @ 3142'

OFF LOCATION @ 2:30 P.M. 2/22/22

BACK ON LOCATION @ 10:30 A.M. 2/25/22



Lm- A/A

Sh- red, muddy red wash
Chert- wt, pr spl quality

Lm- tan, fnxln, scat foss, scat tan chert

Sh- blk, carb

Lm- crm, fnxln, scat foss, chalky, few scat pcs v. pr inxln por, NSO

Lm- crm- wt, fnxln, scat foss, chalky in prt, **scat pr ppt por, few scat pcs brn stn in pores, sli sheen FO in cup, lt odor**

Lm- crm, v.fnxln, cherty, chalky in prt

Lm- crm, v.fn-fnxln, scat foss, scat pr inxln-infoss por, **2-3 scat pcs brn stn in pores, no vis SFO, no odor**
HEEBNER: SPL 3279' (-1188) 3275' (-1184)

Sh- blk carb

Sh- gray-red, muddy red wash
TORONTO: SPL 3301' (-1210) LOG 3297' (-1206)

Lm- crm-tan, v.fn-fnxln, scat foss, chalky in prt, sli cherty, spl carried a lot of regrind
LKC: SPL 3314' (-1223) LOG 3311' (-1220)

Lm- crm-wt, v.fn-fnxln, oolitic in prt, chalky in prt, dense in prt, mostly barren, **few scat pcs v. pr inxln-ppt por, few pcs pr brn stn in pores, NSFO, mod odor**

Lm- crm-wt, v.fnxln, oolitic in prt, sli chalky, barren

Sh- gray-red, muddy red wash

Lm- crm, v.fn-fnxln, foss, oolitic in prt, **scat pr tight infoss por, few scat pcs pr lt brn stn in pores, NSFO, no odor**

Sh- gray-red, muddy red wash

Lm- crm- gray, fnxln, scat foss, dense, **scat pr tight inxln-infoss por, few scat pcs pr brn stn in pores, v. sli sheen FO upon crush, no odor**

Sh- brn

Lm- crm, v.fn-fnxln, chalky, oolitic, **few scat pcs pr tight infoss por, 2-3 pcs pr brn stn in pores, NSFO, no odor**

Lm- crm-wt, v.fn-fnxln, chalky in prt, oolitic in prt, scat mostly tight inxln-infoss por, **few scat pcs brn stn in pores, sli sheen FO upon crush, pr-no odor**

Lm- crm-tan, v.fn-fnxln, chalky in prt, scat foss, cherty in prt

Lm- A/A

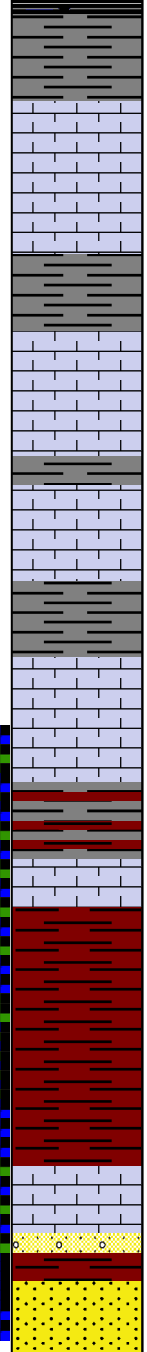
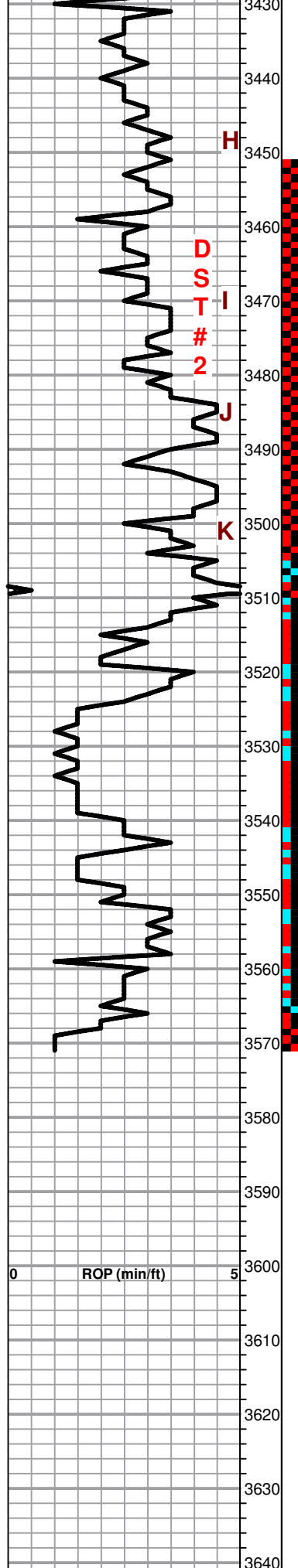
CFS @ 3332'

CFS @ 3383'

DST #1 (LKC E-F)
3378'-3404'
30-30-30-45
80' M w/ few O spots
SIP: 675-684#

STRAP 1.13' SHORT TO BOARD

CFS @ 3404'



Sh- blk, carb
 Chert- tan-wt, angular
 Sh- gray, clumpy
 Lm- off wt, v.fnxln, dense, scat brn-orange chert
 Lm- tan, v.fnxln, dense, scat foss
 Sh- gray-green
 Lm- crm, v.fnxln, chalky in prt, scat foss, scat tight pr inxln por, few scat pcs brn stn in pores, v. sli sheen FO upon crush and in cup, pr-no odor
 Lm- crm, v.fn-fnxln, mostly dense, scat tight inxln por, scat brn stn in pores, few pcs bled FO droplets upon crush, pr-no odor
 Lm- crm-wt, v.fn-fnxln, mostly barren, oolitic in prt, cherty, few scat pcs pr inxln por, 2-3 pcs w/ brn stn in pores, NSFO, no odor
 Lm- crm, v.fnxln, barren, chalky in prt
 Lm- crm, fnxln, oolitic, scat tight inoolitic-inxln por, few scat pcs w/ brn stn in pores, 1-2 scat pcs FO drops upon crush, no odor
 Sh- red silty
 Sh- A/A
 Lm- crm-wt, fnxln, oolitic, dense, scat chert, few scat pcs tight infoss por, 4-5 pcs w/ brn stn in pores, few pcs w/ FO droplets upon crush, no odor
 3558'- 60min- spl was 80% unconsolidated qtz Ss grns, mod well rounded, no vis clusters, FO droplets throughout spl, pr-no odor, muddy red wash
 3560'- unconsolidated Ss grns mixed w/ scat sandy oolitic lm, grns mod well rounded, few scat pcs of lm w/ pr inxln por, sli sheen FO upon crush, mod odor
 3563'- 30 MIN- most of spl was muddy & pr quality, found 2 Ss clusters, md-course grn, calcite cement, pr sorting, mod rounding, brn stn in pores SFO upon crush, sli odor
 3563'- 60MIN- lot of shale possibly just sluff, scat Ss clusters, mod sorting, mod rounding, calcite cement, brn stn in pores, SFO upon crush, sli odor
 3566'- 30MIN- Ss- clear, fn-course grn, qtz, mod rounding, mod sorting, friable in prt, calcite cement, brn sli sat stn, gd SFO in cup & spl, gas bubble when heated, gd odor
 3569'- A/A
 3571'-60MIN- A/A, fairly pr sorting and rounding

DST #2 (LKC I-K)
 3451'-3500'
 30-30-30-45
 5' M
 SIP: 238-184#

CFS @ 3510'
DST #3 (GORHAM SAND)
 3507'-3560'
 30-30-10
 5' M
 SIP: 221#
FLUSHED TOOL, PULLED TOOL 10min INTO 2ND OPEN

DST #4 (REAGAN SAND)
 3506'-3566'
 30-30-30-30
 10' OCM
 SIP: 203-180#

CFS @ 3558'
 CFS @ 3560'
 CFS @ 3563'
 CFS @ 3566'
 CFS @ 3569'
 CFS @ 3571'

DST #5 (REAGAN SAND)
 3505'-3569'
 45-45-45-60
 80' OCM
 SIP: 1050-1082#

DST #6 (REAGAN SAND)
 3508'-3571'
 45-45-45
 250' OCM (10% O)
 550' OCM
 SIP: 1088#
PACKER FAILED w/ 10 MIN LEFT IN 2ND OPEN, PULLED TOOL

SURVEY @ RTD (1/2°)

OFF LOCATION @ 4 P.M. 3/1/22

RTD: SPL: 3571 (-1480) LOG 3569' (-1478)

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 2972

Date	2-19-22	Sec.	11	Twp.	6	Range	20	County	Rooks	State	Ks	On Location		Finish	6:30 PM		
Lease	D.G. Hansen			Well No.	2		Location	Damar N to 24, 3N to Stop Sign IE, N to ERd, 2E to 5Rd, 3N, E/S 3 Battle grounds									
Contractor	STP					Owner		To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.									
Type Job	Surface					Charge To		Jasper									
Hole Size	12 1/4"			T.D.	222'		Street										
Csg.	8 5/8"			Depth	222'		City		State								
Tbg. Size				Depth			The above was done to satisfaction and supervision of owner agent or contractor.		8%								
Tool				Depth			Cement Amount Ordered		150 Corn 3% Cu 2% Gel								
Cement Left in Csg.	15'			Shoe Joint	15'		Meas Line		Displace 13 BLS								
EQUIPMENT													Common			120	
Pumptrk	17 No.		Cementer Helper		David		Poz. Mix		30								
Bulktrk	1 No.		Driver		Doug Clayton		Gel.		3								
Bulktrk	p.u. No.		Driver		Rick		Calcium		6								
JOB SERVICES & REMARKS													Hulls				
Remarks:													Salt				
Rat Hole													Flowseal				
Mouse Hole													Kol-Seal				
Centralizers													Mud CLR 48				
Baskets													CFL-117 or CD110 CAF 38				
D/V or Port Collar													Sand				
Cement did Circulate													Handling			159	
													Mileage				
													FLOAT EQUIPMENT				
													Guide Shoe				
													Centralizer				
													Baskets				
													AFU Inserts				
													Float Shoe				
													Latch Down				
													Pumptrk Charge			Surface	
													Mileage			61	
													Tax				
													Discount				
													Total Charge				
Signature													Todd E. Mudd				
													Thanks				

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "Quality" shall mean Quality Oilwell Cementing, Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

– **TERMS:** Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "QUALITY" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "QUALITY," refunded directly to "CUSTOMER." For purposes of this paragraph, QUALITY and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

– **ATTORNEY FEES:** In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the term of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limit to, a reasonable sum as and attorney's fees.

