

LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name: #1-4 Sampson
Location: 500' FNL & 335' FWL, Sec. 4-T28S-R18W, Kiowa Co., KS.
Licence Number: 15-097-21684-0000 Region: Einsel Field Ext.
Spud Date: 2/25/2011 Drilling Completed: 3/5/2011
Surface Coordinates: 500' FNL & 335' FWL, Sec. 4-T28S-R18W

Bottom Hole Same as above
Coordinates:
Ground Elevation (ft): 2203' K.B. Elevation (ft): 2212'
Logged Interval (ft): 3400' To: 4857' Total Depth (ft): 4857'
Formation: Kinderhook at Total Depth
Type of Drilling Fluid: Freshwater/Gel to 3308'; Chemical Gel 3308' to TD.

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') 4216' - 4232'(Corrected Depths to LOG) Test Times 15"-45"-45"-90" IFP Strong Blow BOB/5 sec., FFP Strong Blow BOB/3 sec., Gas To Surface in 35" - Volume TSTM; Strong BOB Blowback on FSI; REC: 3936' GIP, 118' GOCWM(15%G, 25%O, 45%W, 15%M), 180' MSW(90%W, 10%M), CI 50,000 Mud 4000; IFP 48-77#, ISIP 1267#, FFP 100-174#, FSIP 1169#, IHP 2011#, FHP 2016#, BHT 118 Deg. F.

DST #2(Miss. Chert) 4761' - 4817'(Corrected Depths to LOG) Test Times 15"-137" Strong Blow BOB/5 sec. Gas to Surface/5"(No gauge available), slug of mud/15". Surface choke plugged with cottonseed hulls- unplugged choke, clear 2" line, started flowing gassy 35 Deg. API oil at surface. Close the BOP, drop bar and reverse out approx. 25-30 Bbl gassy oil; REC: 122' MO(95%O, 5%M) below circulating sub, No Water; IFP 1006-1248#, ISIP 1484#, No FFP or FSIP, IHP 2316#, FHP 2240#, BHT 116 Deg. F.

Comments

2/25/11 MIRU Sterling Drilling Co. Rig #4, Spud at 6:45 PM.; 2/26/11 TD. 520' - Running 8 5/8" Surface Casing; 2/27/11 Drilling at 1490'; 2/28/11 Drilling at 2740'; 3/1/11 Drilling at 3440'; 3/2/11 Drilling at 4060'; 3/3/11 TD. 4234' - Rig Service/Preparing to TIH after DST #1; 3/4/11 Drilling at 4590'; 3/5/11 TD. 4819' - DST #2, reached TD. at 4:15 PM; 3/6/11 RTD. 4857' - LTD 4854' - TOH/LDDP to run 5 1/2" Production Casing.

Set 8 5/8"(23#) Surface Casing at 517' w/400 sx/(Basic Energy Services). Cement Did Circulate. PD. 8:15 AM. 2/26/11.

Set 5 1/2"(15.5#) Production Casing at 4850' w/200 sx. "Strata Blend"(Basic Energy Services). PD. 5:00 PM. 3/6/11.

Surveys: 0.75 Degree at 520'(Surface Casing); 0.25 Deg. at 4234'(DST #1); 0.75 Deg. at 4819'(DST #2).


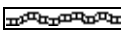
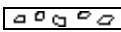
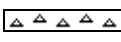
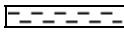







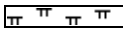

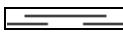
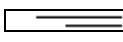
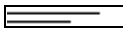



Pipe Strap at 4234'(DST #1): Strap 1.97' Short to the Board, no correction made to the Board.

After review of the Halliburton Logs, DST's, sample data, and positive shows of commercial amounts of hydrocarbons, the operator elected to set new 5 1/2"(15.5#) Production casing for completion in the Mississippi Chert.








































































NOTE: This log was shifted upward 2' for correlation purposes with the Halliburton LOGS.

LOG TOPS: Chase 2450(-238), Stotler Lmst. 3410(-1198), Howard 3617(-1405), Heebner Shale 4050(-1838), Toronto 4062(-1850), Brown Lmst. 4206(-1994), Lansing 'A' 4214(-2002), Lansing 'B' 4238(-2026), Lans/KC. 'H' 4376(-2164), KC 'I' 4423(-2211), Swope 4529(-2317), Hertha 4576(-2364), Base Kansas City 4607(-2395), Pleasanton 4624(-2412), Marmaton 4650(-2438), Pawnee 4700(-2488), Cherokee Shale 4736(-2524), Mississippi Chert 4784(-2572), Kinderhook Shale 4848(-2636).

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

MINERAL  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	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
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OTHER SYMBOLS

- POROSITY**
- [E] Earthy
 - [B] Fenest
 - [F] Fracture
 - [X] 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

