KOLAR Document ID: 1531677

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 # 7281
Name: Vonfeldt, Alan J
Address 1: P.O. BOX 611
Address 2:
City: RUSSELL State: KS Zip: 67665 + 0611
Contact Person: Alan Vonfeldt
Phone: (785) 483-0252
CONTRACTOR: License # 33350
Name: Southwind Drilling, Inc.
Wellsite Geologist: Herb Deines
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 #:

9/24/2020 Spud Date or Recompletion Date
9/29/2020 Date Reached TD
9/30/2020 Completion Date or Recompletion Date

API No.: 15-167-24103-00-00
Spot Description:
S2 - NW - NW - NE Sec. 19 Twp. 15 S. R. 15 ☐ East ☑ West
460 Feet from ☑ North / ☐ South Line of Section
2310 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Russell
Lease Name: LAYHER A Well #: 1
Field Name:
Producing Formation: Lansing-Kansas City
Elevation: Ground: 1814 Kelly Bushing: 1823
Total Vertical Depth: 3340 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 914 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: 51000 ppm Fluid volume: 1120 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Jeff Mcquade OIl LLC
Lease Name: Karst License #: 35477
Quarter SW Sec. 21 Twp. 15 S. R. 13 ☐ East ☑ West
County: Russell Permit #: D22158

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: 11/03/2020
☐ **Confidential Release Date:** 11/03/2022
☑ **Wireline Log Received** ☑ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Karen Ritter **Date:** 11/03/2020

Operator Name: Vonfeldt, Alan J Lease Name: LAYHER A Well #: 1

Sec. 19 Twp. 15 S. R. 15 ☐ East ☑ West County: Russell

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 *(Attach Additional Sheets)*	☑ Yes	☐ No
Samples Sent to Geological Survey	☐ Yes	☑ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☑ Yes	☐ No

List All E. Logs Run:

DUAL INDUCTION LOG
DUAL COMPENSATED POROSITY LOG
MICRORESISTIVITY LOG

☐ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
ANHYDRITE	901	+922
TOPEKA	2796	-973
HEEBNER SHALE	3022	-1199
TORONTO	3040	-1217
LKC	3077	-1254
BKC	3298	-1475
RTD	3340	-1517

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	914	60/40 POS	350	4%CC 2% GEL
Production	7.875	4.5	11.5	3263	COMMON	150	10%SALT, 5% GILSONITE

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ 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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Vonfeldt, Alan J
Well Name	LAYHER A 1
Doc ID	1531677

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	914	60/40 POS	350	4%CC 2% GEL
Production	7.875	4.5	11.5	3263	COMMON	150	10%SALT, 5% GILSONITE

OPERATOR

Company:	ALAN J.VONFELDT		
Address:	PO BOX 611 RUSSELL, KANSAS 67665		
Contact Geologist:	ALAN J. VONFELDT		
Contact Phone Nbr:	785-483-0252		
Well Name:	LAYHER #A-1		
Location:	S2 NW NW NE, SEC,19-T15S-R15W		
API:	15-167-24,103-00-00		
Pool:	INFIELD	Field:	FOSTER
State:	KANSAS	Country:	USA

Scale 1:240 Imperial

Well Name:	LAYHER #A-1		
Surface Location:	S2 NW NW NE, SEC,19-T15S-R15W		
Bottom Location:			
API:	15-167-24,103-00-00		
License Number:	7281		
Spud Date:	9/24/2020	Time:	3:00 PM
Region:	RUSSELL		
Drilling Completed:	9/29/2020	Time:	6:42 AM
Surface Coordinates:	460' FNL & 2310' FEL		
Bottom Hole Coordinates:			
Ground Elevation:	1814.00ft		
K.B. Elevation:	1823.00ft		
Logged Interval:	2400.00ft	To:	3340.00ft
Total Depth:	3340.00ft		
Formation:	LANSING-KANSAS CITY		
Drilling Fluid Type:	CHEMICAL/FRESH WATER GEL		

SURFACE CO-ORDINATES

Well Type:	Vertical
Longitude:	-99.0303434
Latitude:	38.7389955
N/S Co-ord:	460' FNL
E/W Co-ord:	2310' FEL

LOGGED BY

SOLUTIONS CONSULTING

Company:	SOLUTIONS CONSULTING, INC.		
Address:	108 W 35TH HAYS, KS 67601		
Phone Nbr:	(785) 639-1337		
Logged By:	GEOLOGIST	Name:	HERB DEINES

CONTRACTOR

Contractor:	SOUTHWIND DRILLING INC.		
Rig #:	3		
Rig Type:	MUD ROTARY		
Spud Date:	9/24/2020	Time:	3:00 PM
TD Date:	9/29/2020	Time:	6:42 AM
Rig Release:	9/30/2020	Time:	4:15 AM

ELEVATIONS

K.B. Elevation:	1823.00ft	Ground Elevation:	1814.00ft
K.B. to Ground:	9.00ft		

NOTES

DECISION MADE AFTER REVIEW OF LOGS TO RUN PRODUCTION CASING.

OPEN HOLE LOGGING BY MIDWEST WIRELINE: DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, MICRORESISTIVITY LOG.

DRILL STEM TESTING BY TRILOBITE TESTING, INC: ONE (1) CONVENTIONAL TEST AND ONE (1) STRADDLE TEST

	LAYHER #A-1 E2NW NW NE SEC.19-15S-15W KB 1824'	LAYHER # 1 NW SW NW SEC.20-15S-15W KB 1821'	FOSTER # 1 SW NW NE SEC.19-15S-15W KB 1822
	LOG TOPS		
Anhydrite-top	901 +922	+920	+913
Anhydrite-base	936 +887	+886	
Topeka	2796 -973	-976	-971
Heebner Shale	3022-1199	-1195	
Toronto	3040-1217	-1211	
LKC	3077-1254	-1254	-1247
BKC	3298-1475	-1473	
Arbuckle	Not Reached	-1508	-1525
RTD	3340-1517	-1529	-1542

09-24-20	Spud 3:00PM. Drilling surface hole. Hit Fe pyrite at 285'
09-25-20	835', drilling, set 8 5/8" surface casing to 914' w 350 sks 60/40pos 4%CC 2%gel, plug down 3:30PM, Slope 1 ¼ degree @914'. WOC 12 hours
09-26-20	1060', drilling. Drilled plug at 3:30AM. Anhydrite spl top 898'-934'
09-27-20	2295', drilling, displaced at 2600'
09-28-20	3100', drilling, CFS 3125', short trip, DST # 1 3086' to 3125' "C" & "D", drilling
09-29-20	3340', RTD 3340' @ 6:42AM, CCH, TOWB, logs, straddle test #2 3046' to 3086' "A", TIWB, LDDP
09-30-20	3340', run production casing and cement. Job completed 4:15AM

DRILL STEM TEST REPORT

Alan J. Vonfeldt

PO Box 611
Russell, KS 67665

ATTN: Herb Deines

19-15S-15W Russell, KS

Layher A #1

Job Ticket: 59534 **DST#: 1**

Test Start: 2020.09.28 @ 11:12:42

GENERAL INFORMATION:

Formation: **LKC "C&D"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:43:48
Time Test Ended: 18:40:33

Test Type: Conventional Bottom Hole (Initial)
Tester: Brannan Lonsdale
Unit No: 73

Interval: 3086.00 ft (KB) To 3125.00 ft (KB) (TVD)
Total Depth: 3125.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

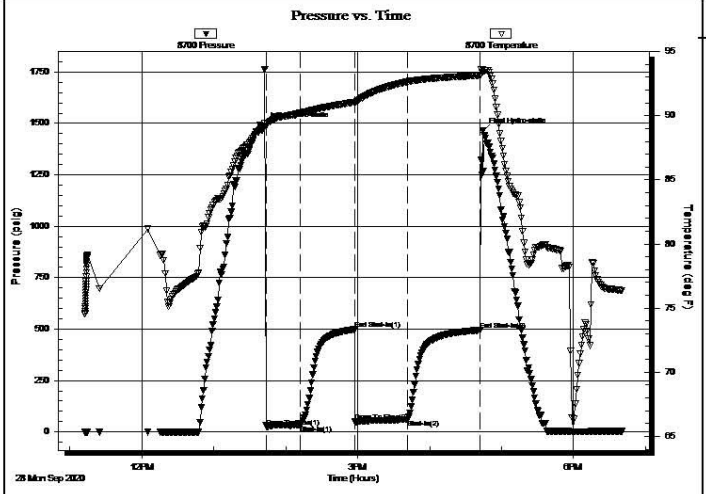
Reference Elevations: 1823.00 ft (KB)
1814.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8700 **Outside**