– **PRICES AND TAXES:** All merchandise listed in "QUALITY'S" current price shall schedule are F.O.B. QUALITY'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by QUALITY shall be added to the quoted prices charged to CUSTOMER.

– **TOWING CHARGES:** QUALITY will make a reasonable attempt to get to and from each job site using its own equipment. Should QUALITY be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by QUALITY, will be charged to and paid by CUSTOMER.

– **PREPARATION CHARGES:** If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay QUALITY for the expenses incurred by QUALITY as a result of the cancellation.

– **DEADHAUL CHARGES:** Unless otherwise specified on the front of this Contract, a deadhaul charges as set forth in QUALITY'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

– **SERVICE CONDITIONS AND LIABILITIES:** 1. QUALITY carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond QUALITY'S control, QUALITY shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless QUALITY, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with QUALITY'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of QUALITY or its employees.

2. With respect to any of QUALITY'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to QUALITY at the landing, CUSTOMER shall either recover the lost item without cost to QUALITY or reimburse QUALITY the current replacement cost of the item unless the loss or damage results from the sole negligence of QUALITY or its employees.

3. QUALITY does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. QUALITY warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. QUALITY'S obligation under this warranty is expressly limited to repair replacement, or allowance for credit, at its option, for any merchandise which is determined by QUALITY to be defective. THIS IS THE SOLE WARRANTY OF QUALITY AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and QUALITY shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be constructed as a warranty by QUALITY of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by QUALITY or any interpretation of test, meter readings, chart information, analysis or research, or recommendations made by QUALITY, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of QUALITY or its employees in the preparation or furnishing of such facts, information or data. (C) Work done by QUALITY shall be under the direct supervision and control of the CUSTOMER or his agent and QUALITY will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. 2718

Date	3-2-22	Sec.	11	Twp.	6	Range	20	County	ROOKS	State	KS	On Location		Finish	7:00 am
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Location Stockton N to ARd W to SRd

Lease	D G Hansen	Well No.	2	Owner	JS
Contractor	STP	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.			
Type Job	Long String	Charge To	JASPER		
Hole Size	7 7/8	T.D.	3571		
Csg.	5 1/2	Depth			
Tbg. Size		Depth			
Tool		Depth			
Cement Left in Csg.	42.40	Shoe Joint	42.40	The above was done to satisfaction and supervision of owner agent or contractor.	
Meas Line		Displace	83.84	Cement Amount Ordered	

500 mud flush 175# Cem 10% Salt
Common 175 5% GILSONITE

EQUIPMENT

Pumptrk	17	No.	Cementer	Bill	Poz. Mix
			Helper		
Bulktrk		No.	Driver	DAVID	Gel.
			Driver		
Bulktrk		No.	Driver	Doug	Calcium
			Driver		

JOB SERVICES & REMARKS

Remarks:		Hulls	
Rat Hole	30 bbl	Salt	15
Mouse Hole		Flowseal	
Centralizers		Kol-Seal	750 #
Baskets		Mud CLR 48	500 gal
D/V or Port Collar		CFL-117 or CD110 CAF-38	
Pipe set	e 3566	Sand	
Shoe Jts.	42.40	Handling	192
Insert	3523.60	Mileage	

FLOAT EQUIPMENT

Pump 500 gal		Guide Shoe	
Cem 145#		Centralizer	-7
pump plug w/ 83.8 bbls		Baskets	-6
Land plug e		AFU Inserts	
Float die hold		Float Shoe	-1
		Latch Down	-1
		Baffle	
		Port collar	
		Pumptrk Charge	prod string
		Mileage	61

Signature	Shane V. [Signature]	Tax	
		Discount	
		Total Charge	

Thanks

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SERVICE CONDITIONS AND LIABILITIES: 1. QUALITY carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond QUALITY'S control, QUALITY shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless QUALITY, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with QUALITY'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of QUALITY or its employees.

2. With respect to any of QUALITY'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to QUALITY at the landing, CUSTOMER shall either recover the lost item without cost to QUALITY or reimburse QUALITY the current replacement cost of the item unless the loss or damage results from the sole negligence of QUALITY or its employees.

3. QUALITY does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. QUALITY warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. QUALITY'S obligation under this warranty is expressly limited to repair replacement, or allowance for credit, at its option, for any merchandise which is determined by QUALITY to be defective. THIS IS THE SOLE WARRANTY OF QUALITY AND NO OTHER WARRANTY IS APPLICABLE; EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and QUALITY shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be constructed as a warranty by QUALITY of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by QUALITY or any interpretation of test, meter readings, chart information, analysis or research, or recommendations made by QUALITY, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of QUALITY or its employees in the preparation or furnishing of such facts, information or data. (C) Work done by QUALITY shall be under the direct supervision and control of the CUSTOMER or his agent and QUALITY will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

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

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

No. **2760**

Date 4-11-22	Sec.	Twp.	Range	County ROCKS	State KS	On Location	Finish
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Location **Stockton 9N 12W 4S**

Lease DG Hansen	Well No. 2	Owner To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.
Contractor Outlaw		
Type Job PORT collar		
Hole Size	T.D.	Charge To JASPER
Csg. 5 1/2	Depth	Street
Tbg. Size 2 3/8	Depth	City
Tool	Depth	State
Cement Left in Csg.	Shoe Joint	The above was done to satisfaction and supervision of owner agent or contractor.
		Cement Amount Ordered 400# QmDC

Meas Line Displace

EQUIPMENT				Common
Pumptrk 18	No.	Cementer Helper	BILL	200# QmDC
Bulktrk	No.	Driver	NICK	Poz. Mix
Bulktrk 19	No.	Driver	JORDAN	Gel.
		Driver		Calcium

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal 100#
Centralizers	Kol-Seal
Baskets	Mud CLR 48
DIV or Port Collar 2021 - Test c 800#	CFL-117 or CD110 CAF 38
pump test bobbles mud	Sand
open tool	Handling 400
EST CIR.	Mileage

FLOAT EQUIPMENT

Cent w/ 200#	Guide Shoe
Cent dnd Cir.	Centralizer
	Baskets
	AFU Inserts
	Float Shoe
	Latch Down

used 200#	Pumptrk Charge port collar Job
	Mileage 61

Signature Shane Velzy	Tax
	Discount
	Total Charge

Thanks

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "Quality" shall mean Quality Oilwell Cementing, Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

– **TERMS:** Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "QUALITY" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "QUALITY," refunded directly to "CUSTOMER." For purposes of this paragraph, QUALITY and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

– **ATTORNEY FEES:** In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the term of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limit to, a reasonable sum as and attorney's fees.

– **PRICES AND TAXES:** All merchandise listed in "QUALITY'S" current price shall schedule are F.O.B. QUALITY'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by QUALITY shall be added to the quoted prices charged to CUSTOMER.

– **TOWING CHARGES:** QUALITY will make a reasonable attempt to get to and from each job site using its own equipment. Should QUALITY be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by QUALITY, will be charged to and paid by CUSTOMER.

– **PREPARATION CHARGES:** If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay QUALITY for the expenses incurred by QUALITY as a result of the cancellation.

– **DEADHAUL CHARGES:** Unless otherwise specified on the front of this Contract, a deadhaul charges as set forth in QUALITY'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

– **SERVICE CONDITIONS AND LIABILITIES:** 1. QUALITY carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond QUALITY'S control, QUALITY shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless QUALITY, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with QUALITY'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of QUALITY or its employees.

2. With respect to any of QUALITY'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to QUALITY at the landing, CUSTOMER shall either recover the lost item without cost to QUALITY or reimburse QUALITY the current replacement cost of the item unless the loss or damage results from the sole negligence of QUALITY or its employees.

