



Scale: 5" / 100'  
Measured Depth Log

Well Name Priesser 25-9-6-1H

Location S2 S2 SE SW, Section 6, T25S-R9W

State Kansas County Reno

Country United States Rig Duke Drilling Co. Rig #20

API Number 15-155-21595

Surface Coordinates 150' FSL, 2,080' FWL

Ground Elevation 1,721' K.B. Elevation 1,733'

Logged Interval 3200 To 8,350' Total Depth 8,350'

Formation Osage (Mississippian)

Type of Drilling Fluid Fresh Water

### Operator

Company Dorado E&P Partners, LLC

Address 1401 17th Street  
Suite 1500  
Denver, CO 80202

### Geologist

Name Dave Wheeler

Company Dorado E&P Partners, LLC

1401 17th Street  
Suite 1500  
Denver, CO 80202

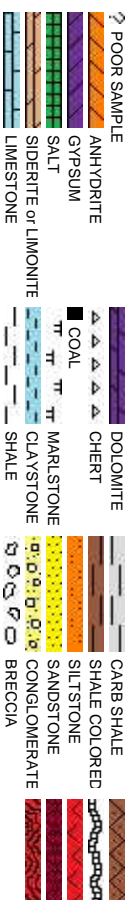


### Other

Loggers

Chris Spencer  
Kyle Welty

### Rock Types



# Accessories

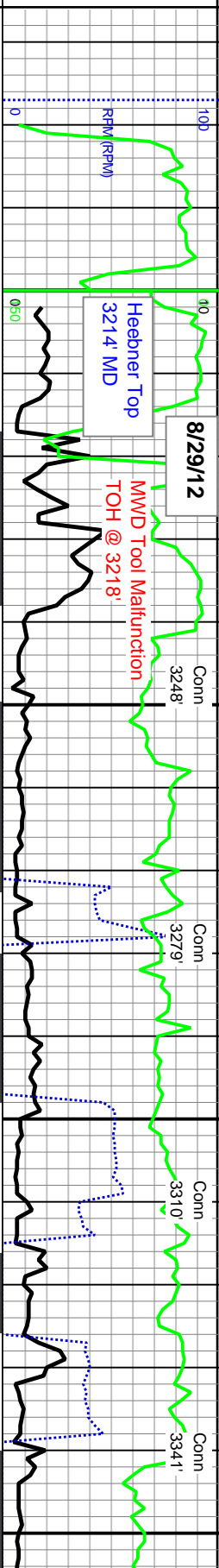
- Fossils**
- F FOSSIL
  - GASTROPOD
  - ARGILLACEOUS
  - ARGILLITE GRAIN
  - GLAUCONITE
  - GYPSIFEROUS
  - OOLITE
  - OSTRACOD
  - PELECYPOD
  - PELLET
  - PISOLITE
  - PLANT REMAINS
  - PLANT SPORES
  - SCAPHOPOD
  - STROMATOPOROID
  - FELDSPAR
  - DOLOMITIC
  - SILTACEOUS
  - FISH
  - FORAMINIFERA
  - ANHYDRITIC
  - FERRUGINOUS PELLET
  - FERRUGINOUS
  - TUFFACEOUS
  - SILTY
- Stringer**
- ANHYDRITE STRINGER
  - BENTONITE STRINGER
  - COAL STRINGER
  - DOLOMITE STRINGER
  - GYPSUM STRINGER
  - LIMESTONE STRINGER
  - MARLSTONE (CALC) STRG
  - MARLSTONE STRINGER
  - SANDSTONE STRINGER
  - SHALE STRINGER
  - SILTSTONE STRINGER
- Minerals**
- BENTONITE
  - BITUMENOUS SUBSTANCE
  - BRECCIA FRAGMENTS
  - CALCAREOUS
  - CARBONACEOUS FLAKES
  - CHTDK
  - CHTLT
  - COAL - THIN BEDS
  - DOLOMITIC
  - FELDSPAR
  - FERRUGINOUS PELLET
  - FERRUGINOUS
  - TUFFACEOUS
  - SILTY

# Other Symbols

- Oil Show**
- MOLDIC
  - ORGANIC
  - PINPOINT
  - EVEN
  - QUESTIONABLE
  - SPOTTED STAINING
- Engineering**
- BIT
  - CONNECTION (LEFT)
  - CONNECTION (RIGHT)
  - CONNECTION GAS
  - CORE - LOST
  - CORE - RECOVERED
  - DST INTERVAL
  - FAULT
  - FORMATION TOP
  - GAS SHOW
  - MINDEPTH
  - MINDEPTH MN DEPTH
  - NORMAL FAULT
  - OIL SHOW
  - OVERTURNED STRATA
  - REVERSE FAULT
  - SEAWALL CORE (LEFT)
  - SEAWALL CORE (RIGHT)
  - TRIP GAS
- Rounding**
- ANGULAR
  - ROUNDED
  - SUBANG
  - SUBRND
  - WIRELINE TESTED - LEFT
  - WIRELINE TESTED - RT
- Textures**
- BOUNDSTONE
  - CHALKY
  - CRYPTOKLN
  - FINELYXLN
  - GRAINSTONE
  - LITHOGRAPHIC
- Sorting**
- MODERATE
  - POOR
  - WELL
  - EARTHY
  - MIX MICROXLN
  - MUDSTONE
  - PACKSTONE
  - WACKSTONE
- Porosity**
- EARTHLY
  - FENESTRAL
  - FRACTURE
  - INTERCRYSTALLINE
  - INTEROOLITIC

- TILL
- BENTONITE
- TUFF
- IGNEOUS
- METAMORPHIC

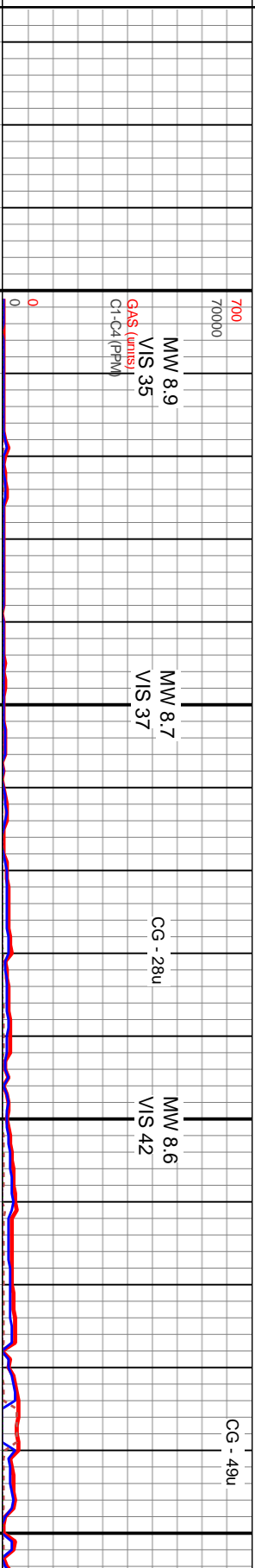
ROP  
 ROF  
 RPL  
 Gamma



Slide/Rotate  
 Depth Labels



Total Gas & Chromatograph  
 GAS  
 C1  
 C2  
 C3  
 C4



Survey Data  
 MD: 3,166 '  
 TVD: 3,166.95 '  
 Inclination: 0.7 °  
 Azimuth: 124.2 °

Survey Data  
 MD: 3,197 '  
 TVD: 3,196.95 '  
 Inclination: 0.5 °  
 Azimuth: 1.6 °

Survey Data  
 MD: 3,228 '  
 TVD: 3,227.94 '  
 Inclination: 1.6 °  
 Azimuth: 3.4 °

Survey Data  
 MD: 3,259 '  
 TVD: 3,258.88 '  
 Inclination: 5.3 °  
 Azimuth: 358.5 °

Survey Data  
 MD: 3,290 '  
 TVD: 3,289.63 '  
 Inclination: 9 °  
 Azimuth: 1.3 °

Survey Data  
 MD: 3,321 '  
 TVD: 3,320.13 '  
 Inclination: 11.6 °  
 Azimuth: 3.4 °

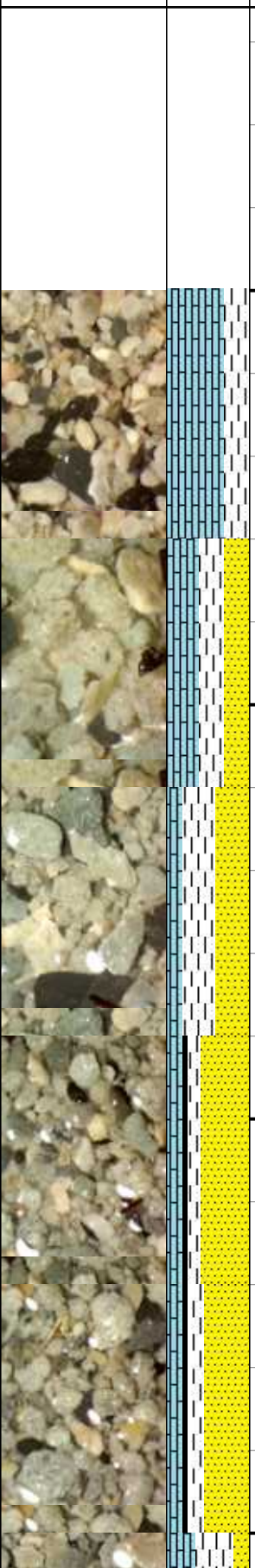
Survey Data  
 MD: 3,352 '  
 TVD: 3,350 '  
 Inclination: 2.7 °  
 Azimuth: 2.7 °

Bit # : 4  
 Type: Smith MDS1613  
 Size: 8.75"  
 Depth In: 3,200 '  
 Depth Out: 4,426 '  
 Hours: 61 hrs  
 Avg Ft/Hr: 20 '/hr  
 Jets: 6-13  
 S/N: JF4790

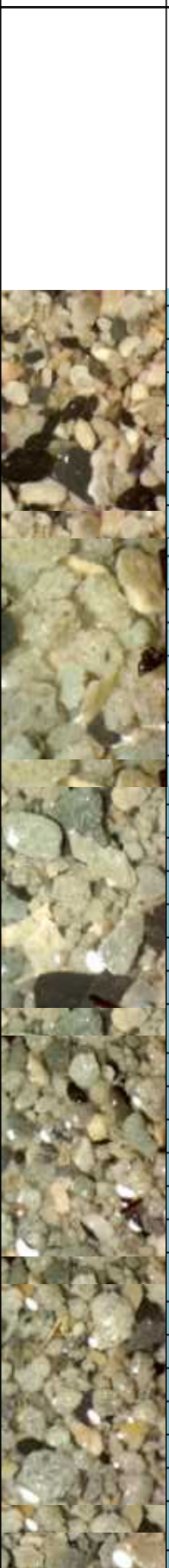
SS: CLR, OFF WH, MKY, TRNSL, VF - F  
 GRN, PREDY CONS, SILC CMTD, SL  
 CALC IP, V SL FRI, TT, <4% POR, 20%  
 SCATT DULL YEL MNRL FLOR, NFSOC

SH:  
 FRW  
 COA

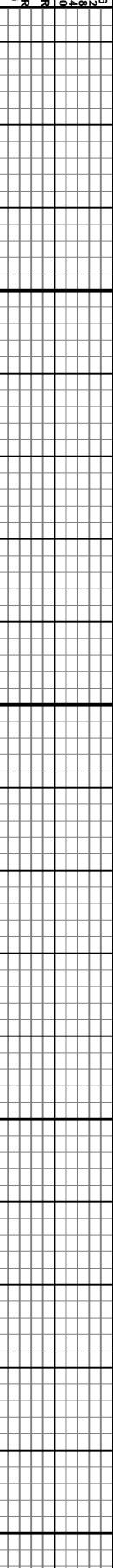
% Lith



Images

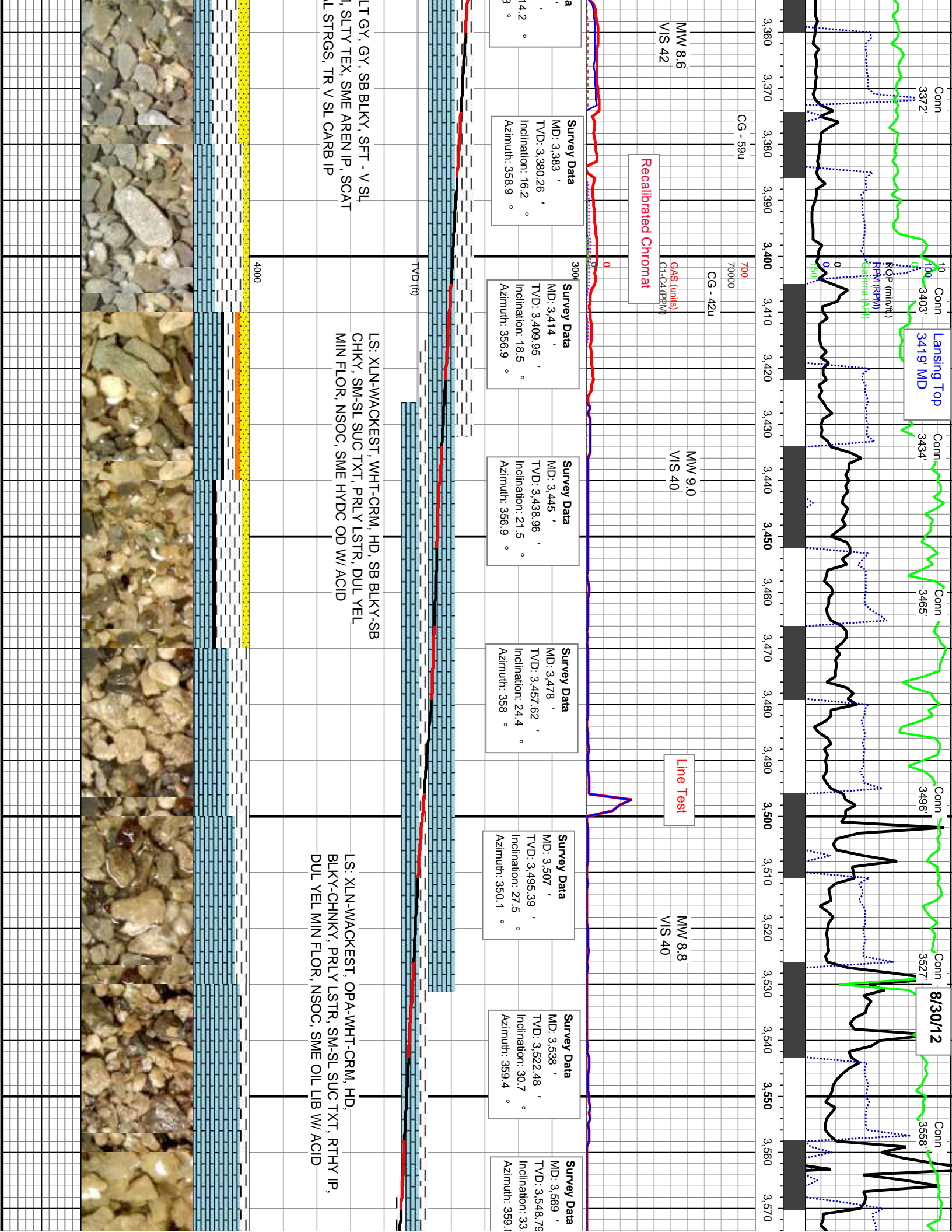


% Porosity

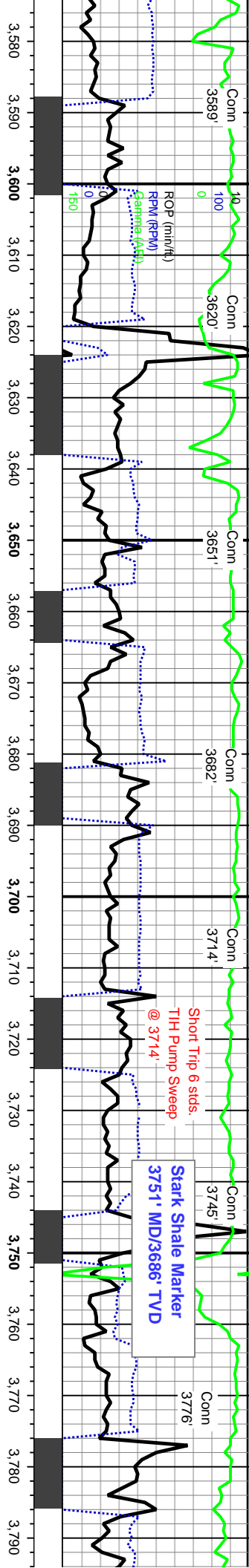


Oil Show









MW 8.7  
VIS 41  
GAS (units)  
C1-C4 (PPM)

