

FORMATION EVALUATION LOG (MD)

WELL - CYBH-055

DISTRITE: SUCUMBIOS TYPE: DESARROLLO FIELD: CUYABENO		BORE HOLE RECORD: OD: FROM: TO: 26" 42 ft 84 ft 16" 84 ft 4985 ft 12 1/4" 4985 ft 8 1/2"			MUD LOGGING SERVICE INTERVAL: FROM: TO: DEPTH: 42 ft DATE: 03-10-2013		
UTM SURFACE N: 10'002.747,45 UTM SURFACE E: 358.439,15 UTM BOTTOM N: UTM BOTTOM E:		CASING RECORD: HOLE SIZE: FROM: TO: 20" 84 ft 4981 ft 13 3/8" 4981 ft 9 5/8" 7" Liner			LOG PRINT INTERVAL: FROM: TO: DEPTH: 42 ft DATE: 03-10-2013		
BOTTOM DEPTH: VERTICAL DEPTH:		MUD PROPERTIES: PHASE 20" GEL PAC 8.5			CREW: PETROAMAZONAS EP: PETROKEM (J.U.): INGS. OMAR DUARTE, RAÚL DUARTE. (M.L.): INGS. GUSTAVO AVILÉS, ROSANGEL COA.		
COMPANY: PETROAMAZONAS E.P. DRILLING RIG: CCDC- 39							
RKB ELEVATION: 806,46 ft GROUND ELEVATION: 774,96 ft							

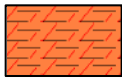
LC Lost Circulation
 PV Plastic Viscosity
 RRB Rerun Bit
 NB New Bit
 DB Diamond Bit

PP Pump Pressure
 YP Yield Point
 TB Turbine
 CB Core Bit
 MW Mud Weight

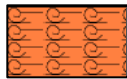
WOB Weight On Bit
 V Viscosity
 MC Mud Cake
 DCB Diamond Core Bit
 RPM Rotation Per Minute



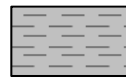
Claystone



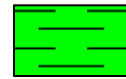
Claystone Anhy



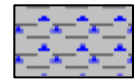
Claystone Foss



Gray Shale



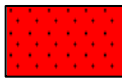
Green Shale



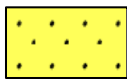
Calcareous Shale



Coal Sable



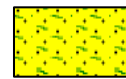
Siltstone



Sandstone



Kaolinitic Sands



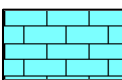
Glauconitic Sands



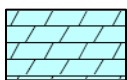
Conglomerate



Chert



Limestone



Dolomite



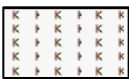
Coal



Extrusive Rock



Intrusive Rock

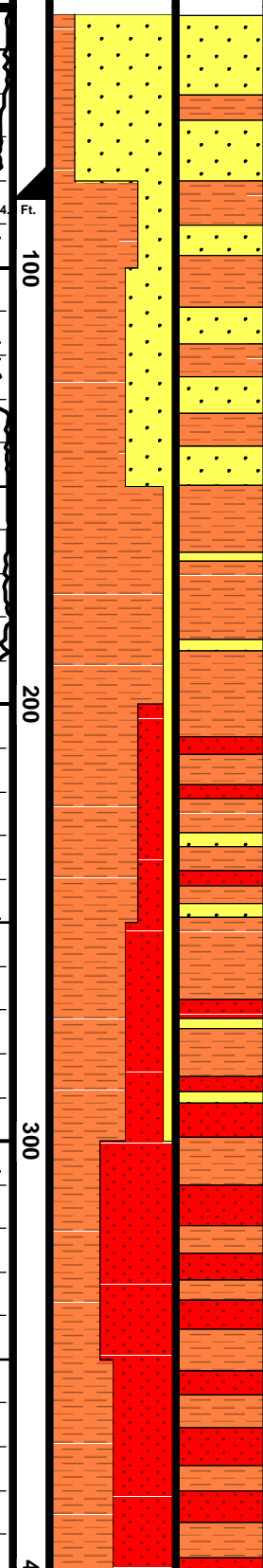


Kaolinite

1:500

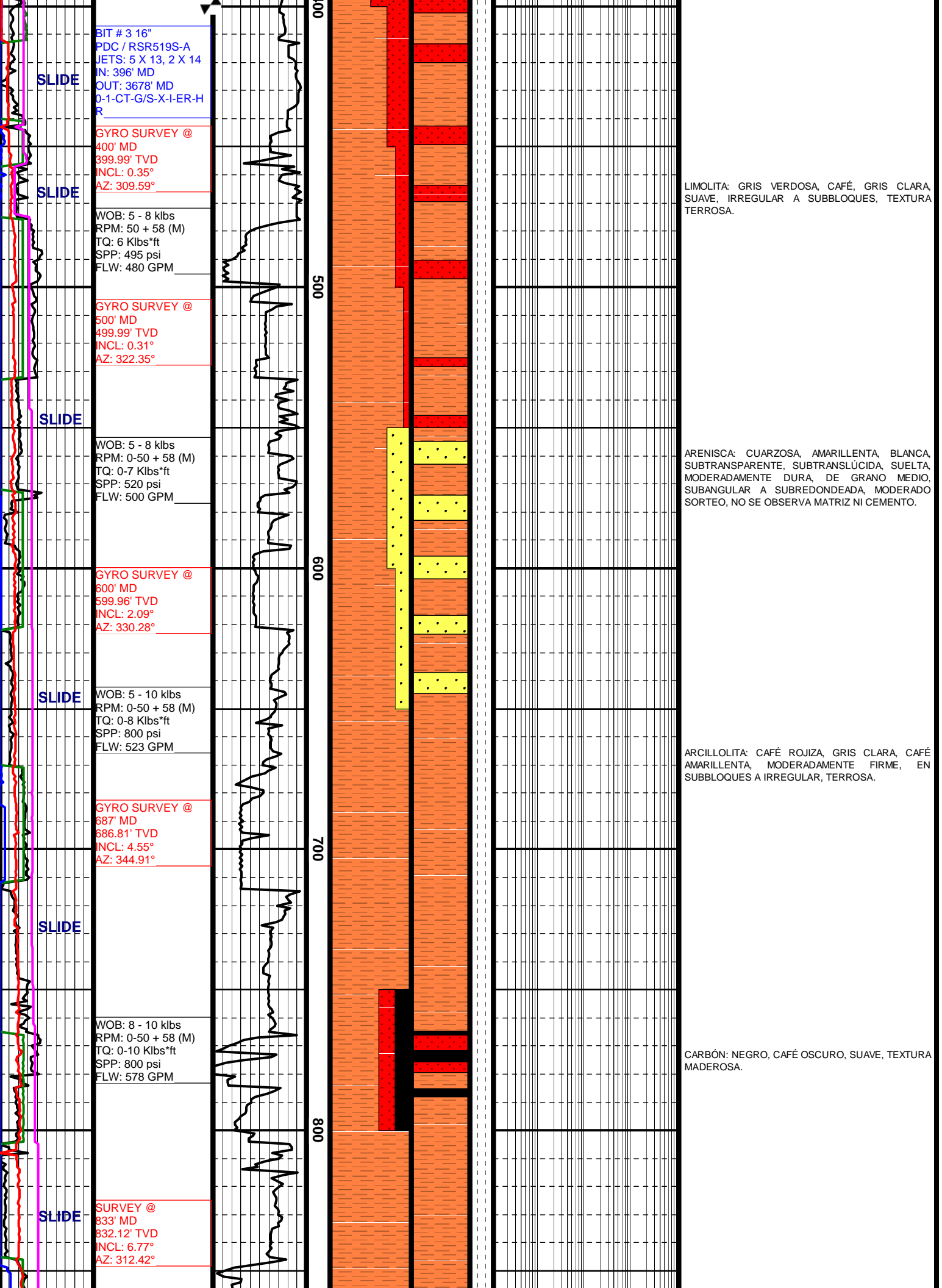
Weight On Bit			REMARKS	Rate Of Penetration	DEPTH (Ft)	CUTTINGS (%)	LITHOLOGY	OIL SHOW	Gas total			GEOLOGICAL DESCRIPCION
0	Klbs	50							1	PPM	100000	
RPM									C1			
0	Rev/Min	200							1	PPM	100000	
TORQUE									C2			

