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MUDLOG MD

COMPANY	ExxonMobil Corporation
WELL	PCU 296-5A04
FIELD	Piceance Creek
REGION	Rockies
COORDINATES	39.911931000 108.198593000
ELEVATION	7295.8'
COUNTY, STATE	Rio Blanco, CO
API INDEX	051031124500
SPUD DATE	11/09/2009
CONTRACTOR	Helmerich and Payne
CO. REP.	Candice Curtis/Mark Hudon
RIG/TYPE	Flex 4/Rig 321
LOGGING UNIT	031
GEOLOGISTS	Chad Record, Mike Franco, Bart Smelser, Mark Gross
ADD. PERSONS	Mickey Piper, Robert McCane
CO. GEOLOGIST	Chris Alba

LOG INTERVAL

DEPTHS:	4705'	TO	13757'
DATES:	10/31/2010	TO	12/08/2010
SCALE:	1" = 100'		

CASING DATA

16"	AT	150'
10.75"	AT	4616'
7.00"	AT	9992'
4.50"	AT	13735'

MUD TYPES

Water Based	TO	13757'
	TO	
	TO	
	TO	

HOLE SIZE

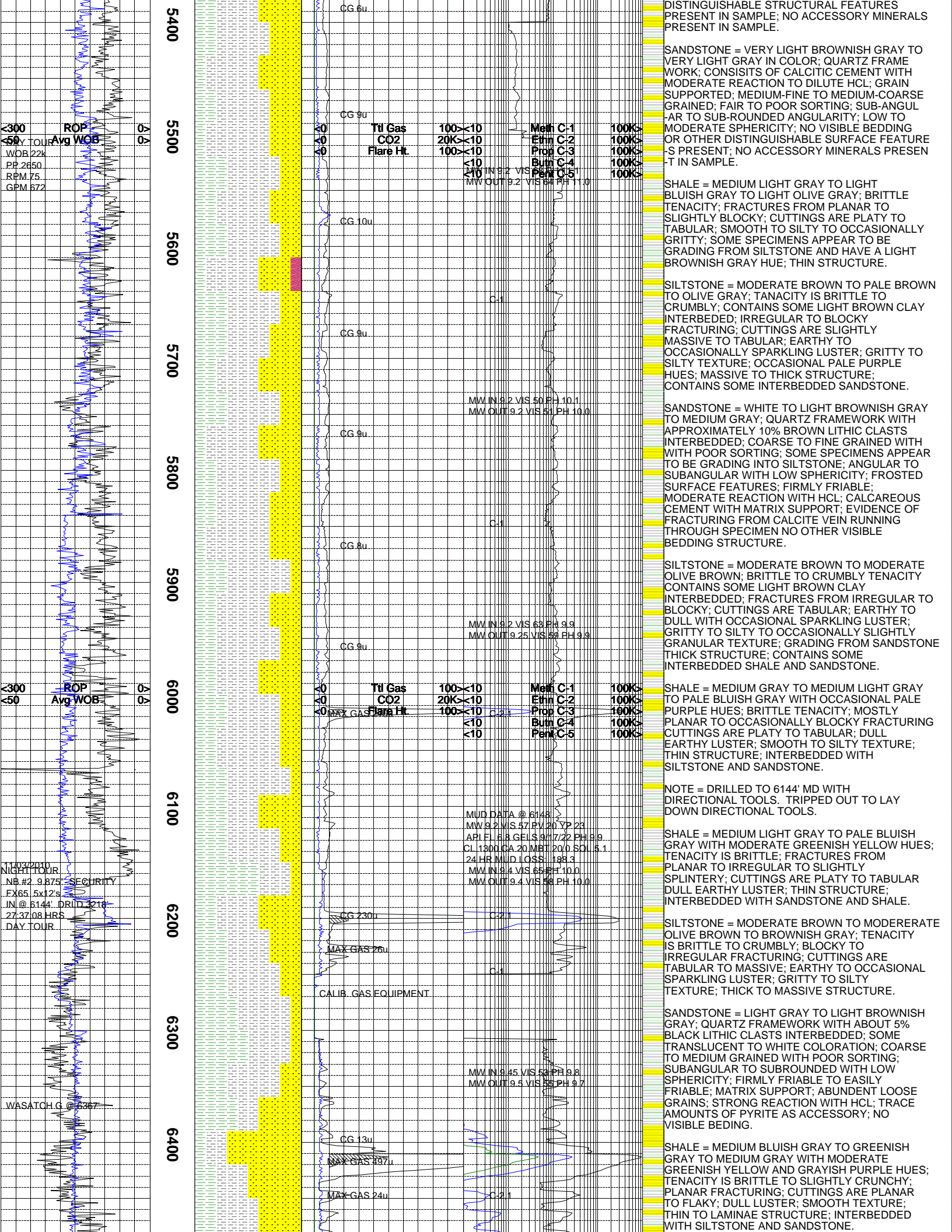
14.75"	TO	4704'
9.875"	TO	10004'
6.125"	TO	13757'
	TO	

