

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1235434
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
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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: _____

1235434

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: _____ _____
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OPERATOR

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

Contact Geologist: TOM DENNING
 Contact Phone Nbr: 785-628-2593
 Well Name: CHARLOTTE TRUST # 2 TWIN
 Location: W2 NE SW NE Sec 23-T23S-R18W
 API: 15-051-26,763-00-00
 Pool:
 State: KANSAS

Field: LEIKER SOUTHEAST
 Country: USA



Scale 1:240 Imperial

Well Name: CHARLOTTE TRUST # 2 TWIN
 Surface Location: W2 NE SW NE Sec 23-T23S-R18W
 Bottom Location:
 API: 15-051-26,763-00-00
 License Number: 4787
 Spud Date: 11/25/2014 Time: 8:41 AM
 Region: ELLIS COUNTY
 Drilling Completed: 12/1/2014 Time: 6:48 AM
 Surface Coordinates: 1650' FNL & 1800' FEL
 Bottom Hole Coordinates:
 Ground Elevation: 1953.00ft
 K.B. Elevation: 1963.00ft
 Logged Interval: 2850.00ft To: 3650.00ft
 Total Depth: 3650.00ft
 Formation: ARBUCKLE
 Drilling Fluid Type: CHEMICAL/FRESH WATER GEL

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -99.2886775
 Latitude: 38.7359361
 N/S Co-ord: 1650' FNL
 E/W Co-ord: 1800' FEL

LOGGED BY

Company: SOLUTIONS CONSULTING, INC.
 Address: 108 WEST 35TH STREET
 HAYS, KANSAS 67601

Phone Nbr: 785-625-3380
 Logged By: GEOLOGIST Name: HERB DEINES

CONTRACTOR

Contractor: SOUTHWIND DRILLING, INC.
 Rig #: 1
 Rig Type: MUD ROTARY
 Spud Date: 11/25/2014 Time: 8:41 AM
 TD Date: 12/1/2014 Time: 6:48 AM

ELEVATIONS

K.B. Elevation: 1963.00ft
 K.B. to Ground: 10.00ft

Ground Elevation: 1953.00ft

NOTES

THIS WELL WAS DRILLED TO EVALUATE FOR PRODUCTIVE POTENTIAL AND IF FOUND TO BE UNECONOMICAL TO CONVERT TO A SALT WATER DISPOSAL WELL.

OPEN HOLE LOGGING BY PIONEER ENERGY SERVICES: DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, MICRORESISTIVITY LOG.

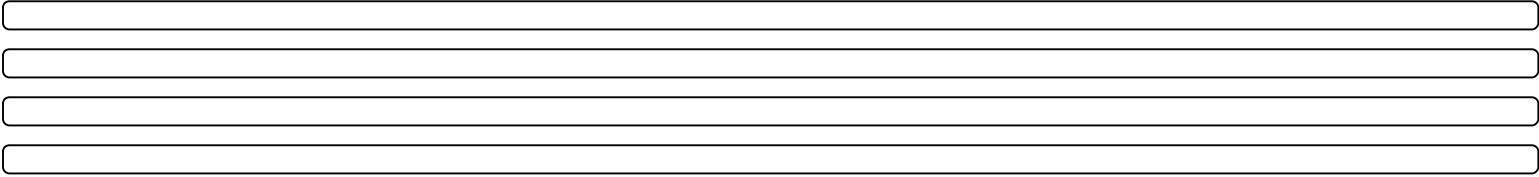
NO DRILL STEM TESTS WERE RAN ON THIS WELL.

FORMATION TOPS COMPARISON

	CHARLOTTE TR #2TWIN W2 NE SW NE SEC.23-15S-18W 1953'GL 1963'KB	CHARLOTTE TR #1 E2 SW SE NE SEC.23-15-18W KB 1965'	GROSS # A-1 NW SE NE SEC.23-15-18W KB 1960'
<u>FORMATION</u>	<u>LOG TOPS</u>	<u>LOG TOPS</u>	<u>LOG TOPS</u>
Anhydrite	1132 +831	+ 837	
B-Anhydrite	1166 +797	+ 803	
Topeka	2935 - 972	- 979	
Heebner Sh.	3198-1235	-1243	-1244
Toronto	3218-1255	-1265	
LKC	3249-1286	-1294	-1290
BKC	3471-1508	-1515	-1521
Arbuckle	3564-1601	-1557	-1569
RTD	3650-1687	-1685	-1580

