



Exploration Services LLC

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

Well Name: Sandridge Energy, Inc. Hammer SWD 3510 1-1
Location: Section 1, T35S, R10W Barber County, Kansas
Licence Number: API #15-007-23936-01-00 Region: Barber, Kansas
Spud Date: 8-22-2012 Drilling Completed: 9-xx-2012
Surface Coordinates: 2444' FSL & 645' FWL of Sec 1, T345S, R10W

Bottom Hole 2446' FSL & 385' FWL of Sec 1, T345S, R10W
Coordinates:
Ground Elevation (ft): 1317 K.B. Elevation (ft): 1328
Logged Interval (ft): 3500 To: Total Depth (ft):
Formation: Anhydrites to Arbuckle
Type of Drilling Fluid: Water-based Mud, Water

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

OPERATOR

Company: Sandridge Energy, Inc.
Address: 123 Robert S. Kerr Avenue
Oklahoma City, OK 73102
405-429-5720

GEOLOGIST

Name: Tammy Alcorn
Company: Sandridge Energy, Inc.
Address: 123 Robert S. Kerr Avenue
Oklahoma City, OK 73102
405-250-3801 off.

Drilling Co.

Tom Cat Rig #2

Mudlogging Co.

PML Exploration Services LLC
5601 NW 72nd Street, Suite 354
Oklahoma City, OK 73132
405-702-5415

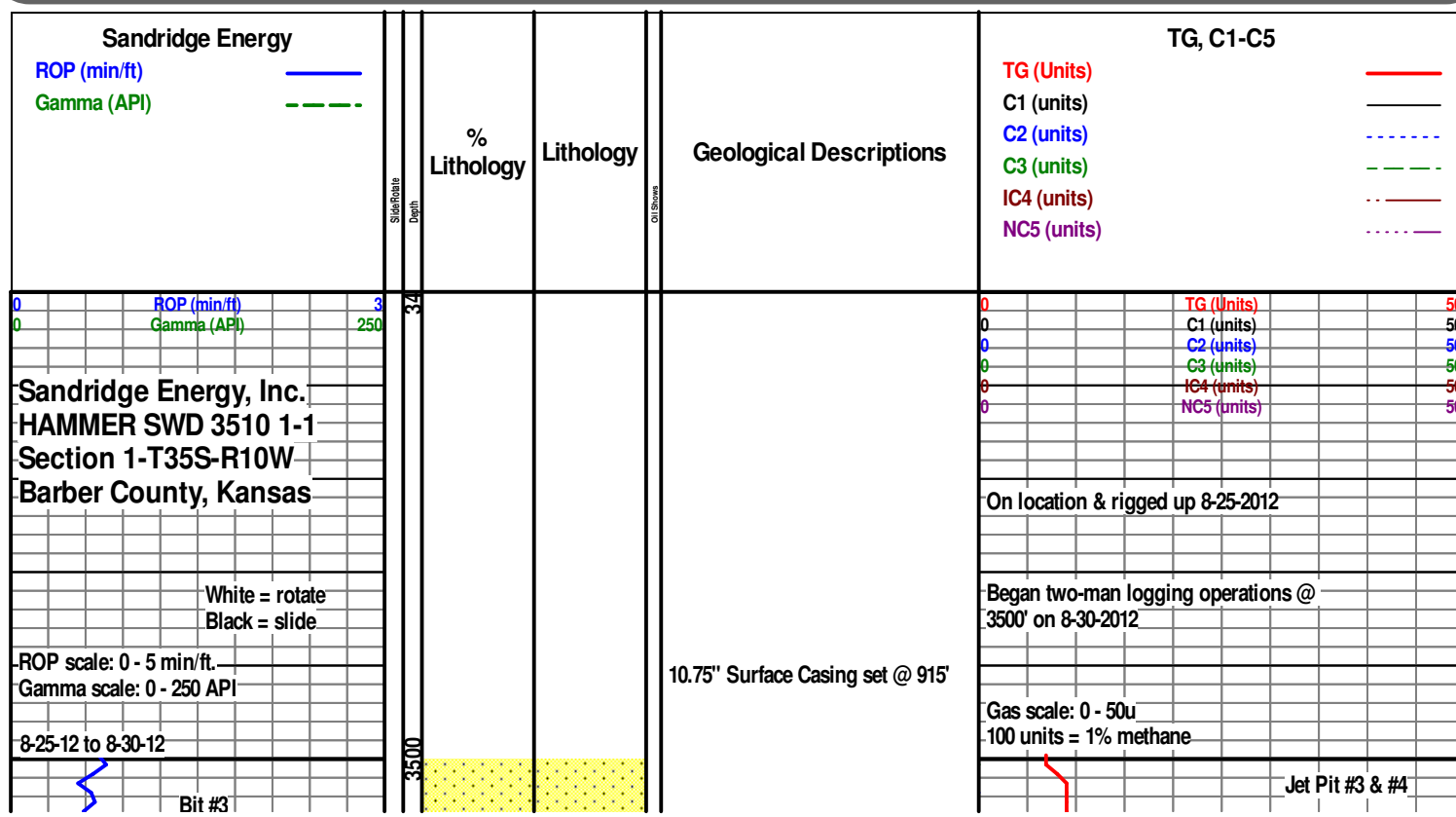
Mudloggers

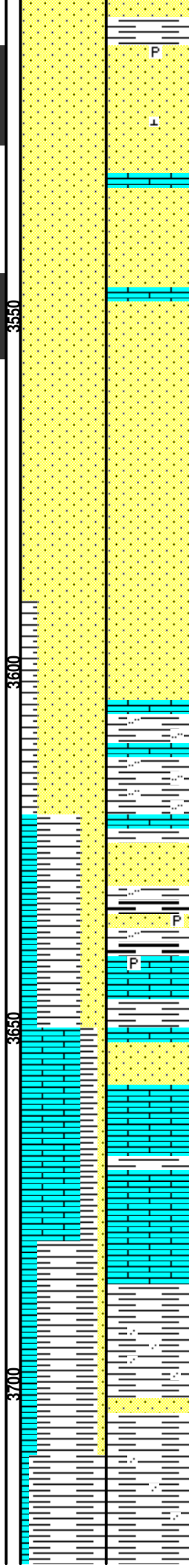
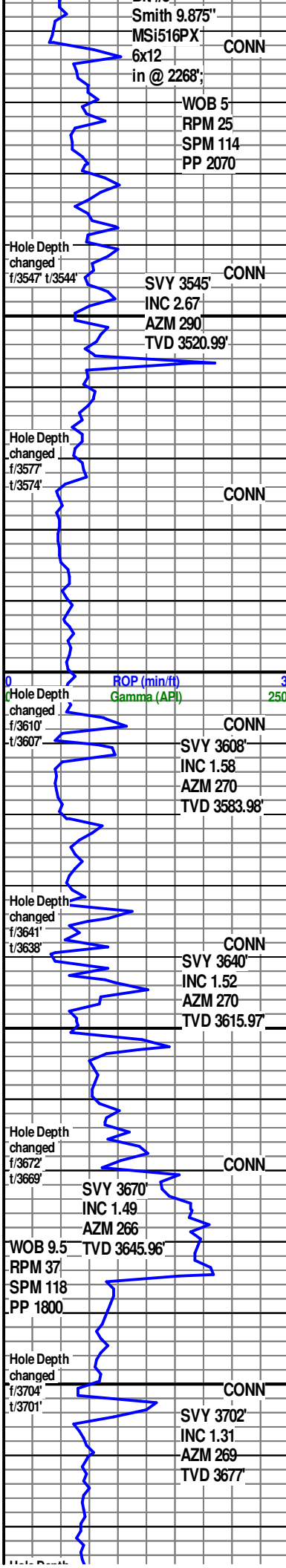
Dawn English, Michael Bickford

	Anhy		Coal		Lmst		Shcol		Shlygw
	Bent		Congl		Meta		Shgy		Shale (carb)
	Brec		Dol		Mrlst		Siltst		Grtwsh
	Cht		Gyp		Salt		Ss		
	Clyst		Igne		Shale		Till		

[illegible]

POROSITY	Vuggy	ROUNDING	Spotted	EVENT
Earthy		Rounded	Ques	Rft
Fenest	SORTING	Subrnd	Dead	Sidewall
Fracture	Well	Subang		
Inter	Moderate	Angular	INTERVAL	
Moldic	Poor		Core	
Organic		OIL SHOW	Dst	
Pinpoint		Even		





SS: mGry-ltGry-offWh, uf-um-uvfgr, ang-sbang, w srt, frm-hd, mod calc, scat carb frag ip, Wh cly fl ip, embd Wh mic mica ip, no vis por, no vis o stn, tr SH

SS: mGry-ltGry-offWh, lvf-uf-umgr, rnd-sbrnd, vw srt, frm-hd, n-mod calc, rr Mica, no vis por, tr o stn; rr LS: ltBrn, crypt xln, hd, no vis por, bri Yel flor w/ no cut

SS: mGry-ltGry-offWh, lvf-uf-umgr, rnd-sbrnd, ang-sbang, vw srt, scat unconslc sbrnd gr, frm-hd, n-mod calc, tr scat carb frag ip, rr Mica, no vis por, NFSOC

