

# LITHOLOGY STRIP LOG

## WellSight Systems

Scale 1:240 (5"=100') Imperial

Well Name: #1-34 Carr  
Location: NE SW NW Sec. 34-T21S-R16W, Pawnee County, KS.  
Licence Number: 15-145-21621-0000 Region: Larned  
Spud Date: 12/1/2010 Drilling Completed: 12/8/10  
Surface Coordinates: 1650' FNL & 990' FWL, Sec. 34-T21S-R16W

Bottom Hole Same as above  
Coordinates:  
Ground Elevation (ft): 1986' K.B. Elevation (ft): 1997'  
Logged Interval (ft): 1800' To: 3851' Total Depth (ft): 3851'  
Formation: Arbuckle at TD.  
Type of Drilling Fluid: Freshwater/Gel to 3052'; Chemical Gel 3052' to TD.

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### OPERATOR

Company: Strata Exploration, Inc.  
Address: P.O. Box 401  
Fairfield, IL. 62837-0401

### GEOLOGIST

Name: Jon D. Christensen  
Company: Consulting Petroleum Geologist  
Address: 9002 W. Silver Hollow St.  
Wichita, KS. 67205-8856

### Cores

None Taken

### DSTs

DST #1(Herington/Krider) 1928' - 1990' Times 15"-45"-30"-60" IFP Strong Blow BOB/7", FFP Fair Blow to BOB/14", no GTS, no Blowback; REC: 50' GIP, 130' GWCM(5% G, 25% W, 70% M), CI N/A, Mud 94,000; IFP 38-61#, ISIP 516#, FFP 68-96#, FSIP 477#, IHP 1018#, FHP 970#, BHT 81 Deg. F.

DST #2(Lansing 'A' & 'B') 3504' - 3545' Test Times 15"-45"-45"-90" IFP Weak Blow to 1"; FFP Fair/Strong Blow BOB/28", no GTS, no Blowback; REC: 425' GIP, 50' GHOCM(4% G, 27% O, 69% M), no Water; IFP 19-27#, ISIP 971#, FFP 25-36#, FSIP 1140#, IHP 1675#, FHP 1672#, BHT 102 Deg. F.

DST #3(Arbuckle) 3770' - 3851' Times 15"-45"-15"-45" IFP Strong Blow BOB/ 55 Sec., FFP Strong Blow BOB/ 60 Sec., 1/4" Blowback FSI; REC: 95' GIP, 480' GHOCWM(8%G, 33%O, 43%W, 16%M), 750' GOCWM(24%G, 22%O, 36%W, 18%M), 635' GOCWM(26%G, 23%O, 38%W, 13%M), 190' GOCMW(11%G, 22%O, 58%W, 9%M), CI 43,000 Mud 7400, Oil 35 Degree API; IFP 355-671#, ISIP 1211#, FFP 662-943#, FSIP 1211#, IHP 1856#, FHP 1848#, BHT 113 Deg. F.

## Comments

12/1/10 MIRU Sterling Drilling Rig #2, Spud at 6:45 PM.; 12/2/10 Drilling at 715'; 12/3/10 TD. 1042' - WOC; 12/4/10 Drilling at 1845'; 12/5/10 Drilling at 2261'; 12/6/10 Drilling at 2996'; 12/7/10 Drilling at 3383'; 12/8/10 Drilling at 3560'; 12/9/10 TD. 3851' - TIH for DST #3; 12/10/10 RTD. 3851' - LTD. 3839' - Running 5 1/2" Production casing.

Set 8 5/8"(23#) Surface Casing at 1037' w/370 sx. cement(Basic Energy Services). Cement did Circulate. PD. at 9:45 PM. on 12/2/10. Set New 5 1/2" (15.5#) Production casing at 3846' KB. Cemented w/200 sx. cement(Basic Energy Services). PD. 12:45 PM. on 12/10/10. Set Port Collar at 2138'.

Surveys: 0.0(Bullseye) Deg. at 1042'(Surface Casing); 0.75 Deg. at 1990'(DST #1); Misfire at 3126'(Bit Trip); 0.75 Deg. at 3545'(DST #2); 0.75 Deg. at 3851'(DST #3) and RTD.


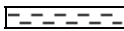





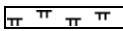

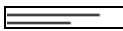

Pipe Strap at 1990'(DST #1): Strap 0.54' Short to the Board, no correction made to the Board. Pipe Strap at 3126'(Bit Trip): Strap 0.07' Long to the Board, no correction made to the Board.

NOTE: Prior to abandonment, the Lansing 'A' zone should be perforated and tested from 3506' - 3512', and the Lansing 'B' from 3538' - 3542'(Halliburton openhole log depths) - see DST #2.








































































After review of the Halliburton openhole logs, DST data and commercial amounts of hydrocarbons encountered, the operator elected to set new 5 1/2" Production casing at 3846' at the top of the Arbuckle for completion.

LOG TOPS: Chase(Herington) 1955(+42), Krider 1972(+25), Queen Hill Shale 3284(-1287), Heebner Shale 3392(-1395), Toronto 3418(-1421), Douglas Shale 3430(-1433), Brown Lmst. 3495(-1498), Lansing 'A' 3504(-1507), Lansing 'B' 3533(-1536), Base K.C. 3718(-1721), Marmaton 3731(-1734), Conglomerate 3758(-1761), Simpson 3800(-1803), Arbuckle 3846(-1849).

## ROCK TYPES

 Anhy  Bent  Brec  Cht	 Clyst  Coal  Congl  Dol	 Gyp  Igne  Lmst  Meta	 Mrlst  Salt  Shale  Shcol	 Shgy  Sltst  Ss  Till
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## ACCESSORIES

<b>MINERAL</b>  Anhy  Arggrn  Arg  Bent  Bit  Brecfrag  Calc  Carb  Chtdk  Chtlt  Dol  Feldspar  Ferrpel  Ferr  Glau	 Gyp  Hvymin  Kaol  Marl  Minxl  Nodule  Phos  Pyr  Salt  Sandy  Silt  Sil  Sulphur  Tuff	<b>FOSSIL</b>  Algae  Amph  Belm  Bioclst  Brach  Bryozoa  Cephal  Coral  Crin  Echin  Fish  Foram  Fossil  Gastro  Oolite	 Ostra  Pelec  Pellet  Pisolite  Plant  Strom  <b>STRINGER</b>  Anhy  Arg  Bent  Coal  Dol  Gyp  Ls  Mrst	 Sltstrg  Ssstrg  <b>TEXTURE</b>  Boundst  Chalky  Cryxln  Earthy  Finexln  Grainst  Lithogr  Microxln  Mudst  Packst  Wackest
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OTHER SYMBOLS