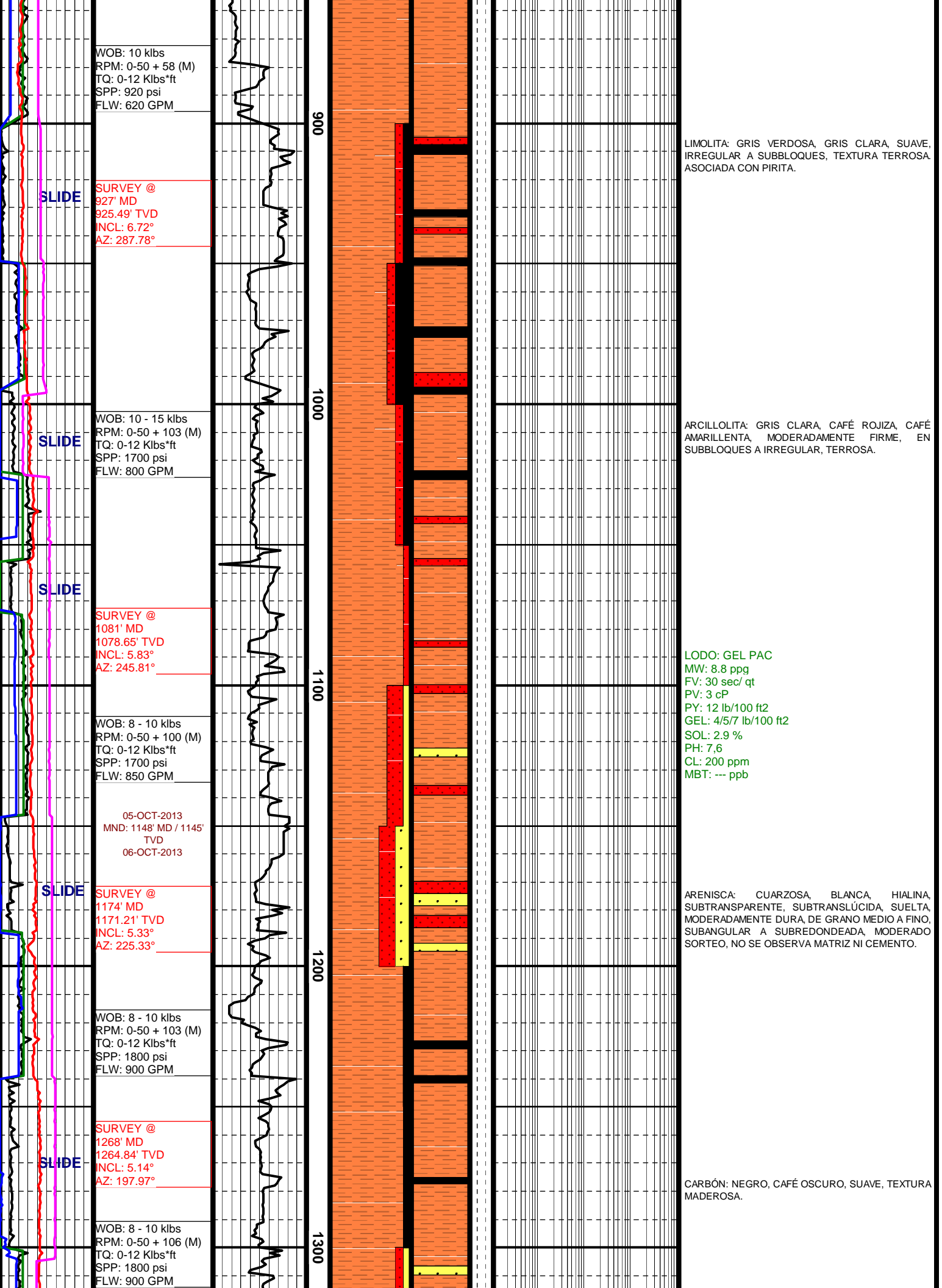
0 gal/mir 1500

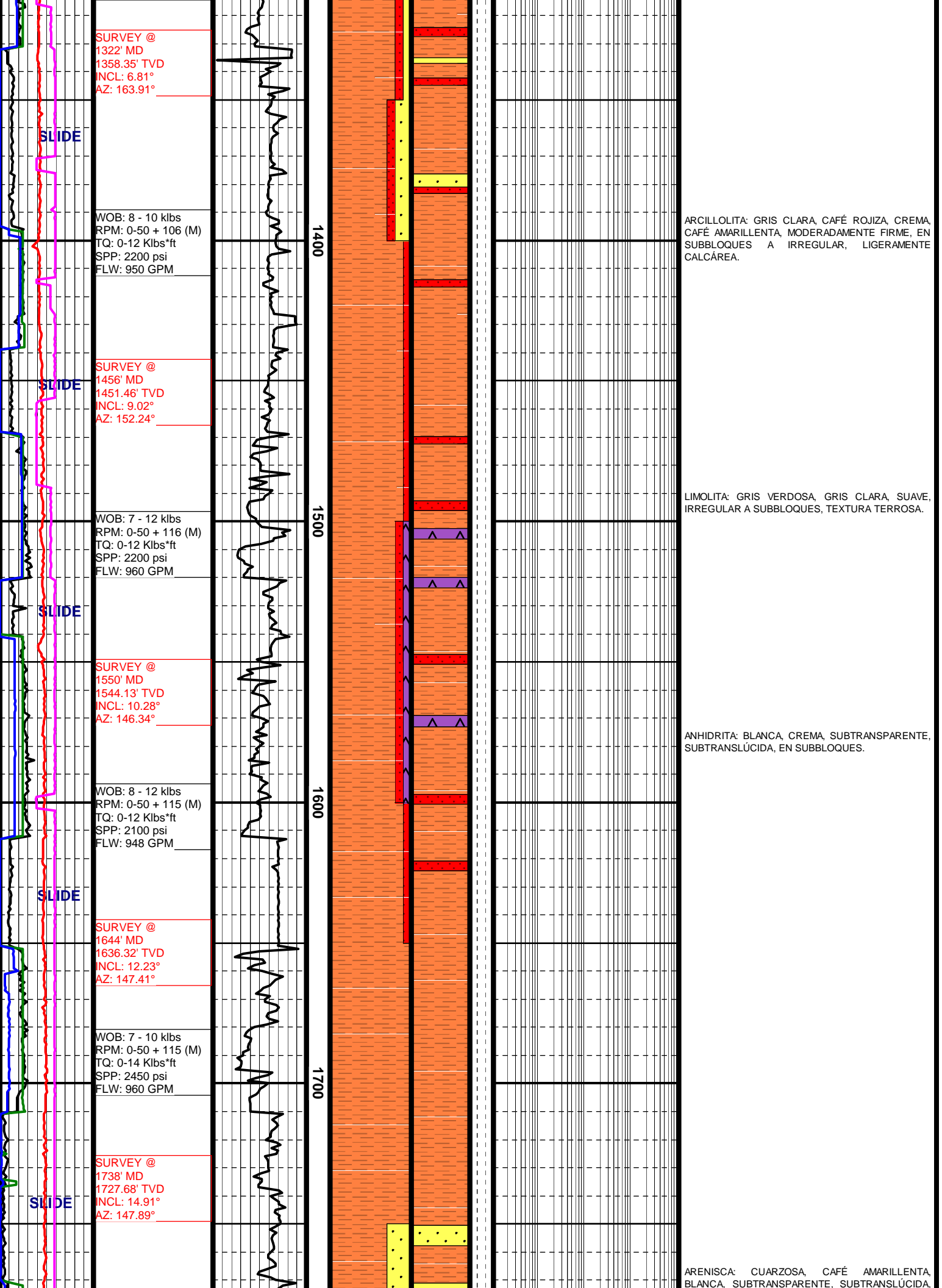


