

SOFTROCK GEOLOGICAL SERVICES, INC.



San Juan Basin's Premier Mudlogging Business



591 Co. Rd. 233 Durango, CO 81301
970.247.8868 fax 970.247.5108



- HORIZONTAL LOGGING
- WELL SITE CONSULTING
- PRECISION CHROMATOGRAPHY
- PHOTO MICROSCOPY
- COAL DESORPTION

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

Well Name: Argenta 34-10 #32-4A
Location: NWSW ---> SESW Sec. 32 T34N R10W La Plata Co., CO
License Number: API #: 05-067-09369 Region: Ignacio Blanco
Spud Date: Drill out of 7" csg. on 9/22/07 Drilling Completed: September 24, 2007
Surface Coordinates: 1605' FSL Lat. 37° 08.6832' North
1224' FWL Lon. 107° 57.7180' West
Bottom Hole 0770' FSL Lat. 37° 08.5491' North
Coordinates: 2091' FWL Lon. 107° 57.5016' West
Ground Elevation (ft): 6758' K.B. Elevation (ft): 6772'
Logged Interval (ft): 3232' MD To: 3677' MD Total Depth (ft): 3677' MD
Formation: Cretaceous Fruitland & Pictured Cliffs
Type of Drilling Fluid: Air / Mist

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: ConocoPhillips
Address: WL3 Suite 4040
600 N. Dairy Ashford P.O. Box 2197
Houston, TX 77252-2197

GEOLOGIST

Name: Dan McGinn, Kristopher Graham
Company: Softrock Geological Services, Inc.
Address: 591 County Rd. 233
Durango, CO 81301
(970) 247-8868 fax (970) 247-5108

Contractors

Aztec Well Services Rig #731
ConocoPhillips Co. Rep.: Mr. Teddy Rodriguez
AFE# WAN.CBM.7144
Network #: 10170909
PO #: STUARTK
Activity Code: K200 mudlogging

Instruments

i3 FID Chromatograph
CO Detector
TIF Combustable Gas Detector

Hole/Csg Data

Hole Data: 12 1/4" to sfc TD
 8 3/4" to 3244' MD
 6 1/4" to 3677' MD (UR to 9 1/2")
 Casing Data: 9 5/8" to 350' 32.3# H-40 ST+C
 7" to 3232' MD 20# J-55 ST+C
 5 1/2" to TD 15.5# J-55 ST+C tubing

ROCK TYPES

LITHOLOGY

Bentonite
 Chert band
 Coal
 Conglom.
 Limestone
 Sandstone

Shale
 Siltstone
 Clay
 Fracture
 Marl
 Carb shale
 Mudstone

Metal
 Cement
STRINGER
 Argillaceous
 Bentonite
 Carby streaks

Coal lam.
 Lime
 Sand lens
 Clay lens
 Carb shale

ACCESSORIES

FOSSIL

Shell hash
 Crinoid
 Fish
 Fossil
 Oolite
 Plant
 Inoceramus

MINERAL

Argillaceous
 Bentonite
 Calcareous
 Carby
 Dark chert
 Light chert
 Dolomite
 Feldspar

Ferromag
 Glaucinite
 Heavy min.
 Kaolinite
 Marly
 Mica
 Min. xl
 Pyrite
 Sandy

Silty
 Silica/qtz
 Water
 Fracfill
 Smkyqtz
 Inter. clay
 Chlorite
 Jasper
 Amber

