

LITHOLOGY STRIP LOG

WellSight Systems

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

Well Name: Sampson #2-4
Location: 1130' FNL & 1625' FWL, Sec. 4-T28S-R18W, Kiowa Co., KS.
Licence Number: 15-097-21717-0000 Region: Einsel Field
Spud Date: 2/20/2012 Drilling Completed: 3/1/12
Surface Coordinates: 1130' FNL & 1625' FWL, Sec. 4-T28S-R18W

Bottom Hole Same as above
Coordinates:
Ground Elevation (ft): 2205' K.B. Elevation (ft): 2216'
Logged Interval (ft): 3900' To: 4925' Total Depth (ft): 4925'
Formation: Kinderhook at Total Depth
Type of Drilling Fluid: Freshwater/Gel to 3295'; Chemical Gel 3295' to 4925'.
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') 4223' - 4239' Test Times 15"-45"-45"-90"

IFP Strong Blow BOB/30 Sec. , FFP Strong Blow BOB/30

Sec., no Gas to Surface, 3.5" Blowback on FSI; REC: 3968' Gas in Pipe, 93' GOCWM(30%G, 10%O, 30%W, 30%M), 125' MSW(5%M, 95%W) CI 93,500, Mud 7300; IFP 53-60#, ISIP 1261#, FFP 67-101#, FSIP 1228#, IHP 2159#, FHP 2150#, BHT 112 Deg. F.

DST #2(Miss. Chert) 4773' - 4821' Test Times 15"-45"-45"-90" IFP Strong Blow BOB/30 Sec., Gas to Surface in 3 Min.,Gauged Max. 615.2 MCFG in 15" of IFP(7# on 1" choke); FFP Gas to Surface throughout, Gauged 443.6 MCFG Stabilized in 45" of FFP(14# on 0.75" choke), weak surface blowback on FSI; REC: 80' GCM(5%G, 95% M), no oil, no

Water; IFP 253-123#, ISIP 1396#, FFP 158-125#, FSIP 1412#, IHP 2319#, FHP 2282#, BHT 118 Deg. F.

DST #3(Miss. Chert) 4821' - 4836' Test Times 15"-45"-30"-90" IFP Strong Blow BOB/30 Sec., Gas to Surface in 5", Gauged 124.1 MCFG. decreased to 32.4 MCFG, Strong BOB Blowback in 25 Min. of ISIP; FFP Strong Blow BOB/2 Sec. Gauged GTS - TSTM - Oil dripping from blowline, Very Strong Blowback in 2 Min. of FSIP; REC: Picked up 10,000# of fluid - attempted to reverse out fluids, no success, put on kelly and reversed out oil, gas and water. Rec. 120' SOCMW(2%O, 48%W, 50%M) below circulating sub, CI 90,000, Mud 8400; IFP 304-348#, ISIP 1392#, FFP 419-658#, FSIP 1397#, IHP 2425#, FHP 2420#, BHT 130 Deg. F.

Comments

2/20/12 MIRU Sterling Drilling Co. Rig #2, Spud at 7:00 PM.; 2/21/12 Drilling at 510'; 2/22/12 TD. 545' - TIH to drill plug; 2/23/12 Drilling at 1965'; 2/24/12 Drilling at 2975'; 2/25/12 Drilling at 3825'; 2/26/12 TD. 4239' - DST #1; 2/27/12 Drilling at 4485'; 2/28/12 TD. 4773' - Bit Trip; 2/29/12 TD. 4821' - TIH after DST #2; 3/1/12 RTD. 4925'-reached TD. at 7:00 AM., CCH for Logs(Halliburton)

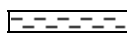



Set new 8 5/8"(23#) Surface Casing at 540' w/400 sx. Cement did Circulate(Basic Energy Services). PD. 3:45 AM. 2/21/12. Cement fell below GL. - Cemented through 1" tubing w/75 sx. to fill to base of cellar; finished 1" cmt. job at 7:00 PM. 2/21/12.



Surveys: 0.25 Deg. at 545'(Surface Casing); 1 Deg. at 4239'(DST #1); 0.75 Deg. at 4773'(Bit Trip); Deg. at 4925' RTD.

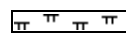

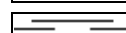
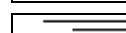
Pipe Strap at 4773'(Bit Trip): Strap 2.27' Short to the Board, no correction made to the Board.