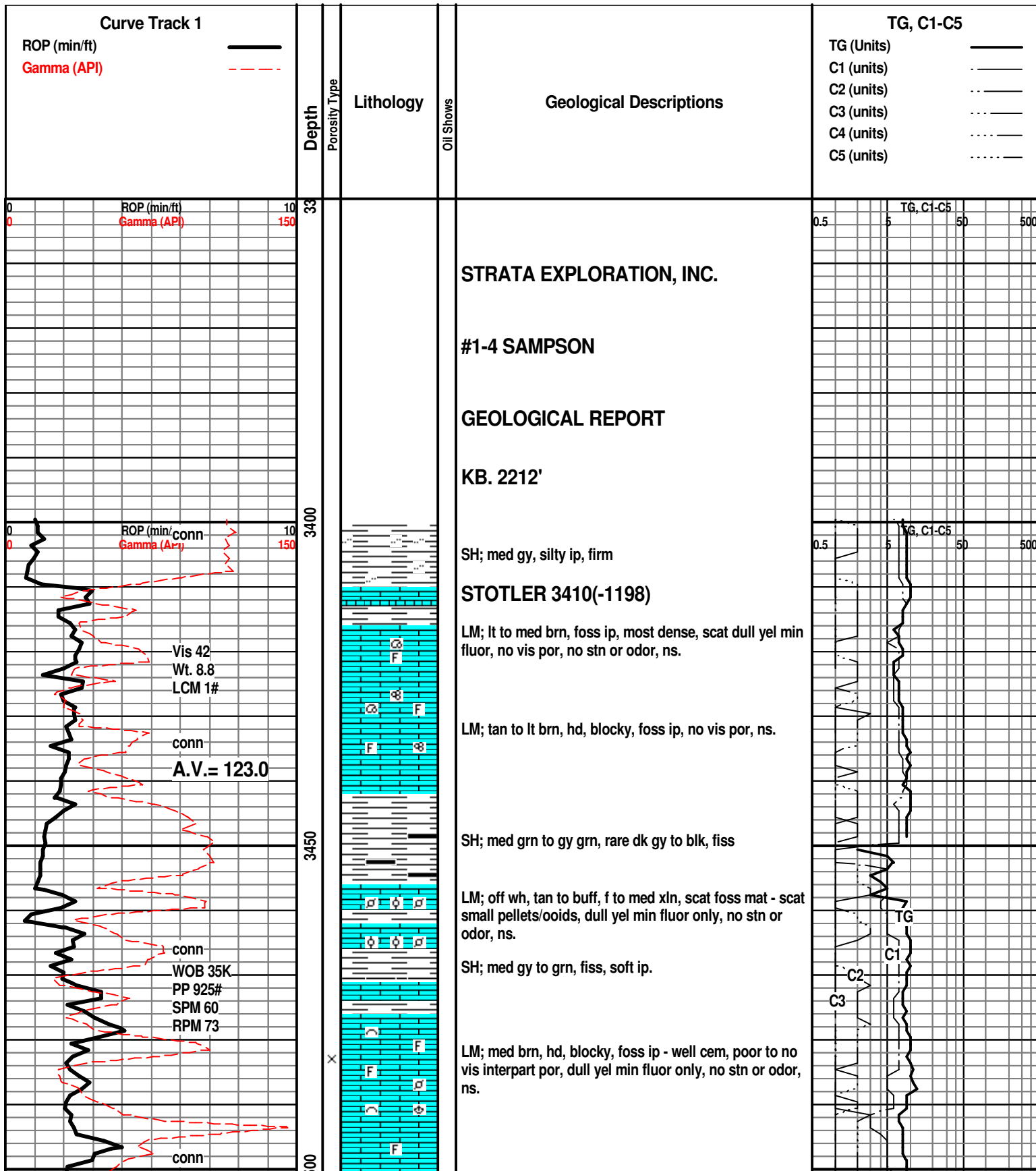
OIL SHOW

- [●] 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)

STRATA EXPLORATION, INC.

#1-4 SAMPSON

GEOLOGICAL REPORT

KB. 2212'

SH; med gy, silty ip, firm

STOTLER 3410(-1198)

LM; lt to med brn, foss ip, most dense, scat dull yel min fluor, no vis por, no stn or odor, ns.

LM; tan to lt brn, hd, blocky, foss ip, no vis por, ns.

SH; med grn to gy grn, rare dk gy to blk, fiss

LM; off wh, tan to buff, f to med xln, scat foss mat - scat small pellets/ooids, dull yel min fluor only, no stn or odor, ns.

SH; med gy to grn, fiss, soft ip.

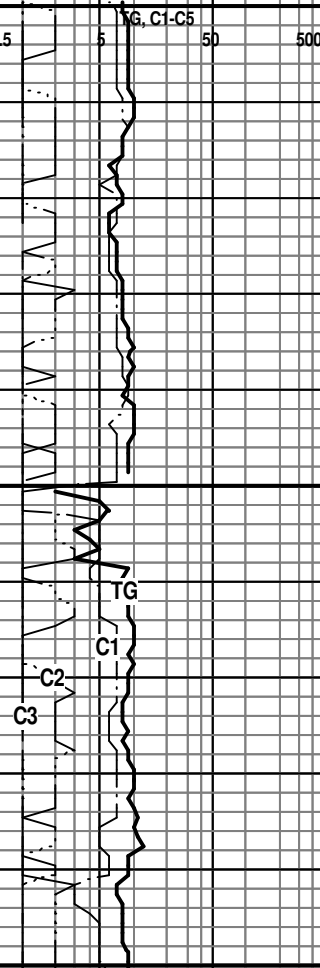
LM; med brn, hd, blocky, foss ip - well cem, poor to no vis interpart por, dull yel min fluor only, no stn or odor, ns.

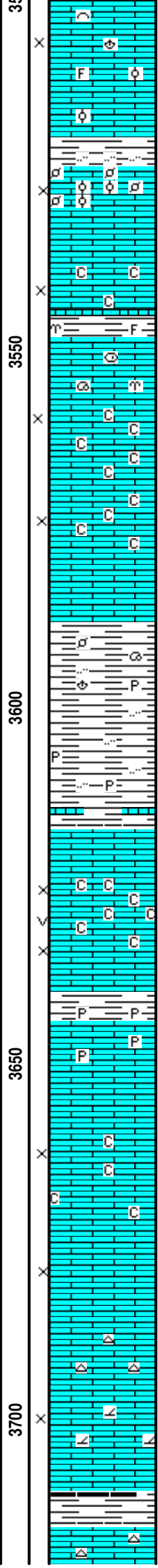
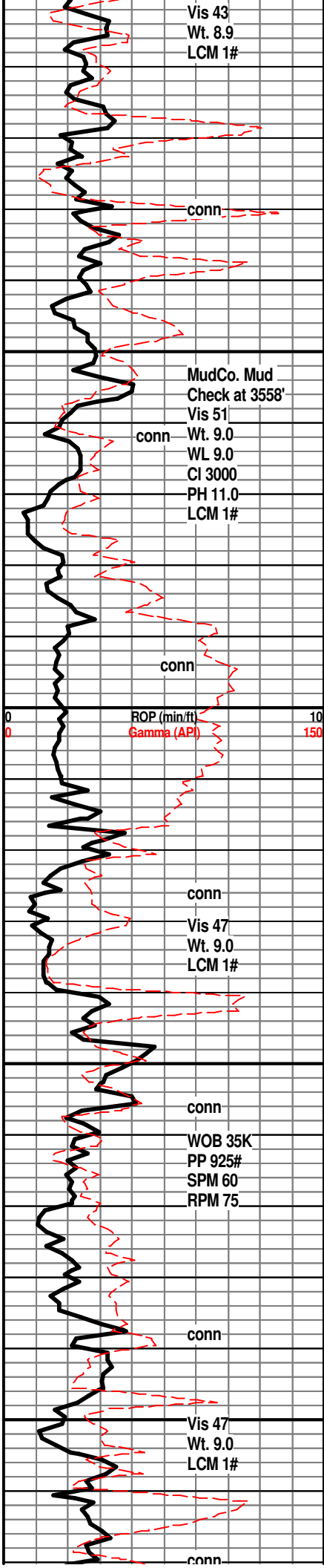
Vis 42
Wt. 8.8
LCM 1#

