



Scale 1:240 Imperial

Well Name: URBAN UNT #1
 Surface Location: NE NW SW SE Sec. 11 - 15S - 19W
 Bottom Location:
 API: 15-051-26483-00-00
 License Number: 4787
 Spud Date: 3/15/2013 Time: 11:00 PM
 Region: ELLIS COUNTY
 Drilling Completed: 3/21/2013 Time: 3:52 PM
 Surface Coordinates: 1220' FSL & 2025' FEL
 Bottom Hole Coordinates:
 Ground Elevation: 2029.00ft
 K.B. Elevation: 2039.00ft
 Logged Interval: 2850.00ft To: 3721.00ft
 Total Depth: 3724.00ft
 Formation: LANSING-KANSAS CITY
 Drilling Fluid Type: FRESH WATER / CHEMICAL GEL

OPERATOR

Company: TDI, INC.
 Address: 1310 BISON RD.
 HAYS, KS 67601
 Contact Geologist: TOM DENNING
 Contact Phone Nbr: (785) 628-2593
 Well Name: URBAN UNT #1
 Location: NE NW SW SE Sec. 11 - 15S - 19W API: 15-051-26483-00-00
 Pool: UNNAMED
 State: KANSAS Country: USA

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: -99.4001305 Latitude: 38.7581742
 N/S Co-ord: 1220' FSL
 E/W Co-ord: 2025' FEL

LOGGED BY



Company: SOLUTIONS CONSULTING, INC.
 Address: 108 W 35TH
 HAYS, KS 67601
 Phone Nbr: (785)259-3737
 Logged By: Geologist Name: JEFF LAWLER

CONTRACTOR

Contractor: SOUTHWIND DRILLING, INC.
 Rig #: 1
 Rig Type: MUD ROTARY
 Spud Date: 3/15/2013 Time: 11:00 PM
 TD Date: 3/21/2013 Time: 3:52 PM
 Rig Release: 3/22/2013 Time: 10:00 AM

ELEVATIONS

K.B. Elevation: 2039.00ft Ground Elevation: 2029.00ft
 K.B. to Ground: 10.00ft

NOTES

NOTE: THERE IS AN ~6' UPHOLE CORRECTION TO CORRELATE LOG CURVES TO DRILL TIME

DUE TO ECONOMICAL RECOVERY ON DRILL STEM TEST #1 AND LOG ANALYSIS 5 1/2" x 14# PRODUCTION CASING WAS RUN.


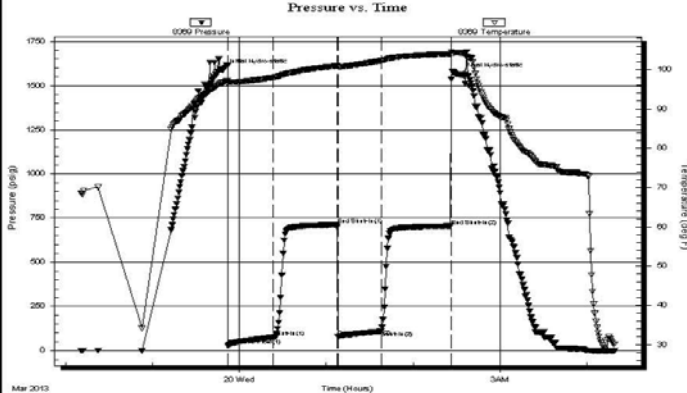
RESPECTFULLY SUBMITTED,
 JEFF LAWLER

WELL COMPARISON SHEET

FORMATION	URBAN UNIT #1				LAWBANCO				STAAB ENERGY & LEASING				TDI, INC.			
	N2 NENESE 11-15-19				S2 NENESE 11-15-19				NW SESW 11-15-19				E2 NW NENE SW 11-15-19			
	2039		2056		2043		2031		2050							
	LOG TOPS	SAMPLE TOPS	COMP. CARD	LOG	SMPL.	COMP. CARD	LOG	SMPL.	COMP. CARD	LOG	SMPL.	COMP. CARD	LOG	SMPL.		
DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM			
ANHYDRITE TOP	4240	799	4244	799	4354	803	4354	793	4320	844	113	4350	800	4350	800	

