

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

New Well  Re-Entry  Workover

Oil  WSW  SWD

Gas  DH  EOR

OG  GSW

CM (Coal Bed Methane)

Cathodic  Other (Core, Expl., etc.): \_\_\_\_\_

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

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

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

Plug Back  Liner  Conv. to GSW  Conv. to Producer

Commingled Permit #: \_\_\_\_\_

Dual Completion Permit #: \_\_\_\_\_

SWD Permit #: \_\_\_\_\_

EOR Permit #: \_\_\_\_\_

GSW Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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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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# BASIC

energy services, L.P.

## TREATMENT REPORT

Customer DIXON OPERATING	Lease No.	Date 11-9-18
Lease KVAR	Well # 1-2	
Field Order # 19463	Station Pratt	Casing 5 1/2
	Depth 1213	County STAFFORD
Type Job 2-47 5 1/2 long string	Formation	State KS
		Legal Description 2-235-12W

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size 5 1/2	Tubing Size	Shots/Ft		Acid 150 SA, AA-2	RATE	PRESS	ISIP	
Depth 1211	Depth	From	To	Pre-Pad	Max 10%	10%	5 Min.	
Volume 10.8	Volume	From	To	Pad	Min .3%		10 Min.	
Max Press 1500	Max Press	From	To	Frac 75 SA 60/40	Avg P/SZ		15 Min.	
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure	
Plug Depth 3869.96	Packer Depth	From	To	Flush 90.4	Gas Volume		Total Load	

Customer Representative T J Dixon	Station Manager Westerman	Treater MATTAL
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Service Units 83333	27463	70959	19862				
Driver Names MATTAL	HANSON	DIXON					

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
4:30					ON LOCATION
6:20					Run 5 1/2 casing down on top of #2
					tube on 3, 4, 5, 6, 7, 8, 9, 10, 12, 14
10:24					Casing on bottom
10:43					Head to casing / P. pack on w rig
12:15	200		12	3	Pump 12 bbl mud/H2O
12:19	200		5	3	Pump 5 bbl water
12:21	300		6	5	Mix 25 SA's scavenger
12:23	300		3.8	5	mix 150 SA, AA-2
12:34			3	4	Release plug / wash pump + circ
12:38	200			6	START DISPERSEMENT
12:50	400		65	5	Lift pressure, SWIVEL HEAD, 90000, 10000
12:50	400		80	3	slow rate / STOP rotating
1:05	1500		90.4	2	Plug Down, released + H-10
1:15			7.5		Plug RAT + mud. Hold
					CIRCULATION THEN JOB
					JOB COMPLETE
					Thank You
					MIKE MATTAL
					2018 + 2019

Customer D. J. ...		Lease No.		Date	
Lease KVA R ...		Well # 1-2			
Field Order # 11464	Station 1718	Casing 8 7/8	Depth 311	County Shoemaker	State KS
Type Job RPS Surface			Formation	Legal Description S. 23 18 2	

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
3 1/2				Pre Pad	Max	500	5 Min.	
Depth	Depth	From	To	Pad	Min		10 Min.	
Volume	Volume	From	To	Frac	Avg		15 Min.	
Max Press	Max Press	From	To		HHP Used		Annulus Pressure	
Well Connection	Annulus Vol.	From	To	Flush	Gas Volume		Total Load	
Plug Depth	Packer Depth	From	To	H <sub>2</sub> O				

Customer Representative J. ...	Station Manager J. ...	Treater S. H.
Service Units	Driver Names	

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
					Called out
					Producing w/ 5-10 gpm
					Begin Bottom Cure 1/2
2310	200			4	Head Spun
2315	200			4	Stirring start @ 14.8 gpm 275K
2320	200		80.8	4	Finish stirring
2330	200			3	Balance Plug set Day w/ H <sub>2</sub> O
2340	200		19.2	4	Drop Pumped Close to 1/2
					Close 3 1/2 hrs Cont = 27 gpm
					Job Complete
					Thank you
					Wally



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Dixon Operating Company LLC  
8100 E.22nd St. N, BLDG 300  
Suite 200  
Wichita, KS. 67226  
ATTN: Chuck Schmalz

**2-23s-12w Stafford Co. Ks**

**KNAR 1-2**

Job Ticket: 64724

**DST#: 1**

Test Start: 2018.11.04 @ 15:15:32

## GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:53:47

Time Test Ended: 00:19:32

Test Type: Conventional Bottom Hole (Initial)

Tester: Matt Smith

Unit No: 68

**Interval: 3535.00 ft (KB) To 3632.00 ft (KB) (TVD)**

Reference Elevations: 1840.00 ft (KB)

Total Depth: 3632.00 ft (KB) (TVD)

1829.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 11.00 ft

**Serial #: 8931**

**Inside**

Press@RunDepth: 47.63 psig @ 3536.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2018.11.04

End Date:

2018.11.05

Last Calib.:

2018.11.05

Start Time: 15:15:37

End Time:

00:19:32

Time On Btm:

2018.11.04 @ 17:53:17

Time Off Btm:

2018.11.04 @ 22:00:32

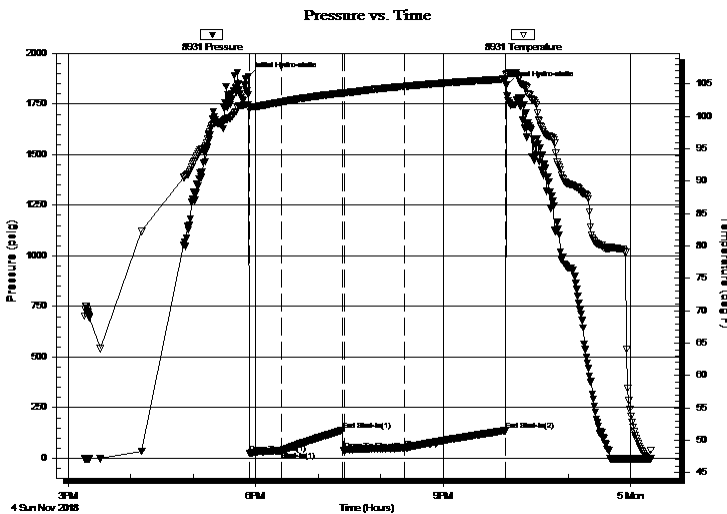
TEST COMMENT: IF: Weak blow . Built to 3 1/4".