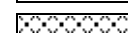
ROCK TYPES

	Anhy
	Bent
	Brec
	Cht

	Clyst
	Coal
	Congl
	Dol

	Gyp
	Igne
	Lmst
	Meta

	Mrlst
	Salt
	Shale
	Shcol

	Shgy
	Sltst
	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

- Siltstrg
- Ssstrg

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

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

OTHER SYMBOLS

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

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

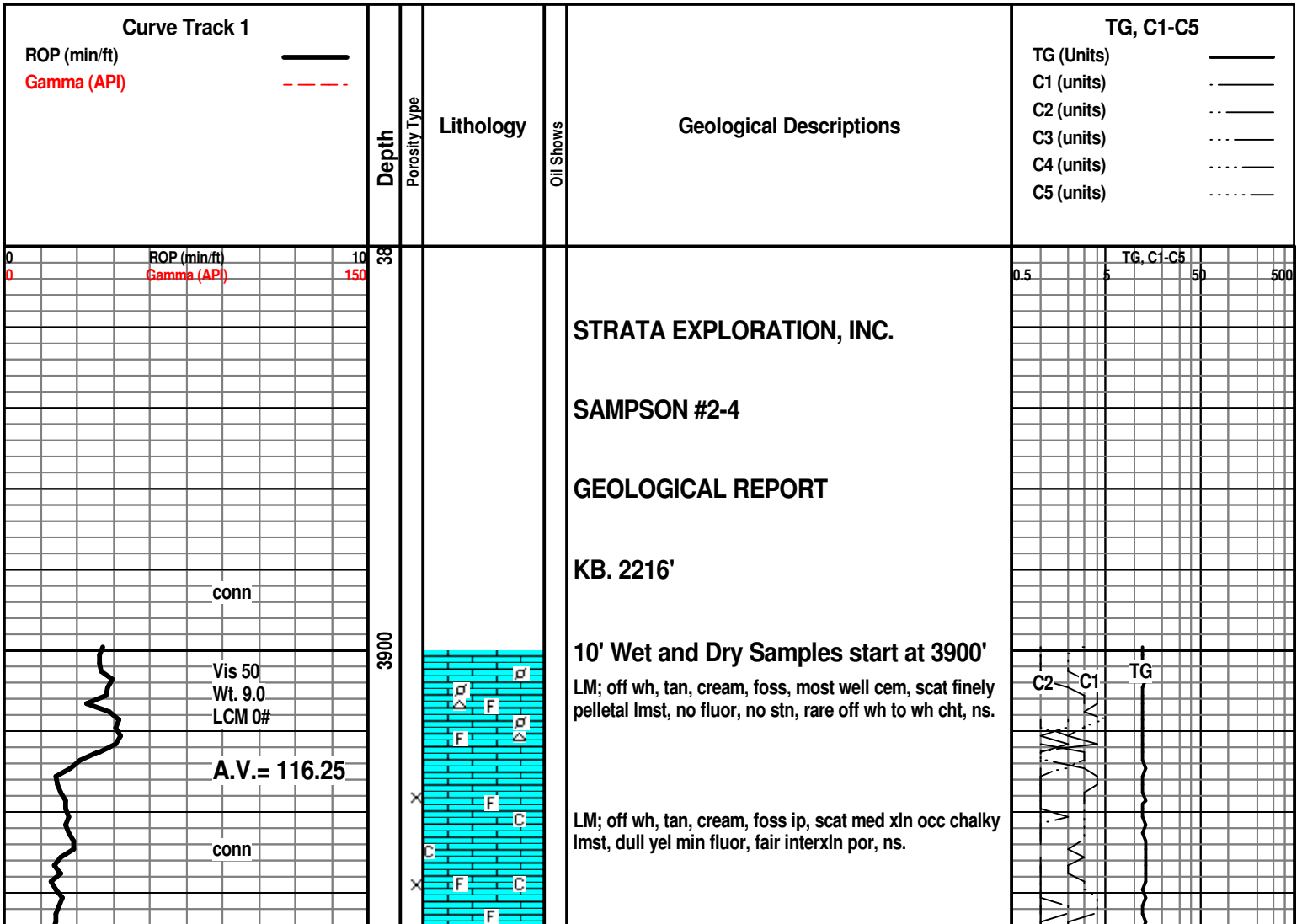
- ROUNDING**
- Rounded
 - Subrnd
 - Subang
 - Angular