ANTHRAHITE TOP	1276	763	1281	758	1287	769	-6	-11	1283	760	+3	-2	1264	767	-4	-9	1284	766	-3	-8
BASE	3002	-963	3005	-966	3016	-960	-3	-6	3009	-966	+3	+0	2998	-967	+4	+1	3013	-963	+0	-3
HEEBNER SHALE	3278	-1239	3285	-1246	3292	-1236	-3	-10	3287	-1244	+5	-2	3277	-1246	+7	+0	3290	-1240	+1	-6
TORONTO	3298	-1259	3313	-1274	3320	-1264	+5	-10	3310	-1267	+8	-7	3300	-1269	+10	-5	3314	-1264	+5	-10
LKC	3324	-1285	3330	-1291	3341	-1285	+0	-6	3334	-1291	+6	+0	3321	-1290	+5	-1	3337	-1287	+2	-4
BKC	3572	-1533	3577	-1538	3580	-1524	-9	-14	3580	-1537	+4	-1	3568	-1537	+4	-1	3582	-1532	-1	-6
CONGLOMERATE SAND					3634	-1578			3648	-1605							3674	-1624		
ARBUCKLE	3641	-1602	3647	-1608	3645	-1589	-13	-19	3675	-1632	+30	+24	3676	-1645	+43	+37	3704	-1654	+52	+46
RTD			3724	-1685	3750	-1694		+9	3702	-1659		-26	3680	-1649		-36	3750	-1700		+15
LTD	3721	-1682			3750	-1694	+12										3750	-1700	+18	

DST #1 LKC A-C 3317' - 3366'


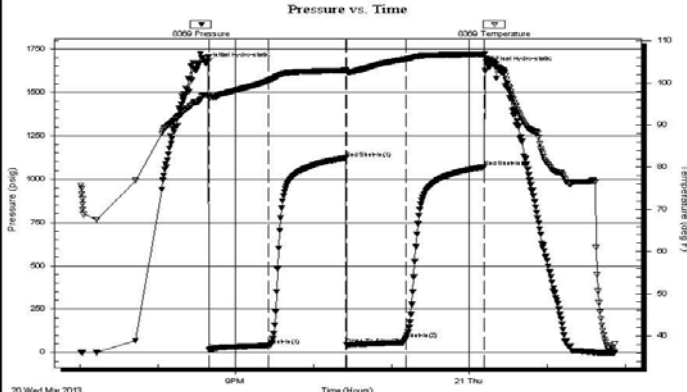
 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT																																					
	TDI Inc 1310 Bison Rd Hays Ks 67601-9696 ATTN: Tom Denning	11-15s-19w Ellis Urban Unit #1 Job Ticket: 50374 DST#: 1 Test Start: 2013.03.19 @ 22:10:49																																				
GENERAL INFORMATION: Formation: LKC A-C Deviated: No Whipstock: ft (KB) Time Tool Opened: 23:52:14 Time Test Ended: 04:19:28 Interval: 3317.00 ft (KB) To 3366.00 ft (KB) (TVD) Total Depth: 3366.00 ft (KB) (TVD) Hole Diameter: 7.85 inches Hole Condition: Fair Test Type: Conventional Bottom Hole (Initial) Tester: Ray Schwager Unit No: 42 Reference Elevations: 2039.00 ft (KB) 2029.00 ft (CF) KB to GR/CF: 10.00 ft																																						
Serial #: 8369 Inside Press@RunDepth: 110.93 psig @ 3330.00 ft (KB) Capacity: 8000.00 psig Start Date: 2013.03.19 End Date: 2013.03.20 Last Calib.: 2013.03.20 Start Time: 22:10:49 End Time: 04:19:28 Time On Btm: 2013.03.19 @ 23:48:44 Time Off Btm: 2013.03.20 @ 02:31:58																																						
TEST COMMENT: 30-IFP-w k to strg in 6min 45-ISIP-1/4"bl bk 30-FFP-w k to strg in 4 min 45-FSP-1/4"bl bk																																						
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Trilobite Testing, Inc