Survey Data  
MD: 3.600 '  
TVD: 3.574.32 '  
Inclination: 35.9 °  
Azimuth: 359.6 °

Survey Data  
MD: 3.631 '  
TVD: 3.598.97 '  
Inclination: 38.7 °  
Azimuth: 359.2 °

Survey Data  
MD: 3.663 '  
TVD: 3.623.48 '  
Inclination: 41.3 °  
Azimuth: 359.1 °

Survey Data  
MD: 3.694 '  
TVD: 3.646.33 '  
Inclination: 43.8 °  
Azimuth: 359.3 °

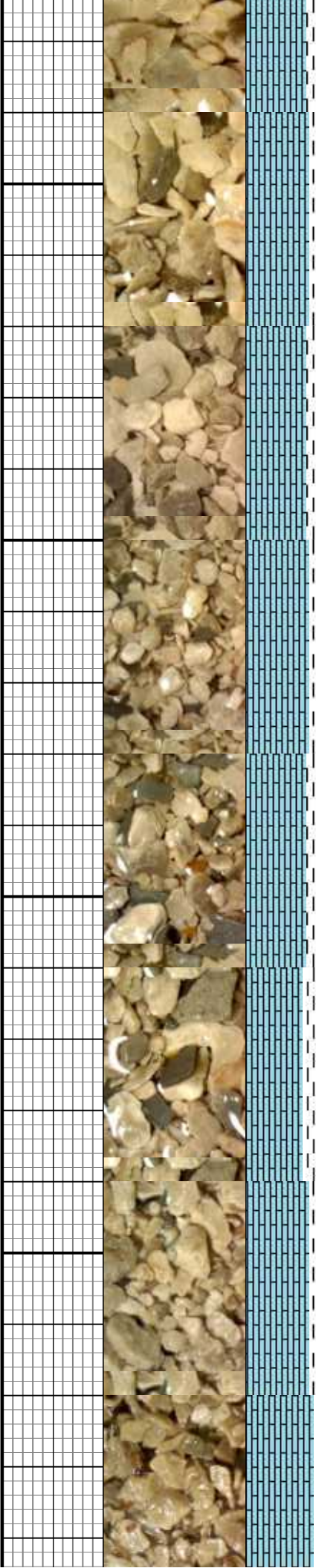
Survey Data  
MD: 3.725 '  
TVD: 3.668.3 '  
Inclination: 45.9 °  
Azimuth: 359.6 °

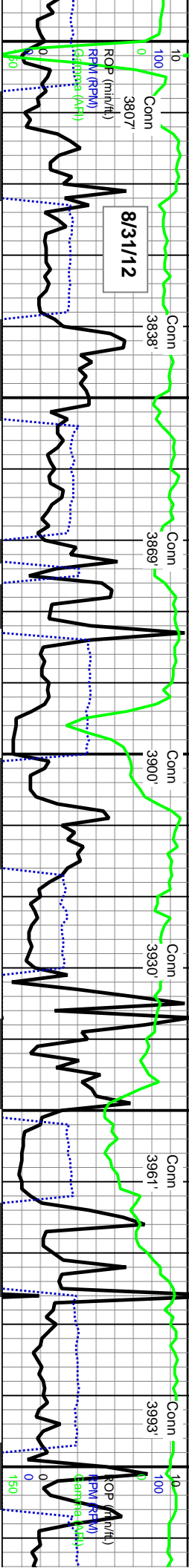
Survey Data  
MD: 3.756 '  
TVD: 3.689.52 '  
Inclination: 47.7 °  
Azimuth: 359.4 °

Survey Data  
MD: 3.787 '  
TVD: 3.710 '  
Inclination: 49. °  
Azimuth: 359. °

LS: PREDY XLN, SME WACKST, CRM-WHT-LT GY, HD, SB BLKY-SB TAB-SB PL TY, MOD SM-MOD SUC TXT, PRLY-BRI LSTR, DUL YEL MIN FLOR, NCOS, SLI HYDC OD W/ ACID

SH: GY-TAN, FRM-MOD HD, SB PLTY-SB T LSTR, MOD RGH-SL SUC TXT, CALC, CAR DULL LSTR, RGH TXT, ABNT ORG CONT, S





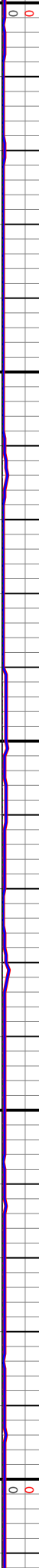
3,800 3,810 3,820 3,830 3,840 3,850 3,860 3,870 3,880 3,890 3,900 3,910 3,920 3,930 3,940 3,950 3,960 3,970 3,980 3,990 4,000 4,010

MW 8.7  
VIS 50

MW 8.9  
VIS 43

700  
70000

700  
70000



Survey Data	Survey Data	Survey Data	Survey Data	Survey Data	Survey Data
MD: 3,818'	MD: 3,849'	MD: 3,879'	MD: 3,910'	MD: 3,941'	MD: 3,972'
TVD: 3,729.57'	TVD: 3,748.09'	TVD: 3,765.15'	TVD: 3,781.85'	TVD: 3,797.21'	TVD: 3,811.11'
Inclination: 52.1°	Inclination: 54.5°	Inclination: 56.2°	Inclination: 58.6°	Inclination: 62°	Inclination: 64.7°
Azimuth: 359°	Azimuth: 359.2°	Azimuth: 358.5°	Azimuth: 358.8°	Azimuth: 359°	Azimuth: 358.5°

AB-SB FLKY, W IND, SL-MOD FIS, DULL-RTHY  
3 SH: BLK, FRM-BRIT, PTTY-FLKY, MOD FIS,  
SME MICXLN PYR, CALC

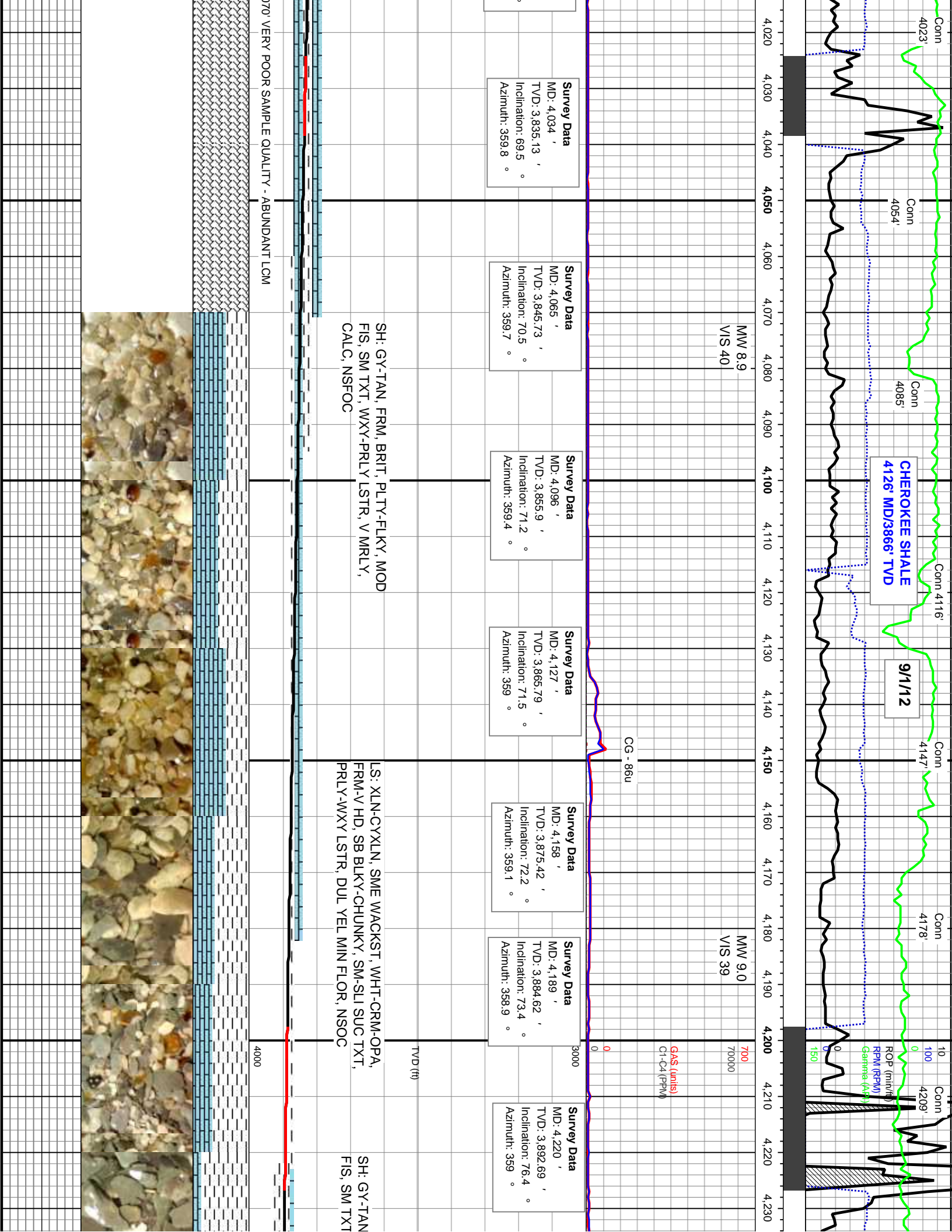
LS: PREDY XLN, SME WACKST, CRM-WHT-TR LT TN, MOD HD - HD, SB  
BLKY-SB TAB-SB PTTY, MOD SM-MOD SUC TXT, PRLY-BRI LSTR, DUL  
YEL MIN FLOR, NCOS, SLI HYDC OD W/ ACID

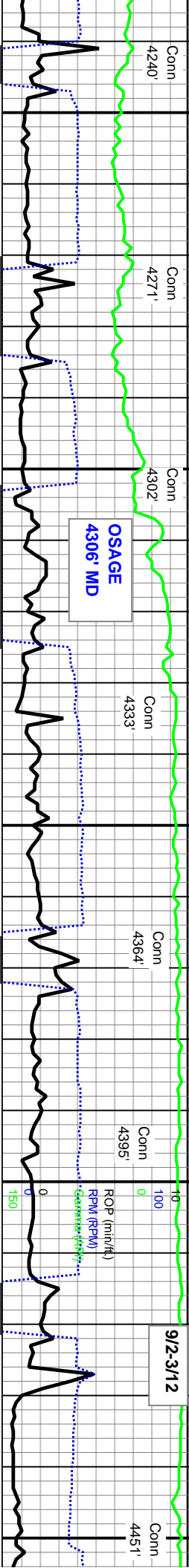
TVD (ft)

3000 4000 4010' 4000









**OSAGE  
4306' MD**

**9/2-3/12**

C1 - 70.3%  
C2 - 12.7%  
C3 - 17.0%

Tip Gas 493u

C1 - 54.2%  
C2 - 14.6%  
C3 - 21.1%  
C4 - 10.1%

**Survey Data**  
MD: 4,251' ,  
TVD: 3,899.48' ,  
Inclination: 78.3 °  
Azimuth: 359.2 °

**Survey Data**  
MD: 4,282' ,  
TVD: 3,904.84' ,  
Inclination: 81 °  
Azimuth: 359.6 °

**Survey Data**  
MD: 4,313' ,  
TVD: 3,909.06' ,  
Inclination: 84 °  
Azimuth: 0.2 °

**Survey Data**  
MD: 4,344' ,  
TVD: 3,911' ,  
Inclination: 85.5 °  
Azimuth: 0.4 °

**Survey Data**  
MD: 4,375' ,  
TVD: 3,913.93' ,  
Inclination: 87 °  
Azimuth: 1.1 °

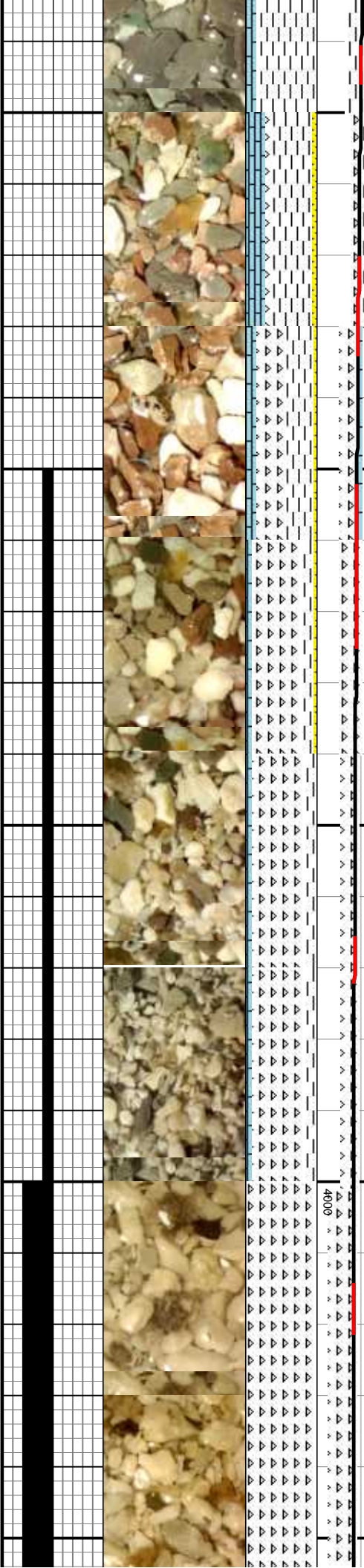
**Bit Data**  
Bit #: 5  
Type: Halliburton FX64D  
Size: 6.125"  
Depth In: 4,426'  
Depth Out: 6,314'  
Hours: 56.6 hrs  
Avg FV/Hr: 33.4 1/hr  
Jets: 6-14  
S/N: 11673324

