CONFIDENTIAL

Alta Mesa Holdings, LP

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

Well Name:	Kauffman 1-34	ALTA MESA	
API:	11-075-20024	AFE: 114DC2101	
Location:	Sec 34, T9N, R4W	Payette County, ID	
License Number:	API 11-075-20024	Region:	Willow/Wildcat
Spud Date:	7/22/2014	Drilling Completed:	8/3/2014
Surface Coordinates:	See drilling report		
Bottom Hole Coordinates:	See drilling report		
Ground Elevation (ft):	2484'	K.B. Elevation (ft):	2498'
Logged Interval (ft):	179' To: 5800'	Total Depth (ft):	5800'
Formation:	Willow		
Type of Drilling Fluid:	WBM to SCP, Invert Emulsion to TD		

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

OPERATOR

Company: Alta Mesa Holdings LP
Address: 15021 Katy Freeway
4th Floor
Houston, TX 77094-1813

GEOLOGIST

Name: Phil Littlefield, Dusty Parker
Company: King Canyon Buffalo, Inc.
Address: 33 King Canyon Rd.
Chadron, NE 69337

Comments

Company Man: Jesse Tatman, Brent New
Alta Mesa Engineer: David Tubbs
Alta Mesa Geologist: Mike McMennamy
Contractor: PGDS Rig #7 (Paul Graham Drilling Service)
Tool Pusher: Dave Landers, Kevin Lopez
Mud Company: Newpark Drilling Fluids
Mud Engineer: Ron Lain, Charles Williams
KCB Wellsite Geology: Phil Littlefield, Dusty Parker
Samples: Adam Johnson, Jack Pappas

ROCK TYPES

Dol gy
Dol pk
Anhy rose
Anhy
Bent
Cht
Coal
Ls off wh
Ls tan
Cement
Congl
Dol ltbrn
Ls ltgy
Ls crm
Ls wh
Ls med brn
Ls medgy
Sh medgy
Sltst rdbrn
sltst wh
sltst ltgy
Sltst tn
sltst ltbrn
Sltst
Ss crs
Ss gy
Ss
Sh rdbrn
Shale sndy
Sh brn
Sh tan
Sh ltblu
Carbshdkgy
Sh carb
Sh dkgy
Sh grn
Sh medgy
Sh ltgy
NO SMPL nosmpl
Csgpt
clyst tan/buff
clyst ltbrn
clyst mar
clyst wh
clyst ltgrn
clyst rdbrn
clyst blgy
clyst lt-mgy
Coal
Tuff ltgy
Tuff ltgrn
Tuff blugy
Tuff medgy
Tuff tan
Basalt flow top
Basalt entab
Basalt columnade
Carbsh

ACCESSORIES

MINERAL

Vertfrac
Anhy
Arggrn
Arg
Mica
Bent
Bit
Brecfrag
Calc
Carb
Chtdk
Chtlt
Dol
Feldspar
Ferrpel
Ferr
Glau
Gyp
Hvymin
Kaol
Marl
Qtz or calct xls
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

STRINGER

Anhy
Arg
Bent
Coal
Dol
Gyp
Ls
Mrst
Sltstrg
Ssstrg
Sltstrg tn
Lsgy
Lscrmtn

TEXTURE

Boundst
Chalky
Cryxln
Earthy
Finexln
Grainst
Lithogr
Microxln
Mudst
Packst
Wackest

OTHER SYMBOLS

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

SORTING
- Well
- Moderate
- Poor

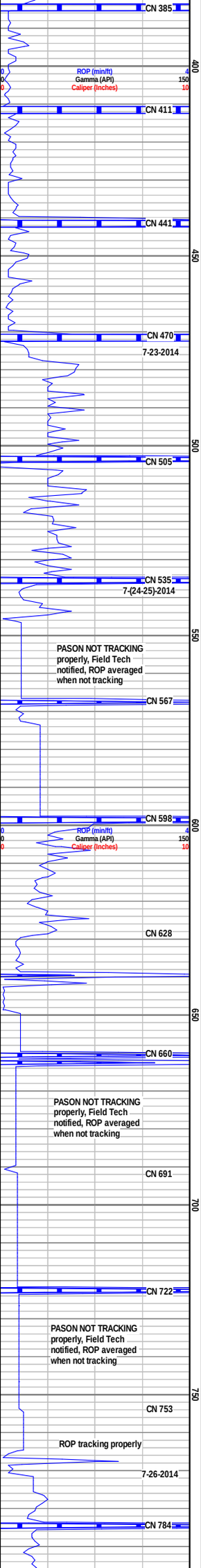
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

