

LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name: #1-4 White
Location: 2310' FSL & 520' FWL, Sec. 4-T28S-R18W, Kiowa Co., KS.
Licence Number: 15-097-21697
Spud Date: 7/6/2011
Surface Coordinates: 2310' FSL & 520' FWL, Sec. 4-T28S-R18W
Region: Einsel Field
Drilling Completed: 7/15/2011

Bottom Hole Same as Above
Coordinates:
Ground Elevation (ft): 2210' K.B. Elevation (ft): 2221'
Logged Interval (ft): 3400' To: 4870' Total Depth (ft): 4870'
Formation: Kinderhook at Total Depth
Type of Drilling Fluid: Freshwater/Gel to 3465'; Chemical Gel 3465' to 4870'

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 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

DST #1(Lansing 'A') 4224' - 4242' Test Times 15"-45"-45"-90" IFP Fair Blow built to 9", FFP Fair Blow built to 5.25", no Blowback on SI's; REC: 90' Gas in Pipe, 30' WCM(10%W, 90%M) CI 50,000, Mud 8,200, no oil shows; IFP 12-18#, ISIP 252#, FFP 14-27#, FSIP 397#, IHP 2070#, FHP 1949#, BHT 113 Deg. F.

DST #2(Mississippi Chert) 4775' - 4826' Test Times 15"-45"-15"-45" IFP Strong Blow BOB/15 Sec. Gas to Surface in 2 Min., Gauged 3.863 MMCFG, FFP BOB Blow - Gauged 4.151 MMCFG/15", spraying mist to heavy mist/10" of FFP, Blow would not bleed off during SI's; REC: 270' Total Fluid: 30' SWCM(4%W, 96%M), 180' GCM(2%G, 98%M), 60' GOCWM(12%G, 4%O, 8%W, 76%M) CI 8500, Mud 9200; IFP 745-844#, ISIP 1468#, FFP 744-856#, FSIP 1467#, IHP 2424#, FHP 2400#, BHT 118 Deg. F.

DST #3(Miss. Chert) 4826' - 4841' Test Times 15"-45"-30"-60" IFP Strong Blow BOB/15 Sec. Gas to Surface in 5 Min., Strong Blowback in 2" on ISI; FFP GTS throughout, Gauged 45.0 MCFG/30" of FFP - Flowed gassy oil to surface when tool shut in (= OTS in 45"). Dropped the bar, broke circ. sub pin and reversed fluids to reserve pit. REC: 4690' CGO(5%G, 95%O) API 29 Deg., 125 SW, CI 110,000; IFP 558-818#, ISIP 1476#, FFP 791-1321#, FSIP 1476#, IHP 2461#, FHP 2399#, BHT 129 Deg. F.

Comments

7/6/11 MIRU Sterling Drilling Co. Rig #2, Spud at 8:30 PM.; 7/7/11 TD. 543' - Circ. to run 8 5/8"; 7/8/11 Drilling at 1110'; 7/9/11 Drilling at 2441'; 7/10/11 Drilling at 3284'; 7/11/11 Drilling at 4009'; 7/12/11 TD. 4242' - TOH with DST #1; 7/13/11 Drilling at 4609'; 7/14/11 TD. 4826' - TIH for DST #2; 7/15/11 TD. 4841' - TIH after DST #3, drilled onto Total Depth at 4870' - ran Halliburton Logs; 7/16/11 RTD. 4870', LTD.

8 5/8" (23#) Surface Casing set at 539' w/400 sx.(Basic Energy Services). Cement did Circulate. PD. 10:00 AM. on 7/7/11.

Surveys: 0.75 Deg. at 543'(Surface Casing); 1 Deg. at 4242'(DST #1); 0.75 Deg. at 4826'(DST #2); 1.75 Deg. at 4870' RTD.

Pipe Strap at 4242'(DST #1): Strap 6.16' Short to the Board(Questionable Strap): no correction made to the Board.

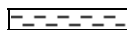



Pipe Strap at 4826'(DST #2): Strap 3.22' Short to the Board, no correction made to the Board.





After review of the Halliburton Logs, DST data, structural position and positive indications of commercial amounts of hydrocarbons, the operator elected to set new 5 1/2" Production Casing for completion in the Mississippi Chert.

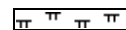

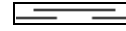
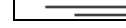
LOG TOPS:

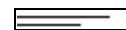


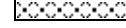
ROCK TYPES

	Anhy
	Bent
	Brec
	Cht

	Clyst
	Coal
	Congl
	Dol

	Gyp
	Igne
	Lmst
	Meta

	Mrlst
	Salt
	Shale
	Shcol

	Shgy
	Slstst
	Ss
	Till

ACCESSORIES

- MINERAL**
- Anhy
 - Arggrn
 - Arg
 - Bent
 - Bit
 - Breclfrag
 - Calc
 - Carb
 - Chtdk
 - Chtlt
 - Dol
 - Feldspar
 - Ferrpel
 - Ferr
 - Glau

- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

- FOSSIL**
- Algae
 - Amph
 - Belm
 - Bioclst
 - Brach
 - Bryozoa
 - Cephal
 - Coral
 - Crin
 - Echin
 - Fish
 - Foram
 - Fossil
 - Gastro
 - Oolite

- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

- STRINGER**
- Anhy
 - Arg
 - Bent
 - Coal
 - Dol
 - Gyp
 - Ls
 - Mrst

- Sltstrg
- Ssstrg

- TEXTURE**
- Boundst
 - Chalky
 - Cryxln
 - Earthy
 - Finexln
 - Grainst
 - Lithogr
 - Microxln
 - Mudst
 - Packst
 - Wackest

