



Santa Rosa, CA

COMPANY Calpine Corporation  
 WELL Aidlin 12 ST2  
 FIELD Geysers  
 COUNTY/STATE Sonoma County California  
 WELL HEAD COORDINATES  
 N 425513.3, E 1748809.9  
 ELEVATION 1722.8' GL KB=30'  
 SPUD DATE 1/15/09  
 TD DATE 6/3/09  
 TOTAL DEPTH 10825'  
 TRUE VERTICAL DEPTH 10447'  
 TD LOCATION N/A  
 CONTRACTOR/RIG Kenai Rig #6  
 COMPANY REPRESENTATIVE See Remarks

**LOG INTERVAL**

DATE LOGGED 1/15/09 TO 6/3/09  
 DEPTH LOGGED 66' TO 10825'  
 MUD DRILLING 66' TO 7785'  
 AIR DRILLING 7785' TO 10825'  
 LOG SCALE 1:600 UNIT NO. 326

LOGGING GEOLOGISTS  
 Dunlap, Boschmann, Broderick, Schepflin, Prowse  
 McLaughlin, Richardson, Blazina, Dobbs

**HOLE**

26 TO 775  
 17.5 TO 5033  
 12.25 TO 7785  
 8.5 TO 10825  
 TO

**CASING**

20 FROM 0 TO 760  
 13.375 FROM 0 TO 5009  
 9.625 FROM 4796 TO 7521  
 7 FROM 0 TO 10825  
 FROM TO  
 FROM TO

**ABBREVIATIONS**

**NB** New Bit **BHT** Bottom Hole Temp  
**RRB** Re-run Bit **C** Carbide Test  
**CB** Core Bit **NR** No Returns  
**WOB** Weight On Bit **LAT** Logged After Trip  
**SPM** Strokes per Minute **CFM** Cubic Feet per Min  
**PP** Pump Pressure **BUT** Bottoms Up Temp  
**RPM** Revolutions per Min

**SYMBOLS**

⚡ Wireline Log ▲ Casing Shoe  
 ◀ Steam/Water Entry ▶ Flow Test  
 ◀ Deviation Survey ▮ Cored Interval  
 ▮ No Recovery

**LITHOLOGY**

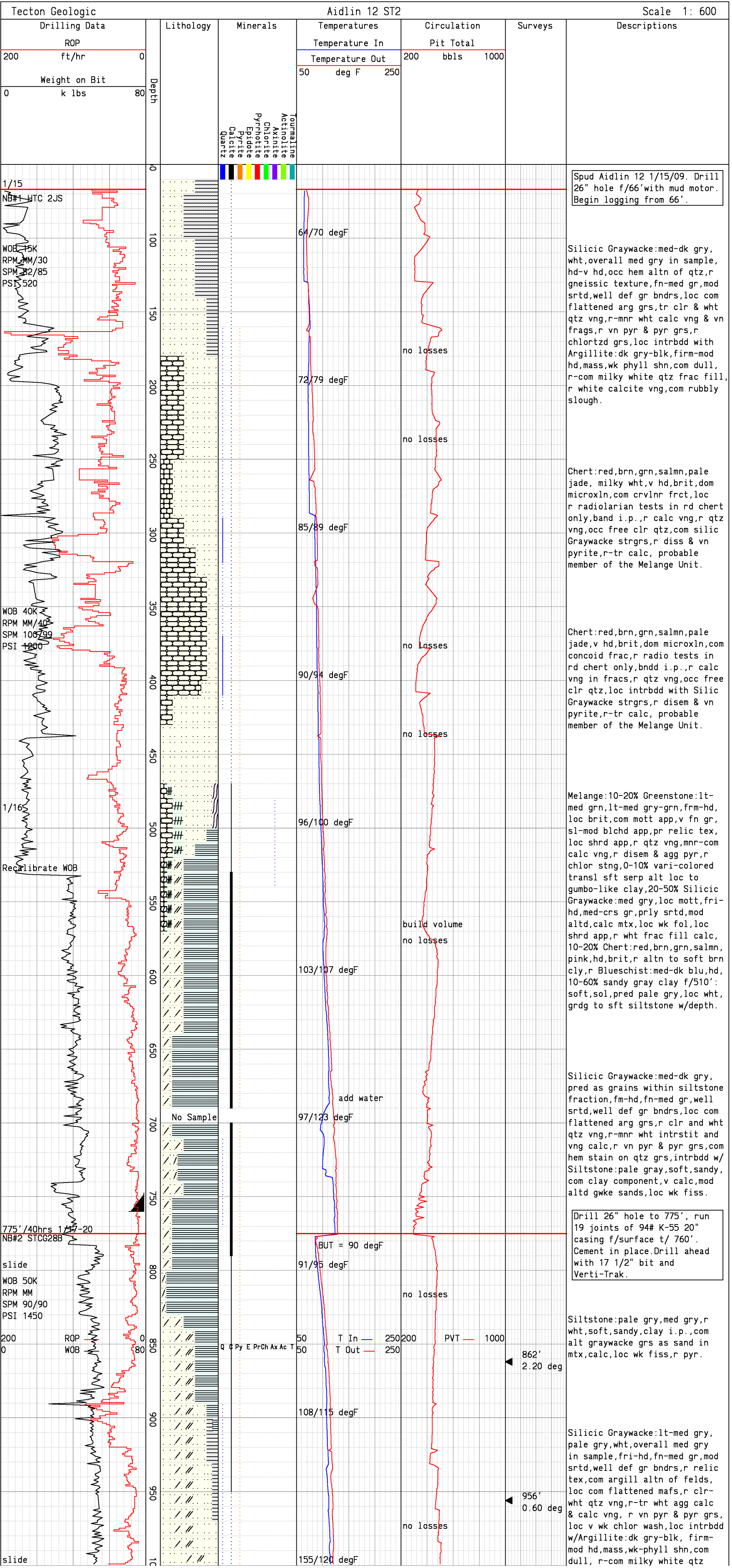
Argillite Argillaceous Graywacke  
 Chert Volcanic Graywacke  
 Phyllite Siliceous Graywacke  
 Greenstone Weak Foliation  
 Serpentine Strong Foliation  
 Blueschist Marginal Alteration  
 Felsite Pervasive Alteration  
 Rhyolite Weakly Hornfelsic  
 Clay Strongly Hornfelsic  
 Lithic Graywacke