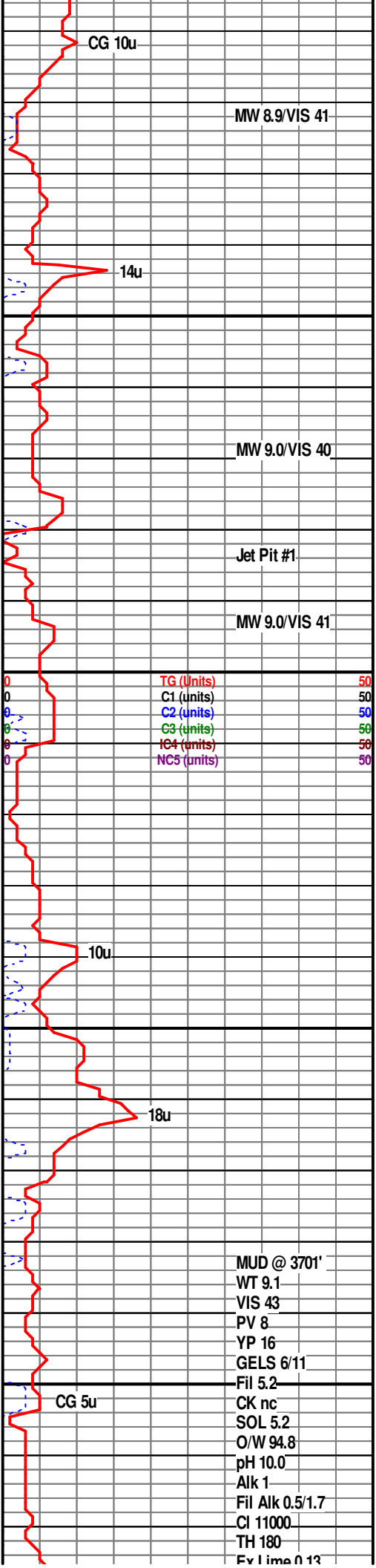
SS: GryBrn-mGry, lvfgr, rnd, w srt, p cmt, fri, shly, mod-v calc, no vis por, no o stn, intbd w/ & grd g to slty SH

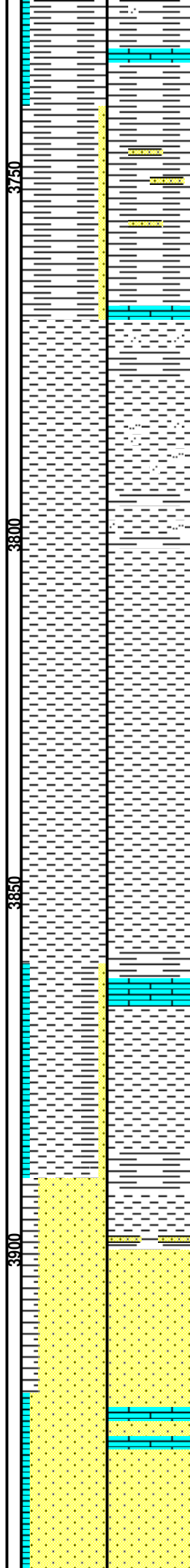
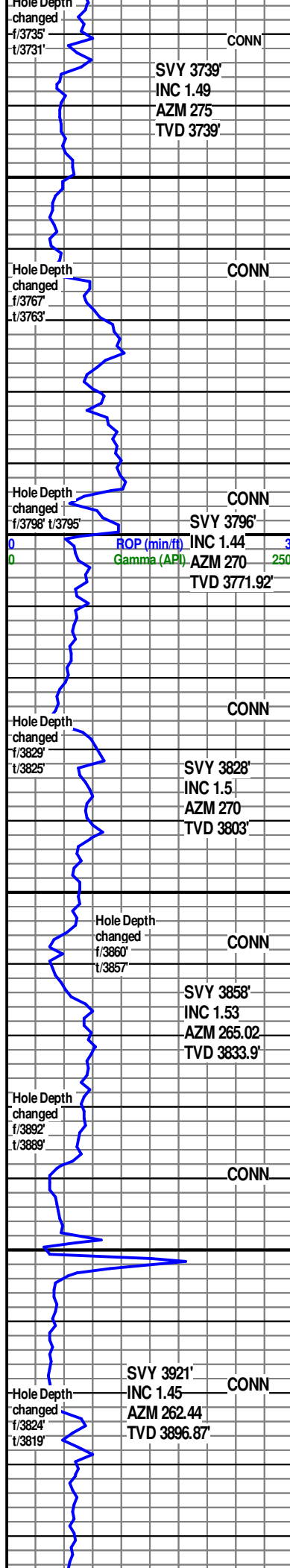
BASE HEEBNER SHALE 3641' MD, 3616' TVD, (-2288' SS)

PKSTN-MDSTN: LS: Crm-ltBrn, blk, frm, lv-uf xln, crypt xln, no-v sli vis por, tr dd o, v fnt dl Gld flor w/ no cut, rr CALC: transl, blk, hd

SH: mGry, sbblky, frm, sbrthy, abnt w rnd fgr sd thru, rr carb frag

SH: mGry-mdkGry, sbblky, mod-p ind, shthy abnt w rnd fgr sd thru





ind, sbrthy, abnt w mdigr sd thru, scat carb frag ip

tr SS: Wh, lvfgr, rnd, w srt, p cmt, sli vis por, no o stn

CLYST: mGry-mdkGry, sbblky, p ind, sbrthy, slty/sd thru, scat carb frag ip

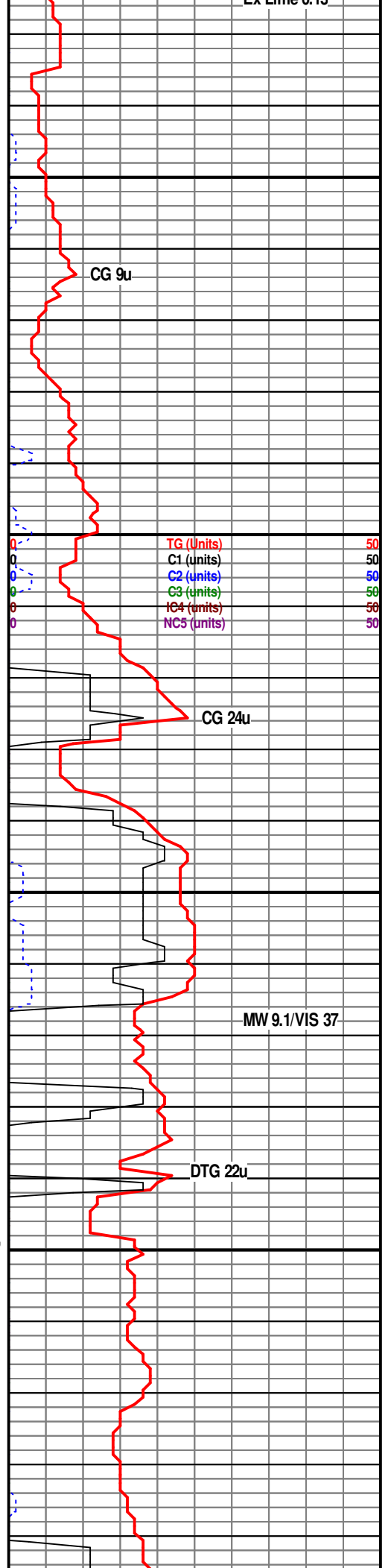
CLYST: mdkGry-mGry, sbblky, p ind, sbrthy, pred slty/sd thru, scat carb frag ip

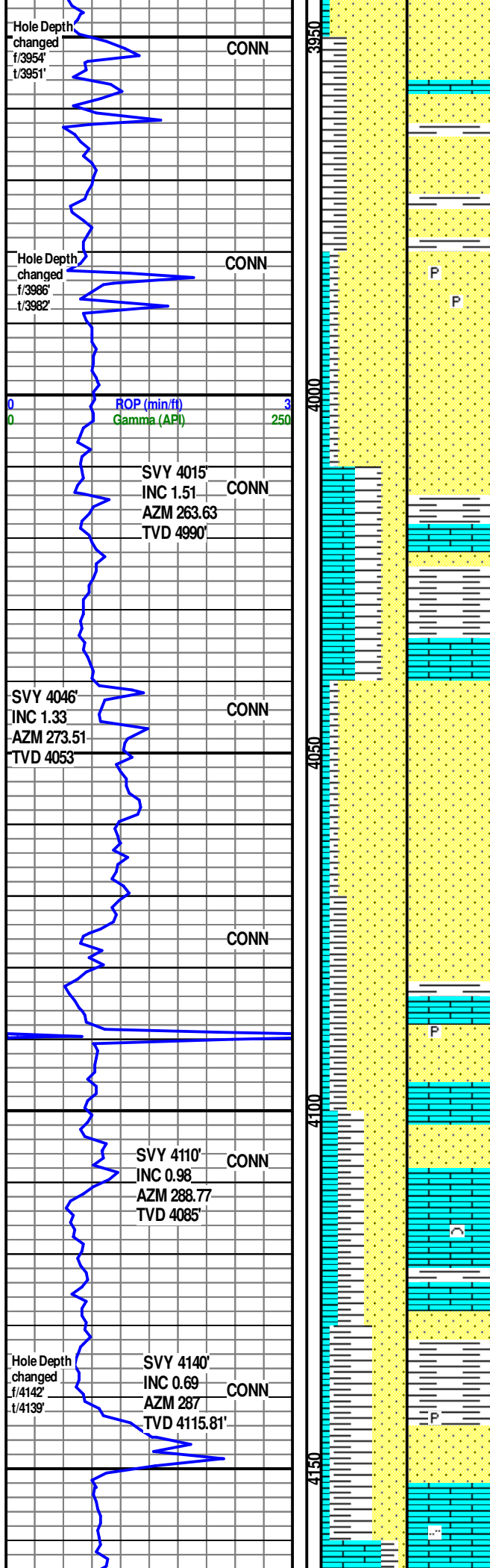
CLYST: ltGry-mGry, sbblky, p ind, sbrthy, pred slty/sd thru, scat carb frag ip

PKSTN-MDSTN: LS: ltBrn-Crm, sbblky, frm, crypt xln, lv-uf xln, no-sli vis por

SS: mGry-transl, lvfgr, f gr ip, rnd, ang ip, w srt, p cmt, n calc, arg, tt, scat carb frag thru, mod-abnt mic Mica ip

SS: mGry-mdkGry-transl, lvfgr, rnd, w srt, p cmt, n calc, arg, tt, scat carb frag thru





SH: GryBrn, sbblky, mod-w ind, n calc, sbrthy-sbwxy

TONKAWA
3972' MD, 3946' TVD
(-2618' SS)