- POROSITY**  
 [E] Earthy  
 [F] Fenest  
 [X] Fracture  
 [I] Inter  
 [M] Moldic  
 [O] Organic  
 [P] Pinpoint

[V] Vuggy

- SORTING**  
 [W] Well  
 [M] Moderate  
 [P] Poor

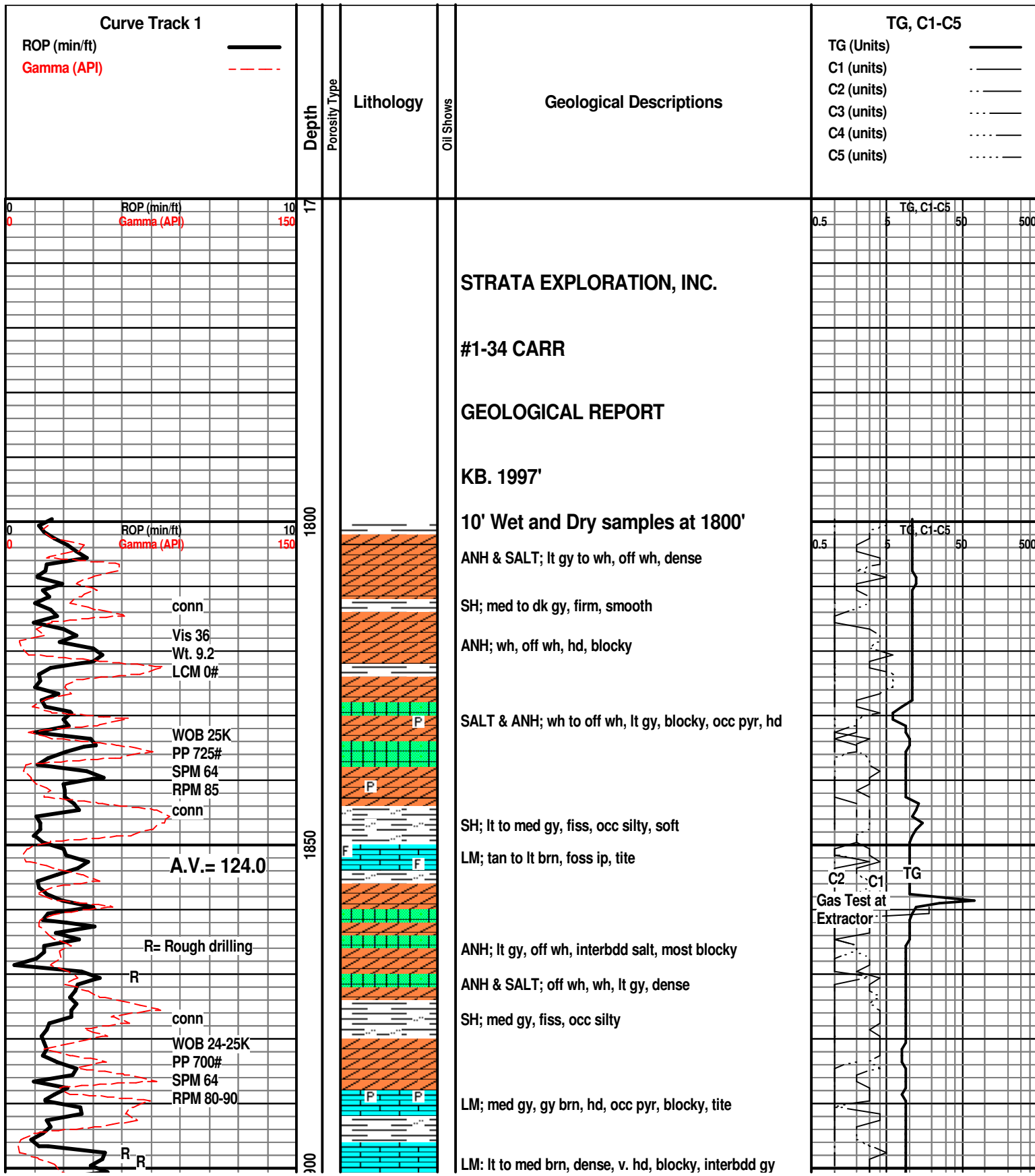
- ROUNDING**  
 [R] Rounded  
 [r] Subrnd  
 [a] Subang  
 [A] Angular

**OIL SHOW**  
 [●] Even

- [●] Spotted  
 [○] Ques  
 [D] Dead

- INTERVAL**  
 [■] Core  
 [□] Dst

- EVENT**  
 [▽] Rft  
 [▲] Sidewall



Curve Track 1

ROP (min/ft) ———  
 Gamma (API) - - - -

TG, C1-C5

TG (Units) ———  
 C1 (units) - - - -  
 C2 (units) ·····  
 C3 (units) ·····  
 C4 (units) ·····  
 C5 (units) ·····