SUMMARY OF DAILY ACTIVITY

11-25-14 RU, spud 4:00 PM
 11-26-14 910', set 8 5/8" surface casing to 1137' w/ 375 sxs SMD, slope 1 degree, plug down 9:15PM
 11-27-14 1137', WOC, shut down for Thanksgiving Day
 11-28-14 1250', drilling
 11-29-14 2374', drilling, displaced 2893' to 2917'
 11-30-14 3070', drilling
 12-01-14 3650', RTD 3650' @6:48AM, short trip, TOWB, logs, TIWB, LDDP, run production casing for salt water disposal
 12-02-14 3650', finish cementing bottom stage, plug down 2:15AM, RD



ROCK TYPES

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

ACCESSORIES

MINERAL

- ▲ Chert, dark
- P Pyrite

OTHER SYMBOLS

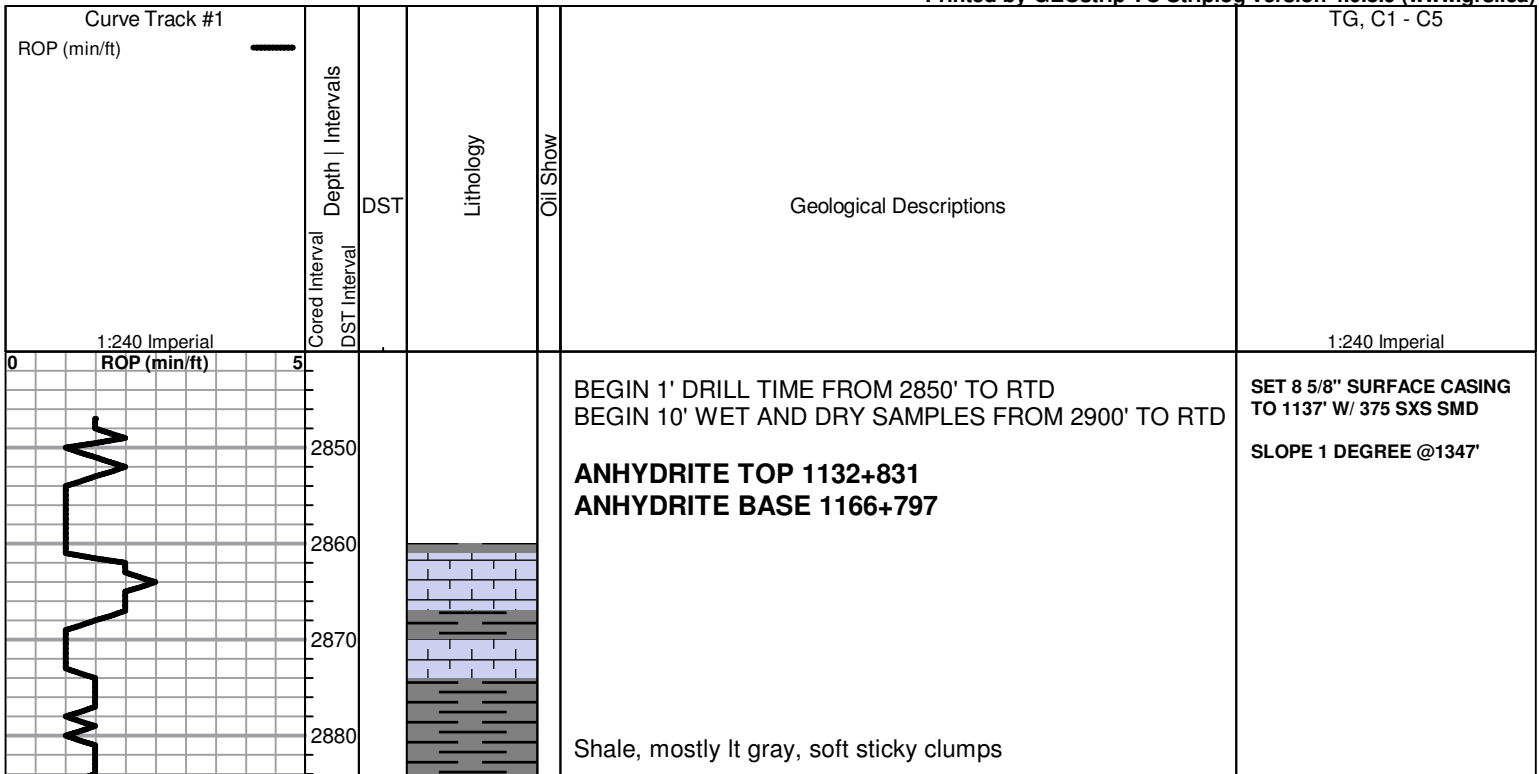
Oil Show

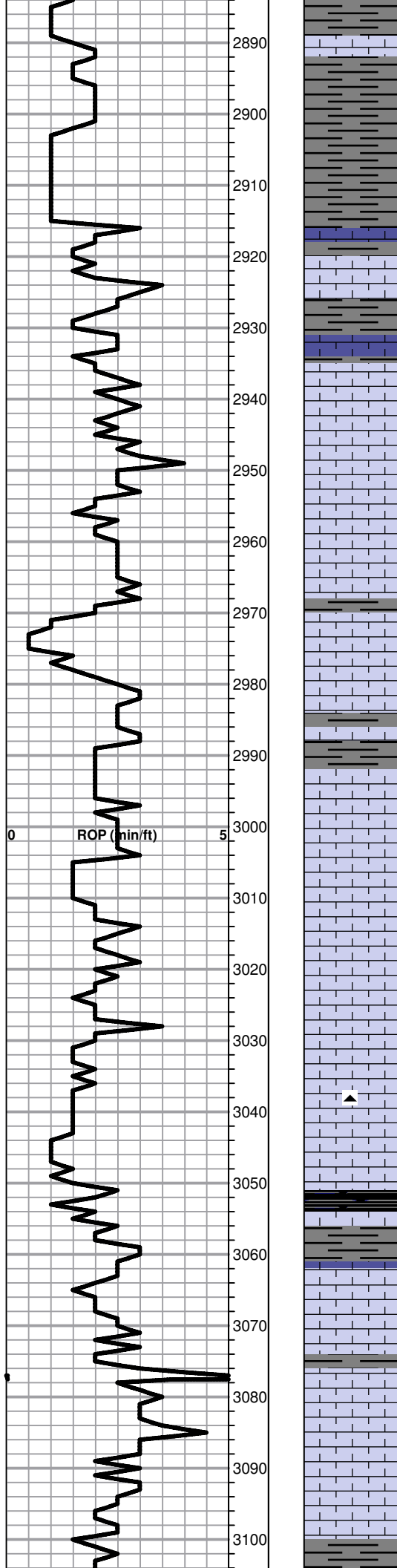
- Good Show
- Fair Show
- Poor Show
- Spotted or Trace
- Questionable Stn
- D Dead Oil Stn
- Fluorescence
- * Gas

DST

-
-
-
-

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Lime, lt brn, fnxln, slightly fossiliferous