OIL SHOW
- Even
- Spotted
- Ques
- Dead

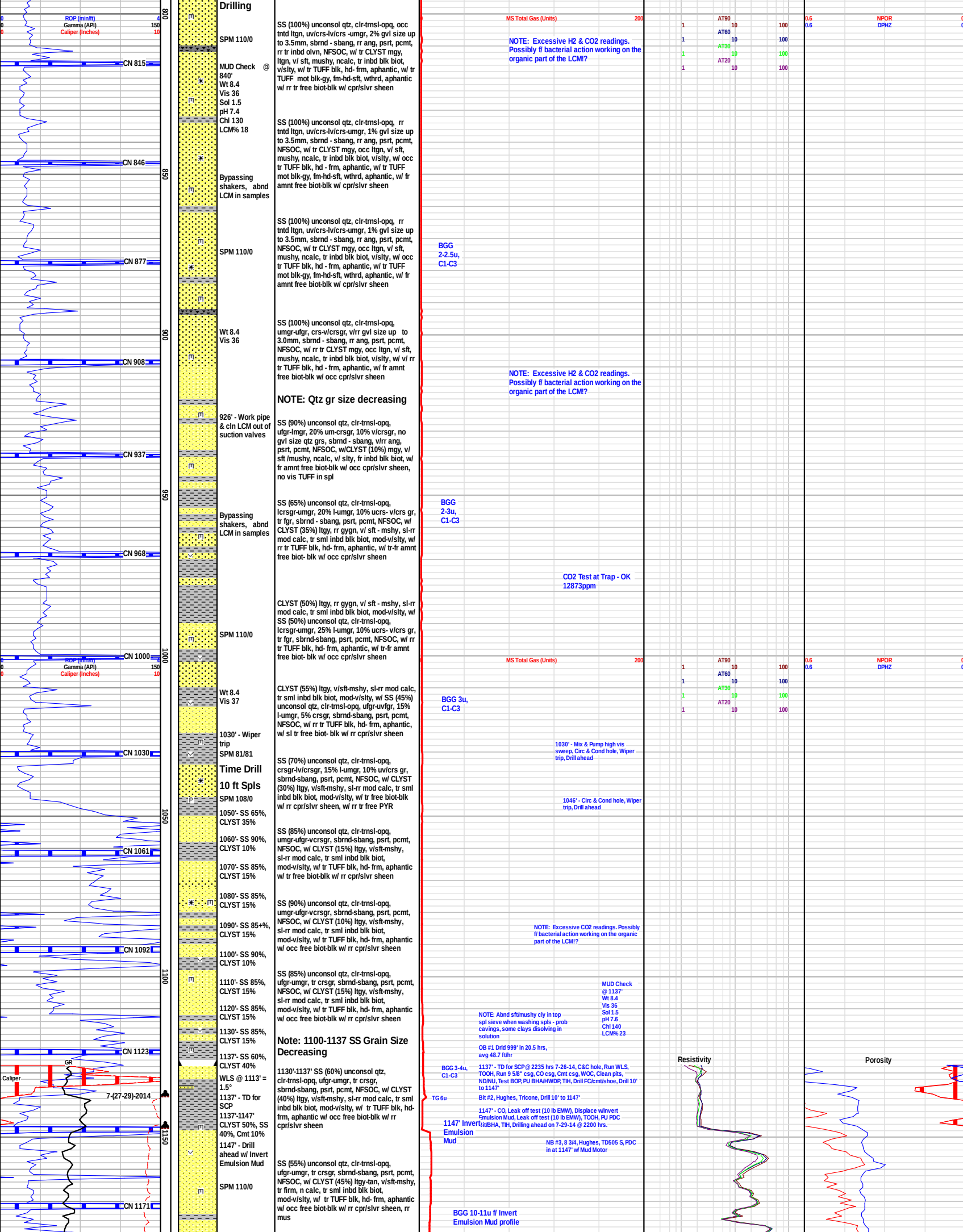
INTERVAL
- Core
- Dst
- Casing

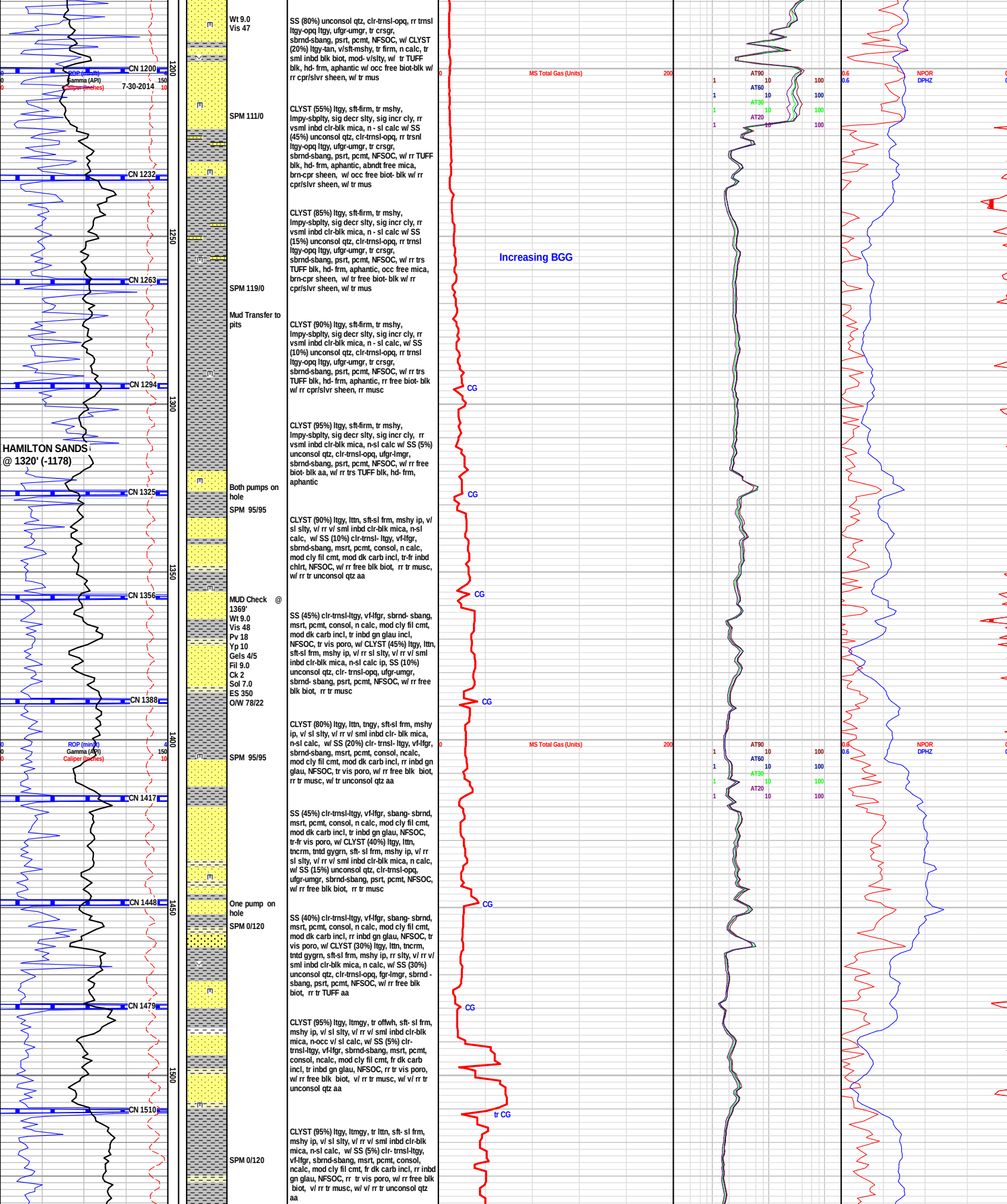
EVENT
- Rft
- Sidewall
- New bit

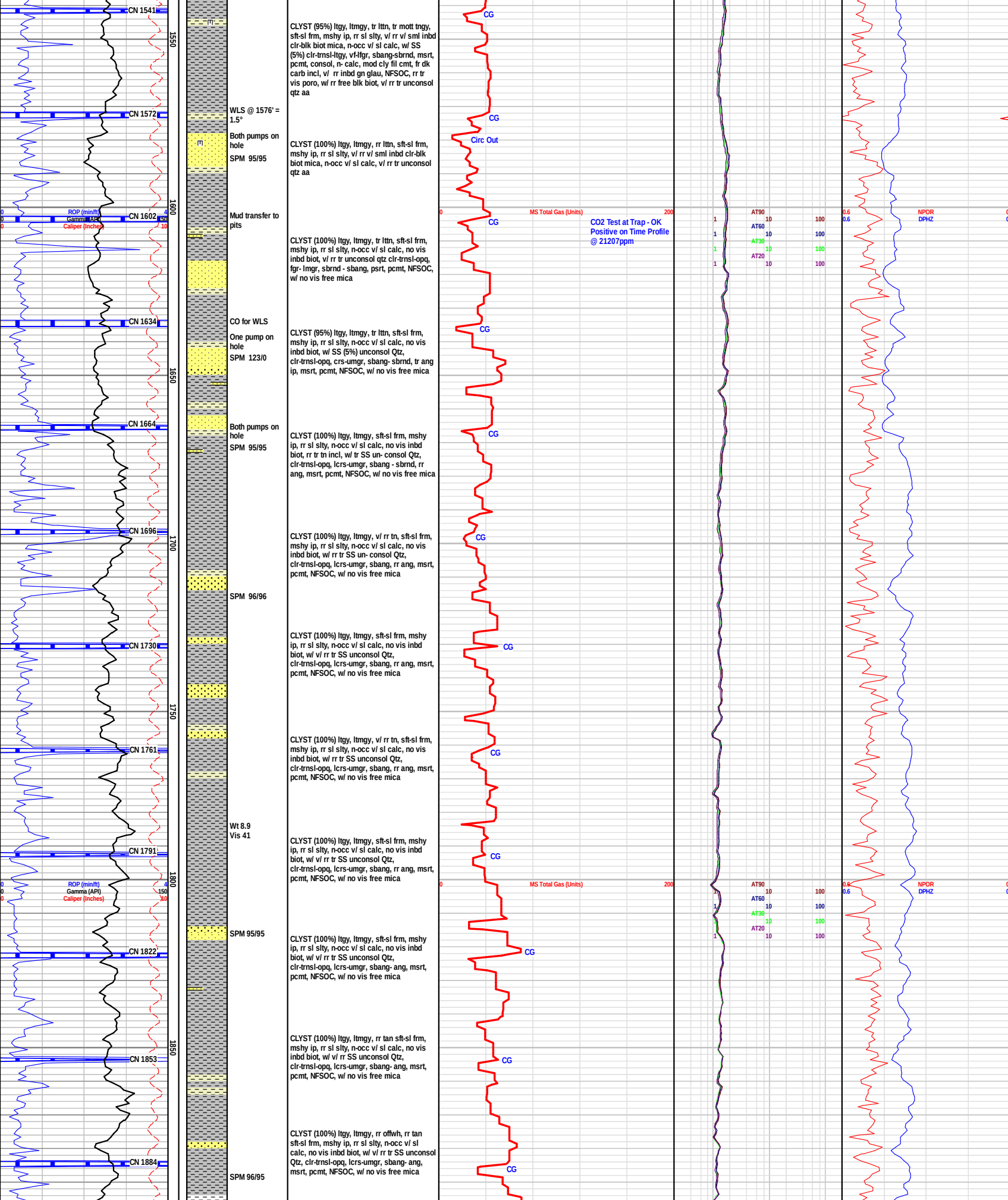
ROP (min/ft)	DEPTH	Lithology	Rig/Mud Data	Geological Descriptions	Mass Spec Total Gas	Resistivity	Porosity
ROP (min/ft) 0–4; Gamma (API) 0–150; Caliper (Inches) 0–10	0		Mud Type Spud Mud		MS Total Gas (Units) 0–200	AT90 1–10–100; AT60 1–10–100; AT30 1–10–100; AT20 1–10–100	NPOR 0.6–0; DPHZ 0.6–0
KING CANYON BUFFALO, INC. 33 King Canyon Rd, Chadron, NE 69337 109 E 17th St, Ste 4159, Cheyenne, WY 82001 kcbison@yahoo.com http://www.kingcanyonbuffalo.com/wellsite/			Rig / Mud Data	ALTA MESA Kauffman 1-34 API # 11-075-20024 AFE: # 114DC2101 GL Elevation: 2484 ft KB Elevation: 2498 ft	ALTA MESA Kauffman 1-34 API # 11-075-20024 AFE: # 114DC2101 GL Elevation: 2484 ft KB Elevation: 2498 ft		
Mr. Chris Nerud, President (970) 212-6868 jcnerud@yahoo.com			MW In/Out Vis In/Out				
	100		Drilling 12 1/4" Surface hole				
Well Logged by Phil Littlefield, Dusty Parker, Adam Johnson & Jack Pappas with FIT "dq1000" Mass Spectrometer (#1078) and Gas Cannibal Trap			NB #1, 12 1/4, Hughes, VM-1, 3x18-1x12 jets, Tricone in at 138', No Mud Mtr	King Canyon Buffalo, Inc. On location 7/16/2014 @ 12:00 hrs Fully Operational 7/17/2014 @ 14:30 hrs	BGG = Background Gas BIB = Break in Bit CN = Connection CG = Connection gas DOT = Dropped on trip DT = Downtime DTG = Downtime gas FMG = Formation gas LTC = Lagged to Connection LTD = Lagged to Downtime NB = New Bit STG = Short Trip Gas TG = Trip Gas WLS = Wireline Survey		
Drilling 12 1/4" Surface hole				13 3/8" Conductor set @ 124' (138' KB)			
			SPUD MUD Check @ 138' Wt 8.4 Vis 27 Sol 1.5 Chl 80 Cal 30	SPUD on 7-22-2014 @ 0800 hrs MST			
	150				138'-179' Pason not tracking ROP, No MS gases DL		
138'-179' Pason not tracking ROP				KCB mudloggers catching 30' lagged samples starting at 170' @ 0830 hrs MST on 7/22/2014			
CN 173			PASON bit depth set at 173', Start tracking ROP @ 179'	SS (50%) unconsol qtz, clr-trnsl-opq, v/crs-umgr, sbrnd-sbang, rr ang, psrt, pcmt, NFSOC, w/ CLYST (30%) mgy, v/ sft, ncalc, fr inbd blk biot, v/slty, w/ CLYST (20%) tn-yeltn, sft/mushy, trs inbd biot, w/ rr tr free mica - blk w/ cpr/slvr sheen	CO2 Test at Trap - OK Positive on Time Profile		
			One Pump on hole				
ROP (min/ft) 0–4; Gamma (API) 0–150; Caliper (Inches) 0–10	200		SPM 110/0		MS Total Gas (Units) 0–200	AT90 1–10–100; AT60 1–10–100; AT30 1–10–100; AT20 1–10–100	NPOR 0.6–0; DPHZ 0.6–0
CN 204			Wt 8.4 Vis 27	CLYST (45%) mgy, v/sft, ncalc, fr inbd blk biot, v/slty, w/ SS (35%) unconsol qtz, clr-trnsl-opq, v/crs-umgr, sbrnd- sbang, rr ang, psrt, pcmt, NFSOC, w/ CLYST (20%) tn-yeltn, sft/mushy, v/ slty, ncalc, trs inbd biot, w/ rr tr free mica - blk w/ cpr/slvr sheen, w/ rr tr mus	CO2 Test at Trap - OK		
					BGG 2-2.5u, C1-C3		
CN 234			DT - Work on slips	CLYST (60%) mgy, v/sft, ncalc, fr inbd blk biot, v/slty, w/ CLYST (30%) tn-yeltn, sft/mushy, v/ slty, ncalc, trs inbd biot, w/ SS (10%) unconsol qtz, clr-trnsl- opq, v/crs-umgr, sbrnd- sbang, rr ang, psrt, pcmt, NFSOC, w/ tr mus, w/ rr tr free mica - blk w/ cpr/slvr sheen			
	250		WLS @ 256' = Mis-run				
Depth Corr					Depth Corr		
CN 266				SS (75%) unconsol qtz, clr-trnsl-opq, v/crs-umgr, sbrnd-sbang, rr ang, psrt, pcmt, NFSOC, w/ CLYST (15%) mgy, v/ sft, ncalc, fr inbd blk biot, v/slty, w/ CLYST (10%) tn-yeltn, sft/mushy, trs inbd biot, w/ rr tr free mica - blk w/ cpr/slvr sheen, rr TUFF rd, sft, wthrd horizon w/ vdkgy, hd, aphantic cntr			
			SPM 116/0				
CN 294				CLYST (45%) mgy, v/sft, ncalc, fr inbd blk biot, v/slty, w/ SS (35%) unconsol qtz, clr-trnsl-opq, v/crs-umgr, sbrnd- sbang, rr ang, psrt, pcmt, NFSOC, w/ CLYST (20%) tn-yeltn, sft/mushy, v/ slty, ncalc, trs inbd biot, w/ rr tr free mica - blk w/ cpr/slvr sheen, w/ tr mus, vrr			
	300		WLS @ 317' = Mis-run				
CN 326					BGG 2-2.5u, C1-C3		
				CLYST (55%) mgy, v/sft, ncalc, fr inbd blk biot, v/slty, w/ SS (35%) unconsol qtz, clr-trnsl-opq, v/crs-umgr, sbrnd- sbang, rr ang, psrt, pcmt, NFSOC, w/ CLYST (10%) tn-yeltn, sft/mushy, v/ slty, ncalc, trs inbd biot, w/ rr tr free mica - blk w/ cpr/slvr sheen, w/ rr tr mus			
	350						
CN 355					CO2 Test at Trap - OK Positive on Time Profile		
			Both Pumps on hole	SS (85%) unconsol qtz, clr-trnsl-opq, tr trnsl ltbl-ltgn, v/crs-umgr, sbrnd-sbang, rr ang, psrt, pcmt, NFSOC, w/ CLYST (10%) mgy, v/ sft, ncalc, occ inbd blk biot, v/slty, w/ CLYST (5%) tn-yeltn, sft/mushy, tr inbd biot, w/ tr TUFF blk, hd-frm, aphantic w/ rr free mica-blk w/ cpr/slvr sheen, w/ rr tr mus			
			SPM 108/109				

