KOLAR Document ID: 1613911

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 # 4787
Name: TDI, Inc.
Address 1: 1310 BISON RD
Address 2:
City: HAYS State: KS Zip: 67601 + 9696
Contact Person: Tom Denning
Phone: (785) 628-2593
CONTRACTOR: License # 33350
Name: Southwind Drilling, Inc.
Wellsite Geologist: Herb Deines
Purchaser: Coffeyville

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 #:

11/6/2021	11/11/2021	12/31/2021
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-051-27013-00-00
Spot Description:
NE - NW - SW - SE Sec. 9 Twp. 15 S. R. 18 ☐ East ☑ West
1087 Feet from ☐ North / ☑ South Line of Section
2032 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: Ellis
Lease Name: MUNSCH Well #: 13
Field Name: Schoenchen
Producing Formation: Arbuckle
Elevation: Ground: 2030 Kelly Bushing: 2040
Total Vertical Depth: 3750 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 223 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 1240 Feet
If Alternate II completion, cement circulated from: 0
feet depth to: 1240 w/ 130 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 28000 ppm Fluid volume: 600 bbls
Dewatering method used: Evaporated
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: 02/16/2022
☐ **Confidential Release Date:** 02/16/2024
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** Deanna Garrison **Date:** 02/16/2022

Page Two

Operator Name: TDI, Inc. Lease Name: MUNSCH Well #: 13

Sec. 9 Twp. 15 S. R. 18 ☐ East ☑ West County: Ellis

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	1205'	+835'
Topeka	3004'	-964'
Heebner	3277'	-1237'
Lansing/KC	3324'	-1284'
Base KC	3547'	-1507'
Arbuckle	3614'	-1574'

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	20	223	80/20 Poz	150	2% gel, 3% cc
Production	7.875	5.5	14	3748	EA-2	150	None

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	0-1240	SMD	130	
	-			

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: 01/15/2022	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:	
		Top	Bottom
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	3615	3618

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)*
4	3615	3618			250 gals, 28%, 250 gals, 20%

TUBING RECORD:	Size:	Set At:	Packer At:	
	2.875	3692		

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

Form	ACO1 - Well Completion
Operator	TDI, Inc.
Well Name	MUNSCH 13
Doc ID	1613911

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	20	223	80/20 Poz	150	2% gel, 3% cc
Production	7.875	5.5	14	3748	EA-2	150	None

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 # 13		
Location:			
API:	15-051-27,013-00-00		
Pool:	IN FIELD	Field:	SCHOENCHEN
State:	KANSAS	Country:	USA

Scale 1:240 Imperial

Well Name:	MUNSCH # 13		
Surface Location:			
Bottom Location:	NE NW SW SE, SEC.9-T15S-R18W		
API:	15-051-27,013-00-00		
License Number:	4787		
Spud Date:	11/6/2021	Time:	3:15 PM
Region:	ELLIS COUNTY		
Drilling Completed:	11/11/2021	Time:	4:11 AM
Surface Coordinates:	1087' FSL & 2032' FEL		
Bottom Hole Coordinates:			
Ground Elevation:	2030.00ft		
K.B. Elevation:	2040.00ft		
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:	38.7579673
Latitude:	-99.3261347
N/S Co-ord:	1087' FSL
E/W Co-ord:	2032' 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 #:	8		
Rig Type:	MUD ROTARY		
Spud Date:	11/6/2021	Time:	3:15 PM
TD Date:	11/11/2021	Time:	4:11 AM

Rig Release:	11/12/2021	Time:	3:30 AM

ELEVATIONS

K.B. Elevation:	2040.00ft	Ground Elevation:	2030.00ft
K.B. to Ground:	10.00ft		

NOTES

RECOMMENDATION TO RUN PRODUCTION CASING BASED ON FAVORABLE ARBUCKLE STRUCTURE AND LOG ANALYSIS.

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

NO DRILL STEM TESTS WERE RAN ON THIS WELL.

