

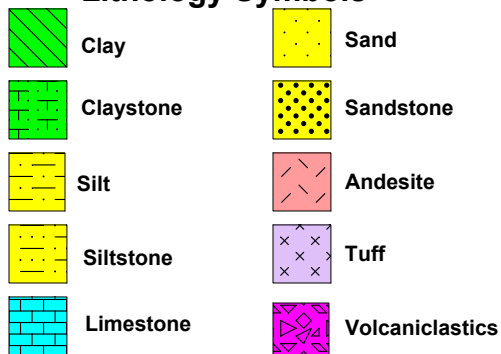
Albuquerque, NM
505-228-3132

U.S. Navy 88-24

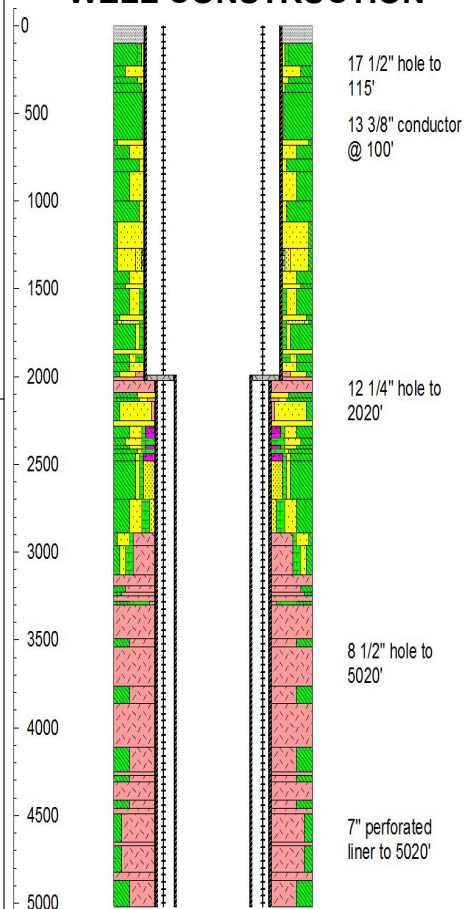
ABBREVIATIONS

NB	New Bit
RRB	Re-run Bit
CB	Core Bit
WOB	Weight on Bit
RPM	Revolutions per Minute
PP	Pump Pressure
SPM	Strokes per Minute
POOH	Pull Out of Hole
WR	Wiper Run
LAT	Logged After Trip
LC	Lost Circulation
NR	No Returns

Lithology Symbols



WELL CONSTRUCTION



COMPANY: U.S.N. Geothermal Program Office

WELL NAME: 88-24

FIELD: Naval Air Station, Fallon, NV

COUNTY/STATE: Churchill / NV

COORDINATES: UTM_e 356376, TM_n 4362769

ELEVATION/KB: 3925' + 15' KB

API NUMBER:

COMPANY REP: Dennis McGrew

CO. GEOLOGIST: Steve Bjornstad

CONTRACTOR/RIG: Barbour Drilling Rig # 77

SPUD DATE: 11/08/2012

LOGGING DATES: 11/08/2012 to 11/26/2012

LOGGED DEPTHS: 110' to 5020'

LOGGING

GEOLOGISTS: Bruce Vesterby

MUDLOGGERS: Jeff Lewis, Richard Taylor

[illegible]

ROP scale changes
@ 2,400' and 2,900'

Bit #1 12 1/4" Hughes
GTX-CMP @ 100

11/9/12 @ 138'

ROP

WOB

Pump Pressure Scale

WOB 6-10K
AVG ROP = 179
PP 130psi
SPM 1 = 80
SPM 2 = 0

50

100

150

200

250

300

350

400

450

In XX / Out XX

Wt x.x Vis xx

In 70° / Out 69° (F)

Clear Flowline
Wt 8.9 Vis 65

TEMP In/Out Scale
50 150 2500

Pressure Out Scale
0 50 100

Pit Volume in BBLS

H2S

CO2

In 70 / Out 71

Wt 8.9 Vis 65

In 70 / Out 70

Wt 9.0 Vis 65

NOTE: Commence drilling on 11/8/2012 @ 20:20 hrs. Hole was previously drilled with 17 1/2" bit to 115' and 13 3/8" conductor was set to 100'. Drilled out of conductor with 12 1/4" bit. All depths are referenced from 15' kelly bushing. Hole depth is determined by driller's pipe tally.

Clay: lt orng, lt gry-grysh wht, v sft, non-mod sol, v sticky, v cohesive/adhesive, occ sft blk almost oily substance, tr pale grn ctnngs w/emerald inclsns (kaolin?), non calcareous, abndt cement in smpls.

Clay: pl grn, lt tan, mod sol, mod cohes, mod adhes, smooth, med-crse gr multicol sand, dom qtz, prly srted, rr andesite frags, tr-com slvry grn micas, com blk micro mafic spkng, v rr dissem pyr, non-weakly calcareous.

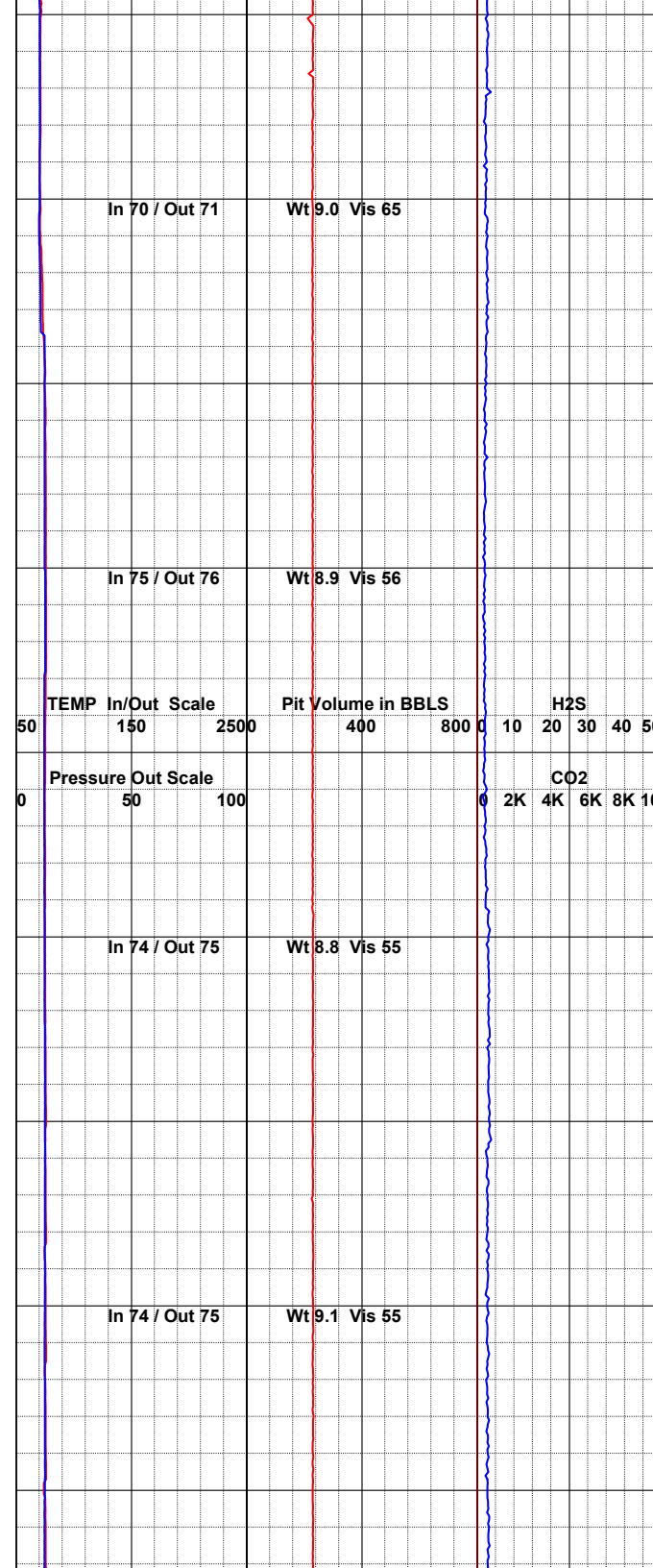
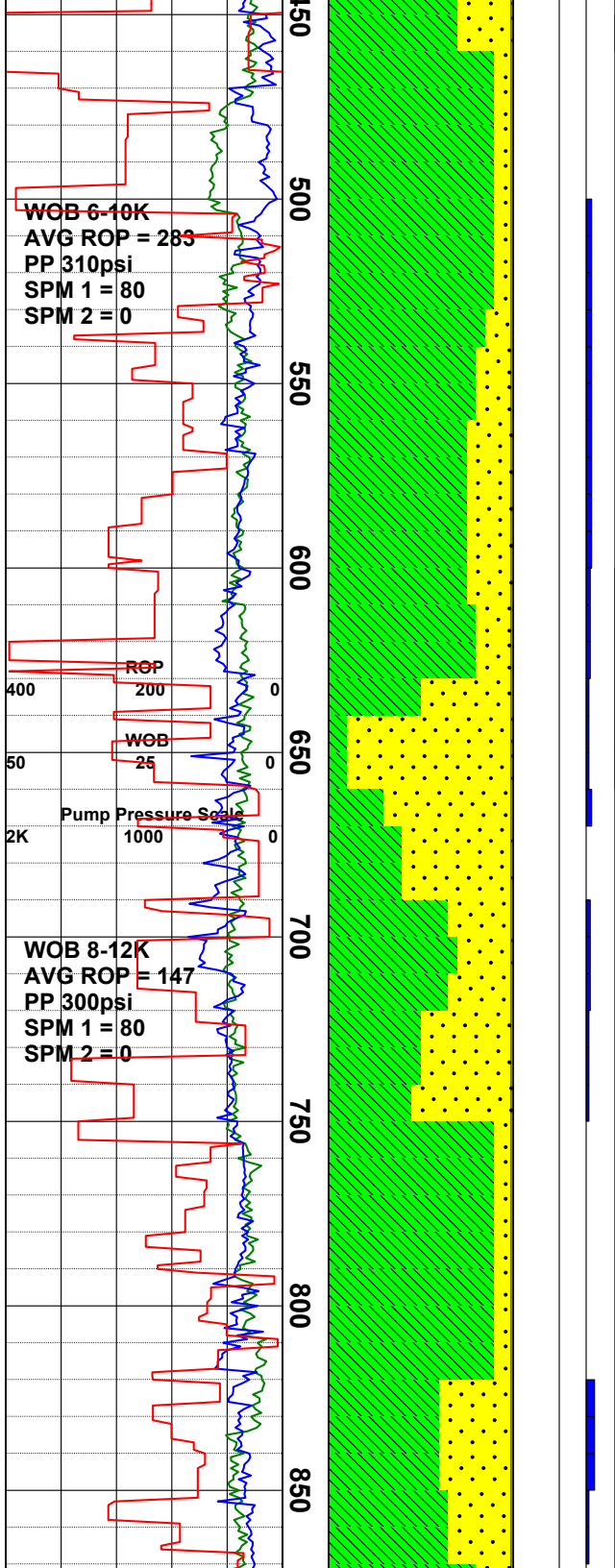
Clay / Sand: med-pl grn, smooth, sl adhes / cohes, curdy, 30-40% silt washing out, incr sand content, med-crse gr, dom clr, med-pl grn, rddsh brn, blk, mod srted, sl calcic.

Survey @ 274' = 1.0°

Clay: med-pl grn, sl clumpy, curdy, sl-mod cohes / adhes, sl tacky, cont silt to 40%, sand gen a/a, bcmng mod-well srted, dom med gr, occ crse clr qtz grs, decr micas, wk calc.

Clay / Sand: a/a, silt ~ 50% of smpls, clay mod sol, med gr snd, occ fn gr, non calcic.

Clay / Sand: med grn-grysh grn, tacky, gd cohes, sl-non sol, gritty; clr, grn, rddsh brn fn-med sbang-sbrndd sand grs, crse IP; rr-tr slvry/blk mica flakes, v wk-non calcareous



Sandy Clay: grnsh gry, pl gry, bluish grn, mod-non sol, v tacky, gd cohes, v adhes, lumpy; clr, grn, brn, rddsh brn, dull yel fn-med sz sand grs, 10%-20% silt washing out, cont scatt mica flakes, sl calcareous thruout section.

