

Confidentiality Requested:

Yes  No

**KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

**Form must be Typed**

**Form must be Signed**

**All blanks must be Filled**

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

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

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

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

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

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

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

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

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

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

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

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

Designate Type of Completion:

New Well  Re-Entry  Workover

Oil  WSW  SWD

Gas  DH  EOR

OG  GSW

CM (Coal Bed Methane)

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

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

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

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

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

Deepening  Re-perf.  Conv. to EOR  Conv. to SWD  
 Plug Back  Liner  Conv. to GSW  Conv. to Producer

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

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

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

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

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

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE  NW  SE  SW

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

Datum:  NAD27  NAD83  WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

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

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

*(Data must be collected from the Reserve Pit)*

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite: \_\_\_\_\_

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

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**AFFIDAVIT**

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

Submitted Electronically

**KCC Office Use ONLY**

Confidentiality Requested

Date: \_\_\_\_\_

Confidential Release Date: \_\_\_\_\_

Wireline Log Received  Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

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

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

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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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) (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	C & S Oil Company, LLC
Well Name	ROCKING P 1-19
Doc ID	1511991

All Electric Logs Run

CDN
DIL
MICRO
SONIC



Date	3-11-2020	Sec.	19	Twp.	11	Range	14	County	Russell	State	KS	On Location		Finish	11:30PM.		
Lease	Rocking P																
Contractor	Flex Drilling																
Type Job	Plug 77/8"																
Hole Size	3340'																
Csg.	T.D.																
Tbg. Size	4 1/2" D.P.																
Tool	Depth																
Cement Left in Csg.	Shoe Joint																
Meas Line	Displace																
	H2O																
	EQUIPMENT																
Pumptrk	18	No.		Cementer	Tim											Helper	
Bulktrk	9	No.		Driver	MIKE											Driver	
Bulktrk		No.		Driver	Rick											Driver	
JOB SERVICES & REMARKS																	
Remarks:	940' - 50 SX																
Rat Hole	580' - 75 SX																
Mouse Hole	280' - 50 SX																
Centralizers	40' - 10 SX w/ plug																
Baskets																	
DV or Port Collar	Rathole w/ 30 SX																
	Mousehole w/ 15 SX																
	Cement did Circulate																
	FLOAT EQUIPMENT																
	Guide Shoe Dry hole plug																
	Centralizer																
	Baskets																
	AFU Inserts																
	Float Shoe																
	Latch Down																
	Pumptrk Charge plug																
	Mileage 15																
	Tax																
	Discount																
	Total Charge																

*[Handwritten Signature]*

Date	3-11-2020	Sec.	19	Twp.	11	Range	14	County	Russell	State	KS	On Location		Finish	11:30PM.		
Lease	Rocking P																
Contractor	Flex Drilling																
Type Job	Plug 77/8"																
Hole Size	3340'																
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Tbg. Size	4 1/2" D.P.																
Tool	Depth																
Cement Left in Csg.	Shoe Joint																
Meas Line	Displace																
	H2O																
	EQUIPMENT																
Pumptrk	18	No.		Cementer	Tim											Helper	
Bulktrk	9	No.		Driver	MIKE											Driver	
Bulktrk		No.		Driver	Rick											Driver	
JOB SERVICES & REMARKS																	
Remarks:	940' - 50 SX																
Rat Hole	580' - 75 SX																
Mouse Hole	280' - 50 SX																
Centralizers	40' - 10 SX w/ plug																
Baskets																	
DV or Port Collar	Rathole w/ 30 SX																
	Mousehole w/ 15 SX																
	Cement did Circulate																
	FLOAT EQUIPMENT																
	Guide Shoe Dry hde plug																
	Centralizer																
	Baskets																
	AFU Inserts																
	Float Shoe																
	Latch Down																
	Pumptrk Charge plug																
	Mileage 15																
	Tax																
	Discount																
	Total Charge																

*[Handwritten Signature]*

MUD LOG

WellSight Systems

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

Well Name: **Rocking P#1-19**  
Well Id: **15-167-24101**  
Location: **NW SE SW SE Sec 19 T11S R14W**  
License Number: \_\_\_\_\_ Region: **Kansas**  
Spud Date: **3/6/2020** Drilling Completed: \_\_\_\_\_  
Surface Coordinates: **485' FSL & 1885' FEL**  
Bottom Hole Coordinates: \_\_\_\_\_  
Ground Elevation (ft): **1828** K.B. Elevation (ft): **1834**  
Logged Interval (ft): **2650 To 3500** Total Depth (ft): **3500**  
Formation: **Topoka-Arbuckle**  
Type of Drilling Fluid: **Gel based mud**  
Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: **C&S Oil Company**  
Address: **Attn:Chris Pasek**  
**325 S Elm St.**  
**Russell, Ks 67665**

GEOLOGIST

Name: **Chad Counts**  
Company: **MG Oil Inc.**  
Address: **1256 W. Hwy 40**  
**Russell, Ks 67665**

Comments

The Rocking P #1-19 was drilled with Flex Drilling Inc. tools beginning 3-6-2020, and ending 3-11-2020.  
Structurally, the well ran lower than seismic suggested, but yet locally high to surrounding wells, and against regional dip.  
Based upon structural position of the Lansing-Kansas City, shows, and negative results of the two DST's it is recommended by all parties to plug and abandon 50' below the BKC.

