

LEGEND

	Anhydrite		Salt		Sandstone		Shale		Crd sh		Limestone		Oolite		Chert		Dolomite
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DRILLING TIME IN MINUTES
PER FOOT
Rate of Penetration Decreases

5" 10" 15" 20" 25"

DEPTH

LITHOLOGY

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS

3000
10
20
30
40
3050
60
70
80
3100
90
10
20
30
40
3150
60
70
80
90
3200
10
20

ls: tan, brown-grey, fr.-med xth
if sil. foss, no vis of N.S. ls: grey,
dk grey, fr.-med xth, dense

ls: tan, grey-tan, fr.-med xth, foss
in part, sil. foss appear on upper xth in
upper 5', N.S. ls: wh. fine xth, chalky
sil. sil. few foss sil. sh

ls: as above, few pos wh. fin xth
ls, chalky, v. sil. sandy: sh: grey

ls: tan, grey, fr.-med xth, foss in
part, no vis of, no show, ls: grey
fin xth, dense: ls: wh. fin xth, chalky
no vis of, no show. sh: lt. grey, green

ls: as above, sh. grey, green, ls:
wh. tan, some wh. imbedded sh

mostly shale, grey, lt. grey, green
sil. sil. mica. few pos wh. lt. grey
sil. some, mica, shaley, streaked

ls: tan, fr.-med xth, dense,
grey, fr.-med xth, mottled sil. foss
sh & few pos sil. some as above N.S.

ls: tan, grey, fr.-med xth, some
mottled sil. foss, few pos sil. shaley
considerable grey, green, grey shale
some sil. is included, wh. chalky
sil. some → sil. chalk

ls: tan, lt. dk grey, mica. some
med xth, foss in part, no vis of
N.S. & few pos tan, fresh opaque

ls: tan, grey, micro xth, dense

ls: grey, dk grey, fin xth, sil. foss
no vis of, no show

ls: as above, few pos wh. lt. grey
fin xth, chalky ls, mottled in part

ls: tan, brown, brown-grey, wh. fin xth
dense, ls: tan, lt. brown, fr.-med xth
sil. foss, no vis of, no show

ls: tan, lt. grey, wh. fin xth, dense
few pos grey, fr.-med xth, mottled
sil. foss no vis of N.S.

ls: as above, ls: brown, fr.-med xth
mottled, sil. foss no vis of, ls: grey
wh. fin xth dense

ls: as above, dense, no vis of N.S.

ls: tan, lt. brown, fr.-med xth, sil.
foss, sil. foss, no vis of, some in xth
of, no show, brown, sil. N.S.

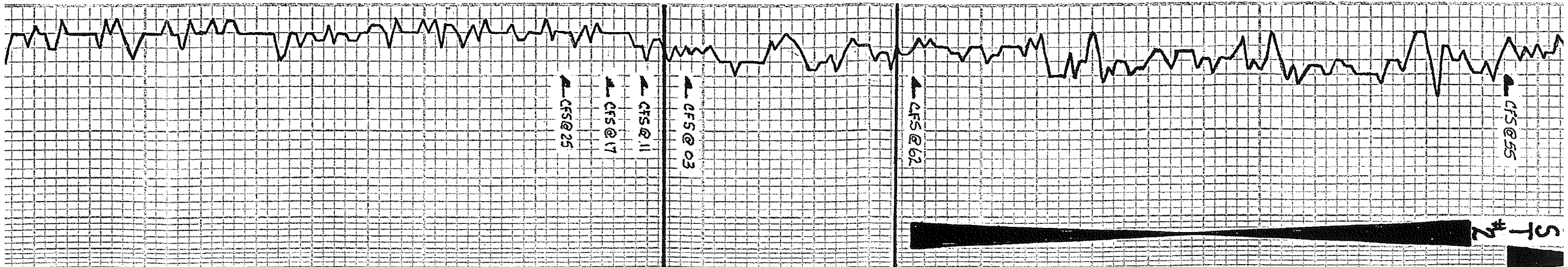
ls: tan, lt. brown, some grey, mica
med xth, dense, no vis of, no show

ls: tan, brown, fr.-med xth,
sil. foss, no vis of, no show, ls: grey
micro-med xth, sil. foss, mottled N.S.

