

LOG TOP COMPARISON:

Formation	Schuck #1	O-H log tops	Brungardt Beery #3	Brungardt Beery #6
Anhydrite	1190(+851)	-9	(+860)	-1
Topeka Ls.	2929(-888)	-3	(-885)	-1
Heebner Sh.	3197(-1156)	-3	(-1153)	-1
Toronto Ls.	3216(-1175)	-2	(-1173)	+1
Top Lansing	3247(-1206)	-3	(-1203)	+1
Top "G" Sh.	3371(-1330)	-1	(-1329)	-1
Base KC	3481(-1440)	-0-	(-1440)	-1
Arbuckle Dol.	3502(-1461)	-2	(-1459)	-1

If you have any questions, please call me at 785-819-2460. Thank you for this opportunity to serve you!

Sincerely,



Robert T. Hopkins, L.G., C. P. G.

attachments



LITHOLOGIC LOG

ROBERT HOPKINS-consulting geologist

Operator Brungardt Oil & Leasing
 Lease / Well Beery #7
 GL 2036 KB 2041 * (measure from *)

Location SW SE NW Sec. 34 - 12S - 16W
 County Ellis State KS
 depth this sheet - from 2900 to 3080

scale 1" = 20'
 page 1 of 4

DRILLING TIME (min/ft)								DEPTH	tops shows	lith graph	DESCRIPTION (lithology, DSTs, mud properties)
1	2	3	4	5	6	7	8				
								2900			ANHYDRITE 1190' (+851)
											9-8-2013 PM MUD VIS 52; wt. 8.3
											Topoka 2929(-888)
											dk gry sh.
											tan fuxls lite lst, n.s.
											dk gry sh. - sdy sh.
								50			dk gry - tan fuxls foss lst, n.s., pr. ϕ
											30' ZONE bf fuxls chalky lst, n.s., sl. ϕ
											dk brn foss lst, tite, n.s.
											gry sh., pyritic
										v. sl. show	gray fuxls foss, lst, v. sl. ϕ , trc str, no odor or free oil No vis. fluorescence
											bf fuxls tite lst, n.s.; sl. foss.
								3000			dk gry - blk sh.
											bf - brn fuxls tite lst, n.s.
											MUD VIS 52; wt 8.8
											dk brn medxls foss lst, sl. ϕ , n.s.
											bf - gry fuxls tite lst, n.s.
											on above, sl. fossiliferous
								50			bf - gry fuxls chalky lst, sl. ϕ , n.s.
											dk gry sh.
											bf fuxls lst, tite, n.s.
											gry siltstone
											bf fuxls tite lst, n.s.
								80			

LITHOLOGIC LOG

ROBERT HOPKINS-consulting geologist

Operator BRUNGART Oil Leasing

Location SW SE NW Sec. 34-125-16W

Lease / Well Berry # 7

County Ellis State KS

scale 1" = 20'

GL KB 2041' (measure from *)

depth this sheet - from 3080 to 3260

page 2 of 4

DRILLING TIME (min/ft)								DEPTH	tops shows	lith graph	DESCRIPTION (lithology, DSTs, mud properties)
1	2	3	4	5	6	7	8				
								3080			bf fuxls tite lst, n.s. mud vis 50; wt 8.9
								3100			gry fuxln sandy lst, foss., n.s., tite -dk gry sh.
											bf-gry fuxln lst, tite, n.s. blle pyritic sh. Queen Hill Sh. 3118'
											gray granular, sdy lst, tite, n.s.
									sl. show		bf chalky lst, sl. ϕ , v. sl. odor, no vis. str., no fluorescence, no free oil
								50			bf lst, n.s. gry fuxlns chalky lst, sl. ϕ , n.s. mud vis 57; wt. 9.0
											bf fuxln lst, sl. ϕ , chalky, v. sl. odor, trc str., no fluorescence
											bf fuxln lst, tite, n.s., cherty Heebner Sh. 3197 (-1156)
								3200	sl. show		-bf lst, sl. ϕ , trc. str., no odor, no free oil; cherty blle pyritic sh; carbonaceous
											red-gry sh. wh cop sst, tite, n.s.
											bf fuxlns lst, sl. vuggy ϕ , Toronto Ls. 3216 trc free oil, scatt. tr. str., sl. odor, weak dull fluorescence (-1175)
									show		-bf tite lst, n.s. Lansing 3247(-1206)
											-gry sh - sdy sh.
								50			-dk gry sh.
									show		bf fuxlns lst, sl. vug. ϕ , trc free oil, sl. str., sl. odor, 10% br. fluorescence
								60			-sh. tite lst, n.s.

