

COLUMBINE LOGGING

Scale: 5" / 100'
Measured Depth Log

Well Name Anschutz State 4-62-2-3228 BH2

Location SWNW S2-T4N-R62W

State CO

County Weld

Country USA

Rig Number Nabors M22

API Number 05-123-38962

AFE # 18749D

Region DJ Basin

Field Wildcat

Spud Date 5/13/2014

Drilling Completed 5/24/2014

Surface Coordinates SWNW Sec 2-T4N-R62W
1629' FNL 250' FWL

Bottom Hole Coordinates SWNE Sec 1-T4N-R62W
2210' FNL 2470' FEL

Ground Elevation 4544'

K.B. Elevation 4566'

Logged Interval 4600' **To** 5633'

Total Depth 12684'

Formation Shannon

Type of Drilling Fluid LSND

Operator

Company Bill Barret Corp.

Address 1099 18th Street, Suite 2300
Denver, CO 80202

Geologist

Name Scott Hampton

Company Bill Barrett Corporation

Address 1099 18th Street, Suite 2300
Denver, CO 80202

Other

Charles Trodick

Senior Wellsite Geologist

Mark Raimo

Wellsite Geologist

Rock Types

UNKNOWN	ANHYDRITE	COAL	CONGLOMERATE	MARLSTONE	SHALY SANDSTONE
BENTONITE	BRECCIA	DOLOMITE	DOLOMITIC LIMESTONE	METAMORPHIC	SHALY SILTSTONE
CEMENT	CHALK	GRANITE	GYPSUM	NO SAMPLE	SILTSTONE
CHERT	CLAY CHOKE SAND	IGNEOUS	LIMESTONE	SALT	SILTY SHALE
CLAYSTONE		SIDERITE or LIMONITE		SALT- PEPPER SAND	TILL
				SHALE	TUFF
				SHALE COLORED	WELDED TUFF
				SHALE GRAY	

Accessories

Fossils

ALGAE
AMPHIPORA
BELEMNITE
BIOCLASTIC
BRACHIOPOD
BRYOZOA
CEPHALOPOD
CORAL
CRINOID
ECHINOID
FISH
FORAMINIFERA
FOSSIL

GASTROPOD

INOCERAMUS

OOLITE

OSTRACOD

PELECYPOD

PELLET

PISOLITE

PLANT REMAINS

PLANT SPORES

SCAPHOPOD

STROMATOPOROID

Minerals

ANHYDRITIC
ARGILLACEOUS

ARGILLITE GRAIN

BENTONITE

BITUMENOUS SUBSTANCE

BRECCIA FRAGMENTS

CALCAREOUS

CARBONACEOUS FLAKES

CHTDK

CHTLT

COAL - THIN BEDS

DOLOMITIC

FELDSPAR

FERRUGINOUS PELLET

FERRUGINOUS

GLAUCONITE

GYPSIFEROUS

HEAVY MINERAL

KAOLIN

MARCASITE

MARLSTONE

MICACEOUS

MINERAL CRYSTALS

NODULES

PHOSPHATE PELLETS

PYRITE

SALT CAST

SANDY

SIDERITE

SILICEOUS

SILTY

TUFFACEOUS

Stringer

ANHYDRITE STRINGER
BENTONITE STRINGER
COAL STRINGER
DOLOMITE STRINGER
GYPSUM STRINGER
LIMESTONE STRINGER
MARLSTONE (CALC) STRG
MARLSTONE (DOL) STRG
SANDSTONE STRINGER
SHALE STRINGER
SILTSTONE STRINGER

Other Symbols

Oil Show

DEAD
EVEN
QUESTIONABLE
SPOTTED STAINING

Porosity

E EARTHY
F FENESTRAL
F FRACTURE
X INTERCRYSTALLINE
O INTEROOLITIC
M MOLDIC

ORGANIC

P PINPOINT

V VUGGY

Engineering

BIT CHANGE
CONNECTION (LEFT)
CONNECTION (RIGHT)
CONNECTION GAS
TRIP GAS
DOWN TIME GAS
CORE - LOST
CORE - RECOVERED
DST INTERVAL

