

# Décollement Consulting Inc.



Scale: 5" / 100'  
Measured Depth Log

Well Name Park O-K-4HC

Location SE/SE Section 4, T4N - R63W

State Colorado

Country USA

API Number 05-123-38605-00

Region D.J. Basin

Spud Date 3/31/2014

Ground Elevation 4,616'

Logged Interval 6,000' To 11,517'

Formation Codell Sandstone

Type of Drilling Fluid Water Based Mud

County Weld

Rig Number Cade 21

Drilling Completed 4/8/2014

K.B. Elevation 4,633'

Total Depth 11,517'

## Operator

Company Bonanza Creek Energy, Inc.

Address 410 17th Street, Suite 1500  
Denver, CO 80202

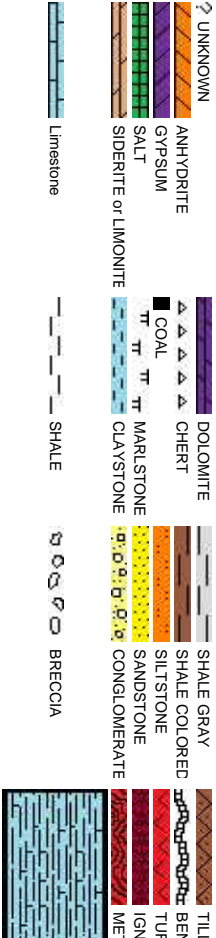
## Geologist

Name Dick Brunner / Scott Sawyer

Company Decollement Consulting Inc.