Survey @ 500' = 1.0°

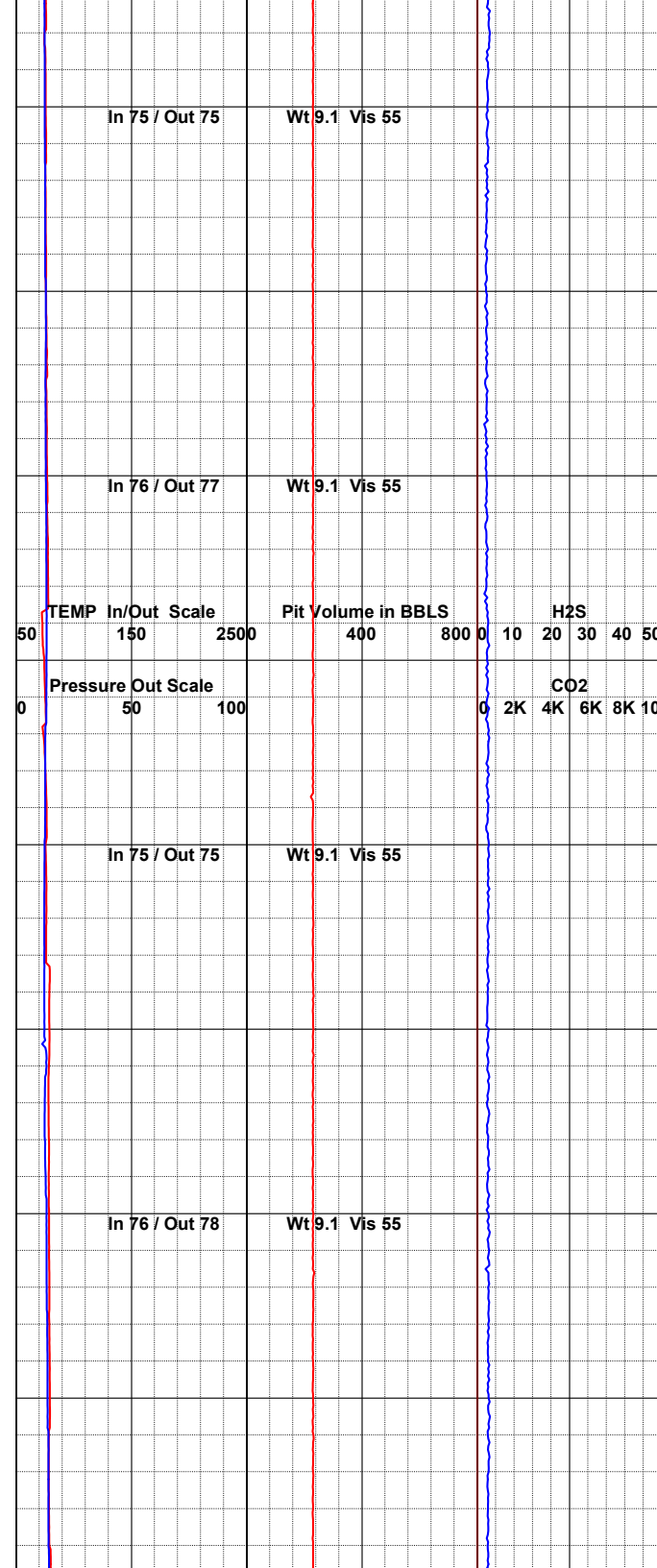
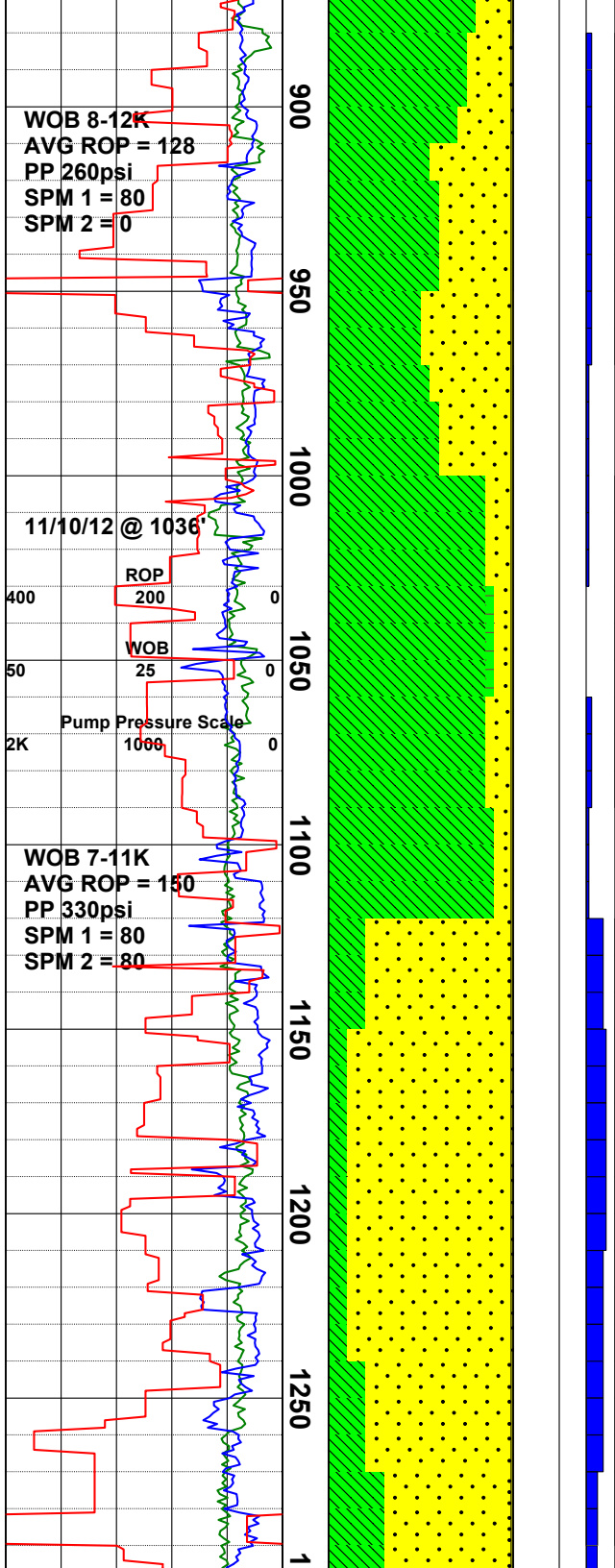
Sandy Clay: pred grnsh gry, lsr lt-m gry, v-mod sol, sl sticky, mod cohesion/adhesion, Sand is multi colored, dom crs-u m gr sz, sbang-sbrnnd, com volcanic frags/seds, com ostracods, mod-sl calcareous.

Sandy Clay: Clay is dom pale grn, lsr grnsh gry, frm-sft, dom non sol, lsr mod-v sol, v gd cohesion, mod-gd adhesion, Sand is multi colored, dom clr, grn-grnsh gry, lsr frosted, blk, rdsh orng, lwr crs-u med gr sz, rndd-well rndd, bcmng pred Sand f/2631', gd tr blk/silver biotite mica books, tr aggregate pyrite clusters, mod sl rxn to HCL throughout.

Survey @ 747' = 1.5°

Clay/Sand: med gry, grnsh gry, pl gry, smooth, non-v mod sol, bcmng less sol & stickier w/depth, gd cohesion/adhesion; multicol fn-med sbrnnd-rndd gr, ip, rr silvry/blk biotite flakes, tr sbhed hrnblnde, tr blk & rddsh brn oxidized volcanic frags, tr tan ostracods, rr tr agg pyr, non-sl rxn to HCL.

Sandy Clay: pred grnsh gry, lt gry, blush gry ip, dom mod-non sol, v sol ip, v sticky, strongly cohesive, sl-mod adhesive, mnr blush-grnsh Claystone, Sand is pred m-u fn gr sz, well rndd-rndd, multi colored, com clr, frosted, cont tr



Sandy Clay: Clay is grnsh gry, lt-m gry, occ tan, dom mushy, firm-v firm ip, pred mod sol, som v sol, occ non sol, gd cohesion, mod-gd cohesion, Sand is multi colored, pred clr, pale-lt grn, wht, lsr pnk, orng, & rd hues, pred lwr crs-lwr m gr sz, well rndd-rndd, sbang ip, com dk gry-blk & rdsh brn ang volcanic frags, tr aggregate pyrite f/880' smpl, rr disseminated anhed calcite xtls.

Survey @ 995' = 1.5°

Sandy Clay: gen as above with a sudden color change to dom lt grn, com blu, & lsr grysh grn (poss chloritic altn?), and an incrsng % of crs ang volcanic frags, tr pyrite clstrs f/1001'-1030', v sl rxn to HCL f/950' smpl.