OTHER SYMBOLS

- POROSITY**
- Earthy
 - Fenest
 - Fracture
 - Inter
 - Moldic
 - Organic
 - Pinpoint

- Vuggy
- SORTING**
- Well
 - Moderate
 - Poor

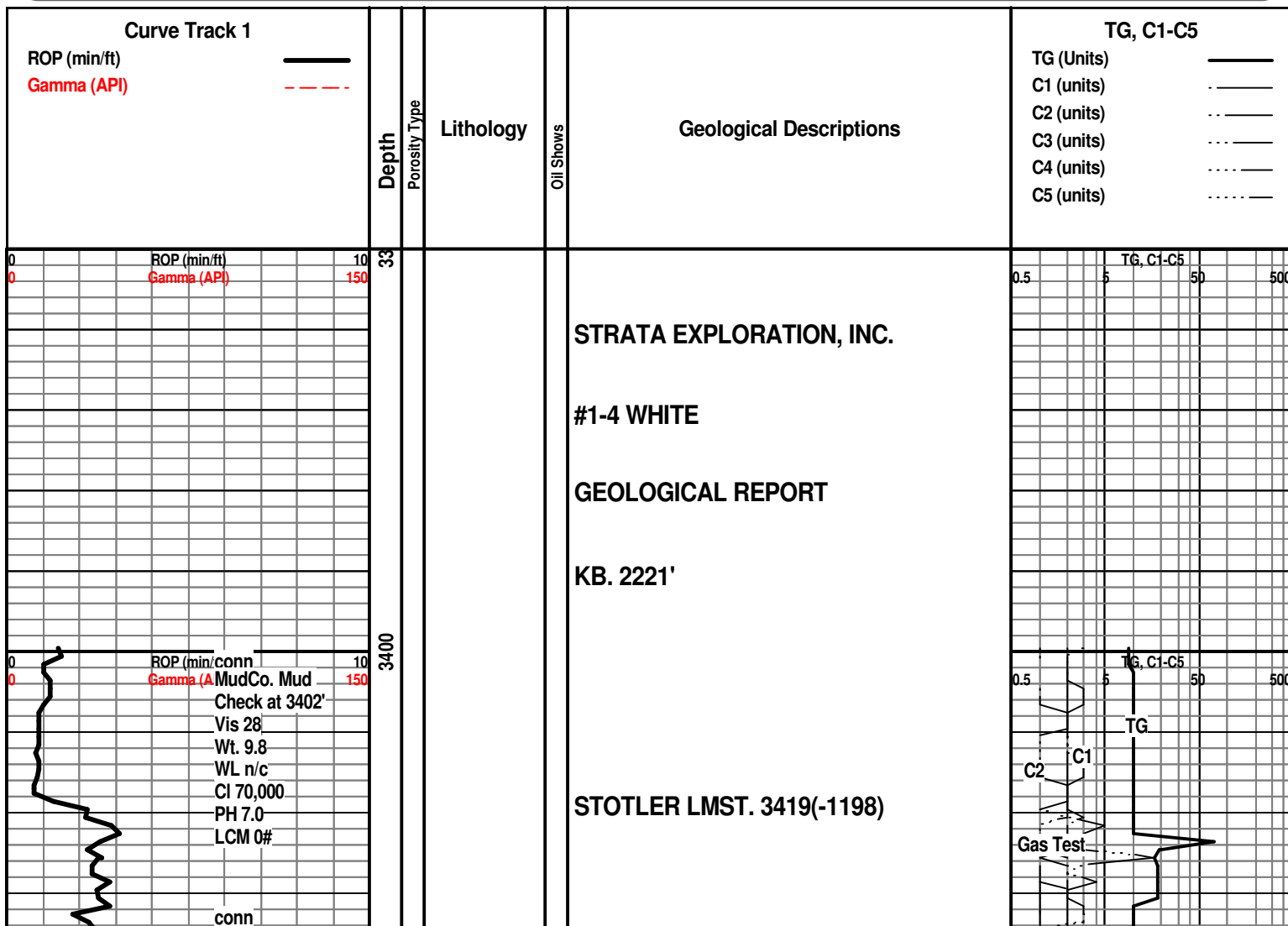
- ROUNDING**
- Rounded
 - Subrnd
 - Subang
 - Angular

