

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	Griffin, Charles N.
Well Name	SAVANNAH 1
Doc ID	1500412

All Electric Logs Run

CNL/CDL w/ PE
DUAL INDUCTION
MICRO
SONIC

Form	ACO1 - Well Completion
Operator	Griffin, Charles N.
Well Name	SAVANNAH 1
Doc ID	1500412

Tops

Name	Top	Datum
KING HILL	3658	-1667
HEEBNER	3860	-1869
BROWN LIME	4030	-2039
LANSING	4046	-2055
STARK	4350	-2359
B/KC	4436	-2445
PAWNEE	4492	-2501
CHEROKEE	4526	-2535
VIOLA	4560	-2569
SIMPSON SHALE	4716	-2725
SIMP SAND	4748	-2757

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

Well Name: Savannah #1
 API: 15-151-22512
 Location: NW - SE - NW of Sec 34 29s 15w
 License Number: 33306
 Spud Date: 2/5/2020
 Surface Coordinates: Lat: 37.480366 Long: -98.95162
 Bottom Hole Coordinates: Same as surface coordinates. Survey 4 degrees @ 4820'.
 Ground Elevation (ft): 1980' K.B. Elevation (ft): 1991'
 Logged Interval (ft): 3600' RTD @ 4820' Total Depth (ft): 4820'
 Formation: Ordovician @ TD
 Type of Drilling Fluid: Mud Co. Chemical Drispac
 Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Griffin Management, LLC
 Address: P.O. Box 347
 Pratt, KS 67124-0347

GEOLOGIST

Name: Eli J. Felts
 Company: Griffin Management, LLC
 Address: ejfelts47@gmail.com
 316.204.5059

Formation Tops

SAMPLE TOPS		LOG TOPS	
KING HILL	3689 (-1688)	KING HILL	3688 (-1687)
HEEBNER	3858 (-1867)	HEEBNER	3860 (-1869)
BROWN LIME	4030 (-2039)	BROWN LIME	4030 (-2039)
LANSING	4046 (-2055)	LANSING	4046 (-2055)
STARK	4382 (-2381)	STARK	4380 (-2389)
BKC	4436 (-2445)	BKC	4436 (-2445)
PAWNEE	4484 (-2503)	PAWNEE	4482 (-2501)
CHEROKEE	4524 (-2543)	CHEROKEE	4526 (-2545)
VIOLA	4586 (-2585)	VIOLA	4580 (-2569)
SIMP SHALE	4718 (-2727)	SIMP SHALE	4716 (-2725)
SIMP SAND	4750 (-2759)	SIMP SAND	4748 (-2757)
RTD	4820 (-2829)	LTD	4818 (-2827)

Drilling Report

Sterling Drilling, Rig #4
 Tool Pusher: Lanny Saloga
 Cell # 620.388.4193

2/05/2020
 MIRU. Spud @ -7pm. Set Surface.

2/06/2020
 WOC @ 272'

2/07/2020
 Drilling @ 1520'

2/08/2020
 Drilling @ 3180'. Displaced Mud @ 2756'. Geo on location @ 7pm.

2/09/2020
 Drilling @ 4165'. DST #1 4310'-4334'.

2/10/2020
 CTCH @ 4334' Following DST #1. Went back in w/ same PDC bit.
 Bit wore out -4632' Started bit trip @ -2am on 2/11.

2/11/2020
 TIH w/ bit @ 4692'
 RTD @ -11:30 AM. CTCH 90". TOOH for loggers
 Finished Logging @ -9:30 PM. Would have finished sooner but Micro-Log had to be ran twice due to tool malfunction.
 TIH w/ bit to CTCH for casing.

2/12/2020
 Running Casing @ 7AM
 Released Rig @ 1:15 PM

Problems

PDC bit wore out -4362'. Tried to make it to TD, but ROP slowed significantly & Tool Pusher elected to bit trip @ 4692'. Went back in w/ new PDC to finish hole. (old bit found to be missing cutters on the bottom. Seems ok condition for re-furb.)

Pipe Setting

12.25" (23#) Surface @ 268' KB. Ticket #7359.
 4.5" (10.5#) Production @ 4810' KB. Ticket #7362.

Cemented by:
 Quality Well Service & Cementing.