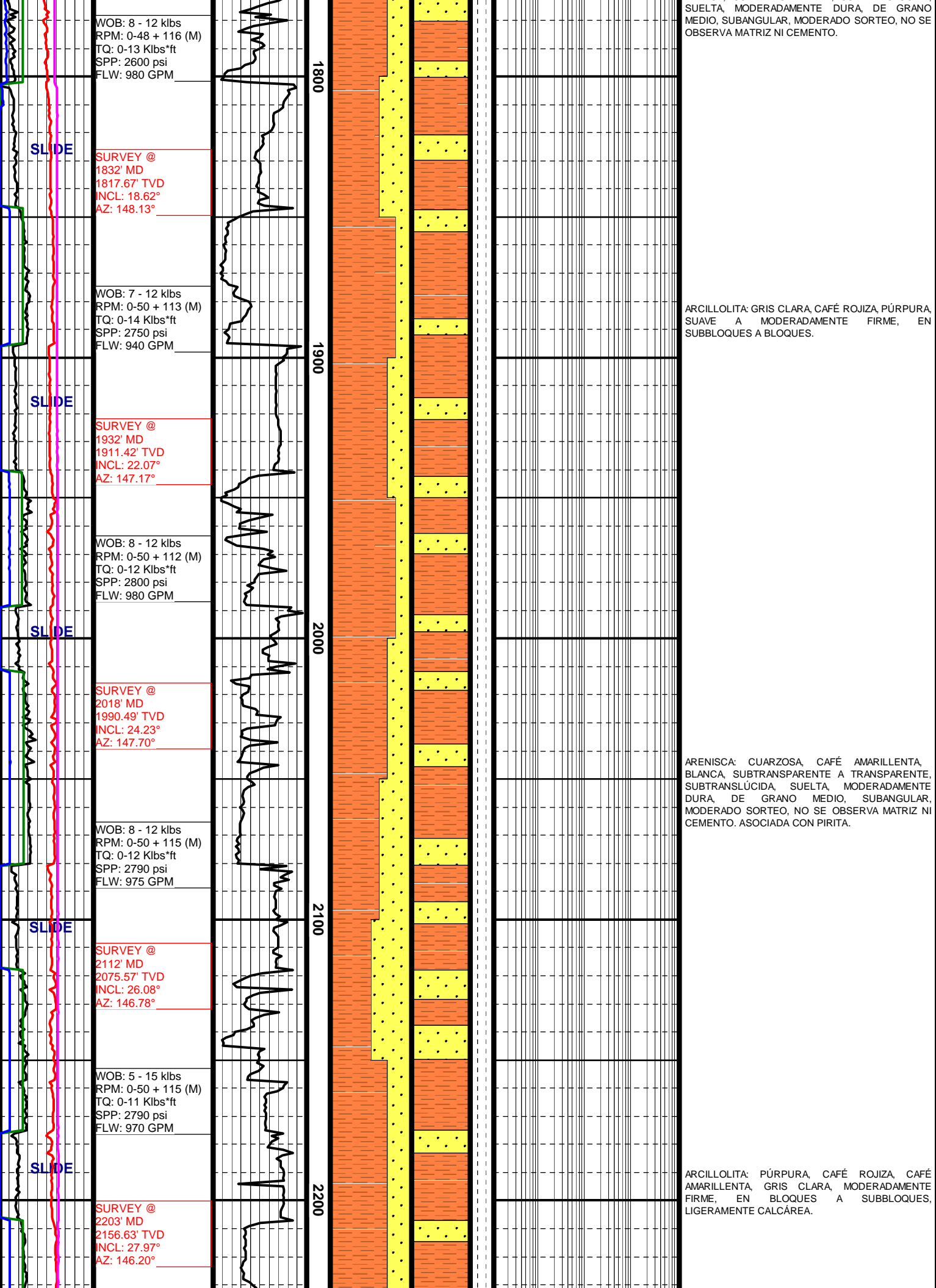
GYRO SURVEY @
382' MD
381.99' TVD
INCL: 0.43°
AZ: 304.68°

