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MUDLOG MD

COMPANY	ExxonMobil Production
WELL	FRU 197-28A5
FIELD	PICEANCE CREEK
REGION	ROCKIES
COORDINATES	LAT: 39.9344449000 LON: 108.295900000
ELEVATION	GL = 6,082' KB = 6,109'
COUNTY, STATE	RIO BLANCO, CO
API INDEX	051031163300
SPUD DATE	08/05/2010
CONTRACTOR	HELMRICH AND PAYNE
CO. REP.	RICKY T. OWENS
RIG/TYPE	215 / FLEX 3
LOGGING UNIT	UNIT 051
GEOLOGISTS	GEORGE BAKER DEVIN CLAAR
ADD. PERSONS	BILL JOHANNING TRISH ORTIZ
CO. GEOLOGIST	MEL,ANIE BIGGS

LOG INTERVAL

DEPTHS:	149'	TO	12,529'
DATES:	8/05/2010	TO	8/25/2010
SCALE:	1" =100'		

CASING DATA

16"	AT	120'
10.75"	AT	3,566'
	AT	
	AT	

HOLE SIZE

14.75"	TO	3,576'
8.75"	TO	12,529'
	TO	
	TO	

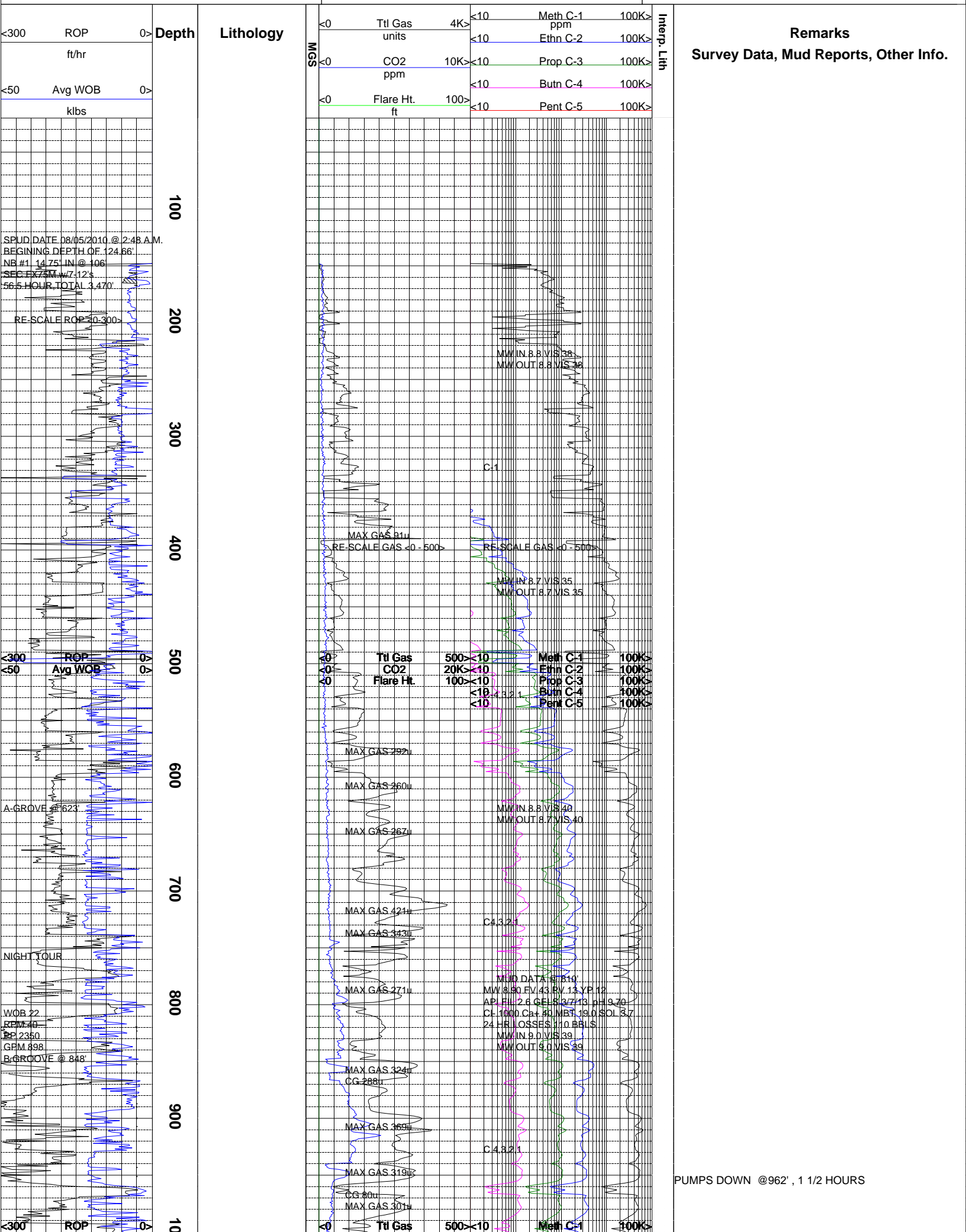
MUD TYPES

