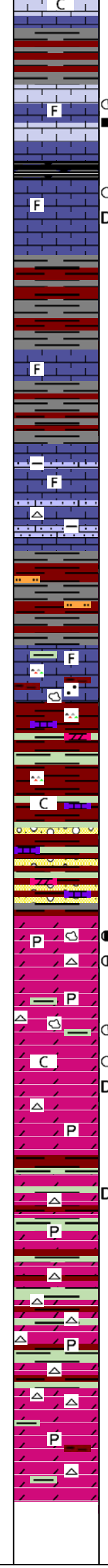
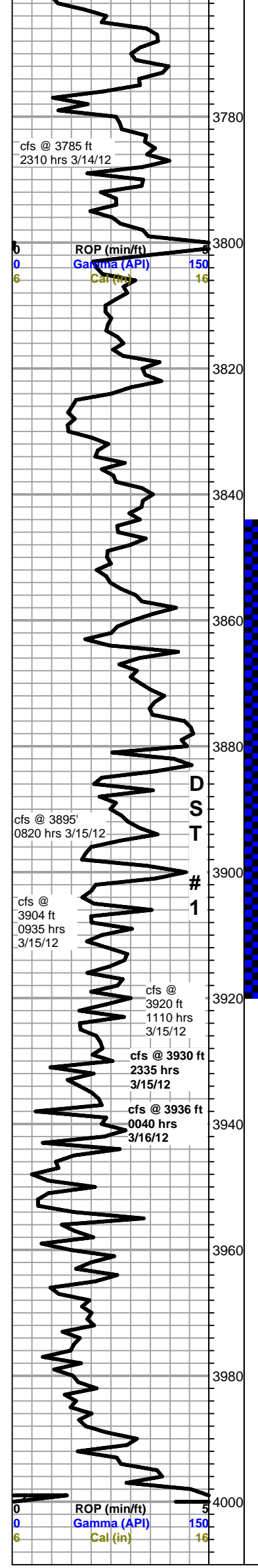


Mud-Co Mud Ck @ 3484 0730 hrs 3/14/12 vis 67 wt. 8.9 pv 15 yp 29 wl 6.4 cake 1/32 pH 11.5 chl 1700 cal 0 sol 4.3 lcm 4# dmc \$1895.15 cmc \$11855.45

propane test Total Gas (units) 100 C1 (units) 100 C2 (units) 100 C3 (units) 100 C4 (units) 100

cfs @ 3608 ft 1250 hrs 3/14/12



mineral fluorescence, no cut, abundant chalk in samples

red and gray shale, soft

limestone, cream to white, micro-cryptocrystalline, lithographic to fossiliferous, fairly chalky, some fair pinpoint porosity, scattered saturated brown to spotty light brown staining, slight show of tar-clingy free oil, no odor, bright green mineral fluorescence, slow streaming cut, abundant chalk throughout samples

3780

limestone, pale green to cream and white, cryptocrystalline, fossiliferous, trace oolitic, poor visible porosity, some scattered tarry black stain, trace tarry free oil, no odor, slight fluorescence

3800

Base KC 3802 -1430

shale, red and gray, soft, heavy red wash

as above with some gray grainy fossiliferous to arenaceous limestone

3820

shales as above, heavy red wash

limestone, gray to white and pale green, fossiliferous, grainy, to sandy/argillaceous, dense, scattered chert, some reworked red shale loaded clastic limestone

3840

red and gray shales, heavy red wash, some light green slightly friable siltstones

3860

Penn Congl. 3864 -1492

limestone, mixed gray to pale green and cream, crypto-microcrystalline, fossiliferous to lithographic, some sandy, some reworked, with flood orange fossiliferous chert, abundant brick red, fairly firm silty shales (more typical of conglomerate)

3880

conglomerate, red and gray shales, orange cherts, mixed limestones, some scattered light gray microcrystalline dolomite, dense, trace stain, one specimen even stain microxin dol with show heavy oil on break, 45 min sample, flood sticky red shale and chalk, trace cream microxin dol, barren, no odor in samples

3900

shaley conglomerate, mixed red and gray, very soft sticky, mixed limestones, chert drops out

a.a. with: angular quartz sandstone, pyritic, dead oil stain

Arbuckle 3907 -1535

dolomite, pink to orange, crypto-microcrystalline, chert and (feldspar?) inclusions (reworked), poor primary but good secondary vuggy porosity, fair staining, some bleeding oil, with: dolomites, mixed gray to cream and white, mixed crystalline, varying degrees of intercrystalline and vuggy solution porosity, spotty to saturated stain to barren, overall good show free oil in tray, weak odor, fairly even light fluorescence - abundant cherts and pyrite

3920

3920-30, dolomites as above, marked decrease in show, only seen in tray, fleeting odor, some bright green shale stringers

3930-36 dolomite, tan to brown and gray, microcrystalline, recrystallized to sub-rhombic to rhombic, rhombic exhibits good porosity in part, abundant caliche (in 30 min sample, drops out in 45 min sample) some pyritic, scattered dead black flakey staining, trace light brown spotty to saturated stain, no show free oil, no odor, faint green yellow fluorescence, with: abundant cream to tan cryptocrystalline dolomite, barren, some scattered cherts

3936-44, as above, with influx orange and yellow cherty dolomites

3944-65 dolomite, tan to gray, some pink/orange to yellow, mostly microcrystalline rhombic to sub-rhombic, some recrystallized, dense, some pyritic, some scattered spotty to saturated black to brown stain, no show free oil, no odor, flood waxy bright green and maroon shales, sandy to pyritic, appx 40% of samples, scattered cherts

as above, decrease in shales (appx 20%), increase in chert

3980

dolomite, white to light gray and tan and light orange, crypto-microcrystalline, some fair rhombic with good intercrystalline porosity, some very pyritic, some black staining and gilsonite, some clingy tar, no show free oil or odor, poor overall fluorescence, marked decrease in shales, trace chert

4000

Total Gas (units)		100
C1 (units)	100	100
C2 (units)	100	100
C3 (units)	100	100
C4 (units)	100	100

short trip @ 3880'		
Mud-Co Mud Ck @ 3892		
0800 hrs 3/15/12		
vis 65 wt. 9.2		
pv 15 yp 21		
wl 6.4 cake 1/32		
pH 10.5		
chl 1900		
cal tr		
sol 6.4 lcm 2#		
dmc \$89.75		
cmc \$11945.20		
pipe strap 0.40 ft. long		
deviation survey 1 deg		

Total Gas (units)		100
C1 (units)	100	100
C2 (units)	100	100
C3 (units)	100	100
C4 (units)	100	100