

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1349159
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

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 SIOW
- Gas D&A ENHR SIGW
- OG GSW Temp. Abd.
- 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 ENHR Conv. to SWD
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
-----------------------------------	-----------------	---

API No. 15 - _____

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
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1349159

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes <input type="checkbox"/> No			
List All E. Logs Run:				

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				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 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)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD: Size: _____ Set At: _____ Packer At: _____ Liner Run: Yes No

Date of First, Resumed Production, SWD or ENHR. _____ 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: <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> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	---	---

Form	ACO1 - Well Completion
Operator	Vonfeldt, Alan J
Well Name	MICHAELIS 3
Doc ID	1349159

Tops

Name	Top	Datum
TARKIO LIME	2298	-577
TOPEKA	2574	-858
HEEBNER SHALE	2803	-1079
TORONTO	2822	-1098
DOUGLAS SHALE	2838	-1114
LKC	2872	-1152
BKC	3131	-1407
ARBUCKLE	3161	-1433
RTD	3202	-1478

OPERATOR

Company: ALAN J. VONFELDT
 Address: PO BOX 611
 RUSSELL, KANSAS 67665

Contact Geologist: ALAN VONFELDT
 Contact Phone Nbr: 785-483-0252
 Well Name: MICHAELIS # 3
 Location: W2 SE SW SW SEC.33-T14S-R13W
 API: 15-167-24,055-00-00
 Pool: IN FIELD
 State: KANSAS
 Field: HALL-GURNEY
 Country: USA

Scale 1:240 Imperial

Well Name: MICHAELIS # 3
 Surface Location: W2 SE SW SW SEC.33-T14S-R13W
 Bottom Location:
 API: 15-167-24,055-00-00
 License Number: 7281
 Spud Date: 3/13/2017 Time: 3:00 PM
 Region: RUSSELL COUNTY
 Drilling Completed: 3/18/2017 Time: 4:06 AM
 Surface Coordinates: 330' FSL & 751' FWL
 Bottom Hole Coordinates:
 Ground Elevation: 1718.00ft
 K.B. Elevation: 1724.00ft
 Logged Interval: 2100.00ft To: 3202.00ft
 Total Depth: 3202.00ft
 Formation: TARKIO SAND
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -98.7777589
 Latitude: 38.7847878
 N/S Co-ord: 330' FSL
 E/W Co-ord: 751' FWL

LOGGED BY

Company: SOLUTIONS CONSULTING, INC.
 Address: 108 W 35TH
 HAYS, KS 67601

Phone Nbr: (785) 639-1337
 Logged By: GEOLOGIST Name: HERB DEINES

CONTRACTOR

Contractor: ROYAL DRILLING INC.
 Rig #: 1
 Rig Type: MUD ROTARY
 Spud Date: 3/13/2017 Time: 3:00 PM
 TD Date: 3/18/2017 Time: 4:06 AM
 Rig Release: 3/18/2017 Time: 10:00 PM

ELEVATIONS

K.B. Elevation: 1724.00ft Ground Elevation: 1718.00ft
 K.B. to Ground: 6.00ft

NOTES

RECOMMENDATION TO RUN PRODUCTION CASING BASED ON SAMPLE EVALUATION AND LOG ANALYSIS.

NO DRILL STEM TESTS WERE RAN ON THIS WELL.






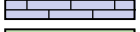


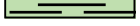

MICHAELIS #3	MICHAELIS # 1	HEFFERNAN # 2
W2 SE SW SW	SE NE SW SW	NW NW NW
SEC.33-14S-13W	SEC.33-14-13W	SEC.4-15-13W
1724'KB	KB 1733'	KB 1740'

<u>FORMATION</u>	<u>LOG TOPS</u>	<u>LOG TOPS</u>	<u>LOG TOPS</u>
Anhydrite	NOT LOGGED	+1048	+1037
B-Anhydrite	708+1016	+1015	+1004
Grand Haven	2227- 503	- 501	- 513
Dover Lime	2249- 525	- 524	- 536
Stotler/Tarkio	2298- 574	- 572	- 582
Topeka	2574 - 858	- 852	- 859
Heebner Sh.	2803-1079	-1084	-1087
Toronto	2822-1098	-1102	-1106
Douglas Shale	2838-1114	-1117	-1122
LKC	2872-1148	-1152	-1156
BKC	3131-1407	-1409	-1415
Arbuckle	3161-1437	-1433	-1446
RTD	3202-1478	-1485	-1586