IS: No blow .

FF: Fair blow . Built to 7 1/4".

FS: No blow .

## PRESSURE SUMMARY



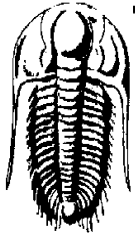
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1887.20	101.84	Initial Hydro-static
1	24.00	101.10	Open To Flow (1)
31	33.70	102.22	Shut-In(1)
90	139.45	103.61	End Shut-In(1)
92	37.98	103.62	Open To Flow (2)
150	47.63	104.65	Shut-In(2)
247	136.41	105.77	End Shut-In(2)
248	1843.38	106.37	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	Oil scum GM 2%g 98% m	0.32
0.00	G.I.P. 100%g 205'	0.00

## Gas Rates

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



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# DRILL STEM TEST REPORT

Dixon Operating Company LLC  
8100 E.22nd St. N, BLDG 300  
Suite 200  
Wichita, KS. 67226  
ATTN: Chuck Schmalz

**2-23s-12w Stafford Co. Ks**

**KNAR 1-2**

Job Ticket: 64724

**DST#: 1**

Test Start: 2018.11.04 @ 15:15:32

## GENERAL INFORMATION:

Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 17:53:47  
 Time Test Ended: 00:19:32  
 Interval: **3535.00 ft (KB) To 3632.00 ft (KB) (TVD)**  
 Total Depth: 3632.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair

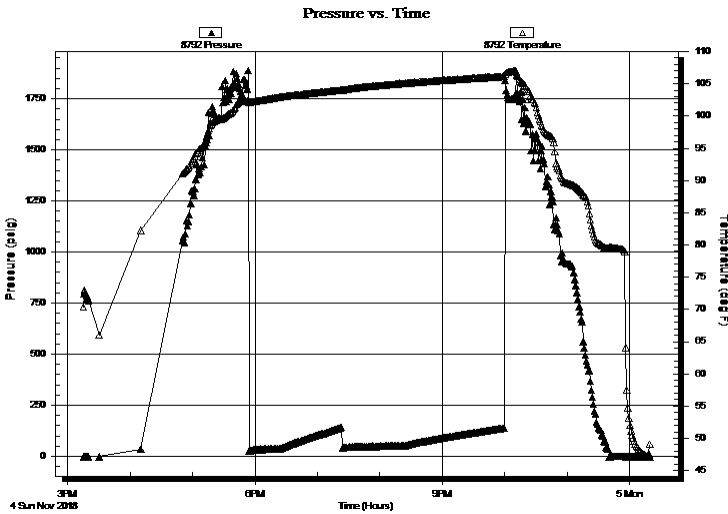
Test Type: Conventional Bottom Hole (Initial)  
 Tester: Matt Smith  
 Unit No: 68  
 Reference Elevations: 1840.00 ft (KB)  
 1829.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 8792 Outside**

Press@RunDepth: psig @ 3536.00 ft (KB)  
 Start Date: 2018.11.04 End Date: 2018.11.05  
 Start Time: 15:15:21 End Time: 00:19:16  
 Capacity: 8000.00 psig  
 Last Calib.: 2018.11.05  
 Time On Btm:  
 Time Off Btm:

TEST COMMENT: IF: Weak blow . Built to 3 1/4".  
 IS: No blow .  
 FF: Fair blow . Built to 7 1/4".  
 FS: No blow .

## PRESSURE SUMMARY



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

## Recovery

Length (ft)	Description	Volume (bbl)
65.00	Oil scum GM 2%g 98%m	0.32
0.00	G.I.P. 100%g 205'	0.00

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Dixon Operating Company LLC  
8100 E.22nd St. N, BLDG 300  
Suite 200  
Wichita, KS. 67226  
ATTN: Chuck Schmalz

**2-23s-12w Stafford Co. Ks**  
**KNAR 1-2**  
Job Ticket: 64724      **DST#: 1**  
Test Start: 2018.11.04 @ 15:15:32

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	13500 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.18 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 15300.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: 0.20 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Oil scum GM 2%g 98%m	0.320
0.00	G.I.P. 100%g 205'	0.000