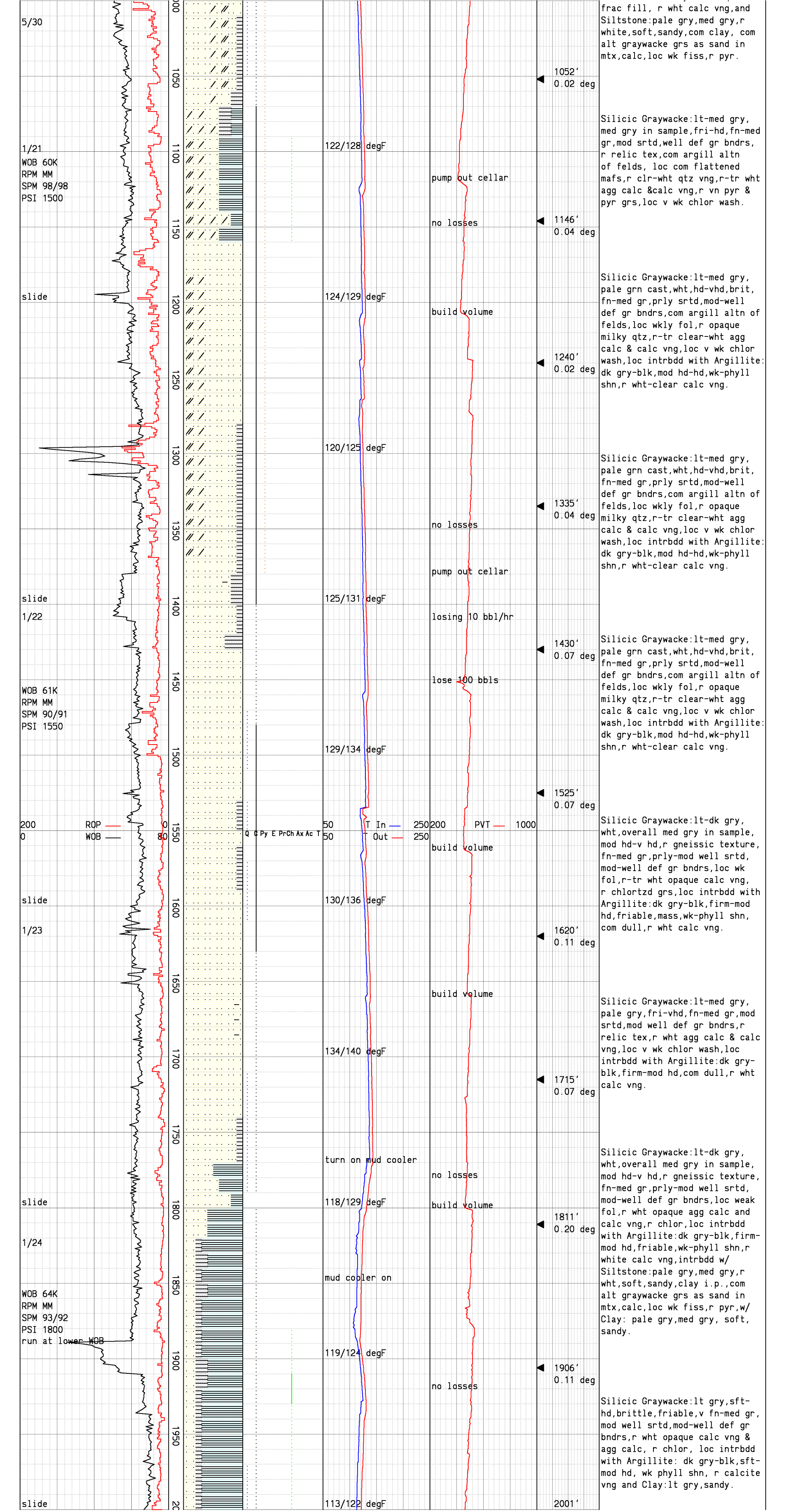
**REMARKS**

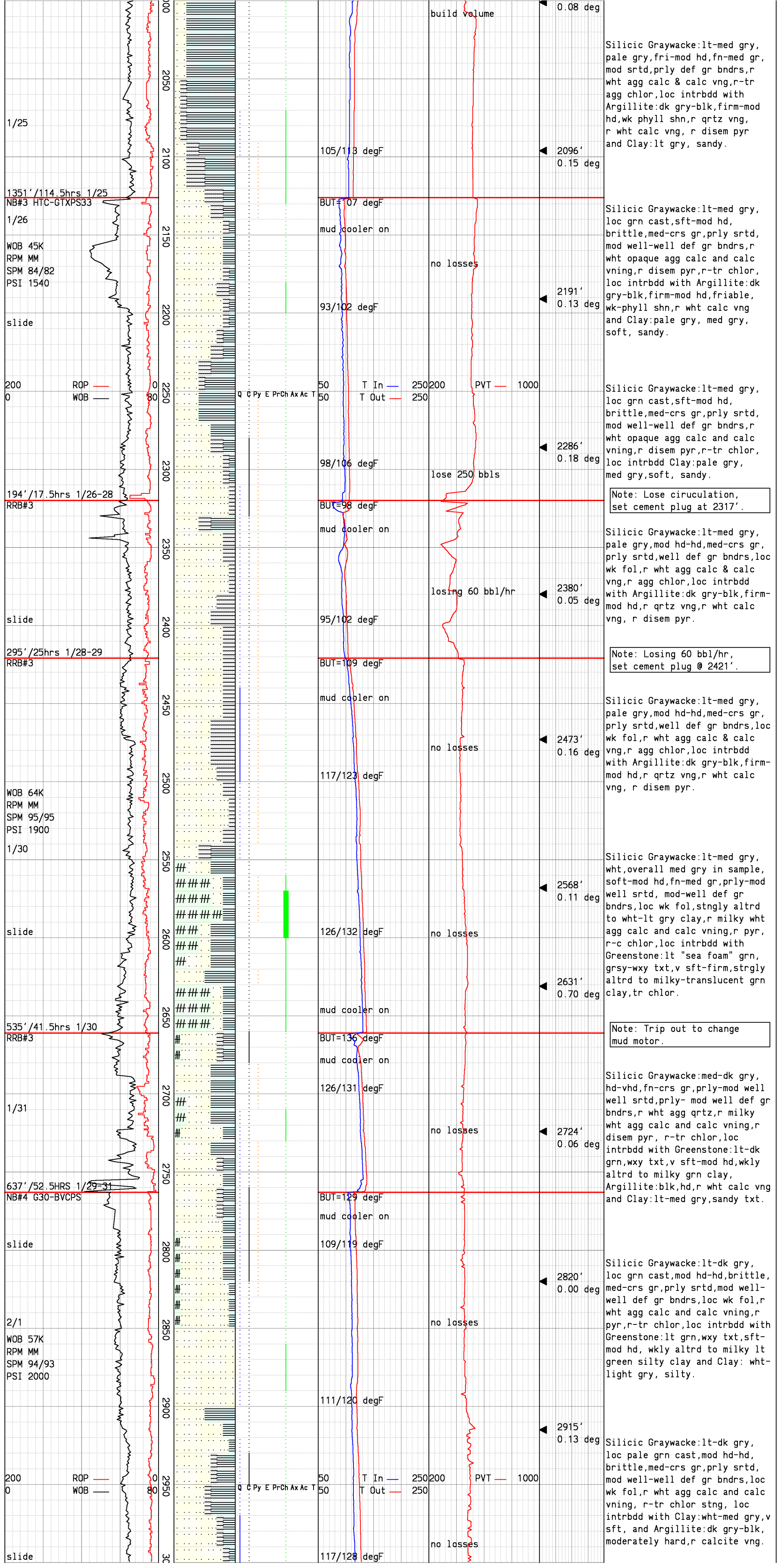
All depths from Kelly Bushing. KB=30'  
 Grassroots injection Well  
 Mud Log includes Original Hole, ST1 and ST2  
 Original Hole = 0-6615'  
 ST1 = 6615-7521'  
 ST2 = 7521-10825'.  
 Company Representatives:  
 Power, Potter, Silva, Gamble

**SECONDARY MINERALS**

Q = Quartz Rare << 1%  
 C = Calcite Trace < 1%  
 P = Pyrite Minor 1% to 4%  
 E = Epidote Common 4% to 7%  
 R = Pyrrhotite Abundant 7% to 10%  
 Ch = Chlorite > 10%  
 X = Axinite  
 A = Actinolite  
 T = Tourmaline







1/25

1351' / 114.5hrs 1/25  
NB#3 HTC-GTXPS33

1/26

WOB 45K  
RPM MM  
SPM 84/82  
PSI 1540

slide

200 ROP  
0 WOB

194' / 17.5hrs 1/26-28  
RRB#3

slide

295' / 25hrs 1/28-29  
RRB#3

WOB 64K  
RPM MM  
SPM 95/95  
PSI 1900

1/30

slide

535' / 41.5hrs 1/30  
RRB#3

1/31

637' / 52.5HRS 1/29-31  
NB#4 G30-BVCPS

slide

2/1  
WOB 57K  
RPM MM  
SPM 94/93  
PSI 2000

200 ROP  
0 WOB

slide

build volume

105/113 degF

BUT=107 degF

mud cooler on

93/102 degF

50 T In 250  
50 T Out 250

98/106 degF

BUT=98 degF

mud cooler on

95/102 degF

BUT=109 degF

mud cooler on

117/123 degF

126/132 degF

mud cooler on

BUT=136 degF

mud cooler on

126/131 degF

BUT=129 degF

mud cooler on

109/119 degF

111/120 degF

117/128 degF

0.08 deg

2096' 0.15 deg

2191' 0.13 deg

2286' 0.18 deg

2380' 0.05 deg

2473' 0.16 deg

2568' 0.11 deg

2631' 0.70 deg

2724' 0.06 deg

2820' 0.00 deg

2915' 0.13 deg

Silicic Graywacke:lt-med gry, pale gry,fri-mod hd,fn-med gr, mod srted,prly def gr bndrs,r wht agg calc & calc vng,r-tr agg chlor,loc intrbdd with Argillite:dk gry-blk,firm-mod hd,wk phyll shn,r qrtz vng, r wht calc vng, r disem pyr and Clay:lt gry, sandy.