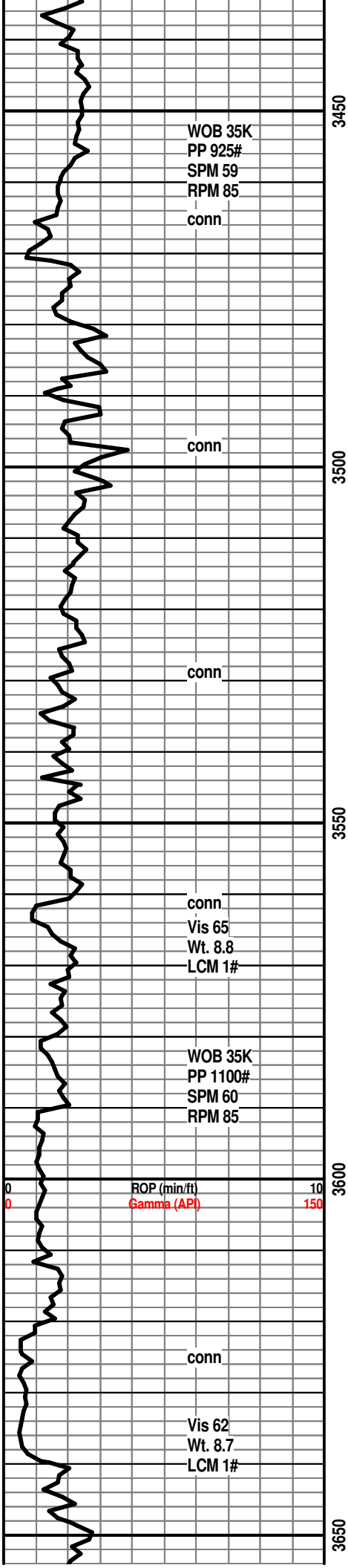
- OIL SHOW**
- Even

- Spotted
- Ques
- Dead

- INTERVAL**
- Core
 - Dst

- EVENT**
- Rft
 - Sidewall

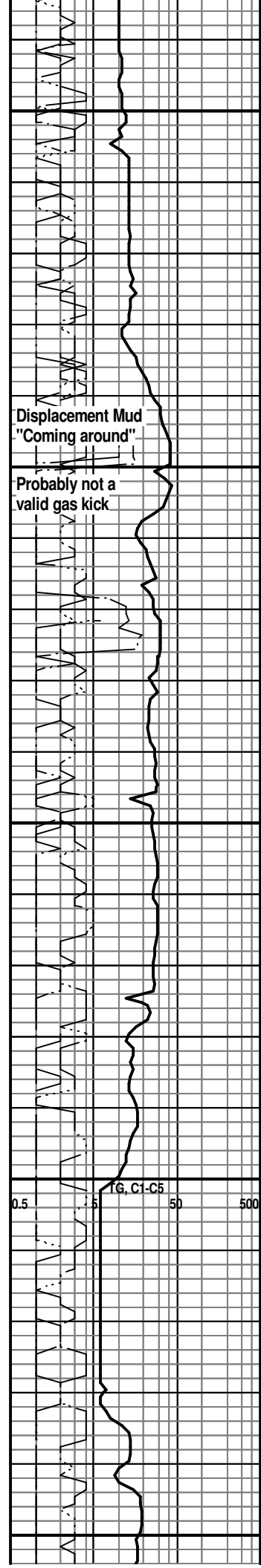


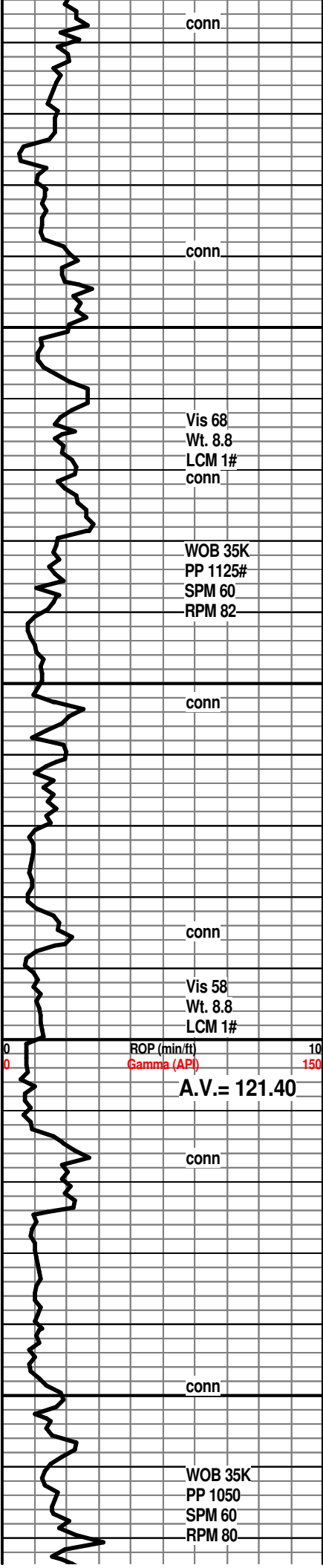


Begin Displacing Mud System at 3465'

Displacement done at 3497'

HOWARD 3618(-1397)



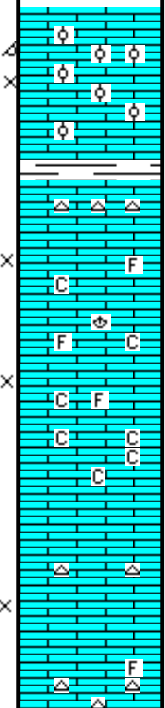


3700

3750

3800

3850



TOPEKA 3718(-1497)

START 10' Wet and Dry Samples at 3800'

LM; tan to cream, off wh, foss - oolitic ip, gd oomoldic por, scat lt yel min fluor, no stn or odor, ns.

