

RECEIVED

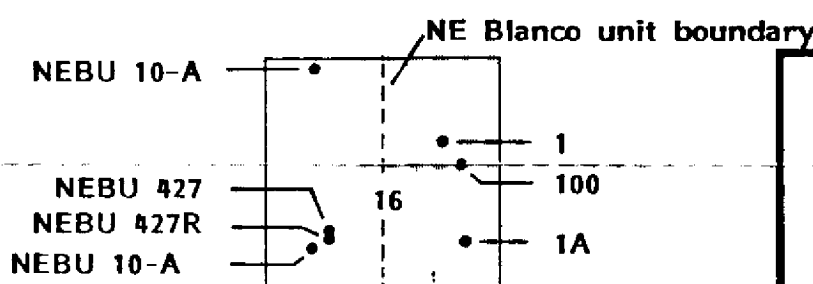
OCT 25 1990

OIL CON. DIV.
DIST. 3HYDROCARBON
WELL LOGBENCH MARK
GEOLOGICAL SERVICESOPERATOR BLACKWOOD AND NICHOLSWELL NE Blanco Unit 427RFIELD Basin Fruitland CoalLOCATION sec 16 T30N R7WCO./STATE Rio Arriba Co., New MexicoELEVATION KB 6258 ft. GL 6244' (ungrd)

SPUD DATE _____

INTERVAL LOGGED 2881 - 3148 ft.DATE LOGGED 7/21 thru 7/22/90LOGGING GEOLOGISTS Randy Laney, Mike MixterINSTRUMENTATION FID Chromatograph and Total Gas Detector, Infrared CO₂ Detector

WELL LOCATION



LEGEND—GAS CURVES

TOTAL GAS	T
METHANE	1
ETHANE	2
PROPANE	3
ISO & N-BUTANE	4
OIL INDICATOR $\frac{C_2 + C_3}{C_1}$	0

HYDROCARBON ANALYSIS

TOTAL GAS			Reported In Units	
10	100	1000	10	100
GAS CHROMATOGRAPHY			Reported In PPM	
100	1000	10000	100	1000
OIL INDICATOR			Dimension Less	
0.01	0.1	1.0	0.01	0.1

ABBREVIATIONS

CO — Circulate Out
CG — Connection Gas
CB — Core Bit
DC — Depth Correction
DS — Directional Survey
DST — Drill Stem Test
DTG — Down Time Gas
FC — Filter Cake
LAT — Logged After Trip
NB — New Bit
NDR — No Data Recorded
NR — No Returns
PP — Pump Pressure
RPM — Rotary Speed
SPM — Pump Strokes
TG — Trip Gas
TGR — Trip Gas Recycle
Vis — Viscosity
WL — Water Loss
WOB — Weight on Bit
WT — Density Of Drill Fluid

LITHOLOGY MODIFIERS

// — Anhydritic
B — Bentonitic
C — Calcareous
C — Carbonaceous Coaly
D — Dolomitic
F — Fossiliferous
G — Glaucconitic
O — Oolitic
P — Pyritic
S — Siliceous

RATE OF PENETRATION

Min./Ft.

STC F2 6 1/4"
3-24's

2.5 5 7.5 10

WOB 10
RPM 100
PP 600circ. out —
TD 3148 ft.

DEPTH

CORE

DS

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

DST

7" casing set at 2881 ft.

100 units Total Gas = 1% methane
10 100 1000 units
100 1000 10,000 ppm

gas detection system down 2890-2916 ft.

total — C₁
CG

total 719 units
C₁ 55,190 ppm
C₂ 425 ppm

total 2,813 units
C₁ 157,900 ppm
C₂ 740 ppm

total 1,250 units
C₁ 73,500 ppm

5 ft. sample interval
Drilling with water
Depth of Coal Intervals
(# of canistered samples)

heavies 100 1000 ppm
CO₂ 1000 10,000 ppm

— carbon dioxide

ONSET OF
FLARED GAS

3026-28

3030-42
(1 can)

3048-51

3067-68

3076-77

3083-84

3097-3105
(1 can)3122-28
(1 can)

3140-41

CO₂ off scale
+20,000 ppmC₂ —