SS: offWh-mGry, uvfgr, ang-sbang, w srt, mod cmt, n calc, sli arg, vis por-tt, abnt mic Mica ip, scat carb frag ip, grdg to SLTST ip

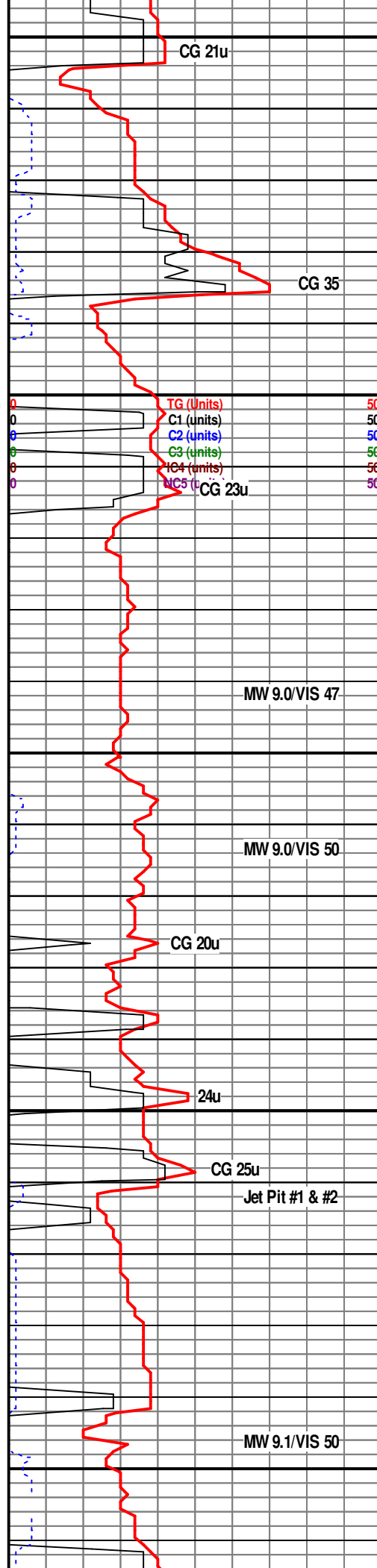
SH: mdkGry, sbplty, mod-p ind, sbrthy, slty, sli calc

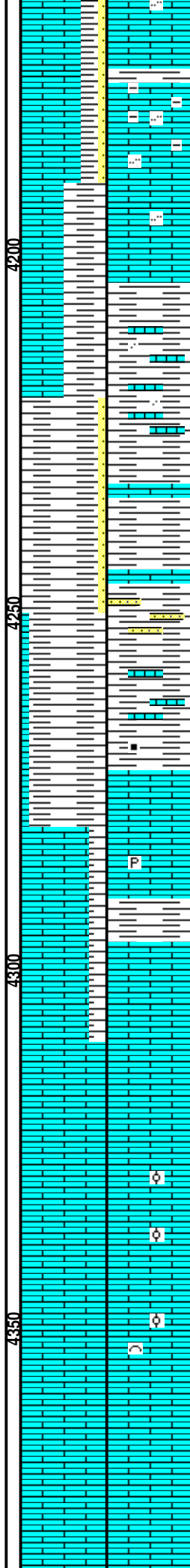
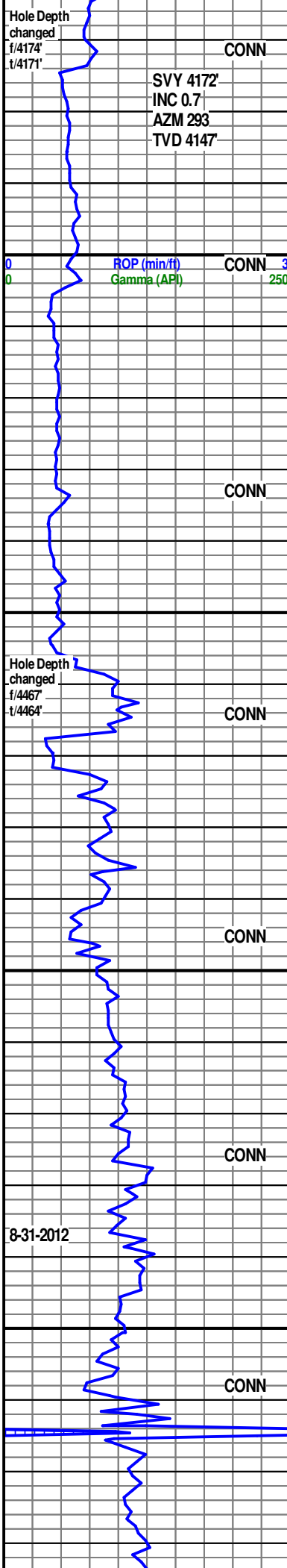
SS: offWh, uvf-lfgr, ang, w srt, w cmt, brit, n calc, gd vis por-tt, arg carb lam ip

SS: offWh, uvf-lvf-lfgr, rnd- sbang, w srt, vw cmt, n calc, tt-sli vis por, mas Pyr ip

WKSTN-MDSTN: LS: Crm- offWh, sbblky, frm, crypt xln-lfgr, mod biocl ip, no vis por

SH: mdkGry, sbblky, frm, mod-sli calc, rthy-sbrthy, v mic, slty, abnt dism Pyr ip; SS: offWh-clr, lvf, ang-sbang, w cmt, n calc, no vis por, 50% disag, mic ip, cly ip





MDSTN-PKSTN: mdkGry, sbblky, frm, lvfgr, v arg, slty, no vis por

SH: GryBrn, sbplty, frm, sbrthy, sli-v calc, slty, sli carb ip

COTTAGE GROVE
4243' MD, 4217' TVD
(-2889' SS)

SH: dkGryBrn-GryBlk, sbplty, frm, sbrthy, sli-v calc, slty, sli carb ip, mod-abnt mic Mic

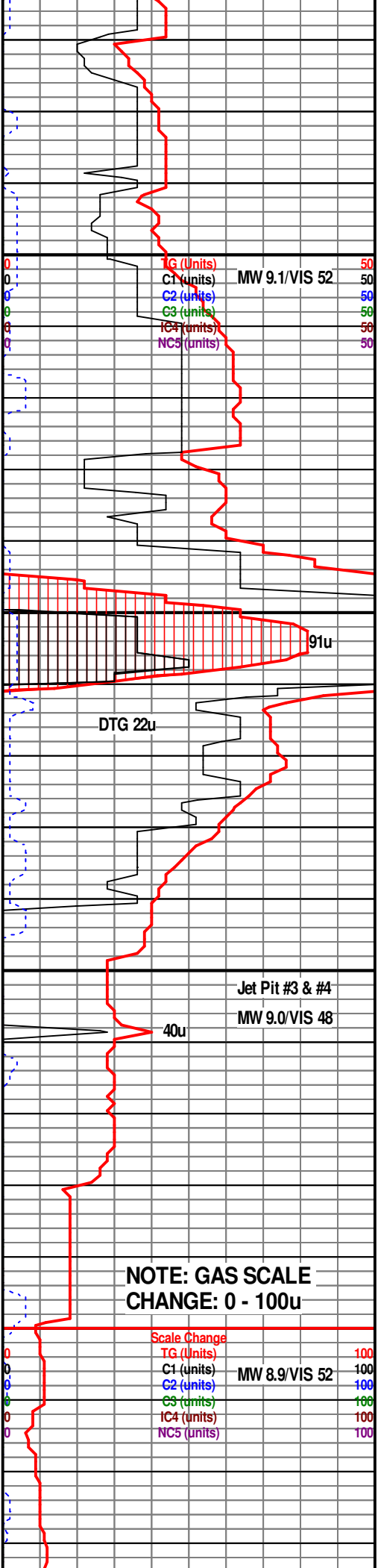
SH: dkGryBrn-GryBlk, sbplty, frm, sbrthy, limy, slty, abnt vfgr imbd Calc xls, mod-abnt mic Mic

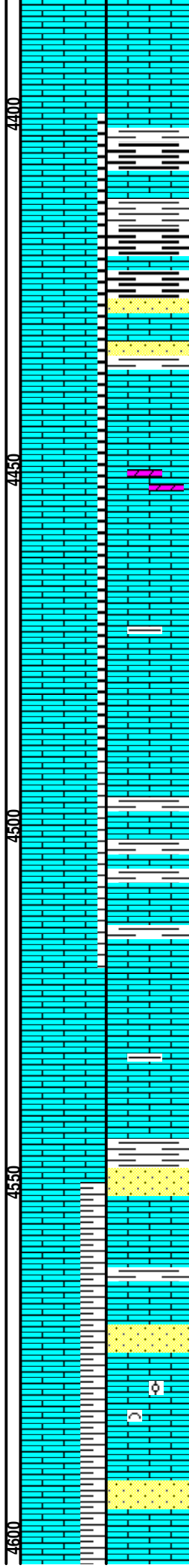
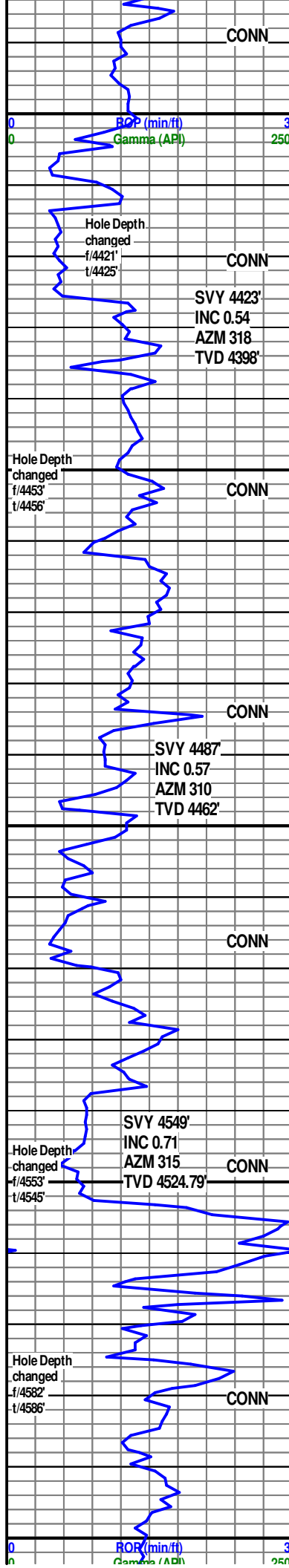
MDSTN-WKSTN: LS: Crm- offWh, blk, hd, pred chky, micro xln ip, uvfgr ip, mod- abnt ooids/biocl ip, intbd w/ dkGry SH