Silicic Graywacke:lt-med gry, loc grn cast,sft-mod hd, brittle,med-crs gr,prly srted, mod well-well def gr bndrs,r wht opaque agg calc and calc vng,r disem pyr,r-tr chlor, loc intrbdd with Argillite:dk gry-blk,firm-mod hd,friable, wk-phyll shn,r wht calc vng and Clay:pale gry, med gry, soft, sandy.

Silicic Graywacke:lt-med gry, loc grn cast,sft-mod hd, brittle,med-crs gr,prly srted, mod well-well def gr bndrs,r wht opaque agg calc and calc vng,r disem pyr,r-tr chlor, loc intrbdd Clay:pale gry, med gry,soft, sandy.

Note: Lose ciruculation, set cement plug at 2317'.

Silicic Graywacke:lt-med gry, pale gry,mod hd-hd,med-crs gr, prly srted,well def gr bndrs,loc wk fol,r wht agg calc & calc vng,r agg chlor,loc intrbdd with Argillite:dk gry-blk,firm-mod hd,r qrtz vng,r wht calc vng, r disem pyr.

Note: Losing 60 bbl/hr, set cement plug @ 2421'.

Silicic Graywacke:lt-med gry, pale gry,mod hd-hd,med-crs gr, prly srted,well def gr bndrs,loc wk fol,r wht agg calc & calc vng,r agg chlor,loc intrbdd with Argillite:dk gry-blk,firm-mod hd,r qrtz vng,r wht calc vng, r disem pyr.

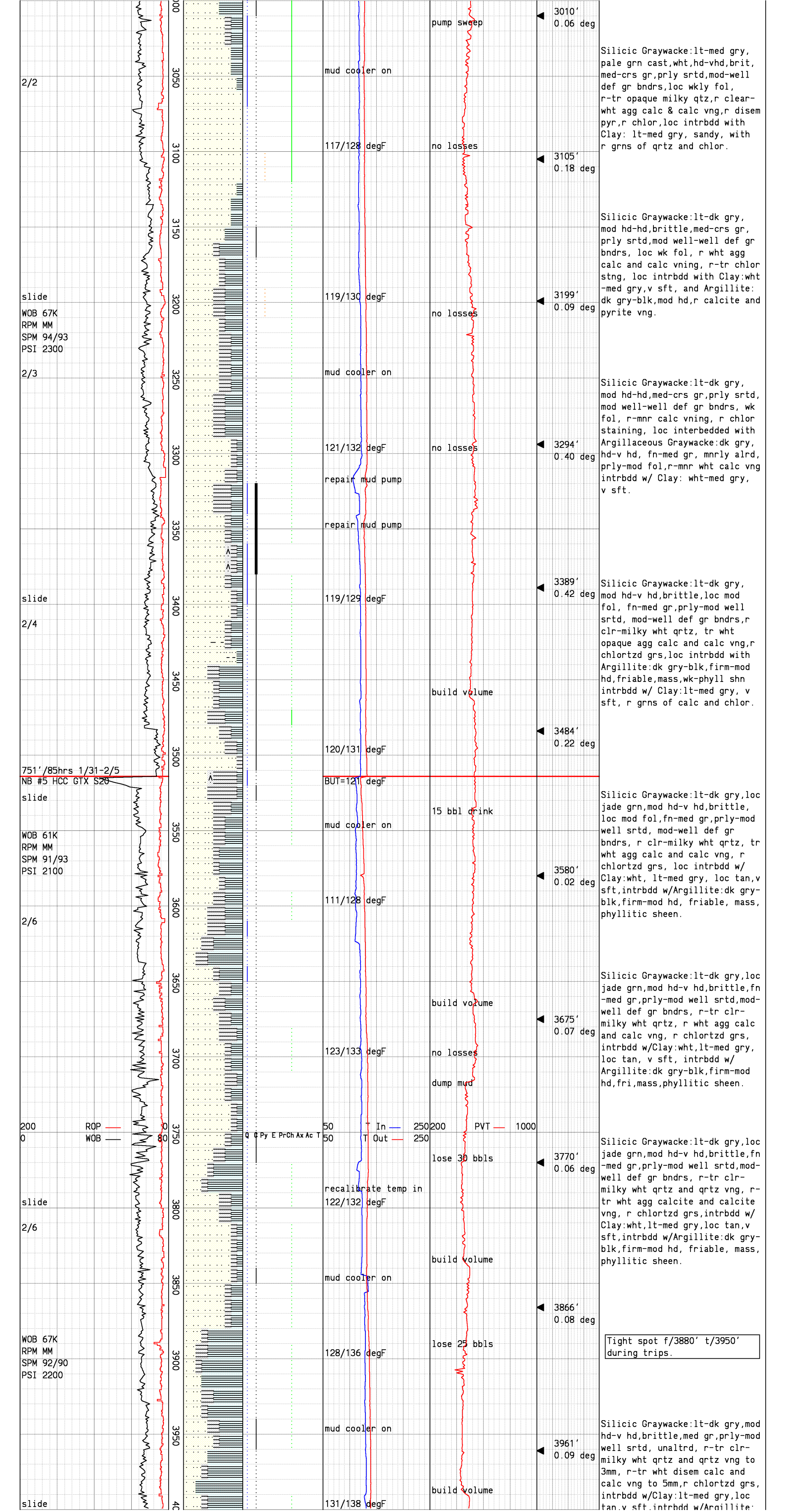
Silicic Graywacke:lt-med gry, wht,overall med gry in sample, soft-mod hd,fn-med gr,prly-mod well srted, mod-well def gr bndrs,loc wk fol,stngly altrd to wht-lt gry clay,r milky wht agg calc and calc vng,r pyr, r-c chlor,loc intrbdd with Greenstone:lt "sea foam" grn, grsy-wxy txt,v sft-firm,strgly altrd to milky-translucent grn clay,tr chlor.

Note: Trip out to change mud motor.

Silicic Graywacke:med-dk gry, hd-vhd,fn-crs gr,prly-mod well well srted,prly-mod well def gr bndrs,r wht agg qrtz,r milky wht agg calc and calc vng,r disem pyr, r-tr chlor,loc intrbdd with Greenstone:lt-dk grn,wxy txt,v sft-mod hd,wkly altrd to milky grn clay, Argillite:blk,hd,r wht calc vng and Clay:lt-med gry,sandy txt.

Silicic Graywacke:lt-dk gry, loc grn cast,mod hd-hd,brittle, med-crs gr,prly srted,mod well-well def gr bndrs,loc wk fol,r wht agg calc and calc vng,r pyr,r-tr chlor,loc intrbdd with Greenstone:lt grn,wxy txt,sft-mod hd, wkly altrd to milky lt green silty clay and Clay: wht-light gry, silty.

Silicic Graywacke:lt-dk gry, loc pale grn cast,mod hd-hd, brittle,med-crs gr,prly srted, mod well-well def gr bndrs,loc wk fol,r wht agg calc and calc vng, r-tr chlor stng, loc intrbdd with Clay:wht-med gry,v sft, and Argillite:dk gry-blk, moderately hard,r calcite vng.