TRIBOLITE LOGGING, INC.
 Charles H Griffin
 PO Box 347
 Pratt, KS 67124
 ATTN: EJ Felts

DRILL STEM TEST REPORT

34-29S-15W Pratt, KS
 Savannah #1
 Job Ticket: 65487
 DST# 1
 Test Start: 2020 02 09 @ 19:47:00

Serial #: 8672
 Press @ Run Depth: 76.97 psi @ 431.00 ft (KB)
 Start Date: 2020 02 09
 End Time: 19:47:01

GENERAL INFORMATION:

Formation: Sw slope
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Reference Elevation: Lateral Classon
 Line Elev: 74
 Interval: 4310.00 ft (KB) To 4334.00 ft (KB) (TVD)
 Total Depth: 4334.00 ft (KB) (TVD)
 Hole Diameter: 7.85 inches-Hole Condition: Good
 Reference Elevation: 1993.00 ft (KB)
 1982.00 ft (CP)
 11.00 ft

Serial #: 8672
 Press @ Run Depth: 76.97 psi @ 431.00 ft (KB)
 Start Date: 2020 02 09
 End Time: 19:47:01

Capacity: Last Call: 2020 02 10 P#0
 Time On Btm: 2020 02 09 @ 21:58:47
 Time Off Btm: 2020 02 10 @ 01:27:02

TEST COMMENT: If Flat Blow, BCB in 12 minutes. Built to 38 inches.
 ISI No Blow Back
 PFB Flat Blow, BCB in 5 minutes. Built to 03 inches.

RECOVERY

Length (ft)	Recovery	Losses (ft)
0.00	825 GP	0.00
120.00	SDCMCV 5%G 5%O 30% M 60%W	0.59

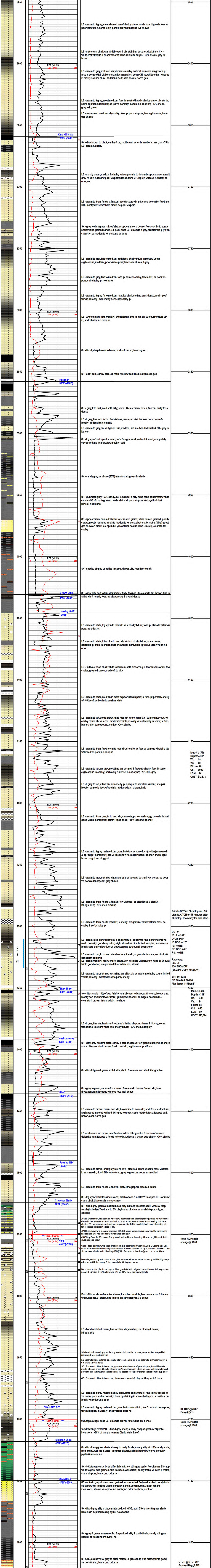
PRESSURE SUMMARY

Time (Min)	Pressure (psig)	Temp (deg F)	Annotation
0	2281.29	104.76	Initial Hydro-static
4	25.31	105.96	Open to Flow (1)
34	39.51	110.61	Shut-In (1)
60	870.86	111.75	First Shut-In (1)
81	36.67	111.63	Open to Flow (2)
142	76.97	114.53	Shut-In (2)
203	824.89	114.59	First Shut-In (2)
209	2332.39	113.51	Final Hydro-static

Gas Rates

Check (min)	Pressure (psig)	Gas Rate (Bbl/DAY)
0.00	0.00	
120.00	0.59	

ROCK TYPES	
Anhy Bent	Congl Dol-cream
Brec	Dol
Ch	Gyp
Clyst	Igne
Coal	Granite 2
Granite	Lmst tan
Lmst	Meta
Mrlst	Quartz
Salt	Shale 2
Shale 1	Shale 1
Shale 1	Shale 1
Shaly	Shaly
Siltst	Ss
Ss	Tiil





**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Charles N Griffin

34-29S-15W Pratt, KS

PO Box 347
Pratt, KS 67124

Savannah 1

Job Ticket: 65487

DST#: 1

ATTN: Eii Felts

Test Start: 2020.02.09 @ 19:47:00

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:

68000 ppm

Viscosity: 52.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	825 GIP	0.000
120.00	SGOMCW 5%G 5%O 30%M 60%W	0.590