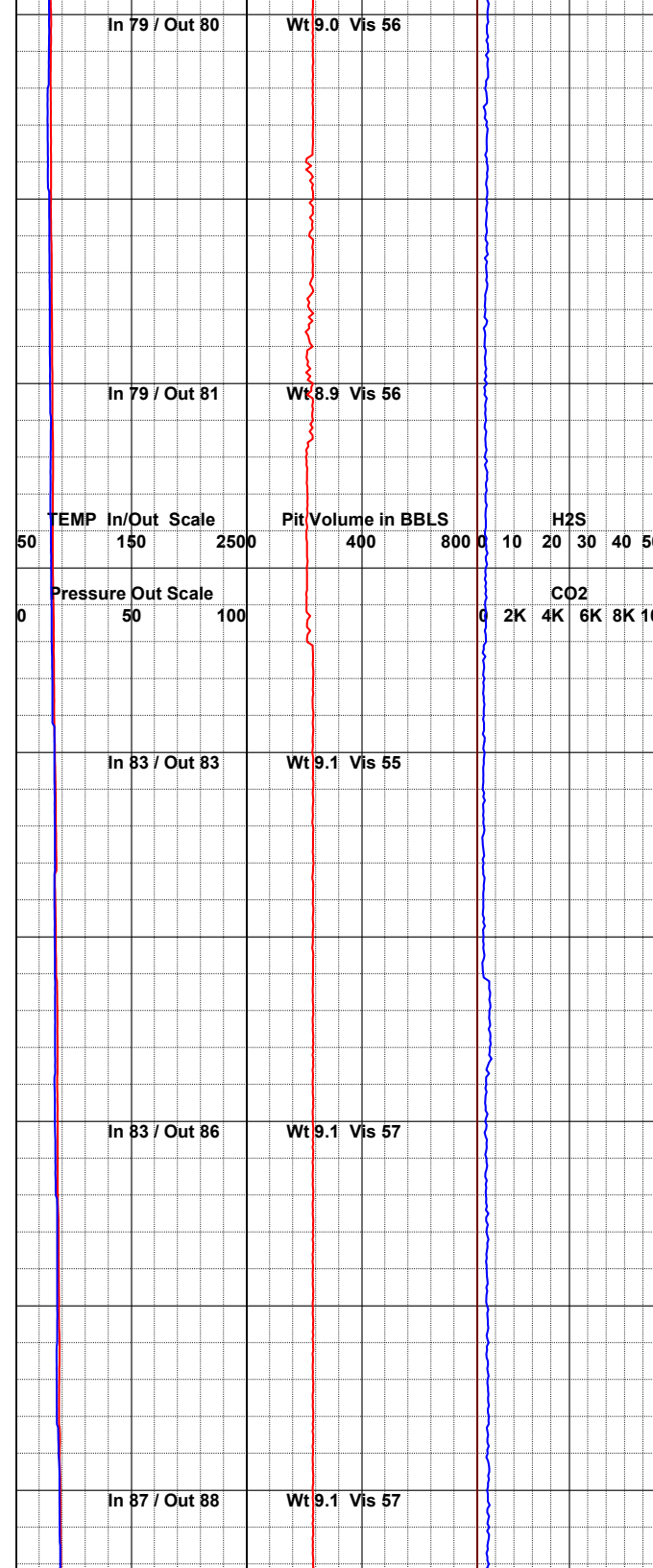
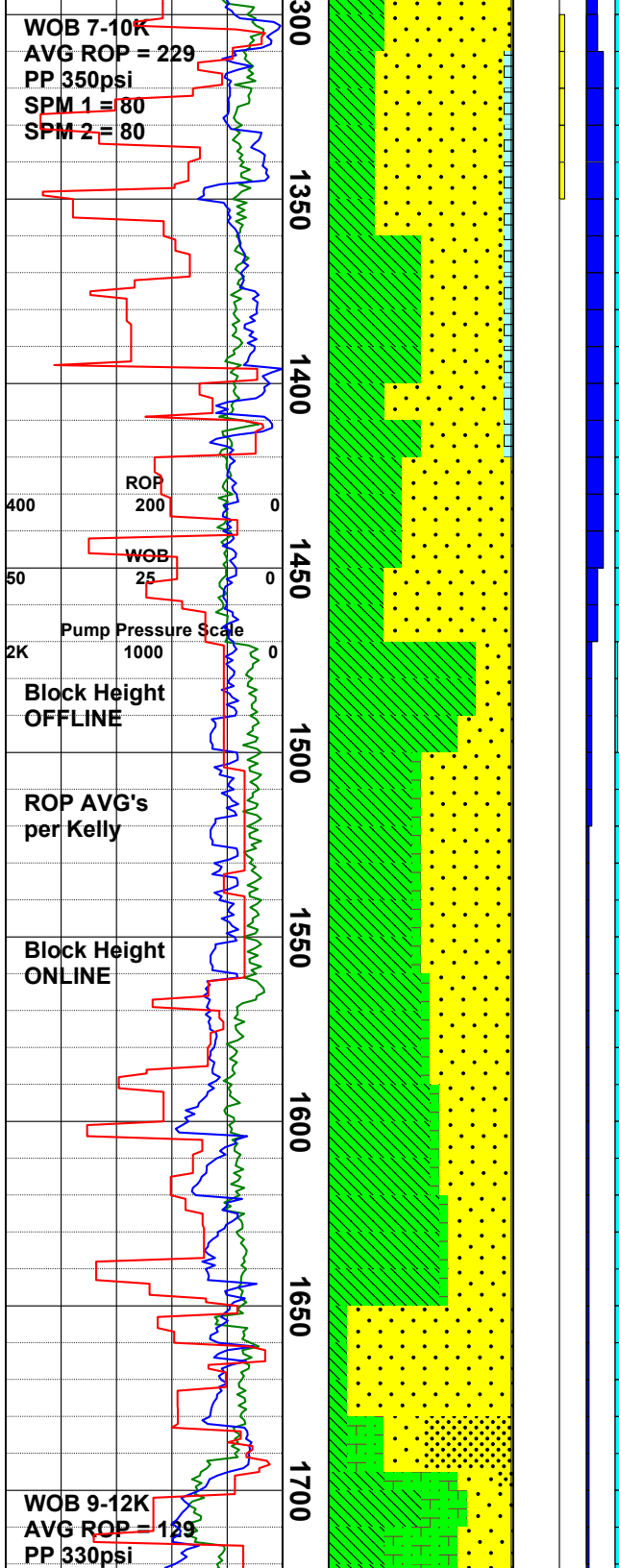
Sandy Clay: pl-med grn, v sft, mushy, sl tacky, v-sl sol, silty; clr, grn, brn, dk gry sbrndd-rndd fn-med sand grs, tr fria-sl frm pl grysh grn Clstn, rr-tr rddsh brn, dk gry, blk, sbang-sbrndd volcanic lithics, com-abdt lt tan-dk gry, sbtntslent microfossils (ostracods), rr Lstn frags, tr clstrd anhed pyr, sl-mod rxn to HCl.

Sand: med-v crse gr, multicol, com drk gry-rddsh brn rndd volcanic frags, poss debris flow / wash, com rndd clr & frstd qtz occ w/ chlorite & hem stnng, v rr acic sbhed-euhed epidote xls @ 1200' & 1220', com ostracods, tr sbhed hrnblnde, diss & aggr pyr, strng rxn to HCl.

Sand: clr, med grn, dk gry, orngsh rd, tr yel, grading to fn-med grn, sbang-sbrndd; whtsh yel-pl grn-gry clay, sl sol, tr fn hrnblnde, rr biot flakes, tr aggr pyr, v calcareous.

Survey @ 1251' = 1.5°

Sand: multicol, fn-med gr, sbang-sbrndd, com volcanic frags, tr sbhed hrnblnde, tr aggr pyr, v calcareous.



crse volcanic seds IP, sl incr pl grn clay, tr whtsh yel ashy clay, tr lse 2ndry qtz frac fill f/ 1310'-1350' w/ pyr on som sfcs, gd tr oolites, occ in calc / Lstn matrix, abdt ostracods, tr aggr & dissem pyr, gd rxn w/ HCl.

Sandy Clay: clr, med grn, dk brn, blk, tr lt blue, sbang-sbrndd, prly srted, tuffaceous IP, tr-com sbrndd crse gr qtz xls, tr rosey qtz, incr med-pl grn sticky clay, tr Lstn frags, rr cherty frags, rr silicified Sstn, abdt ostracods, v calcareous.

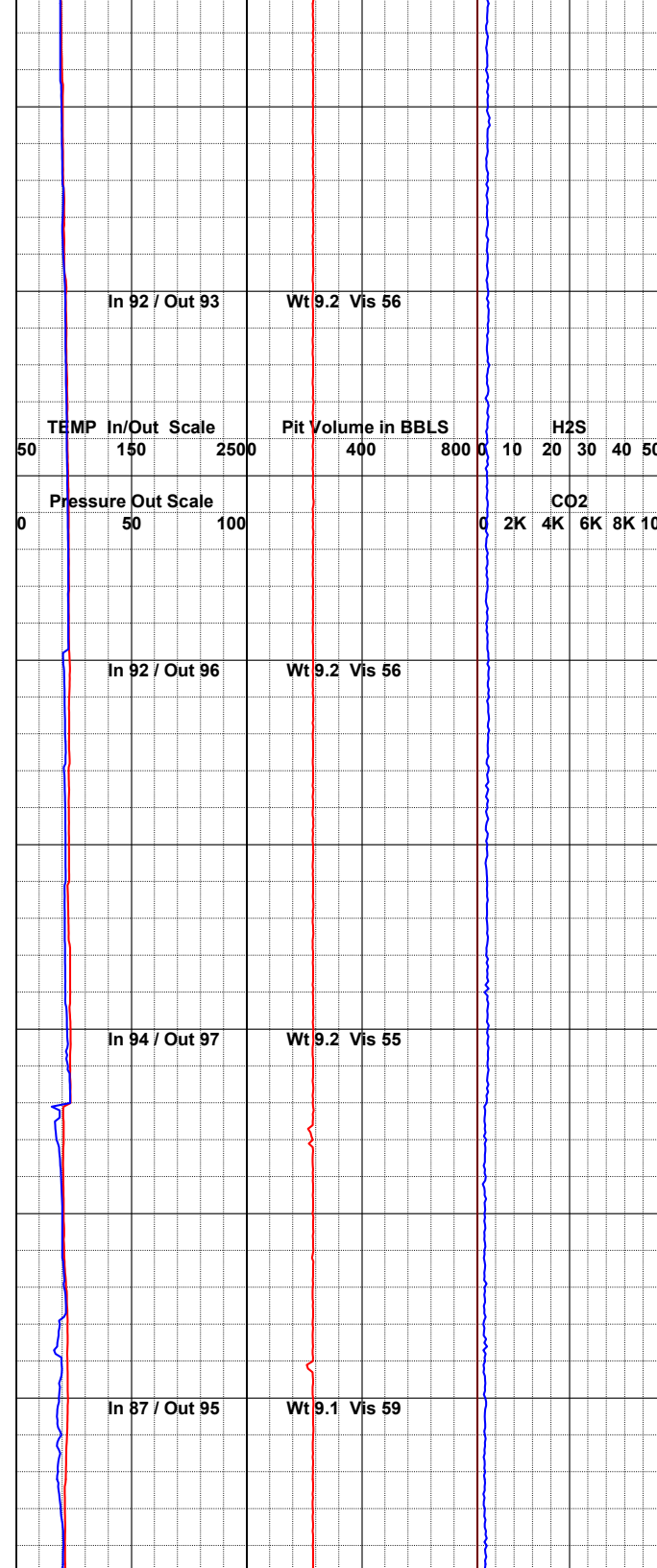
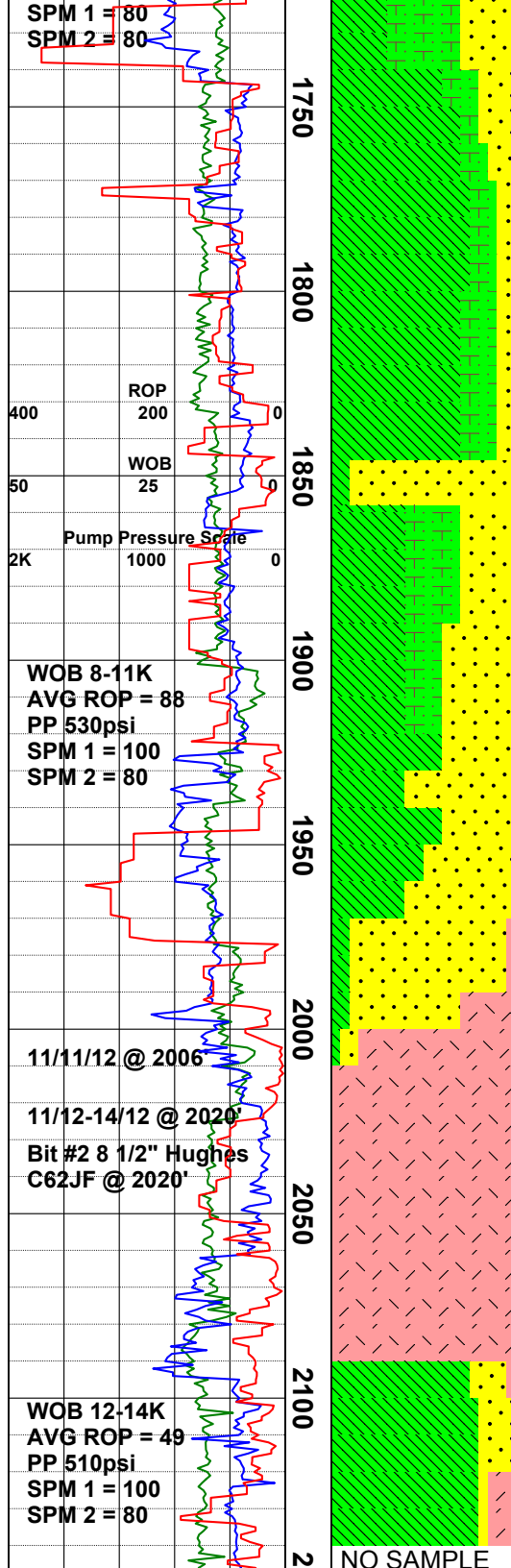
Sandy Clay: pl grysh grn, v tacky, gd adhes / cohes, non-mod sol, earthy, smooth; fn-med gr sbrndd-rndd clr, grn, gry, brn, rddsh brn, tan grs, com-abdt ostracods, tr fn gr aggr pyr, gd rxn w/ HCl.

Survey @ 1521' = 1.5°

Sandy Clay: med grn, grysh grn, pl grn, pl gry, tan, smooth, mod-v sol, wk adhes; multicol fn-med sbang-sbrndd grs, crse IP; tr pl gry Clstn/Siltstn frags, frm-mod hd, rr silvry/blk biotite flakes, tr sbhed hrnblnde, tr volcanic frags, rr agg & fn dissem pyr, sl calcareous.

Sandy Clay / Claystone: pl grnsh gry, pl gry, mod sol, gd adhes / cohes, gen as above; Sand a/a; bcmng up to 90% f/1660' smpl, pl grn, pl gry, sl fria-frm mod indur Clstn up to 5% of smpl, tr rdsh brn, m-dk gry,& blk volcanic frags, tr ostracods, tr fn gr aggr & dissem pyr, sl calcareous.