FAULT

FORMATION TOP

GAS SHOW

OIL SHOW

MN DEPTH

MN DEPTH (RIGHT)

NORMAL FAULT

OVERTURNED STRATA

REVERSE FAULT

CASING

SIDEWALL CORE (LEFT)

SIDEWALL CORE (RIGHT)

SLIDE

SURVEY

DRILL STEM TEST

WIRELINE TESTED - LEFT

WIRELINE TESTED - RT

Rounding

A ANGULAR
R ROUNDED
S SUBANG
S SUBRND

Textures

B BOUNDSTONE
C CHALKY
C CRYPTOXLN

E EARTHY

F FINELYXLN

G GRAINSTONE

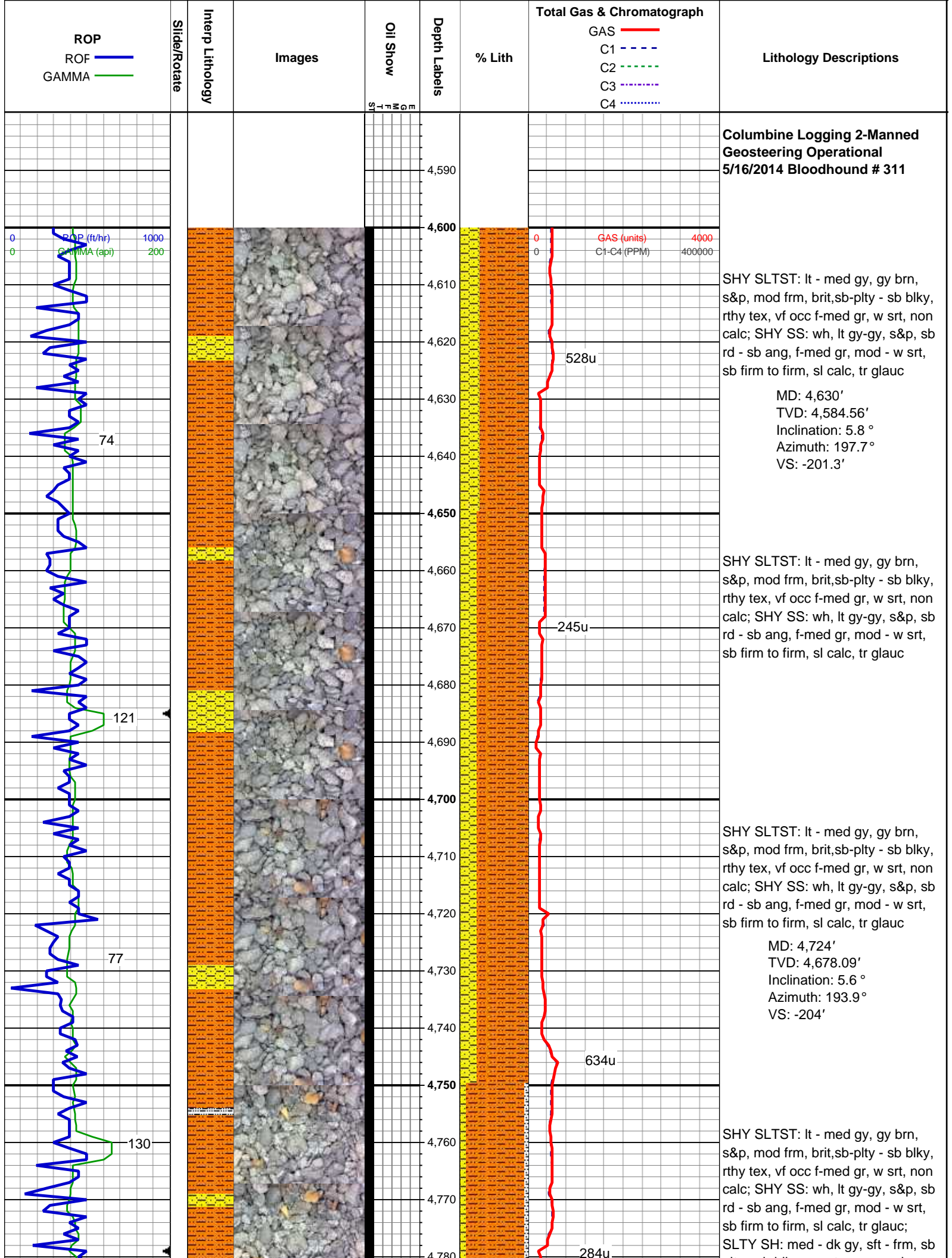