**Land Curve @ 4426' MD**  
18:00 9/1/12  
**Survey Data**  
MD: 4,429' ,  
TVD: 3,915.77' ,  
Inclination: 89.1 °  
Azimuth: 359.9 °

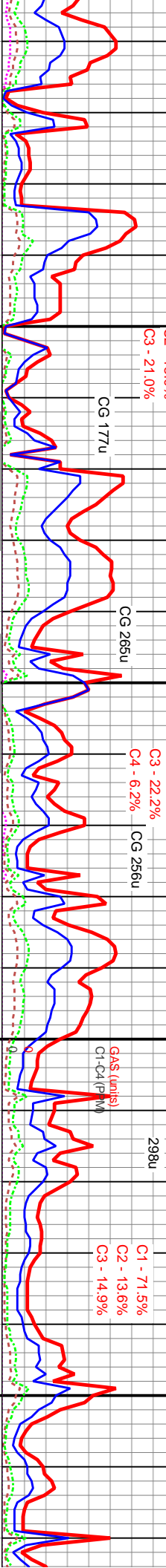
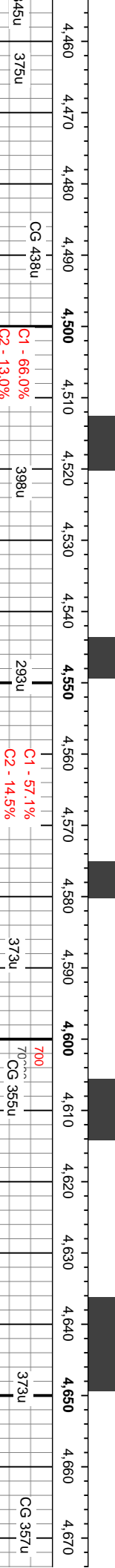
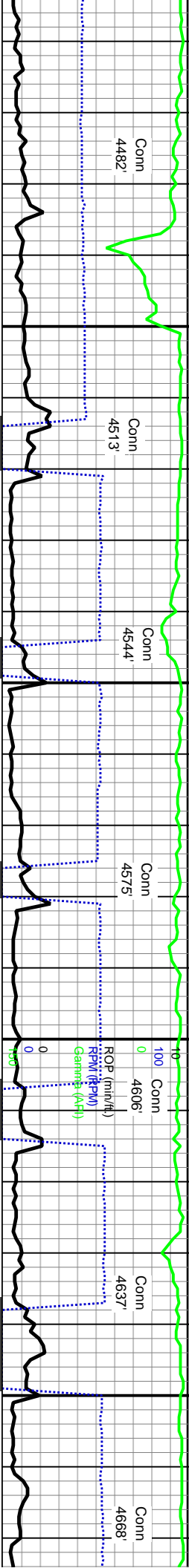
FRM-MOD HD, SB PLTY-FLKY, MOD  
; WXY-PRLY LSTR, CALC, NSFOC

CHT: WHT-OPA-LT TAN, V HD, SB BLKY-SB TAB-SB FLKY, CRPTXLN, SLI CONCH  
FRAC, PRLY-WXY LSTR, SM-SL RGH TXT, NON CALC, 30% BRI YEL-WHT MIN  
FLOR, 20% SLO STRMG VIO-BL CUT FLOR, SME HYDC OD W/ ACID

CHT:  
LSTR  
40% E  
YLD Y







Survey Data  
 MD: 4.460 ' TVD: 3.916.12 ' Inc: 89.6 ° Azimuth: 0.2 °

Survey Data  
 MD: 4.491 ' TVD: 3.916.25 ' Inc: 89.9 ° Azimuth: 0.3 °

Survey Data  
 MD: 4.522 ' TVD: 3.916.47 ' Inc: 89.3 ° Azimuth: 359.8 °

Survey Data  
 MD: 4.553 ' TVD: 3.916.88 ' Inc: 89.2 ° Azimuth: 360 °

Survey Data  
 MD: 4.584 ' TVD: 3.917.36 ' Inc: 89 ° Azimuth: 0.3 °

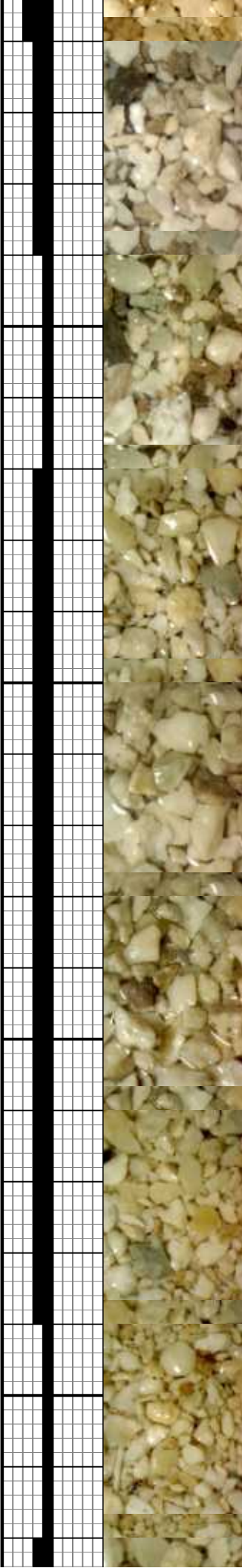
Survey Data  
 MD: 4.615 ' TVD: 3.918.2 ' Inc: 87.9 ° Azimuth: 0.2 °

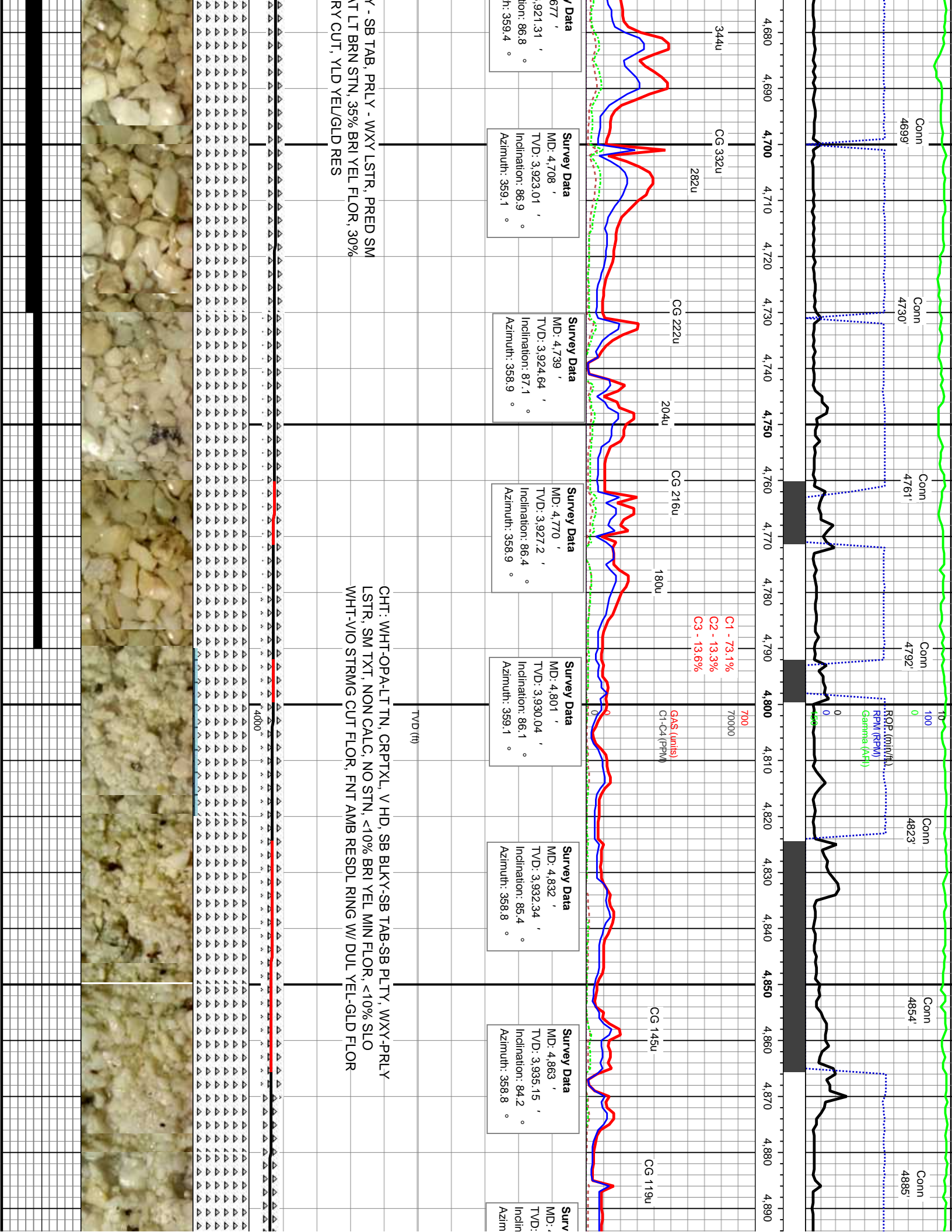
Survey Data  
 MD: 4.646 ' TVD: 3.919 ' Inc: 86.9 ° Azimuth: 359.9 °

Survey Data  
 MD: 4.670 ' TVD: 3.920 ' Inc: 86.9 ° Azimuth: 359.9 °

WH, OFF WH, LT TAN, TR BF, V HD, SB BLKY - SB TAB, PRL Y-WXY  
 PRED SM TX, SME SL RGH, TR SL CALC IP, 10% SCAT LT BRN STN,  
 PRL YEL FLOR, 20% - 30% SLO STRMG CUT, FAST WH/YEL DRY CUT,  
 EU/GLD RES

CHT: WH, OFF WH, LT TN, V HD, SB BLK  
 TXT, SME SL RGH, TR CALC IP, 15% SCAT  
 - 35% SLO STRMG CUT, FAST WH/YEL DRY CUT,  
 EU/GLD RES





Conn 4699'      Conn 4730'      Conn 4761'      Conn 4792'      Conn 4823'      Conn 4854'      Conn 4885'

RFP (ppm/lb)  
 PPM (PPM)  
 Gamma (API)  
 Gas (units)  
 C1-C4 (PPM)

C1 - 73.1%  
 C2 - 13.3%  
 C3 - 13.6%

MD	TVD	Inclination	Azimuth
4,677'	3,923.01'	86.9°	359.1°
4,739'	3,924.64'	87.1°	358.9°
4,770'	3,927.2'	86.4°	358.9°
4,801'	3,930.04'	86.1°	359.1°
4,832'	3,932.34'	85.4°	358.8°
4,863'	3,935.15'	84.2°	358.8°

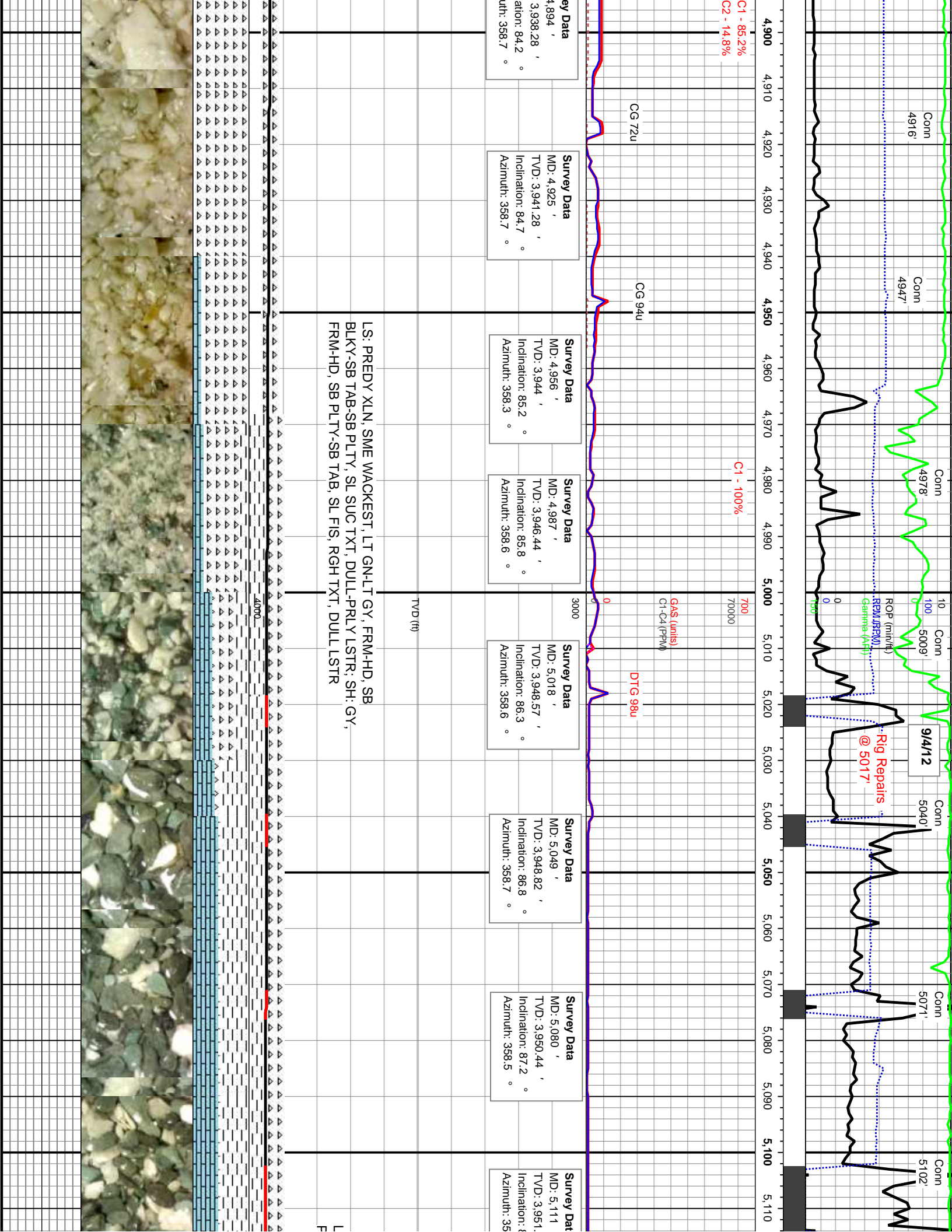
CG 332u      CG 222u      CG 216u      CG 145u      CG 119u

SB TAB, PRLY - WXY LSTR, PRED SM  
 AT LT BRN STN, 35% BRI YEL FLOR, 30%  
 RY CUT, YLD YEL/GLD RES

CHT: WHT-OPA-LT TN, CRPTXL, V HD, SB BLKY-SB TAB-SB PLTY, WXY-PRLY  
 LSTR, SM TXT, NON CALC, NO STN, <10% BRI YEL MIN FLOR, <10% SLO  
 WHT-VIO STRMG CUT FLOR, FNT AMB RESDL RING W/ DUL YEL-GLD FLOR

TVD (ft)  
 4000'