Sandy Clay/Claystone/Sandstone: clay is tan, grnsh gry, pred sft, occ frm, mod-sl sol, mod cohesion, sl adhesive, Sand is multi colored, com volcanic sed, pred sbang-ang, lsr sbrndd, prly srted, dom crs-lwr v crs, Claystone is gry, grnsh gry, lt



Survey @ 1760' = 3.5°

Sandy Clay / Claystone: clay is lt tan, occ m gry, sticky, gd adhesion/cohesion, pred non sol, curdy, lumpy, Sand is multi colored, pred clr, pale-emerald grn, wht, lsr root beer brn, blk, bcmng 90% in 1850' smpl, Claystone is pred m gry, tan, v frm-sft, ang ctnngs, laminar structure ip, non calcareous.

Sandy Clay / Claystone: clay is lt brn, lt-m gry, occ wht, ashy appr, pred mod sol, non sol ip, sft, mushy, gd adhesion/cohesion, Claystone is m gry-lt gry, tan, rr pale blue, sandy ip, Sand is multi colored, lwr m-lwr crs gr sz, prly srtd, pred sbang sb mdd, lsr mdd, tr pyrite, mod-gd rxn to HCL.

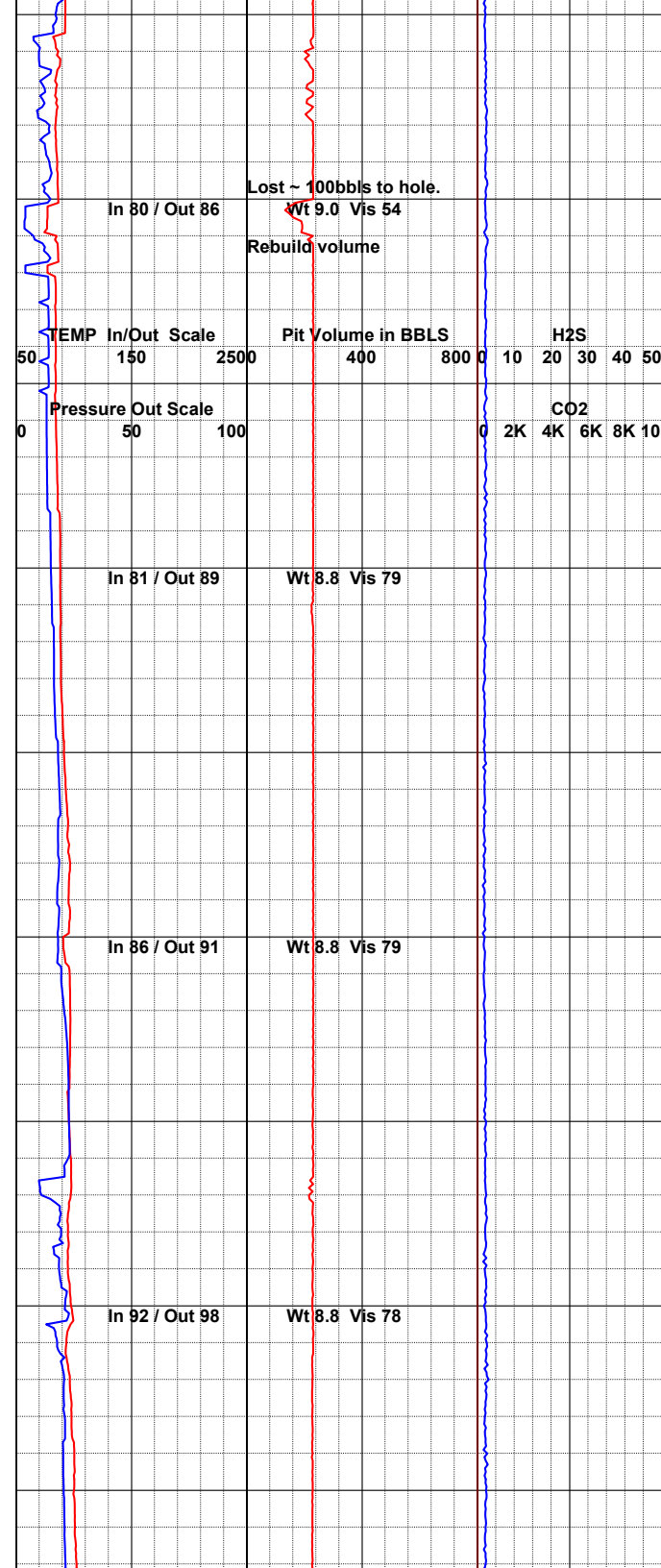
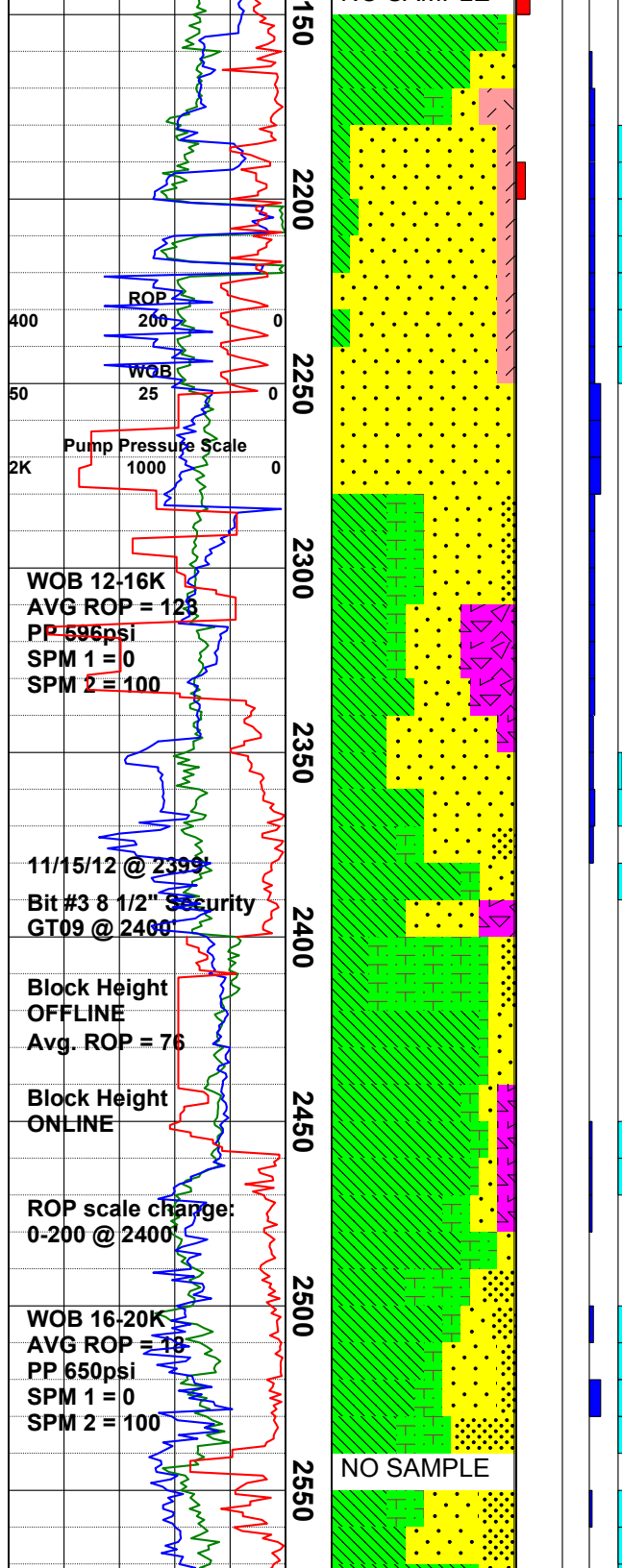
Sand / Andesite: sand a/a; Andesite dk brn-dk gry, blk, v frm-hd, ang-sbang, sub-conchoid frac, microxln, felty, dom aphanitic, tr-com dk grn nontronite filled amygdules w/ occ pyr rims, wk calc.

Survey @ 2020' = 0.0°

NOTE: Drill to 2020' w/12.25' bit. Run 9 5/8" casing to 2020'. Drill ahead with bit #2.

Andesite: dk gry, blk, dk brn, mod hd-hd, ang-blocky, conchoid frac habit, microxln, felty, vuggy, com amygdules filled w/ dk grn nontronite & calcite, sl Fe ox, tr dissem pyr, sl-mod rxn to acid.

Sandy Clay: pl grn, bluish grn, color chng @ 2130' to pl orngsh tan, mod-v sol, sticky, gritty w/ fn-med multicol sand grs, Andesite - dk, non calcareous



Andesite a/a, non calcareous.

NOTE: At 2156' lost circulation @ connection. Lost ~ 220bbls to formation.

NOTE: Very little sample flowing across the shakers, enough to log but not enough to bag samples through 2250' sample. Possibly losing to earlier fracture @ 2156'.

Survey @ 2243' = 4.5°.

Sandy Clay /Claystone: Sand is pred clr, pale grn, wht, orngsh red, lsr emerald grn, amber, dk grn, dom ang-sbrn, lsr rndd-well rndd, prly srted, v crs-v fn gr sz, bcmng com peb sz volcanoclastic seds f/2321'-2340' smpls, Clay is lt gry-grnsh gry, lt tan, pred v sol, sl adhesion / cohesion, Claystone is dom blush/grnsh gry, lsr lt tan, frm, silicified ip, com laminar structure w/blocky-platy ctngs, mod-non calcareous, rr tr sft pale grn & emerald grn nontronite, rr tr pyrite through 2250' smpl.

