

# LITHOLOGY STRIP LOG

## WellSight Systems

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

Well Name: #2-33 Unruh(OWWO)  
Location: C NW NW Sec. 33-T27S-T18W, Kiowa County, Kansas  
Licence Number: 15-097-21469-0001  
Spud Date: 11/22/2010  
Surface Coordinates: 660' FNL & 660' FWL, Sec. 33-T27S-R18W  
Region: Einsel Field  
Drilling Completed: 11/28/2010

Bottom Hole Coordinates: Same as Above  
Ground Elevation (ft): 2199' K.B. Elevation (ft): 2210'  
Logged Interval (ft): 4891' To: 5518'TD Total Depth (ft): 5518'  
Formation: Arbuckle at TD.  
Type of Drilling Fluid: Water & Old Mud in hole; Freshwater Chemical Gel

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

### 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

None Taken

## Comments

11/22/10 MIRU Sterling Rig #2, Mix Mud in Frac tanks for Displacement; 11/23/10 Start drilling Cement Plug in Surface Casing at 12:30 PM. Encountered metal at 25' - run in hole with Weatherford Mill/Junk Basket and milled on metal. Rig up Weatherford Modified Washover fishing tool - washed over fish - REC: 3' Mud pump Rod, Rubber gasket and Wood Plug. Continue washing down old hole; 11/24/10 TD. 134' - Washing down old hole. Drilled last cement plug at 350' to 455'; 11/25/10 Thanksgiving - TD. 2452' - Washing down old hole; 11/26/10 TD. 4755' - Washing down old hole; 11/27/10 Drilling at 5095'; 11/28/10 Drilling at 5503' - Reached TD. 5518' at 8:00 AM. Rig up Log Tech, ran DIL and DEU/DEN openhole logs - LTD. 5518'; 11/29/10 RTD = LTD @ 5518' - Pulling BOP prior to setting the 5 1/2" Production casing.


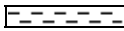

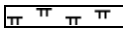
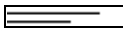
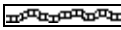


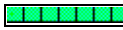

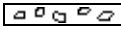


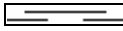

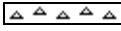


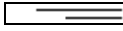

Surface Casing(Old well): 8 5/8" set at 373' OLD KB. w/200sx.(1978).

Production Casing: New 5 1/2" (15.5#) set at 5220' w/200 sx.(Basic Energy Services). Set Port Collar at 3008' for cementing of the upper Stage prior to completion procedures.








































































Surveys: 1.75 Deg. at 4894'(Bit trip); 0.75 Deg. at 5518' TD.

NEW LOG TOPS(KB. 2210'): Viola 4906(-2696), Simpson Shale 5109(-2899), Simpson Dolomite 5113(-2903), Arbuckle 5210(-3000).























## ROCK TYPES

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

## ACCESSORIES

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

## OTHER SYMBOLS

<b>POROSITY</b>	<input checked="" type="checkbox"/> Vuggy	<b>ROUNDING</b>	 Spotted	<b>EVENT</b>
 Earthy		 Rounded	 Ques	 Rft
 Fenest	<b>SORTING</b>	 Subrnd	 Dead	 Sidewall
 Fracture	 Well	 Subang		
 Inter	 Moderate	 Angular	<b>INTERVAL</b>	
 Moldic	 Poor		 Core	
 Organic		<b>OIL SHOW</b>	 Dst	
 Pinpoint		 Even		