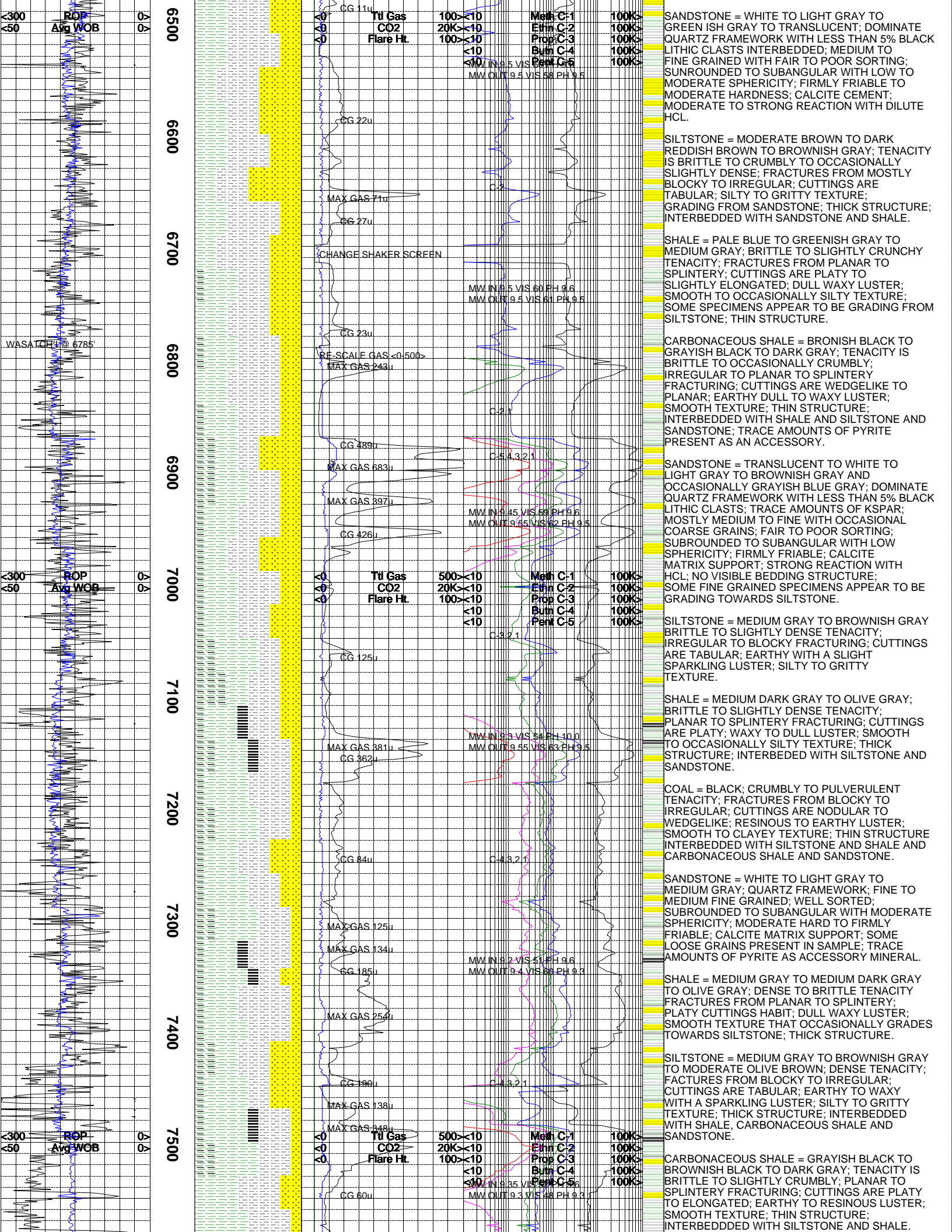
ABBREVIATIONS

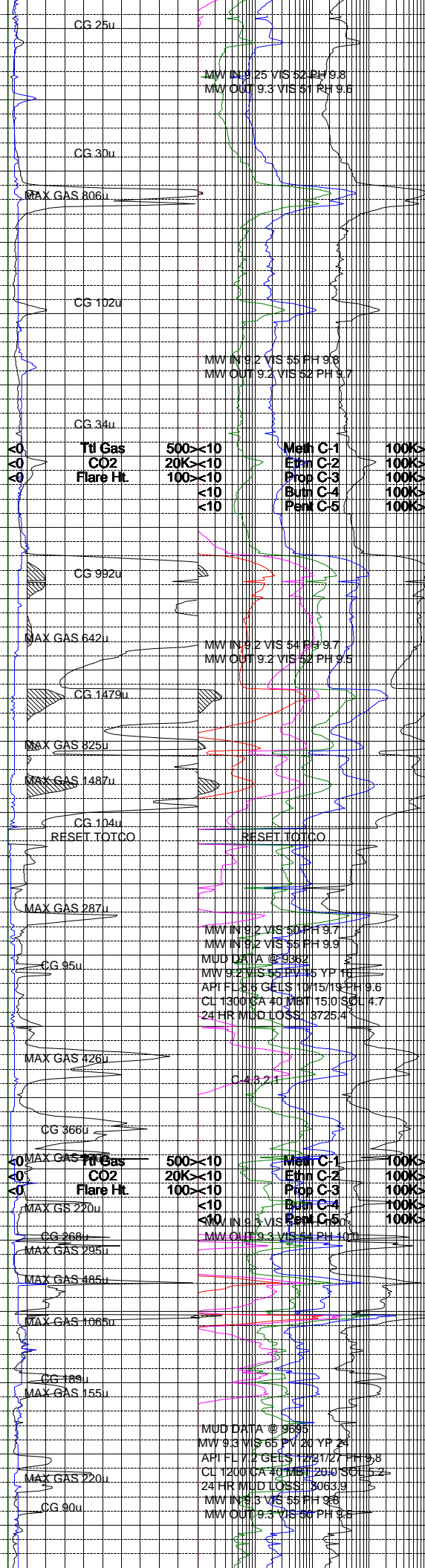
<i>NB</i> NEWBIT	<i>PV</i> PLASTIC VISCOSITY	<i>LC</i> LOST CIRCULATION
<i>RRB</i> RERUN BIT	<i>YP</i> YIELD POINT	<i>CO</i> CIRCULATE OUT
<i>CB</i> CORE BIT	<i>FL</i> FLUID LOSS	<i>NR</i> NO RETURNS
<i>WOB</i> WEIGHT ON BIT	<i>CL</i> PPM CLORIDE ION	<i>TG</i> TRIP GAS
<i>RPM</i> ROTARY REV/MIN	<i>Rm</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	

 ALTERED ZONE	 G CHERT - GLASSY	 FLS FELSIC SILIC DIKE	 TT MARL - CALC	 SS SANDSTONE
 ANDESITE	 P CHERT - PORCEL	 FO FOSSIL	 MP METAMORPHICS	 ST SANDSTONE-TUFFACEOUS
 ANH ANHYDRITE	 TS CHERT - TIGER STRIPE	 GB GABBRO	 MU MUDSTONE	 SC SERICITIZATION
 BAS BASALT	 UD CHERT - UNDIFF	 GT GLASSY TUFF	 OB OBSIDIAN	 SP SERPENTINE
 BE BENTONITE	 CL CLAY	 GR GRANITE	 PA PALEOSOL	 SH SHALE
 BI BIOTITIZATION	 CM CLAY-MUDSTONE	 GW GRANITE WASH	 PH PHOSPHATE	 STS SHALE TUFFACEOUS