Ref. No: 50374

Printed: 2013.03.20 @ 08:07:56

DST #2 LKC H-J 3460' - 3530'

 TRILOBITE TESTING, INC.	DRILL STEM TEST REPORT																																					
	TDI Inc 1310 Bison Rd Hays Ks 67601-9696 ATTN: Tom Denning	11-15s-19w Ellis Urban Unit #1 Job Ticket: 50375 DST#: 2 Test Start: 2013.03.20 @ 19:00:48																																				
GENERAL INFORMATION: Formation: LKC Deviated: No Whipstock: ft (KB) Time Tool Opened: 20:39:43 Time Test Ended: 01:52:12 Interval: 3460.00 ft (KB) To 3530.00 ft (KB) (TVD) Total Depth: 3530.00 ft (KB) (TVD) Hole Diameter: 7.85 inches Hole Condition: Fair Test Type: Conventional Bottom Hole (Reset) Tester: Ray Schwager Unit No: 42 Reference Elevations: 2039.00 ft (KB) 2029.00 ft (CF) KB to GR/CF: 10.00 ft																																						
Serial #: 8369 Inside Press@RunDepth: 77.61 psig @ 3464.00 ft (KB) Capacity: 8000.00 psig Start Date: 2013.03.20 End Date: 2013.03.21 Last Calib.: 2013.03.21 Start Time: 19:00:48 End Time: 01:52:12 Time On Btm: 2013.03.20 @ 20:37:13 Time Off Btm: 2013.03.21 @ 00:14:57																																						
TEST COMMENT: 45-IFP-w k bl thru-out 1/4"to 2"bl 60-ISIP-no bl 45-FFP-w k bl 1/4"bl 60-FSP-no bl																																						
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Recovery			Gas Rates		
Length (ft)	Description	Volume (bbl)	Choke (inches)	Pressure (psig)	Gas Rate (Mcft/d)
90.00	MW 15% M85% W	0.99			

Recovery from multiple tests
 Trilobite Testing, Inc Ref. No: 50375 Printed: 2013.03.21 @ 07:59:25

ROCK TYPES

Cht vari	Dolsec	shale, gry	Ss
Chtcongl	Lmst fw7>	Carbon Sh	
Dolprim	shale, gm	shale, red	