ROP (min/ft) 0 10  
 Gamma (API) 0 150

0.5 5 50 500 TG, C1-C5

ROP (min/ft) 0 10  
 Gamma (API) 0 150

0.5 5 50 500 TG, C1-C5

conn  
 Vis 36  
 Wt. 9.2  
 LCM 0#

WOB 25K  
 PP 725#  
 SPM 64  
 RPM 85  
 conn

A.V. = 124.0

R= Rough drilling

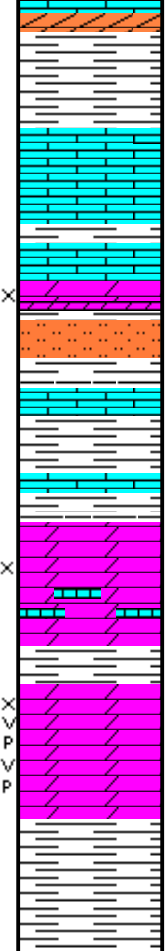
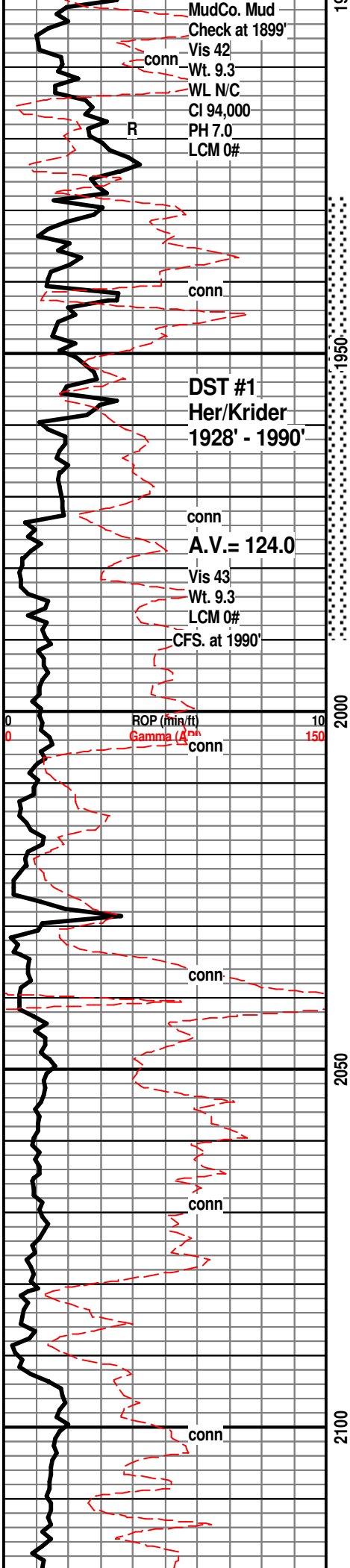
R

conn  
 WOB 24-25K  
 PP 700#  
 SPM 64  
 RPM 80-90

R

R

C2 C1 TG  
 Gas Test at  
 Extractor



anhy.

SH; med gy, fiss, calc.

LM; tan to med brn, occ med/dk gy, dense, blocky, occ cse spar calc xtals interbdd, dull golden yel min fluor, no stn, ns.

DOL; lt gy, sucrosic, soft, fair to gd interxn por, dull yel fluor, no vis gas bubbles

SH & SLTST; rust red, red brn, soft, silty, some sticky

LM; med gy, gritty, dense, hd

SH; grn, gy grn, some rust red, soft

**CHASE - HERINGTON 1955(+42)**  
 DOL; lt gy, sucrosic, firm to soft, fair interxn por, dull yel fluor, few gas bubbles, some well cem hd lmy dolo, no odor, no stn

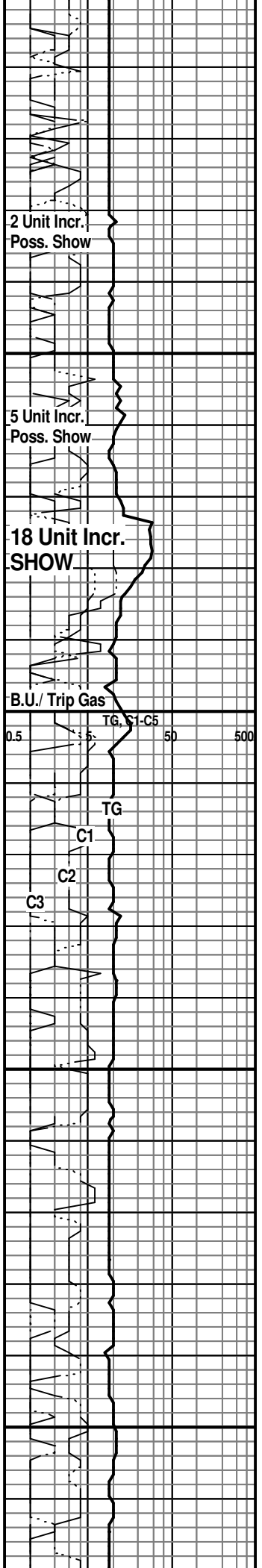
**KRIDER 1972(+25)**  
 DOL; lt brn to lt gy brn, sucrosic - sandy, well dev. p-p, interxn and vug por, dull to lt yel fluor, sev. gas bubbles vis, faint sweet gas odor, no stn, no cut

