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MUDLOG MD

COMPANY ExxonMobil Production

WELL PCU296-5A05

FIELD PICEANCE CREEK

REGION ROCKYS

COORDINATES 39.911890000 Deg N
108.198602000 Deg W

ELEVATION 7295.9'

COUNTY, STATE RIO BLANCO, CO

API INDEX 051031124400

SPUD DATE 11/14/2009

CONTRACTOR HE

CO. REP. CANDICE CURTIS

RIG/TYPE 321, FLEX 4

LOGGING UNIT 31

GEOLOGISTS C. RECORD / B. SMELSER
M. FRANCO

ADD. PERSONS M. PIPER
R. McCANE

CO. GEOLOGIST CHRIS ALBA

LOG INTERVAL

DEPTHS: 4400' **TO** 13721'
DATES: 11/11/2010 **TO** 11/28/2010
SCALE: 5"=100'

CASING DATA

16.00" **AT** 150'
10.75" **AT** 4662'
7.00" **AT** 9954'
4.5" **AT** 13700'

MUD TYPES

WATER BASED **TO** 13721'
TO
TO
TO

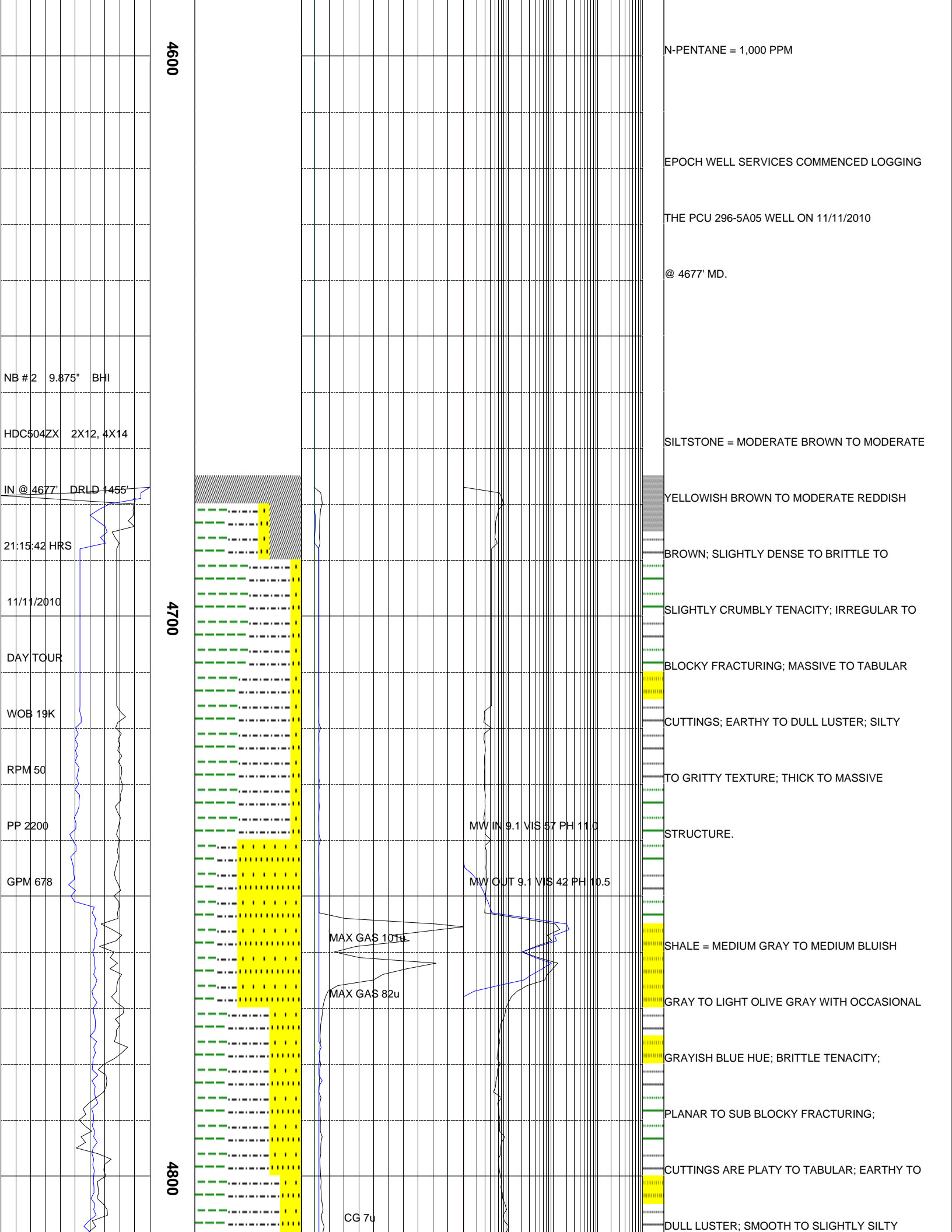
HOLE SIZE

14.75" **TO** 4677'
9.875" **TO** 9967'
6.125" **TO** 13721'
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		CHERT - GLASSY		FELSIC SILIC DIKE		MARL - CALC		SANDSTONE
	ANDESITE		CHERT - PORCEL		FOSSIL		METAMORPHICS		SANDSTONE-TUFFACEOUS
	ANHYDRITE		CHERT - TIGER STRIPE		GABBRO		MUDSTONE		SERICITIZATION
	BASALT		CHERT - UNDIFF		GLASSY TUFF		OBSIDIAN		SERPENTINE
	BENTONITE		CLAY		GRANITE		PALEOSOL		SHALE
	BIOTITIZATION		CLAY-MUDSTONE		GRANITE WASH		PHOSPHATE		SHALE TUFFACEOUS
	BRECCIA		CLYST-TUFFACEOUS		GRANODIORITE		PORCELANITE		SHELL FRAGMENTS
	CALCARENITE		CHLORITIZATION		GYPSUM		PORCELANEOUS CLYST		SIDERITE
	CALCAREOUS TUFF		COAL		HALITE		PYRITE		SILICIFICATION
	CALCILUTITE		CONGLOMERATE		HORNBL-QTZ-DIO		PYROCLASTICS		SILTSTONE
	CARBONATES		CONGL. SAND		IGNEOUS (ACIDIC)		QUARTZ DIORITE		SILTST-TUFFACEOUS
	CARBONACEOUS MAT		CONGL. SANDSTONE		IGNEOUS (BASIC)		QUARTZ LATITE		TUFF
	CARBONACEOUS SH		COQUINA		INTRUSIVES		QUARTZ MONZONITE		VOLCANICLASTICS SEDS
	CEMENT CONTAM.		DACITE		KAOLINITIC		RECRYSTALLIZED CALCITE		VOLCANICS
	CHALK		DIATOMITE		LIMESTONE		RHYOLITE		
	CRYSTALLINE TUFF		DIORITE		LITHIC TUFF		SALT		
	CHERT - ARGILL		DOLOSTONE		MARL - DOLO		SAND		



4600

N-PENTANE = 1,000 PPM

EPOCH WELL SERVICES COMMENCED LOGGING

THE PCU 296-5A05 WELL ON 11/11/2010

@ 4677' MD.

NB #2 9.875" BHI

HDC504ZX 2X12, 4X14

IN @ 4677' DRLD 1455'

21:15:42 HRS

11/11/2010

DAY TOUR

WOB 19K

RPM 50

PP 2200

GPM 678

4700

SILTSTONE = MODERATE BROWN TO MODERATE

YELLOWISH BROWN TO MODERATE REDDISH

BROWN; SLIGHTLY DENSE TO BRITTLE TO

SLIGHTLY CRUMBLY TENACITY; IRREGULAR TO

BLOCKY FRACTURING; MASSIVE TO TABULAR

CUTTINGS; EARTHY TO DULL LUSTER; SILTY

TO GRITTY TEXTURE; THICK TO MASSIVE

STRUCTURE.

SHALE = MEDIUM GRAY TO MEDIUM BLUISH

GRAY TO LIGHT OLIVE GRAY WITH OCCASIONAL

GRAYISH BLUE HUE; BRITTLE TENACITY;

PLANAR TO SUB BLOCKY FRACTURING;

CUTTINGS ARE PLATY TO TABULAR; EARTHY TO

DULL LUSTER; SMOOTH TO SLIGHTLY SILTY

MW IN 9.1 VIS 57 PH 11.0

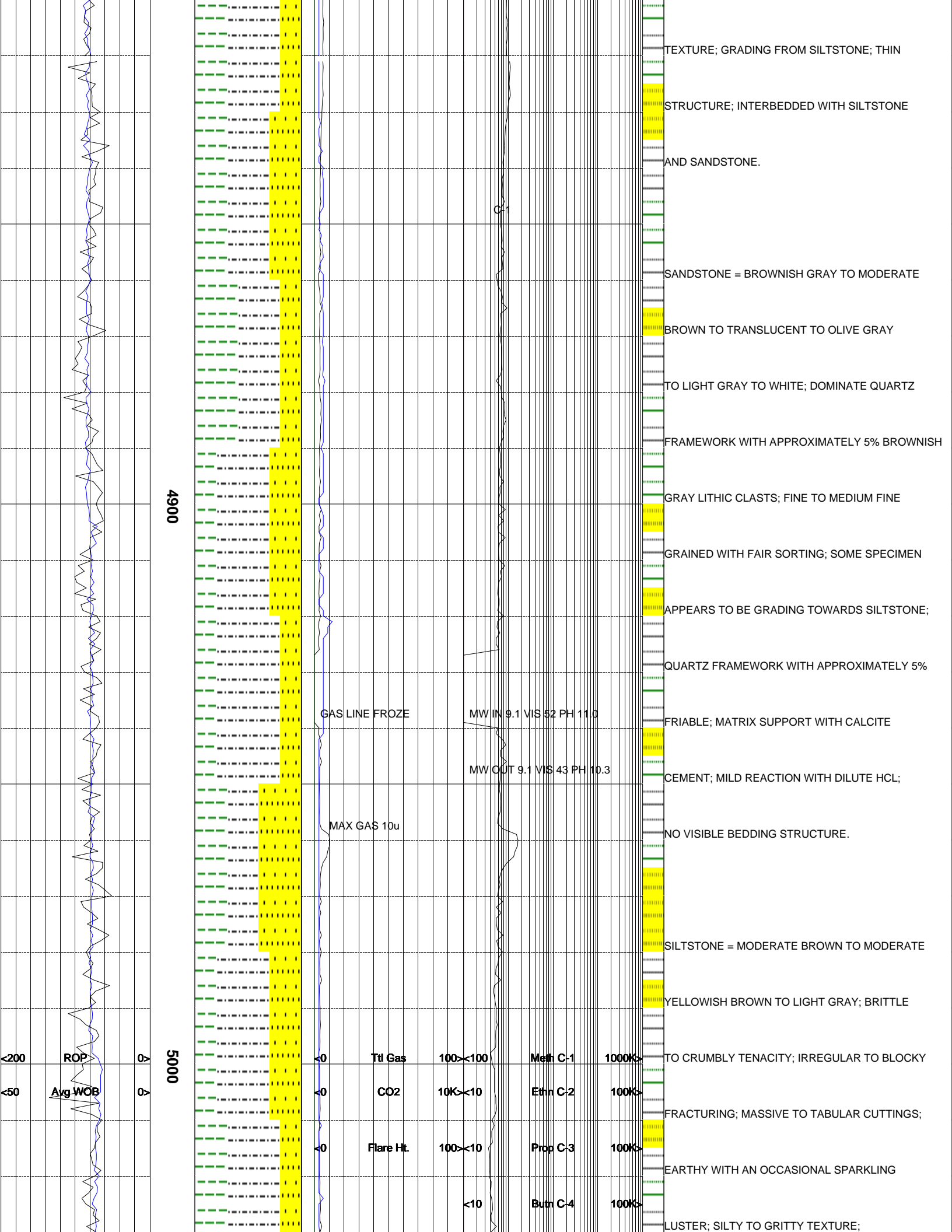
MW OUT 9.1 VIS 42 PH 10.5

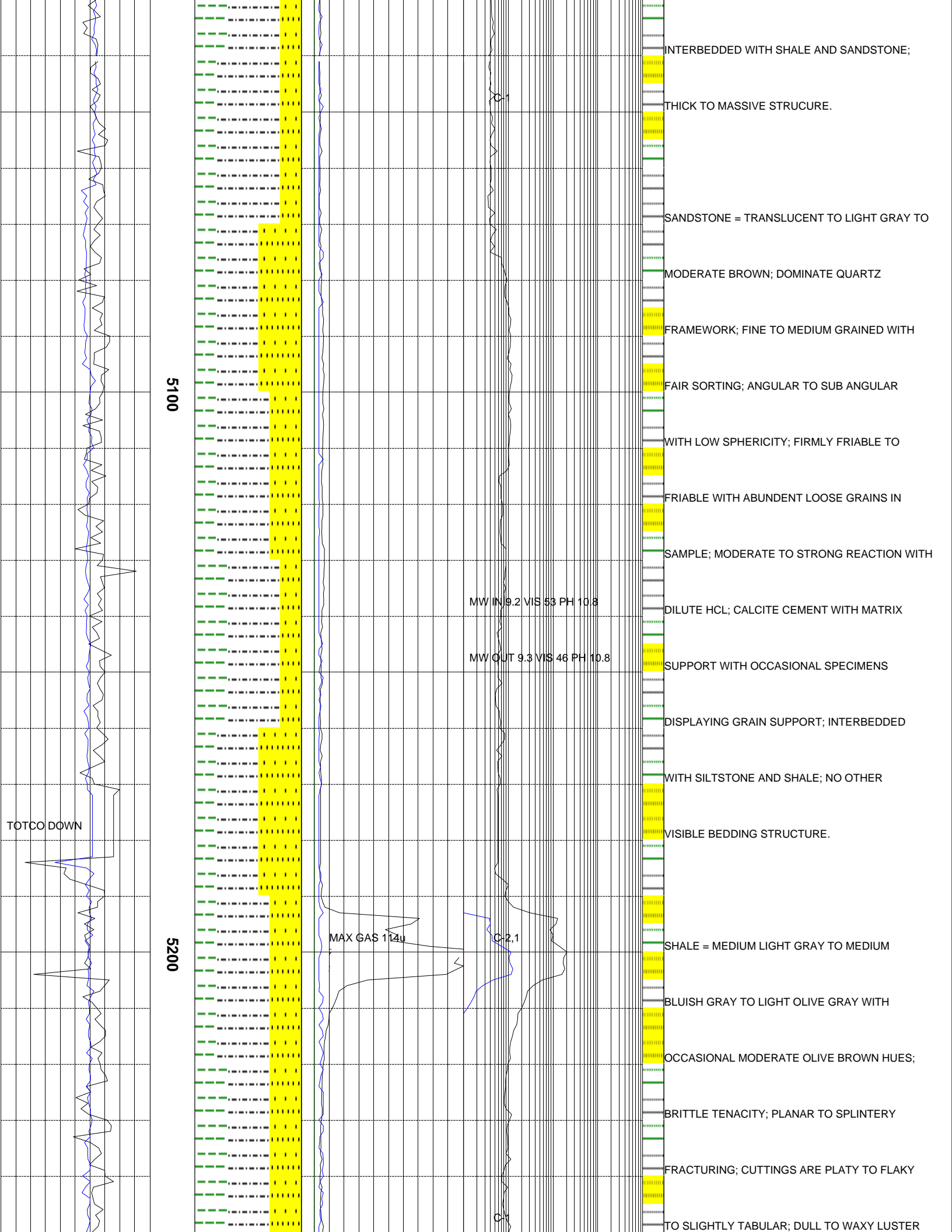
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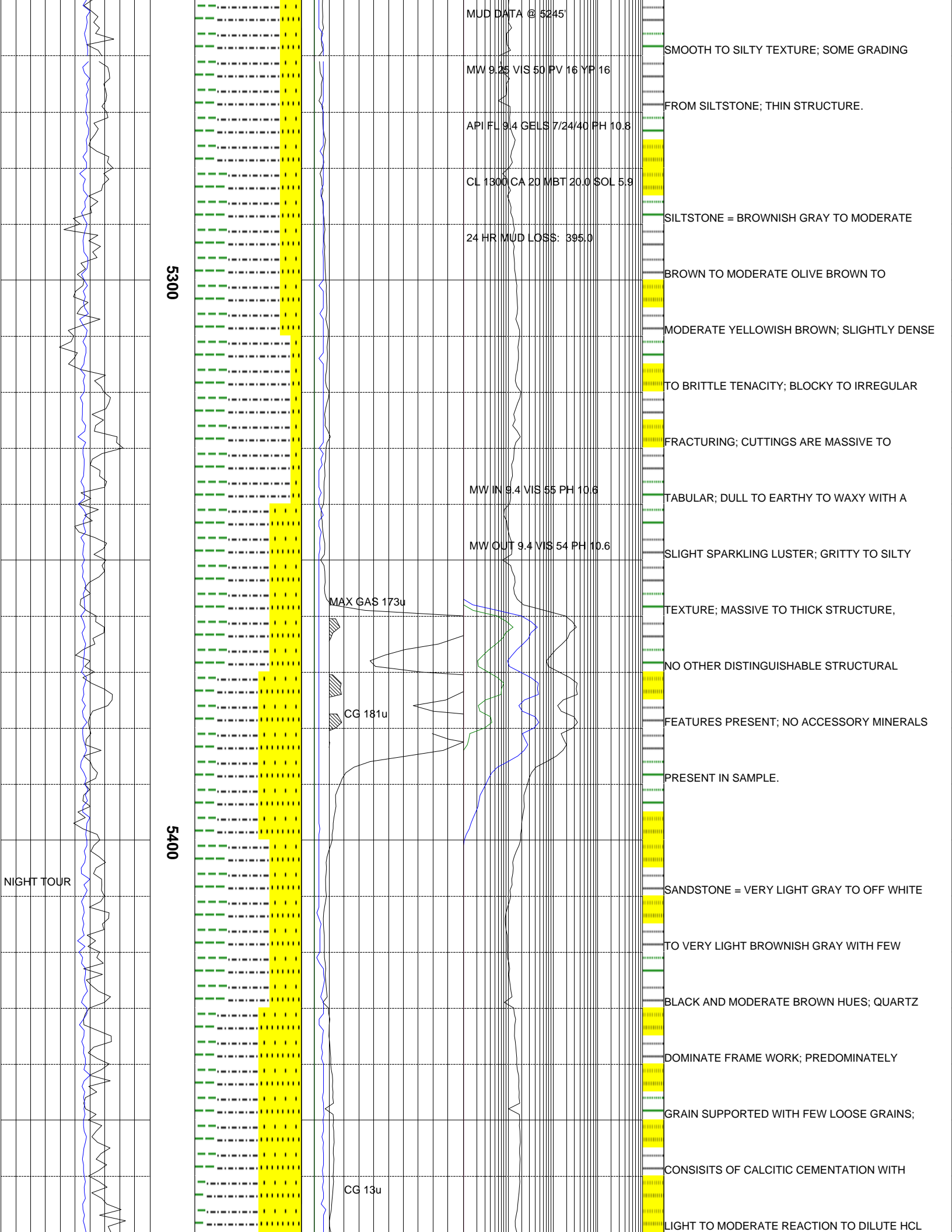
MAX GAS 82u