Respectfully,  
**Chad Counts**

	Formation Tops				Drilling Location	
	Streeker A 1 (D&A)	Streeker A 3 (D&A)	Floda #1 (D&A)	Rocking P #1-19	Rocking P #1-19	Act Top
Formation	NE SW NW Sec. 19	SEC. 19 SW Sec. 19	NE SW NW Sec. 19	NE SW NW Sec. 19	NW SE SW SE Sec. 19	Act Top
Anhydrite Top	895	899	903	903	928' (905')	925' (892')
Anhydrite Base	861	863	863	863	958' (875')	961' (872')
Howard	-866	-874	-874	-874	2696' (-863')	2695' (-862')
Topoka 730m'	-826	-826	810	-816	2753' (-826')	2781' (-816')
King Hill Shale	-1003	-1009	110	-933	2837' (-898')	2830' (-895')
Queen Hill Shale	-1065	-1071	12	-1055	2993' (-1066)	2992' (-1059')
Heebner Shale	-1141	-1147	14	-1123	2969' (-1136)	2966' (-1133')
Toronto	-1160	-1167	15	-1151	2991' (-1158)	2985' (-1152')
Lansing	-1193	-1201	18	-1183	3020' (-1187)	3019' (-1185')
Munroe Creek	-1227	-1236	19	-1219	3166' (-1223)	3164' (-1221')
Stark	-1402	-1411	18	-1391	3229' (-1396)	3226' (-1393')
BKC	-1468	-1468	13	-1443	3288' (-1455)	3286' (-1453')
Simpson Shale	-1568	NDE	NDE	-1557		
Arbuckle	-1611	NDE	NDE	-1601		

GENERAL INFORMATION:							
Formation:	LKC A-C	Whipstock:		ft (KB)	Test Type:	Conventional Bottom Hole (Initial)	
Deviated:	No	Whipstock:		ft (KB)	Tester:	Spencer J Staab	
Time Tool Opened:	21:56:27	Time Tool Closed:	01:21:52	End Time:	Unit No.:	84	
Interval:	3022.00 ft (KB) To	3068.00 ft (KB) (TVD)			Capacity:	2500.03 10 ppsig	
Total Depth:	3058.00 ft (KB)	(TVD)			Last Calc.:	2020.03.10	
Hole Diameter:	7.88	Inches Hole Condition:	Floor		Time On Btm:	2020.03.09 @ 21:55:47	
					Time Off Btm:	2020.03.09 @ 21:30:52	

TEST COMMENT:				PRESSURE SUMMARY			
15-F-Slid 8": Blow @ 14'; Died back to 11"				Time (Min.):	Pressure (psig)	Temp (deg F)	Annnotation
15-F-No Return				0	1476.50	88.25	Initial Hydro-Static
30-F-80/20 mix; Built to 15'				1	89.27	89.27	Open To Flow (1)
30-FSI Very Weak Surface Blow				14	81.56	89.40	Shut-In(1)
				34	598.53	89.70	End Shut-In(1)
				38	80.82	90.05	Open To Flow (2)
				64	95.47	90.35	Shut-In(2)
				98	673.07	90.87	End Shut-In(2)
				98	1449.98	91.19	Final Hydro-Static

Recovery		Gas Rates	
Length (ft)	Description	Volume (bbl)	Flow Rate (bbl/d)
83.00	GVOCM 20%G 40%L 40%W	0.89	
83.00	GVOCM 10%G 5%O 85%M	0.89	
83.00	GVOCM 7%G 3%O 90%M	0.89	
0.00	120 GF 100%G	0.00	

GENERAL INFORMATION:							
Formation:	LKC D	Whipstock:		ft (KB)	Test Type:	Conventional Bottom Hole (Repeat)	
Deviated:	No	Whipstock:		ft (KB)	Tester:	Spencer J Staab	
Time Tool Opened:	08:08:52	Time Tool Closed:	11:47:12	End Time:	Unit No.:	84	
Interval:	3067.00 ft (KB) To	3075.00 ft (KB) (TVD)			Capacity:	2500.03 10 ppsig	
Total Depth:	3075.00 ft (KB)	(TVD)			Last Calc.:	2020.03.10	
Hole Diameter:	7.88	Inches Hole Condition:	Fair		Time On Btm:	2020.03.10	

TEST COMMENT:				PRESSURE SUMMARY			
5-F-Built to 10"				Time (Min.):	Pressure (psig)	Temp (deg F)	Annnotation
20-F-Weak; Built to 24"				1	72.45		
30-F-80/20 mix; Built to 29"							
45-FSI Weak; Built to 18'12"							

Recovery		Gas Rates	
Length (ft)	Description	Volume (bbl)	Flow Rate (bbl/d)
180.00	GVW 10%G 10%W 80%W	2.55	
25.00	GVOCOM 10%G 10%O 30%M 59%W	0.35	
15.00	GVWCMO 5%G 3%W 2%M 90%O	0.21	
0.00	120 GF 100%G	0.00	

ROCK TYPES

Legend for rock types: Anhy, Bent, BreC, Cht, Clyst, Coal, Oolitic limestone, Congl, Dol, Gyp, Igne, Dark grey shale, Black shale, Lmst, Meta, Mrlst, Salt, New Salt, Shale, Shcol, Shgy, Sst, Sls, Tilt

ACCESSORIES

Legend for accessories: MINERAL (Anhy, Arggrn, Arg, Bent, Bit, BreCfrag, Calc, Carb, Chtdk, Chtlt, Dol, Feldspar, Ferrpel, Ferrr, Glau), Gyp, Hvymin, Kaol, Marl, Minxl, Nodule, Phos, Pyr, Salt, Sandy, Silt, Sil, Sulphur, Tuff, FOSSIL (Algae, Amph, Biem, Biemclst, Brach, Bryozoa, Cephal, Coral, Crin, Echin, Fish, Foram, Fossil, Gastro, Oolite), Ostra, Pellet, Pellet, Pisolite, Plant, Strom, STRINGER (Anhy, Arg, Bent, Coal, Dol, Gyp, Ls, Mrst), Ststrg, Ssstrg, TEXTURE (Boundst, Chalky, Crxlyn, Earthy, Finexln, Grainst, Lithogr, Microxln, Mudst, Packet, Wackest)

OTHER SYMBOLS

Legend for other symbols: POROSITY (Earthy, Fenest, Fracture, Inter, Moldic, Organic, Pinpoint), Vuggy, SORTING (Well, Moderate, Poor), ROUNDING (Rounded, Subrnd, Subang, Angular), Spotted, Ques, Dead, INTERVAL (Core, Dst), EVENT (Rft, Sidewall)

Main log page with tracks: Curve Track 1 (ROP, Gamma), DST Overlap, Lithology (MD 2600-3300), Geological Descriptions (2650-3300), Images, and Comments (MW 8.6, MW 8.7, MW 8.8, CFS 607 3058', CFS 607 3075', MW 8.5, MW 8.6, MW 8.7, CFS 4501' 3128').