L LITHOGRAPHIC

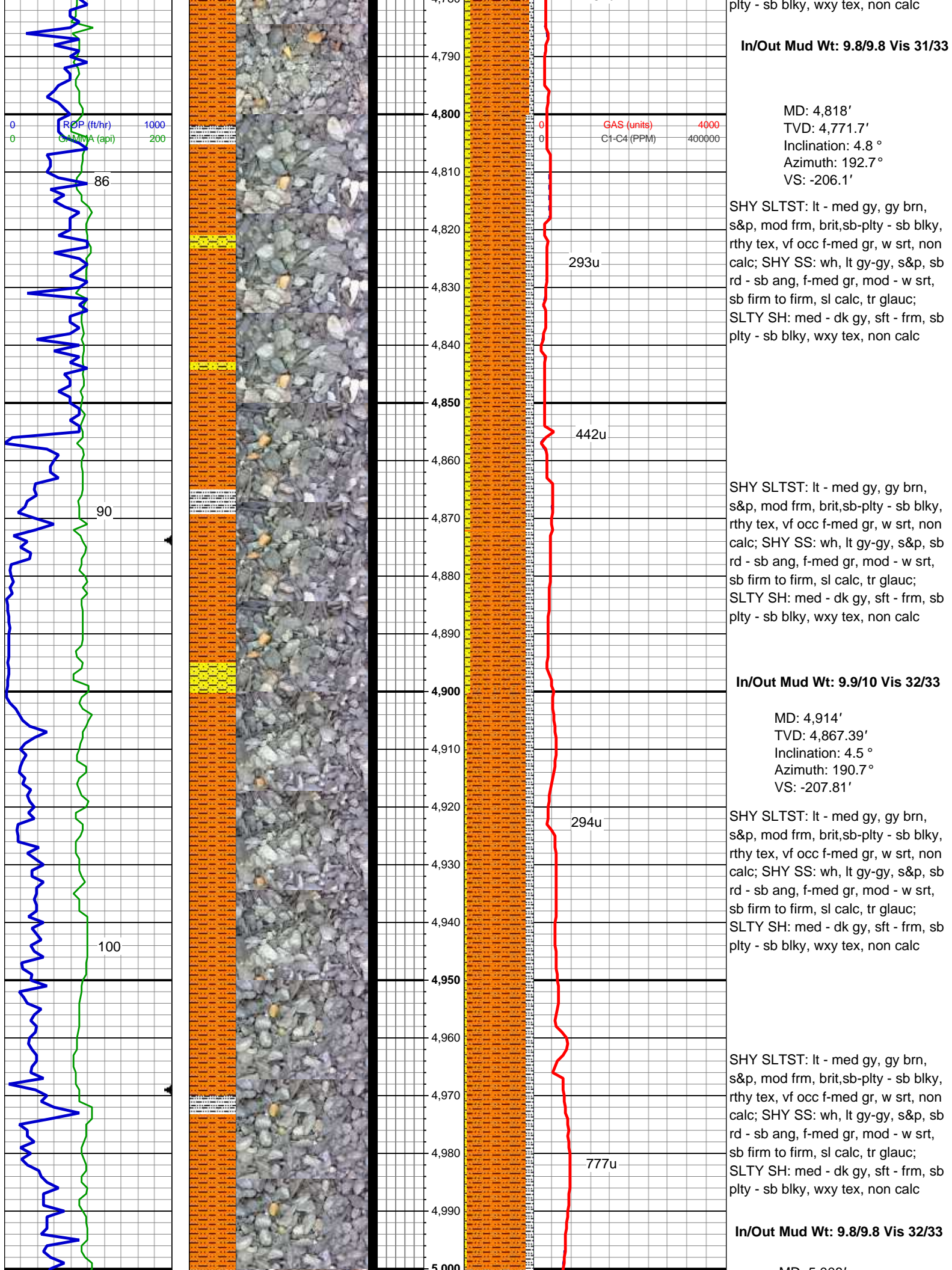
M MICROXLN

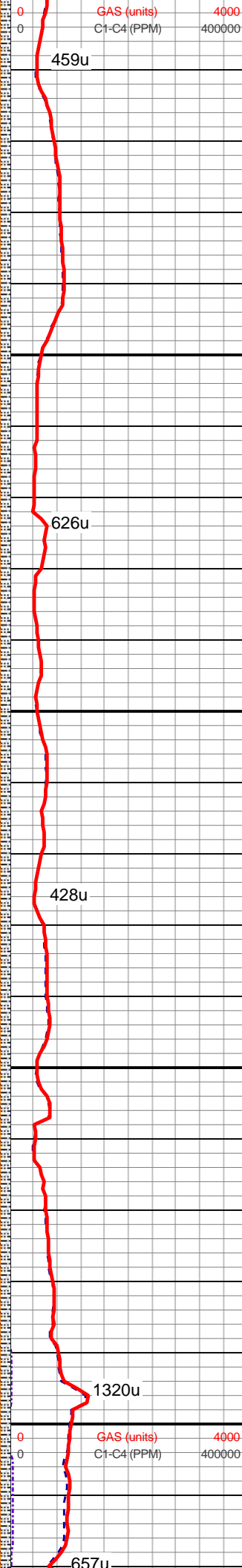
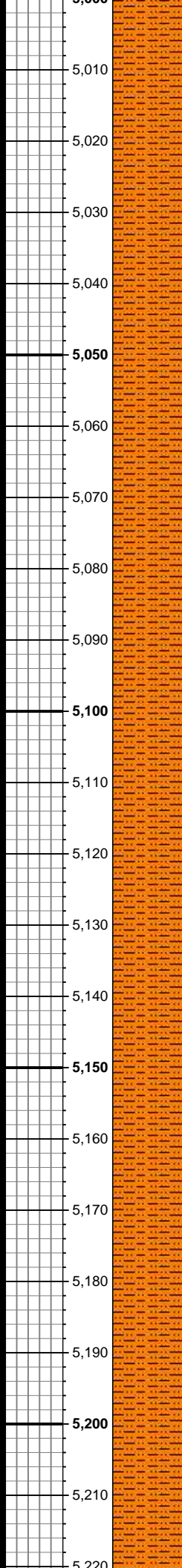
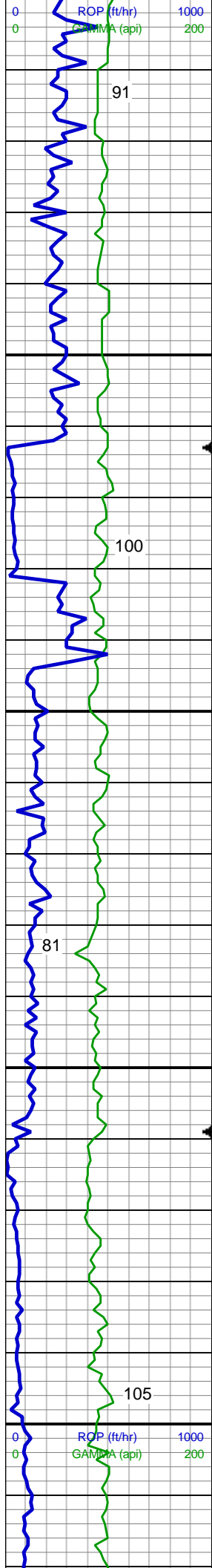
M MUDSTONE