Curve Track 1

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

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

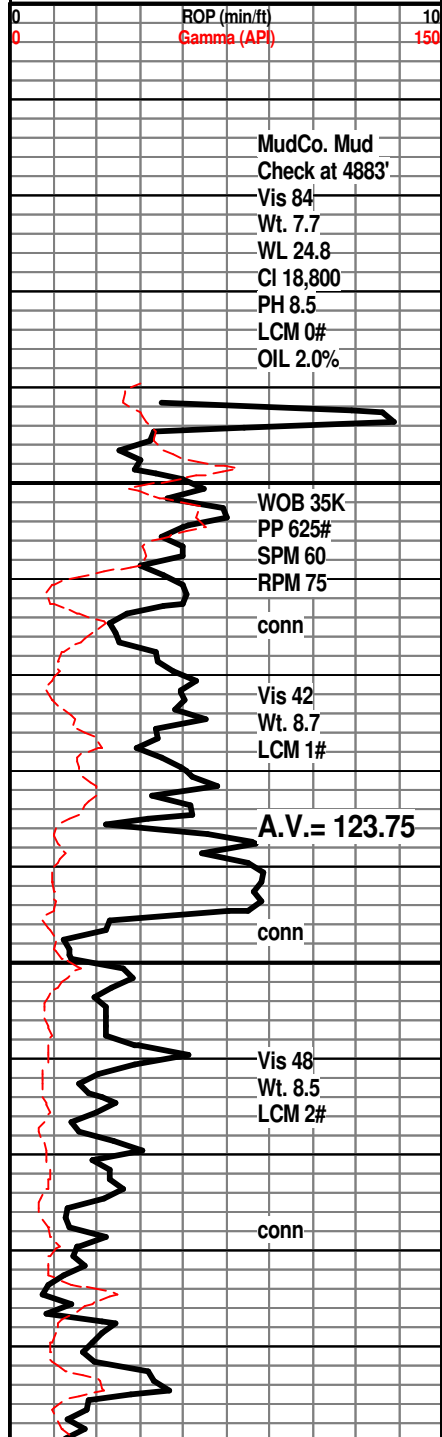
Depth

Porosity Type

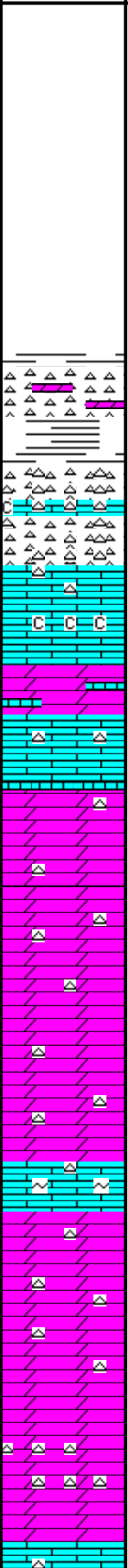
Lithology

Oil Shows

Geological Descriptions



48  
150  
4900  
4950  
5000



**STRATA EXPLORATION, INC.**

**#2-33 Unruh (OWWO)**  
**Deepening Record - Geological Report**

**NOTE: OLD TD. 4885'(+6' difference in KB. on rigs) = 4891' on new hole**

CHT; off wh, pale grn, dolomitic ip, scat pale org hd sharp cht, no vis por, no stn, no fluor, ns, abnt varic shales - some sloughing shales

**VIOLA 4906(-2696)**  
 LM and CHT; wh to off wh, fxln, v. cherty, firm, rare small vug por, scat wh to gy fresh cht, some speckled chert, dull yel min fluor, no stn or odor, ns.

LM; wh to off, med xln, some soft chalky mtx, cherty ip, dull yel min fluor, no stn or odor, ns.

DOL; off wh, lt gy, sucrosic, lmy ip, fair interxln por, no stn, cherty ip, ns.

LM; off wh, hd, blocky, micritic, tite, occ cherty

DOL; off wh, lt gy, tan, sucrosic to finely rhombic, fair to gd interxln and scat vug por, lt yel min fluor, no stn or odor, no gas kick, ns, interbdd dove gy fresh cht

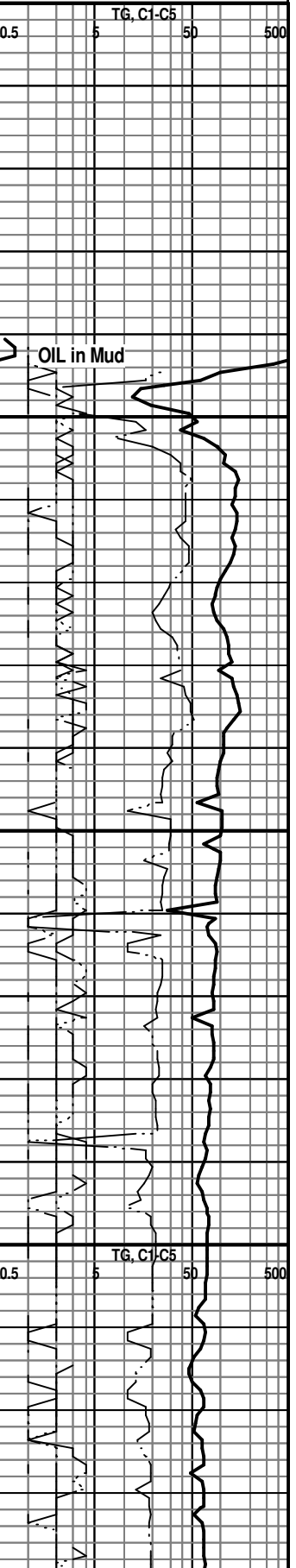
DOL; pred lt gy, finely rhombic, gd interxln and vug por, soft ip, lt yel min fluor, no stn, ns.