Shale, lt-med gray, soft blocky

Lime, lt-med brn, fnxln

TOPEKA ELog 2935-972

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

Lime, lt-med brn-offwhite, fn-vfxln, bedded chalk in part

Lime, offwhite-med grayish brn, fnxln with sticky chalk

Lime, lt brn, granular, NS, bedded chalk in part

Lime, lt-med brn, fn-vfxln

Lime, med gray-med grayish brn, fnxln
Shale, med gray, calcareous

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

Lime, lt-med brn, fnxln, lot of soft bedded chalk

Lime, lt brn-lt grayish brn, fnxln-soft granular with lot of soft bedded chalk

Lime, lt brn, granular, bedded chalk

Lime, lt brn, granular, chalky

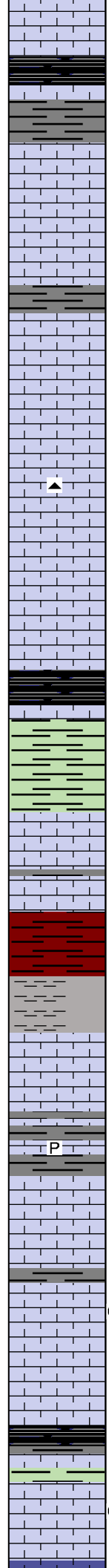
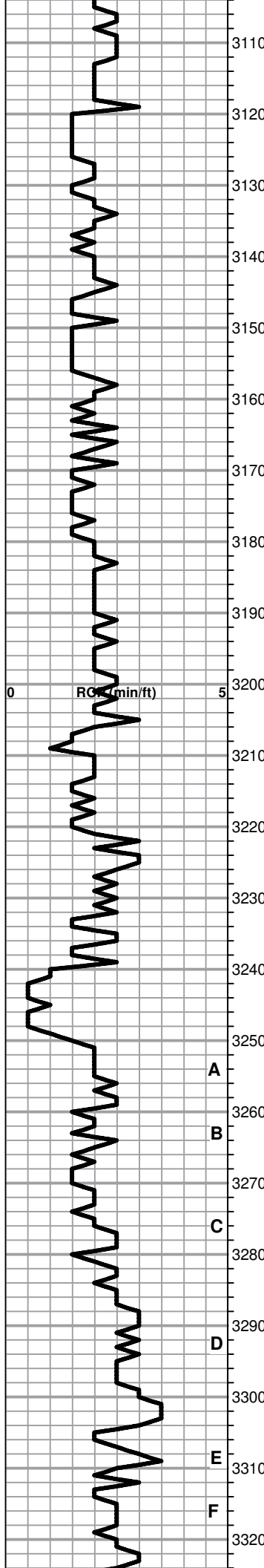
Shale, black carbonaceous, fissile, blocky

Lime, crm, fn-vfxln, lithographic

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

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

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



Lime, lt brn-lt gray, fnxln

Shale, black carbonaceous, blocky, fissile

Lime, lt brn-lt grayish brn, fnxln

Lime, lt brn, fnxln

Lime, lt brn-lt grayish brn, fnxln-granular in part, slightly fossiliferous

Lime, lt brn, granular, NS

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

Lime, crm-lt brn, fnxln-granular, slightly fossiliferous

Lime, lt brn, fnxln-granular, 1 chip with vlt odor on crush. Zone appears thin and poorly developed.

HEEBNER SHALE ELog 3198-1235

Shale, black carbonaceous, fissile, blocky

Shale, lt grayish green, soft blocky

TORONTO ELog 3218-1255

Lime, lt crm, fnxln, brittle on crush, firm bedded chalk, NS

Lime, crm-lt brn, fnxln

Shale, red-dark brn, soft blocky

LKC ELog 3249-1286

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

Lime, lt-med brn, fn-vfxln

Lime, crm-tan, fnxln, slightly fossiliferous, trace of spotty staining in few chips, appears poorly developed

Lime, crm-tan, fnxln

Lime, crm-tan, mostly fnxln, trace of spotty staining in fine inter xln porosity with scattered pinpt vuggy porosity, NFO

Lime, crm-tan, fnxln

Shale, black carbonaceous, blocky

Lime, crm-tan, fnxln, thin fossiliferous bed with inter-fossiliferous porosity with scattered fine vuggy porosity, trace of stain, NFO, not well developed

