

Scale: 5" / 100'
Measured Depth Log

Well Name Pavistma SW #1

Location 1665' FSL, 200' FWL NWSW 32-6N-67W

State Colorado

Country USA

API Number 05-123-37703-00

Region DJ Basin

Spud Date 9-12-13

Surface Coordinates Lat: 44.440534
Long: -104.924793

Drilling Completed 9-13-13

County Weld

Rig Number Frontier #10

Field Wattenburg

Bottom Hole Coordinates (At completion of Lateral)

Lat: 40.4411895
Long: -104.9080935

Ground Elevation 4,954'

K.B. Elevation 4,976.5'

Logged Interval 5,000'

To 7,545'

Total Depth TBD

Formation Niobrara

Type of Drilling Fluid Fresh Water

Company Tekton Windsor LLC

Address 640 Plaza Drive #290
Highlands Ranch, CO 80122

Name Dominic Pitre / Dan Scott

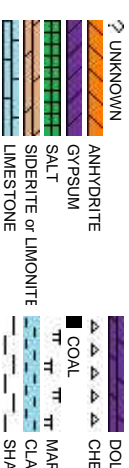
Company Empirica

6741 Satsuma Dr.
Houston, TX 77041
(713)-466-7400

Equipment ML-056

Comments





















































2 Man Logging
Start Date: 8-2-13
Release Date:



Operator

Accessories

Fossils

	F FOSSIL		- ARGILLACEOUS
	GASTROPOD		ARGILLITE GRAIN
	OOLITE		HEAVY MINERAL
	OSTRACOD		KAOLIN
	BELEMNITE		MARLSTONE
	BIOLCLASTIC		MINERAL CRYSTALS
	BRACHIOPOD		NODULES
	BRYOZOA		CHERT
	CEPHALOPOD		PLANT REMAINS
	CORAL		SALT - THIN BEDS
	CRINOID		SALT CAST
	ECHINOID		DOLOMITIC
	FISH		FELDSPAR
	FORAMINIFERA		FERRUGINOUS PELLET
	ANHYDRITIC		SILTY
	FERRUGINOUS		TUFFACEOUS
	GYPSEIFEROUS		ANHYDRITE STRINGER
	BENTONITE		BENTONITE STRINGER
	COAL STRINGER		COAL STRINGER
	DOLOMITIC STRINGER		DOLOMITIC STRINGER
	GYPSEUM STRINGER		GYPSEUM STRINGER
	LIMESTONE STRINGER		LIMESTONE STRINGER
	MARLSTONE (DOLO) STRG		MARLSTONE (DOLO) STRG
	SANDSTONE STRINGER		SANDSTONE STRINGER
	SHALE STRINGER		SHALE STRINGER
	SILTSTONE STRINGER		SILTSTONE STRINGER

