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MUDLOG TVD

COMPANY	ExxonMobil Production
WELL	FRU 197-33A7
FIELD	PICEANCE CREEK
REGION	ROCKIES
COORDINATES	39.915575000 108.28575000
ELEVATION	GL 6386 KB 6359
COUNTY, STATE	RIO BLANCO, CO
API INDEX	05-103-1139-900
SPUD DATE	02/16/2010
CONTRACTOR	HE
CO. REP.	R.T. OWENS
RIG/TYPE	215/FLEX 3
LOGGING UNIT	MLU051
GEOLOGISTS	G.BAKER B.MARSH
ADD. PERSONS	D.CLAAR B.JOHANNING
CO. GEOLOGIST	MELANIE BIGGS

LOG INTERVAL

DEPTHS: 3,790' TO 12,375'
DATES: 02/16/2010 TO 02/26/2010
SCALE: 5"=100'

CASING DATA

10.75" AT 3,808'
7.00" AT 8,609'
AT
AT

MUD TYPES

LSND TO 12,375"
TO
TO
TO

HOLE SIZE

9.875" TO 8,619'
6.125" TO 12,375'
TO
TO

ABBREVIATIONS

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

	ALTERED ZONE
	ANDESITE
	ANHYDRITE
	BASALT
	BENTONITE
	BIOTITIZATION
	BRECCIA
	CALCARENITE
	CALCAREOUS TUFF
	CALCILUTITE
	CARBONATES
	CARBONACEOUS MAT
	CARBONACEOUS SH
	CEMENT CONTAM.
	CHALK
	CRYSTALLINE TUFF
	CHERT - ARGILL

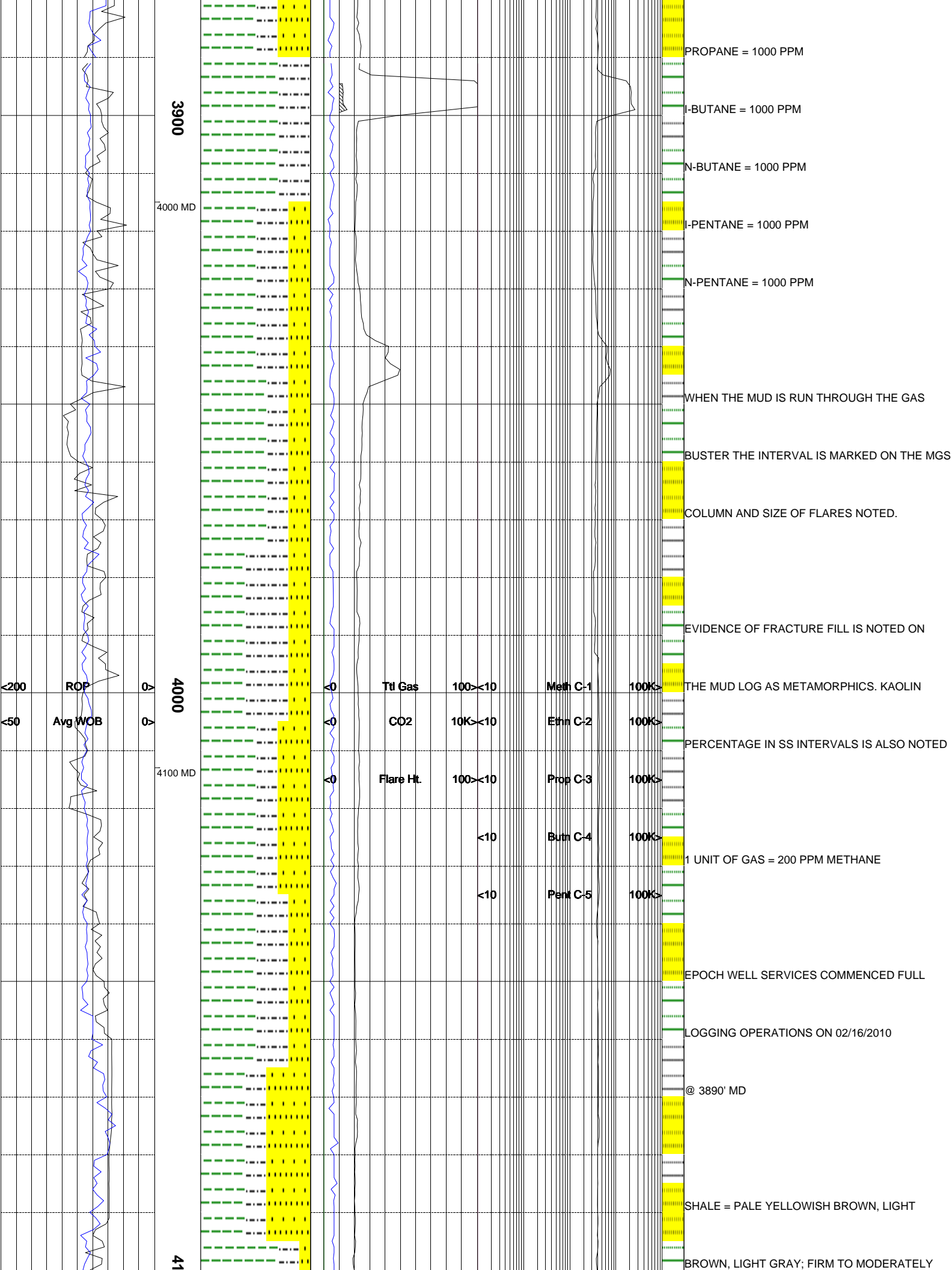
	CHERT - GLASSY
	CHERT - PORCEL
	CHERT - TIGER STRIPE
	CHERT - UNDIFF
	CLAY
	CLAY-MUDSTONE
	CLYST-TUFFACEOUS
	CHLORITIZATION
	COAL
	CONGLOMERATE
	CONGL. SAND
	CONGL. SANDSTONE
	COQUINA
	DACITE
	DIATOMITE
	DIORITE
	DOLOSTONE

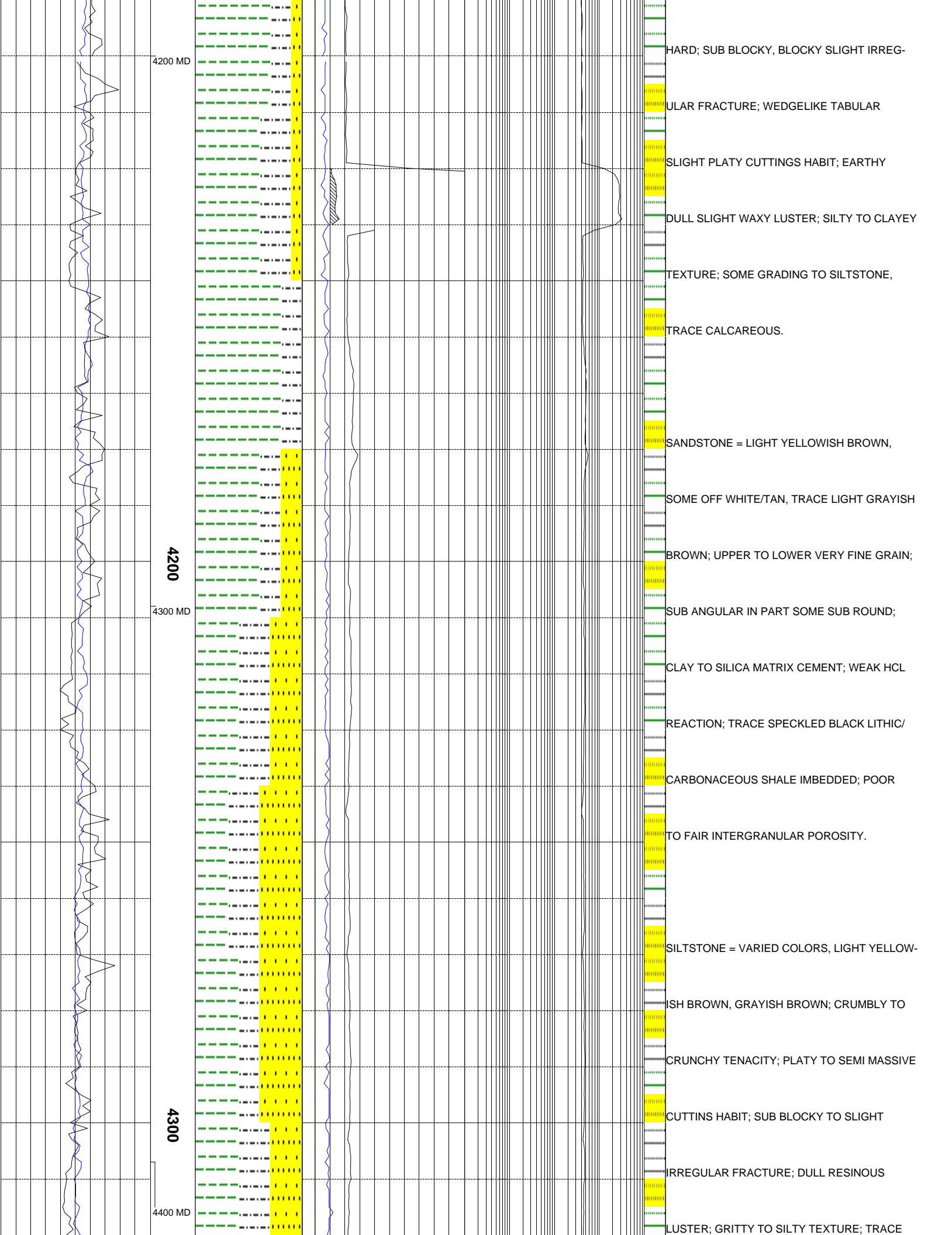
	FELSIC SILIC DIKE
	FOSSIL
	GABBRO
	GLASSY TUFF
	GRANITE
	GRANITE WASH
	GRANODIORITE
	GYPSUM
	HALITE
	HORNBL-QTZ-DIO
	IGNEOUS (ACIDIC)
	IGNEOUS (BASIC)
	INTRUSIVES
	KAOLINITIC
	LIMESTONE
	LITHIC TUFF
	MARL - DOLO

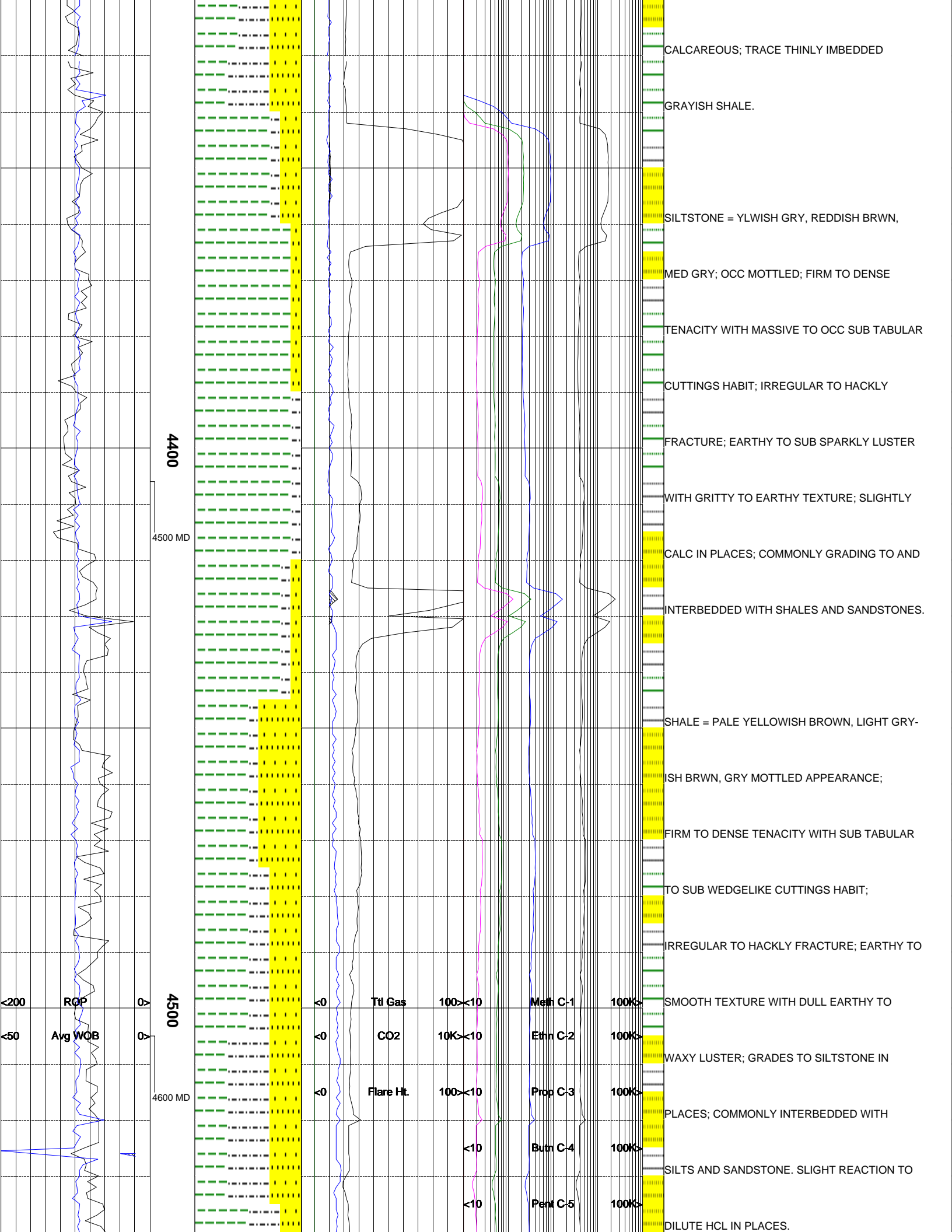
	MARL - CALC
	METAMORPHICS
	MUDSTONE
	OBSIDIAN
	PALEOSOL
	PHOSPHATE
	PORCELANITE
	PORCELANEOUS CLYST
	PYRITE
	PYROCLASTICS
	QUARTZ DIORITE
	QUARTZ LATITE
	QUARTZ MONZONITE
	RECRYSTALLIZED CALCITE
	RHYOLITE
	SALT
	SAND

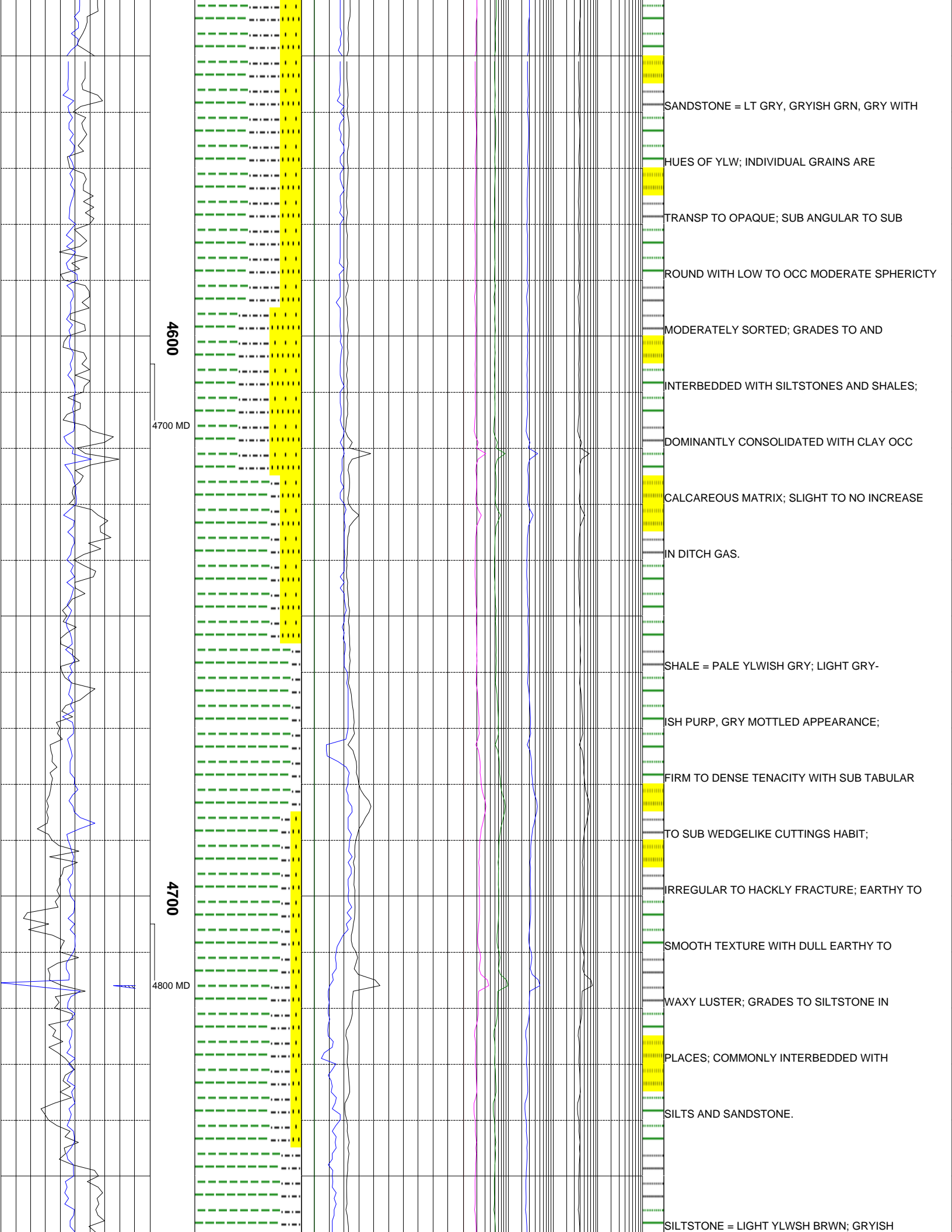
	SANDSTONE
	SANDSTONE-TUFFACEOUS
	SERICITIZATION
	SERPENTINE
	SHALE
	SHALE TUFFACEOUS
	SHELL FRAGMENTS
	SIDERITE
	SILICIFICATION
	SILTSTONE
	SILTST-TUFFACEOUS
	TUFF
	VOLCANICLASTICS SEDS
	VOLCANICS