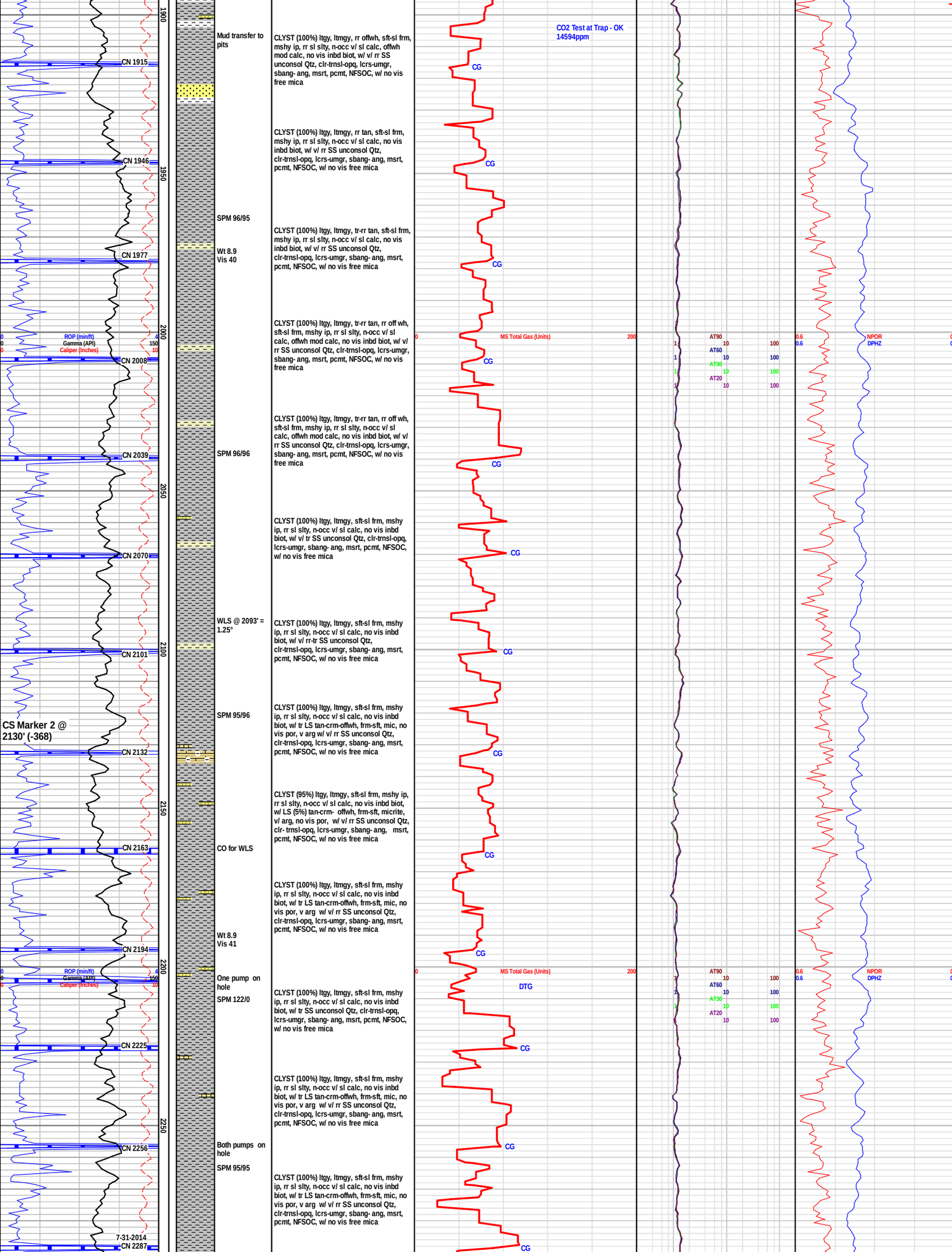


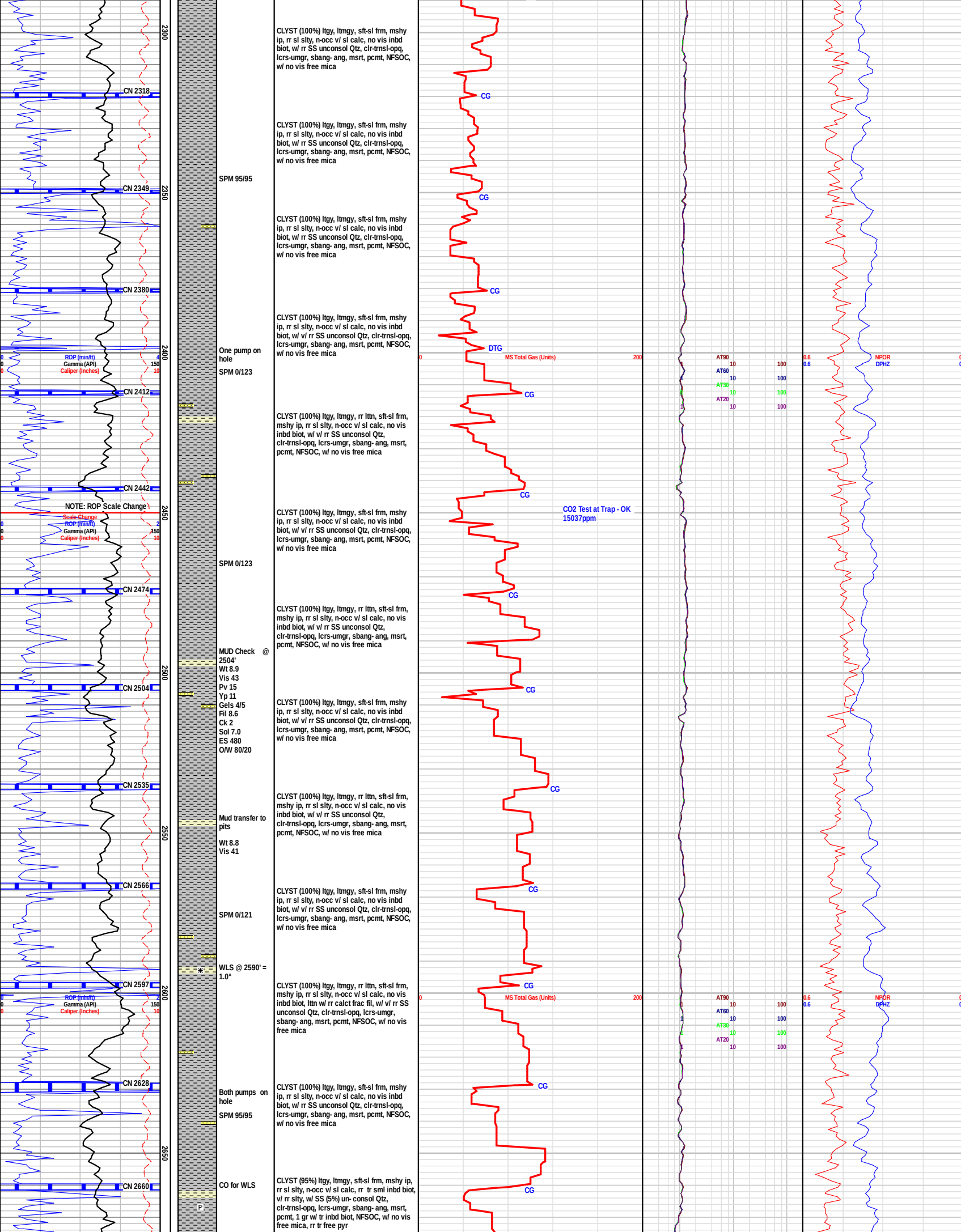
		SS (90%) unconsol qtz, clr-trnsl-opq, tr trnsl ltbl-ltgn v/crs-umgr-lmgr, sbrnd- sbang, rr ang, psrt, pcmt, NFSOC, w/ CLYST (5%) mgy, v/ sft, ncalc, occ inbd blk biot, v/slty, w/ TUFF (5%) blk, hd - frm, aphantic w/ tr CLYST tn-yeltn, sft/ mushy, tr inbd biot, w/ tr free biot-blk w/ cpr/slvr sheen	MS Total Gas (Units) 200	AT90 1 10 100 AT60 1 10 100 AT30 1 10 100 AT20 1 10 100	0.6 0.6 NPOR DPHZ
		SS (90%) unconsol qtz, clr-trnsl-opq, tr trnsl ltbl-ltgn v/crs-mgr, sbrnd-sbang, rr ang, psrt, pcmt, rr yel flour, NFSOC, w/ CLYST (5%) mgy, v/ sft, ncalc, occ inbd blk biot, v/slty, w/ TUFF (5%) blk, hd-frm, aphantic, w/ tr TUFF mot blk- gy, fm-hd, w/ rr TUFF blu-gyblu, frm- britt, sm-rthy tex, occ alt to cly aphantic, w/ tr free biot-blk w/ cpr/slvr sheen	BGG 2-2.5u, C1-C3		
	WLS @ 433' = 1.0°				
	SPM 113/115	SS (90%) unconsol qtz, clr-trnsl-opq, tr trnsl ltbl-ltgn uv/crs-lv/crs-umgr, sb/ rnd-sbang, rr ang, psrt, pcmt, w/ CLYST (5%) mgy, v/ sft, ncalc, occ inbd blk biot, v/slty, w/ TUFF (5%) blk, hd - frm, aphantic, w/ tr TUFF mot blk-gy, fm-hd, aphantic w/ tr free biot-blk w/ cpr/slvr sheen			
	Circ To Clean Hole **Time Drill @ 470'**	SS (85%) unconsol qtz, clr-trnsl-opq, tr trnsl ltbl-ltgn, uv/crs-lv/crs-umgr, 2% gvl size up to 3mm, sbrnd-sbang, rr ang, psrt, pcmt, w/ TUFF (5%) blk, hd- frm, aphantic, w/ TUFF (5%) mot blk-gy, fm-hd-sft, wthrd, aphantic w/ CLYST (5%) mgy, v/ sft, ncalc, occ inbd blk biot, v/slty, w/ tr free biot-blk w/ cpr/slvr sheen, w/ rr CLYST blugy-blu- rd, sft-vsft, lmpy, rthy-chlky tex	BGG 2-2.5u, C1-C3		
			CO2 Test at Trap - OK (10000ppm on Time Profile)		
	SPM 116/115	SS (90%) unconsol qtz, clr-trnsl-opq, tr trnsl ltbl-ltgn, uv/crs-lv/crs-umgr, 2% gvl size up to 3mm, sbrnd-sbang, rr ang, psrt, pcmt, w/ TUFF (5%) mot blk-gy, fm-hd-sft, wthrd, aphantic, w/ CLYST (5%) mgy, v/ sft, ncalc, occ inbd blk biot, v/slty, w/ tr TUFF blk, hd-frm, aphantic, w/ tr free biot-blk w/ cpr/slvr sheen, w/ rr CLYST blugy-blu-rd, sft-vsft, lmpy, rthy-chlky tex	535' - LOST CIRC - Lost 114 bbls mud initially. Mix / Pump LCM, Work pipe, Pull to ~ 404', Pump LCM sweeps, No returns, TOOH, TIH to 471' w/ 4" open end DP, Work Pipe, Mix/Pump hvy LCM Sweeps, Regain returns, Rack back DP, TIH w/ same bit #1 to 492', Brk circ washg to ~ 515', Losing mud, Lost Circ, LD 2 jnts DP, Brk circ, No returns, WLS, Mix/Pump hvy LCM sweeps w/ 0-Intermit Returns, Re-gain returns, Wash to bot, Drilling ahead on 1040 hrs 7-25-14			
			CO2 Test at Trap - OK Positive on Time Profile		
	Lost Circulation @ 535' MUD Check @ 535' Wt 8.4 Vis 48 Sol 1.5 LCM% 18	SS (100%) unconsol qtz, clr-trnsl-opq, tr trnsl ltbl-ltgn, uv/crs-lv/crs-umgr, 2% gvl size up to 3.5mm, sbrnd-sbang, rr ang, psrt, pcmt, NFSOC, w/ tr CLYST mgy, ltgn, v/ sft, ncalc, tr inbd blk biot, v/slty, w/ tr TUFF blk, hd-frm, aphantic, w/ tr free biot-blk w/ cpr/slvr sheen, w/ rr tr CLYST blugy-blu-rd, sft- vsft, lmpy, rthy-chlky tex	No TG	Flow System Check- OK (No Leaks)	
			NOTE: Excessive H2 & CO2 readings. Possibly f/ bacterial action working on the organic part of the LCM!?		
	Drilling ahead w/ FULL RETURNS	SS (100%) unconsol qtz, clr-trnsl-opq, tr trnsl ltbl-ltgn, uv/crs-lv/crs-umgr, 2% gvl size up to 3mm, sbrnd-sbang, rr ang, psrt, pcmt, NFSOC, w/ tr CLYST mgy, ltgn, v/ sft, ncalc, tr inbd blk biot, v/slty, w/ tr TUFF blk, hd-frm, aphantic, w/ rr tr free biot-blk w/ cpr/slvr sheen	PASON NOT TRACKING properly, Field Tech notified, No ROP to tie MS gases to		
	Time Drilling Bypassing shakers, abnd LCM in samples				
	Losing mud - mod seepg	SS (100%) unconsol qtz, clr-trnsl-opq, occ tntd ltgn, uv/crs-lv/crs -umgr, 2-3% gvl size up to 3.5mm,sbrnd -sbang, rr ang, psrt, pcmt, NFSOC, w/ tr CLYST mgy, ltgn, v/ sft, ncalc, tr inbd blk biot, v/slty, w/ tr TUFF blk, hd- frm, aphantic, w/ rr tr free biot-blk w/ cpr/slvr sheen	BGG 2-2.5u, C1-C3	MS Total Gas (Units) 200	AT90 1 10 100 AT60 1 10 100 AT30 1 10 100 AT20 1 10 100	0.6 0.6 NPOR DPHZ
	SPM 119/0		628' - Lost Circ, Decr SPM to 56, Mix LCM, NO to rr partial returns, LD 2 jnts DP, Work pipe, Build vol, Mix LCM, Brk circ @ 558' w/ full returns, Wash to bot, Drill Ahead		
	Lost Circulation @ 628' Drilling ahead w/ FULL RETURNS	SS (100%) unconsol qtz, clr-trnsl-opq, occ tntd ltgn, uv/crs-lv/crs -umgr, 2-3% gvl size up to 3.5mm,sbrnd -sbang, rr ang, psrt, pcmt, NFSOC, w/ tr CLYST mgy, ltgn, v/ sft, mushy, ncalc, tr inbd blk biot, v/slty, w/ tr TUFF blk, hd- frm, aphantic, w/ tr TUFF mot blk-gy, fm-hd-sft, wthrd, aphantic w/ rr tr free biot-blk w/ cpr/slvr sheen		NOTE: Excessive H2 & CO2 readings. Possibly f/ bacterial action working on the organic part of the LCM.	
	SPM 0/120	SS (90%) unconsol qtz, clr-trnsl-opq, occ tntd ltgn, uv/crs-lv/crs -umgr, 2-3% gvl size up to 3.5mm,sbrnd - sbang, rr ang, psrt, pcmt, NFSOC, w/ CLYST (10%) mgy, ltgn, v/ sft, mushy, ncalc, tr inbd blk biot, v/slty, w/ tr TUFF blk, hd- frm, aphantic, w/ tr TUFF mot blk-gy, fm-hd-sft, wthrd, aphantic w/ rr tr free biot-blk w/ cpr/slvr sheen	PASON NOT TRACKING Field Tech notified, No ROP to tie MS gases to		
	Wt 8.4 Vis 37	SS (90%) unconsol qtz, clr-trnsl-opq, occ tntd ltgn, uv/crs-lv/crs -umgr, 1% gvl size up to 3.5mm, sbrnd - sbang, rr ang, psrt, pcmt, NFSOC, w/ CLYST (5%) mgy, ltgn, v/ sft, mushy, ncalc, rr tr blk biot, v/slty, w/ TUFF (5%) blk, hd- frm, aphantic, w/ tr TUFF mot blk-gy, fm-hd-sft, wthrd, aphantic w/ rr tr free biot-blk w/ cpr/slvr sheen	PASON NOT TRACKING Field Tech notified, No ROP to tie MS gases to		
	SPM 110/0	SS (95%) unconsol qtz, clr-trnsl-opq, occ tntd ltgn, uv/crs-lv/crs -umgr, 1-2% gvl size up to 3.5mm, sbrnd-sbang, rr ang, psrt, pcmt, NFSOC, w/ CLYST (5%) mgy, ltgn, v/ sft, mushy, ncalc, tr inbd blk biot, v/slty, w/ tr TUFF blk, hd- frm, aphantic, w/ tr TUFF mot blk-gy, fm-hd-sft, wthrd, aphantic w/ rr tr free biot-blk w/ cpr/slvr sheen	PASON NOT TRACKING Field Tech notified, No ROP to tie MS gases to		
	Bypassing shakers, abnd LCM in samples				
	Lost Circulation @ 764' Drilling ahead w/ FULL RETURNS	SS (100%) unconsol qtz, clr-trnsl-opq, occ tntd ltgn, uv/crs-lv/crs -umgr, 1% gvl size up to 3.5mm ,sbrnd-sbang, rr ang, psrt, pcmt, NFSOC, w/ tr CLYST mgy, ltgn, v/ sft, mushy, ncalc, tr inbd blk biot, v/slty, w/ tr TUFF blk, hd- frm, aphantic, w/ tr TUFF mot blk-gy, fm-hd-sft, wthrd, aphantic w/ rr tr free biot-blk w/ cpr/slvr sheen	764' - Lost Circ, work pipe, Build vol, Mix LCM, Brk circ @ 711' w/ full returns, Wash to bot, Drl to 772' lost returns, est. circ @ 772' w/ 85 SPM, Bring pump to 100 spm, Lost Circ, Build Vol & Visc @ 32, Mix LCM, & Additives @ 20%, Wash to bot, Drill Ahead		
	Lost Circulation @ 772' Drilling ahead w/ FULL RETURNS	SS (100%) unconsol qtz, clr-trnsl-opq, occ tntd ltgn, uv/crs-lv/crs -umgr, 1-2% gvl size up to 3.5mm, sbrnd - sbang, rr ang, psrt, pcmt, NFSOC, w/ tr CLYST mgy, ltgn, v/ sft, mushy, ncalc, tr inbd blk biot, v/slty, w/ tr TUFF blk, hd- frm, aphantic, w/ tr TUFF mot blk-gy, fm-hd-sft, wthrd, aphantic w/ rr tr free biot-blk w/ cpr/slvr sheen	BGG 2-2.5u, C1-C3		
	Time				