Geologist

Other

Service
6-2013
TBD

Block Types

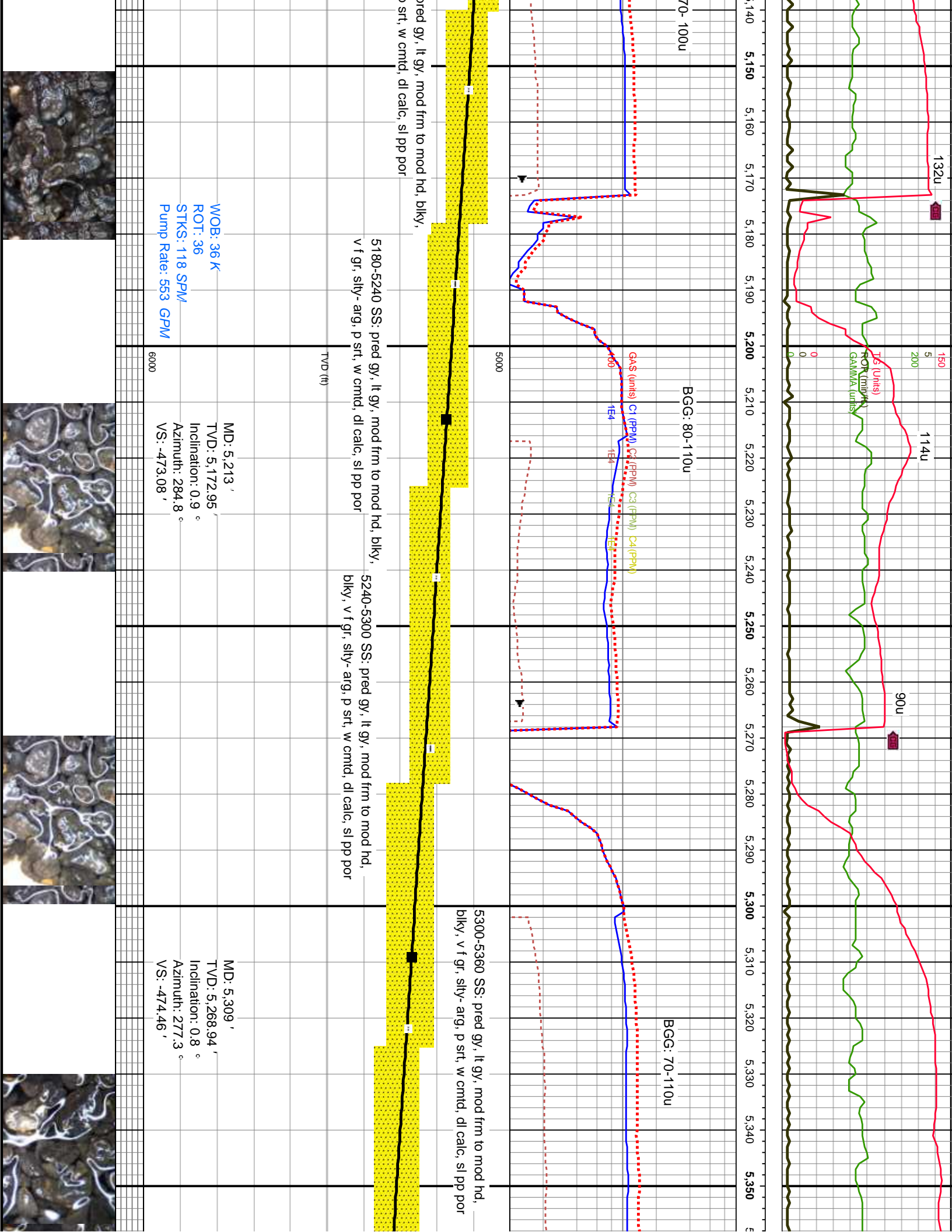
OMITE		TILL	
SHALE		GRAY	
SHALE COLORED		BENTONITE	
SILTSTONE		TUFF	
SANDSTONE		IGNEOUS	
CONGLOMERATE		METAMORPHIC	
BRECCIA			
ALSTONE			
ART			
OMITE			
SHALE			
SHALE COLORED			
SILTSTONE			
SANDSTONE			
CONGLOMERATE			
BRECCIA			
ALSTONE			
ART			
OMITE			

