



# COLUMBINE LOGGING, INC.

Scale 1:240 (5"=100') Imperial

Well Name: Fletcher Gulch 4-24  
Location: SEC 4-T1N-R100W, Rio Blanco, CO  
Licence Number: AP1#05-103-10897-0  
Spud Date: 6/27/08  
Surface Coordinates: 1904' FNL, 574' FEL

Region: Piceance Basin  
Drilling Completed: 6/29/08

Bottom Hole  
Coordinates:  
Ground Elevation (ft): 6476' K.B. Elevation (ft): 6487'  
Logged Interval (ft): 600' To: 2466' Total Depth (ft): 2466'  
Formation: Williams Fork, Iles Formation  
Type of Drilling Fluid: Water/ Starch based mud

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 [www.WellSight.com](http://www.WellSight.com)

## OPERATOR

Company: Genesis Gas and Oil LLC  
Address: 106W 14th Street 7th Floor  
Kansas City MO 64105

## GEOLOGIST

Name: Charles VanHeuvelen, Pete Lessler  
Company: Columbine Logging, Inc.  
Address: 9844 Titan Court, Unit 6  
Littleton CO 80125

## Cores

## DSTs

## Rig

Elenburg Exploration Inc.  
Rig #15

## ROCK TYPES

Anhy  
Bent  
Brec  
Cht

Clyst  
Coal  
Congl  
Dol

Gyp  
Igne  
Lmst  
Meta

Mrlst  
Salt  
Shale  
Shcol

Shgy  
Sltst  
Ss  
Till

## ACCESSORIES

### FOSSIL

Algae  
Amph  
Belm  
Bioclst  
Brach  
Bryozoa  
Cephal  
Coral  
Crin  
Echin  
Fish  
Foram  
Fossil  
Gastro  
Oolite

Ostra  
Pelec  
Pellet  
Pisolite  
Plant  
Strom

### MINERAL

Anhy  
Arggrn  
Arg  
Bent  
Bit  
Brecfrag  
Calc  
Carb

Chtdk  
Chtlt  
Dol  
Feldspar  
Ferrpel  
Ferr  
Glau  
Gyp  
Hvymin  
Kaol  
Marl  
Minxl  
Nodule  
Phos  
Pyr  
Salt

Sandy  
Silt  
Sil  
Sulphur  
Tuff

### STRINGER

Anhy  
Arg  
Bent  
Coal  
Dol  
Gyp  
Ls  
Mrst  
Sltstrg

Ssstrg

### TEXTURE

Boundst  
Chalky  
Cryxln  
Earthy  
Finexln  
Grainst  
Lithogr  
Microxln  
Mudst  
Packst  
Wackest