C1 - 85.2%  
C2 - 14.8%

C1 - 100%

Gas (units)  
C1-C4 (PPM)

DTG 98u

Conn 4916'  
Conn 4947'  
Conn 4978'  
Conn 5009'  
Conn 5040'  
Conn 5071'  
Conn 5102'

Rig Repairs @ 5017'

Survey Data  
MD: 4,894 '  
TVD: 3,938.28 '  
Inclination: 84.2 °  
Azimuth: 358.7 °

Survey Data  
MD: 4,925 '  
TVD: 3,941.28 '  
Inclination: 84.7 °  
Azimuth: 358.7 °

Survey Data  
MD: 4,956 '  
TVD: 3,944 '  
Inclination: 85.2 °  
Azimuth: 358.3 °

Survey Data  
MD: 4,987 '  
TVD: 3,946.44 '  
Inclination: 85.8 °  
Azimuth: 358.6 °

Survey Data  
MD: 5,018 '  
TVD: 3,948.57 '  
Inclination: 86.3 °  
Azimuth: 358.6 °

Survey Data  
MD: 5,049 '  
TVD: 3,948.82 '  
Inclination: 86.8 °  
Azimuth: 358.7 °

Survey Data  
MD: 5,080 '  
TVD: 3,950.44 '  
Inclination: 87.2 °  
Azimuth: 358.5 °

Survey Data  
MD: 5,111 '  
TVD: 3,951. '  
Inclination: 87.2 °  
Azimuth: 358.5 °

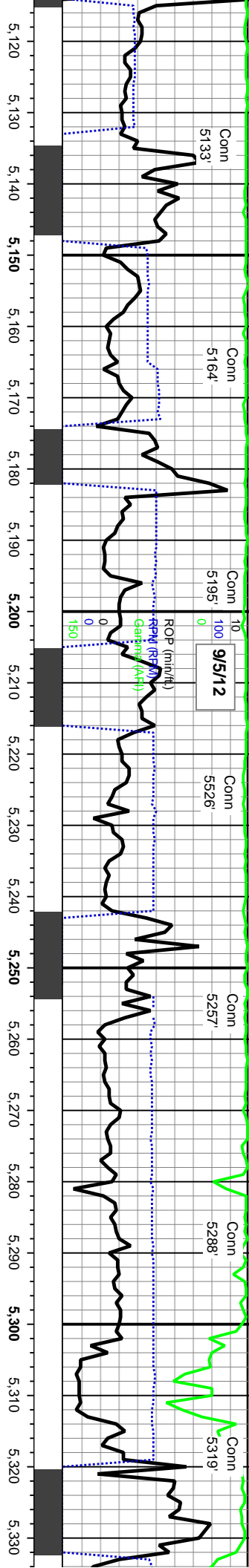
LS: PREDY XLN, SME WACKEST, LT GN-LT GY, FRM-HD, SB  
BLKY-SB TAB-SB PLTY, SL SUC TXT, DULL-PRLY LSTR; SH: GY,  
FRM-HD, SB PLTY-SB TAB, SL FIS, RGH TXT, DULL LSTR

TVD (ft)



L  
F



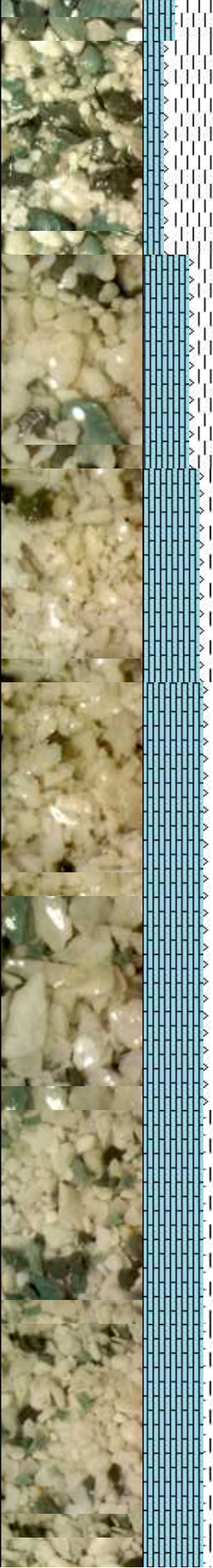
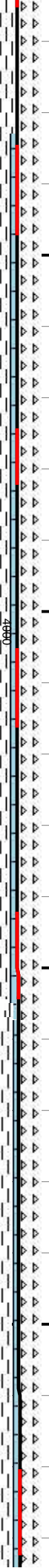


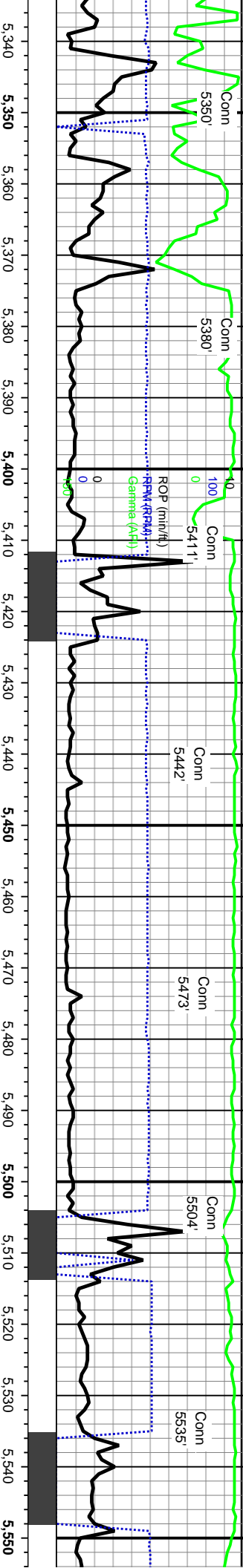
Line Test

7000  
70000  
MMW 8.5  
VIS 29

Survey Data	Survey Data	Survey Data	Survey Data	Survey Data	Survey Data	Survey Data
MD: 5,142 ' TVD: 3,952.25 ' Inclination: 89.5 ° Azimuth: 358.4 °	MD: 5,173 ' TVD: 3,952.31 ' Inclination: 90.3 ° Azimuth: 358.7 °	MD: 5,204 ' TVD: 3,951.85 ' Inclination: 91.4 ° Azimuth: 358.9 °	MD: 5,235 ' TVD: 3,950.88 ' Inclination: 92.2 ° Azimuth: 358.9 °	MD: 5,266 ' TVD: 3,949.47 ' Inclination: 93 ° Azimuth: 358.9 °	MD: 5,297 ' TVD: 3,947.74 ' Inclination: 93.4 ° Azimuth: 359.2 °	MD: 5,327 ' TVD: 3,945.62 ' Inclination: 94.7 ° Azimuth: 359.2 °

LS: PREDY XLN, SME WACKEST, WHT-OPA-LT CRM, HD, SB BLKY-SB TAB-SB  
 PLTY, RTHY TXT, DUL-CHKY LSTR, ABNT DUL YEL MIN FLOR, NSCOF





**Survey Data**  
 MD: 5,358 '  
 TVD: 3,942.86 '  
 Inclination: 95.5 °  
 Azimuth: 359.3 °

**Survey Data**  
 MD: 5,389 '  
 TVD: 3,939.87 '  
 Inclination: 95.5 °  
 Azimuth: 359.6 °

**Survey Data**  
 MD: 5,420 '  
 TVD: 3,937.08 '  
 Inclination: 94.7 °  
 Azimuth: 0.1 °

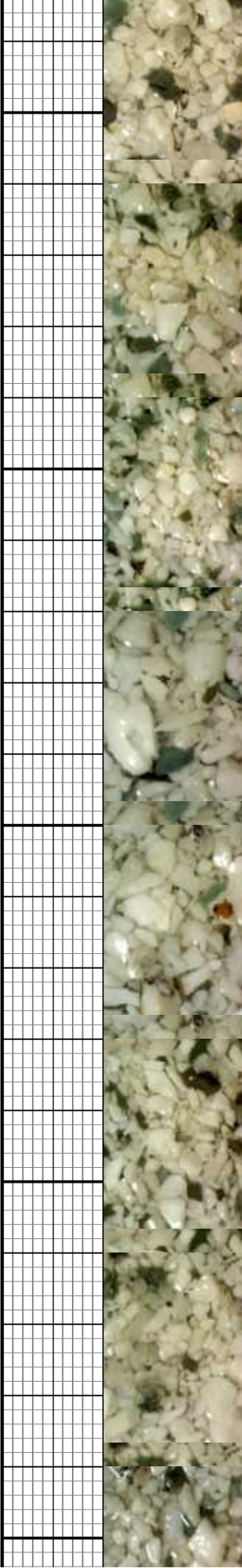
**Survey Data**  
 MD: 5,451 '  
 TVD: 3,934.57 '  
 Inclination: 94.6 °  
 Azimuth: 359.9 °

**Survey Data**  
 MD: 5,482 '  
 TVD: 3,931.92 '  
 Inclination: 95.2 °  
 Azimuth: 0.1 °

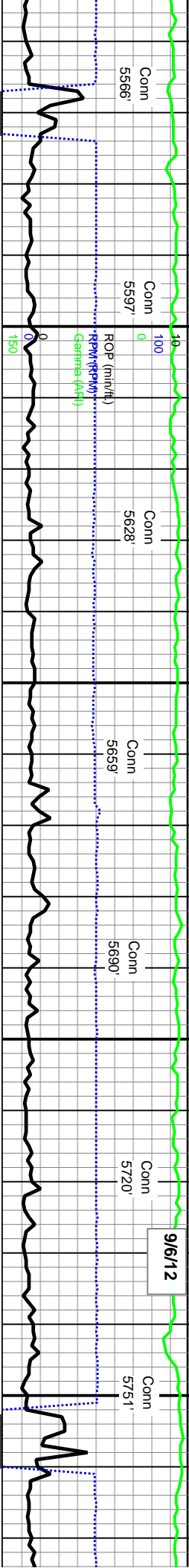
**Survey Data**  
 MD: 5,513 '  
 TVD: 3,929.38 '  
 Inclination: 94.2 °  
 Azimuth: 359.4 °

**Survey Data**  
 MD: 5,544 '  
 TVD: 3,927.54 '  
 Inclination: 92.2 °  
 Azimuth: 359.6 °

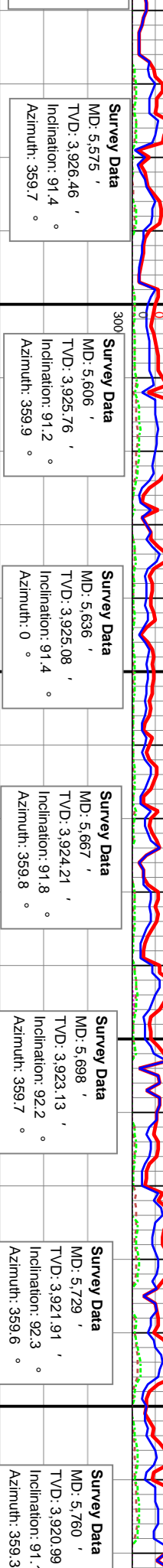
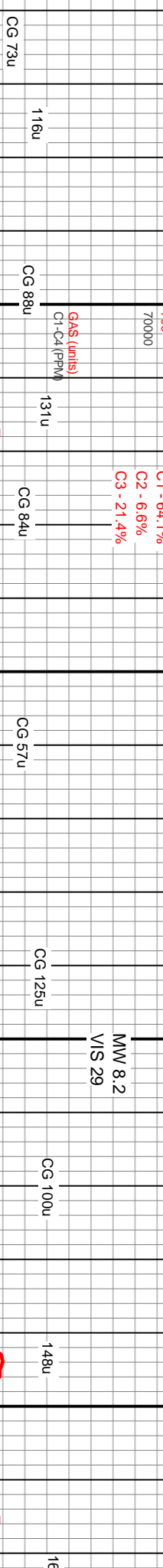
CG 42u  
 CG 101u  
 CG 88u  
 MW 8.5  
 VIS 26  
 C1 - 74%  
 C2 - 12%  
 C3 - 14%



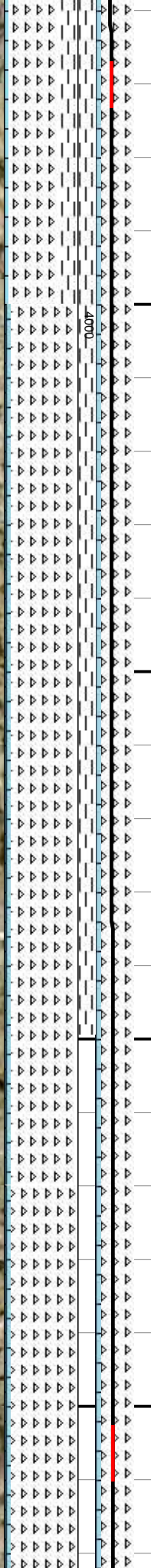




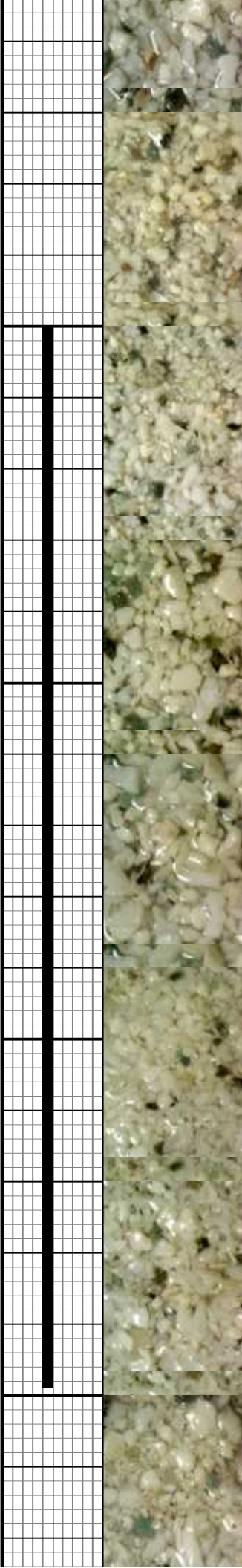
5.560 5.570 5.580 5.590 5.600 5.610 5.620 5.630 5.640 5.650 5.660 5.670 5.680 5.690 5.700 5.710 5.720 5.730 5.740 5.750 5.760 5.770



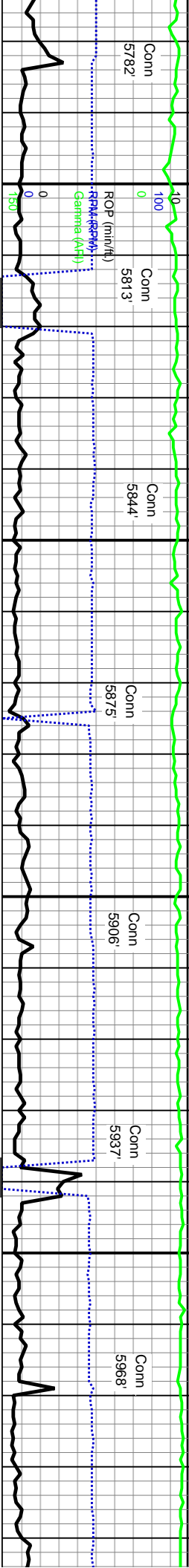
CG 73u 116u CG 88u 131u CG 84u CG 57u CG 125u CG 100u 148u 163u



