

A.P.T. # 15-137-20745-00-00.

**GEOLOGICAL REPORT**  
DRILLING TIME AND SAMPLE LOG

COMPANY Baird Oil Company, LLC.  
 LEASE Stapp-Ward Unit # 1-32  
 FIELD Wildcat  
 LOCATION 1631 FSL + 158 FEL  
 SEC 32 TWSP 2S RGE 25W  
 COUNTY Norton STATE Kansas

ELEVATION  
 KB 2555'  
 DF 2553'  
 GL 2547'  
 Depths Measured From  
 Log KB Drilling KB

CONTRACTOR WW Drilling Rig #12  
 SPUD 5-15-17 COMP 5-23-17  
 SAMPLES SAVED FROM 3250' TO B.T.D.

CASING  
 Surface 8 5/8" @ 252'  
 Production None

ELECTRIC LOGS  
ELI

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE	E. LOG	DATUM	A	B	C	D
			<u>2.109</u>				
				<u>.0-</u>			
<u>Anhydrite</u>	<u>2110</u>	<u>2106</u>	<u>+ 449</u>	<u>+ 451</u>			
<u>Base Anhydrite</u>	<u>2140</u>	<u>2136</u>	<u>+ 419</u>	<u>+ 422</u>			
<u>Topeka</u>	<u>3303</u>	<u>3299</u>	<u>- 744</u>	<u>- 743</u>			
<u>Heebner</u>	<u>3474</u>	<u>3468</u>	<u>- 913</u>	<u>- 914</u>			
<u>Toronto</u>	<u>3508</u>	<u>3502</u>	<u>- 947</u>	<u>- 947</u>			
<u>Lansing</u>	<u>3520</u>	<u>3515</u>	<u>- 960</u>	<u>- 959</u>			
<u>Base Kansas City</u>	<u>3715</u>	<u>3709</u>	<u>- 1154</u>	<u>- 1158</u>			
<u>Granite Wash</u>	<u>3884</u>	<u>3878</u>	<u>- 1323</u>	<u>- 1371</u>			
<u>Granite</u>	<u>3891</u>	<u>3885</u>	<u>- 1330</u>	<u>- 1382</u>			
<u>Total Depth</u>	<u>3916</u>	<u>3912</u>	<u>- 1357</u>	<u>- 1404</u>			

REFERENCE WELLS

A Mull Drlg. Co., Kennedy #1-5, 585' FNL + 660' FNL Sec 5-35-25W  
 B  
 C  
 D

REMARKS

This well ran structurally higher on the lensing top by 1 foot and by 52 feet on the Granite top than the reference well. After reviewing D.S.T data and the suite of open hole logs it was decided this well should be plugged and abandoned.

Richard S. Bell  
5-23-17

7502

LEGEND

- Anhydrite
- Salt
- Sandstone
- Shale
- Carb sh
- Limestone
- Ool. Lime
- Chert
- Dolomite

DRILLING TIME IN MINUTES  
PER FOOT

Rate of Penetration Decreases



5" 10" 15" 20" 25"