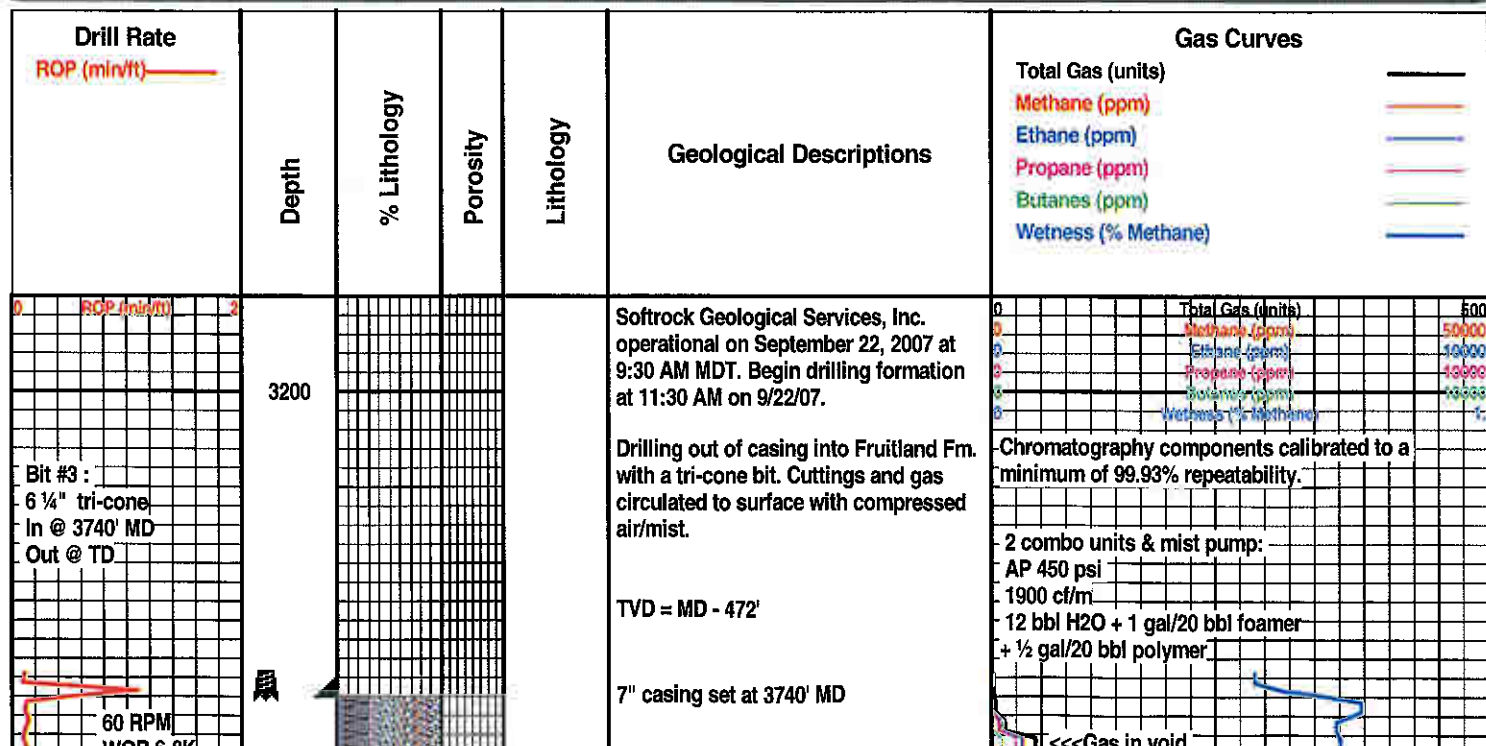
OTHER SYMBOLS

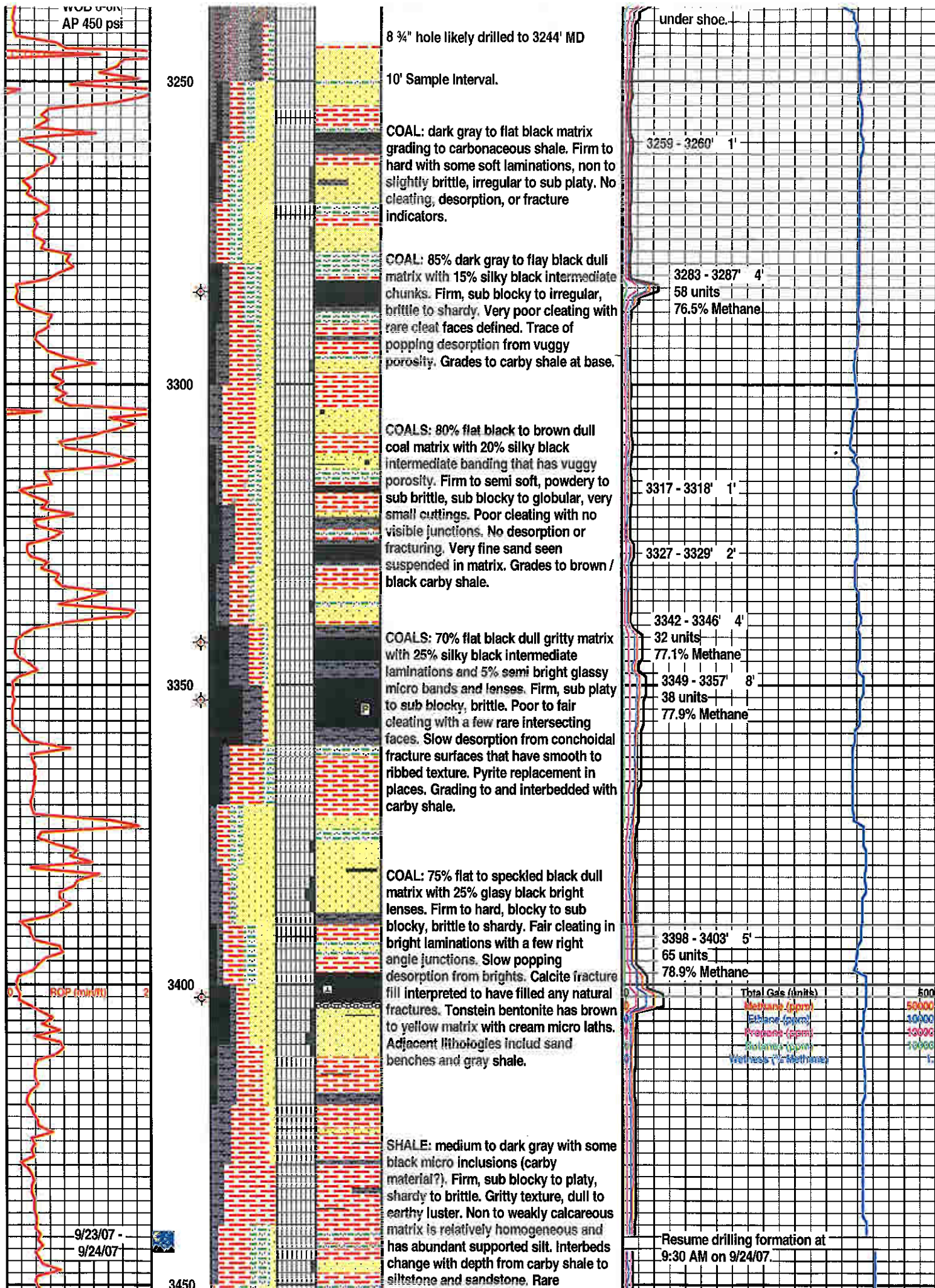
Casing shoe
 Midnight
 Bit trip
 Fracture