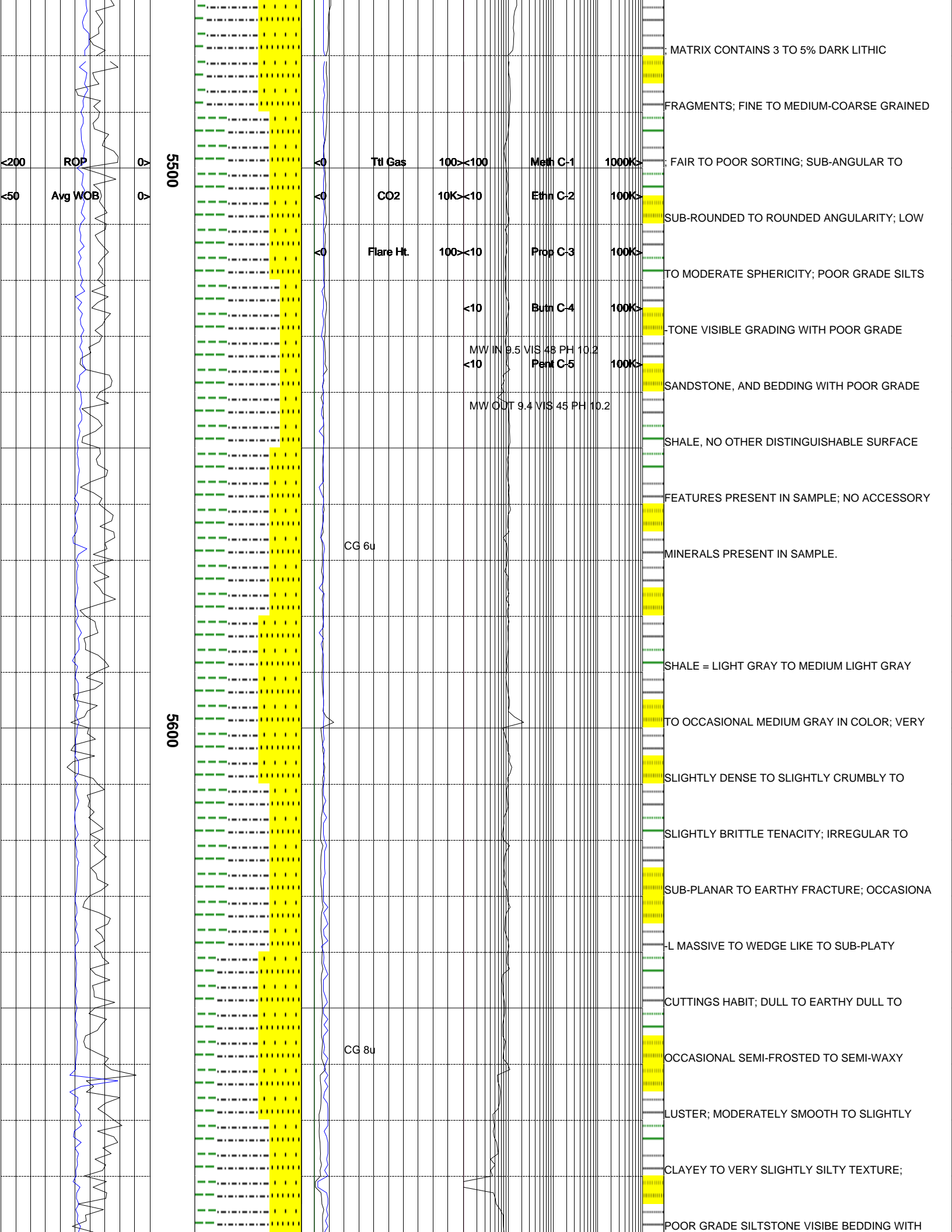
CG 7u

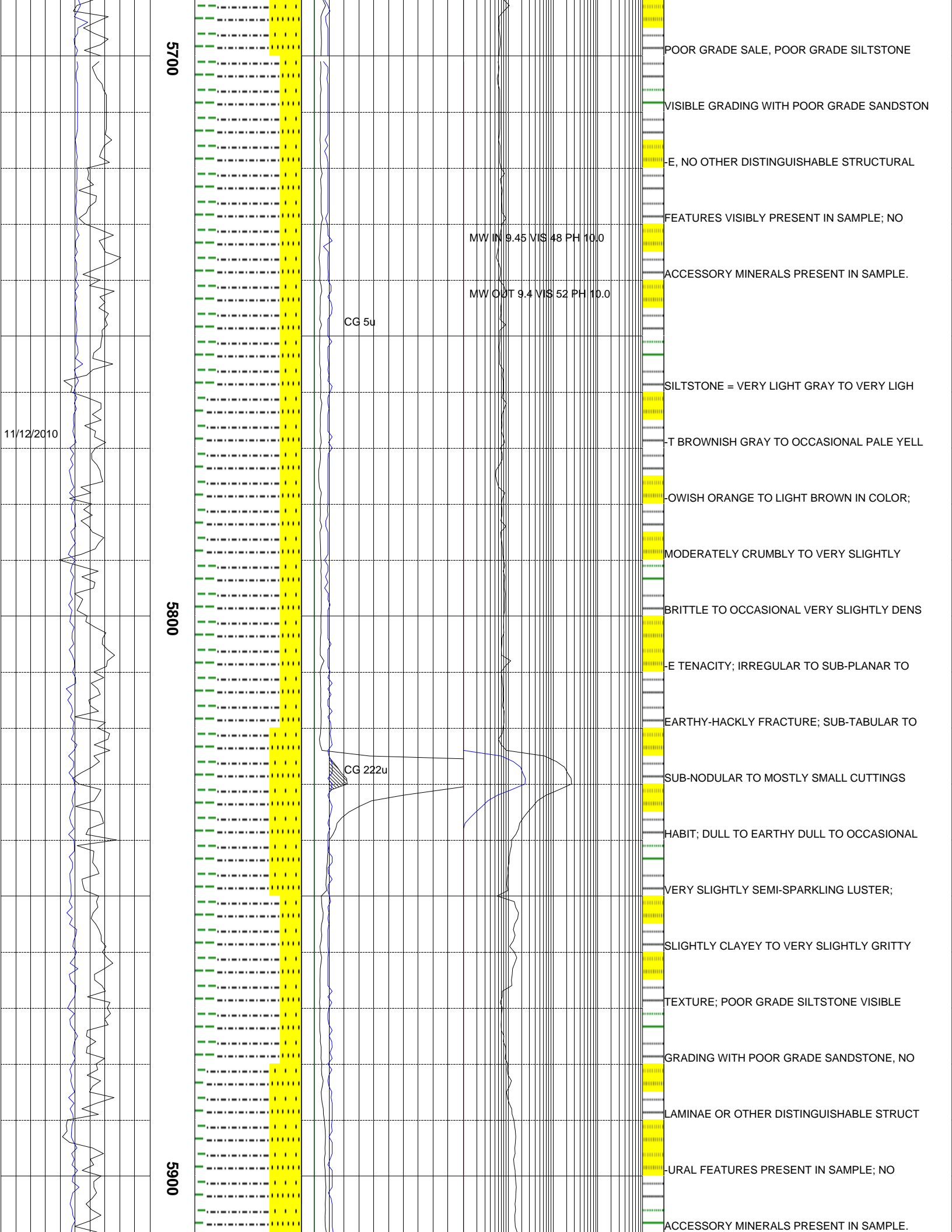
4800

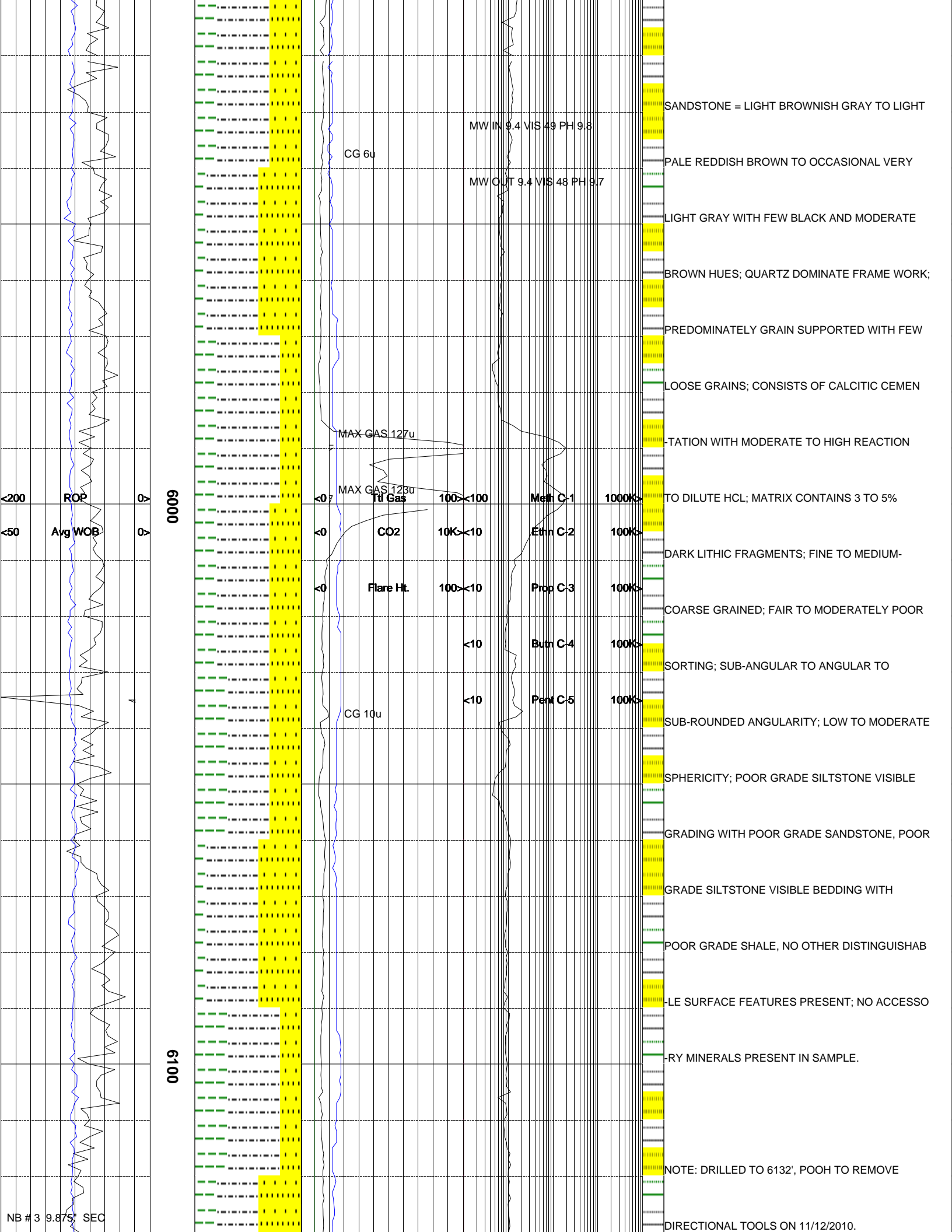


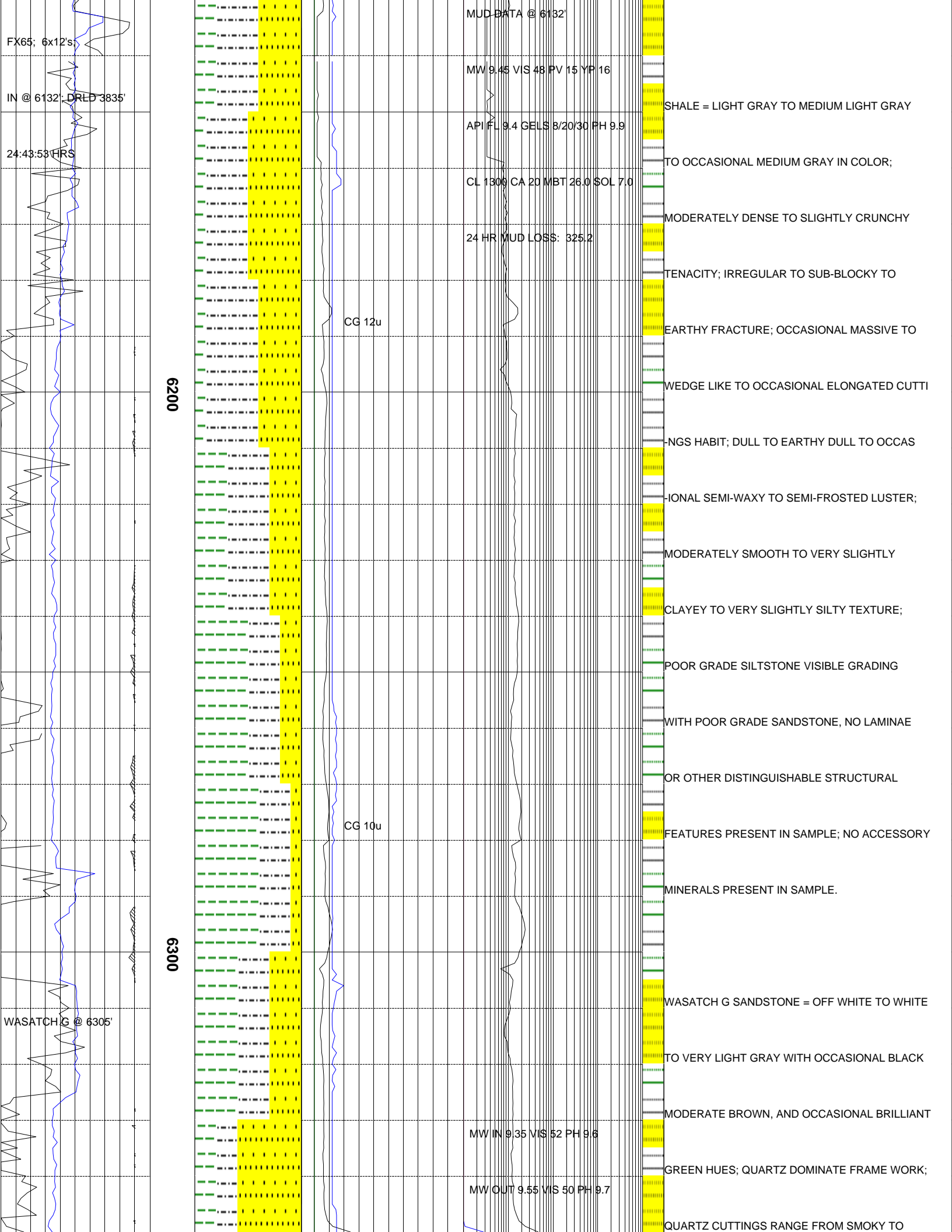


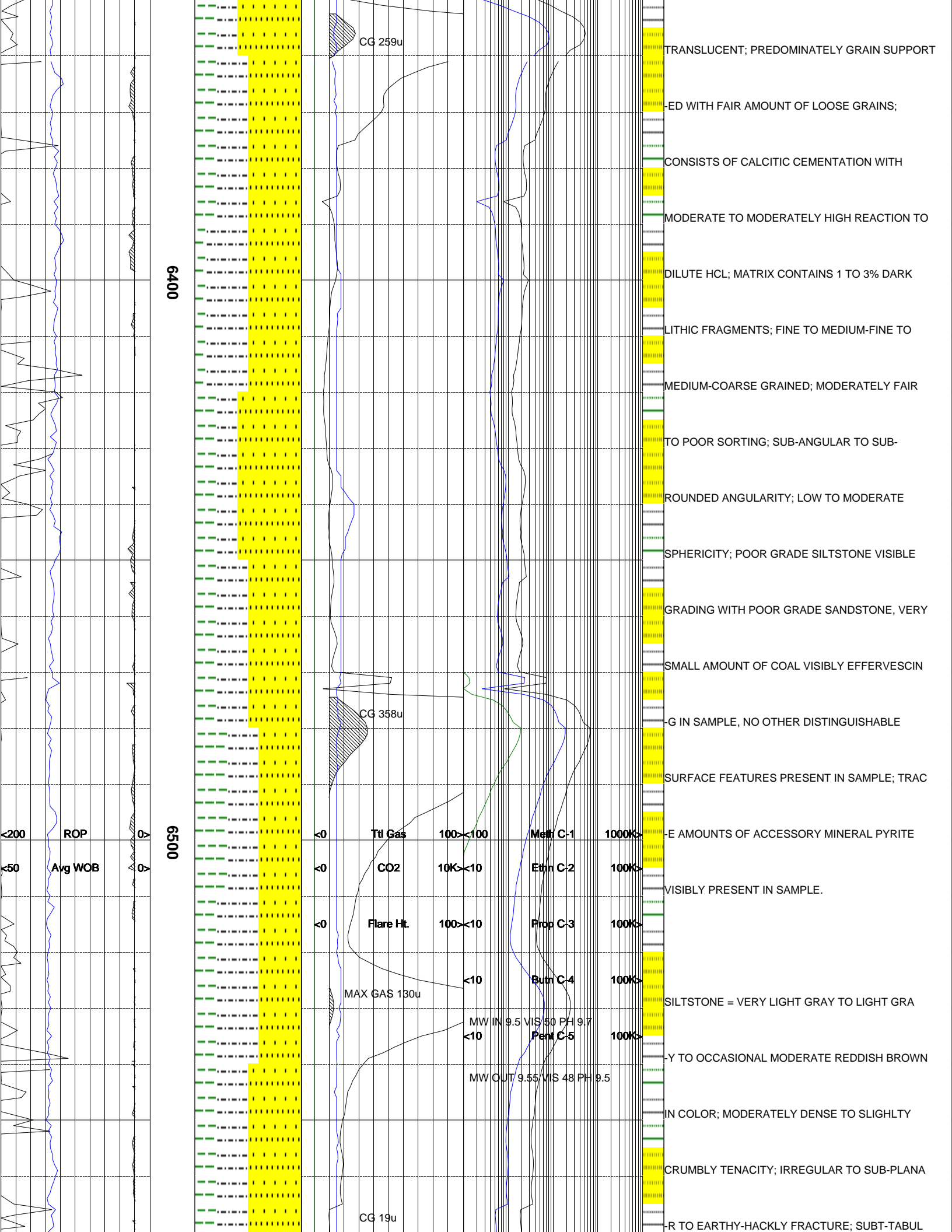