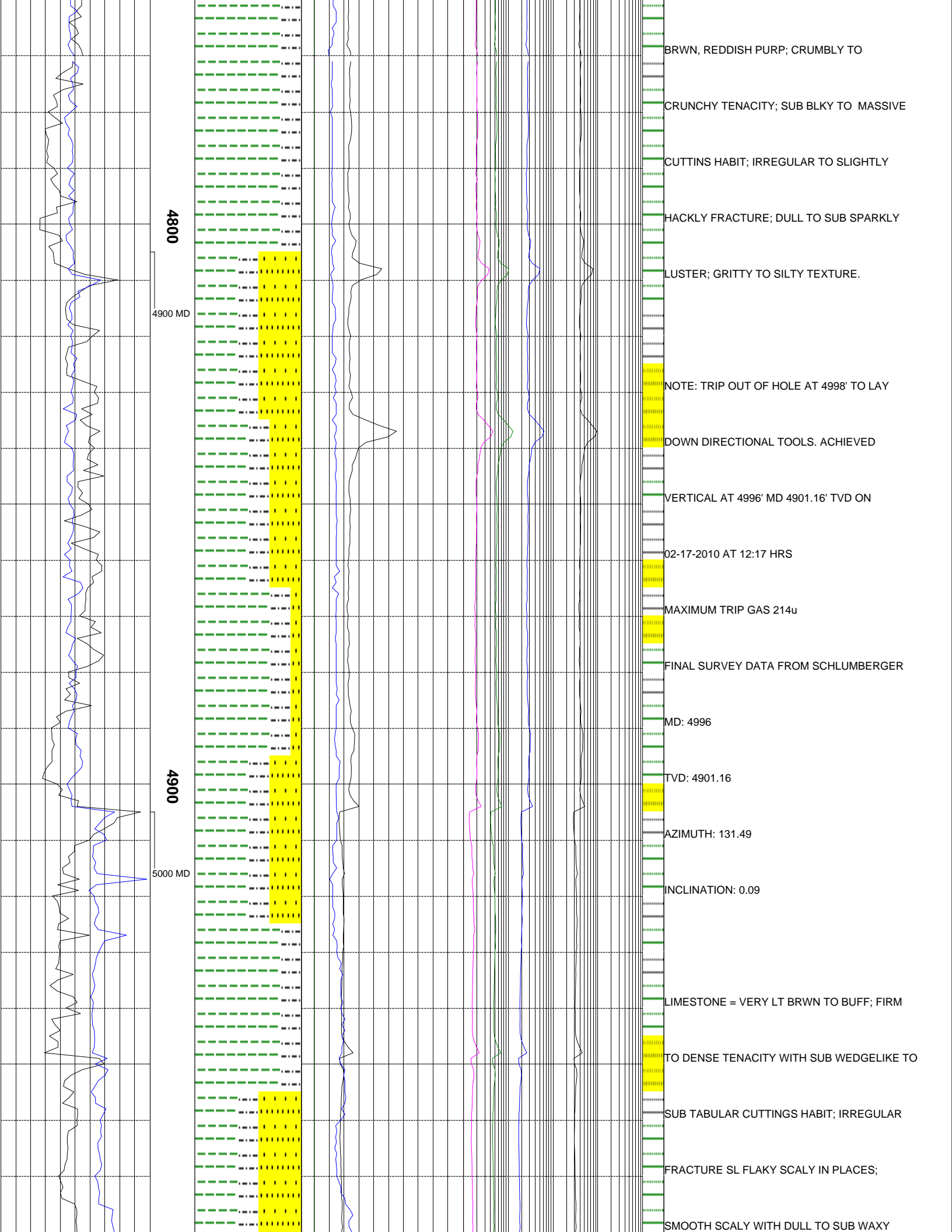
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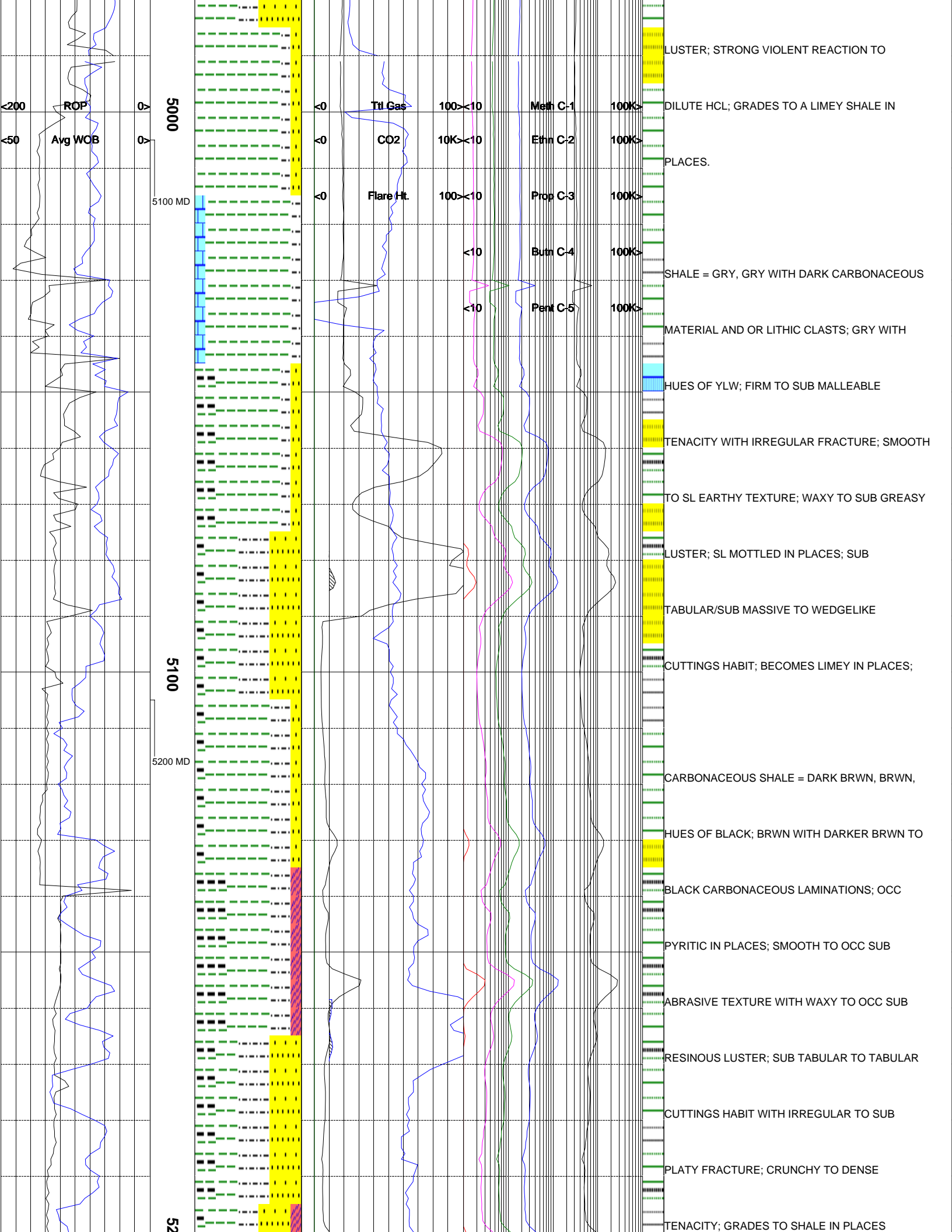