Address 13300 Braun Road  
Golden, CO 80401

## Rock Types

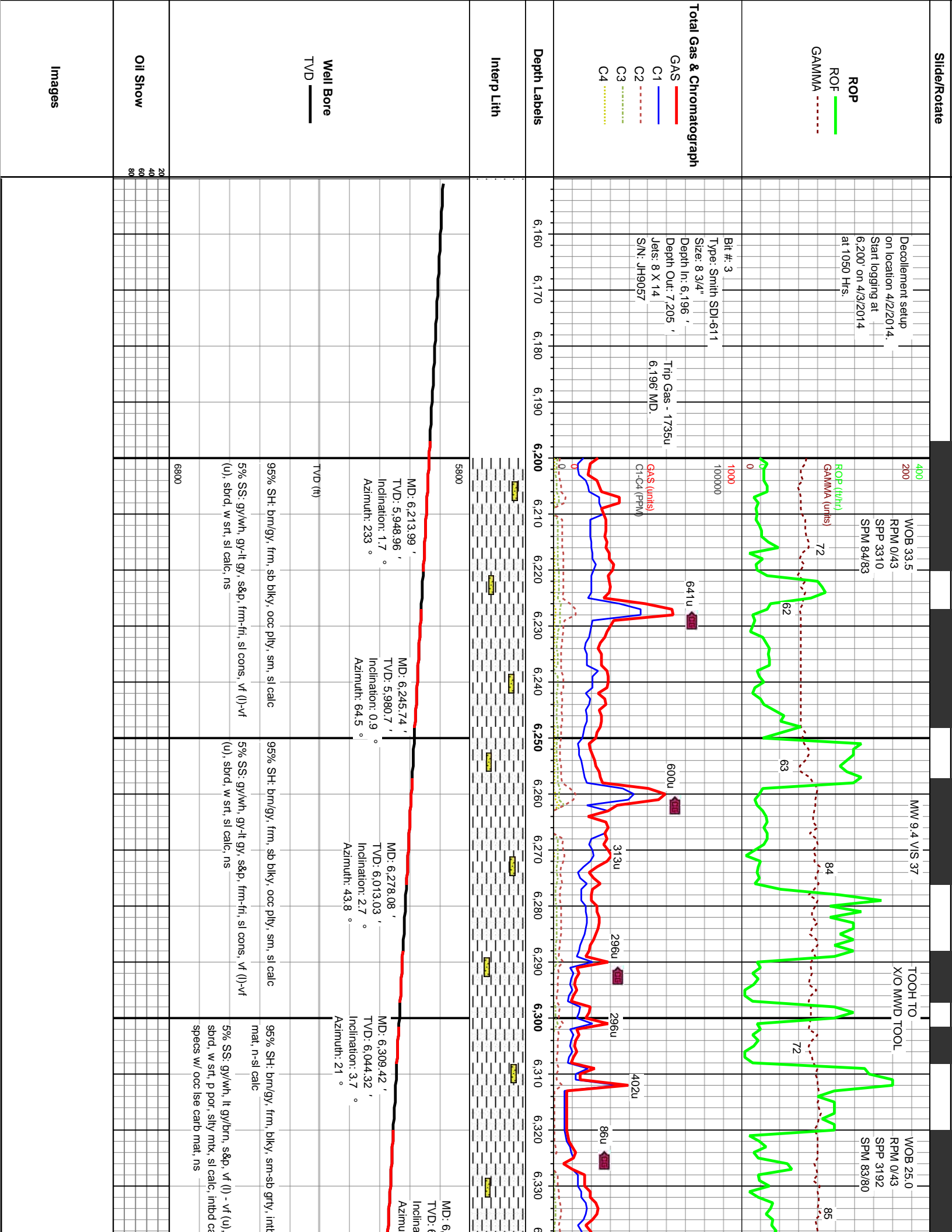


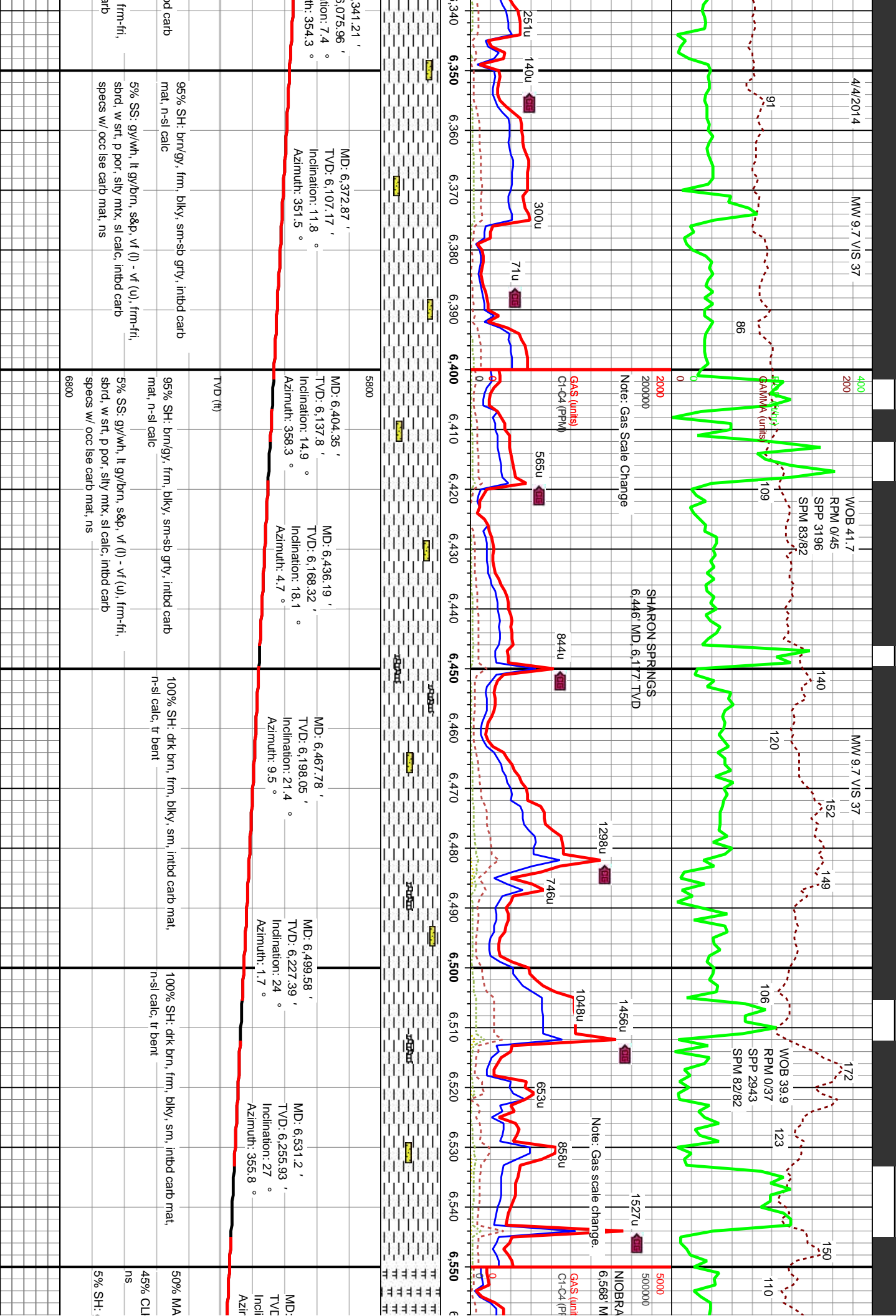
Accessories

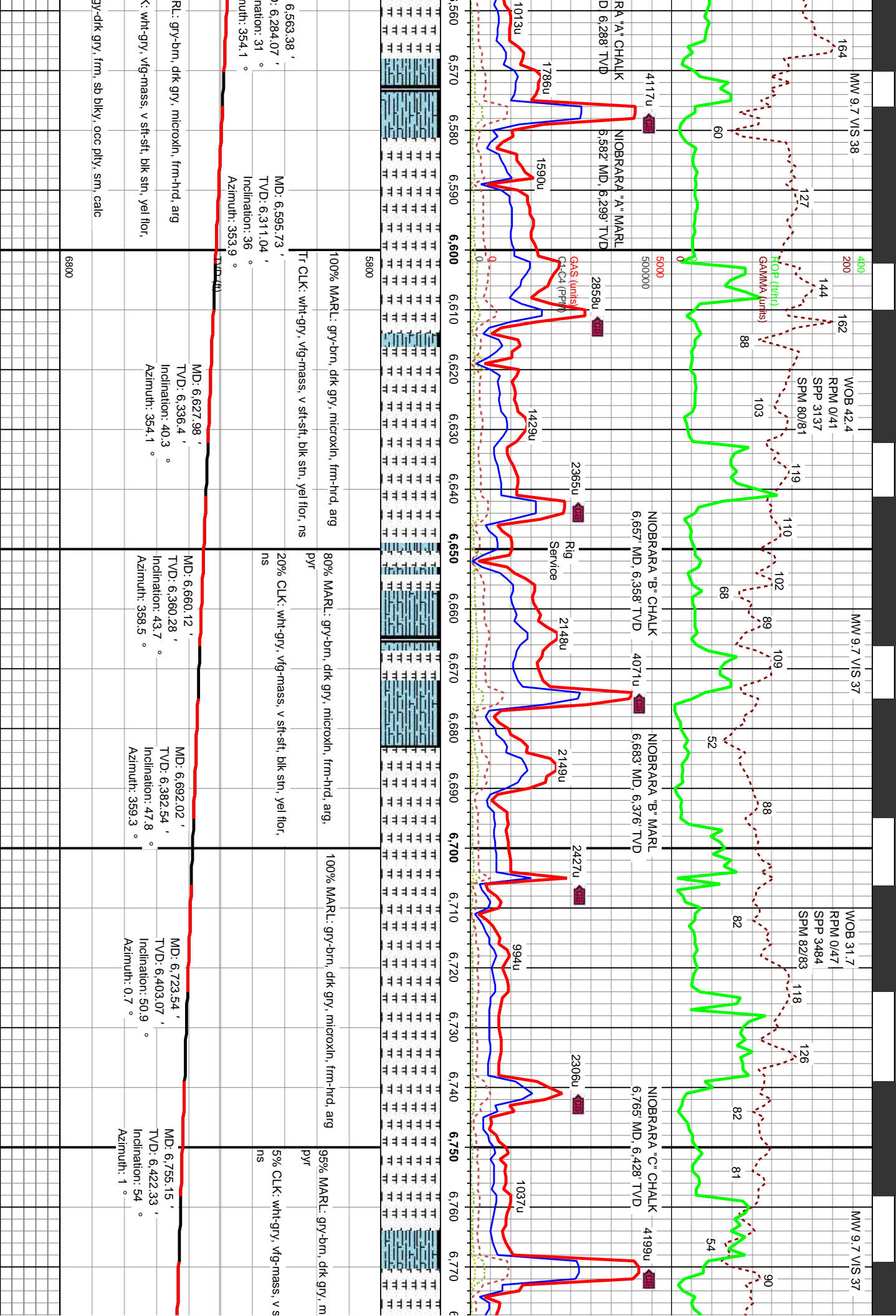
<b>Fossils</b>	<b>F</b> FOSSIL	<b>-</b> ARGILLACEOUS	<b>✓</b> GLAUCONITE	<b>Stringer</b>
GASTROPOD	ARGILLITE GRAIN	GYPSIFEROUS	ANHYDRITE STRINGER	BENTONITE STRINGER
ALGAE	OOLITE	HEAVY MINERAL	KAOLIN	COAL STRINGER
AMPHIPORA	OSTRACOD	BITUMENOUS SUBSTANCE	MARLSTONE	DOLOMITE STRINGER
BELEMNITE	PELECYPOD	BRECCIA FRAGMENTS	MINERAL CRYSTALS	GYPSUM STRINGER
BIOCLASTIC	PELLET	CALCAREOUS	NODULES	LIMESTONE STRINGER
BRACHIOPOD	PISOLITE	CARBONACEOUS FLAKES	PHOSPHATE PELLET	MARLSTONE (CALC) STRG
BRYOZOA	PLANT REMAINS	CHTDK	PYRITE	MARLSTONE (DOL) STRG
CEPHALOPOD	PLANT SPORES	CHTLT	SALT CAST	SANDSTONE STRINGER
CORAL	SCAPHOPOD	COAL - THIN BEDS	SANDY	SHALE STRINGER
CRINOID	STROMATOPOROID	DOLOMITIC	SILTY	SILTSTONE STRINGER
ECHINOID	FELDSPAR	FERRUGINOUS PELLET	SILTY	
FISH		FERRUGINOUS	TUFFACEOUS	
FORAMINIFERA	ANHYDRITIC			