FORMATION TOPS COMPARSION

	MUNSCH # 13 NE NW SW SE SEC.9-15S-18W KB 2040'	MUNSCH # 12 NE NE SW SE SEC. 9-15S-18W KB 2043'	MUNSCH # 4 N2 SW SW SE SEC.9-15S-18W KB 2037'
	LOG TOPS		
Anhydrite-top	1205 +835	+834	+841
Anhydrite-base	1243 +797	+799	+805
Topeka	3004 - 964	- 957	- 949
Heebner Shale	3277-1237	-1230	-1225
Toronto	3296-1255	-1248	-1245
LKC	3324-1284	-1277	-1272
BKC	3547-1507	-1500	-1497
Arbuckle	3614-1574	-1555	-1569
RTD	3750-1710	-1707	-1731

11-06-21	Spud 3:15 PM. Set 8 5/8" surface casing to 223'
11-07-21	226', cement surface pipe w 150 sks 80/20 pos 3%CC 2%gel, plug down 4:30 AM, slope 1/2 degree @226'. WOC 8 hours drill plug at 12:30 PM with PDC bit
11-08-21	1940', drilling, bit trip to run button bit, displaced 2641-2685
11-09-21	2900', drilling,
11-10-21	3380', drilling,
11-11-21	3750', RTD 3750' @4:11AM, short trip 25 stands, CCH, TOWB, logs, TIWB, LDDP, run production casing and cement

ROCK TYPES

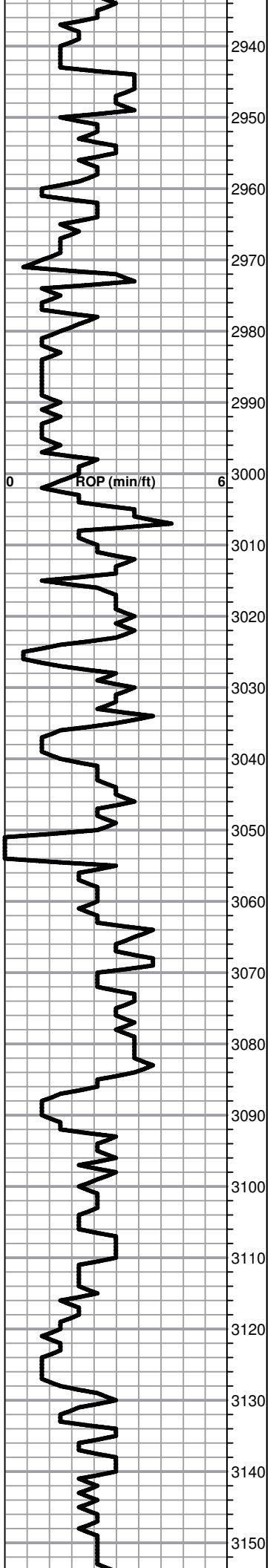
Chtcongl
Dolprim
Lmst fw<7
Lmst fw7>
Lscongl
shale, grn
shale, gry
Carbon Sh
shale, red

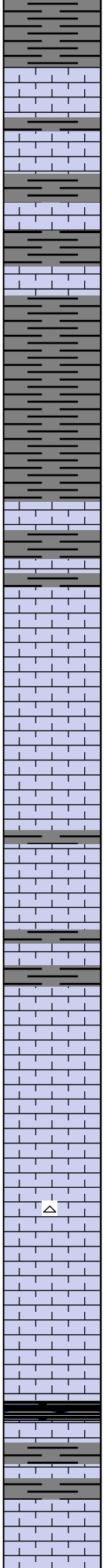
ACCESSORIES

MINERAL
Glauconite
Pyrite
Chert White

FOSSIL
Oomoldic

Curve Track #1 ROP (min/ft) 1:240 Imperial	Depth | Intervals Cored Interval DST Interval	DST	Lithology	Oil Show	Geological Descriptions	Curve Track #3 1:240 Imperial
0 ROP (min/ft) 6	2890 2900 2910 2920 2930				BEGIN 1' DRILL TIME FROM 2900' TO RTD BEGIN 10' WET AND DRY SAMPLES FROM 2950' TO RTD **ANHYDRITE TOP 1205+835** **ANHYDRITE BASE 1243+797** Lime, med brn-med grayish brn, fnxln, fossiliferous Shale, lt gray, sticky	8 5/8" SURFACE CASING SET TO 223' W/ 150 SXS 80/20 POS 2% GEL 3%CC SLOPE 1/2 DEGREE @226'