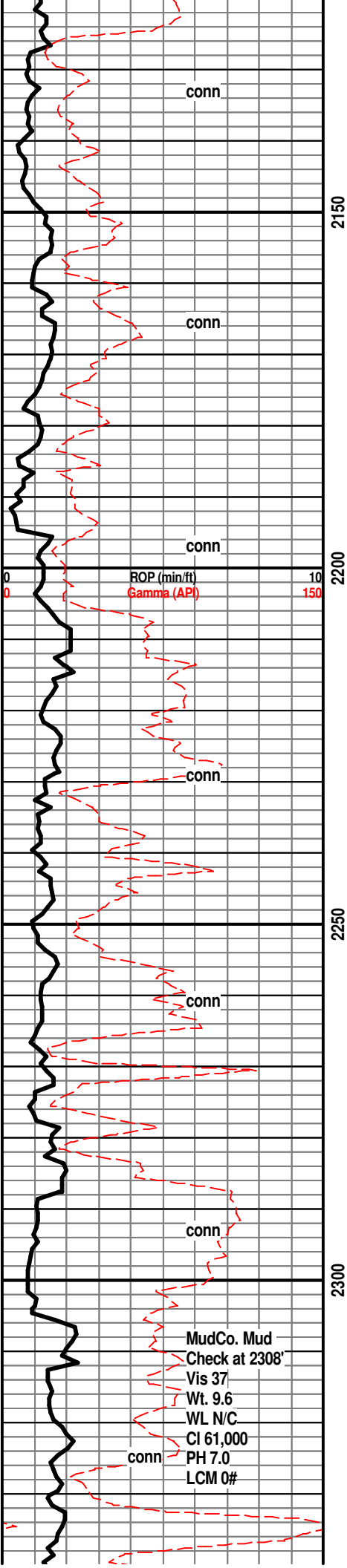
SH; med gy, firm

**DST #1: 1928'-1990' Her/Krider**

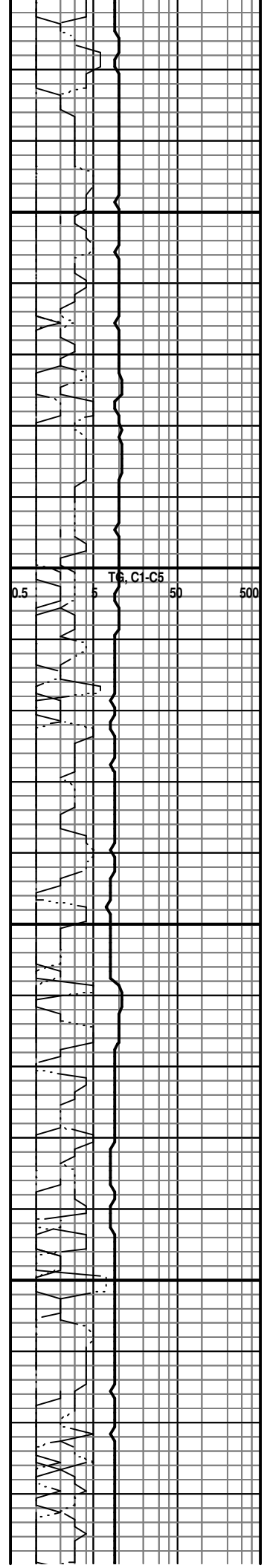
**WINFIELD 2006(-9)**

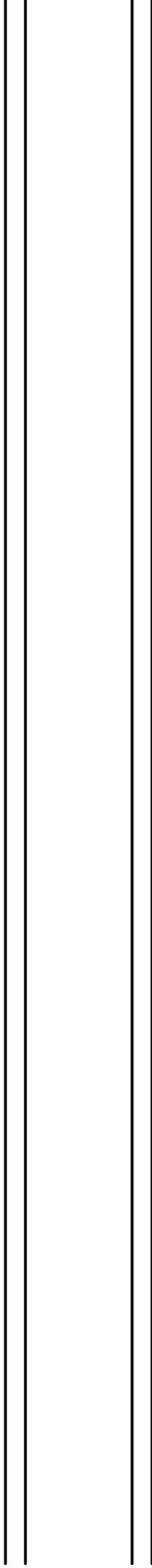
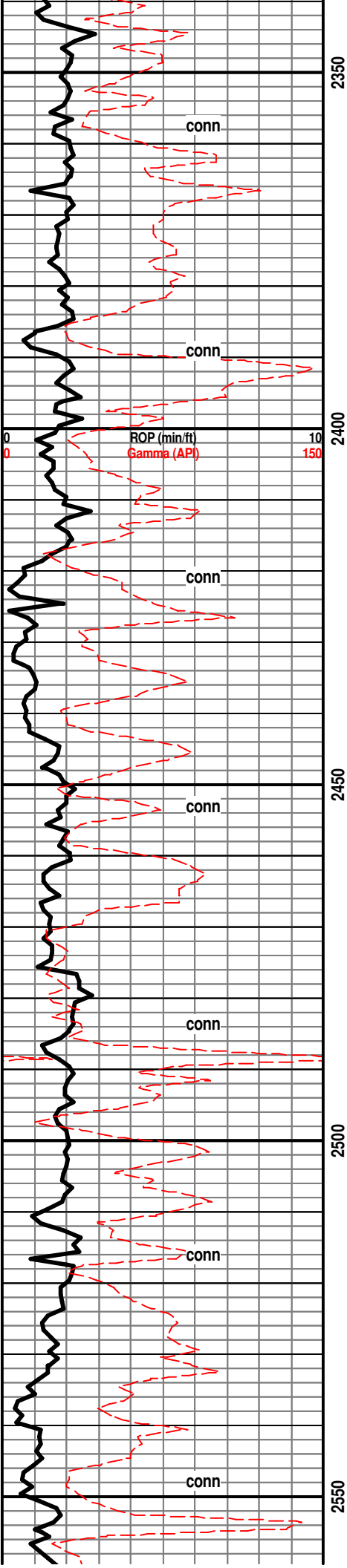
**TOWANDA 2080(-83)**