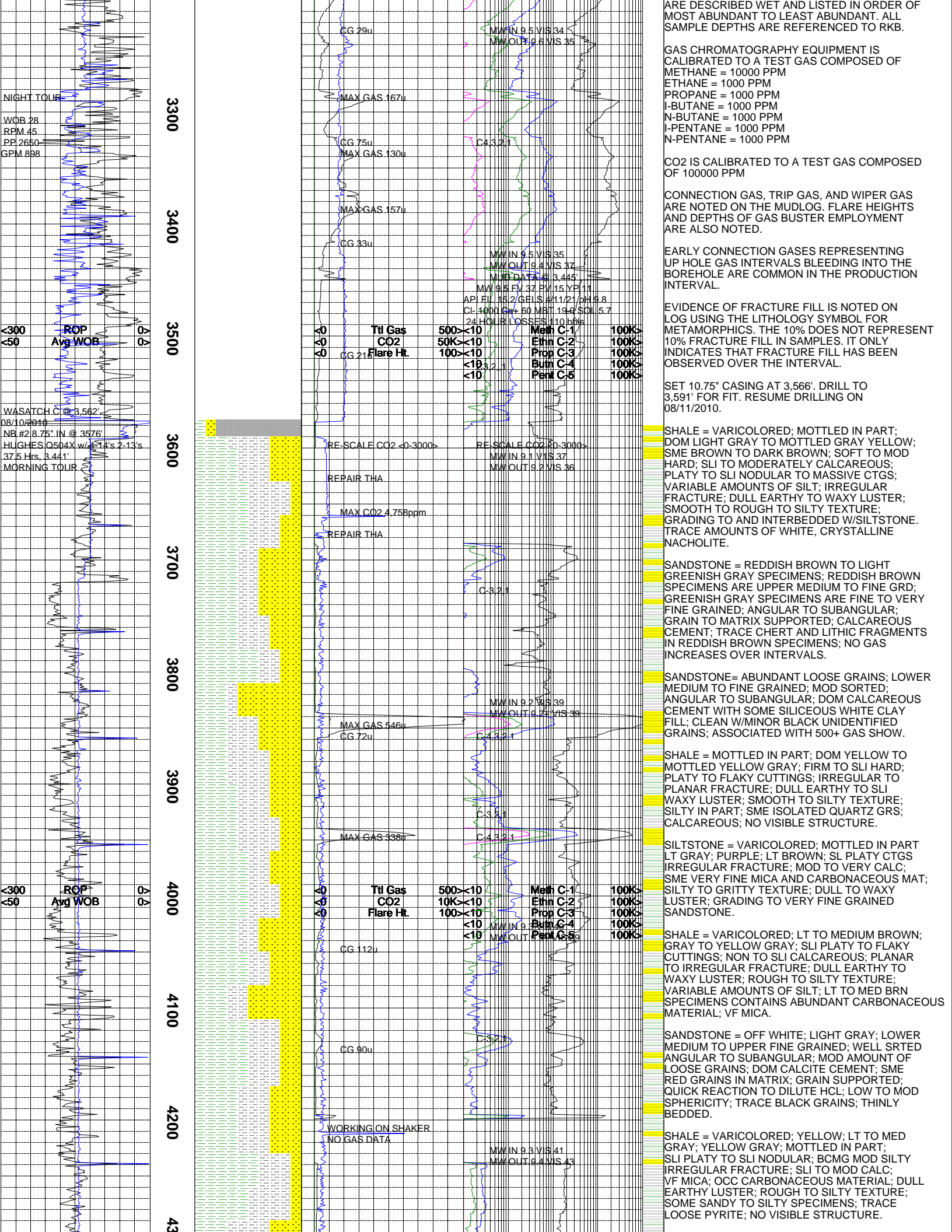
SPUD MUD	TO	3,576'
BARO-TROL PLUS	TO	12,529'
	TO	
	TO	

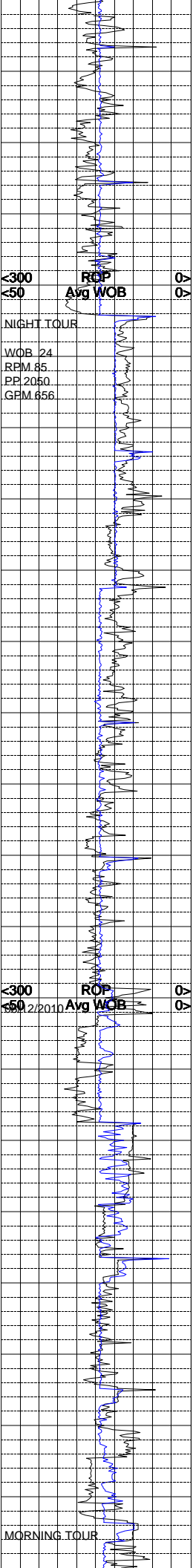
ABBREVIATIONS

<i>NB</i> NEWBIT	<i>PV</i> PLASTIC VISCOSITY	<i>LC</i> LOST CIRCULATION
<i>RRB</i> RERUN BIT	<i>YP</i> YIELD POINT	<i>CO</i> CIRCULATE OUT
<i>CB</i> CORE BIT	<i>FL</i> FLUID LOSS	<i>NR</i> NO RETURNS
<i>WOB</i> WEIGHT ON BIT	<i>CL</i> PPM CLORIDE ION	<i>TG</i> TRIP GAS
<i>RPM</i> ROTARY REV/MIN	<i>Rm</i> MUD RESISTIVITY	<i>SG</i> SURVEY GAS
<i>PP</i> PUMP PRESSURE	<i>Rmf</i> FILTRATE RESISTIVITY	<i>WG</i> WIPER GAS
<i>SPM</i> STROKES/MIN	<i>PR</i> POOR RETURNS	<i>CG</i> CONNECTION GAS
<i>MW</i> MUD WEIGHT	<i>LAT</i> LOGGED AFTER TRIP	
<i>VIS</i> FUNNEL VISCOSITY	<i>LAS</i> LOGGED AFTER SURVEY	









