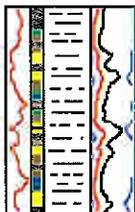
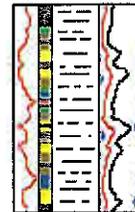


# SOFTROCK GEOLOGICAL SERVICES, INC.



591 County Rd. 233 Durango, CO 81301

(970) 247- 8868 fax 247- 5108



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

**Well Name:** Argenta 34-10 #34-1A  
**Location:** NENW Sec. 34 T34N R10W La Plata Co., CO  
**License Number:** API 05-067-09374-00 **Region:** Ignacio Blanco  
**Spud Date:** July 1, 2007 **Drilling Completed:** August 7, 2007  
**Surface Coordinates:** 911' FNL Lat. 37.152348° North  
1465' FWL Lon. 107.924237° West  
**Bottom Hole Coordinates:** 1840' FNL Lat. 37.14980° North  
800' FWL Lon. 107.92719° West  
**Ground Elevation (ft):** 6755' **K.B. Elevation (ft):** 6767'  
**Logged Interval (ft):** 3056' **To:** 3438' **Total Depth (ft):** 3438'  
**Formation:** Cretaceous Fruitland and Pictured Cliffs Formations  
**Type of Drilling Fluid:** Compressed Air/Mist  
Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

## OPERATOR

**Company:** Burlington Resources Oil and Gas Company  
**Address:** San Juan Division---Coal Team  
3401 E. 30th Street  
Farmington, NM 87401

## GEOLOGIST

**Name:** Jim Hughes, Mason Auger  
**Company:** Softrock Geological Services, Inc.  
**Address:** 591 County Rd. 233  
Durango, CO 81301  
(970) 247-8868 fax (970) 247-5108

## Contractors

**Aztec Rig #731**  
**CPOG Rep. :** Mr. Teddy Rodriguez  
**API #** 05-067-09374-00  
**AFE#** WAN.CBM.7127  
**Serv #:** K200

## Instrument

16 FID Chromatograph & FID Total Gas Detector

### Hole/Csg Data

Hole Data: 12 1/4" to 223'  
 8 3/4" to 3071'  
 6 1/4" to 3438'  
 Casing Data: 9 5/8" to 220' 32.3# WE-50  
 7" to 3056' 20# J-55 STC  
 4 1/2" to 3438' 10.5/11.6# J-55 STC & LTC

### ROCK TYPES

#### LITHOLOGY

- Bentonite
- Chert band
- Coal
- Conglom.
- Limestone
- Sandstone

- Shale
- Siltstone
- Clay
- Fracture
- Marl
- Carb shale
- Mudstone

- Cement

#### STRINGER

- Argillaceous
- Bentonite
- Coal lam.
- Lime

- Sand lens
- Clay lens
- Carb shale
- Carby streaks
- Microfrac

### ACCESSORIES

#### FOSSIL

- Shell hash
- Crinoid
- Fish
- Fossil
- Oolite
- Plant
- Inoceramus

#### MINERAL

- Argillaceous
- Bentonite
- Calcareous
- Carby
- Dark chert
- Light chert
- Dolomite
- Feldspar

- Ferromag
- Glaucanite
- Heavy min.
- Kaolinite
- Marly
- Mica
- Min. xl
- Pyrite
- Sandy

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

### OTHER SYMBOLS

- Lost circ
- Casing shoe
- Midnight
- Bit trip

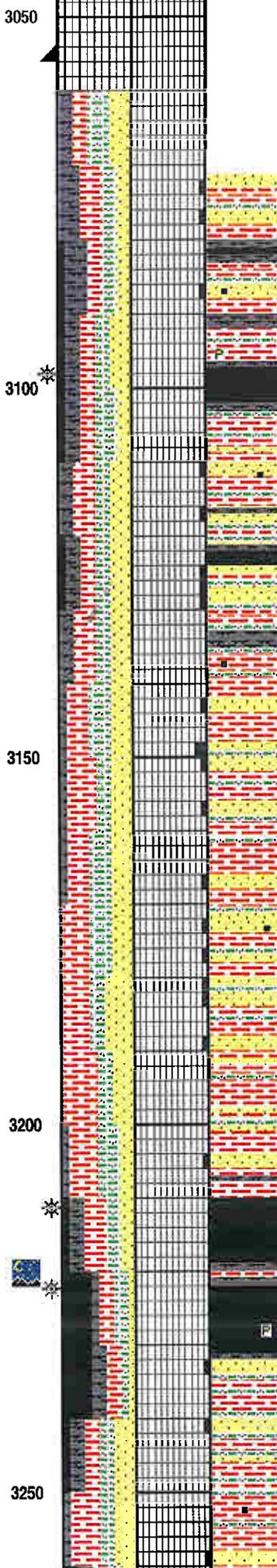
- Fracture
- Survey
- Dz canister
- Gas show

- Td
- Tite conn
- Pitot
- Sea level

- Fm. member
- Fm. tops
- Water
- Nitrogen

Curve Track 1 ROP (min/ft)	Depth	% Lithology	Porosity 0 - 24%	Lithology	Geological Descriptions	Gas Curves
<p>Bit #1: 6 1/4" In @ 3056' Out @ T.D.</p> <p>RPM 80 WOB 6-8K CFM 1800 AP 550</p> <p>8/3-6/07</p>					<p>Softrock Geological Services, Inc. operational on August 3, 2007 at 3:00 PM MDT. Began drilling Fruitland Formation on August 6, 2007. Cuttings and gas circulated to surface with compressed air/mist. Sampling rock every 10', gas every 3 minutes. S - curve drilled @ an azimuth of ~ 220°, with a reach of 1,124'.</p>	<p>Total Gas (units)</p> <p>Methane (ppm)</p> <p>Ethane (ppm)</p> <p>Propane (ppm)</p> <p>Butanes (ppm)</p> <p>Wetness (% Methane)</p>
						<p>Chromatography components calibrated to a minimum of 98.9% repeatability.</p> <p>AIR PACKAGE: 2 combo units 550 psi 1800 cf/m 10-12 bbl/hr H2O + 1 gal soap per 10 bbl H2O</p>

Note: Driller did not take weight until 3071' MD, the depth reported as intermediate T.D.



**COAL:** mostly satiny black intermediate grade (55%), with some bright black vitreous coal (25%), and some dull flat black coal grading to carbonaceous shale (20%), cuttings are sub blocky to sub platy, slightly firm to brittle, smooth to granular texture with some striations, traces of conchoidal fractures on brightest cuttings, cleat development is hard to determine due to very small fragments, expected to be good to fair, gas show increased background gas significantly.

**SHALE:** light gray brown to gray brown with some darker cuttings, sub platy to platy and fissile, soft to slightly firm, smooth to slightly silty texture, weakly calcareous clay matrix with some suspended silt, interbedded with fine grained sandstone and argillaceous siltstone stringers, grades to thin carbonaceous shale stringers.

**COAL:** predominately satiny black intermediate (45%) with common bright black vitreous coal (30%) and some dull flat black coal grading to carbonaceous shale, cuttings are sub blocky to blocky, smooth to slightly granular texture with few striations, fair to good cleat face development with common intersecting cleat faces, some conchoidal fractures on brightest cuttings, few accessory minerals present, traces of micro crystalline pyrite, overall good quality coal.