2/2

slide  
WOB 67K  
RPM MM  
SPM 94/93  
PSI 2300

2/3

slide

2/4

751' / 85hrs 1/31-2/5  
NB #5 HCC GTX SZ6

slide

WOB 61K  
RPM MM  
SPM 91/93  
PSI 2100

2/6

200 ROP  
0 WOB

slide

2/6

WOB 67K  
RPM MM  
SPM 92/90  
PSI 2200

slide

mud cooler on

117/128 degF

no losses

119/130 degF

no losses

mud cooler on

121/132 degF

no losses

repair mud pump

repair mud pump

119/129 degF

120/131 degF

BUT=121 degF

mud cooler on

111/128 degF

123/133 degF

50 T In 250  
50 T Out 250

recalibrate temp in

122/132 degF

mud cooler on

128/136 degF

mud cooler on

131/138 degF

pump sweep

no losses

no losses

no losses

build volume

15 bbl drink

build volume

no losses

dump mud

lose 30 bbls

build volume

lose 25 bbls

build volume

3010' 0.06 deg

3105' 0.18 deg

3199' 0.09 deg

3294' 0.40 deg

3389' 0.42 deg

3484' 0.22 deg

3580' 0.02 deg

3675' 0.07 deg

3770' 0.06 deg

3866' 0.08 deg

3961' 0.09 deg

Silicic Graywacke:lt-med gry, pale grn cast,wht,hd-vhd,brit, med-crs gr,prly srted,mod-well def gr bndrs,loc wkly fol, r-tr opaque milky qtz,r clear-wht agg calc & calc vng,r disem pyr,r chlor,loc intrbdd with Clay:lt-med gry, sandy, with r grns of qtz and chlor.

Silicic Graywacke:lt-dk gry, mod hd-hd,brittle,med-crs gr, prly srted,mod well-well def gr bndrs, loc wk fol, r wht agg calc and calc vng, r-tr chlor stng, loc intrbdd with Clay:wht -med gry,v sft, and Argillite:dk gry-blk,mod hd,r calcite and pyrite vng.

Silicic Graywacke:lt-dk gry, mod hd-hd,med-crs gr,prly srted, mod well-well def gr bndrs, wk fol, r-mnr calc vng, r chlor staining, loc interbedded with Argillaceous Graywacke:dk gry, hd-v hd, fn-med gr, mnrly alrd, prly-mod fol,r-mnr wht calc vng intrbdd w/ Clay: wht-med gry, v sft.

Silicic Graywacke:lt-dk gry, mod hd-v hd,brittle,loc mod fol, fn-med gr,prly-mod well srted, mod-well def gr bndrs,r clr-milky wht qtz, tr wht opaque agg calc and calc vng,r chlortzd grs,loc intrbdd with Argillite:dk gry-blk,firm-mod hd,friable, mass,wk-phyll shn intrbdd w/ Clay:lt-med gry, v sft, r grns of calc and chlor.

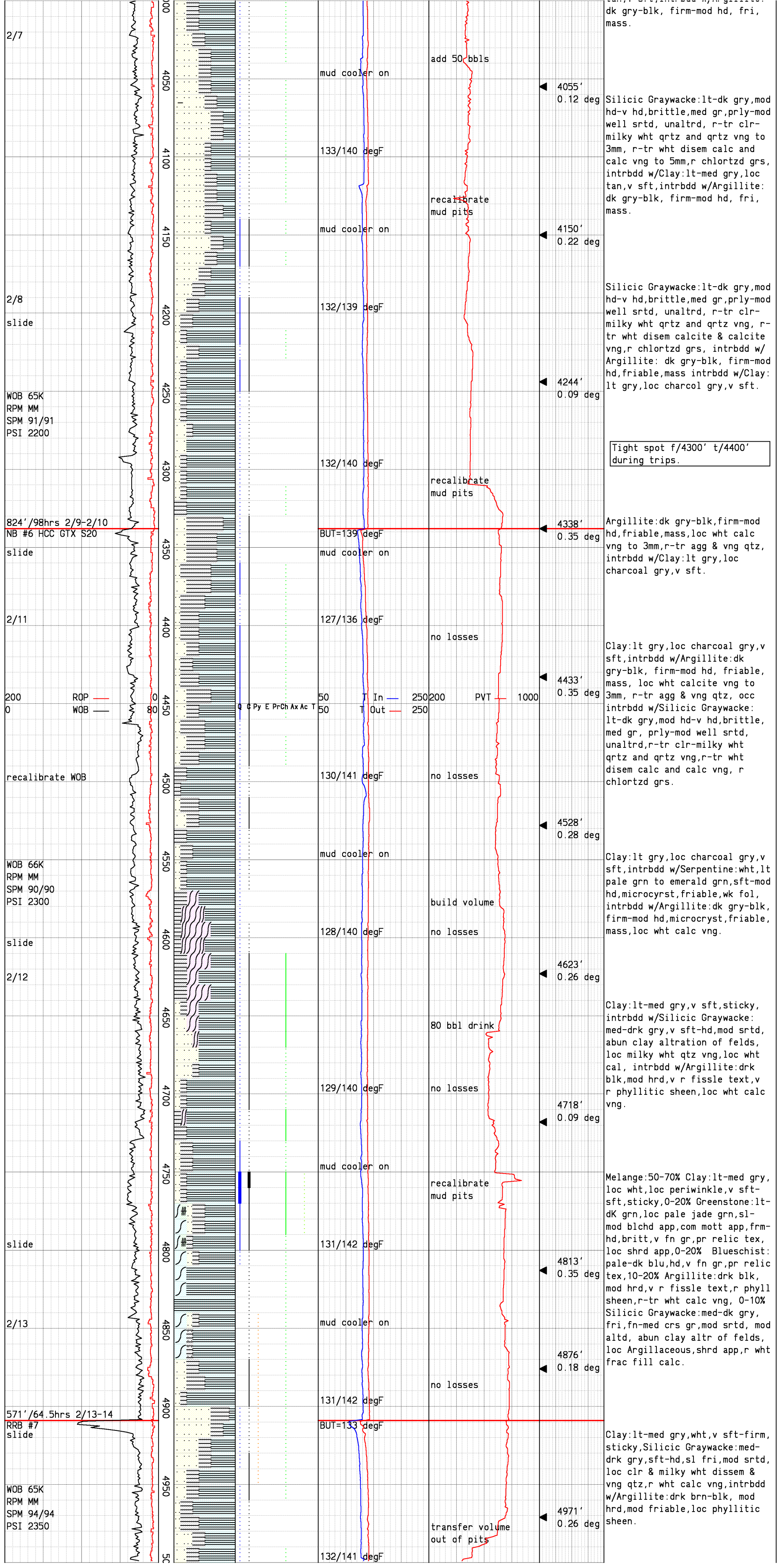
Silicic Graywacke:lt-dk gry,loc jade grn,mod hd-v hd,brittle, loc mod fol,fn-med gr,prly-mod well srted, mod-well def gr bndrs, r clr-milky wht qtz, tr wht agg calc and calc vng, r chlortzd grs, loc intrbdd w/ Clay:wht, lt-med gry, loc tan,v sft,intrbdd w/Argillite:dk gry-blk,firm-mod hd, friable, mass, phyllitic sheen.

Silicic Graywacke:lt-dk gry,loc jade grn,mod hd-v hd,brittle,fn -med gr,prly-mod well srted,mod-well def gr bndrs, r-tr clr-milky wht qtz, r wht agg calc and calc vng, r chlortzd grs, intrbdd w/Clay:wht,lt-med gry, loc tan, v sft, intrbdd w/ Argillite:dk gry-blk,firm-mod hd,fri, mass,phyllitic sheen.

Silicic Graywacke:lt-dk gry,loc jade grn,mod hd-v hd,brittle,fn -med gr,prly-mod well srted,mod-well def gr bndrs, r-tr clr-milky wht qtz and qtz vng, r-tr wht agg calcite and calcite vng, r chlortzd grs,intrbdd w/ Clay:wht,lt-med gry,loc tan,v sft,intrbdd w/Argillite:dk gry-blk,firm-mod hd, friable, mass, phyllitic sheen.

Tight spot f/3880' t/3950' during trips.