## OTHER SYMBOLS

### POROSITY

Earthy  
Fenest  
Fracture  
Inter  
Moldic  
Organic

Pinpoint  
Vuggy

### OIL SHOW

Even  
Spotted  
Ques

Dead

### SORTING

Well  
Moderate  
Poor

### ROUNDING

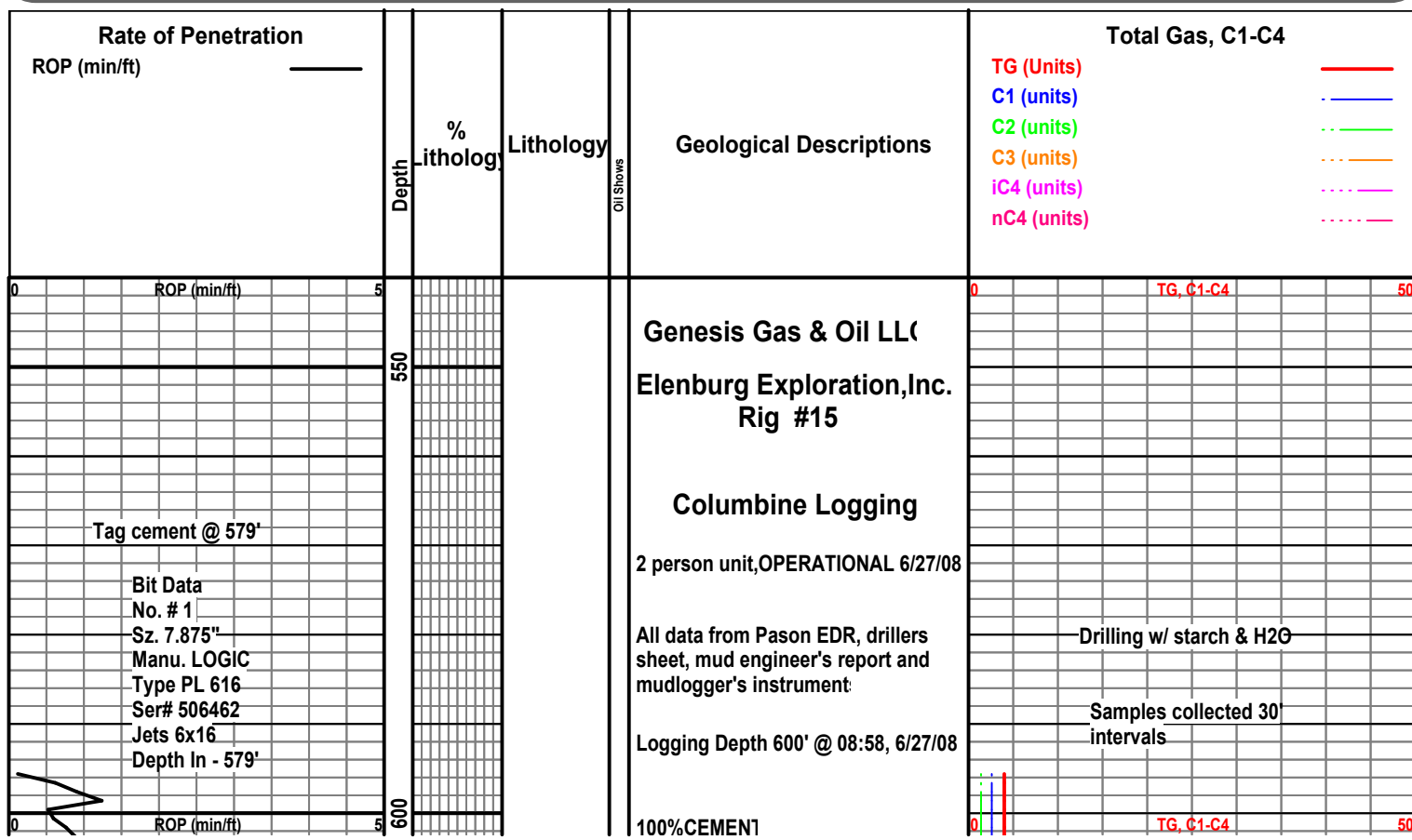
Rounded  
Subrnd  
Subang  
Angular

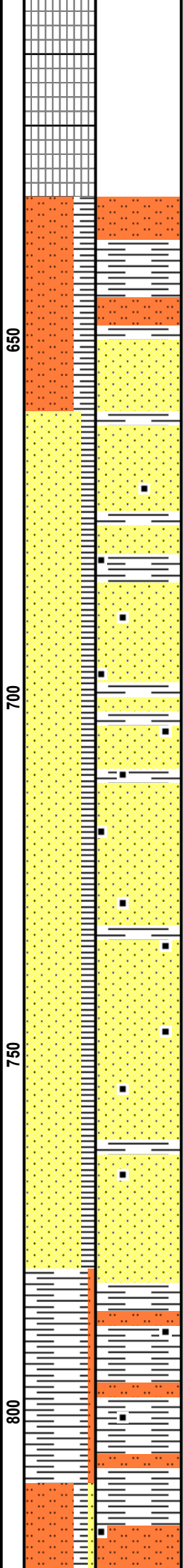
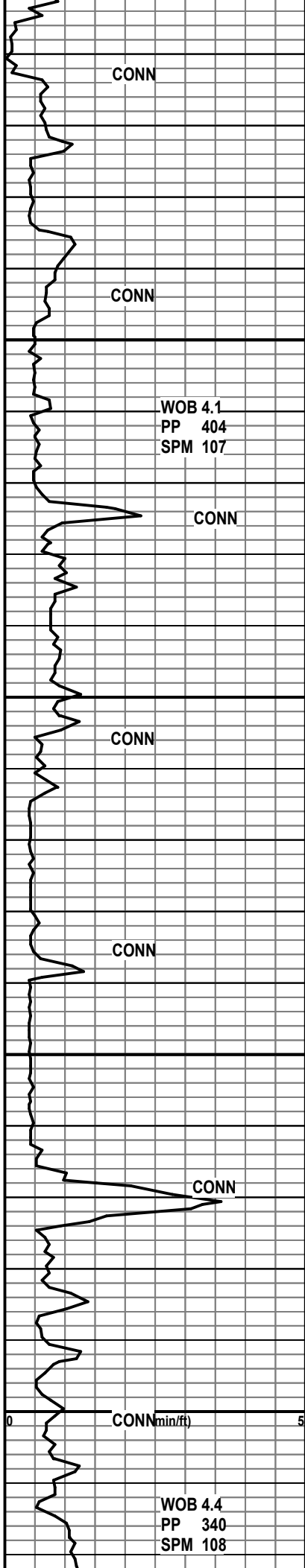
### INTERVAL