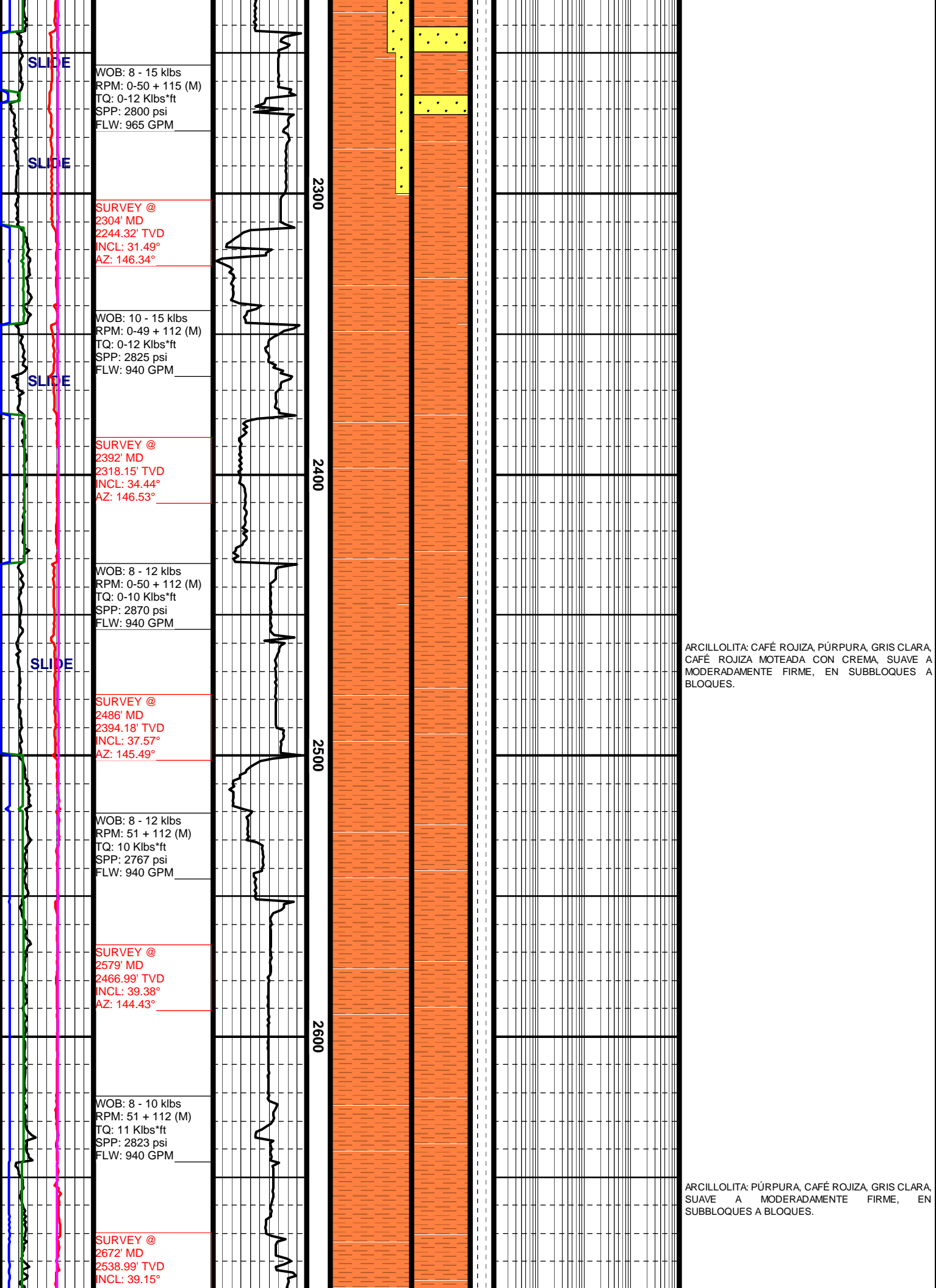
ARCILLOLITA: CAFÉ AMARILLENTO, PÚRPURA, CAFÉ
ROJIZA MOTEADA CON CREMA, CAFÉ ROJIZA,
MODERADAMENTE FIRME, IRREGULAR A
SUBLOQUES. TEXTURA TERROSA.