 BR BRECCIA	 CT CLYST-TUFFACEOUS	 GD GRANODIORITE	 PR PORCELANITE	 SF SHELL FRAGMENTS
 CA CALCARENITE	 CH CHLORITIZATION	 GS GYPSUM	 PC PORCELANEOUS CLYST	 SI SIDERITE
 CTU CALCAREOUS TUFF	 CO COAL	 HA HALITE	 PY PYRITE	 SIL SILICIFICATION
 CLU CALCILUTITE	 COG CONGLOMERATE	 HQT HORNBL-QTZ-DIO	 PYR PYROCLASTICS	 SILT SILTSTONE
 CAR CARBONATES	 CONG CONGL. SAND	 IGA IGNEOUS (ACIDIC)	 QD QUARTZ DIORITE	 STT SILTST-TUFFACEOUS
 CMA CARBONACEOUS MAT	 CONGS CONGL. SANDSTONE	 IGB IGNEOUS (BASIC)	 QL QUARTZ LATITE	 TU TUFF
 CAS CARBONACEOUS SH	 COQ COQUINA	 INT INTRUSIVES	 QM QUARTZ MONZONITE	 VCS VOLCANICLASTICS SEDS
 CCC CEMENT CONTAM.	 DAC DACITE	 KA KAOLINITIC	 RC RECRYSTALLIZED CALCITE	 VOL VOLCANICS
 CHK CHALK	 DIA DIATOMITE	 LIM LIMESTONE	 RH RHYOLITE	
 CRT CRYSTALLINE TUFF	 DIO DIORITE	 LIT LITHIC TUFF	 SA SALT	
CRA CHERT - ARGILL	DOLO DOLOSTONE	MD MARL - DOLO	SA SAND	