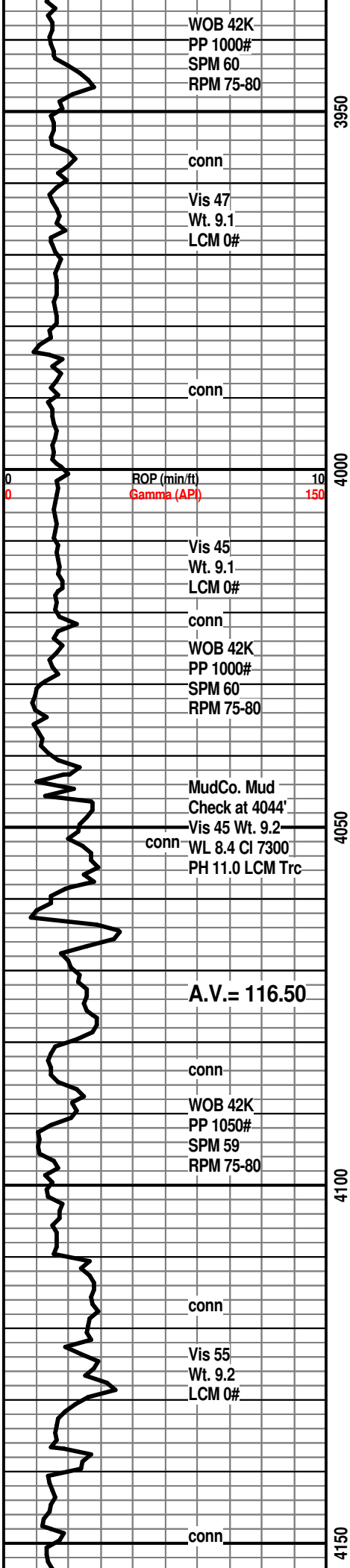
- Spotted
- Ques
- Dead

- EVENT**
- Rft
 - Sidewall

- INTERVAL**
- Core
 - Dst

- OIL SHOW**
- Even





WOB 42K
PP 1000#
SPM 60
RPM 75-80

conn
Vis 47
Wt. 9.1
LCM 0#

conn

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

Vis 45
Wt. 9.1
LCM 0#
conn

WOB 42K
PP 1000#
SPM 60
RPM 75-80

MudCo. Mud
Check at 4044'
Vis 45 Wt. 9.2
conn WL 8.4 CI 7300
PH 11.0 LCM Trc

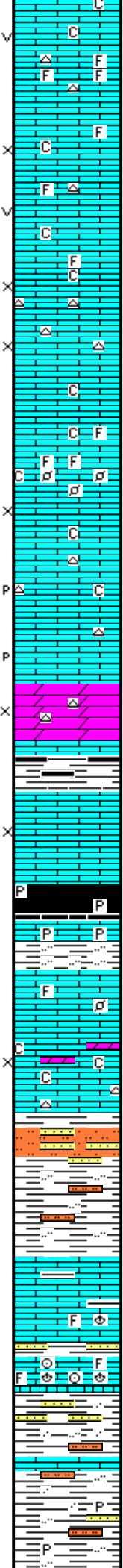
A.V.= 116.50

conn
WOB 42K
PP 1050#
SPM 59
RPM 75-80

conn
Vis 55
Wt. 9.2
LCM 0#

conn

3950
4000
4050
4100
4150



LM; lt gy to lt brn, fxln w/scat foss mat, poor to fair interpart por, occ small vug por, rare gy cht, no fluor, ns.

LM; tan to lt brn, med xln w/scat foss mat, fair interxln por, occ vug por, interbdd soft chalky lmst, no fluor, no stn or odor, ns.

LM; tan to lt brn, buff, med to occ cse xln, scat foss mat, fair to gd interxln por, occ soft chalky mtx, interbdd gy fresh cht, no fluor, no stn or odor, ns.

LM; tan to lt brn, rare gy brn, highly foss - pelletal ip, occ soft chalky mtx, trc sucrosic text, fair to gd interxln por, no fluor, ns.

LM; tan to cream, off wh, med xln, gran text ip, fair to gd interxln w/occ p-p por, minor sucrosic text, cherty ip, rare lt yel fluor, no stn or odor, ns.

DOL; lt gy, tan, sucrosic, lmy, rare gy cht, fair to gd interxln por, lt yel min fluor, no stn or odor, ns.

SH; dk gy, trc blk, platy

LM; off wh, tan, foss to fxln, scat poor interpart por, occ soft chalky mtx, much dense micrite, no fluor, no stn or odor, ns.

HEEBNER SHALE 4058(-1842)

SH; blk, carb ip, occ pyr
LM; med to dk brn, dense, occ pyr, hd.
SH; grn, silty, platy

TORONTO 4070(-1854)

LM; tan to lt brn, fxln w/scat foss mat, most tite

LM; off wh, tan, buff, med xln, trc sucrosic text, fair interxln por, lt yel fluor, partly chalky mtx, no stn or odor, no vis gas bubbles, ns.

DOUGLAS SHALE 4090(-1874)

SLTST; lt gy, platy, sl sandy

SH; lt to med gy, silty to sandy, platy

LM; med brn, occ gy brn, hd, blocky, some argil

LM; med to dk brn, dk gy, highly foss ip, dense

SH; lt to med gy, interbdd vf to f gr qtz mica ss strngs, platy

Extractor plugged - clean out/new glycol

Gas test at Extractor

0.5 5 50 500 C1-C5

8 Unit Incr. Shale

6 Unit Incr. Recycle??

WOB 40K
PP 1050#
SPM 59
RPM 75

conn

Vis 55
Wt. 9.3
LCM 0#

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

conn

A.V.= 116.75

DST #1
Lansing 'A'
4223' - 4239'

CFS. at 4239'
MudCo. Mud
Check at 4239'
Vis 55 Wt. 9.05
WL 9.2 CI 8200
PH 10.5 LCM Trc

conn

WOB 41K
PP 1000#
SPM 59
RPM 75

conn

Vis 58
Wt. 9.1+
LCM 0#

conn

conn

WOB 41K
PP 1000#
SPM 60
RPM 75

Vis 60
Wt. 9.2
LCM 0#

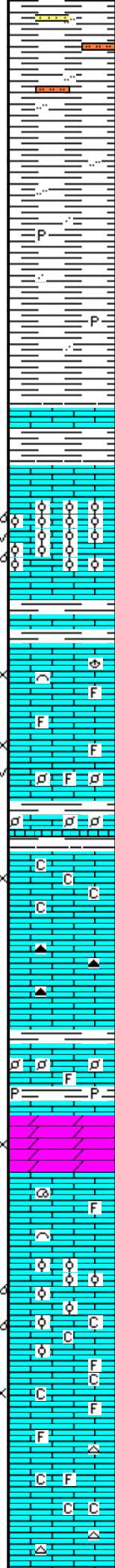
conn

4200

4250

4300

4350



SH; lt to med gy, fiss, silty to sandy, occ dissem pyr

SH; lt to med gy, silty, fiss, some v. soft - gumbo, tight connections

SH; most med gy, soft, platy to flakey, occ silty, rarely pyr

BROWN LMST. 4211(-1995)