conn
A.V.= 123.0

conn
WOB 35K
PP 925#
SPM 60
RPM 73

conn





LM; off wh, tan to lt brn, scat foss mat, few ooids, other foss hash, most well cem, scat poor interpart por, rare dull yel min fluor, ns.

SH; med gy, silty ip.

LM; tan to pale yel, abnt foss pellets/ooids, med yel fluor, scat fair interpart por, no stn or odor, no gas kick, ns.

LM; off wh, tan, buff, cse xln w/occ soft chalky mtz, fair interxln por, lt yel fluor, no stn or odor, poss gas kick, no sample shows

SH; grn, gy grn, foss ip.

LM; tan to off wh, wh, foss to med xln, fair interxln por, occ soft chalky mtz, dull to lt yel min fluor, no stn or odor, ns.

LM; off wh, wh, fxln to sucrosic text, chalky mtz, gd interxln por ip, soft, dull yel min fluor, no stn or odor, no gas kick, ns.

SH; med to dk gy, foss ip, firm

SH; med gy, pyr ip, platy, occ silty, interbdd hd lmy shale

HOWARD 3617(-1405)

LM; tan to off wh, cream, med xln to occ gran text, much soft chalky mtz, fair to gd interxln w/scat vug por, lt yel fluor, no stn or odor, no gas kick, ns.

SH; med gy, grn, firm, occ pyr

LM; med/dk brn, hd, micritic, occ pyr, tite

LM; tan to buff, lt brn, fxln to med xln, fair to gd interxln por, scat soft chalky mtz, occ sucrosic lmst w/gd interxln por, dull yel fluor, no stn or odor, ns.

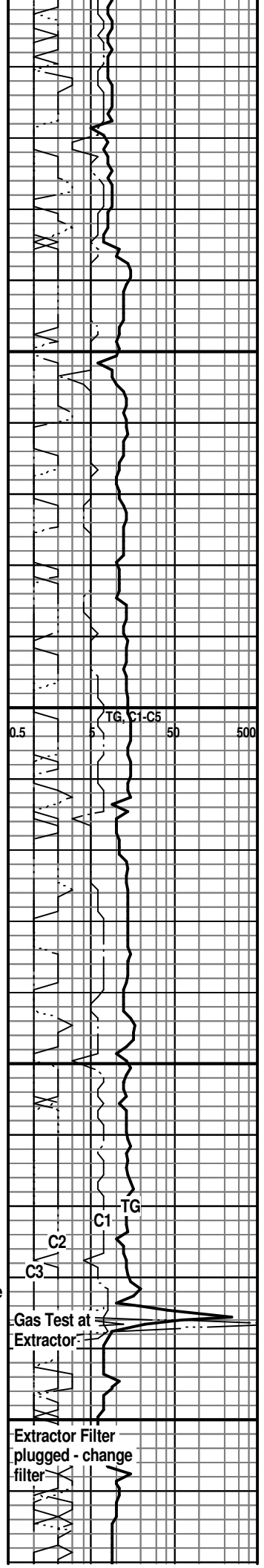
LM; tan to lt brn, gran to med xln, gd interxln por, scat foss mat, dull to lt yel fluor, no stn or odor, interbdd cse xln spary lmst, ns.

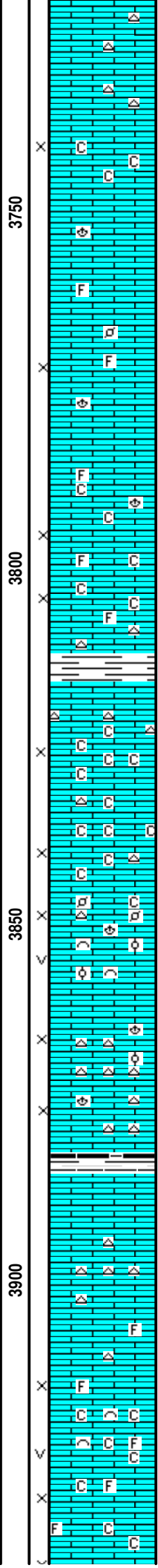
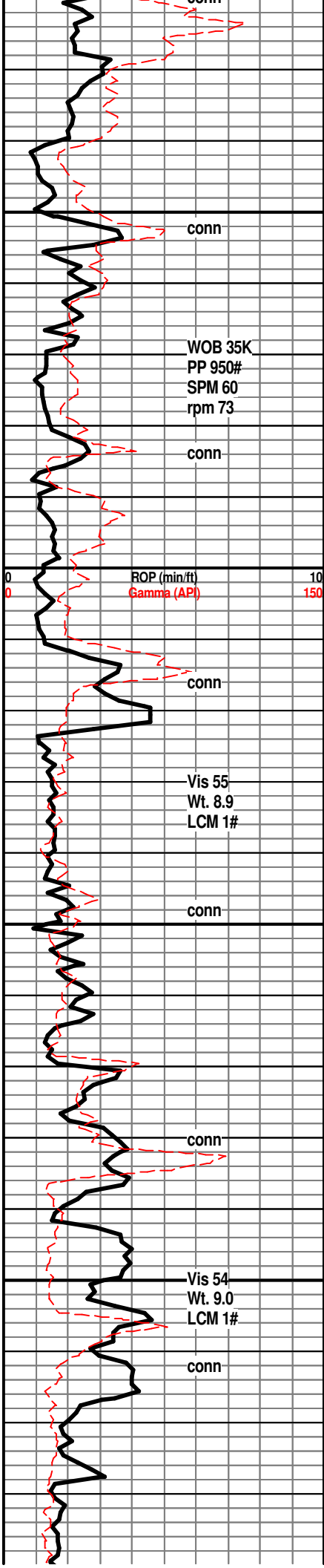
LM; tan to lt brn, sucrosic to fxln, partly dolomitic, gd interxln por, lt yel fluor, no stn or odor, ns.