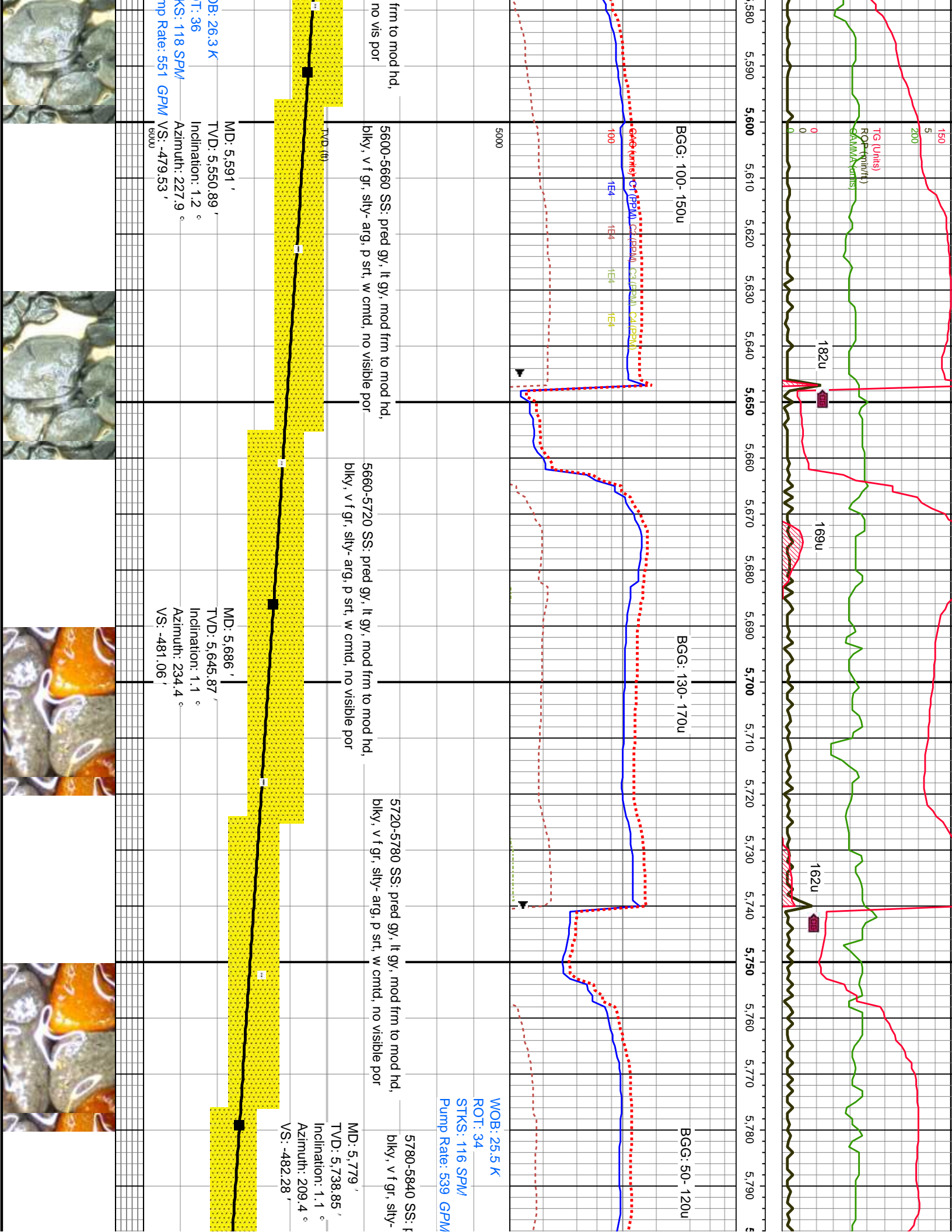
Other Symbols

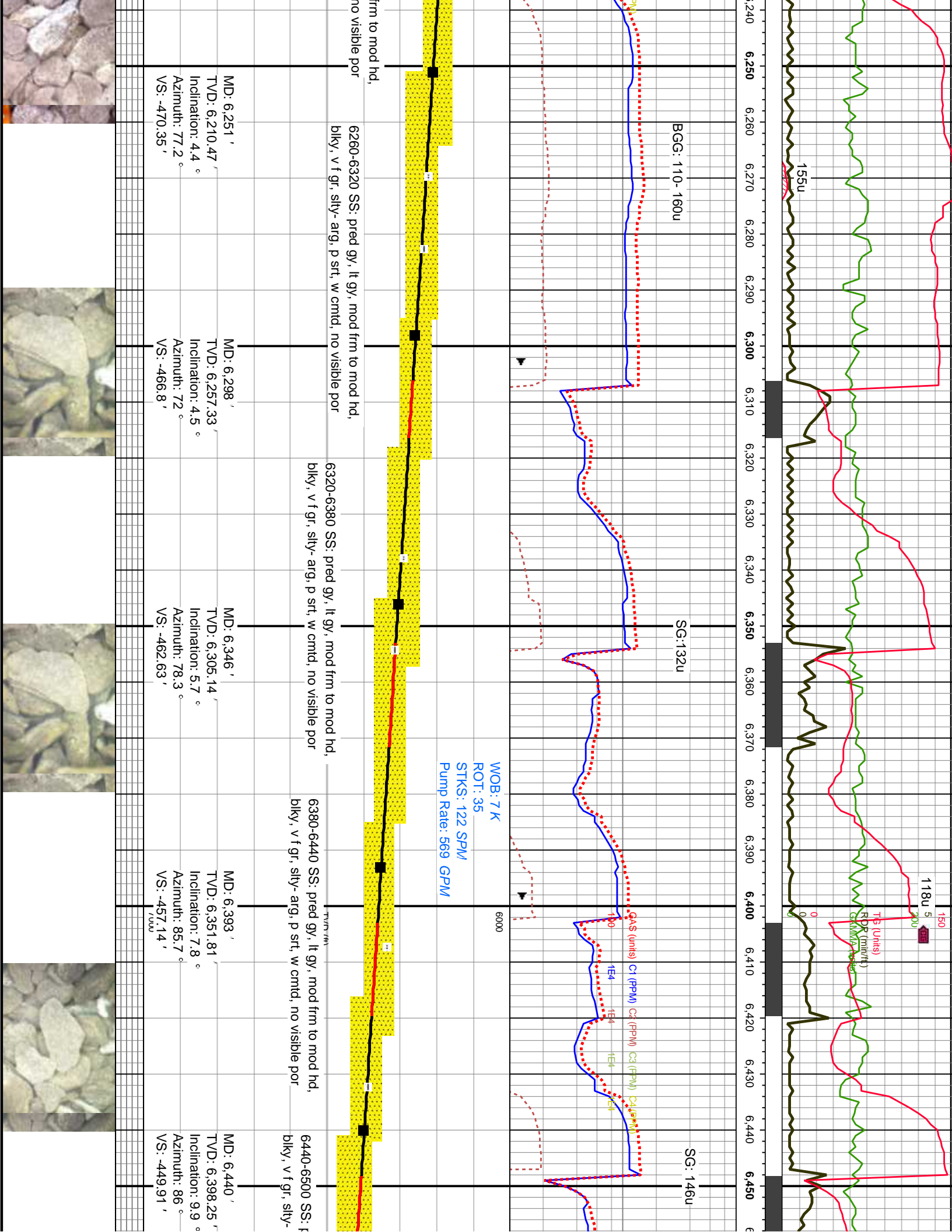
Oil Show

[illegible]

<div>Tekton</div> <div>Pavisima SW # 1</div>		<div><div>ROP</div><div>TG</div><div>ROF</div><div>GAMMA</div></div> <div></div>	
<div>Slide/Rotate</div>			
<div>Depth Labels</div>		<div>4,960 4,970 4,980 4,990 5,000 5,010 5,020 5,030 5,040 5,050 5,060 5,070 5,080 5,090 5,100 5,110 5,120 5,130</div>	
<div>Total Gas & Chromatograph</div> <div><div>GAS</div><div>C1</div><div>C2</div><div>C3</div><div>C4</div></div>		<div><div>BGG:</div><div></div></div>	
<div>Well Bore</div> <div>TVD</div>		<div><div>Bit #: 2</div><div>Type: Smith/SD1611MPX</div><div>Size: 8.75</div><div>Depth In: 891 '</div><div>Depth Out: 7,545 '</div><div>Jets: 6x15</div><div>S/N: JH1593</div></div> <div><div>5000-5060 SS: pred gy, lt gy, mod firm to mod hd, blk, v f gr, silty-arg, p srt, w cmtd, dl calc, sl pp por</div><div>5060-5120 SS: pred gy, lt gy, mod firm to mod hd, blk, v f gr, silty-arg, p srt, w cmtd, dl calc, sl pp por</div><div>5120-5180 SS: f</div></div>	
<div>WOB: 24 K</div> <div>ROT: 36</div> <div>STKS: 118 SPM</div> <div>Pump Rate: 550 GPM</div>		<div><div>MD: 5,024 '</div><div>TVD: 4,983.98 '</div><div>Inclination: 1.2 °</div><div>Azimuth: 284.1 °</div><div>VS: -470.06 '</div></div> <div><div>DP @ 5,000'</div><div>6000</div></div>	
<div>Oil Show</div>		<div><div>5000</div><div>5120</div></div>	
<div>Images</div>		<div><div>5000</div><div>5120</div></div>	