DOL; lt gy, off wh, rare tan, sucrosic to med rhombic, scat gd vug por, gd vis interconn of por, lt yel min fluor only, no stn, ns, occ cherty

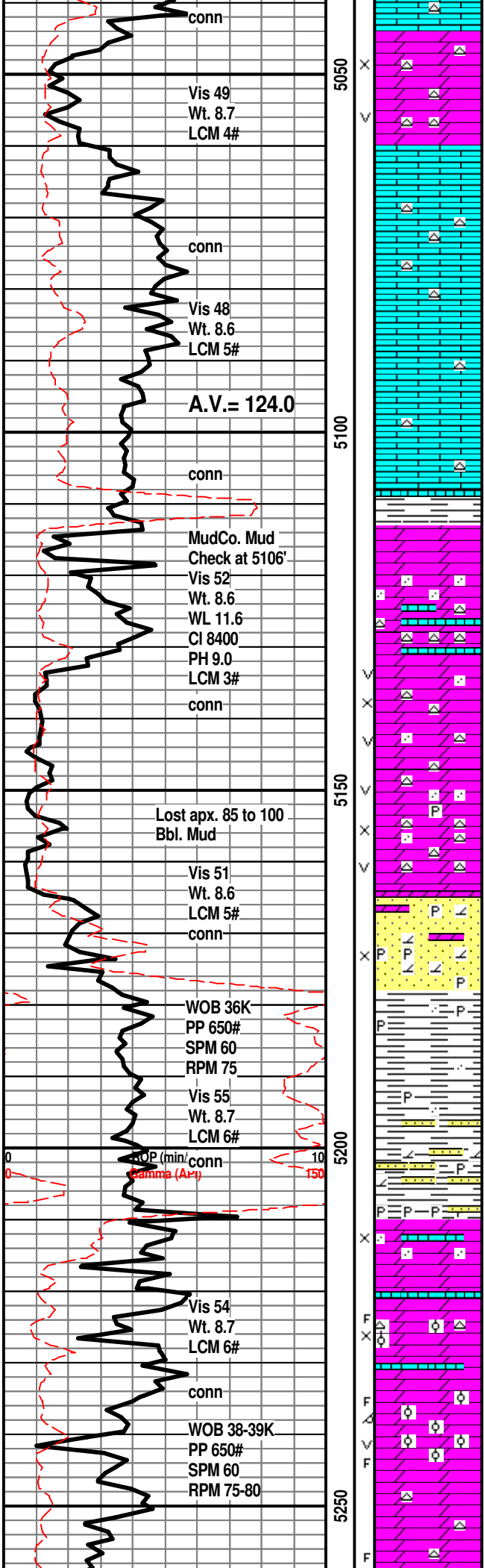
LM; off wh, wh, dense, cherty ip, occ grn clay-glau incl, tite

DOL; lt gy, off wh, most fine to med rhombic, well dev. vug por in some, scat off wh to dove gy cht, dull yel min fluor, no stn, ns.

DOL; tan, buff, off wh, sucrosic, cherty ip, interbdd wh fresh occ fractured cht, fair interxln por, dull yel min fluor, no stn, ns.



0.5 5 50 500  
 TG, C1-C5  
 0.5 5 50 500  
 TG, C1-C5



LM; lt brn, tan, hd, blocky, some gy cht, tile

DOL; tan to lt brn, buff, sucrosic to finely rhombic, gd interxln and vug por, cherty ip, no stn or odor, ns.

LM; tan to lt brn, hd, micritic, blocky, occ cherty

LM; med brn, hd, occ cherty, most dense, micritic, rarely dolomitic, no fluor, ns.