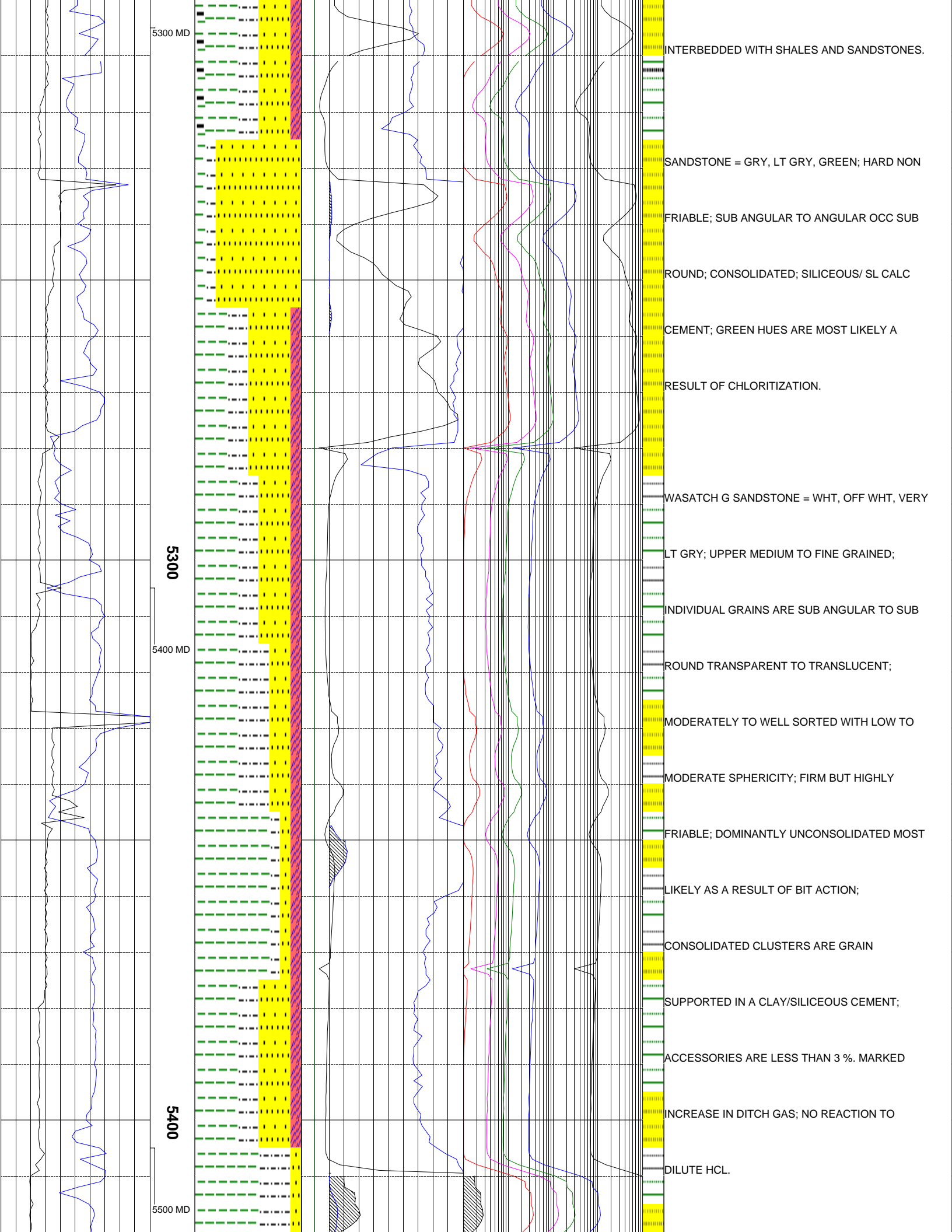


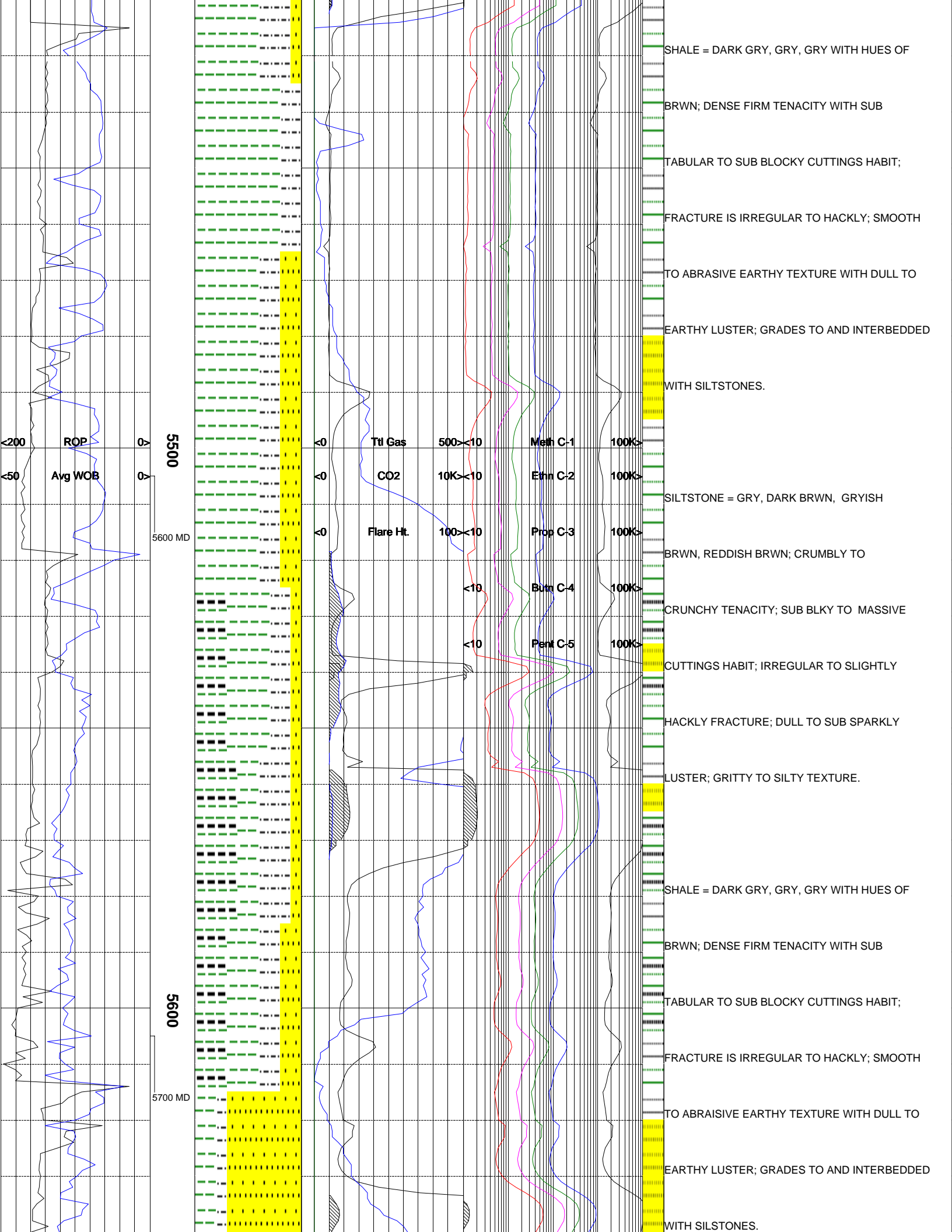


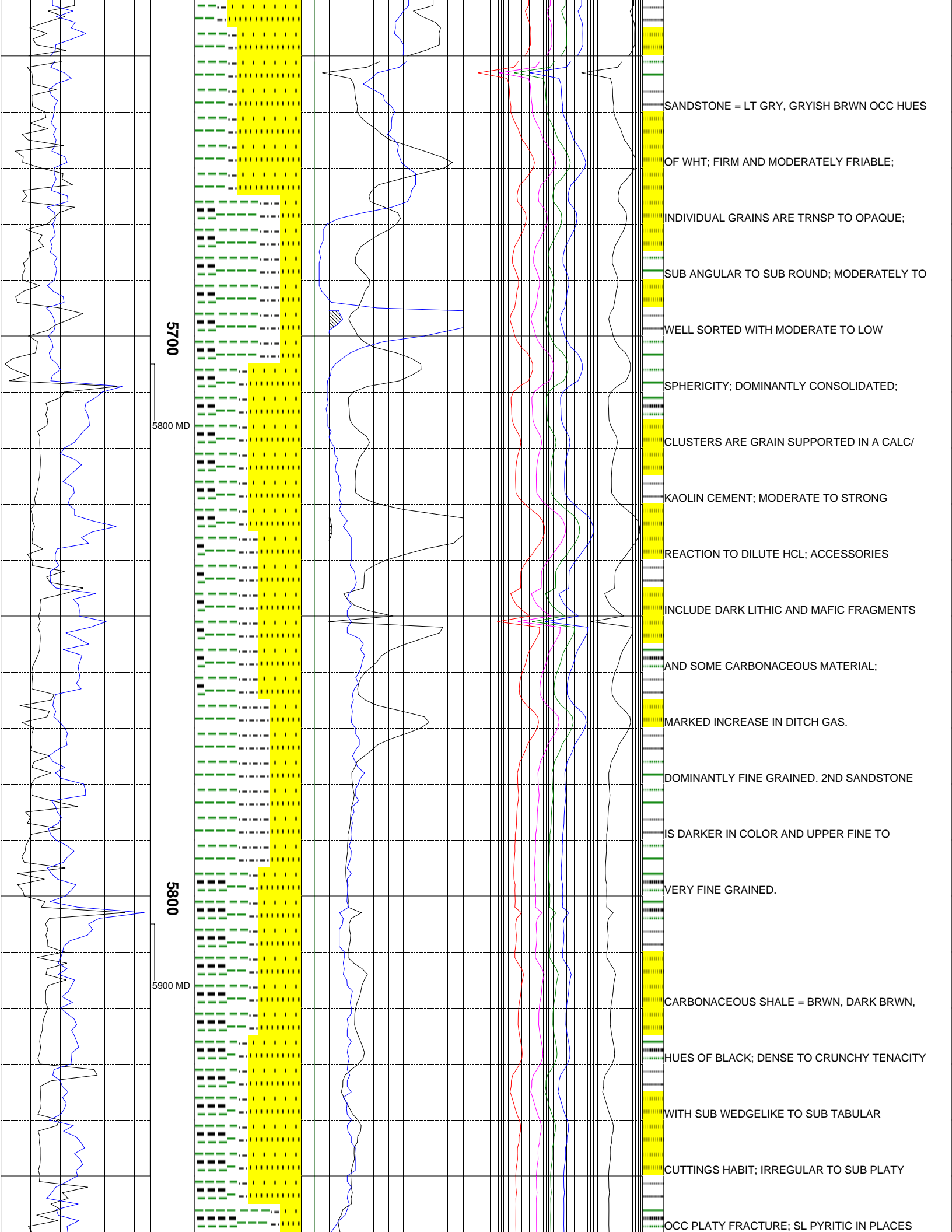


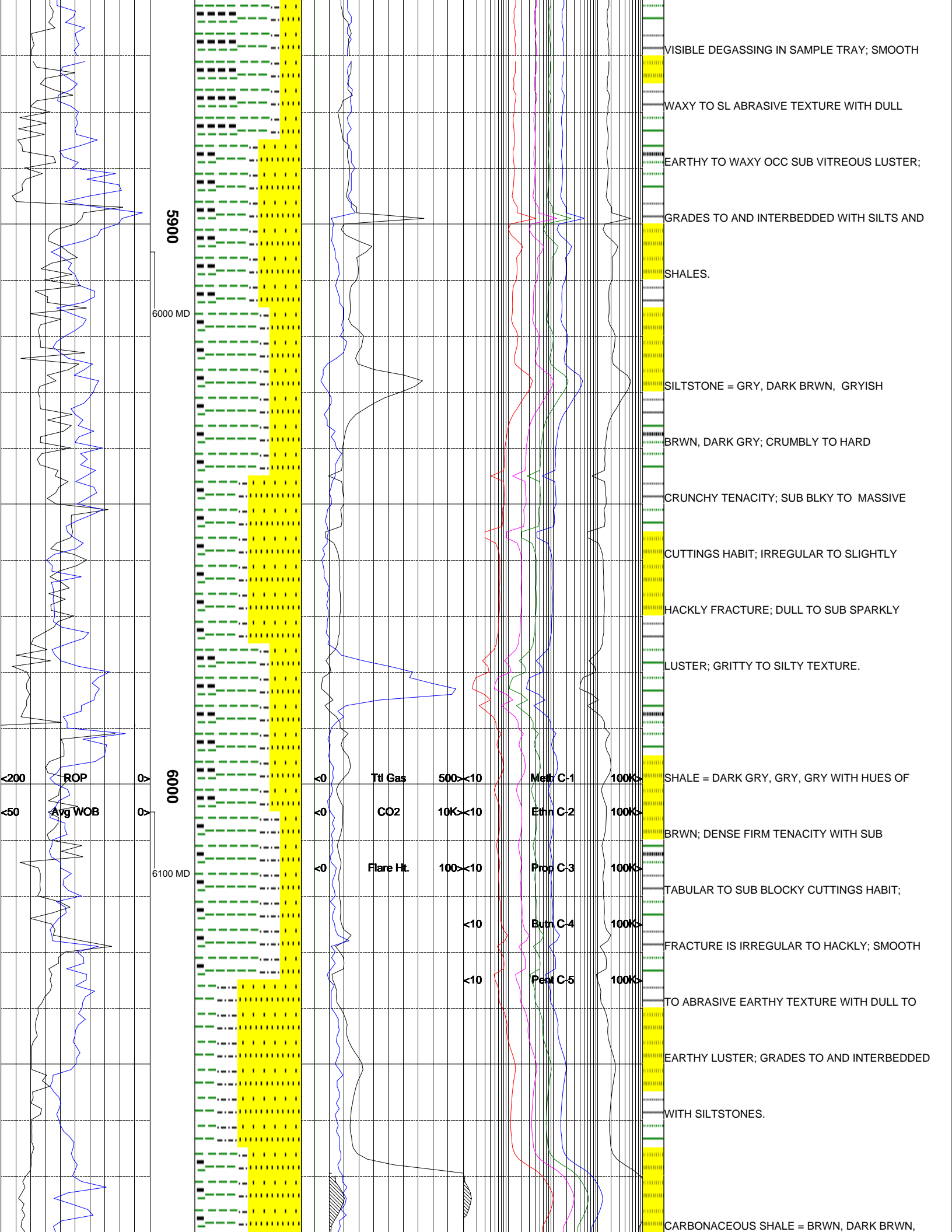


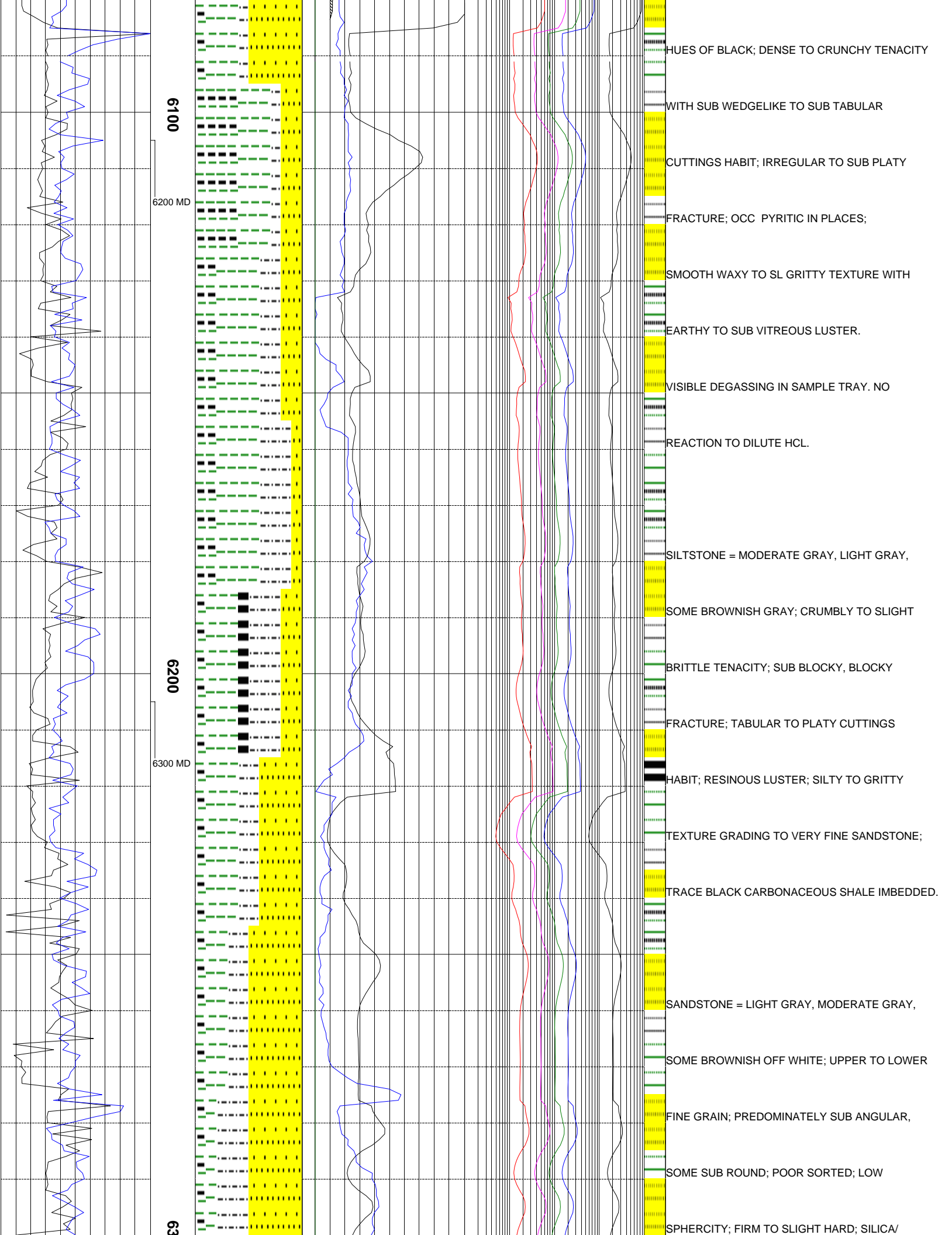


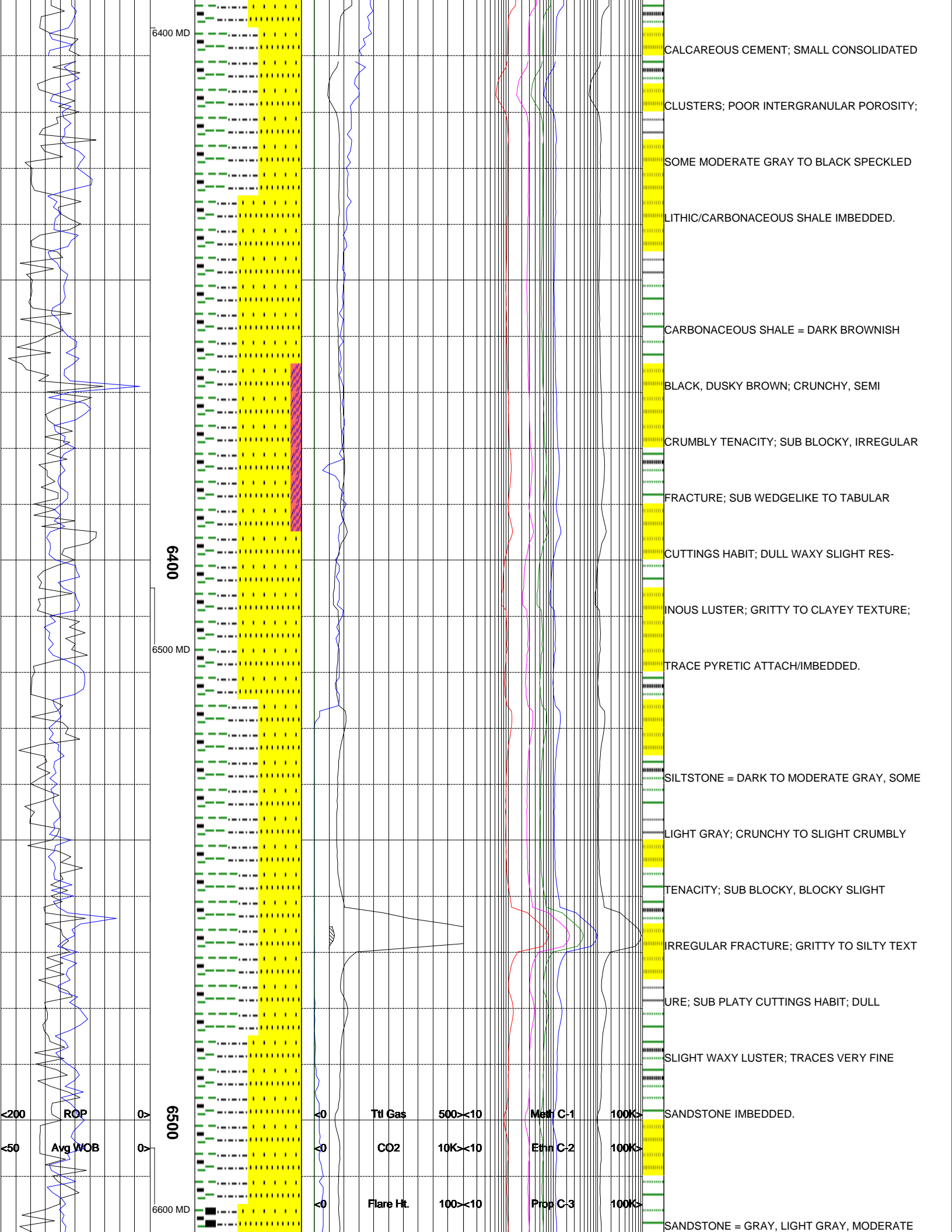


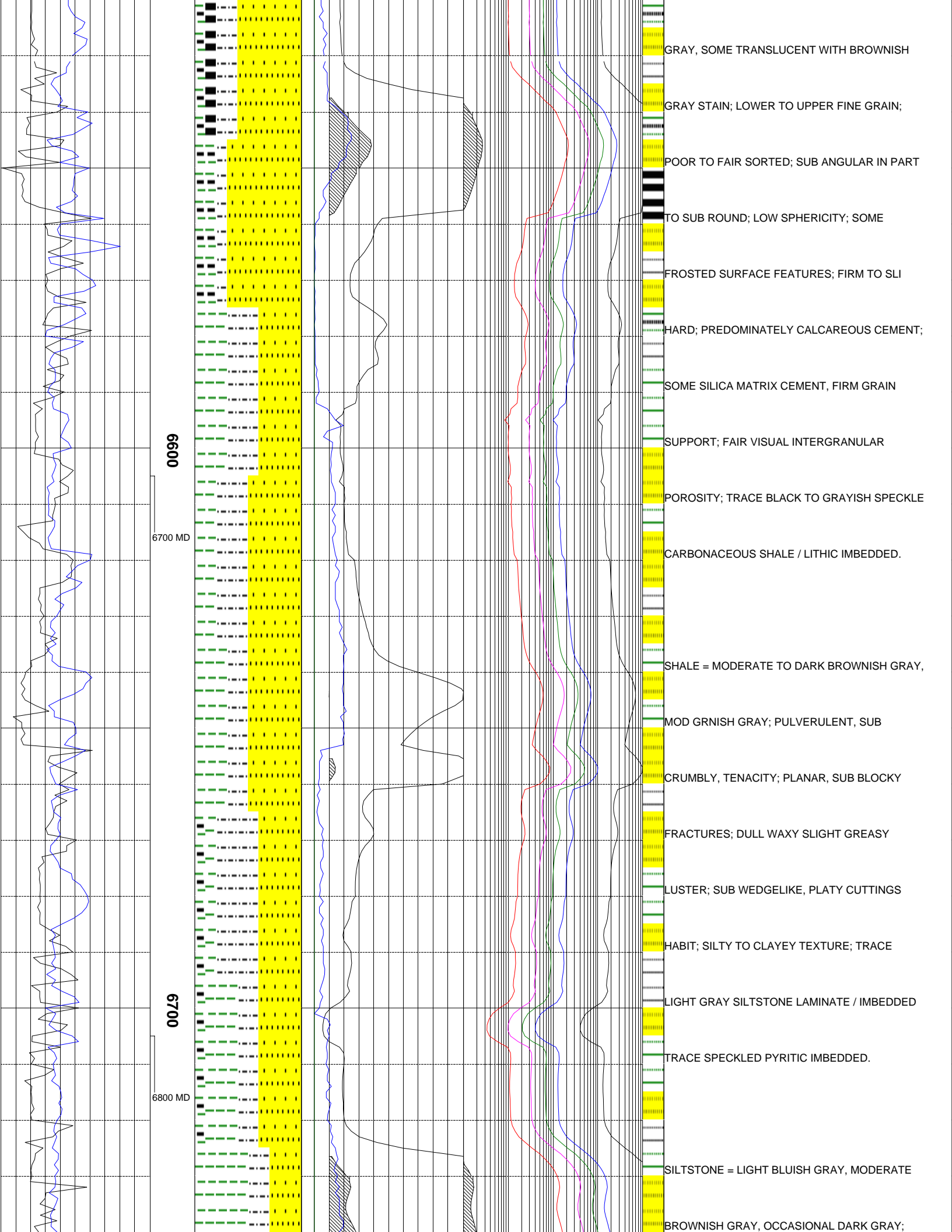


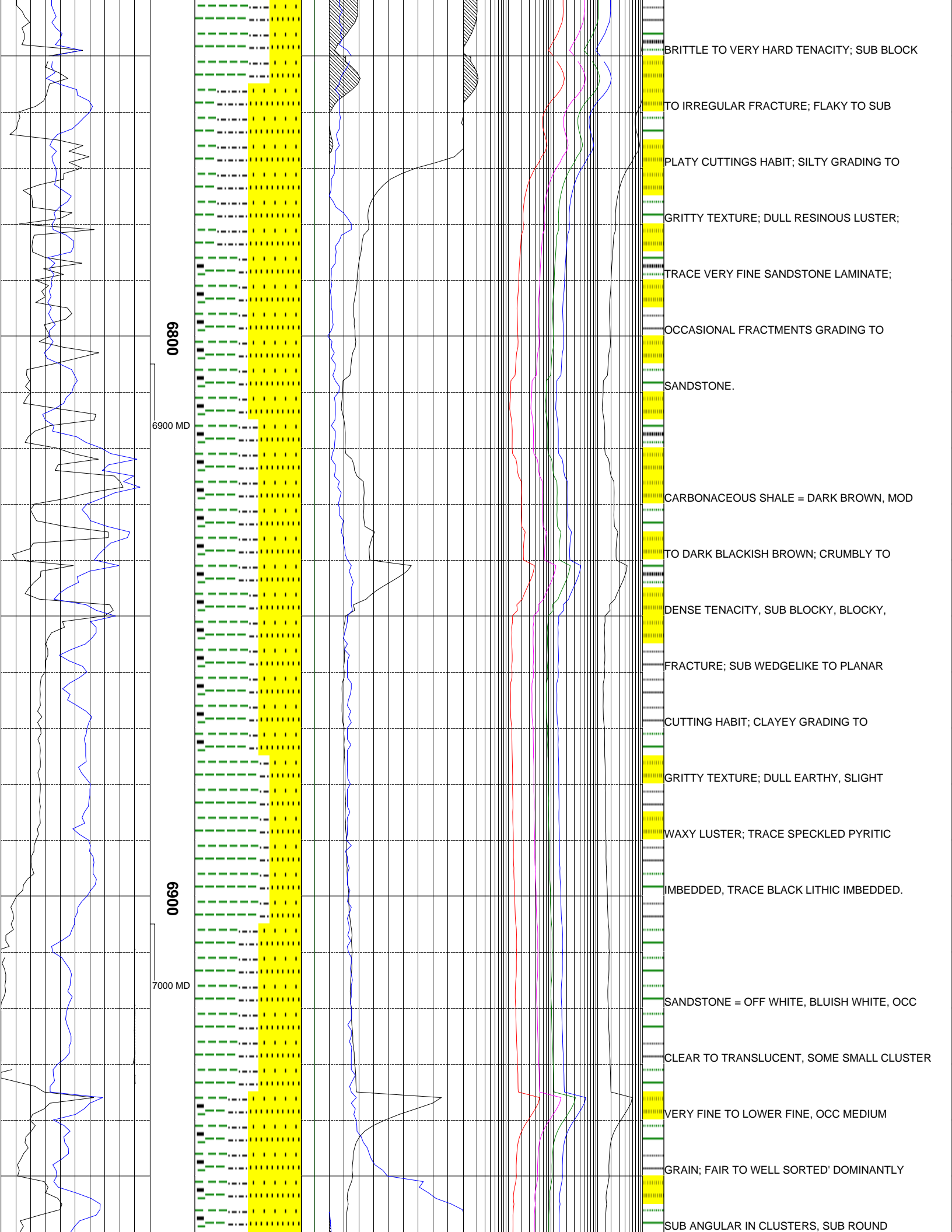


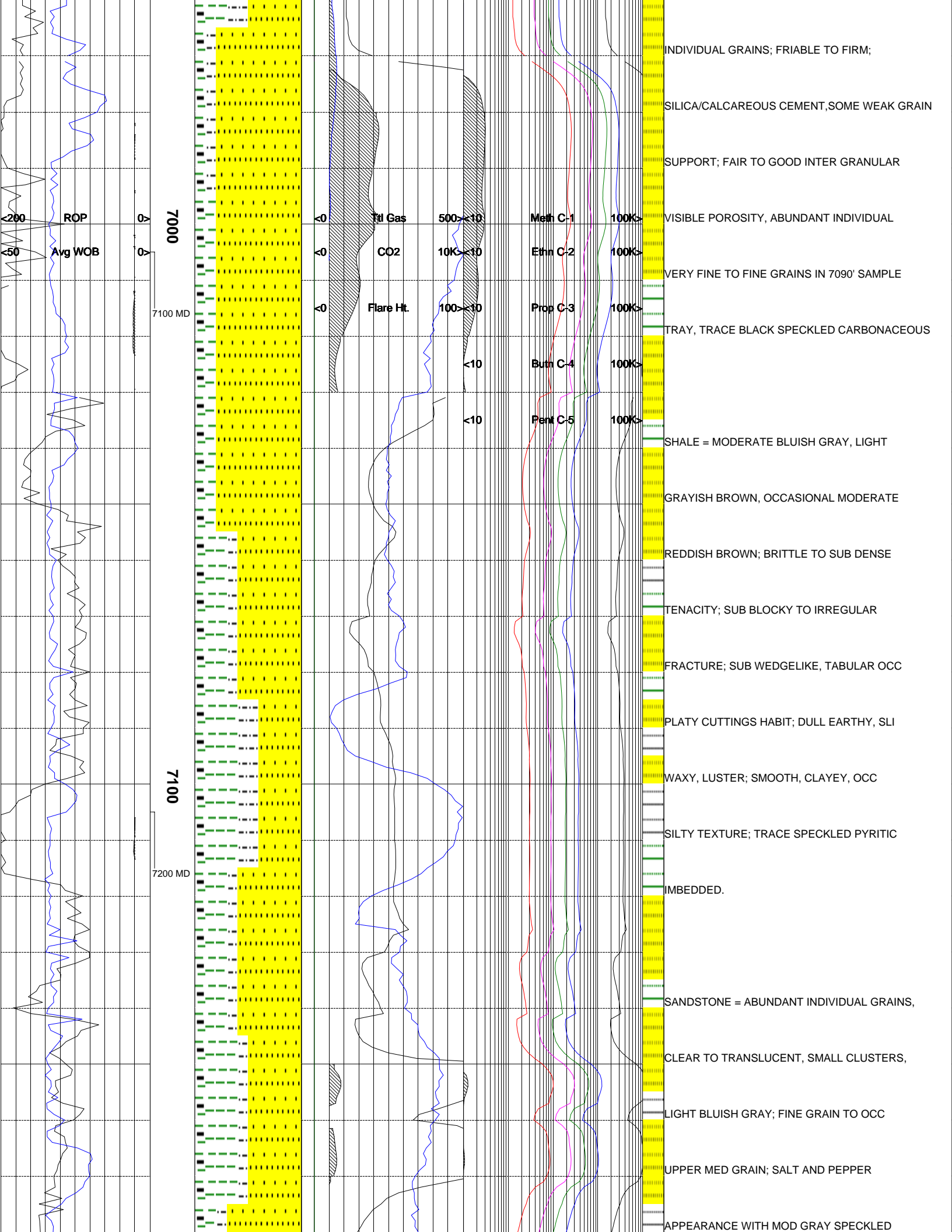


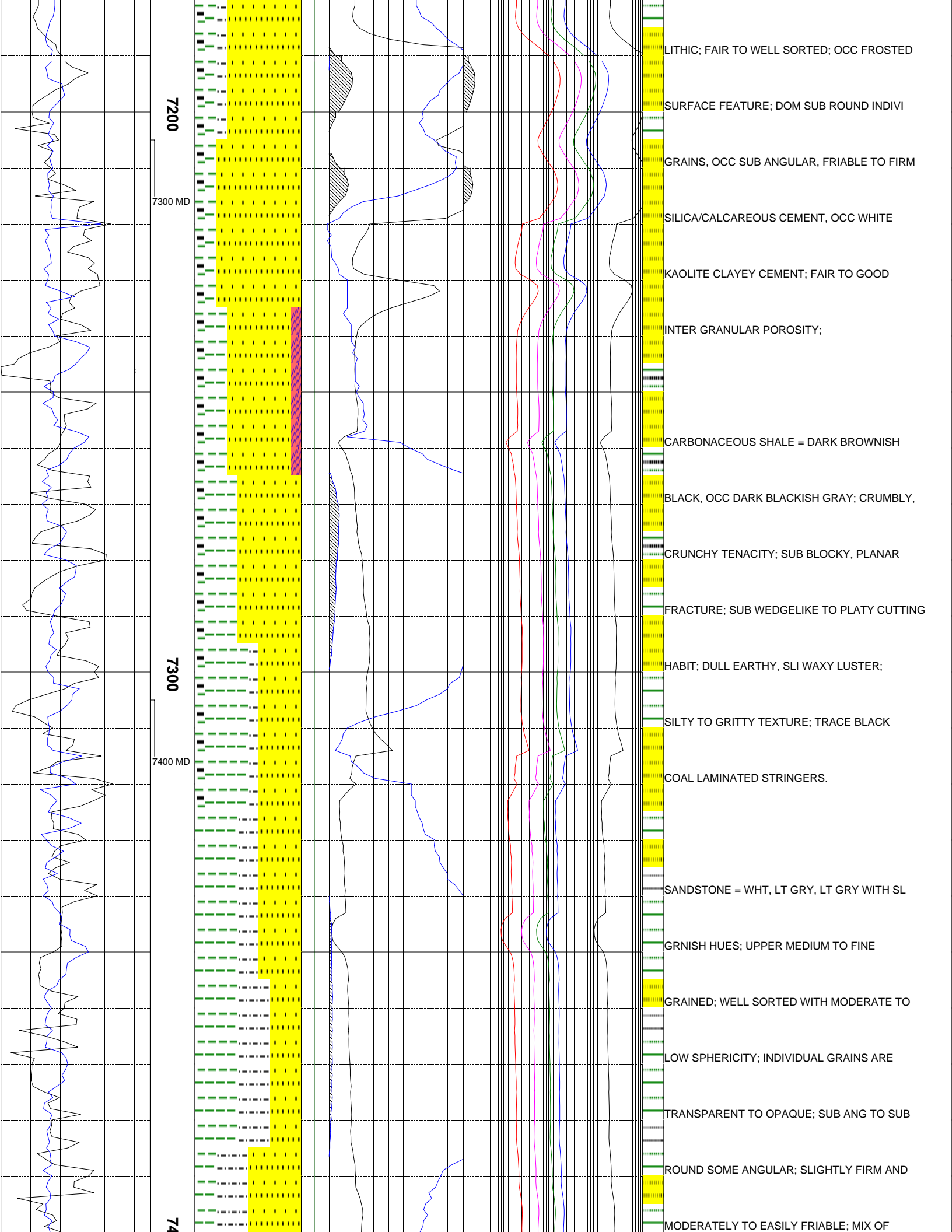


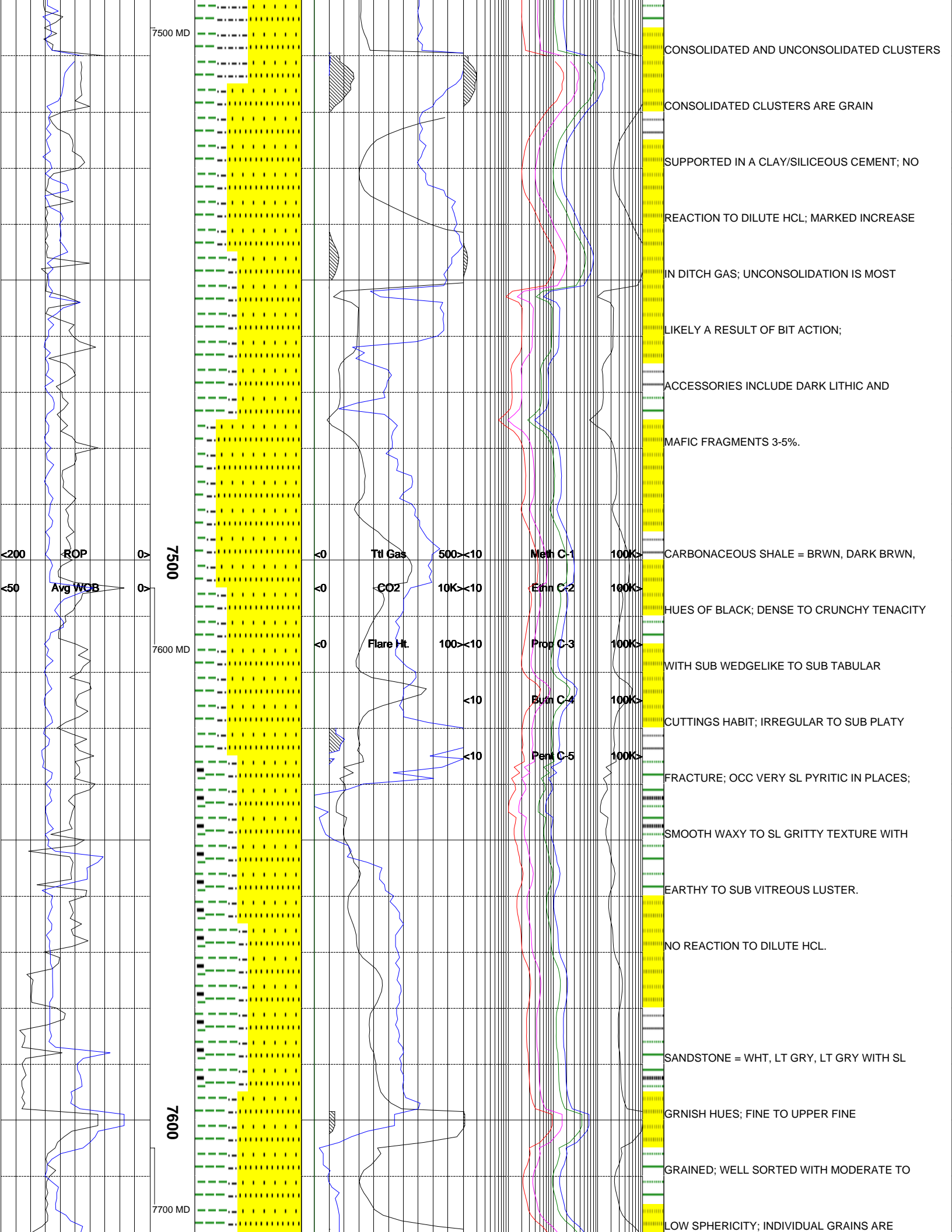












7500 MD

7500

7600 MD

7600

7700 MD

<200

ROP

<50

Avg WOB

<0 Ttl Gas

500<10

Meth C-1

100K<

<0 CO2

10K<10

Ethn C-2

100K<

<0 Flare Ht.

100<10

Prop C-3

100K<

<10