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

C&S Oil Company  
305 S Elm St  
Russell KS 67665+3005  
ATTN: Chad Counts

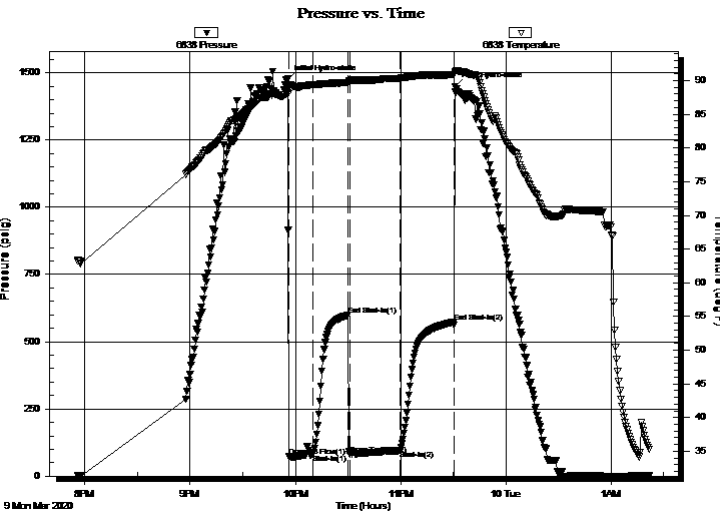
**19-11s-14w Russell KS**  
**Rocking P #1-19**  
Job Ticket: 66382      **DST#: 1**  
Test Start: 2020.03.09 @ 19:56:00

## GENERAL INFORMATION:

Formation: **LKC A-C**  
Deviated: No Whipstock: ft (KB)      Test Type: Conventional Bottom Hole (Initial)  
Time Tool Opened: 21:56:27      Tester: Spencer J Staab  
Time Test Ended: 01:21:52      Unit No: 84  
**Interval: 3022.00 ft (KB) To 3058.00 ft (KB) (TVD)**      Reference Elevations: 1833.00 ft (KB)  
Total Depth: 3058.00 ft (KB) (TVD)      1826.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Poor      KB to GR/CF: 7.00 ft

**Serial #: 6838      Inside**  
Press@RunDepth: 95.47 psig @ 3023.00 ft (KB)      Capacity:      psig  
Start Date: 2020.03.09      End Date: 2020.03.10      Last Calib.: 2020.03.10  
Start Time: 19:56:01      End Time: 01:21:52      Time On Btm: 2020.03.09 @ 21:55:47  
Time Off Btm: 2020.03.09 @ 23:30:52

**TEST COMMENT:** 15-IF-Slid 8'; Blow @ 14"; Died back to 11"  
15-ISI-No Return  
30-FF-BOB 19 mins; Built to 15"  
30-FSI-Very Weak Surface Blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1476.50	88.25	Initial Hydro-static
1	72.45	89.27	Open To Flow (1)
14	81.56	89.40	Shut-In(1)
34	598.53	89.70	End Shut-In(1)
35	80.82	90.05	Open To Flow (2)
64	95.47	90.35	Shut-In(2)
95	573.97	90.87	End Shut-In(2)
96	1449.98	91.19	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
63.00	GHOCM 20%G 40%O 40%M	0.89
63.00	GOCM 10%G 5%O 85%M	0.89
63.00	GSOCM 7%G 3%O 90%M	0.89
0.00	120' GIP 100%G	0.00

## Gas Rates

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







**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

C&S Oil Company

**19-11s-14w Russell KS**

305 S Elm St  
Russell KS 67665+3005

**Rocking P #1-19**

Job Ticket: 66382

**DST#: 1**

ATTN: Chad Counts

Test Start: 2020.03.09 @ 19:56:00

## 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: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3500.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
63.00	GHOCM 20%G 40%O 40%M	0.893
63.00	GOCM 10%G 5%O 85%M	0.893
63.00	GSOCM 7%G 3%O 90%M	0.893
0.00	120' GIP 100%G	0.000