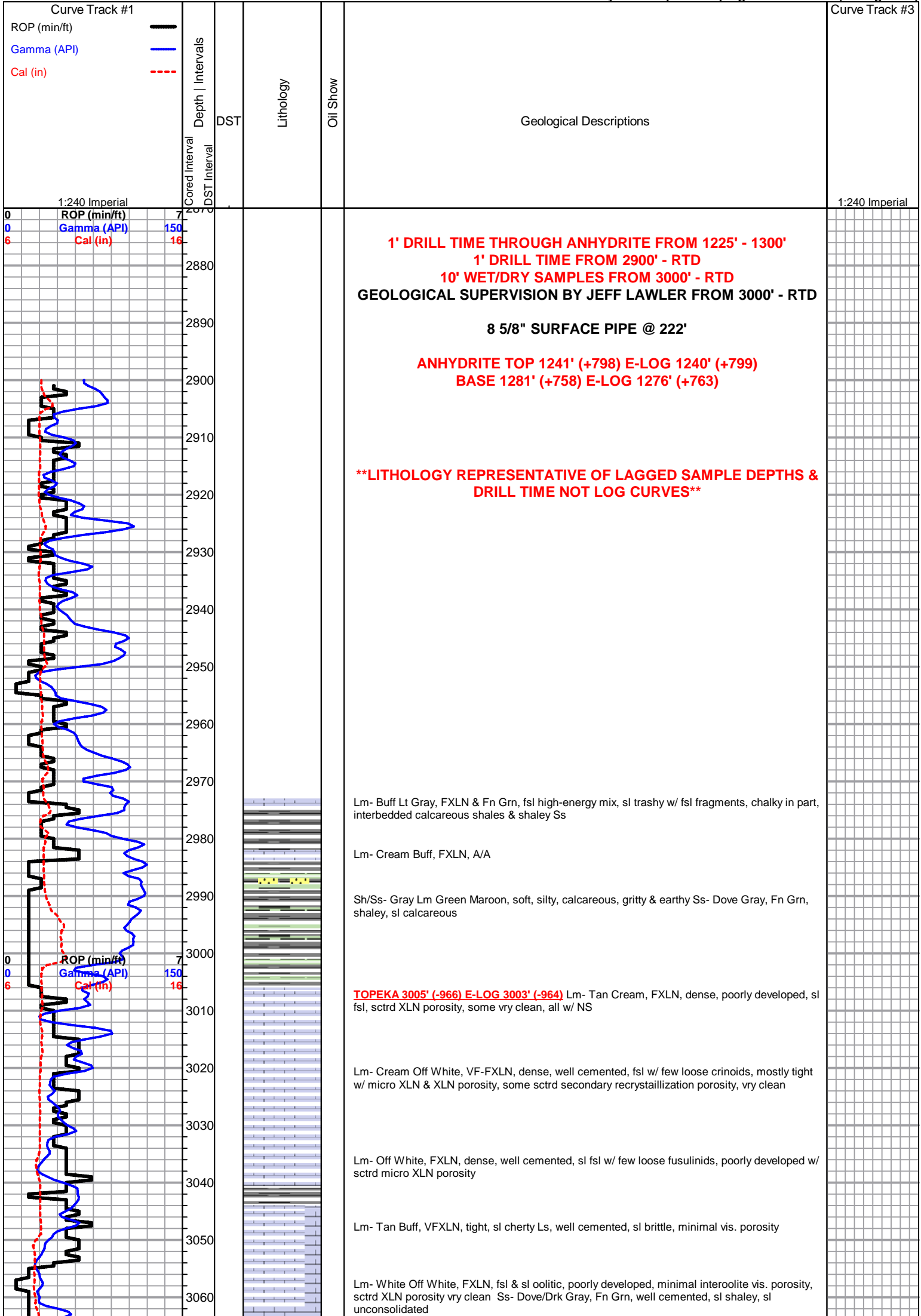
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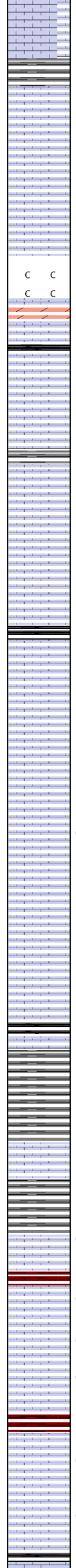
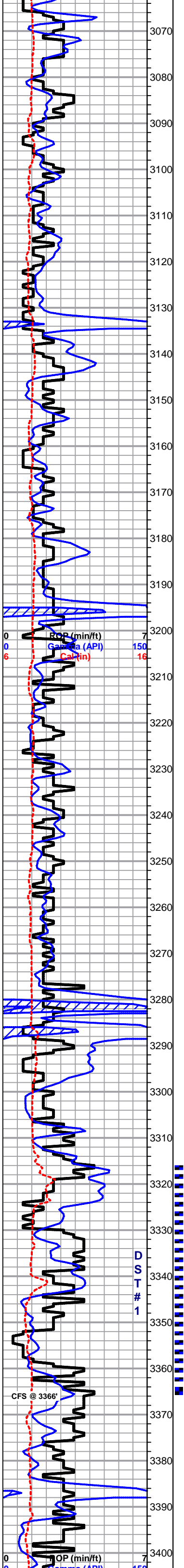
STRINGER	TEXTURE
Sandstone	Chalky
carb shale	

OTHER SYMBOLS

DST
DST Int
DST alt

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)





Lm- Tan Buff, VF-FXLN, mix of tight well cemented cherty Ls & gritty, sub-sucrosic well cemented, poorly developed dolomitic Ls w/ mostly consistant vry fn ppt porosity throughout