3. QUALITY does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. QUALITY warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. QUALITY'S obligation under this warranty is expressly limited to repair replacement, or allowance for credit, at its option, for any merchandise which is determined by QUALITY to be defective. THIS IS THE SOLE WARRANTY OF QUALITY AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and QUALITY shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be construed as a warranty by QUALITY of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by QUALITY or any interpretation of test, meter readings, chart information, analysis or research, or recommendations made by QUALITY, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of QUALITY or its employees in the preparation or furnishing of such facts, information or data. (C) Work done by QUALITY shall be under the direct supervision and control of the CUSTOMER or his agent and QUALITY will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Jaspar Co
PO Box 1120
Hays, KS 67601
ATTN: Shane Vege

11-6-20w
DG Hansen #2
Job Ticket: 59479 **DST#: 1**
Test Start: 2022.02.26 @ 09:50:00

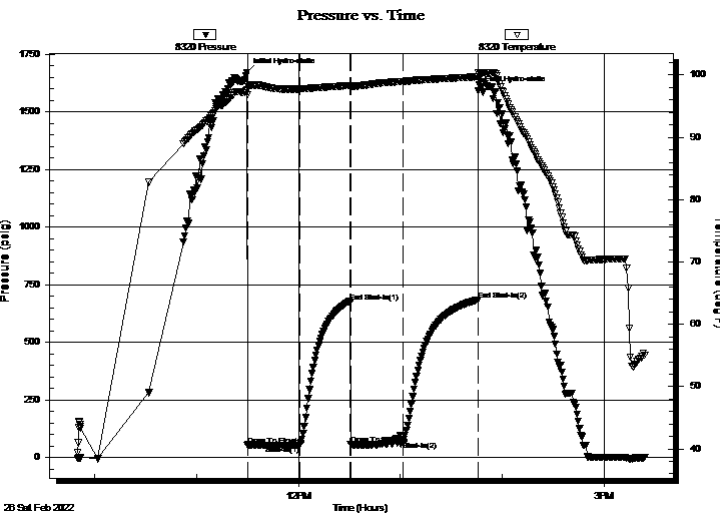
GENERAL INFORMATION:

Formation: **Lansing e-f**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 11:30:00
Time Test Ended: 15:24:00
Interval: **3378.00 ft (KB) To 3404.00 ft (KB) (TVD)**
Total Depth: 3404.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition:
Test Type: Conventional Bottom Hole (Initial)
Tester: Terry
Unit No: 75
Reference Elevations: 2091.00 ft (KB)
2084.00 ft (CF)
KB to GR/CF: 7.00 ft

Serial #: 8320

Press@RunDepth: 69.43 psig @ ft (KB) Capacity: 8000.00 psig
Start Date: 2022.02.26 End Date: 2022.02.26 Last Calib.: 1899.12.30
Start Time: 09:50:05 End Time: 15:23:59 Time On Btm: 2022.02.26 @ 11:29:45
Time Off Btm: 2022.02.26 @ 13:46:00

TEST COMMENT: if-5 inches died to 1 inch
isi-no return
ff- no blow
fsi-no blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1672.31	97.68	Initial Hydro-static
1	53.32	96.82	Open To Flow (1)
31	51.84	97.77	Shut-In(1)
61	675.16	98.33	End Shut-In(1)
61	56.63	98.07	Open To Flow (2)
92	69.43	98.98	Shut-In(2)
136	684.22	99.73	End Shut-In(2)
137	1592.26	100.31	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	100% mud w with a few oil spots in tool	0.39

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Jaspar Co

11-6-20w

PO Box 1120
Hays, KS 67601

DG Hansen #2

Job Ticket: 59479

DST#: 1

ATTN: Shane Vege

Test Start: 2022.02.26 @ 09:50:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length: ft

Water Salinity: ppm

Viscosity: 51.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.00 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
80.00	100% mud w ith a few oil spots in tool	0.393

Total Length: 80.00 ft Total Volume: 0.393 bbl

Num Fluid Samples: 0

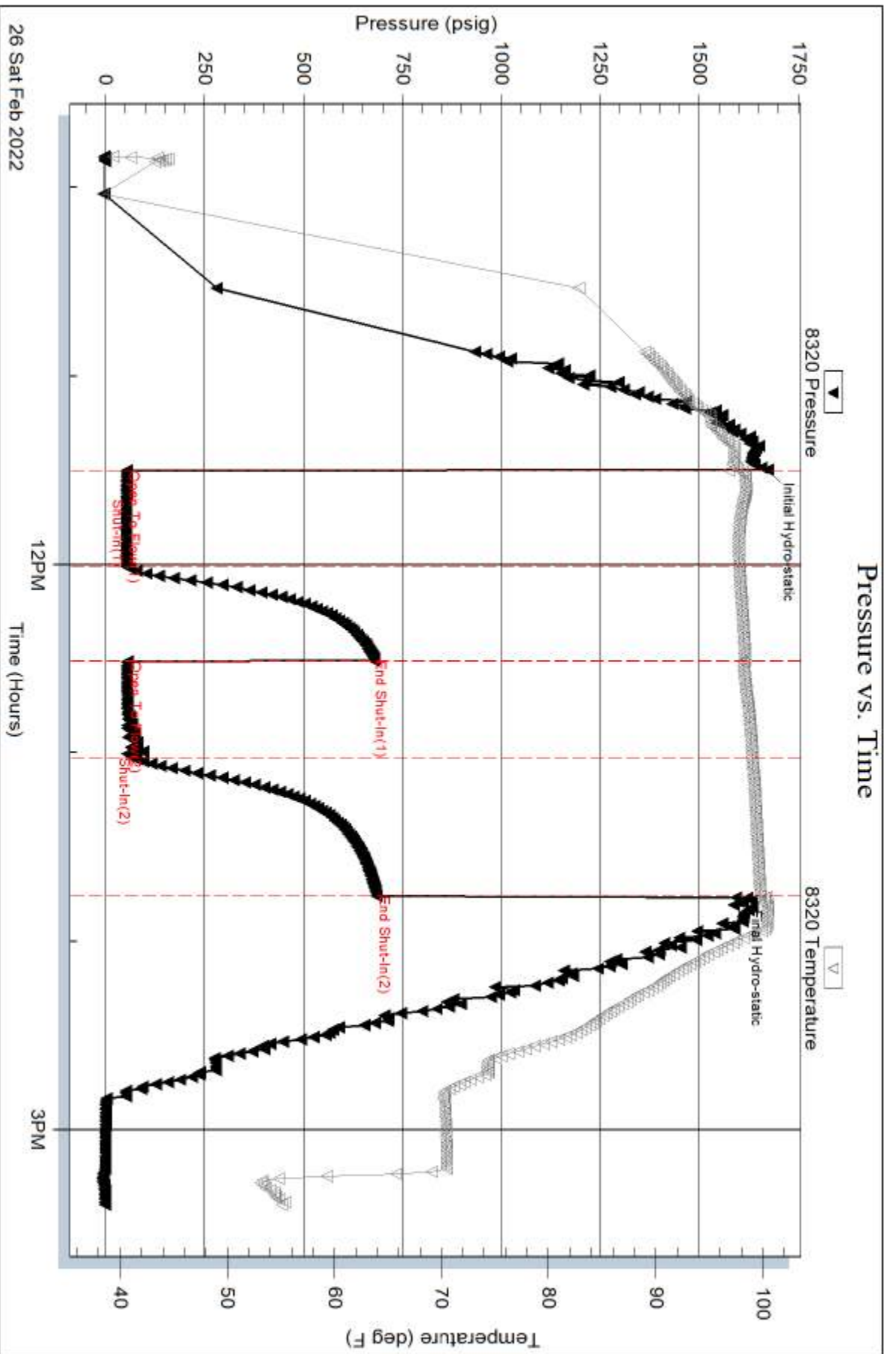
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

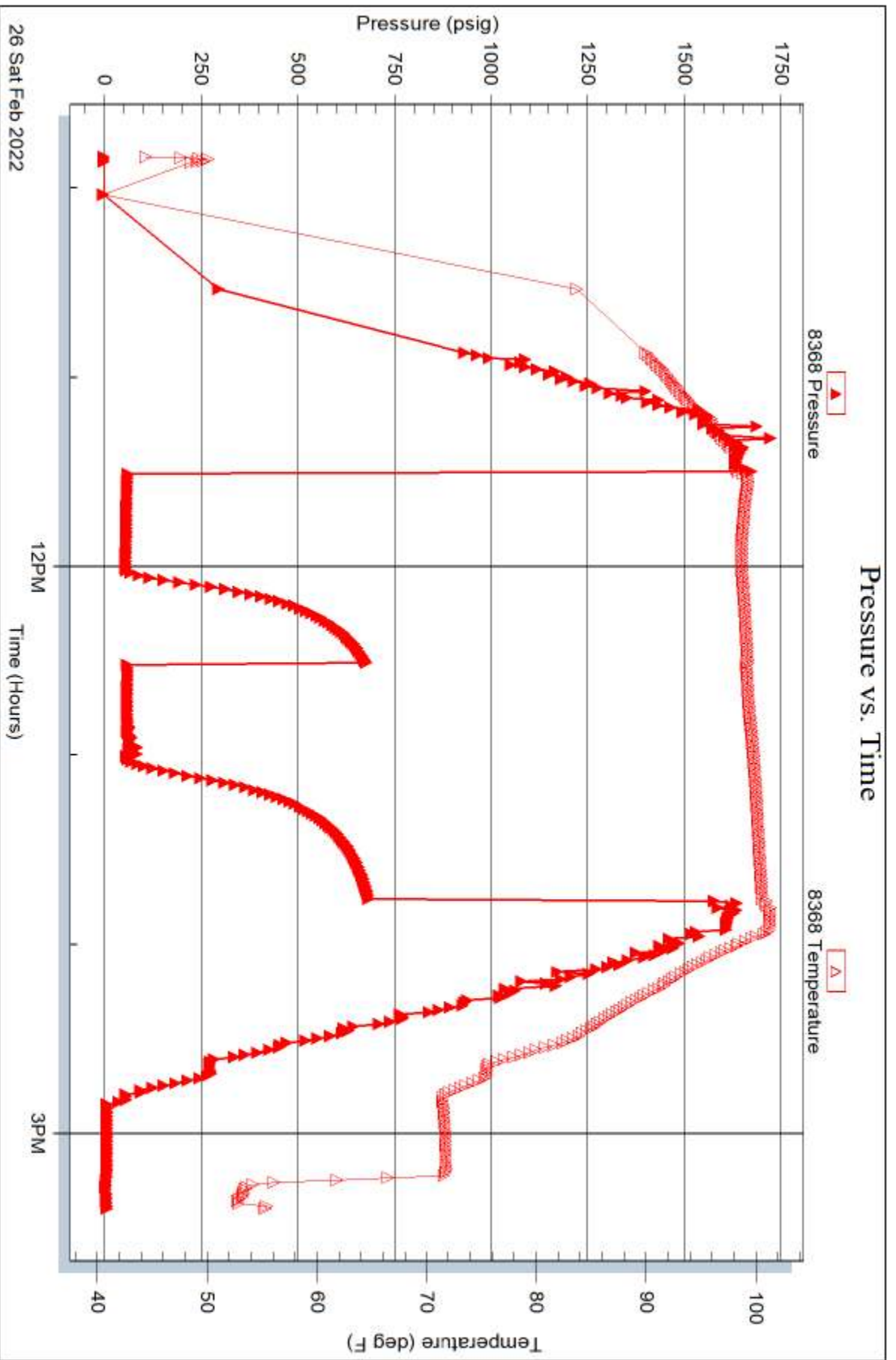


Serial #: 8368

Jaspar Co

DG Hansen #2

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 59479

Printed: 2022.02.26 @ 16:19:43



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Jaspar Co
 PO Box 1120
 Hays, KS 67601
 ATTN: Shane Vege