DEPTH  
2100

LITHOLOGY

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS

LOG 7710



2150

3100

20

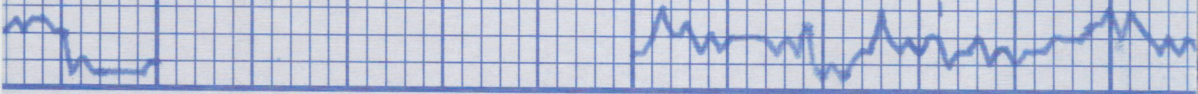
40

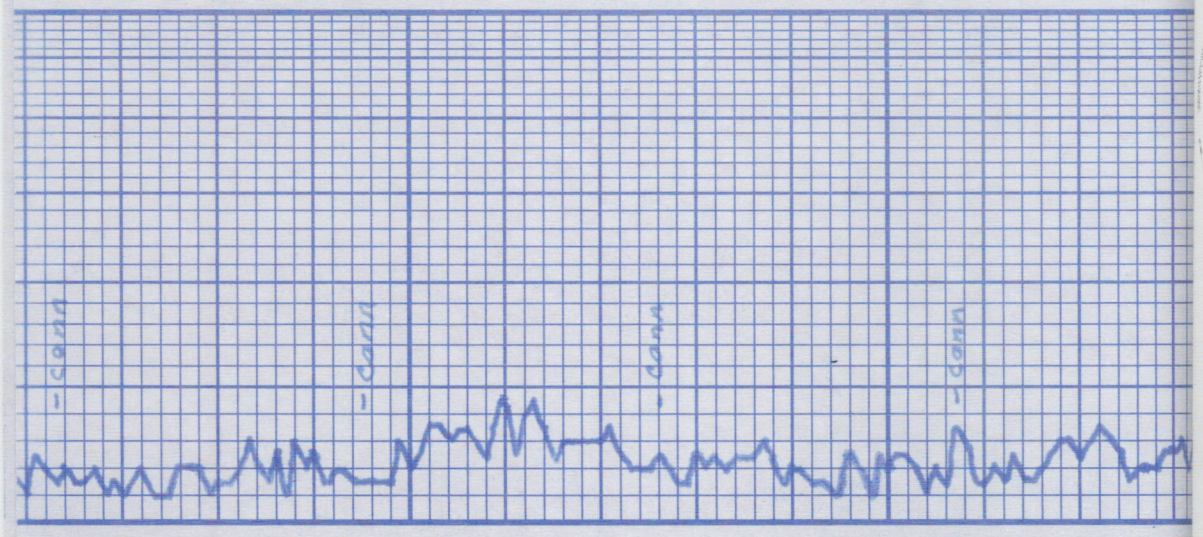


Base Polyamide

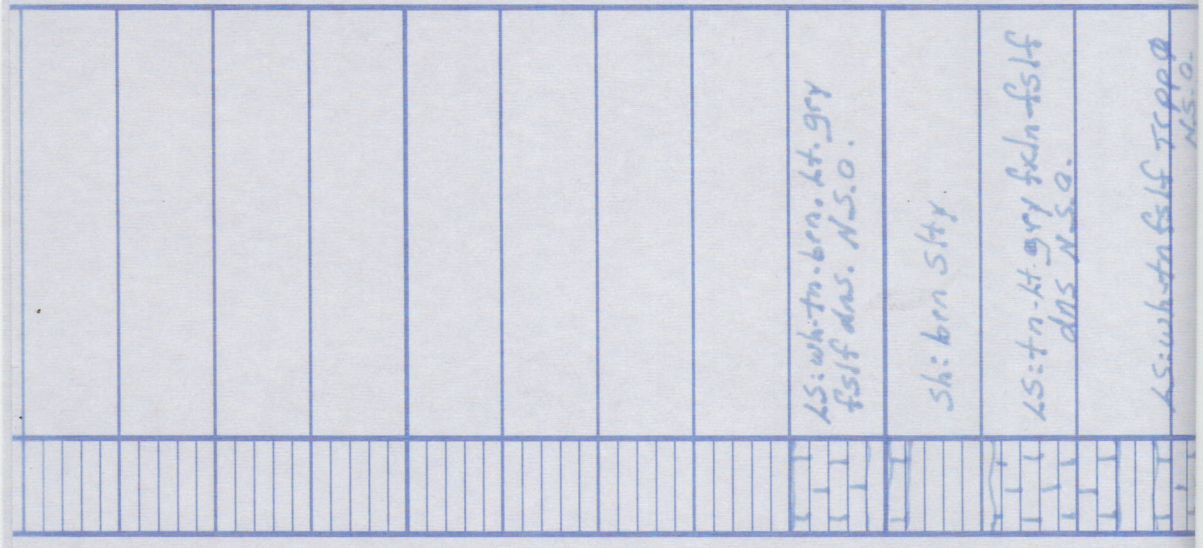
E-109 2136

—Cant





60  
80  
3200  
20  
40  
60  
80



LS: wh-tn-brn. Lt. gry  
fsif drs. N.S.O.