4400

4500

4600

4700

4800

4900

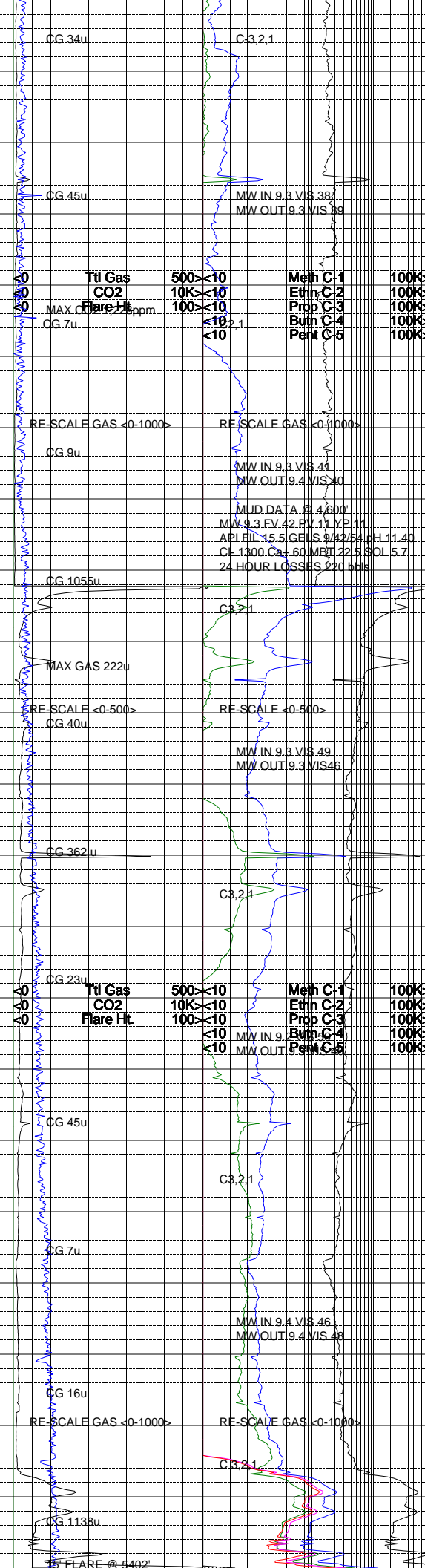
5000

5100

5200

5300

5400



SHALE = VARICOLORED; SME MOTTLED; EXAMPLES; DOM YELLOW TO GRAY; FIRM TO MOD HARD; PLATY TO SLI NODULAR TO MASSIVE CUTTINGS; SLI CALCAREOUS; DULL EARTHY LUSTER; SILTY IN PART; SMOOTH TO SILTY TEXTURE; SME ISOLATED QUARTZ GRs; SOME VISIBLE SANDSTONE PARTINGS; GEN NO VISIBLE STRUCTURE; INTERBEDDED WITH SILTSTONE.

SILTSTONE = VARICOLORED; YELLOW; GRAY; BROWN; PURPLE; MOD HARD; SLI PLATY TO MASSIVE CUTTINGS; IRREGULAR FRACTURE; MOD CALCAREOUS; SILTY TO GRITTY TEXTURE; DULL TO WAXY LUSTER; VERY FINE MICA; VERY FINE CARBONACEOUS MATERIAL; THINLY BEDDED WITH SHALE; GRADING TO SILTY SHALE; NO VISIBLE STRUCTURE.

SHALE = LIGHT GRAY WITH HUES OF YELLOW CRUMBLY TO BRITTLE TENACITY; SUB PLANAR TO IRREGULAR FRACTURE; SUB TABULAR TO SUB WEDGELIKE CUTTINGS HABIT; DULL TO WAXY LUSTER; SILTY TO GRITTY TEXTURE.

SANDSTONE = VARI COLORED, YELLOWS, LIGHT BROWN, ORANGE, OFF WHITE; FINE GRAIN; POOR SORTING; SUB ROUNDED TO SUB ANGULAR; LOW SPHERICITY; SOFT TO EASILY FRIABLE; MODERATE REACTION TO HCL.

SILTSTONE = VARIOUS COLORS, ORANGE, PURPLE, LIGHT BROWN, YELLOW HUES; BRITTLE TO CRUMBLY TENACITY; IRREGULAR TO SLIGHTLY PLANAR, OCCASIONAL CONCHOIDAL FRACTURE SUB PLATY TO TABULAR CUTTING HABIT, DULL TO EARTHY LUSTER; GRITTY TEXTURE.

SHALE = VERY LIGHT GRAY TO MEDIUM GRAY BRITTLE TO CRUMBLY TENACITY; SUB PLANAR TO MOTTLED FRACTURE; SUB PLATY TO SUB TABULAR CUTTINGS HABIT; DULL WAXY TO SLIGHTLY GREASY LUSTER; SLIGHTLY SILTY TO CLAYEY TEXTURE.

SANDSTONE = LIGHT GRAYISH WHITE TO VERY LIGHT BROWN, YELLOWISH HUES; FINE TO MEDIUM GRAIN; FAIR TO POOR SORTING; SUB ROUNDED TO SUB ANGULAR; LOW SPHERICITY; EASILY FRIABLE; GRAIN SUPPORTED; MODERATE REACTION TO HCL.

SILTSTONE = VARIOUS COLORS, GRAYS, YELLOW, ORANGE, BROWNS; DENSE TO BRITTLE TENACITY; IRREGULAR TO SUB PLANAR FRACTURE; SUB TABULAR TO SUB PLATY CUTTINGS HABIT; DULL TO EARTHY LUSTER; GRITTY TO ABRASIVE TEXTURE.

SANDSTONE = OCCASIONAL TRANSLUCENT, WHITE TO LIGHT BROWN, WITH HUES OF ORANGE; FINE TO VERY FINE GRAINED; FAIR SORTING; SUB ROUNDED; LOW SPHERICITY; EASILY FRIABLE; GRAIN SUPPORTED; MODERATE REACTION TO HCL.

SHALE = VERY LIGHT GRAY TO MEDIUM GRAY, SOME MOTTLED HUES OF YELLOW AND GREEN; BRITTLE TO CRUMBLY TENACITY; SUB PLANAR TO IRREGULAR FRACTURE; SUB PLATY TO SUB TABULAR CUTTINGS HABIT; WAXY TO DULL LUSTER; GRITTY TEXTURE.