Total Length: 120.00 ft Total Volume: 0.590 bbl

Num Fluid Samples: 0

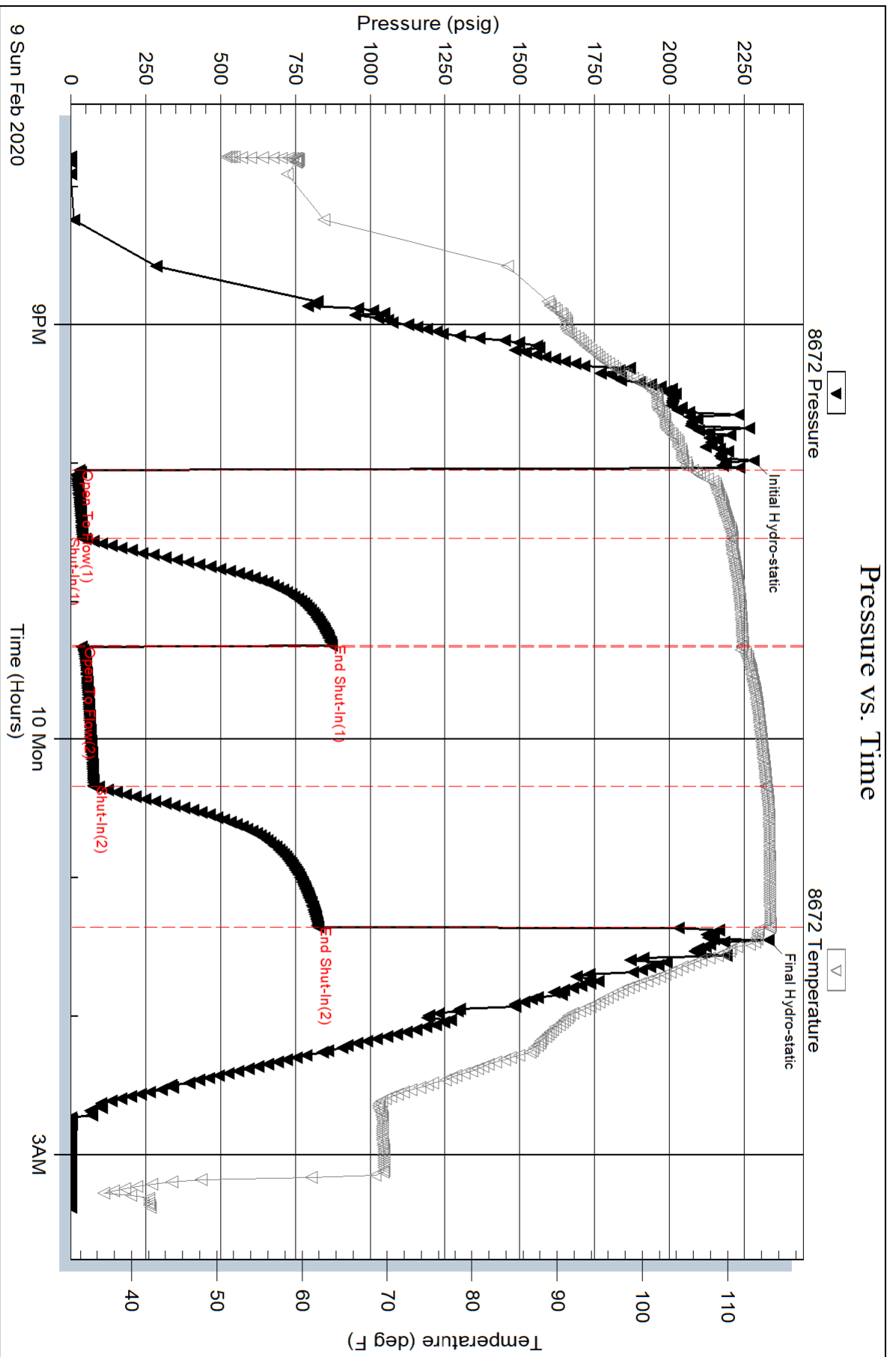
Num Gas Bombs: 0

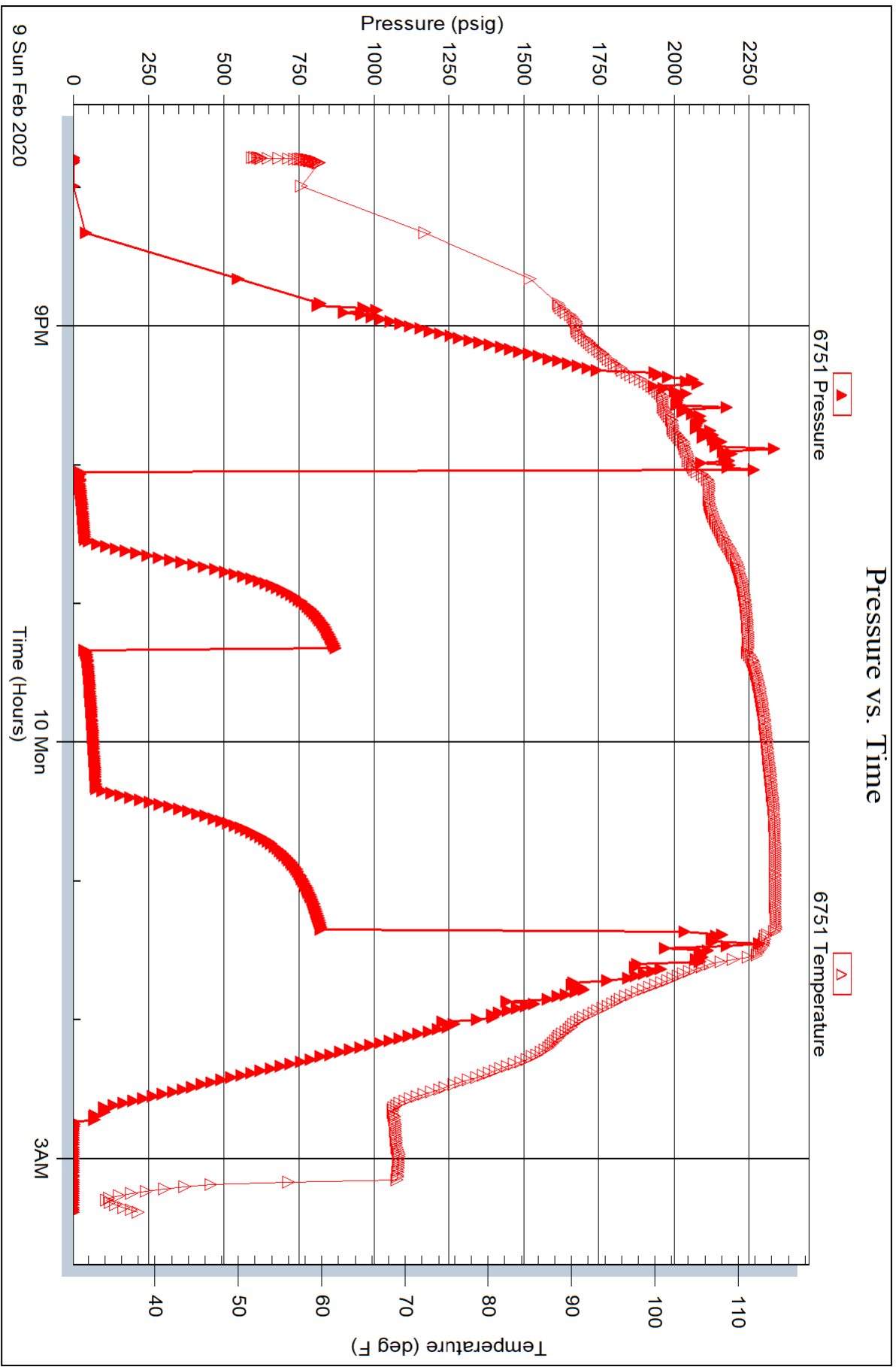
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW was .26 @ 33 degrees





QUALITY WELL SERVICE, INC.

Federal Tax I.D. # 481187368

Home Office 30060 N. Hwy 281, Pratt, KS 67124

Mailing Address P.O. Box 468

Office 620-727-3410

Fax 620-672-3663

Rich's Cell 620-727-3409

Brady's Cell 620-727-6964

7359
JW
C-2275

Date	Sec.	Twp.	Range	County	State	On Location	Finish
2-6-20	34	29S	15W	PRATT	Ks.		
Lease SAVANNAH	Well No. #1	Location CROFT, K. S to 110 th RD 2.2 E to					
Contractor STEELING	Owner CATTLE GUARD .3 S E into			To Quality Well Service, Inc.			
Type Job SURFACE	You are hereby requested to rent cementing equipment and furnish			cementer and helper to assist owner or contractor to do work as listed.			
Hole Size 12 1/4	T.D.	272'		Charge To			
Csg. 85/8 23 1/2	Depth	263'		To GIFFIN			
Tbg. Size	Depth	Street					
Tool	Depth	City				State	
Cement Left in Csg.	Shoe Joint	25		The above was done to satisfaction and supervision of owner agent or contractor.			