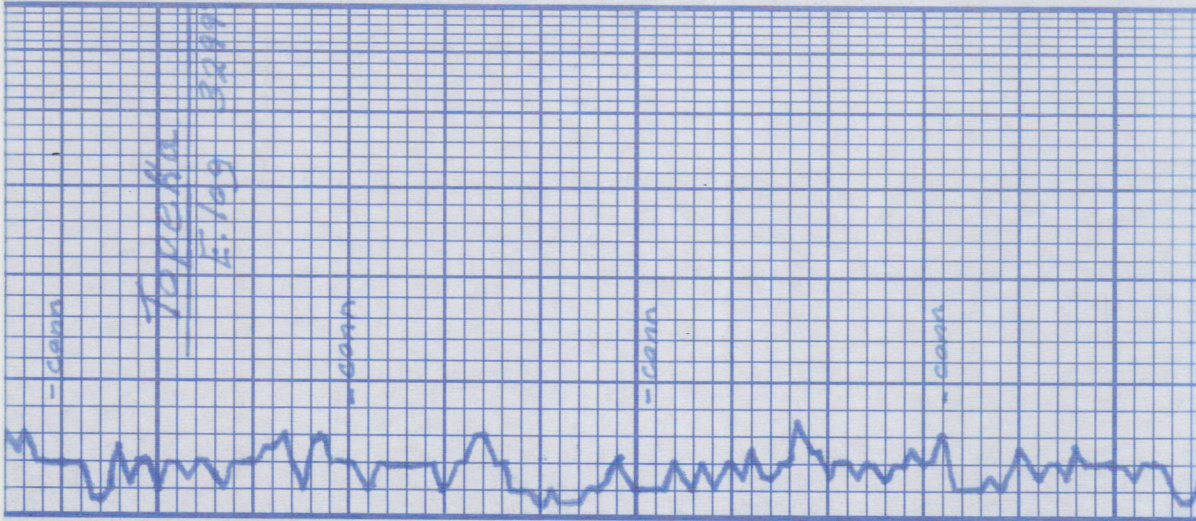
Sh: brn Shty

LS: tn-lt gry fsif  
drs N.S.O.

LS: wh-tn fsif  
N.S.O.

Samples are lagged  
good samples

Drilling time has to  
be adjusted up 5-6  
feet to match  
open hole log tops.



3300  
 3200  
 3100  
 3000

3300

20

40

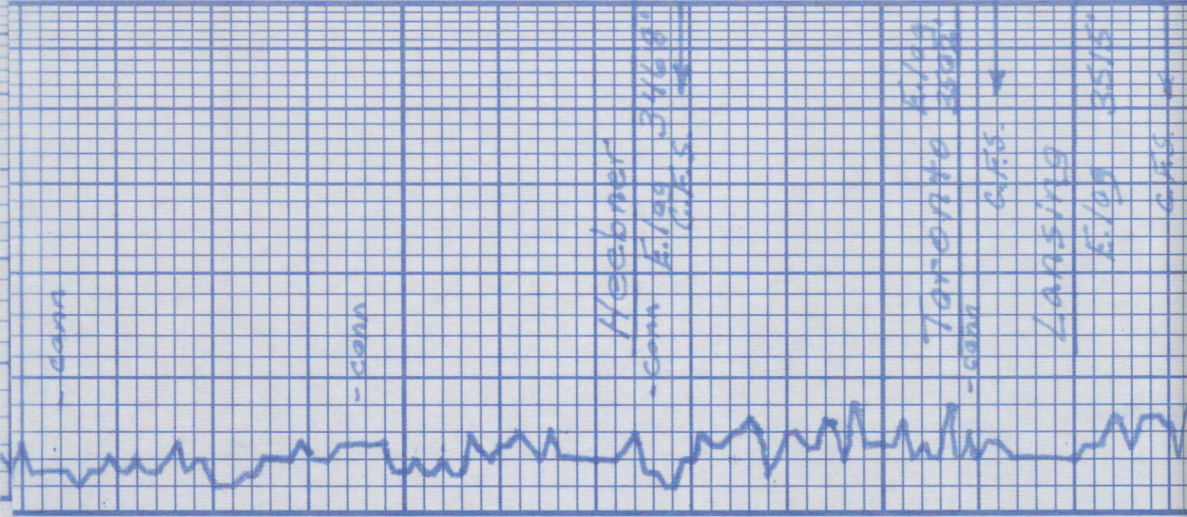
60

80

3400

LS: wht - bra - fslf das  
 N.S.O.  
 Sh: brn + gry  
 LS: wht - fslf ppφ N.S.O.  
 LS: wht cky - fslf friable  
 ppφ N.S.O.  
 LS: wht - fslf - fslf Tr. dtn  
 ppφ - 19Yφ N.S.O.  
 Sh: brn sly - 55: wh -  
 gry v. gn. gn. consol.  
 ingran. φ N.S.O.  
 Sh: brn sly  
 LS: wht - sly cky - fslf  
 Tr. ppφ N.S.O.  
 LS: wht - cky - fslf Tr. ppφ  
 N.S.O. Tr. dtn  
 Tr. Sh: brn, gry, gen  
 LS: wht - fslf - sly - fslf das  
 Tr. dtn - of  
 N.S.O.  
 Sh: blk carb  
 LS: trn - gry fslf das