CHT: OPA-WHT-LT CRM, V HD, CRPTXLN, SB FLKY-SB PLTY-SB TAB, MOD SM-SL SUC TXT, PRLY-DUL LSTR, ABNT GLAU, 10% MED AMB STN, 20% BRI YEL FLOR, FNT DUL ORG-BRN CUT FLOR BCMG YEL







C1 - 63.2%  
 C2 - 12.8%  
 C3 - 16.7%  
 C4 - 7.3%

Gas (units)  
 C1-C4 (PPM)

**Survey Data**  
 MD: 5,791 '  
 TVD: 3,920.45 '  
 Inclination: 90.9 °  
 Azimuth: 359.2 °

**Survey Data**  
 MD: 5,822 '  
 TVD: 3,920.07 '  
 Inclination: 90.5 °  
 Azimuth: 359.5 °

**Survey Data**  
 MD: 5,853 '  
 TVD: 3,918.86 '  
 Inclination: 90.3 °  
 Azimuth: 359.9 °

**Survey Data**  
 MD: 5,884 '  
 TVD: 3,919.75 '  
 Inclination: 90.1 °  
 Azimuth: 359.7 °

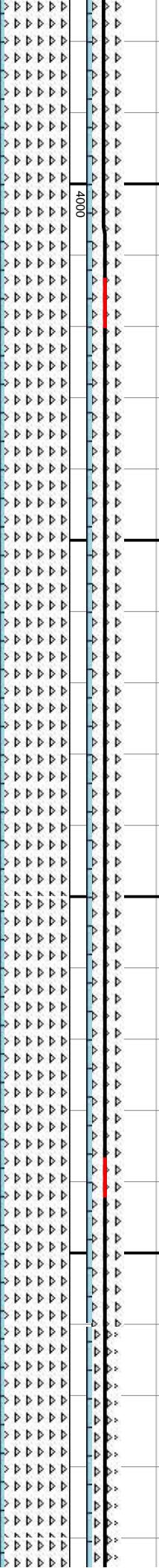
**Survey Data**  
 MD: 5,915 '  
 TVD: 3,919.67 '  
 Inclination: 90.2 °  
 Azimuth: 359.6 °

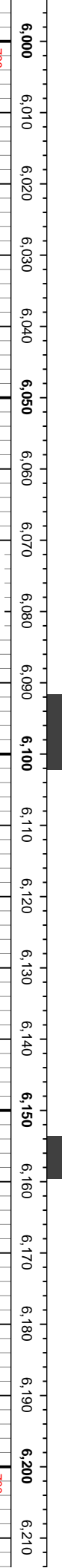
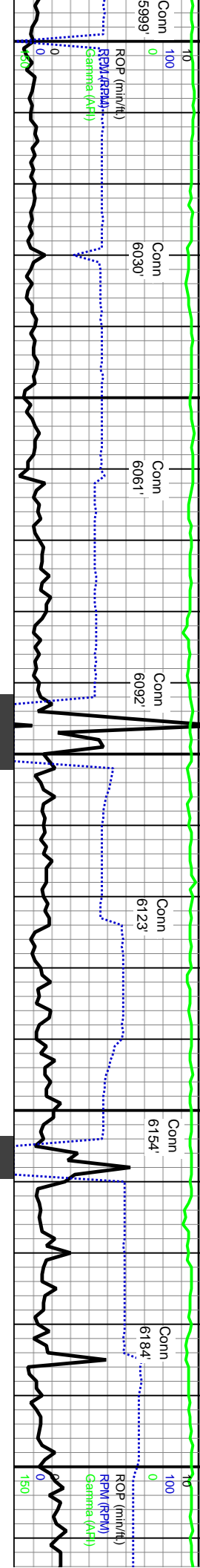
**Survey Data**  
 MD: 5,946 '  
 TVD: 3,919.48 '  
 Inclination: 90.5 °  
 Azimuth: 359.3 °

**Survey Data**  
 MD: 5,977 '  
 TVD: 3,919 '  
 Inclination: 90.7 °  
 Azimuth: 359.4 °

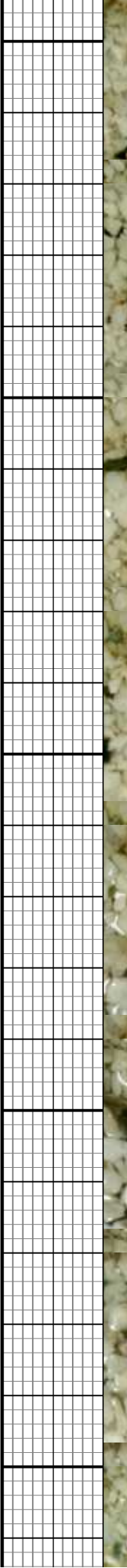
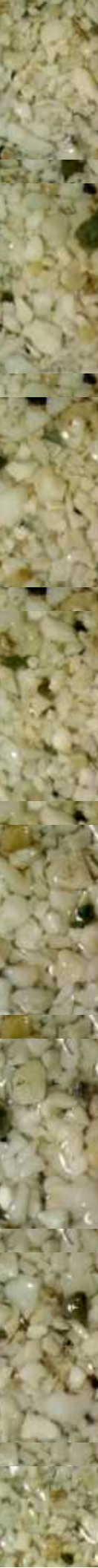
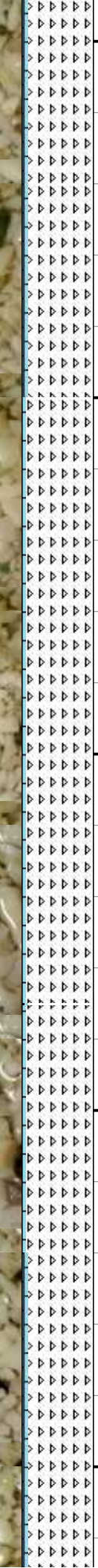
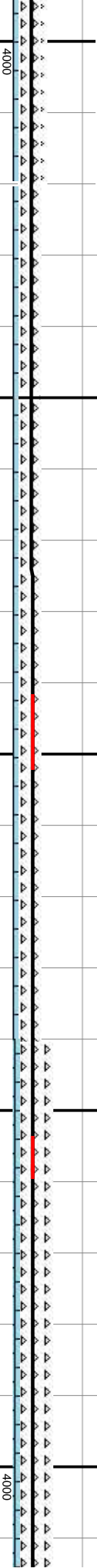
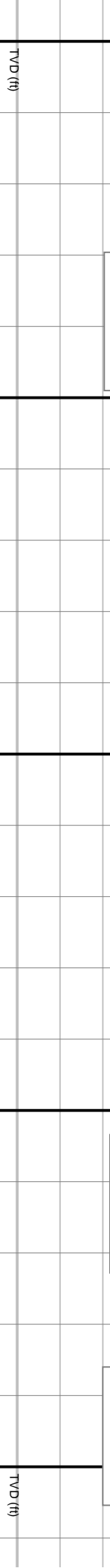
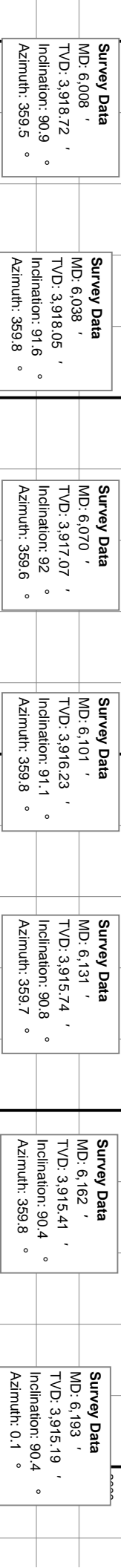
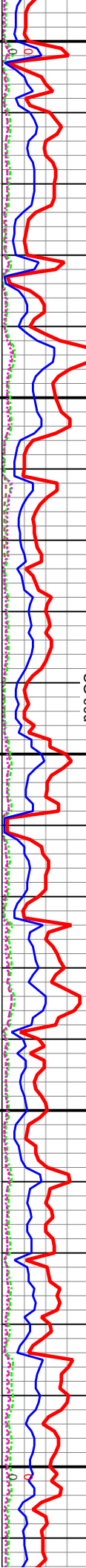
LT CRM, V HD, CRPTXLN, SB FLKY-SB PLTY-SB TAB, MOD  
 , PLY-DUL LSTR, ABNT GLAU, 10% FNT AMB-BRN STN, 10%  
 SLO DUL MKY ORG-BRN CUT FLOR BCMG BRI ORG-GLD

CHT: OPA-WHT-LT CRM, V HD, CR  
 SUC TXT, PLY-DUL LSTR, ABNT C  
 FLOR, SLO DUL MKY ORG-BRN CL





C1 - 62.7%  
C2 - 12.3%  
C3 - 14.9%  
C4 - 10.1%



**Survey Data**  
MD: 6,008 ' ,  
TVD: 3,918.72 ' ,  
Inclination: 90.9 ° ,  
Azimuth: 359.5 °

**Survey Data**  
MD: 6,038 ' ,  
TVD: 3,918.05 ' ,  
Inclination: 91.6 ° ,  
Azimuth: 359.8 °

**Survey Data**  
MD: 6,070 ' ,  
TVD: 3,917.07 ' ,  
Inclination: 92 ° ,  
Azimuth: 359.6 °

**Survey Data**  
MD: 6,101 ' ,  
TVD: 3,916.23 ' ,  
Inclination: 91.1 ° ,  
Azimuth: 359.8 °

**Survey Data**  
MD: 6,131 ' ,  
TVD: 3,915.74 ' ,  
Inclination: 90.8 ° ,  
Azimuth: 359.7 °

**Survey Data**  
MD: 6,162 ' ,  
TVD: 3,915.41 ' ,  
Inclination: 90.4 ° ,  
Azimuth: 359.8 °

**Survey Data**  
MD: 6,193 ' ,  
TVD: 3,915.19 ' ,  
Inclination: 90.4 ° ,  
Azimuth: 0.1 °

CG 218u)  
C1-C4 (RPM)  
CG 207u  
291u  
CG 182u  
CG 90u  
212u  
CG 229u  
259u  
MW 8.5  
VIS 28  
CG 232u  
GAS (units)  
C1-C4 (RPM)

Conn 6030'  
Conn 6061'  
Conn 6092'  
Conn 6123'  
Conn 6154'  
Conn 6184'

PTXLN, SB FLKY-SB PLTY-SB TAB, MOD SM-SL  
BLAU, 10% FNT AMB-BRN STN, 10% DUL GLD  
IT FLOR BCMG BRI ORG-GLD

CHT: OPA-WHT-LT CRM, V H  
SUC TXT, PRLY-DUL LSTR, A  
FLOR, 20% INST BLDG BRI V

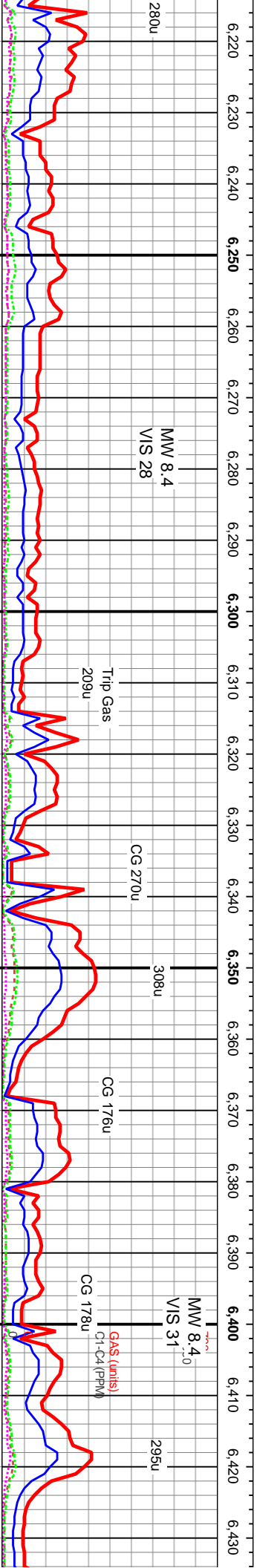
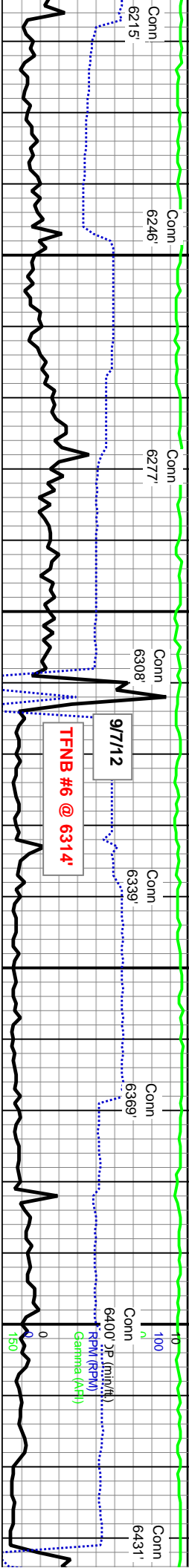
TVD (ft)

TVD (ft)

4000

4000





D, CRPTXLN, SB BLKY-SB PLTY-SB TAB, SM-SL  
 BNT GLAU, 30% AMB STN, 30% BRI YEL-GLD  
 WHT-VIO CUT FLOR BCMG BRI ORG-GLD

Survey Data  
 MD: 6,224 ' ,  
 TVD: 3,914.87 ' ,  
 Inclination: 90.8 ° ,  
 Azimuth: 359.9 °

Survey Data  
 MD: 6,255 ' ,  
 TVD: 3,914.33 ' ,  
 Inclination: 91.2 ° ,  
 Azimuth: 359.7 °

Survey Data  
 MD: 6,286 ' ,  
 TVD: 3,913.63 ' ,  
 Inclination: 91.4 ° ,  
 Azimuth: 360 °

Survey Data  
 MD: 6,316 ' ,  
 TVD: 3,913.05 ' ,  
 Inclination: 90.8 ° ,  
 Azimuth: 0.5 °