Silicic Graywacke:lt-dk gry,mod hd-v hd,brittle,med gr,prly-mod well srted, unaltrd, r-tr clr-milky wht qtz and qtz vng to 3mm, r-tr wht disem calc and calc vng to 5mm,r chlortzd grs, intrbdd w/Clay:lt-med gry,loc tan,v sft,intrbdd w/Argillite:



2/7

2/8

slide

WOB 65K  
RPM MM  
SPM 91/91  
PSI 2200

824' /98hrs 2/9-2/10  
NB #6 HCC GTX S20

slide

2/11

200 ROP  
0 WOB

recalibrate WOB

WOB 66K  
RPM MM  
SPM 90/90  
PSI 2300

slide

2/12

80 bbl drink

2/13

slide

2/13

571' /64.5hrs 2/13-14  
RRB #7  
slide

WOB 65K  
RPM MM  
SPM 94/94  
PSI 2350

mud cooler on

add 50 bbls

4055'  
0.12 deg

Silicic Graywacke:lt-dk gry,mod hd-v hd,brittle,med gr,prly-mod well srted, unaltrd, r-tr clr-milky wht qtz and qtz vng to 3mm, r-tr wht disem calc and calc vng to 5mm,r chlortzd grs, intrbdd w/Clay:lt-med gry,loc tan,v sft,intrbdd w/Argillite:dk gry-blk, firm-mod hd, fri, mass.

133/140 degF

recalibrate mud pits

4150'  
0.22 deg

Silicic Graywacke:lt-dk gry,mod hd-v hd,brittle,med gr,prly-mod well srted, unaltrd, r-tr clr-milky wht qtz and qtz vng, r-tr wht disem calcite & calcite vng,r chlortzd grs, intrbdd w/Argillite: dk gry-blk, firm-mod hd,friable, mass intrbdd w/Clay: lt gry,loc charcol gry,v sft.

132/139 degF

Tight spot f/4300' t/4400' during trips.

132/140 degF

recalibrate mud pits

4338'  
0.35 deg

Argillite:dk gry-blk,firm-mod hd,friable, mass,loc wht calc vng to 3mm,r-tr agg & vng qtz, intrbdd w/Clay:lt gry,loc charcoal gry,v sft.

BUT=139 degF

mud cooler on

127/136 degF

no losses

4433'  
0.35 deg

Clay:lt gry,loc charcoal gry,v sft,intrbdd w/Argillite:dk gry-blk, firm-mod hd, friable, mass, loc wht calcite vng to 3mm, r-tr agg & vng qtz, occ intrbdd w/Silicic Graywacke: lt-dk gry,mod hd-v hd,brittle, med gr, prly-mod well srted, unaltrd,r-tr clr-milky wht qtz and qtz vng,r-tr wht disem calc and calc vng, r chlortzd grs.

130/141 degF

no losses

4528'  
0.28 deg

Clay:lt gry,loc charcoal gry,v sft,intrbdd w/Serpentine:wht,lt pale grn to emerald grn,sft-mod hd,microcryst,friable,wk fol, intrbdd w/Argillite:dk gry-blk, firm-mod hd,microcryst,friable, mass,loc wht calc vng.

mud cooler on

build volume

128/140 degF

no losses

4623'  
0.26 deg

Clay:lt-med gry,v sft,sticky, intrbdd w/Silicic Graywacke: med-drk gry,v sft-hd,mod srted, abun clay altration of felds, loc milky wht qtz vng,loc wht cal, intrbdd w/Argillite:drk blk,mod hrd,v r fissle text,v r phyllitic sheen,loc wht calc vng.

129/140 degF

no losses

4718'  
0.09 deg

Melange:50-70% Clay:lt-med gry, loc wht,loc periwinkle,v sft-sft,sticky,0-20% Greenstone:lt-dk grn,loc pale jade grn,sl-mod blchd app,com mott app,frm-hd,britt,v fn gr,pr relic tex, loc shrd app,0-20% Blueschist: pale-dk blu,hd,v fn gr,pr relic tex,10-20% Argillite:drk blk, mod hrd,v r fissle text,r phyll sheen,r-tr wht calc vng, 0-10% Silicic Graywacke:med-dk gry, fri,fn-med crs gr,mod srted, mod altd, abun clay altr of felds, loc Argillaceous,shrd app,r wht frac fill calc.

mud cooler on

recalibrate mud pits

131/142 degF

4813'  
0.35 deg

mud cooler on

no losses

4876'  
0.18 deg

131/142 degF

BUT=133 degF

Clay:lt-med gry,wht,v sft-firm, sticky,Silicic Graywacke:med-drk gry,sft-hd,sl fri,mod srted, loc clr & milky wht dissem & vng qtz,r wht calc vng,intrbdd w/Argillite:drk brn-blk, mod hrd,mod friable,loc phyllitic sheen.

