

BLANCO

Geological Services LLC

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

Well Name: Volvo 12-02
Location: SW/NW Sec. 2 T32S R66W Las Animas County
Licence Number: 05-071-08205-00 Region: Purgatoire River
Spud Date: 12/10/04 Drilling Completed: 12/17/04
Surface Coordinates: 1884' FNL 827' FWL
37.289185 -104.755997

Bottom Hole Coordinates:

Ground Elevation (ft): 7198' K.B. Elevation (ft): 7202'
Logged Interval (ft): 405' To: 1905' Total Depth (ft): 1905'
Formation: Raton/Vermejo/Trinidad
Type of Drilling Fluid: Air

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Pioneer Natrual Resources, Inc.
Address: 1401 17th Street Suite 1200
Denver CO 80202

GEOLOGIST

Name: Kyle Welty
Company: BLANCO Geological Services LLC
Address: 806 Robinson
Trinidad CO 81020
(719) 846-3364

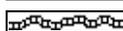
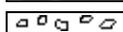
Rig

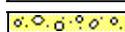
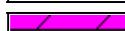
Pense #9

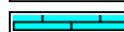
Comments

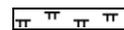
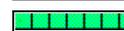
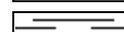
8 5/8" #24 Surface Casing set to 350 ft

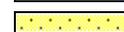
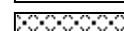
ROCK TYPES

 Anhy
 Bent
 Brec
 Cht

 Clyst
 Coal
 Congl
 Dol

 Gyp
 Igne
 Lmst
 Meta

 Mrlst
 Salt
 Shale
 Shcol

 Shgy
 Sltst
 Ss
 Till

ACCESSORIES

MINERAL

- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Breclfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau

- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff

FOSSIL

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

- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

STRINGER

- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst

- Siltstrg
- Ssstrg

TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY TYPE

- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint

- Vuggy

SORTING

- Well
- Moderate
- Poor

ROUNDING

- Rounded
- Subrnd
- Subang
- Angular

- Spotted
- Ques
- Dead

- Cv-v
- Cv-c

EVENTS

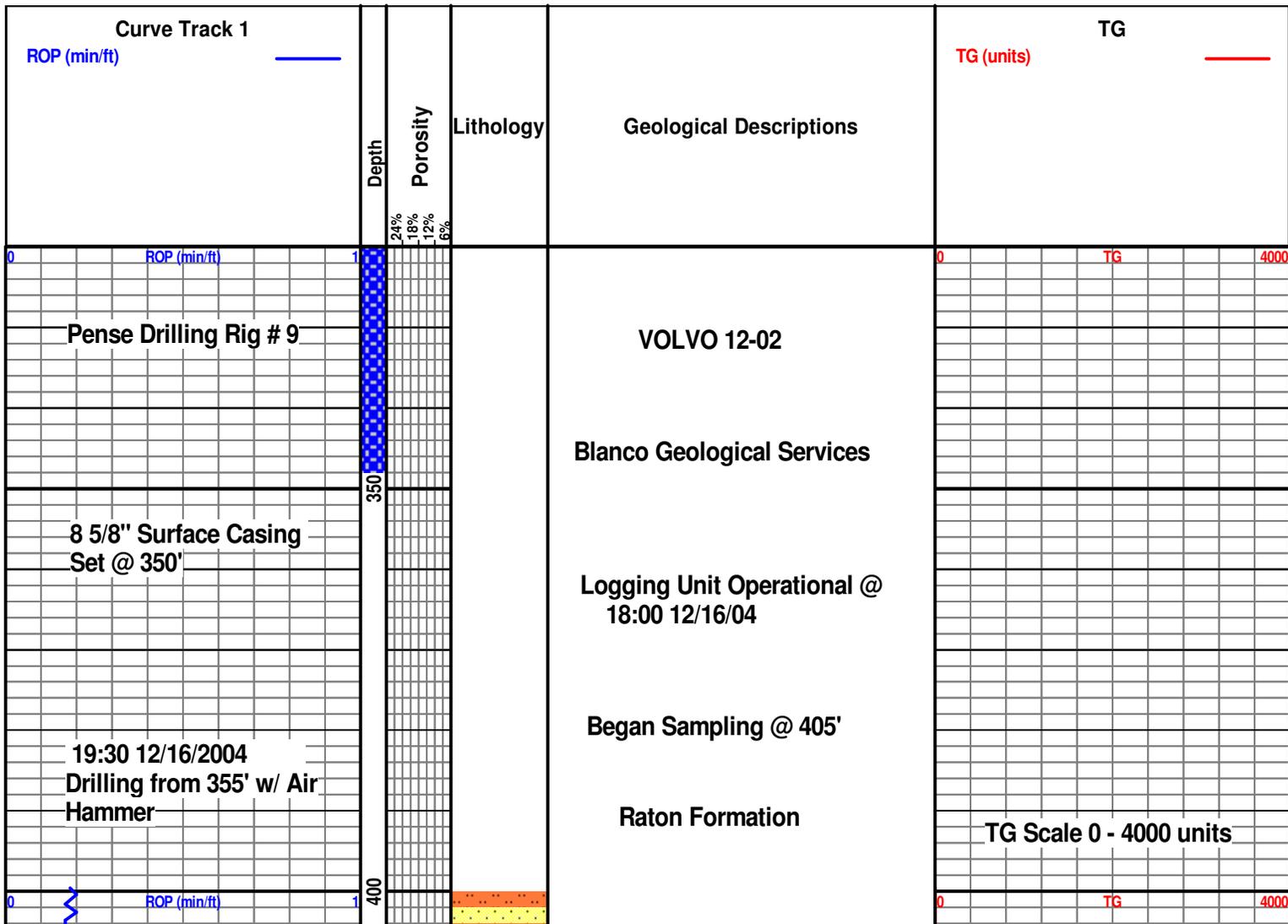
- Rft
- Sidewall
- Srfcsg

OIL SHOWS

- Even

INTERVALS

- Core
- Dst
- Srfcsg



20:00 @ 427'

450

500

550

600

SILTSTONE grey tan, soft, sub platy, smooth, bright w/
SANDSTONE Interbedded

COAL black, vitreous, hard, well cleated, conchoidal fracture

SILTSTONE brown, soft, sub platy, smooth, bright w/
SANDSTONE Interbedded

COAL black, vitreous, hard, well cleated, conchoidal fracture

SANDSTONE grey, fg, sub angular-sub rounded, well
sorted, well consolidated, mod calcareous, ARGILLACEOUS
Matrix

COAL black, vitreous, hard, well cleated, conchoidal fracture

COAL black, vitreous, hard, well cleated, conchoidal
fracture, PYRITE

SANDSTONE grey tan , fg, sub angular-sub rounded, well
sorted, well consolidated, weakly calcareous w/ SHALE
Interbedded

SHALE grey tan, hard, sub platy - sub blocky, gritty,
pearly, sandy

COAL black, vitreous, hard, well cleated, conchoidal
fracture, PYRITE

COAL black, vitreous, hard, well cleated, conchoidal
fracture, PYRITE

ROP (min/ft)

TG

4000

21:00 @ 627'
200'/hr

SHALE grey tan, hard, sub platy - sub blocky, gritty, pearly
w/ SANDSTONE INTERBEDDED

650

COAL black, metallic, hard, not cleated, blocky, MOD
COKED, minor PYRITE

SANDSTONE white grey, fg-mg, sub rounded - rounded,
poorly sorted, unconsolidated, weakly calcareous

CG

700

SHALE grey, firm, sub platy, gritty, pearly, sandy w/
SANDSTONE Interbedded

CG

COAL black, metallic, hard, not cleated, blocky, MOD
COKED, minor PYRITE

SHALE grey, firm, sub platy, gritty, pearly, sandy w/
SANDSTONE Interbedded

CG

750

COAL black, metallic, hard, not cleated, blocky, MOD
COKED, minor PYRITE

COAL black, vitreous, hard, well cleated, conchoidal fracture

SHALE grey tan, firm, sub platy - sub blocky, gritty, waxy,
sandy w/ SANDSTONE Interbedded

CG

COAL black, vitreous, hard, well cleated, conchoidal fracture

ROP (min/ft)

800

SANDSTONE grey, fg, sub angular-sub rounded, well
sorted, well consolidated, weakly calcareous w/ SHALE
Interbedded

TG

4000

COAL black, vitreous, hard, well cleated, conchoidal fracture

CG

COAL black, vitreous, hard, well cleated, conchoidal fracture

SANDSTONE grey, fg, sub angular-sub rounded, well
sorted, well consolidated, weakly calcareous w/ SHALE
Interbedded

CG

22:00 @ 809'
182'/hr

