

API# 15-179-21369-00-00

GEOLOGICAL REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY RL Investment, LLC.
 LEASE Mike Pratt #1-13
 FIELD Wildcat
 LOCATION 339' ESL + 1412' FWL
 SEC 13 TWSP 9s RGE 29w
 COUNTY Sheridan STATE Kansas

ELEVATION
 KB 2786'
 DF 2784'
 GL 2778'
 Depths Measured From
 Log KB Drilling KB

CONTRACTOR WW Drilling Rig #12
 SPUD 8-7-14 COMP 8-16-14
 SAMPLES SAVED FROM 3500 TO R.T.D.

CASING
 Surface 858' @ 262'
 Production none

ELECTRIC LOGS
Nabors

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE	E. LOG	DATUM ^{E-log}	A	B	C	D
				-0-	-0-		
Anhydrite	2394	2393	+ 393	+ 391	+ 380		
Base Anhydrite	2428	2428	+ 358	+ 358	+ 343		
Howard	3570	3568	- 782	- 779			
Topeka	3656	3654	- 868	- 867	- 874		
Heebner	3872	3870	- 1084	- 1079	- 1090		
Toronto	3892	3890	- 1104	- 1095	- 1112		
Lansing	3906	3904	- 1118	- 1114	- 1128		
Base Kansas City	4147	4145	- 1359	- 1354	- 1367		
Pawnee	4265	4263	- 1477	- 1470	- 1482		
Ft. Scott	4352	4352	- 1566	- 1558	- 1570		
Mississippian	4458	4456	- 1670	N.R.	- 1675		
Total Depth	4500	4499	- 1713	- 1609	- 1858		

REFERENCE WELLS

- A RL Investment, LLC., Clark #1, 1476' ESL + 1923' FWL Sec. 18-9S-28W
- B John O. Farmer, #D-1 Pratt, C-SW-SW Sec. 14-9S-29W
- C
- D

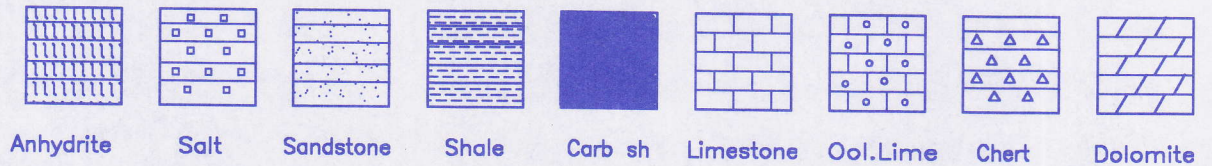
REMARKS

This well ran 4 feet lower to 10 feet higher on the Lansing top than the reference wells. After reviewing the suite of open hole logs it was decided no further testing was warranted and the well was plugged and abandoned.