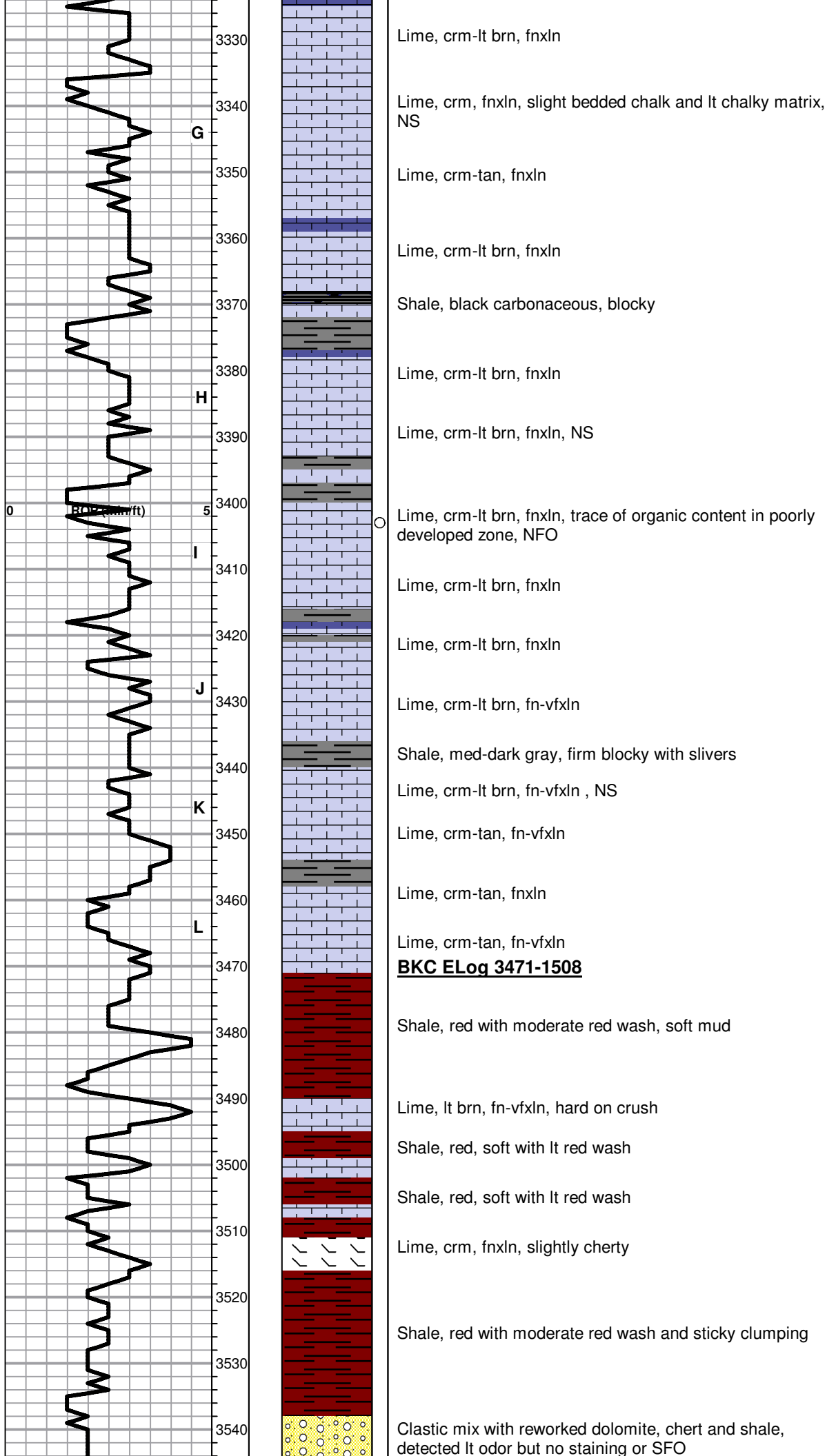
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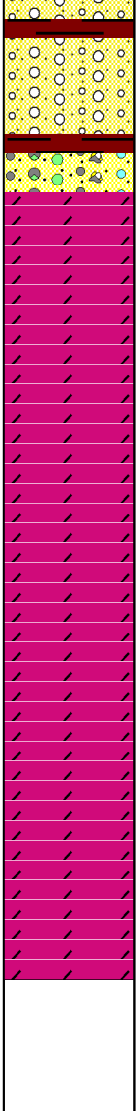
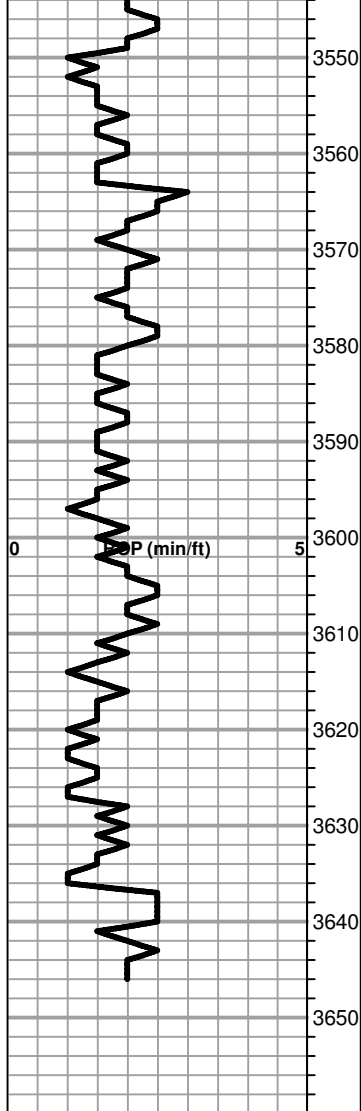
P