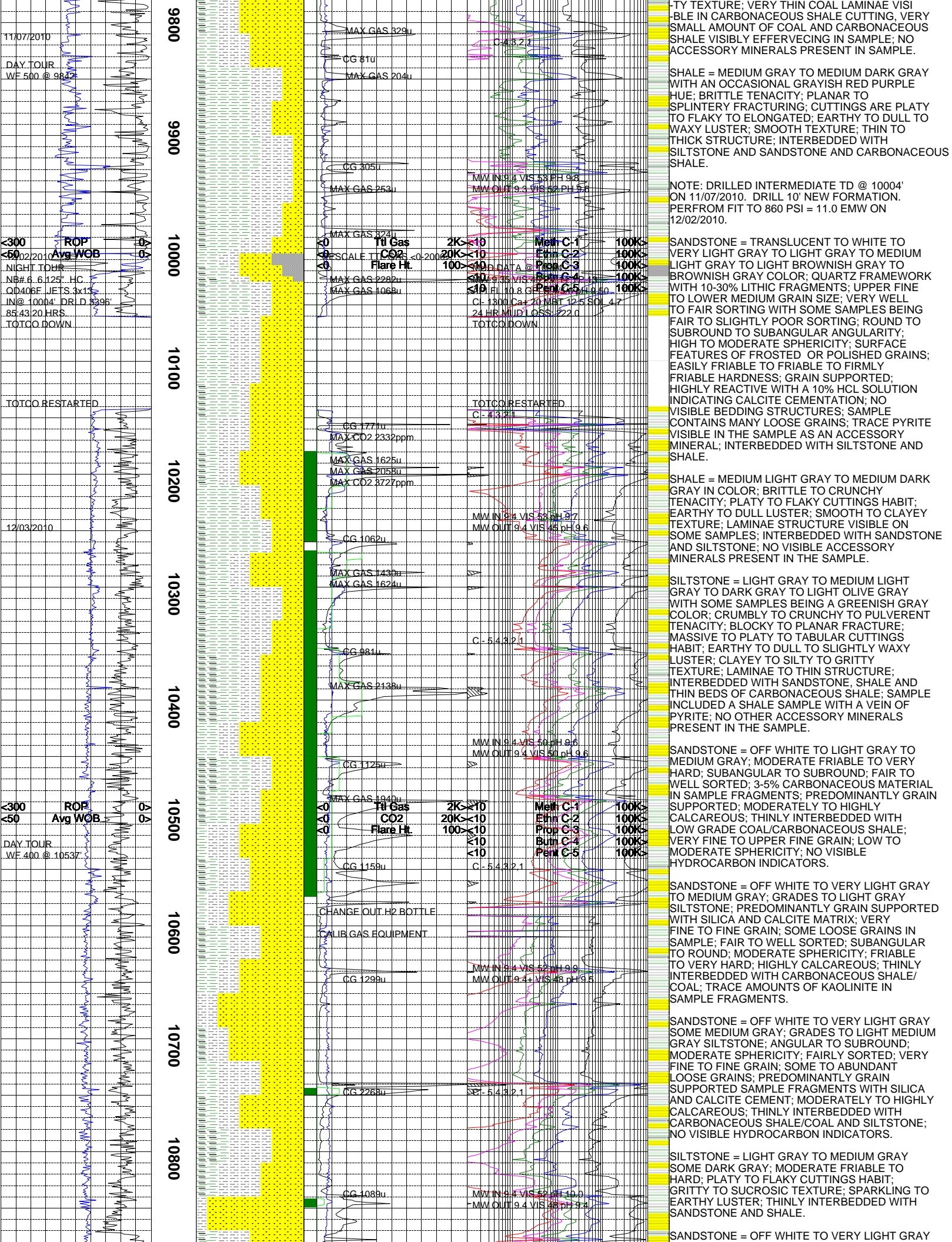
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