SUMMARY OF DAILY ACTIVITY

3-13-17 Spud 4:15 PM,
3-14-17 698', set 8 5/8" surface casing to 698' w/ 350 sxs 60/40 pos 2%gel
4%CC, WOC 10 hrs, plug down 11:00 AM
3-15-17 1285', drilling
3-16-17 2100', drilling, displaced 2100'
3-17-17 2795', drilling
3-18-17 3202, CFS 3158', RTD @4:06AM, short trip, TOWB, logs, TIWB,
LDDP, run and cement production casing, RD

ROCK TYPES

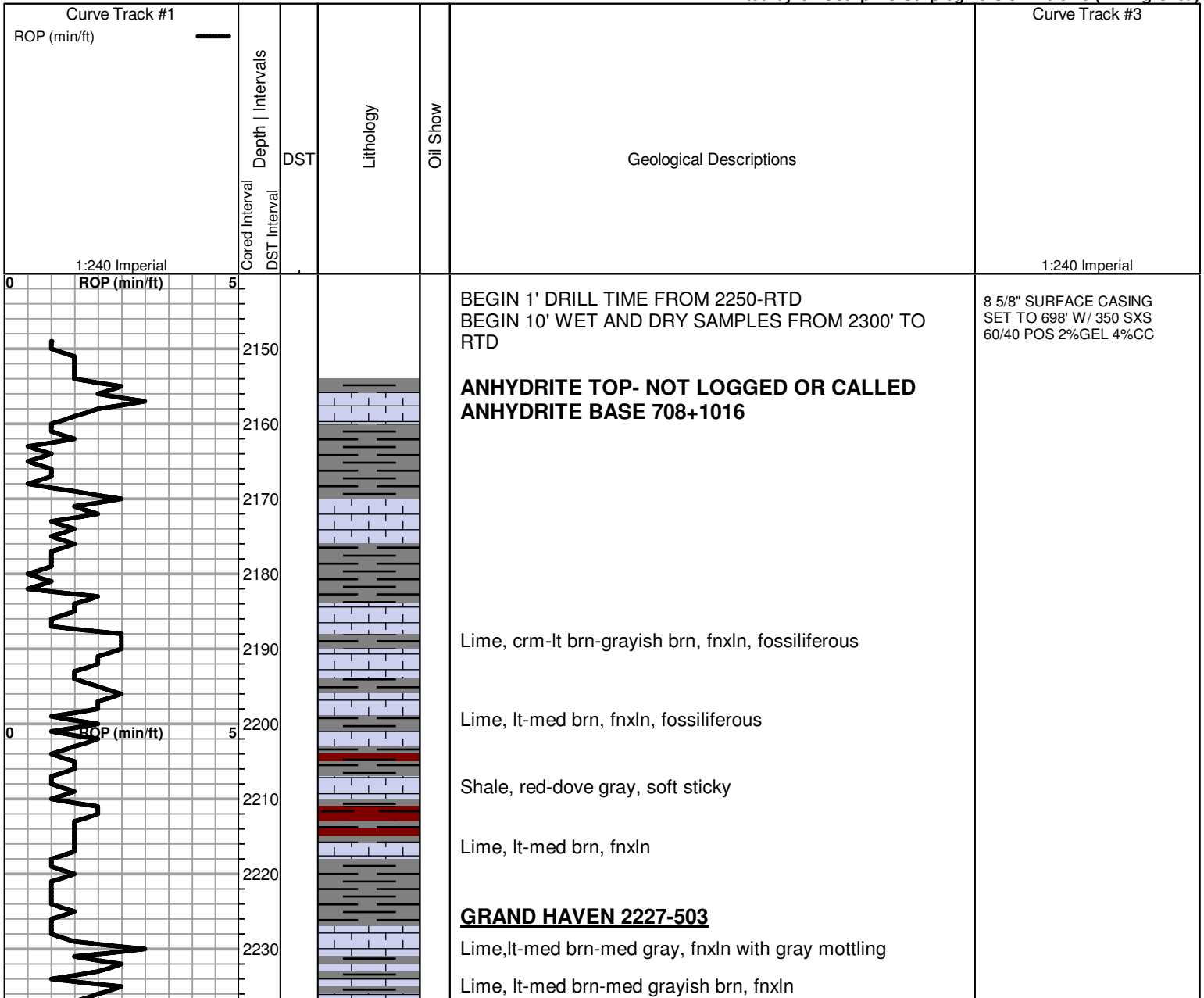
 Clystgy	 Lmst fw<7	 shale, gry	 Ss
 Chtcongl	 Lmst fw7>	 Carbon Sh	
 Dolprim	 shale, grn	 shale, red	

