

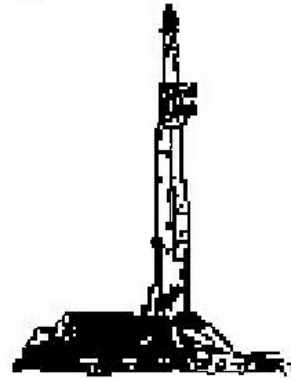
# GOOLSBY BROTHERS and associates, inc.

575 Union Blvd, Suite 208  
Lakewood, CO 80228  
303-945-2860 Office



Geological Wellsite  
Supervision

[www.goolsbybrothers.com](http://www.goolsbybrothers.com)



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

Well Name: STATE #3-16

API: 05-121-11073

Location: NENW Sec 16 T3N R52W Washington County, CO.

License Number:

Spud Date: June 02, 2018

Region:

Drilling Completed: June 09, 2018

Surface Coordinates: 1700' FWL, 1100' FNL (NENW)

39.79648 N Latitude, -103.21273 W Longitude

Bottom Hole A/A

Coordinates:

Ground Elevation (ft): 4,821'

K.B. Elevation (ft): 4,827'

Logged Interval (ft): 289' To: 4492' Total Depth (ft): 4504' LMTD

Formation: J SAND TARGET

Type of Drilling Fluid: Gel Lime for surf., LSND 'surf-DMTD 4500',

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

## OPERATOR

Company: ST CROIX, Paul Melnychinko

Address: PO Box 13799  
Denver, CO. 80201

## GEOLOGIST

Name: Phillip Willcox

Company: Goolsby Brothers & Assoc. (GBA), Inc. ([www.goolsbybrothers.com](http://www.goolsbybrothers.com))

Address: 575 Union Blvd.  
Suite 208,  
Lakewood CO. 80228

## Logs

Platform Express Array Induction, Porosity

## Casing

8 5/8" Surface Casing set @ 324'  
5 1/2" Production Casing Ran 06/11/18

## Contractors

- 1) Drilling Contractor: Xcell; Rig #10  
Toolpusher: Max  
2) Company Man: Gary Doke

## ROCK TYPES

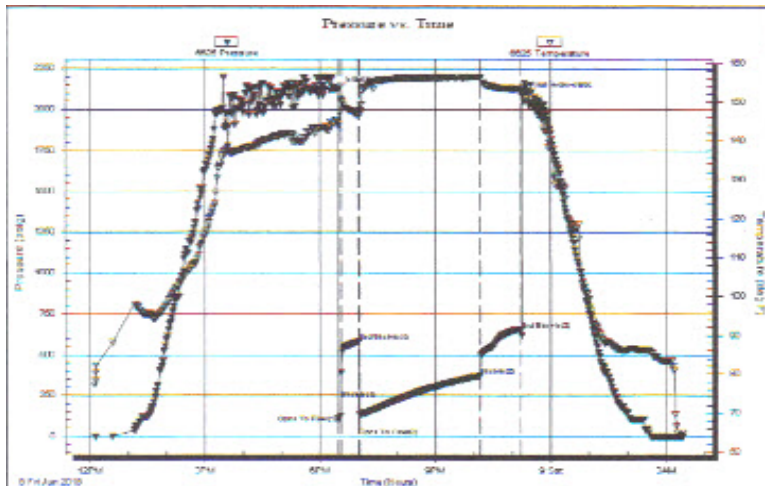
	Bent		Ls		Ss		Arg dol
	Arg ss		Mrlst		Chlk		Clybasedsltst
	Cht		Sh		Mdston		Carb sh
	Clyst		Shcol		Fracture		Carb chalk
	Coal		Shgy		Anhyd		Arg lmy ss
	Congl		Ss		Mdston		
	Dol		Cement		Ss		
	Gyp		Sltst		Sltly sh		