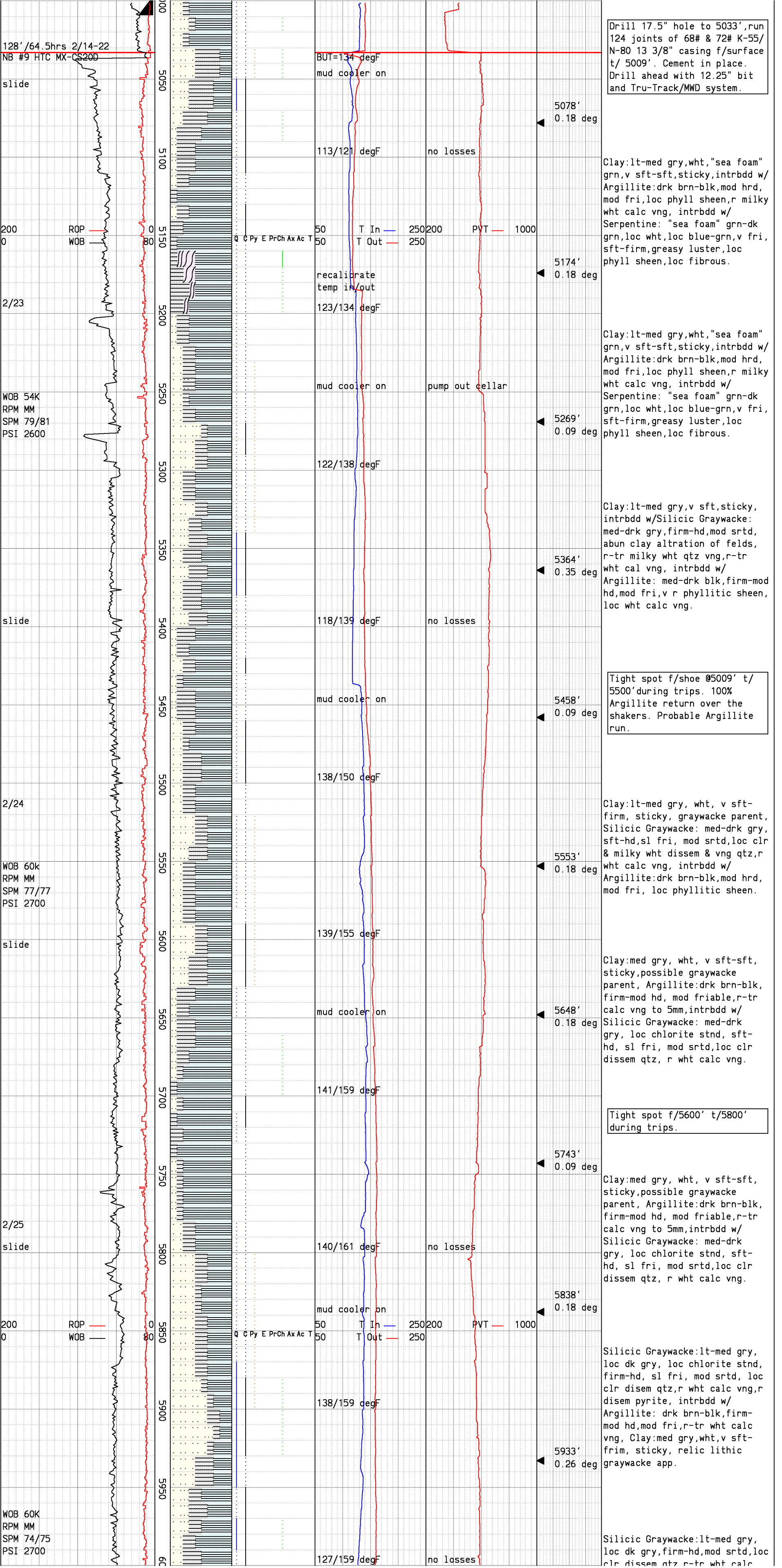
transfer volume out of pits

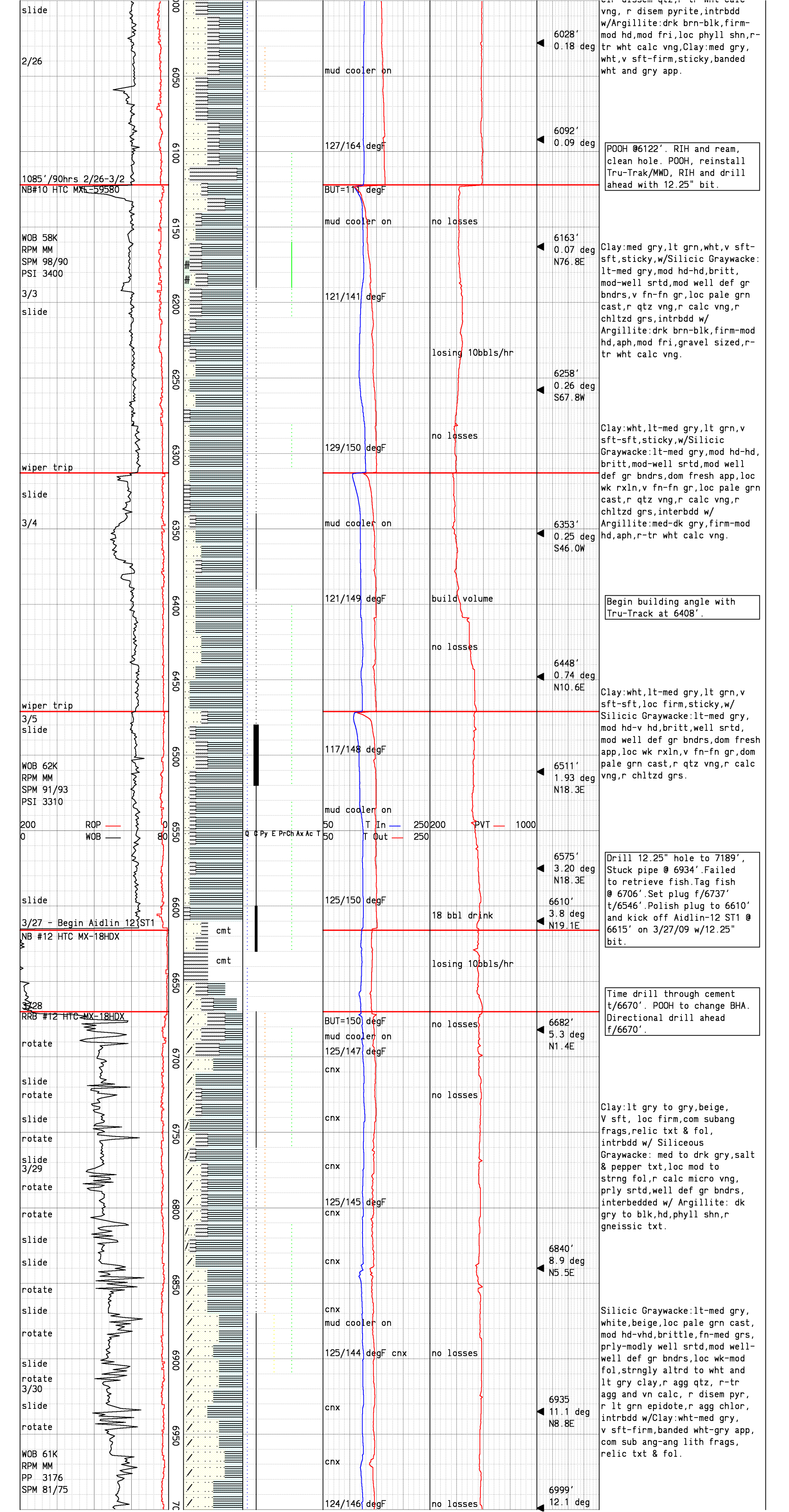
4971'  
0.26 deg

132/141 degF

Py E PrCh Ax Ac T  
50 T In 250  
50 T Out 250

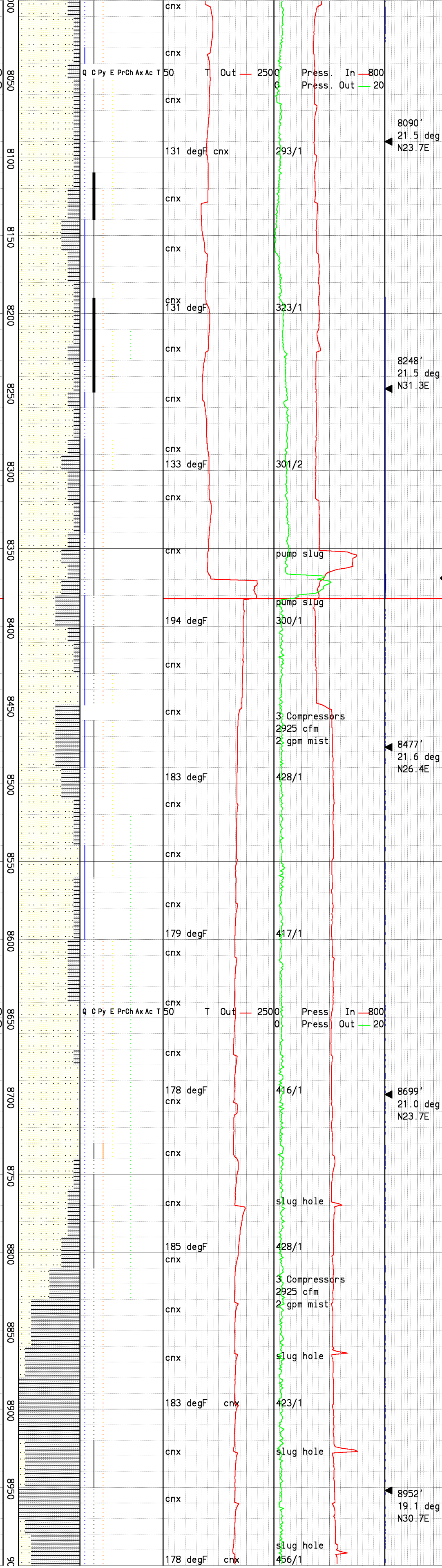
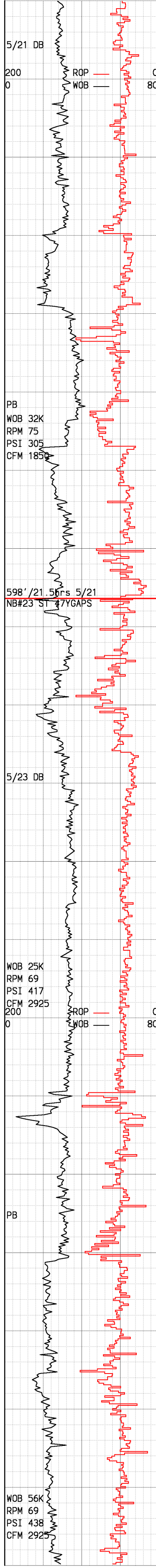
PVT 1000











Silicic Graywacke:lt-med gry, occ dk gry,hd-v hd,com fresh app,fn-med grs,well def gr bndrs, mod well-well srtd, subrnnd-subang grs,loc argillaceous,r-tr wht agg/vn qtz,r-tr milky wht agg/vn calc, r disse pyr. Intrbdd W/ Argillite:dk gry-blk,mod hd-hd, com phyll shn,r qtz vng,r calc vng,r disse pyr.