Core  
Dst

### EVENT

Rft  
Sidewall





100%CEMENT

Survey @ 644' = 0.75°

70%SLTST; dk gry, sb blkly-sb plty, grty, sndy, 30%SH; dk gry-blu gry, frm, sb blkly-sb plty, rthy, v lt calc, no fluor, no cut

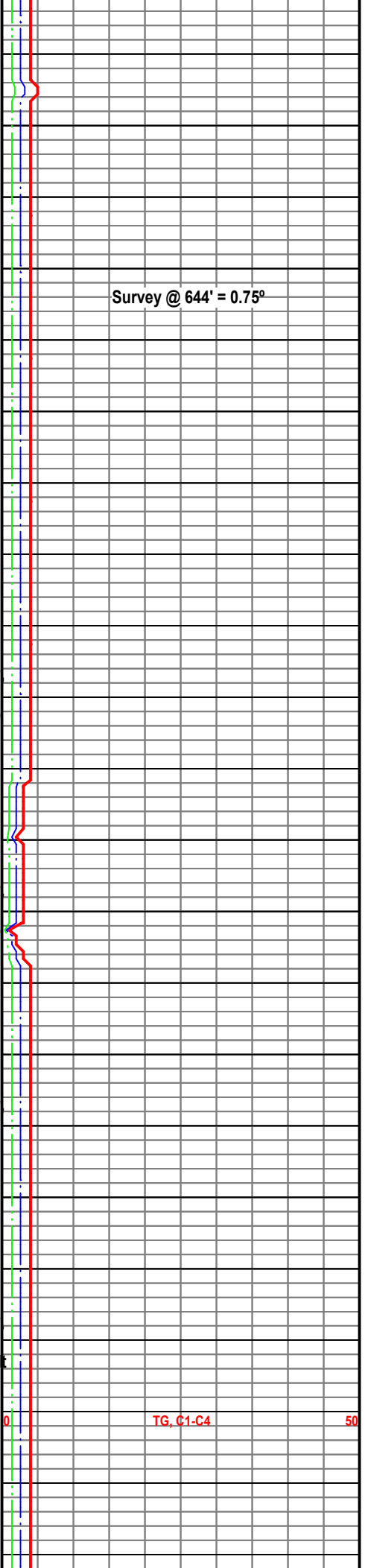
80%SS; clr-wht, f-m gr, ang-sb rd, mod srt, pol-fros, uncon, qtz, 15%SH; gry, frm, sb blkly-sb plty, rthy, v lt calc, 5%COAL; blk, frm, vit, tr LS; off wht-buff, sb blkly, frm, no fluor, no cut

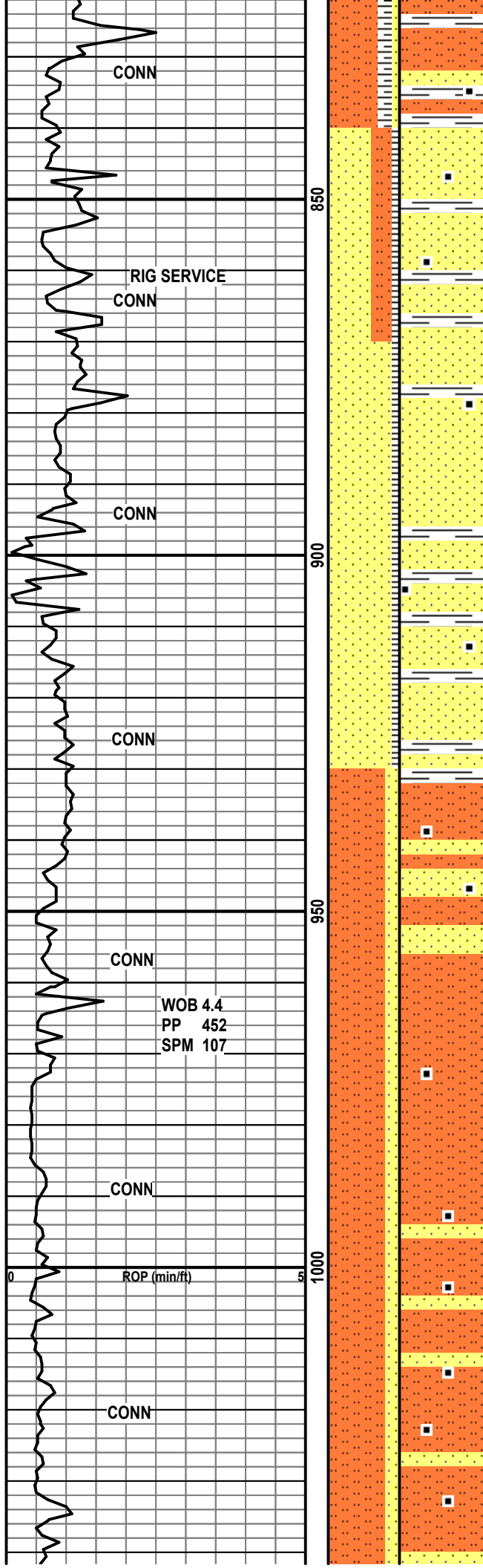
80%SS; clr-wht, f-m gr, ang-sb rd, mod srt, pol-fros, uncon, qtz, 15%SH; gry, frm, sb blkly-sb plty, rthy, v lt calc, 5%COAL; blk, frm, vit, tr LS; off wht-buff, sb blkly, frm, no fluor, no cut