Press@RunDepth: 59.56 psig @ 3087.00 ft (KB)
Start Date: 2020.09.28 End Date: 2020.09.28
Start Time: 11:12:43 End Time: 18:40:33

Capacity: 8000.00 psig
Last Calib.: 2020.09.28
Time On Btm: 2020.09.28 @ 13:42:18
Time Off Btm: 2020.09.28 @ 16:44:18

TEST COMMENT: 30- IF- BOB 18mins. Built to 14.78"
45- ISI- Sporadic surface blow
45- FF- BOB 20mins. Biult to 16.32"
60- FSI- Surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1488.90	89.21	Initial Hydro-static
2	25.91	89.22	Open To Flow (1)
30	33.94	90.22	Shut-In(1)
75	497.87	91.06	End Shut-In(1)
76	49.54	90.99	Open To Flow (2)
119	59.56	92.65	Shut-In(2)
180	494.95	93.13	End Shut-In(2)
182	1462.81	93.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	WOCM, 20%W 25%O 55%M	0.85
20.00	HOCM, 40%O 60%M	0.28

Gas Rates

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

DRILL STEM TEST REPORT

Alan J. Vonfeldt

PO Box 611
Russell, KS 67665

ATTN: Herb Deines

19-15S-15W Russell, KS

Layher A #1

Job Ticket: 59535 **DST#: 2**

Test Start: 2020.09.29 @ 12:47:17

GENERAL INFORMATION:

Formation: **LKC "A"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:02:53
Time Test Ended: 19:01:08

Test Type: Conventional Straddle (Reset)
Tester: Brannan Lonsdale
Unit No: 73

Interval: 3046.00 ft (KB) To 3086.00 ft (KB) (TVD)
Total Depth: 3340.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

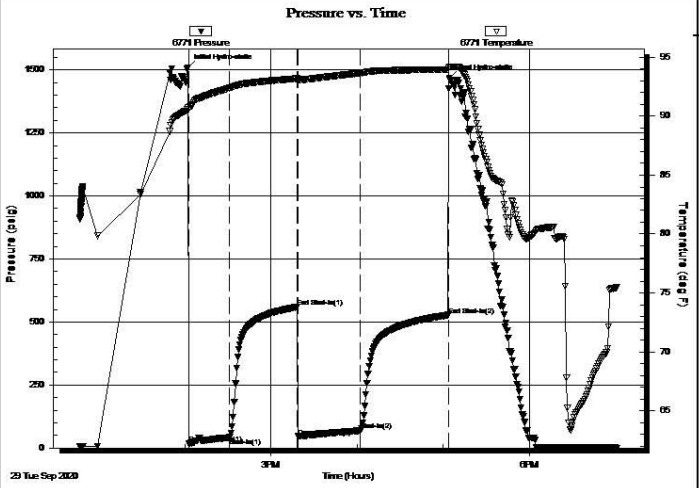
Reference Elevations: 1823.00 ft (KB)
1814.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: 69.68 psig @ 3047.00 ft (KB)
Start Date: 2020.09.29 End Date: 2020.09.29
Start Time: 12:47:18 End Time: 19:01:08

Capacity: 8000.00 psig
Last Calib.: 2020.09.29
Time On Btm: 2020.09.29 @ 14:02:23
Time Off Btm: 2020.09.29 @ 17:04:23

TEST COMMENT: 30- IF- BOB 24mins. Built to 12.03"
45- ISI- Weak surface blow
45- FF- BOB 26mins. Built to 16.25"
60- FSI- Surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1509.01	90.70	Initial Hydro-static
1	17.22	90.57	Open To Flow (1)
29	42.20	92.38	Shut-In(1)
76	559.17	93.18	End Shut-In(1)
77	46.05	93.10	Open To Flow (2)
120	69.68	93.65	Shut-In(2)
181	527.49	93.95	End Shut-In(2)
182	1467.93	94.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	WOCM, 20%O 25%W 55%M	1.70
5.00	CO	0.07