ls: tan, tan-grey, mica wh. dense
ls: brown, grey, fr.-med xth, sil.
foss, no vis of, no show

ls: as above, no vis of, no show

Topoka
3095 (-934)



S T #2

3450	15: tan, lt. brown, micro. fm. w/fin. qtz
60	15: tan, brown, grey, fm. med. kh. fr. loss, no vis of, no show. 15: dk. tan, tan, w/fin. sh. cherty, no vis of N.S.
70	15: tan, brown, grey, micro. fr. kh. no vis of N.S. 15: grey, fm. med. kh. mottled, sh. loss, no vis of, N.S. shale: grey, dk. grey → black
80	15: tan, brown, grey, dk. grey, micro. fr. kh. dense, qtz pcs 15: dk. tan, tan, fr. kh. sh. cherty, fr. med. kh. no vis of, no show
90	15: tan, brown, dk. grey, micro. fr. kh. dense, considerable Δ. brown, grey-brown, op. semi. trans. fresh w/ sh. grey, green, grey, some calc.
3500	15: wh. off wh. tan, fr. some med. kh. sand pr. fr. fine wavy & med. kh. of sand pr. fr. dk. stain, pr. fr. show cut. USSFO, few gas bubbles on bit
10	15: wh. tan, fr. med. kh. v. sh. calc & ool. fr. calcite, fr. pr. calc. sand pr. fr. med. kh. of, sand pr. fr. dk. of, some sand & bubbles USSFO & gas bubbles on bit, v. fr. calc
20	15: tan, brown, micro. fr. kh. dense w/ sh. fr. cherty w/ grey sh.
30	15: tan, brown, grey, micro. fr. kh. dense, few gas w/ sh. calc. w/ pr. med. kh. & sand, pr. brown oil residue, USS "scummy" brown oil, USSO, no calc
40	15: tan, brown, fr. med. kh. sh. loss. dense, 15: wh. off wh. fr. kh. all cherty in part, no vis of, N.S. some shale green-grey, green, calc in pt.
50	fr. off wh. tan, fr. med. kh. some w/ shale contact, no vis of, no show w/ shale: grey, grey-green, brown
60	15: off wh. tan, some grey, fr. med. kh. no vis of. sh. grey, brown, red, yellow few gas w/ imbedded sand grains no show
70	sh: grey, green, brown, shale, yellow sandy, s. ss; med. grained, rounded, yellow shale matrix, no B, no show, no odor, considerable sh. brown, red, grey, green yellow-green, w/ 15 as above, v. some sandy, sh. 15, no show @ 03
80	as above w/ globe: tan, fr. med. kh. fr. pr. med. kh. & sand, dk. calc. & hwy dk. calc, no show free oil, no odor @ 11
90	15: tan, grey, fr. med. kh. pr. fr. kh. med. kh. & wavy, sand dk. calc. oil residue qtz pcs w/ show hwy dk. calc, fr. pr. dk. stain, v. pr. show calc, no odor @ 17
30	15: off wh. tan, pink, fr. med. kh. few gas sandy, sand, pr. fr. med. kh. & wavy, calc. oil residue & hwy dk. calc, fr. pr. dk. stain, fr. pr. show calc, no odor @ 25
40	15: tan, wh. - some med. kh. pr. med. kh. & show, calc: dk. grey, fr. med. kh. pr. some fr. med. kh. of sand, dk. calc. oil residue, qtz pcs w/ sandy calc, no odor
3600	15: tan, lt. brown, fr. grey, fr. med. kh. calc. pr. fr. med. kh. & wavy, calc. oil residue, USSFO, no calc
10	15: same as above w/ sh. calc. in inter. kh. & wavy, calc. few gas w/ calc oil st. USSFO, no odor
20	15: same as above w/ sh. calc. in inter. kh. & wavy, calc. few gas w/ calc oil st. USSFO, no odor
30	15: same as above w/ sh. calc. in inter. kh. & wavy, calc. few gas w/ calc oil st. USSFO, no odor
40	15: same as above w/ sh. calc. in inter. kh. & wavy, calc. few gas w/ calc oil st. USSFO, no odor
3650	15: same as above w/ sh. calc. in inter. kh. & wavy, calc. few gas w/ calc oil st. USSFO, no odor
70	15: same as above w/ sh. calc. in inter. kh. & wavy, calc. few gas w/ calc oil st. USSFO, no odor
80	15: same as above w/ sh. calc. in inter. kh. & wavy, calc. few gas w/ calc oil st. USSFO, no odor
90	15: same as above w/ sh. calc. in inter. kh. & wavy, calc. few gas w/ calc oil st. USSFO, no odor
3700	15: same as above w/ sh. calc. in inter. kh. & wavy, calc. few gas w/ calc oil st. USSFO, no odor
10	15: same as above w/ sh. calc. in inter. kh. & wavy, calc. few gas w/ calc oil st. USSFO, no odor
20	15: same as above w/ sh. calc. in inter. kh. & wavy, calc. few gas w/ calc oil st. USSFO, no odor