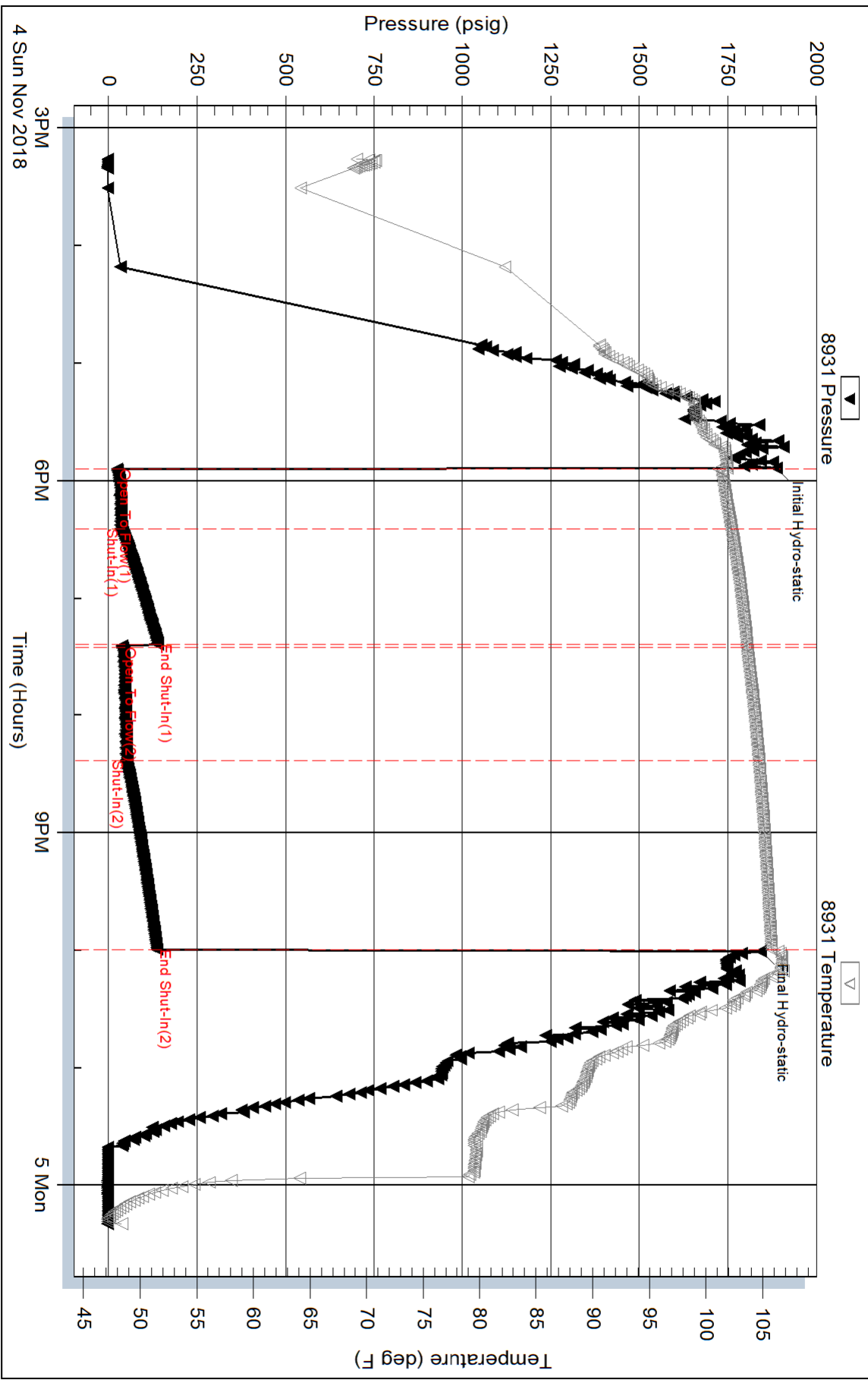
Total Length: 65.00 ft      Total Volume: 0.320 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #: None

Laboratory Name:      Laboratory Location:

Recovery Comments: 205 Ft of G.I.P. 100% gas

### Pressure vs. Time

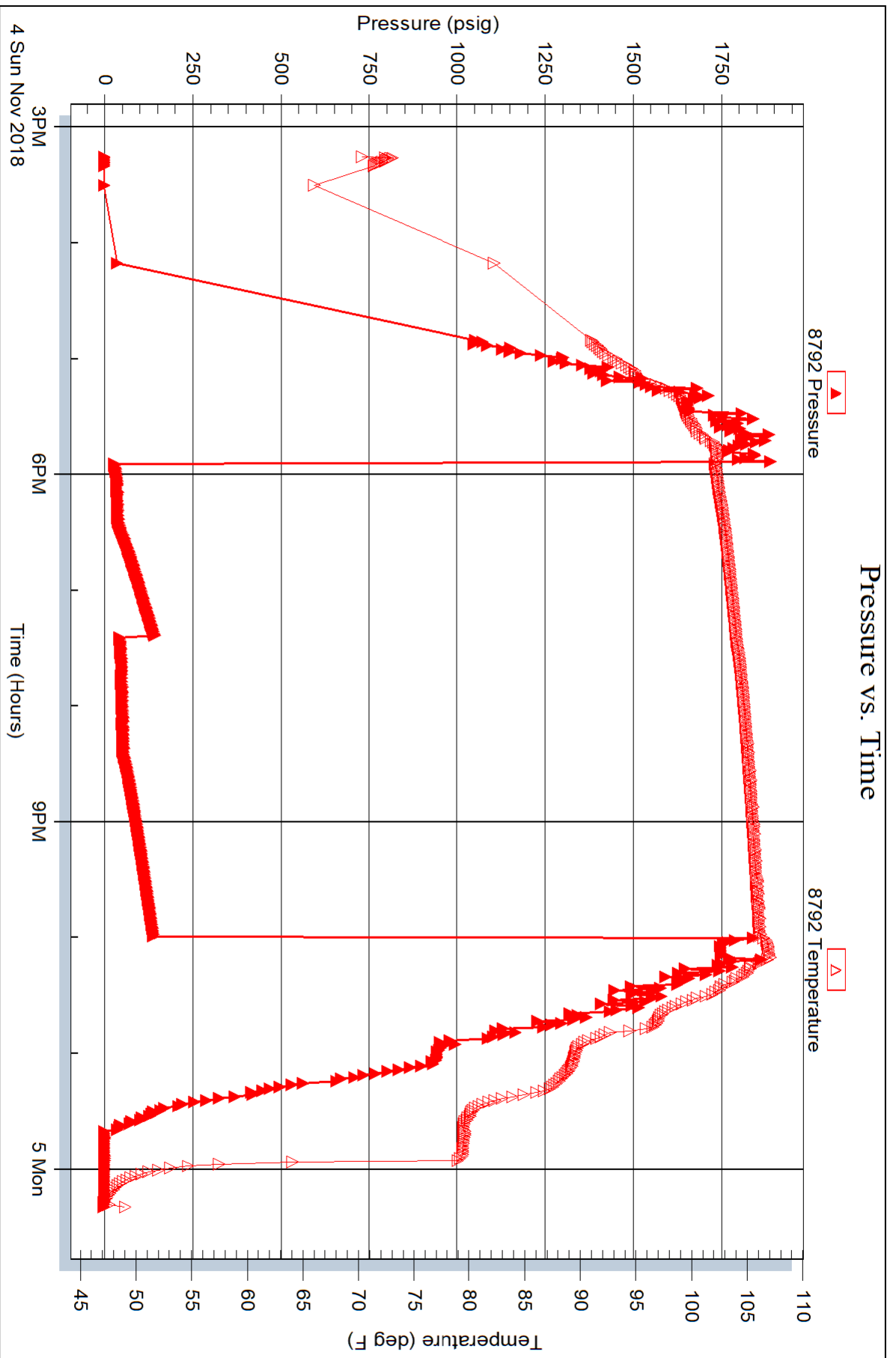


Serial #: 8792

Outside Dixon Operating Company LLC

KNAR-1-2

DST Test Number: 1





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Dixon Operating Company LLC  
 8100 E.22nd St. N, BLDG 300  
 Suite 200  
 Wichia, KS. 67226  
 ATTN: Chuck Schmalz

