

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) (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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**OPERATOR**

Company: TDI, INC  
 Address: 1310 BISON ROAD  
 HAYS, KANSAS 67601-9696

Contact Geologist: TOM DENNING  
 Contact Phone Nbr: 785-628-2593  
 Well Name: MUNSCH # 12  
 Location: NE NE SW SE, SEC,9-T15S-R18W  
 API: 15-051-26,996-00-00  
 Pool: IN FIELD  
 State: KANSAS

Field: SCHOENCHEN  
 Country: USA



Scale 1:240 Imperial

Well Name: MUNSCH # 12  
 Surface Location: NE NE SW SE, SEC,9-T15S-R18W  
 Bottom Location:  
 API: 15-051-26,996-00-00  
 License Number: 4787  
 Spud Date: 6/18/2021 Time: 12:00 AM  
 Region: ELLIS COUNTY  
 Drilling Completed: 6/23/2021 Time: 4:17 AM  
 Surface Coordinates: 1180' FSL & 1380' FEL  
 Bottom Hole Coordinates:  
 Ground Elevation: 2033.00ft  
 K.B. Elevation: 2043.00ft  
 Logged Interval: 2900.00ft To: 3750.00ft  
 Total Depth: 3750.00ft  
 Formation: ARBUCKLE  
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

**SURFACE CO-ORDINATES**

Well Type: Vertical  
 Longitude: -99.3238434  
 Latitude: 38.7582057  
 N/S Co-ord: 1180' FSL  
 E/W Co-ord: 1380' FEL

**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: SOUTHWIND DRILLING INC.  
 Rig #: 1  
 Rig Type: MUD ROTARY  
 Spud Date: 6/18/2021 Time: 12:00 AM  
 TD Date: 6/23/2021 Time: 4:17 AM

**ELEVATIONS**

K.B. Elevation: 2043.00ft  
 K.B. to Ground: 10.00ft

Ground Elevation: 2033.00ft

**NOTES**

RECOMMENDATION TO RUN PRODUCTION CASING BASED ON LOG ANALYSIS AND HIGH STRUCTURAL POSITION OF LKC AND ARBUCKLE.










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

NO DRILL STEM TESTS WERE RAN ON THIS WELL.

**WELL COMPARISON TABLE**

	MUNSCH # 12 NE NE SW SE SEC.9-15S-18W KB 2043'	MUNSCH # 7 NW NE SE SE SEC. 9-15S-18W KB 2039'	MUNSCH # 10 NW SW NE SE SEC.9-15S-18W KB 2039'
	LOG TOPS		
Anhydrite-top	1209 +834	+831	+834
Anhydrite-base	1244 +799	+795	+797
Topeka	3000 - 957	- 957	- 956
Heebner Shale	3273-1230	-1236	-1236
Toronto	3291-1248	-1255	-1254
LKC	3320-1277	-1281	-1282
BKC	3543-1500	-1505	-1506
Arbuckle	3598-1555	-1566	-1619
RTD	3750-1707	-1711	-1711
6-18-21	Spud 3:15 PM. Set 8 5/8" surface casing to 213.88' w 150 sks 80/20 pos 3%CC 2%gel, plug down 8:45 PM, slope 1 1/4 degree @214'. WOC 8 hours		
6-19-21	393', drill plug at 4:45AM with PDC bit		
6-20-21	2096', drilling, bit trip to run conventional button bit		
6-21-21	2762', drilling, displaced 2793-2825		
6-22-21	3299', drilling		
6-23-21	3750', drilling, RTD 3750' at 4:17AM, CCH, short trip, TOWB, logs, LDDP, run production casing and cement, slope survey 1 3/4 degree.		


**ROCK TYPES**

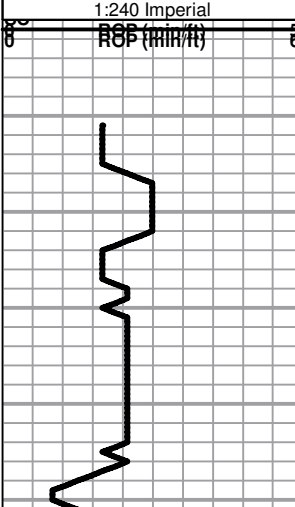
 Clystcol	 Lmst fw<7	 Lscongl	 shale, gry	 shale, red
 Dolprim	 Lmst fw7>	 shale, grn	 Carbon Sh	