LM; lt brn, off wh, cse xln, hd, well cem, rarely cherty, tite

**SIMPSON SHALE 5109(-2899)**  
SH; turquoise grn, sea grn, waxy ip, platy

**UPPER SIMPSON DOL. 5113(-2903)**  
DOL; tan, buff, lt gy, hd, some med gr qtz in dense mtx, lt yel min fluor, no stn or odor, ns, interbdd hd occ cherty dolomitic lmst.

DOL; tan to off wh, finely rhombic, rarely sandy, scat wh speckled cht(slough?), dull yel min fluor, v. gd interxln w/excellent med to lrg vug por, no stn or odor, ns.

DOL; tan to lt brn, off wh, rhombic, gd interxln w/excellent well dev. lrg vug por, occ cherty, trc med gr clr qtz ss grains, dull yel min fluor only, no stn or odor, rare pyr

SS; clr to lt gy, most med gr, qtz, clusters, rnd to subrnd, fairly clean, fair to occ gd intergran por, partly dolomitic, rare dissem pyr, no fluor, no stn, ns.

SH; grn, sea grn, pyr ip, rare qtz ss gr in shale

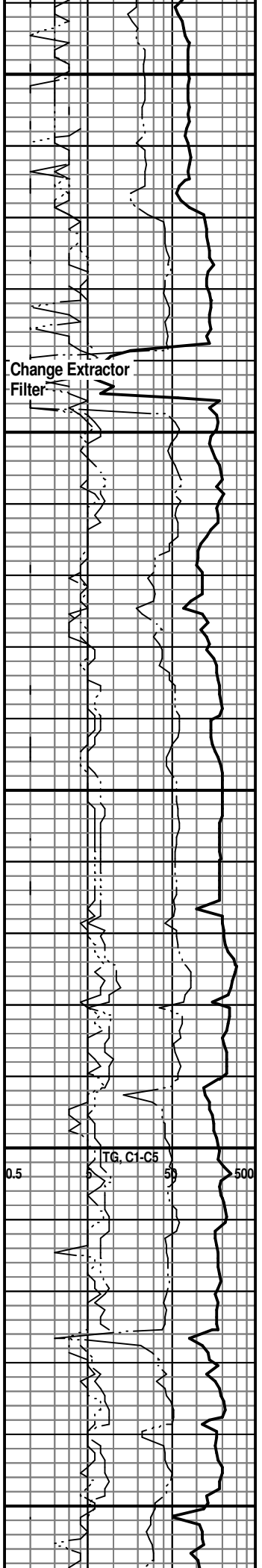
SH; grn, sea grn, platy, waxy ip, occ pyr, firm

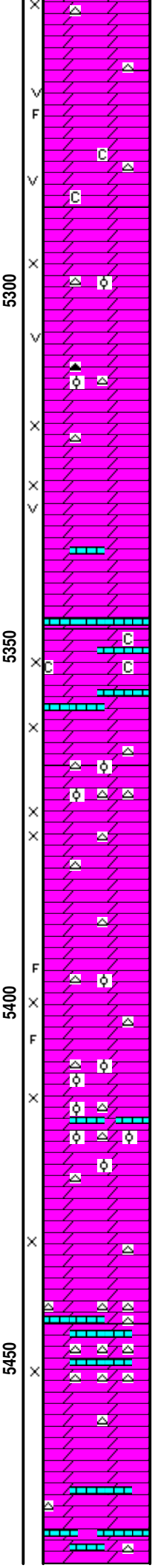
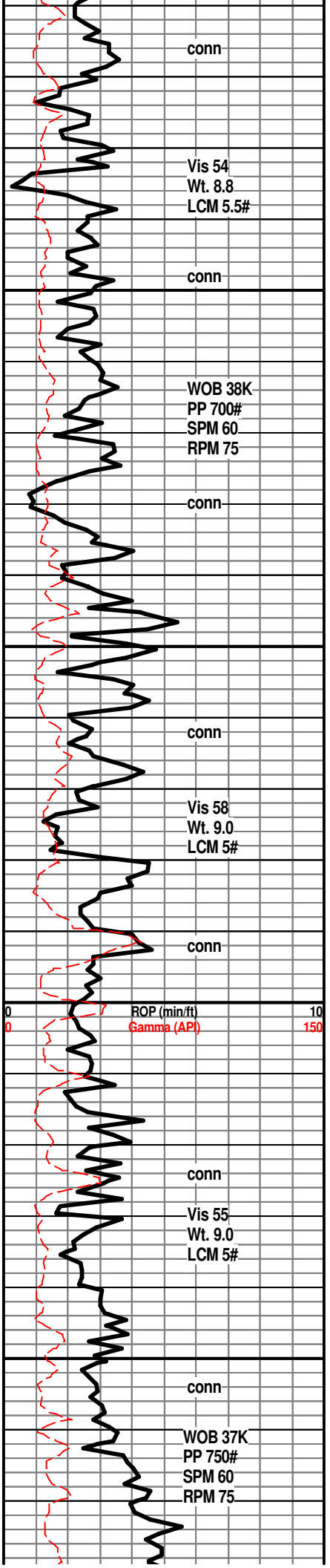
SH; grn, gy grn, firm, occ pyr, interbdd lt gy f to med gr pyr to dolomitic qtz ss