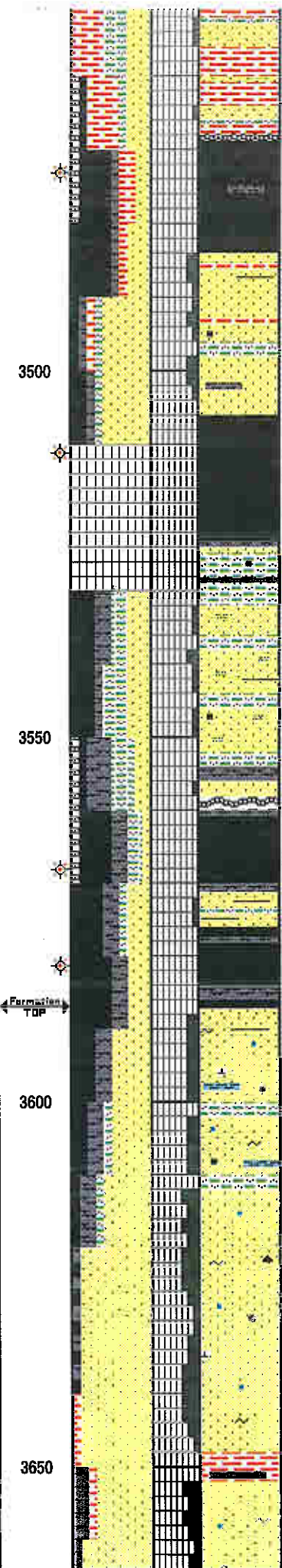
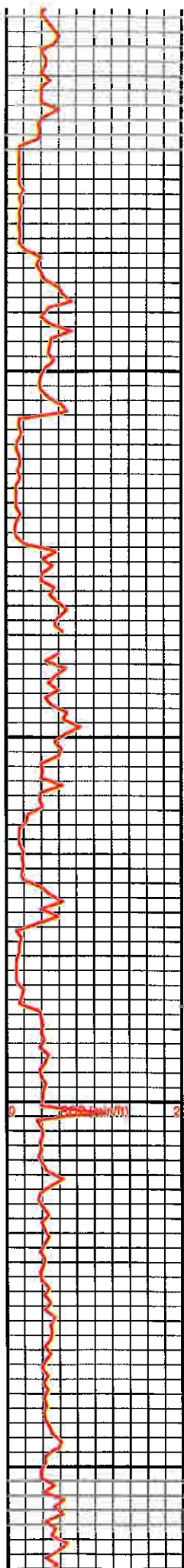
Survey
 Dz canister
 Gas show
 Td

Tite conn
 Pitot
 Sea level
 Fm. member

Fm. tops
 Interp. show







desorption seen as very slow growing bubbles on bedding planes.

COAL: 50% satiny to silky black intermediate matrix with 30% flat black dull laminations and 20% sub glassy black semi bright banding. Firm, brittle to powdery, globular to sub blocky. Fair cleating on intact cuttings, but mostly powdered fines. Desorption seen and actively growing gas bubbles in globs on powdered coal fines. Tonstein and carby shale logged. Fracture indicators not seen due to powder.