SH; dk gy, occ blk, fiss

TOPEKA 3715(-1503)

LM; tan to lt brn, gy brn, shaly ip, some dense blocky





lmst, no vis por, no fluor, interbdd gy cht, ns.

LM; tan to off wh, buff, fxln, much soft chalky mtx, fair interxln por, minor gy cht, lt yel fluor, no stn or odor, n.s

WOB 35K
PP 950#
SPM 60
rpm 73

LM; tan to lt brn, occ buff, f to med xln, scat fair interxln por, occ foss, scat dull to lt yel min fluor only, no stn or odor, ns.

conn

LM; tan to cream, off wh, f to med xln, scat foss mat, fair to gd interxln por, chalky ip, occ lt yel fluor, no stn or odor, barren, ns.

conn

SH; dk gy grn, fiss

LM; off wh, tan to cream, f to med xln, fair to gd interxln por, much soft chalk and chalky mtx, dull yel min fluor, occ cherty, ns.

Vis 55
Wt. 8.9
LCM 1#

LM; tan to lt brn, foss to gran text, well dev. interxln and interpart/vug por, lt yel min fluor only, no stn, ns.

conn

LM; off wh, lt gy, f to med xln, scat foss mat, bands of wh to off wh cht, fair interpart por, bcm tite, occ lt yel min fluor, ns.

SH; dk gy to blk, firm, carb ip.

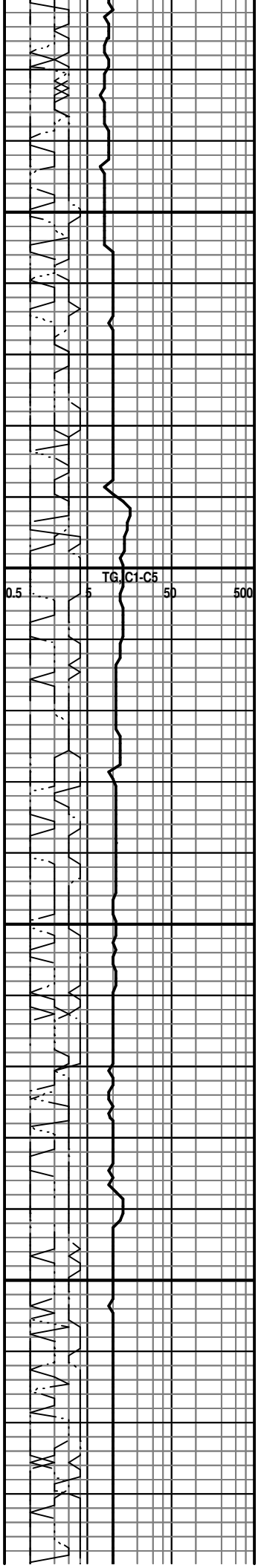
Vis 54
Wt. 9.0
LCM 1#

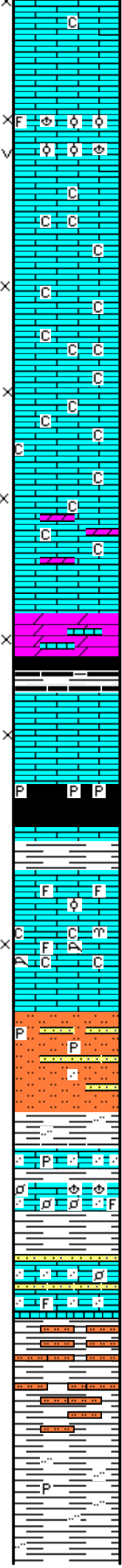
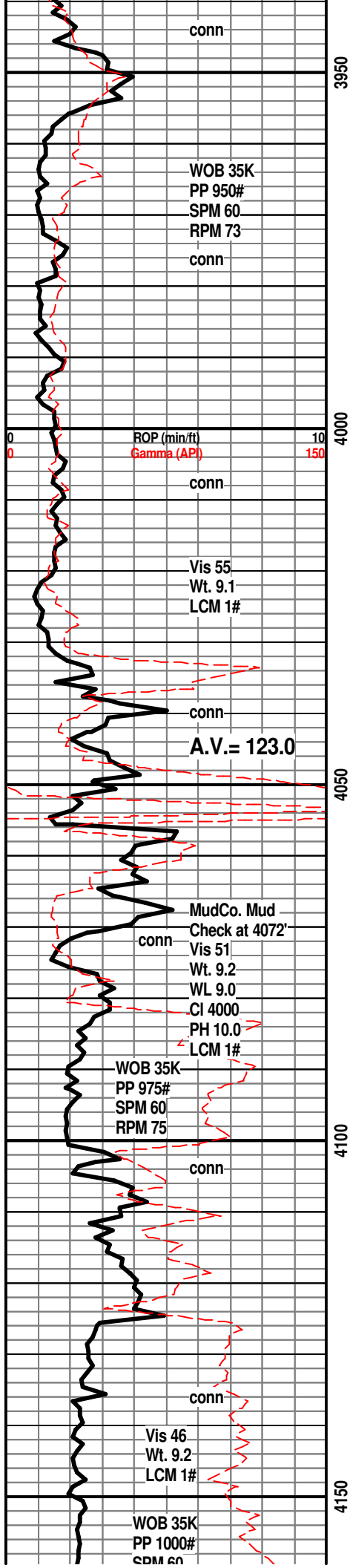
LM; tan to buff, lt brn, most dense, micritic, occ cherty, no vis por, ns.

conn

LM; tan to lt gy, buff, foss, scat well dev. interpart and vug por, minor chalky mtx, dull yel min fluor, no stn or odor, no gas kick, ns.