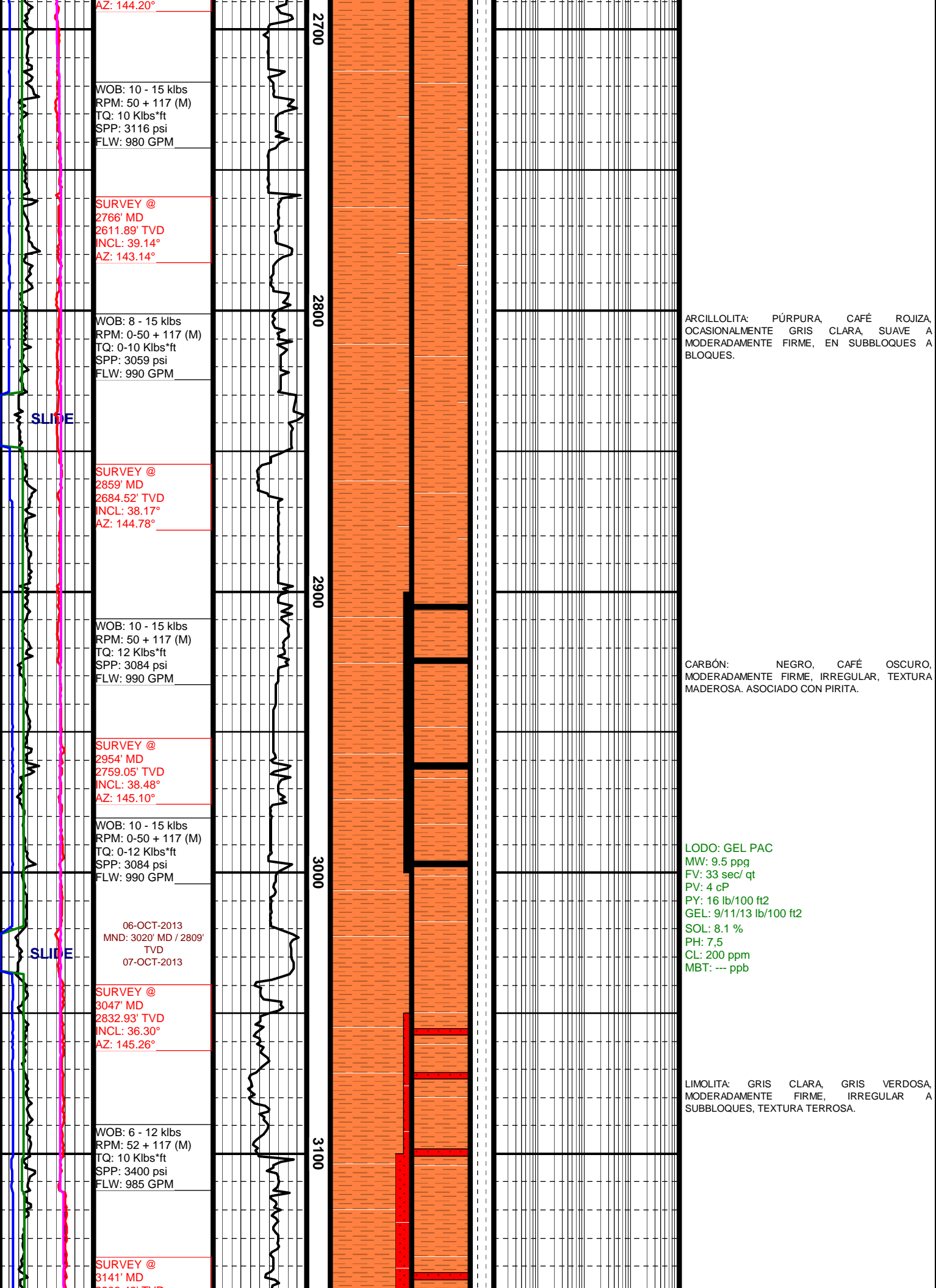


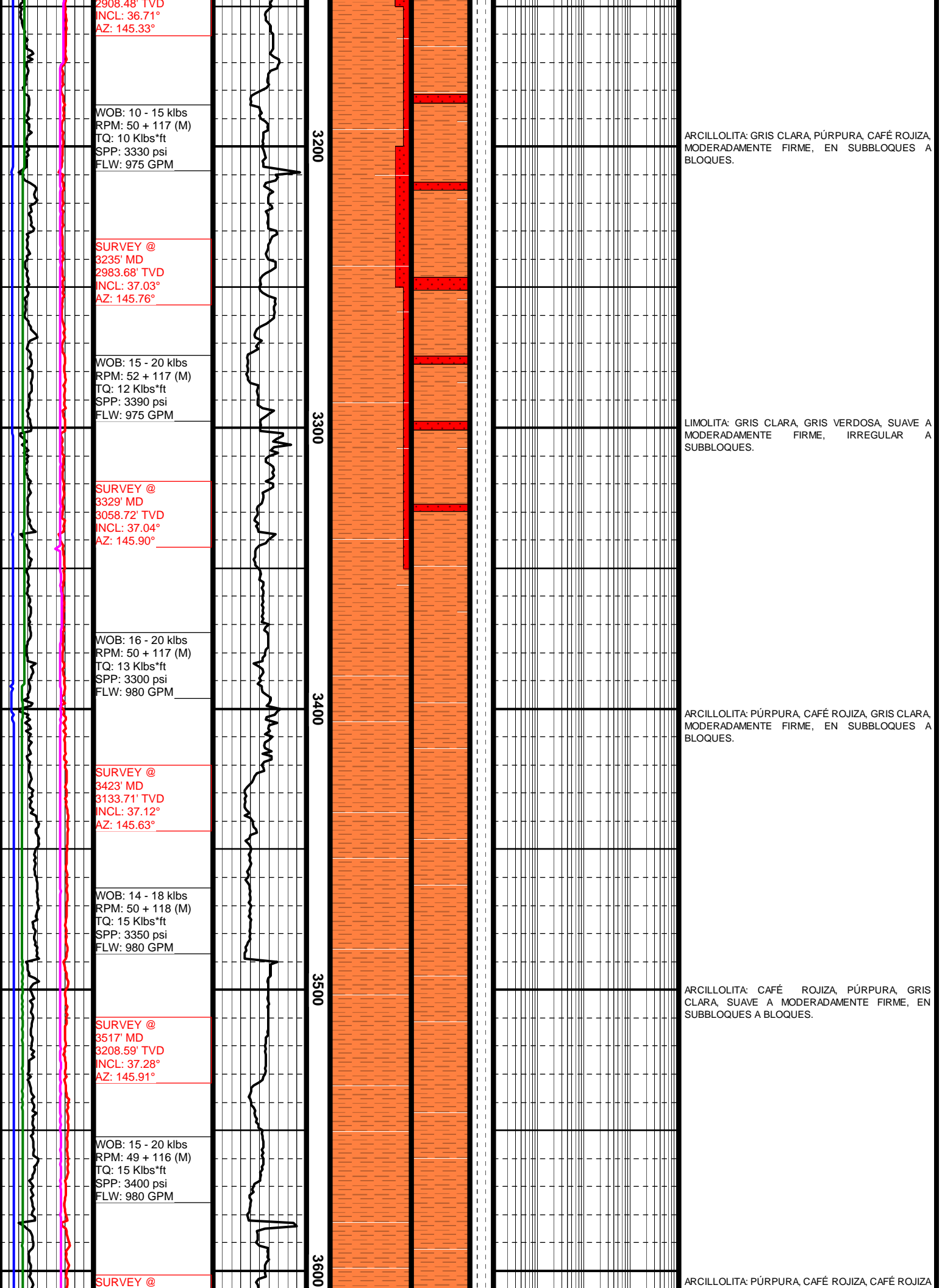


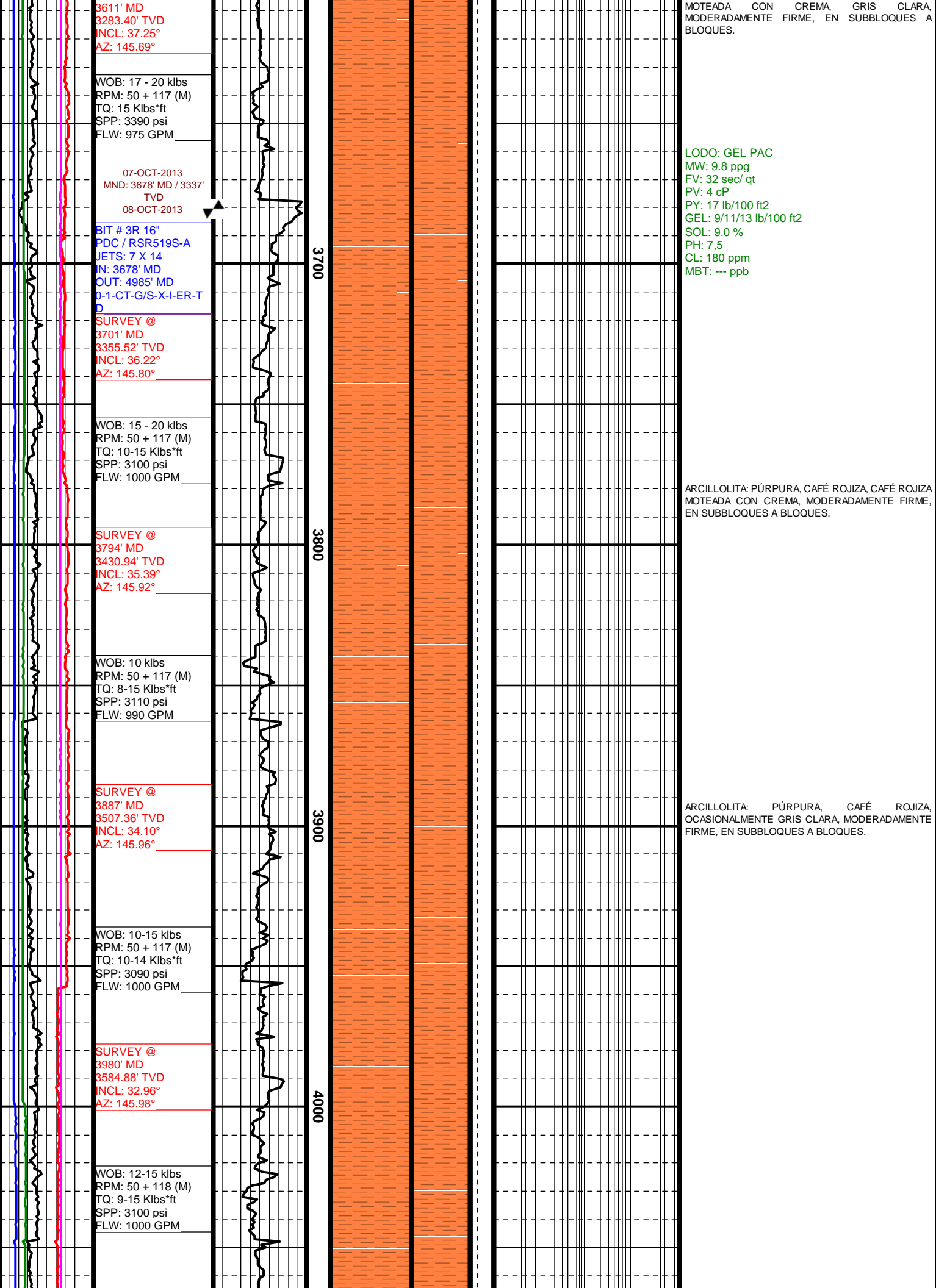


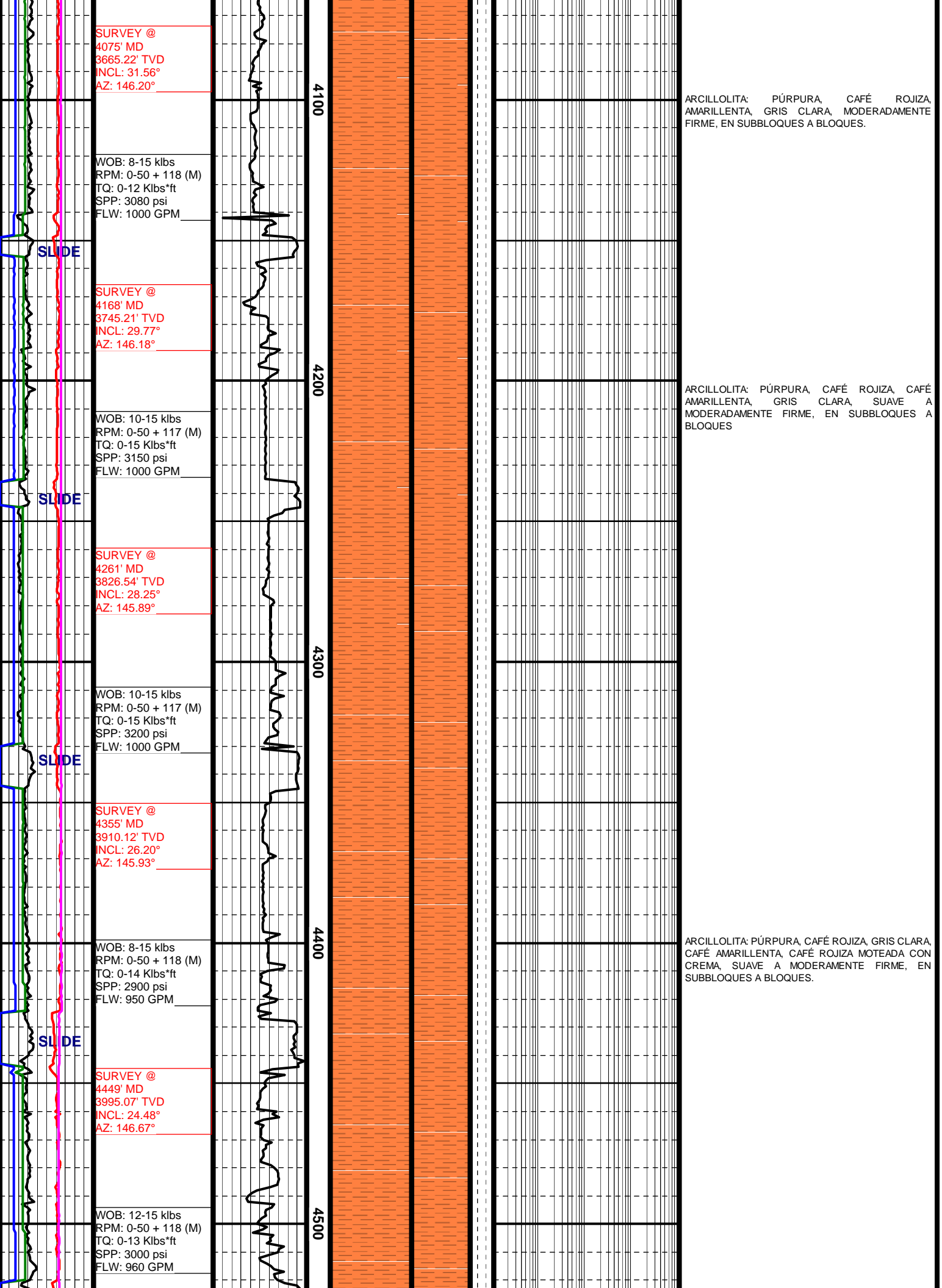
ARCILLOLITA: CAFÉ ROJIZA, PÚRPURA, GRIS CLARA, CAFÉ ROJIZA MOTEADA CON CREMA, SUAVE A MODERADAMENTE FIRME, EN SUBBLOQUES A BLOQUES.