11-6-20w
DG Hansen #2
 Job Ticket: 59480 **DST#: 2**
 Test Start: 2022.02.27 @ 02:35:00

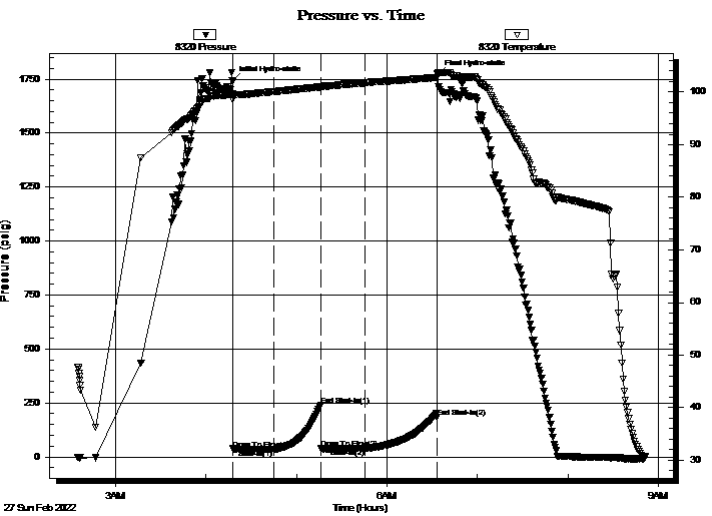
GENERAL INFORMATION:

Formation: **lansing j-k**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:17:45
 Time Test Ended: 08:50:45
 Interval: **3451.00 ft (KB) To 3510.00 ft (KB) (TVD)**
 Total Depth: 3404.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition:
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Terry
 Unit No: 75
 Reference Elevations: 2091.00 ft (KB)
 2084.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8320

Press@RunDepth: 38.51 psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2022.02.27 End Date: 2022.02.27 Last Calib.: 1899.12.30
 Start Time: 02:35:05 End Time: 08:50:44 Time On Btm: 2022.02.27 @ 04:17:30
 Time Off Btm: 2022.02.27 @ 06:33:30

TEST COMMENT: if- 30 min -w eak blow
 is-30 min -no return
 ff- 30 min no blow
 fsi- 45 min - no blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1740.84	99.58	Initial Hydro-static
1	36.81	98.56	Open To Flow (1)
28	35.84	100.07	Shut-In(1)
59	238.23	100.99	End Shut-In(1)
59	40.14	100.91	Open To Flow (2)
88	38.51	101.75	Shut-In(2)
136	184.24	102.76	End Shut-In(2)
136	1772.42	103.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud	0.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Jaspar Co

11-6-20w

PO Box 1120
Hays, KS 67601

DG Hansen #2

Job Ticket: 59480

DST#: 2

ATTN: Shane Vege

Test Start: 2022.02.27 @ 02:35:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length: ft

Water Salinity: ppm

Viscosity: 51.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.00 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