-conn



20  
40  
60  
80  
3500  
20  
'A'

Sh: brn silty Tr. ss. w/ shuff  
V. fn. gn. concol. ingrand  
N.S.O.  
Ls: white Chy. fab. - fsh  
Tr. sl: cal pp & N.S.O.  
Sh: brn silty, gry stly, grn  
Ls: tn-gry fsh dns N.S.O.  
Tr. A. fn  
Ls: tn-sli. vel fsh pr.  
pp & glauc. saks  
N.S.O. No cut  
Ls: tn-gry fsh dns N.S.O.  
Sh: Bk Carb.  
Ls: tn-gry fsh - fsh  
dns. N.S.O.  
Sh: gry stly  
Sh: brn silty + gry stly  
Ls: white fab. - sli. fsh Tr. sli.  
ool. R. isal. vngs N.S.O.  
sh: brn silty  
Ls: white fab. R.T. shallow  
isal. vngs w/ bl. ool. stn  
Tr. at edge. stn N.F. a. no odor  
ff. cut

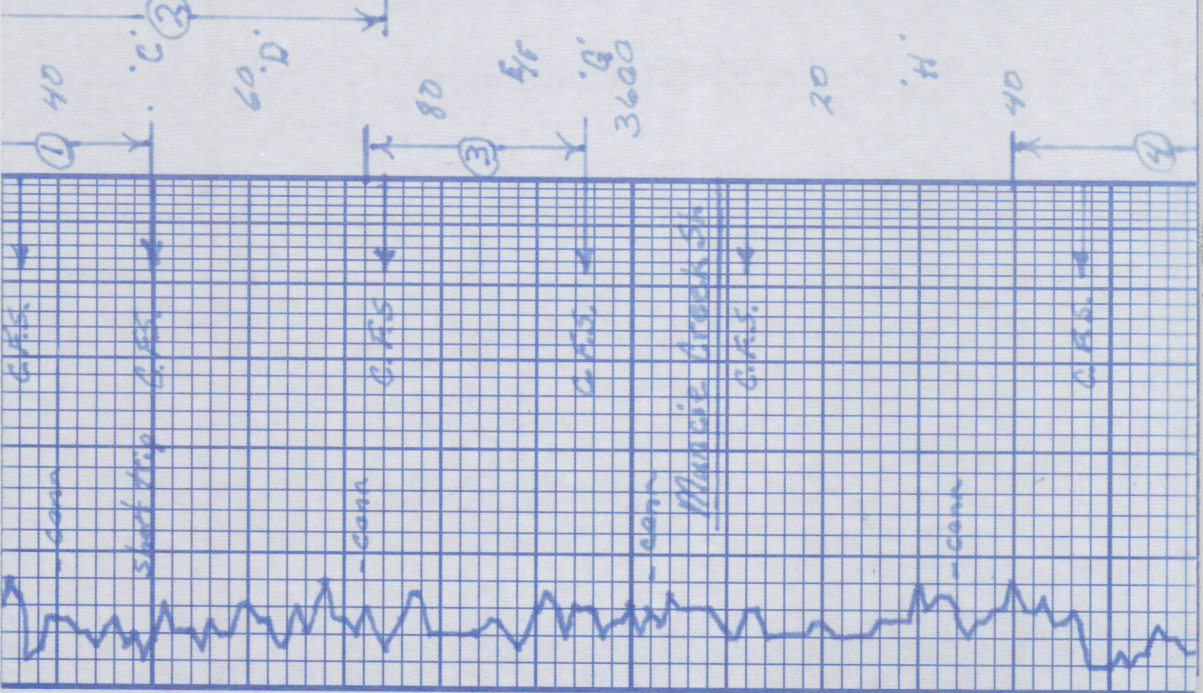
Board 3572.06  
Strap 3568.84  
Diff. 3.22  
Inclina @ 3550' 1/2°  
Trilobite Tasting  
DST #1 3529-3650'  
45-45-45-45

ISI: No blow  
 FF: No blow  
 FSI: No blow  
 Recovery: 15' @ 1  
 2g, 96% @ 22m  
 HYD: 1723-1705 #  
 FP: 12.18 / 22-22 #  
 BHP: 148-156 #  
 BHTemp: 97°F  
 Gravity: 32° A.P.I.