P PACKSTONE

W WACKESTONE







MD: 5,008'
TVD: 4,961.12'
Inclination: 4.2 °
Azimuth: 188.2 °
VS: -209.11'

SHY SLTST: lt - med gy, gy brn, s&p, mod frm, brit,sb-plty - sb blk, rthy tex, vf occ f-med gr, w srt, non calc; SLTY SH: med - dk gy, sft - frm, sb plty - sb blk, wxy tex, non calc, tr shy ss

SHY SLTST: lt - med gy, gy brn, s&p, mod frm, brit,sb-plty - sb blk, rthy tex, vf occ f-med gr, w srt, non calc; SLTY SH: med - dk gy, sft - frm, sb plty - sb blk, wxy tex, non calc, tr shy ss

MD: 5,104'
TVD: 5,056.84'
Inclination: 4.5 °
Azimuth: 207.2 °
VS: -211.45'

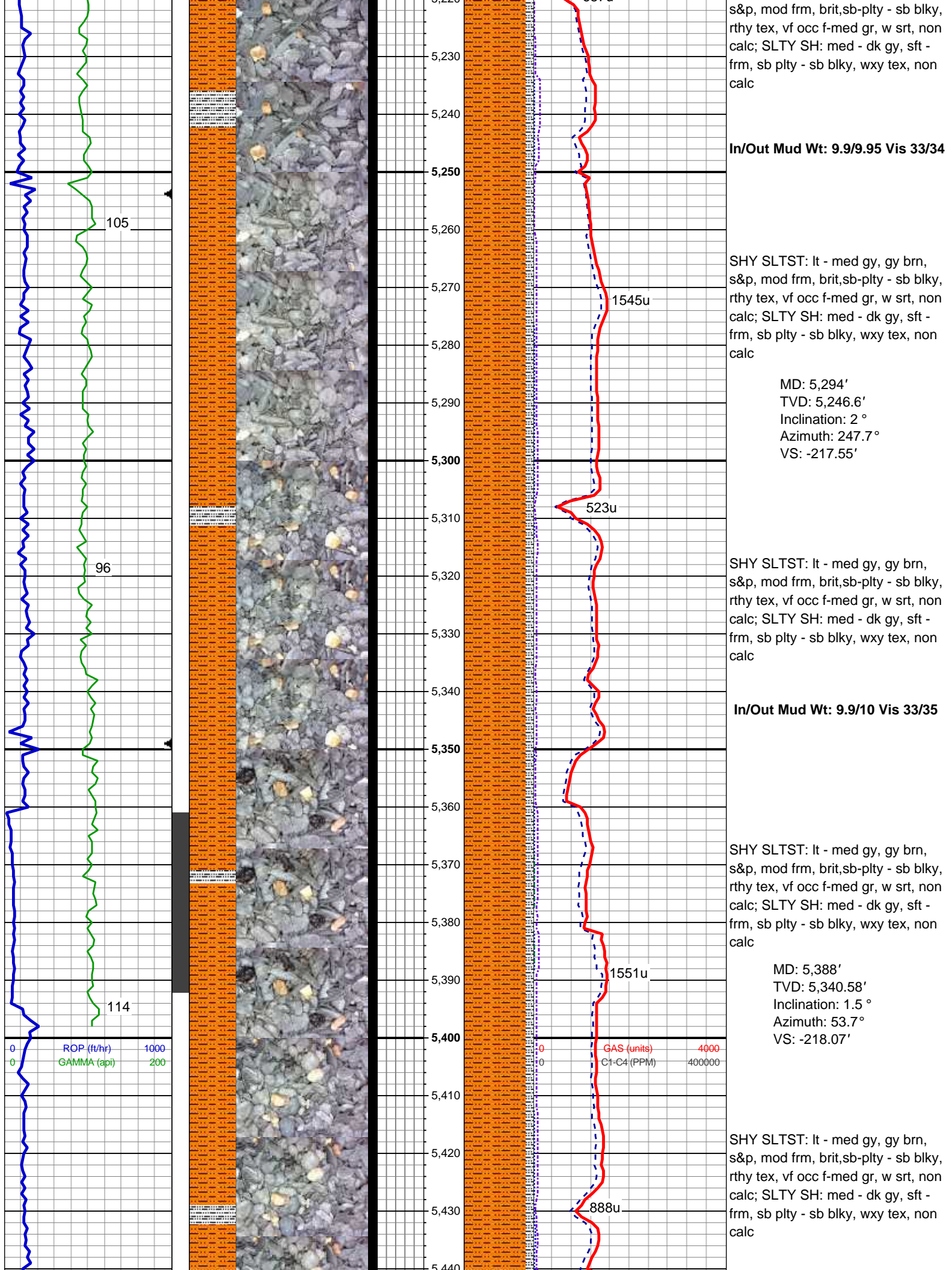
SHY SLTST: lt - med gy, gy brn, s&p, mod frm, brit,sb-plty - sb blk, rthy tex, vf occ f-med gr, w srt, non calc; SLTY SH: med - dk gy, sft - frm, sb plty - sb blk, wxy tex, non calc, tr shy ss