**ARBUCKLE 5210(-3000)**  
DOL; tan to buff, lt gy, most sucrosic, trc cse rhombic, v. hd pyr "cap rock", poor interxln por, sandy ip, hd, uniform lt to med yel min fluor, no stn or odor, ns, interbdd gy shale

DOL; lt brn, tan, buff, sucrosic, lmy - hd ip, rare wh fractured oolitic cht, poor to fair interxln por, med yel min fluor, no odor, ns.

DOL; lt brn, tan, foss - oolitic, much small to med size moldic por, dolomitized, scat vug por, possible frags, med yel min fluor, no stn or odor, no gas kick, ns.





DOL; tan to lt brn, sucrosic to finely rhombic, fair interxn por, occ wh foss cht, med yel min fluor, no stn, ns.

DOL; tan to cream, buff, lt brn, sucrosic to med rhombic, scat gd vug por, minor soft chalky mtx, med yel fluor, interbdd opaque spar calc xtals, ns.

DOL; tan to buff, rare off wh, med rhombic, scat fair to gd interxn por, rare vug por, minor amt of off wh oolitic cht and amber cht, med yel min fluor, no stn or odor, ns.

DOL; off wh, tan, rare lt gy, med rhombic, most w/v. gd interxn and scat vug por, occ cse opaque spar calc xtals, no stn or odor, ns.

DOL; tan to lt brn, lmy ip w/interbdd hd lmy dolo strngs, scat fair interxn por, minor amt of soft chalky mtx, med yel fluor, no stn, faint sour odor, ns.

DOL; wh, off wh, soft, sucrosic, gd interxn por, interbdd wh cht and oolitic cht, occ opaque spar calc xtals also, med yel min fluor, no stn or odor, ns.

DOL; tan to med brn, fine to med rhombic, fair interxn por, scat oolitic cht, poss fractures, occ wh to opaque spar calc xtals, min fluor only, no stn or odor, ns.

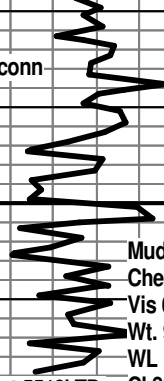
DOL; tan to lt brn, buff, lmy ip w/interbdd oolitic lmy dolo, scat foss frags also, poor to fair interxn por, minor vug por, occ oolitic cht, min fluor only, no stn or odor, ns.

DOL; tan to lt brn, buff, finely rhombic, v. lmy ip, bcm dense, abnt wh fresh cht, med yel min fluor, poor to fair porosity development, ns.

DOL; med brn, v. hd, lmy, interbdd dense dolomitic lmst, occ cherty, poor to no vis por, most tite, med yel min fluor, no stn odor, ns.



conn

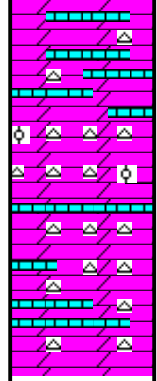


MudCo. Mud  
Check at 5504'  
Vis 64  
Wt. 9.0  
WL 13.2  
CFS. at 5518' TD. CI 8600  
PH 9.0  
LCM 4#

5500

5550

00



DOL; tan to lt brn, sucrosic, lmy, interbdd wh to off wh  
cht, some oolitic cht, most dense, poor interxln por,  
dull/med yel min fluor, no stn, ns.

DOL; tan to lt brn, sucrosic, lmy ip, interbdd cherty  
dolo, poor interxln por, med yel min fluor, no stn or  
odor, ns.

RTD. 5518' at 8:00 AM. 11/28/10

LTD. 5518' by Log Tech  
DIL, NEU/DEN