Butn C-4

100K<

<10

Pent C-5

100K<

CONSOLIDATED AND UNCONSOLIDATED CLUSTERS

CONSOLIDATED CLUSTERS ARE GRAIN

SUPPORTED IN A CLAY/SILICEOUS CEMENT; NO

REACTION TO DILUTE HCL; MARKED INCREASE

IN DITCH GAS; UNCONSOLIDATION IS MOST

LIKELY A RESULT OF BIT ACTION;

ACCESSORIES INCLUDE DARK LITHIC AND

MAFIC FRAGMENTS 3-5%.

CARBONACEOUS SHALE = BRWN, DARK BRWN,

HUES OF BLACK; DENSE TO CRUNCHY TENACITY

WITH SUB WEDGELIKE TO SUB TABULAR

CUTTINGS HABIT; IRREGULAR TO SUB PLATY

FRACTURE; OCC VERY SL PYRITIC IN PLACES;

SMOOTH WAXY TO SL GRITTY TEXTURE WITH

EARTHY TO SUB VITREOUS LUSTER.

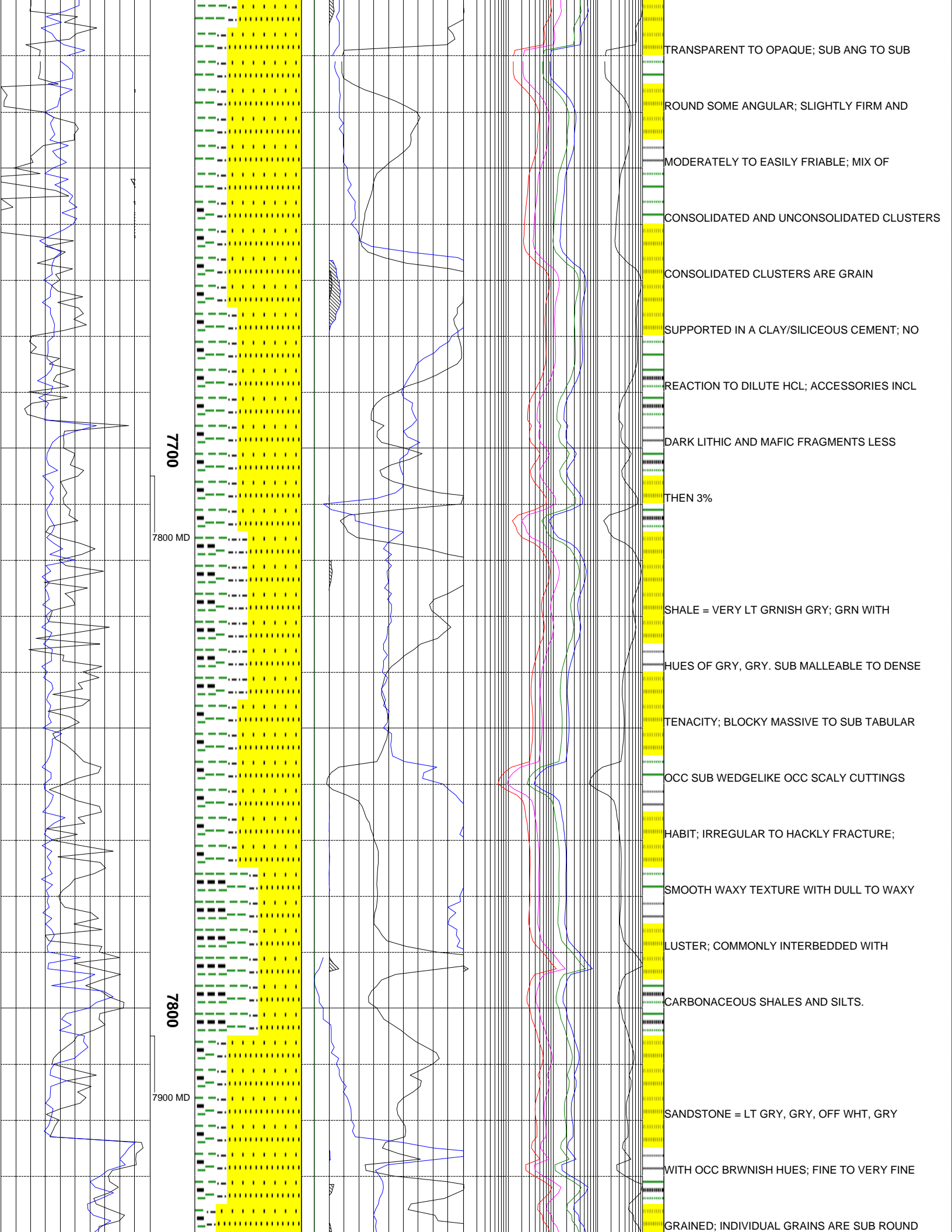
NO REACTION TO DILUTE HCL.