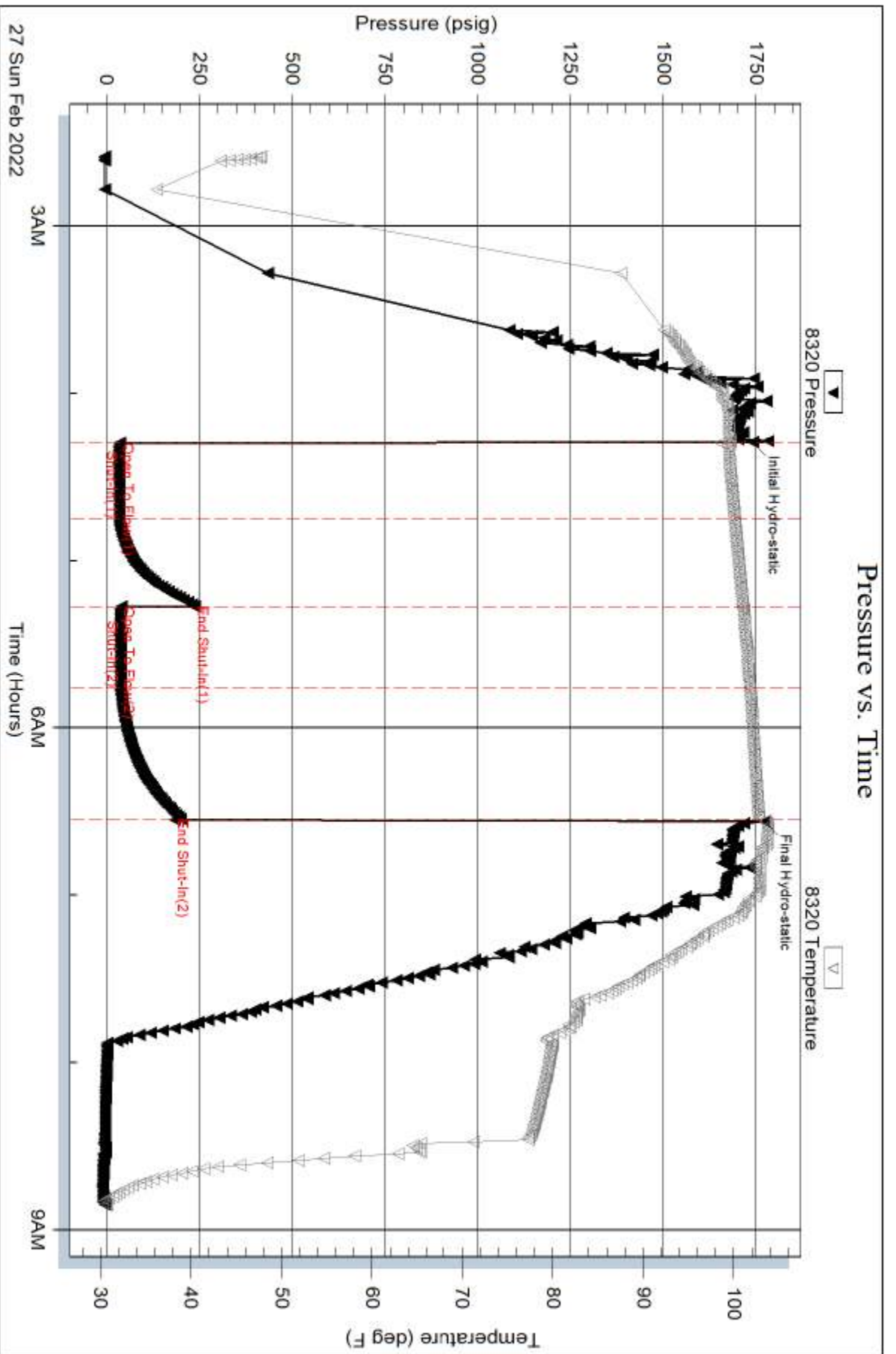
Num Gas Bombs: 0

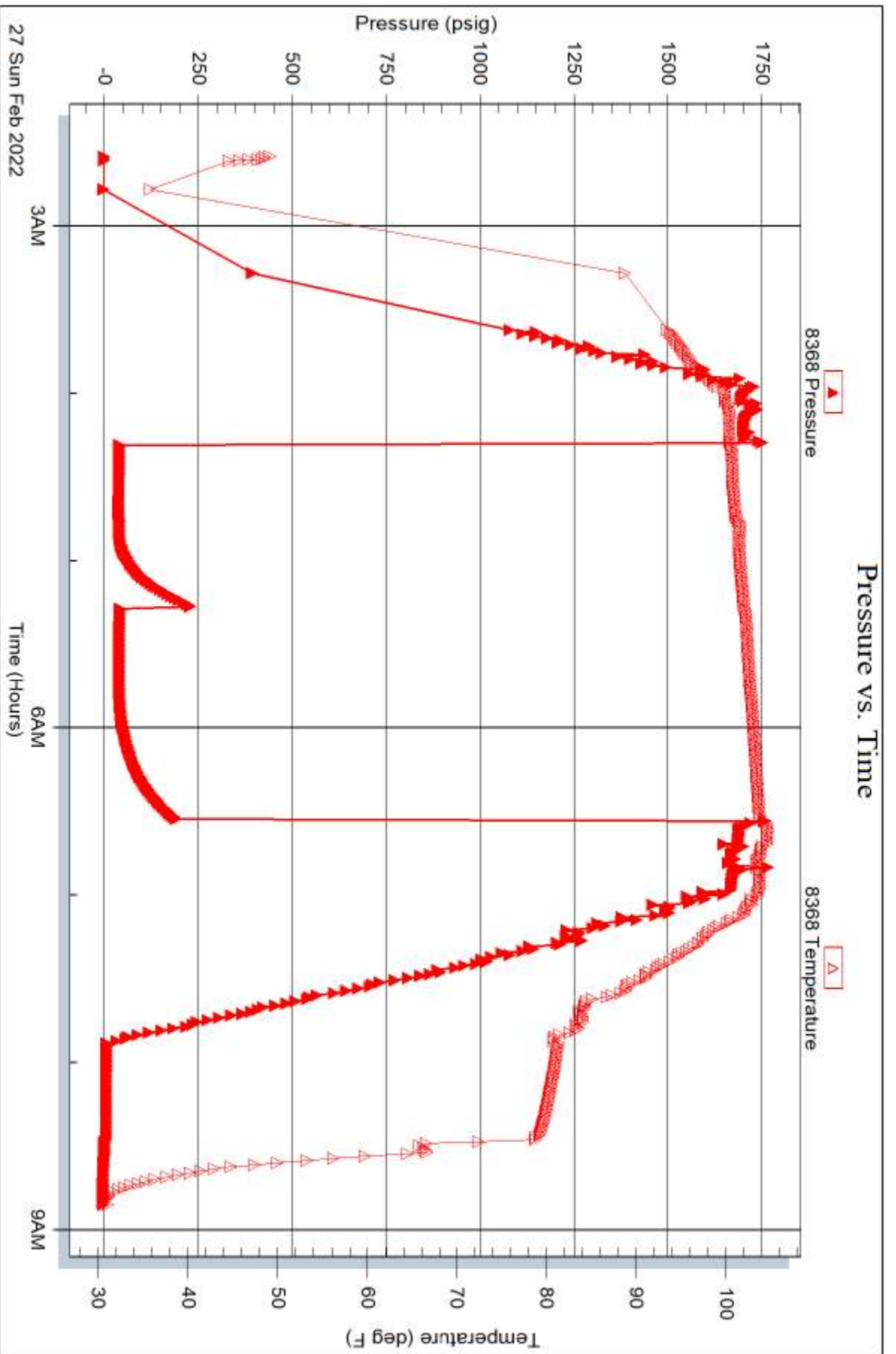
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Jaspar Co
 PO Box 1120
 Hays, KS 67601
 ATTN: Shane Vege

11-6-20w
DG Hansen #2
 Job Ticket: 59481 **DST#: 3**
 Test Start: 2022.02.27 @ 17:45:14

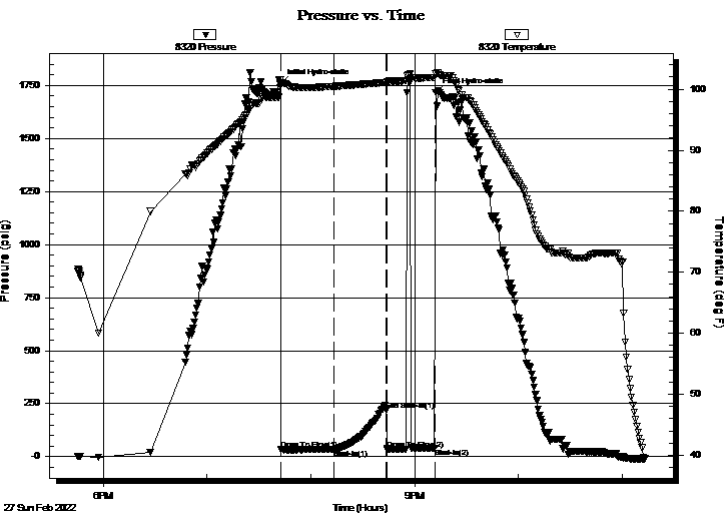
GENERAL INFORMATION:

Formation: **reagan sand**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 19:42:54
 Tester: Terry
 Time Test Ended: 23:13:23
 Unit No: 75
Interval: 3507.00 ft (KB) To 3560.00 ft (KB) (TVD)
 Reference Elevations: 2091.00 ft (KB)
 Total Depth: 3560.00 ft (KB) (TVD) 2084.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Poor KB to GR/CF: 7.00 ft

Serial #: 8320

Press@RunDepth: 35.24 psig @ ft (KB) Capacity: 8000.00 psig
 Start Date: 2022.02.27 End Date: 2022.02.27 Last Calib.: 1899.12.30
 Start Time: 17:45:14 End Time: 23:13:23 Time On Btm: 2022.02.27 @ 19:42:39
 Time Off Btm: 2022.02.27 @ 21:12:09

TEST COMMENT: if-30- weak surface blow - died
 is- 30 -no return
 ff- 10 flushed tool tripped out



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1760.69	101.55	Initial Hydro-static
1	34.60	101.04	Open To Flow (1)
31	35.24	100.48	Shut-In(1)
61	221.05	101.12	End Shut-In(1)
62	35.84	101.11	Open To Flow (2)
89	40.39	101.95	Shut-In(2)
90	1714.80	102.62	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	mud	0.02

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Jaspar Co

11-6-20w

PO Box 1120
Hays, KS 67601

DG Hansen #2

Job Ticket: 59481

DST#: 3

ATTN: Shane Vege

Test Start: 2022.02.27 @ 17:45:14

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length: ft

Water Salinity: ppm

Viscosity: 51.00 sec/qt

Cushion Volume: bbl

Water Loss: 8.00 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure: psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	mud	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