LM; tan to cream, rare lt gy, f to med xln, occ gran, gd interxln por. minor chalkv mtx. dull to lt vel min fluor.





ns.

LM; lt brn, cse xln, well dev. vug por, scat foss mat - oolitic ip, med yel min fluor, no stn or odor, no gas kick

LM; tan to lt brn, buff, off wh, med to occ cse xln, gd interxln por, occ chalky - soft, dull yel min fluor, no stn or odor, ns.

LM; tan to lt brn, buff, med xln, chalky mtx ip, interbdd sucrosic text dolo. lmt, fair to gd interxln por, dull yel min fluor only, no stn or odor, ns.

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

SH; dk gy, trc blk, fiss

LM; tan to lt brn, off wh, med xln w/occ cse spar calc xtals, fair/ poor interxln por, dull yel min fluor only, no stn or odor, ns.

HEEBNER SHALE 4050(-1838)
SH; blk, carb ip, occ pyr, trc gas
LM; med to dk brn, hd, micritic

TORONTO 4062(-1850)
LM; tan to off wh, fxl, scat well cem foss, ns.

LM; tan to off wh, cream, med xln, scat foss mat, chalky - soft, fair interxln/interpart por, dull yel min fluor, no stn or odor, ns.

DOUGLAS SHALE 4082(-1870)
SLTST; lt gy, fiss, interbdd vf to f gr qtz mica occ pyr ss.

SH; lt to med gy, fiss, occ silty

LM; med gy, sandy, pyr ip, hd

LM; dk gy brn, dk brn, v. foss-well cem, pelletal and hash, sandy ip, lt yel fluor, no stn, ns.

LM; med gy, sandy, foss ip, interbdd lmy ss, no vis por, tite, ns.

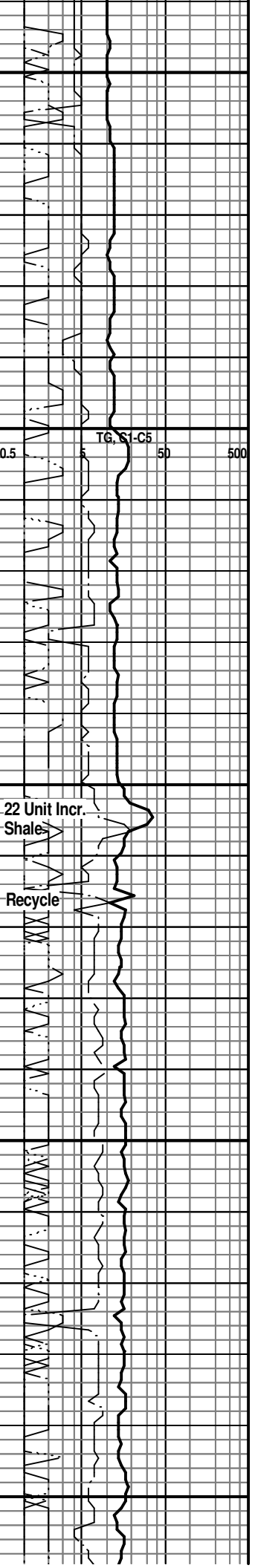
SH; lt to med gy, silty, interbdd sltst, occ mica

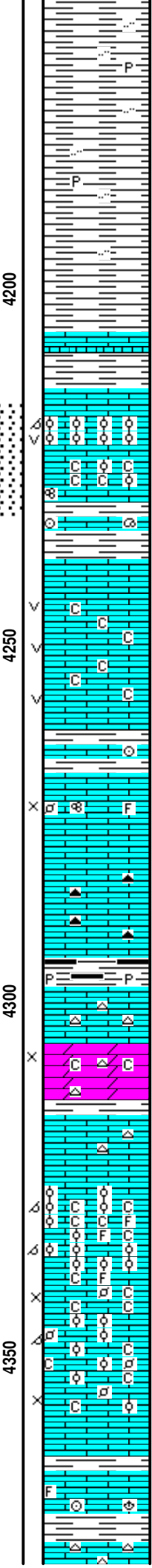
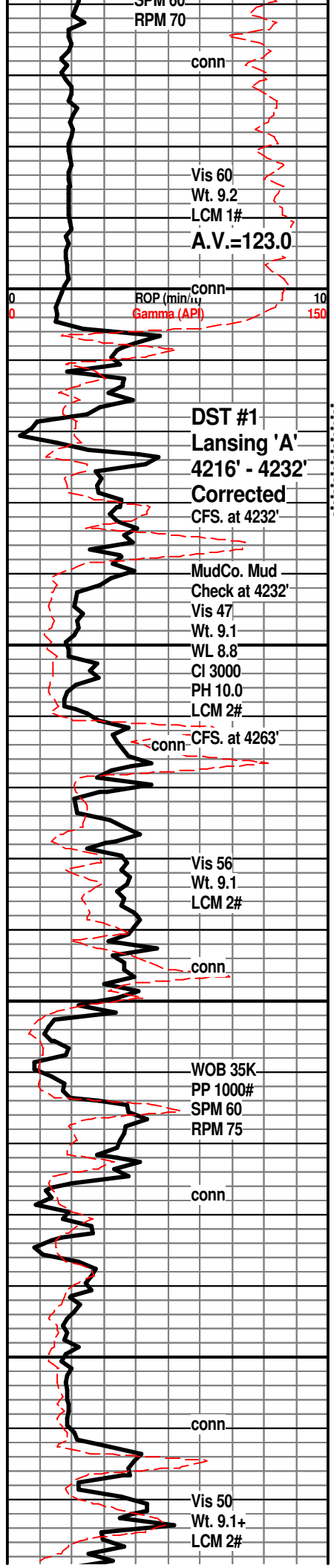
SH; lt gy, rare grn, platy, occ silty