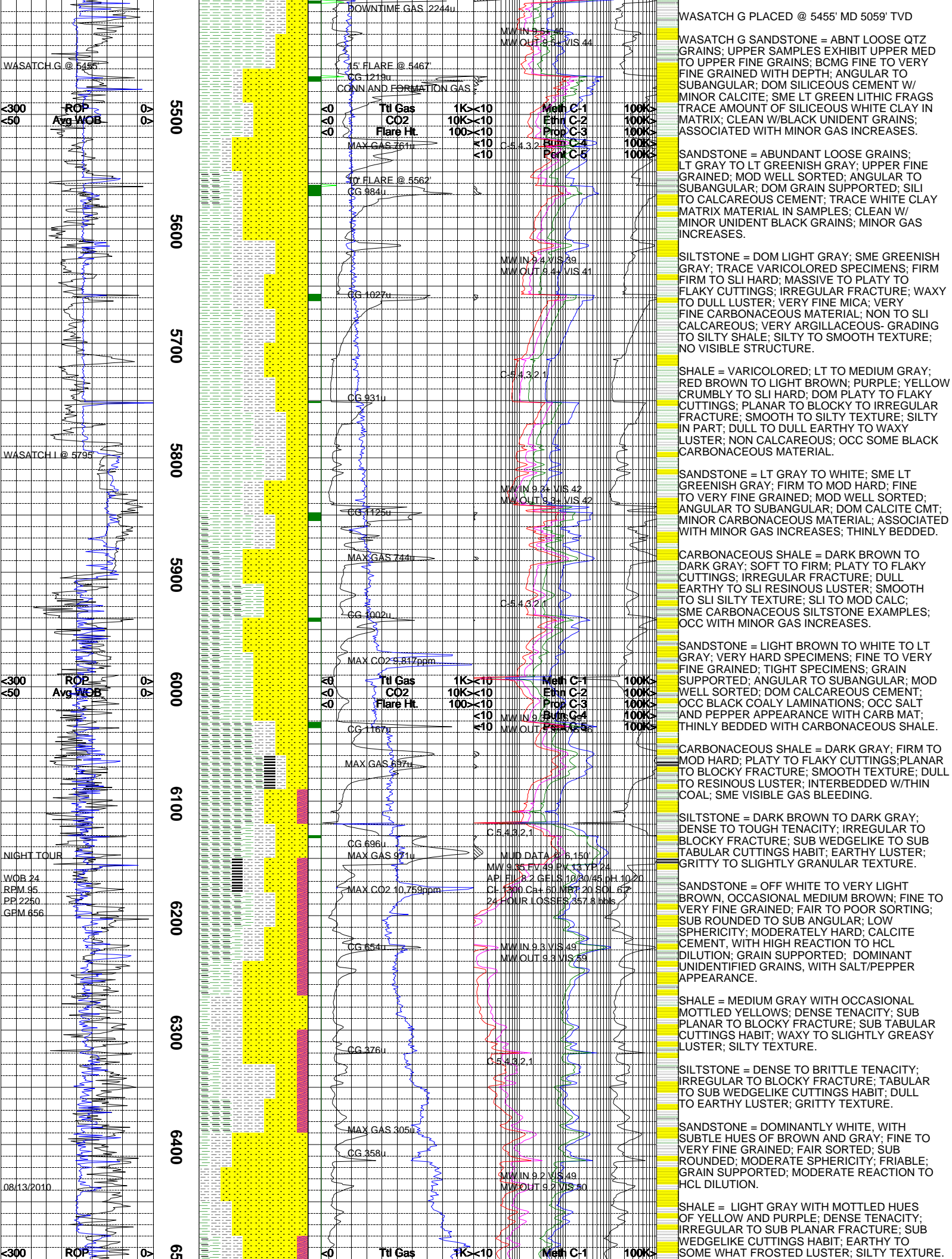
SILTSTONE = VARIOUS COLORS OF PURPLE, ORANGE, YELLOW AND REDDISH HUES; BRITTLE TO CRUMBLY TENACITY; IRREGULAR TO BLOCKY FRACTURE; SUB TABULAR TO SUB WEDGELIKE CUTTINGS HABIT, EARTHY TO DULL LUSTER WITH OCCASIONAL SPARKLING APPEARANCE; GRITTY TEXTURE.

