

LITHOLOGIC LOG

ROBERT HOPKINS-consulting geologist

Operator Denis Roberts
 Lease / Well Werth 7
 GL 2586 KB 2591 * (measure from *)

Location SE NW 2-10s-26w
 County Sheridan State KS scale 1" = 20'
 depth this sheet - from 3560 to 3740' page 1 of 4

DRILLING TIME (min/ft)								DEPTH	tops shows	lith graph	DESCRIPTION (lithology, shows, mud properties)
1	2	3	4	5	6	7	8				
								60			grn-gry sh. (w/red sh. cavings from above)
											bf fuxln lst, tite, n.s. mud vis 55 wt. 8.6
											grn-gry sh. (air in mud)
											gry. fuxln tite lst, n.s.; granular blk-dk gry fissile sh. Topeka Ls. 3604'
								3600			gry sh.
											bf. fn-med xln sl. foss. lst, sl. φ, n.s.
											bf-gry fuxln lst, sl. chalky, sl. φ, n.s.
											gry sh - sdy sh.
											bf-gry fuxln lst, tite, n.s.
											gry sh.
											bf-brn fuxln lst, tite, n.s.
											brn foss lst, tite, n.s.
											gry sh.
											bf-brn fuxln lst, sl. chalky, sl φ, n.s. mud vis 54 wt 8.6
											gry sh.
											bf-gry fuxln granular lst, sl. foss., tite, n.s.
											bf fuxln chalky lst, sl-fr φ, n.s.
								3700			blk fissile sh.
											gray sh - sdy sh; some limy inclusions;
											bf fr-med xln lst, granular, tite, n.s.
											↓
											mud vis 66 wt 8.7

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Location SE NW 2-105-26W
 County Sheridan State KS scale 1" = 20'
 depth this sheet - from 3740 to 3920 page 2 of 4

DRILLING TIME (min/ft)								DEPTH	tops shows	lith graph	DESCRIPTION (lithology, shows, mud properties)
1	2	3	4	5	6	7	8				
								40			bf fuxln chalky lst., sl. ϕ , n.s.
								50			gry sh.
											bf fuxln granular lst., tite, n.s.
											blk sh.
											bf chalky lst., sl ϕ , n.s.
								3800			gry - blk sh. vis 69, wt. 8.3
											bf fuxln tite lst., sl. foss., n.s.
											gry fuxln foss lst., tite, n.s.; sl. cherty
											Heebner Sh. 3820
											blk fissile sh.
											bf fuxln lst., tite, n.s.; sl. cherty
											gry sh - sdy sh. - siltstone
											grn limy sh. Toronto 3843'
								50			bf fuxln foss lst., tite, n.s.; sl. cherty
											grn - gry sh. Top LKC 3860'
								"A"			bf fuxln lst., tite, sl. oolitic, n.s.
											vis 67, wt. 8.9
								"B"			bf fuxln cherty lst., tite, n.s.
								DST #1			gry sh.
								CFS			bf fuxln sl. oolitic lst., sl. ϕ , sl. ferr. str., no odor, no free oil; no wt; v. poor fluorescence
								"C"			gry sh.
								3900			bf fuxln lst., sl. - fr vuggy ϕ , sl. - fr str., fr. free oil, fair fluorescence, no odor
								"D"			bf fuxln tite lst., n.s.; sl. fossiliferous
								CFS			vis 62, wt. 9.0

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Location SE NW 2-10S-26W
 County Sheridan State KS
 depth this sheet - from 3920 to 4100

scale 1" = 20'
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DRILLING TIME (min/ft)								DEPTH	tops shows	lith graph	DESCRIPTION (lithology, shows, mud properties)
1	2	3	4	5	6	7	8				
								20			- dk gry sh. bf fuxls lst, tite, n.s.
								"E"			
								"F"			
											blk sh. - dk gry sh.
								50			bf - gry fin-med xls tite lst, trc dead oil str., tite lst, n.s. no free oil, no flux, no odor
								" "			bf fuxls lst, sl. chalky, sl. ϕ , n.s.
								"G"			vis 64; wt. 9.1
											bf fw-med xls lst, tite, n.s.; very cherty, sl. fossiliferous
								"G"			wh cherty lst, tite, n.s.
								"G"			blk sh. gry fuxls foss lst, tite, n.s.
											dk gry sh. - grn sh.
								4000			wh fuxls chalky lst, sl ϕ , n.s.
								"H"			bf fw-med xls tite lst, sl. cherty, n.s.
											blk sh.
											dk gry sh.
								"I"			bf - gry fuxls foss lst, tite, n.s.
								DST #2			bf fuxls lst, pinpoint ϕ , fair str, odor, and fluorescence, trc free oil
								"J"			gry sh.
											bf fuxls oolitic lst., sl. ϕ , fair str, no odor, weak flux, trc free oil
								50			gry sh.
								"K"			bf fw oolitic lst., sl. vug ϕ ; sl. fast, trc free oil, poor flux; sl. odor
											bf - brn tite lst, n.s.
											DST #2: 4025-4060' 30, 45, 30, 45" FP: 23-51#; 56-78# SID: 974-934#
								"L"			bf - gry fuxls fossiliferous lst, tite, n.s.
											blk sh.
											H. - dk gry sh. <u>BKC 4083</u>
											REC: 8.5' oil, 55' vsocm, 240' GIP fair/weak blow

vis 60
wt. 9.0

IN 4100' @ 0830 5/15/2012