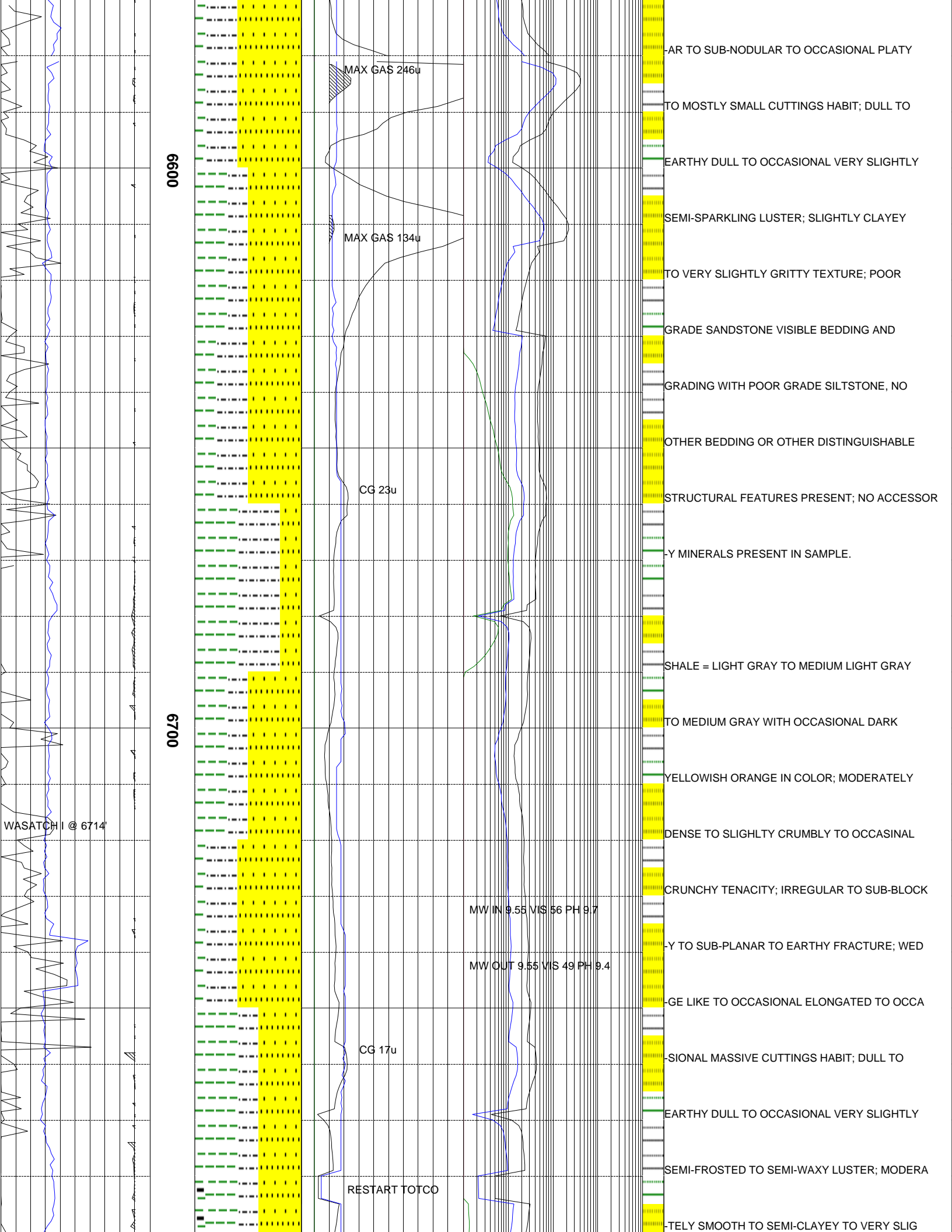


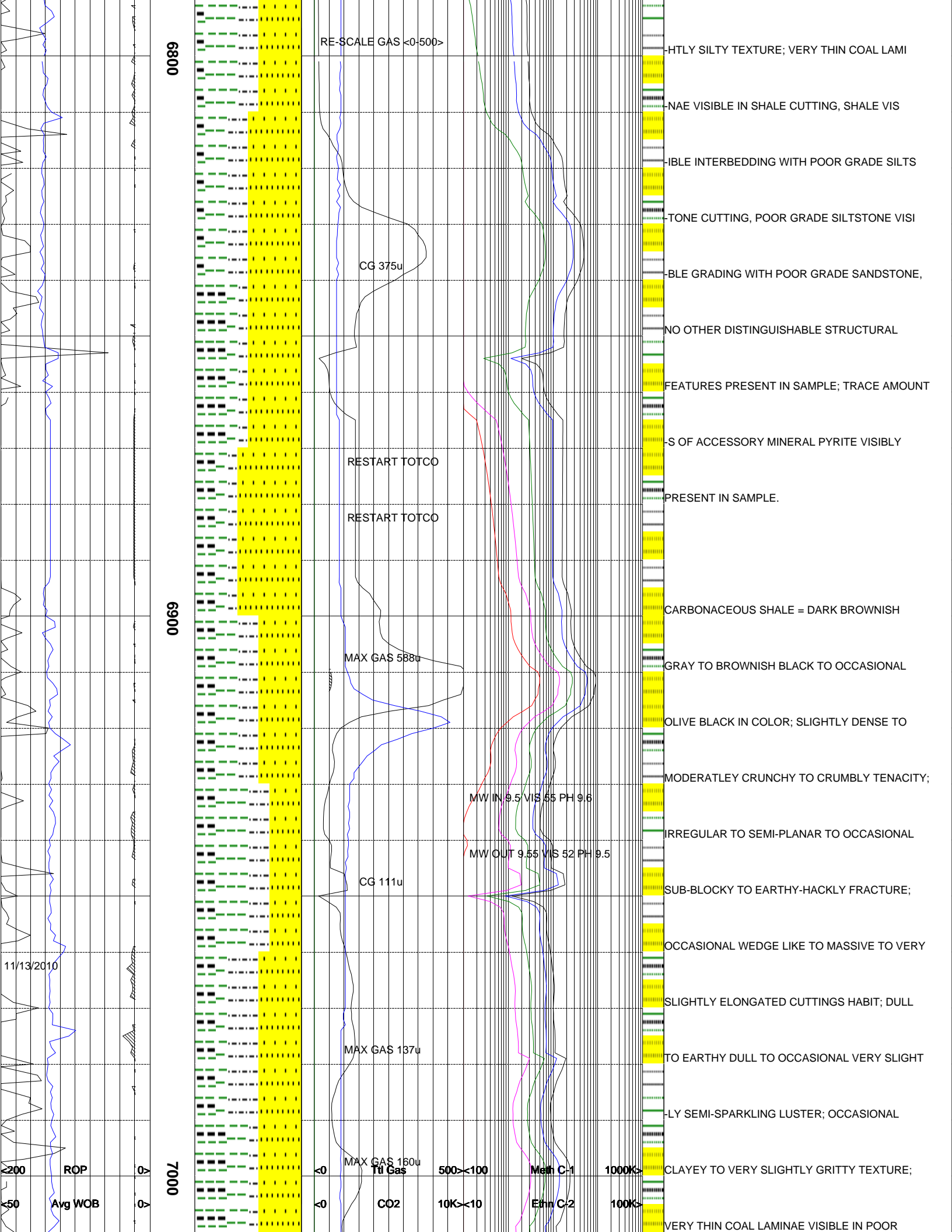


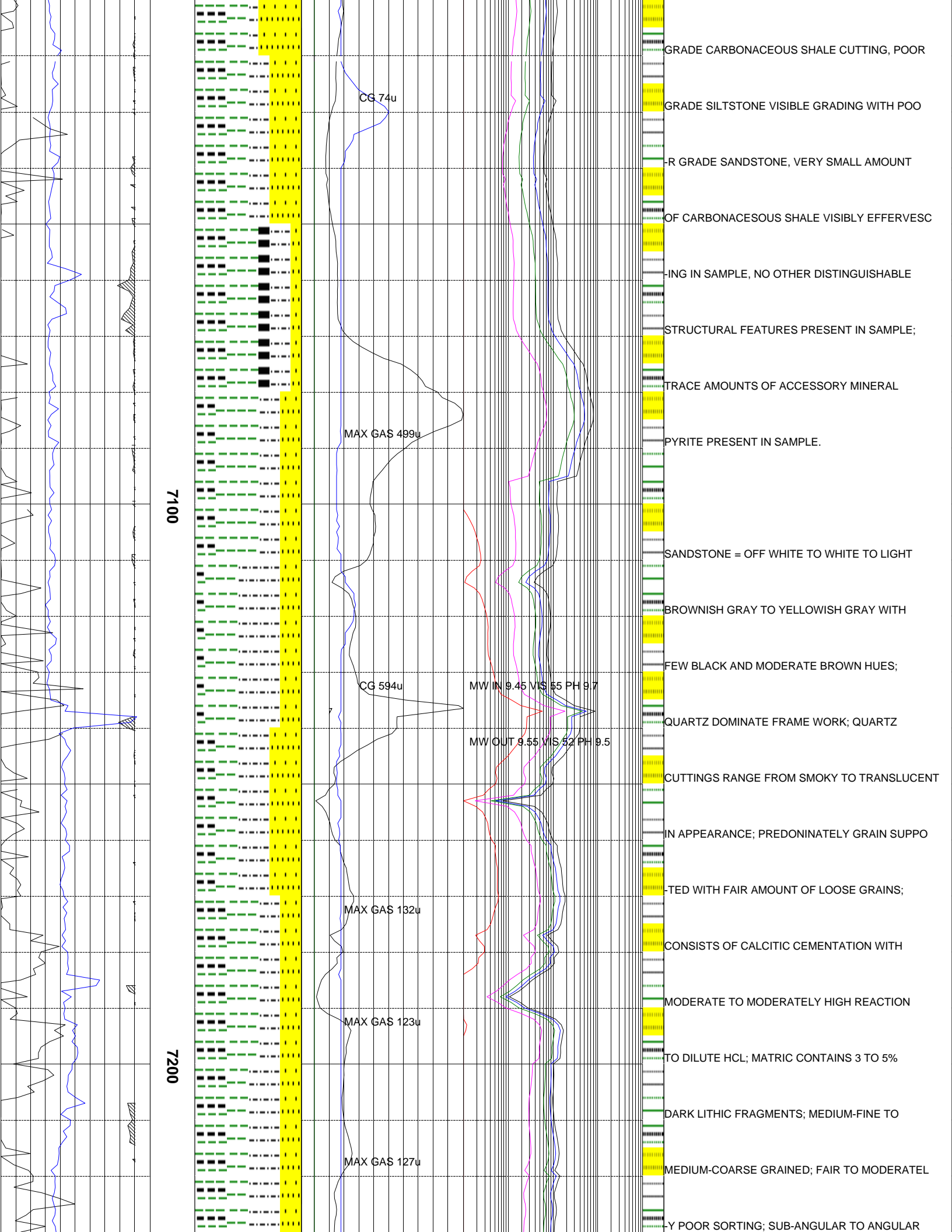


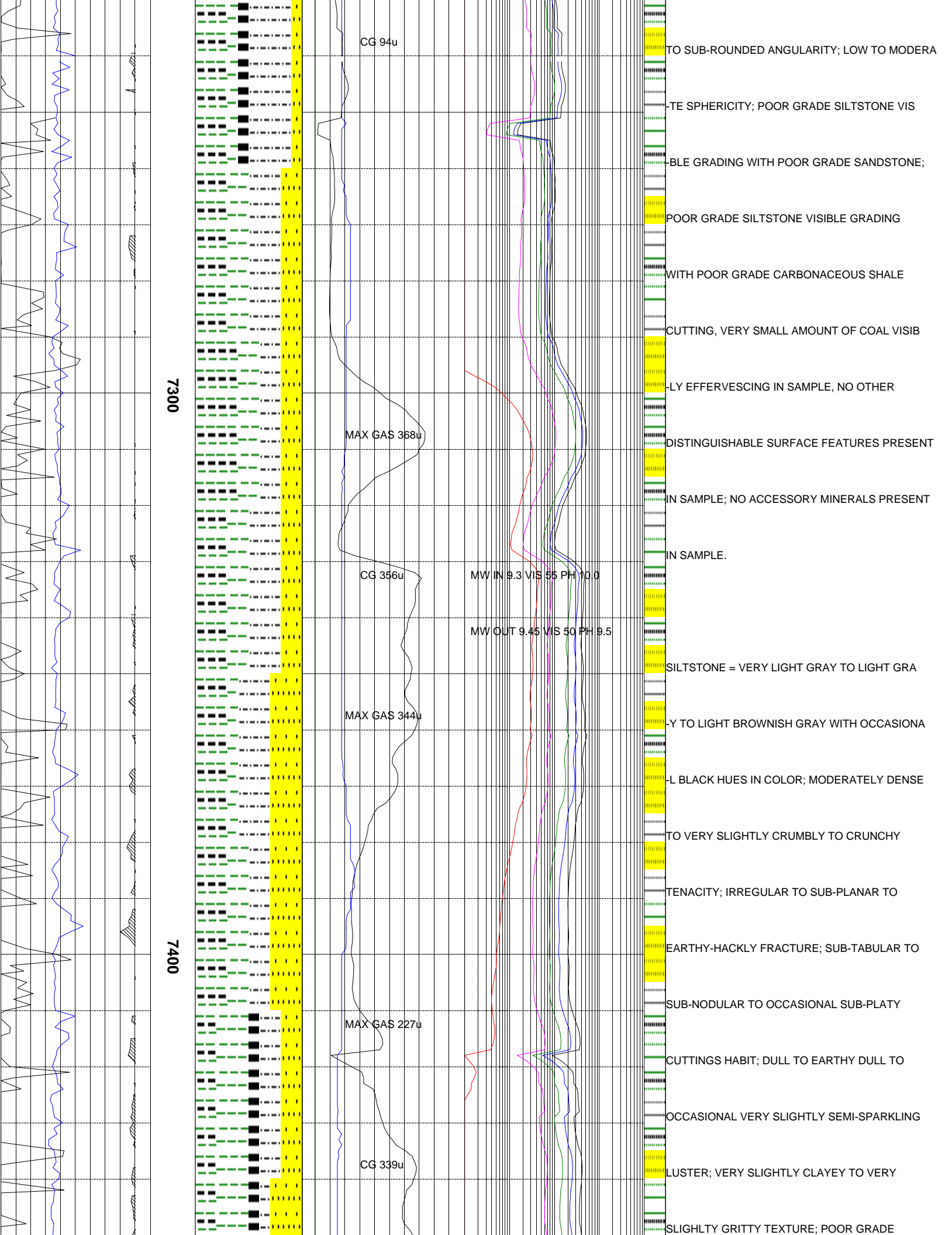


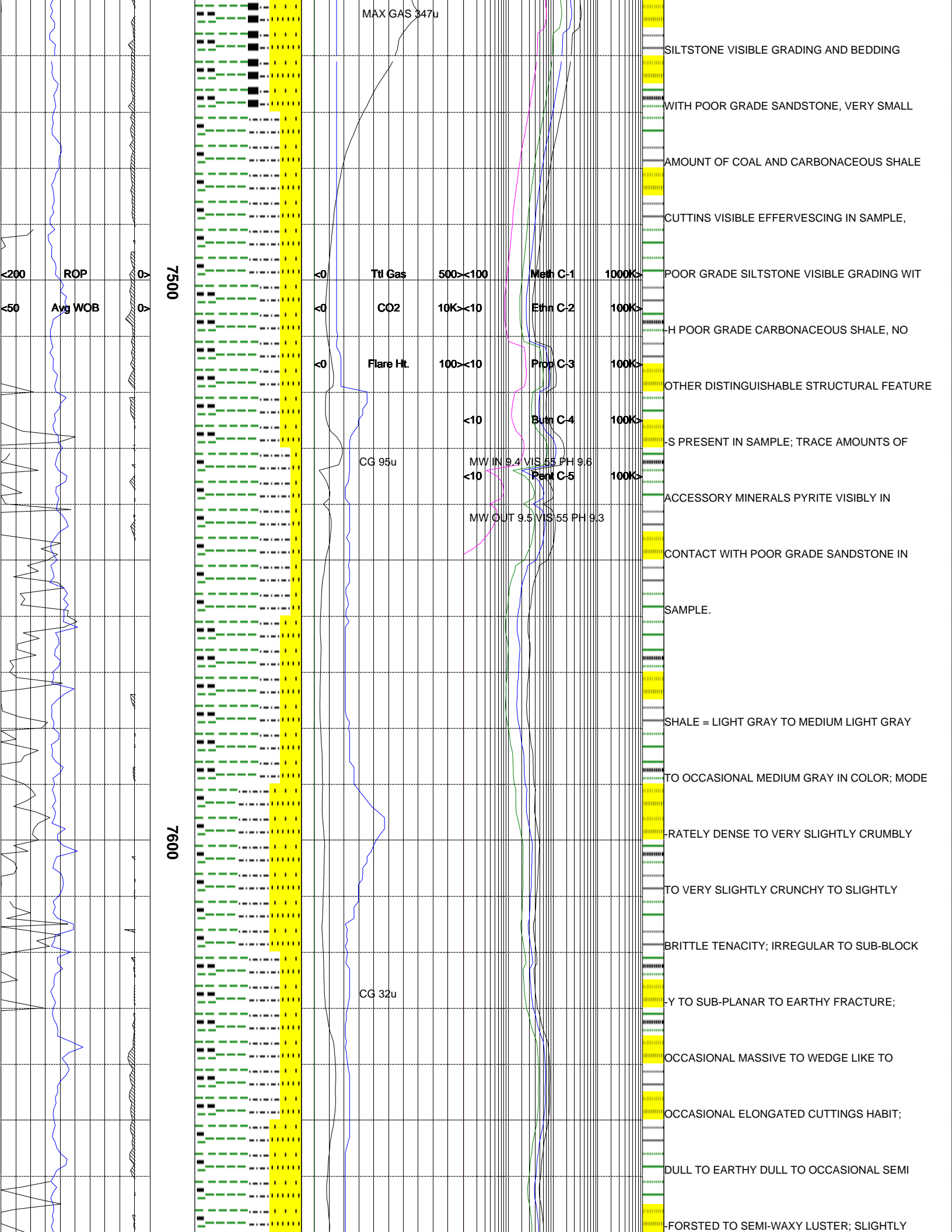


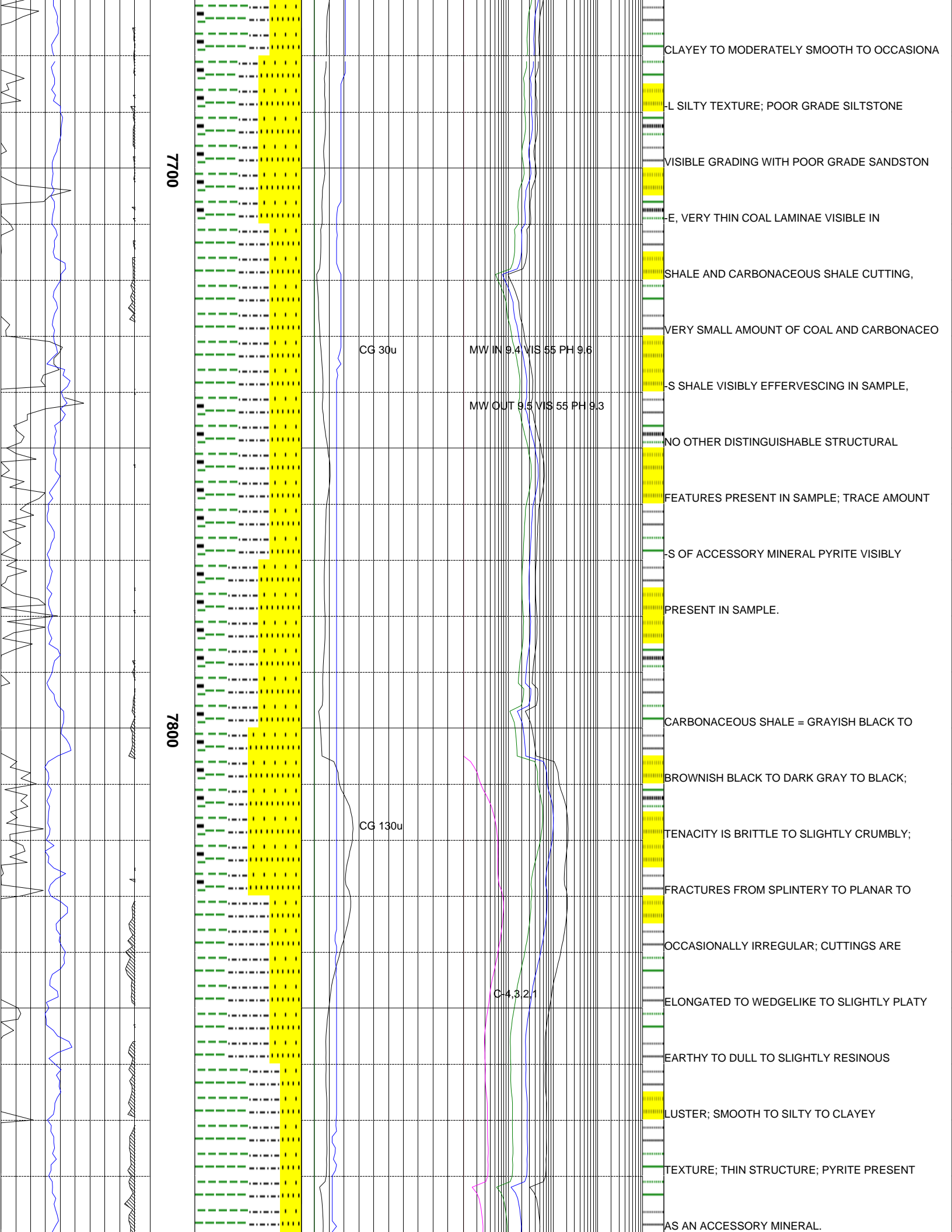