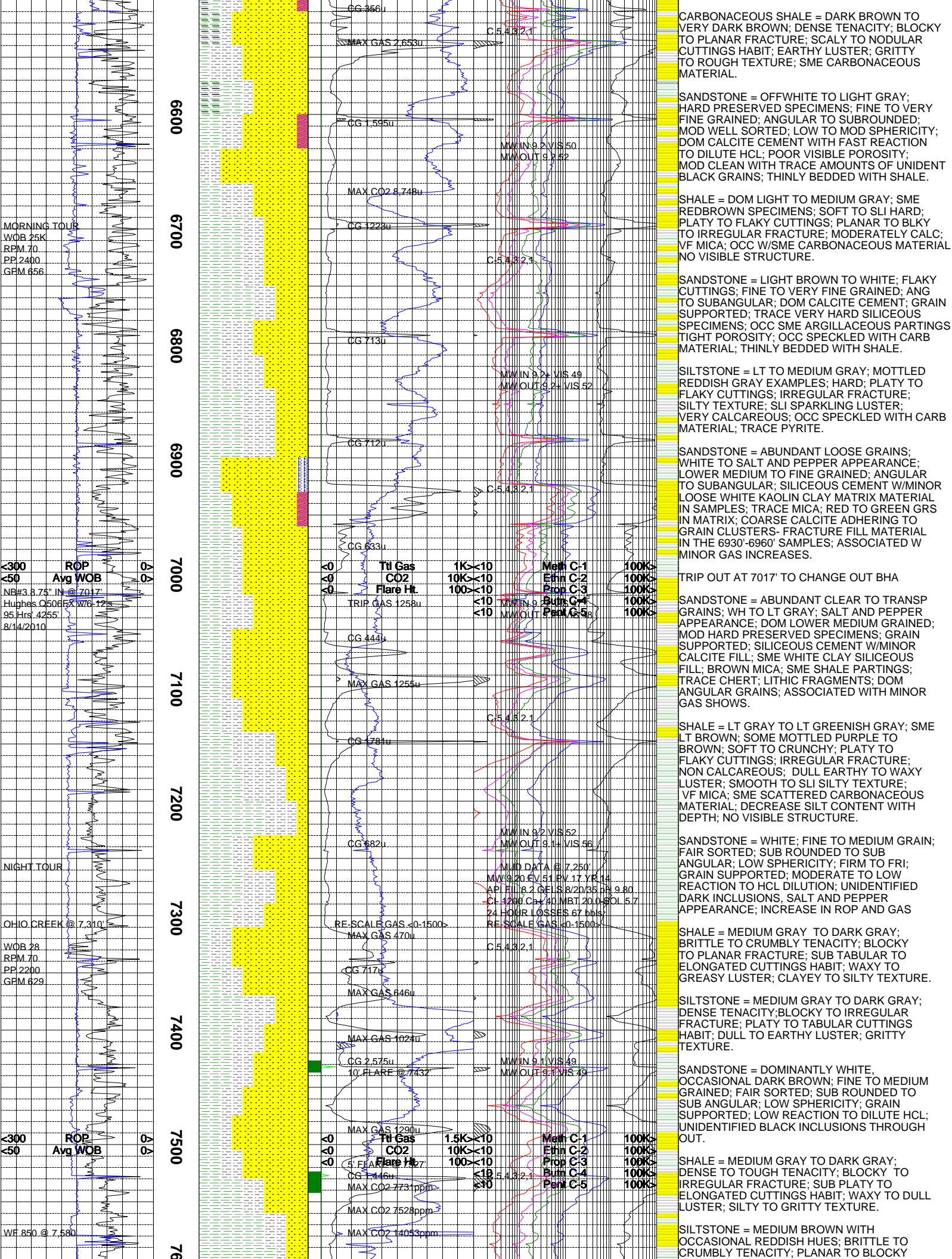
SANDSTONE = WHITE TO VERY LIGHT BROWN FINE TO MEDIUM GRAIN; FAIR SORTED; SUB ROUNDED TO SUB ANGULAR; LOW SPHERICITY EASILY FRIABLE; CALCITE CEMENTATION.

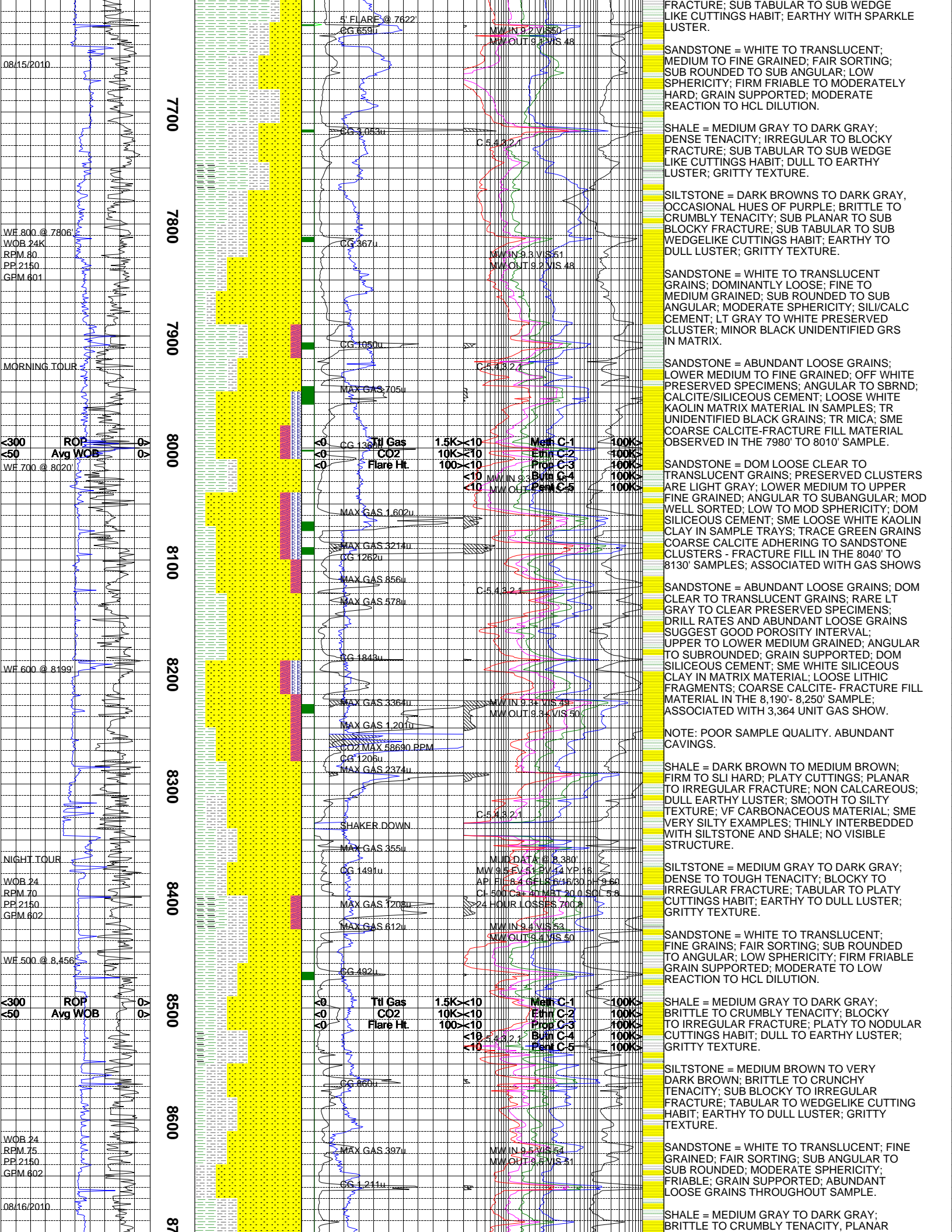
SHALE = LIGHT GRAY TO MEDIUM GRAY, OCCASIONAL MOTTLED APPEARANCE; BRITTLE TO CRUMBLY TENACITY; IRREGULAR TO BLOCKY FRACTURE; SUB TABULAR TO SUB WEDGELIKE; DULL TO SLIGHTLY WAXY LUSTER; SILTY TO SLIGHTLY GRITTY TEXTURE.