## ACCESSORIES

MINERAL							
	Anhy		Minxl		Crin		Gyp
	Arggrn		Nodule		Echin		Ls
	Arg		Phos		Fish		Mrst
	Bent		Pyr		Foram		Sltstrg
	Bit		Salt		Fossil		Ssstrg
	Brecfrag		Sandy		Gastro	TEXTURE	
	Calc		Silt		Oolite		Boundst
	Carb		Sil		Ostra		Chalky
	Chtdk		Sulphur		Pelec		Cryxln
	Chtlt				Pellet		Earthy
	Dol	FOSSIL			Pisolite		Finexln
	Feldspar		Algae		Plant		Grainst
	Ferrpel		Amph		Strom		Lithogr
	Ferr		Belm	STRINGER			Microxln
	Glau		Bioclst		Anhy		Mudst
	Gyp		Brach		Arg		Packst
	Hvymin		Bryozoa		Bent		Wackest
	Kaol		Cephal		Coal		
	Marl		Coral		Dol		

## OTHER SYMBOLS

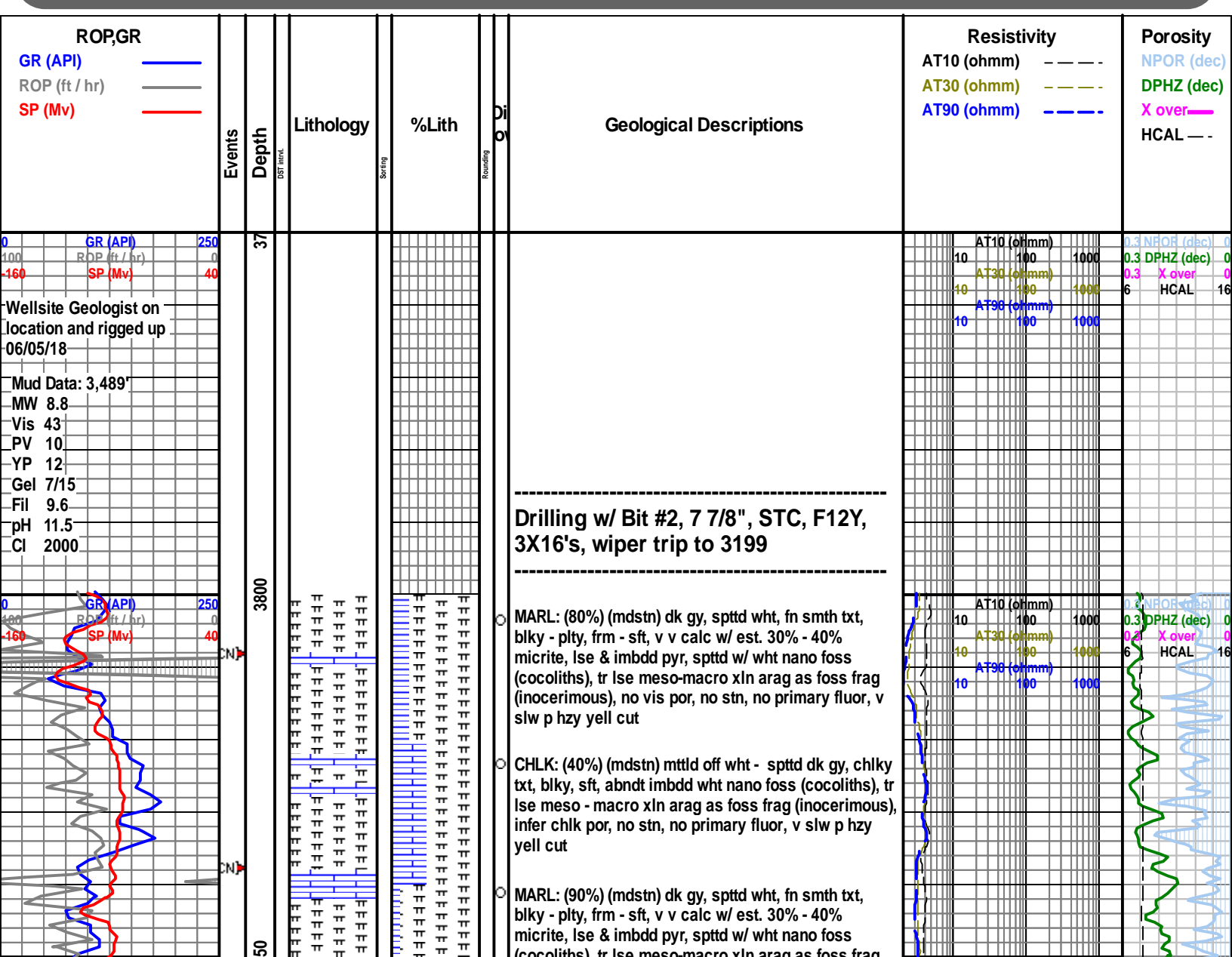
POROSITY TYPE							
	Earthy		Well		Uniform		Trip_point
	Fenest		Moderate		Spotted		New bit
	Fracture		Poor		Quiescent		Connection(cn)
	Inter	ROUNDING			Dead		Survey(mwd)
	Moldic		Rounded		Patchy		Survey(dropped)
	Organic		Subrnd		Vspotty		Survey(wireline)
	Pinpoint		Subang	INTERVALS			Casing_shoe(1)
	Vuggy		Angular		Core		Off bottom
					Dst		Sidewall core