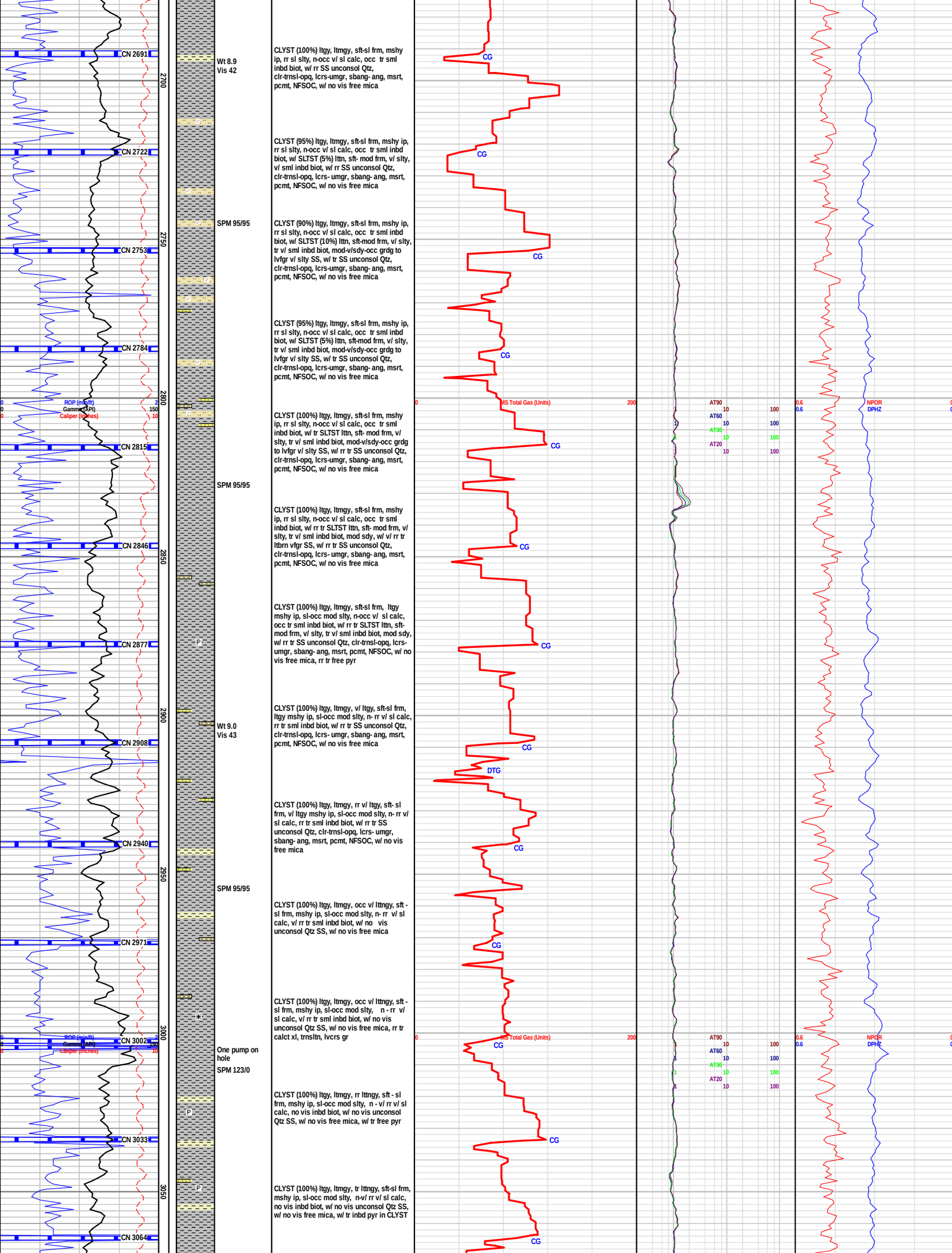

ROP (min/ft)
Gamma (API)
Caliper (Inches)
CN 815
CN 846
CN 877
CN 908
CN 937
CN 968
CN 1000
CN 1030
CN 1061
CN 1092
CN 1123
CN 1171
GR
Caliper
7-(27-29)-2014
Drilling
SPM 110/0
MUD Check @ 840'
Wt 8.4
Vis 36
Sol 1.5
pH 7.4
Chl 130
LCM% 18
Bypassing shakers, abnd LCM in samples
SPM 110/0
Wt 8.4
Vis 36
NOTE: Qtz gr size decreasing
926' - Work pipe & cln LCM out of suction valves
Bypassing shakers, abnd LCM in samples
SPM 110/0
Wt 8.4
Vis 37
1030' - Wiper trip
SPM 81/81
Time Drill
10 ft Spls
SPM 108/0
1050'- SS 65%, CLYST 35%
1060'- SS 90%, CLYST 10%
1070'- SS 85%, CLYST 15%
1080'- SS 85%, CLYST 15%
1090'- SS 85+%, CLYST 15%
1100'- SS 90%, CLYST 10%
1110'- SS 85%, CLYST 15%
1120'- SS 85%, CLYST 15%
1130'- SS 85%, CLYST 15%
Note: 1100-1137 SS Grain Size Decreasing
1137'- SS 60%, CLYST 40%
WLS @ 1113' = 1.5°
1137' - TD for SCP
1137'-1147' CLYST 50%, SS 40%, Cmt 10%
1147' - Drill ahead w/ Invert Emulsion Mud
SPM 110/0
SS (100%) unconsol qtz, clr-trnsl-opq, occ tntd ltgn, uv/crs-lv/crs -umgr, 2% gvl size up to 3.5mm, sbrnd - sbang, rr ang, psrt, pcmt, rr tr inbd olvn, NFSOC, w/ tr CLYST mgy, ltgn, v/ sft, mushy, ncalc, tr inbd blk biot, v/slty, w/ tr TUFF blk, hd- frm, aphantic, w/ tr TUFF mot blk-gy, fm-hd-sft, wthrd, aphantic w/ rr tr free biot-blk w/ cpr/slvr sheen
SS (100%) unconsol qtz, clr-trnsl-opq, rr tntd ltgn, uv/crs-lv/crs-umgr, 1% gvl size up to 3.5mm, sbrnd - sbang, rr ang, psrt, pcmt, NFSOC, w/ tr CLYST mgy, occ ltgn, v/ sft, mushy, ncalc, tr inbd blk biot, v/slty, w/ occ tr TUFF blk, hd - frm, aphantic, w/ tr TUFF mot blk-gy, fm-hd-sft, wthrd, aphantic, w/ fr amnt free biot-blk w/ cpr/slvr sheen
SS (100%) unconsol qtz, clr-trnsl-opq, rr tntd ltgn, uv/crs-lv/crs-umgr, 1% gvl size up to 3.5mm, sbrnd - sbang, rr ang, psrt, pcmt, NFSOC, w/ tr CLYST mgy, occ ltgn, v/ sft, mushy, ncalc, tr inbd blk biot, v/slty, w/ occ tr TUFF blk, hd - frm, aphantic, w/ tr TUFF mot blk-gy, fm-hd-sft, wthrd, aphantic, w/ fr amnt free biot-blk w/ cpr/slvr sheen
SS (100%) unconsol qtz, clr-trnsl-opq, umgr-ufgr, crs-v/crsgr, v/rr gvl size up to 3.0mm, sbrnd - sbang, rr ang, psrt, pcmt, NFSOC, w/ rr tr CLYST mgy, occ ltgn, v/ sft, mushy, ncalc, tr inbd blk biot, v/slty, w/ v/ rr tr TUFF blk, hd - frm, aphantic, w/ fr amnt free biot-blk w/ occ cpr/slvr sheen
SS (90%) unconsol qtz, clr-trnsl-opq, ufgr-lmgr, 20% um-crsgr, 10% v/crsgr, no gvl size qtz grs, sbrnd - sbang, v/rr ang, psrt, pcmt, NFSOC, w/CLYST (10%) mgy, v/ sft /mushy, ncalc, v/ slty, fr inbd blk biot, w/ fr amnt free biot-blk w/ occ cpr/slvr sheen, no vis TUFF in spl
SS (65%) unconsol qtz, clr-trnsl-opq, lcrsgr-umgr, 20% l-umgr, 10% ucrs- v/crs gr, tr fgr, sbrnd - sbang, psrt, pcmt, NFSOC, w/ CLYST (35%) ltgy, rr gygn, v/ sft - mshy, sl-rr mod calc, tr sml inbd blk biot, mod-v/slty, w/ rr tr TUFF blk, hd- frm, aphantic, w/ tr-fr amnt free biot- blk w/ occ cpr/slvr sheen
CLYST (50%) ltgy, rr gygn, v/ sft - mshy, sl-rr mod calc, tr sml inbd blk biot, mod-v/slty, w/ SS (50%) unconsol qtz, clr-trnsl-opq, lcrsgr-umgr, 25% l-umgr, 10% ucrs- v/crs gr, tr fgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ rr tr TUFF blk, hd- frm, aphantic, w/ tr-fr amnt free biot- blk w/ occ cpr/slvr sheen
CLYST (55%) ltgy, v/sft-mshy, sl-rr mod calc, tr sml inbd blk biot, mod-v/slty, w/ SS (45%) unconsol qtz, clr-trnsl-opq, ufgr-uvfgr, 15% l-umgr, 5% crsgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ rr tr TUFF blk, hd- frm, aphantic, w/ sl tr free biot- blk w/ rr cpr/slvr sheen
SS (70%) unconsol qtz, clr-trnsl-opq, crsgr-lv/crsgr, 15% l-umgr, 10% uv/crs gr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ CLYST (30%) ltgy, v/sft-mshy, sl-rr mod calc, tr sml inbd blk biot, mod-v/slty, w/ tr free biot-blk w/ rr cpr/slvr sheen, w/ rr tr free PYR
SS (85%) unconsol qtz, clr-trnsl-opq, umgr-ufgr-vcrsgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ CLYST (15%) ltgy, v/sft-mshy, sl-rr mod calc, tr sml inbd blk biot, mod-v/slty, w/ tr TUFF blk, hd- frm, aphantic w/ tr free biot-blk w/ rr cpr/slvr sheen
SS (90%) unconsol qtz, clr-trnsl-opq, umgr-ufgr-vcrsgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ CLYST (10%) ltgy, v/sft-mshy, sl-rr mod calc, tr sml inbd blk biot, mod-v/slty, w/ tr TUFF blk, hd- frm, aphantic w/ occ free biot-blk w/ rr cpr/slvr sheen
SS (85%) unconsol qtz, clr-trnsl-opq, ufgr-umgr, tr crsgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ CLYST (15%) ltgy, v/sft-mshy, sl-rr mod calc, tr sml inbd blk biot, mod-v/slty, w/ tr TUFF blk, hd- frm, aphantic w/ occ free biot-blk w/ rr cpr/slvr sheen
1130'-1137' SS (60%) unconsol qtz, clr-trnsl-opq, ufgr-umgr, tr crsgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ CLYST (40%) ltgy, v/sft-mshy, sl-rr mod calc, tr sml inbd blk biot, mod-v/slty, w/ tr TUFF blk, hd- frm, aphantic w/ occ free biot-blk w/ rr cpr/slvr sheen, rr mus
SS (55%) unconsol qtz, clr-trnsl-opq, ufgr-umgr, tr crsgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ CLYST (45%) ltgy-tan, v/sft-mshy, tr firm, n calc, tr sml inbd blk biot, mod-v/slty, w/ tr TUFF blk, hd- frm, aphantic w/ occ free biot-blk w/ rr cpr/slvr sheen, rr mus
MS Total Gas (Units)
NOTE: Excessive H2 & CO2 readings. Possibly f/ bacterial action working on the organic part of the LCM!?
BGG 2-2.5u, C1-C3
NOTE: Excessive H2 & CO2 readings. Possibly f/ bacterial action working on the organic part of the LCM!?
BGG 2-3u, C1-C3
CO2 Test at Trap - OK 12873ppm
BGG 3u, C1-C3
1030' - Mix & Pump high vis sweep, Circ & Cond hole, Wiper trip, Drill ahead
1046' - Circ & Cond hole, Wiper trip, Drill ahead
NOTE: Excessive CO2 readings. Possibly f/ bacterial action working on the organic part of the LCM!?
MUD Check @ 1137' Wt 8.4 Vis 36 Sol 1.5 pH 7.6 Chl 140 LCM% 23
NOTE: Abnd sft/mushy cly in top spl sieve when washing spls - prob cavings, some clays disolving in solution
OB #1 Drld 999' in 20.5 hrs, avg 48.7 ft/hr
BGG 3-4u, C1-C3
1137' - TD for SCP @ 2235 hrs 7-26-14, C&C hole, Run WLS, TOOH, Run 9 5/8" csg, CO csg, Cmt csg, WOC, Clean pits, ND/NU, Test BOP, PU BHA/HWDP, TIH, Drill FC/cmt/shoe, Drill 10' to 1147'
TG 6u
Bit #2, Hughes, Tricone, Drill 10' to 1147'
1147' - CO, Leak off test (10 lb EMW), Displace w/Invert Emulsion Mud, Leak off test (10 lb EMW), TOOH, PU PDC bit/BHA, TIH, Drilling ahead on 7-29-14 @ 2200 hrs.
1147' Invert Emulsion Mud
NB #3, 8 3/4, Hughes, TD505 S, PDC in at 1147' w/ Mud Motor
BGG 10-11u f/ Invert Emulsion Mud profile
AT90
AT60
AT30
AT20
NPOR
DPHZ
Resistivity
Porosity

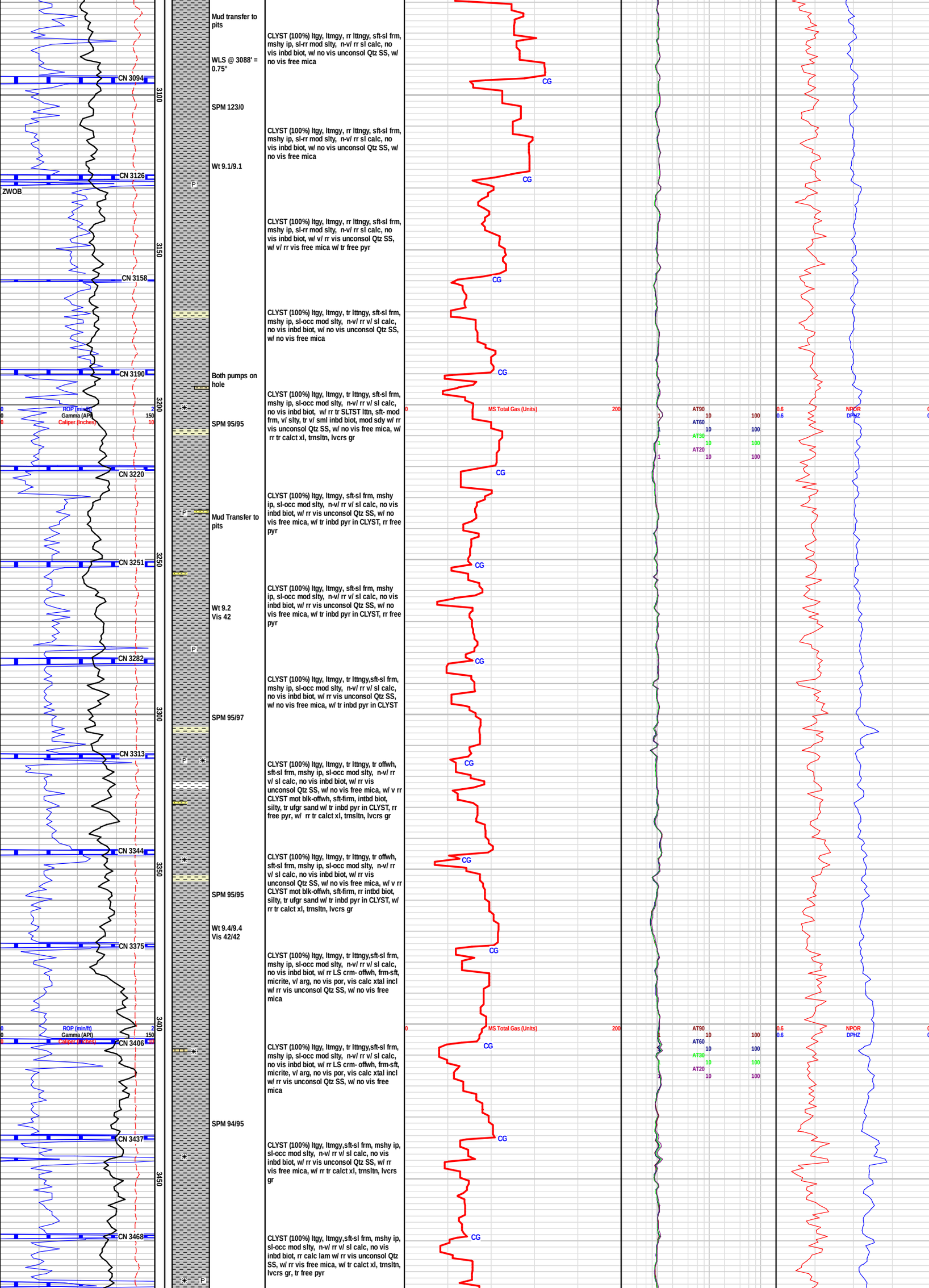

ROP (min/ft)
Gamma (API)
Caliper (inches)
7-30-2014
CN 1200
CN 1232
CN 1263
CN 1294
CN 1325
CN 1356
CN 1388
CN 1417
CN 1448
CN 1479
CN 1510
1200
1250
1300
1350
1400
1450
1500
HAMILTON SANDS
@ 1320' (-1178)
Wt 9.0
Vis 47
SS (80%) unconsol qtz, clr-trnsl-opq, rr trnsl ltgy-opq ltgy, ufgr-umgr, tr crsgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ CLYST (20%) ltgy-tan, v/sft-mshy, tr firm, n calc, tr sml inbd blk biot, mod- v/slty, w/ tr TUFF blk, hd- frm, aphantic w/ occ free biot-blk w/ rr cpr/slvr sheen, w/ tr mus
SPM 111/0
CLYST (55%) ltgy, sft-firm, tr mshy, lmpy-sbplty, sig decr slty, sig incr cly, rr vsml inbd clr-blk mica, n - sl calc w/ SS (45%) unconsol qtz, clr-trnsl-opq, rr trsnl ltgy-opq ltgy, ufgr-umgr, tr crsgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ rr TUFF blk, hd- frm, aphantic, abndt free mica, brn-cpr sheen, w/ occ free biot- blk w/ rr cpr/slvr sheen, w/ tr mus
CLYST (85%) ltgy, sft-firm, tr mshy, lmpy-sbplty, sig decr slty, sig incr cly, rr vsml inbd clr-blk mica, n - sl calc w/ SS (15%) unconsol qtz, clr-trnsl-opq, rr trnsl ltgy-opq ltgy, ufgr-umgr, tr crsgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ rr trs TUFF blk, hd- frm, aphantic, occ free mica, brn-cpr sheen, w/ tr free biot- blk w/ rr cpr/slvr sheen, w/ tr mus
SPM 119/0
Mud Transfer to pits
CLYST (90%) ltgy, sft-firm, tr mshy, lmpy-sbplty, sig decr slty, sig incr cly, rr vsml inbd clr-blk mica, n - sl calc, w/ SS (10%) unconsol qtz, clr-trnsl-opq, rr trnsl ltgy-opq ltgy, ufgr-umgr, tr crsgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ rr trs TUFF blk, hd- frm, aphantic, rr free biot- blk w/ rr cpr/slvr sheen, rr musc
CLYST (95%) ltgy, sft-firm, tr mshy, lmpy-sbplty, sig decr slty, sig incr cly, rr vsml inbd clr-blk mica, n-sl calc w/ SS (5%) unconsol qtz, clr-trnsl-opq, ufgr-lmgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ rr free biot- blk aa, w/ rr trs TUFF blk, hd- frm, aphantic
Both pumps on hole
SPM 95/95
CLYST (90%) ltgy, lttn, sft-sl frm, mshy ip, v/ sl slty, v/ rr v/ sml inbd clr-blk mica, n-sl calc, w/ SS (10%) clr-trnsl- ltgy, vf-lfgr, sbrnd-sbang, msrt, pcmt, consol, n calc, mod cly fil cmt, mod dk carb incl, tr-fr inbd chlrt, NFSOC, w/ rr free blk biot, rr tr musc, w/ rr tr unconsol qtz aa
MUD Check @ 1369'
Wt 9.0
Vis 48
Pv 18
Yp 10
Gels 4/5
Fil 9.0
Ck 2
Sol 7.0
ES 350
O/W 78/22
SS (45%) clr-trnsl-ltgy, vf-lfgr, sbrnd- sbang, msrt, pcmt, consol, n calc, mod cly fil cmt, mod dk carb incl, tr inbd gn glau incl, NFSOC, tr vis poro, w/ CLYST (45%) ltgy, lttn, sft-sl frm, mshy ip, v/ rr sl slty, v/ rr v/ sml inbd clr-blk mica, n-sl calc ip, SS (10%) unconsol qtz, clr- trnsl-opq, ufgr-umgr, sbrnd- sbang, psrt, pcmt, NFSOC, w/ rr free blk biot, rr tr musc
CLYST (80%) ltgy, lttn, tngy, sft-sl frm, mshy ip, v/ sl slty, v/ rr v/ sml inbd clr- blk mica, n-sl calc, w/ SS (20%) clr- trnsl- ltgy, vf-lfgr, sbrnd-sbang, msrt, pcmt, consol, ncalc, mod cly fil cmt, mod dk carb incl, rr inbd gn glau, NFSOC, tr vis poro, w/ rr free blk biot, rr tr musc, w/ tr unconsol qtz aa
SPM 95/95
SS (45%) clr-trnsl-ltgy, vf-lfgr, sbang- sbrnd, msrt, pcmt, consol, n calc, mod cly fil cmt, mod dk carb incl, tr inbd gn glau, NFSOC, tr-fr vis poro, w/ CLYST (40%) ltgy, lttn, tncrm, tntd gygrn, sft- sl frm, mshy ip, v/ rr sl slty, v/ rr v/ sml inbd clr-blk mica, n calc, w/ SS (15%) unconsol qtz, clr-trnsl-opq, ufgr-umgr, sbrnd-sbang, psrt, pcmt, NFSOC, w/ rr free blk biot, rr tr musc
One pump on hole
SPM 0/120
SS (40%) clr-trnsl-ltgy, vf-lfgr, sbang- sbrnd, msrt, pcmt, consol, n calc, mod cly fil cmt, mod dk carb incl, rr inbd gn glau, NFSOC, tr vis poro, w/ CLYST (30%) ltgy, lttn, tncrm, tntd gygrn, sft-sl frm, mshy ip, rr slty, v/ rr v/ sml inbd clr-blk mica, n calc, w/ SS (30%) unconsol qtz, clr-trnsl-opq, fgr-lmgr, sbrnd - sbang, psrt, pcmt, NFSOC, w/ rr free blk biot, rr tr TUFF aa
CLYST (95%) ltgy, ltmgy, tr offwh, sft- sl frm, mshy ip, v/ sl slty, v/ rr v/ sml inbd clr-blk mica, n-occ v/ sl calc, w/ SS (5%) clr-trnsl-ltgy, vf-lfgr, sbrnd-sbang, msrt, pcmt, consol, ncalc, mod cly fil cmt, fr dk carb incl, tr inbd gn glau, NFSOC, rr tr vis poro, w/ rr free blk biot, v/ rr tr musc, w/ v/ rr tr unconsol qtz aa
SPM 0/120
CLYST (95%) ltgy, ltmgy, tr lttn, sft- sl frm, mshy ip, v/ sl slty, v/ rr v/ sml inbd clr-blk mica, n-sl calc, w/ SS (5%) clr- trnsl-ltgy, vf-lfgr, sbrnd-sbang, msrt, pcmt, consol, ncalc, mod cly fil cmt, fr dk carb incl, rr inbd gn glau, NFSOC, rr tr vis poro, w/ rr free blk biot, v/ rr tr musc, w/ v/ rr tr unconsol qtz aa
Increasing BGG
CG
CG
CG
CG
CG
tr CG
MS Total Gas (Units)
0
200
AT90
AT60
AT30
AT20
1
10
100
NPOR
DPHZ
0.6