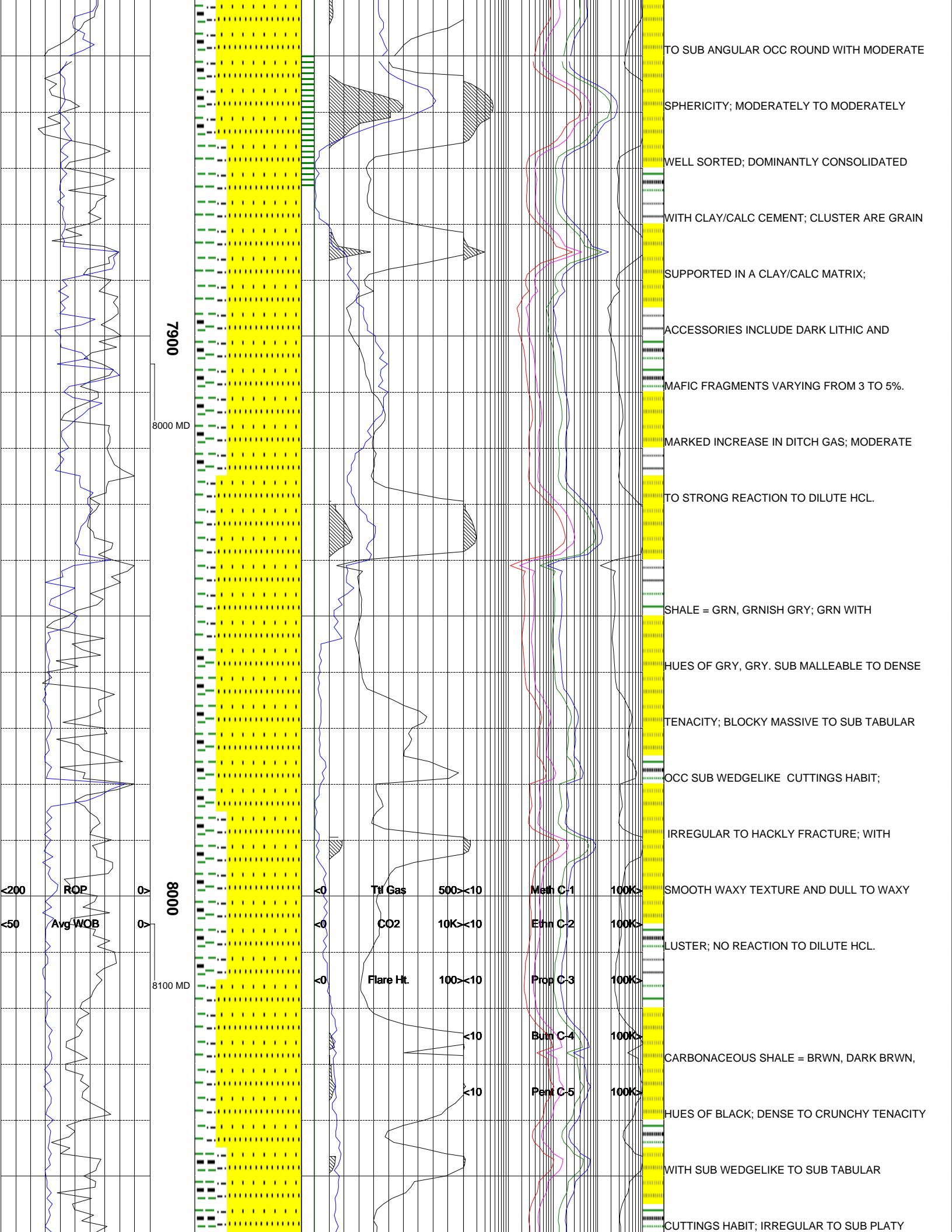
SANDSTONE = WHT, LT GRY, LT GRY WITH SL

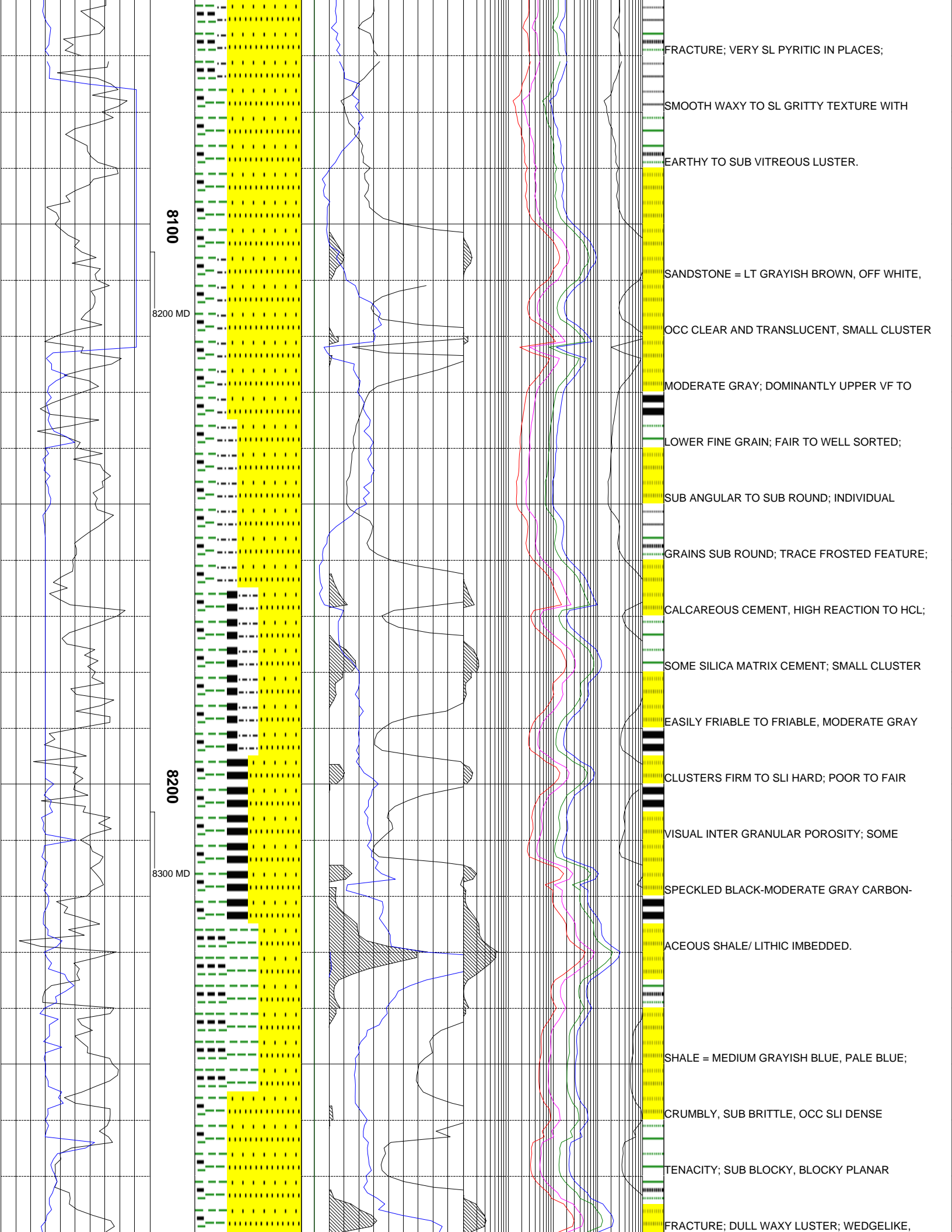
GRNISH HUES; FINE TO UPPER FINE

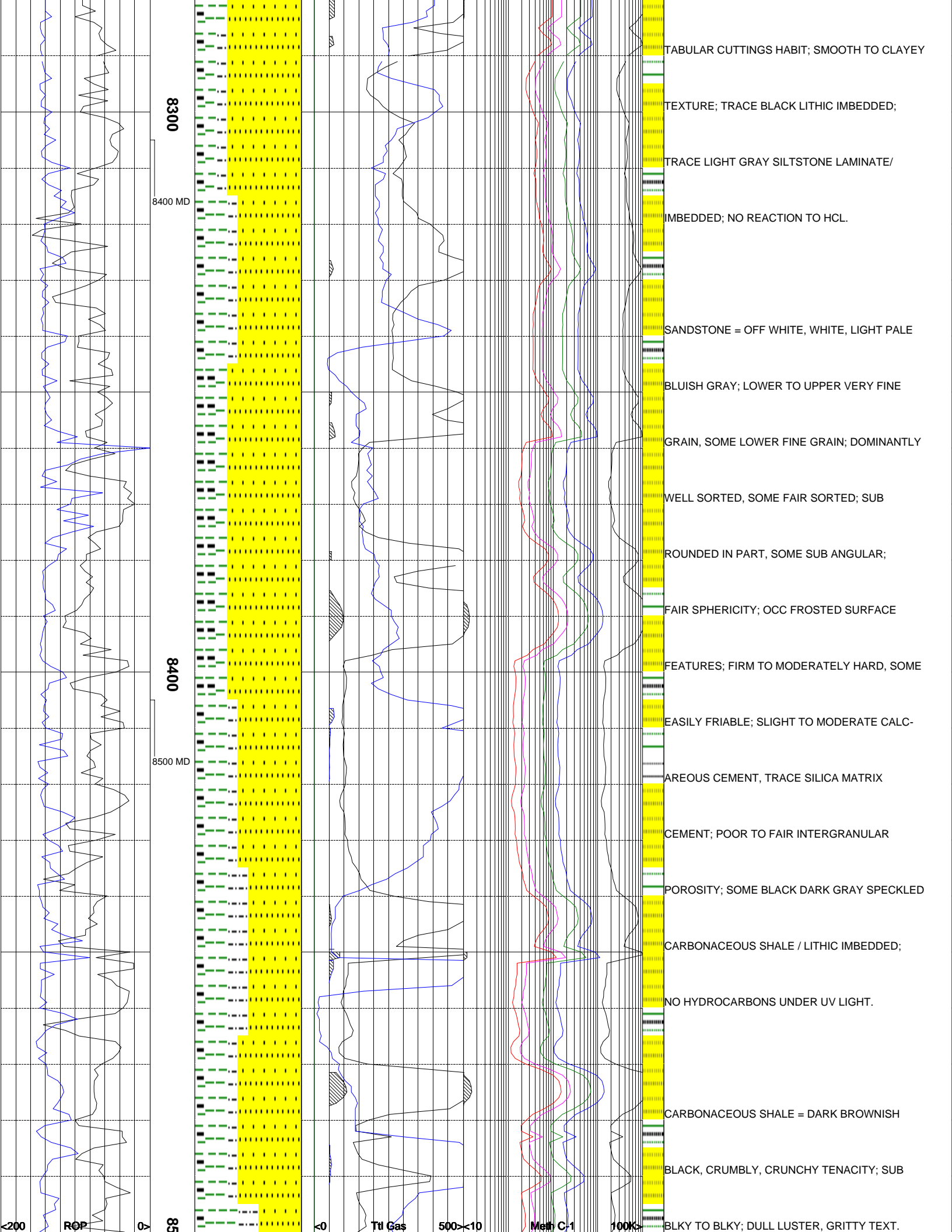
GRAINED; WELL SORTED WITH MODERATE TO

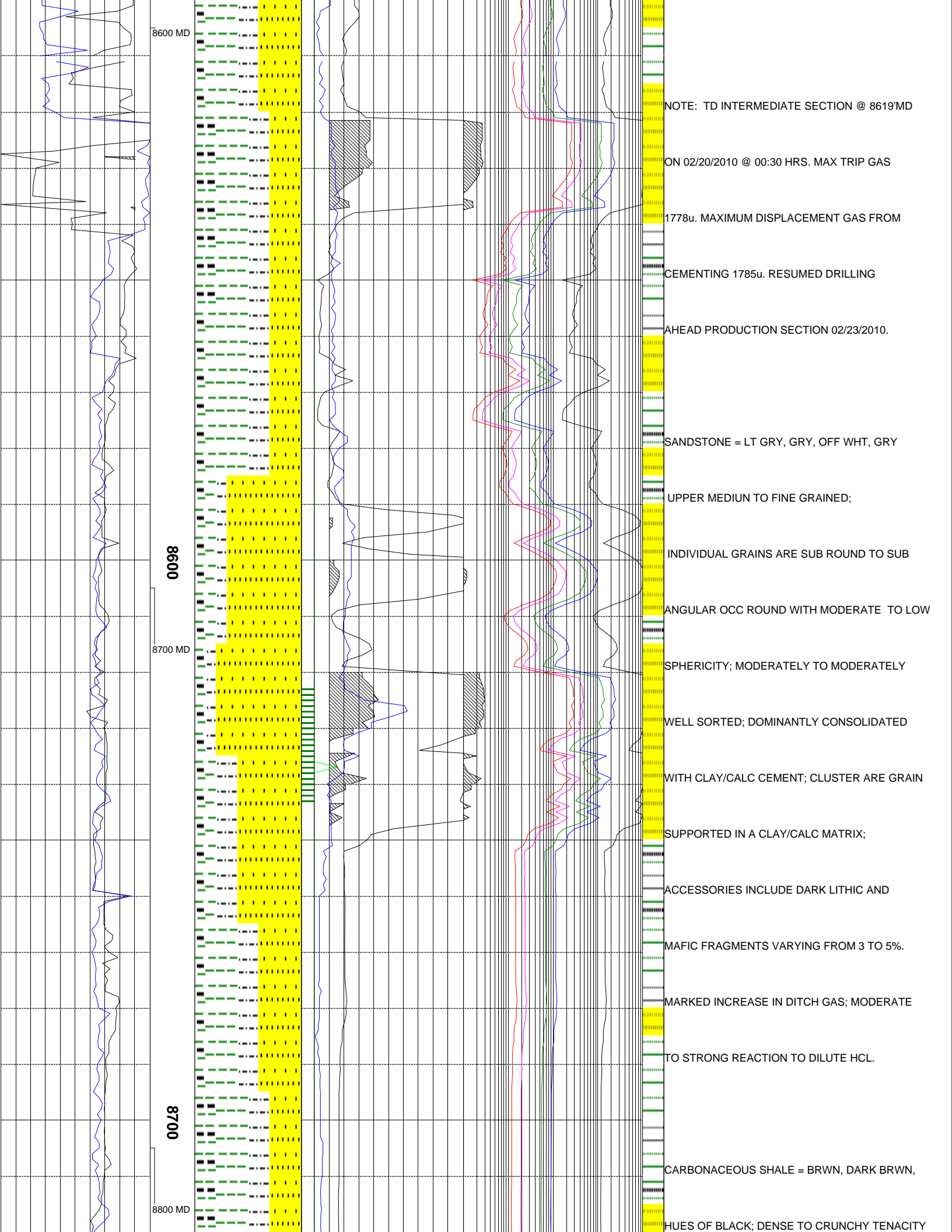