80%SS; clr-wht, f-m gr, ang-sb rd, mod srt, pol-fros, uncon, qtz, 15%SH; gry, frm, sb blkly-sb plty, rthy, v lt calc, 5%COAL; blk, frm, vit, tr LS; off wht-buff, sb blkly, frm, yel fluor, lt cut

80%SS; clr-wht, f-m gr, ang-sb rd, mod srt, pol-fros, uncon, qtz, 15%SH; gry, frm, sb blkly-sb plty, rthy, v lt calc, 5%COAL; blk, frm, vit, tr LS; off wht-buff, sb blkly, frm, yel fluor, v lt cut

90%SH; dk gry, frm, sb blkly-sb plty, rthy, lt calc, 10%SLTST; gry, sb blkly-sb plty, grty, tr qtz, tr COAL, , yel fluor, v lt cut





70%SLTST; gry, sb blkly-sb plty, grty, 20%SH; dk gry, frm, sb blkly-sb plty, rthy, lt calc, 10%SS; clr, f-m gr, ang-sb rd, mod srt, pol-fros, uncon-con, qtz, , yel fluor, lt cut

60%SS; clr-wht, f-m gr, ang-sb rd, mod srt, pol-fros, uncon, qtz, tr pyr, 25%SLTST; gry, sb blkly-sb plty, grty, 15%SH; dk gry, frm, sb blkly-sb plty, rthy, lt calc, tr COAL, yel fluor, v lt cut

90%SS; clr-wht, f-m gr, ang-sb rd, mod srt, pol-fros, uncon, qtz, 10%SH; gry, frm, sb blkly-sb plty, rthy v lt calc, tr COAL; blk, frm, vit, tr LS; off wht-buff, sb blkly, frm, yel fluor, lt cut

90%SS; clr-wht, f-m gr, ang-sb rd, mod srt, pol-fros, uncon, qtz, 10%SH; gry, frm, sb blkly-sb plty, rthy v lt calc, tr COAL; blk, frm, vit, tr LS; off wht-buff, sb blkly, frm, yel fluor, med cut

80%SLTST; gry, sb blkly-sb plty, grty, sndy, 20%SS; clr, f-m gr, ang-sb rd, mod srt, pol-fros, uncon-con, qtz, tr SH; dk gry-blu gry, frm, sb blkly-sb plty, rthy, lt calc, tr COAL; blk, frm, vit, yel fluor, hvy cut

80%SLTST; gry, sb blkly-sb plty, grty, sndy, 20%SS; clr, f-m gr, ang-sb rd, mod srt, pol-fros, uncon-con, qtz, tr SH; dk gry-blu gry, frm, sb blkly-sb plty, rthy, lt calc, tr COAL; blk, frm, vit, yel fluor, hvy cut

80%SLTST; lt gry-tan, sb blkly-sb plty grty, sndy, 20%SS; clr, f-m gr, ang-sb rd, mod srt, pol-fros, uncon-con, qtz, tr SH; dk gry-blu gry, frm, sb blkly-sb plty, rthy, lt calc, tr COAL; blk, frm, vit, yel fluor, lt cut

Mud VIS 33/ WT 8.5/ WL 18/ pH 8.5

Survey @ 926' = 1°

Mud VIS  
35/ WT  
8.5

| Mud Properties |         |
|----------------|---------|
| 6/27/08        |         |
| (Depth 959')   |         |
| Wt             | 8.55    |
| Vis            | 35      |
| YP             | 3       |
| Gel            | 3/4/6   |
| Cake           | (2)1/32 |
| Sol            | 1.6     |
| pH             | 10.5    |
| Pm             | .8      |
| Cl             | 220     |
| Ca             | 80      |

TG, C1-C4

LIGHTER TEST - 402 Units