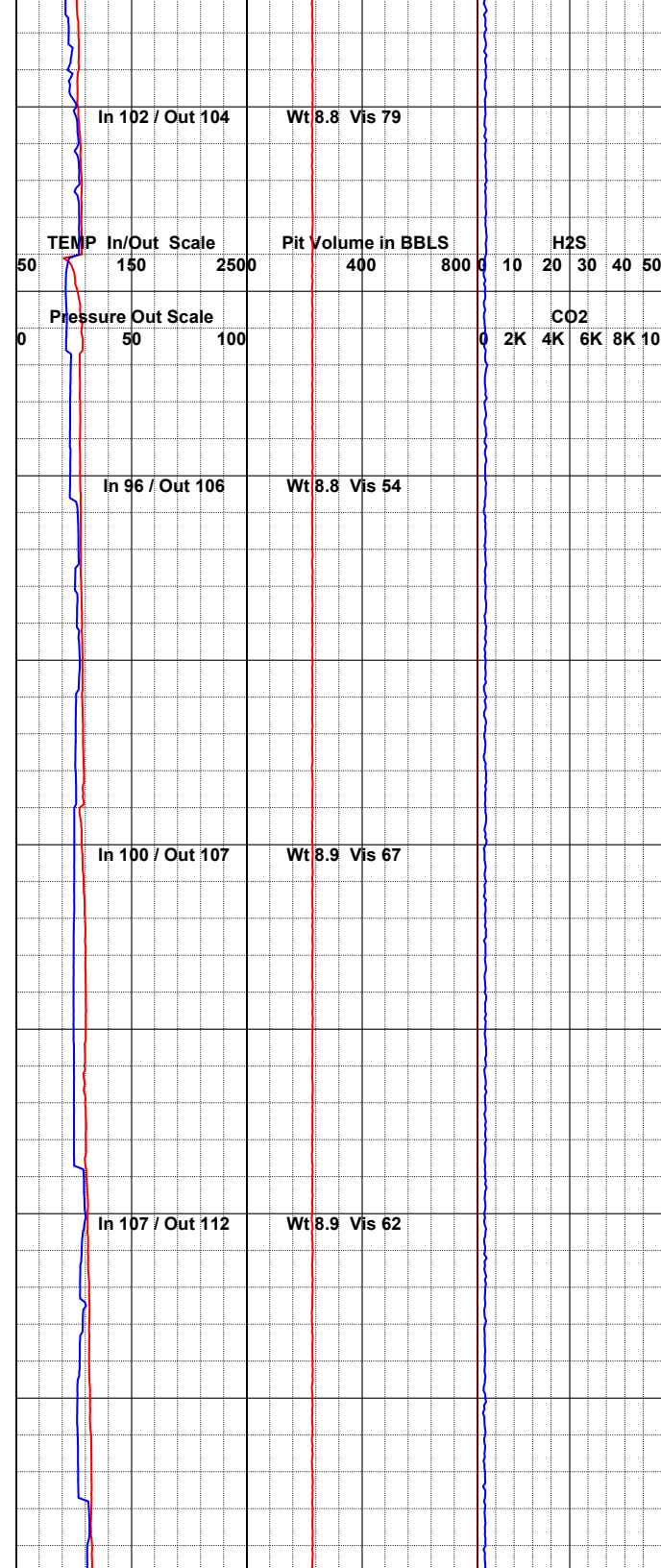
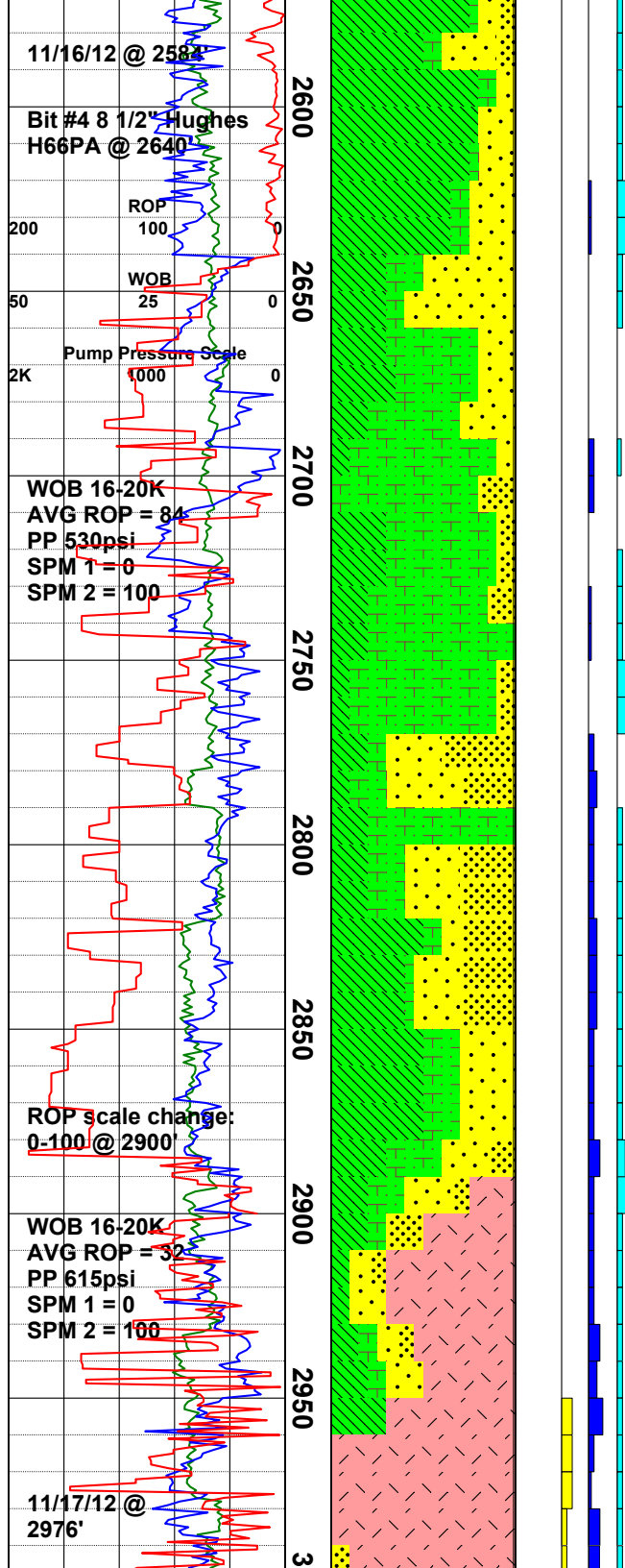
NOTE: Drill to 2399' and POOH for new bit #3.

Clay / Claystone: med rddsh brn, pl grn, bluish grn, smooth, sl gritty IP, sl adhes, mod-v sol; fria-v frm Clstn, sbang-platy ctngs, mntr fria Sstn, tr brnzy/blk mica flakes, non calcareous.

Clay / Claystone: med gry, tan, soft, mod sol, smooth; med brn-rddsh brn, tr-com bluish grn-med brn Clstn, dom platy ctngs, fria-frm, orng, blk, clr incls, occ lams; mntr fria-frm bluish grn-med brn Sstn, non calcareous.

Survey @ 2495' = 4.0°.

Sandy Clay/Claystone/Sandstone: Clay & Claystone gen as above, w/Clstn bcmng abndt in 2540' smpl. Sandstone is



containing about 10-15% imp.; Sandstone is pred lt tan, occ grn, lt gry, dom v fn gr sz, well rndd, sft, crumbly, weakly indurated w/clay cmnt, tr dissemin pyrite, occ on frac surfaces, v sl calcic ip.

NOTE: POOH @ 2640' for new bit #4.

Claystone / Sandy Clay: Clystn is pred m brn, m gry, tan, occ lt blush gry, dom well indurated, occ laminar, blocky, platy ctngs, sandy ip, com slender along blk inclns, Sand is clr, tan, wht w com blk spcklng, well rndd-rndd, lwr crs-u m gr sz, Clay is lt tan, occ rdsh brn, v sft, dom v sol, sl cohes/adhes, tr aggregate pyrite rr tr pyrite vnng, non-sl calcareous throughout.

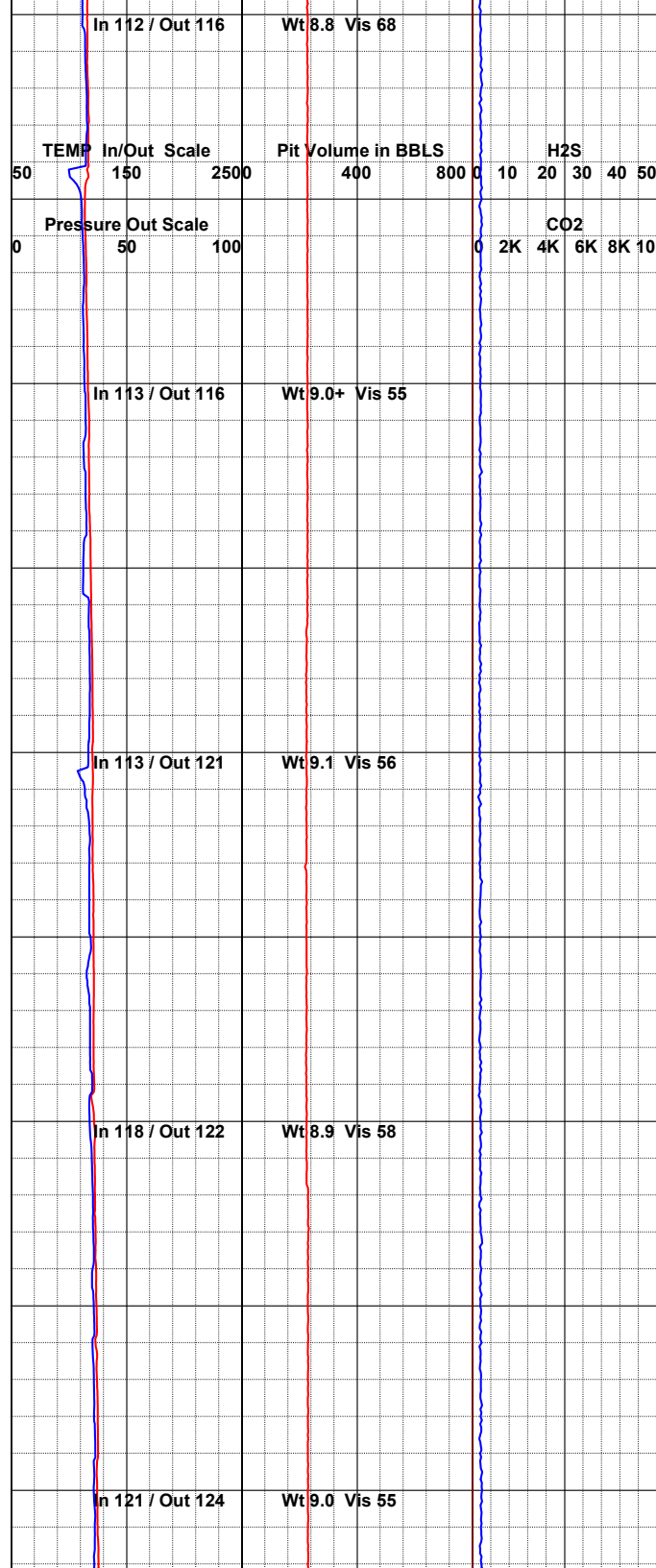
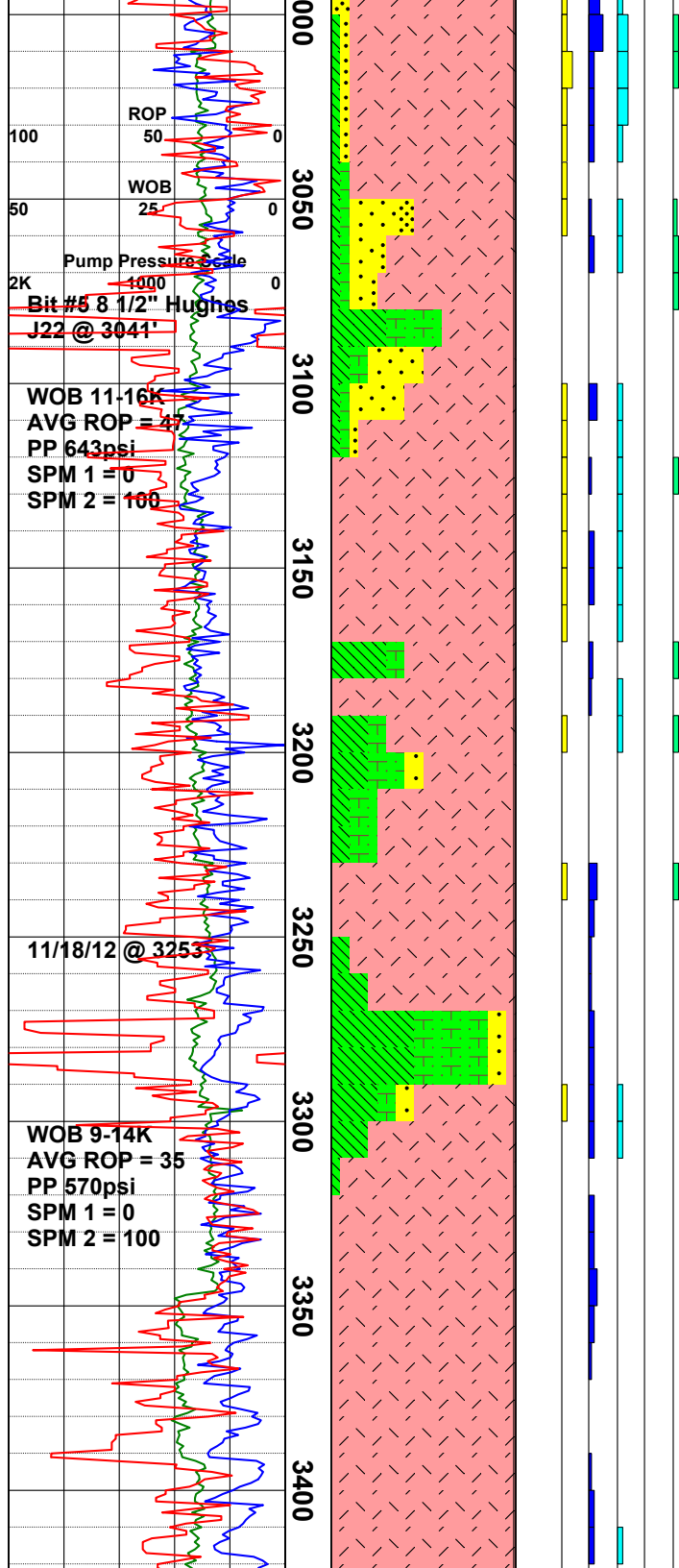
Survey @ 2748' = 5.0°.