0.5 TG, S1-C5 50 500

22 Unit Incr. Shale

Recycle





SH; lt to med gy, firm, platy, rarely silty, occ dissem. pyr

SH; med gy, smooth, rarely silty

BROWN LMST. 4206(-1994)
LM; med brn, hd, blocky, foss ip, tite

LANSING 'A' 4214(-2002)
LM; lt brn, tan, oolitic, well dev. oomoldic por, rare vug por, fair/gd oil odor when crushed, spotted to even med brn oil stn, SSFO, brite yel fluor, occ gas bubbles, interbdd off wh chalky partly oolitic soft lmst w/brite yel fluor

DST #1: Lansing 'A' 4218' - 4234'
Corrected Depths to LOG

LANSING 'B' 4238(-2026)
LM; lt gy to tan, med to cse xln, abnt spar calc xtals, scat vug por, occ soft chalky mtx, dull to lt yel fluor, no vis stn, no odor, quest. gas bubbles

LM; lt gy to lt brn, med xln, occ spar calc xtals, scat lrg vug por, dull yel min fluor, occ soft chalky mtx, no stn or odor, no cut, ns.

SH; med gy, firm, platy, interbdd brn foss lmst.

LM; tan to lt brn, foss ip, fair interpart por, lt yel fluor, no stn or odor, ns.

LM; med brn, occ dk brn, most dense, micritic, interbdd amber/ brn/blk cht, tite

SH; dk gy, blk, platy, occ pyr

DOL; tan to buff, sucrosic, lmy ip, fair interxln por, occ wh cht, minor chalky mtx, ns.

LM; tan to lt brn, rare lt gy, most dense, blocky, scat gy cht, tite

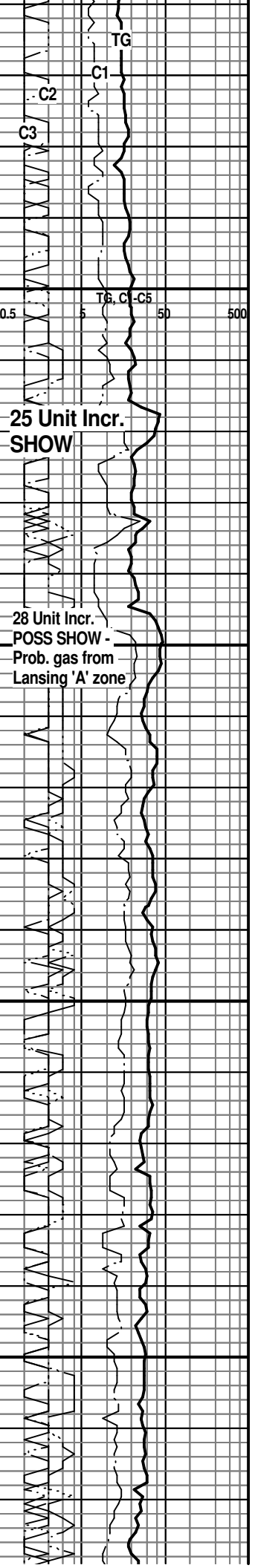
LM; off wh, cream to buff, f to med xln, scat foss - oolites, fair oomoldic por, much soft chalky mtx, lt yel fluor, no stn or odor, ns.

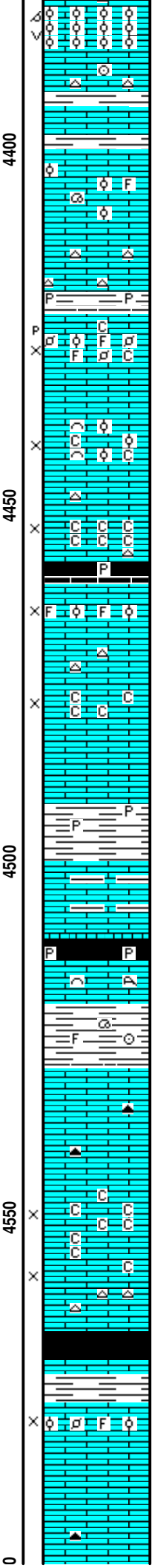
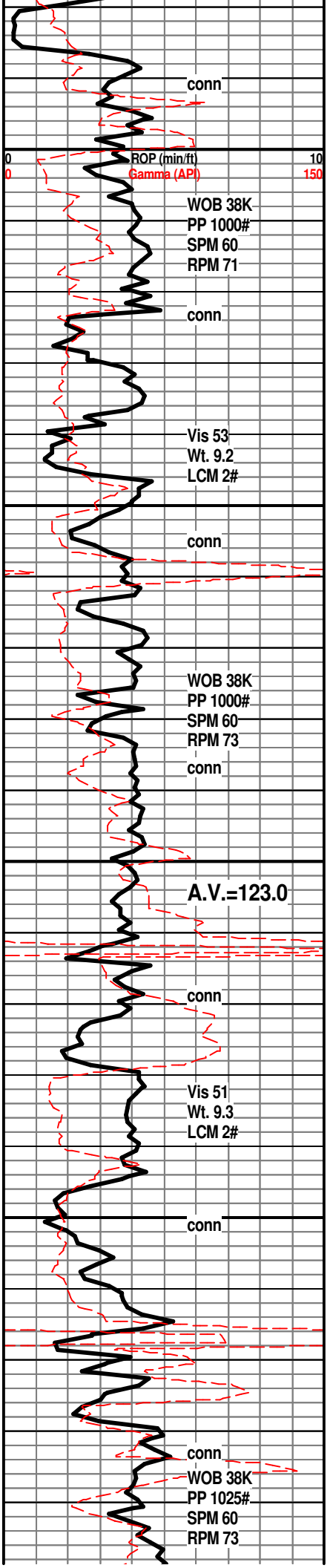
LM; tan to buff, off wh, foss, occ finely pelletal to oolitic, scat cse spar calc xtals, chalky mtx ip, fair interpart/oomoldic por, interbdd off wh to lt gy cht, lt yel min fluor, no stn or odor, ns.