LM; med brn, foss ip, hd, blocky

LANSING 'A' 4219(-2003)

LM; lt to med brn, oolitic, well dev. oomoldic por, occ lrg vug por, brittle, med to brn yel fluor, spotted to occ even lt brn oil stn, VSSGO, gas bubbles, faint to fair odor, fair cut in few pcs.

DST #1: Lansing 'A' 4223' - 4239'

LANSING 'B' 4244(-2028)

LM; tan to lt gy, fxln w/scat foss mat, fair interpart por, dull to lt yel fluor, no vis stn, no odor, ns.

LM; tan to lt gy, med xln, scat cse spar calc xtals, occ foss mat, fair interxln w/occ vug por, lt to occ med yel fluor, no vis stn, no odor, no sample shows

LM; med brn, finely pelletal, well cem, tite

LM; off wh, buff, tan, fxln to partly sucrosic text, chalky soft mtx ip, fair interxln por, dull yel min fluor, no stn or odor, ns.

LM; tan to off wh, buff, most dense, micritic, scat smoky/dk gy cht, tite

LM; med to dk brn, hd, foss ip, scat foss pellets, no vis por, ns.

SH; med gy, grn, platy, occ pyr

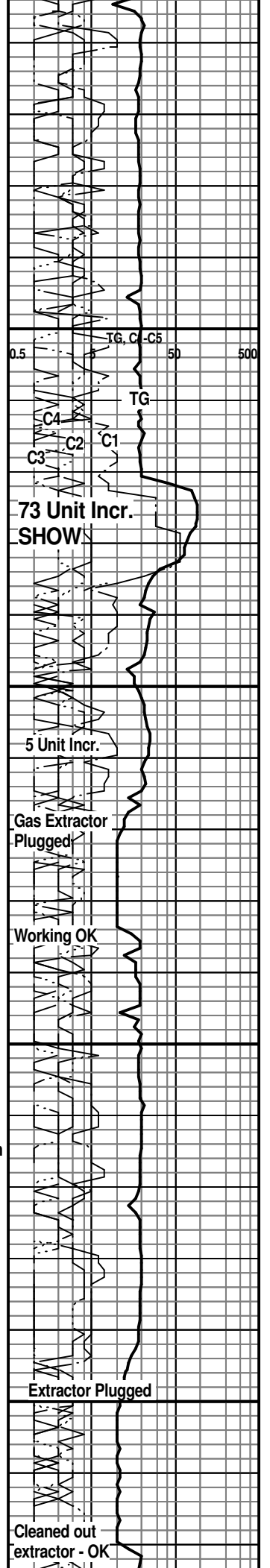
DOL; off wh, tan, sucrosic, lmy ip, fair to gd interxln por, lt yel min fluor, interbdd chalky soft lmst, no vis stn or odor, ns.

LM; med brn, hd, blocky, scat well cem foss, tite

LM; lt brn, oolitic, most med size moldic por, brittle ip, lt yel min fluor, no stn or odor, no gas kick, ns.

LM; tan to buff, foss ip, med xln w/scat soft chalky mtx, poor to fair interxln por, no fluor, ns.

LM; tan to off wh, wh, fxln, cherty ip, interbdd soft chalky med xln lmst, poor/no vis por, no fluor, ns.



0.5 50 500

TG, C-C5
TG
C4
C2
C1
C3

73 Unit Incr. SHOW

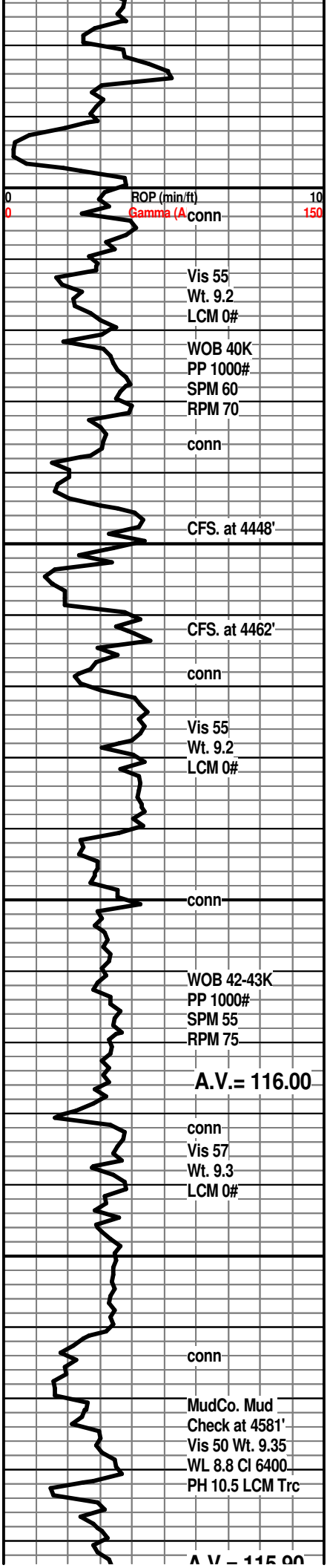
5 Unit Incr.