* Recovery from multiple tests

Gas Rates

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

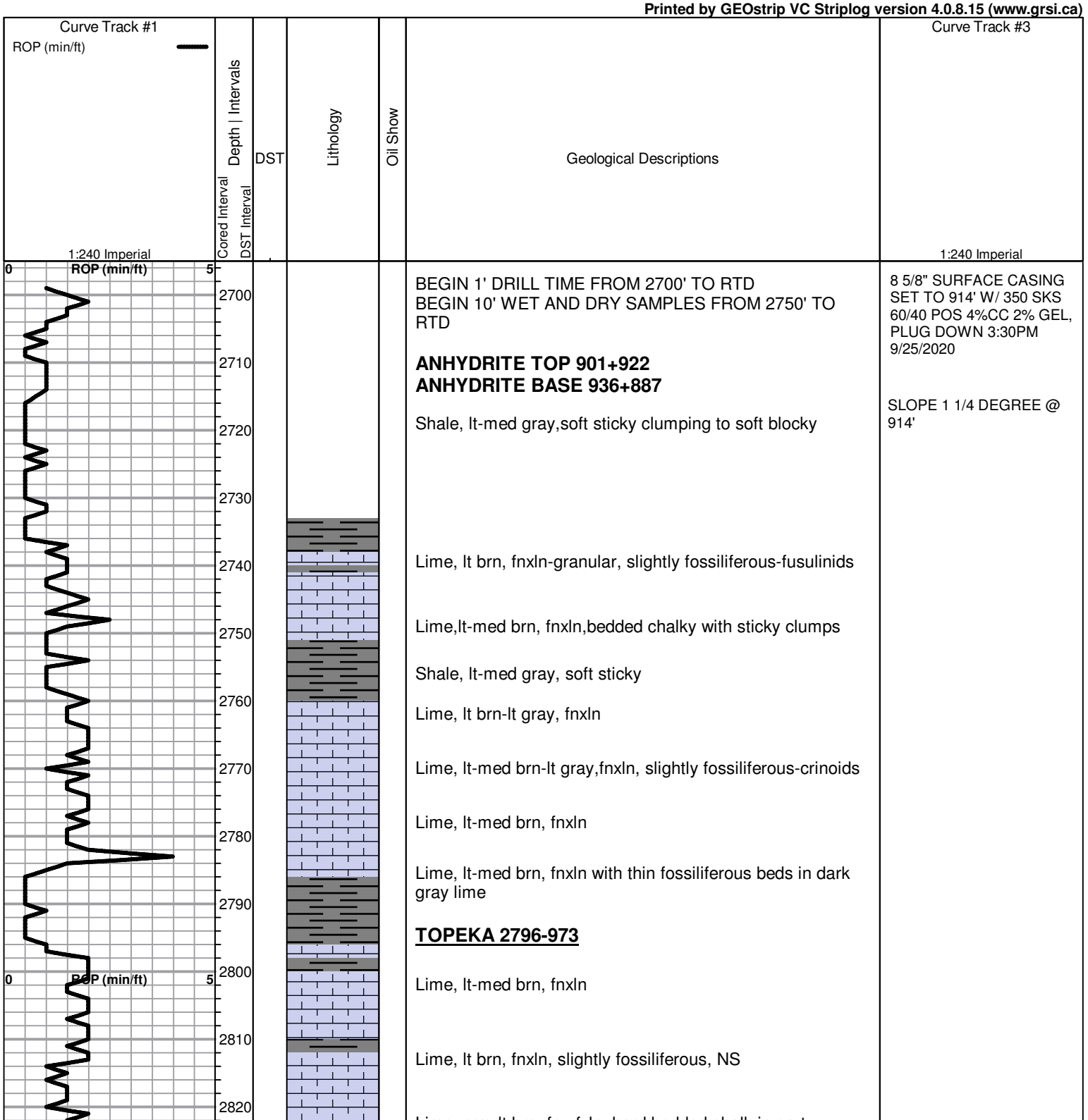
ROCK TYPES

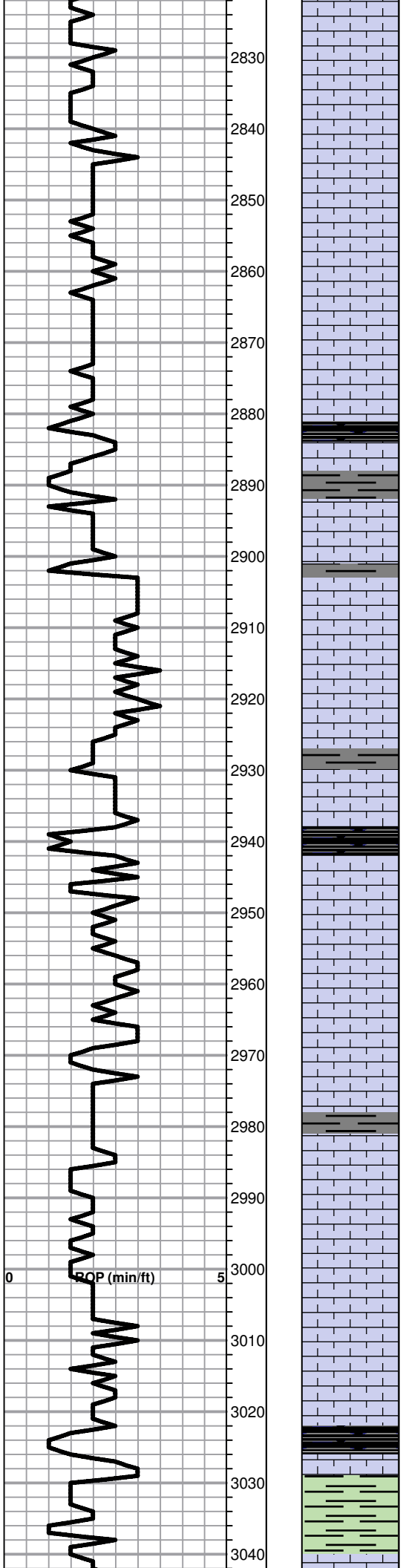
Clystgy | Lmst fw<7 | Lscongl | shale, gry | shale, red
Chtcongl | Lmst fw7> | shale, grn | Carbon Sh

ACCESSORIES

FOSSIL
Oolite

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





Lime, crm-lt brn, fn-vfxln, hard bedded chalk in part

Lime, lt brn-lt gray, fn-vfxln

Lime. lt brn-lt gray, fnxln, slight bedded chalk

Lime, lt brn-lt gray, fnxln

Lime, crm-lt brn, fnxln-granular in part, increasing bedded chalk

Lime, crm-lt brn, fnxln-granular, bedded chalk

Shale, black carbonaceous, blocky

Shale, lt gray, soft mud

Lime, crm-lt brn-lt gray, fn-vfxln

Lime, crm-lt brn, fn-vfxln

Lime, lt-med brn-med gray, fn-vfxln

Lime, lt-med brn, fnxln

Shale, black carbonaceous, blocky

Lime, lt-med-med gray brn, fn-vfxln

Lime, crm-lt brn, fnxln, slight bedded chalk

Lime, lt brn, fnxln,chalky matrix in part

Lime, lt brn, fnxln-granuar, soft chalky, NS

Lime, lt brn, fnxln, bedded chalk

Lime, crm, soft fnxln, chalky matrix, NS

Lime, lt brn, fnxln, soft on crush, chalky , NS

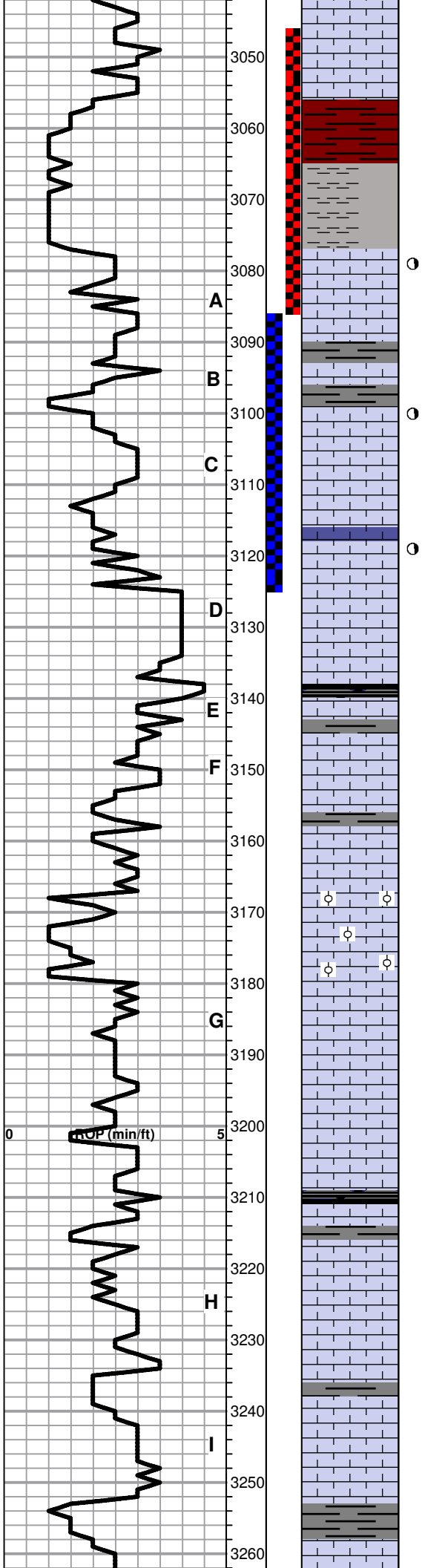
Lime, lt brn, fnxln-granular, chalky matrix

HEEBNER SHALE 3022-1199

Shale, black carbonaceous, blocky, fissile
Lime, lt-med brn, fn-vfxln

Shale, lime green, soft sticky

TORONTO 3040-1217



Lime, white-crm, fn-micro xln, NS

Lime, crm, fn-vfxln, hard bedded chalk

Lime, crm-lt brn, fn-vfxln

Shale, red, brn, gray, soft mud

DST # 2 STRADDLE TEST 3046' TO 3086' SEE HEADER FOR TEST SUMMARY

LKC 3077-1254

Lime, lt brn, fnxln, 1 chip with spotty lt stain, NFO or odor

ZONE TESTED AFTER LOG EVALUATION

Lime, lt brn, fn-vfxln

Lime, lt-med brn-med gray, fn-vfxln

Lime, lt-med brn-med gray, fn-vfxln, vlt odor, scattered vugs with SFO-lt gassy.