**2-23s-12w Stafford Co. Ks**

**KNAR 1-2**

Job Ticket: 64725

**DST#: 2**

Test Start: 2018.11.05 @ 21:41:19

## GENERAL INFORMATION:

Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 00:14:49  
 Tester: Matt Smith  
 Time Test Ended: 07:25:19  
 Unit No: 68  
 Interval: **3632.00 ft (KB) To 3665.00 ft (KB) (TVD)**  
 Reference Elevations: 1840.00 ft (KB)  
 Total Depth: 3665.00 ft (KB) (TVD)  
 1829.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Fair  
 KB to GR/CF: 11.00 ft

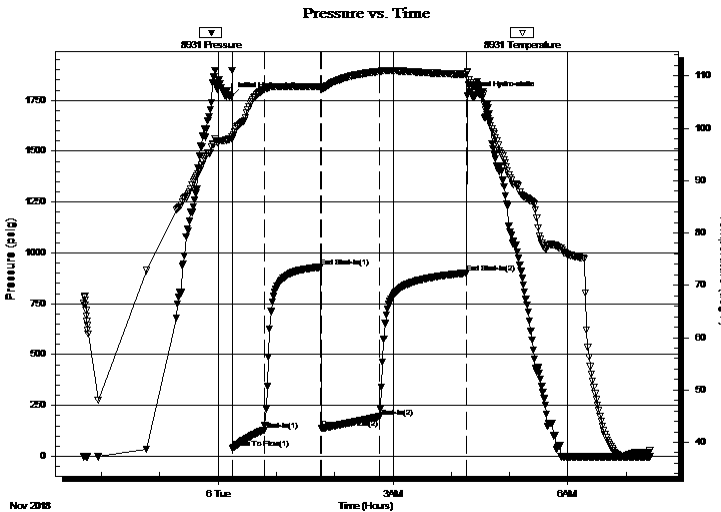
## Serial #: 8931

Inside

Press@RunDepth: 194.11 psig @ 3633.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2018.11.05 End Date: 2018.11.06 Last Calib.: 2018.11.06  
 Start Time: 21:41:24 End Time: 07:25:19 Time On Btm: 2018.11.06 @ 00:13:19  
 Time Off Btm: 2018.11.06 @ 04:16:34

**TEST COMMENT:** IF: Strong blow . B.O.B. in 5 mins. Built to 25.67".  
 IS: Weak blow . Built to 3/4".  
 FF: Strong blow . B.O.B. in 12 mins. Built to 36.30".  
 FS: Weak blow . Built to 1.75".

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1767.33	97.97	Initial Hydro-static
2	40.13	98.06	Open To Flow (1)
35	129.39	107.41	Shut-In(1)
92	930.08	107.94	End Shut-In(1)
93	139.40	107.70	Open To Flow (2)
153	194.11	110.86	Shut-In(2)
243	901.46	110.29	End Shut-In(2)
244	1773.80	110.87	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	OMGCW 2%o 2%m 11%g 85%w	0.30
180.00	Oil Scum GMCW 2%g 3%m 95%w	0.89
123.00	WOGCM 5%w 10%o 30%g 55%m	1.46
62.00	OGCM 20%o 40%g 40%m	0.87
0.00	G.I.P. 100%g	0.00

\* Recovery from multiple tests

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Dixon Operating Company LLC  
8100 E.22nd St. N, BLDG 300  
Suite 200  
Wichita, KS. 67226  
ATTN: Chuck Schmalz

**2-23s-12w Stafford Co. Ks**

**KNAR 1-2**

Job Ticket: 64725

**DST#: 2**

Test Start: 2018.11.05 @ 21:41:19

## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 43.00 sec/qt  
Water Loss: 13.99 in<sup>3</sup>  
Resistivity: 14800.00 ohm.m  
Salinity: ppm  
Filter Cake: 0.20 inches

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

Oil API: deg API  
Water Salinity: 39000 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	OMGCW 2%o 2%m 11%g 85%w	0.295
180.00	Oil Scum GMCW 2%g 3%m 95%w	0.885
123.00	WOGCM 5%w 10%o 30%g 55%m	1.461
62.00	OGCM 20%o 40%g 40%m	0.870
0.00	G.I.P. 100%g	0.000