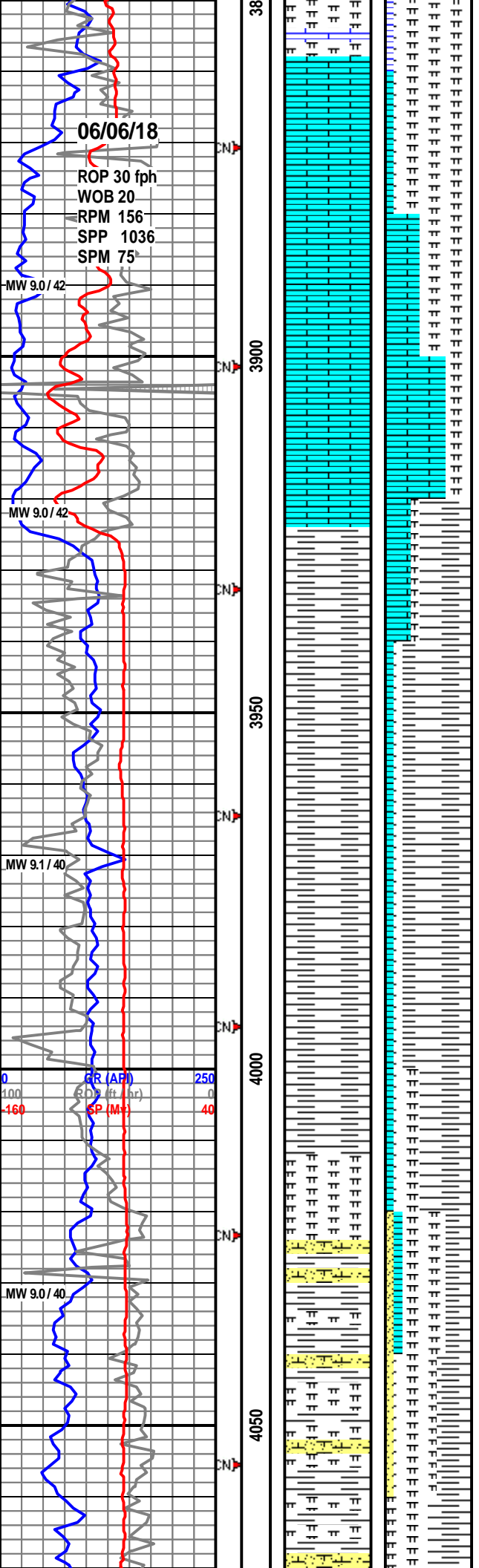


PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2117.80	145.22	Initial Hydro-static
1	105.64	144.09	Open To Flow (1)
5	124.92	150.47	Shut-In(1)
33	581.29	146.88	End Shut-In(1)
34	128.37	146.57	Open To Flow (2)
223	370.51	156.44	Shut-In(2)
286	653.91	153.18	End Shut-In(2)
288	2088.67	153.52	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
410.00	SMCW 94%w , 6% m	3.10
390.00	MCW 82%w , 18% m	4.23

Gas Rates			
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)





(coccoliths), a fine meso-macro xlm arag as loss frag (inocerimous), no vis por, no stn, no primary fluor, v slw p hzy yell cut