Total Length: 189.00 ft

Total Volume: 2.679 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 2#LCM

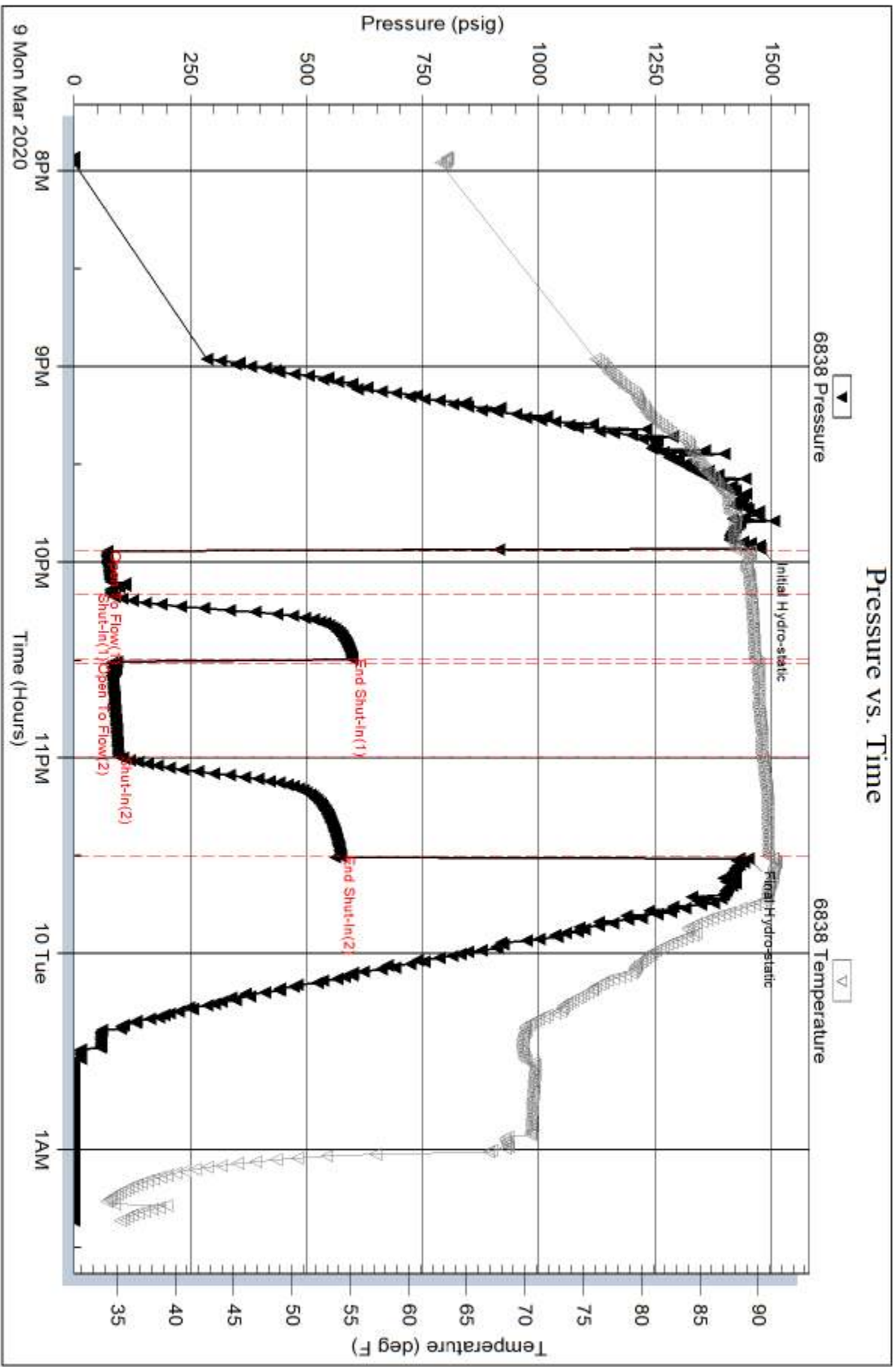
Serial #: 6838

Inside

C&S Oil Company

Rocking P#1-19

DST Test Number: 1



Tribble Testing, Inc

Ref. No: 66382

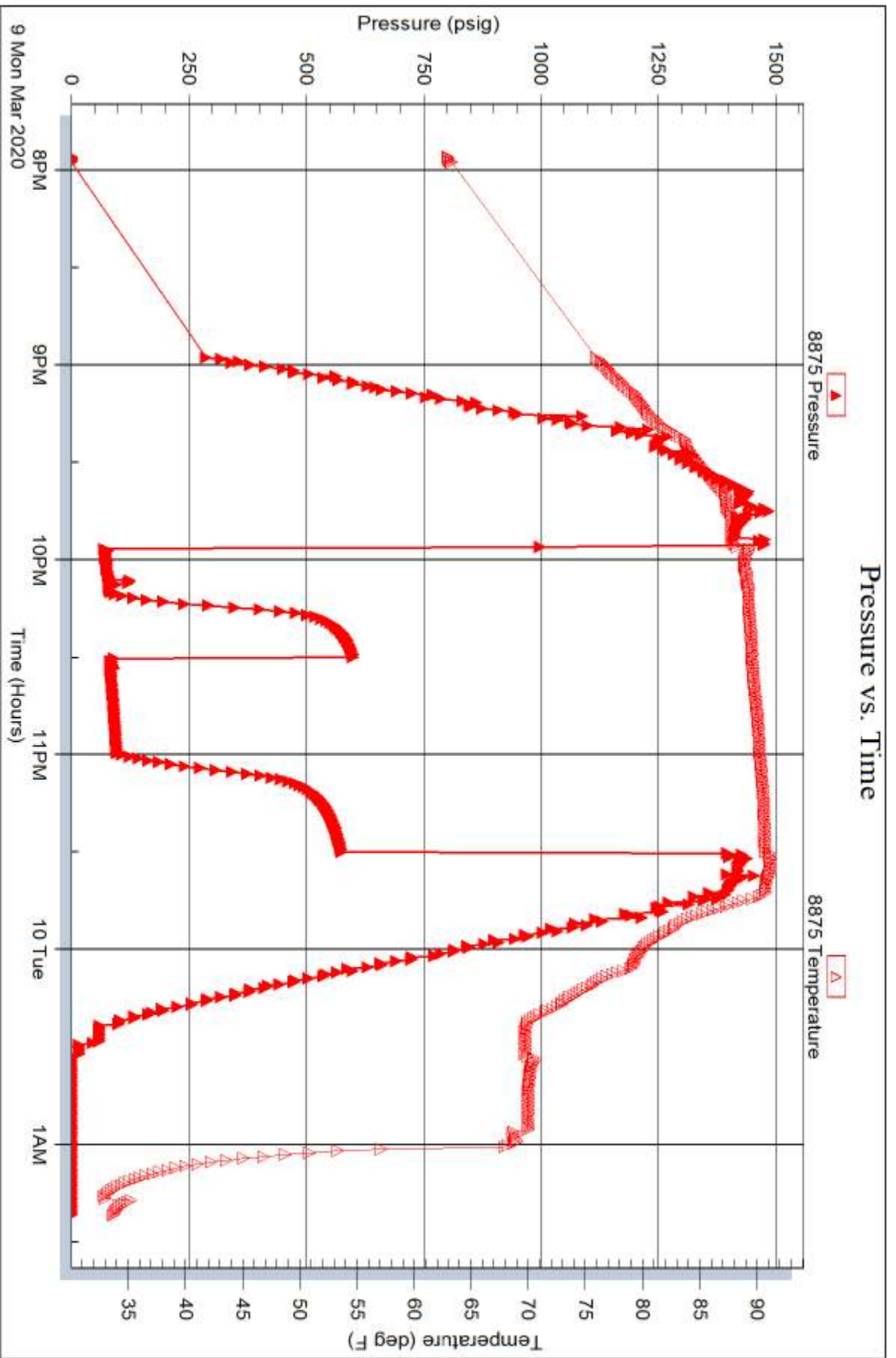
Printed: 2020.03.10 @ 07:04:03

Serial #: 8875

Outside C&S Oil Company

Rocking P#1-19

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 66382

Printed: 2020.03.10 @ 07:04:03



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

C&S Oil Company  
305 S Elm St  
Russell KS 67665+3005  
ATTN: Chad Counts

**19-11s-14w Russell KS**  
**Rocking P #1-19**  
Job Ticket: 66383      **DST#: 2**  
Test Start: 2020.03.10 @ 06:30:00

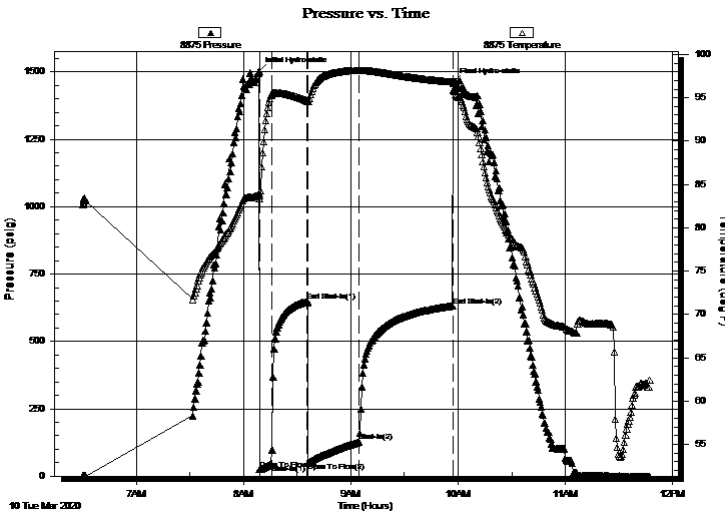
## GENERAL INFORMATION:

Formation: **LKC D**  
Deviated: No Whipstock:                      ft (KB)      Test Type: Conventional Bottom Hole (Reset)  
Time Tool Opened: 08:08:52      Tester: Spencer J Staab  
Time Test Ended: 11:47:12      Unit No: 84  
**Interval: 3057.00 ft (KB) To 3075.00 ft (KB) (TVD)**      Reference Elevations: 1833.00 ft (KB)  
Total Depth: 3075.00 ft (KB) (TVD)      1826.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Fair      KB to GR/CF: 7.00 ft

**Serial #: 8875      Outside**  
Press@RunDepth: 127.49 psig @ 3058.00 ft (KB)      Capacity:                      psig  
Start Date: 2020.03.10      End Date: 2020.03.10      Last Calib.: 2020.03.10  