LOW SPHERICITY; INDIVIDUAL GRAINS ARE

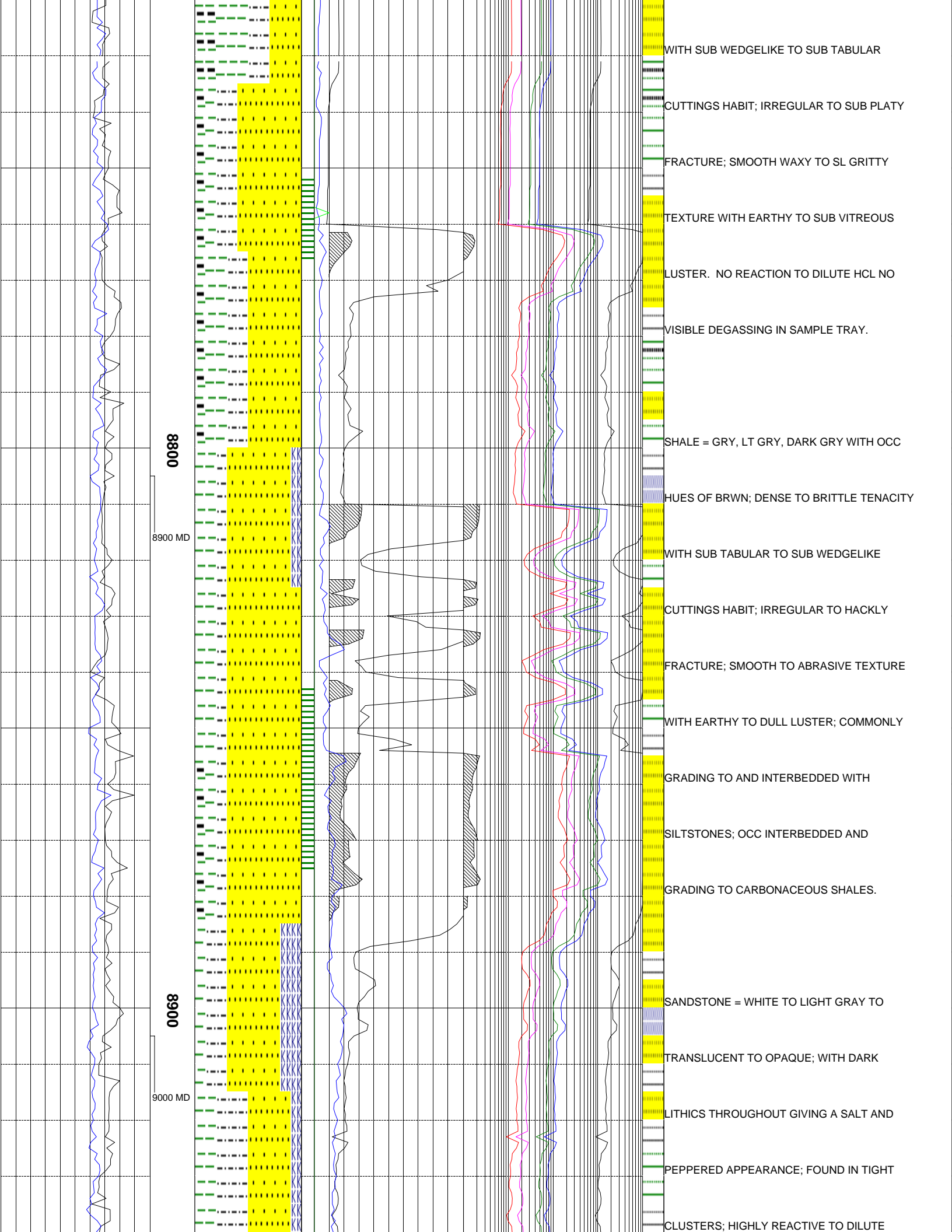


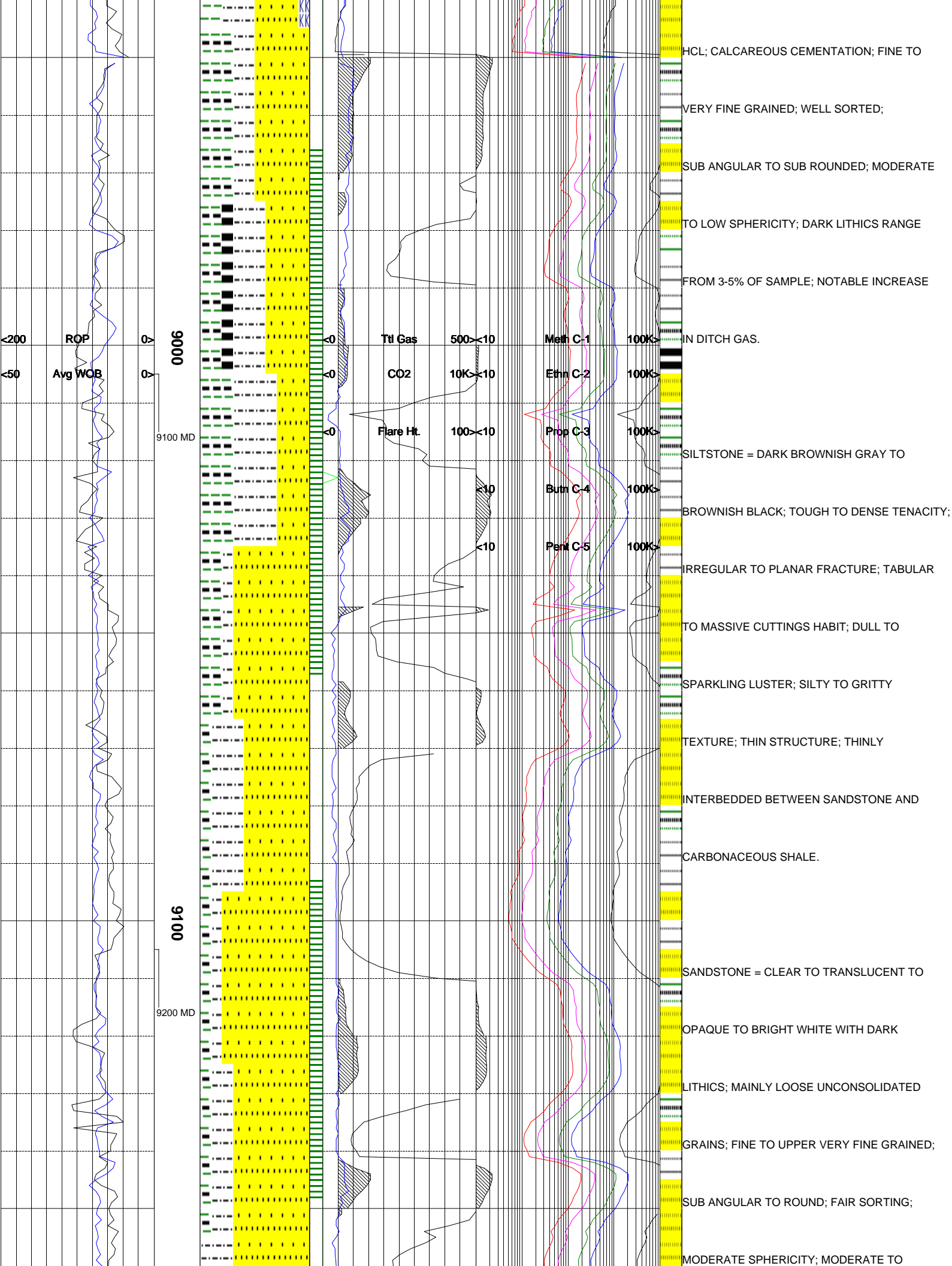


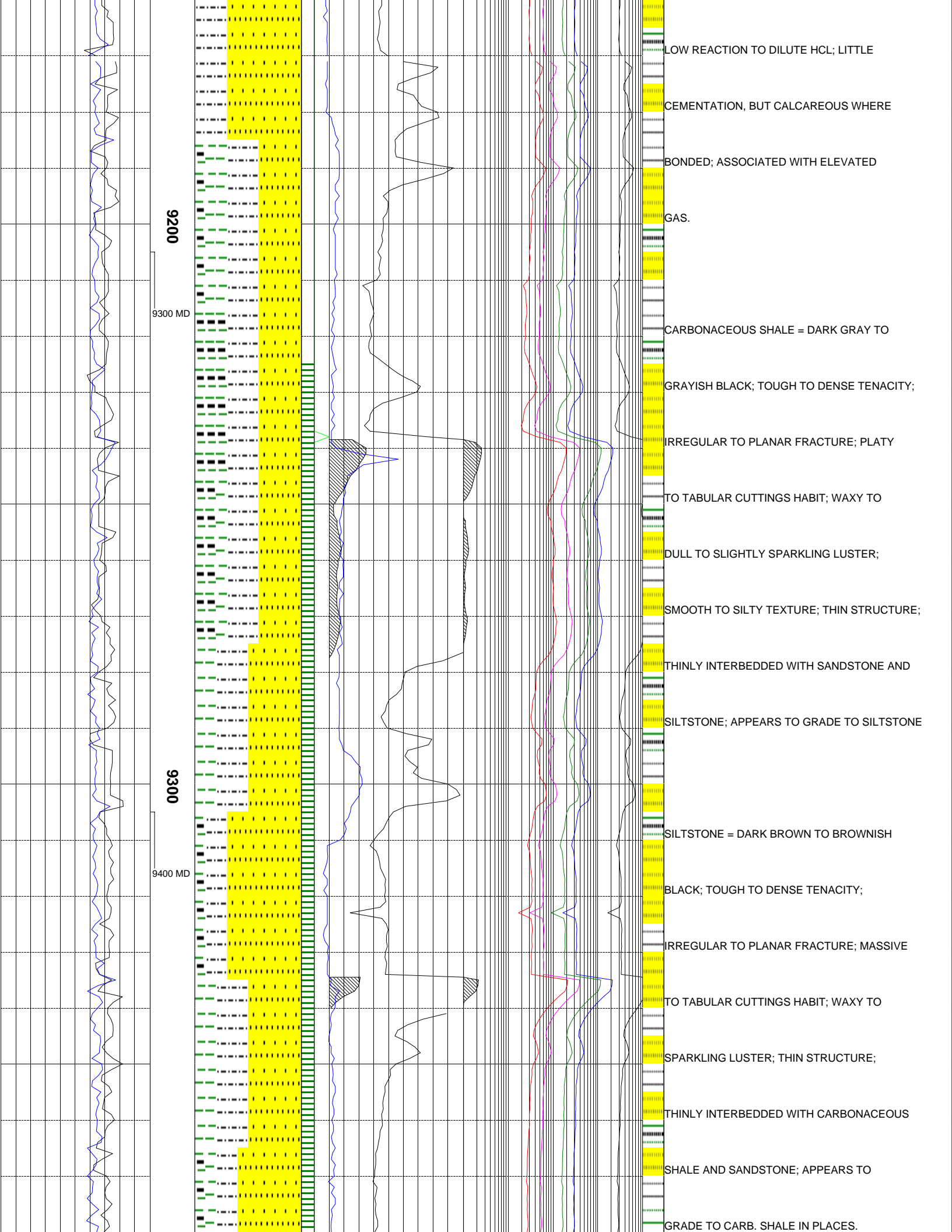


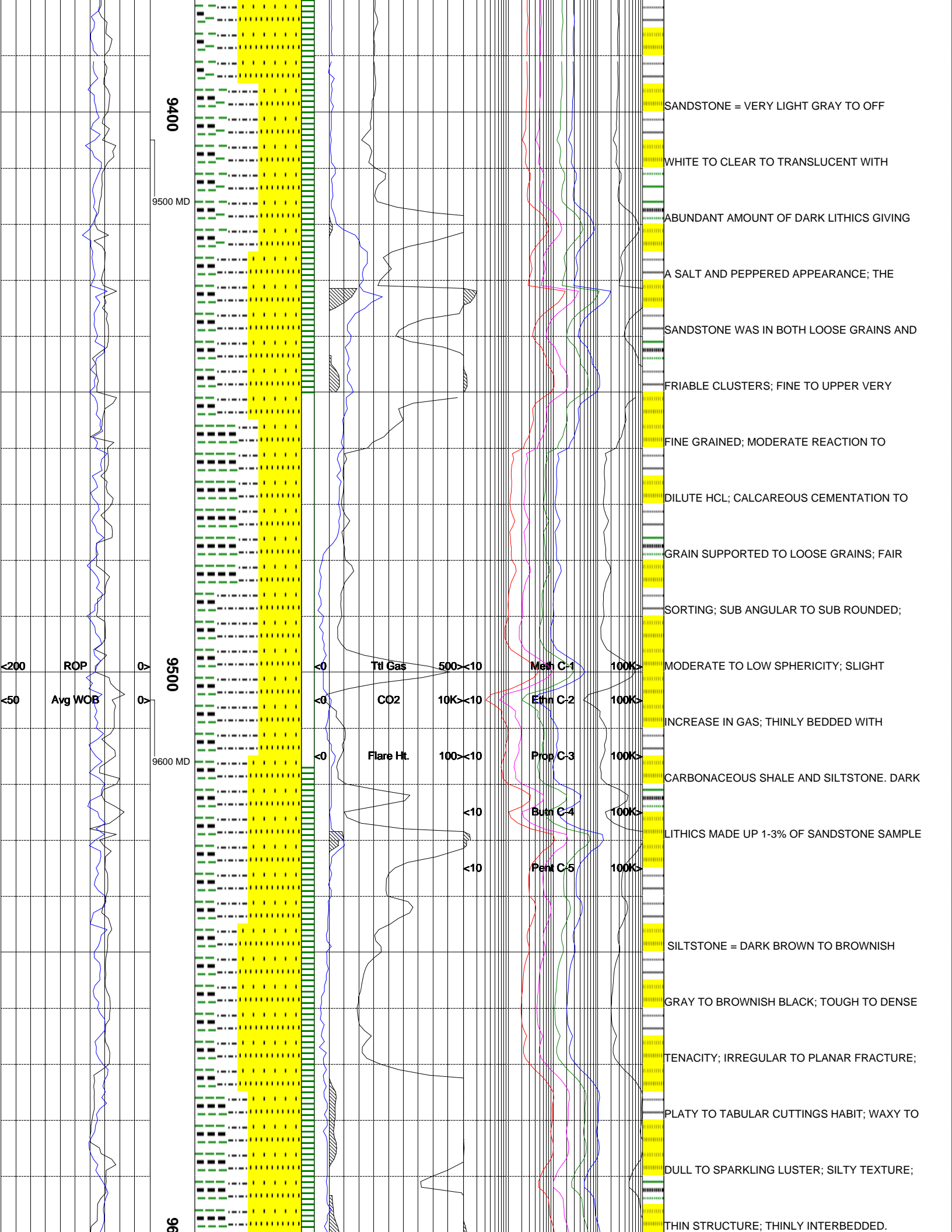


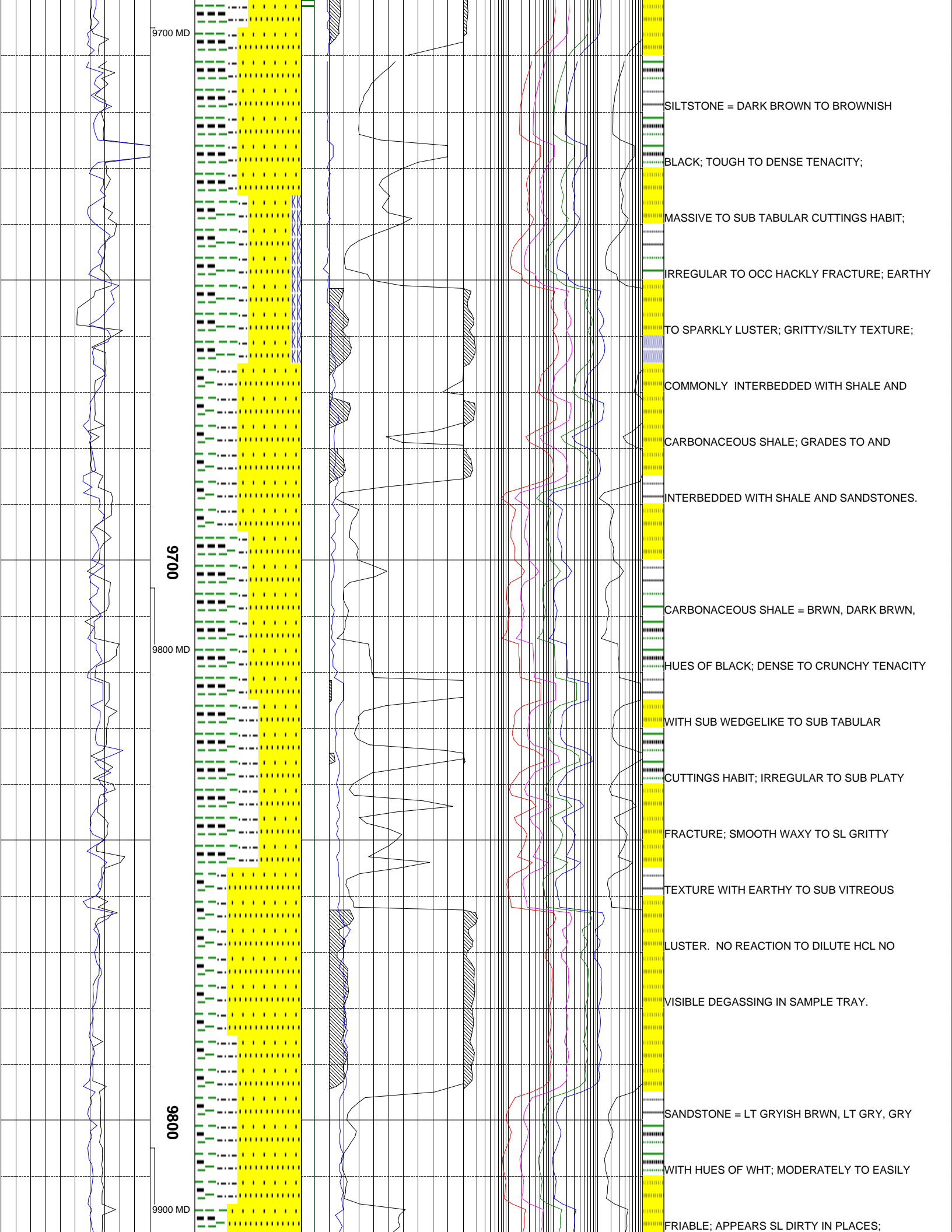


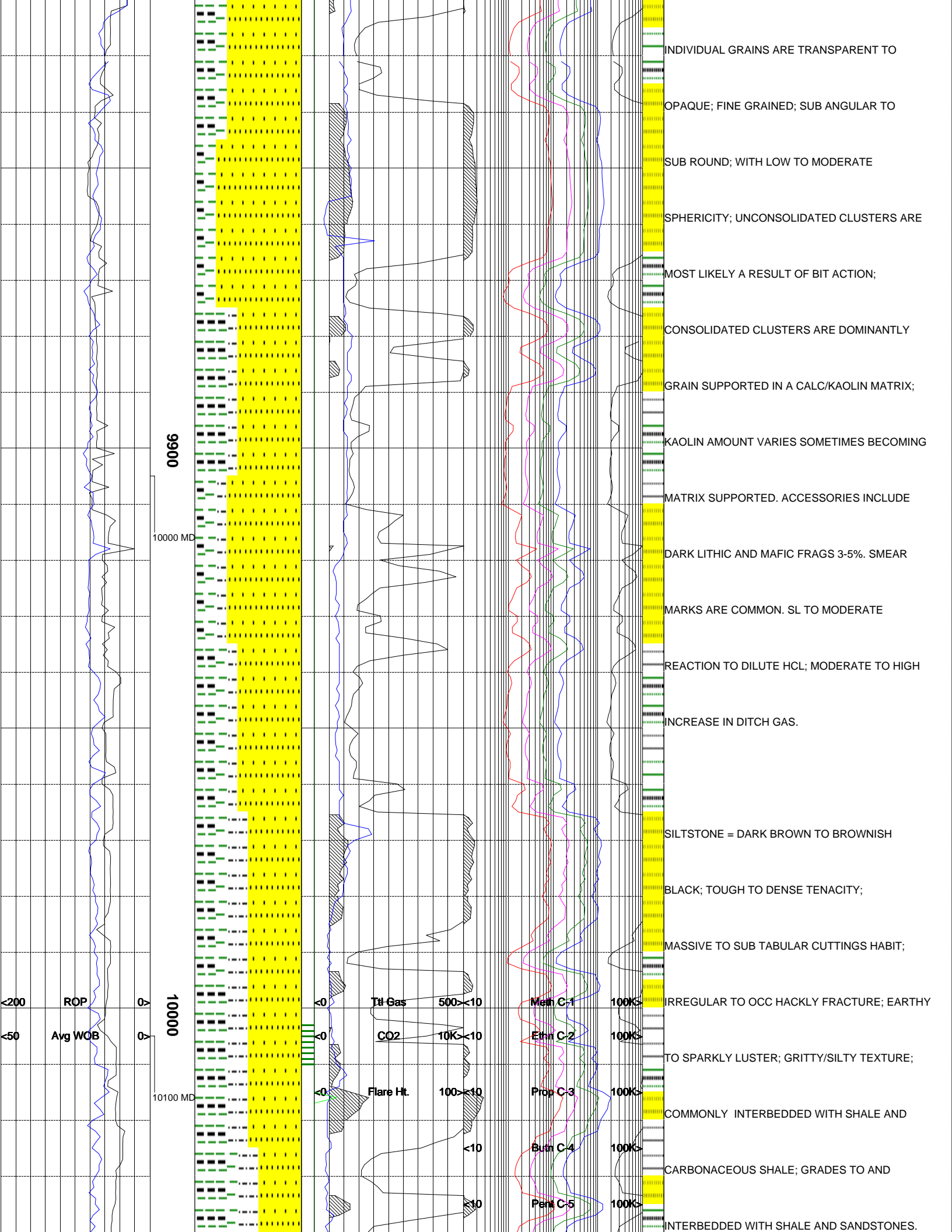