SH; med to dk gy, firm, platy

LM; med to dk brn, foss ip, hd

LANSING/K.C. 'H' 4376(-2164)





LM; tan to brn, oolitic, med size molds w/well dev. oomoldic por, some rextalized, brittle - fri, rare vug por, lt yel fluor, no stn or odor, no gas kick, barren, ns.

SH; med gy, firm, platy

LM; off wh, buff, cream, foss ip, scat well cem oolites, most dense, lt yel min fluor only, ns.

LM; tan to lt brn, most dense-micritic, cherty ip, tite, ns.

K.C. 'I' 4423(-2211)
 LM; off wh, wh, cream, foss - finely pelletal, scat small oolites, fair interpart/p-p por, minor chalky mtx, lt yel fluor, no stn or odor, ns.

LM; tan to off wh, foss, gd interpart por, scat oolites, minor chalky mtx, lt yel min fluor only, no stn or odor, ns.

LM; off wh, wh, fxln, rare foss, poor interxln por, much soft chalky mtx, no stn, ns.

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

K.C. 'J' DENNIS 4461(-2249)
 LM; tan to lt brn, foss ip, scat small oolites and foss mat, most well cem, no fluor, no stn or odor, no gas kick, ns.

LM; tan to lt brn, cream, f to med xln, fair interxln por, occ chalky mtx, dull yel min fluor, no stn, ns.

SH; med to dk gy, pyr ip, firm

LM; med to dk gy, gy brn, hd, blocky, some argil lmst, tite,

STARK SHALE 4511(-2299)
 SH; blk, pyr ip, trc gas, platy, soft to brittle

LM; dk brn, foss ip, hd

SH; med gy to grn, foss ip, soft, platy

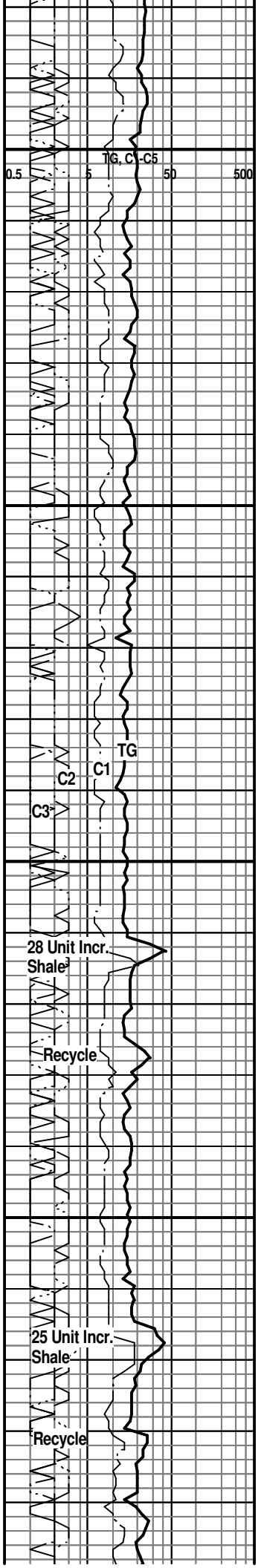
SWOPE 4529(-2317)
 LM; tan to off wh, rare lt brn, dense, blocky, tite, rare amber cht

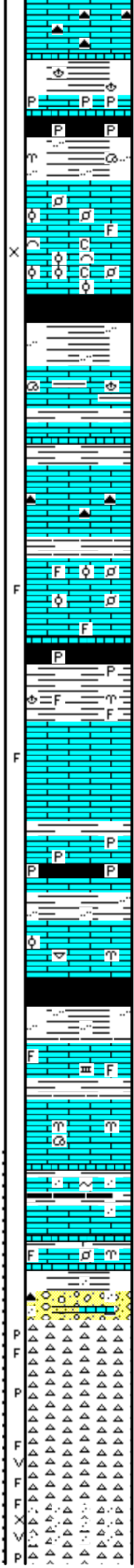
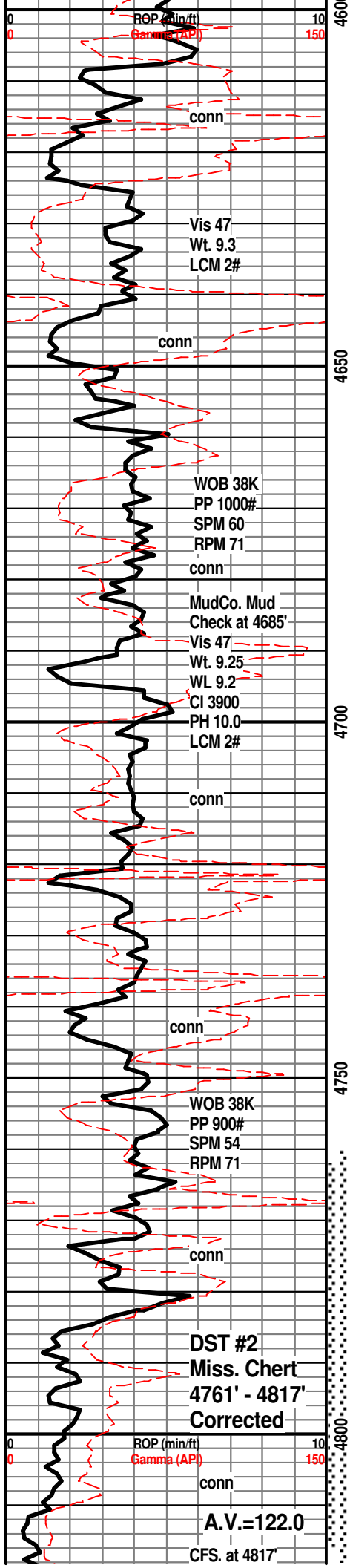
LM; off wh, tan to cream, buff, most med xln, fair to gd interxln por, much soft wh chalk and chalky mtx, scat cse xln - opaque sparry calc, lt yel fluor, no stn or odor, ns.