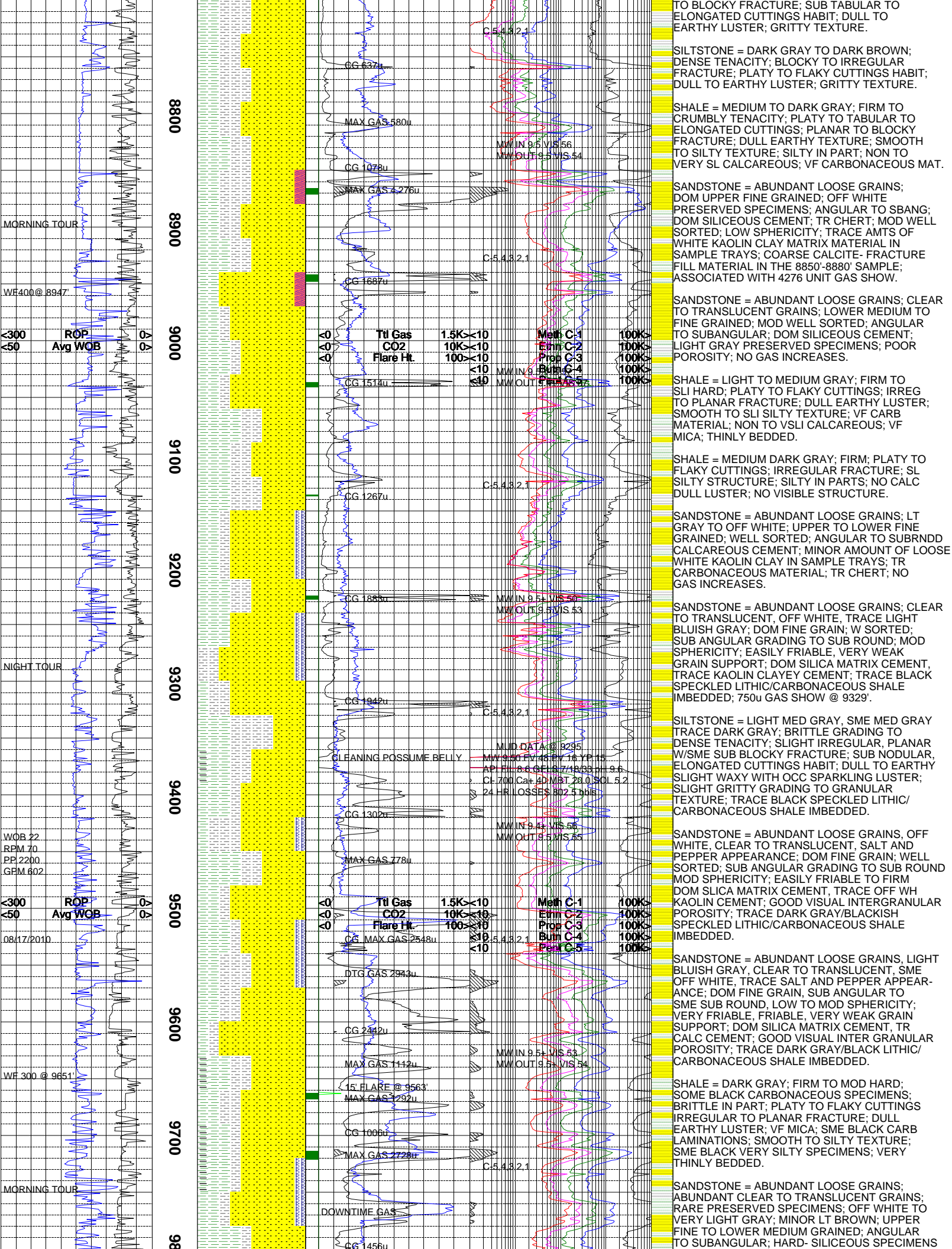
SILTSTONE = LIGHT TO MEDIUM GRAY; FIRM TO CRUMBLY TENACITY; IRREGULAR FRACTURE; SLI CALCAREOUS; VF MICA; DULL EARTHY TO SLI WAXY LUSTER; SMOOTH TO SILTY TEXTURE VARIABLE AMOUNTS OF SILT; NO VISIBLE STRUCTURE.