MDSTN-WKSTN: LS: paYelBrn, sbblky, crypt xln-uf xln, v hd, sbvit, abnt ooids/pel ip, biocl ip, rr carb frag, no vis por

WKSTN-MDSTN: LS: ltBrn, sbblky, sft, crypt-micro-lf xln, chky, abnt ooids ip, no vis por

MDSTN-WKSTN: LS: paYelBrn





MDSTN-WKSTN: LS: payeBnI-
mdkGry, sbblky, frm, chky,
crypt-micro-lf xln, abnt ooids/biocl
ip, tr scat carb incl ip, no vis o stn

SH: GryBlk-Blk, plty, sbrthy- sbvit,
frm, n calc, carb

LS: GryOrng, trltOlvGry- mGry,
sbbky-plty, hd-frm, crypt-lvf xln,
chky-vit, tr bio ip, dol ip; tr SS:
offWh, uvfgr, ang-sbang, w cmt, v
srt, sli calc cmt, no vis por, intbd
w/ Carb SH

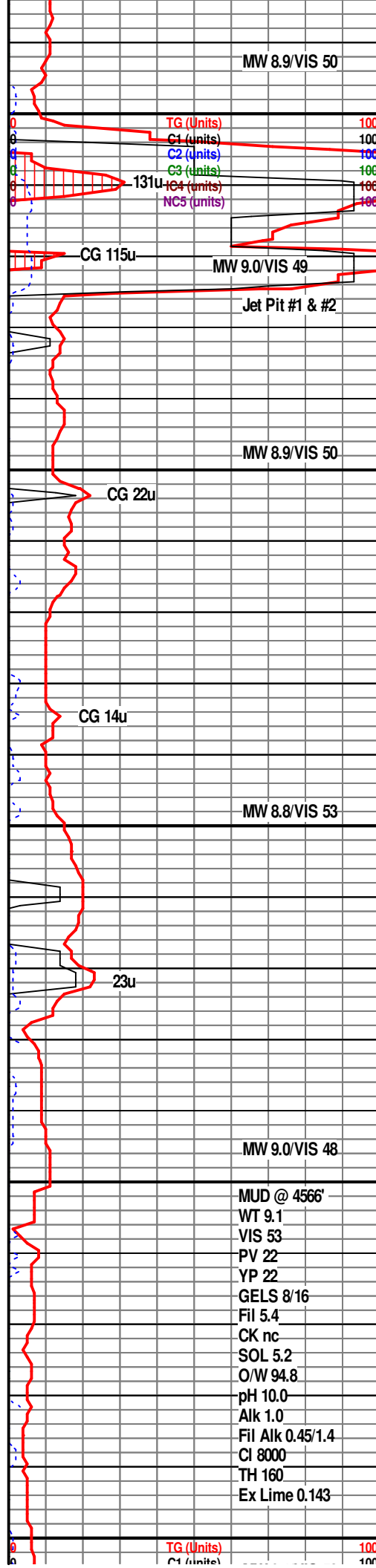
SH: mdkGry-dkGry, sbblky, frm,
sbwxy, v sli-n calc

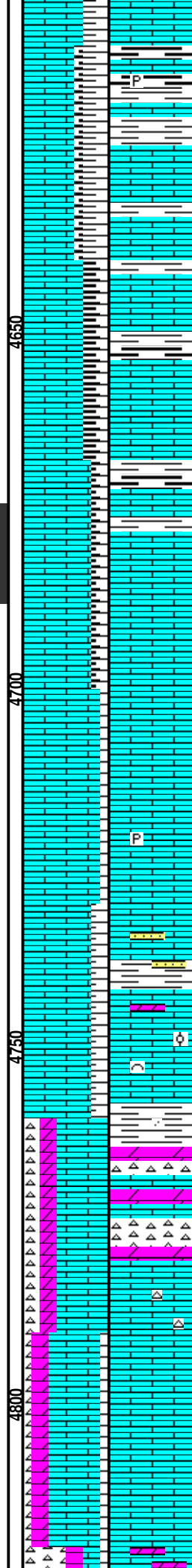
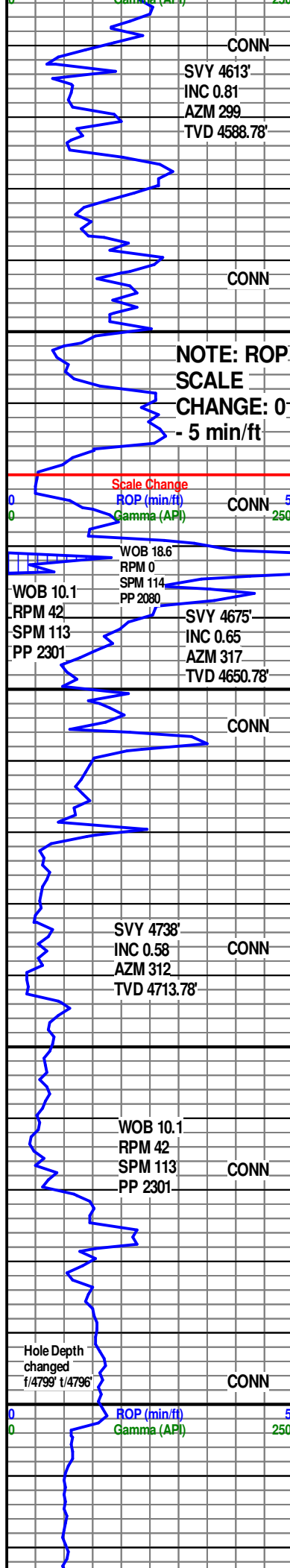
SH: mBlGry, blk-plty, frm,
sbrthy-wxy, v sli=mod calc

OSWEGO
4552' MD, 4527' TVD
(-3199' SS)

MDSTN: LS: GryOrng,
GryOrng-mGry mot, chky, f xln ip,
sbbky-blky, hd, sli dol ip, tr biocl

MDSTN: LS: GryOrng-mGry, chky,
f xln ip, sbbky-blky, hd-sli sft, sli
dol ip, tr biocl, rr Carb SH str





SH: Blk-GryBlk, plty-sbblky, p ind,
sbrthy-sbwxy, pred fis, carb

CHEROKEE 4650' MD, 4625' TVD (-3297' SS)

XLN CARB: vpaOrng,
vpaOrng-paBrn mot, mGry, sbblky,
hd, sbvit-chky, arg ip, rr biocl ip,
no vis por; SH: Blk, sbblky-plty,
sbrthy, n-v sli calc

VERDIGRIS 4682' MD 4657' TVD (-3329' SS)

MDSTN-XLN CARB-WKSTN:
GryOrngPnk-Crm-mGry, sbblky, v
hd-sft, chky-sbvit, ooids/biocl ip, rr
embd mgr Calc xls

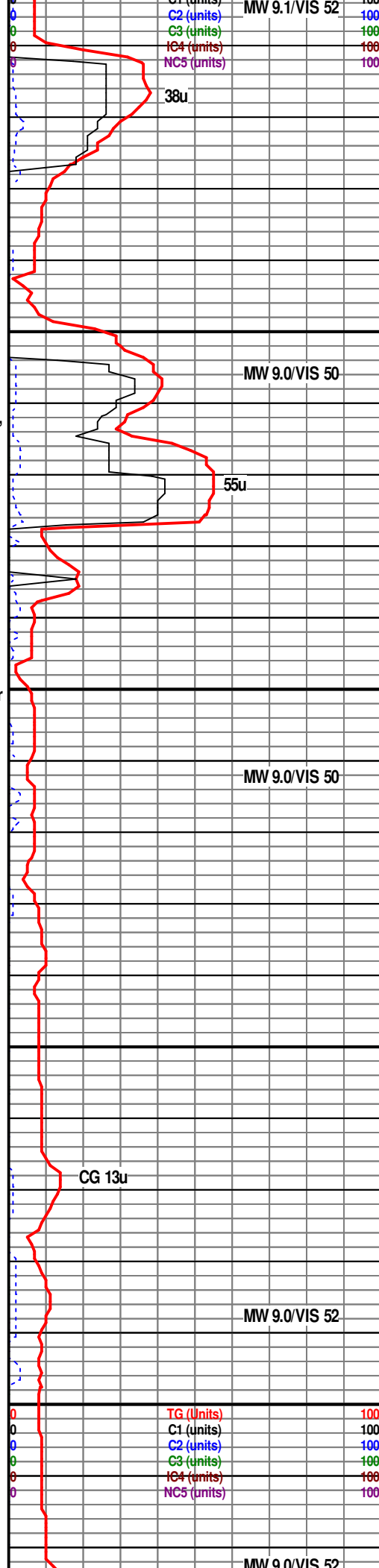
BNDST-XLN CARB: LS: mGry-
ltGry-mod OrngPnk, tr GryRed,
lvgr-lfgr-crypt xln, sbblky-blky,
hd-sli sft, grn- sbvit, ooids/pel ip,
fnt dkGld flor w/ no cut