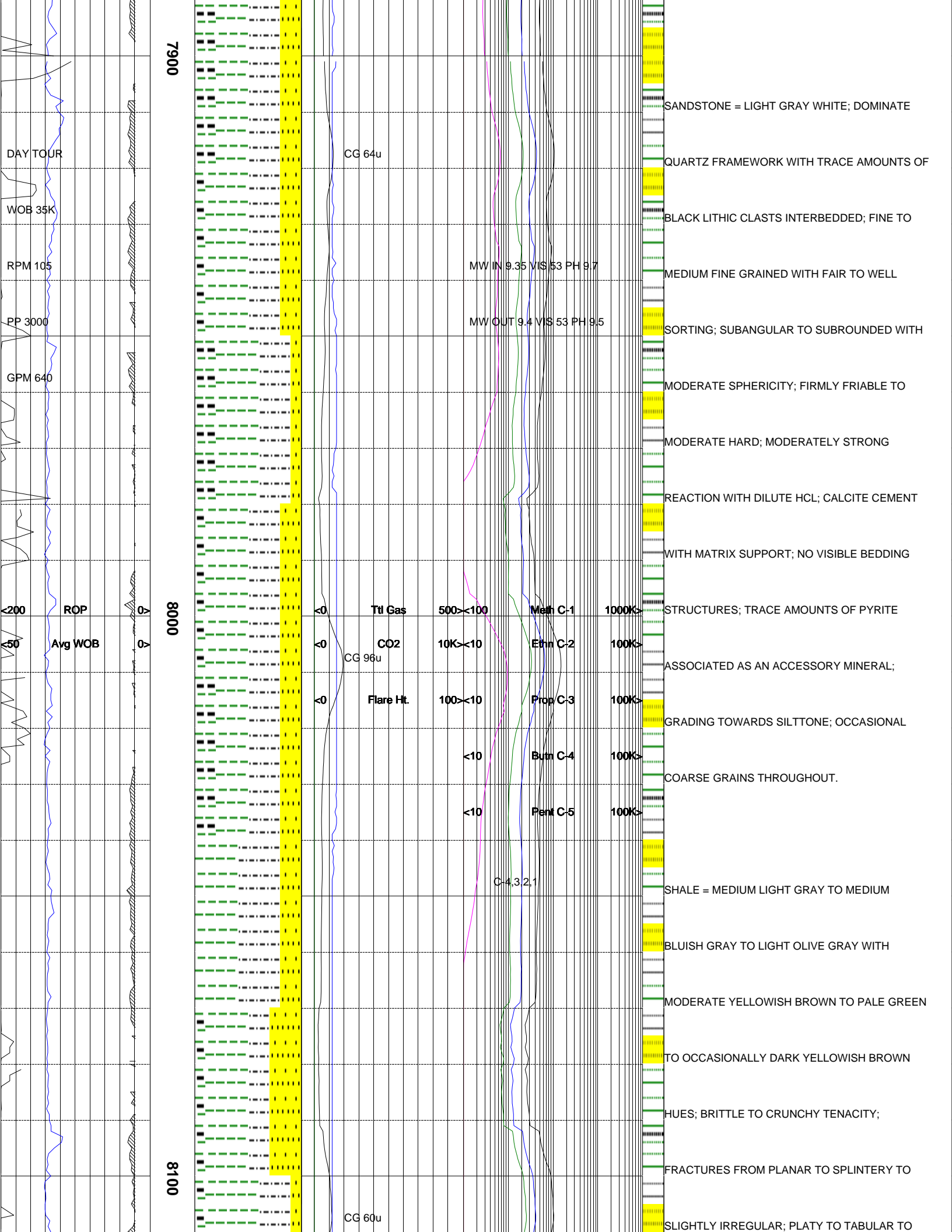


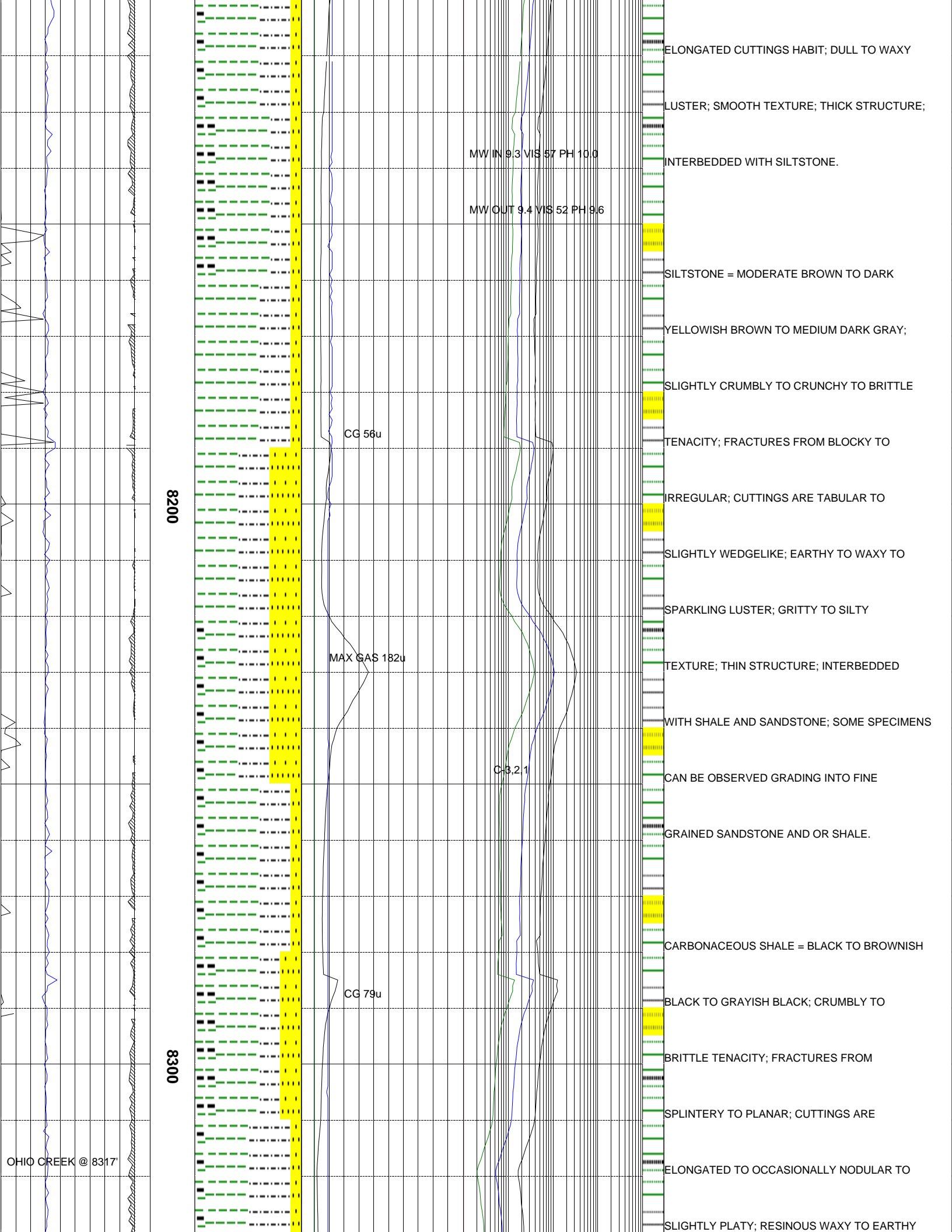


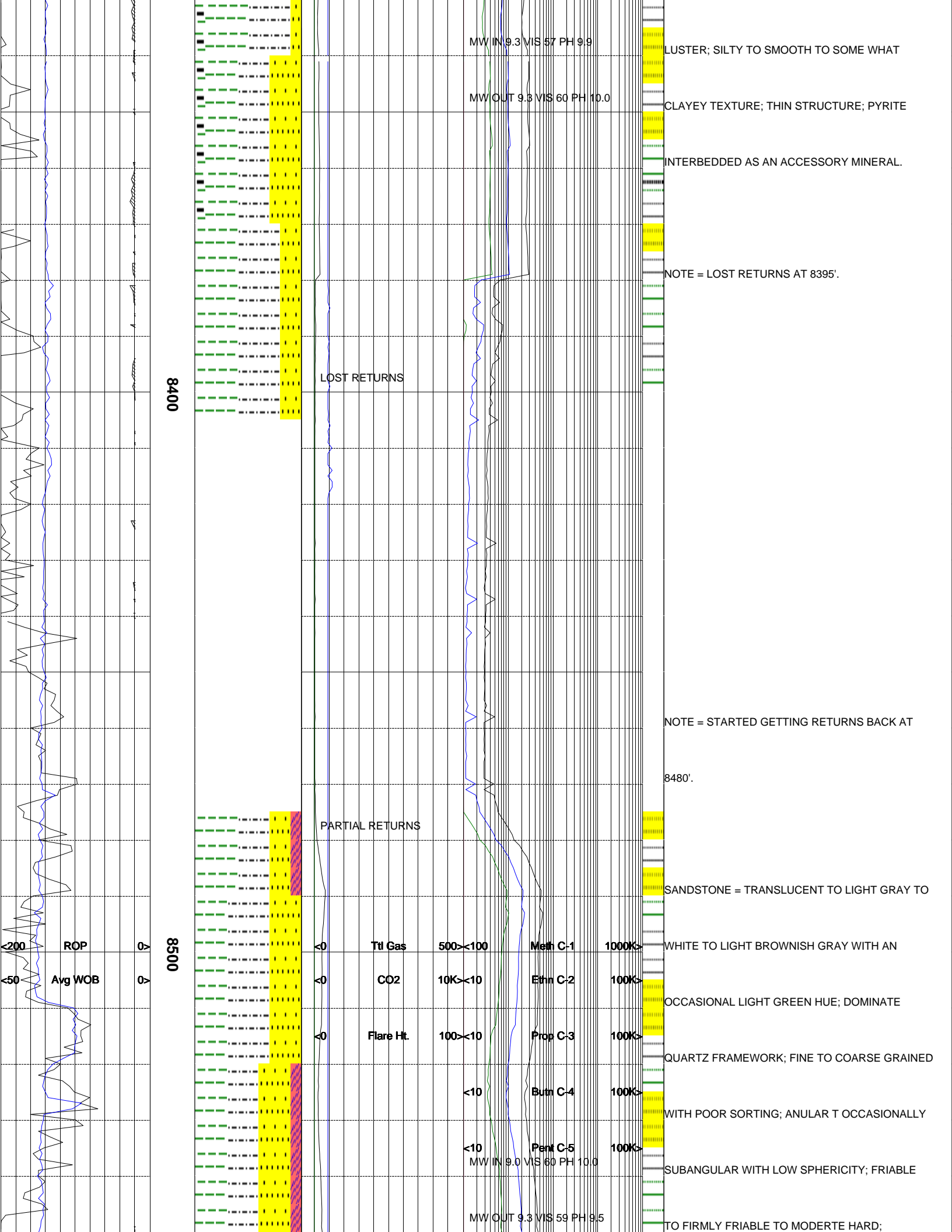


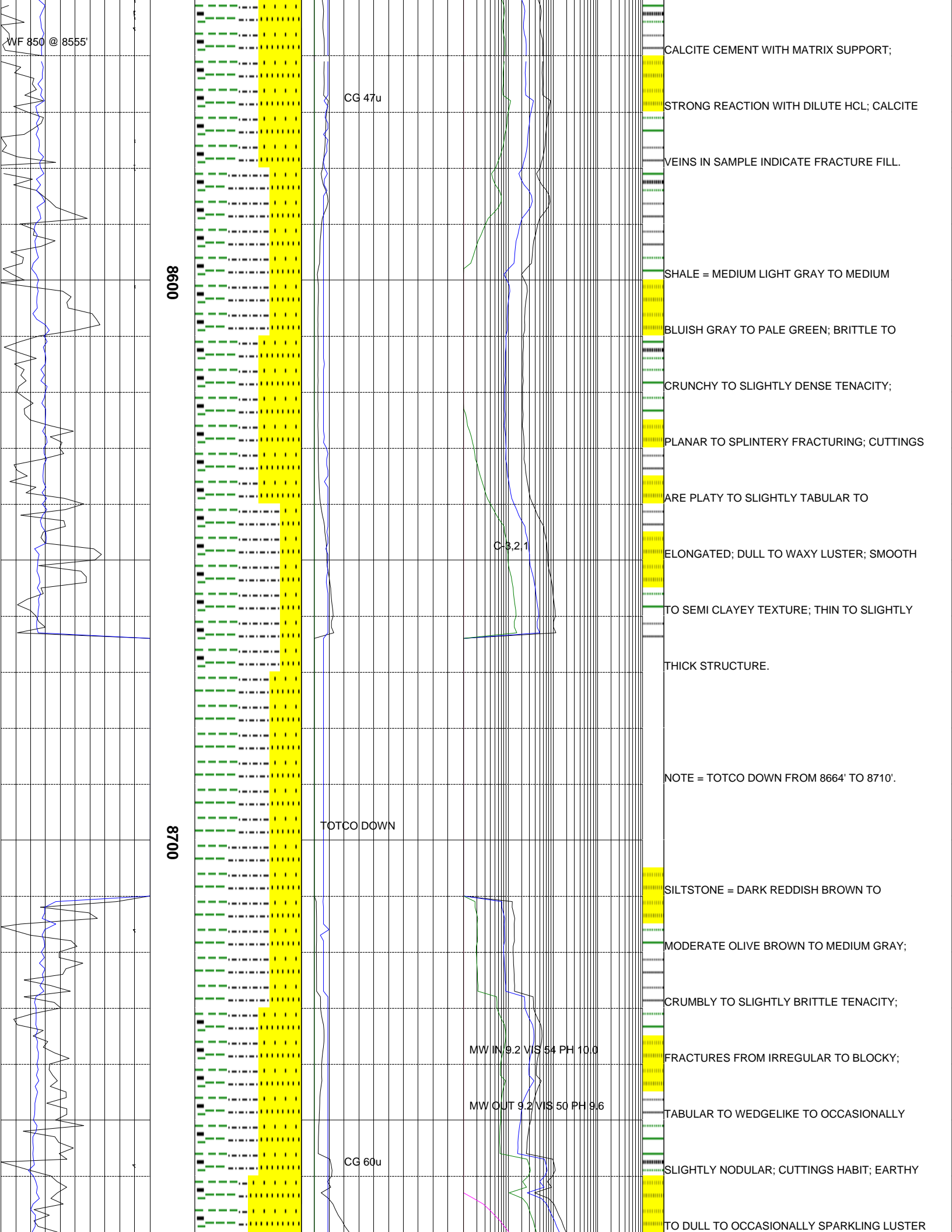


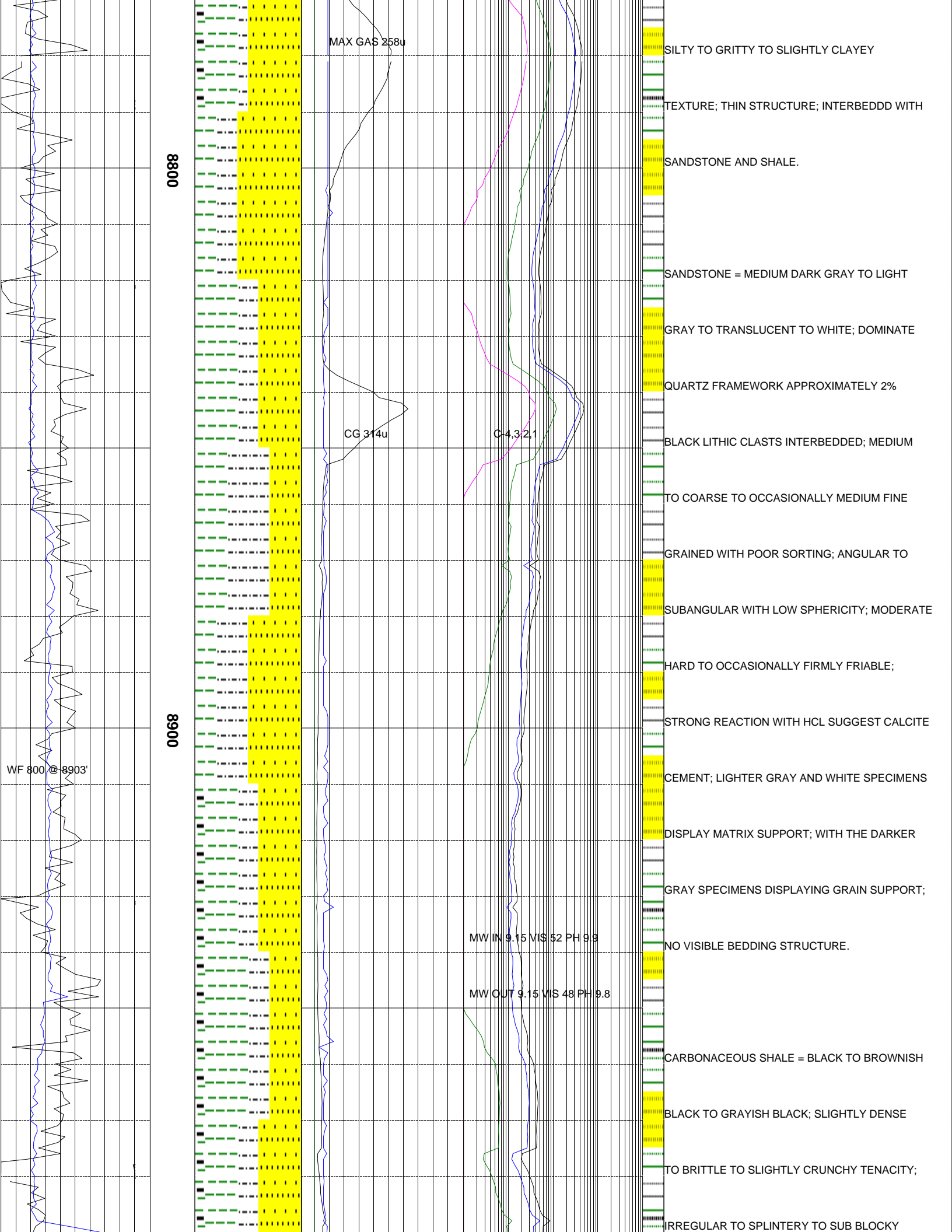


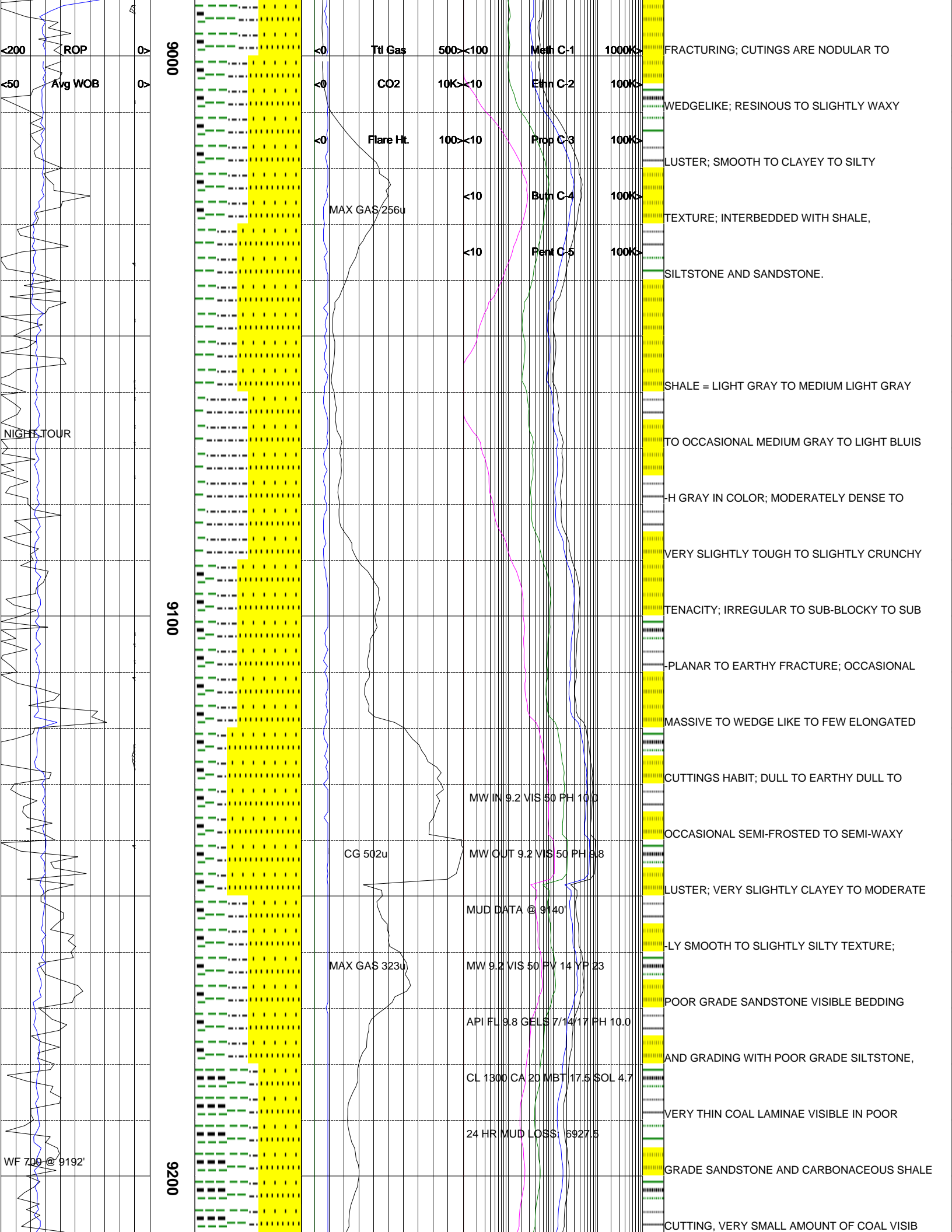