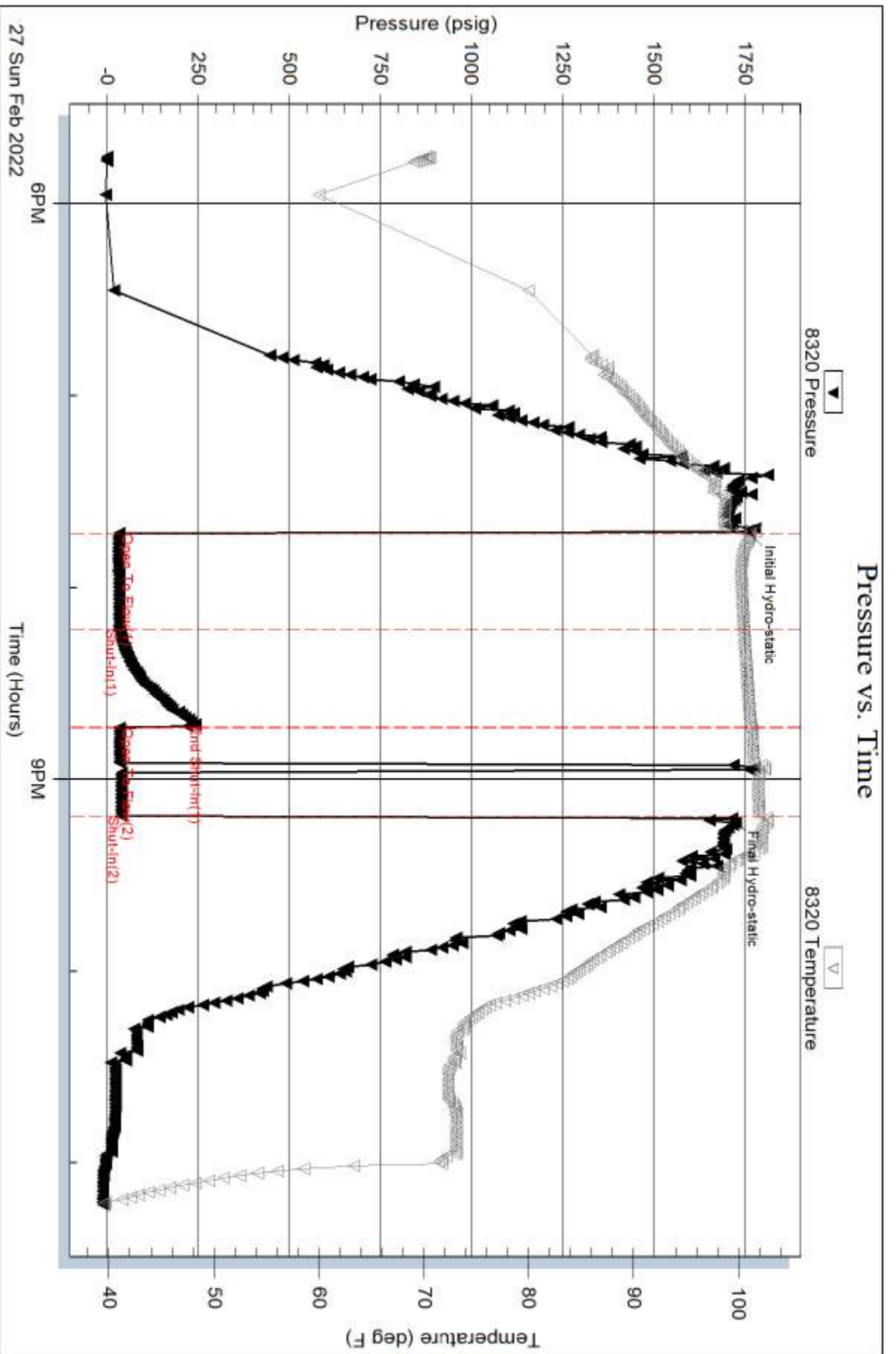
Num Gas Bombs: 0

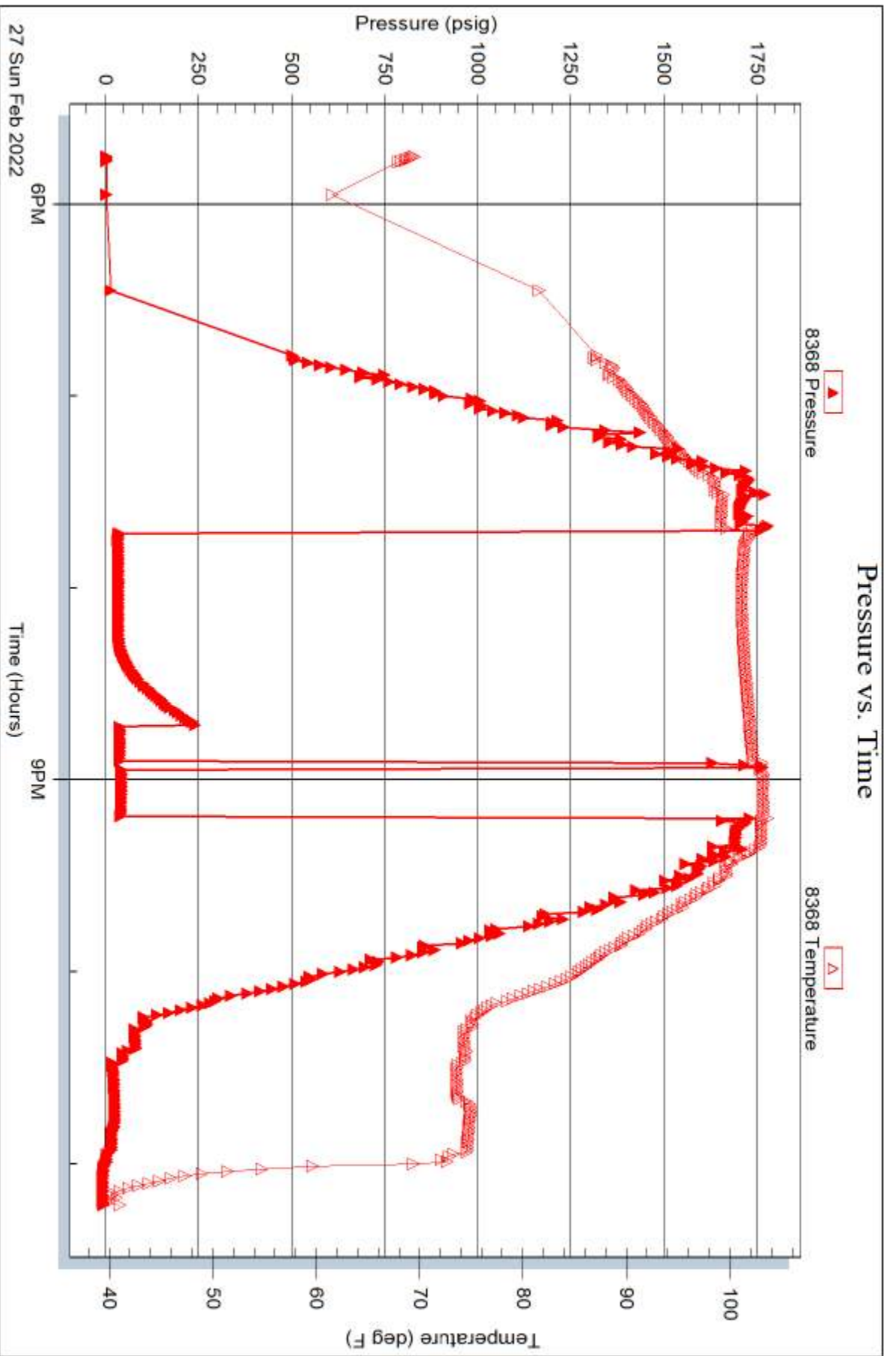
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:







TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Jaspar Co
 PO Box 1120
 Hays, KS 67601
 ATTN: Shane Vege

11-6-20w
DG Hansen #2
 Job Ticket: 59482 **DST#: 4**
 Test Start: 2022.02.28 @ 06:40:00

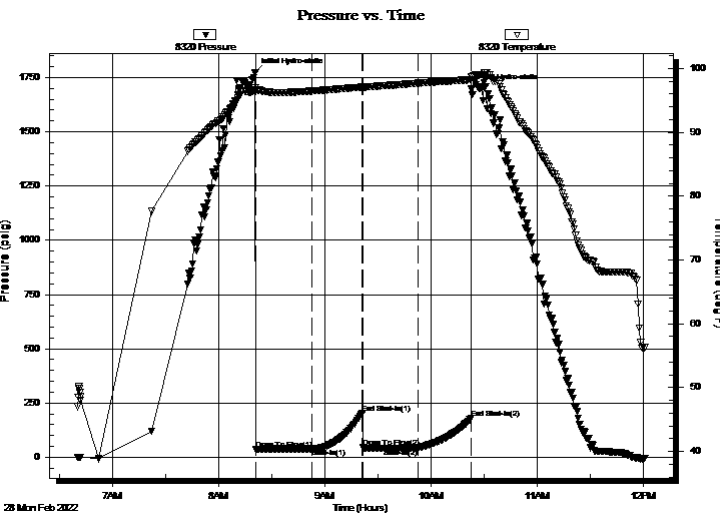
GENERAL INFORMATION:

Formation: **reagan sand**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 08:20:45
 Tester: Terry
 Time Test Ended: 12:01:00
 Unit No: 75
Interval: 3506.00 ft (KB) To 3560.00 ft (KB) (TVD)
 Reference Elevations: 2091.00 ft (KB)
 Total Depth: 3404.00 ft (KB) (TVD) 2084.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 7.00 ft

Serial #: 8320 Outside

Press@RunDepth: 43.32 psig @ 3514.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2022.02.28 End Date: 2022.02.28 Last Calib.: 2022.02.28
 Start Time: 06:40:05 End Time: 12:00:59 Time On Btm: 2022.02.28 @ 08:20:30
 Time Off Btm: 2022.02.28 @ 10:23:00

TEST COMMENT: if-30-1/4 inch blow
 isi-30-no return
 ff-30-no return
 fsi-30- no return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1773.81	97.01	Initial Hydro-static
1	37.95	96.51	Open To Flow (1)
33	38.99	96.48	Shut-In(1)
61	203.72	97.09	End Shut-In(1)
61	43.94	97.02	Open To Flow (2)
93	43.32	97.69	Shut-In(2)
123	180.65	98.26	End Shut-In(2)
123	1700.31	98.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	ocm 10%oil 90%mud	0.05

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Jaspar Co

11-6-20w

PO Box 1120
Hays, KS 67601

DG Hansen #2

Job Ticket: 59482

DST#: 4

ATTN: Shane Vege

Test Start: 2022.02.28 @ 06:40:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.00 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	ocm 10%oil 90%mud	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

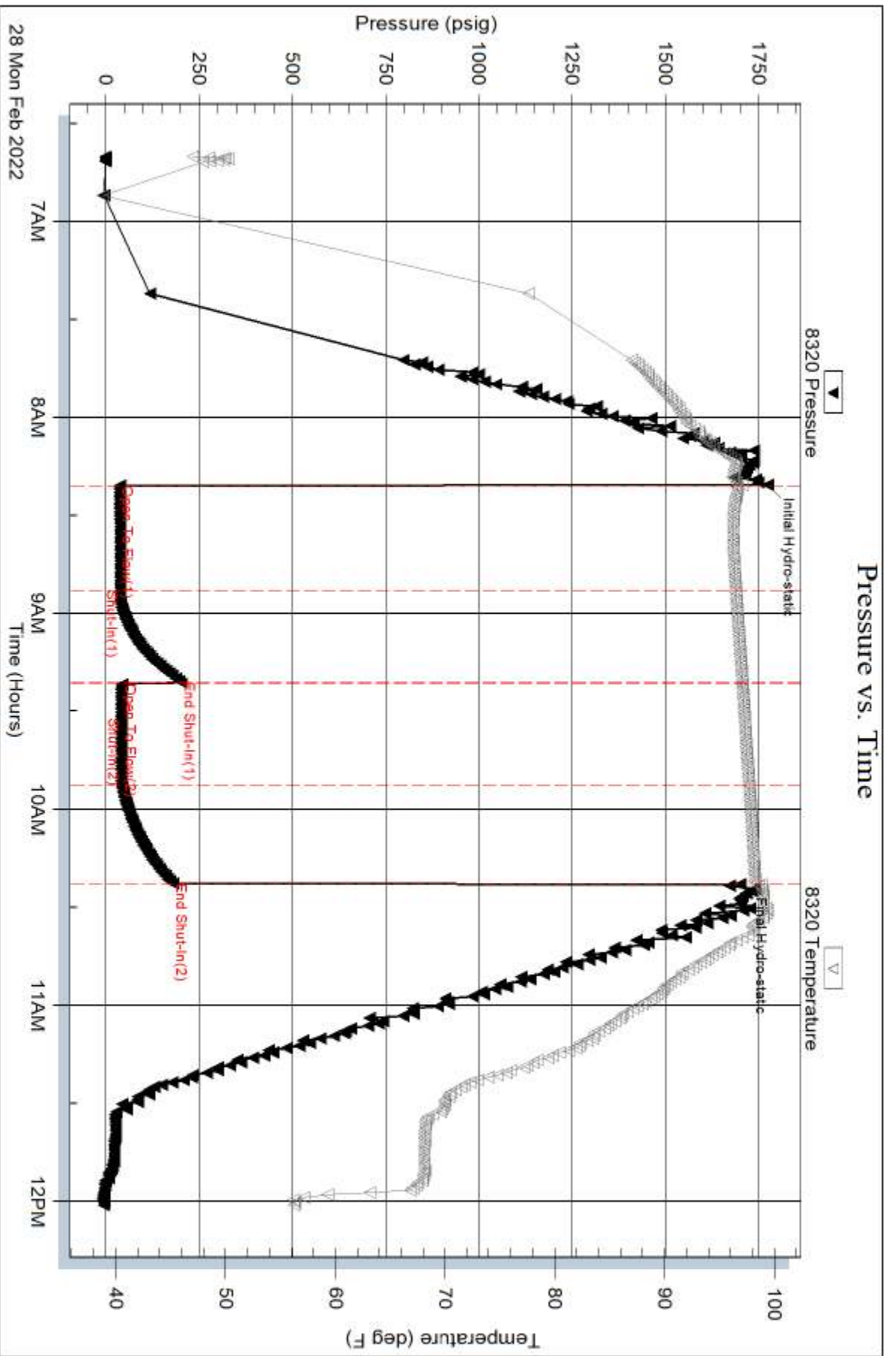
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