Start Time: 06:30:01      End Time: 11:47:12      Time On Btm: 2020.03.10 @ 08:08:47  
Time Off Btm: 2020.03.10 @ 09:57:17

**TEST COMMENT:** 5-IF-Built to 10"  
20-ISI-Weak; Built to 3/4"  
30-FF-BOB 10 mins; Built to 29"  
45-FSI-Weak; Built to 1&1/2"

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1502.21	83.92	Initial Hydro-static
1	24.58	83.37	Open To Flow (1)
7	45.57	95.38	Shut-In(1)
27	648.94	94.61	End Shut-In(1)
28	49.74	94.55	Open To Flow (2)
56	127.49	98.14	Shut-In(2)
109	632.28	96.85	End Shut-In(2)
109	1458.85	97.06	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
180.00	GMW 10%G 10%M 80%W	2.55
25.00	GVSOCMW 10%G 1%O 30%M 59%W	0.35
15.00	GSWCMO 5%G 3%W 2%M 90%O	0.21
0.00	120 GIP 100%G	0.00

\* Recovery from multiple tests

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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# DRILL STEM TEST REPORT

C&S Oil Company  
305 S Elm St  
Russell KS 67665+3005  
ATTN: Chad Counts

19-11s-14w Russell KS

Rocking P #1-19

Job Ticket: 66383      **DST#: 2**

Test Start: 2020.03.10 @ 06:30:00

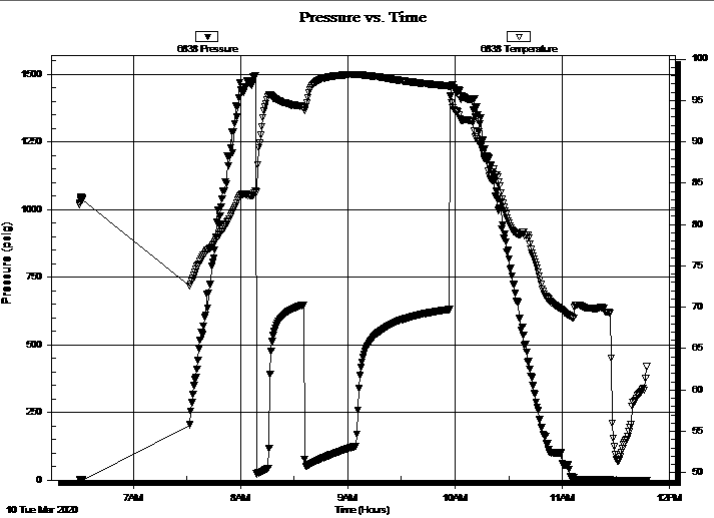
## GENERAL INFORMATION:

Formation:	LKC D	Test Type:	Conventional Bottom Hole (Reset)
Deviated:	No Whipstock:	ft (KB)	
Time Tool Opened:	08:08:52	Tester:	Spencer J Staab
Time Test Ended:	11:47:12	Unit No:	84
<b>Interval:</b>	<b>3057.00 ft (KB) To 3075.00 ft (KB) (TVD)</b>	Reference Elevations:	1833.00 ft (KB)
Total Depth:	3075.00 ft (KB) (TVD)		1826.00 ft (CF)
Hole Diameter:	7.88 inches	Hole Condition:	Fair
		KB to GR/CF:	7.00 ft