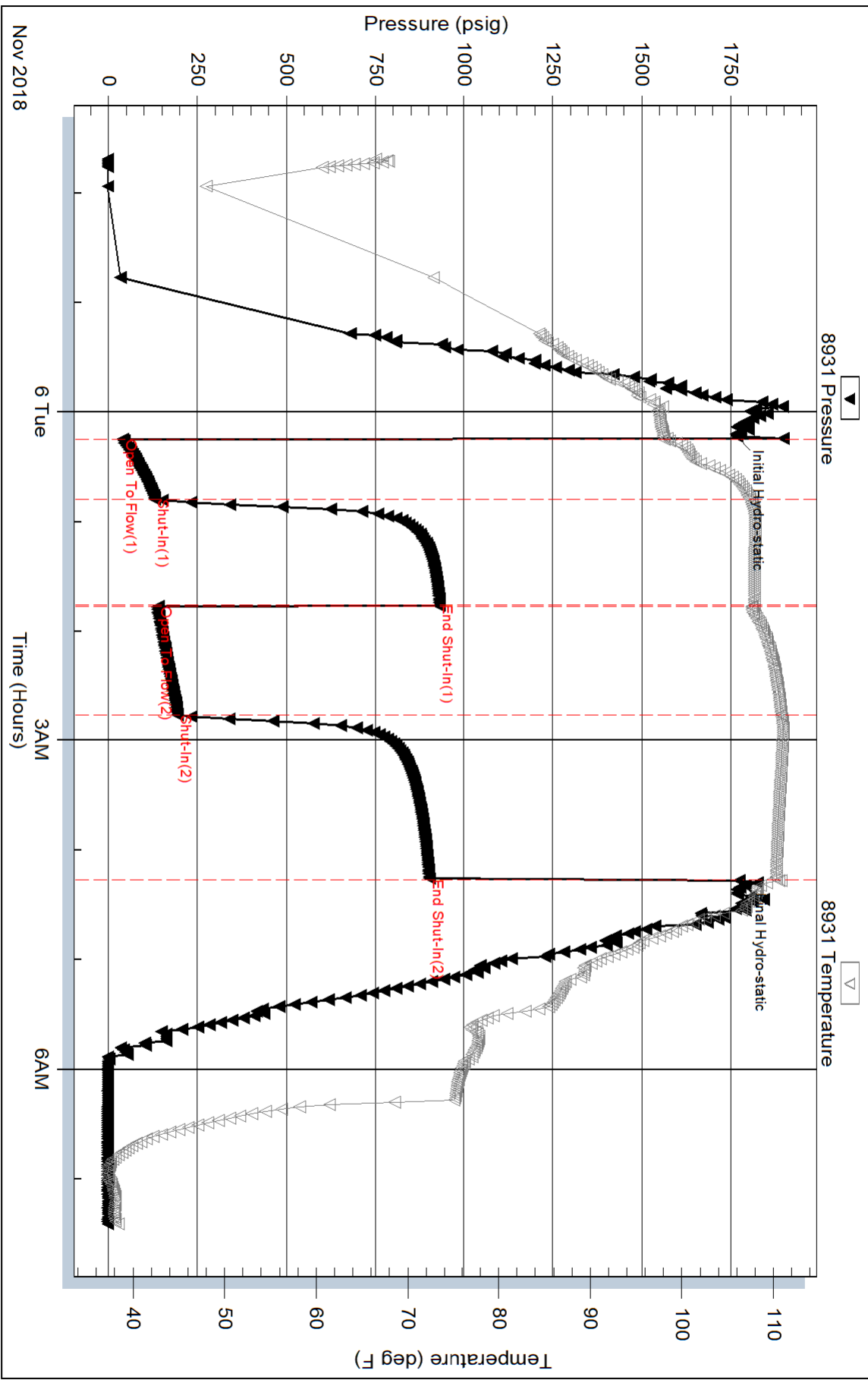
Total Length: 425.00 ft      Total Volume: 3.511 bbl

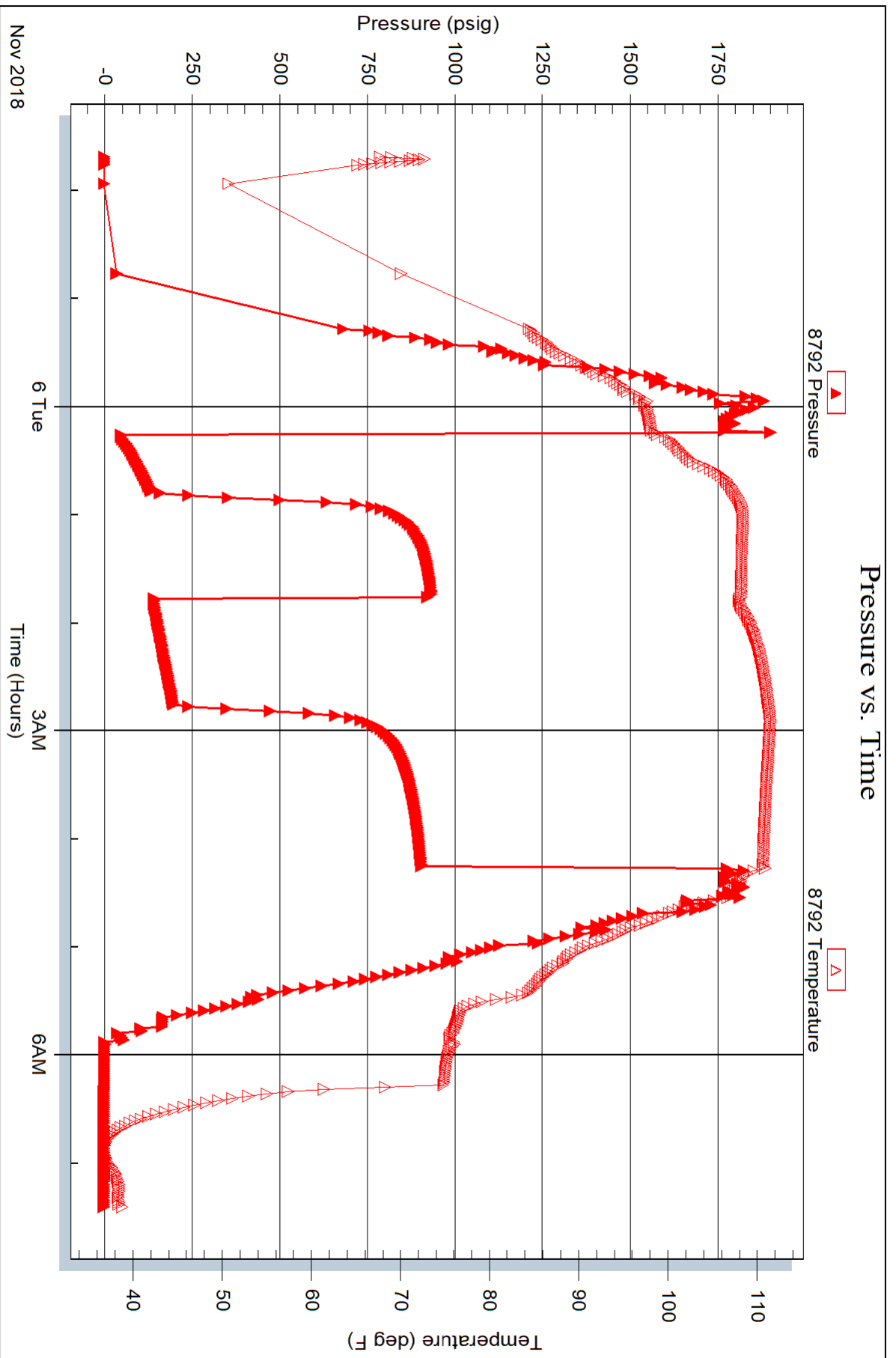
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #: none

Laboratory Name:      Laboratory Location:

Recovery Comments: G.I.P. 960 FT 100%g  
RW is .33 @ 40 degrees = 39,000 Chlorides.