LS: (10%) wht, pred amorph - sb chlky, chnky - blkly, frm - mod hd, cln, no vis por, NSFOC

LS: (40%) wht, pred amorph - sb chlky, chnky - blkly, frm - mod hd, cln, no vis por, NSFOC

LS: (80%) wht, pred amorph - sb chlky, chnky - blkly, frm - mod hd, cln, no vis por, NSFOC

SH: (60%) dk gy, fn smth - slty txt, plty, frm, non calc

SH: (90%) dk gy, fn smth - slty txt, plty, frm, non calc

SH: (80%) dk gy, fn smth - slty txt, plty, frm, non calc

tr vf gr ss

SH: (80%) dk gy, fn smth - slty txt, plty, frm, non calc

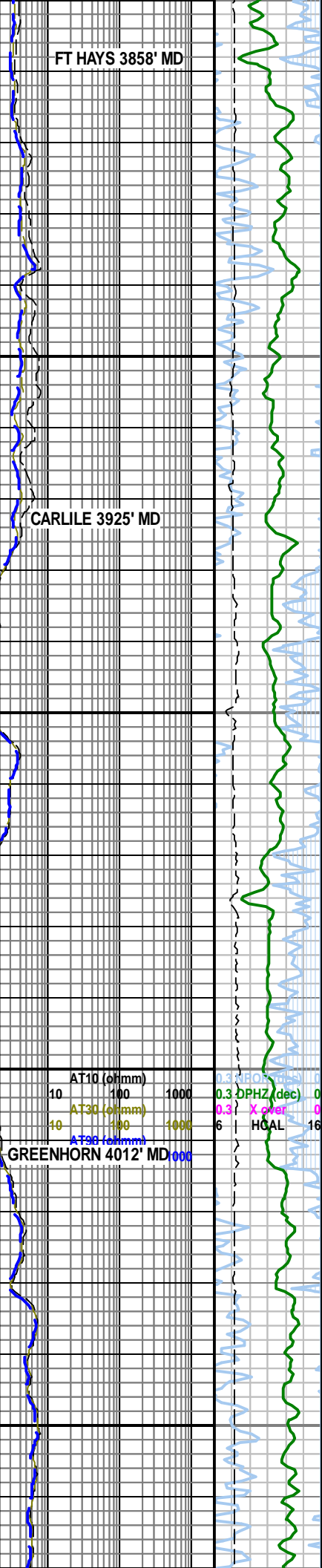
ARG LMY SS: med lt gy, vf - fn gr, sbrnd, mod s rtd, mod cons - fri, abndt calc cmt, est 18% vis por, NSFOC