Other Symbols

<b>Oil Show</b>	ORGANIC	GAS SHOW	ANGULAR	MICROXLN
PINPOINT	VUGGY	NORMAL FAULT	ROUNDED	MUDDSTONE
DEAD	EVEN	OIL SHOW	SUBANG	PACKSTONE
QUESTIONABLE	<b>Engineering</b>	OVERTURNED STRATA	SUBRND	WACKESTONE
SPOTTED STAINING	BIT	REVERSE FAULT	<b>Textures</b>	<b>Sorting</b>
CONNECTION (LEFT)	SIDEWALL CORE (LEFT)	SIDEWALL CORE (RIGHT)	BOUNDSTONE	MODERATE
<b>Porosity</b>	CONNECTION (RIGHT)	SLIDE	CHALKY	POOR
EARTHLY	CONNECTION GAS	SURVEY	CRYPTOXLN	WELL
FENESTRAL	CORE - LOST	TRIP GAS	EARTHLY	<b>Chalk</b>
FRACTURE	CORE - RECOVERED	WIRELINE TESTED - LEFT	FINELYXLN	
INTERCRYSTALLINE	DST INTERVAL	WIRELINE TESTED - RT	GRAINSTONE	
INTEROOLITIC	FAULT		LITHOGRAPHIC	
MOLDIC	FORMATION TOP	<b>Rounding</b>		