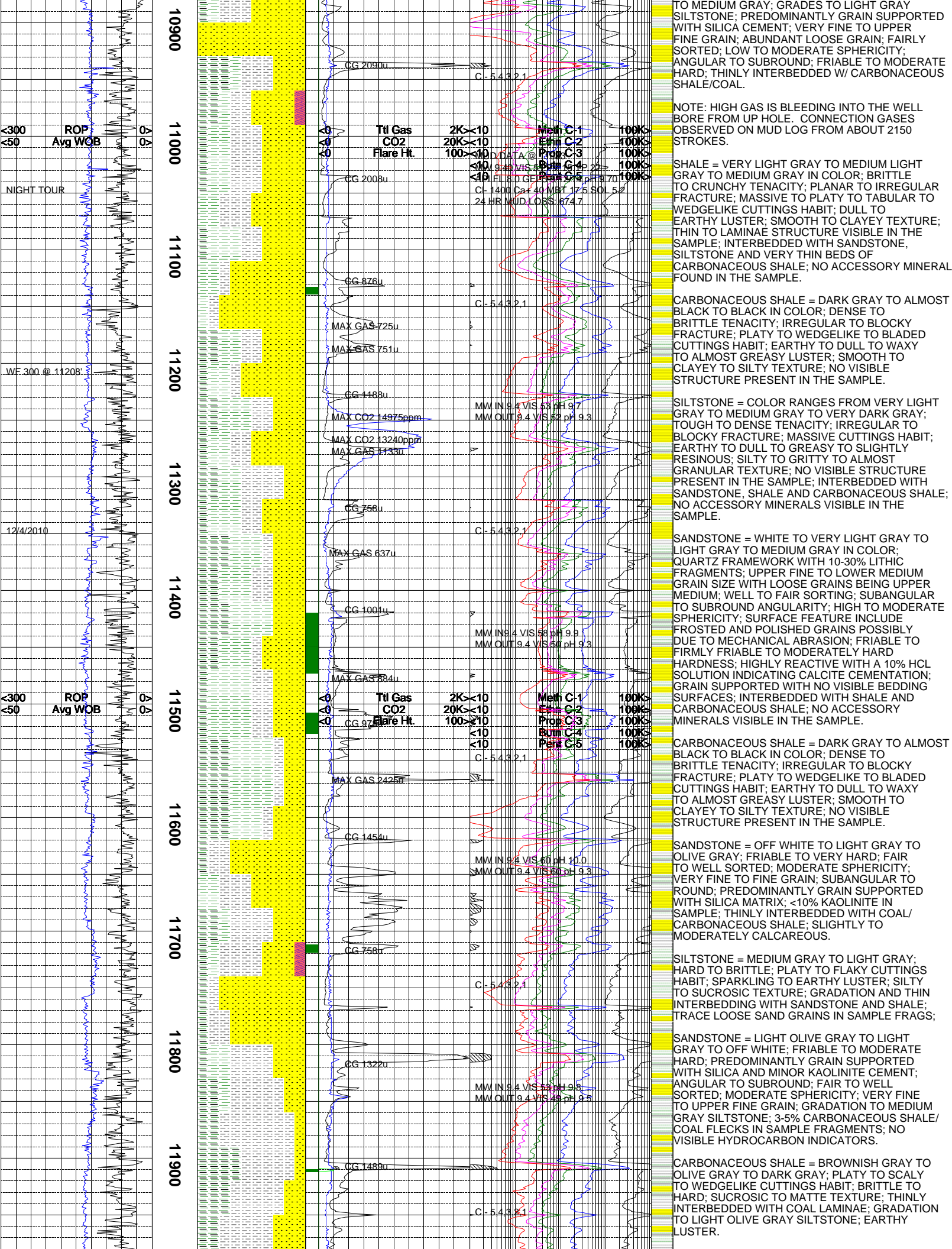