Sandstone / Claystone: Cstn gen as above, Sandstone is pred lt-m gry, v hd, friable ip, dom m-fn gr sz, com blk (mafic?) & rdsh-rdsh brn inclns, poss oxidized andesite, gd tr pyrite vnng & dissem clusters, sl rxn to HCL.

Sandstone/Sandy Clay/Claystone: Sstn is pred blush gry, lt gry, lsr wht, lt tan, hd, friable ip, com blk & emerald inclns, Clay is m-lt gry, lt tan, ash wht ip, v sft, mushy, pred v sol, sl adhes/cohes, Sand is multi colored, com oxidized volcanic frags, Clystn as above, gd tr pyrite as vnng & dissem aggregates, mod calcareous.

Andesite: lt-m gry, grnsh gry, dk brn, aphanitic, com mafic spcklng, com hornblende & plag inclns, com microlites, porphyritic ip, sucrosic tex, v hd, som qtz vnng, abndt lse snhed clr, wht, & trnsclnt grn qtz xtls, mod-gd rxn to HCL.

Andesite: med-dk gry, lt gry, mod hd-v hd, conchoid frac habit, occ wthrd ctngs,



arg ip, microxln, aphanitic, felty, rr phenos, tr-com amygdulcs w/ nontronite in vugs, lse & on frac sfc, tr qtz vnng & lse frac fill occ w/ chlorite stnng, silicified Sstn frags @ 3000', mnrr bluish gry tuff seds, tr hrnblnde, tr-gd tr dissem pyr, milky wht-clr calc xls, sl-mod HCl rxn thruout.

NOTE: POOH @ 3041' for new bit #5.

Survey @ 3041' = 7.0°.

Clay/Claystone: Clay is rdsh orng, grnsh gry, v sft, mod sol, Clystn is lt brn, lt gry, mod hd. Logged after trip.

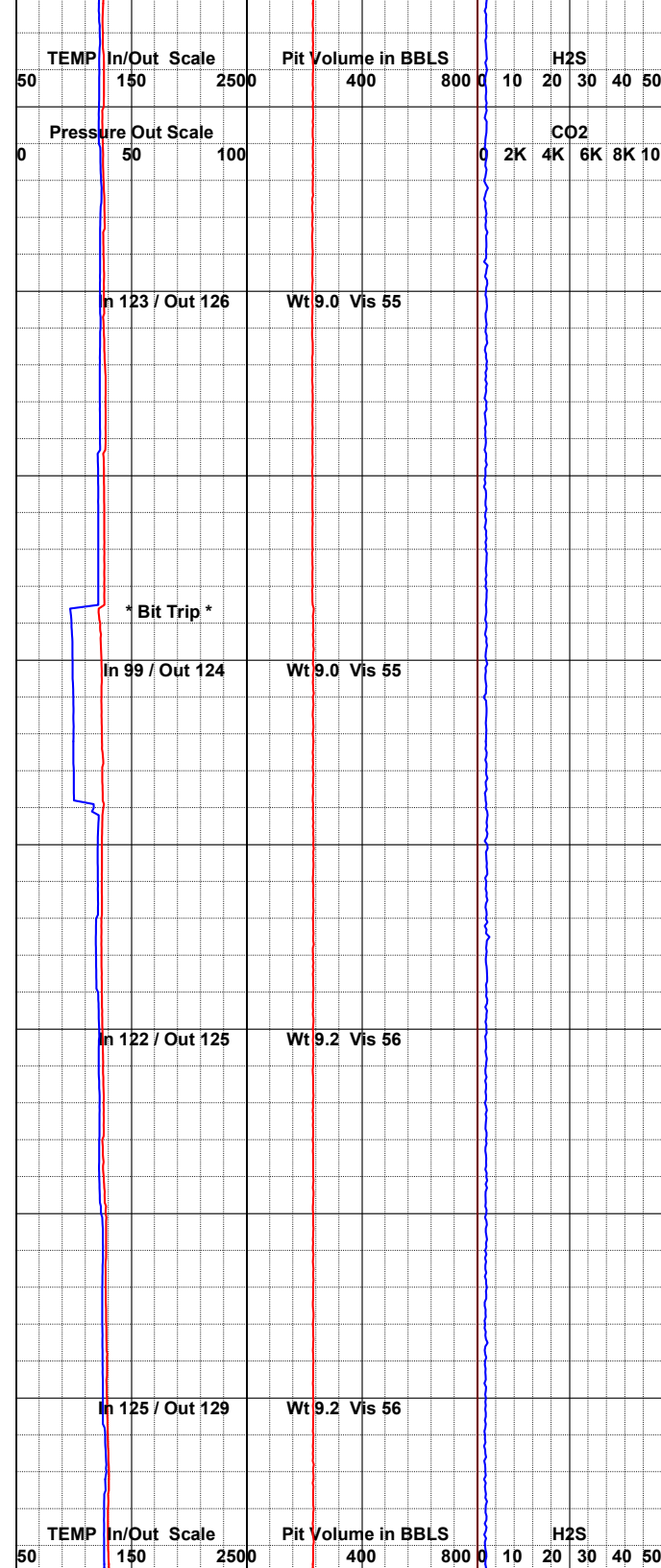
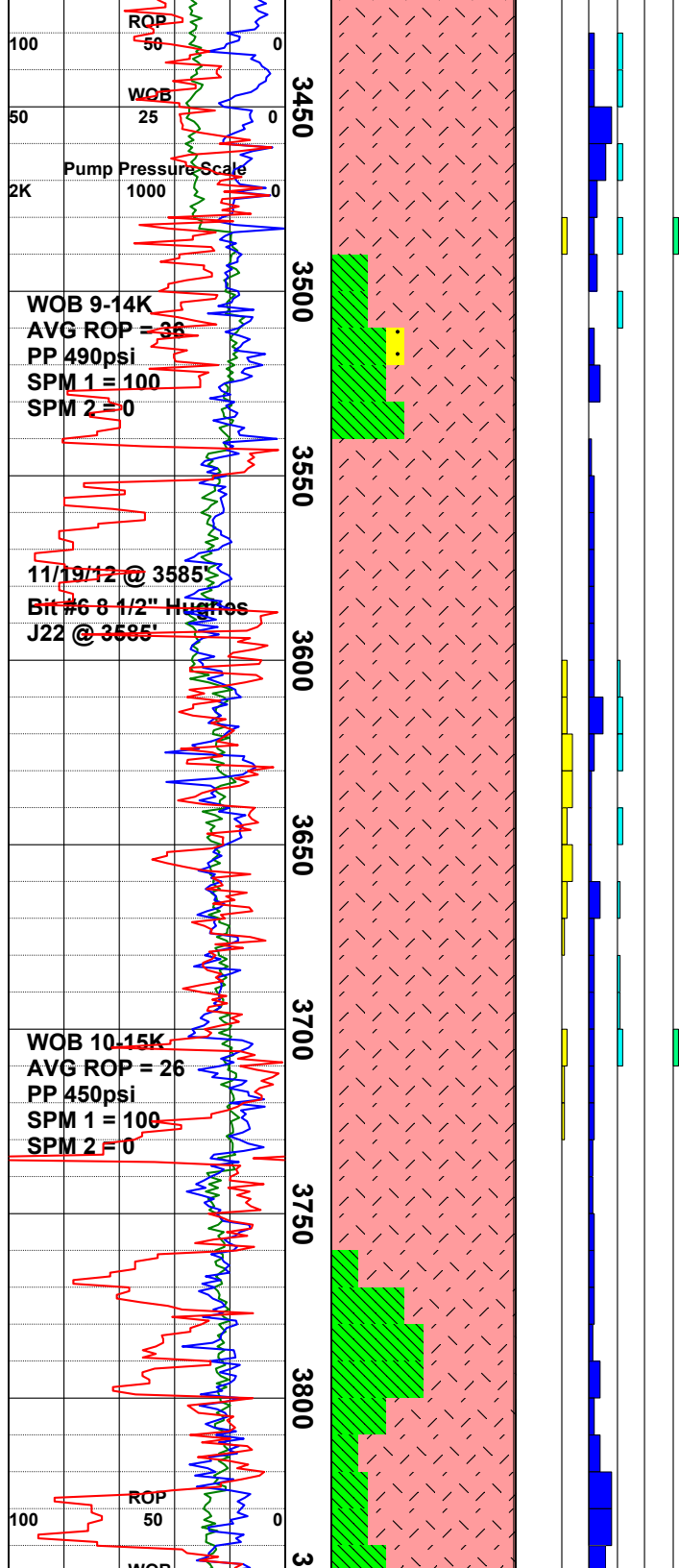
Andesite: pred m-dk gry, occ dk-m rdsh brn, grnsh gry, dom aphanitic, porphyritic ip w/dk emerald grn nontronite fill, v hd-hd, sucrosic-felty tex wet, ashy when dry, com mafic spkng, com hornblend blades, gd tr clr & trnsntc grn & lt blu qtz on frac srfs, & dissem, gd tr pyrite as above, rr flow algnmt of xtls, non-gd rxn to HCL, <5% clay, clystn prob slough.

Andesite: med gry-dk gry, pl gry, rr bluish gry, mod hd-hd, occ sbrndd wthrd frm ctngs, gd conchoid frac, sbang-blocky, microxln, aphanitic, tr milky wht calc xls, tr 2ndry qtz frac fill.

Clay / Claystone: tan, med brn, bluish gry prob bit gen f/ wthrd andesite frags, mushy, sft, mod-v sol; med brn ang Clstn ctngs w/ orng, clr & brn incl, sl fria-frm, fault gouge mtrl @ 3280', tr micro breccia w/ clay matrix, wthrd arg basalt ctngs occ w/ Fe ox, sbrndd fn-med gr sand, sl calc.

Survey @ 3285' = 5.0°.

Andesite: dk-med gry, bcmng dom pl gry f/ 3380', frm-mod hd, fria ip, microxln, grainy, wthrd appear f/ 3340' w/ blocky-sbrndd ctngs, felty, rr trachytic tex, decr vugs w/ depth, rr plag phenos, aphanitic, mnrr pl gry bit gen clay, wk-mod rxn to HCl.



Andesite: med gry, pl gry, occ rddsh brn, fria-mod hd, aphanitic, microxln, grainy, sbang-blocky, sb-conchoid frac habit, com argil altd matrix, mntr silicified Sstn frags f/ 3440-3450', abdt lse clr & wht calc xls @ 3460'.

Survey @ 3535' = 2.0°.

Andesite: pred m-dk gry, som blk, dk brn, bcmng weathered ip, com rdsh brn, oxidized, com FeO stngg, scoriaceous ip, hd, pred m-u fn sand sz cttngs f/3491'-3510' smpls, abndt anhed wht calcite xtls f/3491'-3510' smpls, up to 40% grnsh gry v sol clay (ash?) in 3540' smpl, tr-rr tr pyrite both lse and on frac srfs, gd-non rxn to HCL.