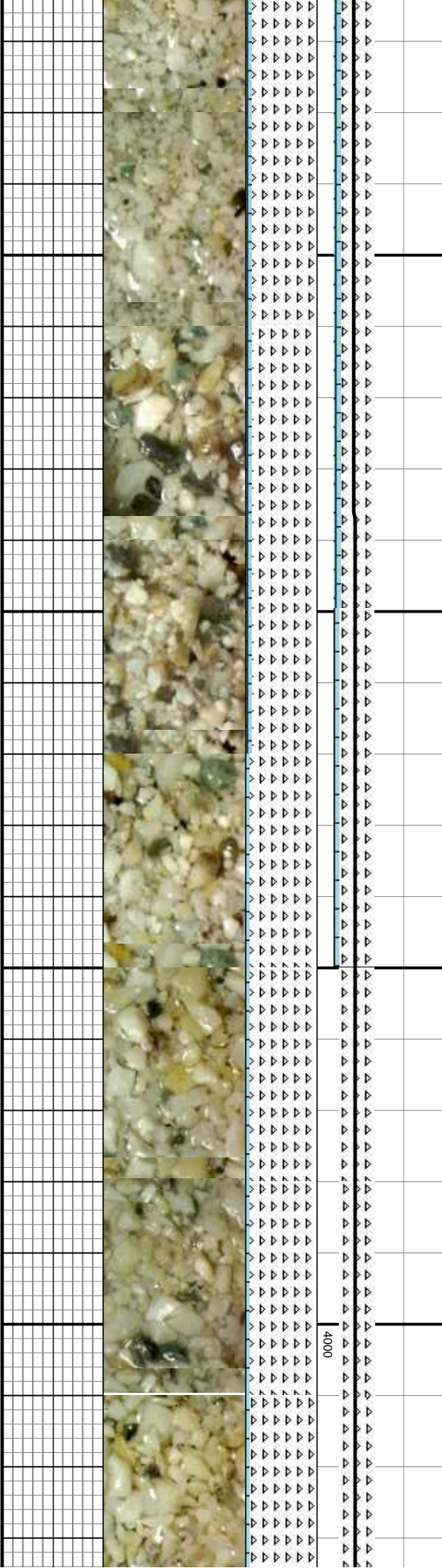
Survey Data  
 MD: 6,347 ' ,  
 TVD: 3,912.62 ' ,  
 Inclination: 90.8 ° ,  
 Azimuth: 0.3 °

Survey Data  
 MD: 6,378 ' ,  
 TVD: 3,912.08 ' ,  
 Inclination: 91.2 ° ,  
 Azimuth: 0.4 °

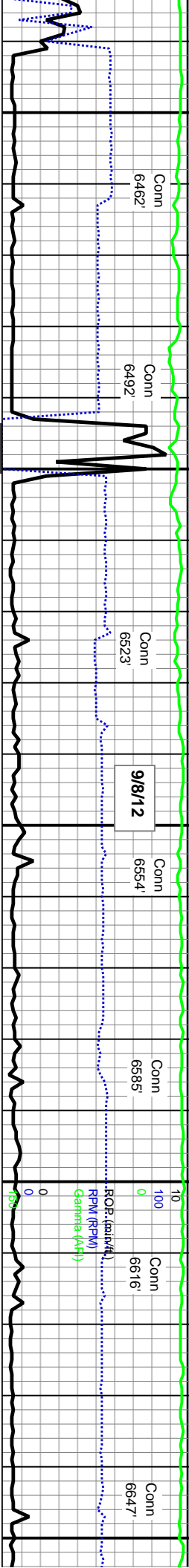
Survey Data  
 MD: 6,408 ' ,  
 TVD: 3,911.4 ' ,  
 Inclination: 91.4 ° ,  
 Azimuth: 0.5 °

Bit Data  
 Bit #: 6  
 Type: Halliburton FX64D  
 Size: 6.12  
 Depth In: 6.314  
 Jets: 6-14  
 S/N: 11951732

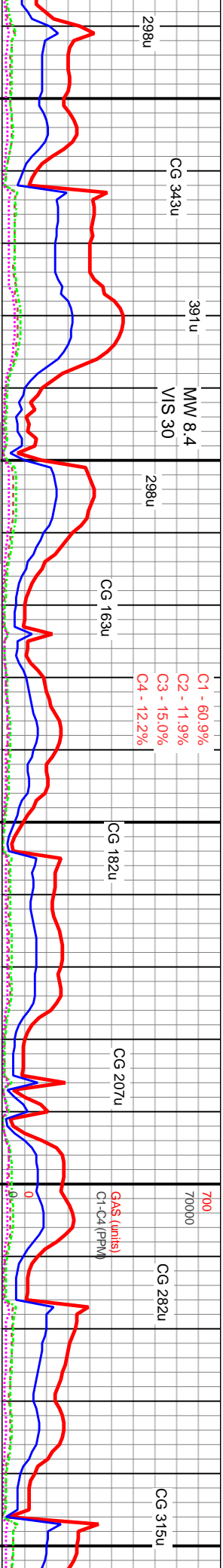
TVD (ft)







6.440 6.450 6.460 6.470 6.480 6.490 6.500 6.510 6.520 6.530 6.540 6.550 6.560 6.570 6.580 6.590 6.600 6.610 6.620 6.630 6.640 6.650



Key Data  
MD: 6.439 '  
TVD: 3.910.91 '  
Inclination: 90.4 °  
Azimuth: 0.7 °

Survey Data  
MD: 6.470 '  
TVD: 3.910.77 '  
Inclination: 90.1 °  
Azimuth: 1 °

Survey Data  
MD: 6.501 '  
TVD: 3.910.99 '  
Inclination: 89.1 °  
Azimuth: 1 °

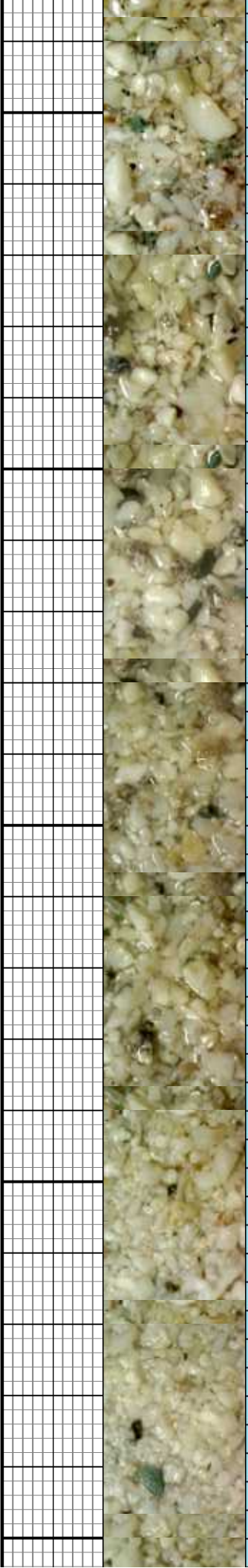
Survey Data  
MD: 6.532 '  
TVD: 3.911.48 '  
Inclination: 89.1 °  
Azimuth: 1.2 °

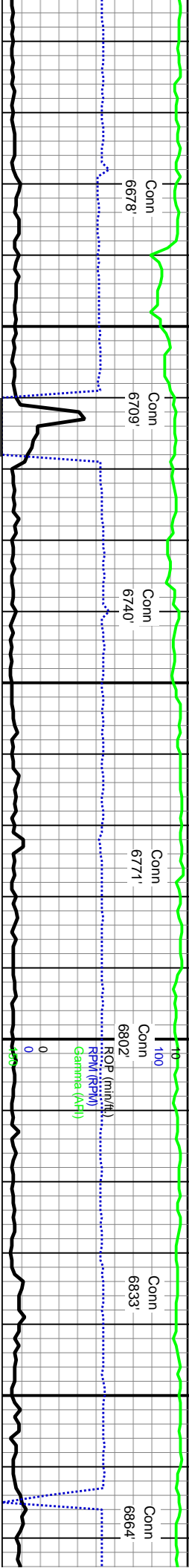
Survey Data  
MD: 6.563 '  
TVD: 3.911.91 '  
Inclination: 89.3 °  
Azimuth: 1 °

Survey Data  
MD: 6.594 '  
TVD: 3.912.83 '  
Inclination: 89.3 °  
Azimuth: 0.8 °

Survey Data  
MD: 6.625 '  
TVD: 3.912.83 '  
Inclination: 89.1 °  
Azimuth: 0.7 °

CHT: OPA-WHT-LT CRM, V HD, CRPTXLN, SB BLKY-SB PLTY-SB TAB, SM-SL SUC TXT,  
PRLY-DUL LSTR, SME GLAU, FOSUS, LSE ASPHC FRAGS, 30% AMB STN, 30% BRI  
YEL-GLD FLOR, 10% SLO BLDG BRI WHT-VIO CUT FLOR BCMG BRI ORG-GLD





C1 - 59.3%  
 C2 - 13.7%  
 C3 - 17.4%  
 C4 - 9.6%

MW 8.2  
 VIS 32

318u

CG 213u

290u

CG 248u

MW 8.4  
 VIS 34

CG 231u

CG 185u

Survey Data  
 MD: 6.656 ' ,  
 TVD: 3.913.32 ' ,  
 Inclination: 89.1 ° ,  
 Azimuth: 1 °

Survey Data  
 MD: 6.687 ' ,  
 TVD: 3.913.72 ' ,  
 Inclination: 89.4 ° ,  
 Azimuth: 1.3 °

Survey Data  
 MD: 6.718 ' ,  
 TVD: 3.913.83 ' ,  
 Inclination: 90.2 ° ,  
 Azimuth: 1 °

Survey Data  
 MD: 6.749 ' ,  
 TVD: 3.913.61 ' ,  
 Inclination: 90.6 ° ,  
 Azimuth: 1 °

Survey Data  
 MD: 6.780 ' ,  
 TVD: 3.913.21 ' ,  
 Inclination: 90.9 ° ,  
 Azimuth: 0.5 °

Survey Data  
 MD: 6.811 ' ,  
 TVD: 3.912.72 ' ,  
 Inclination: 90.9 ° ,  
 Azimuth: 0.3 °

Survey Data  
 MD: 6.842 ' ,  
 TVD: 3.912.13 ' ,  
 Inclination: 91.3 ° ,  
 Azimuth: 0.2 °

Survey Data  
 MD: 6.873 ' ,  
 TVD: 3.91 ' ,  
 Inclination: ' ,  
 Azimuth: ( ' )

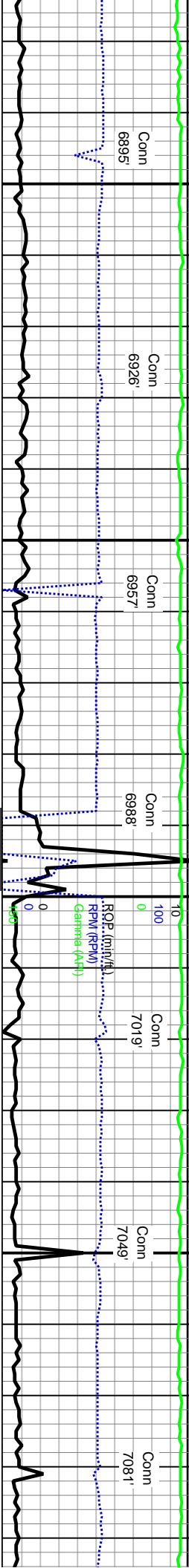
CHT: WHT-LT CRM, V HD, CRPTXLN, SB BLKY-SB PLTY-SB TAB, SM-SL SUC TXT,  
 PRLY-DUL LSTR, TR GLAU, DECRNG FOSUS, INCRG ASPHC FRAGS, 30% AMB  
 STN, 30% BRI YEL-GLD FLOR, 10% SLO BLDG BRI WHT-VIO CUT FLOR

TVD (ft)

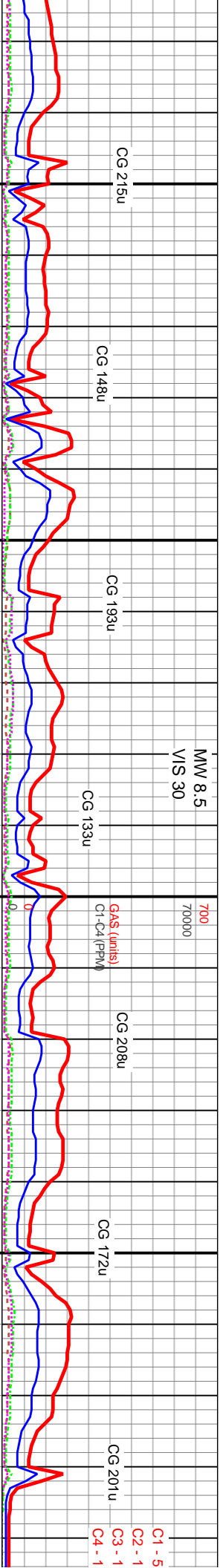
4000







6880 6890 6900 6910 6920 6930 6940 6950 6960 6970 6980 6990 7000 7010 7020 7030 7040 7050 7060 7070 7080 7090



Survey Data  
MD: 6,904 ' TVD: 3,910.56 ' Inclination: 91.5 ° Azimuth: 0.4 °

Survey Data  
MD: 6,935 ' TVD: 3,909.72 ' Inclination: 91.6 ° Azimuth: 0.3 °

Survey Data  
MD: 6,966 ' TVD: 3,908.77 ' Inclination: 91.9 ° Azimuth: 0.7 °

Survey Data  
MD: 6,997 ' TVD: 3,907.93 ' Inclination: 91.9 ° Azimuth: 0.9 °

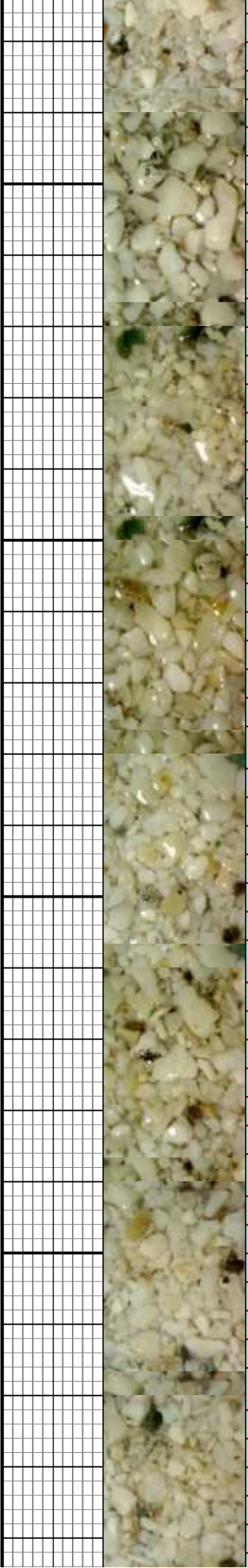
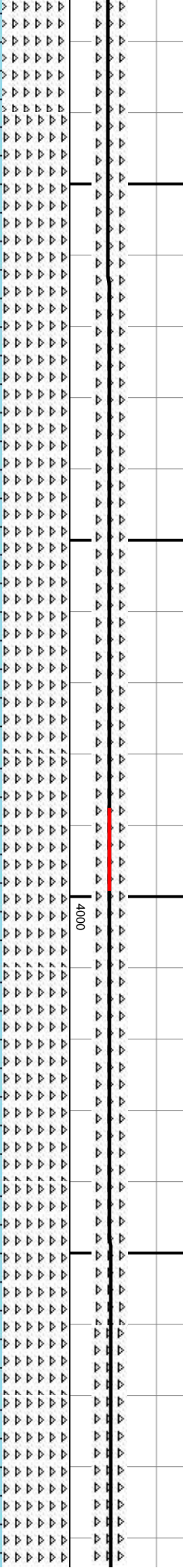
Survey Data  
MD: 7,028 ' TVD: 3,907.36 ' Inclination: 90.9 ° Azimuth: 1.3 °