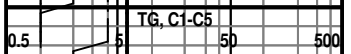
SH; med gy, grn, fiss

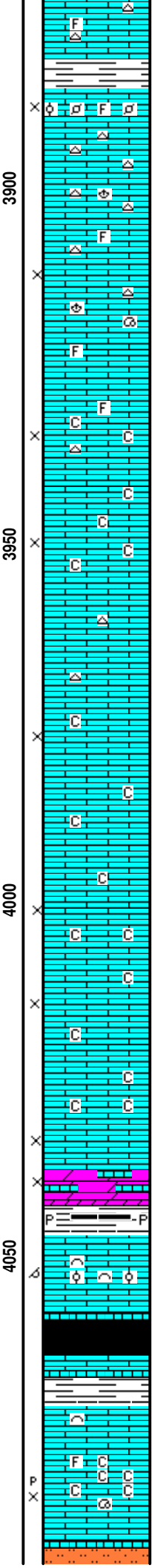
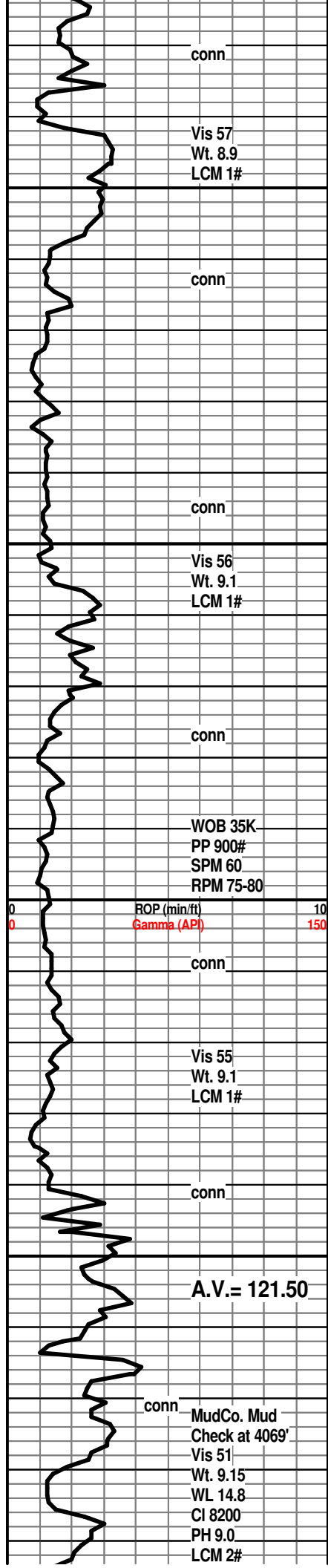
LM; med brn, dense, cherty ip, tite

LM; tan to buff, off wh, med xln to gran text, scat foss mat, fair interxln por, occ soft chalky mtx, no fluor, no stn or odor, ns.

LM; tan to buff, off wh, med xln, incr. chalky, scat cse spar calc xtals, dull yel fluor, ns.

LM; tan to lt brn, rare lt gy, f to med xln, scat wh to gy cht, poor interxln por, no fluor, ns.





LM; tan to lt brn, most dense, scat foss mat, occ cherty, no vis por, no fluor, ns.

SH; med gy, platy, smooth

LM; tan, buff, v. foss w/med xln lmst, gd interpart/interxln por, lt yel min fluor, no stn or odor, ns.

LM; med brn, hd, micritic, blocky, scat wh/gy cht, tite

LM; tan to lt brn, buff, f to med xln, occ foss, scat poor to fair vis interxln por, cherty ip, no flour, no stn or odor, ns.

LM; tan to cream, off wh, most med xln, scat cse xln, chalky - soft ip, fair to gd interxln por, occ spar calc xtals, dull to lt yel min fluor, no stn or odor, ns.

LM; tan to lt brn, scat foss mat, blocky, rare gy cht, no vis por, no stn, ns.

LM; tan to off wh, wh, f to med xln, chalky mtx, interbdd tan oolitic lmst w/poor to fair moldic por, dull yel min flour, no stn odor, ns.

LM; off wh, tan, med to cse xln, scat cse spar calc xtals, occ chalky, dull yel min fluor, ns.

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

DOL; tan to lt brn, sucrosic, lmy, fair interxln por, no stn or odor, dull yel min fluor, ns.

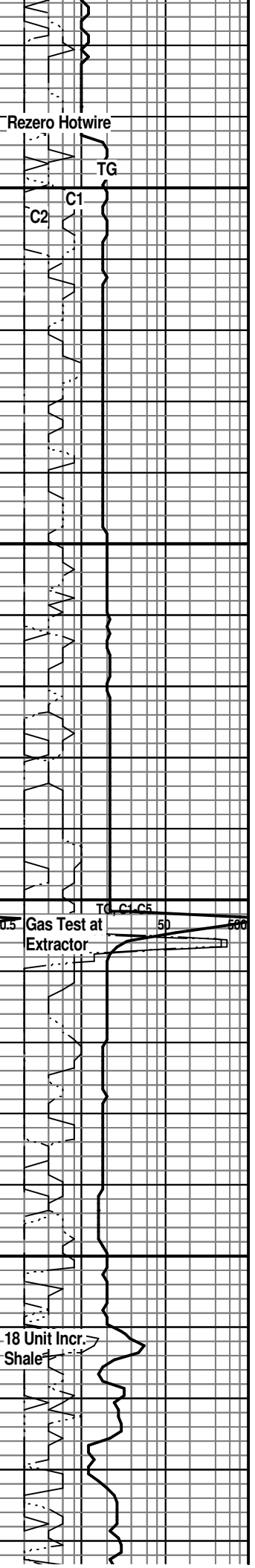
SH; dk gy, rare blk, fiss, pyr ip.