DST # 1 3086' TO 3125' SEE HEADER FOR TEST SUMMARY

Lime, lt brn, fnxln , chalky white wash

Lime, lt brn, fnxln, scattered vugs and oolitic chips, fair odor, spotty lt staining

CFS 3125', SHORT TRIP SLOPE 1 1/4 DEGREES @ 3125'

Lime, crm, fn-vfxln

Lime, crm-lt gray, fn-micro xln
Shale, black carbonaceous, blocky
Lime, very lt gray, vfxln

Lime, oolitic and interoolitic porosity with fossil fragments, no odor, NFO, trace of lt spotty staining

Lime, crm-lt brn, fn-vfxln, bedded chalk with lt white wash

Lime, tan-lt brn, oomoldic, NS

Lime, white-crm, fn-vfxln

Lime, crm-lt brn, fn-vfxln, bedded chalk

Lime, lt brn-lt gray, fn-micro xln

Shale, black carbonaceous, blocky

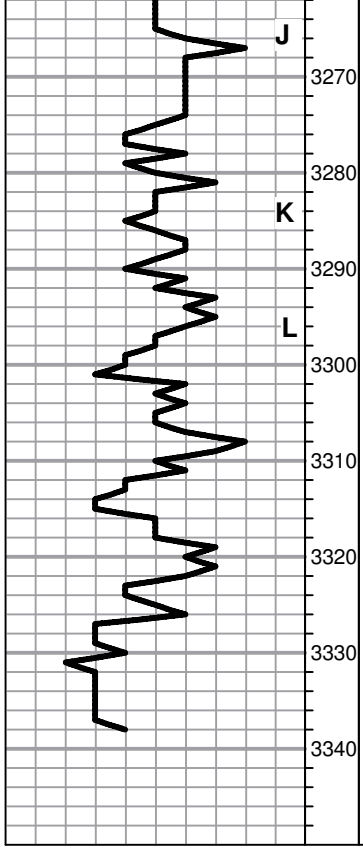
Lime, lt-med brn, fnxln, NFO, no odor or staining

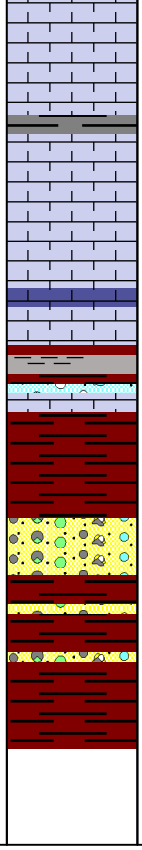
Lime, crm-lt brn, fn-vfxln, hard bedded chalk

Lime, crm-lt brn, fnxln, bedded chalk, NS or odor

Lime, crm, fn-vfxln,

Lime, crm-lt brn,fnxln with few oomoldic chips, NS, no odor





or staining	
Lime, lt brn, fn-micro xln	
Lime, lt brn-crm, fn-micro xln , NS	
Lime, crm-lt brn, fn-vfxln, slight bedded chalk, NS	
Lime, crm-lt brn,fn-vfxln	RAN 4 1/2" PRODUCTION CASING SET TO 3263' W/ 150 SACKS COMMON 10% SALT 5% GILSONITE, 30 SXS IN RATHOLE. JOB COMPLETED 9/30/2020 AT 4:15AM
BKC 3298-1475	
Shale, lt gray-lt grayish green, soft blocky	
Shale, red soft, cherty in part	
Shale and tan cherts, fresh, sharp, lt red wash	
Shale, soft sticky with scattered chert rubble	
Shale, red sticky with scattered chert rubble,	CFS 3335'
	SLOPE 1 1/2 DEGREES @ 3340'
RTD 3340-1517	

DRILL STEM TEST REPORT

Alan J. Vonfeldt

PO Box 611
Russell, KS 67665

ATTN: Herb Deines

19-15S-15W Russell, KS

Layher A #1

Job Ticket: 59534 **DST#: 1**

Test Start: 2020.09.28 @ 11:12:42

GENERAL INFORMATION:

Formation: **LKC "C&D"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:43:48
Time Test Ended: 18:40:33

Test Type: Conventional Bottom Hole (Initial)
Tester: Brannan Lonsdale
Unit No: 73

Interval: 3086.00 ft (KB) To 3125.00 ft (KB) (TVD)
Total Depth: 3125.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1823.00 ft (KB)
1814.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8700 **Outside**

Press@RunDepth: 59.56 psig @ 3087.00 ft (KB)
Start Date: 2020.09.28 End Date: 2020.09.28
Start Time: 11:12:43 End Time: 18:40:33

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Last Calib.: 2020.09.28
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TEST COMMENT: 30- IF- BOB 18mins. Built to 14.78"
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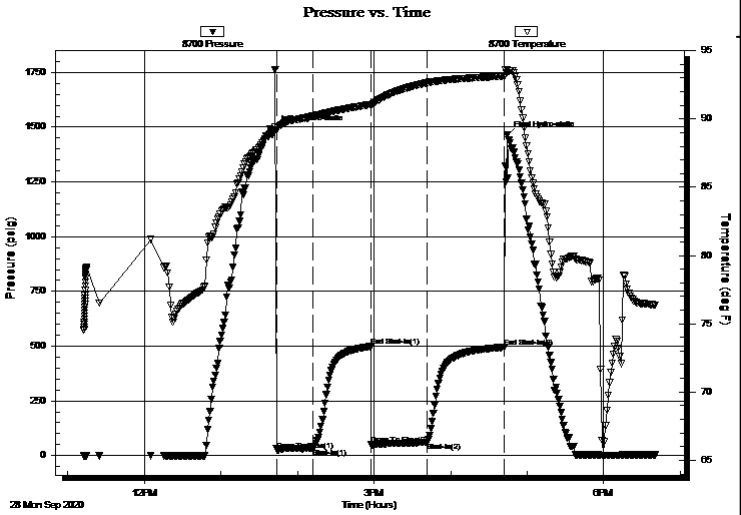
45- FF- BOB 20mins. Biult to 16.32"
60- FSI- Surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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75	497.87	91.06	End Shut-In(1)
76	49.54	90.99	Open To Flow (2)
119	59.56	92.65	Shut-In(2)
180	494.95	93.13	End Shut-In(2)
182	1462.81	93.57	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	WOCM, 20%W 25%O 55%M	0.85
20.00	HOCM, 40%O 60%M	0.28

Gas Rates

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

DRILL STEM TEST REPORT

Alan J. Vonfeldt

PO Box 611
Russell, KS 67665

ATTN: Herb Deines

19-15S-15W Russell, KS

Layher A #1

Job Ticket: 59534 **DST#: 1**

Test Start: 2020.09.28 @ 11:12:42

GENERAL INFORMATION:

Formation: **LKC "C&D"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:43:48
Time Test Ended: 18:40:33

Test Type: Conventional Bottom Hole (Initial)
Tester: Brannan Lonsdale
Unit No: 73

Interval: 3086.00 ft (KB) To 3125.00 ft (KB) (TVD)
Total Depth: 3125.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

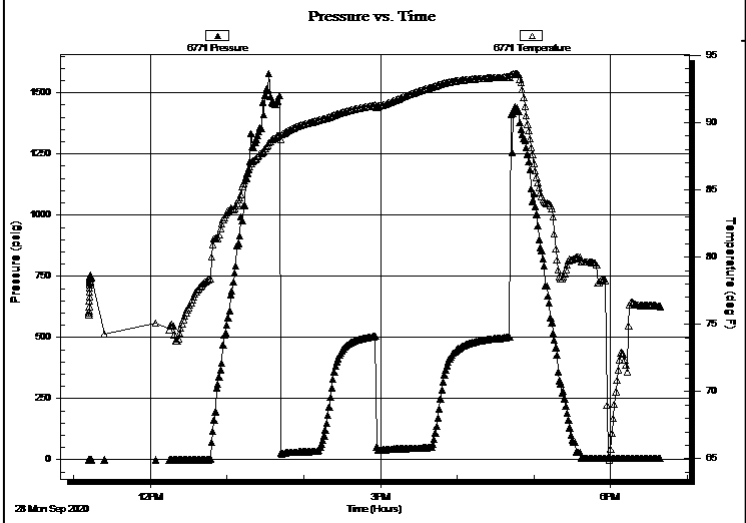
Reference Elevations: 1823.00 ft (KB)
1814.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: psig @ 3087.00 ft (KB)
Start Date: 2020.09.28 End Date: 2020.09.28
Start Time: 11:12:07 End Time: 18:39:42

Capacity: 8000.00 psig
Last Calib.: 2020.09.28
Time On Btm:
Time Off Btm:

TEST COMMENT: 30- IF- BOB 18mins. Built to 14.78"
45- ISI- Sporadic surface blow
45- FF- BOB 20mins. Biult to 16.32"
60- FSI- Surface blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	WOCM, 20%W 25%O 55%M	0.85
20.00	HOCM, 40%O 60%M	0.28