In/Out Mud Wt: 9.95/9.95 Vis 33/35

SHY SLTST: lt - med gy, gy brn, s&p, mod frm, brit,sb-plty - sb blk, rthy tex, vf occ f-med gr, w srt, non calc; SLTY SH: med - dk gy, sft - frm, sb plty - sb blk, wxy tex, non calc

MD: 5,199'
TVD: 5,151.67'
Inclination: 2.4 °
Azimuth: 223.7 °
VS: -214.6'

SHY SLTST: lt - med gy, gy brn,



Pason Down

Pason Down

Pason Down

Pason Down

MD: 5,483'
TVD: 5,435.53'
Inclination: 2.3 °
Azimuth: 61.3 °
VS: -215.37'

SHY SLTST: lt - med gy, gy brn,
s&p, mod frm, brit,sb-plty - sb blk,
rthy tex, vf occ f-med gr, w srt, non
calc; SLTY SH: med - dk gy, sft -
frm, sb plty - sb blk, wxy tex, non
calc

SHY SLTST: lt - med gy, gy brn,
s&p, mod frm, brit,sb-plty - sb blk,
rthy tex, vf occ f-med gr, w srt, non
calc; SLTY SH: med - dk gy, sft -
frm, sb plty - sb blk, wxy tex, non
calc

MD: 5,578'
TVD: 5,530.47'
Inclination: 1.9 °
Azimuth: 62 °
VS: -212.28'

SHY SLTST: lt - med gy, gy brn,
s&p, mod frm, brit,sb-plty - sb blkly,
rthy tex, vf occ f-med gr, w srt, non
calc; SLTY SH: med - dk gy, sft -
frm, sb plty - sb blkly, wxy tex, non
calc

TOOH TO CHANGE MWD TOOLS:
14:20 MST ON
5/17/2013VERTICAL TD: 5633'
MDDATA CONTINUED
ONHORIZONTAL LOG

**THANK YOU FOR CHOOSING
COLUMBINE LOGGING INC.**