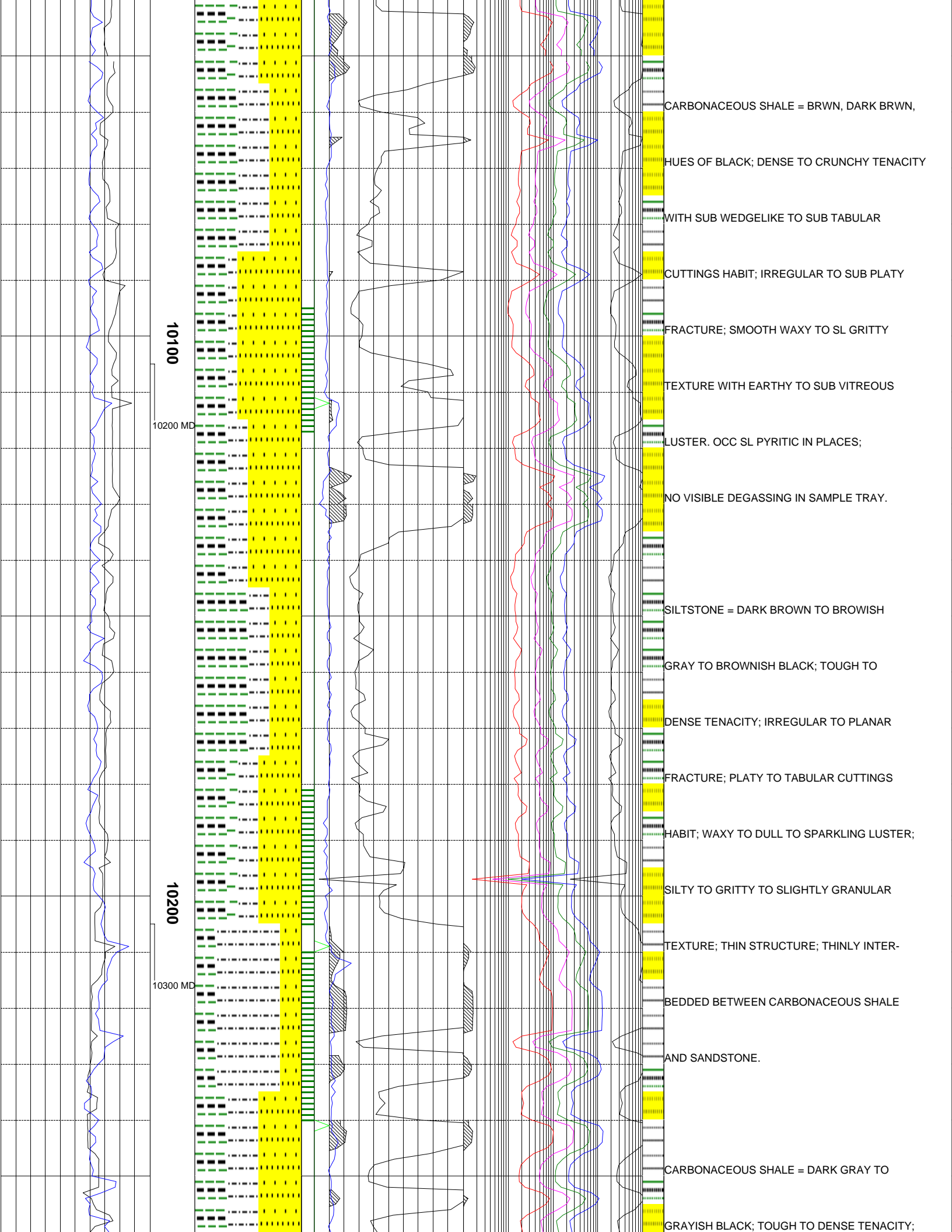


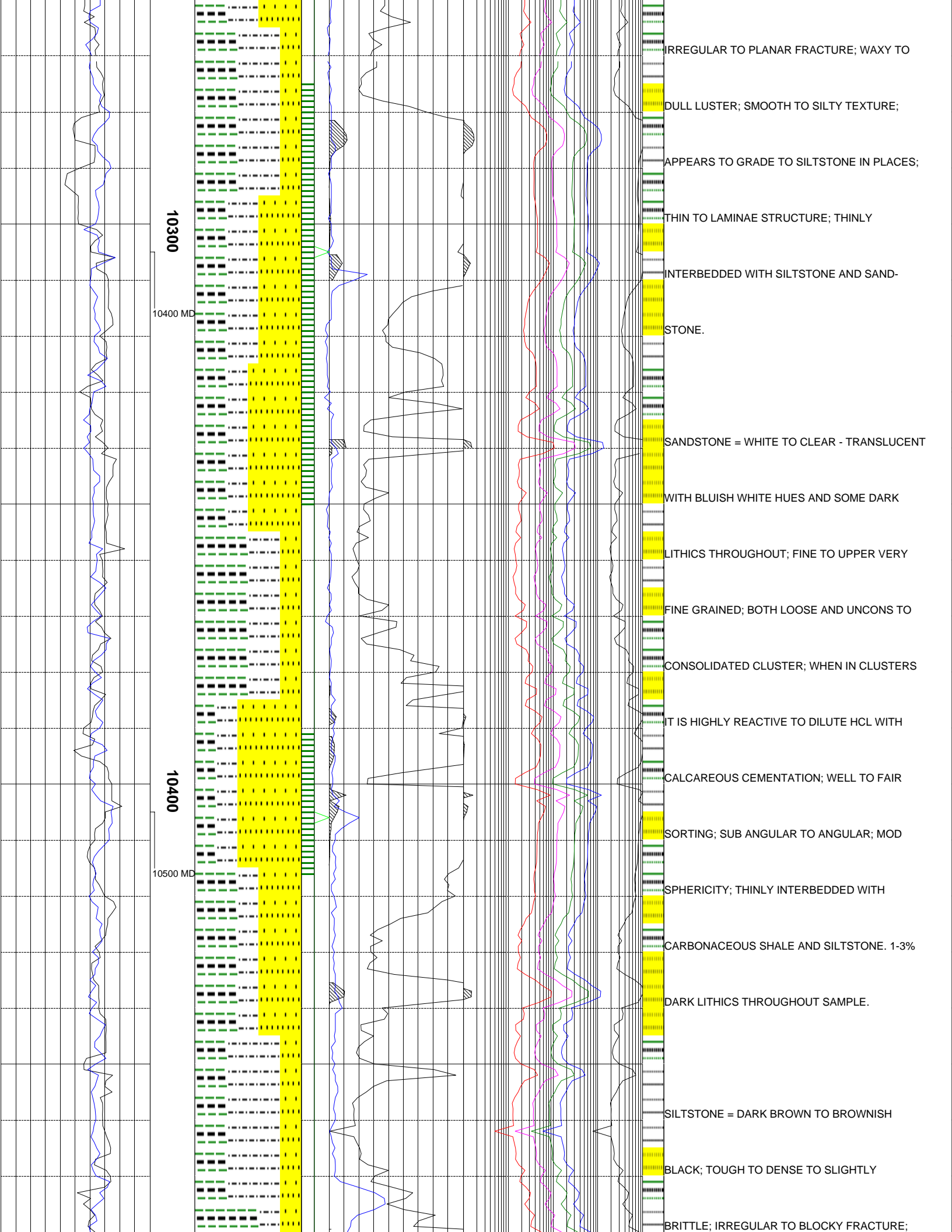


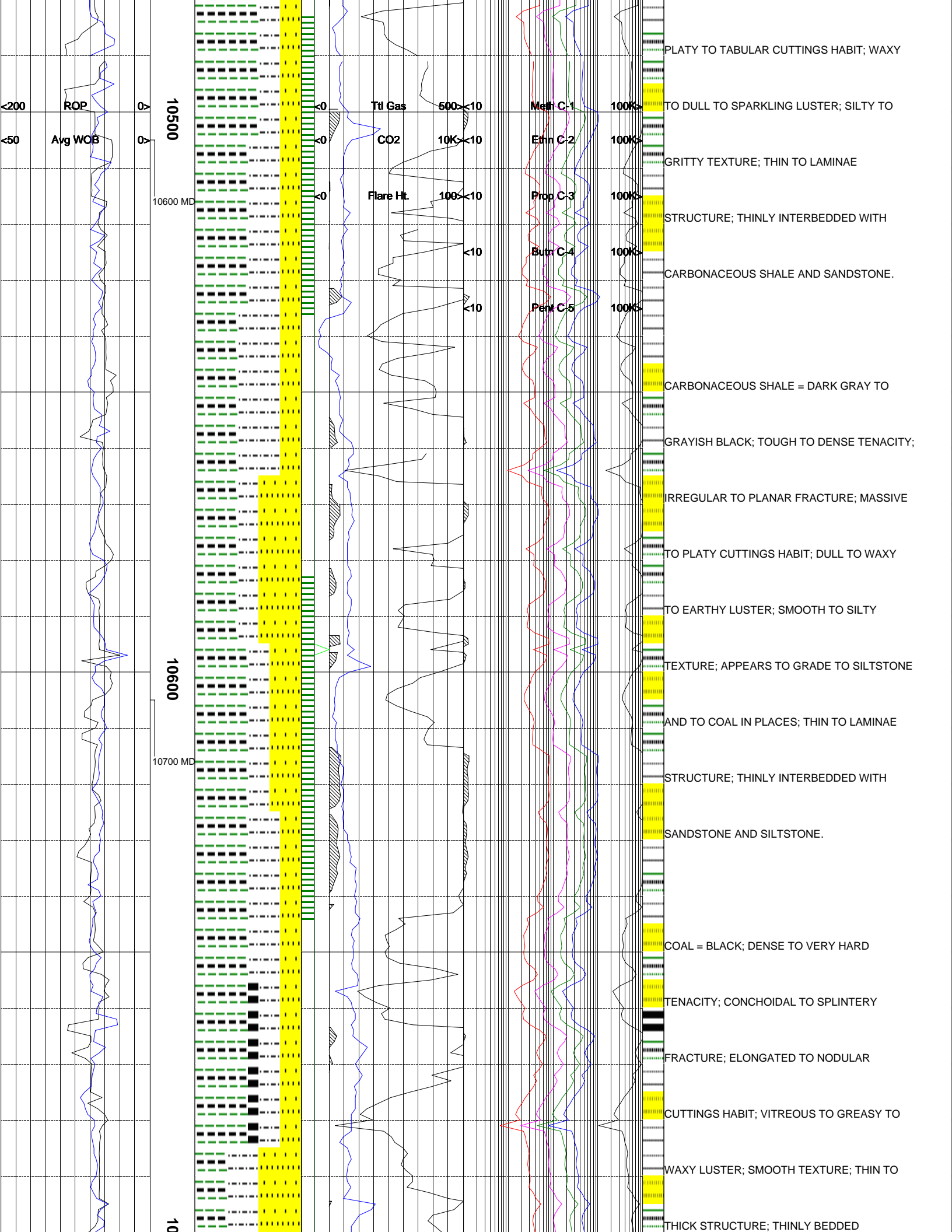


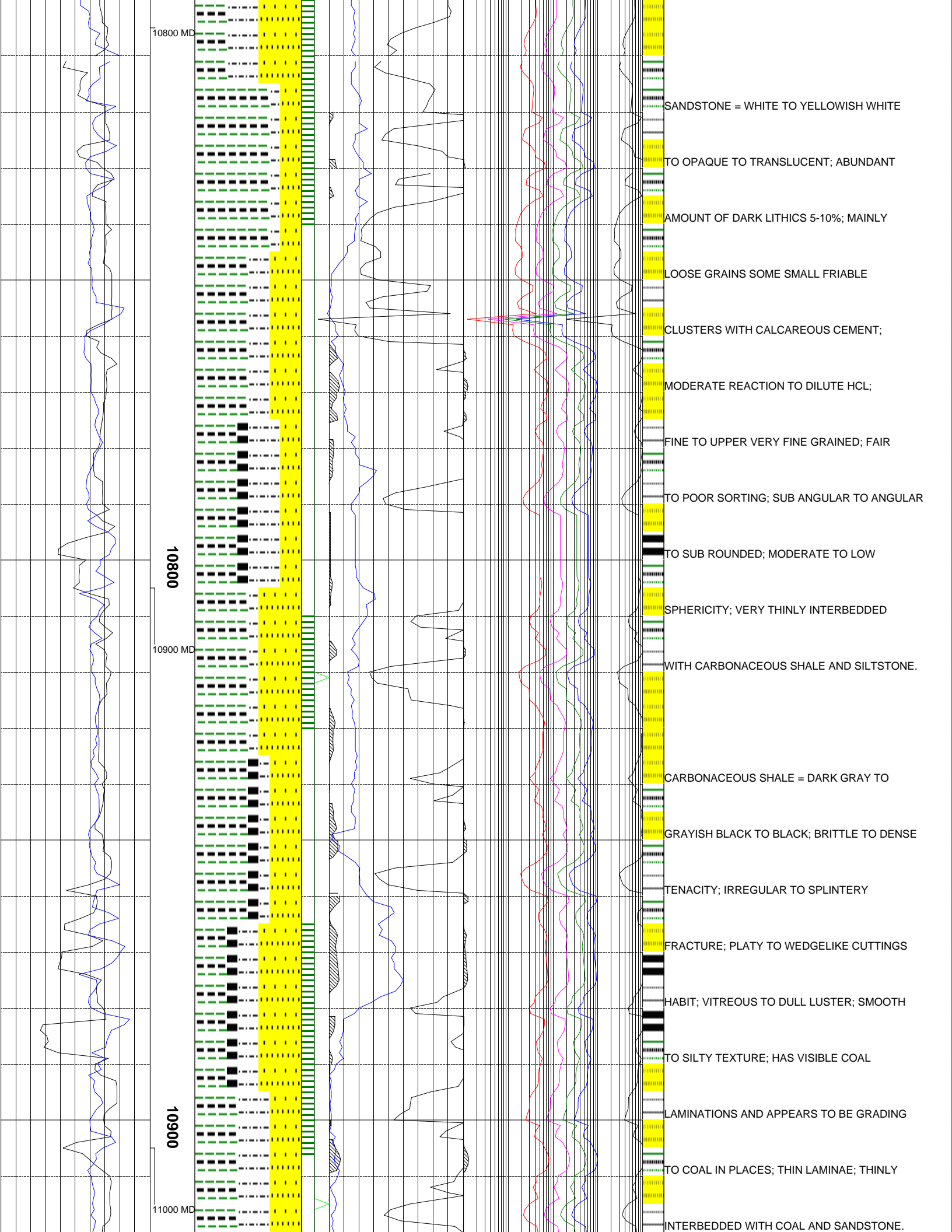


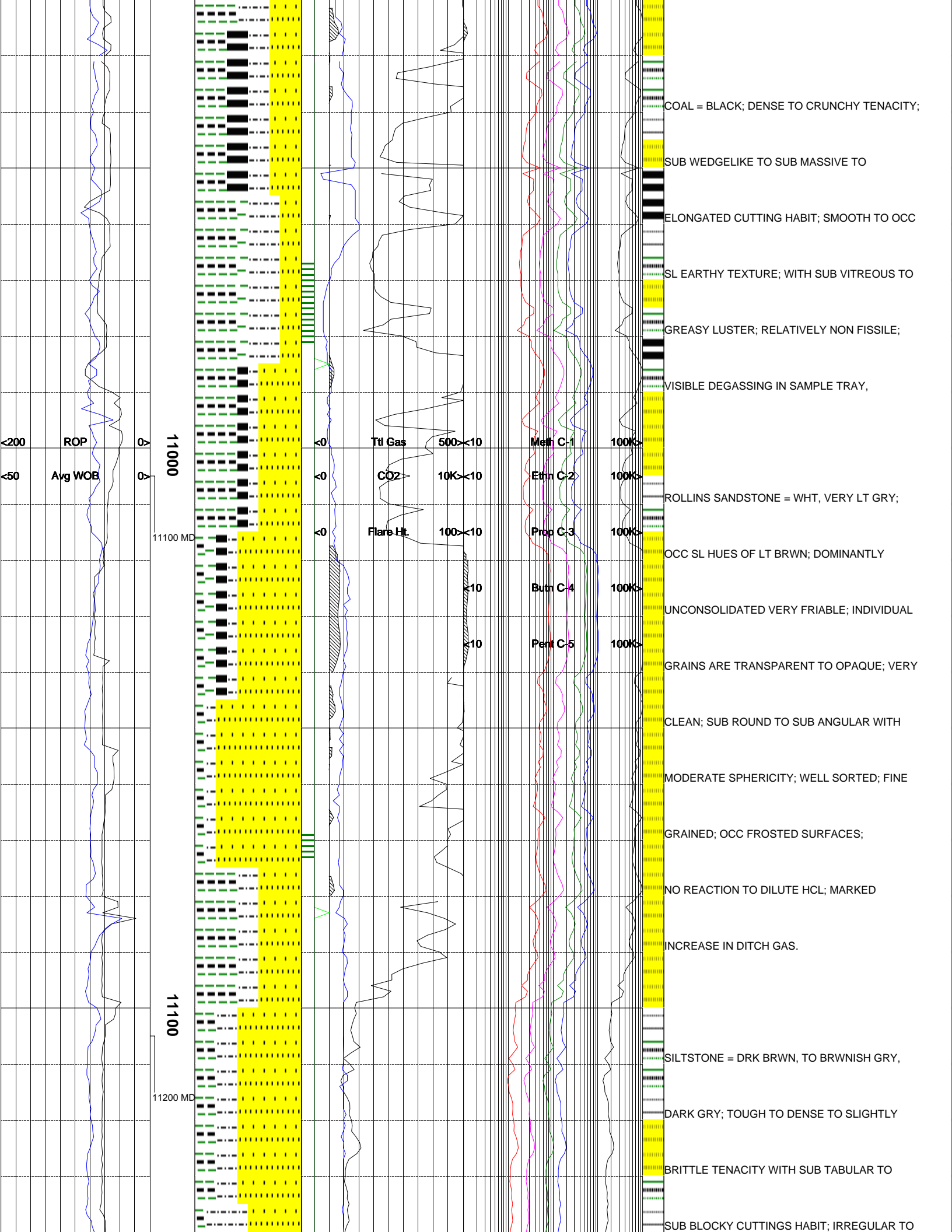


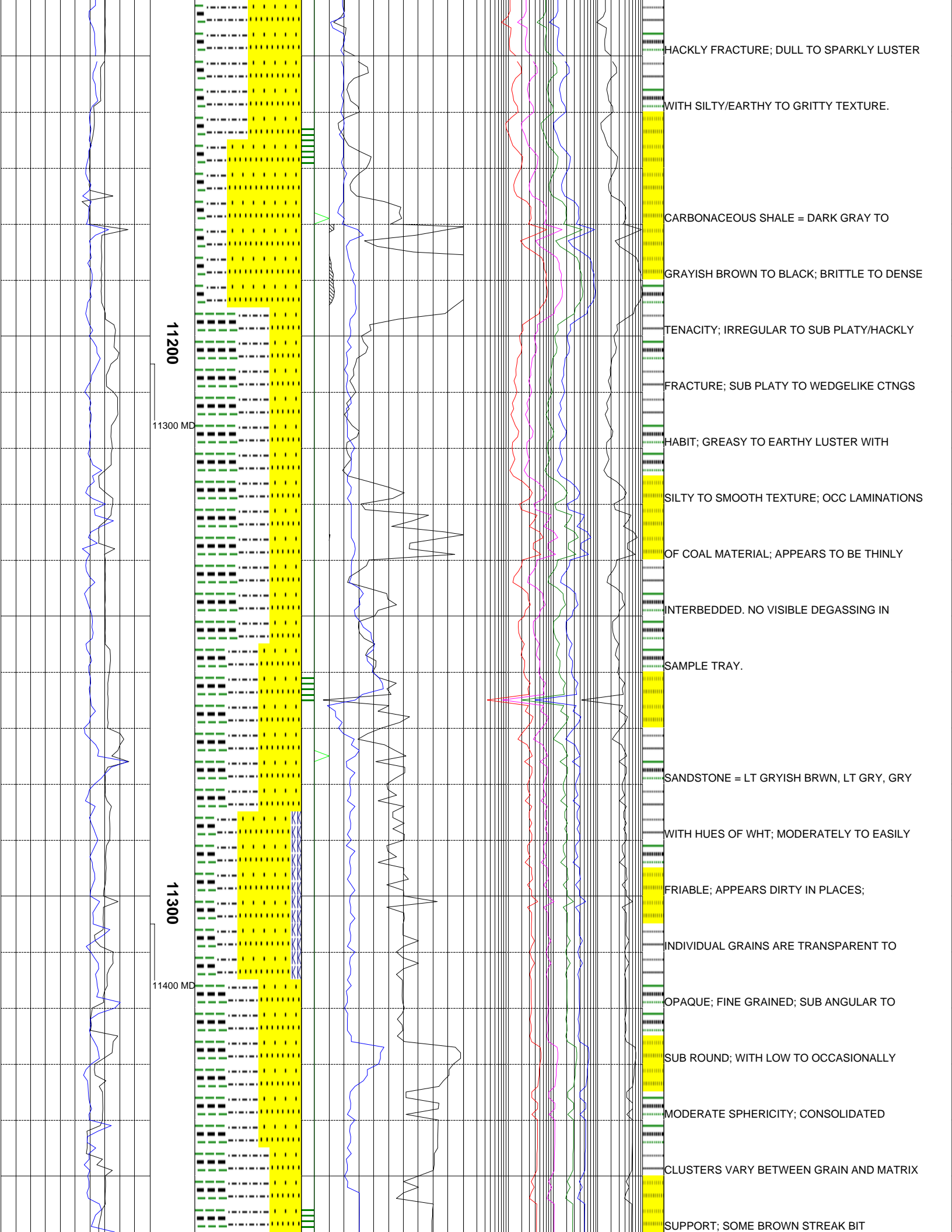