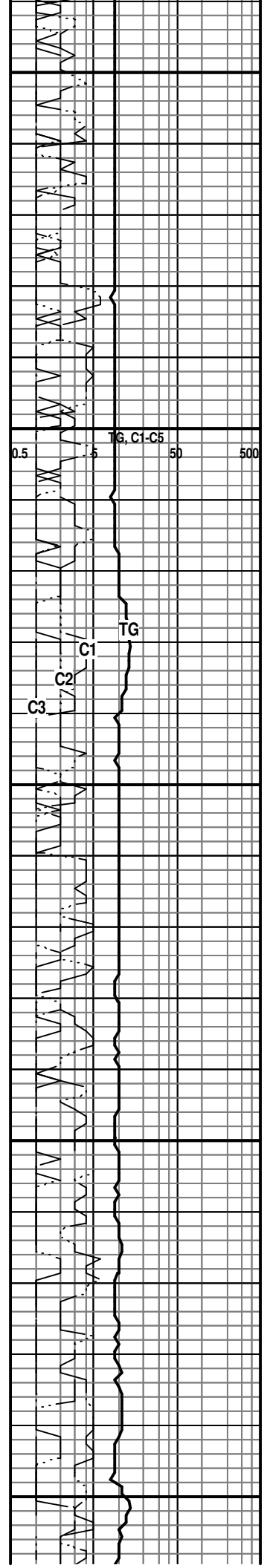


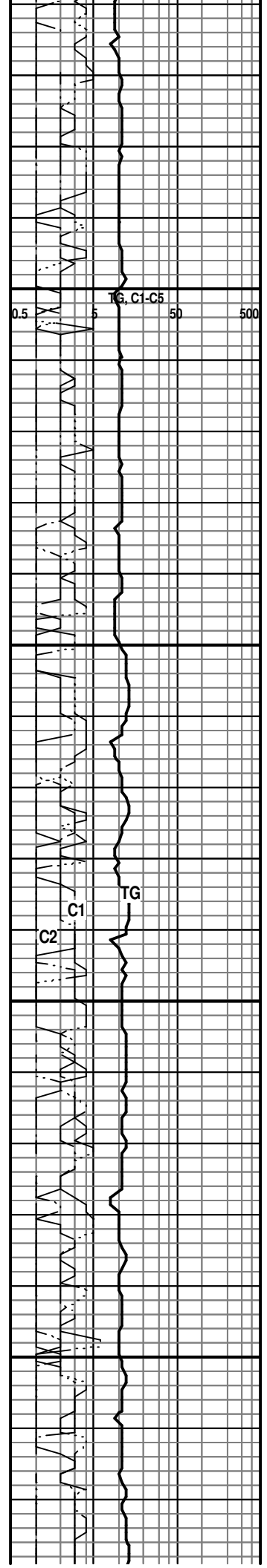
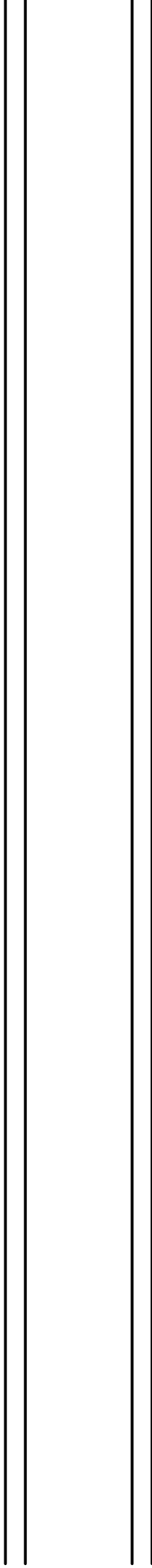
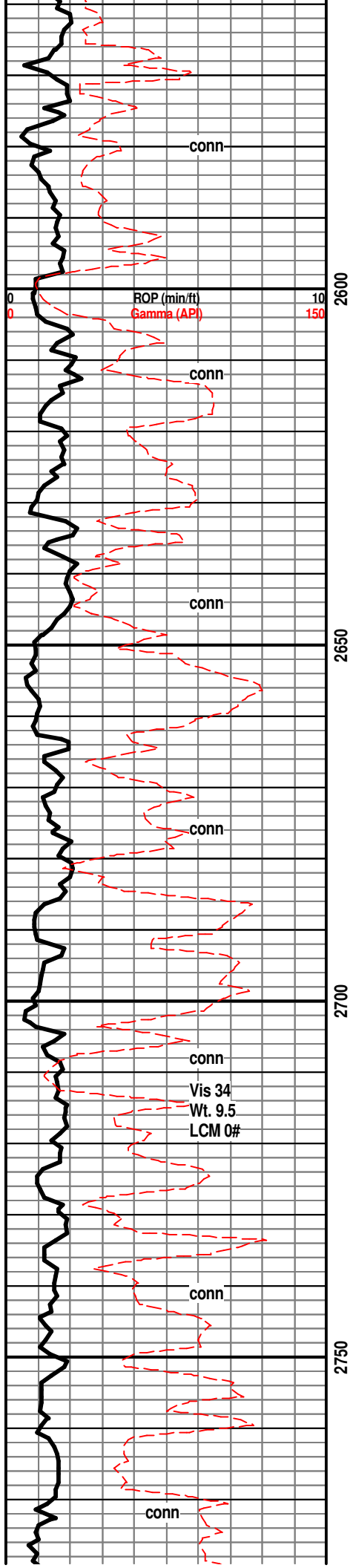
COUNCIL GROVE 2287(-290)





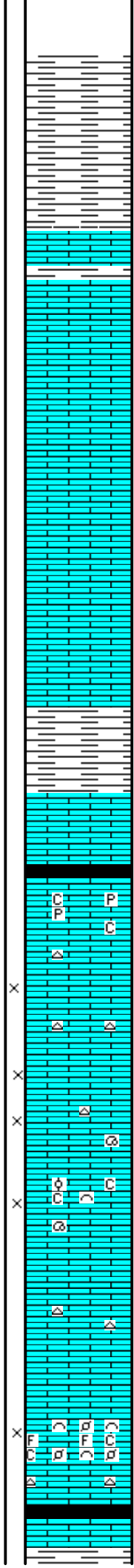
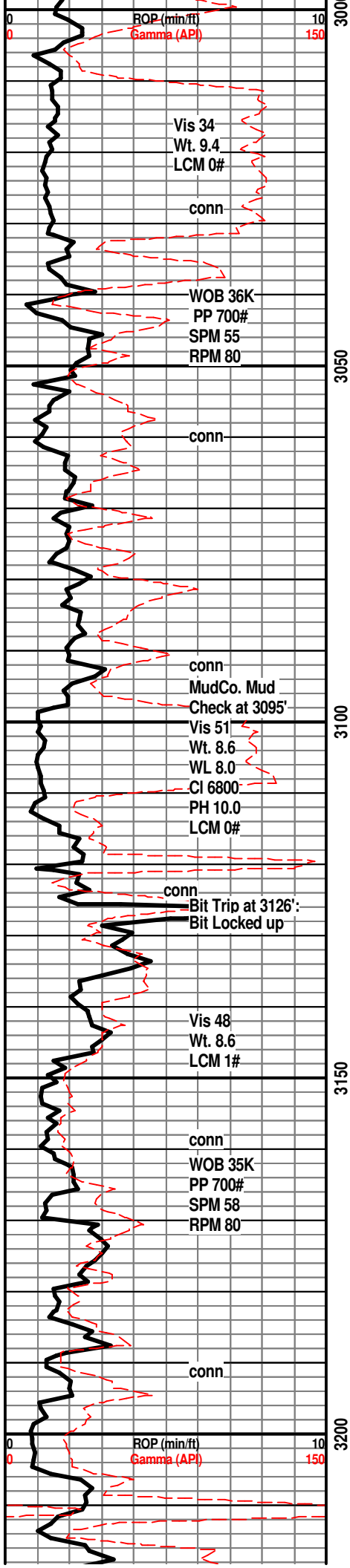
RED EAGLE 2534(-537)











**TOPEKA 3032(-1035)**

Annular velocity off due to 55 SPM on Pump

NOTE: Check logs - possible show  
Displace Mud System from 3052' to 3070'

SH; dk gy to blk, fiss

**Bit Trip at 3126'**

LM; off wh, lt gy, firm, occ chalky mtx, minor pyr, lt yel min fluor, no vis por, no stn, ns.

LM; tan to lt brn, buff, fxln, scat foss mat, fair to poor interxln por, scat lt yel min fluor, no stn or odor, occ tan/gy cht, ns.

LM; tan to lt brn, fxln to gran text, foss ip, fair vis interxln por, scat tan cht, dull to lt yel min fluor, no stn or odor, ns.

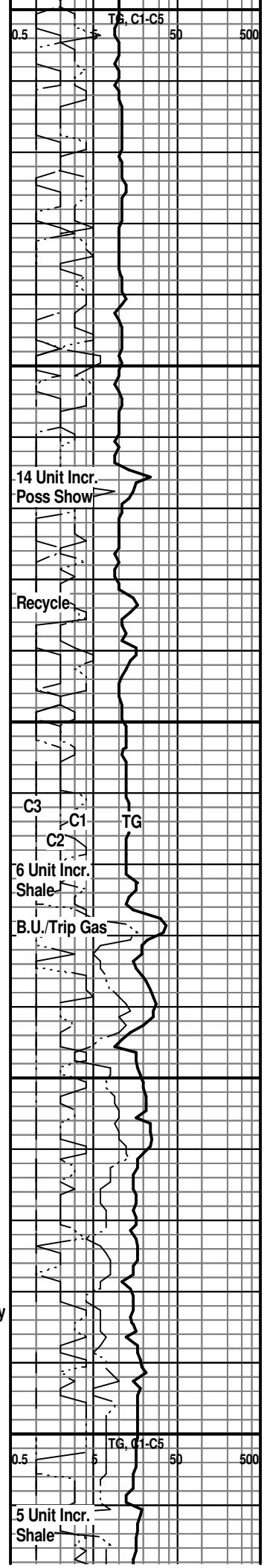
LM; tan to lt brn, foss, minor chalky mtx, fair interxln por, dull yel min fluor, no stn, ns.