Richard B. Bell
8-16-14

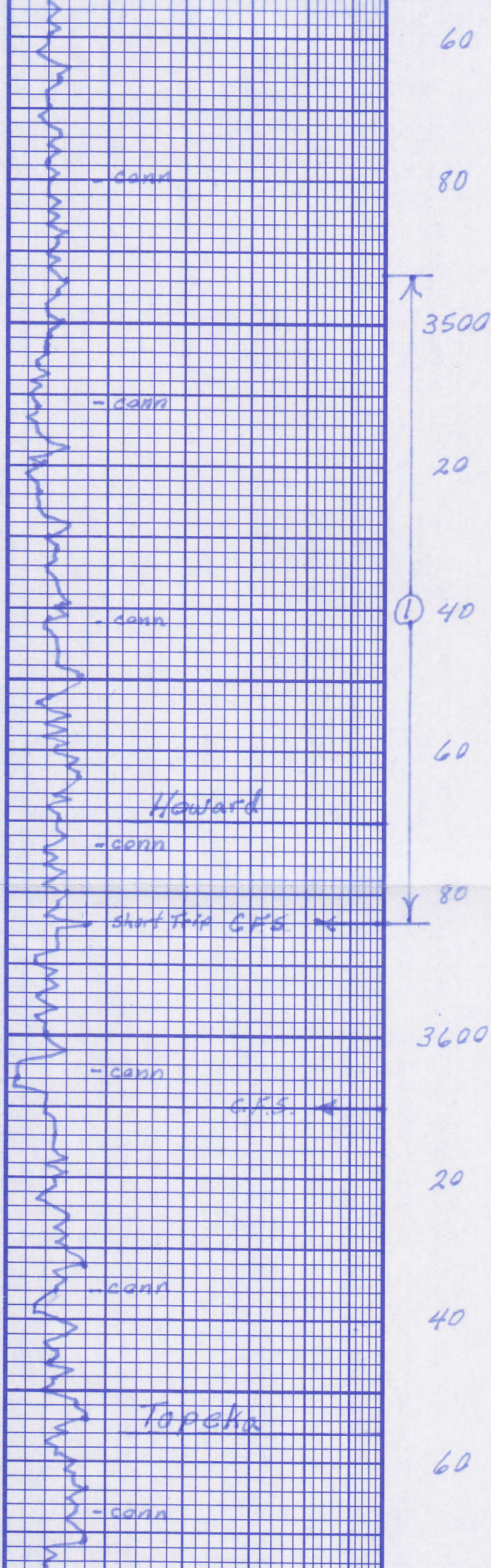
7502

LEGEND



LOG 7710

<p>DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Decreases</p> <p>5" 10" 15" 20" 25"</p>	<p>DEPTH</p>	<p>LITHOLOGY</p>	<p>SAMPLE DESCRIPTIONS</p>	<p>OIL SHOWS</p>	<p>REMARKS</p>
<p>Anhydrite</p>	<p>2390</p>				
	<p>2400</p>				
<p>- conn</p>	<p>20</p>				
<p>Base Anhydrite</p>	<p>40</p>				
	<p>3400</p>				
<p>- conn</p>	<p>20</p>				



60	
80	LS: wh-tn-yel-gry Tr fxl mostly fsif pr. pp φ N.S.O. Tr Δ'gry sh: brn + gry
3500	LS: wh-tn cky-fsif pp φ - pr. in part φ N.S.O.
20	sh: rd, brn, gry
40	sh: gry stly LS: gry fsif dns
60	sh: gry stly LS: tn-gry fsif dns N.S.O. No cut
80	sh: drk gry LS: tn-gry fsif dns N.S.O.
3600	LS: tn-gry fsif isol. vgy φ thick brn f.o. Tr. asph str No odor
20	LS: wh-tn sli. cky-fxl dns N.S.O.
40	LS: wh-tn cky-fsif pp φ N.S.O. No cut, No odor
60	LS: tn-gry fxl-fsif dns N.S.O.
	sh: brn + gry
	LS: wh-tn cky-fsif in part φ N.S.O. No cut
	LS: wh-tn fxl-fsif dns
	LS: wh-tn-gry fxl-fsif dns N.S.O. sh: rd, brn + gry
	R.T. Dol: tn fxl dns N.S.O.
	LS: tn-gry fsif dns
	sh: rd, brn, gry
	LS: wh-tn sli. cky-fxl sh fsif No vis φ N.S.O.

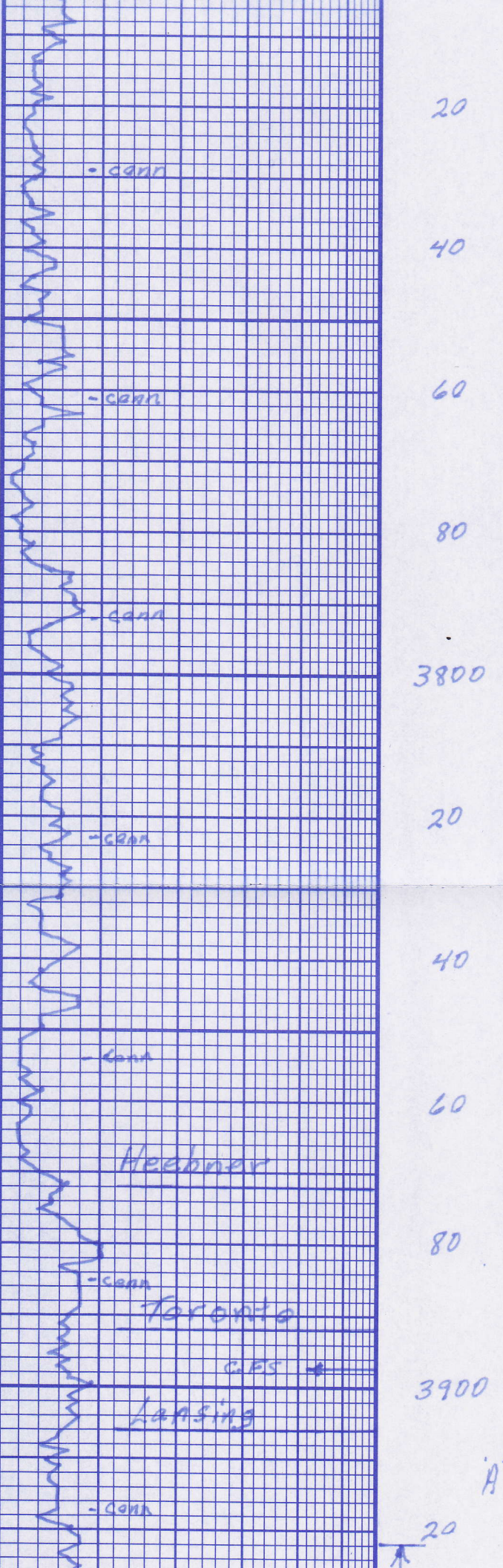
Samples are lag
good samples

Diamond Test

DST # 13493
30-45-30-4
IF: 1/4" blow decr.
FF: 30 min Surface
Recovery: 180%
No show
Hyd: 1655-16
FP: 10-72/77-
BHP: 1096-10
Bit Temp: 112°