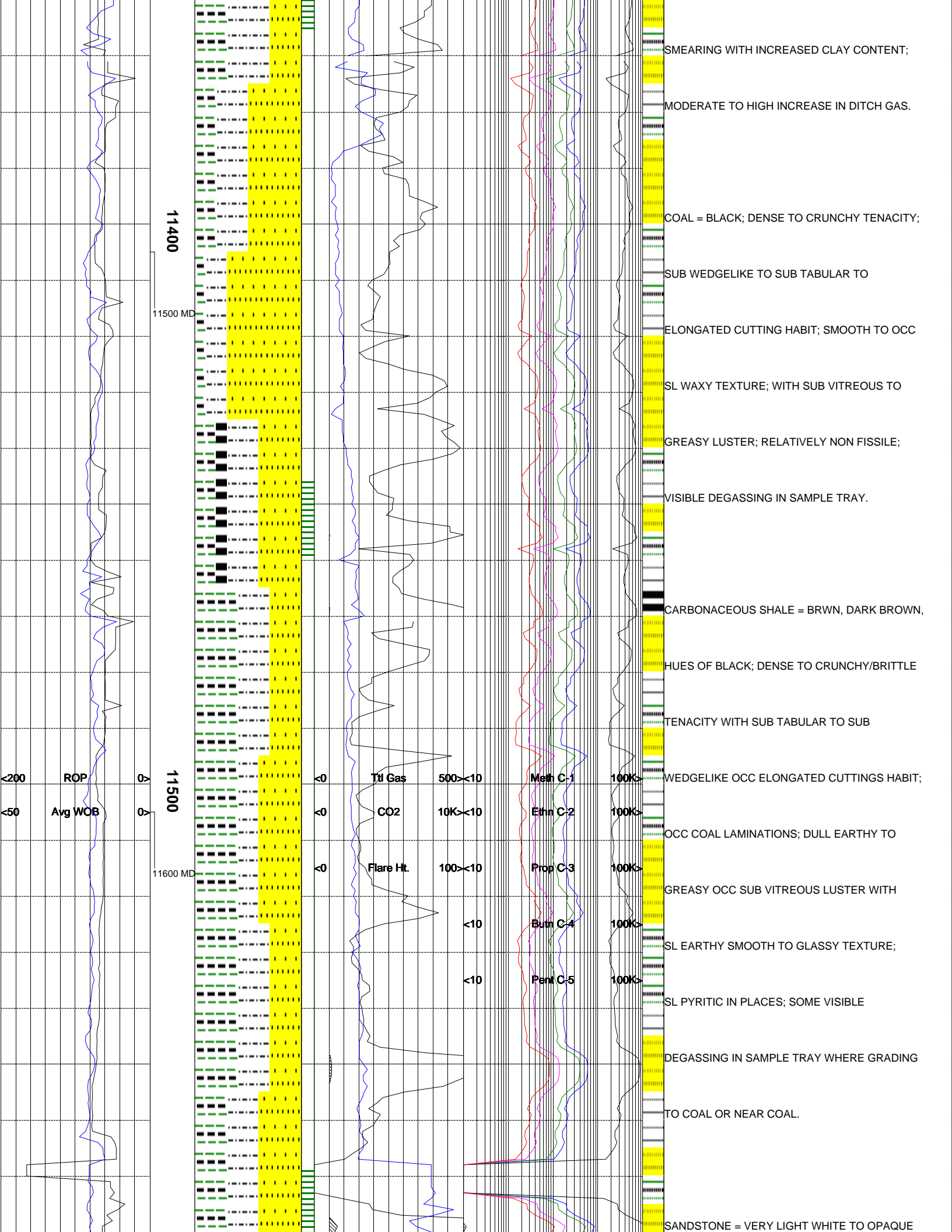


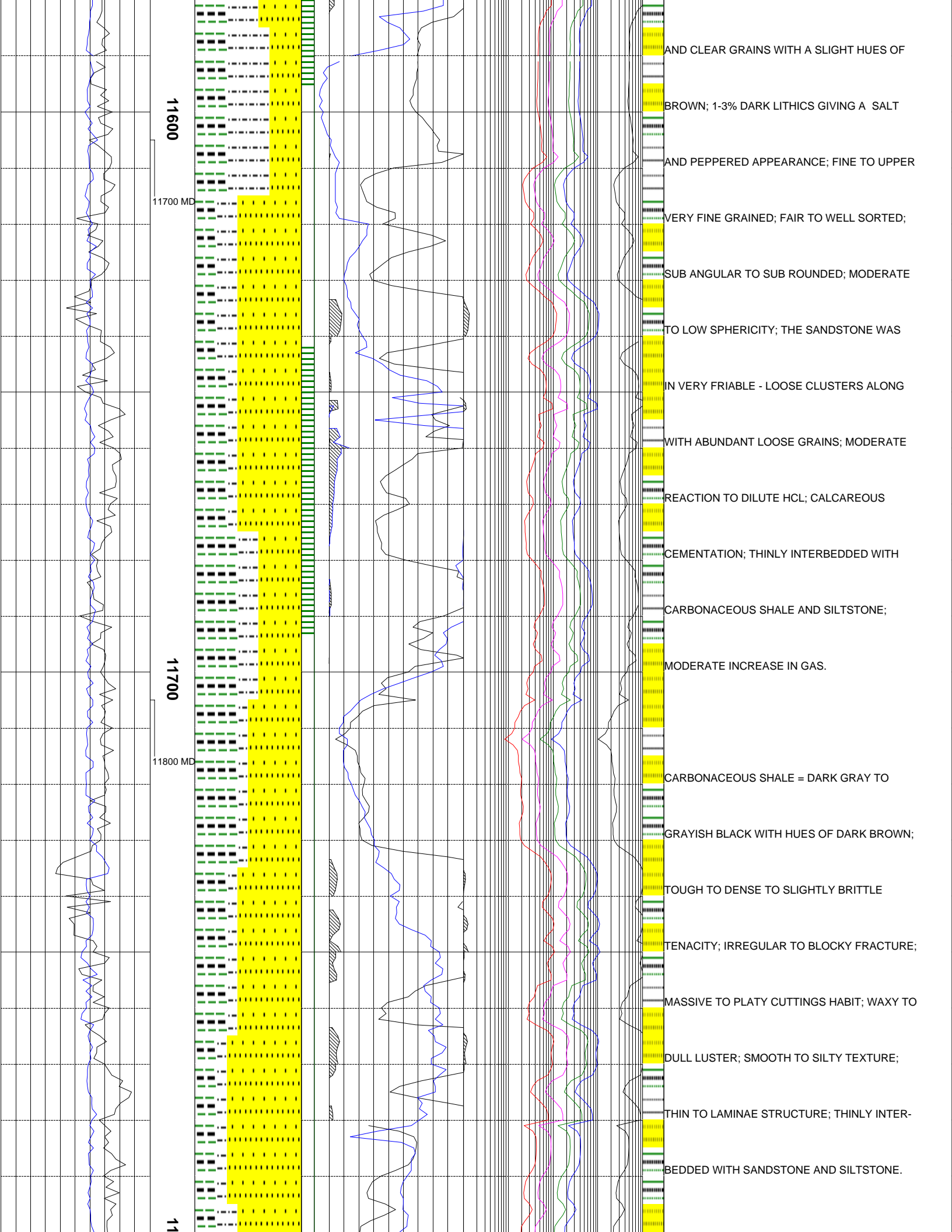


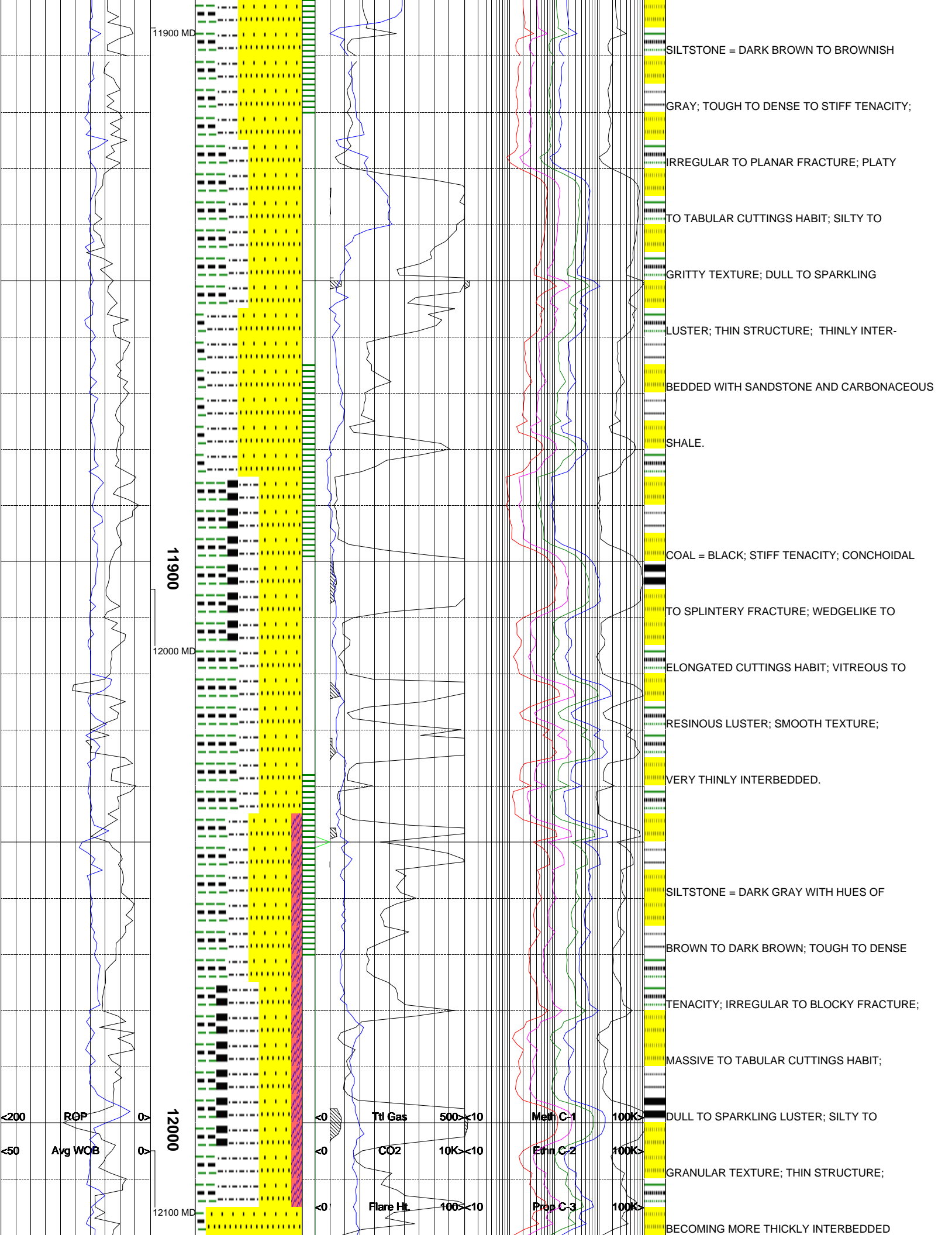


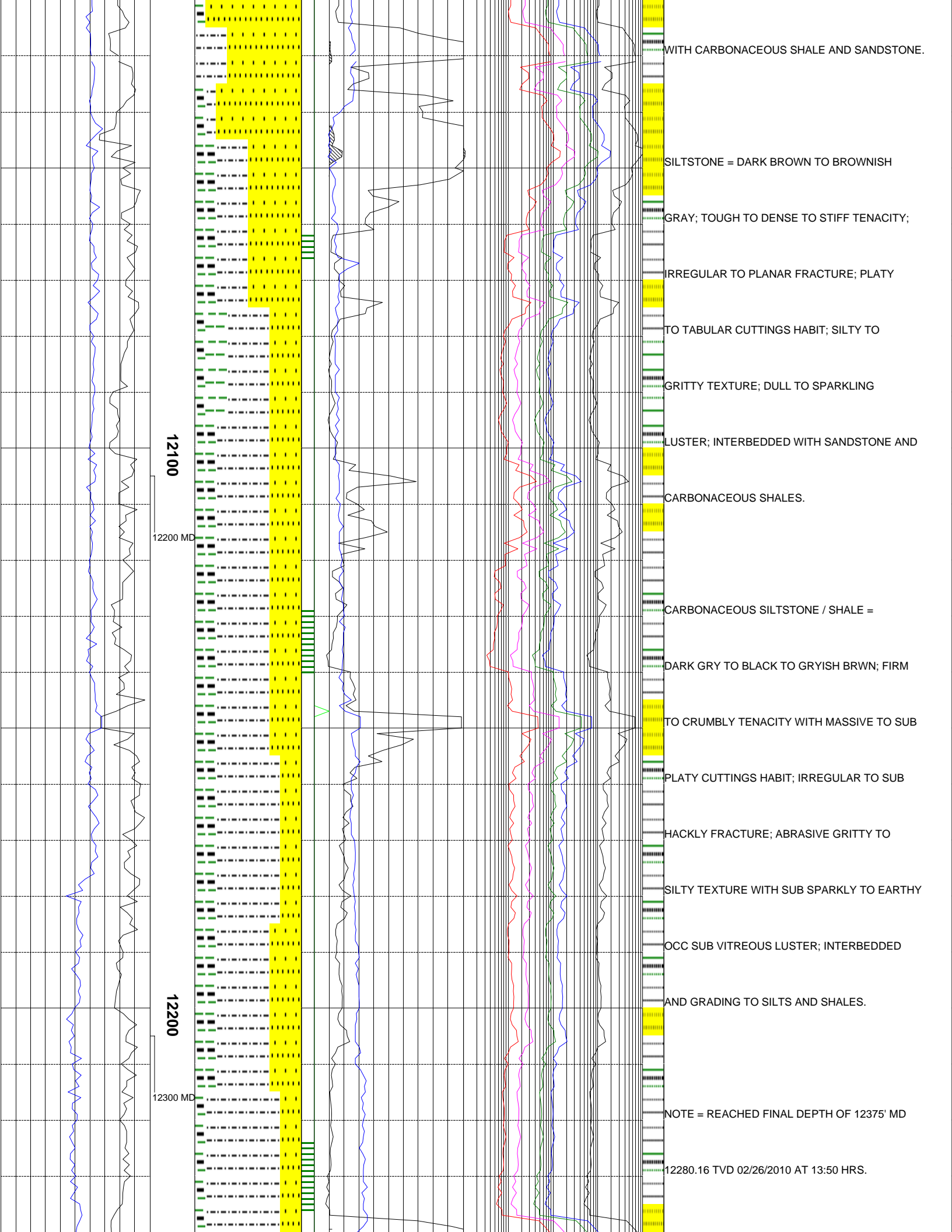


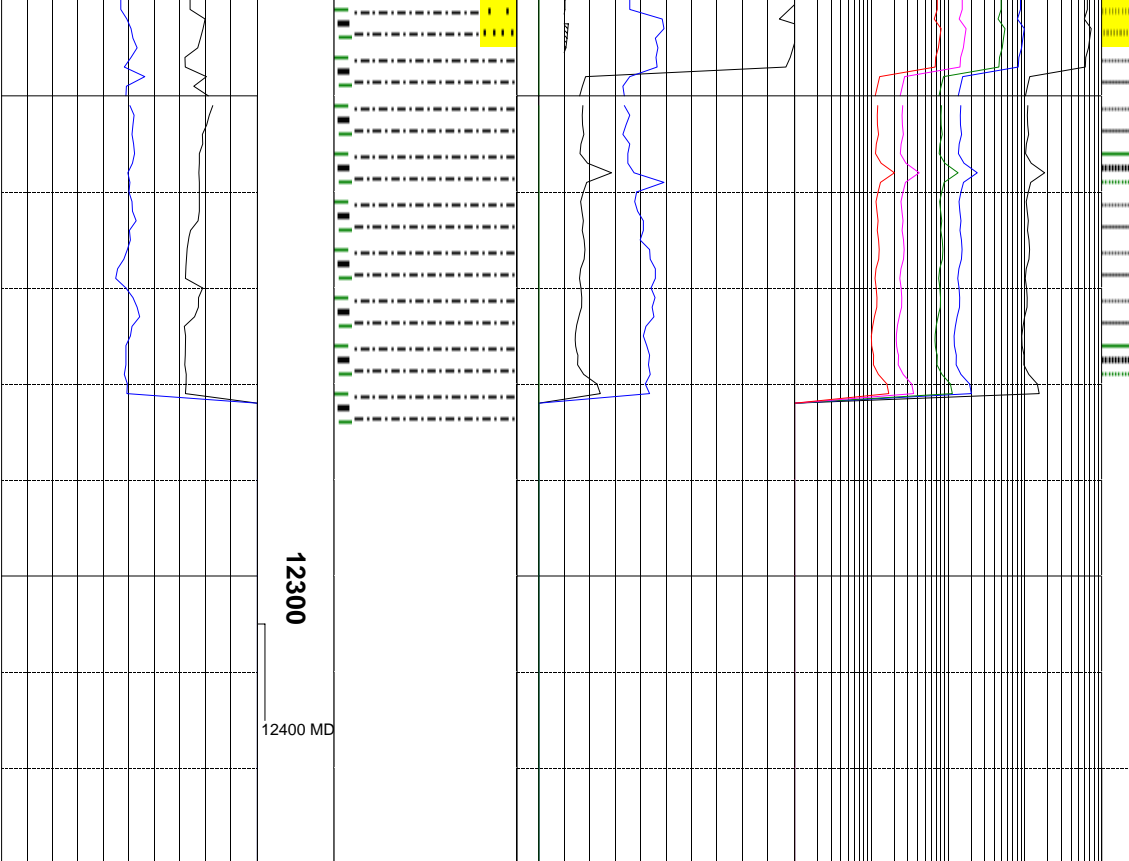












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