"A"
"B"

DST #

LITHOLOGIC LOG

ROBERT HOPKINS-consulting geologist

Operator BRUNGARDT Oil & Leasing
 Lease / Well Beery #7
 GL KB 2041* (measure from *)

Location SW SE NW Sec. 34-125-16W
 County Ellis State KS
 depth this sheet - from 3260 to 3440

scale 1" = 20'
 page 3 of 4

DRILLING TIME (min/ft)								DEPTH	tops shows	lith graph	DESCRIPTION (lithology, DSTs, mud properties)
1	2	3	4	5	6	7	8				
								3260			gry sdy sh. -gry tite lst., n.s.
								3280	show		bf oolitic lst. sl. f. ^{oom} _{to} free oil, sl. str. sl. odor poor fluor.
								3300			-bf lst., n.s. red-gry sh bf fr-nst xst lst., tite, n.s.
								3320			-grn-gry sh. bf faxls tite lst., n.s., cherty gry sh. dk gry calcareous sh.
								3340	v. sl. show		tite lst., n.s. dk gry calc. sh. bf faxls sl. oolitic lst. sl. f. to tite tite str, no odor no free oil; no fluorescence
								3360			bf-gry faxls tite lst., n.s. dk gry pyritic sh; sl. limy & cherty
								3380			gry limy sh. blk sh. dk gry-blk calcareous sh.
								3400			bf faxls tite lst., n.s. dk gry-blk sh. pyritic
								3420	sl. show		bf faxls lst. sl. pinpoint & sl. str, no free oil, sl. odor, 10% weak fluorescence bf lst., n.s., tite sl. fossiliferous
								3440			bf faxls sl. oolitic lst., tite, n.s. blk carb sh.

MUD VIS 54; wt 9.1
 DST #1: 3202 - 3280'
 TORONTO, A/B, C; weak blow-
 30", 30", 30", 5"
 SIP: 837-96#
 FP: 49-99"; 66-100"
 REC: 25' mud, w/show oil

mud vis 58; wt. 9.0

G-scale 3371'

MUD VIS 51; wt 9.1

LITHOLOGIC LOG

ROBERT HOPKINS-consulting geologist

Operator BRUNGARDT Oil & Leasing
 Lease / Well Beery #7
 GL KB 2041* (measure from *)

Location SW SE NW Sec. 34-125-16W
 County Ellis State KS scale 1" = 20'
 depth this sheet - from 3440 to 3590 page 4 of 4

DRILLING TIME (min/ft)								DEPTH	tops shows	lith graph	DESCRIPTION (lithology, DSTs, mud properties)
1	2	3	4	5	6	7	8				
								40			red - gry sh.
								50			bf - gry truxls tite lst., n.s.
											blke sh.
											bf - brns med xls granular lst., tite, n.s.
											Base KC 3481 (-1440)
											Arbuckle 3502 (-1461)
											MUD VIS 51; WT. 9.3
								3500			grn - gry - red shale
											tan granular dolomite, w/ gry frsh. chert; gd ϕ , even str, fair free oil, fair odor, weak dull fluv. pyritic, sl. cherty
											wh. sacrosic dolomite, exc ϕ , scattered stain, sl. odor, trc free oil, sl. cherty
											wh. sacrosic to granular dolomite, exc ϕ , n.s., except odor, sl. cherty
								50			air above, abundant chert
											3590' RTD
											prepare to run OHI log; tool - stuck, fish tool.

DST #2: 3488-3510'
 TOP ARBUCKLE; good blow
 45" - 45" - 45" - 45"
 SIP: 812-773"
 FP: 26-215"; 222-298"
 REC: 378' CO, 252' MOCW,
 126' GIP

DRILLING TIME (min/ft) graph with handwritten annotations: "K", "L", "DST #2", "CHATTER", "CFS", "RTD".