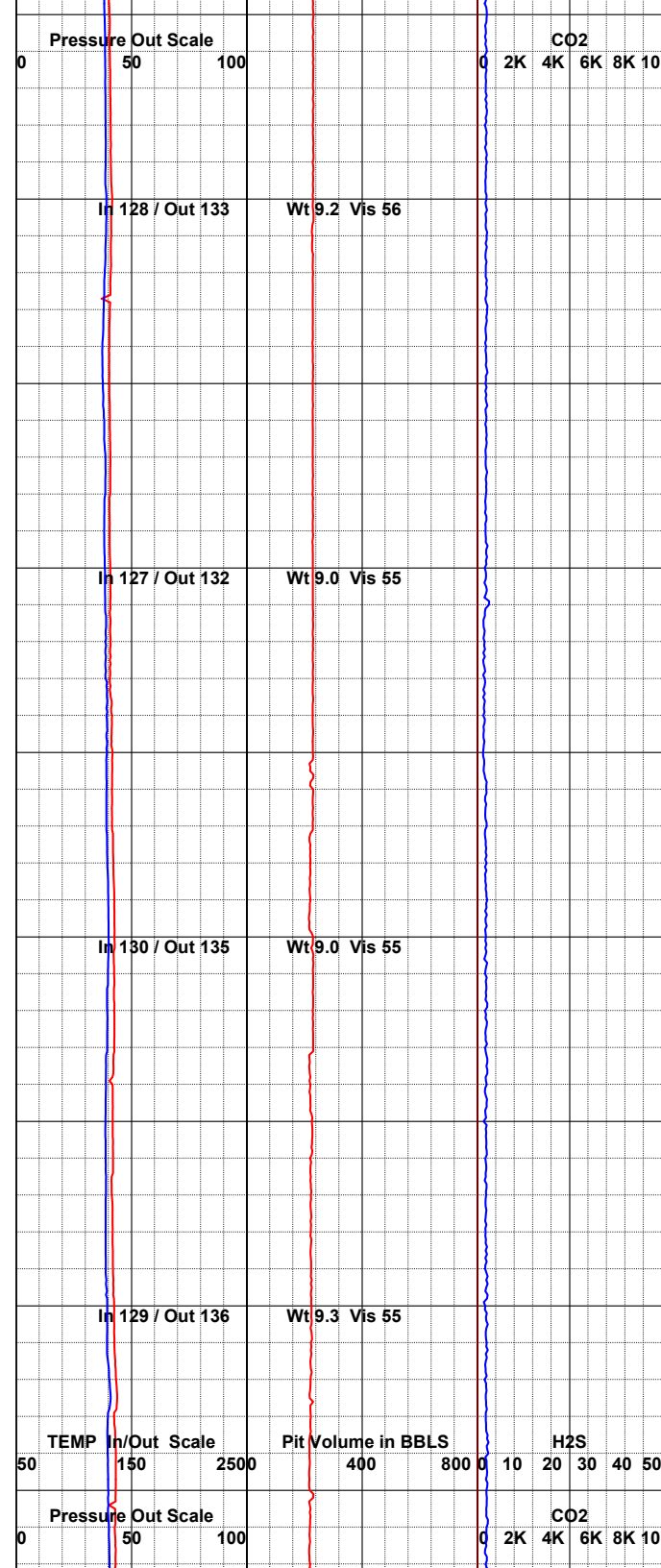
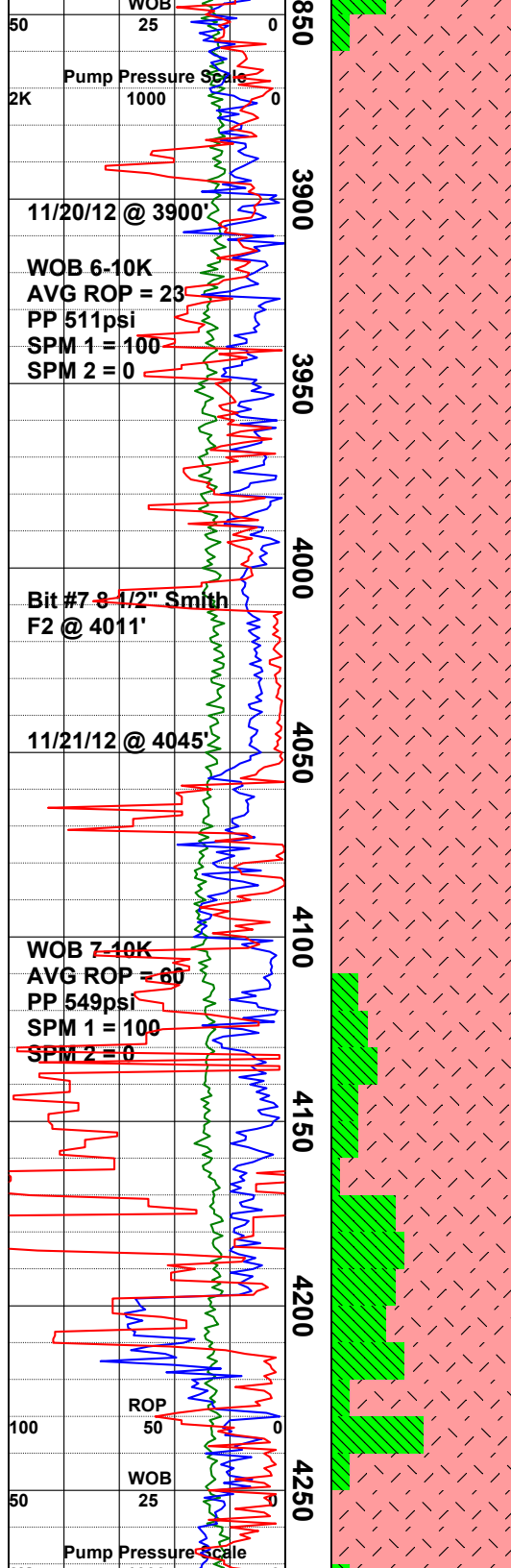
NOTE: POOH @ 3585' for new bit #6.

Andesite: med-dk gry, brnsh gry, brick rd, frm-mod hd, microxln, grainy, aphanitic, sbang-sbrn d cttngs, sb-conchoidal frac, com felty microlites, occ elong, abdt Fe ox frags @ 3610' w/ mntr tuffs <5%, tr-com chalcedony, botryoidal frags @ 3660', rr lse zeolite mnrl, tr-gd tr mag, mod-gd rxn to HCL thru section.

Andesite: dk gry, med gry, rddsh brn, v frm-mod hd, grainy, microxln, aphanitic, wthrd appr @ 3680', tr Fe stngg, rr aggr pyr, sl calcareous.

Andesite: pred m gry, incrsng FeO stngg in 3720' & 3740' smpls, hd, friable ip, com nontronite vug fill, sucrosic tex, earthy luster ip when dry, up to 50% m brn w/pnksh hue & brite rdsh brn v sol clay (v weathered top of andesite flow?) coming in @ 3760' smpl, cttngs bcmng pred crs-u fn sand size, scoriaceous ip, non cacic mtrx w/com-abndt dissem milky wht anhed calcite xtls.

Andesite: pred m-dk gry, m-dk brn, bcmng rdsh brn w/depth, aphanitic-



Andesite: med gry, dk gry, dk brn, brick rd, v frm-hd, sbang-blocky, microxln, grainy, aphanitic, sl vuggy, rr micro brecciated frags @ 3920', hvy Fe ox @ 3940' & 4980' w/ tr scoria, tr hem stnng @ 3950-3970' w/ v rr anhed v fn xls, rr magnetite, tr dull yel Lim @ 3990', com lse dk grn nontronite, mnr med gry bit gen clay, mod calc.

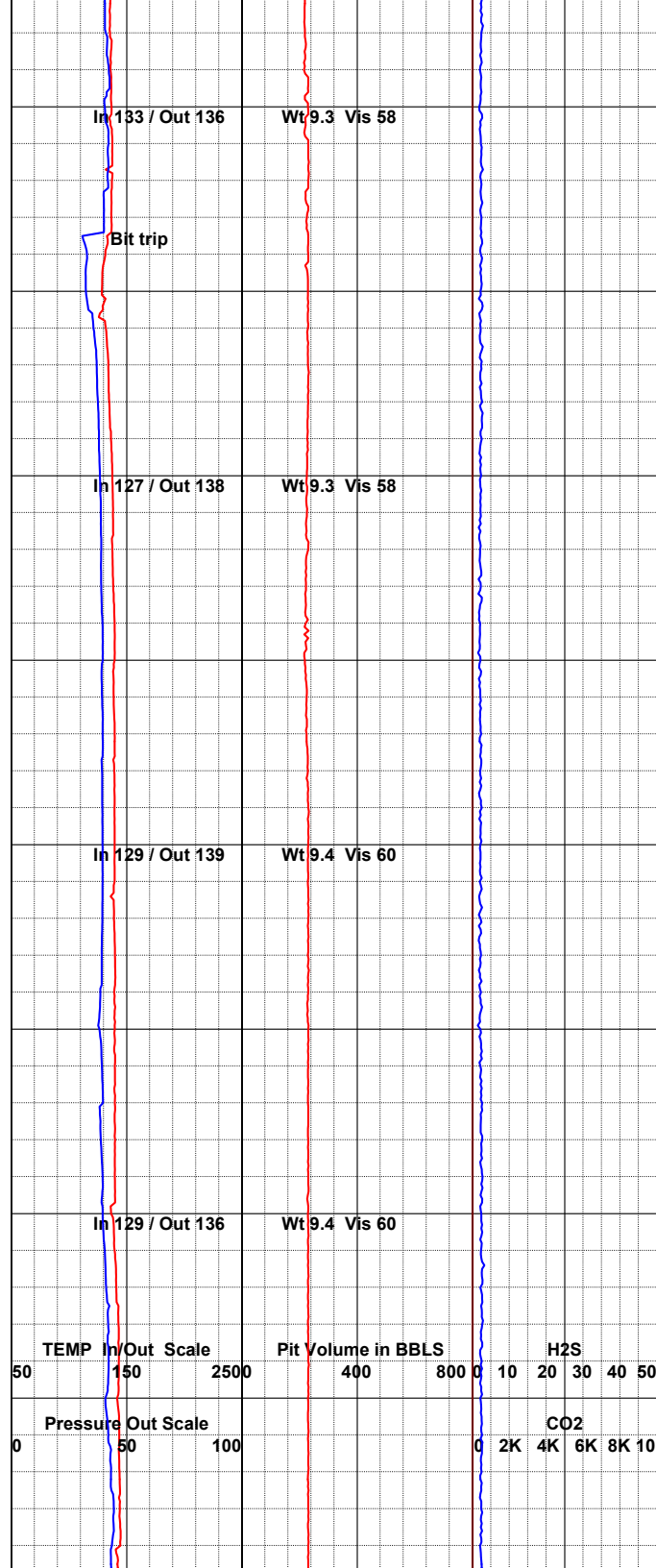
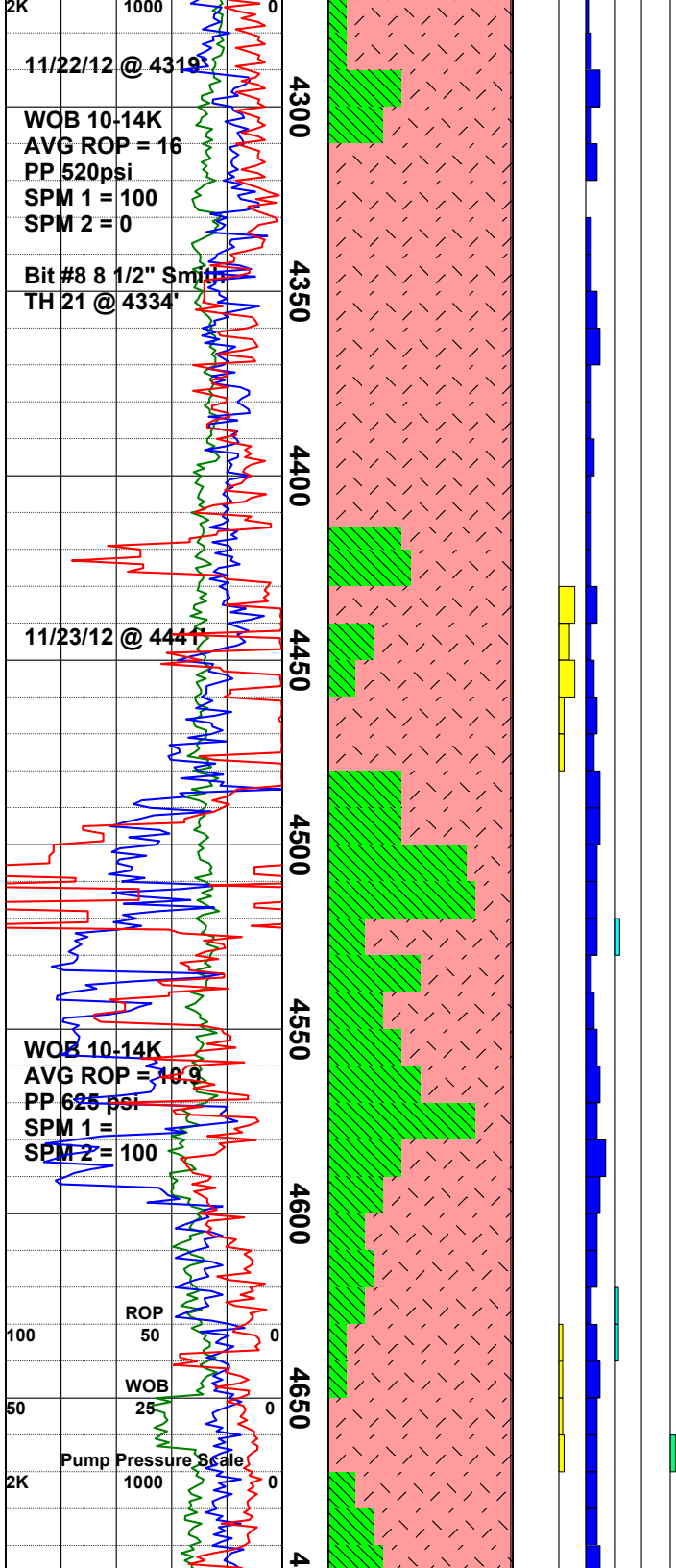
NOTE POOH for new bit #7 @ 4011'

Andesite: med-dk gry, rddsh brn, med grn, dom v hd, frm-mod hd f/ 4060'-4070' w/ med-pl gry bit generated clay & bit cake, sbang-sbrnnd, gd conchoid frac habit, micro granular, abdt microlites & elong acic felds, rr anhed-sbhed olivene xls, tr-com nontronite lse & on frac sfcs, tr 2ndry qtz, sl-mod calc.