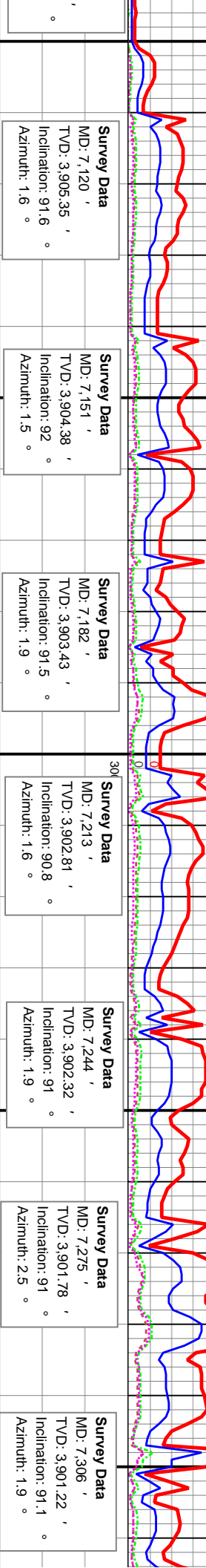
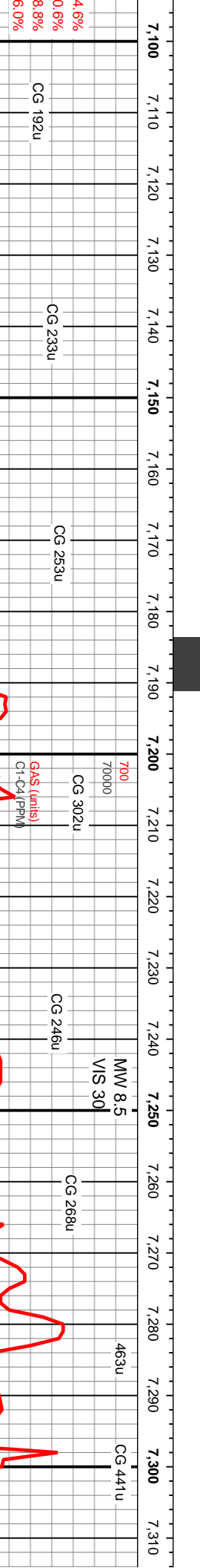
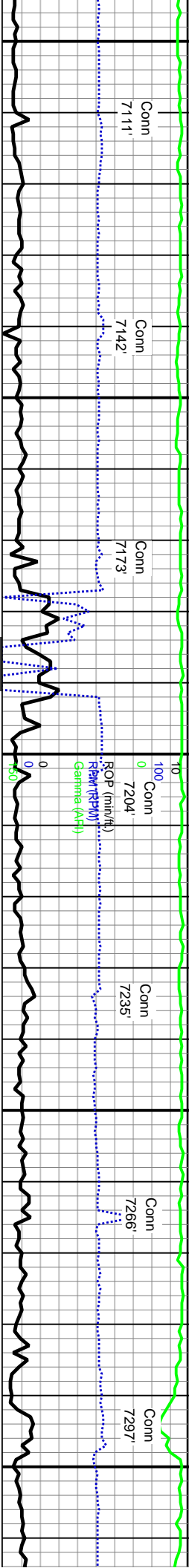
Survey Data  
MD: 7,058 ' TVD: 3,906.81 ' Inclination: 91.2 ° Azimuth: 1.4 °

Survey Data  
MD: 7,089 ' TVD: 3,906.14 ' Inclination: 91.3 ° Azimuth: 1.3 °

CGT: WHT-LT CRM, V HD, CRPTXLN, SB BLKY-SB PLY-SB TAB, SM-SL SUC TXT, PRLY-DUL LSTR, TR GLAU, DECRNG FOSUS, INCRG ASPHC FRAGS, 20% AMB STN, 15% BRI YEL-GLD FLOR, 10% SLO BLDG BRI WHT-VIO CUT FLOR

CGT: WHT-LT CRM, PRLY-DUL LSTR, STN, 10% BRI YEL.



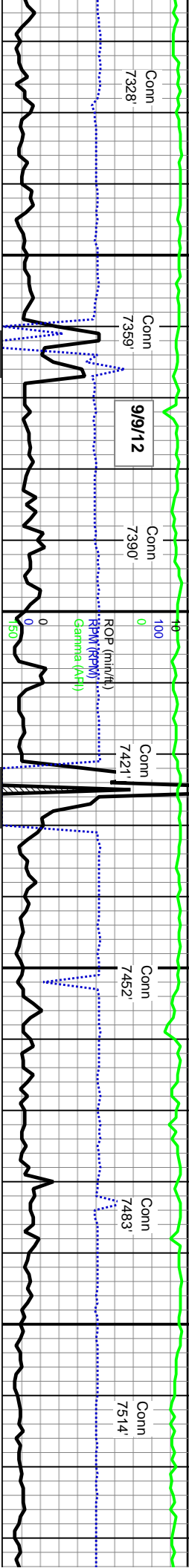


MD	TVD	Inclination	Azimuth
7,120'	3,905.35'	91.6°	1.6°
7,151'	3,904.38'	92°	1.5°
7,182'	3,903.43'	91.5°	1.9°
7,213'	3,902.81'	90.8°	1.6°
7,244'	3,902.32'	91°	1.9°
7,275'	3,901.78'	91°	2.5°
7,306'	3,901.22'	91.1°	1.9°

V HD, CRPTXLN, SB BLKY-SB PLTY-SB TAB, SM-SL SUC TXT,  
 R GLAU, DECRNG FOSUS, INCRG ASPHC FRAGS, 15% AMB  
 GLD FLOR, 10% SLO BLDG BRI WHT-VIO CUT FLOR  
 CHT: WHT-LT CRM, V HD, CRPTXLN, SB BLKY-SB PLTY-SB TAB, SM-SL SUC TXT, PRLY-DUL  
 LSTR, SME GLAU, OCC FOSUS, ABUN ASPHC FRAGS, 40% AMB STN, 10% BRI YEL-GLD FLOR,  
 30% MED BLDG BRI WHT-VIO CUT FLOR W/ 10% INST STRMG, FNT AMB RESDL RING







CG 257u

291u

MW 8.5  
VIS 33

CG 199u

CG 306u

**Survey Data**  
MD: 7,337 '  
TVD: 3,900.59 '  
Inclination: 91.2 °  
Azimuth: 1.9 °

**Survey Data**  
MD: 7,358 '  
TVD: 3,900.05 '  
Inclination: 90.8 °  
Azimuth: 2 °

**Survey Data**  
MD: 7,399 '  
TVD: 3,899.59 '  
Inclination: 90.9 °  
Azimuth: 2.1 °

**Survey Data**  
MD: 7,430 '  
TVD: 3,899.32 '  
Inclination: 90.1 °  
Azimuth: 2.1 °

**Survey Data**  
MD: 7,461 '  
TVD: 3,899.19 '  
Inclination: 90.4 °  
Azimuth: 1.9 °

**Survey Data**  
MD: 7,492 '  
TVD: 3,898.92 '  
Inclination: 90.6 °  
Azimuth: 1.4 °

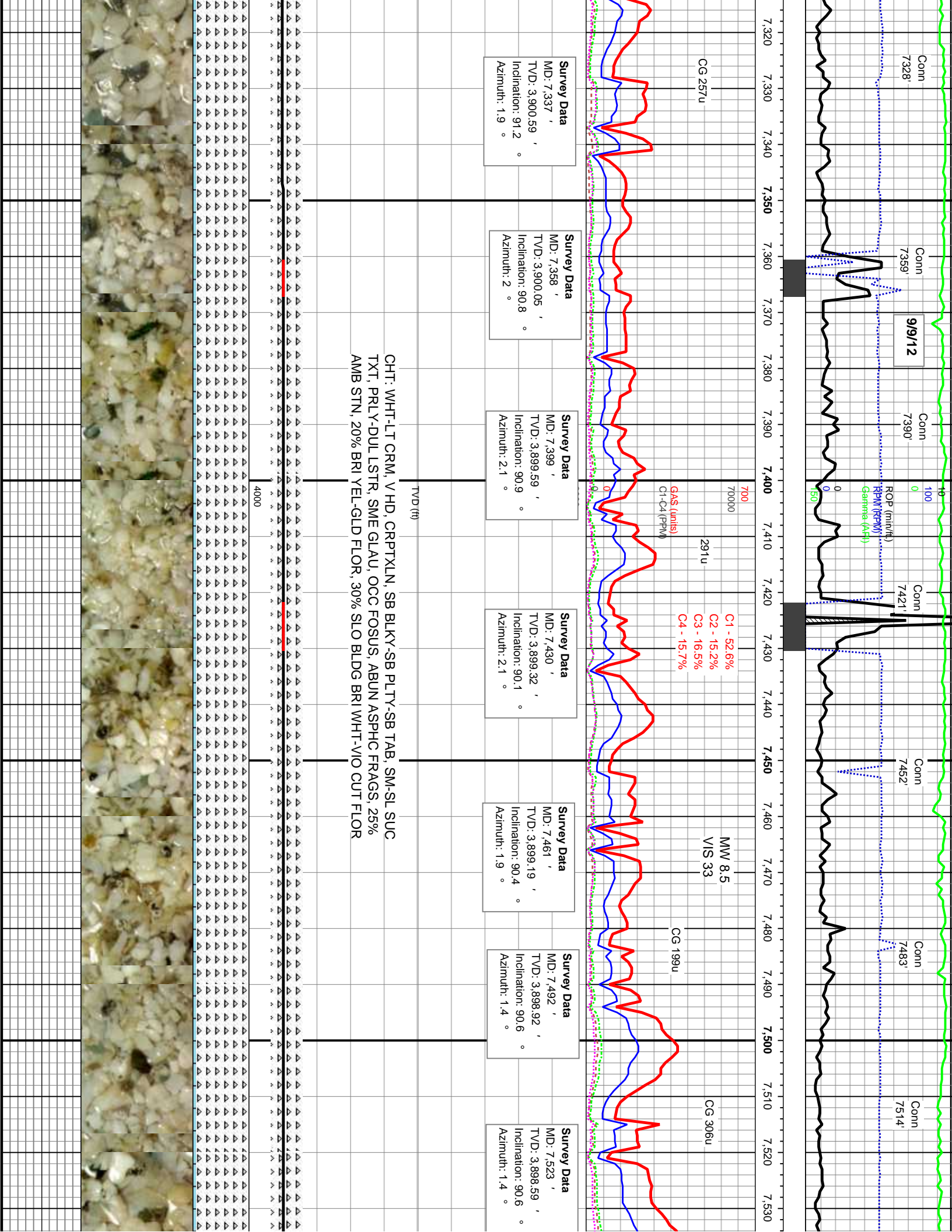
**Survey Data**  
MD: 7,523 '  
TVD: 3,898.59 '  
Inclination: 90.6 °  
Azimuth: 1.4 °

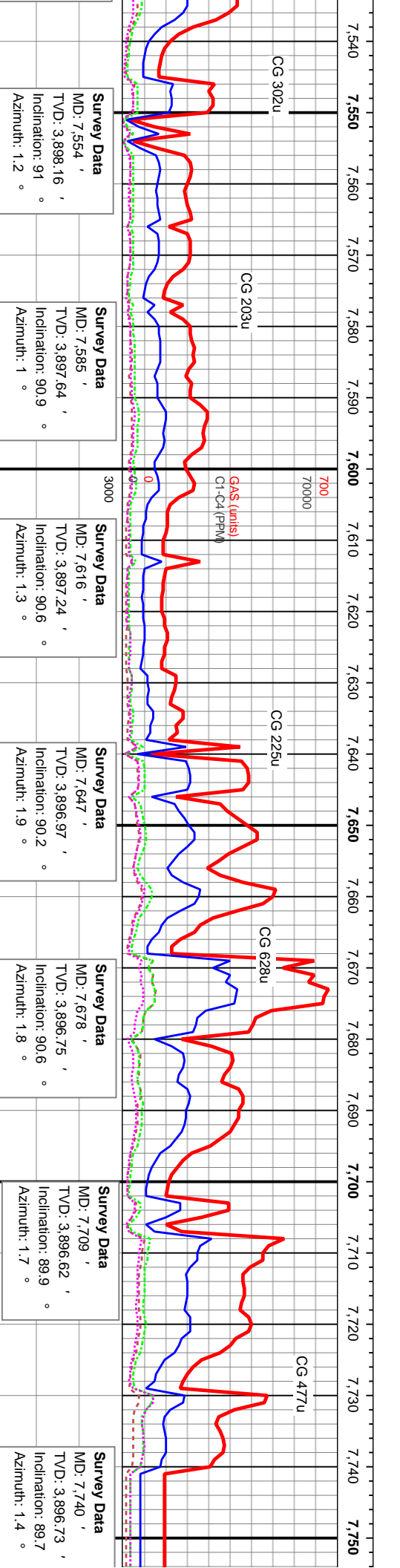
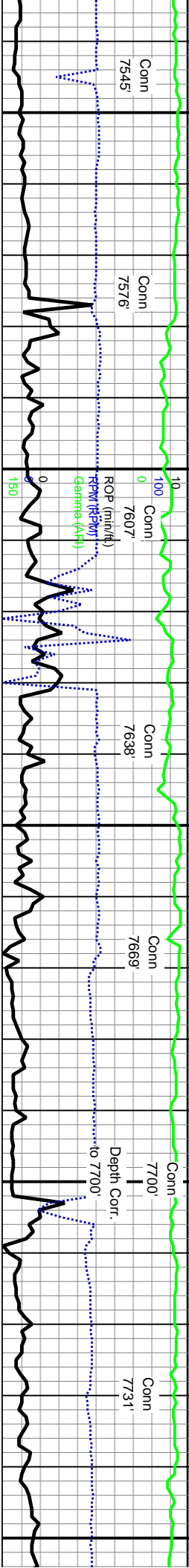
Gas (units)  
C1 - 52.6%  
C2 - 15.2%  
C3 - 16.5%  
C4 - 15.7%

TVD (ft)

CHT: WHT-LT CRM, V HD, CRPTXLN, SB BLKY-SB PLTY-SB TAB, SM-SL SUC  
TXT, PRLY-DUL LSTR, SME GLAU, OCC FOSUS, ABUN ASPHC FRAGS, 25%  
AMB STN, 20% BRI YEL-GLD FLOR, 30% SLO BLDG BRI WHT-VIO CUT FLOR