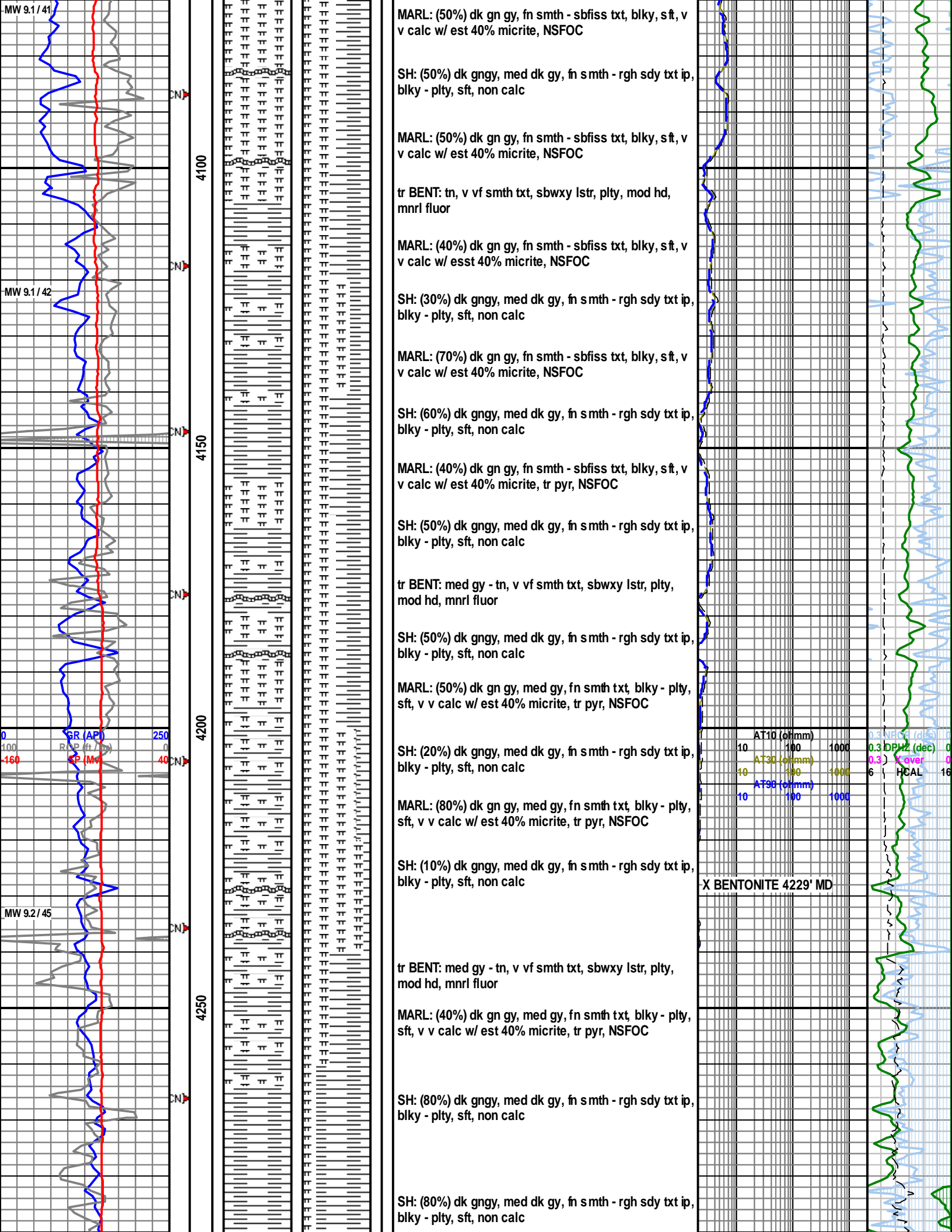
MARL: (40%) dk gy, gn gy, rgh slty txt, blkly, sft - frm, v calc

SH: (50%) dk gngy, med dk gy, fn smth - rgh sdy txt ip, blkly - plty, sft, non calc