DST #2
(3462-3562)

45" - 60" - 45" - 60"

1FP: SURF BLOW BLDG TO 3"
2FP: SURF BLOW BLDG TO 1/2"

RECOVERY:

80' MCW w/ oil spls
(30% MUD, 70% WTR)

CHL: 35,000 PPM
MUD: 2,250 PPM

HSP: 1709# 1641#

FP: 23/49# 50/65#

SIP: 6341# 622#

BHT: 102°F

BKC

3565 (-1404)

Arbuckle

3607 (-1446)

DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
3700		very fine, med. conc. tan, nr grey, v. fine, dense		
		dblo: same as above, few pcs wh vfnrtn dense dblo, few pcs wh-grey speckle fresh Δ		
10		dblo: tan, fn. med xtn, few pcs calc conc w/pr. fr conc δ, dblo: tan, lt grey fn. med xtn, pr. some fr intertn δ, N.S.		
20		dblo: tan, lt brown, fn. med xtn, seat pr intertn δ, N.S. dblo: lt grey tan, off wh, vfnrtn, dense		
30		dblo: same as above, no show		
40		dblo: as above, wh, lt grey, tan vfnrtn, dense dblo		
3750		dblo: tan, lt brown, fn. med xtn, seat pr. fr intertn δ, vuggy δ N.S.		
60		dblo: off wh, tan, grey, green-grey fr. some coarse xtn, seat gd. etal inter xtn & vuggy δ, fr. pr. δ tan, fr. med xtn w/ pr. fr conc δ, N.S.		
70		dblo: off wh, tan, lt grey fr. some coarse xtn w/ fr. very good vuggy δ intertn δ N.S.		
80		dblo: tan, lt grey, fr. coarse xtn, fr. gd intertn & vuggy δ no show, few pcs pink fvnrtn dense dblo.		
90		dblo: tan, grey, some pink, vfn. some med xtn, most w/ no sp. intertn δ, few pcs w/pr. fr. intertn & vuggy δ N.S.		
3800				

RTD 3800 LTD 3801

5" 10" 15" 20" 25"

DRILLING TIME Minutes/Foot

Rate of Penetration Decreases

CONTRACTOR MAVERICK DRLE. Co.
 LEASE CARMICHAEL IP _____
 ELEVATION 2161 KB RTD 3800

LOCATION 1400' ENL, 2970' FEL
 SEC 22 TWP 9S RNG 18W
 COUNTY ROOKS STATE KANSAS