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Alan J. Vonfeldt

PO Box 611
Russell, KS 67665

ATTN: Herb Deines

19-15S-15W Russell, KS

Layher A #1

Job Ticket: 59534 **DST#: 1**

Test Start: 2020.09.28 @ 11:12:42

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:	16000 ppm
Viscosity:	61.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.39 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2000.00 ppm				
Filter Cake:	inches				

Recovery Information

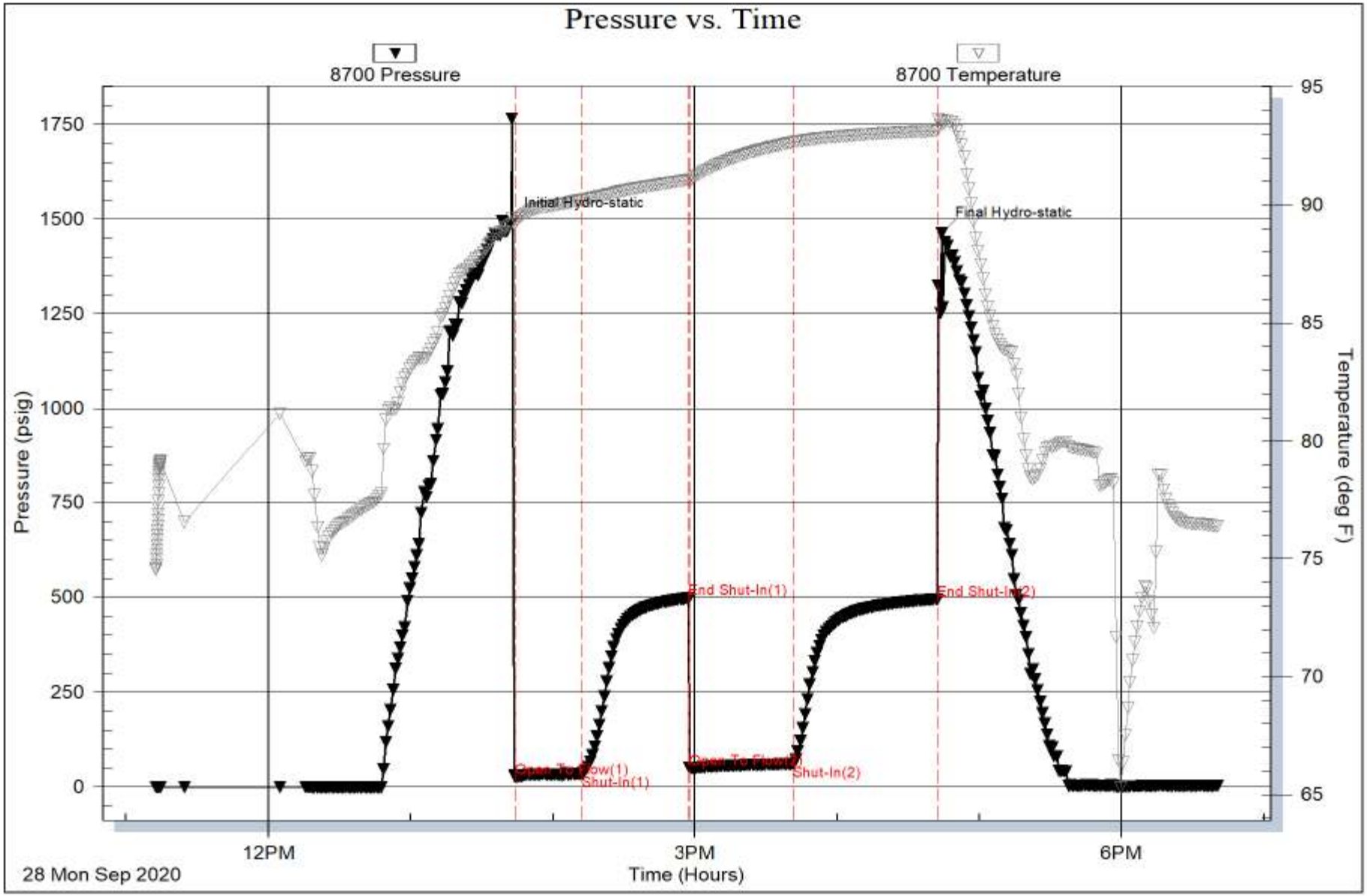
Recovery Table

Length ft	Description	Volume bbl
60.00	WOCM, 20%W 25%O 55%M	0.851
20.00	HOCM, 40%O 60%M	0.284

Total Length: 80.00 ft Total Volume: 1.135 bbl

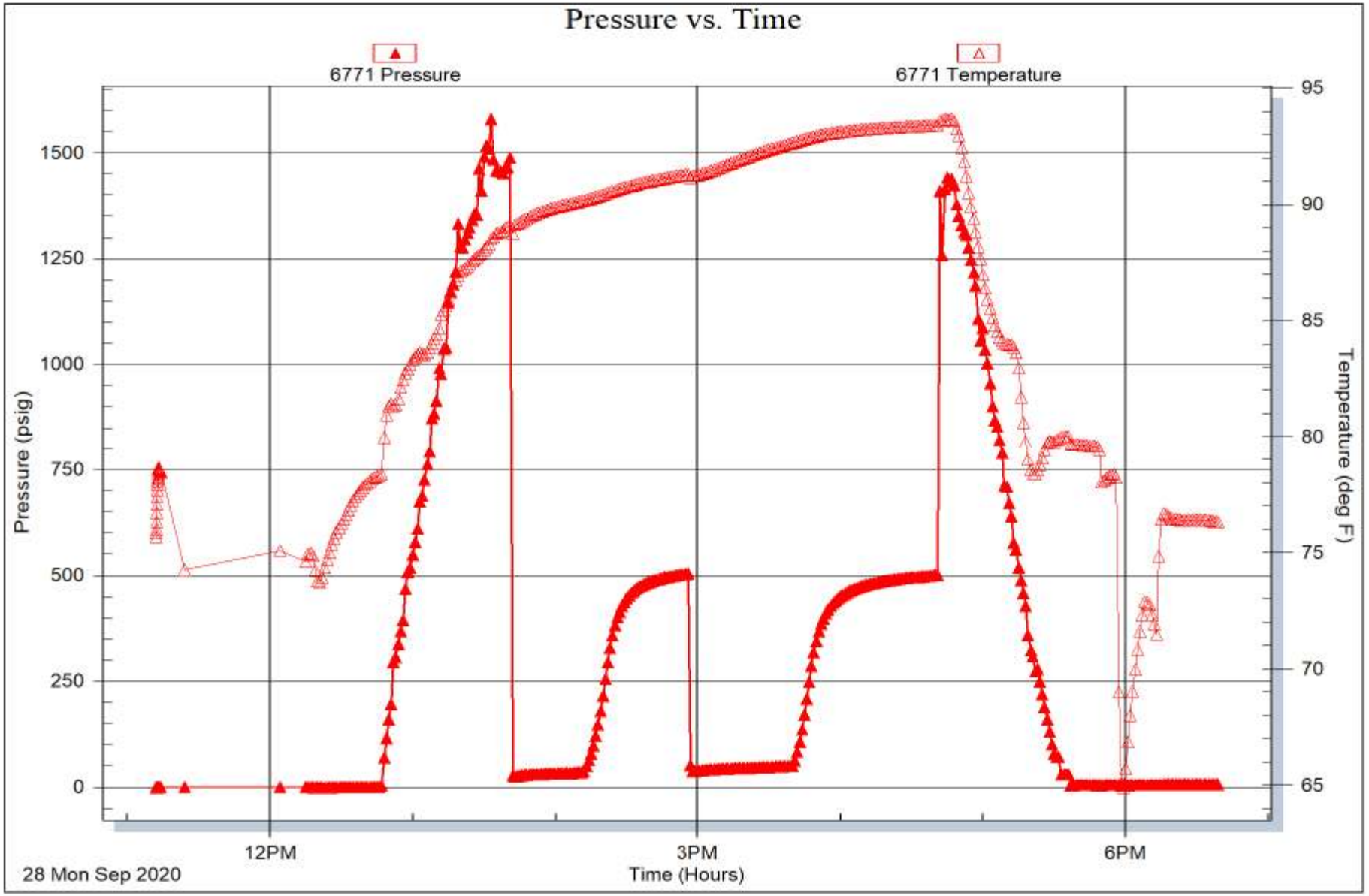
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: .41@69deg