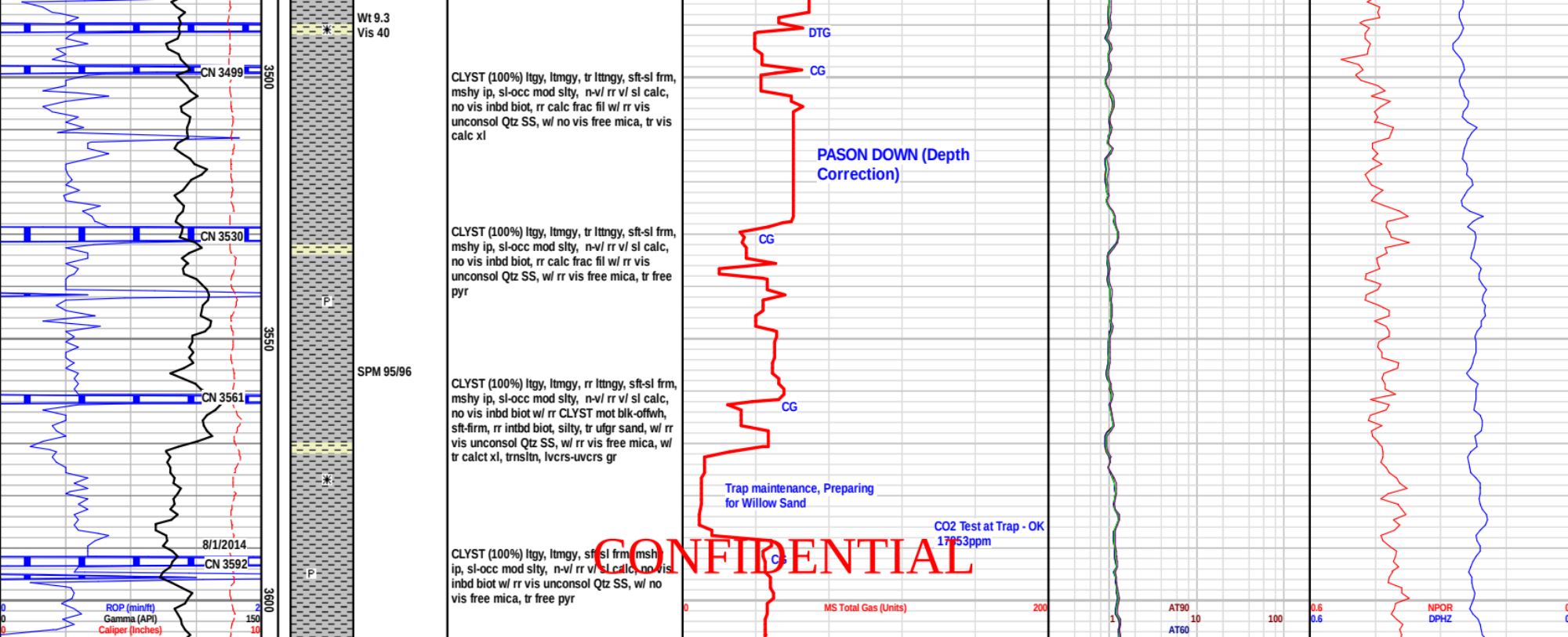

CN 1541
1550
CN 1572
1600
ROP (min/ft)
Gamma (API)
Caliper (Inches)
CN 1602
CN 1634
1650
CN 1664
CN 1696
1700
CN 1730
1750
CN 1761
CN 1791
1800
CN 1822
1850
CN 1853
CN 1884
CLYST (95%) ltgy, ltmgy, tr lttn, tr mott tngy, sft-sl frm, mshy ip, rr sl slty, v/ rr v/ sml inbd clr-blk biot mica, n-occ v/ sl calc, w/ SS (5%) clr-trnsl-ltgy, vf-lfgr, sbang-sbrnd, msrt, pcmt, consol, n- calc, mod cly fil cmt, fr dk carb incl, v/ rr inbd gn glau, NFSOC, rr tr vis poro, w/ rr free blk biot, v/ rr tr unconsol qtz aa
WLS @ 1576' = 1.5°
Both pumps on hole
SPM 95/95
CLYST (100%) ltgy, ltmgy, rr lttn, sft-sl frm, mshy ip, rr sl slty, v/ rr v/ sml inbd clr-blk biot mica, n-occ v/ sl calc, v/ rr tr unconsol qtz aa
Mud transfer to pits
CLYST (100%) ltgy, ltmgy, tr lttn, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, v/ rr tr unconsol qtz clr-trnsl-opq, fgr- lmgr, sbrnd - sbang, psrt, pcmt, NFSOC, w/ no vis free mica
CO for WLS
One pump on hole
SPM 123/0
CLYST (95%) ltgy, ltmgy, tr lttn, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ SS (5%) unconsol Qtz, clr-trnsl-opq, crs-umgr, sbang- sbrnd, tr ang ip, msrt, pcmt, NFSOC, w/ no vis free mica
Both pumps on hole
SPM 95/95
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, rr tr tn incl, w/ tr SS un- consol Qtz, clr-trnsl-opq, lcrs-umgr, sbang - sbrnd, rr ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, v/ rr tn, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ rr tr SS un- consol Qtz, clr-trnsl-opq, lcrs-umgr, sbang, rr ang, msrt, pcmt, NFSOC, w/ no vis free mica
SPM 96/96
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ rr tr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang, rr ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, v/ rr tn, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ rr tr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang, rr ang, msrt, pcmt, NFSOC, w/ no vis free mica
Wt 8.9
Vis 41
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ rr tr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang, rr ang, msrt, pcmt, NFSOC, w/ no vis free mica
SPM 95/95
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ rr tr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, rr tan sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, rr offwh, rr tan sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ rr tr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
SPM 96/95
CG
Circ Out
MS Total Gas (Units)
CO2 Test at Trap - OK
Positive on Time Profile
@ 21207ppm
AT90
AT60
AT30
AT20
NPOR
DPHZ


1900
1950
2000
2050
2100
2150
2200
2250
CN 1915
CN 1946
CN 1977
CN 2008
CN 2039
CN 2070
CN 2101
CN 2132
CN 2163
CN 2194
CN 2225
CN 2256
CN 2287
7-31-2014
ROP (min/ft)
Gamma (API)
Caliper (Inches)
CS Marker 2 @ 2130' (-368)
Mud transfer to pits
SPM 96/95
Wt 8.9
Vis 40
SPM 96/96
WLS @ 2093' = 1.25°
SPM 95/96
CO for WLS
Wt 8.9
Vis 41
One pump on hole
SPM 122/0
Both pumps on hole
SPM 95/95
CLYST (100%) ltgy, ltmgy, rr offwh, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, offwh mod calc, no vis inbd biot, w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, rr tan, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, tr-rr tan, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, tr-rr tan, rr off wh, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, offwh mod calc, no vis inbd biot, w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, tr-rr tan, rr off wh, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, offwh mod calc, no vis inbd biot, w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ tr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ rr-tr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ tr LS tan-crm-offwh, frm-sft, mic, no vis por, v arg w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (95%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ LS (5%) tan-crm- offwh, frm-sft, micrite, v/ arg, no vis por, w/ v/ rr SS unconsol Qtz, clr- trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ tr LS tan-crm-offwh, frm-sft, mic, no vis por, v arg w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ tr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ tr LS tan-crm-offwh, frm-sft, mic, no vis por, v arg w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ tr LS tan-crm-offwh, frm-sft, mic, no vis por, v arg w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CO2 Test at Trap - OK
14594ppm
MS Total Gas (Units)
DTG
AT90
AT60
AT30
AT20
NPOR
DPHZ


2300
2350
2400
2450
2500
2550
2600
2650
CN 2318
CN 2349
CN 2380
CN 2412
CN 2442
CN 2474
CN 2504
CN 2535
CN 2566
CN 2597
CN 2628
CN 2660
ROP (min/ft)
Gamma (API)
Caliper (Inches)
NOTE: ROP Scale Change
Scale Change
SPM 95/95
One pump on hole
SPM 0/123
SPM 0/123
MUD Check @ 2504'
Wt 8.9
Vis 43
Pv 15
Yp 11
Gels 4/5
Fil 8.6
Ck 2
Sol 7.0
ES 480
O/W 80/20
Mud transfer to pits
Wt 8.8
Vis 41
SPM 0/121
WLS @ 2590' = 1.0°
Both pumps on hole
SPM 95/95
CO for WLS
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, rr lttn, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, rr lttn, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, rr lttn, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, no vis inbd biot, lttn w/ rr calct frac fil, w/ v/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (95%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, rr tr sml inbd biot, v/ rr slty, w/ SS (5%) un- consol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, 1 gr w/ tr inbd biot, NFSOC, w/ no vis free mica, rr tr free pyr
CG
DTG
MS Total Gas (Units)
CO2 Test at Trap - OK
15037ppm
AT90
AT60
AT30
AT20
NPOR
DPHZ

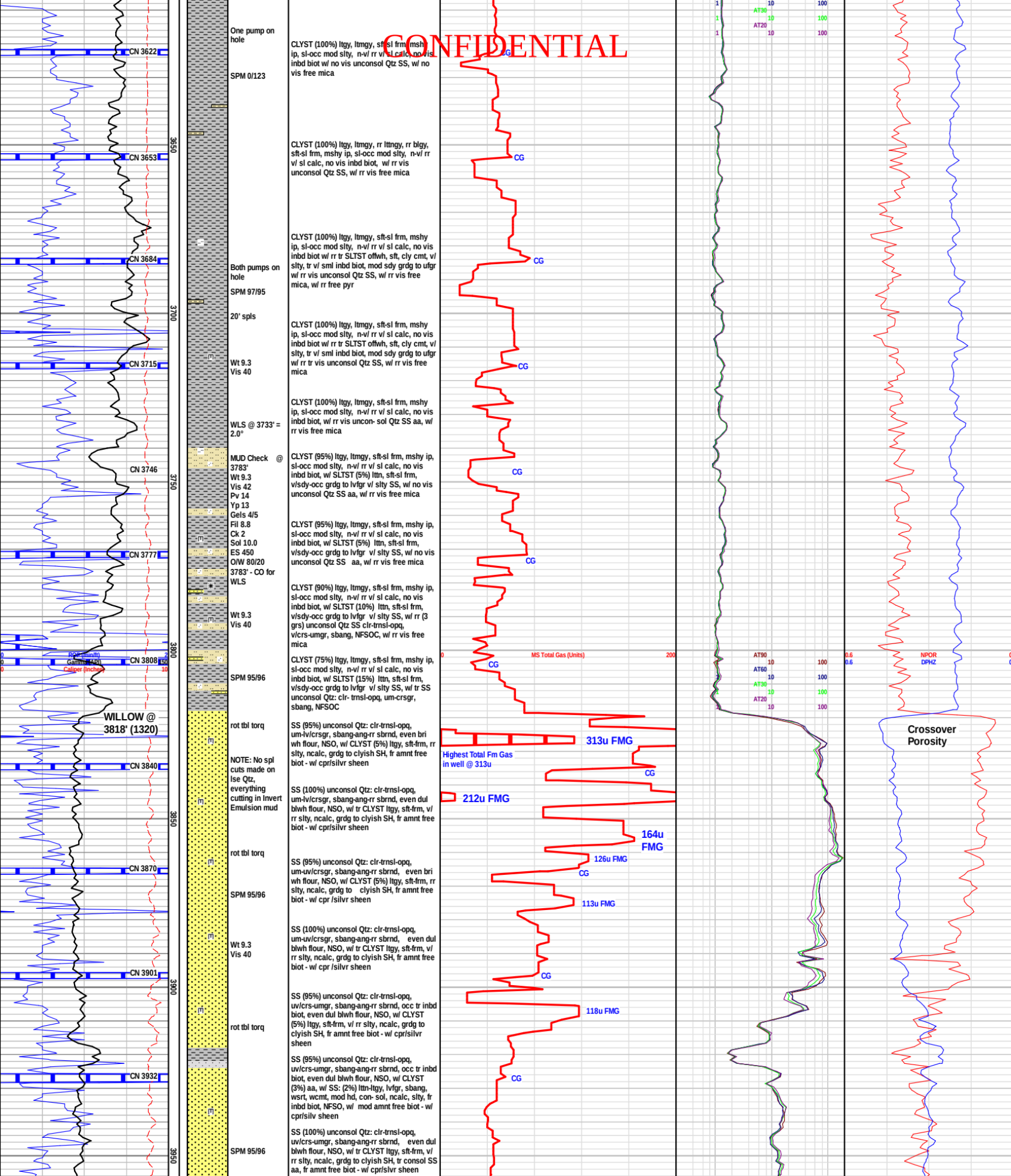

CN 2691
CN 2722
CN 2753
CN 2784
CN 2815
CN 2846
CN 2877
CN 2908
CN 2940
CN 2971
CN 3002
CN 3033
CN 3064
2700
2750
2800
2850
2900
2950
3000
3050
ROP (min/ft)
Gamma (API)
Caliper (inches)
Wt 8.9
Vis 42
SPM 95/95
Wt 9.0
Vis 43
One pump on hole
SPM 123/0
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, occ tr sml inbd biot, w/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (95%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, occ tr sml inbd biot, w/ SLTST (5%) lttn, sft- mod frm, v/ slty, v/ sml inbd biot, w/ rr SS unconsol Qtz, clr-trnsl-opq, lcrs- umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (90%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, occ tr sml inbd biot, w/ SLTST (10%) lttn, sft-mod frm, v/ slty, tr v/ sml inbd biot, mod-v/sdy-occ grdg to lvfgr v/ slty SS, w/ tr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (95%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, occ tr sml inbd biot, w/ SLTST (5%) lttn, sft-mod frm, v/ slty, tr v/ sml inbd biot, mod-v/sdy-occ grdg to lvfgr v/ slty SS, w/ tr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, occ tr sml inbd biot, w/ tr SLTST lttn, sft- mod frm, v/ slty, tr v/ sml inbd biot, mod-v/sdy-occ grdg to lvfgr v/ slty SS, w/ rr tr SS unconsol Qtz, clr-trnsl-opq, lcrs-umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, rr sl slty, n-occ v/ sl calc, occ tr sml inbd biot, w/ rr tr SLTST lttn, sft- mod frm, v/ slty, tr v/ sml inbd biot, mod sdy, w/ v/ rr tr ltbrn vfgr SS, w/ rr tr SS unconsol Qtz, clr-trnsl-opq, lcrs- umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, sft-sl frm, ltgy mshy ip, sl-occ mod slty, n-occ v/ sl calc, occ tr sml inbd biot, w/ rr tr SLTST lttn, sft- mod frm, v/ slty, tr v/ sml inbd biot, mod sdy, w/ rr tr SS unconsol Qtz, clr-trnsl-opq, lcrs- umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica, rr tr free pyr
CLYST (100%) ltgy, ltmgy, v/ ltgy, sft-sl frm, ltgy mshy ip, sl-occ mod slty, n- rr v/ sl calc, rr tr sml inbd biot, w/ rr tr SS unconsol Qtz, clr-trnsl-opq, lcrs- umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, rr v/ ltgy, sft- sl frm, v/ ltgy mshy ip, sl-occ mod slty, n- rr v/ sl calc, rr tr sml inbd biot, w/ rr tr SS unconsol Qtz, clr-trnsl-opq, lcrs- umgr, sbang- ang, msrt, pcmt, NFSOC, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, occ v/ lttngy, sft - sl frm, mshy ip, sl-occ mod slty, n- rr v/ sl calc, v/ rr tr sml inbd biot, w/ no vis unconsol Qtz SS, w/ no vis free mica
CLYST (100%) ltgy, ltmgy, occ v/ lttngy, sft - sl frm, mshy ip, sl-occ mod slty, n - rr v/ sl calc, v/ rr tr sml inbd biot, w/ no vis unconsol Qtz SS, w/ no vis free mica, rr tr calct xl, trnsltn, lvcrs gr
CLYST (100%) ltgy, ltmgy, rr lttngy, sft - sl frm, mshy ip, sl-occ mod slty, n - v/ rr v/ sl calc, no vis inbd biot, w/ no vis unconsol Qtz SS, w/ no vis free mica, w/ tr free pyr
CLYST (100%) ltgy, ltmgy, tr lttngy, sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, w/ no vis unconsol Qtz SS, w/ no vis free mica, w/ tr inbd pyr in CLYST
CG
DTG
MS Total Gas (Units)
0
200
AT90
AT60
AT30
AT20
10
100
0.6
NPOR
DPHZ