3070

Sh- Drk & Lt Gray White Lm Green, soft, silty, calcareous, gummy white chalk, sl waxy, dense & blocky

3080

Lm- Cream Tan, VF-FXLN, dense, well cemented, poorly developed mix of sl fsl cherty Ls & gritty, mostly tight dolomitic Ls

3090

Lm/Chert- FXLN, Cream, sl fsl & trahsy, loosely cemented, chalky in part Chert- Drk Gray sl fsl fresh bedded chert

3100

Lm- Tan Cream, Vf Grn & FXLN, mix of lithofied mud matrix w/o vis. grains/porosity, & vry fsl, poorly developed w/ sctrd XLN porosity, clean & barren

3110

3120 C C

Sh- White, abundant gummy white chalk

3130 C C

Lm- Buff, FXLN, fsl, gritty, sl dolomitic Ls, loosely cemented, massive, heavily mottled & sl unconsolidated

3140

Sh- Black Gray, fissile, slaty, carbonaceous, silty & calcareous

3150

Lm- Cream Buff, FXLN, gritty sub-sucrosic & sucrosic, loosely cemented dolomitic Ls, sctrd mottling, sl unconsolidated, dense XLN porosity, NS

3160

Sh- Gray Lm Green White, sandy shales & gummy white chalk

3170

Lm- Cream Tan, Crypto XLN, tight chert & cherty Ls, no vis. grains/porosity

3180

Lm- Tan Cream, FXLN, gritty dolomitic Ls, loosely cemented & sl unconsolidated, sctrd mottling, NS

3190

Lm- Cream Lt Green Tint, Fn Grn, gritty, dense, algal Ls, no vis. porosity

3200

Sh- Black Lm Green Gray, fissile, carbonaceous, sl sandy, silty & calcareous

3210

Lm- Cream Tan, FXLN, fsl, poorly developed, well cemented, sctrd XLN porosity, some sctrd mottling

3220

Lm- Buff Lt Gray, A/A w/ few chips of fsl sl cherty Ls

3230

Lm- Cream Off White, F-Med Grn, sl chalky, loosely cemented, sctrd mottling, some sl dolomitic Ls w/ sctrd XLN porosity

3240

○ Lm- Tan Cream, FXLN, sl fs, poorly developed, most w/ dense micro XLN porosity & sctrd secondary recrystallizaton porosity, 1 chip w/ LT BRWN FLAKEY STN, NO SFO, NO ODR

3250

Lm- Cream Off White, FXLN, gritty sl dolomitic Ls, few chips of fsl fresh bedded chert

3260

Lm- Cream Off White, FXLN, dense, well cemented, poorly developed, tight w/ minimal vis. porosity

3270

3280

HEEBNER 3285' (-1246) E-LOG 3278' (-1239) Sh- Black Maroon Gray Lm Green, fissile, soft, carbonaceous, gritty & earthy, sl waxy & some sl sandy

3290

Sh- Lt Gray Lm Green, soft, silty, sl sandy

3300

TORONTO 3313' (-1274) E-LOG 3298' (-1259) Lm- White Off White, Vf Grn & VFXLN, dense mix of chalky mud supported matrix & poorly developed VFXLN w/ minimal vis. porosity, vry clean, barren

3310

3320

LKC 3330' (-1291) E-LOG 3325' (-1286) Lm- White Off White, VF-FXLN, poorly developed mix, mostly tight w/ sctrd micro XLN & XLN porosity, 2 chips w/ rare fn ppt porosity, WK SPOTTY STN, VRY SL SFO, NO ODR

3330 ○

Sh- Maroon, gritty & earthy, few gummy clumps

3340

● Lm- Tan, FXLN, dense, loosely cemented, dense micro XLN & micro XLN porosity, LT SPT STN, 1 CHIP w/ SL SFO, PR-FR ODR