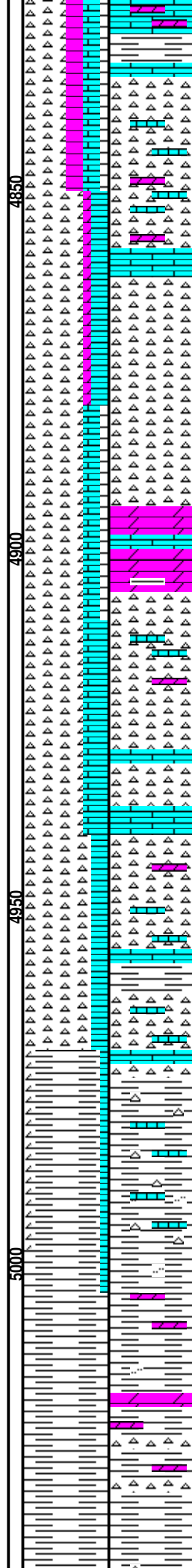
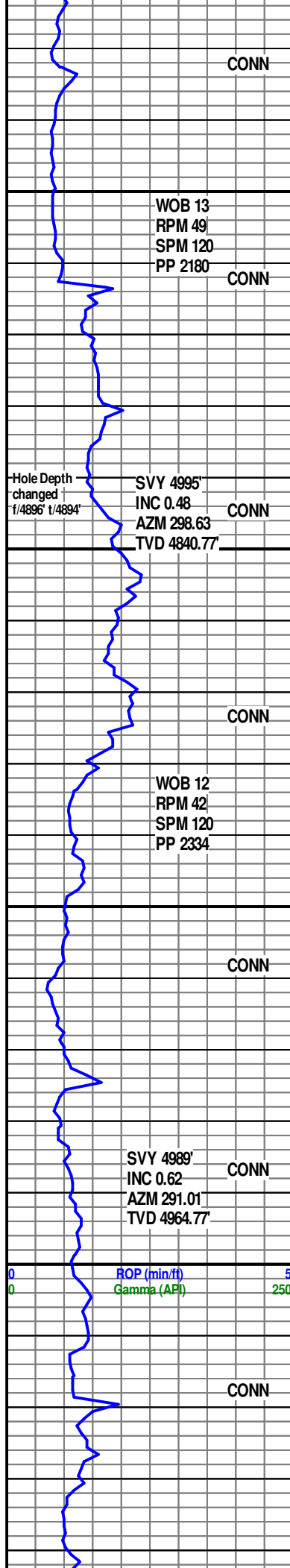
BNDST-XLN CARB: LS:
paYelBrn-ltGry, vfgr-lfgr-crypt xln,
sbblky-blky, hd-sli sft, grn- sbvit,
abnt ooids/pel, v arg ip, fnt Bl flor
w/ no cut

MISSISSIPPI LIME 4770' MD, 4715' TVD (-3387' SS)

CHT: offWh-ltGry, tr paBl, sbblky,
brit, trip ip w/ LS incl, frm-hd,
sbvit-opaq, no vis por, no o stn

CHT: offWh-ltGry, sbblky, brit, trip
ip w/ LS incl, hd, conch frac,
opaq, sbvit, no vis por, no o stn;
SH: ltGry-mGry, blky- splty





CHT: Wh-ltGry, sbblky, frm, sucr, sbvit, LS incl (20%), tr euhed f xln Dol incl, fnt BI & dl Gld flor, scattflor w/ no cut; SH: dkGry, plty-sbblky, frm, sli calc,

CHT: Wh-ltGry, sbblky, frm, sucr, vit, LS incl (20%), tr euhedv f xln Dol incl; fnt BI & dlGld flor, spty bri Yel flor w/ wk mlky blm & no resd rng cut; SH: dkGry, plty-sbblky, frm, sli calc

CHT: Wh-offWh mot, sbblky- blky, hd, sbvit, sucr, LS incl (20%), rr euhed f xln Dol incl, fnt dl Gld-Brn flor w/ no cut; incr SH

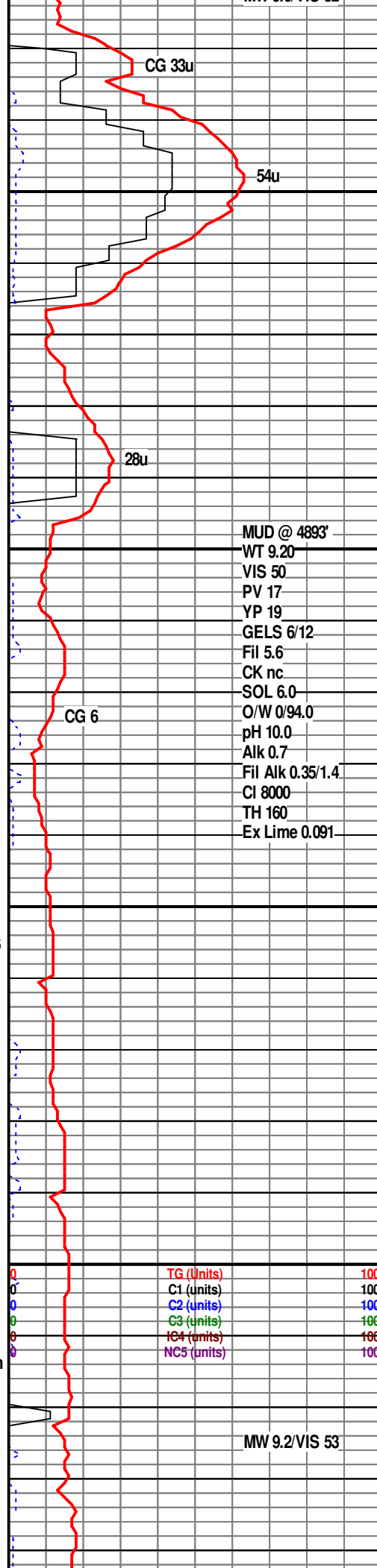
CHT: Wh-offWh, sbblky- blky, hd-frm, sbvit, sucr, LS incl (30%), tr Dol incl, tr mGry SH; fnt dl Gld-Brn flor w/ no cut

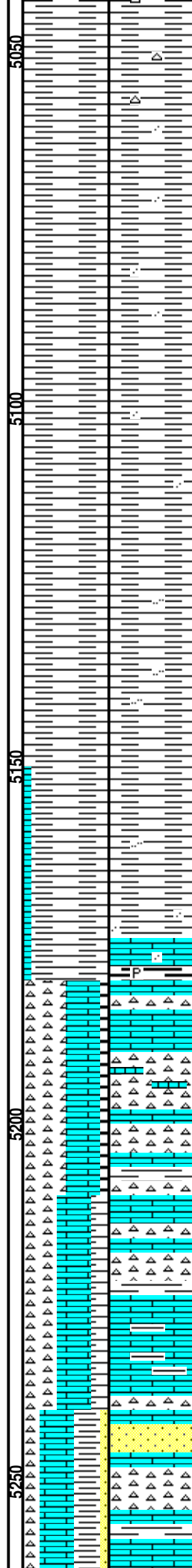
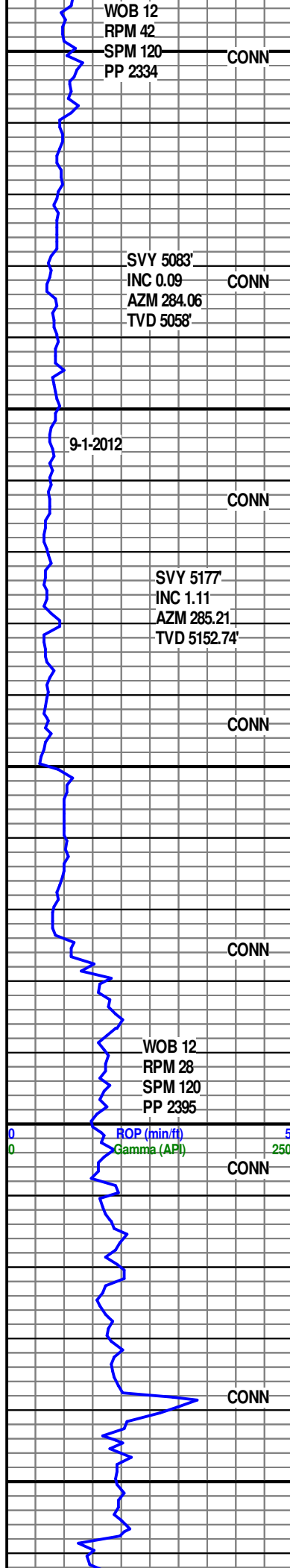
CHT: Wh-offWh, tr mGry, sbblky-blky, frm-hd, sbvit, sucr, LS incl (20%), tr Dol incl, tr mGry SH, mod dl Gld flor w/ no cut

SH: BrnGry, sbblky, mod ind, rthy, slty thru, sli-mod calc, tr Wh CHT, mod dl Gld flor w/ v fnt slo Yel blm & no resd rng cut

SH: BrnGry, sbblky, mod ind, rthy, slty thru, mod calc, tr Wh CHT; fnt dl dk Gld flor w/ v slo fnt mlky blm w/ dl Wh & dl BI cnch rng cut

KINDERHOOK
5031' MD, 5006' TVD
(-3678' SS)





SH: GryBrn, sbblky, mod ind, rthy, slty thru, sli calc, rr Wh CHT, fnt dl dk Gld flor w/ v slo fnt mlky blm & wk dl Gld resd rng cut

SH: GryBrn, sbblky-blky, mod ind, rthy, slty thru, sli calc, v fnt paBl flor w/ no cut

SH: BrnBlk-OlvBlk, sbblky-blky, mod ind, rthy, slty thru, sli calc, fnt Gld flor w/ wk Yel-Wh blm & v gd bri Wh & bri Wh cncn rng cut

WOODFORD
5120' MD, 5055' TVD
(-3727' SS)

SH: mdkGry, blk, mod ind, mod-p ind, mod calc, rthy, slty, no vis flor w/wk mlky blm & mod bri Wh resd rng cut