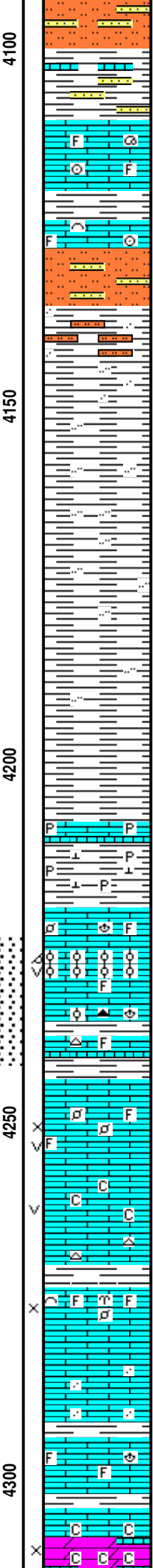
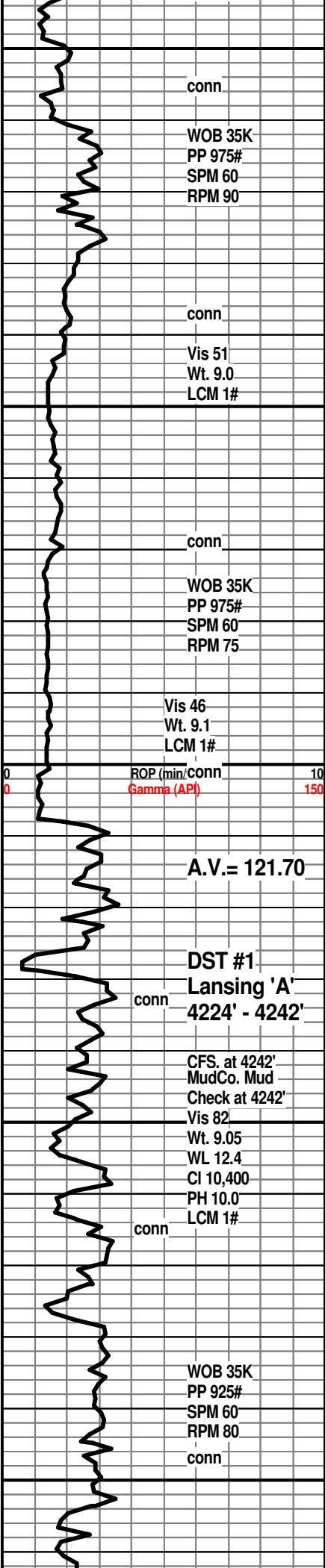
LM; tan to lt brn, foss ip - scat finely oolitic lmst w/fair oomoldic por, most dense, no fluor, no stn or odor, ns.

HEEBNER SHALE 4059(-1838)
SH; blk, carb ip, soft to brittle, trc gas
LM; med/dk brn, dense, micritic

TORONTO 4071(-1850)
LM; tan to off wh, cream, most f to med xln, scat foss mat, much soft chalky mtx, fair to gd vis p-p and interxln por in some, lt yel min fluor only, no stn or odor, ns.

DOUGLAS SHALE 4091(-1870)





SLTST; lt gy, grn, fiss, mica, sandy ip.

SH; lt gy, platy, silty to sandy, interbdd vf gr qtz ss strngs, mica ip

LM; med brn, hd, foss ip, well cem, no vis por, scat lt yel min fluor, no stn or odor, ns.

LM; tan to med brn, csely foss, hd, tite, ns.

SLTST; lt gy, interbdd v. hd vf gr qtz ss strngs, firm, rarely mica

SH; lt to occ med gy, firm, silty ip, platy

SH; lt to med gy, fiss to flakey, silty ip.

SH; med gy, smooth, flakey ip.

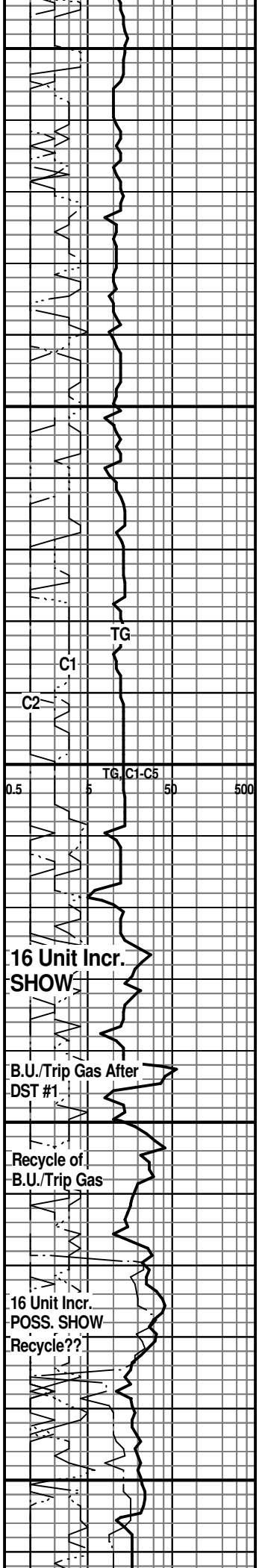
BROWN LMST. 4208(-1987)
LM; med brn, hd, occ pyr, dense
SH; med gy, calc, firm, occ pyr