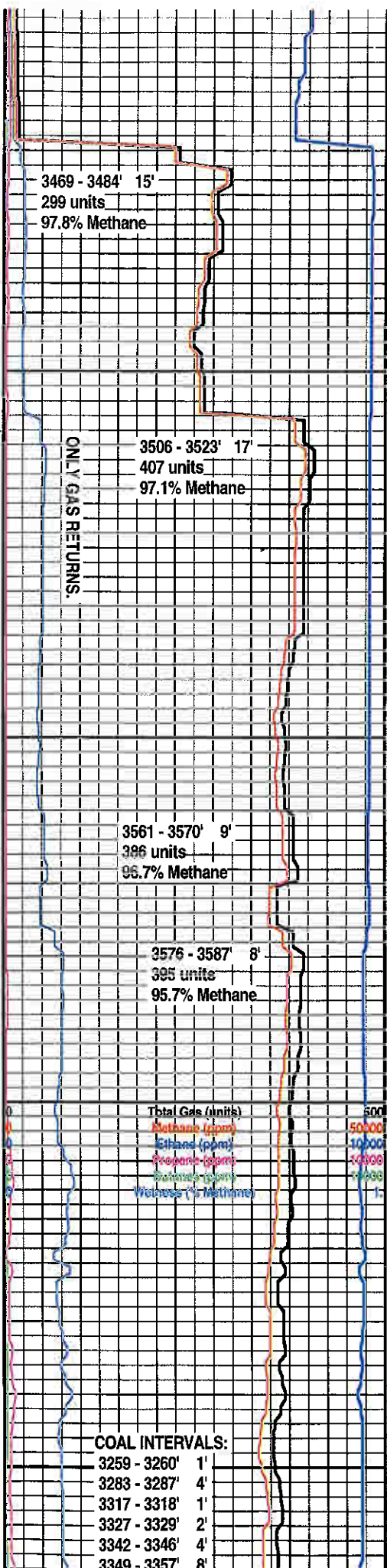
NO SAMPLE RETURNS 3510-3530'

COAL: AS SEEN IN 3530' SAMPLE: 60% satiny black low-end intermediate matrix with 20% glassy black bright laminations and 20% flat black grading to carby shale. Firm to soft, powdery, globular. No cleating seen. Open natural fractures interpreted from gas show and offset logs over same coal, but no smokey quartz seen in sample. Most of the cuttings either lost into formation or washed off as powdered fines smaller than finest sample sieve available.

COALS: 75% satiny black intermediate matrix with 20% glassy black bright laminations, 5% flat black dull near carby shale margins. Firm, sub blocky, brittle to powdery. Fair cleating with a few right angle junctions seen. Active desorption from cleat faces and micro vuggy porosity. No secondary mineralization seen. Brownish orange tonstein seen at top of package.

Pictured Cliffs Formation
3587' MD = 3115' TVD
+3657' subsea elevation

SANDSTONE: Pictured Cliffs: translucent to white to light gray, peppered heavier in top 35'. Accessories include, glauconite, blue/green clay, carby specks changing to ferro-mag grains, chert, and rare rose quartz. Very fine to fine, sub angular to sub rounded, well sorted. Fairly tight cement is primarily calcite, but there are weaker zone with clay and stronger lenses with quartz overgrowths. Fair pinpoint to intergranular porosity. Mostly massive with a few siltstone and shale interbeds.



3469 - 3484' 15'
299 units
97.8% Methane

3506 - 3523' 17'
407 units
97.1% Methane

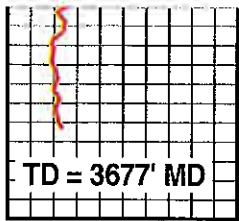
3561 - 3570' 9'
386 units
96.7% Methane

3576 - 3587' 8'
395 units
95.7% Methane

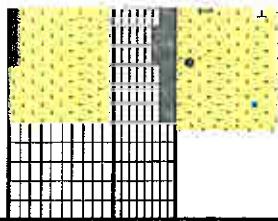
Total Gas (units) 5000
Methane (ppm) 50000
Ethane (ppm) 10000
Propane (ppm) 10000
Butanes (ppm) 10000
Weight % Methane 1

COAL INTERVALS:

- 3259 - 3260' 1'
- 3283 - 3287' 4'
- 3317 - 3318' 1'
- 3327 - 3329' 2'
- 3342 - 3346' 4'
- 3349 - 3357' 8'



TD



Total Depth of 3677' MD (3205' TVD)
reached at 1:45 PM MDT on September
24, 2007.