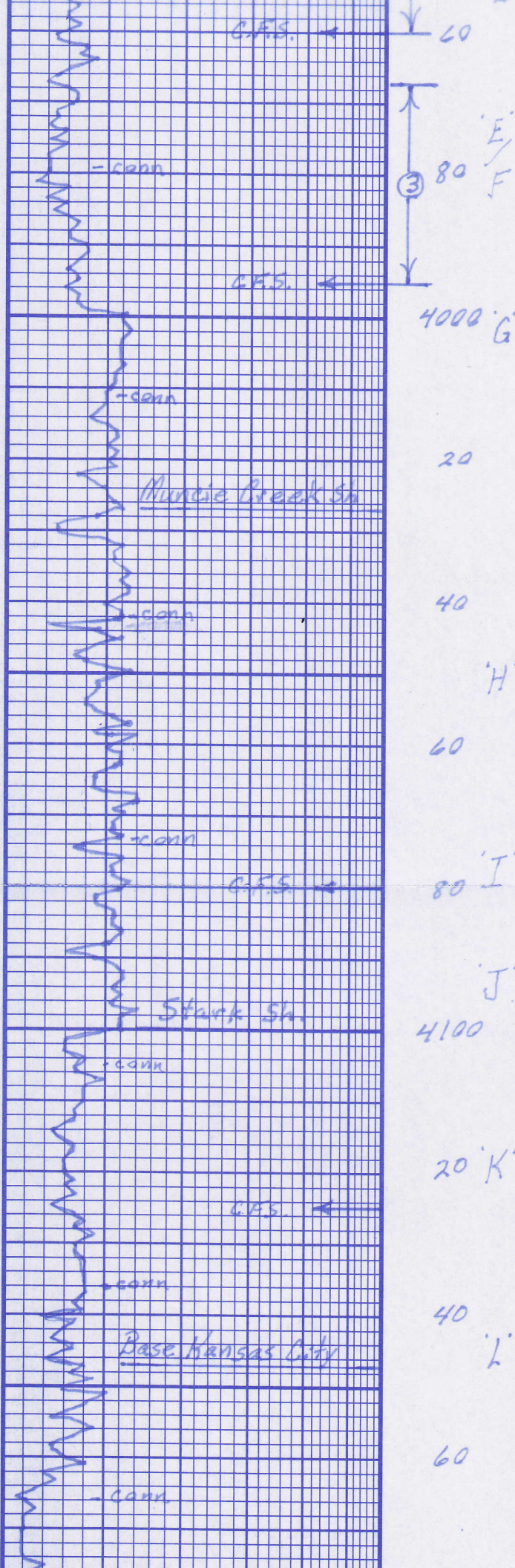
Incline @ 3584

Strap 3605
Board 3605
Diff.



	sh: gry + brn
20	LS: wh-tn gry mtl d fslf dns pp φ friable N.S.O.
	LS: wh-tn incr. cky, fxl ool pp φ - in part φ N.S.O.
40	sh: gry + brn
	LS: wh-tn cky-fxl ool pp φ N.S.O.
60	Trace blk Carb. sh.
	sh: brn + gry ss: v. fn. gn. Consol. in gran φ N.S.O.
80	
	sh: brn slty, shly sd brn
3800	LS: wh-tn cky-fslf pp φ N.S.O.
20	LS: wh-tn sl: cky-fxl Tr sl: ool Tr pp φ N.S.O.
	Trace blk Carb sh. LS: brn fslf dns
40	LS: wh-tn sl: ool pp φ fxl N.S.O.
	sh: brn + gry
60	LS: wh-tn cky-fxl pp φ friable N.S.O.
80	sh: blk Carb. LS: tn fslf dns
	sh: gry slty + brn
	LS: tn -lt. gry fxl dns N.S.O.
3900	sh: brn, gry + grn.
	LS: wh-tn sl: cky-fxl ool w/ fass includ. pp φ - in part φ N.S.O. No cut
20	LS: wh-tn sl: cky fxl dns N.S.O.

DST #2 3922:
45-45.45-45
IF: wk blow incr. to
EE: surface blow



Crushing fr. odor

LS: wh to sli. cky-fxl n pp φ
Tr. pr. vgy φ Tr. ht. 0 sat
lt. fr. spid 0 strn Tr pp F a fr.
Strong odor
Tr. Tary-asph strn
decr. odor

LS: wh to incr. cky-fxl n sub.
ool dns N.S.O.