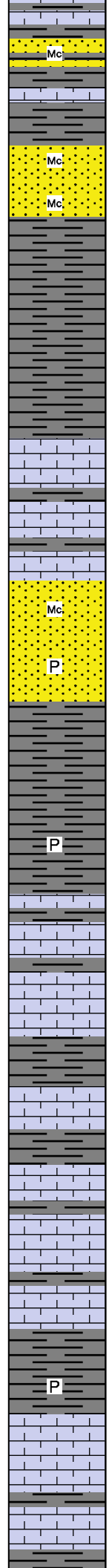
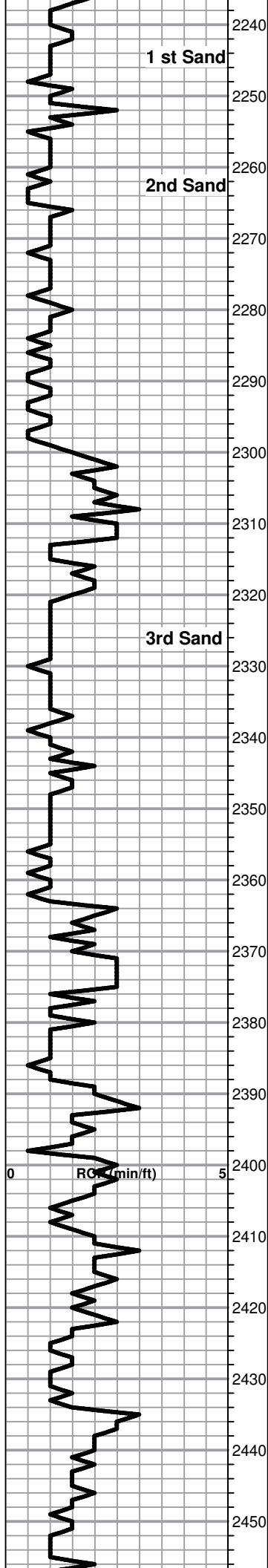
ACCESSORIES

- MINERAL**
- ▲ Chert, dark
 - P Pyrite
 - Sandy
 - Mc Mica

- FOSSIL**
- ⊕ Oolite
 - ⊕ Oomoldic

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





Sandstone, fine grained, poorly sorted, gritty, micaceous, spotty stain in part

DOVER LIME 2249-525

Sandstone, fine grained, lt gray-lt brn, friable, micaceous, scattered to saturated staining, lt odor and show of lt gassy oil

Shale, lt-med gray, soft blocky with sticky clumping in part

TARKIO LIME/STOTLER 2298-574

Lime, lt brn-gray, fnxln

Lime, lt brn-lt gray, fnxln

Lime, lt brn-tan, fnxln

Sandstone, lt gray-lt brn, fine grained, poorly sorted, micaceous, pyritic clusters, spotty staining