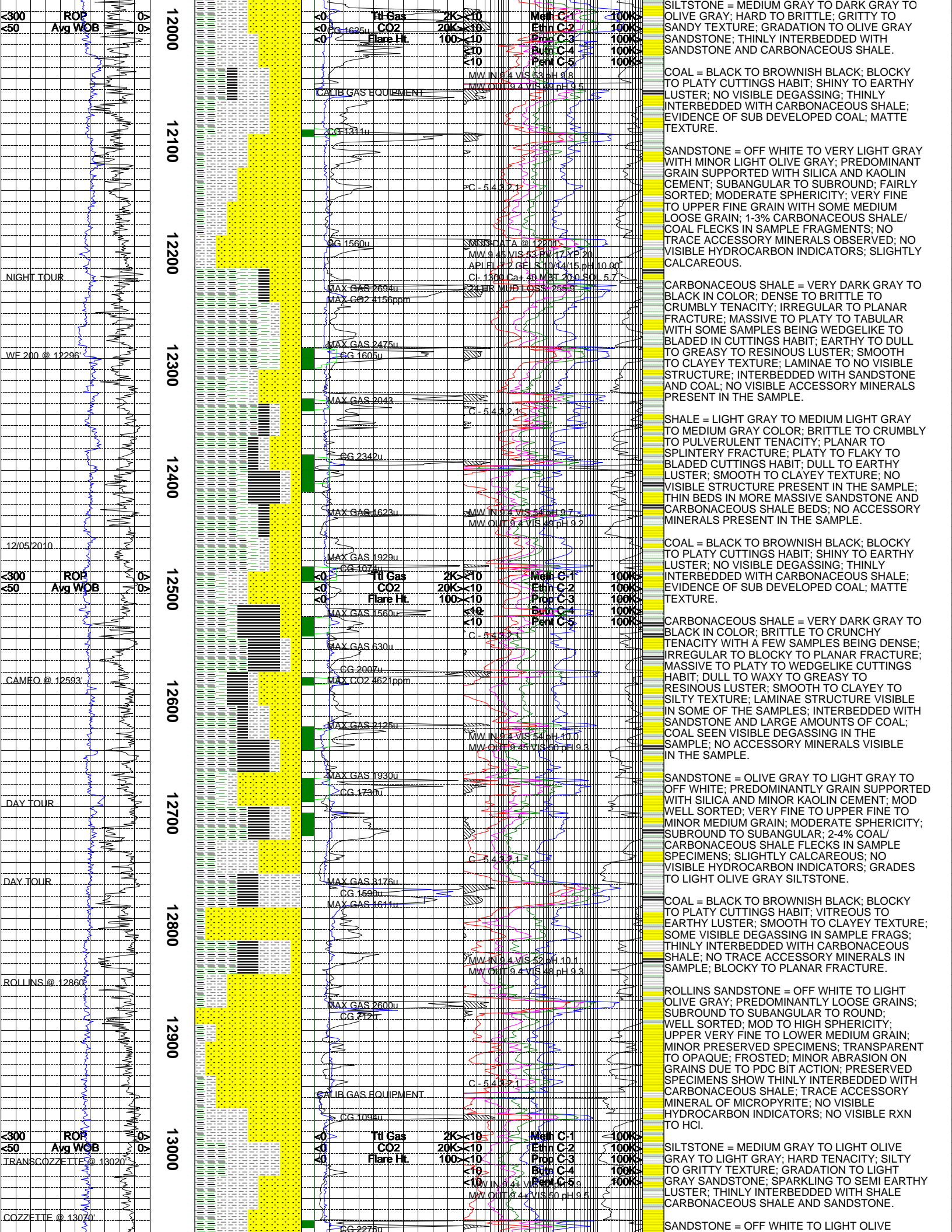


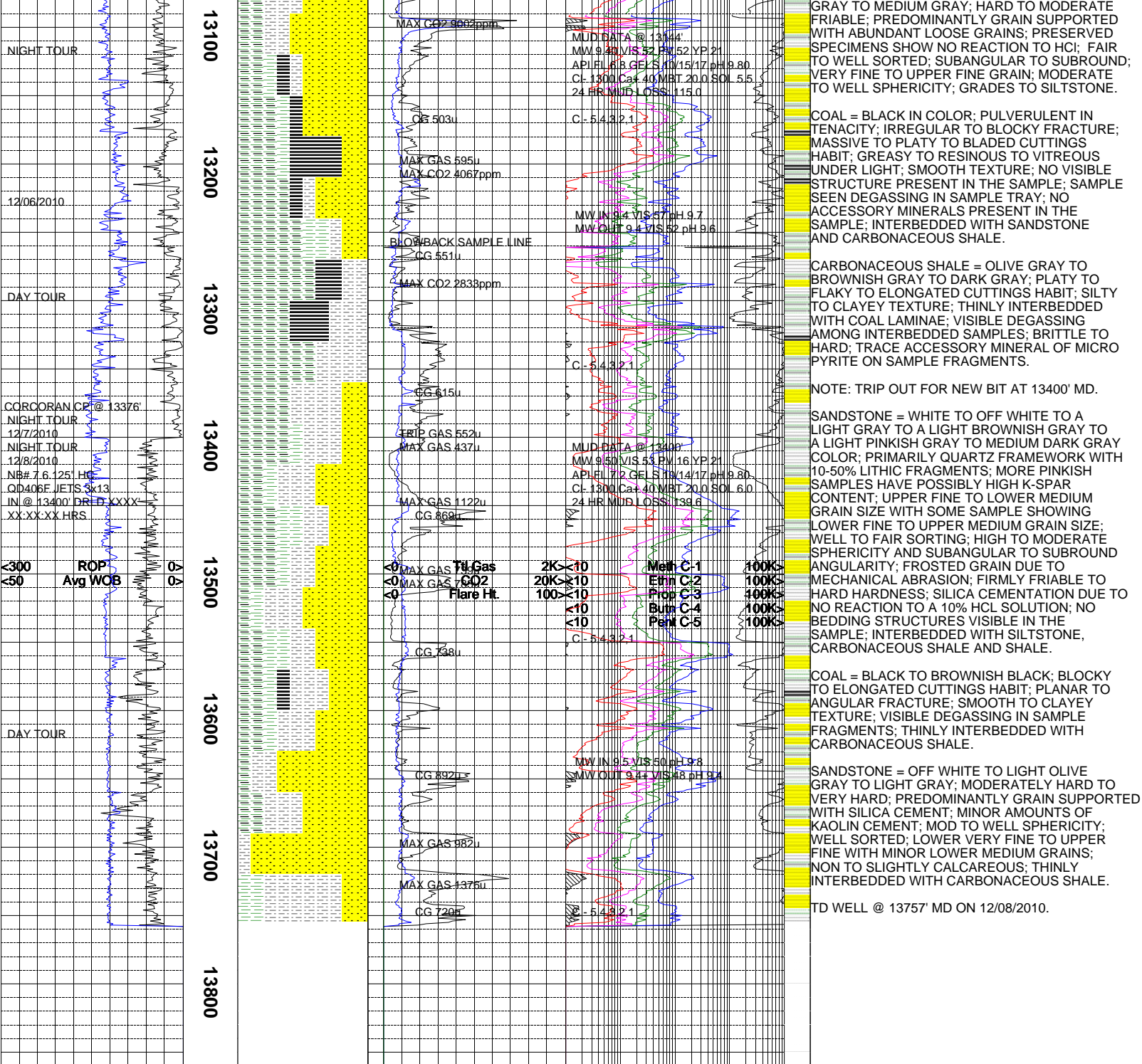


CARBONACEOUS SHALE = BROWNISH GRAY TO DARK BROWNISH GRAY TO BROWNISH BLACK IN COLOR; MODERATELY DENSE TO SLIGHTLY CRUMBLY TENACITY; IRREGULAR TO SUB-BLOCKY TO EARTHY-HACKLY FRACTURE; SUB-TABULAR TO SUB-NODULAR TO OCCASIONAL WEDGE LIKE TO ELONGATED CUTTINGS HABIT; DULL TO EARTHY DULL TO OCCASIONAL VERY SLIGHTLY SEMI-SPARKLING LUSTER; SEMI-SMOOTH TO SLIGHTLY CLAYEY TO VERY SLIGHTLY GRIT









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