Gas Extractor Plugged

Working OK

Extractor Plugged

Cleaned out extractor - OK



ROP (min/ft) 10
Gamma (A) conn 150

Vis 55
Wt. 9.2
LCM 0#
WOB 40K
PP 1000#
SPM 60
RPM 70

conn

CFS. at 4448'

CFS. at 4462'

conn

Vis 55
Wt. 9.2
LCM 0#

conn

WOB 42-43K
PP 1000#
SPM 55
RPM 75

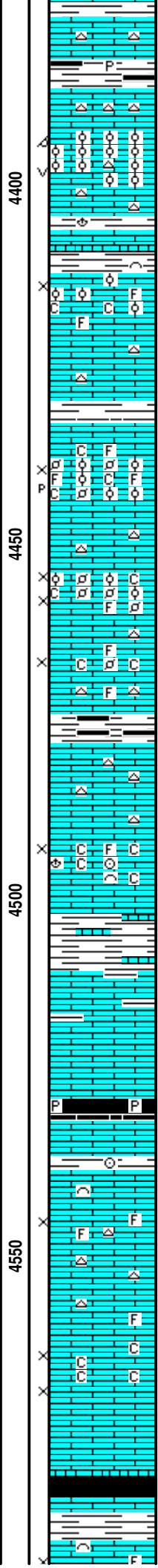
A.V. = 116.00

conn
Vis 57
Wt. 9.3
LCM 0#

conn

MudCo. Mud
Check at 4581'
Vis 50 Wt. 9.35
WL 8.8 Cl 6400
PH 10.5 LCM Trc

A.V. = 115.00



SH; dk gy, blk, platy, occ pyr

LANSING/KC. 'H' 4386(-2169)

LM; lt brn, oolitic, med to lrg molds, gd oomoldic por, brittle ip, scat small vug por, occ oolitic cht, lt yel min fluor, no stn or odor, barren, ns.

LM; med brn, hd, cherty ip, micritic, tite

SH; med gy, grn, platy, occ foss

LM; tan to buff, lt brn, foss, scat oolites and foss frags, poor/fair interpart por, minor soft chalky mtx, no fluor, no stn or odor, ns.

LM; tan to buff, off wh, fxln w/occ cse opaque spar calc xtals, cherty ip, no vis por, ns.

KC. 'I' ZONE 4433(-2217)

LM; lt brn, tan, med xln to foss - pelletal/oolitic, fair to gd interpart por, occ p-p por, rare soft chalky mtx, no fluor, no stn or odor, barren, no gas kick

LM; tan to lt brn, gran to med xln, foss w/minor small pellets and oolites, chalky mtx ip, fair interpart/interxln por, v. dull yel fluor, no stn or odor, no sample shows

LM; tan to lt brn, buff, foss ip, scat poor to fair interpart por, minor chalky mtx, no fluor, no stn or odor, ns.

KC. 'J' DENNIS 4478(-2262)

LM; tan to lt brn, fxln to micritic, blocky, hd, no vis por, scat gy to off wh cht, no fluor, ns.

LM; tan to lt brn, off wh, foss w/scat foss hash and small pellets, partly chalky mtx, fair interpart por, dull yel to no fluor, no stn, ns.

SH, med to dk gy, gy brn, lmy, interbdd shaly lmst.

LM; tan to lt brn, most dense, argil ip, blocky, no vis por, ns.

STARK SHALE 4528(-2312)

SH; blk, carb ip, platy, pyr ip.

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

SWOPE 4538(-2322)

LM; lt gy to lt brn, foss ip, scat poor interpart por, most tite, occ lt yel min fluor, no stn or odor, no sample shows