Silicic Graywacke:lt-med gry, occ dk gry,hd-v hd,v fn-med grs, mod-well def gr bndrs,mod well srtd,subrnnd grs,r-tr qtz vng, t wht calc,r disse pyr,loc r epid.

Drill breaks f/8215-8218': 107ft/hr, f/8263-8283': 89ft/hr.

Silicic Graywacke:lt-med gry, occ dk gry,hd-v hd,com fresh app,fn-med grs,well def gr bndrs, mod well-well srtd, subrnnd-subang grs,loc argillaceous,r-tr wht agg/vn qtz,r-tr milky wht agg/vn calc, r disse pyr. Intrbdd W/ Argillite:dk gry-blk,mod hd-hd, com phyll shn,r qtz vng,r calc vng,r disse pyr.

Steam entry observed @ 8369' upon unloading of well after slug. Initial pressure incr of 67#, 6# sustained. 102 degF initial incr., 84 degF sustained. Entry probably occurred during drilling breaks f/8263' t/8283'.

Drill breaks f/8434'-8436': 80 ft/hr, f/8438'-8447': 65-108 ft/hr. Note:well making ~20bph.

Silicic Graywacke:lt-med gry, loc dk gry/brn,occ sl grn cast, hd-v hd,fn-med grs,well def gr bndrs,mod well-well srtd, subrnnd-subang grs,r-tr wht qtz vng,r clr qtz,r-tr milky wht agg/vn calc,r disse/vn pyr,loc r yel epid,loc r disse/agg chlor. Intrbdd w/Argillite:dk gry-blk,mod hd-hd,britt,com phyll shn,r qtz vng,r-tr wht calc vng,r pyr vng.

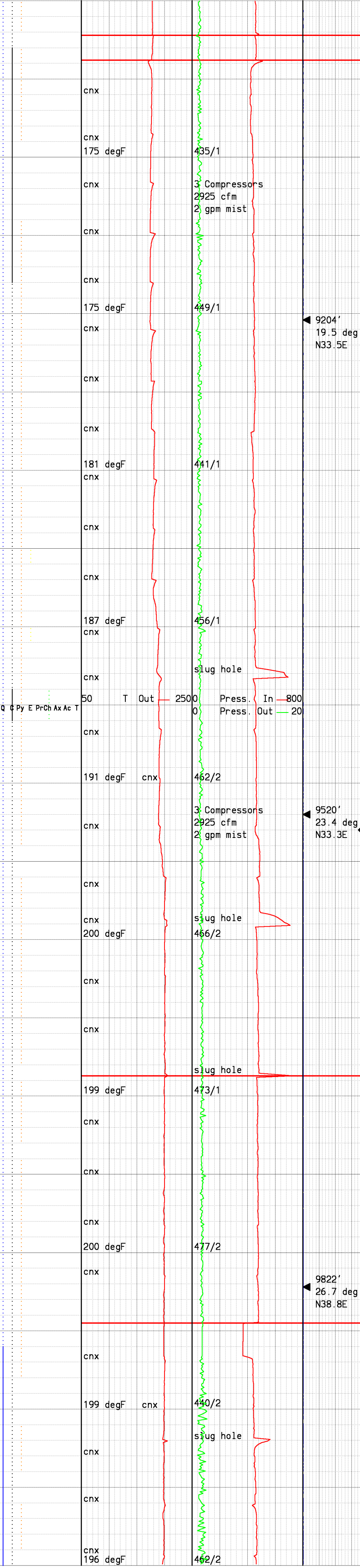
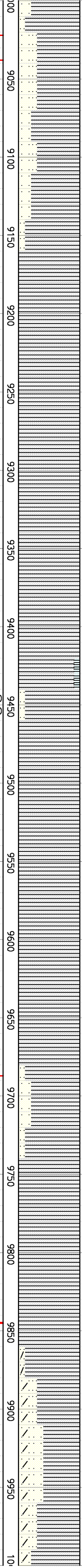
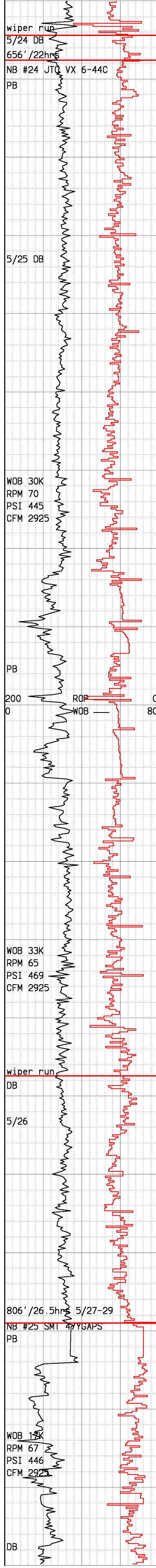
Silicic Graywacke:lt-med gry, loc dk gry,com sl grn cast,hd-v hd,com fresh app,fn-med grs, well def gr bndrs,mod well-well srtd,subrnnd-subang grs,r-tr wht qtz vng,r clr qtz xls,r-tr milky wht calc vng,r disse/vn pyr,loc r yel epid,r disse/agg chlor. Intrbdd w/ subordinate Argillite:dk gry-blk,mod hd-hd, britt,loc com phyll shn,r qtz vng,r-tr wht calc vng,r disse/vn pyr.

Silicic Graywacke:lt-med gry, occ sl grn cast,mod hd-hd,com fresh app,fn-med grs,well def gr bndrs,mod well srtd,r-tr wht qtz vng,r euhedral clr qtz xls,r-tr milky wht calc vng,r disse/vn pyr,loc r canary yel epid,r disse/agg teal chlor.

Argillite: med-dk gry,taupe,loc lt gry, mod hd-hd, britt, loc wk phyll shn, r qtz vng, r-tr calc vng, r disse/vng pyr intbdd w/Silicic Graywacke:lt-med gry,occ sl grn cast,mod hd-hd,com fresh app,fn-med grs, well def gr bndrs, mod well srtd,r-tr wht qtz vng,r euhed clr qtz xls,r-tr milky wht calc vng, r disse/vn pyr.

Reduced returns

Argillite:med-dk gry, brn-gry, loc lt gry, mod hd-hd, britt, aphan txt,com slty app, loc wk phyll shn, r qtz vng, r-tr calc vng,r disse/vng pyr intbdd w/ Silicic Graywacke:lt-med gry, occ sl grn cast, mod hd-hd, com



fresh app,fn-med grs, well def gr bndrs,mod well srted,r-tr wht qtz vng,r euhed clr qtz xls,r-tr milky wht calc vng,r dissem/vn pyr.

Argillite:med-dk gry,blk,taupe, loc lt gry, mod hd-hd, britt, aphan txt, com slty app, loc wk phyll shn,r clr drusy qtz,r-tr vng & disem calc,r disem pyr, intbdd w/Silicic Graywacke:lt-med gry, mod hd-hd, com fresh app,loc marg altrd,fn-med grs, predom well def grn bndrs,prly-mod well srted,r-tr wht qtz vng, r-tr milky wht calc vng,r disem pyr.

Argillite:med-dk gry,blk,loc lt gry,mod hd-hd,britt,aphan txt, loc v fn grs,com slty app,occ wk phyll shn,r-tr milky wht qtz vng,loc r clr qtz xls,r-tr wht agg calc,r-tr calc microvng, r dissem pyr,r pyr assoc w/qtz vng.

Well making 10-15 BPH water. Decreased steam flow observed. Only trace steam visible during svy. Unable to get accurate C/NC due to decreased steam flow.

Argillite:med-dk gry,blk,loc lt gry/lt brn,mod hd-hd,britt, aphan txt,occ v fn grs,com slty app,com str phyll shn,r-tr milky wht qtz vng,occ r clr qtz xls,r-tr wht agg calc & calc microvng,r disem pyr,r pyr assoc w/qtz vng,r agg/dissem yel epid assoc w/qtz vng.

Drill break f/9445'-9446': ROP to 96 ft/hr.