### Pressure vs. Time









**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Dixon Operating Company LLC  
 8100 E.22nd St. N, BLDG 300  
 Suite 200  
 Wichia, KS. 67226  
 ATTN: Chuck Schmalz

**2-23s-12w Stafford Co. Ks**

**KNAR 1-2**

Job Ticket: 64901

**DST#: 3**

Test Start: 2018.11.06 @ 15:56:20

## GENERAL INFORMATION:

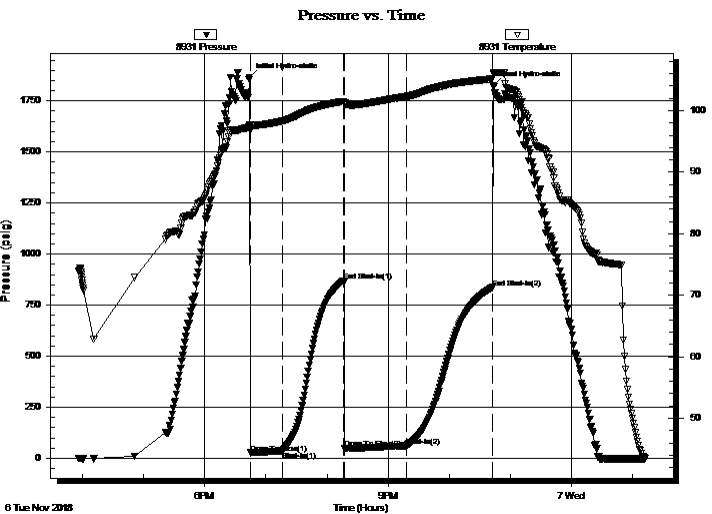
Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 18:44:50  
 Time Test Ended: 01:12:20  
 Interval: **3665.00 ft (KB) To 3722.00 ft (KB) (TVD)**  
 Total Depth: 3722.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Matt Smith  
 Unit No: 68  
 Reference Elevations: 1840.00 ft (KB)  
 1829.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 8931**

**Inside**

Press@RunDepth: 60.79 psig @ 3666.00 ft (KB)  
 Start Date: 2018.11.06 End Date: 2018.11.07  
 Start Time: 15:56:25 End Time: 01:12:20  
 Capacity: 8000.00 psig  
 Last Calib.: 2018.11.07  
 Time On Btm: 2018.11.06 @ 18:44:05  
 Time Off Btm: 2018.11.06 @ 22:43:20

**TEST COMMENT:** IF: Weak blow . Built to 1 1/2".  
 IS: No blow .  
 FF: Weak blow . Surface to 1/4".  
 FS: No blow .



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1865.47	97.52	Initial Hydro-static
1	26.57	96.76	Open To Flow (1)
32	36.93	98.30	Shut-In(1)
93	868.48	101.52	End Shut-In(1)
94	47.21	101.23	Open To Flow (2)
154	60.79	102.30	Shut-In(2)
239	836.01	105.16	End Shut-In(2)
240	1826.12	106.03	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	GWCM 5%g 5%w 90%m	0.34

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Dixon Operating Company LLC  
8100 E.22nd St. N, BLDG 300  
Suite 200  
Wichita, KS. 67226  
ATTN: Chuck Schmaltz

**2-23s-12w Stafford Co. Ks**  
**KNAR 1-2**  
Job Ticket: 64901      **DST#: 3**  
Test Start: 2018.11.06 @ 15:56:20

## 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:	16500 ppm
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 12.39 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 16500.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: 0.20 inches			