## Serial #: 6838      Inside

Press@RunDepth:	psig @ 3058.00 ft (KB)	Capacity:	psig
Start Date:	2020.03.10	End Date:	2020.03.10
Start Time:	06:30:01	End Time:	11:47:12
		Last Calib.:	2020.03.10
		Time On Btm:	
		Time Off Btm:	

TEST COMMENT: 5-IF-Built to 10"  
 20-ISI-Weak; Built to 3/4"  
 30-FF-BOB 10 mins; Built to 29"  
 45-FSI-Weak; Built to 1&1/2"



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
180.00	GMW 10%G 10%M 80%W	2.55
25.00	GVSOCMW 10%G 1%O 30%M 59%W	0.35
15.00	GSWCMO 5%G 3%W 2%M 90%O	0.21
0.00	120 GIP 100%G	0.00

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

C&S Oil Company  
305 S Elm St  
Russell KS 67665+3005  
ATTN: Chad Counts

**19-11s-14w Russell KS**  
**Rocking P #1-19**  
Job Ticket: 66383      **DST#: 2**  
Test Start: 2020.03.10 @ 06:30:00

## Mud and Cushion Information

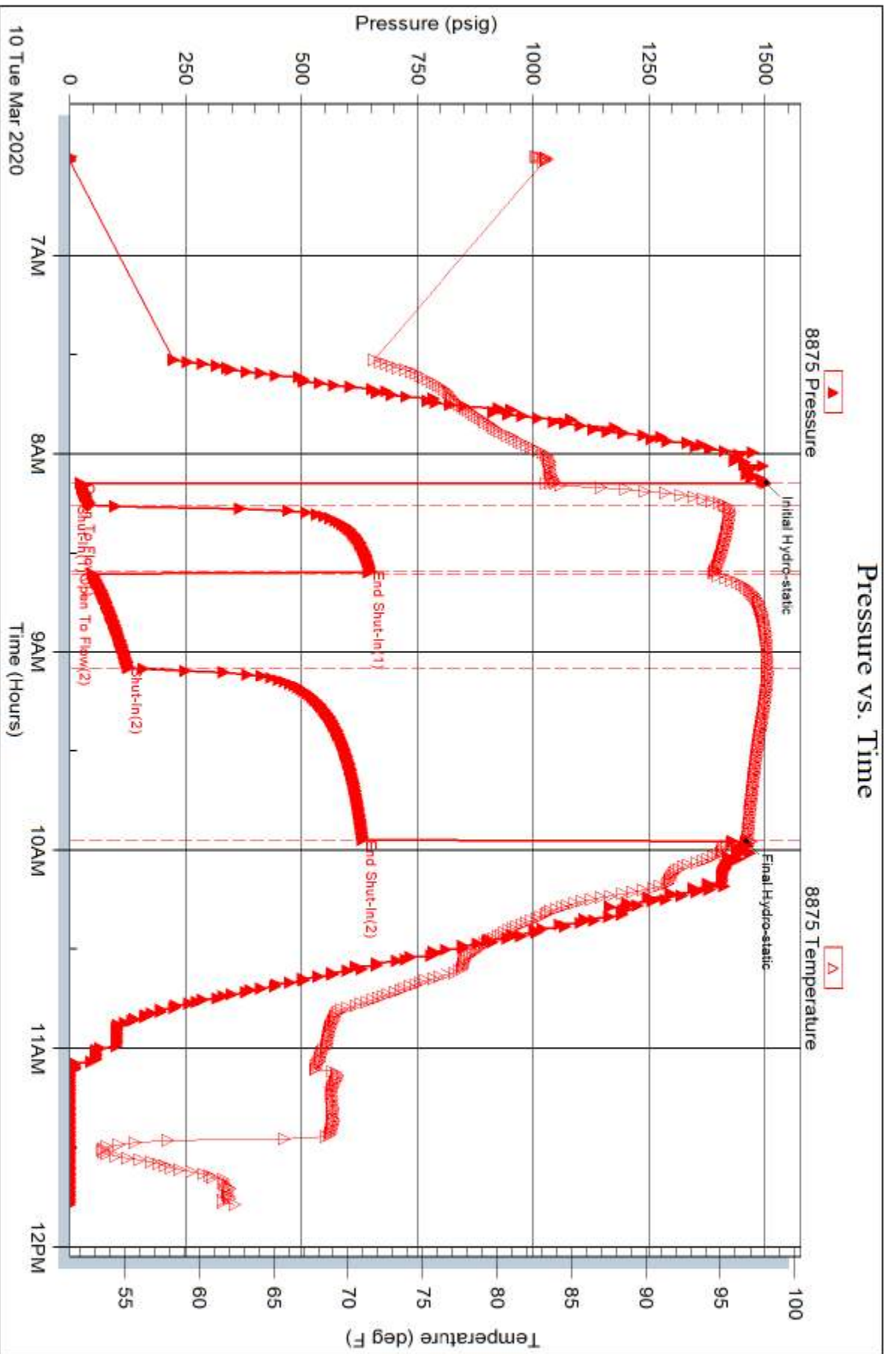
Mud Type: Gel Chem	Cushion Type:	Oil API: 40 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 36000 ppm
Viscosity: 51.00 sec/qt	Cushion Volume: bbl	
Water Loss: 8.39 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 5500.00 ppm		
Filter Cake: inches		