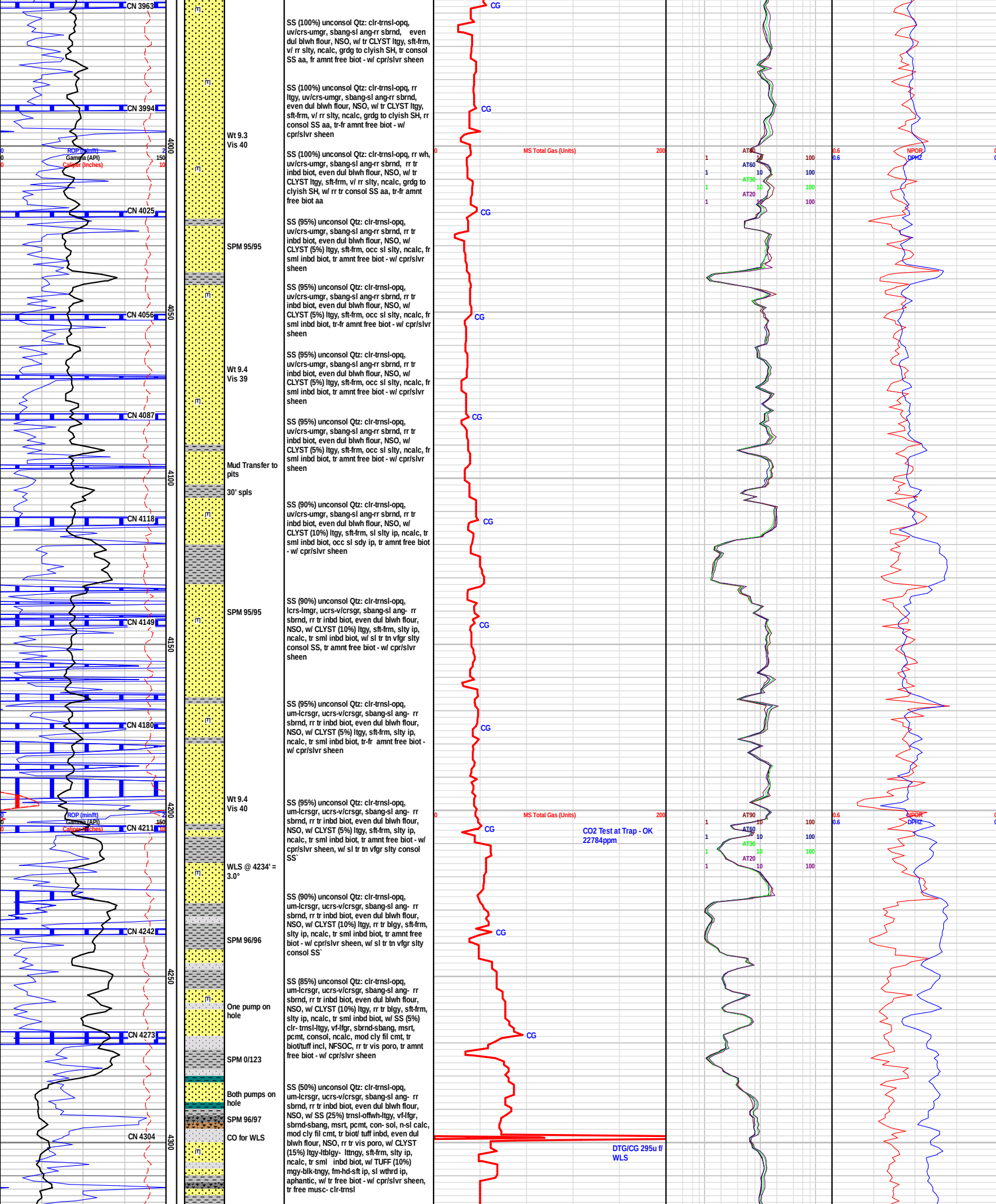

Mud transfer to pits
CLYST (100%) ltgy, ltmgy, rr lttngy, sft-sl frm, mshy ip, sl-rr mod slty, n-v/ rr sl calc, no vis inbd biot, w/ no vis unconsol Qtz SS, w/ no vis free mica
WLS @ 3088' = 0.75°
CN 3094
3100
SPM 123/0
CLYST (100%) ltgy, ltmgy, rr lttngy, sft-sl frm, mshy ip, sl-rr mod slty, n-v/ rr sl calc, no vis inbd biot, w/ no vis unconsol Qtz SS, w/ no vis free mica
Wt 9.1/9.1
CN 3126
ZWOB
CLYST (100%) ltgy, ltmgy, rr lttngy, sft-sl frm, mshy ip, sl-rr mod slty, n-v/ rr sl calc, no vis inbd biot, w/ v/ rr vis unconsol Qtz SS, w/ v/ rr vis free mica w/ tr free pyr
3150
CN 3158
CLYST (100%) ltgy, ltmgy, tr lttngy, sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, w/ no vis unconsol Qtz SS, w/ no vis free mica
CN 3190
Both pumps on hole
3200
ROP (min/ft)
Gamma (API)
Caliper (inches)
SPM 95/95
CLYST (100%) ltgy, ltmgy, tr lttngy, sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, w/ rr tr SLTST lttn, sft- mod frm, v/ slty, tr v/ sml inbd biot, mod sdy w/ rr vis unconsol Qtz SS, w/ no vis free mica, w/ rr tr calct xl, trnsltn, lvcrs gr
MS Total Gas (Units)
AT90
AT60
AT30
AT20
NPOR
DPHZ
CN 3220
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, w/ rr vis unconsol Qtz SS, w/ no vis free mica, w/ tr inbd pyr in CLYST, rr free pyr
Mud Transfer to pits
CN 3251
3250
CLYST (100%) ltgy, ltmgy, sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, w/ rr vis unconsol Qtz SS, w/ no vis free mica, w/ tr inbd pyr in CLYST, rr free pyr
Wt 9.2
Vis 42
CN 3282
CLYST (100%) ltgy, ltmgy, tr lttngy,sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, w/ rr vis unconsol Qtz SS, w/ no vis free mica, w/ tr inbd pyr in CLYST
3300
SPM 95/97
CN 3313
CLYST (100%) ltgy, ltmgy, tr lttngy, tr offwh, sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, w/ rr vis unconsol Qtz SS, w/ no vis free mica, w/ v rr CLYST mot blk-offwh, sft-firm, intbd biot, silty, tr ufgr sand w/ tr inbd pyr in CLYST, rr free pyr, w/ rr tr calct xl, trnsltn, lvcrs gr
CN 3344
CLYST (100%) ltgy, ltmgy, tr lttngy, tr offwh, sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, w/ rr vis unconsol Qtz SS, w/ no vis free mica, w/ v rr CLYST mot blk-offwh, sft-firm, rr intbd biot, silty, tr ufgr sand w/ tr inbd pyr in CLYST, w/ rr tr calct xl, trnsltn, lvcrs gr
3350
SPM 95/95
Wt 9.4/9.4
Vis 42/42
CN 3375
CLYST (100%) ltgy, ltmgy, tr lttngy,sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, w/ rr LS crm- offwh, frm-sft, micrite, v/ arg, no vis por, vis calc xtal incl w/ rr vis unconsol Qtz SS, w/ no vis free mica
3400
ROP (min/ft)
Gamma (API)
Caliper (inches)
CN 3406
CLYST (100%) ltgy, ltmgy, tr lttngy,sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, w/ rr LS crm- offwh, frm-sft, micrite, v/ arg, no vis por, vis calc xtal incl w/ rr vis unconsol Qtz SS, w/ no vis free mica
SPM 94/95
CN 3437
CLYST (100%) ltgy, ltmgy,sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, w/ rr vis unconsol Qtz SS, w/ rr vis free mica, w/ rr tr calct xl, trnsltn, lvcrs gr
3450
CN 3468
CLYST (100%) ltgy, ltmgy,sft-sl frm, mshy ip, sl-occ mod slty, n-v/ rr v/ sl calc, no vis inbd biot, rr calc lam w/ rr vis unconsol Qtz SS, w/ rr vis free mica, w/ tr calct xl, trnsltn, lvcrs gr, tr free pyr