Shale, lt gray, soft blocky forming soft sticky clumps in large part

Lime, lt-med brn, fnxln

Lime, lt brn-lt gray, fnxln, hard on crush

Shale, lt-med gray, soft blocky

Lime, med gray, fnxln

Lime, lt brn-med grayish brn, fnxln

Lime, lt-med brn-med gray, fnxln

Lime, lt-med brn, fnxln

Shale, lt gray, soft sticky

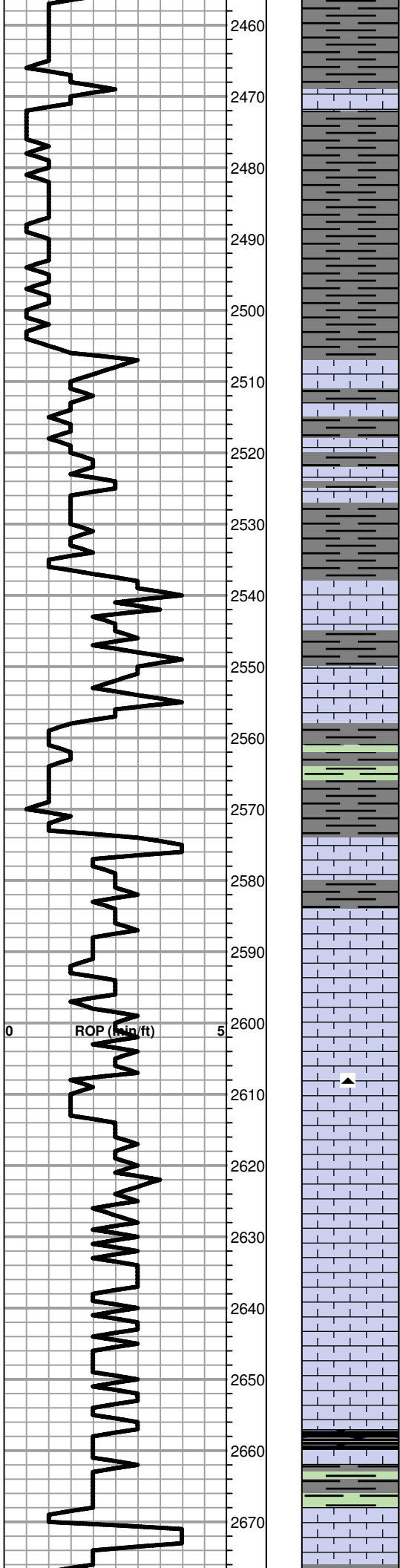
Lime, lt-med brn-med grayish brn, fn-vfxln, slightly fossiliferous

Lime, med brn-med grayish brn, fnxln, slightly fossiliferous

Perf 2238-42 Does not appear well developed on the logs but is productive in the field

Perf 2259-2268

This sand is the thickest but produces only in the higher wells.



Shale, lt gray, soft blocky, sticky clumping in part

Lime, lt-med brn, fnxln, slightly fossiliferous-fusulinids

Shale, lt-med gray-dark gray, soft blocky

Lime, lt med-dark brn, fnxln, slightly fossiliferous

Lime, lt-dark brn, fnxln, slightly fossiliferous

Shale, lt-med gray, soft blocky

Lime, lt-med brn-med grayish brn, fnxln, slightly fossiliferous

Lime, med brn-med gray, fn-vfxln, slightly fossiliferous

Shale, lime green-med gray, soft blocky

TOPEKA 2574-858

Lime, lt-med brn, fn-micro xln

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

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

Lime, lt brn-lt grayish brn, fnxln, NS

Lime, lt brn-lt grayish brn, fn-vfxln

Lime, lt brn-lt gray, lt chalk wash with bedded chalk and chalky matrix

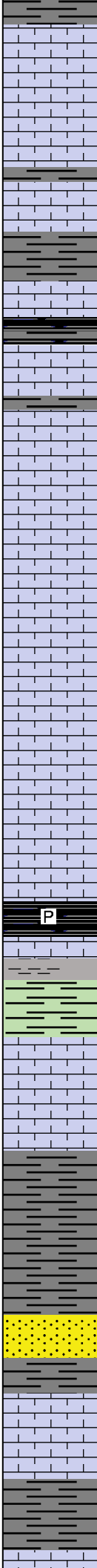
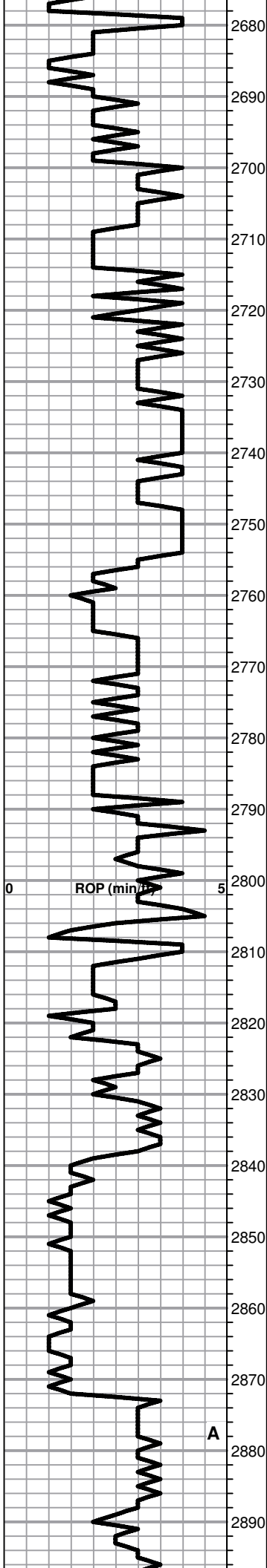
Lime, lt-med brn, fnxln, slight bedded chalk