Shale, lt gray, sticky

Lime, lt-med brn, fnxln

Lime, lt-med brn, fnxln

Shale, lt gray, sticky

Shale, lt-med gray, soft blocky to soft mud

TOPEKA 3004-964

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

Shale, lt gray, sticky

Lime, lt-med brn-gray, fnxln

Lime, white, soft chalky with some sticky clumping, NS

Lime, lt brn-lt grayish brn, fnxln

Lime, lt brn-lt grayish brn, fnxln with bedded soft chalk, NS

Lime, lt brn, fn-vfxln, bedded chalk with some sticky clumps

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

Lime, lt-med brn, fn-vfxln

Lime, lt-med brn, fn-vfxln

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

Lime, lt-med brn, fn-vfxln

Lime, lt brn, fnxln-granular in part, bedded chalk with sticky clumping in part
Chert, lt gray, sharp

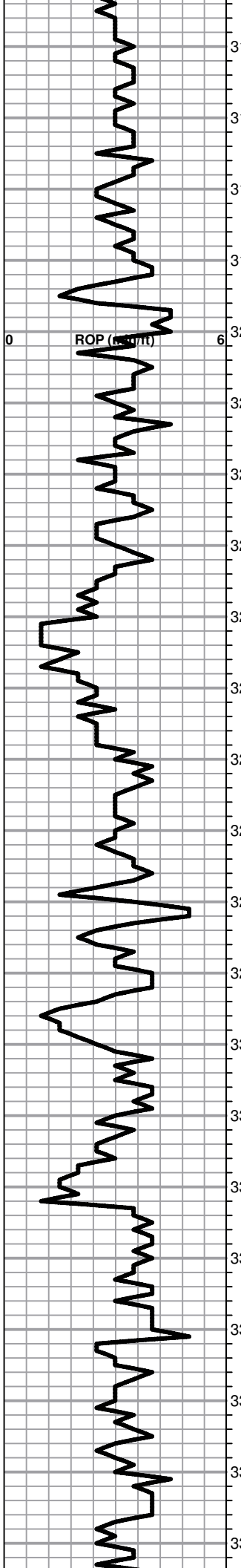
Lime, lt brn, soft granular, slightly fossiliferous, bed chalk

Shale, black carbonaceous, blocky, fissile

Lime, crm-lt brn, fn-micro xln, clean, lithographic

Lime, lt brn, fn-micro xln

CORRECT TO BOARD



3160 Lime, lt brn, fn-micro xln

3170 Lime, lt-med brn, fn-micro xln, slightly fossiliferous

3180

3190 Lime, lt brn-lt grayish brn, fn-micro xln

Shale, black carbonaceous, blocky, fissile

3200 Shale, dove gray, soft sticky

3210 Lime, lt brn, fnxln, very chalky with white wash

3220

3230 Lime, lt-med brn fn-vfxln, bedded chalk

Lime, lt brn, fnxln-granular, few chips with spotty staining,
3240 NFO, scattered fine vugs, very lt odor