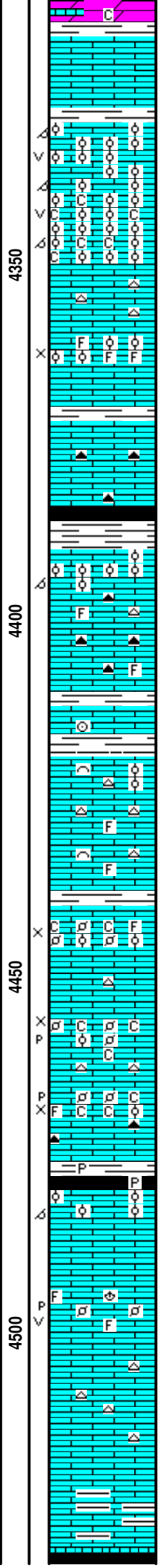
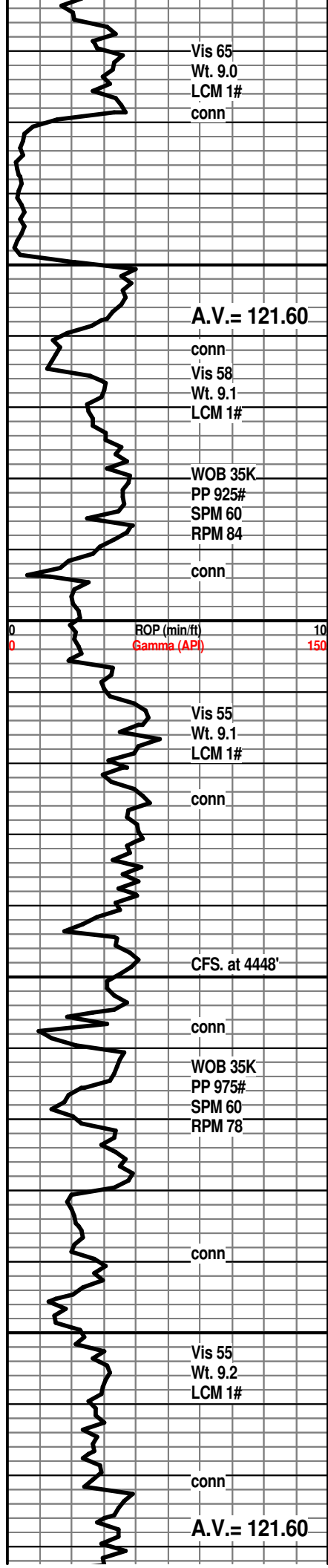
LANSING 'A' 4220(-1999)
LM; tan to off wh, foss, well cem, lt yel fluor, ns.
LM; off wh, oolitic, gd oomoldic por, rare vug por, med-brite yel fluor, faint odor, rare lt brn oil stn, gas bubbles, weak/no cut
LM; tan to off wh, lt brn, foss ip, occ cherty, tite

DST #1: Lansing 'A' 4224' - 4242'

LANSING 'B' 4244(-2023)
LM; tan to lt brn, foss, scat poor to fair interpart/occ vug por, lt yel fluor, no vis stn or odor, no cut, ns.
LM; tan, lt gy, lt gy brn, f to med xln, occ spar calc xtals, fair/gd vug por, minor chalky soft mtx, lt yel min fluor, no stn or odor, ns.
SH; grn, gy grn, fiss, smooth
LM; tan to lt gy, foss, med xln, gd interxln por, some sucrosic text, lt yel fluor, no stn odor, quest. gas bubbles, no cut
LM; tan to lt brn, most dense, micritic, some sandy to gritty text, tite
LM; tan to lt brn, foss ip. - well cem, most blocky, no vis por, no fluor, ns.
SH; med gy, fiss - flakey

DOL; off wh, tan, finely rhombic to sucrosic, lmy, chalky mtx ip, fair interxln por, dull to lt yel fluor, no stn or





odor, no gas kick, ns.

LM; med to dk brn, dense, micritic, blocky, v. hd

LM; tan to lt brn, buff, oolitic, med to occ lrg molds, gd oomoldic w/occ lrg vug por, brittle ip, lt to med yel min fluor, no stn or odor, no gas kick, barren, ns.

LM; lt to med brn, oolitic, med size molds, brittle ip, chalky, dull yel min fluor only, ns.

LM; tan to lt brn, dense, micritic, occ wh cht, tite

LM; tan to cream, lt brn, foss - partly oolitic, small to med size molds, fair interpart por, lt yel min fluor, no stn or odor, ns.

LM; tan to lt brn, hd, blocky, interbdd dk gy to smoky cht, no vis por, ns.

SH; blk, dk gy, fiss

LANS/KC. 'H' 4390(-2169)
LM; tan to lt brn, occ med brn, faintly oolitic, poorly dev. oomoldic por, poor interconn, dull yel min fluor, no stn or odor, barren, ns.

LM; med brn, micritic, dk brn/smoky cht, tite

SH; med gy grn, platy, smooth

LM; lt to med brn, hd, foss ip, well cem, scat tan to off wh cht, no vis por, ns.

LM; tan to cream, lt brn, foss ip, hd - blocky, no vis por, rare tan to amber cht, tite

KC. 'I' 4440(-2219)
LM; tan to cream, buff, finely pelletal, scat small oolites, chalky - soft mtx ip, poor to fair interpart por, rare lt yel min fluor only, no stn or odor, ns.

LM; tan to buff, off wh, finely pelletal - foss frags, fair interpart/p-p por, minor chalky mtx, lt yel fluor, no stn or odor, ns.

LM; tan to cream, buff, foss, fair interpart & p-p por, chalky - soft, dull to lt yel fluor, no stn or odor, no sample shows

SH; dk gy-blk, fiss, pyr ip.

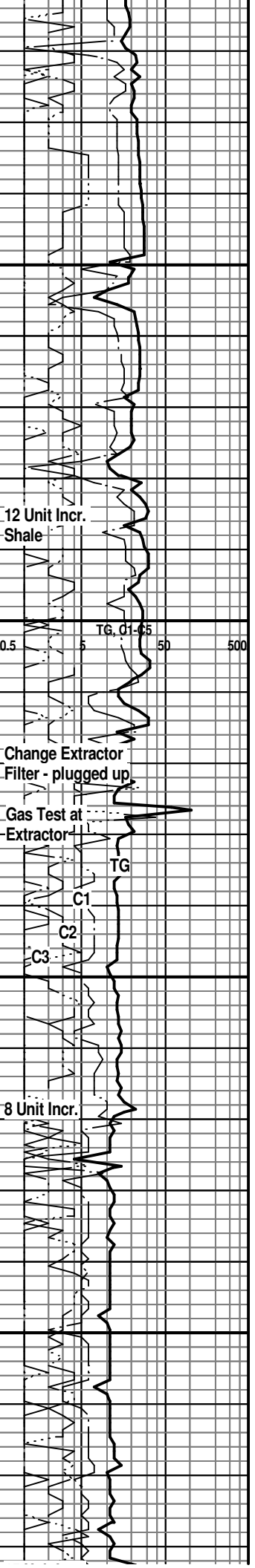
KC. 'J' 4480(-22597)
LM; off wh, finely oolitic, poor oomoldic por, occ soft chalky mtx, no fluor, no stn or odor, ns.