Lime, lt brn, fnxln with chalky matrix and bedded chalk

Shale, black carbonaceous, blocky

Shale, dove gray-lime green, soft sticky clumps

Lime, crm, fn-micro xln



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

Lime, crm-lt brn, fnxln-granular in part, bedded chalk with sticky clumps in part

Lime, lt-med brn, fn-vfxln, bedded chak

Shale, med gray, soft blocky

Lime, lt brn-lt gray, fnxln, chalky

Shale, black carbonaceous, fissile, blocky

Lime, crm-lt brn, fnxln-granular in part, NS

Lime, crm-lt brn, fnxln-slightly granular in part, slight bed chalk

Lime, lt brn, fn-vfxln

Lime, lt brn-lt gray, fn-micro xln, white chalk wash

Lime, crm-lt brn, fnxln-granular, scattered fusulinids, lt white chalk wash

Lime, crm-lt brn, fnxln

Lime, lt-med brn, fn-vfxln

Lime, lt brn, fn-micro xln

Lime, lt-med brn, fn-micro xln

HEEBNER SHALE 2803-1079

Shale, black carbonaceous, fissile, blocky
Lime, lt grayish brn, micro xln, pyritic

Shale, dove gray-lime green, soft sticky

TORONTO 2822-1098

Lime, white-crm, fnxln-fine granular, very lt staining with lt gas odor, NFO

Lime, crm-lt brn, fnxln

DOUGLAS SHALE 2838-1114

Shale, lt gray, soft blocky to soft mud

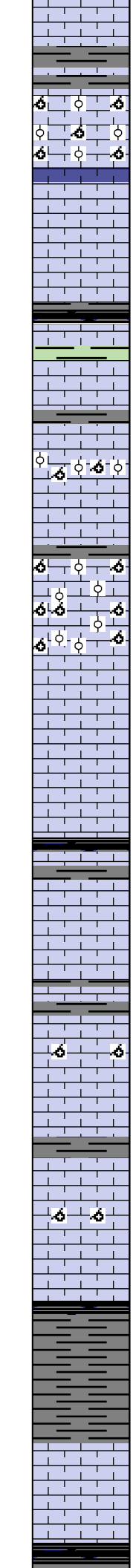
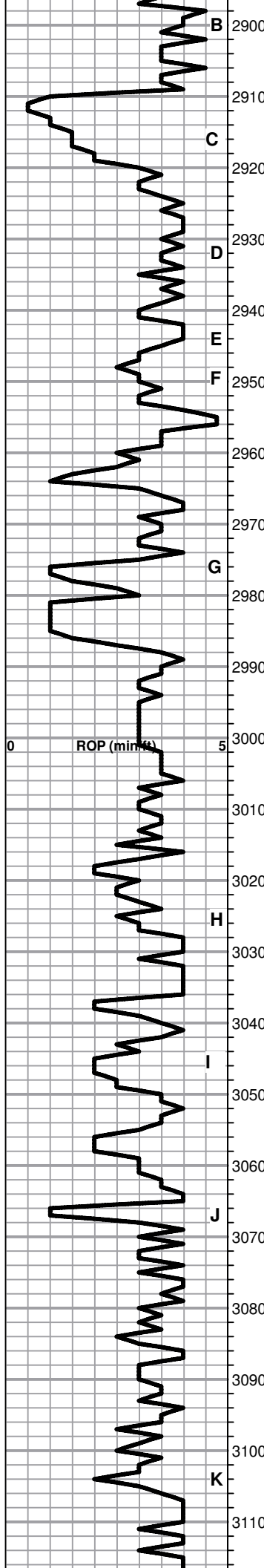
LKC 2872-1148

Lime, crm, fnxln with bedded chalk, noted 1 chip with trace of staining but microlog shows no development

Lime, lt brn, fn-micro xln

This appears to be a fine grained limestone bearing mostly gas. Would recommend perforating and testing to eliminate possible fracture potential before abandonment of well.