3250 Lime, lt brn, fnxln, bedded chalk with white wash

3260 Lime, lt brn, fn-vfxln

3270 Lime, lt brn, fn-vfxln, bedded chalk

HEEBNER SHALE 3277-1237

3280 Shale, black carbonaceous, blocky, fissile
Lime, med brn, micro xln

3290 Shale, lime green, soft mud

TORONTO 3296-1255

3300 Lime, crm, fn-vfxln, NS, no odor

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

3310

Shale, red, soft with red wash

3320 **LKC 3324-1284**

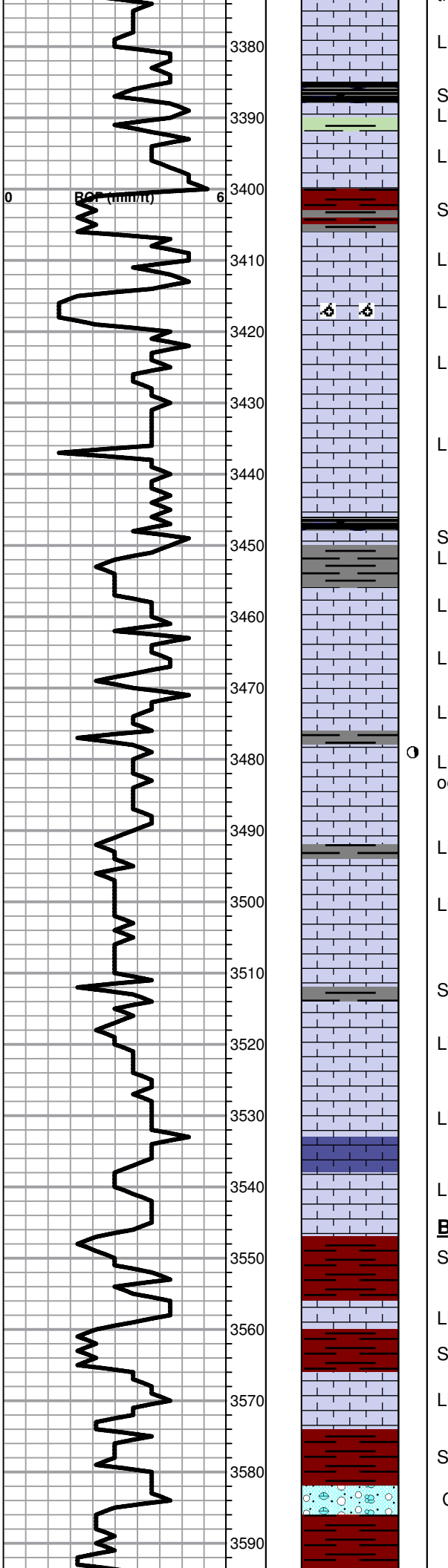
3330 Lime, lt brn, fn-micro xln, NS or odor

Shale, gray-red, soft blocky
3340 Lime, lt gray, fn-vfxln

Lime, crm-lt brn, fnxln, chalky, few oolitic chips with spotty
3350 staining, NFO or odor

3360 Lime, crm-lt brn, fn-vfxln, chalky with white wash

Lime, crm, fnxln, fossil fragments with oolites, inter oolitic
3370 spotty staining, very lt odor with few specs of floating oil in
tray.