○

○

RC (min/ft)





Clastic mix as above, scattered loose quartz grains and oolitic chert fragments

ARBUCKLE ELog 3564-1601

Dolomite, ivory, fnxln-granular, NS, No Odor

Dolomite, lt brn, fnxln-granular in part, NS

Dolomite, lt brn, fnxln-granular, scattered oolitic chert fragments

Dolomite, ivory-crm, fnxln-granular, slightly sucrosic

Dolomite, ivory-crm, fnxln-granular, scattered oolitic chert and tan chert, fresh, sharp

Dolomite, ivory-crm, fn-coarse granular, slight white chalk wash

Dolomite, ivory-lt salmon, med-coarse granular, sucrosic

Dolomite, lt salmon, granular, sucrosic

RTD 3650-1687 LTD 3644-1681

SET 5 1/2" 14# CASING TO 3646' W/ 125 SXS EA2

JOB LOG

SWIFT Services, Inc.

DATE 11-26-14 PAGE NO. 1

CUSTOMER TDI WELL NO. #2 LEASE Charlotte JOB TYPE Cement Surface Casing TICKET NO. 26975

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		TD 1170'	DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING		
	1100								On location - Float Equip start casing - 8 5/8" - 23 #/ft. to 1168' ST 34 1/2' - Baffle Plate 11.37.63' = 72 1/4 (881) Cont 1-3-14
	1900								Fin run casing
	1915								St. CIR - Wait on last ticks
	2000								Fin CIR
	2005	5	12				300		500 gal Mud Flush
		6	20				300		20 BBL KCL Flush
		5	59				300		125 SKS @ 11.8 #/gal
		5	38	97			300		100 SKS @ 12.5 #/gal
		4 1/2	23	120			300		75 SKS @ 13.5 #/gal
		4	20	140			300		75 SKS @ 14.5 #/gal
							Var		Fin cont
									Release Plug
		6					300		Start Displ
		5	15				500		Cont circulating to Pit 75/sks
	2115		72 1/4				600 900		Plug Down - close in
									Washup P.T & Reelup
									Job Complete
									Thanks Don, Jon, Steve Jared & Tyler

JOB LOG

SWIFT Services, Inc.

DATE 12-1-14 PAGE NO.

CUSTOMER TDI WELL NO. #2-Twin LEASE Charlotte Trust JOB TYPE Cement Logging TICKET NO. 27102

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
12/1	2145							TD 3650
	2215							DN location - Float Equip start 5 1/2" 14 #4 casing to 3649"
								Insert Float Shoe (w) / Fill-up L.D. Baffle - 55 - 43 1/2' @ 3605 1/2' (88) 881
								Coat 1-3-5-7-9-11-13-15 Cement Basket #2
	2350							Drop fill-up ball & its out
	2400							Fin run casing - Tag & lay it. Down
12/2	0100							Start air / Rotate Fin air - wtc fits here
								Plug RH - 30 SKS MH - 20 SK std cut
		5					300	500 gal Mead Flush
		6					350	20 BBL KCL Flush
		4 1/2					300	Start 125 SKS EH-2 cut
							vac	Fin cut Wash out pump & lines
		9					400	Drop L.D. Plug Start Displ
		9	65				500	Caught left
		7 1/2	75				700	slow rate
		6	80				700	slow rate
		5 1/2	85				800	slow rate
		5 1/2	87				850	last air press
	0150	0	88				1500	Plug Down - Held - Release & Held Job Complete
	0200							Wash up & Rack up Trks
	0230							Thanks Hon - Jon - Steve & Craig