3350

● Lm- Off White Cream, FXLN, oomoldic/sl oolitic, moderately well developed w/ partial to full skeletal dissolution & moderate intervugular connectivity, LT BRWN STN, SL SHW GSY FRO, FR-GD ODR, OIL SCUM ON TOP OF WET CUP

3360

○ Lm- Cream Tan, FXLN, sl fsl, loosely cemented, sctrd XLN porosity, LT SCTRD STN, SL GSY SHEEN, ODR A/A

3370

Sh- Maroon Gray Lm Green, gritty & earthy, soft, sl silty, sl waxy & dense

3380

● Lm- White Off White, VF-FXLN, mostly dense, well cemented, poorly developed w/ minimal vis. porosity, several chips sl fsl, moderately developed w/ sctrd inter fsl fn ppt porosity, WK SPOTTY STN, SL FLAKEY, NO SFO, PR-FNT ODR

3390

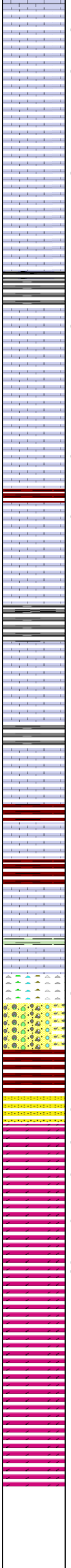
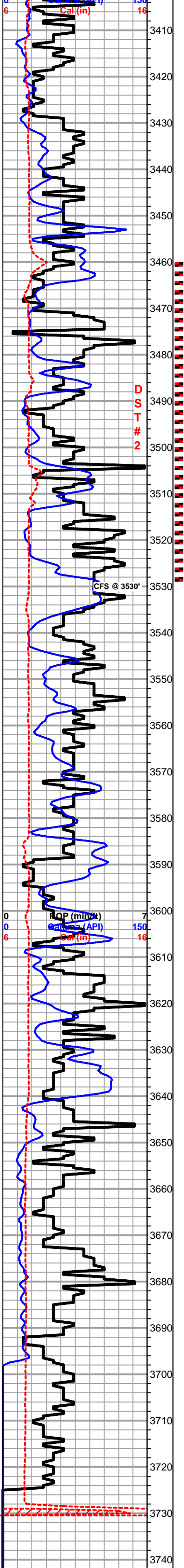
● Lm- White Off White, FXLN, dense, well cemented, sctrd development w/ sctrd XLN porosity, WK SPOTTY STN, NO SFO, PR-FNT ODR

3400

Sh- Black Maroon Gray White, dense & blocky, carbonaceous, gritty & earthy, gummy white clumps

SHORT TRIP SURVEY 1 dgr STRAP +2.03'

DST #1 LKC A-C 3317' - 3366'



clumps

3410 Lm- Off White, VFXLN, dense, vry well cemented, massive, sctrd sub-cavernous porosity w/ recrystallization w/in, LT BRWN STN, SL GSY SHN, NO SFO, FNT ODR

3420 Lm- Cream Tan Buff Off White, mix of oolitic biomicrite w/ clean siliceous cementation, no vis. porosity, poorly developed oolitic Ls w/ minimal vis. porosity, 1-2 chips of oolitic grainstone, & oolitic/sl oomoldic, moderately developed w/ sctrd interoolitic & rare vuggy porosity, SCTRD LT STN, NO SFO, FNT-PR ODR

3430 Lm- White Off White, VF-FXLN, dense, poorly developed w/ micro XLN porosity, chalky in part, vry clean

3440 Lm- Cream Buff, FXLN, oomoldic, partailly/mostly dissolved skeletal cavity, moderate intervugular connectivity & vuggy porosity, SCTRD LT STN, NO SFO, VRY SL GSY SHEEN, FNT ODR

3450 Lm- Cream Buff, Crypto-VFXLN, dense, well cemented, tight w/o vis. porosity, few chips of fresh bedded chert

3460 Sh- Black Gray Maroon, dense & well compacted, carbonaceous, slick blocky slivers, & gritty & earthy

3470 Lm- White Cream, FXLN, mix of sl oolitic w/ sctrd ppt interoolitic porosity, some w/ DRK RESIDUAL STN, NO SFO, some w/ LT BRWN STN, NO SFO, ALL W/ FNT ODR, and VF-FXLN, dense, well cemented, poorly developed w/ minimal vis. porosity, clean & barren