Andesite: dk gry, grnsh gry, rddsh brn, med gry, frm-hd, blocky sbrnnd ctnngs, jagged conchoid frac ip @ 4120', incr vugs & amyg, dom wthrd appr, com Fe ox rimming vugs & amygdulcs, med-dk gry tacky non sol clay to 25% w/ sbang-sbrnnd med sand sz ctnngs thruout, abdt turquoise nontronite, mod-v calcareous.

Andesite / Clay: Andesite is m-dk gry, brt rdsh brn, hd, gen aphanitic, friable ip, com FeO stnng, com biotite & blk mafic inclns, som weathered appr, Clay is rdsh brn, mod sol, gd adhesion, also lt gry, v sol, gd cohesion, non adhesive, rr tr pyrite, rr sbhed qtz xtls in 4220' smpl, non calc mtrx w/tr-abndt dissem calcite.

Andesite / Clay: Andesite is pred m-dk



NOTE: POOH for new bit #8 @ 4334'

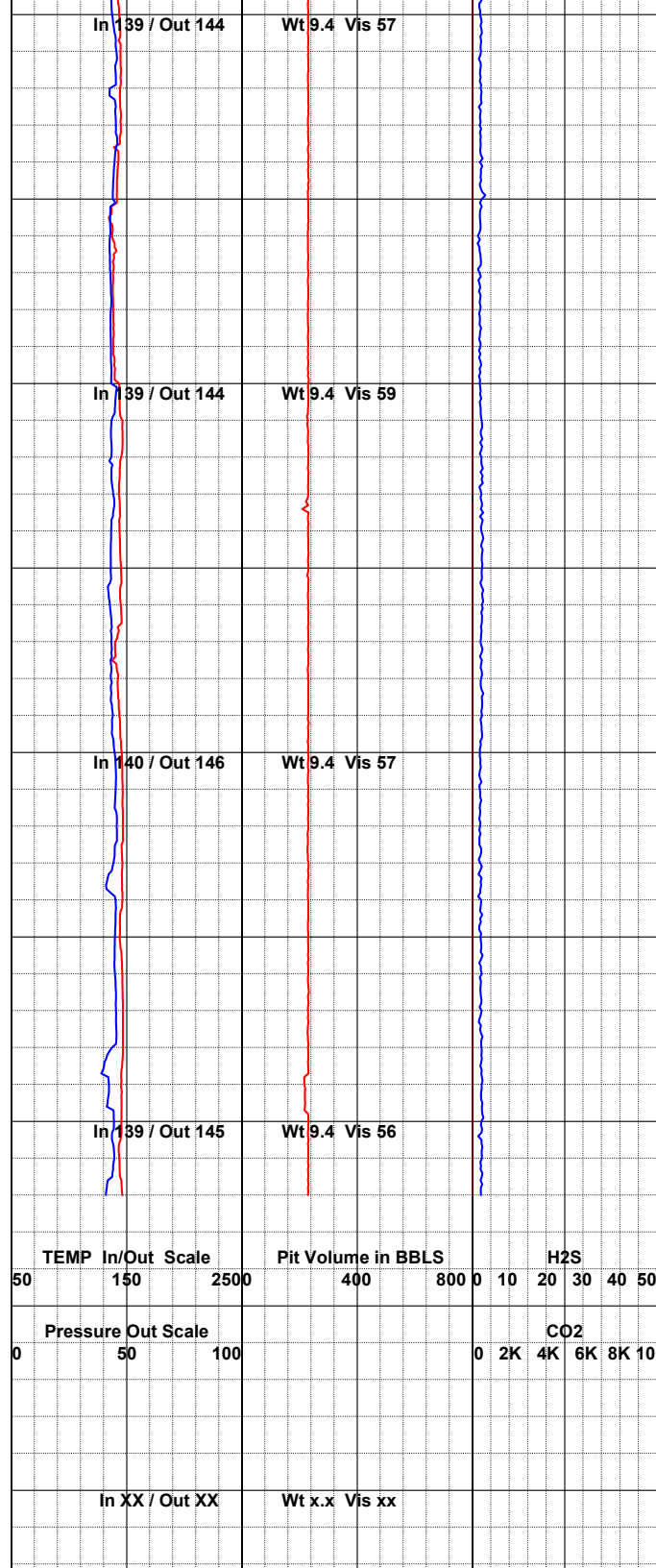
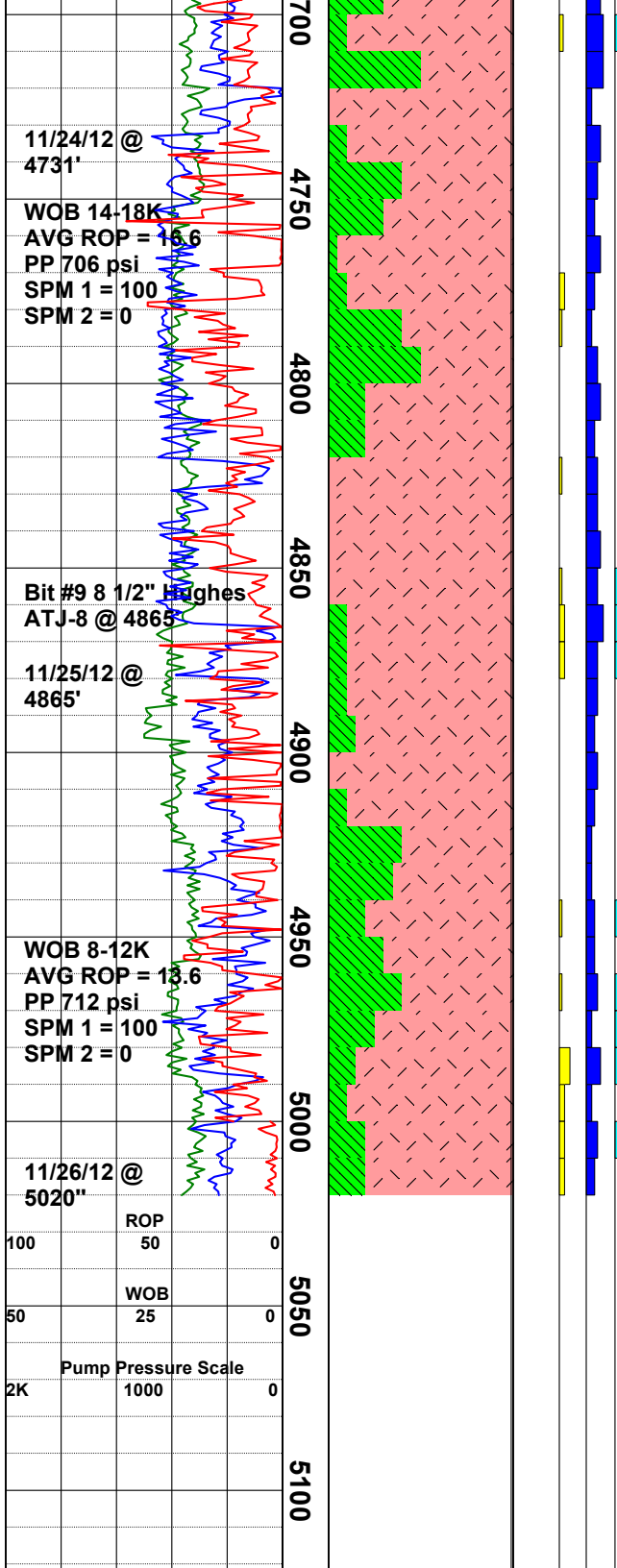
Andesite: lt-m gry, lt brn, occ dk gry, hd-v hd, pred porphyritic w/dk grn vug fill, aphanitic ip, com blk mafic spkng, com lse clr, wht, & sbtrnsclnt pale grn & blu anhed qtz, cttngs pred < 1mm, up to 40% rdsh brn, lt gry, & grn v sol clay (poss grnd up rock/mud slurry /ash?), gd tr-abndt lse anhed calcite.

Andesite: med gry, dk gry, grnsh gry, mod hd-v hd, micro granular, sbang-sbrndd, com felty microlites, silicic, dom aphanitic, tr plag phenos, tr-com 2ndry qtz f/ 4440-4480' w/ occ chlorite stnng, var amnts med-pl grn & med gry sol clay, mod-gd rxn to HCl.

Clay / Andesite: med-pl grn, pl gry, wht, dk gry, mod v sol, sl-non cohes, com med-fn sand sz cttngs; v frm-mod hd Andesite, wthrd pl gry-dk gry, grnsh hue, micro granular, aphanitic, tr plag phenos, sl vitreous lstr, scatt micro mafic mnrl, rr Fe ox on frac sfcs, non vesic, rr qtz frac fill, v rr dissem pyr, overall mod calcareous.

Andesite: med gry, grnsh hue, dk gry, rr blk, brt orng, mod hd-v hd, sbrndd, rr ang, dom fn cttngs, microxln, vitreous, com lse dk grn nontronite, v rr bot qtz @ 4570', tr-com ox frags f/ 4580', vis plag laths @ 4610 w/ incr ox cttngs, tr lse milky wht / yelsh wht calc xls, clay a/a up to 80% of smpl.

Andesite: m-lt gry, m-dk brn, occ bright rdsh orng & wethrd, rr dk gry, hd-frm, friable ip, pred porphyritic w/ nontronite filled vugs up to 2mm in lgr cttngs, com blk mafic spkng, com lse anhed-shhd



Andesite: med-dk gry, rddsh brn, rr blk, dk grn, mod hd-hd, vitreous, microxln, abdt microlites, tr-com plag laths, sl sbtrnsclnt appr, aphan-porphyr; lt gry-pl grn clay up to 50% of smpl, com lse wht & pl yel calc xls, mod-gd rxn to acid.

Andesite: med gry, dk gry, grn, occ sl prpl hue, mod hd-v hd, glassy grndmss, abdt microlites, dom aphanitic, sbang-blocky ctnngs, conchoidal frac habit, tr-com hrnblnde, tr rddsh brn/orng ox frags, com lse dk grn vug & frac fill, clr & wht anhed-sbhed calc xls thruout.

NOTE: POOH for new bit #9 @ 4865'

Andesite: dk-med gry, mod hd-hd, sbang-blocky ctnngs, microxln, vitreous, sucrosic dry, abdt microlites & laths, com lse grn nontronite, tr-com lse anhed calc xls, mod-gd rxn to HCl.

Andesite: med-dk gry, med grn, occ rddsh orng ox frags, frm-hd, micro-cryptoxln, aphanitic-porphyr, com-abdt felds laths, sbtrnsclnt grndmss, sbang-blocky ctnngs, occ platy, rr-tr hrnblnde, tr-com fn spkld mag, gd tr 2ndry qtz, tr fn dissem pyr, med gry mod sol clay up to 40%, gd rxn to HCl.

Drill to 5020' TD. Make a wiper trip to the shoe @ 2020'. Circulate and condition mud to run E-Logs. Mudloggers released 11/26/12 @ 16:20.