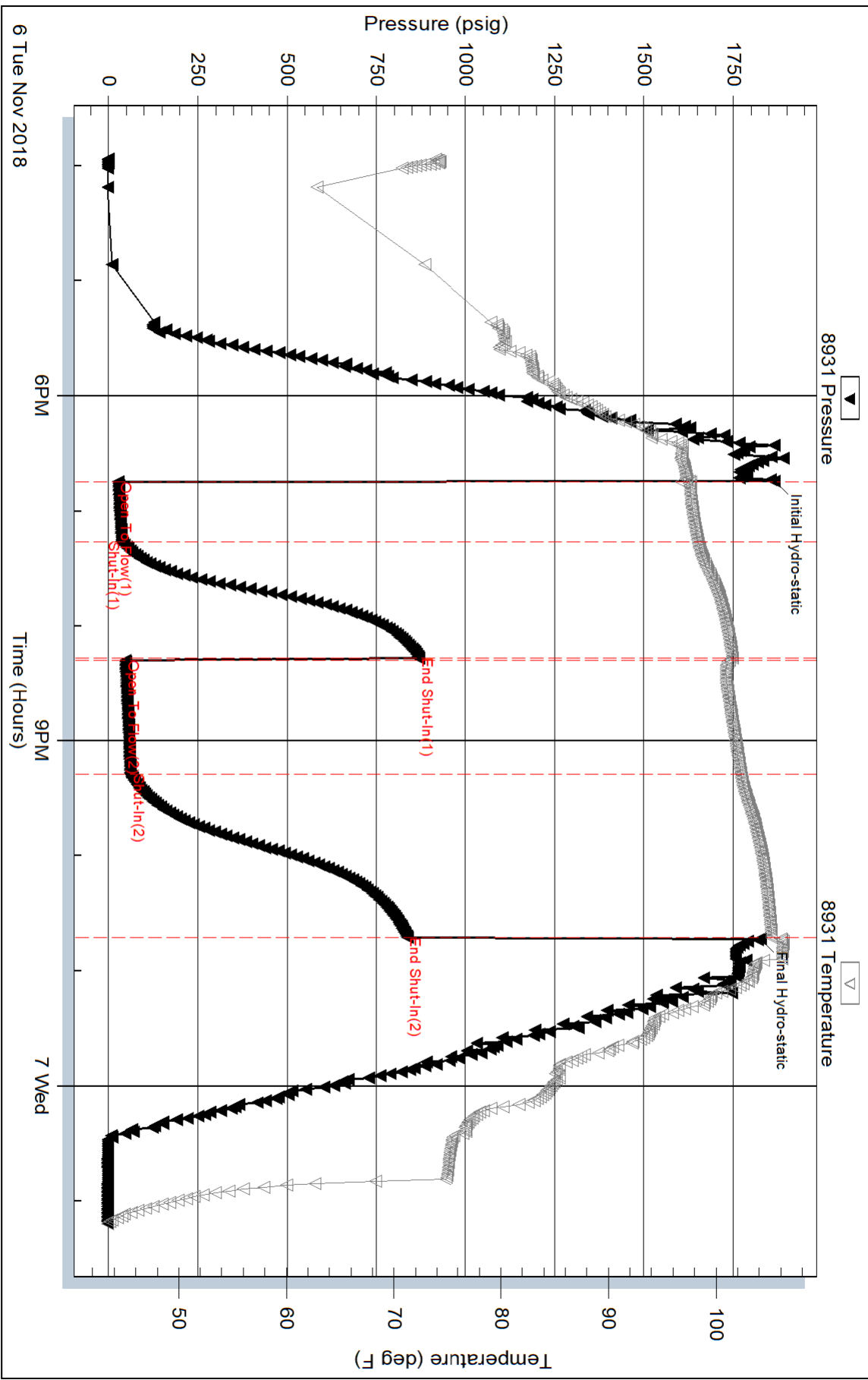
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
70.00	GWCM 5%g 5%w 90%m	0.344

Total Length: 70.00 ft      Total Volume: 0.344 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #: none  
Laboratory Name:      Laboratory Location:  
Recovery Comments:

# Pressure vs. Time

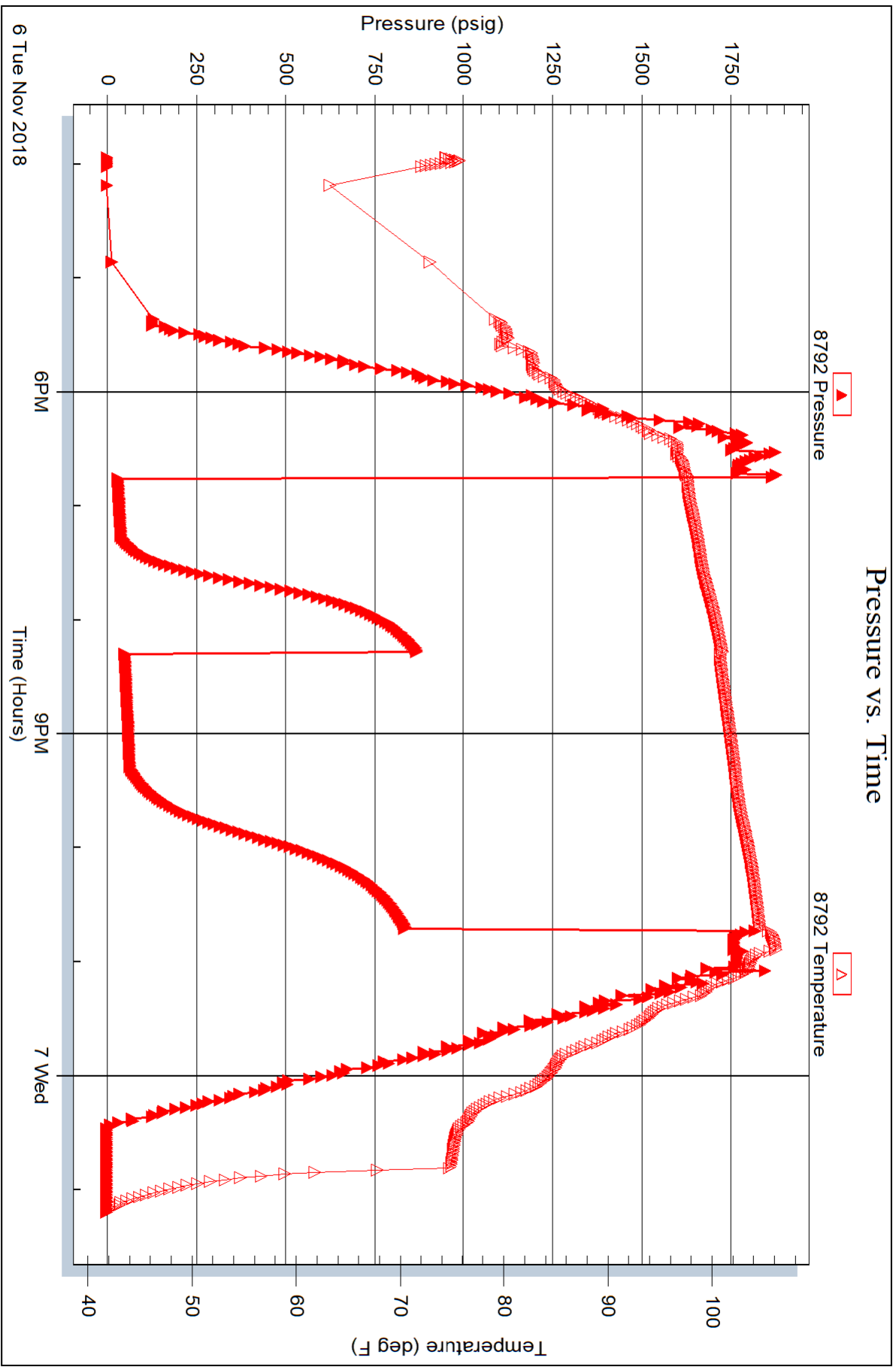


Serial #: 8792

Outside Dixon Operating Company LLC

KNAR-1-2

DST Test Number: 3



# CHARLES SCHMALTZ

CONSULTING GEOLOGIST  
WICHITA, KANSAS

LOG

COMPANY: **DIXON OPERATING CO., LLC**

WELL: **KNAR #1-2**

FIELD: **MIKE S. FELDER**

LOCATION: **H460 FSL, H490 FEL**

SEC: **7** T15S R12W

COUNTY: **STAFFORD**

STATE: **KANSAS**

API #: **15-185-24034-000**

NO. OWNER: **MAUD S. STEVENS**

DATE ACQUIRED: **10/18/1918**

CONVEYANCE: **DEED TO DIXON OPERATING CO., INC. 1/11/1988**

RECORD: **1/11/1988**

DATE OF LOG: **1/11/1988**

LOG NO: **3818**

FORMATION TYPES & STRATIGRAPHIC POSITION

FORMATION	SWATH	ELECTRIC LOG	SUBSEA	STRATIGRAPHIC POSITION
ANHYDRITE - TOP	N2	6.02	+1236	+6
ANHYDRITE - BASE	N1	6.01	+1236	+6
HEEBNER	N1	6.01	+1236	+6
BROWN LIME	N1	6.01	+1236	+6
LANSING	N1	6.01	+1236	+6
VIDLA	N1	6.01	+1236	+6
SIMPSON SH	N1	6.01	+1236	+6
ARBUCKLE	N1	6.01	+1236	+6
TRIAL DEPTH	N1	6.01	+1236	+6

REFERENCE WELL FOR STRUCTURE: **DIXON OPERATING CO., LLC**

4600 FSL, 360 FSL: SEC. 2-T15S-R12W, STAFFORD CITY, KS

DRILL STEM TESTS

No.	Interval	Depth	Pressure	Flow	Remarks
1	3535-3532	24' 31"	139	36" 10"	205 GIP
2	3665-3662	30' 12"	60	90"	65 VSB CM w/ SCUM OIL
3	3722-3720	37' 27"	60	90"	70 SC & W/CM

BIT RECORD

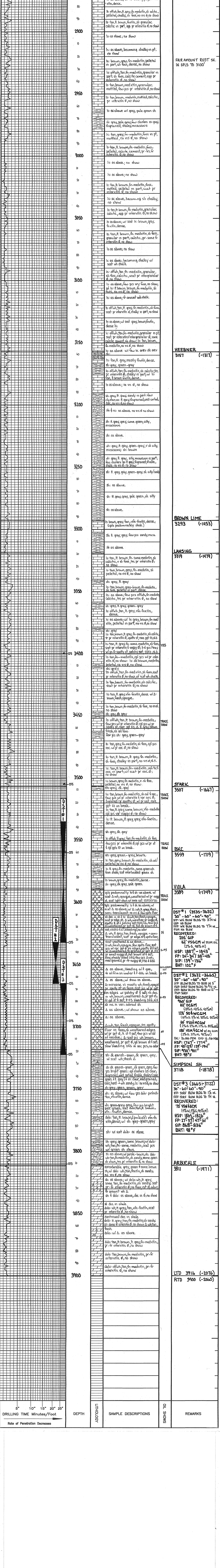
NO.	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS	REMARKS
1	1 1/4"	D2	D2	312'	3 1/2	4	PERFORMANCE: 170 LBS
2	1 1/2"	HTC	D2506	2821'	2 5/8	3 1/2	PERFORMANCE: 150 LBS
3	1 7/8"	HTC	GX200	3500'	1000	40 1/2	PERFORMANCE: 150 LBS

DAILY PENETRATION

DATE	TIME	DEPTH	REMARKS
0-30	MILE		
0-31	MILE & SEED	3 11.3	202.5
1-1	MILE	31.2	202.5
1-2	MILE	31.2	202.5
1-3	MILE	31.2	202.5
1-4	MILE	31.2	202.5
1-5	MILE	31.2	202.5
1-6	MILE	31.2	202.5
1-7	MILE	31.2	202.5
1-8	MILE	31.2	202.5
1-9	MILE	31.2	202.5
1-10	MILE	31.2	202.5
1-11	MILE	31.2	202.5
1-12	MILE	31.2	202.5
1-13	MILE	31.2	202.5
1-14	MILE	31.2	202.5
1-15	MILE	31.2	202.5
1-16	MILE	31.2	202.5
1-17	MILE	31.2	202.5
1-18	MILE	31.2	202.5
1-19	MILE	31.2	202.5
1-20	MILE	31.2	202.5

## LEGEND

	Anhydrite		Salt		Sandstone		Shale		Carb sh		Limestone		Ool. Lime		Chert		Dolomite
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Customer Dixon Oper	Lease No.	Date 10-31-18
Lease KNAR	Well # 1-2	
Field Order # 16469	Station 1718	Casing 8 5/8
Type Job 8 5/8 Surface	Depth 311	County Stafford
	Formation	State KS
		Legal Description 2-23-12w

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
8 5/8							
Depth 301	Depth	From	To	Pre Pad 375sk. 60-40p2	Max	500	5 Min.
Volume 19.2	Volume	From	To	Pad 3% cc 1/4 cell	Min		10 Min.
Max Press	Max Press	From	To	Frac	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush H2O	Gas Volume		Total Load

Customer Representative Juan	Station Manager J Westerman	Treater Scott
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Service Units Vap	27463	70959	19862						
Driver Names Scott	Westerman	B	Strickland						

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
					Called Out
					On Location w/Trk's safety mtg
					Csg on Bottom Circ w/Rig
2310	300			4	H2O Spacer
2312	300			4	St mixing Cmt @ 14.8 ppg 375sk
2332	⊕		80.8	⊕	Finish mixing Cmt
2320	100			3	Release Plug st Disp w/H2O
2345	250		19.2	⊕	Disp Pumped Close In w.H.
					Circ 8 Bbl's Cmt = 37 ski
					Job Complete
					Thank you
					Scotty