DST #2 3528'-3574'  
 45-45-45-45  
 IF: wkblow incrt to B.O.B.  
 ISI: No blow  
 FF: B.O.B. in 2 min.  
 FSI: No blow  
 Recovery: 500' Total  
 10' WCM 22% W, 78% M  
 490 MW 80% W, 20% M  
 HYD: 1690-1676 #  
 FP: 42-160/166-251 #  
 BHP: 1062-1009 #  
 BHTemp: 100°F  
 Chlorides: 28,000 ppm

DST #3 3572'-3585'  
 30-30-0-0  
 IF: 1/4" blow  
 ISI: No blow  
 Pulled Tool  
 Recovery: 1' Mud  
 1797-1693 #

15: wh-tn fcln-dns R.T.  
 Sptd 0.5tn N.F.O. No odor  
 Sh: brn + gry slty  
 15: tn fcln-inpart. φ fr-dk  
 0.5tn rainbow ss pp F.O.  
 No odor  
 Sh: brn, gry, grn  
 15: wh-ta fcln fcln  
 φ sct. 1.2 sptd 0.5tn  
 Tr. pp F.O. g.d odor  
 Lwh-gry  
 Sh: brn, gry, grn  
 15: wh-ta fcln-fcln Tr pp  
 1.5tn v. R. T. P. at 0.5tn  
 No odor  
 Tr blk carb sh at gry sh  
 Sh: brn slty, gry slty  
 15: wh-ta fcln-dns R.T.  
 1.5tn v. R. T. P. sctd  
 0.5tn N.F.O. No odor  
 Lt. carb Tr Δ or  
 Sh: brn slty

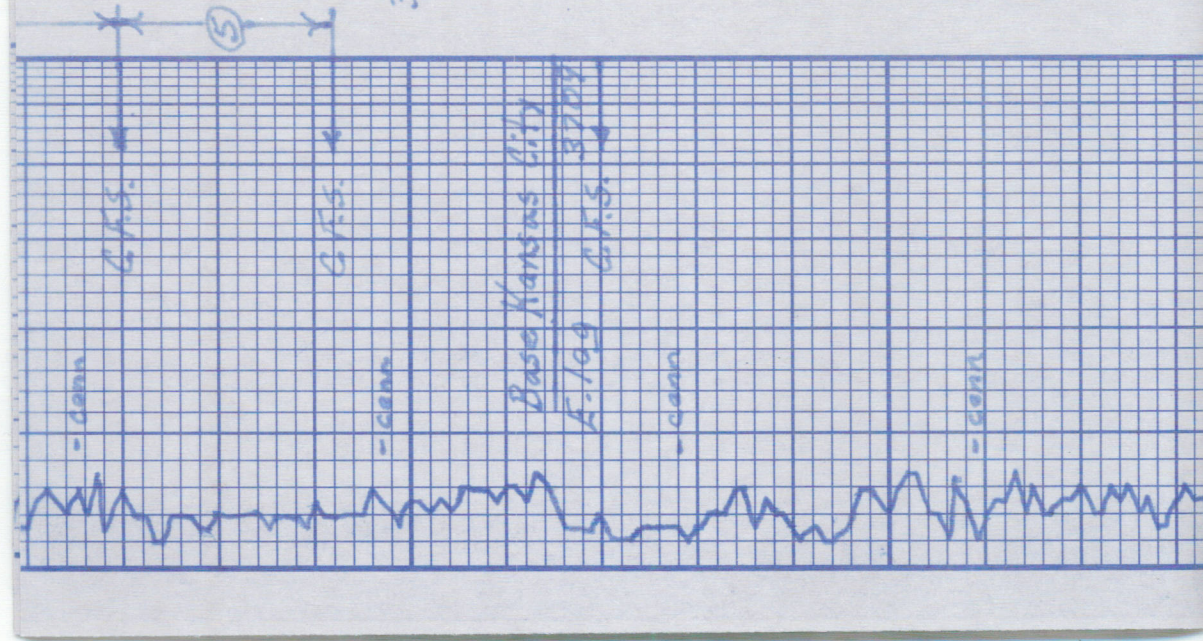


FP: 19-19 #  
 BNP: 23 #  
 BHTemp: 89°F.  
 DST # 4 3640'-3670'  
 30-30-a-a  
 IF: wk blow dieclin  
 18 min.  
 Recovery: 2' Mud  
 Trace of Oil  
 HYD: 1757-1752#  
 FP: 18-18#  
 BHP: 44#  
 BHTemp: 93°F.  
 DST # 5 3670'-3692'  
 45-45-45-45  
 IF: wk blow inc. to 2 1/2"  
 ISI: No blow  
 FF: wk blow inc. to 1"  
 FSI No blow  
 Recovery: 90' Total  
 30' MCW 170, 66% W  
 33% M  
 60' MCW 94% W, 6% M  
 Trace of Oil  
 HYD: 1771-1740#  
 FP: 18-42/49-65#  
 BNP: 1114 - 1054#  
 BHTemp: 100°F.  
 Chlorides: 2,000 ppm