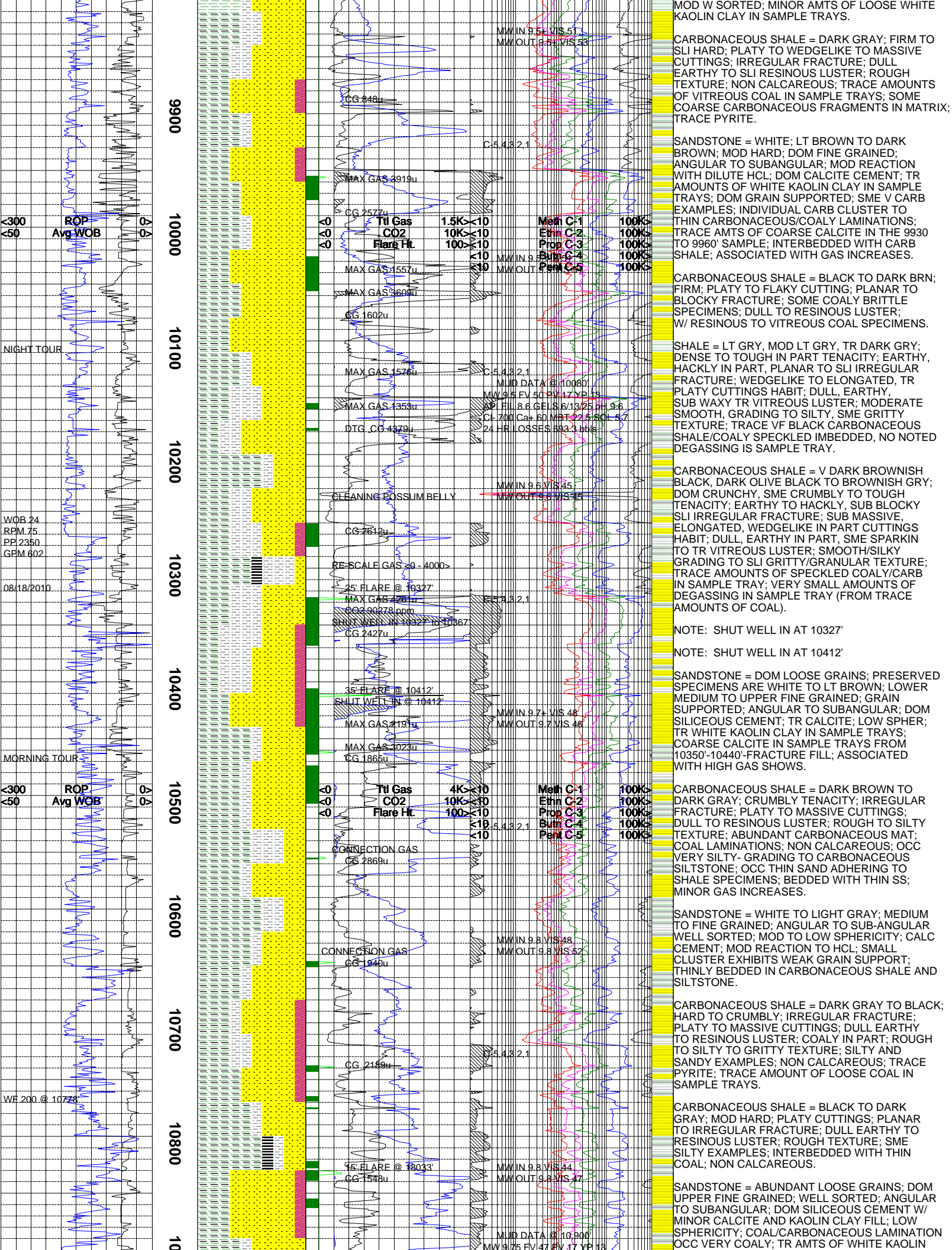
SANDSTONE = DOM LOOSE GRAINS; UPPER MEDIUM TO UPPER FINE LOOSE QUARTZ GRs; RARE WHITE TO LIGHT GRAY PRESERVED SPECIMENS; ANGULAR GRAINS; SILICEOUS/ CALCAREOUS CEMENT; MOD WELL SORTED; TRACE CHERT; SOME LOOSE COARSE CALCITE FRACTURE FILL MATERIAL IN THE 5370' TO 5400' SAMPLE; ASSOCIATED WITH A 469 UNIT GAS SHOW.