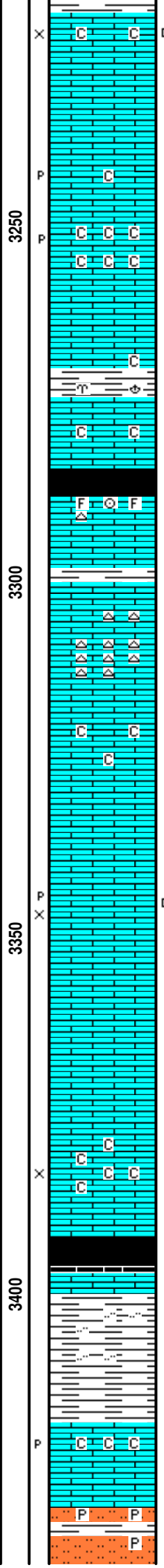
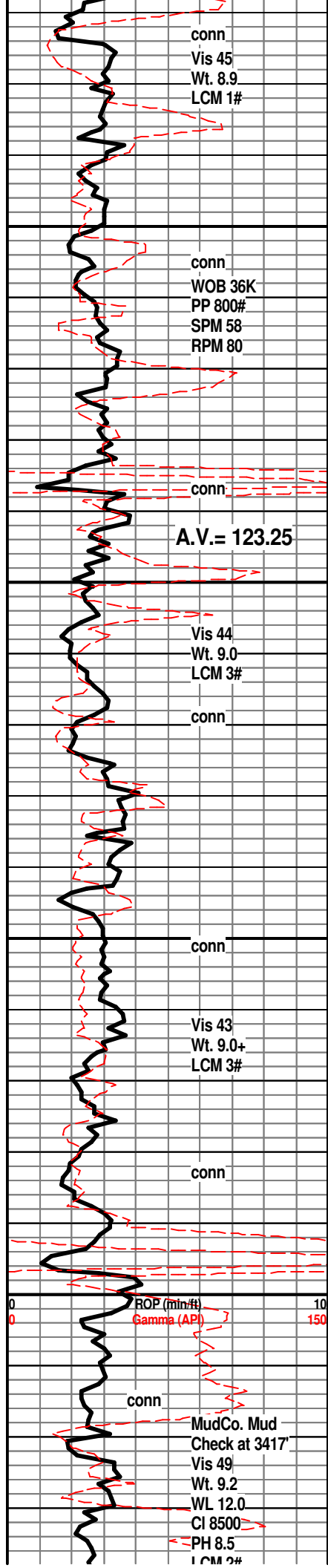
LM; lt to med brn, some mottled text, dense, interbdd gy cht, no vis por, ns.

LM; tan to buff, lt brn, v. foss, gd vis interpart por, soft, some chalky mtx, dull yel min fluor, no stn or odor, ns.

**KING HILL SHALE 3210(-1213)**

SH; blk, v. dk gy, splintery





LM; tan to off wh, fxln, minor chalky mtx, fair interxln por, few pcs. blk dead oil/tar, med yel fluor, no odor, no gas kick

LM; tan to lt brn, scat foss mat, most well cem, rare small p-p por, occ chalky mtx, dull yel min fluor, no stn or odor, ns.

LM; med gy to gy brn, most dense, blocky, tite

SH; dk gy, fiss, smooth, foss ip.

LM; off wh, wh, fxln, chalky mtx, dull yel fluor, no vis por, ns.

**QUEEN HILL SHALE 3284(-1287)**  
SH; v. dk brn, blk, carb, trc gas bubbles

LM; tan to cream, lt brn, foss, some well cem, interbdd gy cht, poor to no vis por, no fluor, ns.

LM; tan to buff, lt brn, fxln, abnt gy to tan foss to spicular cht, hd - sharp, no vis por, no fluor, ns.

LM; off wh, tan, fxln, minor chalky mtx, most dense, blocky, no vis por, no fluor, ns.

LM; tan to cream, off wh, fxln, scat fair p-p and inxln por, few pcs. w/dk hvy blk dead oil stn, dull yel to no fluor, no gas kick, faint odor

LM; tan to buff, fxln to micritic, hd, no vis por, no stn or odor, ns.

LM; tan to wh, off wh, f to med xln, much soft chalky mtx, fair interxln por, no fluor, no stn or odor, ns.

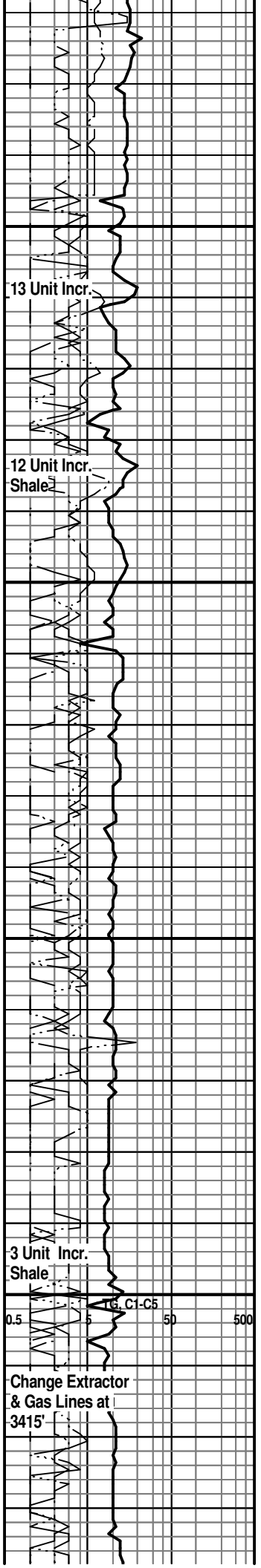
**HEEBNER SHALE 3392(-1395)**  
SH; blk, carb, platy