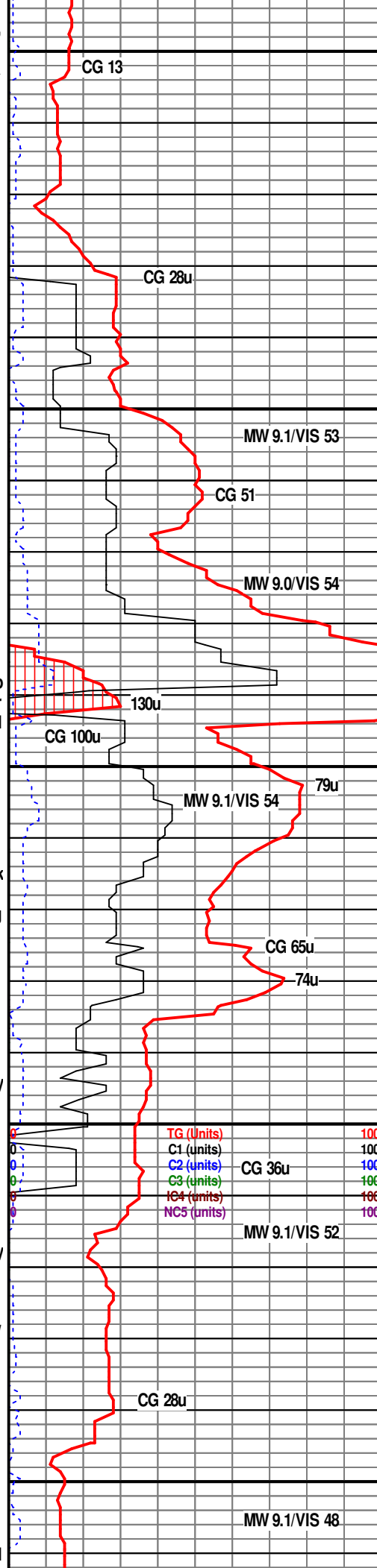
SH: mGry-GryBrn-dsky YelBrn, sbblky, hd-frn, n calc, slty thru, wk paBl-wk Gld flor w/ slo fnt mlky blm & gd paBl rng cut, grdg to arg LS

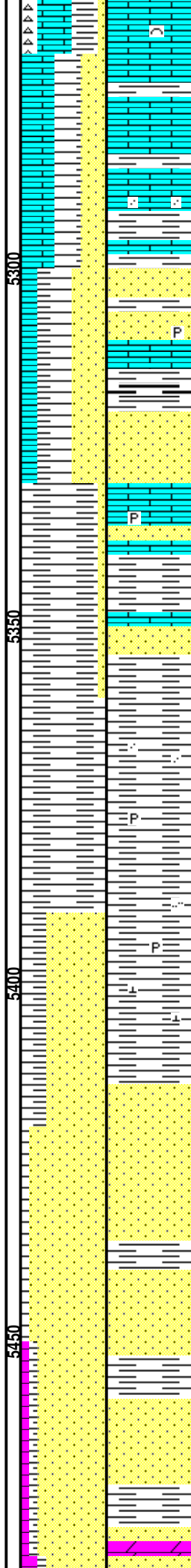
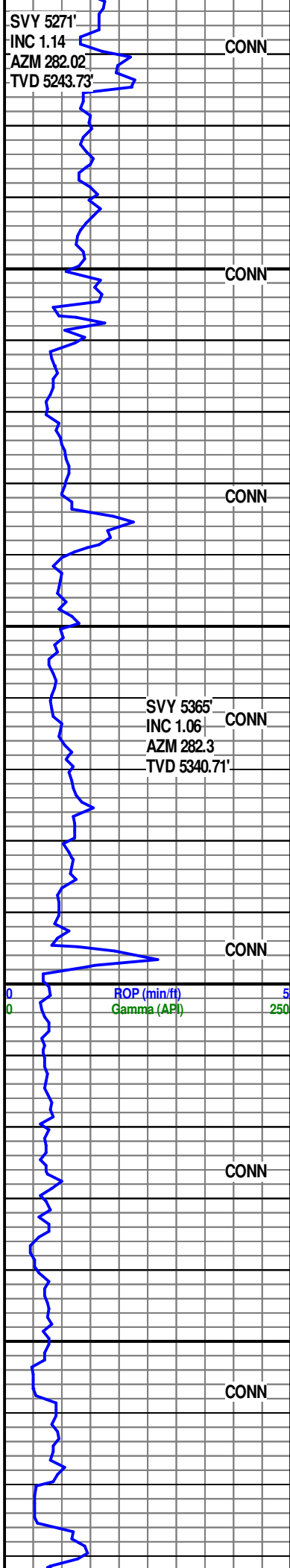
VIOLA
5186' MD, 5161' TVD
(-3838' SS)

CHT: Wh-transl mot, ltGtry, blk, hd, gran, no vis por, no o stn, limy incl (20%), wk Gld-wk Bl flor w/ slo fnt-mlky blm & no cut; SH: BrnGry, blk, frm, rthy, sli calc, mod ind

CHT: Wh-transl mot, ltGtry, blk, hd, gran, no vis por, no o stn, limy incl (20%), wk Gld-wk Bl flor w/ slo fnt-mlky blm & no cut; SH: BrnGry- ltBrn, blk-sbblky, w ind, rthy, sli calc, slty, wk dl Gld flor w/ no cut

MDST: LS: offWh-Crm-mod
OrngPnk-ltBrn, sbblky, frm, chky-f xln, tr biocl, scat disag w rnd uf sd





gr in spl, no o stn, wk dl Gld flr w/ no cut

SH: BrnGry-YelGry, blk, p- mod ind, sli calc, rthy-sbwxy, sdy ip, wk dl Gld flr w/ no cut

SIMPSON
5305' MD, 5280' TVD
(-3952' SS)

SS: Transl, um-ufgr, sbrnd- rnd, w srt, uncons/disag, tr mas disag Pyr, fnt dl paBl flr w/ no cut; SH: GryBlk- Blk, blk, fis, v hd, sbrthy, sli carb

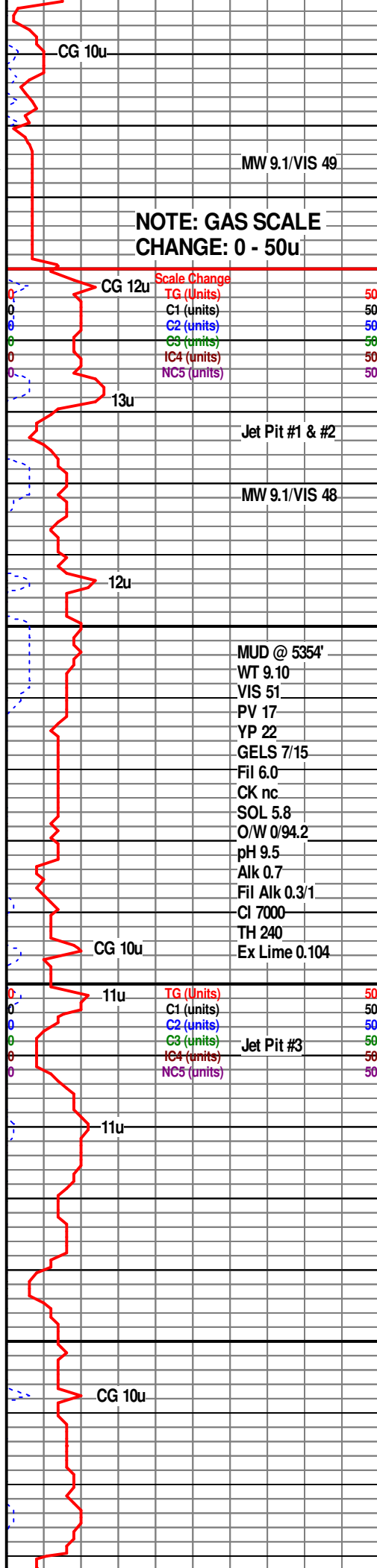
SH: GrnGry-dkGrnGry-BrnGry, blk-pty, mod ind, sbwxy-wxy-sbrthy, sli slty ip, n-v sli calc, fnt paBl flr w/ no cut

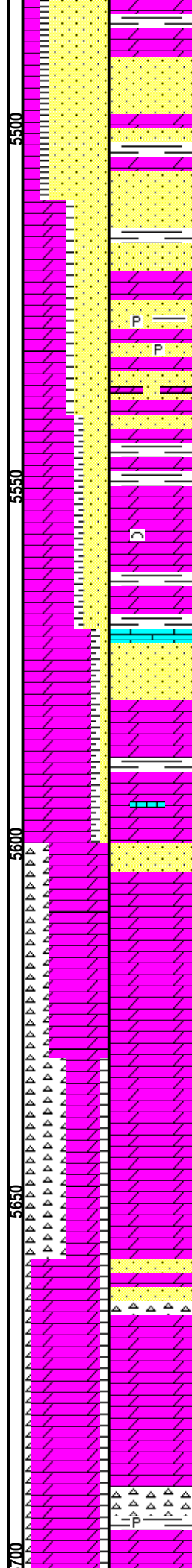
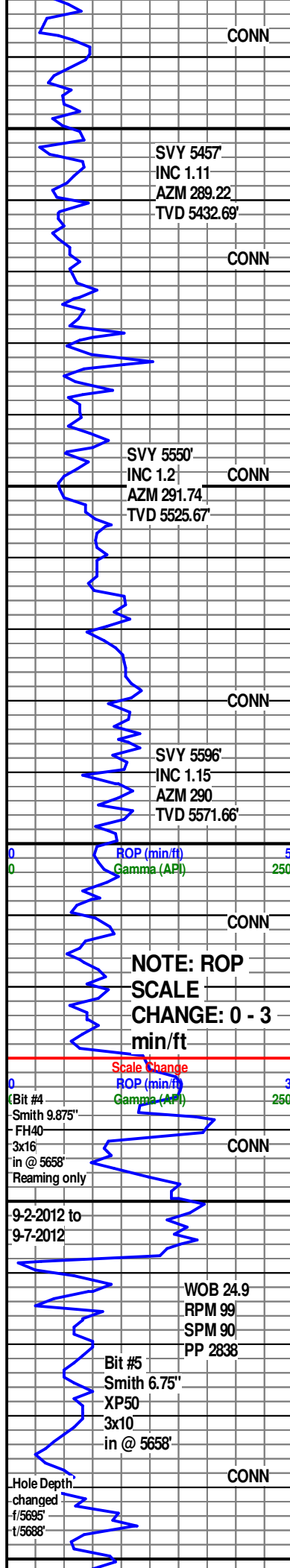
SH: GryBrn-dkGrnGry, sbpty-sbbly, mod ind, sbrthy- sbwxy, sli slty ip, n-v sli calc, rr diss pp Pyr, v fnt Gld flr w/ no cut