SH; blk, carb ip, soft, gassy

HERTHA 4576(-2364)
 LM; tan to off wh, foss - scat small pellets and oolites, most well cem, other foss hash, poor interpart por, no stn or odor, ns.

LM; med to dk brn, sandy text ip, hd, blocky, interbdd dk brn to smoky/blk cht, no vis por, ns.





BASE KANSAS CITY 4607(-2395)

SH; varic: grn, brn, red/brn, yel, foss

LM; dk brn, hd, dissemin pyr, tite

SH; dk gy - blk, pyr ip, coaly frags, also varic shales, occ silty, foss ip.

PLEASANTON 4624(-2412)

LM; med brn, foss - finely pelletal, hd, well cem, lt yel min fluor, no stn or odor, ns.

LM; off wh, wh, highly foss, oolitic, soft chalky mtz ip, poor interpart por, lt yel fluor, no vis stn, no odor, no gas kick, ns.

SH; varic: blk, grn, rust red, yel, silty ip, fiss

MARMATON 4650(-2438)

LM; lt gy, grn-brn, some grn argil lmst, foss ip, well cem, no vis por, no stn, ns.

LM; tan to lt brn, most dense, micritic, blocky, scat dk brn foss cht, no vis por, no stn or odor, ns.

LM; lt to med brn, most dense, blocky, scat well cem foss - pellets/ooids, trc blk tar/gilsonite, no live shows, poss. frags, dull yel fluor, no gas kick

SH; blk, fiss, pyr ip, w/grn occ foss waxy sh.

PAWNEE 4700(-2488)

LM; tan to lt brn, most dense, litho, hd, no vis por, poss frags - trc blk tar/gils, no fluor, no live shows, no gas kick(recycle only)

LM; med brn, rare tan, dense, pyr ip, tite

SH; blk, carb ip, hd - blocky, gassy, pyr ip.

LM; med brn, gy brn, hd, foss ip, well cem, no vis por, no stn or odor, ns.

CHEROKEE SHALE 4736(-2524)

SH; blk, brn, grn, med to dk gy, silty ip.

LM; tan to lt brn, buff, med xln, occ foss mat, no vis por, dull yel fluor, no stn or odor, ns.

LM; tan to med brn, most dense, blocky, hd, rare well cem foss mat, scat spar calc xtals, no vis por, no fluor, ns.

LM; med brn, glau ip, some sandy text, most well cem, scat dead blk tar/gils, dull yel fluor

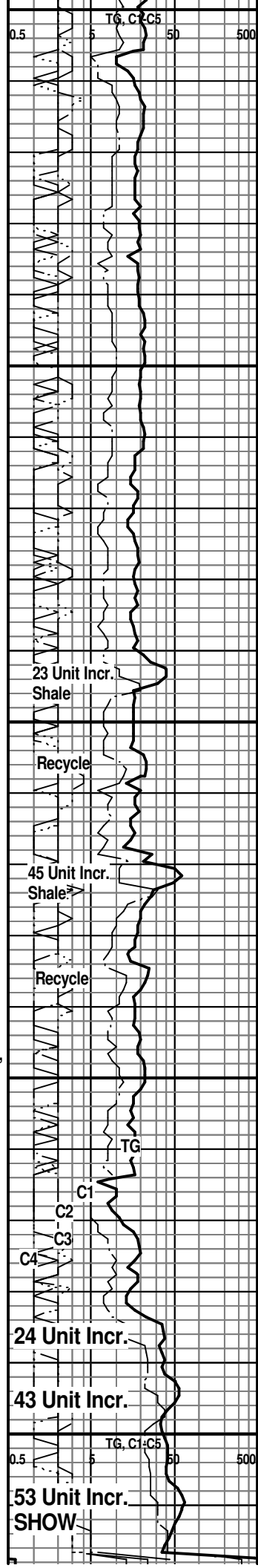
SH; varic: grn, lavender, brn, sandy ip, interbdd brn foss lmst.

MISSISSIPPI CHERT 4784(-2572)

CHT; wh, off wh, opaque, fresh and trip cht, much dk brn oil stn, frags, scat fair trip(p-p) por, oil stn on frac edges, faint gassy odor, med to occ brite yel fluor, SSFO, gas bubbles

CHT; wh, off wh, pale grn tint, incr. trip cht %, SFO, much brite yel fluor, faint/fair odor, gas bubbles, scat vug por, gd cut

CHT; wh, off wh, pale grn, very sandy/gritty text ip w/gd interxln por, sev. oil saturated pcs. of trip cht, gas bubbles, fair oil/gas odor, most w/brite yel fluor, frags, scat v. gd p-p(trip) and vug por, streaming cut



MudCo. Mud
Check at 4817'
Vis 51
Wt. 9.3
WL 8.4
CI 9200
PH 9.5
LCM 2#

conn

CFS. at 4857'
RTD.

4850

00

F
F
V
F
V



DST #2: Miss. Chert 4761' - 4817'

Corrected Depths to LOG

CHT; wh to off wh, most opaque, fresh and trip, frags and vug por, much brite yel fluor, faint odor, decreasing shows with depth in the chert

CHT; wh, bone wh, nearly all fresh, opaque, scat vug por, few frags, rare blk tar/gils. on frac edges, v. scat oil stn, decr. shows, decr. fluor

KINDERHOOK SHALE 4848(-2636)

SH; med gy grn, grn, silty, firm, interbdd vf gr grn ss strngs

RTD. 4857' at 4:15 PM. 3/5/11

LTD. 4854'

Halliburton NEU/Den, DIL, Microlog

NOTE: This log was shifted upward 2' to correlate with the Halliburton LOGS.

**OIL AND GAS
IN MUD
FROM DST
#2**