Meas Line	Displace	15.6		Cement Amount Ordered 220sx Common			
EQUIPMENT				2 1/2 GAL 3 1/2 CC 1/2 # PS			
Pumptrk 8 No.				Common 220			
Bulktrk 15 No.				Poz. Mix			
Bulktrk No.				Gel. 423 #			
Pickup No.				Calcium 634.5 #			
JOB SERVICES & REMARKS				Hulls			
Rat Hole				Salt			
Mouse Hole				Flowseal 112.5 #			
Centralizers				Kol-Seal			
Baskets				Mud CLR 48			
D/V or Port Collar				CFL-117 or CD110 CAF 38			
Run 6 H's 85/8 23 1/2 CSG SET @ 263'				Sand			
START CSG CSG ON Bottom				Handling 242			
Hook up to CSG & BREAK CIRC w/ TRIG				Mileage 25 / 6050			
START Pumping H2O				85/8 FLOAT EQUIPMENT			
START Mix & Pump sx Common				Guide Shoe HEAD & MANIFOLD 1 EA			
2 1/2 GAL 3 1/2 CC 1/2 # PS @ 14.3 #/GAL				Centralizer 85/8 WOODEN PLUG 1 EA			
SHUT DOWN & RELEASE 85/8 WOODEN PLUG				Baskets			
START DISP				AFU Inserts			
PLUG DOWN 15.6 Bbls				Float Shoe			
Close Valve on CSG 150 #				Latch Down			
Good circ thro JOB				SERVICE SUPV 1 EA			
Circ OUT TO Pt				LMV			
THANK YOU				Pumptrk Charge SURFACE			
PLEASE CALL AGAIN				Mileage 50			
TS MIKE JAKE				Tax			
Signature <i>Jimmy D. Taylor</i>				Discount			
				Total Charge			