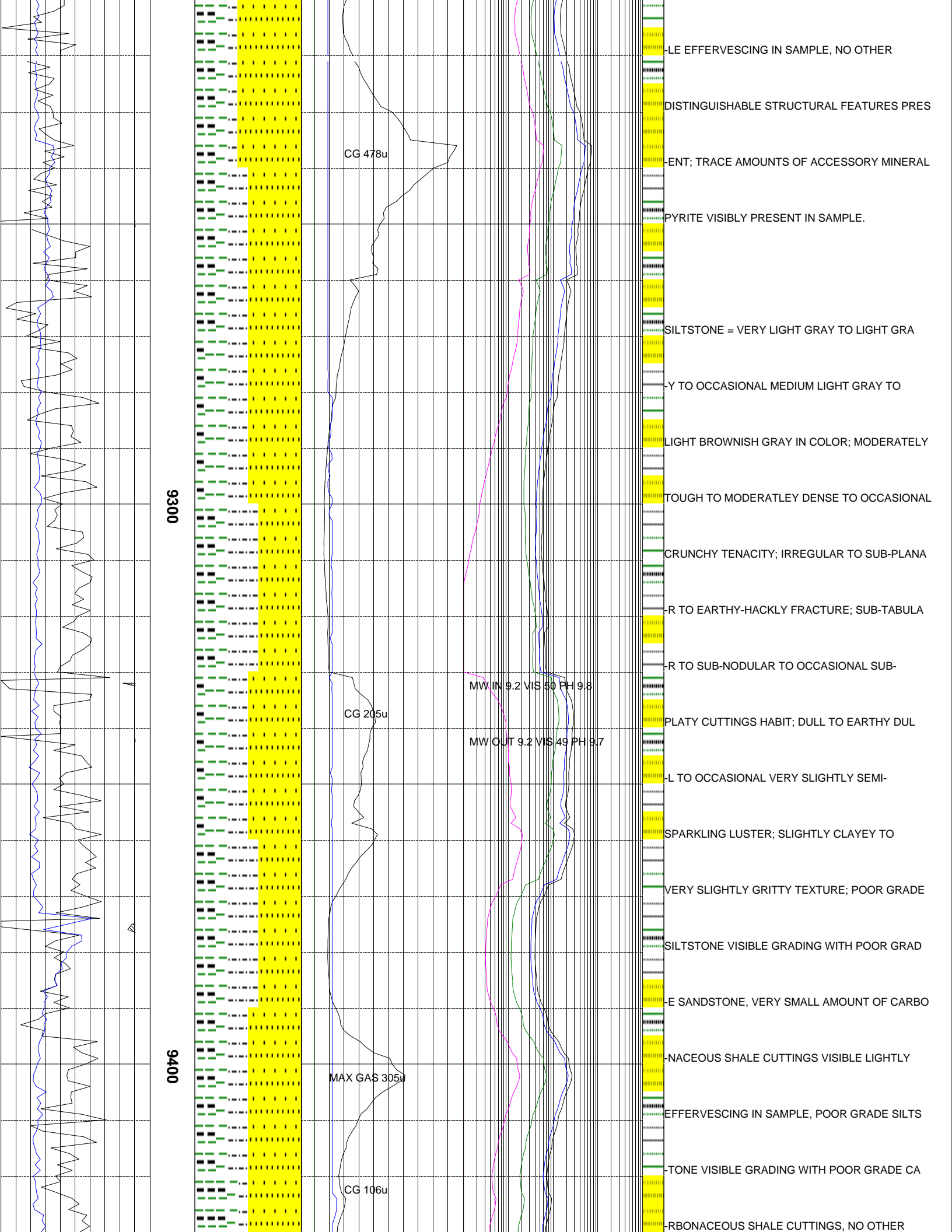


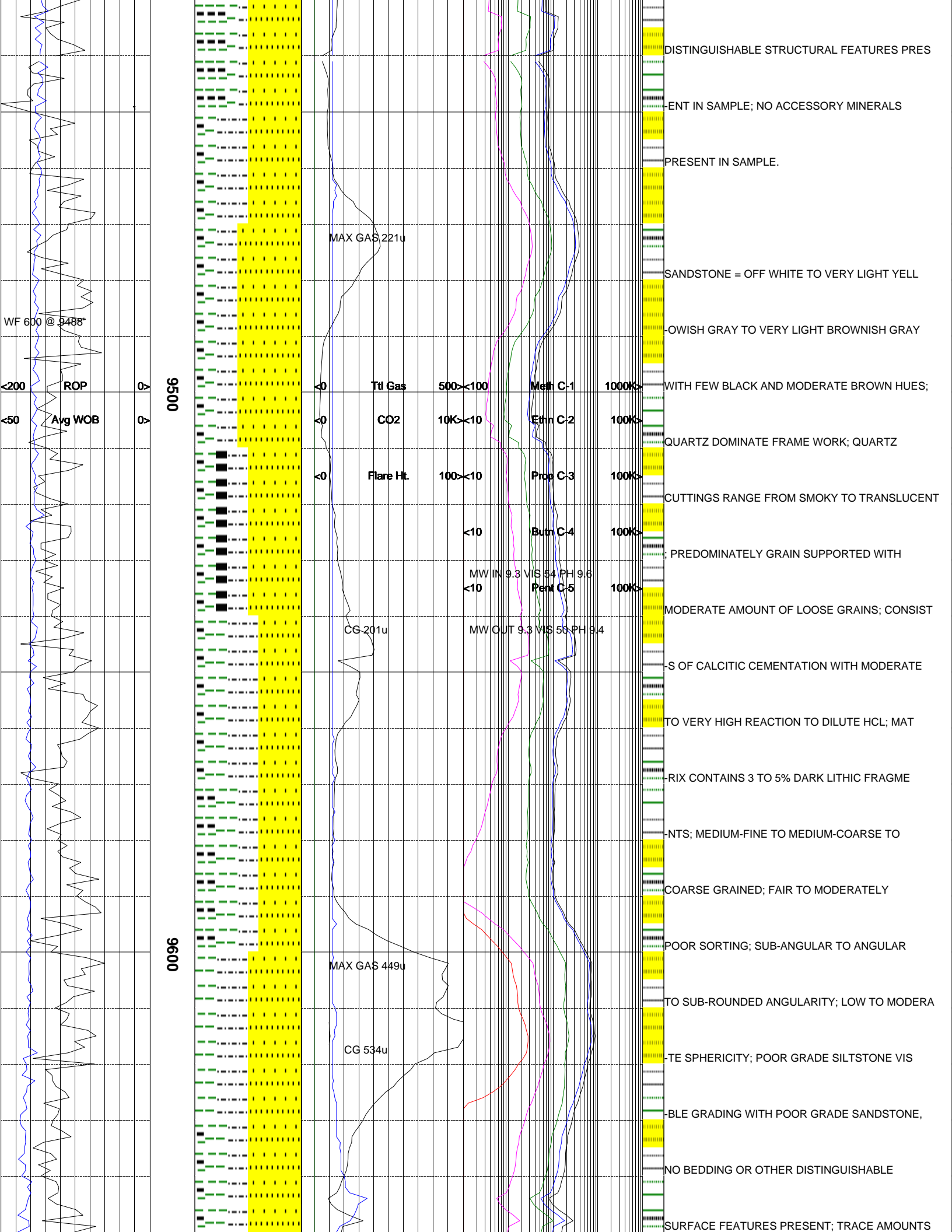


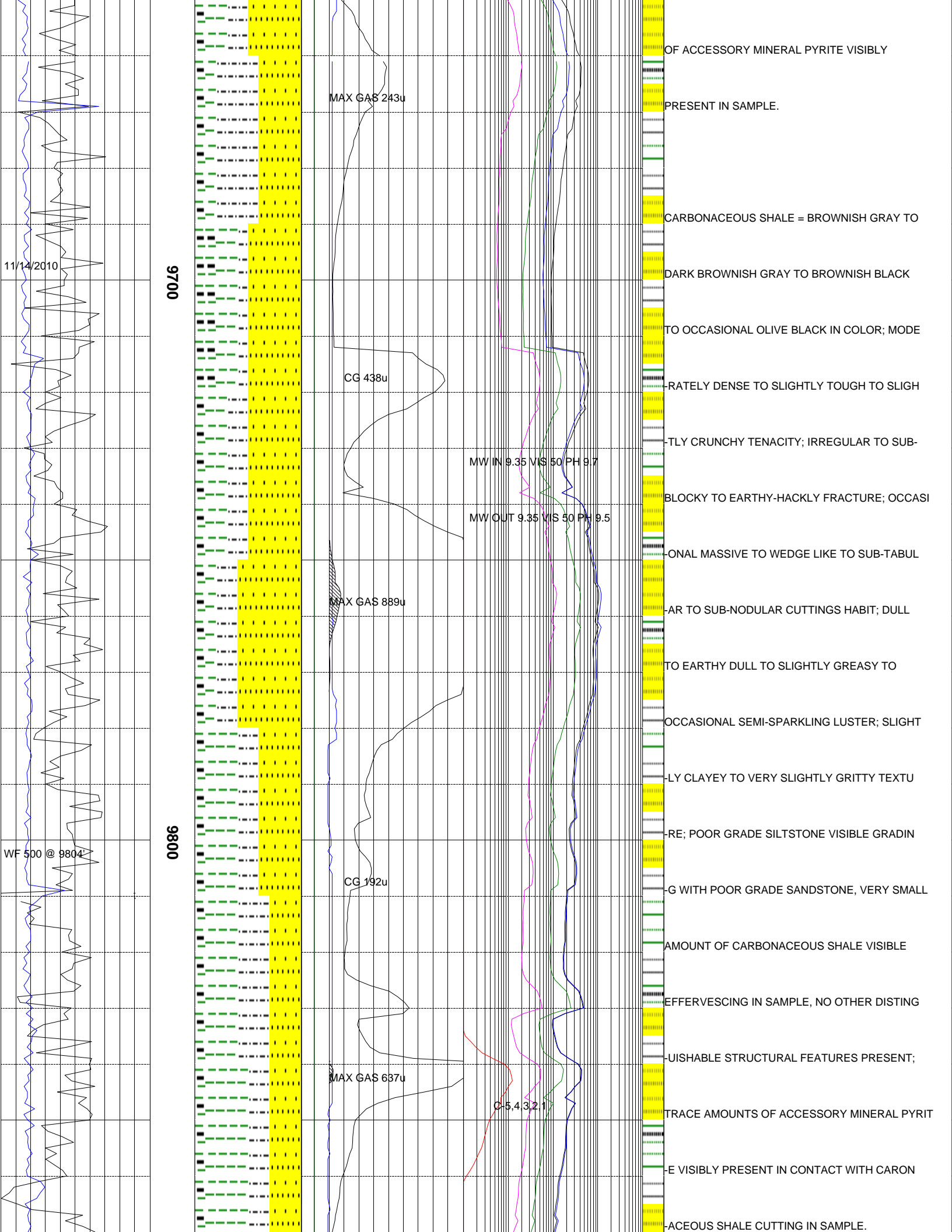


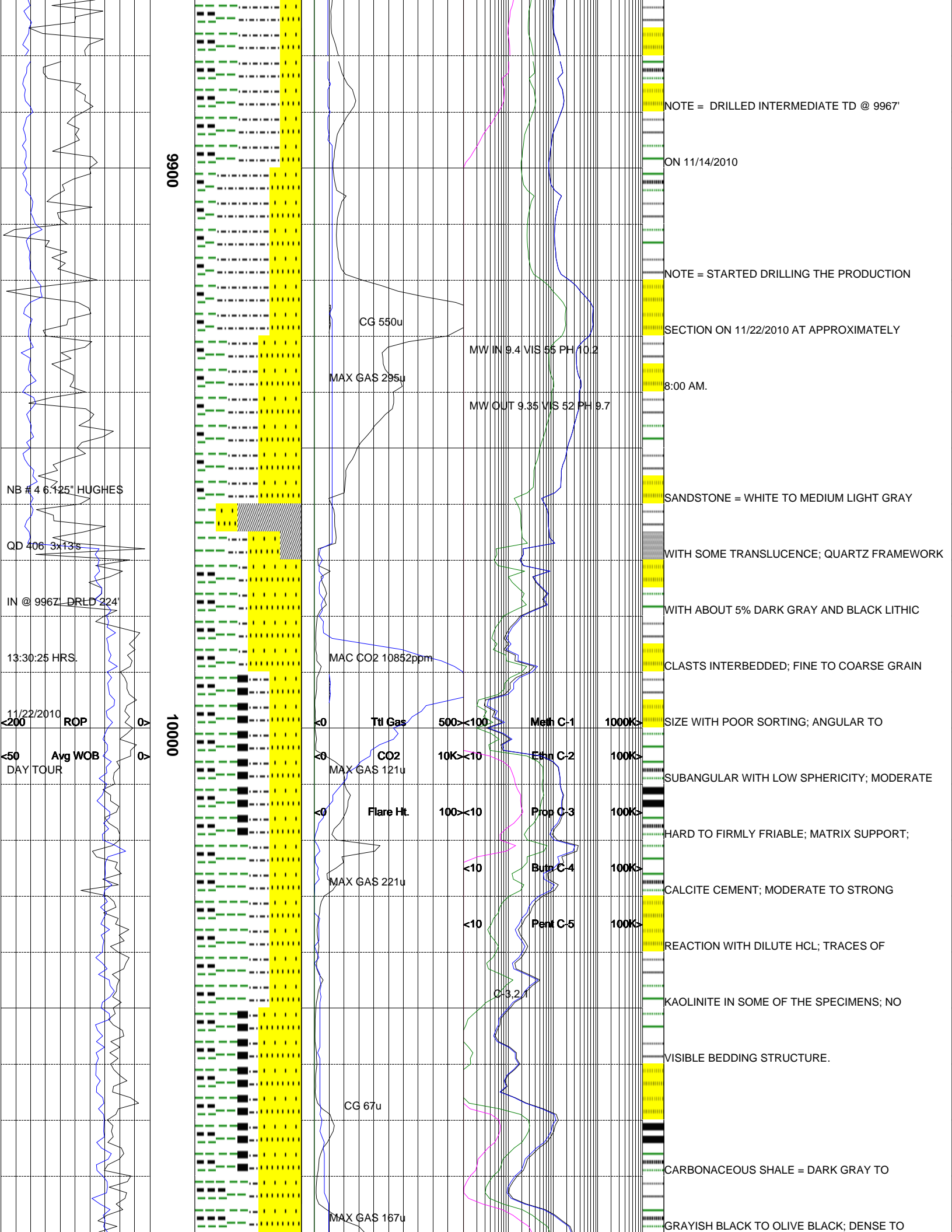


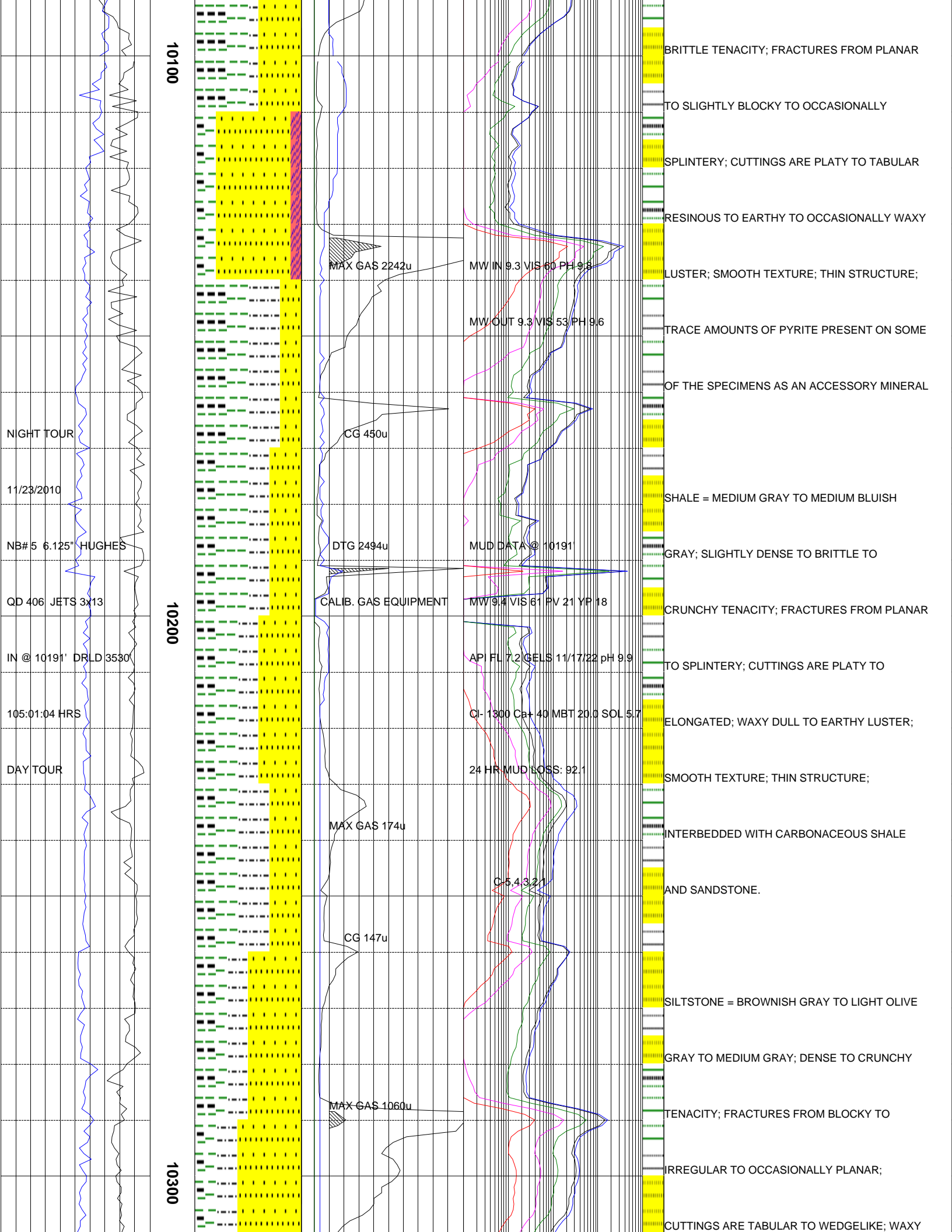