LM; tan to lt gy, buff, most dense, blocky, micritic, tite, occ cherty

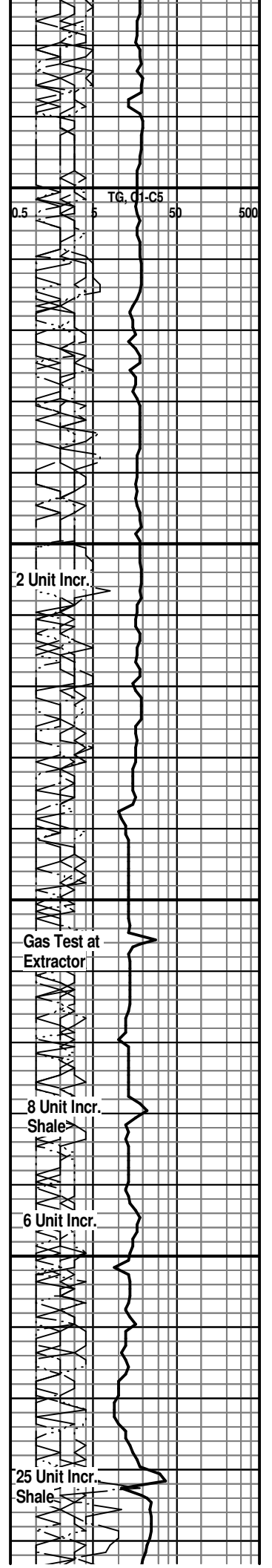
LM; tan to buff, cream, off wh, f to med xln, scat soft chalky mtx, fair interxln por, lt yel min fluor, no stn or odor, barren, ns.

SH; blk, platy, trc gas, blocky to soft

SH; med to dk gy, platy

HERTHA 4590(-2374)

LM; off wh, tan, scat foss mat, fair interpart por, lt yel



TG, Cl-C5 50 500

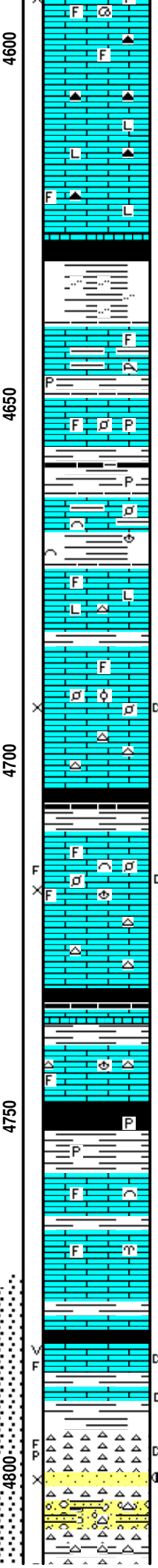
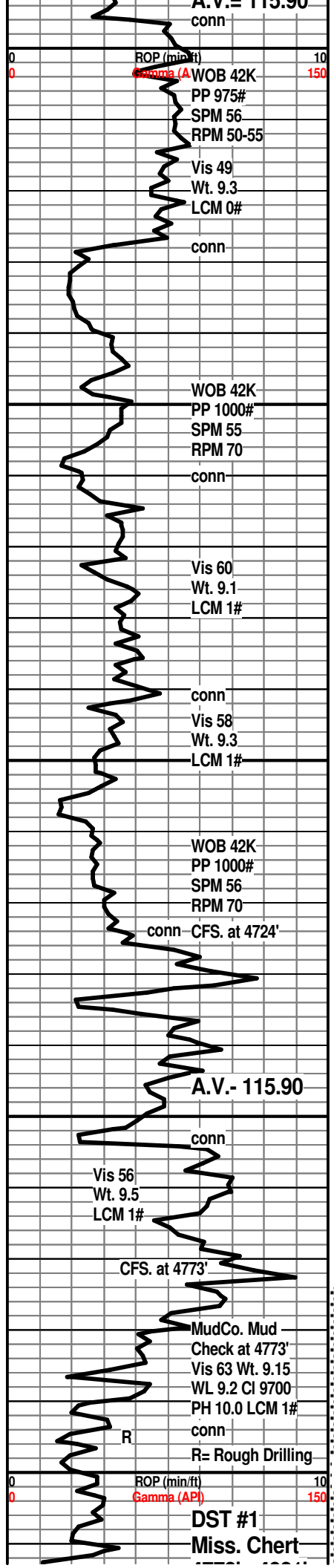
2 Unit Incr.

Gas Test at Extractor

8 Unit Incr. Shale

6 Unit Incr.

25 Unit Incr. Shale



LM; off wh, tan, scat loss mat, fair interpart por, lt yel min flour, no vis stn, no odor, ns.

LM; med to dk brn, dense, pyr ip, hd, scat amber to smoky cht, no vis por, ns.

LM; med to dk brn, litho, hd, scat dk gy brn foss to smoky cht, interbdd gritty text lmst, tite

BASE KANSAS CITY 4627(-2411)
SH; varic, dk gy - blk, grn, gy, maroon - rust red, silty ip.

PLEASANTON 4639(-2423)
LM; med brn, gy brn, hd, scat pyr, rarely foss, no vis por, argil ip, no fluor, ns.
LM; lt brn, tan, buff, occ pale grn, most dense, scat foss mat, no vis por, occ pyr, no fluor, ns.

SH; grn, gy grn, rare dk gy w/trc blk, platy, pyr

MARMATON 4663(-2447)
LM; tan, lt brn, grn, foss-pelletal ip, well cem, blocky, some argil, tite
SH; grn, gy, blue/gy, foss ip,
LM; lt brn, micritic, v. rare foss mat, some litho, hd, no vis por, no fluor, occ brn foss cht, ns.

LM; lt to med brn, tan, foss ip, trc finely pelletal to oolitic lmst, most well cem, trc blk dead tar/gilsonite, v. poor interpart por, spotted lt yel flour, no odor, no gas kick, cherty ip.