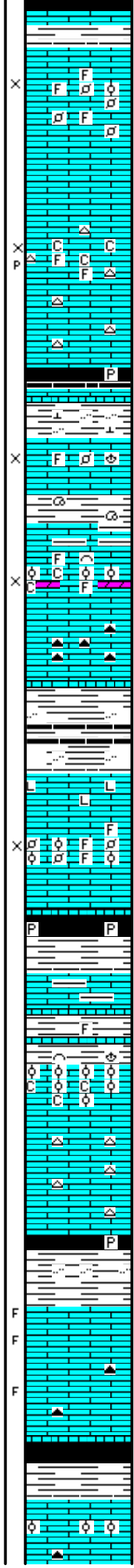
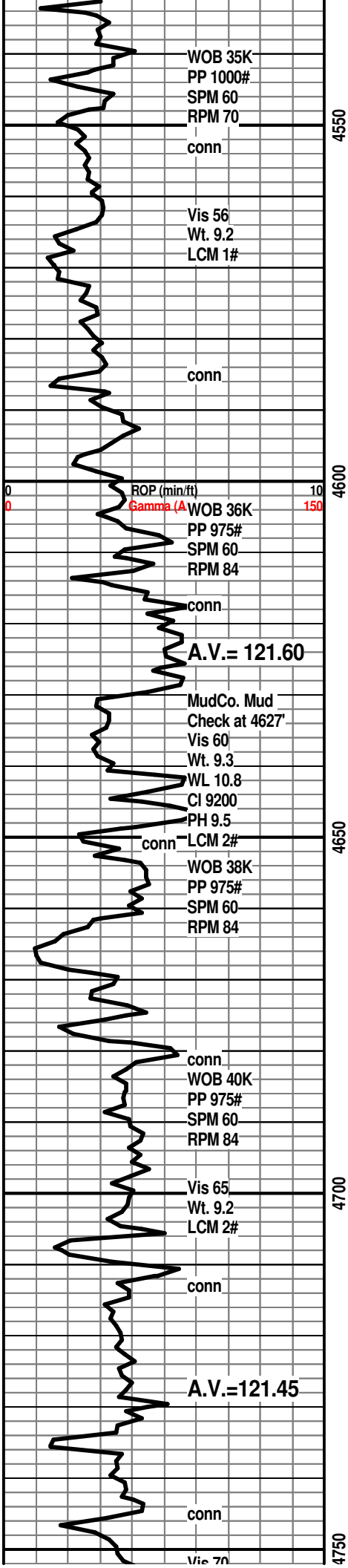
LM; tan to lt brn, off wh, foss, scat fairly well dev. p-p & vug por, no fluor, no stn or odor, ns.

LM; tan to off wh, cream, most dense, micritic, blocky, scat tan to gy cht, tite

LM; dk brn, dk gy brn, dense, argil, micritic, tite

STARK SHAI F 4531(-2310)





SH; blk, carb ip, trc gas, soft to blocky

SWOPE 4539(-2318)
LM; tan to lt brn, foss - finely pelletal ip, scat fair interpart por, trc oolitic lmst, lt yel fluor, no stn or odor, ns.

LM; med to dk brn, hd, blocky, tite

LM; off wh, wh, tan, fxln, fair interxln w/scat p-p por, chalky soft mtx, dull yel min fluor, interbdd wh foss cht, ns.

LM; lt to med brn, dense, blocky, scat off wh/gy cht, tite

SH; blk, fiss, trc pyr

SH; dk gy grn, firm, occ silty, calc

HERTHA 4594(-2374)
LM; lt brn, tan, foss ip, most well cem, lt yel min fluor, poor to fair interpart por, no stn, ns.

SH; dk gy, gy brn, lmy, hd, foss ip.

LM; dk brn, gy brn, argil, tite

LM; tan to lt brn, buff, foss - partly oolitic, interbdd sucrosic text, dolomitic ip, fair interpart/interxln por, minor soft chalky mtx, lt yel fluor, ns.

LM; dk brn, hd, dk brn foss cht, tite

BASE KANSAS CITY 4629(-2408)
SH; varic, brn, brick red, grn, dk gy, blk, fiss to flakey, occ silty

PLEASANTON 4641(-2420)
LM; med to dk brn, most dense, litho, hd, ns.

LM; tan to lt brn, off wh, foss - oolitic ip, most well cem, scat foss hash, poor to fair interpart por, lt yel fluor, no stn or odor, no gas kick, ns.

SH; blk, dk gy, platy, dissem. pyr

MARMATON 4669(-2448)
LM; tan to buff, lt brn, pale grn tint - interbdd grn shaly lmst, most dense, no stn, ns.

SH; grn, gy grn, platy, occ foss

LM; lt brn, tan, oolitic, most well cem, poor interpart por, most dense, occ soft chalky mtx, lt yel min fluor, no stn or gas kick, ns.

LM; tan to lt brn, buff, micritic, blocky, interbdd amber/pale org to opaque fresh cht, no por, ns.