QUALITY WELL SERVICE, INC.

7362

Federal Tax I.D. # 481187368

Home Office 30060 N. Hwy 281, Pratt, KS 67124

Mailing Address P.O. Box 468

Office 620-727-3410
Fax 620-672-3663

Rich's Cell 620-727-3409
Brady's Cell 620-727-6964

Jmw
C-2287

Date	2-12-20	Sec.	34	Twp.	29S	Range	15W	County	PRATT	State	Ks	On Location		Finish				
Lease	SAVANNAH		Well No.		41		Location									CROFT, Ks S to 110 th Rd 2 1/4 E to		
Contractor	STERLING DRIG. RIG # 4							Owner									CATTLE GROWN 1/4 S into	
Type Job	4 1/2 LS							To Quality Well Service, Inc.									You are hereby requested to rent cementing equipment and furnish	
Hole Size	7 7/8							T.D.									4320'	
Csg.	4 1/2 N.6"-105"							Depth									4312.45	
Tbg. Size								Depth										
Tool								Depth										
Cement Left in Csg.								Shoe Joint									13.97	
Meas Line								Displace									75.31	
EQUIPMENT										10% SAH 5 1/8" KOLSEAL .6% C16A 25% C4IP 1/4" PI								
Pumptrk	8	No.												Common	200 SK.			
Bulktrk	10	No.												Poz. Mix				
Bulktrk		No.												Gel.	376 #.			
Pickup		No.												Calcium				
JOB SERVICES & REMARKS										Hulls								
Rat Hole	30 SK							Salt									1101 #.	
Mouse Hole	20 SK							Flowseal									50 #.	
Centralizers	1-2-3-4-5-6							Kol-Seal									1000 #.	
Baskets								Mud CLR 48									500 GAL.	
D/V or Port Collar	72=302316 44=1784.29							CFL-117 or CD110 CAF 38									C16A 112.8 #.	
Run 116 ft's 11.6" x 10.5" CSG. SET @ 4312.45										Sand						CC-1 7 GAL. C4IP 47 #.		
START CSG CSG ON Bottom & TAG Hook up										Handling						246		
to CSG & Break circ w/ RIG DROP BALL										Mileage						25/6150		
circ w/ RIG										4 1/2 FLOAT EQUIPMENT								
START Pumping 10RHK H2O 12RHK MF 10RHK H2O										Guide Shoe						HEAD & manifold 1 EA.		
START Mix Pump 50 SK PUG B-M HOLES										Centralizer						6 EA.		
START Mix Pump 150 SK PROCL J CSG @ 14.0" GAL										Baskets								
SHUT DOWN washing tank & RELEASE 4 1/2 LD PUG										AFU Inserts								
START disp w/ 2 1/2 KCL										Float Shoe						1 EA.		
Lift PI: 65 out 600"										Latch Down						1 EA.		
PUG DOWN 75.5 out 1200"										SERVICE Sepv						1 EA.		
PUG up CSG 1500"										LMV						25'		
RELEASE HELD 1/2 BNL BACK										Pumptrk Charge						LS.		
GOOD circ thru JOBS										Mileage						50		
THANK YOU																Tax		
PLEASE CALL AGAIN TOM TOM MIKE JAKE																Discount		
Signature <i>[Signature]</i>																Total Charge		