## Recovery Information

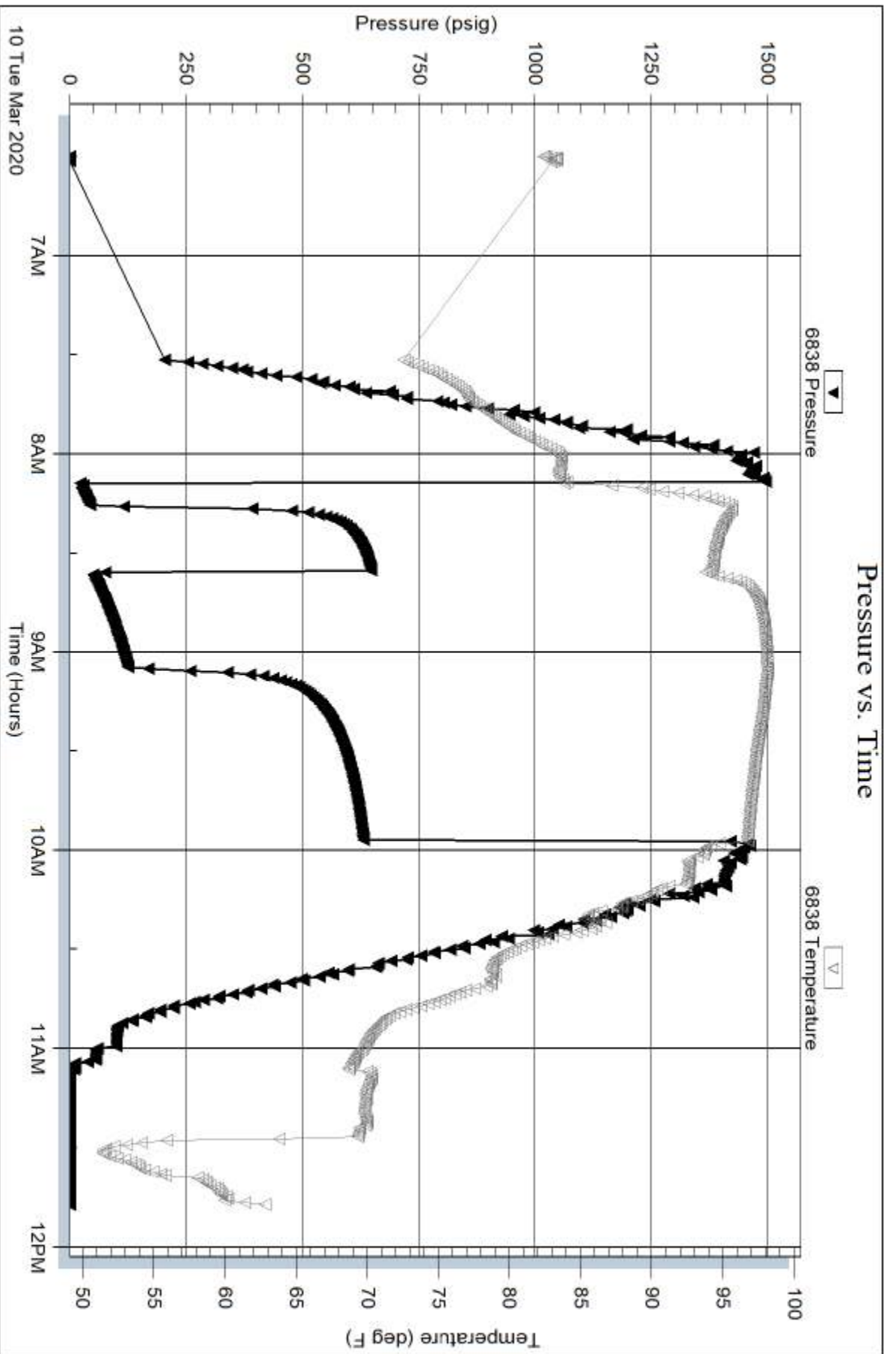
Recovery Table

Length ft	Description	Volume bbl
180.00	GMW 10%G 10%M 80%W	2.552
25.00	GVSOCMW 10%G 1%O 30%M 59%W	0.354
15.00	GSWCMO 5%G 3%W 2%M 90%O	0.213
0.00	120 GIP 100%G	0.000

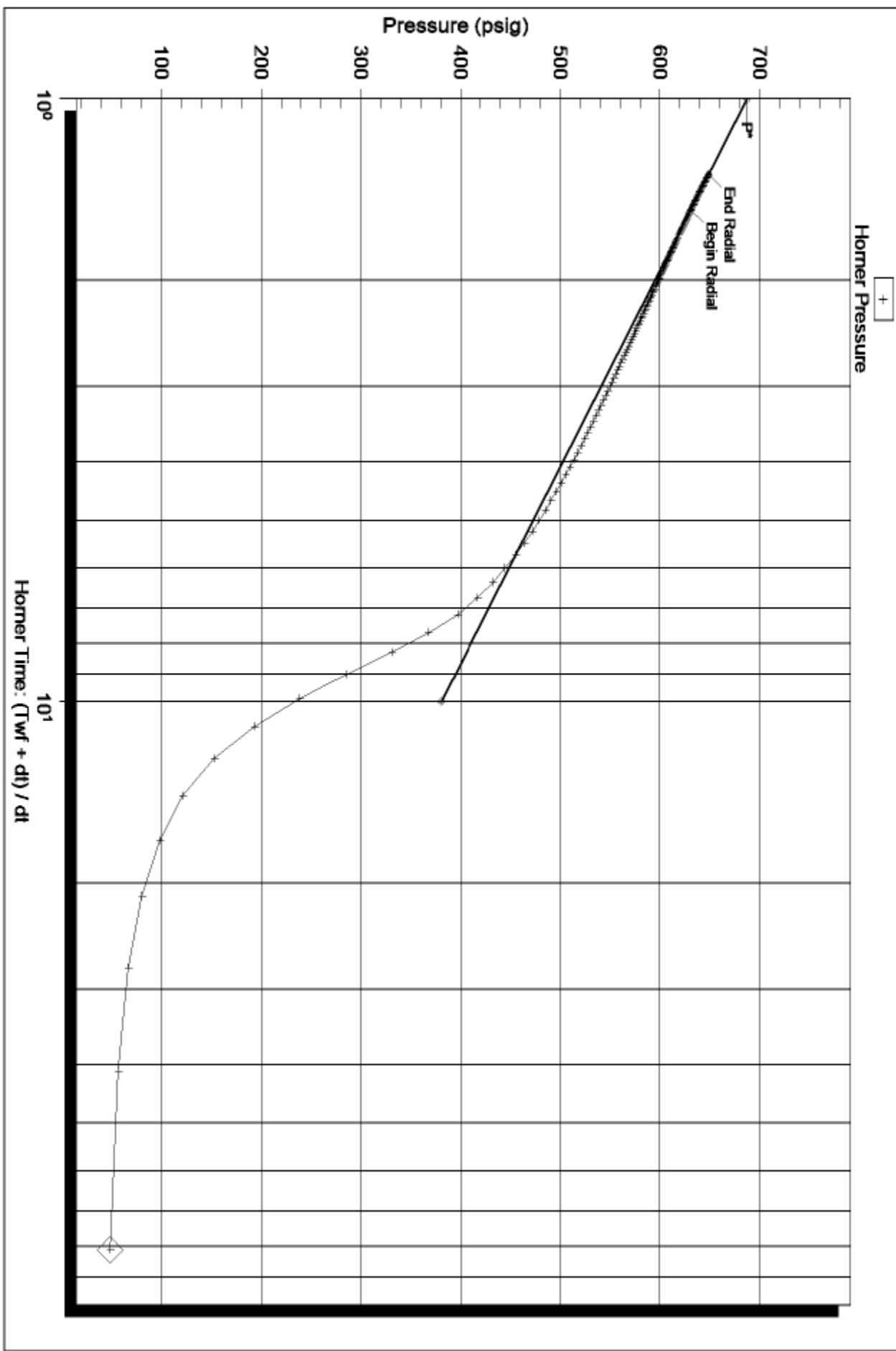
Total Length: 220.00 ft      Total Volume: 3.119 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: 2#LCM  
RW=.257@54F