SH; blk, carb, gassy ip, rare pyr

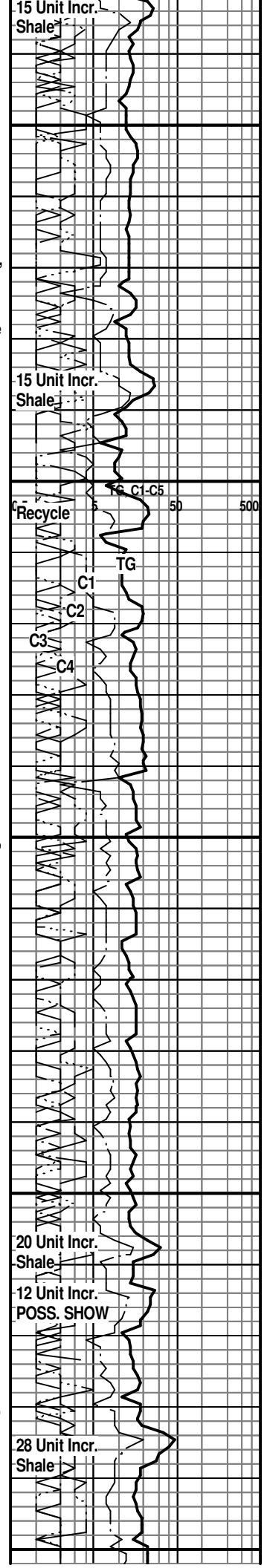
SH; med gy to gy grn, firm, occ silty

PAWNEE 4716(-2495)
LM; tan to med brn, scat foss mat, most well cem, occ spar calc fld fracs, occ lt yel fluor, no vis stn, no odor, no cut, no sample shows

LM; lt to med brn, blocky, scat med yel flour, faint odor, quest. oil stn - trc oily sheen on frac faces, occ dk gy to smoky cht

SH; blk, carb ip, gassy, brittle

LM; lt to med brn, foss ip, most dense, blocky, interbdd finely oolitic lmst, looks tite, no vis por, no stn or odor, ns.



vis 70
Wt. 9.3
LCM 1#

conn
WOB 38K
PP 900#
SPM 56
RPM 75
A.V.= 120.25

ROP (min/ft)
conn (AP)

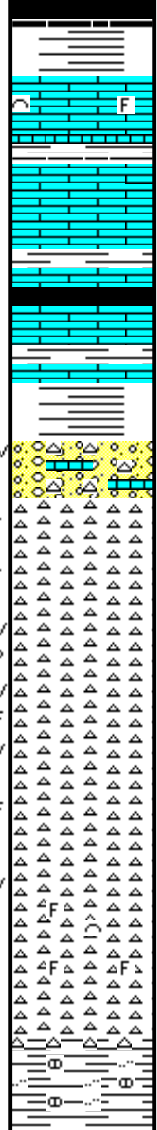
DST #2
Miss. Chert
4775' - 4826'

R= Rough
Drilling

CFS. at 4826'
DST #3
Miss. Chert
4826' - 4841'
CFS. at 4841'

Vis 62
Wt. 8.9
LCM 1.5#

CFS. at 4870' RTD.



CHEROKEE SHALE 4752(-2531)

SH; blk, carb ip, interbdd varic shales

LM; lt gy to lt brn, tan, med xln w/scat foss mat, well cem, no vis por, occ lt yel fluor, no stn, ns.

LM; tan to lt brn, fxln, scat foss mat - well cem, few pcs. w/blk tar/gilsonite - dead oil, no live shows, dull yel fluor, no gas kick

SH; dk gy to blk, fiss

LM; off wh, tan, foss ip, scat blk tar/dead oil only, lt yel fluor, no gas kick, no live shows

CONGL; brn weathered lmst, much grn shale, some varic sh, off wh/brn foss weath cht w/blk tar/ gil, occ vug por, faint odor, rare med gr ss

MISS. CHERT 4805(-2584)

CHT; wh, off wh, opaque, pred. fresh - sharp, scat dk brn/blk spotted stn, no F.O, v. faint odor, scat med yel fluor, mostly fracture por

CHT; wh, fresh and trip cht, fair/gd p-p and trip por, frags in fresh cht, occ lrg vug por w/oil stn in vugs, scat to abnt brite yel fluor, SFO, gas bubbles, faint odor, fair/gd cut

DST #2: Miss. Chert 4775' - 4826'

CFS.@4841': CHT; wh, opaque, much fresh cht w/weath.-trip cht w/gd trip por, much brite yel fluor, SFO, gas bubbles, decr. show in fresh frac. cht, faint odor, scat/even med brn live oil stn, stn on frac faces

DST #3: Miss. Chert 4826' - 4841'

LM; wh, off wh, lt gy, foss ip, pred fresh cht, scat lrg vug por, decreasing shows of oil and gas, med to occ brite yel fluor, scat/spotty med brn oil stn, faint odor, fair to no cut

KINDERHOOK SHALE 4861(-2640)

SH; med to dk gy, gy grn, firm, platy, occ rnd nodular incl, rarely silty

RTD. 4870' at 10:15 AM. 7/15/2011

LTD.

Halliburton DIL, NEU/DEN, Microlog and Imaging Log

6 Unit Incr.
+ Recycles

TG, Cl-C6
0.5 5 50 500

28 Unit Incr.

37 Unit Incr.

51 Unit Incr.

SHOW

Mud heavy gas cut
after DST #2

1000 Unit
Gas Kick

OIL/GAS IN MUD
AFTER DST #3