

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
■ — Carbonaceous, Coaly
Δ — Dolomitic
F — Fossiliferous
N — Glaucopititic
O — Oolitic
P — Pyritic
A — Siliceous

BENCH MARK GEOLOGICAL SERVICES

HYDROCARBON WELL LOG RECEIVED

JAN 04 1990

OIL CON. DIV.
DIST. 3

OPERATOR Blackwood and Nichols

WELL NE Blanco Unit 452

FIELD

LOCATION sec 15 T31N R7W

CO/STATE San Juan Co., New Mexico

ELEVATION KB 6553' est GL 6539' ungraded

SPUD DATE

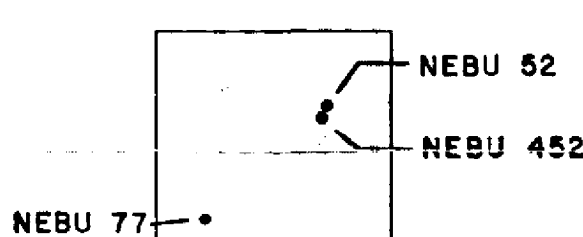
INTERVAL LOGGED 3003' - 3425'

DATE LOGGED 12/17 - 12/18/89

LOGGING GEOLOGISTS Randy Laney, Dan Wyckoff

INSTRUMENTATION 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

RATE OF PENETRATION

Min./Ft.

5 1/4" STC FDT
2-20's, 1 open

2.5 5 7.5 10

WOB BK
RPM 80
PP 700

TD 3425'

inc. WOB to 12 K

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DEPTH

LITHOLOGY OBSERVED

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7" being set at 3003'

5 ft sample interval
Drilling with fresh water

Depth of Cool Intervals
(# of canistered samples)

100 units Total Gas = 1% methane

10 100 1000 units
100 1000 10,000 ppm

heavies 100 1000 ppm
CO₂ 1000 10,000 ppm

Total — C₁

CG

carbon dioxide

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