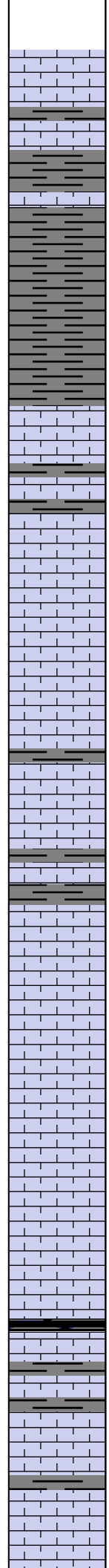
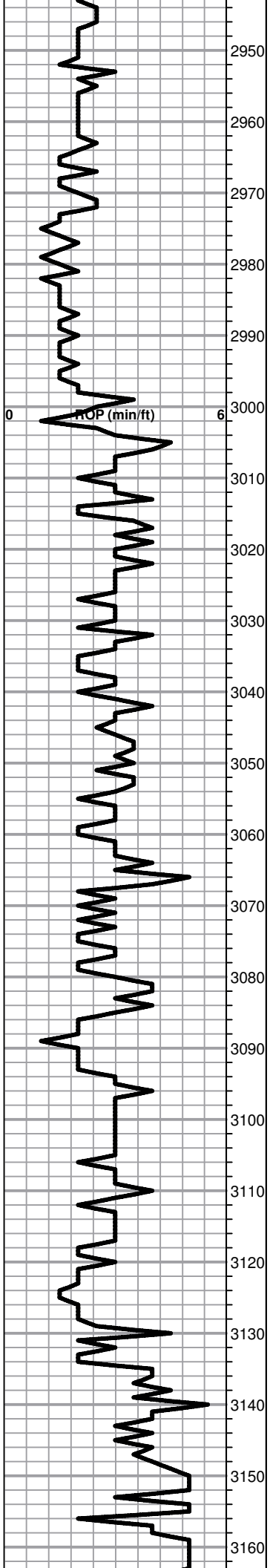
**ACCESSORIES**

**MINERAL**  
 △ Chert White

**FOSSIL**  
 ○ Oolite  
 ⊕ Oomoldic

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

Curve Track #1 ROP (min/ft)	Depth   Intervals DST	Lithology	Oil Show	Geological Descriptions	Curve Track #3
1:240 Imperial 	Cored Interval DST Interval 2900 2910 2920 2930 2940			BEGIN 1' DRILL TIME FROM 2900' TO RTD BEGIN 10' WET AND DRY SAMPLES FROM 3000' TO RTD.  <b>ANHYDRITE TOP 1209+834</b> <b>ANHYDRITE BASE 1244+789</b>	1:240 Imperial 8 5/8" SURFACE CASING SET TO 213.88' W/ 150 SXS 80/20 POS 2% GEL 3%CC PLUG DOWN AT 8:45PM 6/18/21  SLOPE @214' 1 1/4 DEGREES



Shale, lt gray, soft mud

**TOPEKA 3000-957**

Lime, lt brn, fnxln xln, sticky chalk clumps

Lime, lt-med brn, fn-vfxln

Lime, lt-med brn-med gray, fnxln

Lime, med brn-med gray, fn-vfxln

Lime, lt brn-lt gray, fnxln, sticky chalk clumps in part

Lime, lt-med brn, fn-micro xln

Lime, lt brn-lt gray, fn-vfxln, slightly fossiliferous in part

Lime, lt-med brn, fn-granular, bedded chalk in chalky matrix, slightly fossiliferous

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

Lime, lt-med brn, fnxln-granular in part with chalky matrix

Lime, lt-med brn, fn-vfxln

Lime, lt-med brn-lt gray, fnxln, slight bedded chalk, slightly fossiliferous

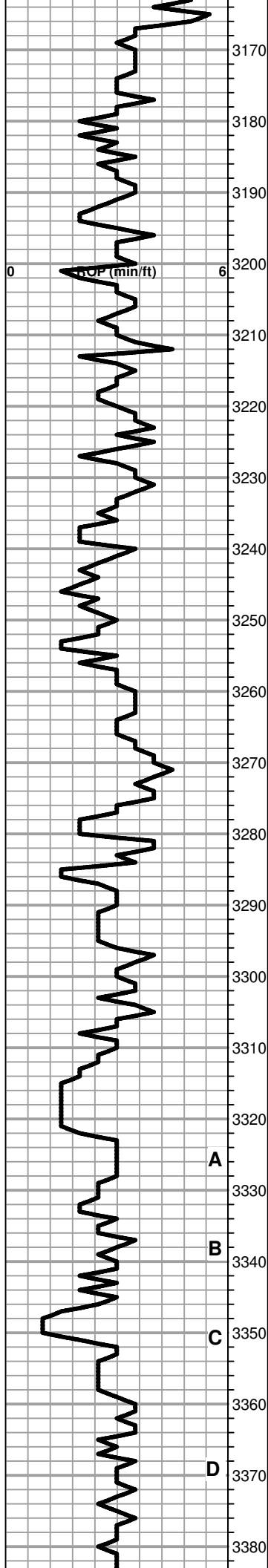
Lime, lt-med brn, granular with bedded chalk and slightly fossiliferous, chalky matrix