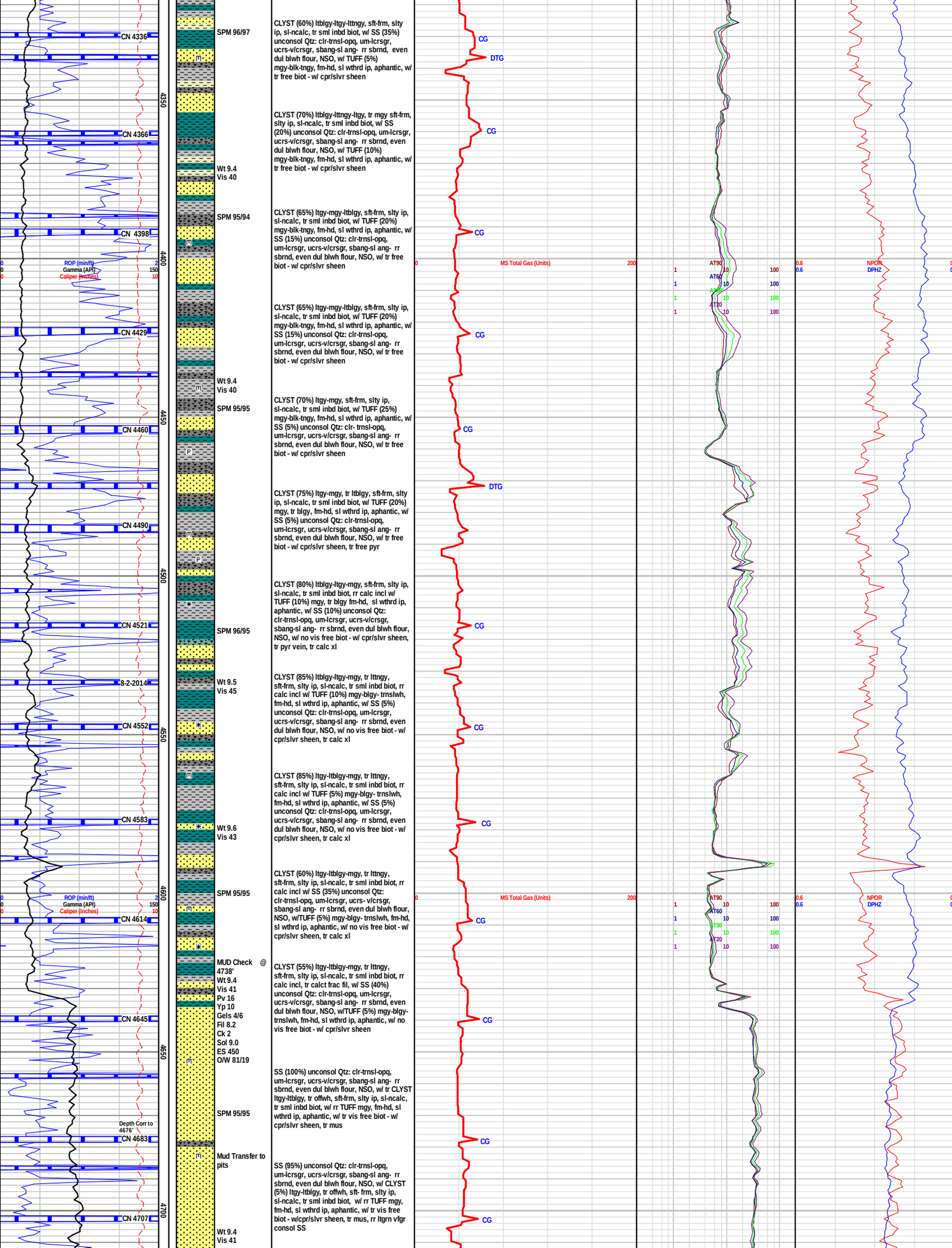


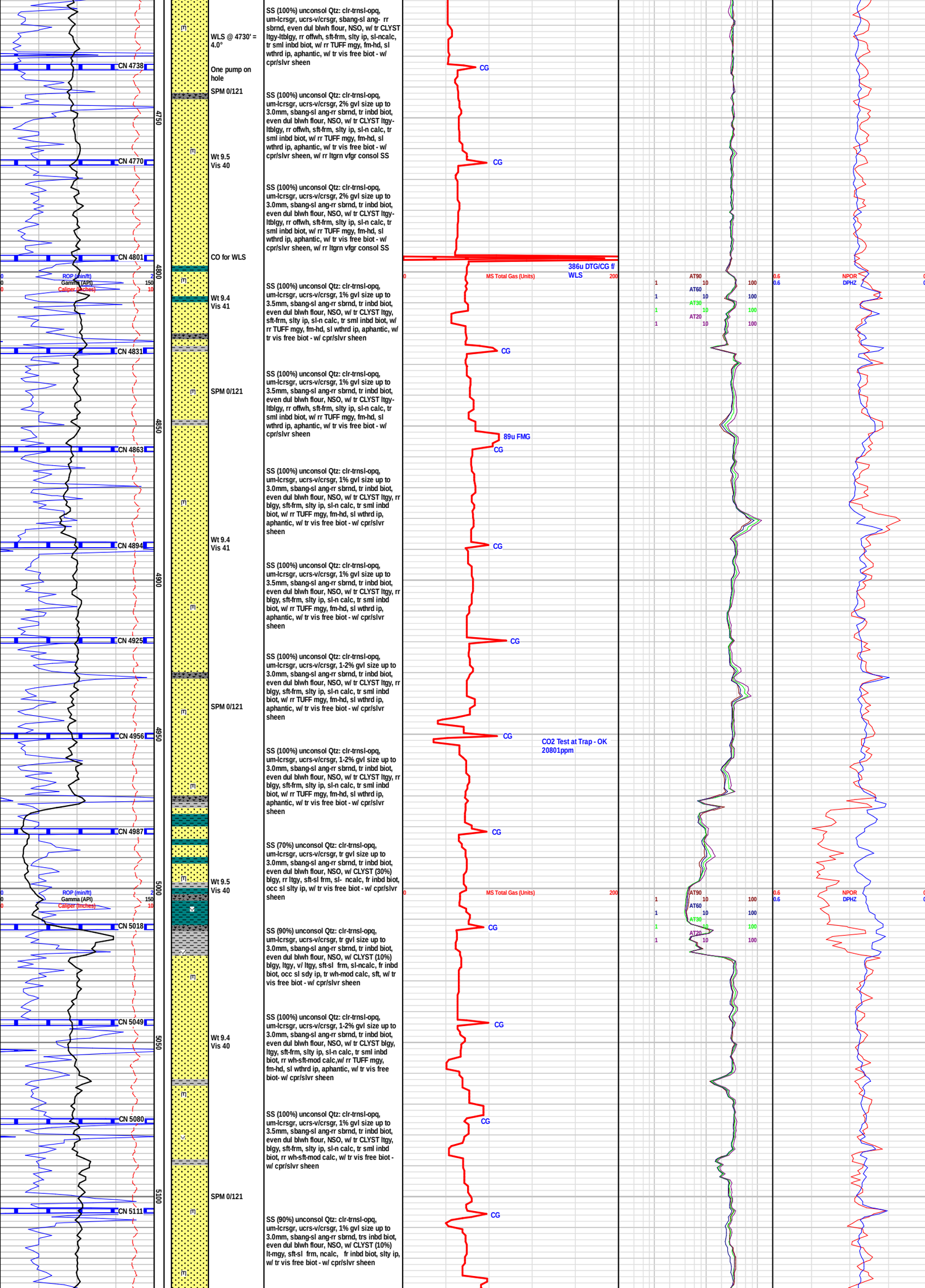
CONFIDENTIAL

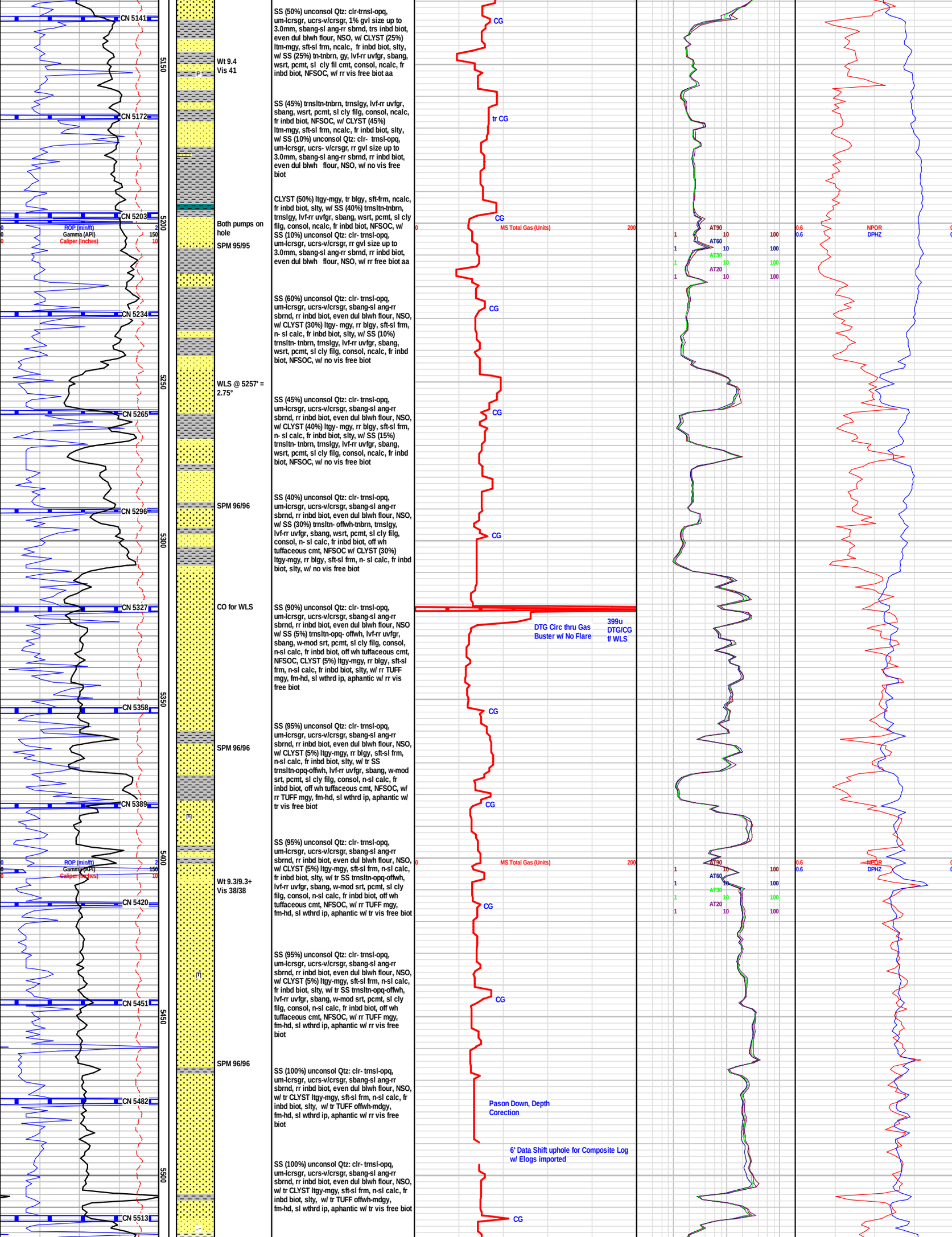
CONFIDENTIAL

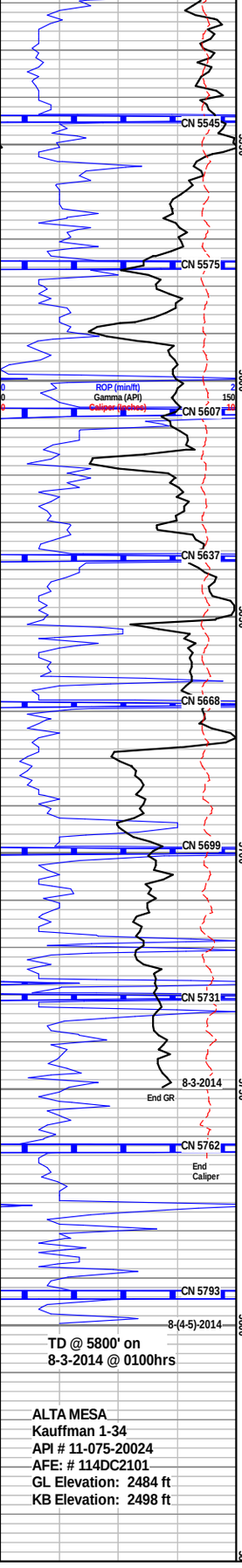


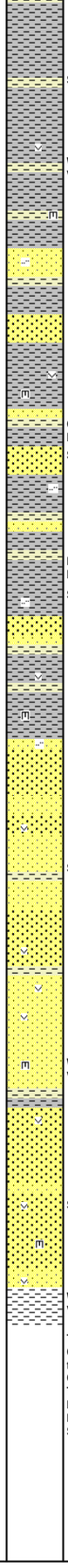

CN 3963
CN 3994
CN 4025
CN 4056
CN 4087
CN 4118
CN 4149
CN 4180
CN 4211
CN 4242
CN 4273
CN 4304
ROP (min/ft)
Gamma (API)
Caliper (Inches)
4000
4050
4100
4150
4200
4250
4300
Wt 9.3
Vis 40
SPM 95/95
Wt 9.4
Vis 39
Mud Transfer to pits
30' spls
SPM 95/95
Wt 9.4
Vis 40
WLS @ 4234' = 3.0°
SPM 96/96
One pump on hole
SPM 0/123
Both pumps on hole
SPM 96/97
CO for WLS
SS (100%) unconsol Qtz: clr-trnsl-opq, uv/crs-umgr, sbang-sl ang-rr sbrnd, even dul blwh flour, NSO, w/ tr CLYST ltgy, sft-frm, v/ rr slty, ncalc, grdg to clyish SH, tr consol SS aa, fr amnt free biot - w/ cpr/slvr sheen
SS (100%) unconsol Qtz: clr-trnsl-opq, rr ltgy, uv/crs-umgr, sbang-sl ang-rr sbrnd, even dul blwh flour, NSO, w/ tr CLYST ltgy, sft-frm, v/ rr slty, ncalc, grdg to clyish SH, rr consol SS aa, tr-fr amnt free biot - w/ cpr/slvr sheen
SS (100%) unconsol Qtz: clr-trnsl-opq, rr wh, uv/crs-umgr, sbang-sl ang-rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ tr CLYST ltgy, sft-frm, v/ rr slty, ncalc, grdg to clyish SH, w/ rr tr consol SS aa, tr-fr amnt free biot aa
SS (95%) unconsol Qtz: clr-trnsl-opq, uv/crs-umgr, sbang-sl ang-rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ CLYST (5%) ltgy, sft-frm, occ sl slty, ncalc, fr sml inbd biot, tr amnt free biot - w/ cpr/slvr sheen
SS (95%) unconsol Qtz: clr-trnsl-opq, uv/crs-umgr, sbang-sl ang-rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ CLYST (5%) ltgy, sft-frm, occ sl slty, ncalc, fr sml inbd biot, tr-fr amnt free biot - w/ cpr/slvr sheen
SS (95%) unconsol Qtz: clr-trnsl-opq, uv/crs-umgr, sbang-sl ang-rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ CLYST (5%) ltgy, sft-frm, occ sl slty, ncalc, fr sml inbd biot, tr amnt free biot - w/ cpr/slvr sheen
SS (95%) unconsol Qtz: clr-trnsl-opq, uv/crs-umgr, sbang-sl ang-rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ CLYST (5%) ltgy, sft-frm, occ sl slty, ncalc, fr sml inbd biot, tr amnt free biot - w/ cpr/slvr sheen
SS (90%) unconsol Qtz: clr-trnsl-opq, uv/crs-umgr, sbang-sl ang-rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ CLYST (10%) ltgy, sft-frm, sl slty ip, ncalc, tr sml inbd biot, occ sl sdy ip, tr amnt free biot - w/ cpr/slvr sheen
SS (90%) unconsol Qtz: clr-trnsl-opq, lcrs-lmgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ CLYST (10%) ltgy, sft-frm, slty ip, ncalc, tr sml inbd biot, w/ sl tr tn vfgr slty consol SS, tr amnt free biot - w/ cpr/slvr sheen
SS (95%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ CLYST (5%) ltgy, sft-frm, slty ip, ncalc, tr sml inbd biot, tr-fr amnt free biot - w/ cpr/slvr sheen
SS (95%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ CLYST (5%) ltgy, sft-frm, slty ip, ncalc, tr sml inbd biot, tr amnt free biot - w/ cpr/slvr sheen, w/ sl tr tn vfgr slty consol SS`
SS (90%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ CLYST (10%) ltgy, rr tr blgy, sft-frm, slty ip, ncalc, tr sml inbd biot, tr amnt free biot - w/ cpr/slvr sheen, w/ sl tr tn vfgr slty consol SS`
SS (85%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ CLYST (10%) ltgy, rr tr blgy, sft-frm, slty ip, ncalc, tr sml inbd biot, w/ SS (5%) clr- trnsl-ltgy, vf-lfgr, sbrnd-sbang, msrt, pcmt, consol, ncalc, mod cly fil cmt, tr biot/tuff incl, NFSOC, rr tr vis poro, tr amnt free biot - w/ cpr/slvr sheen
SS (50%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, rr tr inbd biot, even dul blwh flour, NSO, w/ SS (25%) trnsl-offwh-ltgy, vf-lfgr, sbrnd-sbang, msrt, pcmt, con- sol, n-sl calc, mod cly fil cmt, tr biot/ tuff inbd, even dul blwh flour, NSO, rr tr vis poro, w/ CLYST (15%) ltgy-ltblgy- lttngy, sft-frm, slty ip, ncalc, tr sml inbd biot, w/ TUFF (10%) mgy-blk-tngy, fm-hd-sft ip, sl wthrd ip, aphantic, w/ tr free biot - w/ cpr/slvr sheen, tr free musc- clr-trnsl
CG
MS Total Gas (Units)
0
200
CO2 Test at Trap - OK
22784ppm
DTG/CG 295u f/ WLS
AT90
AT60
AT30
AT20
1
10
100
NPOR
DPHZ
0.6


CN 4336
CN 4366
CN 4398
CN 4429
CN 4460
CN 4490
CN 4521
8-2-2014
CN 4552
CN 4583
CN 4614
CN 4645
CN 4683
CN 4707
4350
4400
4450
4500
4550
4600
4650
4700
ROP (min/ft)
Gamma (API)
Caliper (Inches)
SPM 96/97
Wt 9.4
Vis 40
SPM 95/94
Wt 9.4
Vis 40
SPM 95/95
SPM 96/95
Wt 9.5
Vis 45
Wt 9.6
Vis 43
SPM 95/95
MUD Check @ 4738'
Wt 9.4
Vis 41
Pv 16
Yp 10
Gels 4/6
Fil 8.2
Ck 2
Sol 9.0
ES 450
O/W 81/19
SPM 95/95
Depth Corr to 4676'
Mud Transfer to pits
Wt 9.4
Vis 41
CLYST (60%) ltblgy-ltgy-lttngy, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, w/ SS (35%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ TUFF (5%) mgy-blk-tngy, fm-hd, sl wthrd ip, aphantic, w/ tr free biot - w/ cpr/slvr sheen
CLYST (70%) ltblgy-lttngy-ltgy, tr mgy sft-frm, slty ip, sl-ncalc, tr sml inbd biot, w/ SS (20%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ TUFF (10%) mgy-blk-tngy, fm-hd, sl wthrd ip, aphantic, w/ tr free biot - w/ cpr/slvr sheen
CLYST (65%) ltgy-mgy-ltblgy, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, w/ TUFF (20%) mgy-blk-tngy, fm-hd, sl wthrd ip, aphantic, w/ SS (15%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ tr free biot - w/ cpr/slvr sheen
CLYST (65%) ltgy-mgy-ltblgy, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, w/ TUFF (20%) mgy-blk-tngy, fm-hd, sl wthrd ip, aphantic, w/ SS (15%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ tr free biot - w/ cpr/slvr sheen
CLYST (70%) ltgy-mgy, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, w/ TUFF (25%) mgy-blk-tngy, fm-hd, sl wthrd ip, aphantic, w/ SS (5%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ tr free biot - w/ cpr/slvr sheen
CLYST (75%) ltgy-mgy, tr ltblgy, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, w/ TUFF (20%) mgy, tr blgy, fm-hd, sl wthrd ip, aphantic, w/ SS (5%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ tr free biot - w/ cpr/slvr sheen, tr free pyr
CLYST (80%) ltblgy-ltgy-mgy, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, rr calc incl w/ TUFF (10%) mgy, tr blgy fm-hd, sl wthrd ip, aphantic, w/ SS (10%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ no vis free biot - w/ cpr/slvr sheen, tr pyr vein, tr calc xl
CLYST (85%) ltblgy-ltgy-mgy, tr lttngy, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, rr calc incl w/ TUFF (10%) mgy-blgy- trnslwh, fm-hd, sl wthrd ip, aphantic, w/ SS (5%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ no vis free biot - w/ cpr/slvr sheen, tr calc xl
CLYST (85%) ltgy-ltblgy-mgy, tr lttngy, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, rr calc incl w/ TUFF (5%) mgy-blgy- trnslwh, fm-hd, sl wthrd ip, aphantic, w/ SS (5%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ no vis free biot - w/ cpr/slvr sheen, tr calc xl
CLYST (60%) ltgy-ltblgy-mgy, tr lttngy, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, rr calc incl w/ SS (35%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs- v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/TUFF (5%) mgy-blgy- trnslwh, fm-hd, sl wthrd ip, aphantic, w/ no vis free biot - w/ cpr/slvr sheen, tr calc xl
CLYST (55%) ltgy-ltblgy-mgy, tr lttngy, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, rr calc incl, tr calct frac fil, w/ SS (40%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/TUFF (5%) mgy-blgy- trnslwh, fm-hd, sl wthrd ip, aphantic, w/ no vis free biot - w/ cpr/slvr sheen
SS (100%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ tr CLYST ltgy-ltblgy, tr offwh, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic, w/ tr vis free biot - w/ cpr/slvr sheen, tr mus
SS (95%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ CLYST (5%) ltgy-ltblgy, tr offwh, sft- frm, slty ip, sl-ncalc, tr sml inbd biot, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic, w/ tr vis free biot - w/cpr/slvr sheen, tr mus, rr ltgrn vfgr consol SS
CG
DTG
MS Total Gas (Units)
AT90
AT60
AT30
AT20
NPOR
DPHZ