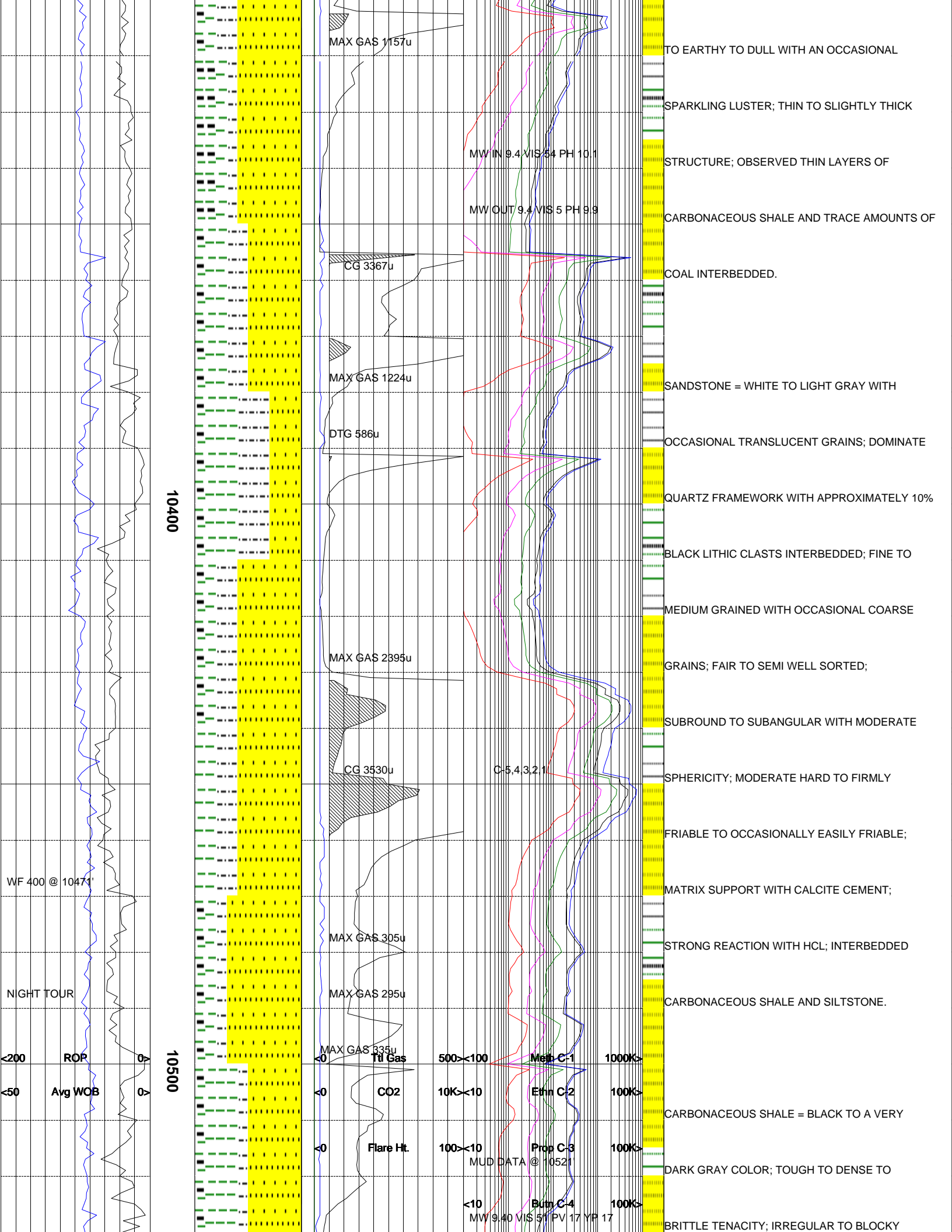


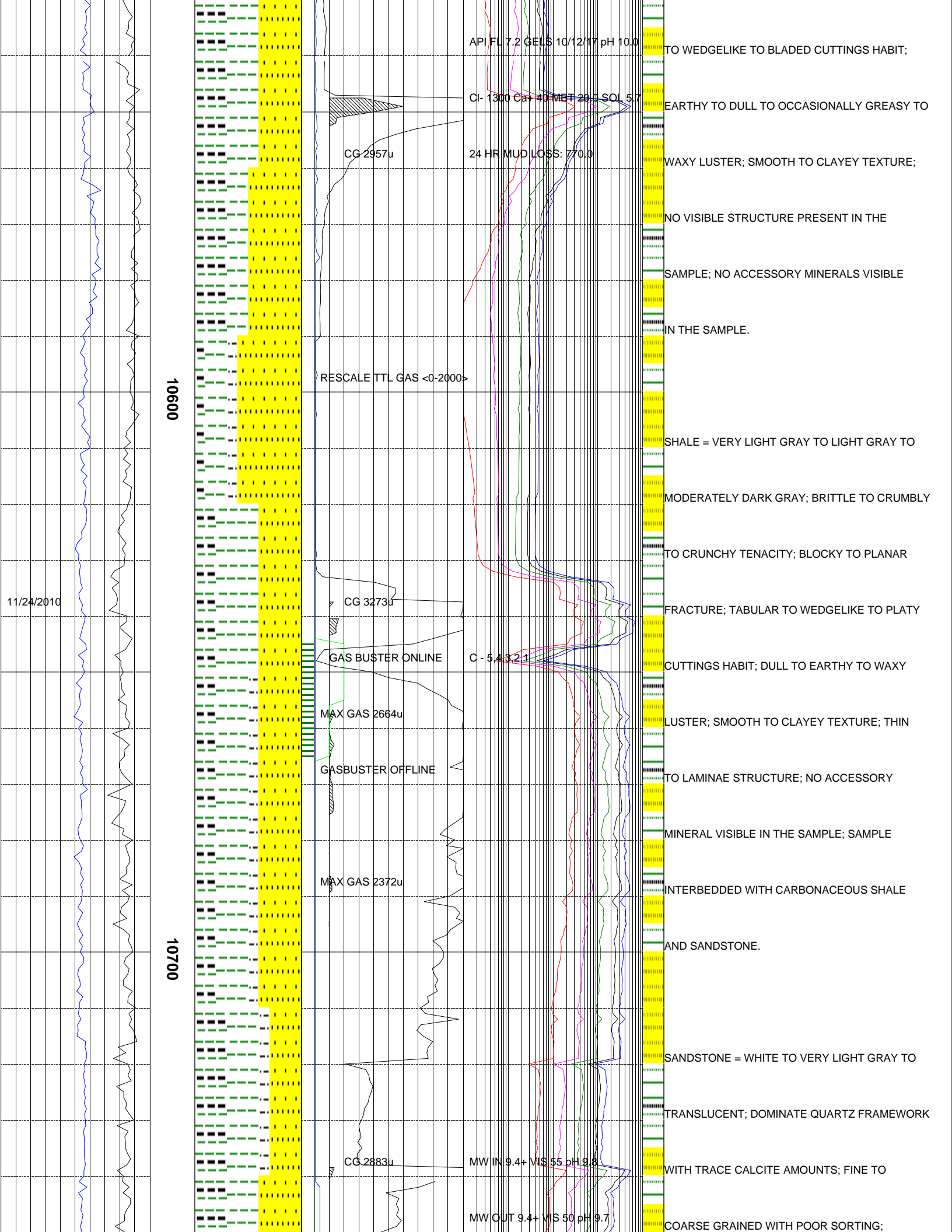


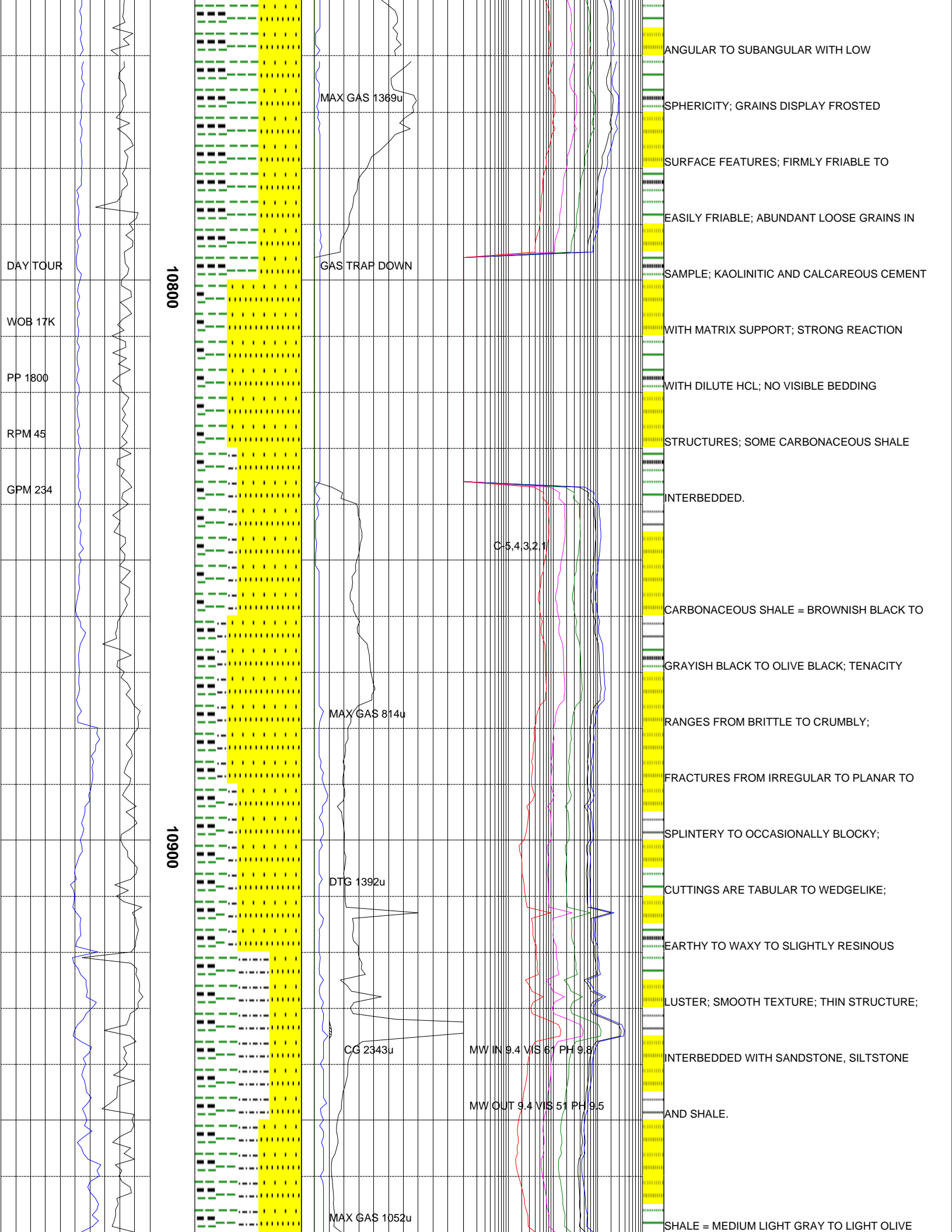


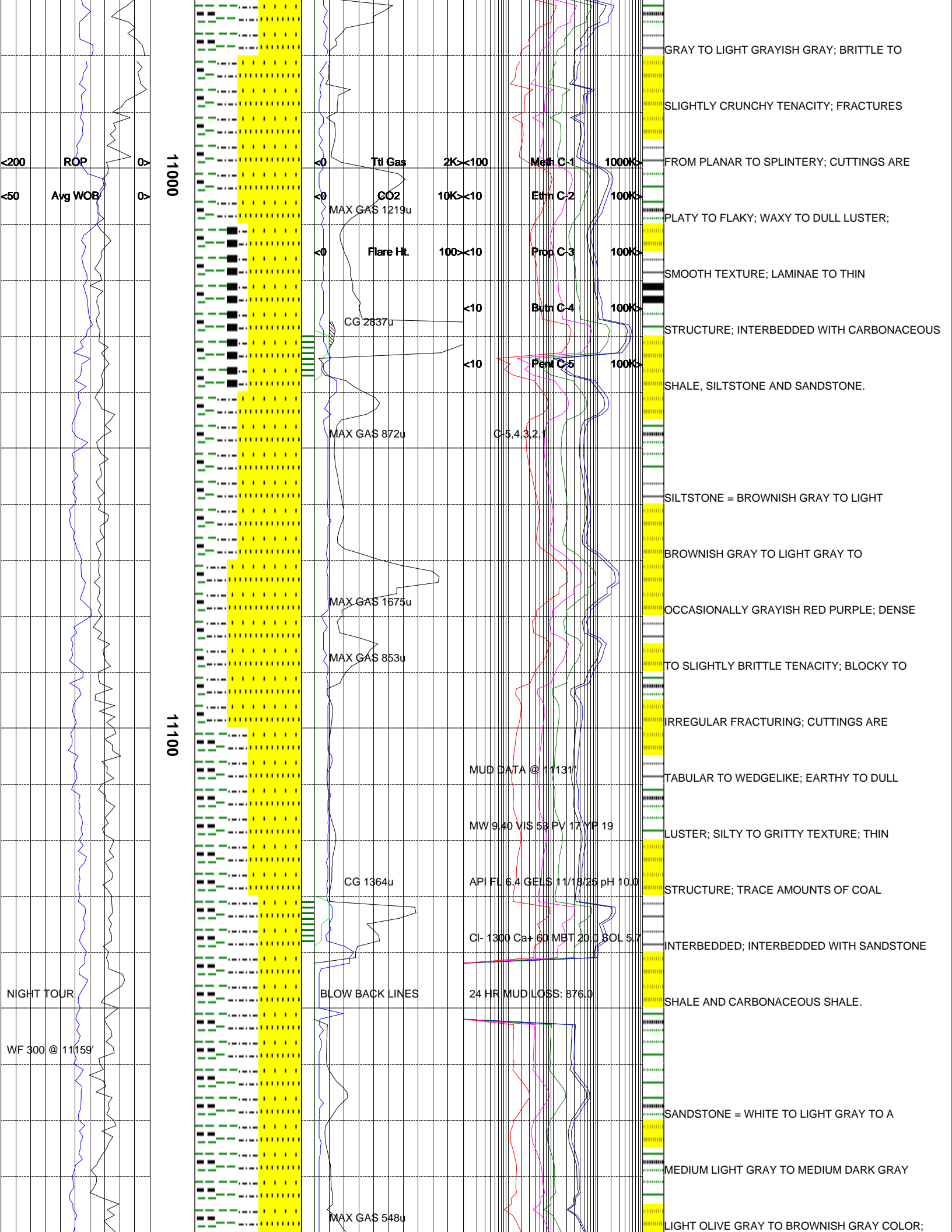


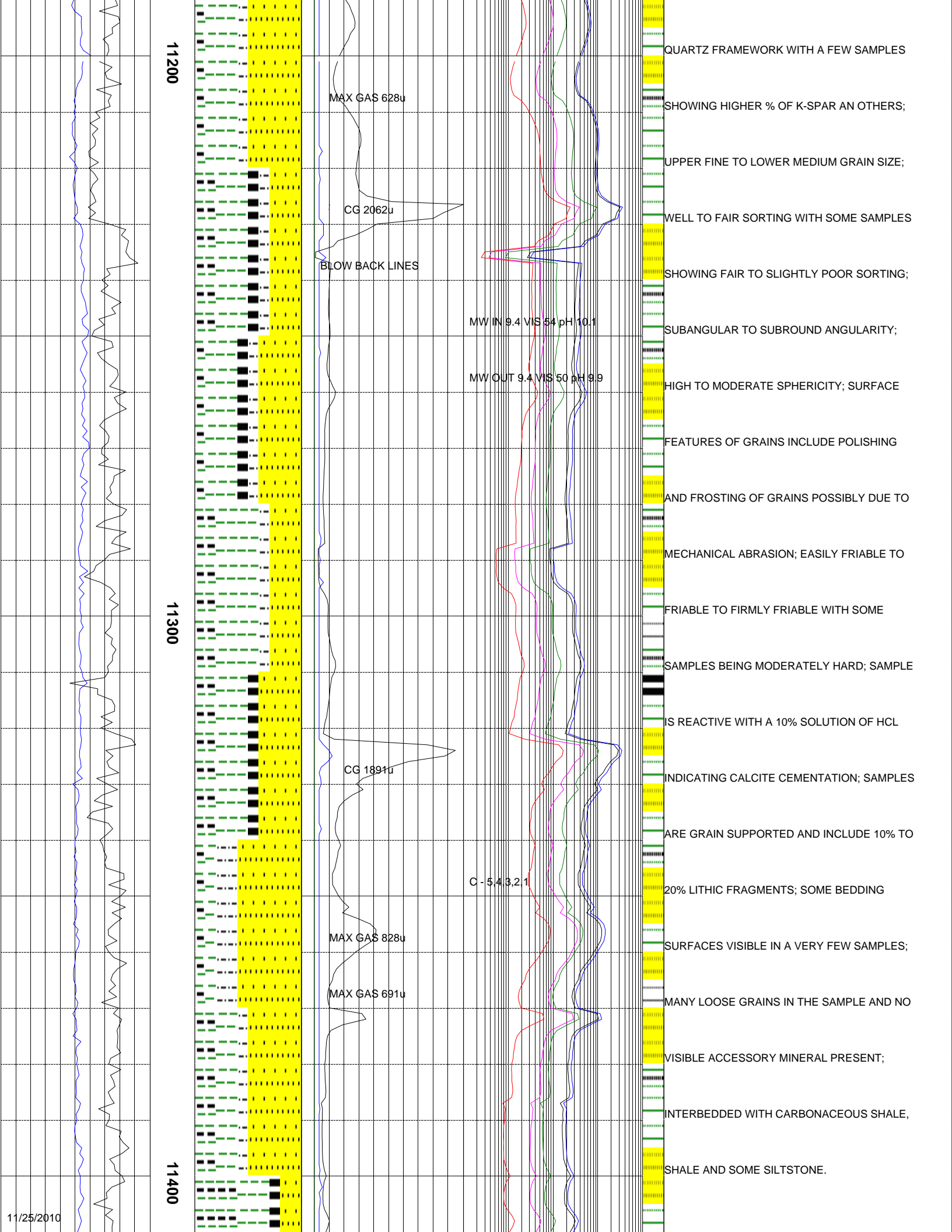


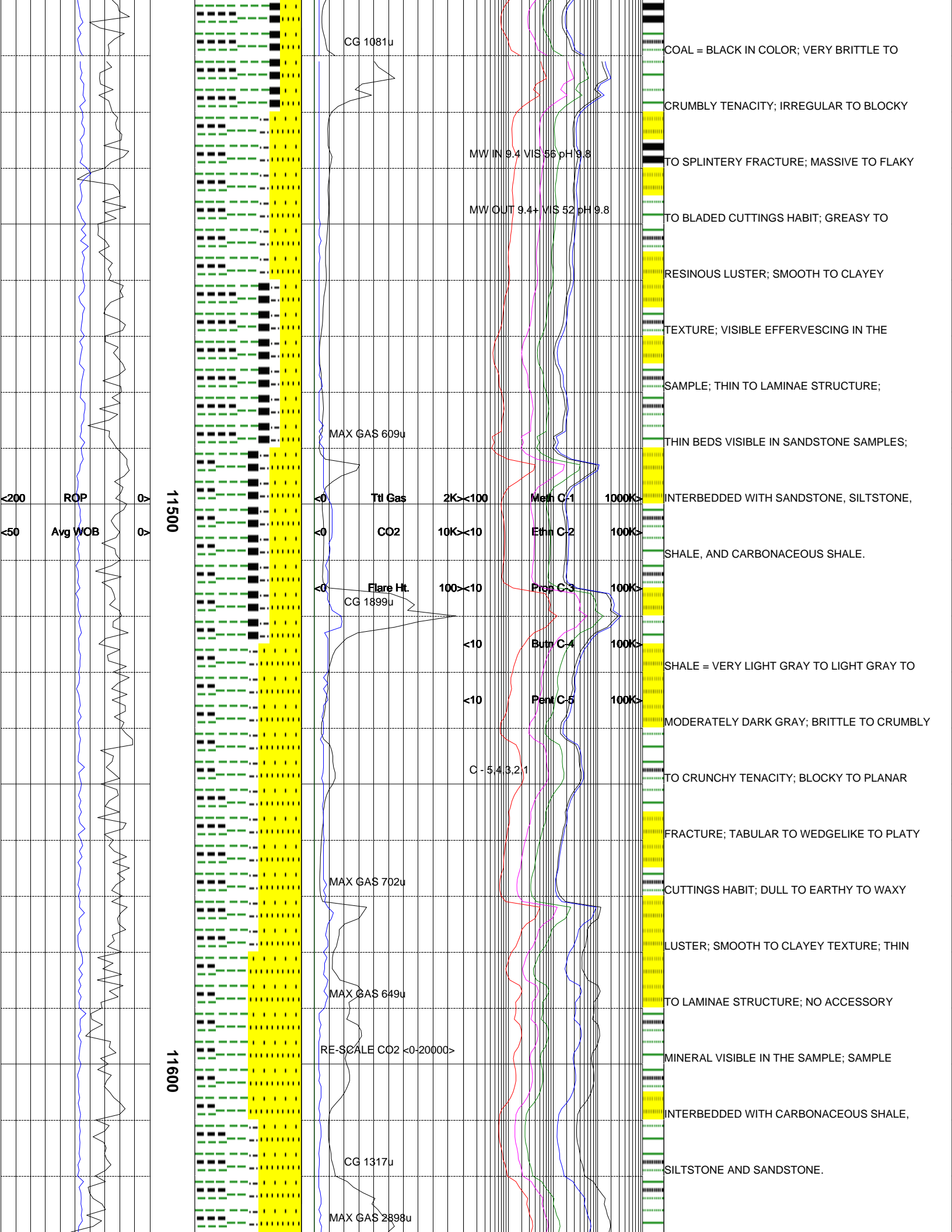