3480 Lm- Cream Off White, VF-FXLN, dense, mostly tight w/ sctrd micro XLN & XLN porosity, sl chalky in part, vry clean

3490 Lm- Cream Tan, FXLN, mix of moderately developed oolitic, few small chips of pearl shaped oolitic grainstone, LT BRWN STN, VRY SL SFO, PR-FNT ODR, FXLN, vry sctrd fn ppt & XLN porosity, clean & barren, sl chalky in part, few chips of chalky carry LT STN

3500 Sh- Maroon Lm Green, red wash & gummy argillaceous clumps

3510 Lm- Cream Tan, F-Med XLN, oolitic/sctrd oomoldic, moderately to moderately well developed, vry loosely to well cemented, LT BRWN STN, 1-2 CHIPS W/ VRY SL SFO, PR ODR

3520 Lm- White Off White, VF-FXLN, dense, vry well cemented, tight w/ minimal vis. porosity, vry clean

3530 Sh- Black Gray Lm Green, few chips of fissile carbonaceous shale, slick well compacted slivers, sl waxy

3540 Lm- Cream Off White, Crypto-FXLN, poorly developed, mostly tight w/o vis porosity to sl sctrd XLN porosity, vry clean, barren

3550 Lm- White Off White, FXLN, dense, loosely cemented & sl crumbly, sctrd soft white chalk, minimal vis.to sctrd micro XLN porosity

3560 Lm/Chert- White Ivory Cream, VF-FXLN mix, dense brittle cherty Ls w/ rare micro XLN porosity, sl fsl fresh bedded chert, & few chips of sl dolomitic chert, all w/ minimal vis. & no effective porosity, vry clean

3570 **BKC 3577' (-1538) E-LOG 3572' (-1533)** Sh- Maroon, gritty & earthy, some dense & nearly lithofied, some red wash, sandy shales

3580 Lm- Cream Off White, Crypto-VFXLN, dense, sl cherty Ls, tight w/ no vis. porosity

3590 Sh- Maroon, mix of dense & blocky, shaley Ss & sandy lime

3600 Lm- Cream Off White, VFXLN, dense, well cemented, cherty Ls w/ minimal vis. porosity, 1-2 chips w/ RARE BLK EDGE STN, NO SFO, NO ODR

3610 Chert- Salmon Semi-Translucent Golden Brown, mix of fresh bedded & weatherd chert, few chips of gritty sl dolomitic chert, few chips of tan bedded chert w/ vry sctrd ppt porosity, DRK BRWN STN, VRY SL SFO, NO ODR

3620 Cherty Conglomerate- A/A w/ more weathered chert, red wash shale & conglomerate ls

3630 Ss- Clear to Sl Frosted, sub-rounded, lightly cemented & friable, mostly consolidated, some sl shaley, SAT DRK STN, GD FO UPON CRUSH, NO ODR

3640 **ARBUCKLE 3547' (-1608) E-LOG 3640' (-1601)** Dolomite- Ivory, Med XLN, well developed, euhedral rhombs, loosely cemented, GD consistant ppt porosity throughout, DRK SCTRD STN, FR SFO, VRY FNT ODR

3650 Dolomite- Sandy dolomite, mature rounded grains w/ lt dolomitic cementation, HCL completely dissolved chip, friable, moderately sorted, DRK BLK SAT STN, GD SFO, PR ODR

3660 Dolomite- Ivory, Med-Crs XLN, vry well developed euhedral rhombs, sl friable, consistant ppt porosity throughout, NEARLY SAT STN, GD SFO, PR ODR

3670 Dolomite-Cream Off White, Med-Crse XLN, unconsolidated w/ mature sctrd rounded to sub-rounded qtz. inclusions, vry friable to well cemented, vry well developed to poorly developed, DRK BRWN STN, PR-GD SFO UPON CRUSH, FNT ODR