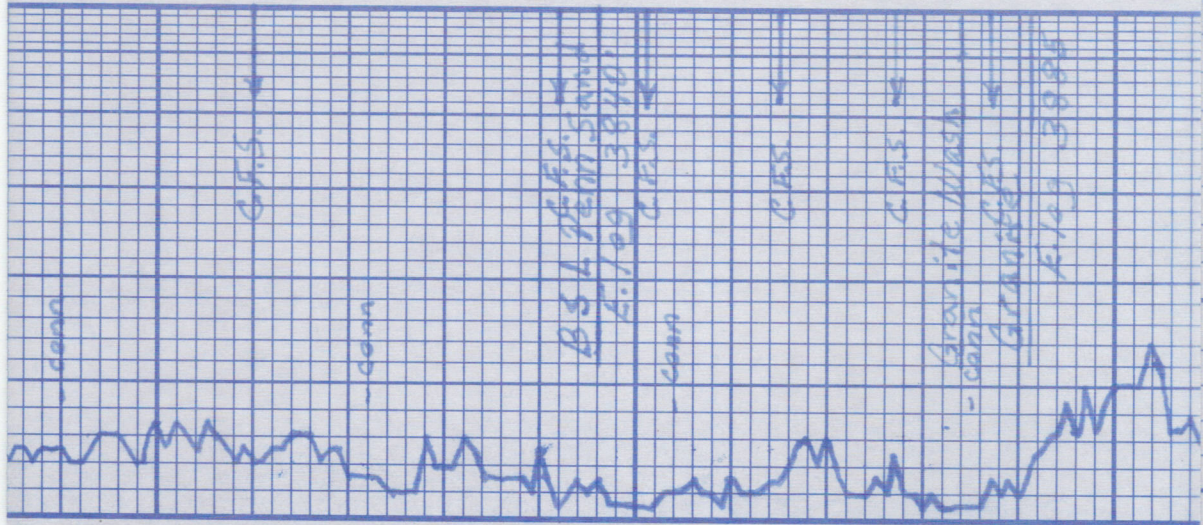
✓  
 ✓

LS: white, fslt pp & Tr.  
 in part of ht. Spd O Str  
 Tr. pp Fe. on crushing  
 No odor. Tr. asphalt  
 LS: white fslt tr. sli. oil  
 Tr. pp & Tr. in part of  
 ht. Spd O Str. R.T. pp F.O.  
 on crush. No odor  
 sh: brn, gry, grn  
 LS: white - yel dns  
 N.S.O.  
 Sh: brn  
 Sh: brn slty  
 LS: wh - ht. gry - sli. yel  
 fsln dns N.S.O.  
 Sh: brn slty  
 LS: white fsln - sli. fslt  
 dns N.S.O.  
 Sh: brn slty  
 LS: white fsln dns N.S.O.

60' I  
 80' J  
 3700' K  
 20  
 40  
 60  
 80







3800	sh: brn + gry LS: tn-brn fch drs N.S.O.	
20	LS: wh tn-sli. yel fch drs N.S.O.	
40	sh: brn slty LS: tn-fxl calcite crys. asph str sh: gry slty	✓
60	Δ + wea Δ tn asphalt SS: slr-fract fn. gn consol Pyrite, magnetite, asphalt R.F.O. No odor Qtz, angular coarse in can Consol. + unconsol SS a.a. mostly coarse unconsol ang - sub rnd sh: brn	✓
80	SS: blu gry v. fn. gn consol SS: rd-brn v. fn. gn consol ingran of N.S.O. wea. granite	✓
3900	Quartz, biotite, feldspar incr. Quartz, biotite, feldspar	

Incline @ 3916 3/4

Quartz, biotite, Feldspar

20

R. T. D.  
1/2 Spind. quartz Pkg