SS: Transp-offWh, um-lcgr, ww rnd-sbang, w-mod srt, uncons/disag, wk dl Gld flr w/ no cut; GrnGry SH

OIL CREEK
5445' MD, 5420' TVD
(-4162' SS)

SS: Transp-offWh, um-lcgr, ww rnd-sbang, w-mod srt, uncons/disag, fnt Brn flr w/ no vis blm & v fnt Wh resd rng cut; GryBrn SH





SS: Transp-offWh, lc-umgr,
sbrnd-w rnd, w-mod srt,
uncons/disag, tr Dol cmt, Yel-Wh
blm w/ no cut

ARBUCKLE
5515' MD, 5490' TVD
(-4162' SS)

WKST: DOL: GryOrng-offWh-
ltBrn, lvfgr-cryptxln, suc- sbvit, no
vis por, no o stn, gd Gld-dl Gld
flor w/ no cut; SS: Transp-offWh,
lc-umgr, sbrnd-w rnd, w-mod srt,
uncons/disag, tr Dol cmt

WKST: DOL: GryOrng-offWh-
ltBrn, lvfgr-cryptxln, chky, no vis
por, no o stn, gd Gld-dl Gld flor
w/ no cut

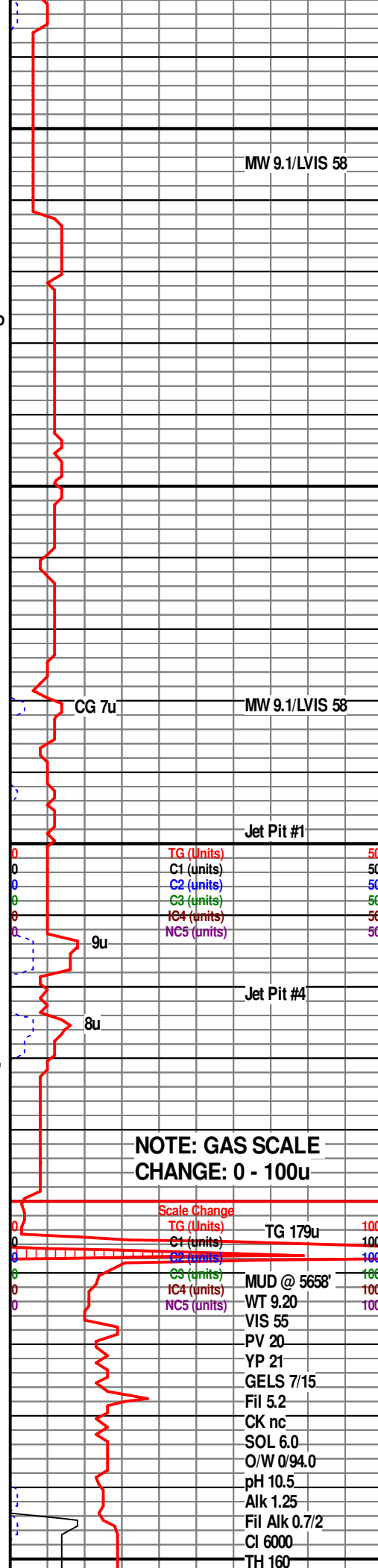
WKST: DOL: GryOrng-offWh-
ltBrn, lvfgr-cryptxln, chky, sft, sli
calc cmt ip, no vis por, no o stn,
gd spty Gld flor w/ wk Yel blm &
gd dl Wh & dl Gld cnch resd rng
cut; tr SH

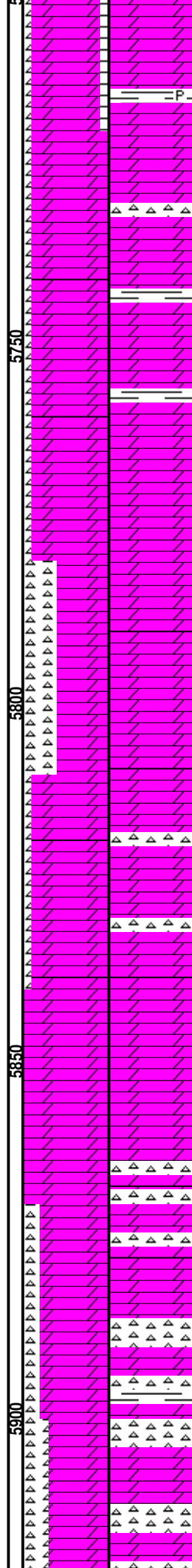
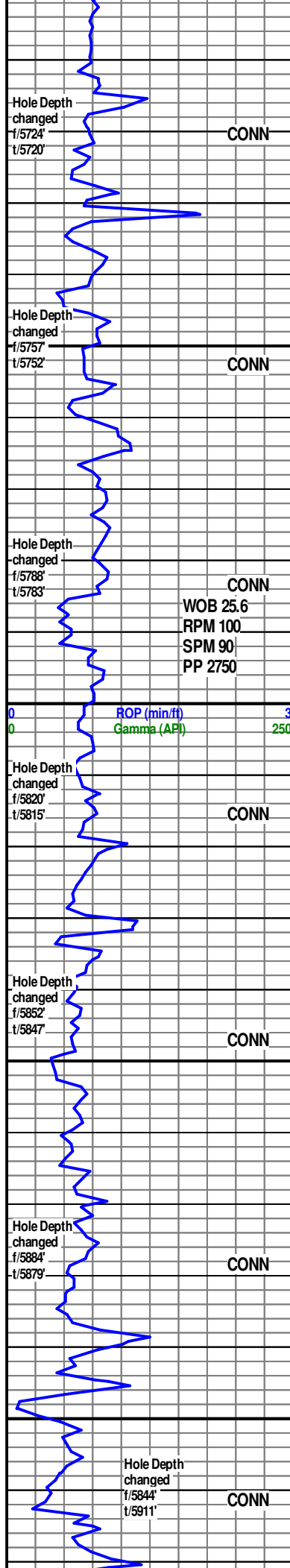
CHT: offWh, abnt uvf rnd Sil grn
thru, sli vis por ip; PKSTN: DOL:
GryOrng-offWh-ltBrn, anhed, lvf
xln, sbvit, no-sli vis por, no o stn;
SH: GryGn- mGry-GryBlk, plty, fis,
n calc, sbwxy-wxy, NFSOC

**TD for INTERMEDIATE
CASING @ 5658'**

7.625" Casing set @ 5648'

DOL: euhed, Wh-transl, micr
xln-sucr, frm, no-sli vis por, tr SH:
BrnBlk, sbblky, mod ind, rthy, n
calc: tr CHT: Wh. sbblkv. frm-hd.





no vis por

DOL: euhed, Wh-transl, micr xln-sucr, frm, sli-mod calc, no-sli vis por, no vis o stn; CHT: Trans-dkBrn mott, Wh, sbblky, frm- hd, no vis por,

DOL: sbhed-anhed, Wh, micr xln, frm-hd, v sli calc, no vis por, no vis o stn, gld Yel flor w/ v fnt mlky blm & no resd rng cut; CHT: Wh-offWh, blk- sbblky, frm, tr euhed Dol incl

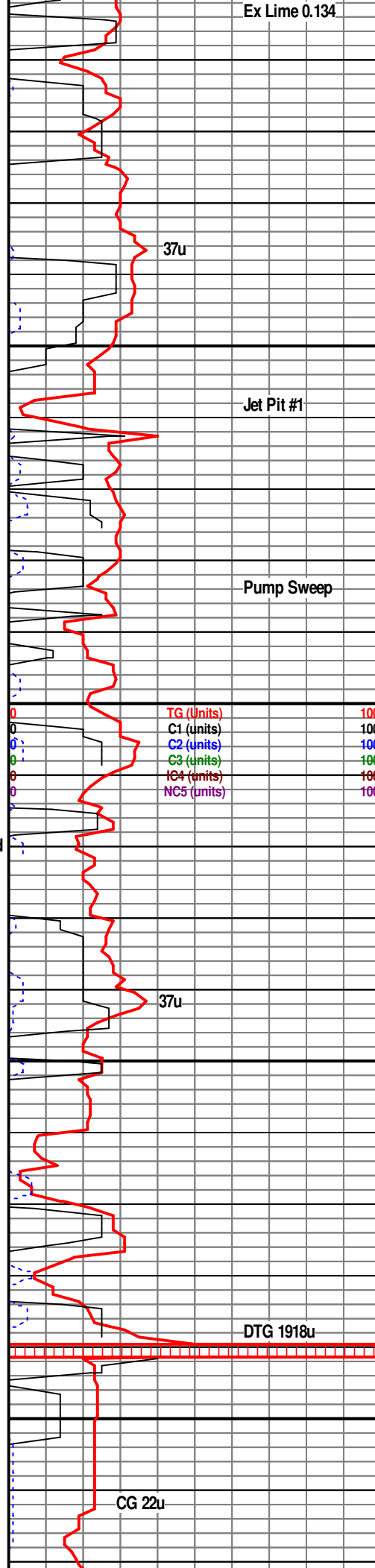
DOL: anhed, transl-Wh, crypt xln, frm-hd, no vis por, no vis o stn, gd Yel flor w/ wk mlky blm & no resd rng cut; CHT: Wh- offWh, blk- sbblky, frm- hd