Lime, crm, fn-vfxln, chalky

Shale, black carbonaecous, blocky
Lime, lt gray, fn-vfxln

Lime, lt brn, fnxln, fossiliferous but cemented, NS or odor

Shale, red-gray, sticky

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

Lime, crm fnxln-oolmoldic, barren, with bedded chalk

Lime, lt gray, micro xln, hard bedded chalk

Lime, crm, fn-micro xln with bedded chalk

Shale, black carbonaceous, blocky
Lime, med-dark gray, mottled

Lime, crm, fn-micro xln,bedded chalk, NS

Lime, crm-lt brn, fn-micro xln

Lime, lt brn, micro xln, hard bedded chalk, NS

Lime, crm, fn-micro xln, scattered spotty stain, NFO, very lt odor

Lime, gray, fn-vfxln, shaley and trashy section

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

Shale, grayish green, fossiliferous, calcareous

Lime, white-crm fn-vfxln

Lime, crm, fn-micro xln, hard bedded chalk

Lime, crm, fn-micro xln, hard bedded chalk

BKC 3547-1507

Shale, red, soft with red wash

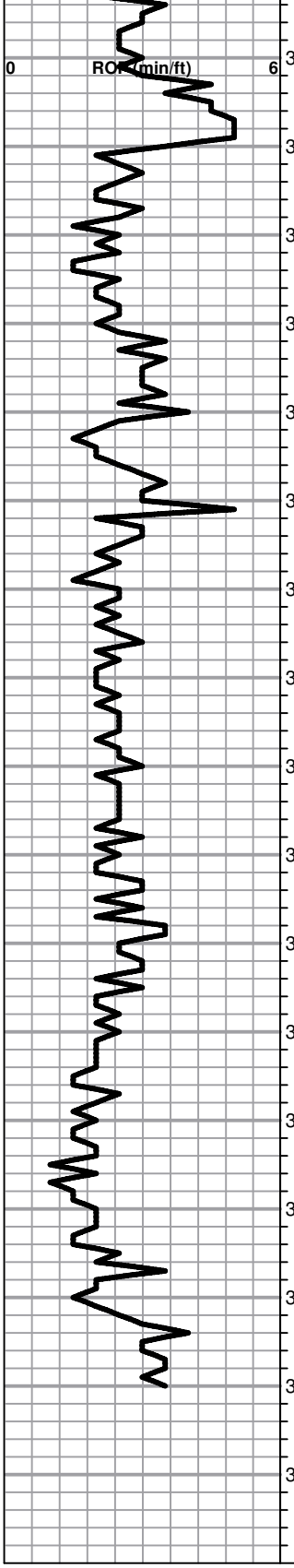
Lime, crm-white, fnxln, bed chalk

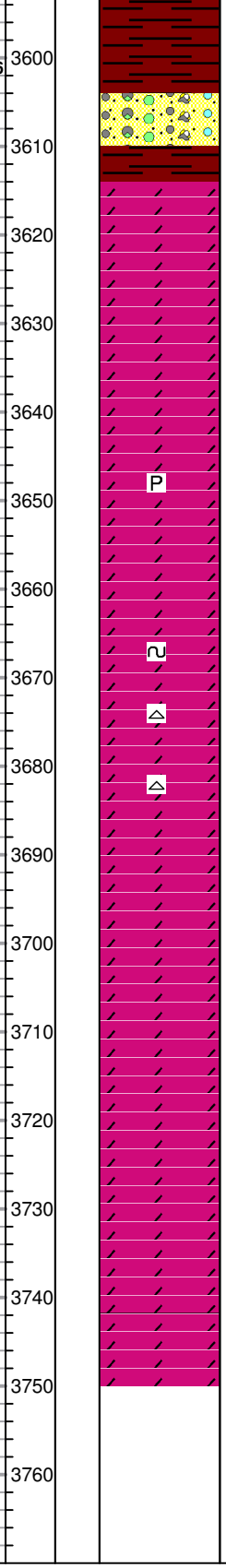
Shale, red soft with red wash

Lime, white-crm, fnxln

Shale, red soft with red wash

Clastic limestone rubble with red shale staining





Shale, red-brn, soft blocky-soft mud, red wash

Clastic mix of chert, dolomitic lime and rubble

ARBUCKLE 3614-1574

Dolomite, lt brn, fnxln-granular, sucrosic in part, good odor with saturated staining and free oil.

Dolomite, lt brn-ivory, fnxln with fine to coarse grain sucrosic

Dolomite, lt brn-ivory, fnxln-granular, strong sulfur odor

Dolomite, lt-med brn, granular with fine to coarse sucrosic, strong odor with scattered saturated staining

Dolomite, crm-ivory, fn-vfxln, chalky , pyrite inclusions in part

Dolomite, white-ivory, fnxln-granular

Dolomite, white-ivory, fnxln-granular, white chalk wash, scattered specs of glauconite

Dolomite, white-ivory, fn-micro xln, hard cherty appearance

Dolomite, ivory, fn-micro xln, lt chalk wash

Dolomite, white-ivory-tan, fnxln with silica inclusions

Dolomite, white-salmon, fnxln-soft granular with silica inclusions, very dolomitic

Dolomite, ivroy-salmon, fnxln-granular

Dolomite, crm-ivory, fnxln-granular, white wash

Dolomite, buff-crm, fnxln-granular with white chalk wash

RTD 3750-1710 LTD 3752-1712

SET 5 1/2" PRODUCTION CASING TO 3747'. BOTTOM STAGE CEMENT W/150 SXS EA2, TOP STAGE W/ 130 SXS SMD, 30 SXS RATHOLE, 20 SXS MOUSEHOLE. PLUG DOWN 3:15 AM 11-12-21
SWIFT TICKET #34084