SH; dk gy to blk, carb ip, platy

PAWNEE 4710(-2494)
LM; tan to lt brn, foss ip, scat well cem small pellets and foss hash, v. poor to no interpart por, trc blk tar/dead oil/gilsonite, lt yel flour, no live shows, trc fracs

LM; lt brn, buff, dense, scat amber cht, tite

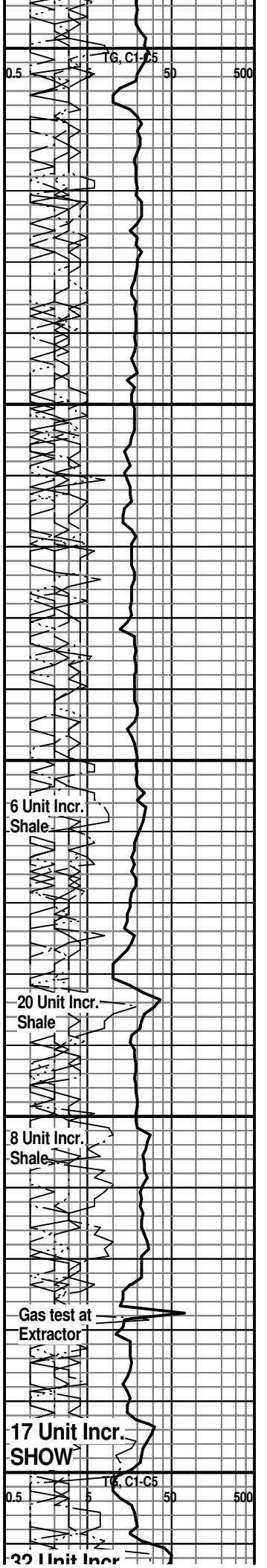
SH; blk, carb ip, soft, trc gas

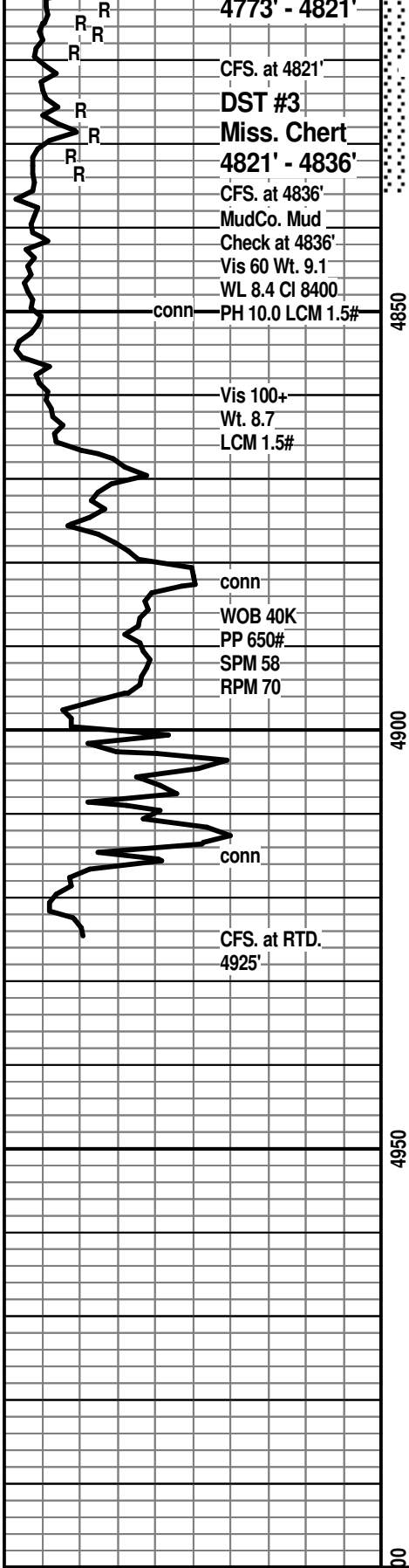
LM; lt brn, buff, tan, fxln, occ foss, scat tan cht, no vis por, no fluor, ns.

CHEROKEE SHALE 4748(-2532)
SH; dk gy to blk, firm, interbdd gy to grn fiss shale, occ pyr
LM; lt brn, tan, foss ip, well cem, most blocky, no vis por, dull yel min flour, ns.
LM; lt to med brn, hd, micritic, rare foss, tite

Bit Trip at 4773'
SH; med to dk gy, platy
LM; off wh, tan, fxln, scat dead blk tar/dead oil in occ vug por, few fracs w/blk edge stn, lt yel flour, no live shows, no apparent gas kick

REW. MISS. CHERT 4794(-2578)
CHT; gy, wh, yel, most fresh, fracs w/lt yel flour, trc blk dead oil/gils, some clr med gr qtz ss w/blk tar and gas bubbles, lt yel flour, no odor
CONGL; weath cht in various colors, also hd fresh cht, scat f to med gr shaly ss
CHT; wh, off wh, fresh and tricolite, fair spotted to even