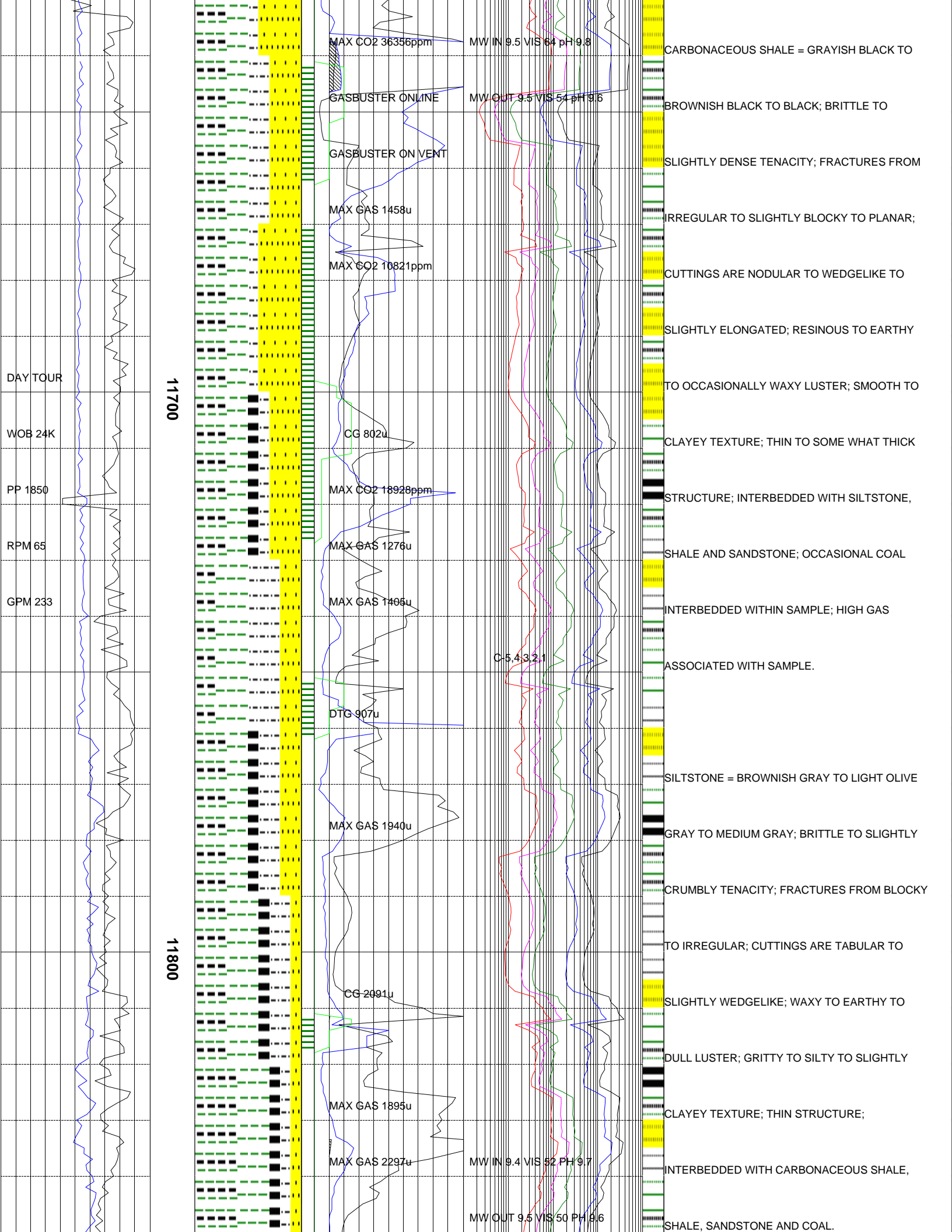


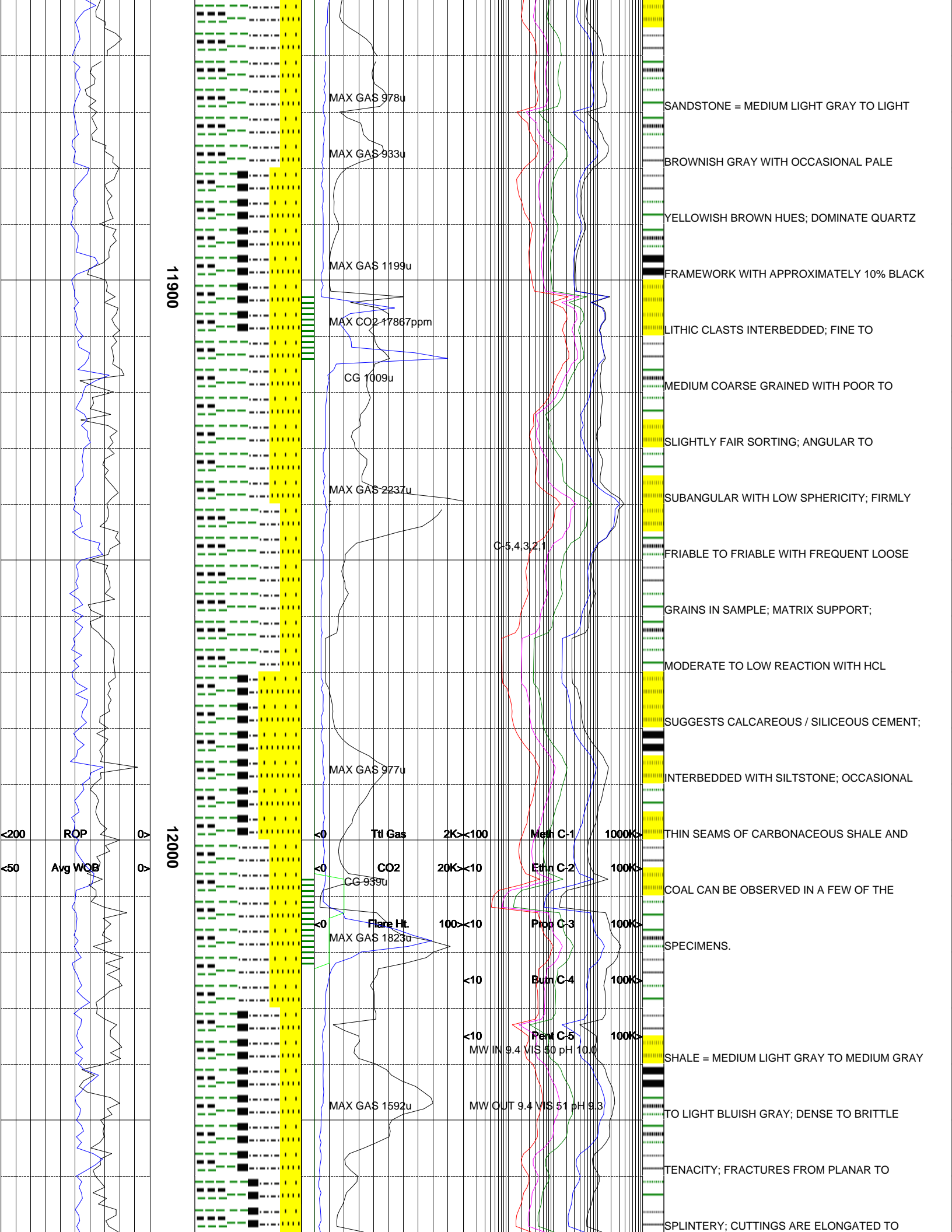


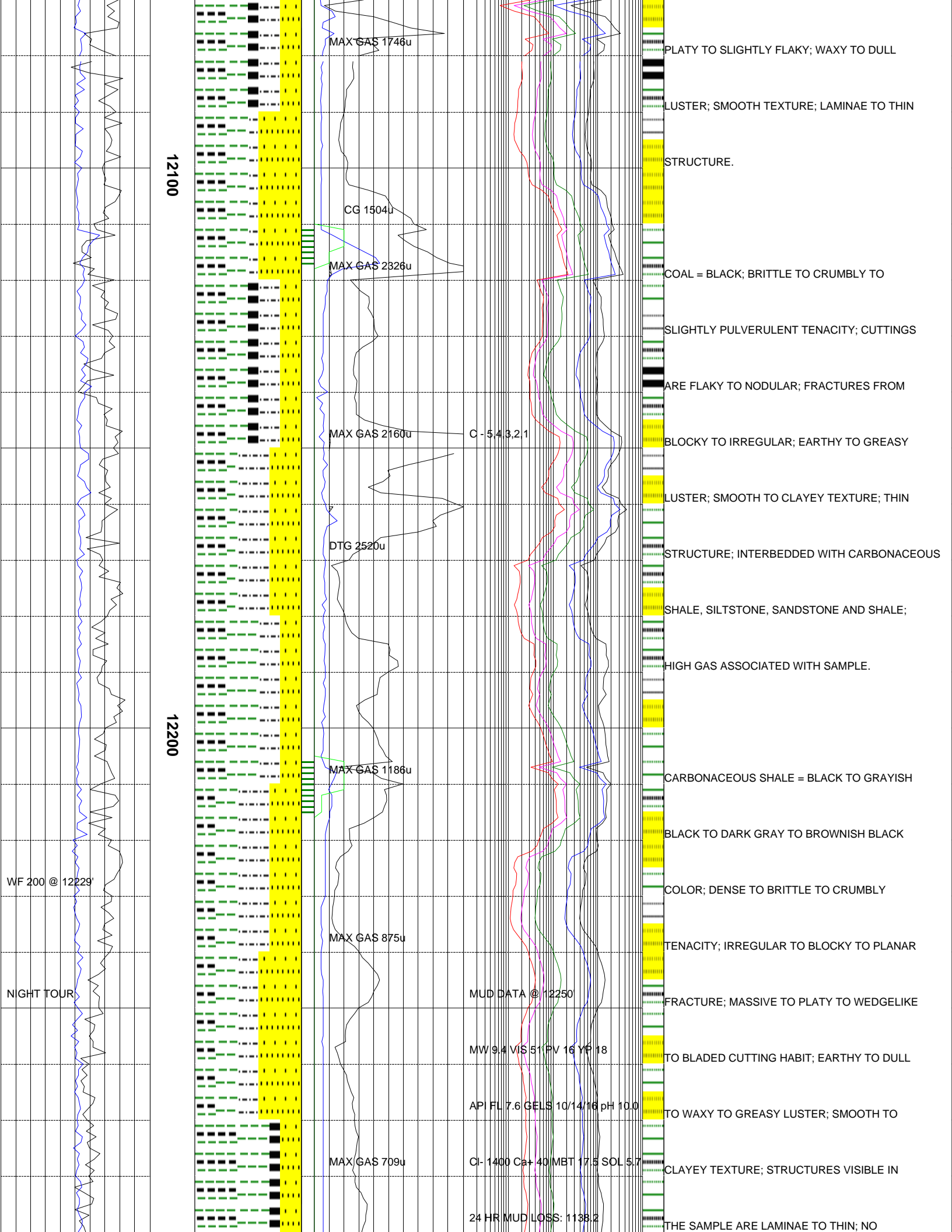


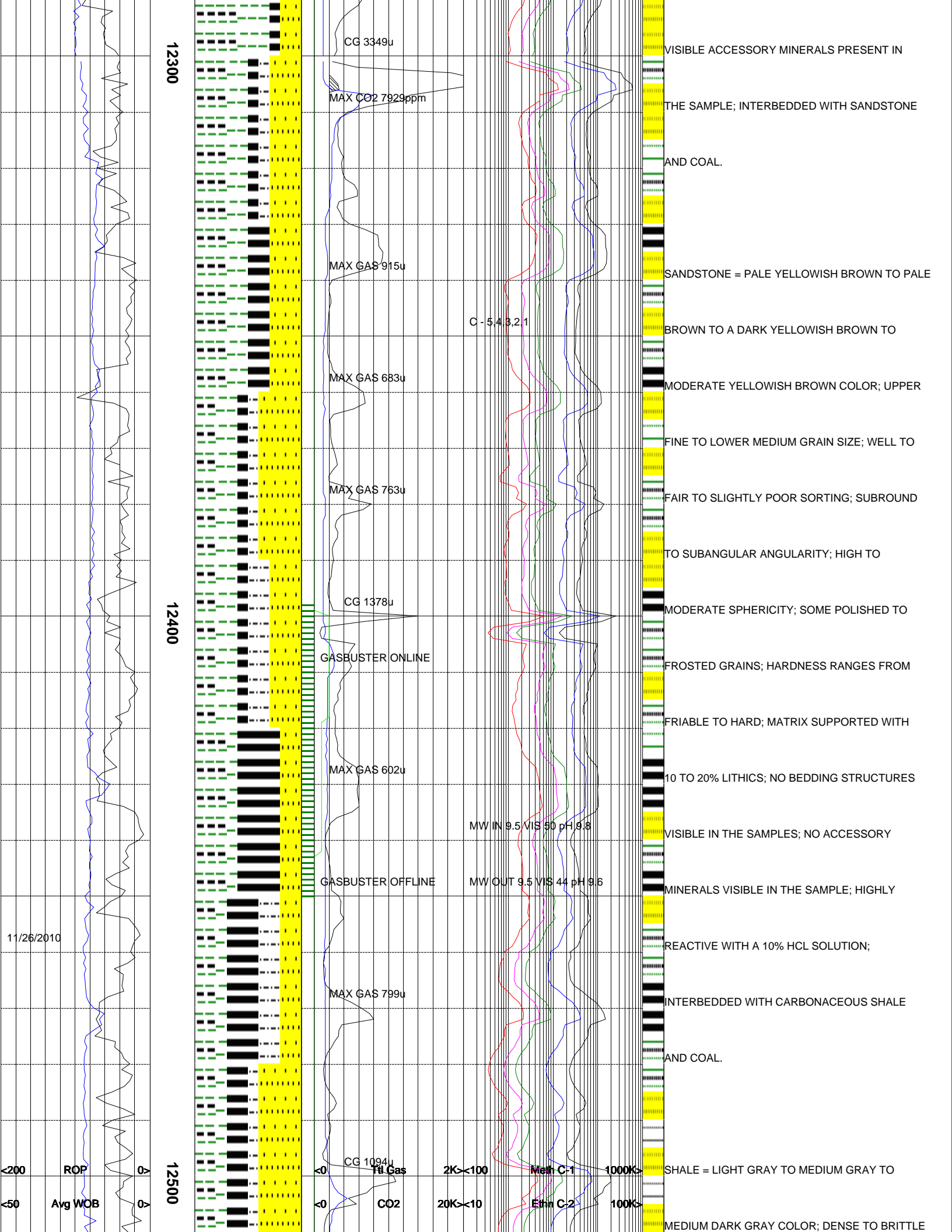


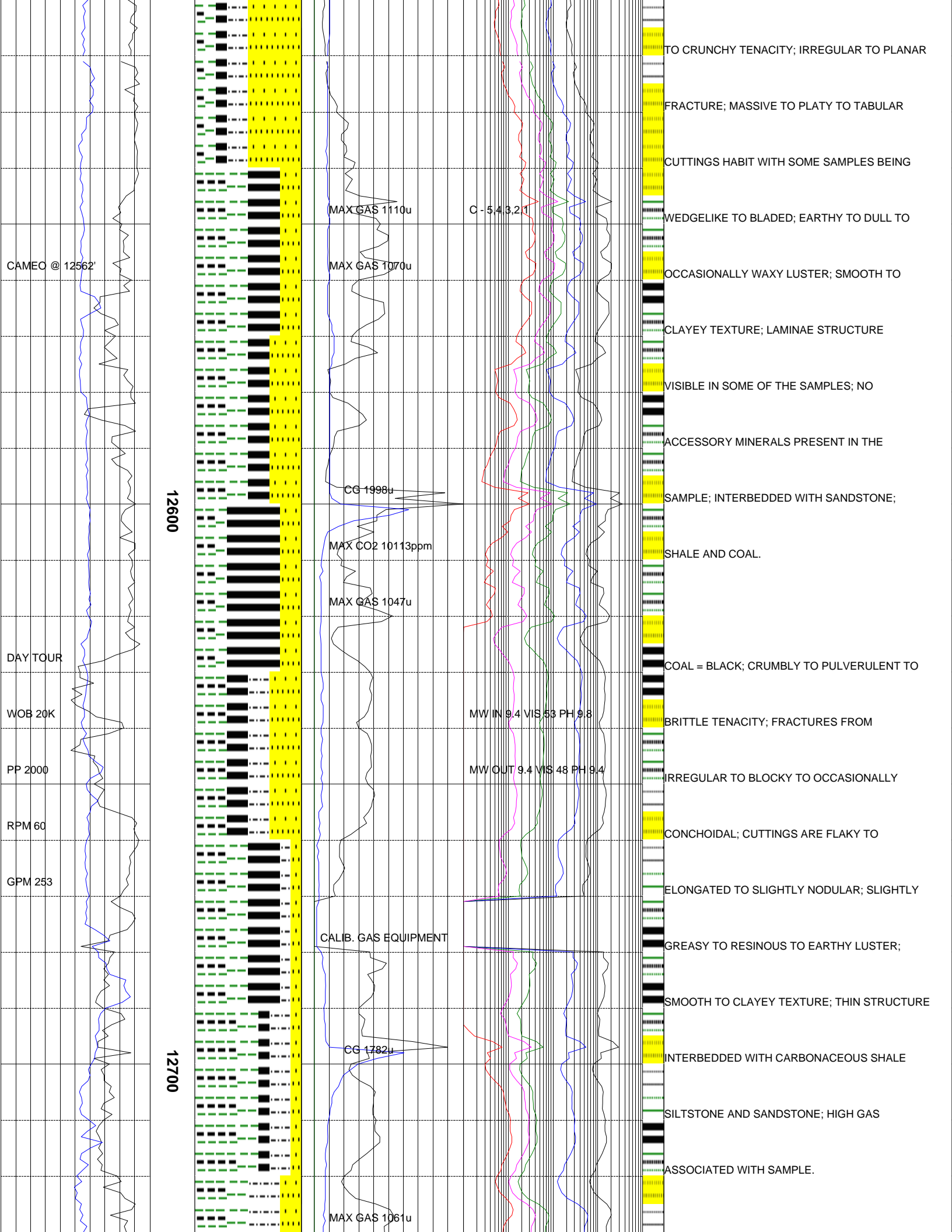


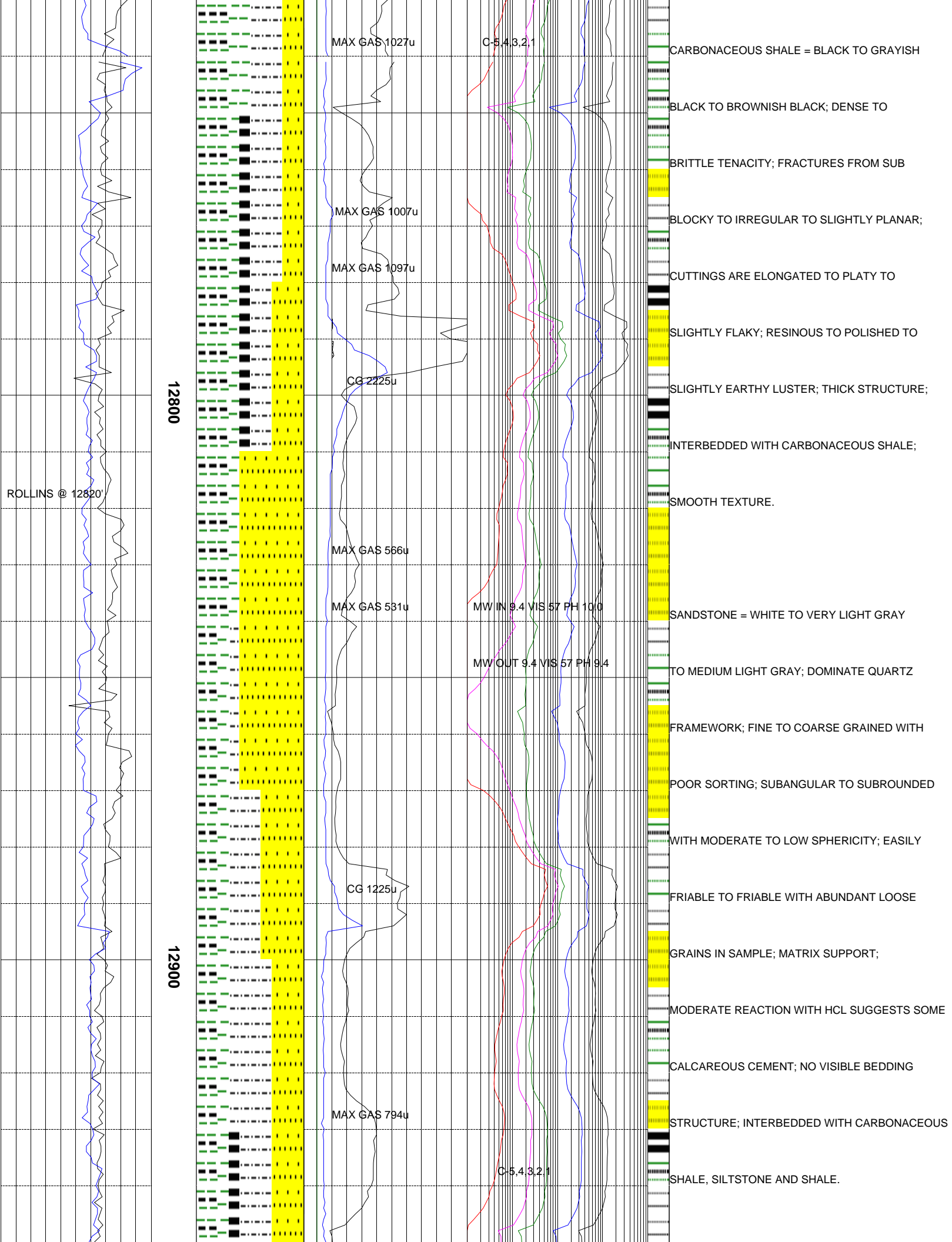