Shale, black carbonaceous, blocky, fissile

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

Lime, crm, fn-micro xln

Lime, crm- fn-micro xln



Lime, crm-lt brn, fn-micro xln, bedded chalk

Lime, lt-med brn, fnxln, slightly fossiliferous

Lime, lt-med brn, fn-vfxln

Shale, black carbonaceous, blocky, fissile

Lime, lt-med brn, fn-micro xln

Lime, lt-med brn, fn-micro xln

Lime, lt-med brn, fn-micro xln, lt chalk wash

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

○ Lime, lt brn, fnxln-granular, very lt odor, few chips with lt scattered stain, NFO

Lime, lt brn-lt grayish brn, fn-vfxln slight bedded chalk

Lime, lt brn, fn-vfxln, slightly fossiliferous

Lime, lt-med brn, fn-vfxln

**HEEBNER SHALE 3273-1230**

Shale, black carbonaceous, blocky, fissile

Lime, med brn, fn-micro xln, slightly fossiliferous

Shale, dove gray to lime green, soft sticky

**TORONTO 3291-1248**

Lime, white, fn-vfxln, no visible porosity, NS

Lime, crm-white, fn-vfxln, hard bedded chalk

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

**LKC 3320-1277**

○ Lime, lt brn, fnxln, fine grained granular chips with scattered to sat staining, NFO, very lt odor

Lime, lt brn, fn-micro xln

○ Lime, lt-med brn, fnxln with oolmoldic chips, scattered to sat staining, lt odor, NFO

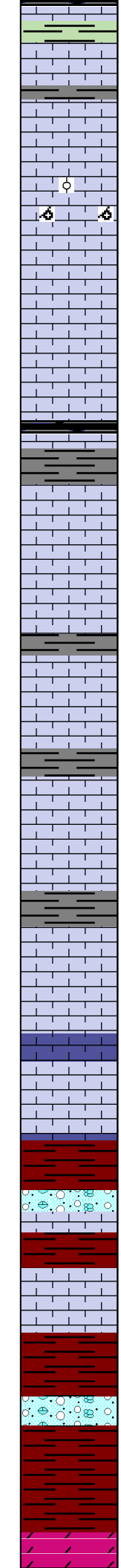
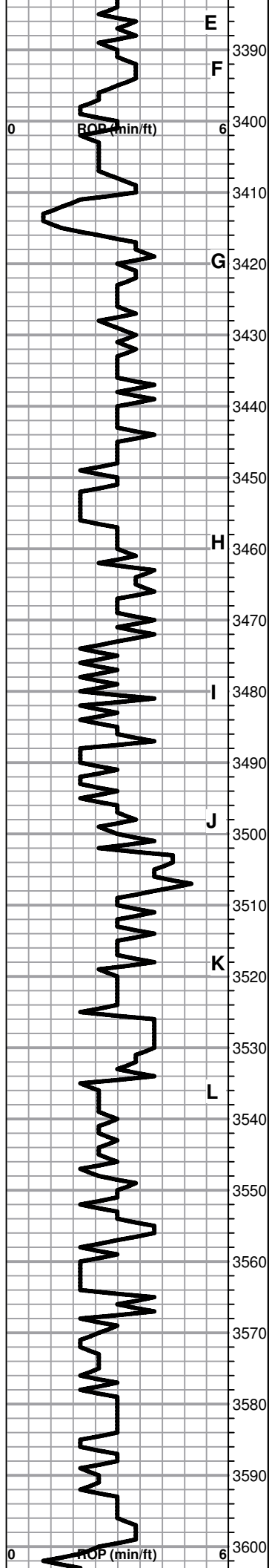
Lime, lt-med brn-lt grayish brn, fn-vfxln

○ Lime, white, fn-micro xln, few fossil casts with scattered staining with sparry calcite backfill. NFO with very lt odor

Lime, white, fn-micro xln, bedded chalk in part

Shale, black carbonaceous





Shale, black carbonaceous

○

3390

F

Lime, white-crm, fossiliferous with lt-scattered stain, NFO, with interfossiliferous porosity.