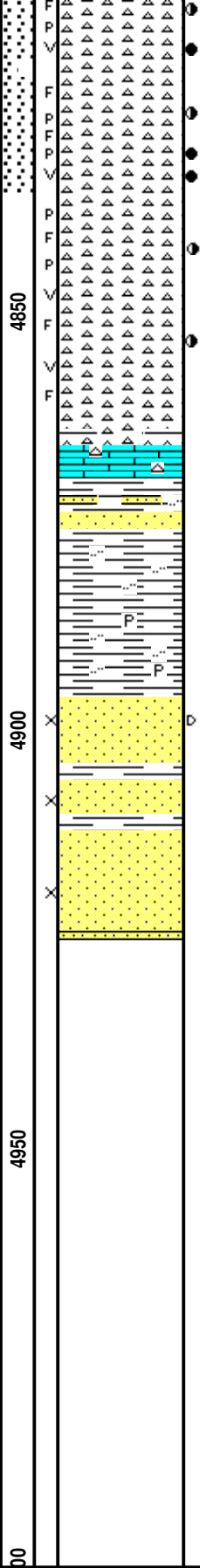


4773' - 4821'
 CFS. at 4821'
DST #3
Miss. Chert
4821' - 4836'
 CFS. at 4836'
 MudCo. Mud
 Check at 4836'
 Vis 60 Wt. 9.1
 WL 8.4 Cl 8400
 conn PH 10.0 LCM 1.5#

Vis 100+
 Wt. 8.7
 LCM 1.5#

conn
 WOB 40K
 PP 650#
 SPM 58
 RPM 70

conn
 CFS. at RTD.
 4925'



CHT; wh, off wh, med and tripolite, fair spotted to even. It brn stn, v. faint odor, scat p-p and vug por, gas bubbles, scat brite yel fluor, Trc. FO.

DST #2: Miss. Chert 4773' - 4821'
 CFS. @ 4836': CHT; wh to off wh, fresh and tripolite, much brite yel fluor, faint/fair odor, SFO, gas bubbles, frags w/some gd p-p & vug por, much even lt brn stn, gd cut

DST #3: Miss. Chert 4821' - 4836'
 CHT; wh, fresh and trip, most fresh, scat gd p-p and occ vug por, much brite yel fluor, fair odor, spotted lt brn stn, SSFO

CHT; wh, off wh, porc, most fresh, frags ip, very little fluor, trc v. spotted stn - show decreasing, scat small vug por, most barren w/ns.

LM; lt to med brn, dense, partly cherty, tite
KINDERHOOK SHALE 4870(-2654)

SH; med gy to grn, silty to sandy ip, interbdd grn vf to f gr qtz shaly ss

SH; grn, gy grn, silty to sandy, platy, rarely pyr

KINDERHOOK SAND 4896(-2680)

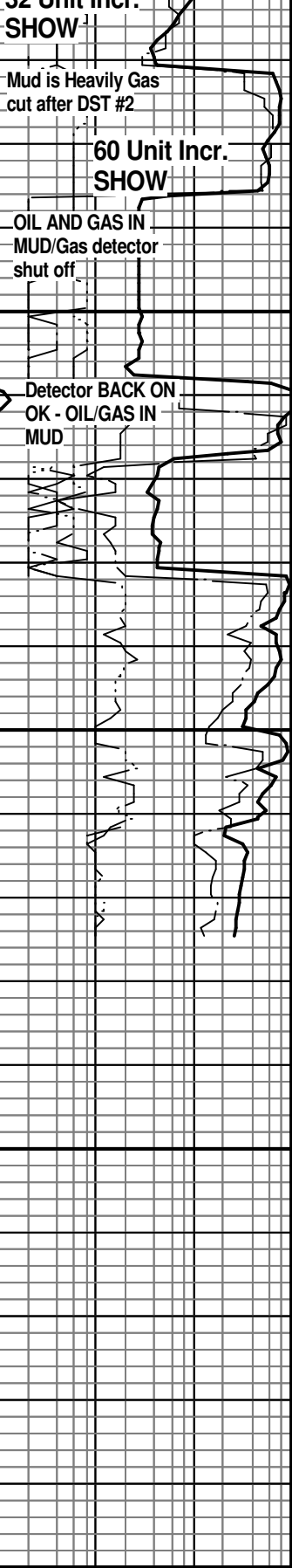
SS; wh, lt gy, most f gr qtz, clusters, fri ip, fair to gd intergran por, interbdd wh v. hd qtzite and dense ss, trc blk dead/residual oil stn, no fluor, no odor

SS; wh to lt gy, f gr qtz, well srt, calc, scat grn glau, clusters fair to gd intergran por, no fluor, interbdd hd qtzitic ss, occ argil, no stn or odor, barren, ns.

RTD. 4925' at 7:00 AM. 3/1/12

LTD.

Halliburton DIL, NEU/DEN w/ PE,
 Microlog, MIRL



Mud is Heavily Gas cut after DST #2

60 Unit Incr. SHOW

OIL AND GAS IN MUD/Gas detector shut off

Detector BACK ON OK - OIL/GAS IN MUD