Argillite:med-dk gry,blk,taupe, mod hd-hd,britt,aphan txt,occ v fn grs,com slty app,com mod str phyll shn,r milky wht qtz vng,occ r clr qtz xls,r-tr wht agg calc & calc microvng, r disem pyr,r pyr assoc w/qtz vng.

Steam entry @ 9530'.ROP to 75ft/hr.33# Init pressure incr,21# sustained. 10 degF init incr,10 degF sustained.

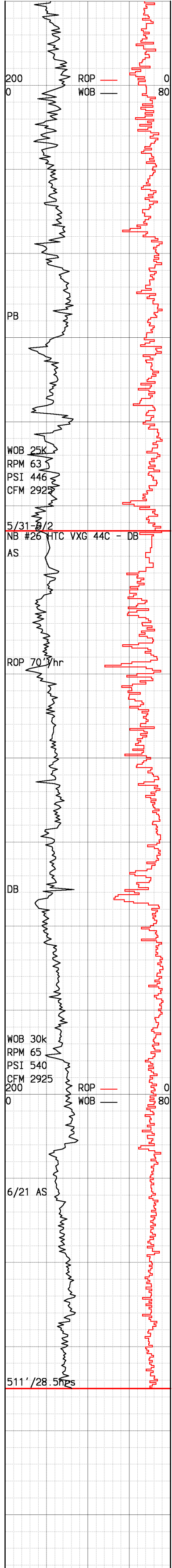
Argillite:med-dk gry,blk,taupe, mod hd-hd,britt,aphan txt,occ v fn grs,com slty app,com mod str phyll shn,r milky wht qtz vng,occ r clr qtz xls,r-tr wht agg calc & calc microvng, r disem pyr,r pyr assoc w/qtz vng.

Drill break f/9658-9659:ROP up to 90 ft/hr.Note:well making ~15bph

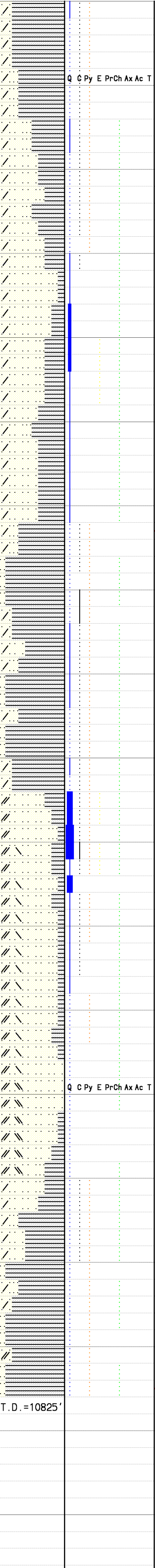
Argillite:med gry-blk,occ lt gry,mod hd-hd,britt,aphan txt, com slty app,mod str phyll shn, r milky wht qtz vng,loc r clr qtz xls,r wht agg/vn calc,r dissem/vn pyr assoc w/qtz vng.

Mechanical failure with draw work brakes. Blocks drop to rig floor while POH on 5/26. Rig up new blocks,rotary table and cables and drill ahead on 5/29.

Argillite:med gry-blk,occ lt gry,taupe,mod hd-hd,britt,aphan txt,com slty app, prly-mod str phll shn,r-tr translu & milky wht qtz vng,r wht agg/vn calc,r disem/vng pyr, intbdd w/Silicic Graywacke: lt-med gry, occ dk gry, hd-v hd, predom fresh app, loc com lithic frags, fn-med grs, prly srted, indist-mod well def grn bndrs, r-tr qtz vng.



000  
10050  
10100  
10150  
10200  
10250  
10300  
10350  
10400  
10450  
10500  
10550  
10600  
10650  
10700  
10750  
10800  
10850  
10900



Depth (ft)	Temp (degF)	Pressure (In/Out)	Notes
10050	50	2500	cnx
10100	199 degF	449/2	cnx
10150	197 degF	444/2	cnx
10200	198 degF	453/2	cnx
10300	198 degF	453/2	cnx
10350	198 degF	453/2	cnx
10400	200 degF	516/2	cnx
10450	201 degF	512/2	cnx
10500	201 degF	512/2	cnx
10550	218 degF	534/2	cnx
10600	208 degF	537/2	cnx
10650	208 degF	537/2	cnx
10700	200 degF	530/2	cnx
10750	200 degF	530/2	cnx
10800	200 degF	530/2	cnx
10825	T.D. = 10825'		

Silicic Graywacke:lt-med gry, occ dk gry,occ wht blchd app, hd-v hd,v fn-med grs,mod well-mod pr def gr bndrs, mod well-well srtd,subrddd-subang grs, loc argillaceous,overall marg altn,r-tr wht agg/vn qtz,r-tr milky wht agg/vn calc,r dissempyr,loc r grn dissem/agg chlor, intrbddd w/Argillite:med-gry-blk, occ lt gry,mod hd-hd,britt, aphan txt,com slty text,loc com phyll shn,r-tr wht qtz vng,r clr qtz xls,r wht calc vng,r dissem/vn pyr.

Silicic Graywacke:lt-med gry, occ dk gry,com wht blchd app, hd-v hd,v fn-med grs,indist-mod well def gr bndrs,prly-mod well srtd,subrddd-subang grs,loc argillaceous,overall marg altn, r-mnr wht agg/vn qtz,abs-r mlky wht agg/vn calc,r agg yellow epidote,loc r grn dissem/agg chlor,intrbddd w/Argillite:med-dk gry,occ blk,occ lt gry,mod hd-hd,britt,aphan txt,com slty text,loc com phyll shn,r-tr wht qtz vng,r clr qtz xls,abs calc.

Poss Steam Entry @ 10350'. 65# Initial pressure incr, 0 degF temp out incr. w/No new steam observed.

10392' 39.4 deg N37.6E

Argillite:dk gry-blk,mod hd-hd, aphan txt,com slty app,str phyll shn,r agg pyr,r calc vng,loc r qtz microvng.Intrbddd w/Silicic Graywacke:lt-med gry,hd-v hd,fn-med gr,prly-mod srtd,marg altrd, com blchd,loc fresh,r-tr mlky qtz vng,r chlrtzd grs.

Silicic Graywacke:lt gry-white, hd-v hd,indist gr bndrs,perv altrd,loc wk hornfslsic,com-abun clr qtz vng,com mlky qtz vng,r-tr calc vng,r disem chlor,r yell epid.

Steam entry @ 10580'.5# initial pressure incr,10# sustained,18 degF initial incr,.9 degF sustained. Note:suspend mist injection for wet test at 10,610'.

Silicic Graywacke:lt-med gry, occ wht/blchd app,loc grn cast, com brn cast,hd-v hd,v fn-med grs,prly def gr bndrs,mod-str rexln,perv altrd,wk-loc str hornfelsic,r-tr qtz vng,r-com clr qtz xls,loc r disse calc, occ r pyr,r disse/vn chlor.

Argillite:dk gry-blk,r lt gry, mod hd-hd,aphan txt,com slty app,str phyll shn,r agg pyr,loc r calc vng,loc r qtz microvng. Intrbddd w/Silicic Graywacke:lt-med gry,com brn cast,hd-v hd,fn-med gr,prly-mod srtd,marg altrd, com blchd,loc fresh,r mlky qtz vng,r chlrtzd grs.

Drill 8.5" hole to a total depth of 10825'.Run hot 36 jnts 7" 29# L-80 slotted liner from 9346' to 10825' & 68 jnts of 7" 29# L-80 blank liner from 6536' to 9346'w/ X-0 & 2 jnts 8-1/8" 35.5# L-80 Hydril 511 receptacle and landing collar from 6473'to 6536'.Run cold 3 jnts 6-3/4" 32# L-80 FJWP, 24 jnts 7" 29# L-80 VAMTOP, 146 jnts 7" 26# L80 NK3SB, 1 jnt 7" 26# L-80 butress and hanger from surface to 6500'.

Note:Lose survey tool,unable to get final survey.