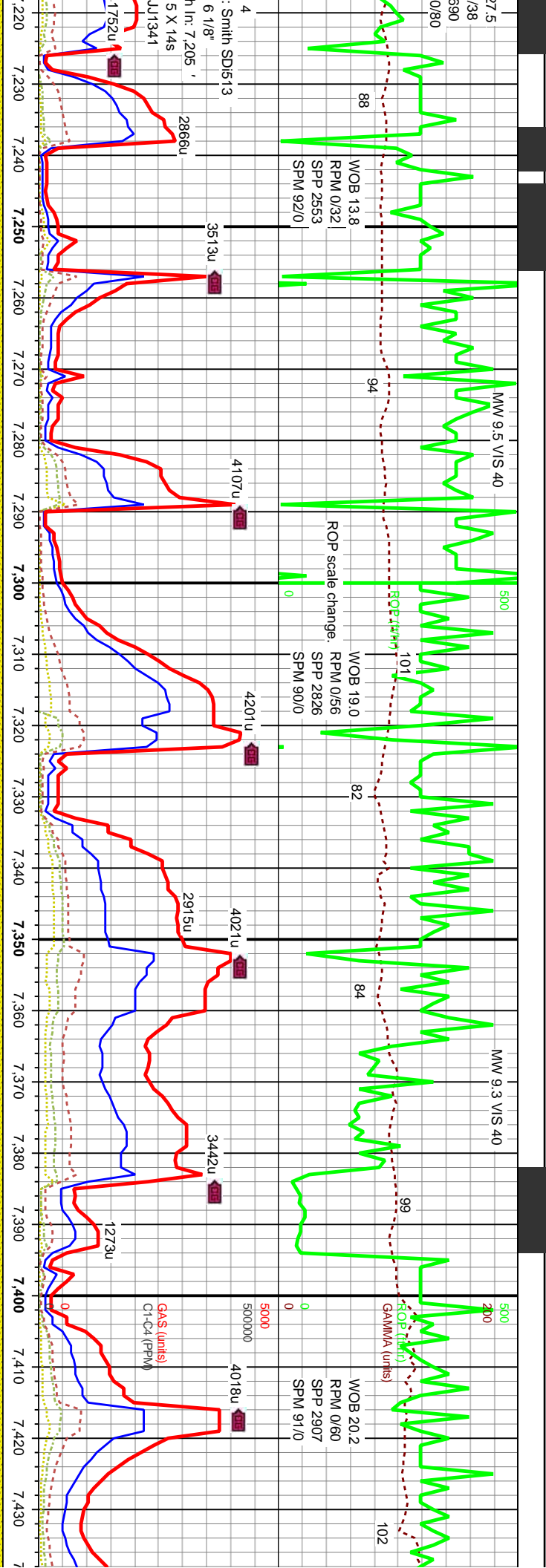












vfl (l) - vfl (u), frm-fri, sbang-sbrd, p calc, occ lse carb mat		100% SS: lt brn/gy, vfl (l) - vfl (u), frm-fri, sbang-sbrd, p srt, p por, silty mix, sl calc, occ lse carb mat		100% SS: lt brn/gy, vfl (l) - vfl (u), frm-fri, sbang-sbrd, p srt, p por, silty mix, sl calc, occ lse carb mat		100% SS: lt brn/gy, vfl (l) - vfl (u), frm-fri, sbang-sbrd, p srt, p por, silty mix, sl calc, occ lse carb mat, pyr		100% SS: lt brn/gy, vfl (l) - vfl (u), frm-fri, sb p srt, p por, silty mix, sl calc, occ lse carb r	
MD: 7,239.82 ' TVD: 6,554.01 ' Inclination: 89.4 ° Azimuth: 357.8 °		MD: 7,271.49 ' TVD: 6,554.29 ' Inclination: 89.6 ° Azimuth: 357.8 °		MD: 7,303.25 ' TVD: 6,554.52 ' Inclination: 89.6 ° Azimuth: 357.8 °		MD: 7,334.78 ' TVD: 6,554.68 ' Inclination: 89.8 ° Azimuth: 357.7 °		MD: 7,367.24 ' TVD: 6,554.65 ' Inclination: 90.3 ° Azimuth: 357.5 °	
								TVD (ft)	
								6800	