Serial #: 8700 **Outside** Alan J. Vonfeldt Layher A #1 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 59534 Printed: 2020.09.29 @ 07:06:29

Serial #: 6771 **Inside** Alan J. Vonfeldt Layher A #1 DST Test Number: 1



DRILL STEM TEST REPORT

Alan J. Vonfeldt

PO Box 611
Russell, KS 67665

ATTN: Herb Deines

19-15S-15W Russell, KS

Layher A #1

Job Ticket: 59535 **DST#: 2**

Test Start: 2020.09.29 @ 12:47:17

GENERAL INFORMATION:

Formation: **LKC "A"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:02:53
Time Test Ended: 19:01:08

Test Type: Conventional Straddle (Reset)
Tester: Brannan Lonsdale
Unit No: 73

Interval: 3046.00 ft (KB) To 3086.00 ft (KB) (TVD)
Total Depth: 3340.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

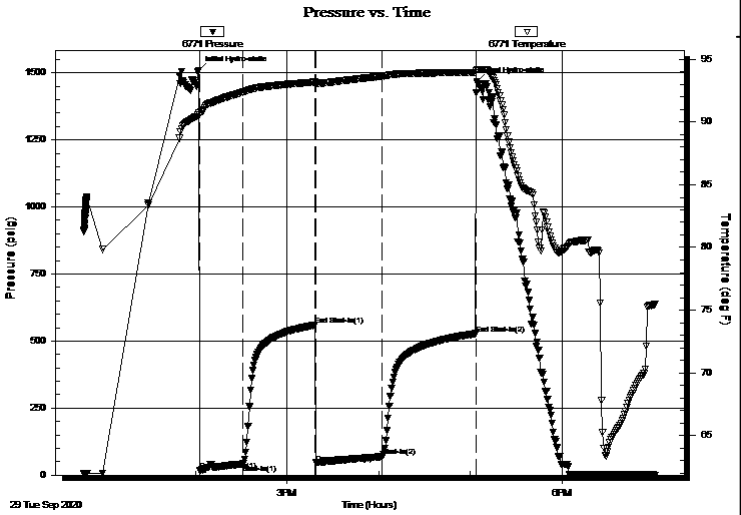
Reference Elevations: 1823.00 ft (KB)
1814.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: 69.68 psig @ 3047.00 ft (KB)
Start Date: 2020.09.29 End Date: 2020.09.29
Start Time: 12:47:18 End Time: 19:01:08

Capacity: 8000.00 psig
Last Calib.: 2020.09.29
Time On Btm: 2020.09.29 @ 14:02:23
Time Off Btm: 2020.09.29 @ 17:04:23

TEST COMMENT: 30- IF- BOB 24mins. Built to 12.03"
45- ISI- Weak surface blow
45- FF- BOB 26mins. Built to 16.25"
60- FSI- Surface blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1509.01	90.70	Initial Hydro-static
1	17.22	90.57	Open To Flow (1)
29	42.20	92.38	Shut-In(1)
76	559.17	93.18	End Shut-In(1)
77	46.05	93.10	Open To Flow (2)
120	69.68	93.65	Shut-In(2)
181	527.49	93.95	End Shut-In(2)
182	1467.93	94.17	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	WOCM, 20%O 25%W 55%M	1.70
5.00	CO	0.07

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Alan J. Vonfeldt

PO Box 611
Russell, KS 67665

ATTN: Herb Deines

19-15S-15W Russell, KS

Layher A #1

Job Ticket: 59535 **DST#: 2**

Test Start: 2020.09.29 @ 12:47:17

GENERAL INFORMATION:

Formation: **LKC "A"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:02:53
Time Test Ended: 19:01:08

Test Type: Conventional Straddle (Reset)
Tester: Brannan Lonsdale
Unit No: 73

Interval: 3046.00 ft (KB) To 3086.00 ft (KB) (TVD)
Total Depth: 3340.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

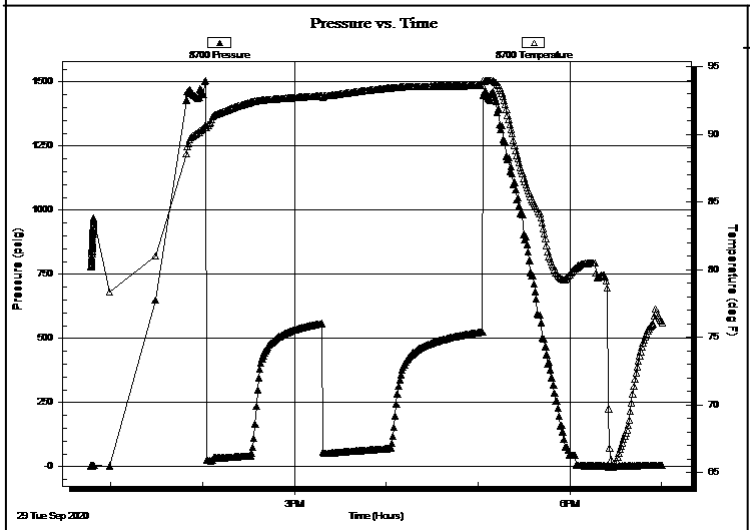
Reference Elevations: 1823.00 ft (KB)
1814.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8700 **Outside**

Press@RunDepth: psig @ 3047.00 ft (KB)
Start Date: 2020.09.29 End Date: 2020.09.29
Start Time: 12:47:01 End Time: 19:01:06

Capacity: 8000.00 psig
Last Calib.: 2020.09.29
Time On Btm:
Time Off Btm:

TEST COMMENT: 30- IF- BOB 24mins. Built to 12.03"
45- ISI- Weak surface blow
45- FF- BOB 26mins. Built to 16.25"
60- FSI- Surface blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	WOCM, 20%O 25%W 55%M	1.70
5.00	CO	0.07

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Alan J. Vonfeldt

PO Box 611
Russell, KS 67665

ATTN: Herb Deines

19-15S-15W Russell, KS

Layher A #1

Job Ticket: 59535 **DST#: 2**

Test Start: 2020.09.29 @ 12:47:17

GENERAL INFORMATION:

Formation: **LKC "A"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 14:02:53
Time Test Ended: 19:01:08

Test Type: Conventional Straddle (Reset)
Tester: Brannan Lonsdale
Unit No: 73

Interval: 3046.00 ft (KB) To 3086.00 ft (KB) (TVD)
Total Depth: 3340.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

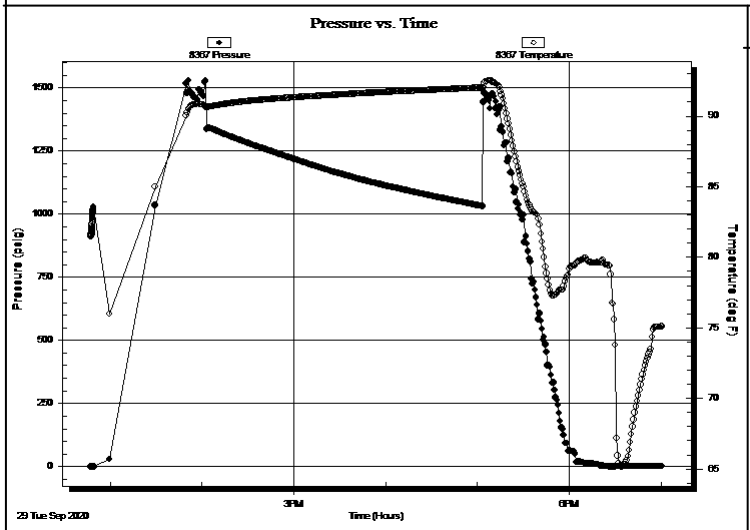
Reference Elevations: 1823.00 ft (KB)
1814.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8367 **Below (Straddle)**