3400

Lime, white-crm, fn-vfxln, white chalk wash

3410

○

Lime, crm-white, fnxln-oomoldic, scattered lt stain, NFO or odor

3420

G

Lime, tan-lt brn, fn-vfxln, slight bedded chalk

3430

Lime, lt brn, fn-vfxln

3440

Lime, lt brn, fn-micro xln, slight bedded chalk  
Shale, black carbonaceous, blocky

3450

Lime, lt gray, fn-micro xln, NFO or odor

3460

H

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

3470

Lime, crm-lt brn, fn-micro xln

3480

I

Lime, crm-tan, fn-vfxln, firm bedded chalk, NS

3490

Lime, lt-med brn, fn-micro xln, hard bedded chalk, NS

3500

J

Lime, crm-lt brn, fn-micro xln

3510

Lime, crm-lt brn, fn-micro xln, bedded chalk, trace of spotty staining, NFO or odor

3520

K

Lime, crm-lt brn, fn-micro xln

3530

Lime, crm-lt brn, fn-micro xln

3540

Lime, crm-lt brn, fn-micro xln, hard bedded chalk  
**BKC 3543-1500**  
Shale, lt red wash

3550

Clastic lime mix with scattered red contact staining

3560

Shale, red-brn, sticky

Lime, white-crm, fn-vfxln, hard bedded chalk

3570

Clastic lime and vari colored shales with chert nodules

3580

Lime, crm, fnxln, soft on crush

Shale, vari colored with scattered blue green waxy shale

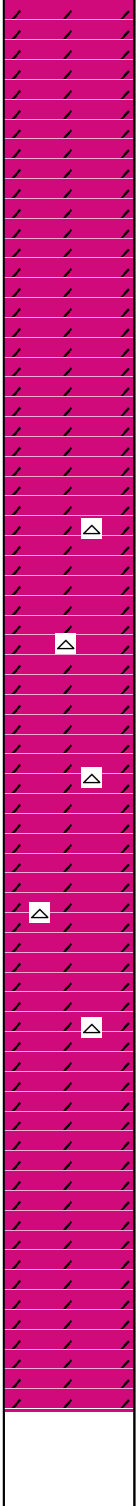
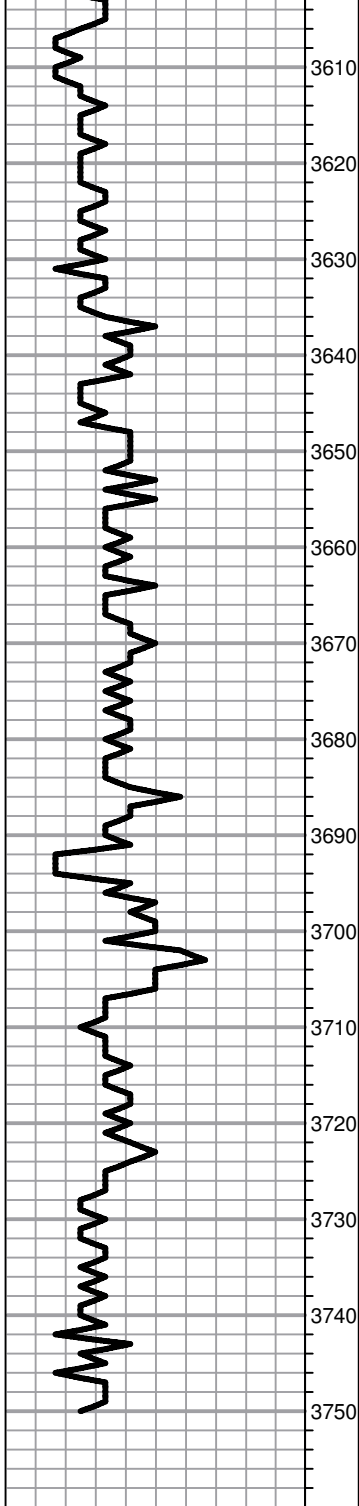
3590