The Douglas sand did not show up in samples but logs indicate some development. Recommend perforating from 2863-68 and testing prior to abandonment of well.



Lime, med , fn-micro xln, slightly fossiliferous

● Lime, crm, oolitic/oomoldic, good odor, show of lt gassy oil, spotty-saturated staining

Lime, offwhite-crm, fn-micro xln, slight bedded chalk

Lime, offwhite-crm, fn-micro xln

Shale, black carbonaceous, blocky
Lime, lt brn with gray tint, micro xln

○ Lime, lt-dark brn, fn-vfxln with few chips with trace of lt staining, NFO or odor

● Lime, crm-lt brn, fn-micro xln grading into oolitic/oomoldic zone, lt odor, lt show of free oil, scattered to saturated stain

Lime, crm-lt brn, fn-micro xln

● Lime, white, oomoldic, NS

Lime, lt brn-lt grayish brn, micro xln, slight bedded chalk

Lime, lt-med brn, fn-micro xln

Lime, lt-med brn, micro xln

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

Lime, crm-lt brn, fn-micro xln

Lime, crm-tan, fn-micro xln, few oolmoldic chips but barren

Lime, crm-lt brn, fn-micro xln

Lime, crm, fn-micro xln

● Lime, white, oomoldic, NS , no wet cut

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

Shale, med gray to black carbonaceous, soft blocky

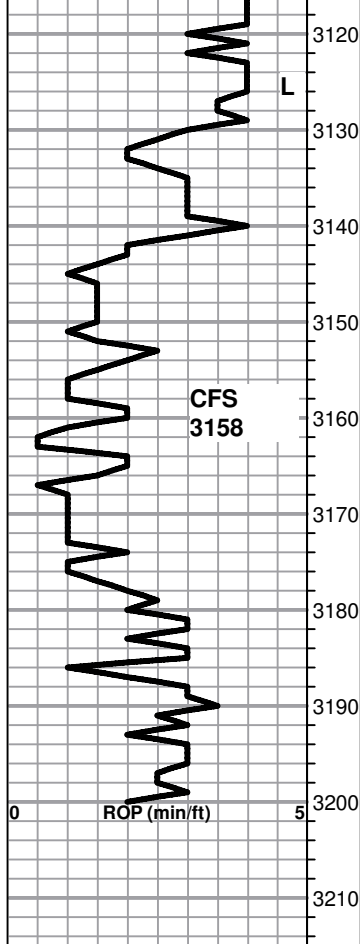
Lime, lt brn, fn-vfxln, hard chalk beds in part, NS

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

Recommend perforating from 2910-15 to test. Favorable structure may favor development of permeability in this interval

The "F" zone is typically a fossiliferous zone with staining in fossil casts. Microlog shows some perms from 2748-50 which should be perforated and tested prior to abandonment of well.

Recommend perforating and testing from 2962-66 prior to abandonment of well. The logs indicate permeability but also that the zone may be water bearing even though there was a show of oil and lt odor in the samples.



Lime, crm, fn-vfxln, bedded chalk with lt chalk wash, NS

BKC 3131-1407

Shale, red-reddish brn, soft mud to soft blocky

Lime, crm, fnxln, chalky, NS

Shale, lt gray to red, soft mud with red wash

Shale, red and vari colored cherts, NS

ARBUCKLE 3161-1437

Dolomite, lt brn, fnxln, fine grain sucrosic, strong sulfur odor, saturated staining

Dolomite, lt brn, fnxln-granular, lt chalk wash

Dolomite, lt brn, fnxln-granular with quartz grain inclusions

Dolomite, lt brn, fnxln-granular with abundant individual and fused quartz grains. The clarity of the quartz grains and lack of abrasion evidence suggest dissolution of the soluble dolomite leaving a bed of unworked quartz material.