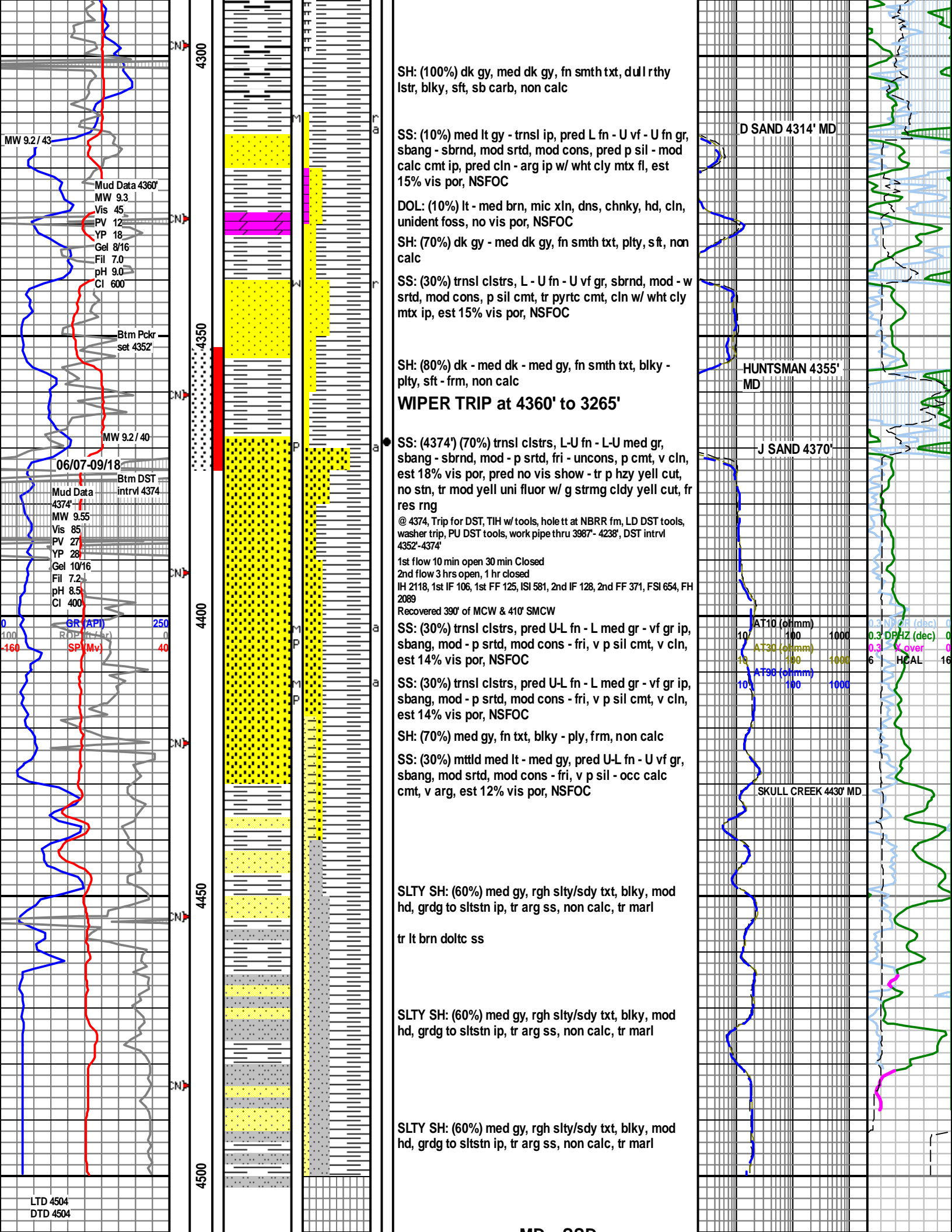
MARL: (40%) dk gn gy, fn smth - sbfiss txt, blkly, sft, v v calc w/ est 40% micrite

SH: (50%) dk gngy, med dk gy, fn smth - rgh sdy txt ip, blkly - plty, sft, non calc









FT HAYS	3858'	+969
CARLILE	3925'	+902
X BENTONITE	4229'	+598
D SAND	4314'	+513
J SAND	4370'	+457
SKULL CREEK	4430'	+397

**THANK YOU!!!**  
**Phillip Willcox, Goolsby Brothers**