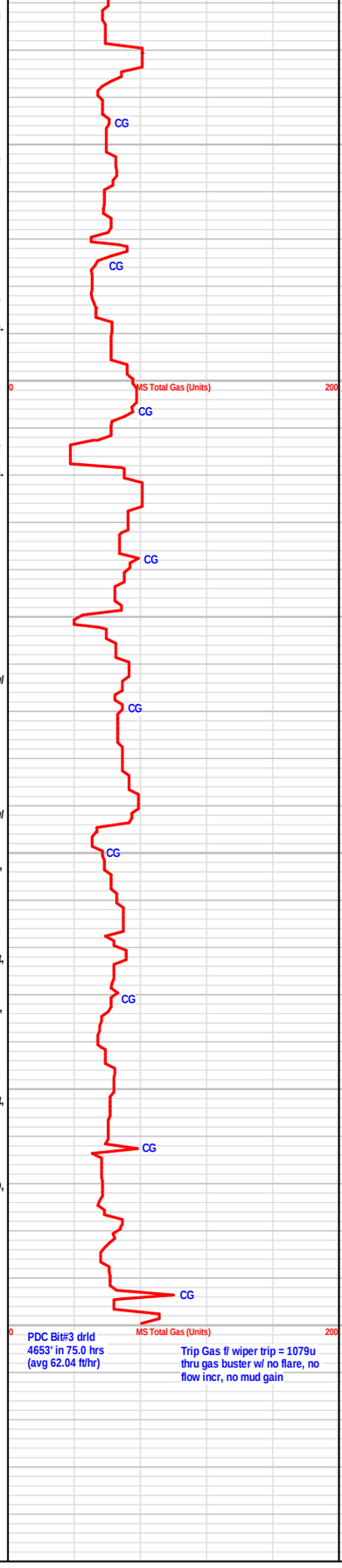

ROP (min/ft)
Gamma (API)
Caliper (inches)
MS Total Gas (Units)
AT90
AT60
AT30
AT20
NPOR
DPHZ
4750
4800
4850
4900
4950
5000
5050
5100
CN 4738
CN 4770
CN 4801
CN 4831
CN 4863
CN 4894
CN 4925
CN 4956
CN 4987
CN 5018
CN 5049
CN 5080
CN 5111
WLS @ 4730' = 4.0°
One pump on hole
SPM 0/121
Wt 9.5
Vis 40
CO for WLS
386u DTG/CG f/ WLS
Wt 9.4
Vis 41
89u FMG
CO2 Test at Trap - OK 20801ppm
SS (100%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang- rr sbrnd, even dul blwh flour, NSO, w/ tr CLYST ltgy-ltblgy, rr offwh, sft-frm, slty ip, sl-ncalc, tr sml inbd biot, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic, w/ tr vis free biot - w/ cpr/slvr sheen
SS (100%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, 2% gvl size up to 3.0mm, sbang-sl ang-rr sbrnd, tr inbd biot, even dul blwh flour, NSO, w/ tr CLYST ltgy-ltblgy, rr offwh, sft-frm, slty ip, sl-n calc, tr sml inbd biot, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic, w/ tr vis free biot - w/ cpr/slvr sheen, w/ rr ltgrn vfgr consol SS
SS (100%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, 1% gvl size up to 3.5mm, sbang-sl ang-rr sbrnd, tr inbd biot, even dul blwh flour, NSO, w/ tr CLYST ltgy, sft-frm, slty ip, sl-n calc, tr sml inbd biot, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic, w/ tr vis free biot - w/ cpr/slvr sheen
SS (100%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, 1% gvl size up to 3.5mm, sbang-sl ang-rr sbrnd, tr inbd biot, even dul blwh flour, NSO, w/ tr CLYST ltgy-ltblgy, rr offwh, sft-frm, slty ip, sl-n calc, tr sml inbd biot, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic, w/ tr vis free biot - w/ cpr/slvr sheen
SS (100%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, 1% gvl size up to 3.0mm, sbang-sl ang-rr sbrnd, tr inbd biot, even dul blwh flour, NSO, w/ tr CLYST ltgy, rr blgy, sft-frm, slty ip, sl-n calc, tr sml inbd biot, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic, w/ tr vis free biot - w/ cpr/slvr sheen
SS (100%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, 1% gvl size up to 3.5mm, sbang-sl ang-rr sbrnd, tr inbd biot, even dul blwh flour, NSO, w/ tr CLYST ltgy, rr blgy, sft-frm, slty ip, sl-n calc, tr sml inbd biot, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic, w/ tr vis free biot - w/ cpr/slvr sheen
SS (100%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, 1-2% gvl size up to 3.0mm, sbang-sl ang-rr sbrnd, tr inbd biot, even dul blwh flour, NSO, w/ tr CLYST ltgy, rr blgy, sft-frm, slty ip, sl-n calc, tr sml inbd biot, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic, w/ tr vis free biot - w/ cpr/slvr sheen
SS (100%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, 1-2% gvl size up to 3.0mm, sbang-sl ang-rr sbrnd, tr inbd biot, even dul blwh flour, NSO, w/ tr CLYST ltgy, rr blgy, sft-frm, slty ip, sl-n calc, tr sml inbd biot, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic, w/ tr vis free biot - w/ cpr/slvr sheen
SS (70%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, tr gvl size up to 3.0mm, sbang-sl ang-rr sbrnd, tr inbd biot, even dul blwh flour, NSO, w/ CLYST (30%) blgy, rr ltgy, sft-sl frm, sl- ncalc, fr inbd biot, occ sl slty ip, w/ tr vis free biot - w/ cpr/slvr sheen
SS (90%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, tr gvl size up to 3.0mm, sbang-sl ang-rr sbrnd, tr inbd biot, even dul blwh flour, NSO, w/ CLYST (10%) blgy, ltgy, v/ ltgy, sft-sl frm, sl-ncalc, fr inbd biot, occ sl sdy ip, tr wh-mod calc, sft, w/ tr vis free biot - w/ cpr/slvr sheen
SS (100%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, 1-2% gvl size up to 3.0mm, sbang-sl ang-rr sbrnd, tr inbd biot, even dul blwh flour, NSO, w/ tr CLYST blgy, ltgy, sft-frm, slty ip, sl-n calc, tr sml inbd biot, rr wh-sft-mod calc,w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic, w/ tr vis free biot- w/ cpr/slvr sheen
SS (100%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, 1% gvl size up to 3.5mm, sbang-sl ang-rr sbrnd, tr inbd biot, even dul blwh flour, NSO, w/ tr CLYST ltgy, blgy, sft-frm, slty ip, sl-n calc, tr sml inbd biot, rr wh-sft-mod calc, w/ tr vis free biot - w/ cpr/slvr sheen
SS (90%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, 1% gvl size up to 3.0mm, sbang-sl ang-rr sbrnd, trs inbd biot, even dul blwh flour, NSO, w/ CLYST (10%) lt-mgy, sft-sl frm, ncalc, fr inbd biot, slty ip, w/ tr vis free biot - w/ cpr/slvr sheen

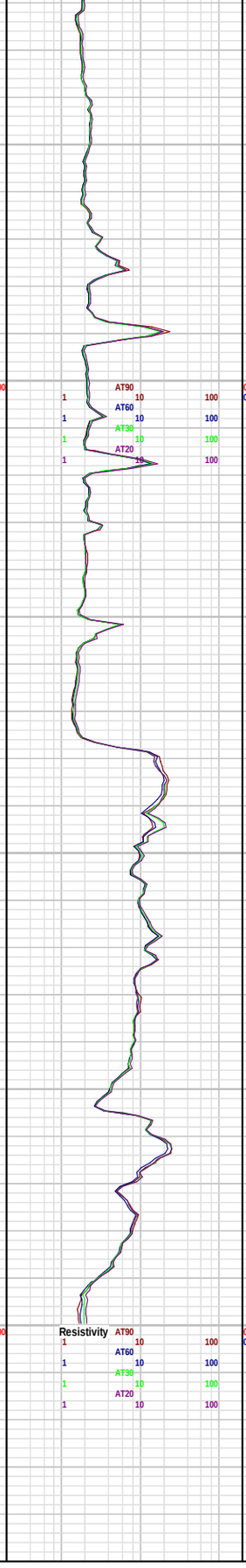

CN 5141
5150
Wt 9.4
Vis 41
CN 5172
CN 5203
5200
ROP (min/ft)
Gamma (API)
Caliper (Inches)
Both pumps on hole
SPM 95/95
CN 5234
5250
WLS @ 5257' = 2.75°
CN 5265
CN 5296
SPM 96/96
5300
CN 5327
CO for WLS
CN 5358
5350
SPM 96/96
CN 5389
5400
Wt 9.3/9.3+
Vis 38/38
CN 5420
CN 5451
5450
SPM 96/96
CN 5482
5500
CN 5513
SS (50%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, 1% gvl size up to 3.0mm, sbang-sl ang-rr sbrnd, trs inbd biot, even dul blwh flour, NSO, w/ CLYST (25%) ltm-mgy, sft-sl frm, ncalc, fr inbd biot, slty, w/ SS (25%) tn-tnbrn, gy, lvf-rr uvfgr, sbang, wsrt, pcmt, sl cly fil cmt, consol, ncalc, fr inbd biot, NFSOC, w/ rr vis free biot aa
SS (45%) trnsltn-tnbrn, trnslgy, lvf-rr uvfgr, sbang, wsrt, pcmt, sl cly filg, consol, ncalc, fr inbd biot, NFSOC, w/ CLYST (45%) ltm-mgy, sft-sl frm, ncalc, fr inbd biot, slty, w/ SS (10%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs- v/crsgr, rr gvl size up to 3.0mm, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ no vis free biot
CLYST (50%) ltgy-mgy, tr blgy, sft-frm, ncalc, fr inbd biot, slty, w/ SS (40%) trnsltn-tnbrn, trnslgy, lvf-rr uvfgr, sbang, wsrt, pcmt, sl cly filg, consol, ncalc, fr inbd biot, NFSOC, w/ SS (10%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, rr gvl size up to 3.0mm, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ rr free biot aa
SS (60%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ CLYST (30%) ltgy- mgy, rr blgy, sft-sl frm, n- sl calc, fr inbd biot, slty, w/ SS (10%) trnsltn- tnbrn, trnslgy, lvf-rr uvfgr, sbang, wsrt, pcmt, sl cly filg, consol, ncalc, fr inbd biot, NFSOC, w/ no vis free biot
SS (45%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ CLYST (40%) ltgy- mgy, rr blgy, sft-sl frm, n- sl calc, fr inbd biot, slty, w/ SS (15%) trnsltn- tnbrn, trnslgy, lvf-rr uvfgr, sbang, wsrt, pcmt, sl cly filg, consol, ncalc, fr inbd biot, NFSOC, w/ no vis free biot
SS (40%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ SS (30%) trnsltn- offwh-tnbrn, trnslgy, lvf-rr uvfgr, sbang, wsrt, pcmt, sl cly filg, consol, n- sl calc, fr inbd biot, off wh tuffaceous cmt, NFSOC w/ CLYST (30%) ltgy-mgy, rr blgy, sft-sl frm, n- sl calc, fr inbd biot, slty, w/ no vis free biot
SS (90%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO w/ SS (5%) trnsltn-opq- offwh, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, off wh tuffaceous cmt, NFSOC, CLYST (5%) ltgy-mgy, rr blgy, sft-sl frm, n-sl calc, fr inbd biot, slty, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic w/ rr vis free biot
SS (95%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ CLYST (5%) ltgy-mgy, rr blgy, sft-sl frm, n-sl calc, fr inbd biot, slty, w/ tr SS trnsltn-opq-offwh, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, off wh tuffaceous cmt, NFSOC, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic w/ tr vis free biot
SS (95%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ CLYST (5%) ltgy-mgy, sft-sl frm, n-sl calc, fr inbd biot, slty, w/ tr SS trnsltn-opq-offwh, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, off wh tuffaceous cmt, NFSOC, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic w/ tr vis free biot
SS (95%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ CLYST (5%) ltgy-mgy, sft-sl frm, n-sl calc, fr inbd biot, slty, w/ tr SS trnsltn-opq-offwh, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, off wh tuffaceous cmt, NFSOC, w/ rr TUFF mgy, fm-hd, sl wthrd ip, aphantic w/ rr vis free biot
SS (100%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ tr CLYST ltgy-mgy, sft-sl frm, n-sl calc, fr inbd biot, slty, w/ tr TUFF offwh-mdgy, fm-hd, sl wthrd ip, aphantic w/ rr vis free biot
SS (100%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ tr CLYST ltgy-mgy, sft-sl frm, n-sl calc, fr inbd biot, slty, w/ tr TUFF offwh-mdgy, fm-hd, sl wthrd ip, aphantic w/ tr vis free biot
CG
tr CG
MS Total Gas (Units)
0
200
DTG Circ thru Gas Buster w/ No Flare
399u DTG/CG f/ WLS
Pason Down, Depth Corection
6' Data Shift uphole for Composite Log w/ Elogs imported
AT90
AT60
AT30
AT20
NPOR
DPHZ

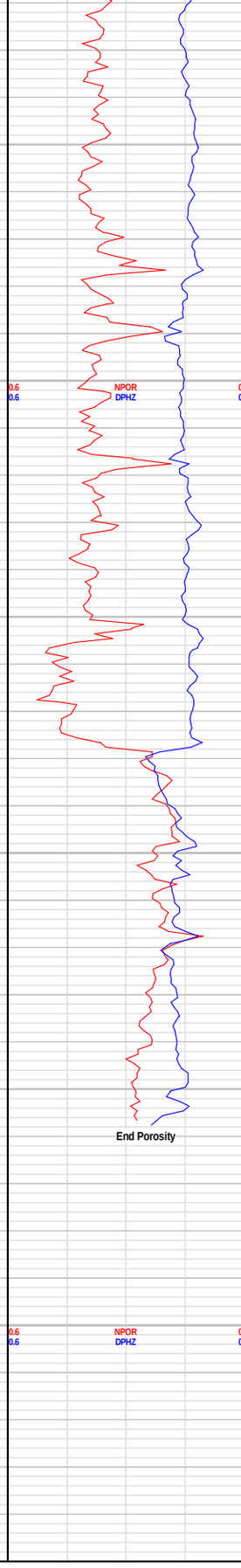




SPM 96/96	CLYST (90%) mgy-lttngy, sft-frm, n-sl calc, fr inbd biot, v slty, grdg lvfgr-uvfgr, tr tuffaceous ip, w/ SS (5%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs- v/crsgr, sbang-sl ang-rr sbrnd, w/ SS (5%) offwh-trnsl-opq, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, tr offwh tuffaceous cmt, NFSOC, w/ rr free biot
Wt 9.3 Vis 41	CLYST (90%) mgy-lttngy, sft-frm, n-sl calc, fr inbd biot, v slty, grdg lvfgr-uvfgr, tr tuffaceous ip, w/ SS (5%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs- v/crsgr, sbang-sl ang-rr sbrnd, w/ SS (5%) offwh-trnsl-opq, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, tr offwh tuffaceous cmt, NFSOC, w/ rr free biot
	CLYST (85%) mgy-lttngy, sft-frm, n-sl calc, fr inbd biot, v slty, grdg lvfgr-uvfgr, tr tuffaceous ip, w/ SS (10%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs- v/crsgr, sbang-sl ang-rr sbrnd, w/ SS (5%) offwh-trnsl-opq, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, tr offwh tuffaceous cmt, NFSOC, w/ rr free biot
One pump on hole SPM 0/123	CLYST (85%) mgy-lttngy, sft-frm, n-sl calc, fr inbd biot, v slty, grdg lvfgr-uvfgr, tr tuffaceous ip, w/ SS (10%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs- v/crsgr, sbang-sl ang-rr sbrnd, w/ SS (5%) offwh-trnsl-opq, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, tr offwh tuffaceous cmt, NFSOC, w/ rr free biot
Both pumps on hole SPM 96/97	CLYST (90%) ltgy-mgy-lttngy, sft-frm, n-sl calc, fr inbd biot, m slty, grdg lvfgr-uvfgr, tr tuffaceous ip, w/ SS (5%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs- v/crsgr, sbang-sl ang-rr sbrnd, w/ SS (5%) offwh-trnsl-opq, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, tr offwh tuffaceous cmt, NFSOC, w/ rr free biot
	CLYST (85%) ltgy-mgy-lttngy, sft-frm, n-sl calc, fr inbd biot, m slty, grdg lvfgr-uvfgr, tr-occ tuffaceous ip, w/ SS (15%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs- v/crsgr, sbang-sl ang-rr sbrnd, w/ rr SS offwh-trns-opq, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, tr offwh tuffaceous cmt, NFSOC, w/ rr free biot
SPM 94/95	SS (40%) offwh-trnsl-opq, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, tr offwh tuffaceous cmt, NFSOC, w/ SS (30%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ CLYST (30%) ltgy-mgy-lttngy, sft-frm, n-sl calc, fr inbd biot, m slty, grdg lvfgr-uvfgr, tr-occ tuffaceous ip
Wt 9.3 Vis 41	SS (85%) offwh-trnsl-opq, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, tr offwh tuffaceous cmt, NFSOC, w/ SS (10%) unconsol Qtz: clr-trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ CLYST (5%) ltgy-mgy-lttngy, sft-frm, n-sl calc, fr inbd biot, m slty, grdg lvfgr-uvfgr, tr tuffaceous ip
SPM 96/97	SS (70%) unconsol Qtz: clr- trnsl-opq, um-lcrsgr, ucrs-v/crsgr, sbang-sl ang-rr sbrnd, rr inbd biot, even dul blwh flour, NSO, w/ SS (20%) offwh- trnsl-opq, lvf-rr uvfgr, sbang, w-mod srt, pcmt, sl cly filg, consol, n-sl calc, fr inbd biot, tr offwh tuffaceous cmt, w/ CLYST (5%) ltgy-mgy-lttngy, sft-frm, n-sl calc, fr inbd biot, m slty, grdg lvfgr-uvfgr, tr tuffaceous ip
Wt 9.3/9.4 Vis 43/43	5790'-5800' spl: CLYST (70%) wh-offwh, sft/chlky, ncalc, mod-abnd amnt med- lrg inbd biot, mod wthrd tuffacious mat, w/SS (30%) unconsol Qtz: clr-trnsl -opq, um-lcrsgr, ucrs-v/crsgr, sbang- sl ang-rr sbrnd, rr-tr inbd biot, even dul blwh flour, NSO, tr free biot-blk, rr tr mus
TD @ 5800', CO, C&C hole, Wiper trip to shoe, TIH, CO, C&C hole, TOOH for LOGS, RU Loggers, Run LOGS, Run Sidewall Cores	Driller TD = 5800', Logger TD = 5801'







TD @ 5800' on
8-3-2014 @ 0100hrs

ALTA MESA
Kauffman 1-34
API # 11-075-20024
AFE: # 114DC2101
GL Elevation: 2484 ft
KB Elevation: 2498 ft

THANK YOU FOR USING
KING CANYON BUFFALO
Phil Littlefield

CONFIDENTIAL