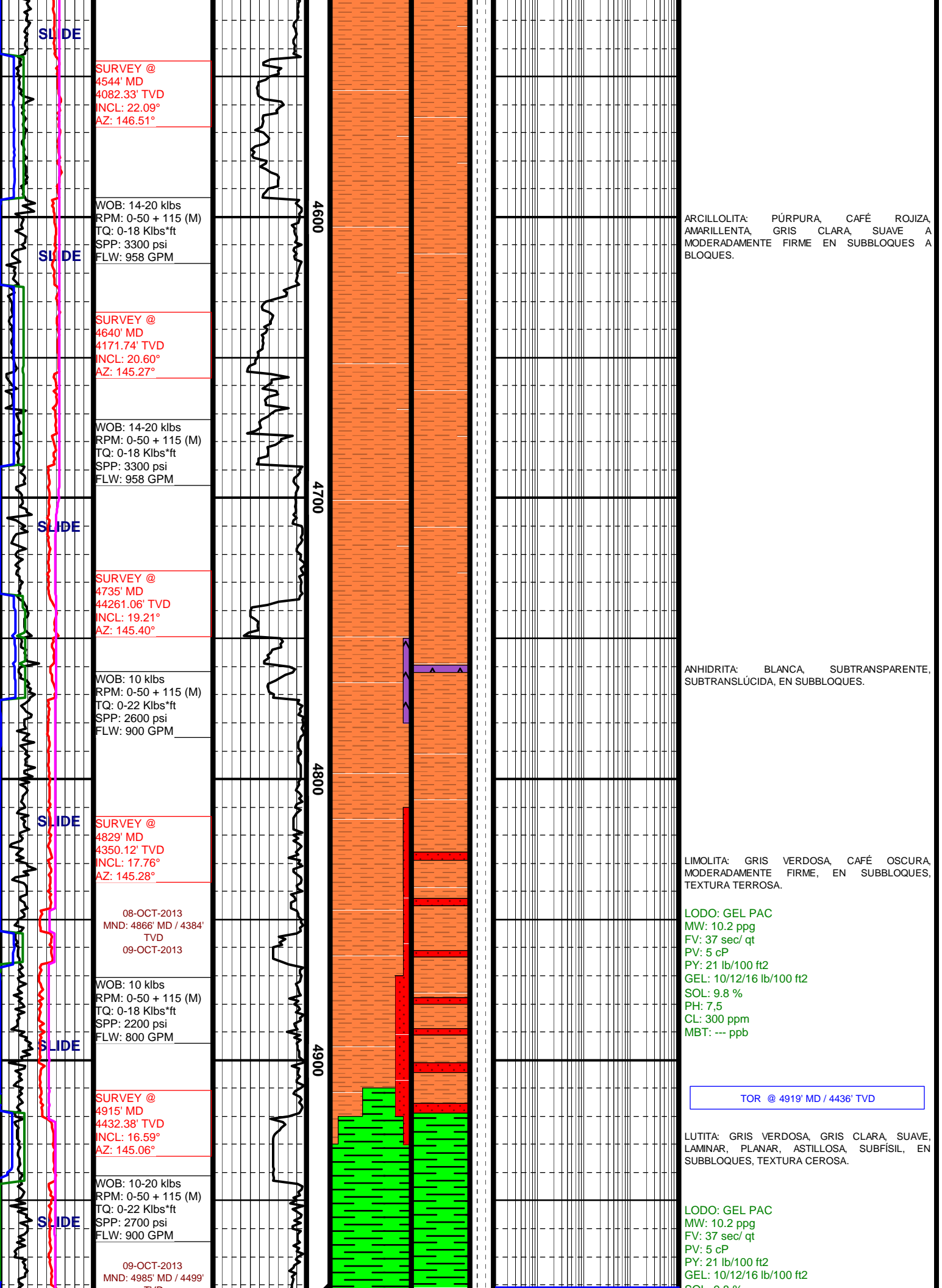
ARCILLOLITA: PÚRPURA, CAFÉ ROJIZA, GRIS CLARA, SUAVE A MODERADAMENTE FIRME, EN SUBBLOQUES A BLOQUES.