LS: wh to sli. cky-fxl n dns

LS: wh to lt. gry fxl n dns.
X wh to gry

Sh: blk Carb
LS: tn-brn fslf dns
Sh: gry + grn

LS: wh to fxl n sli. pyritic
N.S.O.

Sh: gry + brn

LS: wh to lt. gry sli. cky.
fxl n dns N.S.O.

Sh: brn + gry
LS: wh to sli. cky-fxl n
sli. ool w/ foss. inclus pyritic
pp φ asph spks N.F.O.
No odor

Sh: gry, brn, grn Tr. blk Carb

LS: wh to lt. gry sli. cky-fxl n
No V's φ Tr asph strn on
edges Tr Δ gry fslf

Sh: gry, brn + grn

LS: tn-gry fxl n dns

Sh: gry, brn + grn

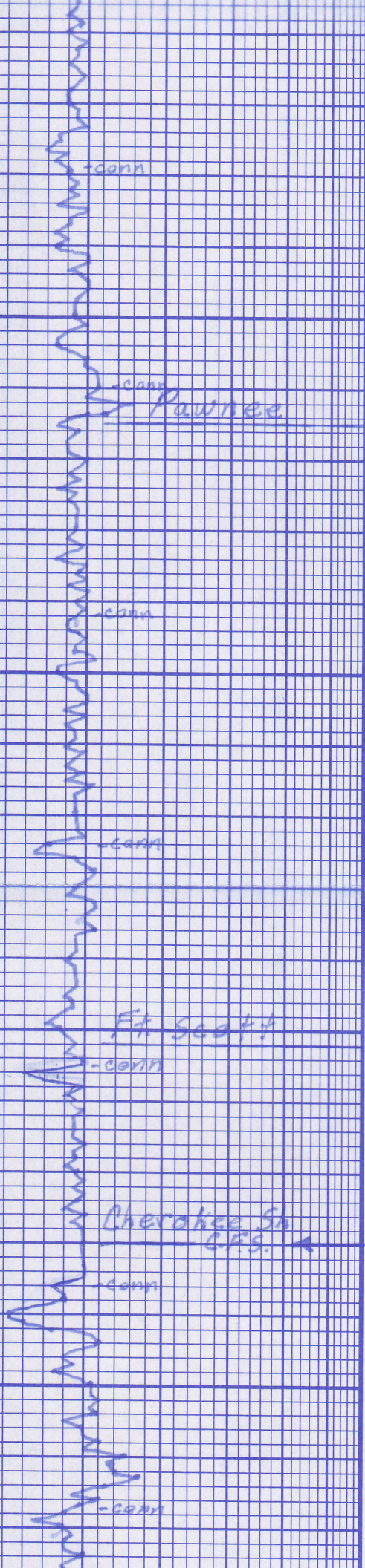
SS: gry v. fn. gn. consal.
in gran φ N.S.O. No cut

DST # 3 3967
30-30-30-3
IF: 1/2" blow died
FF: No blow
Recovery: 10' m
Trace of oil in too
HYD: 1950-1941
FP: 12-24/25-3
BHP: 1070-1000
BH Temp: 116°F

✓

✓

✓



20	LS: tn-lt. gry fxln. sh. slt dns N.S.O.
	sh: brn slt + gry
	LS: tn-lt. gry fxln. sh. slt dns
40	LS: tn-gry fxln dns N.S.O.
	LS: aa Tr Δ or Sh: gry + brn
60	sh: brn, gry + grn
	LS: wh-tn-lt. gry sh.cky. fxln No Vis φ Tr. lt. Sptd 0 stn 1 pc. fr. oil sat w/pp F.O. No odor
80	LS: tn-gry + brn fxln dns R.T. stn from above
4300	Tr. blk Carb. sh. LS: gry mtd fslf dns sh: brn + gry
	LS: wh-tn sh.cky-fxln sub oil dns N.S.O.
20	Sh: gry + brn
	LS: gry fxln dns
40	sh: drk gry
60	Sh: blk Carb
	LS: tn-lt. gry fxln-sh. slt prvitic Tr pp φ Tr Vgy φ lt. Sptd 0 stn. Tr. lt. brn floating F.O. ft. odor cut on crushing
80	LS: wh-tn fxln dns Tr Δ brn sh: blk carb sh: brn, gry + grn
4400	LS: wh-tn-lt. gry chy-fxln dns N.S.O.
	LS: a.a. sh: gry + grn
20	LS: wh-tn-lt. gry chy-fxln-sh fslf dns N.S.O. sh: gry, brn, grn Tr. blk carb

DST # 4 4317:
30-30-30-30
IF: surface blow die
FF: No blow
Recovery: 5' mud
tool sample: trace of
in mud
Hyd: 2160-2147#
FP: 8-11/12-12#
BHP: 21-16#
BHTemp: 124°F.