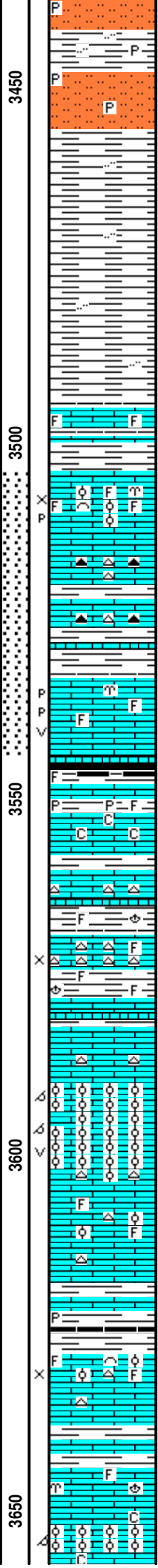
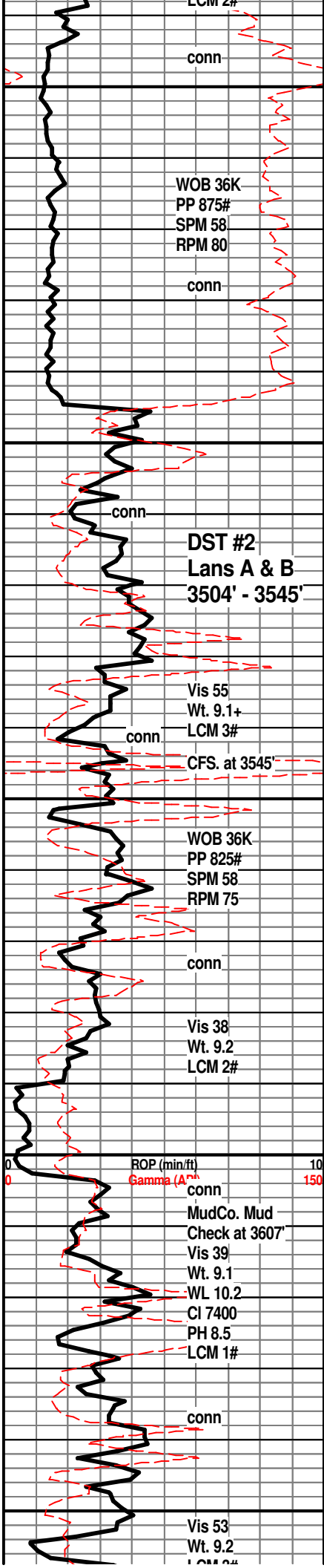
LM; med brn, v. hd, blocky

SH; lt gy to grn, silty ip, most v. soft to sticky

**TORONTO 3418(-1421)**  
LM; off wh, wh, occ tan, foss ip, fxln, occ v. soft - chalky mtx, med yel min fluor, fair p-p por, bcm dense tan to lt brn micrite, no stn or odor, ns.

**DOUGLAS SHALE 3430(-1433)**  
SH and SLTST; lt gy, gy grn, firm to soft, rarely mica,





pyr ip

SLTST; lt gy, occ pyr, firm to soft

SH; lt gy, rare med gy, firm, platy

SH; lt gy, fiss, rarely silty

**BROWN LMST. 3495(-1498)**  
LM; med brn, dense, rare well cem foss, v. hd

**LANSING 'A' 3504(-1507)**  
LM; tan to med brn, v. foss, partly oolitic, fair to gd p-p and interpart por, most w/even lt golden brn to saturated oil stn, SFO, gd oil odor, med to brite yel fluor, gd cut, trc gas bubbles

LM; off wh, tan, most dense, micritic, cherty, no vis por, no stn or odor, ns.

SH; med gy to grn, firm, thin hd lmst strngs.

**LANSING 'B' 3533(-1536)**  
LM; off wh, cream, foss ip, scat med brn spotted to even oil stn, poor to fair p-p and vug por, fair to gd oil odor, med to brite yel fluor, no F.O., fair cut, few gas bubbles, some looks tite

**DST #2: Lans. A & B 3504' - 3545'**  
SH; med gy, foss ip, pyr  
LM; wh to off wh, fxln, soft chalky mtx ip, dull yel to no fluor, no stn or odor, ns.

LM; med brn, dense, blocky, interbdd gy foss cht, hd, no vis por, no stn, ns.

LM; wh to off wh, lt gy, fxln, v. cherty, poor interxln por, foss ip, no fluor, no stn or odor, ns.  
SH; med gy, calc, interbdd dk brn hd lmst strng.

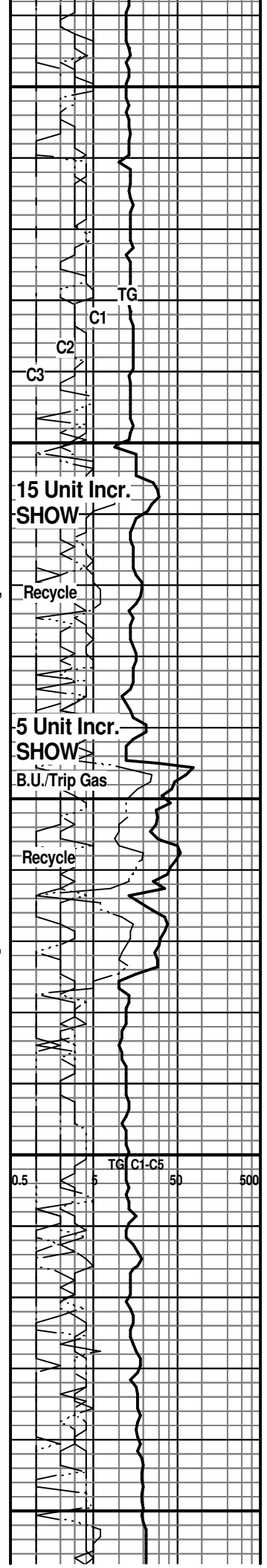
**LANSING 'G' 3582(-1585)**  
LM; off wh, tan, lt gy, oolitic, most med size molds, gd oomoldic por, brittle ip, rare vug por, dull yel min fluor only, no stn or odor, barren, ns.