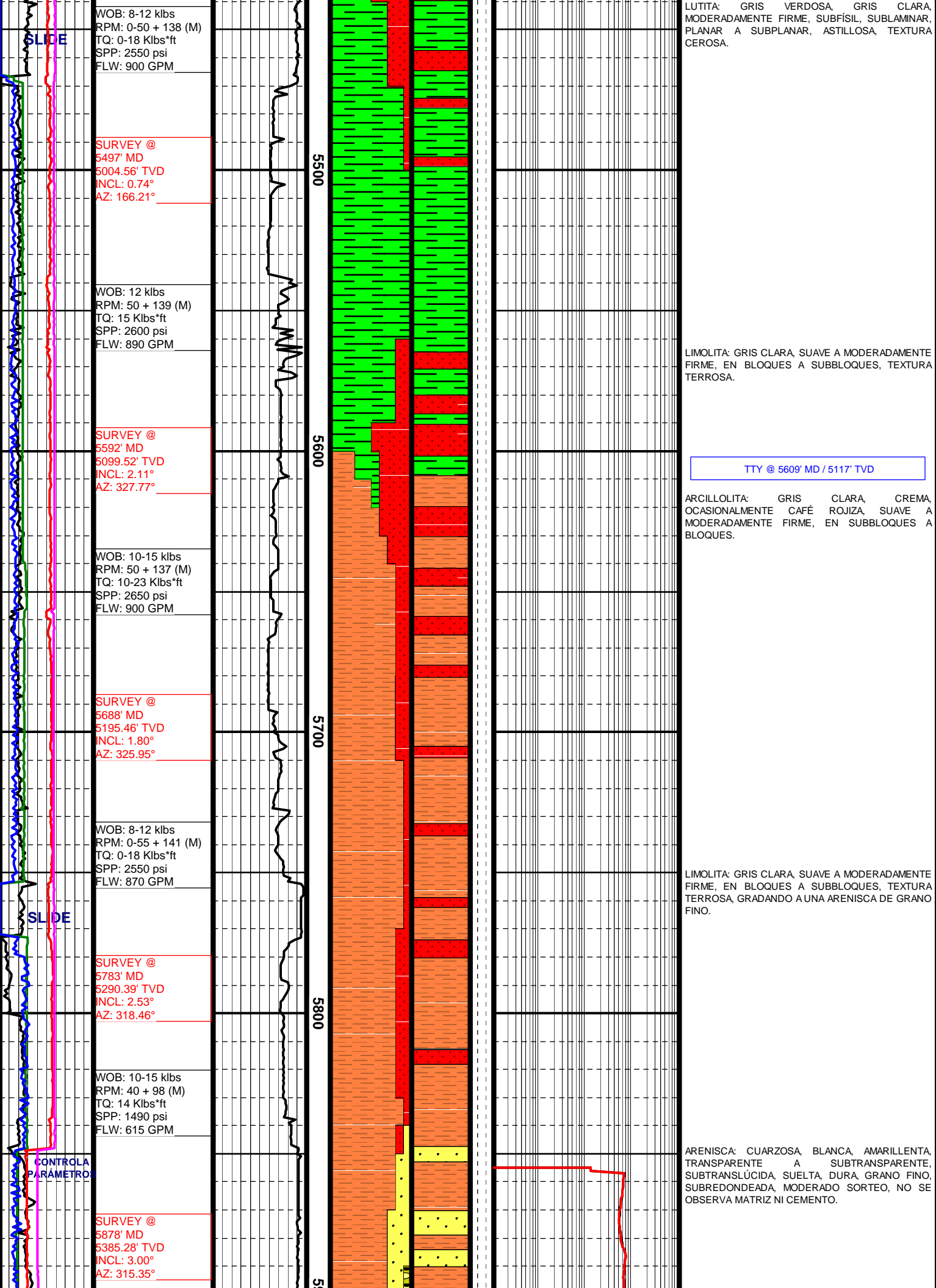


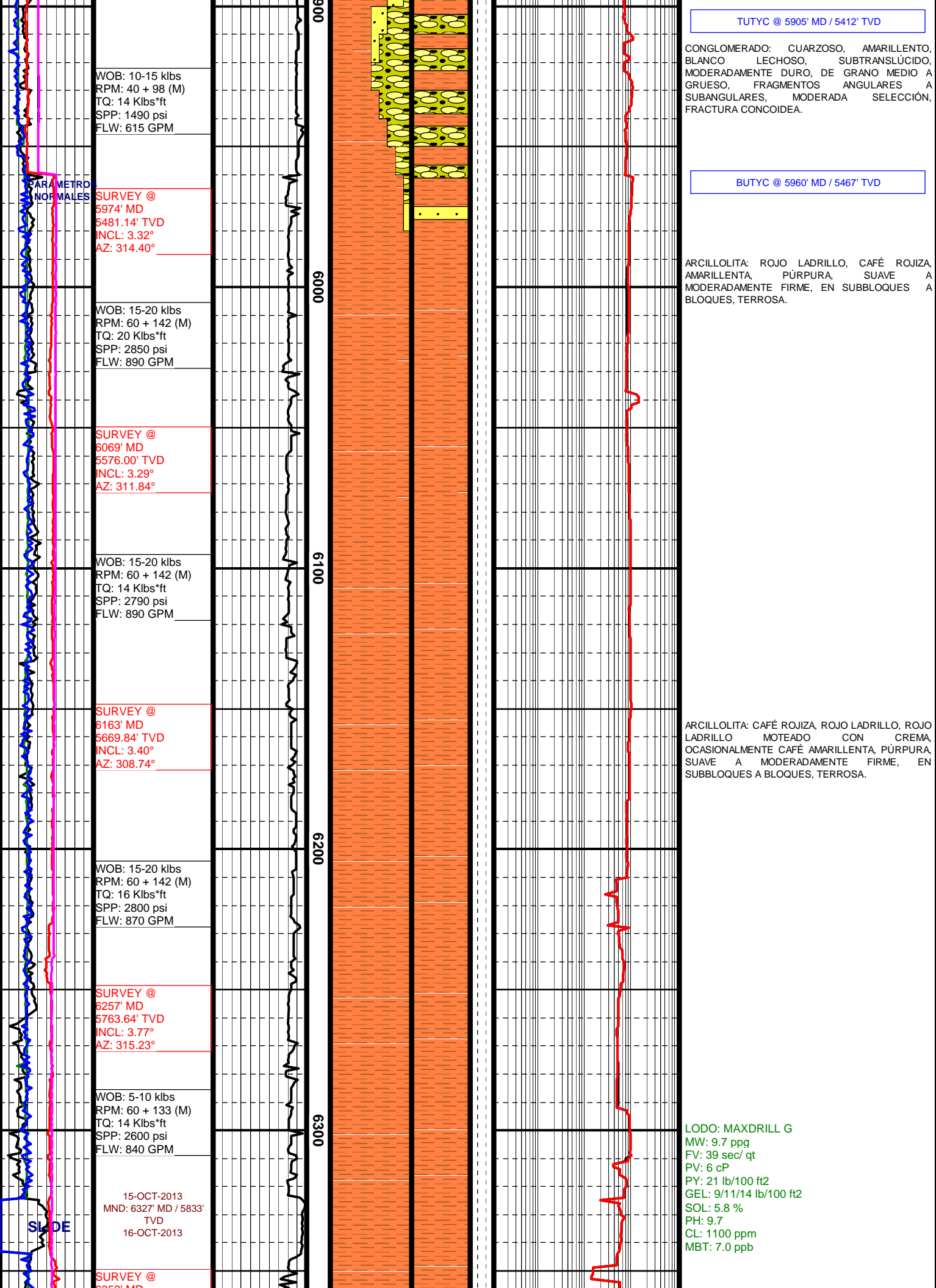






LODO: MAXDRILL G
 MW: 9.3 ppg
 FV: 37 sec/ qt
 PV: 7 cP
 PY: 12 lb/100 ft²
 GEL: 7/8/10 lb/100 ft²
 SOL: 3.8 %
 PH: 9.5
 CL: 850 ppm
 MBT: 4.0 ppb





TUTYC @ 5905' MD / 5412' TVD

CONGLOMERADO: CUARZOSO, AMARILLENTO, BLANCO LECHOSO, SUBTRANSLÚCIDO, MODERADAMENTE DURO, DE GRANO MEDIO A GRUESO, FRAGMENTOS ANGULARES A SUBANGULARES, MODERADA SELECCIÓN, FRACTURA CONCOIDEA.

BUTYC @ 5960' MD / 5467' TVD

ARCILLOLITA: ROJO LADRILLO, CAFÉ ROJIZA, AMARILLENTO, PÚRPURA, SUAVE A MODERADAMENTE FIRME, EN SUBBLOQUES A BLOQUES, TERROSA.

ARCILLOLITA: CAFÉ ROJIZA, ROJO LADRILLO, ROJO LADRILLO MOTEADO CON CREMA, OCASIONALMENTE CAFÉ AMARILLENTO, PÚRPURA, SUAVE A MODERADAMENTE FIRME, EN SUBBLOQUES A BLOQUES, TERROSA.

LODO: MAXDRILL G
MW: 9.7 ppg
FV: 39 sec/ qt
PV: 6 cP
PY: 21 lb/100 ft2
GEL: 9/11/14 lb/100 ft2
SOL: 5.8 %
PH: 9.7
CL: 1100 ppm
MBT: 7.0 ppb