SLOPE 0 DRGREES @ 3750'

FRANKS Oilfield Service

◆ 815 Main Street Victoria, KS 67671 ◆ 24 Hour Phone (785) 639-7269
◆ Office Phone (785) 639-3949 ◆ Email: franksoilfield@yahoo.com

TICKET NUMBER 0447
LOCATION Victoria
FOREMAN Tom Williams

FIELD TICKET & TREATMENT REPORT
CEMENT

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
11-7-21	4787	Munsch 13	9	15s	18 W	Ellis

CUSTOMER TDI Inc
MAILING ADDRESS 1310 Bison Rd
CITY Hays STATE KS ZIP CODE 67601

TRUCK #	DRIVER	TRUCK #	DRIVER
101	Tom W		
	Preston D		

JOB TYPE Surface HOLE SIZE 12¼" HOLE DEPTH 226' CASING SIZE & WEIGHT 8⅝"
CASING DEPTH 226' DRILL PIPE _____ TUBING _____ OTHER _____
SLURRY WEIGHT 14.8 SLURRY VOL 1.32 WATER gal/sk _____ CEMENT LEFT in CASING _____
DISPLACEMENT 13 Bbl DISPLACEMENT PSI _____ MIX PSI _____ RATE _____

REMARKS: Safety meeting + rig up on Southwind Drl. Circulate mud. Hooked up + pump 150 sx 60/20. Displaced 13 Bbl + shut in
Cement did circulate
USED 8⅝" head Thanks Tom + Preston

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
PL002	1	PUMP CHARGE	$1150.00	$1150.00
M001	20	MILEAGE	$6.50	$130.00
M002	7.1 ton	Ton Mileage delivery	$600.00	$600.00
CB040	150 sx	60/20 3% cc 2% gel	$21.25	$3,187.50
			sub total	$5,067.50
		less 25% disc.		$1266.88
			sub total	$3800.62
			SALES TAX	$ 167.38
			ESTIMATED TOTAL	$ 3967.00

AUTHORIZATION Doug Robert TITLE _____ DATE _____

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at ou office, and conditions of service on the back of this form are in effect for services identified on this form.

JOB LOG

SWIFT Services, Inc.

DATE 11/11/21 | PAGE NO.

CUSTOMER	WELL NO.	LEASE	JOB TYPE	TICKET NO.
TDI	#13	MUNSCH	2 STAGE L.S	34084

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	2030							ON LOCATION
								5½ x 14#
								RTD
								TOTAL PIPE - 3747.75
								SHOE - 42.42
								D.V. - 59 @ 1239.98
								CENTRALIZERS - 1, 3, 4, 6, 8, 10, 12, 14, 16, 58
								BASKET - 5, 59
	2245							START RUNNING Csg
	1240							BREAK CIRC ON BTM
		5.5	12			300		PUMP MUDFLUSH - 500 GAL
		5.5	20			300		PUMP KCL SPACER
		5	36			300		PUMP CMT - 150 sx EA-2 @ 15.5
								DROP PLUG - WASH P&L
	215	7	0					START DISP
	230	5.5	90.4			900		LAND PLUG @ 1500#
								DROP THE BOMB
		2.5	8			0		PLUG RAT HOLE - 30 sx CMT
		2.5	4			0		PLUG MOUSE HOLE - 20 sx
	245					900		OPEN D.V. TOOL
		6.5	0			500		START CMT - 110 sx @ 11.2
		6.5	60			500		RAISE WGT TO 14 PPG FOR 20 sx
		6.5	6~~5~~			300		END CMT
								Drop plug
	300	6.5	0			200		START DISP
	310	6.5	30.25			700		LAND PLUG @ 1500#
								RELEASE PSI - DRY
								CIRCULATED 50 sx CMT
								JOB COMPLETE
								THANKS
								DAVID, ROGER, JOE & ISAAC