Note Lithology @ 6,980' MD

Sharon Springs

Niobrara

180u

130u

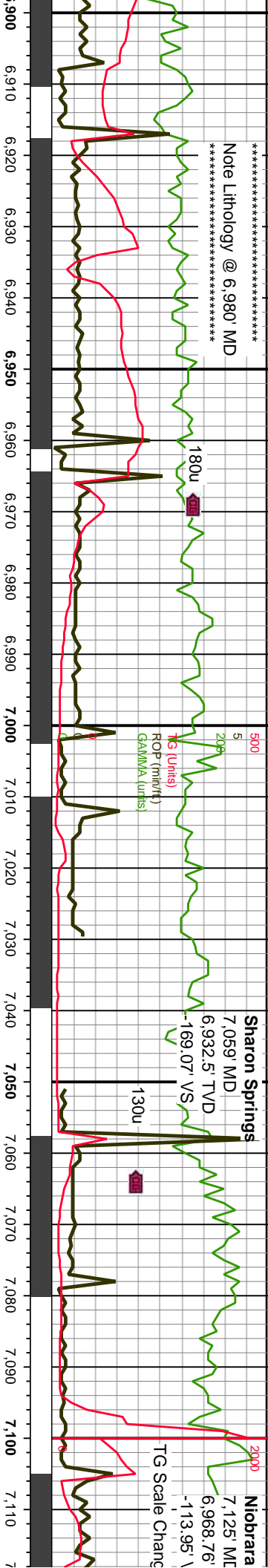
2000

500
200
50

7,059' MD
6,932.5' TVD
-169.07' VS

7,125' MD
6,968.76' TVD
-113.95' VS

TG Scale Chang



SG: 193

Gas (units) C1 (PPM) C2 (PPM) C3 (PPM) C4 (PPM)

100 1E4 1E4 1E4 1E4

SG: 35u

SG: 702u

Gas (PPM)

1E5 1E5

MD: 6,910 ' TVD: 6,829.43 ' Inclination: 36.7 ° Azimuth: 94.8 ° VS: -275.63 '	MD: 6,957 ' TVD: 6,865.61 ' Inclination: 42.6 ° Azimuth: 90.1 ° VS: -245.78 '	WOB: 26.4 K ROT: 0 STKS: 122 SPM Pump Rate: 568 GPM	MD: 7,003 ' TVD: 6,897.72 ' Inclination: 48.8 ° Azimuth: 89.7 ° VS: -212.9 '	MD: 7,050 ' TVD: 6,927.19 ' Inclination: 53.5 ° Azimuth: 89 ° VS: -176.33 '	MD: 7,097 ' TVD: 6,953.91 ' Inclination: 57.2 ° Azimuth: 88.8 ° VS: -137.69 '
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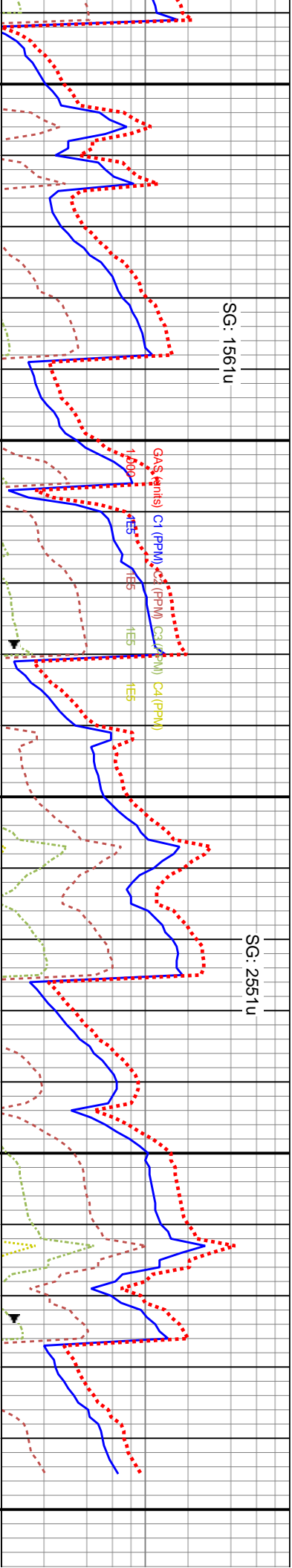
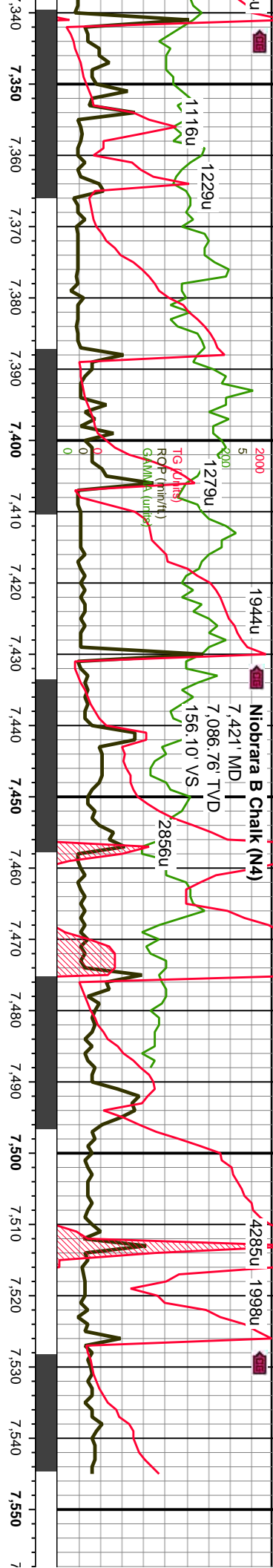
6920-6980 SS: pred gy- lt gy, occ off wh, mod frm to mod hd, blk- pty, v f gr, v silty- arg, p srt, v sl- sl calc, sl- mod carb, mod f lam, tr cal, no visible por, sme silty sh, rr unconcs trmsl med qtz grs, rr fy dissim pyr, pos fe stn, tr lt gn crush cut