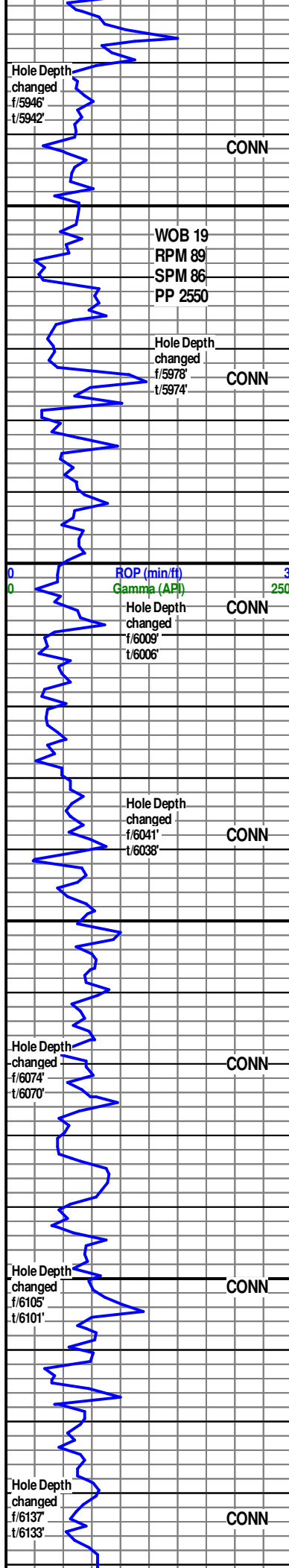
DOL: anhed-sbhed, transl- Wh, crypt xln, rr uf xln, frm- hd, no vis por, no vis o stn, gd Yel flor w/ mod mlky blm & no resd rng cut; CHT: Wh- offWh, blk- sbblky, frm-hd

DOL: anhed-sbhed, offWh- ltBrnGry, crypt xln-lf xln, vit- sbvit, no vis por, no vis o stn; CHT: offWh-ltBrn, blk- sbblky, frm-hd, brit, no vis por, no o stn

Rig Repairs - POOH 14 STDS

DOL: anhed-sbhed, offWh, crypt xln-lf xln, vit, no vis por, no vis o stn; CHT: Tn-offWh- ltBrn, blk- sbblky, hd, conch frac ip, no vis por, no o stn





DOL: anhed-sbhed, offWh, crypt
xln-f xln, vit, no vis por, no vis o
stn; CHT: Tn-offWh- mGry,
blky-sbblky, hd, conch frac ip, no
vis por, no o stn

DOL: anhed-sbhed, offWh, crypt
xln-f xln, vit, no vis por, no vis o
stn; CHT: offWh-ltBrn, blky-sbblky,
hd, tr conch frac ip, no vis por, no
o stn

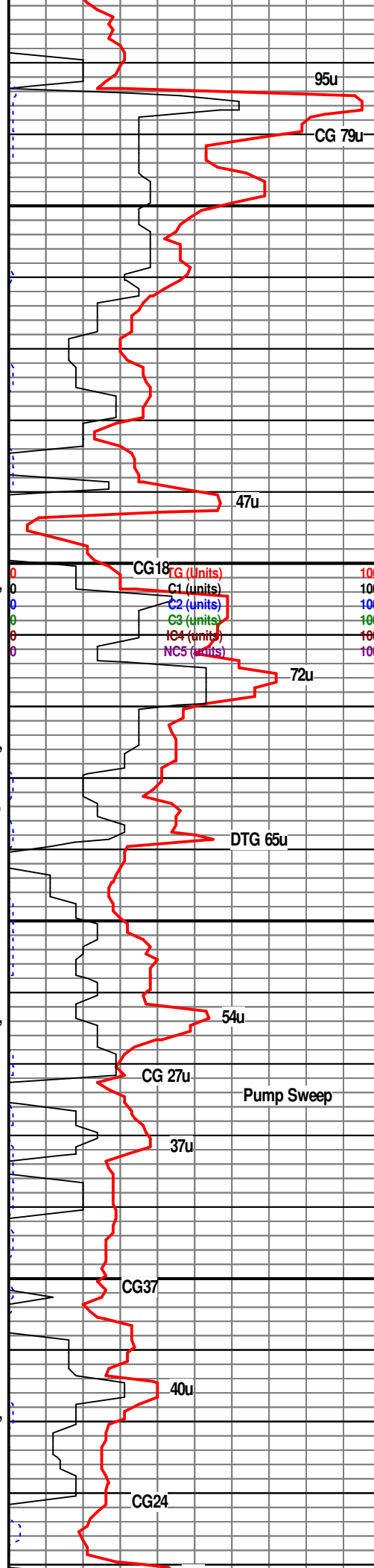
DOL: anhed-sbhed, offWh-
ltOlVgry, crypt xln-f xln, vit, no vis
por, no vis o stn; CHT: ltBrn-offWh,
blky-sbblky, hd, tr conch frac ip,
no vis por, no o stn

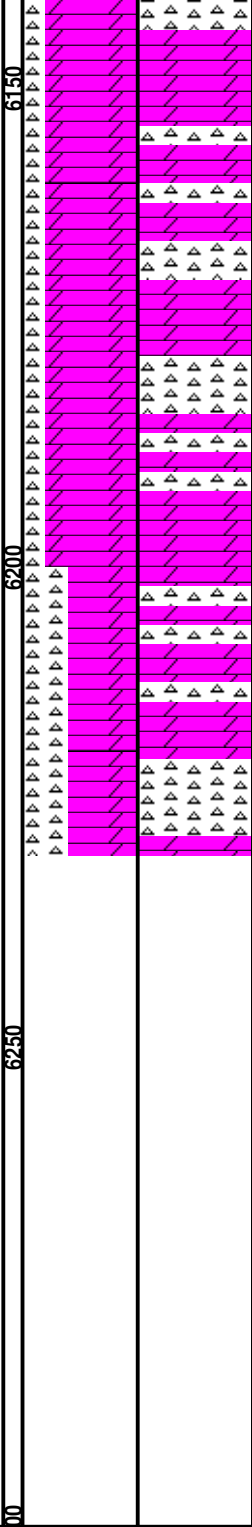
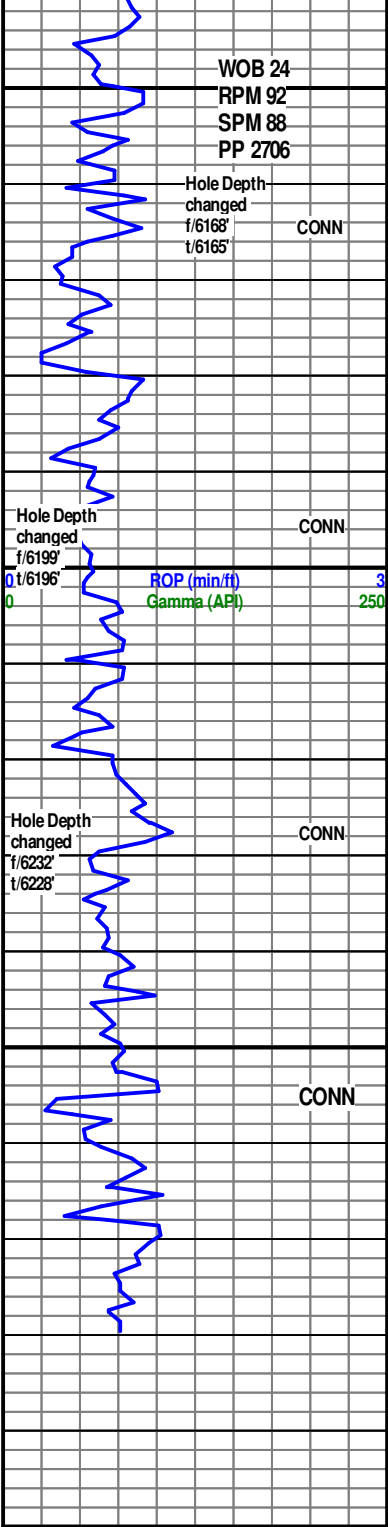
DOL: anhed-sbhed, BrnGry- offWh,
crypt xln-f xln, vit, no vis por, no
vis o stn; CHT: offWh-transl mot,
dkBrn- ltBrn, blky-sbblky, sucr, hd,
tr conch frac ip, no vis por, no o
stn

DOL: anhed-sbhed, BrnGry- offWh,
crypt xln-f xln, vit, no vis por, no
vis o stn; CHT: offWh-transl mot,
dkBrn- ltBrn, blky-sbblky, sucr,
sft frm, no vis por, no o stn

DOL: anhed-sbhed, ltGry-
transl-offWh, crypt xln-f xln, vit-dl,
no vis por, no vis o stn; CHT:
ltBrn, sucr, sft

DOL: anhed-sbhed, BrnGry- offWh,
crypt xln-f xln, dl, no vis por, no
vis o stn; CHT: transl-ltBrn mot,
clr, offWh, sbblky, sucr, sli sft frm,
no vis por, no o stn





DOL: anhed-sbhed, offWh- Brn,
crypt xln-f xln, dl, no vis por, no
vis o stn; CHT: transl-ltBrn mot,
clr, offWh, sucr, tr sbblky, sli
sft frm, no vis por, no o stn

DOL: anhed-sbhed, offWh, crypt
xln-f xln, dl, no vis por, no vis o
stn; CHT: transl-ltBrn mot, offWh,
sucr-sbblky, sli sft frm, no vis por,
no o stn

DOL: offWh-transl-clr, sbhed-
aned, lv xln ip, vit-sbvit, no vis
por, no o stn CHT: Wh- offWh,
blky-sbblky, frm, no vis por, no vis
o stn