4000





**Survey Data**  
 MD: 7,554 '  
 TVD: 3,898.16 '  
 Inclination: 91 °  
 Azimuth: 1.2 °

**Survey Data**  
 MD: 7,585 '  
 TVD: 3,897.64 '  
 Inclination: 90.9 °  
 Azimuth: 1 °

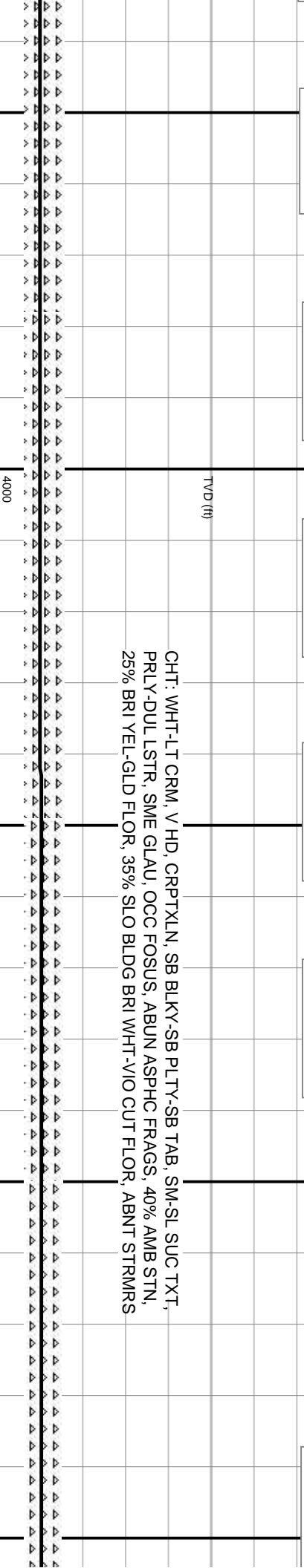
**Survey Data**  
 MD: 7,616 '  
 TVD: 3,897.24 '  
 Inclination: 90.6 °  
 Azimuth: 1.3 °

**Survey Data**  
 MD: 7,647 '  
 TVD: 3,896.97 '  
 Inclination: 90.2 °  
 Azimuth: 1.9 °

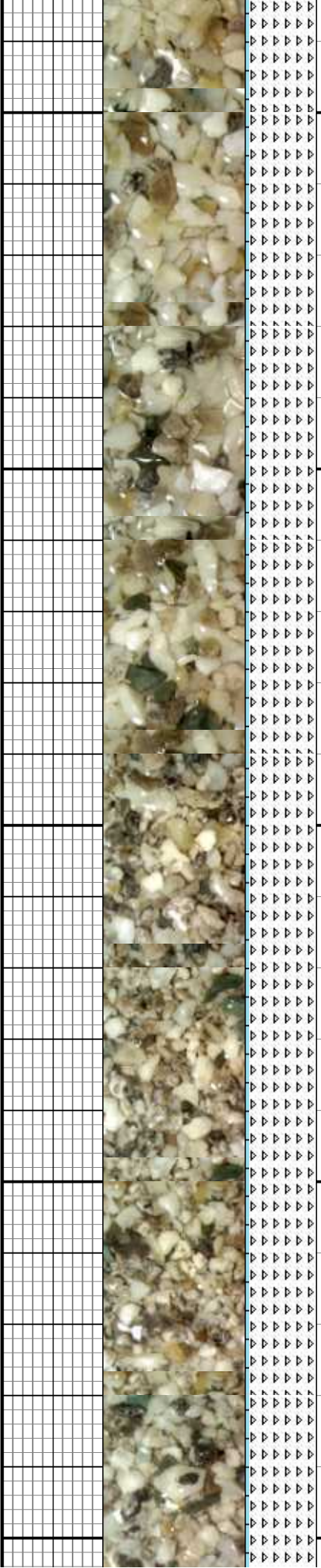
**Survey Data**  
 MD: 7,678 '  
 TVD: 3,896.75 '  
 Inclination: 90.6 °  
 Azimuth: 1.8 °

**Survey Data**  
 MD: 7,709 '  
 TVD: 3,896.62 '  
 Inclination: 89.9 °  
 Azimuth: 1.7 °

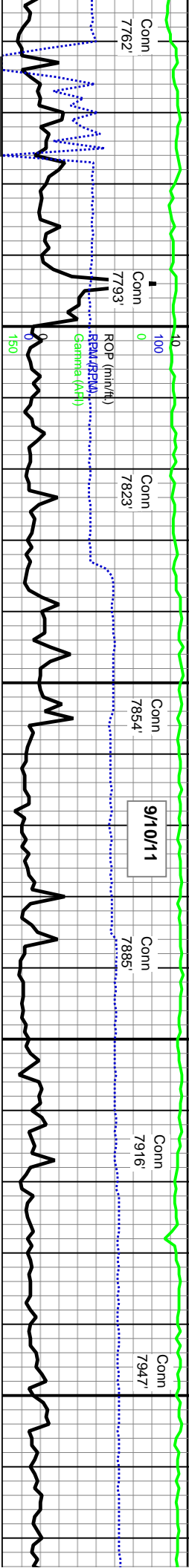
**Survey Data**  
 MD: 7,740 '  
 TVD: 3,896.73 '  
 Inclination: 89.7 °  
 Azimuth: 1.4 °



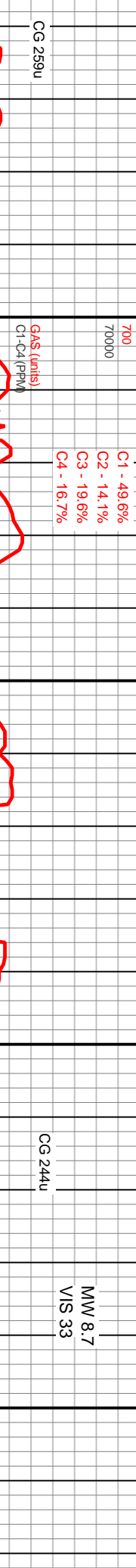
CHT: WHT-LT CRM, V HD, CRPTXLN, SB BLKY-SB PLTY-SB TAB, SM-SL SUC TXT,  
 PRLY-DUL LSTR, SME GLAU, OCC FOSUS, ABUN ASPHC FRAGS, 40% AMB STN,  
 25% BRI YEL-GLD FLOR, 35% SLO BLDG BRI WHT-VIO CUT FLOR, ABNT STRMRS







7,760 7,770 7,780 7,790 7,800 7,810 7,820 7,830 7,840 7,850 7,860 7,870 7,880 7,890 7,900 7,910 7,920 7,930 7,940 7,950 7,960 7,970



MD (ft)	TVD (ft)	Inclination (°)	Azimuth (°)
7,770	3,897.14	88.7	1.5
7,801	3,897	88.5	1.4
7,832	3,898.63	88.8	1.3
7,863	3,899.2	89.1	0.8
7,894	3,899.74	88.9	0.4
7,925	3,900.42	88.6	0.1
7,956	3,901.15	88.7	359.7

CG 259u  
CG 244u  
MW 8.7  
VIS 33

TVT (ft)

4000

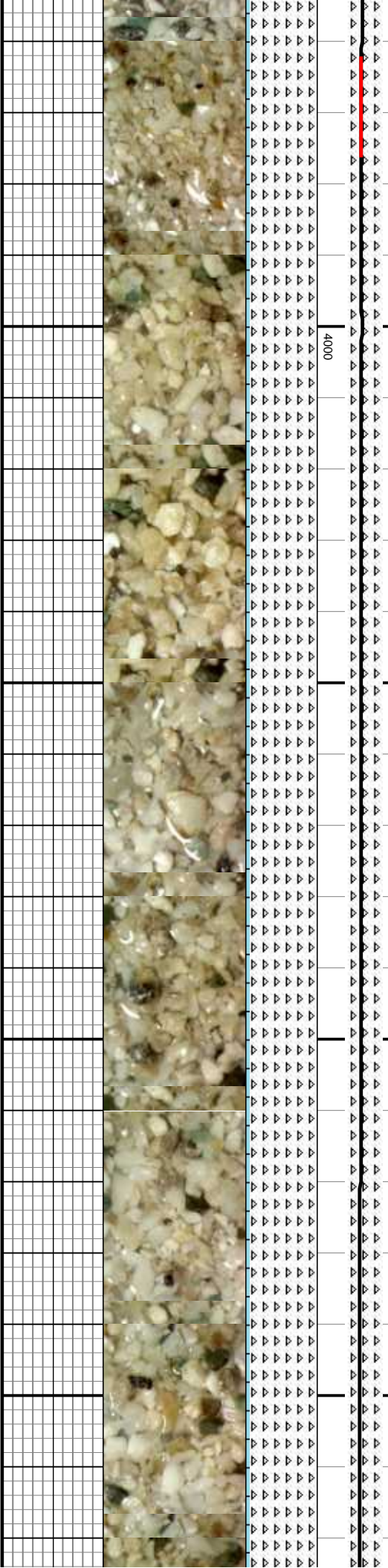
3000

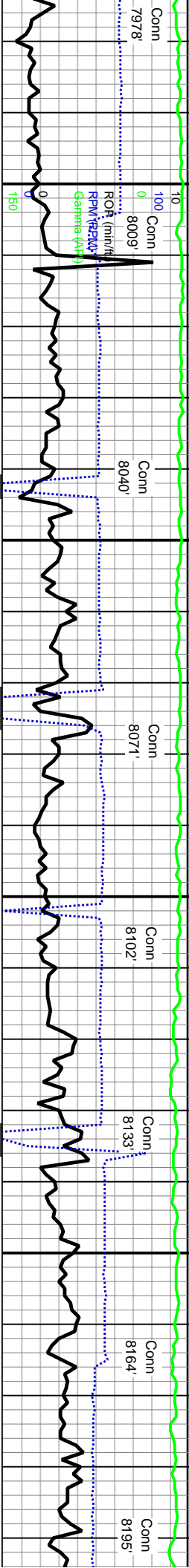
7000  
70000

CH-C4 (PPM)

C1 - 49.6%  
C2 - 14.1%  
C3 - 19.6%  
C4 - 16.7%

CHT: WHT-LT CRM-OPA, V HD, CRPTXLN, SB BLKY-SB PLTY-SB FLKY, SM-SL SUC  
TXT, PRLY-DUL LSTR, SME GLAU, TR FOSUS, DECRNG ASPHC FRAGS, 20% AMB  
STN, 30% BRI YEL-GLD FLOR, SLO DUL BRN ORG CUT FLOR BCMG ORG-YEL W/  
20% STRMG BLDG BRI WHT-VIO CUT FLOR





7000  
70000  
GAS (units)  
C1-C4 (PPM)

Diverting past  
shakers to  
build volume

**Survey Data**  
MD: 7,987 ' ,  
TVD: 3,901.8 ' ,  
Inclination: 88.9 ° ,  
Azimuth: 0.1 °

**Survey Data**  
MD: 8,018 ' ,  
TVD: 3,902.34 ' ,  
Inclination: 89.1 ° ,  
Azimuth: 359.9 °

**Survey Data**  
MD: 8,049 ' ,  
TVD: 3,902.66 ' ,  
Inclination: 89.7 ° ,  
Azimuth: 0.3 °

**Survey Data**  
MD: 8,080 ' ,  
TVD: 3,902.8 ' ,  
Inclination: 89.8 ° ,  
Azimuth: 359.8 °

**Survey Data**  
MD: 8,111 ' ,  
TVD: 3,902.25 ' ,  
Inclination: 90 ° ,  
Azimuth: 0.1 °

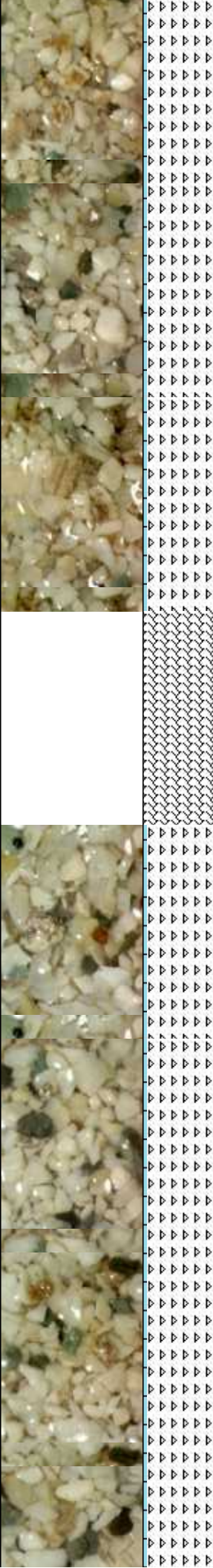
**Survey Data**  
MD: 8,142 ' ,  
TVD: 3,902.8 ' ,  
Inclination: 90.2 ° ,  
Azimuth: 359.4 °

**Survey Data**  
MD: 8,173 ' ,  
TVD: 3,902.69 ' ,  
Inclination: 90.2 ° ,  
Azimuth: 359.2 °

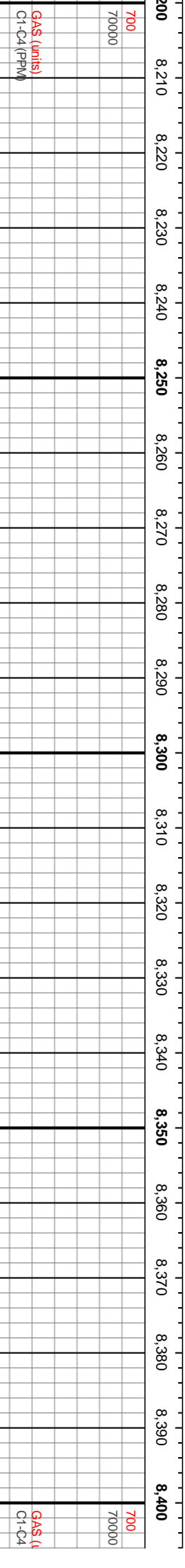
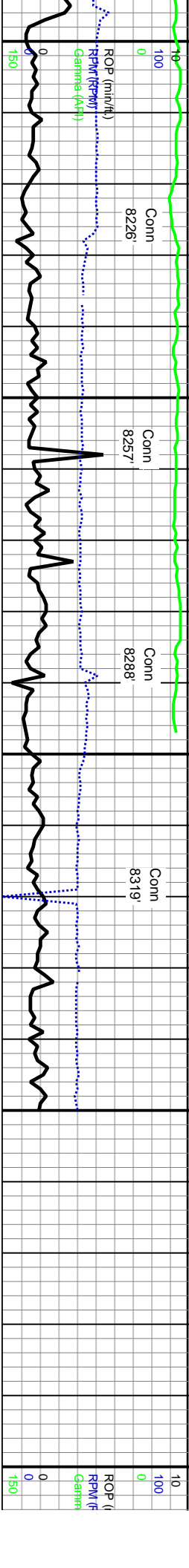
TVD (ft)

CHT: WHT-LT CRM-OPA, V HD, CRPTXLN, SB BLKY-SB PLTY-SB FLKY, SM-SL  
SUC TXT, PRLY-DUL LSTR, SME GLAU, TR FOSUS, DECRNG ASPHC FRAGS,  
10% AMB STN, 15% BRI YEL-GLD FLOR, SLO DULL BRN ORG CUT FLOR BCMG  
ORG-YEL W/ 10% STRMG BLDG BRI WHT-VIO CUT FLOR

4000







**Survey Data**  
 MD: 8,204 '  
 TVD: 3,902.53 '  
 Inclination: 90.4 °  
 Azimuth: 358.9 °

**Survey Data**  
 MD: 8,235 '  
 TVD: 3,902.28 '  
 Inclination: 90.5 °  
 Azimuth: 359 °

**Survey Data**  
 MD: 8,266 '  
 TVD: 3,901.96 '  
 Inclination: 90.7 °  
 Azimuth: 358.7 °

**Survey Data**  
 MD: 8,297 '  
 TVD: 3,901.55 '  
 Inclination: 90.8 °  
 Azimuth: 358.8 °