6980-7040 SS: pred gy- lt gy, occ off wh, mod frm to mod hd, blk- pty, v f gr, v silty- arg, p srt, v sl- sl calc, sl- mod carb, mod f lam, sme cal, no visible por, rr fy dissim py, tr lt gn crush cut; SLTY SH: pred gy- md gy, frm, ip sl frm- hd, blk- pty, sm tex, pred mot w chk incl, v sil- sl calc, carb

7040-7100 SLTY SH: pred gy- md gy, frm, ip sl frm- hd, blk- pty, mltst, sm tex, pred mot w chk incl, v sil- sl calc, carb; SS: pred gy- lt gy, occ off wh, mod frm to mod hd, blk- pty, v f gr, v silty- arg, p srt, v sl- sl calc, sl- mod carb, mod f lam, sme cal, no visible por, rr fy dissim pyr, ip silty sh, sme br gn flor, tr lt gn crush cut

7000

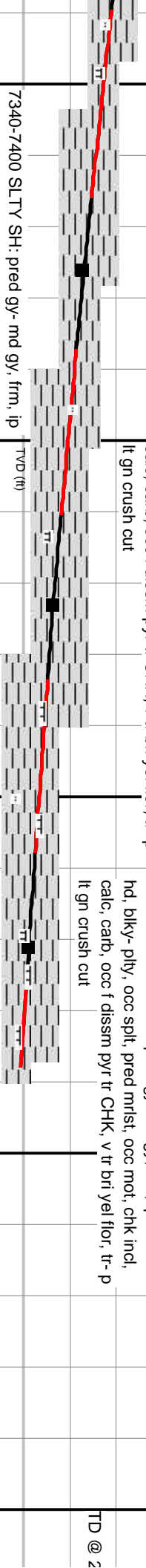




WOB: 25.5 K
ROT: 35
STKS: 106 SPM
Pump Rate: 494 GPM

7400-7460 SLTY SH: pred gy- md gy, frm, ip sl frm-
hd, blk- ply, occ spl, pred mrst, occ mot, chk incl,
calc, carb, occ f dissim pyr tr CHK, v tr bri yel flr, tr- p
lt gn crush cut

7460-7520 SLTY SH: pred gy- md gy, frm, ip sl frm-
hd, blk- ply, occ spl, pred mrst, occ mot, chk incl,
calc, carb, occ f dissim pyr tr CHK, v tr bri yel flr, tr- p
lt gn crush cut



MD: 7,376 '
TVD: 7,074.04 '
Inclination: 72 °
Azimuth: 91.1 °
VS: 113.02 '

MD: 7,423 '
TVD: 7,087.27 '
Inclination: 75.3 °
Azimuth: 90.9 °
VS: 158.03 '

MD: 7,471 '
TVD: 7,097.74 '
Inclination: 79.5 °
Azimuth: 91.1 °
VS: 204.77 '

DS @ 7,450'