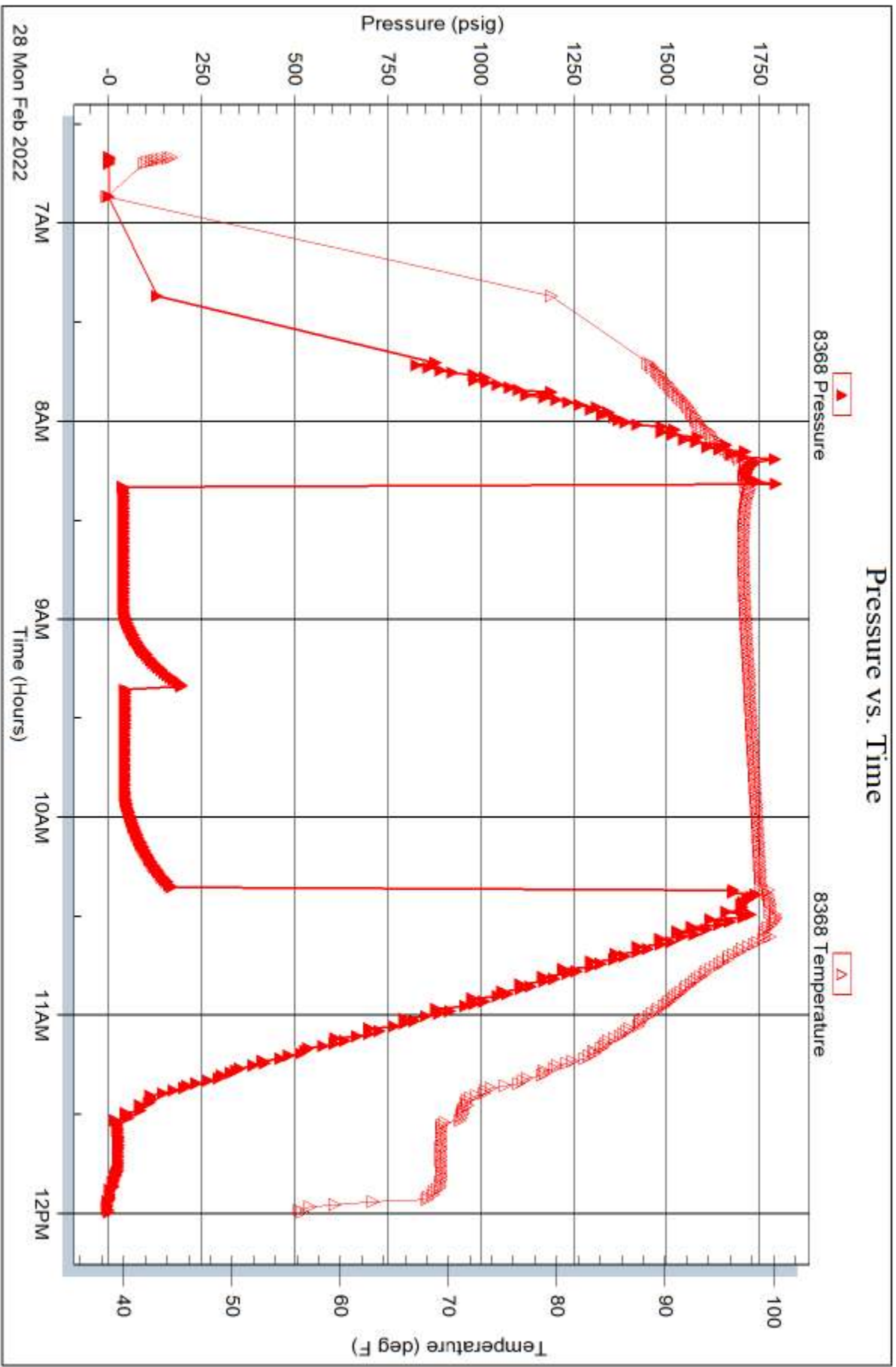


Serial #: 8368

Outside Jasper Co

DG Hansen #2

DST Test Number: 4





TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Jaspar Co
 PO Box 1120
 Hays, KS 67601
 ATTN: Shane Vege

11-6-20w
DG Hansen #2
 Job Ticket: 59483 **DST#: 5**
 Test Start: 2022.02.28 @ 17:35:00

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:25:15
 Time Test Ended: 01:06:15

Test Type: Conventional Bottom Hole (Reset)
 Tester: Terry
 Unit No: 75

Interval: 3505.00 ft (KB) To 3569.00 ft (KB) (TVD)
 Total Depth: 3404.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition:

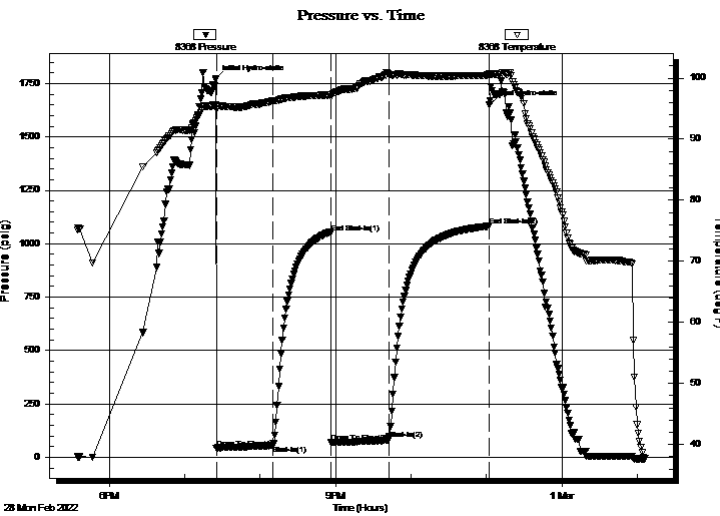
Reference Elevations: 2091.00 ft (KB)
 2084.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8368

Press@RunDepth: 85.64 psig @ ft (KB)
 Start Date: 2022.02.28 End Date: 2022.03.01
 Start Time: 17:35:05 End Time: 01:06:14

Capacity: 8000.00 psig
 Last Calib.: 2022.03.01
 Time On Btm: 2022.02.28 @ 19:25:00
 Time Off Btm: 2022.02.28 @ 23:02:30

TEST COMMENT: if-45-21/2 inch blow
 isi-45-no return
 ff-45-11/2 inch blow
 fsi-60-no return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1770.55	95.67	Initial Hydro-static
1	41.77	94.86	Open To Flow (1)
45	55.13	96.29	Shut-In(1)
91	1050.02	97.26	End Shut-In(1)
92	67.91	96.87	Open To Flow (2)
138	85.64	100.54	Shut-In(2)
218	1082.62	100.47	End Shut-In(2)
218	1650.36	100.68	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
80.00	ocm	0.39

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Jaspar Co

11-6-20w

PO Box 1120
Hays, KS 67601

DG Hansen #2

Job Ticket: 59483

DST#: 5

ATTN: Shane Vege

Test Start: 2022.02.28 @ 17:35:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.00 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbf
80.00	ocm	0.393