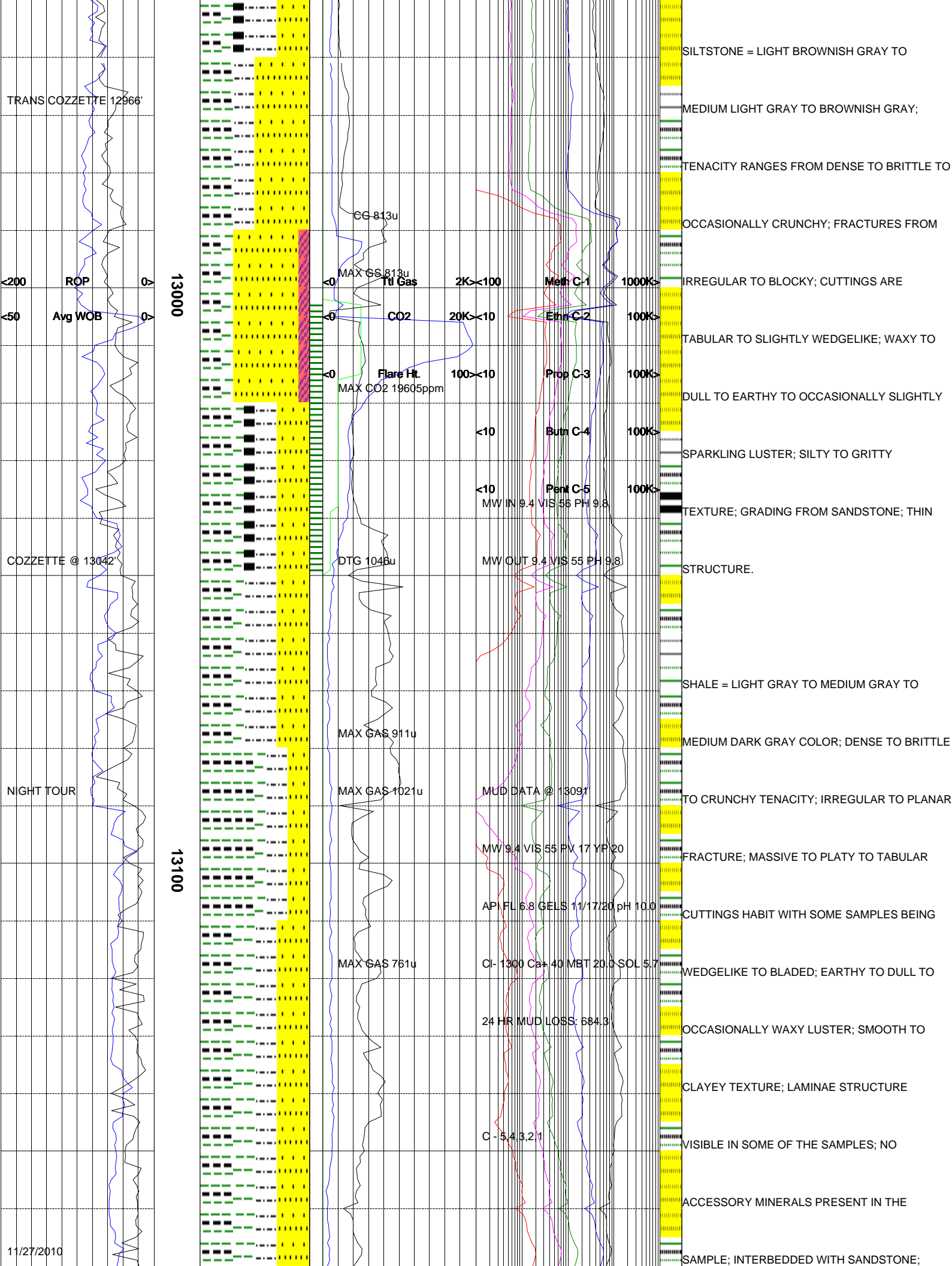


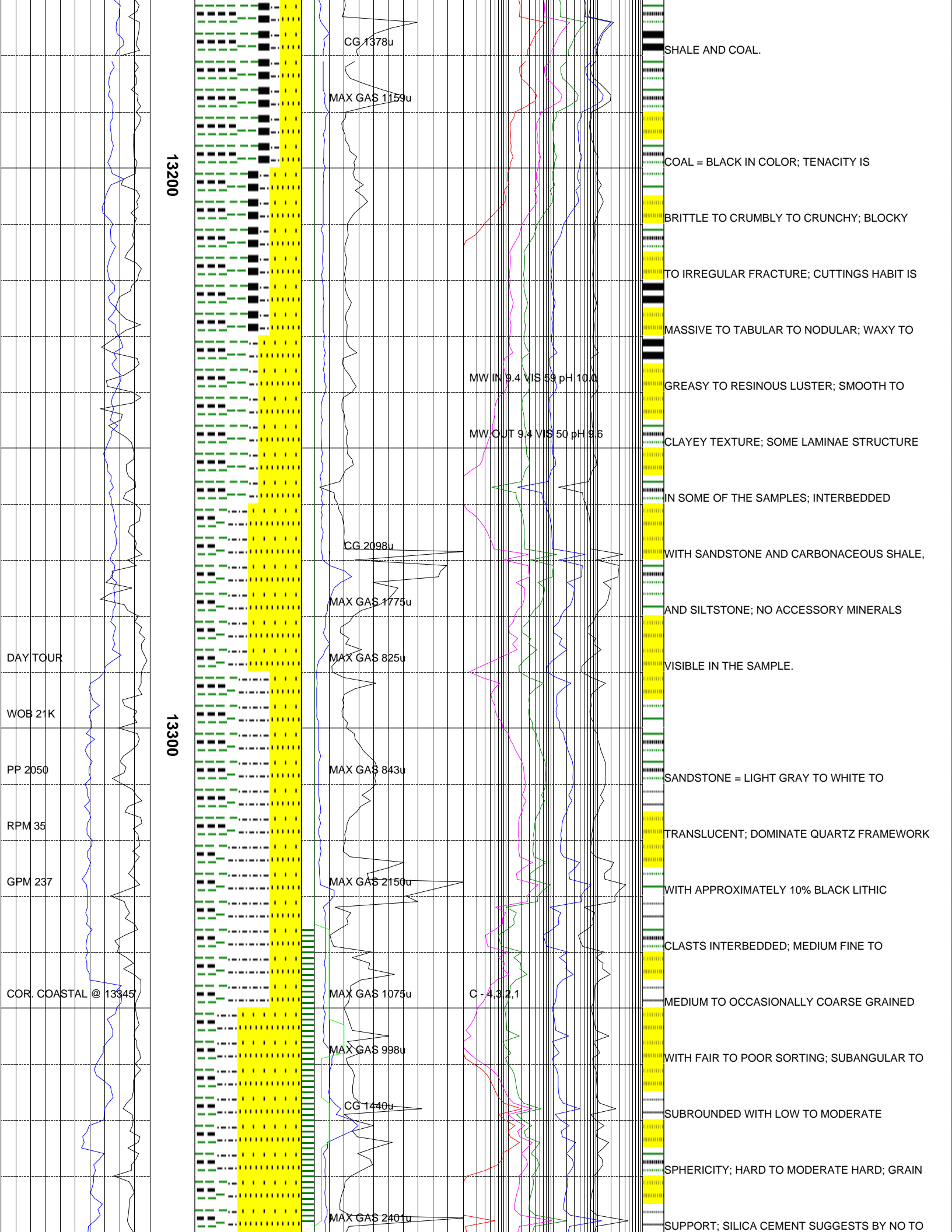


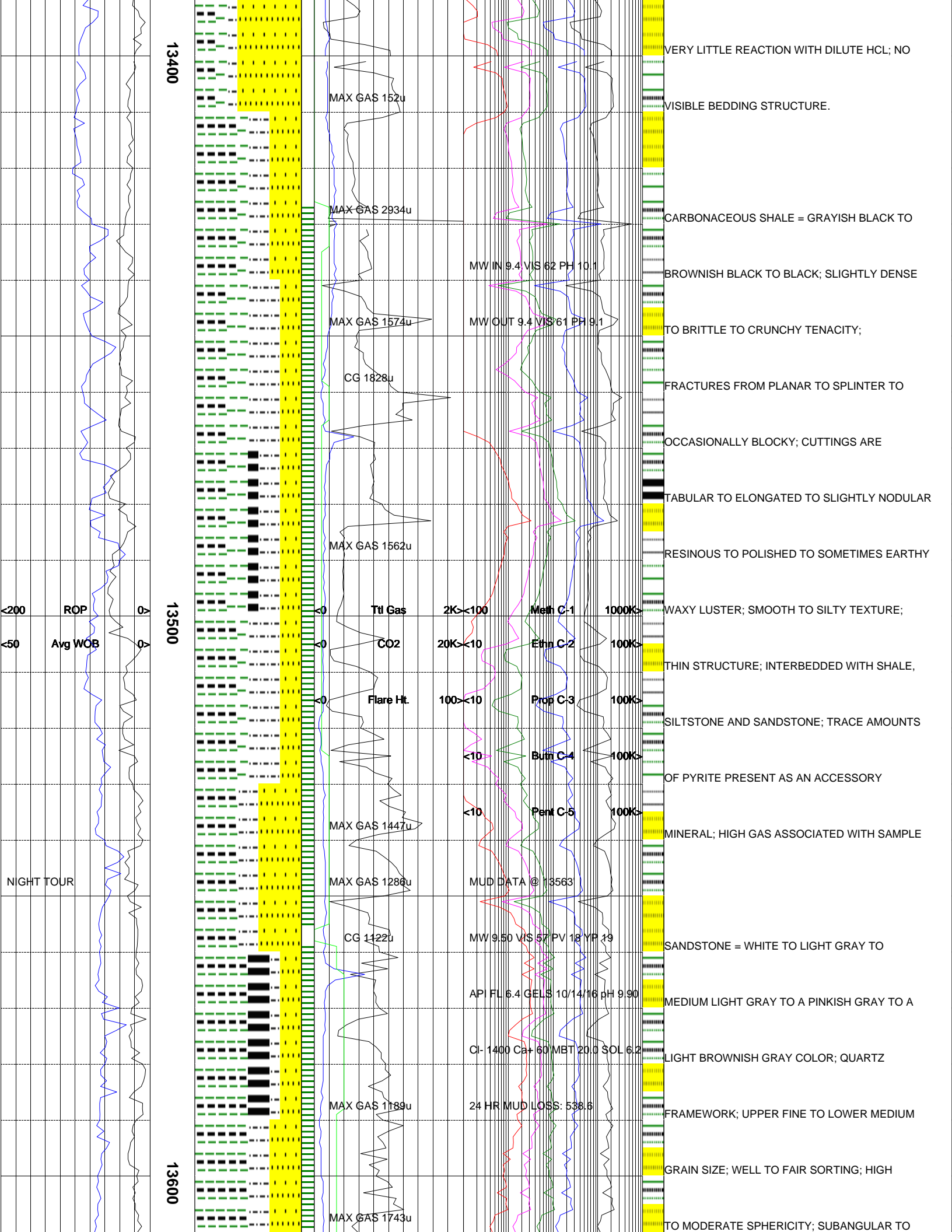


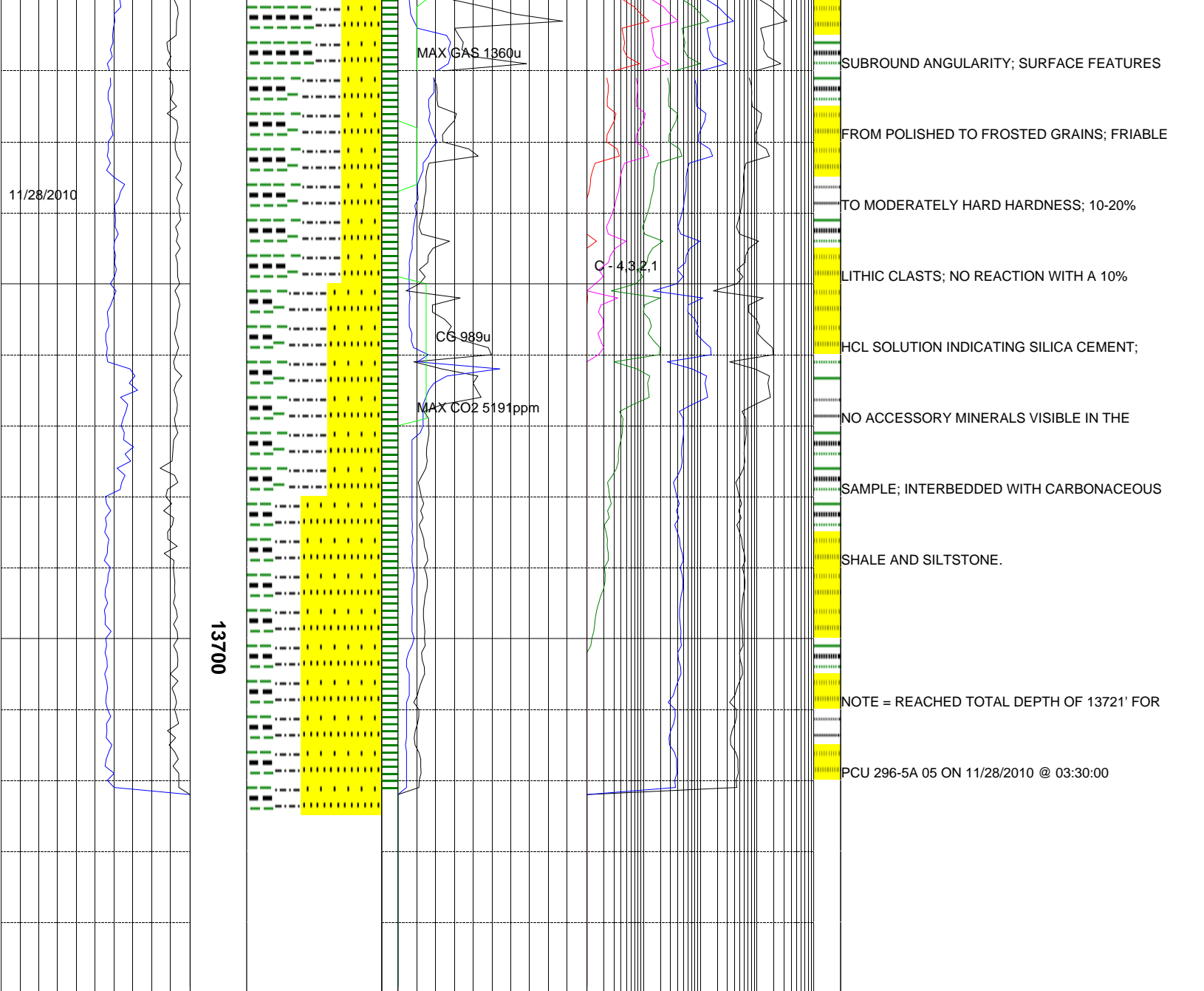












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