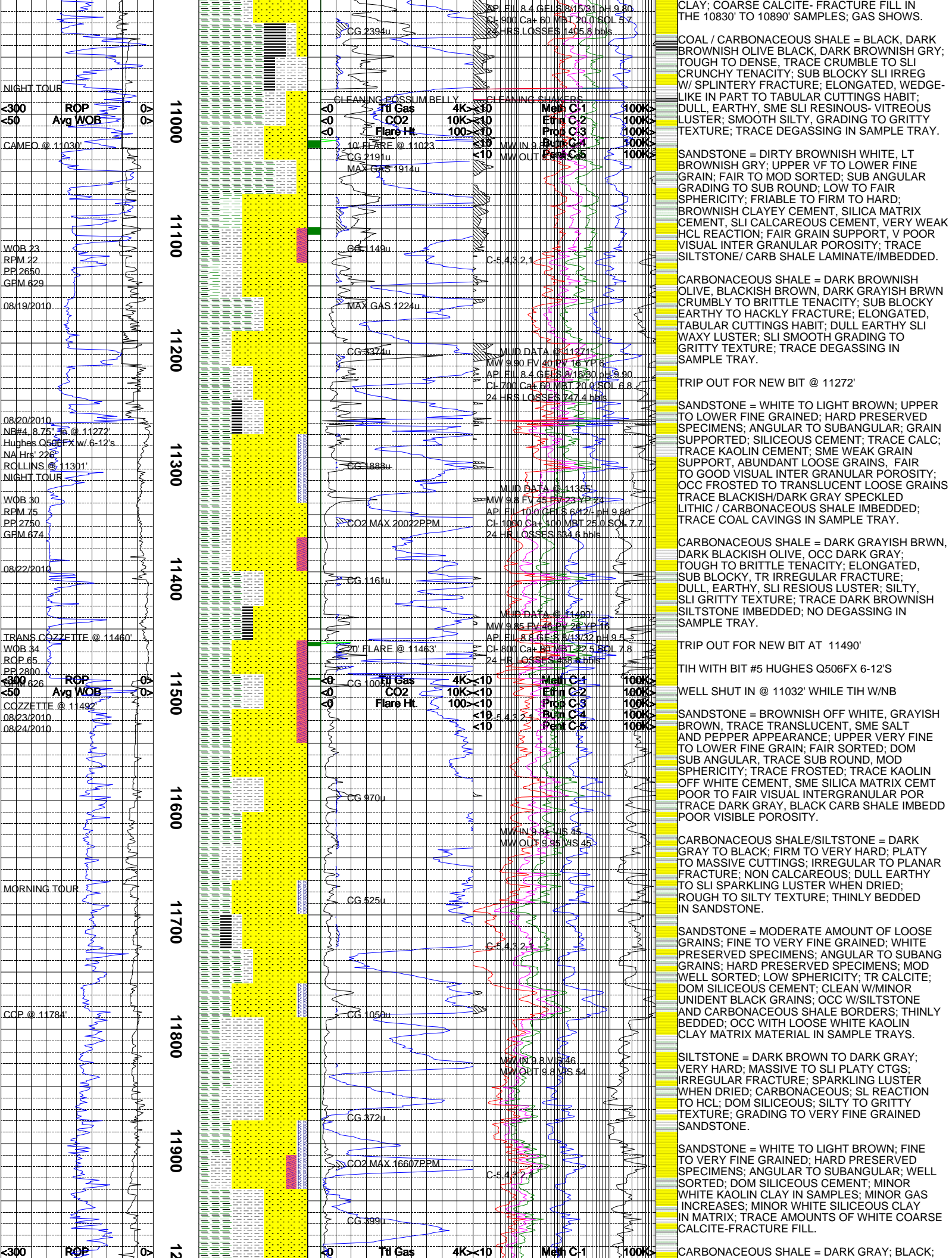


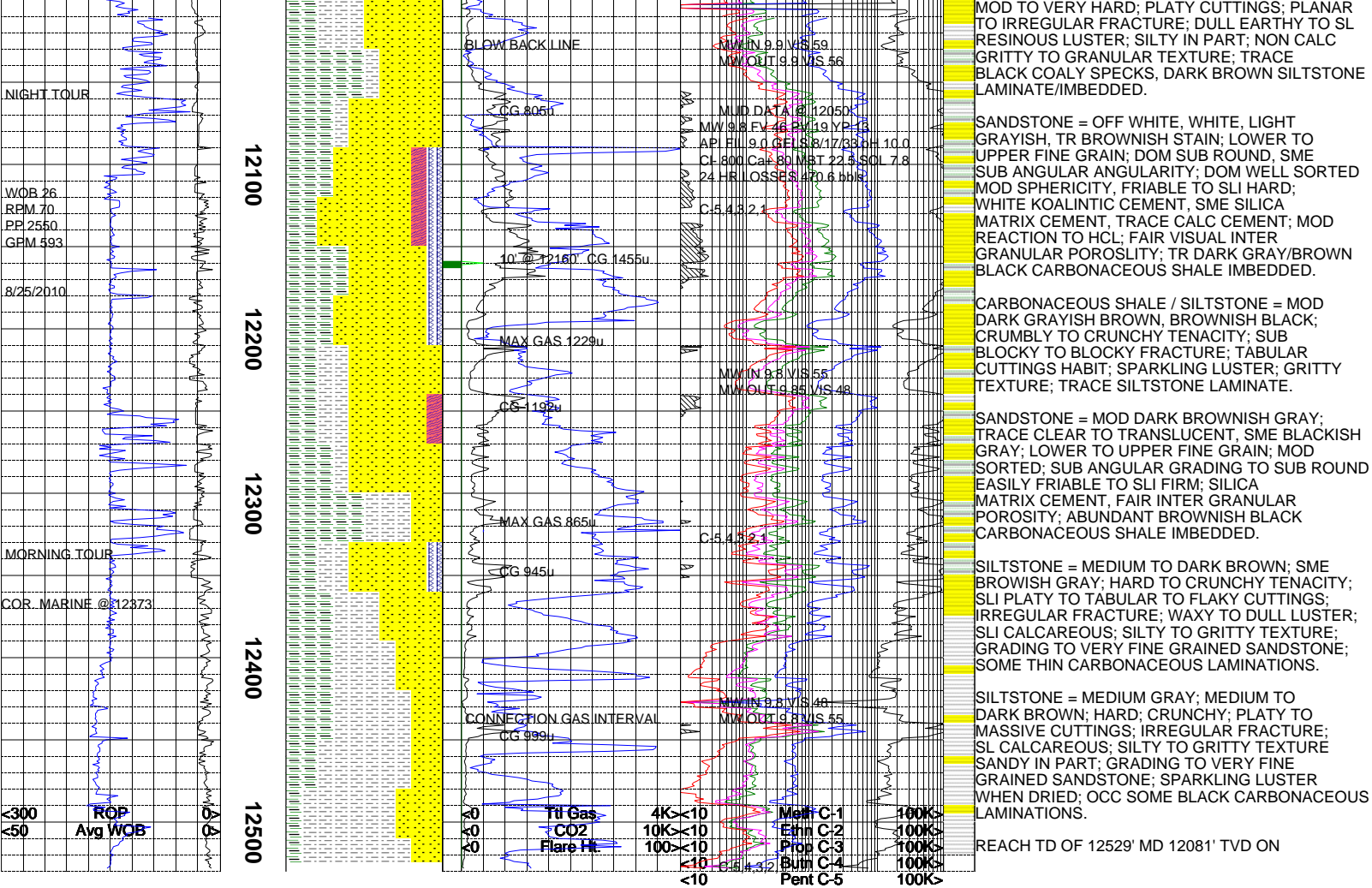












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