Total Length: 80.00 ft Total Volume: 0.393 bbf

Num Fluid Samples: 0

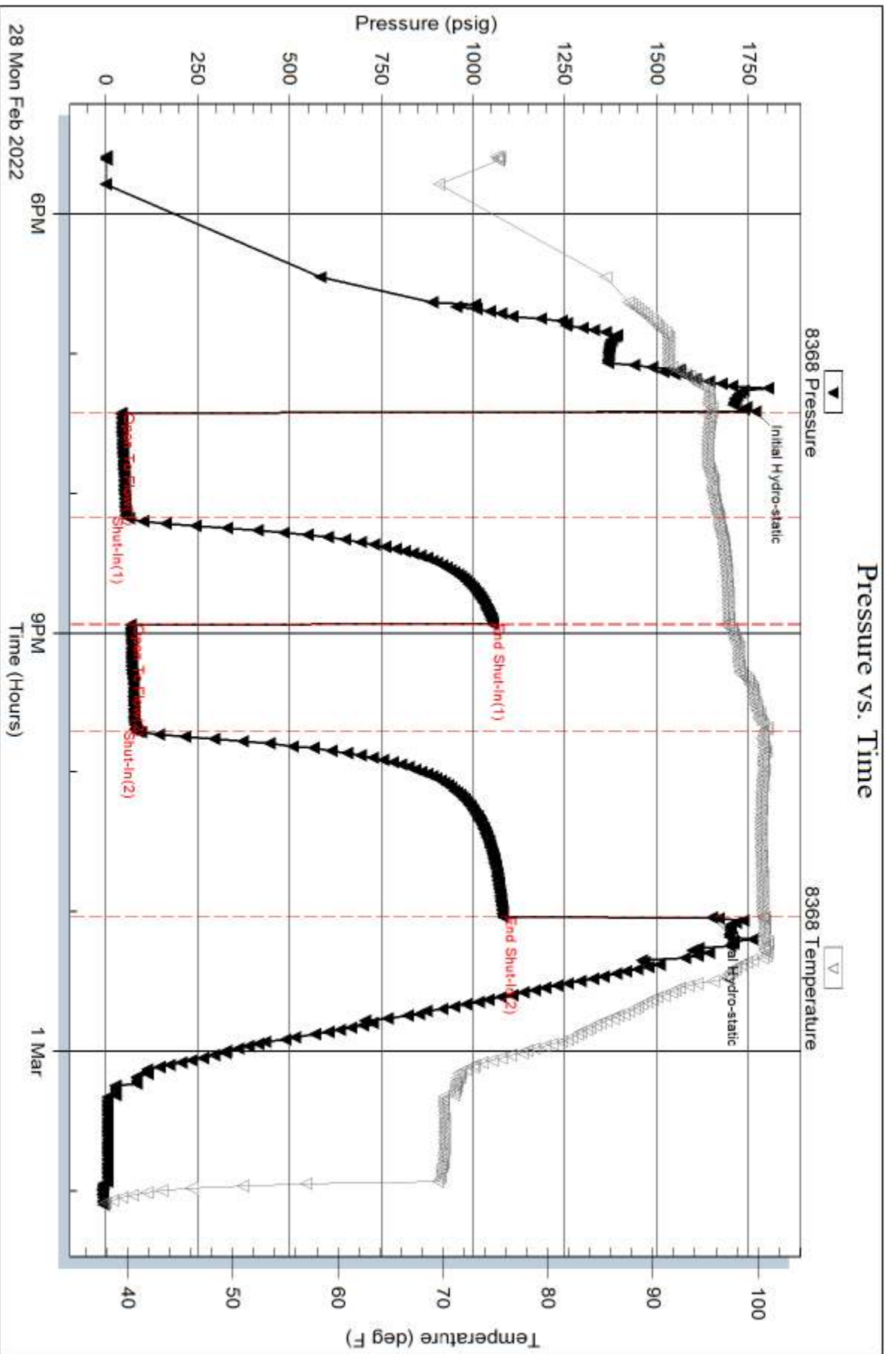
Num Gas Bombs: 0

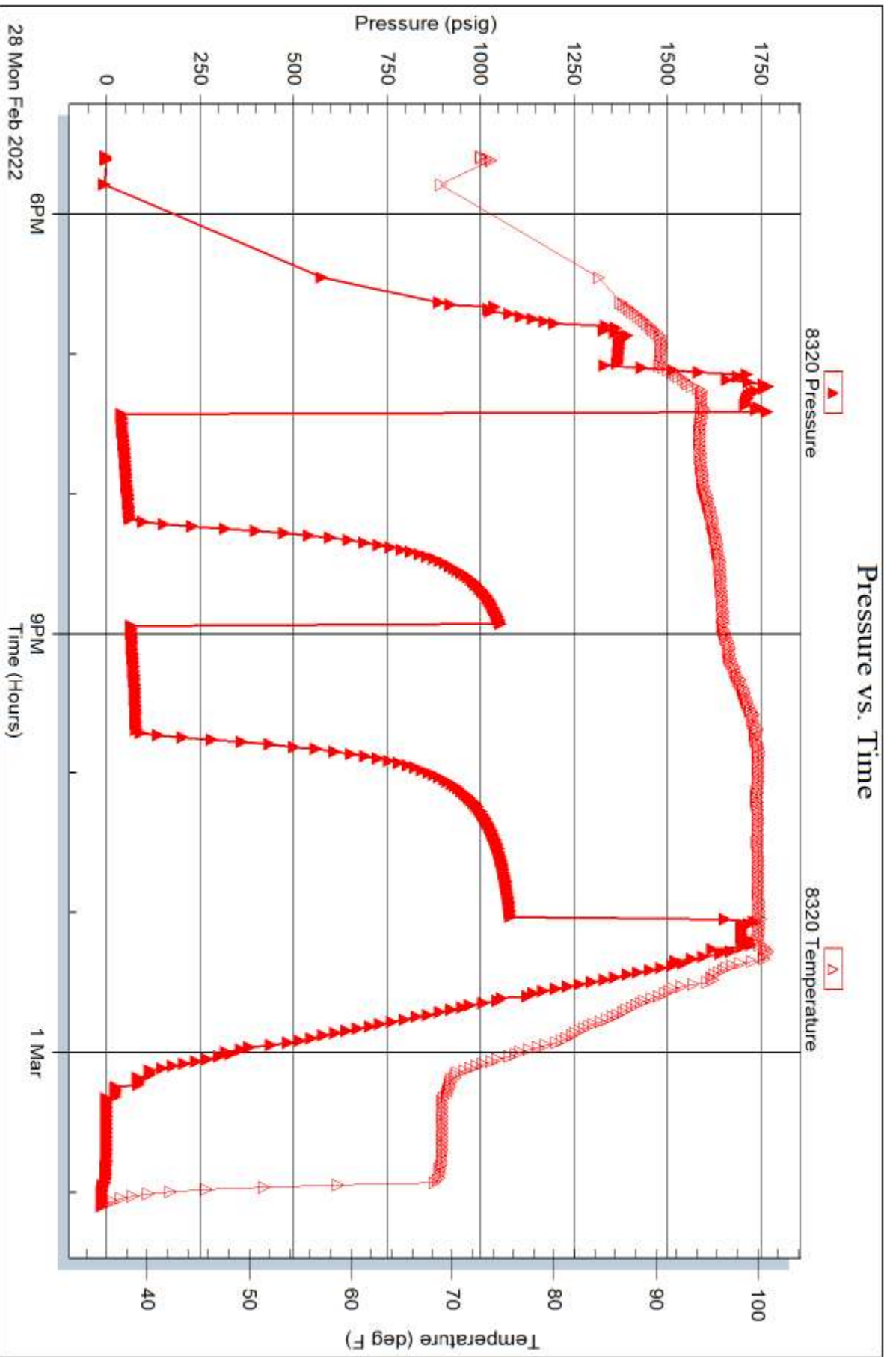
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 10% OIL 90%MUD







TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Jaspar Co
 PO Box 1120
 Hays, KS 67601
 ATTN: Shane Vege

11-6-20w
DG Hansen #2
 Job Ticket: 59484 **DST#: 6**
 Test Start: 2022.03.01 @ 07:30:00

GENERAL INFORMATION:

Formation:

Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:10:45
 Time Test Ended: 14:12:00

Test Type: Conventional Bottom Hole (Reset)
 Tester: Terry
 Unit No: 75

Interval: 3508.00 ft (KB) To 3571.00 ft (KB) (TVD)
 Total Depth: 3404.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

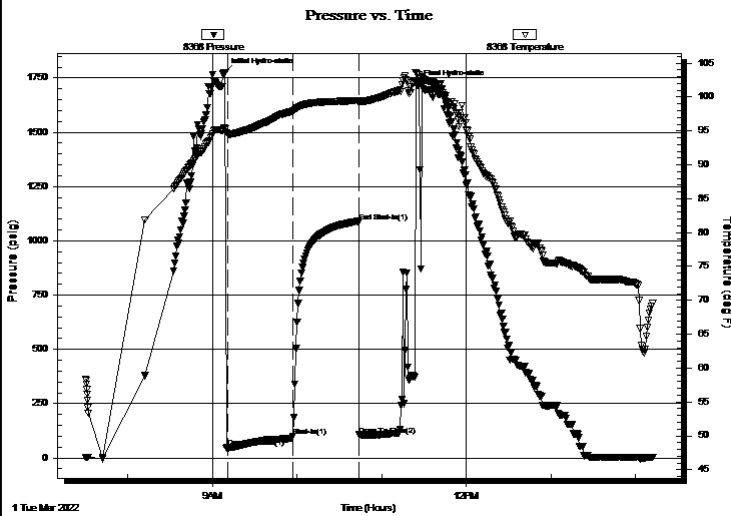
Reference Elevations: 2091.00 ft (KB)
 2084.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8368

Press@RunDepth: 100.89 psig @ ft (KB)
 Start Date: 2022.03.01 End Date: 2022.03.01
 Start Time: 07:30:05 End Time: 14:11:59

Capacity: 8000.00 psig
 Last Calib.: 2022.03.01
 Time On Btm: 2022.03.01 @ 09:09:00
 Time Off Btm: 2022.03.01 @ 11:25:00

TEST COMMENT: if-45-101/2 inches
 isi-45-no return
 ff-9 inches then packer failure with about 10 minutes left (35 min in)



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1773.76	95.30	Initial Hydro-static
2	46.52	94.55	Open To Flow (1)
48	100.89	97.94	Shut-In(1)
95	1088.14	99.49	End Shut-In(1)
95	106.27	99.23	Open To Flow (2)
136	1717.77	103.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	ocm 10%oil 90%mud	2.43
550.00	ocm	7.84

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Jaspar Co

11-6-20w

PO Box 1120
Hays, KS 67601

DG Hansen #2

Job Ticket: 59484

DST#: 6

ATTN: Shane Vege

Test Start: 2022.03.01 @ 07:30:00

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.00 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
250.00	ocm 10%oil 90%mud	2.433
550.00	ocm	7.837

Total Length: 800.00 ft

Total Volume: 10.270 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