Clastic mix of cherts and vari colored shales  
**ARBUCKLE 3598-1555**

●

3600

Dolomite, ivory, granular-sucosic, lt odor and sat staining



- Dolomite, ivory, granular, sucrosic, good odor and staining
- Dolomite, ivory, fnxln-granular, sucrosic, fair odor and staining
- Dolomite, lt brn, granular, sucrosic, good odor and SFO
- Dolomite, crm-lt brn, fnxln-granular, lt decreasing odor
- Dolomite, crm-lt brn, fn-granular
- △ Dolomite, ivory-crm with increasing fnxln content, oolitic white chert fragments,
- △ Dolomite, ivory-crm, fnxln with decreasing amount of sucrosic
- △ Dolomite, ivory-lt brn, fnxln-granular
- △ Dolomite, ivory-lt brn, fnxln-granular
- △ Dolomite, white, fn-vflxn
- △ Dolomite, crm-lt brn, fnxln-granular
- △ Dolomite, white-crm, fnxln-granular, quartz inclusions in part
- △ Dolomite, white-crm, fnxln-granular
- △ Dolomite, white-crm, fnxln-granular

5 1/2" PRODUCTION CASING SET TO 3745' CEMENTED WITH 150 SXS EA2, DV TOOL SET AT 1224' CEMENTED WITH 155 SXS SMD. SWIFT TICKET # 35105, JOB COMPLETED 11:15PM 6/23/2021

SLOPE SURVEY 1 3/4 DEGREE @ 3740' SHORT TRIP AT 3750'

**RTD 3750-1707 LTD 3752-1709**

# QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071

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

No. 2272

Cell 785-324-1041

Date	6/14/21	Sec.	9	Twp.	15	Range	18	County	Ellis	State	Kansas	On Location		Finish	8:45 pm
Lease								Munsch		Well No.		12			
Contractor								Southwind Drilling		Owner		1/4 W Ninto			
Type Job								Surface		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.			
Hole Size				12 1/4				T.D.		215'					
Csg.				8 5/8				Depth		213.88					
Tbg. Size								Depth							
Tool								Depth							
Cement Left in Csg.				15'				Shoe Joint		15'					
Meas Line								Displace		12.6					
<b>EQUIPMENT</b>								Common							
Pumptrk				17				No.		Cementer					
										Helper					
Bulktrk				14				No.		Driver					
										Driver					
Bulktrk								No.		Driver					
										Driver					
<b>JOB SERVICES &amp; REMARKS</b>								Common							
Remarks:										120					
Rat Hole										30					
Mouse Hole										3					
Centralizers										6					
Baskets										Hulls					
D/V or Port Collar										Salt					
Handling				159						Flowseal					
Mileage										Kol-Seal					
Ran 8 5/8 and est. Circulation										Mud CLR 48					
Cemented with 150 SKS										CFL-117 or CD110 CAF 38					
										Sand					
										Handling					
										Mileage					
<b>FLOAT EQUIPMENT</b>															
										Guide Shoe					
										Centralizer					
										Baskets					
										AFU Inserts					
										Float Shoe					
										Latch Down					
Cement Did Circulate										Pumptrk Charge					
										Surface					
										Mileage					
										15 (MIM)					
Signature				Frank J. Rowe						Tax					
										Discount					
										Total Charge					

JOB LOG

SWIFT Services, Inc.

DATE

6-23-21

PAGE NO.

CUSTOMER

TDI Inc

WELL NO.

#12

LEASE

Munsch

JOB TYPE

TWO STAGE LS

TICKET NO.

35105

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1830							ON LOCATION
								5 1/2 x 14 # RTD - 3750 Shoe e 3745 D.V. TOOL - #6 @ 1224 CENTRALIZERS - 1, 3, 5, 7, 9, 91, 12, 14, 16, 58 BASKETS - 4, 59
	1900							START Running Csg
	2100							BREAK Circ on Bottom
		5.5	12			300		pump MYD FLUSH
		5.5	20			300		pump KCL SPACER
		5	36			300		pump CMT - 150 sx EA-2 e 15.5 pp Drop plug - WASH P&L
		6.5	0			200		START Disp
	2230	6.5	91			700		LAND Plug e 1500 psi Drop D.V. opening tool
		2.5	8			0		plug rat hole - 30 sx
		2.5	4			0		plug mouse hole - 15 sx
								open D.V. TOOL e 900 psi
		6.5	0			300		START CMT - 155 sx SMD e 11.2 pp
		5.5	85			300		END CMT
								Drop plug
		6.5	0			200		START Disp
	2305	6.5	30			400		LAND plug e 1800 psi Release psi - Dry Circ 30 sx CMT to pit JOB Complete
								Thanks DAVID, ZACH & Isaac