Press@RunDepth: psig @ 3112.00 ft (KB)
Start Date: 2020.09.29 End Date: 2020.09.29
Start Time: 12:47:27 End Time: 19:01:17

Capacity: 8000.00 psig
Last Calib.: 2020.09.29
Time On Btm:
Time Off Btm:

TEST COMMENT: 30- IF- BOB 24mins. Built to 12.03"
45- ISI- Weak surface blow
45- FF- BOB 26mins. Built to 16.25"
60- FSI- Surface blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
120.00	WOCM, 20%O 25%W 55%M	1.70
5.00	CO	0.07

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Alan J. Vonfeldt

PO Box 611
Russell, KS 67665

ATTN: Herb Deines

19-15S-15W Russell, KS

Layher A #1

Job Ticket: 59535 **DST#: 2**

Test Start: 2020.09.29 @ 12:47:17

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	33 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	43000 ppm
Viscosity:	55.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.79 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
120.00	WOCM, 20%O 25%W 55%M	1.701
5.00	CO	0.071

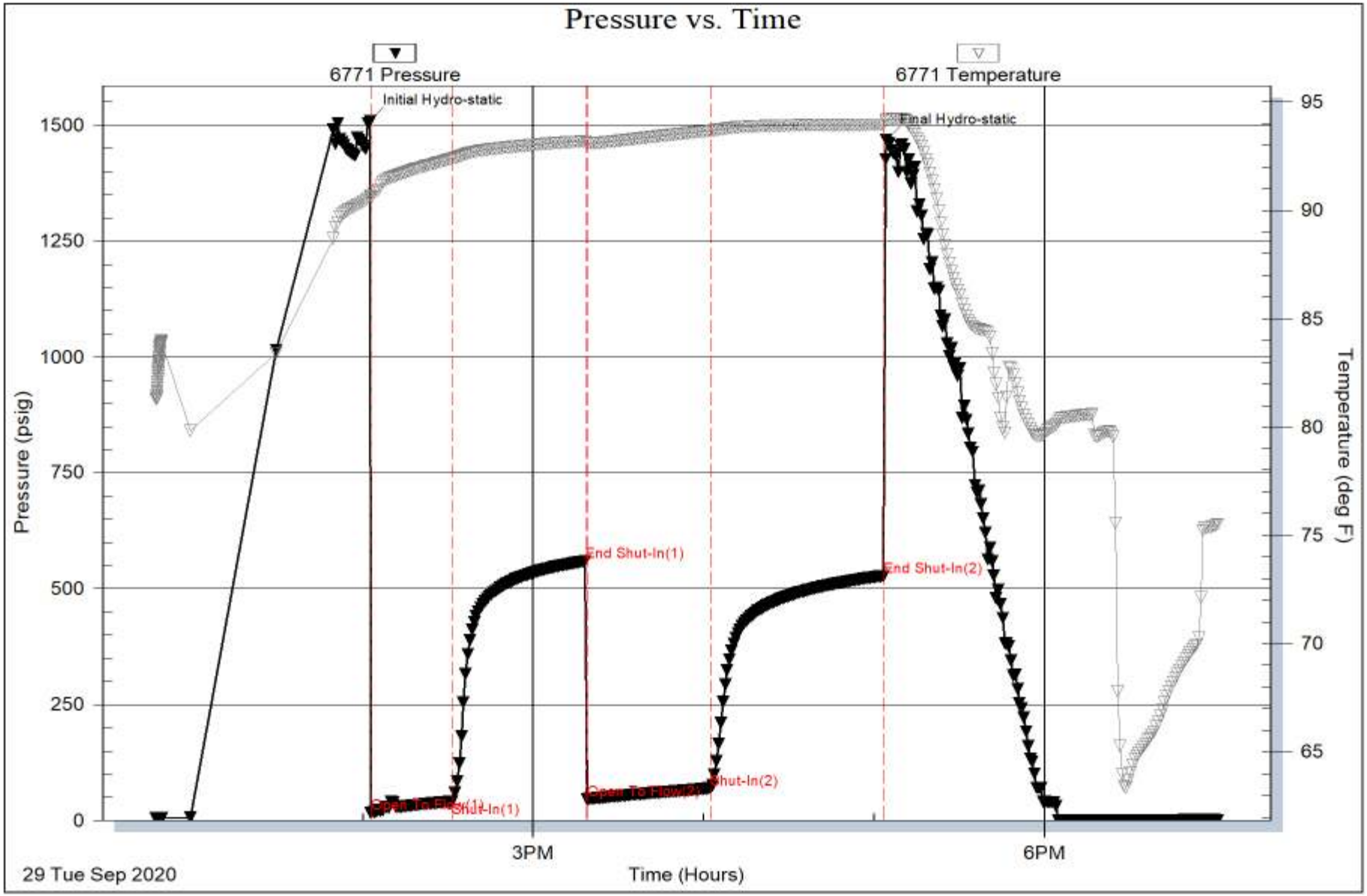
Total Length: 125.00 ft Total Volume: 1.772 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