3680 Dolomite- Ivory Cream, FXLN, dense, most well cemented, poorly developed, sub-sucrosic w/ consistant XLN porosity, barren

3690 Dolomite- A/A w/ few chips of limey dolomite and sl cherty dolomite, all clean & barren

3700 Dolomite- A/A, few chips sl shaley, several chips of gummy white chalk, & bone white fresh bedded chert

3710 Dolomite- Cream, F-Med XLN, sl developed w/ mostly consistant vry fn ppt porosity, some vry loosely cemented & crumbly, most well cemented, all clean & barren

3720

3730 **RTD 3724' (-1685) LTD 3721' (-1682) @ 15:52 3/21/2013**

3740

DST #2
LKC H-J
3460' - 3530'

*PROBLEMS W/
AUTO DRILLER
FROM
~3505' - 3530'

*NO AUTO
DRILLER AFTER
DST #2 TO TD*

SURVEY 3/4
dgr.

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025

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

No. 6628

Cell 785-324-1041

Date	3-15-13	Sec.	11	Twp.	15	Range	19	County	Ellis	State	Ks	On Location		Finish	8:30 PM
Lease								Location				Antonino, Ks - 2S, 1/2 W, N Into			
Urban unit								Well No. 1				Owner			
Contractor Southwind								#1				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. 224'				Charge To TDI Inc.							
Csg. 8 5/8"				Depth 222'				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. 15'				Shoe Joint 15'				Cement Amount Ordered 150 Sx Common 3% CC							
Meas Line				Displace 13 Bcs				2 1/2 gal							
EQUIPMENT								Common 150							
Pumptrk 16				No. Cementer				Franz				Poz. Mix			
Bulktrk 10				No. Driver				Rick				Gel. 3			
Bulktrk				No. Driver				Clayton				Calcium 5			
JOB SERVICES & REMARKS								Hulls							
Remarks: Cement did Circulate.								Salt							
Rat Hole								Flowseal							
Mouse Hole								Kol-Seal							
Centralizers								Mud CLR 48							
Baskets								CFL-117 or CD110 CAF 38							
D/V or Port Collar								Sand							
								Handling 158							
								Mileage							
FLOAT EQUIPMENT															
								Guide Shoe							
								Centralizer							
								Baskets							
								AFU Inserts							
								Float Shoe							
								Latch Down							
								Pumptrk Charge Surface							
								Mileage 12							
								Tax							
								Discount							
X Signature <i>Raj K</i>								Total Charge							

JOB LOG

SWIFT Services, Inc.

DATE 3-22-13 PAGE NO. 1

CUSTOMER T D I WELL NO. # 1 LEASE Urban Trust JOB TYPE 2-stage TICKET NO. 23955

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0550							on loc w/ FE.
								RTD 3724'
								5 1/2" x 14" x 3721' x 42'
								Cent 1, 3, 5, 7, 8, 10, 12, 56
								Back 2, 13, 57
								DV. 57 @ 1285'
	0615							start FE
	0805							Break Circ
	0905	5	0					start Pre-flushes 500 gal Mud flush 20 bbl KCL flush
	0911	5	32/0					start 150 sks EA-2 Cement
	0918		36					End Cement
								Wash P+L
								Drop LD Plug
	0924	6	0			150		start Displacement
	0934	5	60			250		Catch Cement 20 bbl KCL in last
	0940		89.5			650/1500		Land Plug of Displacement
								Release Pressure / Float Held
								Drop Opening Plug
	0945	2.5	7/4					Plug RHYMTH 30/15 sks SMD Cement
	0950					1100		Open D.V. Tool.
	0951	5	0			150		start 155 sks SMD Cement
	1008		86					End Cement
								Drop Closing Plug
	1012	5	0			150		start Displacement
	1014	4	09			200		Circulate Cement
	1020		31			400/1500		Land Plug
								Release Pressure
								Float Held
								circ 40 sks to pit
								Thank you
								Nick, David E. & Isaac