# Horner Plot



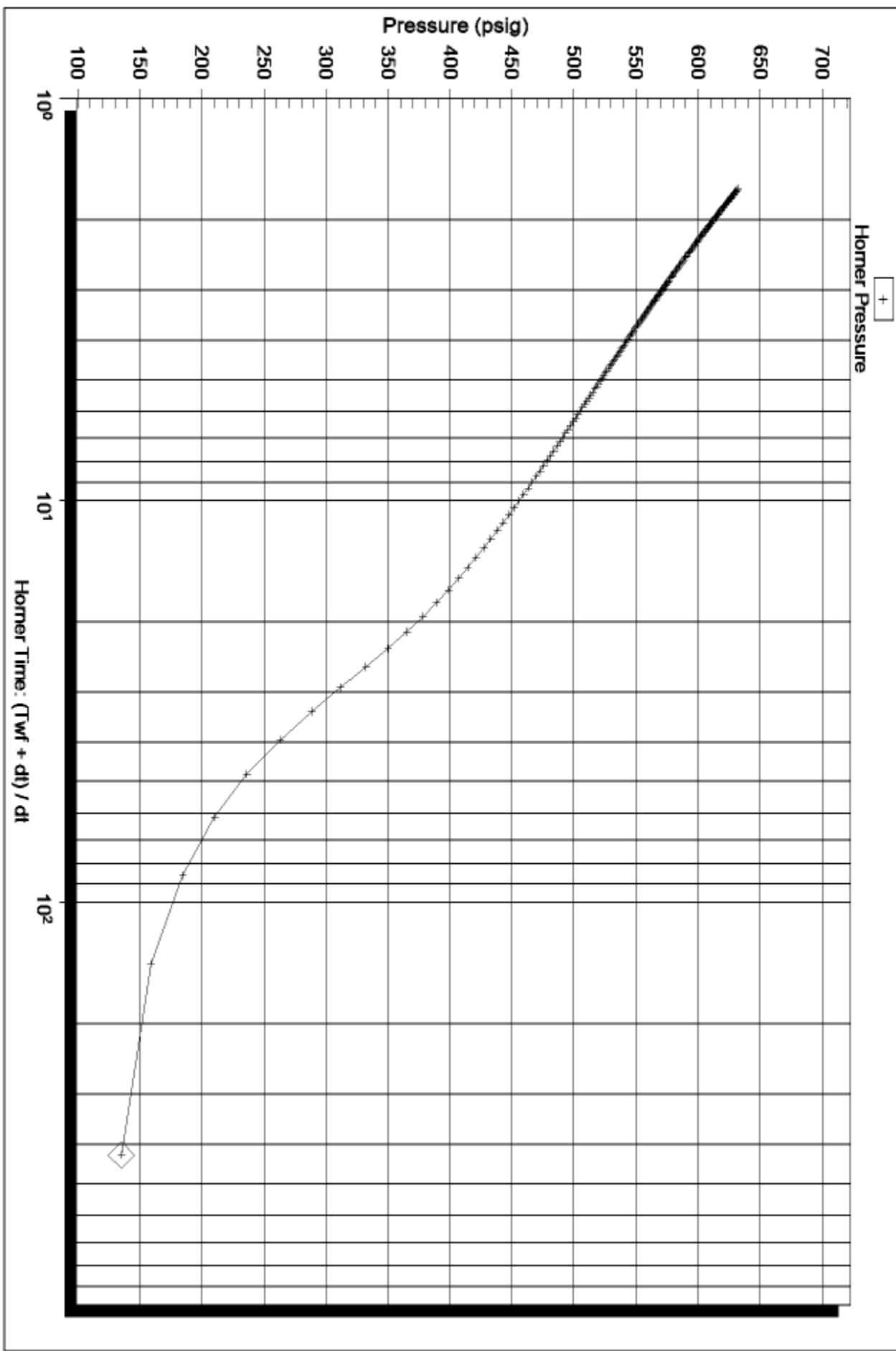
Serial Number: 8875 (Outside)

$P^*$  : 687.15

Slope (m) : 306.68 kpa/log cycle

Flow Cycle: 1

### Horner Plot



Serial Number: 8875 (Outside)

P\* :

Slope (m) : kpa/log cycle

Flow Cycle: 2