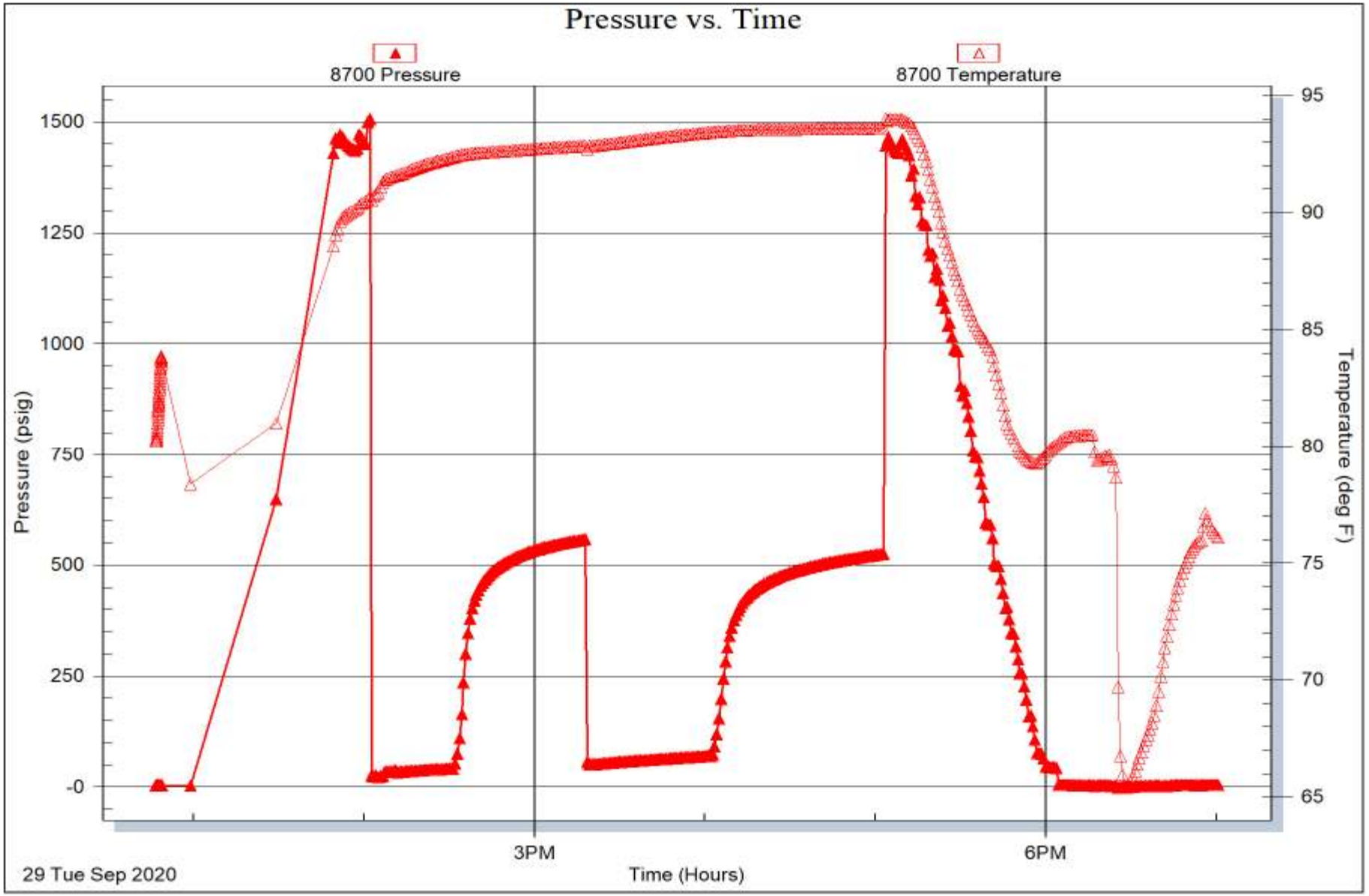
Recovery Comments: RW: .14@76deg

Serial #: 6771 **Inside** Alan J. Vonfeldt Layher A #1 DST Test Number: 2



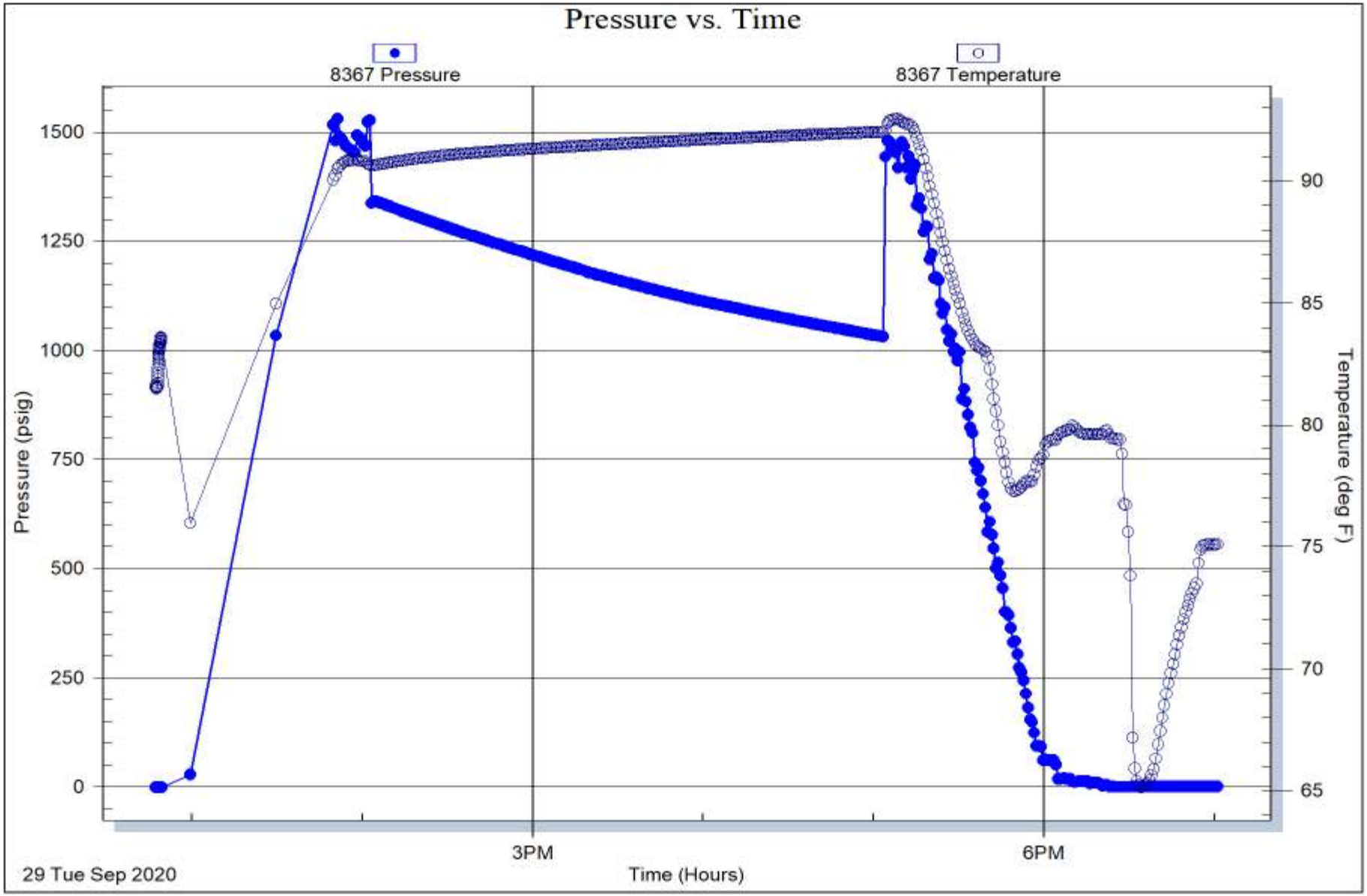
Trilobite Testing, Inc Ref. No: 59535 Printed: 2020.09.29 @ 21:18:09

Serial #: 8700 **Outside** Alan J. Vonfeldt Layher A #1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 59535 Printed: 2020.09.29 @ 21:18:09

Serial #: 8367 Below (Straddle) Vonfeldt Layher A #1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 59535 Printed: 2020.09.29 @ 21:18:09

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. 2059

Date	Sec.	Twp.	Range	County	State	On Location	Finish
9/25/2020	19	15	15	Russell	Kansas		3:30pm

Location Gorham S 10-1 miles W into

Lease Layher A Well No. 1

Contractor Southwind Rig 3

Type Job Surface

Hole Size 12¼ T.D. 914

Csg. 8⅝ Depth 914.09

Tbg. Size Depth

Tool Depth

Cement Left in Csg. 20.22 Shoe Joint 20.22

Meas Line Displace 58

EQUIPMENT

Pumptrk 5 No. Cementer Helper Tim

Bulktrk 21 No. Driver Driver Tom

Bulktrk PU No. Driver Driver David

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

Ran 8⅝ casing and established circulation and cemented

Cement Did Circulate

X Signature George W Preacher

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.

Charge To Alan Vonfeldt

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 350 60/40 4%cc 2%gel

Common	210
Poz. Mix	140
Gel.	7
Calcium	15
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	372
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
	Baffle plate - 1
	Rubber Plug - 1
Pumptrk Charge	Long Surface
Mileage	20
Tax	
Discount	
Total Charge	

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. 2106

Date	Sec.	Twp.	Range	County	State	On Location	Finish
9-30-20	19	15	15	Russell	KS		4:15 A.m

Location Gorham 10/4S W into

Lease Layer Well No. A-1

Contractor Southwind #3

Type Job Production String

Hole Size 7 7/8 T.D. 3340

Csg. 4 1/2 11.60# Depth ~~3340~~ 3267

Tbg. Size Used Depth

Tool Depth

Cement Left in Csg. 37.29 Shoe Joint 37.29

Meas Line Displace 50 BC

EQUIPMENT

Pumptrk 17	No.	Cementer	Craig
		Helper	
Bulktrk	No.	Driver	Dave
		Driver	
Bulktrk 15	No.	Driver	Tom
		Driver	

JOB SERVICES & REMARKS

Remarks:

Rat Hole 30SK

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

4 1/2 Set @ 3267 Bot Ac @ 3230. Est. Circulation - Pump 500 gal Mud Clear - Plug Rathole 30SK Cement 4 1/2 with 150SK Clear-lines & Displace Plug. Plug Landed @ 1200# Lift pressure @ 550#

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.

Charge To Alan Van Pelt

Street

City State

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Amount Ordered 180 com 10# Salt 5# Gilsonite 500 gal Mud Clear

Common 180

Poz. Mix

Gel.

Calcium

Hulls

Salt 15

Flowseal

Kol-Seal 800#

Mud CLR 48 500#

CFL-117 or CD110 CAF 38

Sand

Handling 203

Mileage

FLOAT EQUIPMENT 4 1/2

Guide Shoe

Centralizer 4

Baskets

AFU Inserts

Float Shoe 1

Latch Down 1

Pumptrk Charge Thanks

Mileage 20

Tax

Discount

Total Charge

X Signature Terry W. Riesterer