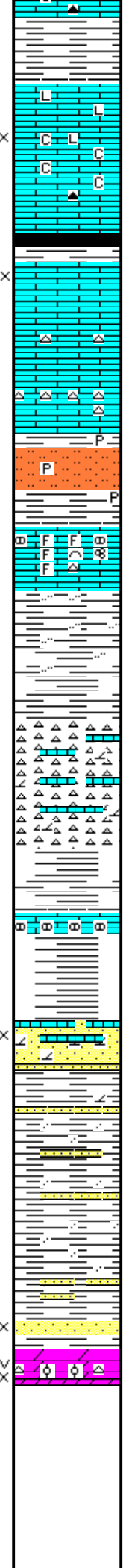
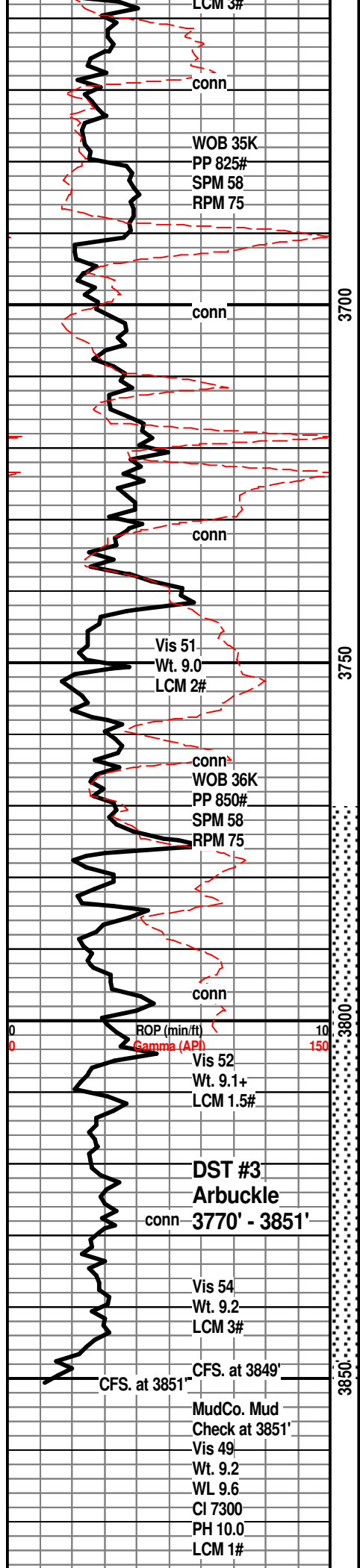
LM; tan to cream, off wh, most dense, micritic, rare well cem foss/oolites, no fluor, occ oolitic off wh to gy cht, ns.

SH; dk gy, trc blk, platy, trc pyr

**K.C. 'H' 3628(-1631)**  
LM; tan to lt brn, foss to partly oolitic, fair interpart por, v. dull yel min fluor, no stn, most tite, ns.

**K.C. 'I' 3644(-1647)**  
LM; off wh, tan, fxln to foss, most well cem, lt yel min fluor, no stn or odor, ns.  
LM; tan to off wh, oolitic, oolastic, brittle ip, fair oomoldic por, dull yel fluor, chalky mtx ip, no stn or





odor, ns.

SH; med to dk gy, fiss, smooth

**K.C. 'J' 3669(-1672)**

LM; tan to lt brn, hd, blocky, most micritic, no vis por, some lithographic, tite

LM; off wh, tan, fxln, interbdd soft chalky mtx, poor interxln por, lt to med yel min fluor, no stn or odor, no gas kick, ns.

SH; dk gy to blk, fiss

**K.C. 'K' 3694(-1697)**

LM; wh to off wh, med xln w/scat cse spar calc xtals, fair interxln por, chalky - soft, med yel min fluor, no stn or odor, ns.

LM; off wh, tan, buff, f to med xln, most dense, no vis por, no fluor, interbdd grn nodular lmst, hd, interbdd cht, ns.

**BASE KANSAS CITY 3718(-1721)**

SH & SLTST; varic, rust red, grn, dk gy brn, firm, occ pyr

**MARMATON 3731(-1734)**

LM; lt brn, tan to cream, v. foss, most well cem, blocky, some gy grn hd nodular lmst, no vis por, no stn or odor, ns.

SH; grn, gy grn, platy, occ silty

SH; varic, grn, maroon, mustard yel, silty, soft to sticky, occ silty

**CONGLOMERATE 3758(-1761)**

CHT; brite org, wh, lmy w/interbdd off wh fxln partly dolomitic lmst, no vis por, no stn or odor, no gas kick, ns.

SH; varic, some dk gy, soft to sticky

LM; dk red brn, nodular, hd

SH; varic, pred maroon, rust red, yel, grn, occ lavender, platy

**SIMPSON SAND 3800(-1803)**

SS; med gr, qtzitic, v. hd, rare loose subrnd gr, some lmy - v. hd, partly dolomitic, trc blk dead tarry oil flakes, no odor, poor to no vis por, tite

SH; med grn, firm, occ loose med gr qtz gr embdd in shale - sandy ip, interbdd clusters of fine gr qtz ss w/blk tarry dead oil, dull yel fluor, no live shows, no gas kick

SH; sea grn to turquoise, platy to flakey, waxy ip, interbdd f gr qtz ss w/dk brn oil stn, strong odor, no live oil shows in ss

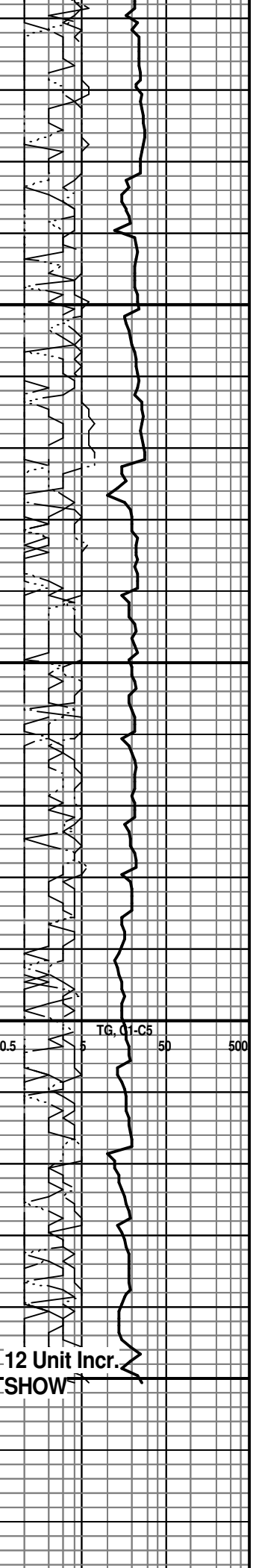
SS; lt brn, f to med gr, fri, live and dead oil stn, fair por, gd odor, dull golden yel fluor, fair cut

**ARBUCKLE 3846(-1849)**

DOL; tan, lt brn, med rhombic, well dev. lrg vug and interxln por, oil saturated, strong odor, GSFO, med to brite yel fluor, streaming cut, interbdd oolitic cht

**DST #3: Arbuckle 3770' - 3851'**

RTD. 3851' at 11:45 PM. 12/8/10



LTD. 3839'

Halliburton DIL, NEU/DEN, Microlog

3900

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