Although there was strong odor and staining noted in the samples, it is felt that the finer sucrosic dolomite will not give up oil but will give up water in the coarser grained dolomite. The zone has also been produced over the years in area wells and likely has been depleted of oil leaving saltwater.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

7921
Phone 785-483-2025
Cell 785-324-1041

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

No. 1672

Date	3-14-17	Sec.	33	Twp.	14	Range	13	County	Russell	State	Ks	On Location		Finish	11:20 AM
------	---------	------	----	------	----	-------	----	--------	---------	-------	----	-------------	--	--------	----------

Lease Michealis Well No. 3 Location Alan's house - 15, 1/4 E, N/1 into

Contractor Royal 1 Owner
To Quality Oilwell Cementing, 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. 698' Charge To Alan J. Vanfeldt

Csg. 8 5/8" 32# Depth 698' Street

Tbg. Size Depth City State

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

Cement Left in Csg. 20' Shoe Joint 20' Cement Amount Ordered 300 60/40 4% CC 2% Gel

Meas Line Displace 41 1/4 BLS

EQUIPMENT

Pumptrk	18	No.	Cement	Common	<u>210 180</u>
			Helper	Poz. Mix	<u>740 120</u>
Bulktrk	4	No.	Driver	Gel.	<u>6</u>
			Driver	Calcium	<u>14</u>
Bulktrk	p.u.	No.	Driver		
			Driver		

JOB SERVICES & REMARKS

Remarks:	<u>Cement did</u>	Hulls
Rat Hole	<u>Circulate</u>	Salt
Mouse Hole		Flowseal
Centralizers		Kol-Seal
Baskets		Mud CLR 48
D/V or Port Collar		CFL-117 or CD110 CAF 38
		Sand
		Handling <u>320</u>
		Mileage

Thanks

FLOAT EQUIPMENT

Guide Shoe	<u>Rubber plug</u>
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Pumptrk Charge long surface
Mileage 15

X Signature Young Buday

Tax
Discount
Total Charge

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

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

No. 123

Date	3-18-17	Sec.	33	Twp.	14	Range	13	County	Russell	State	KS	On Location		Finish	7:30pm
Location													Alan Vanfeldt's house 1/4 E 1/4		

Lease	Michael's	Well No.	3	Owner	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.										
Contractor	Royal #1														
Type Job	Production string														
Hole Size	7"18	T.D.	3202	Charge To	Alan Vanfeldt										
Csg.	4 1/2	Depth	3172	Street											
Tbg. Size		Depth		City	State										
Tool		Depth		The above was done to satisfaction and supervision of owner agent or contractor.											
Cement Left in Csg.	45'	Shoe Joint	45'	Cement Amount Ordered	275 ^{60#} / 10 / salt 2 / CLR										
Meas Line		Displace	5 1/2 BBL		500 gal mud clear 1/4 #FB										

EQUIPMENT

Pumptrk	16	No.	Cementer	Craig	Common	165
			Helper		Poz. Mix	110
Bulktrk		No.	Driver	Travis	Gel.	5
			Driver		Calcium	
Bulktrk	3	No.	Driver	David		
			Driver			

JOB SERVICES & REMARKS

Remarks:	Hulls											
Rat Hole	303K	Salt 23										
Mouse Hole	155K	Flowseal 60#										
Centralizers		Kol-Seal										
Baskets		Mud CLR 48 500 gal										
D/V or Port Collar		CFL-117 or CD110 CAF 38										
	4 1/2 size 3172. 3127	Sand										
	First Connection Pump 500 gal	Handling 303										
	mud clear plug bottom mouse hole	Mileage										
	Cement 4 1/2 with 2305K	<p style="text-align: center;">FLOAT EQUIPMENT 4 1/2</p>										
	Clear lines & Displace Plug	Guide Shoe										
	Plug landed @ 1500#	Centralizer 7										
		Baskets 2										
		AFU Inserts										
		Float Shoe 1										
		Latch Down 1										
		Pumptrk Charge 1 ^{prod string}										
		Mileage 15										

X Signature *[Handwritten Signature]*

Tax
Discount
Total Charge