

FRAC HITE & FRAC MIGRATION LOGS

OBJECTIVE OF LOGS: TO DETERMINE LIMITING INJECTION PRESSURE
SUCH THAT INJECTED FLUIDS REMAIN IN
OBJECTIVE GRAYBURG - SAN ANDRES INTERVAL

1. TURNER "B" NO. 85

TOP OF GRAYBURG: 3035'
TOP PERF. (METEX): 3177'

FROM SCHLUMBERGER FRAC HITE LOG OF OCTOBER 1990:
FRAC GRADIENT @ 3177' = 0.82psi/ft
FRAC PRESSURE @ 3177' = 2605psi
PRESSURE REQUIRED
TO FRAC ABOVE 3160' = $\frac{+1000\text{psi}}{3605\text{psi}}$

AVERAGE WEIGHT OF FLUID COLUMN:
3177' X 0.45psi/ft = 1430psi

THEREFORE, A SURFACE INJECTION PRESSURE GREATER THAN
 $3605\text{psi} - 1430\text{psi} = \underline{2175\text{psi}}$ IS REQUIRED TO FRAC OUT OF
ZONE 20 FEET.

2. TURNER "B" NO. 84

TOP OF GRAYBURG: 2993'
TOP PERF. (LOCO HILLS): 3120'

FROM ATLAS WIRELINE SERVICES LOG OF MARCH 1991:
FRAC GRADIENT @ 3120' = 0.70psi/ft
FRAC PRESSURE @ 3120' = 2184psi
PRESSURE REQUIRED
TO FRAC ABOVE 3040' = $\frac{+1400\text{psi}}{3584\text{psi}}$

AVERAGE WEIGHT OF FLUID COLUMN:
3120' X 0.45psi/ft = 1404psi

THEREFORE, A SURFACE INJECTION PRESSURE GREATER THAN
 $3584\text{psi} - 1404\text{psi} = \underline{2180\text{psi}}$ IS REQUIRED TO FRAC OUT OF
ZONE 75 FEET.

BEFORE EXAMINER CATANACH	
OIL CONSERVATION DIVISION	
<i>Avon</i>	EXHIBIT NO. <u>5</u>
CASE NO. <u>10290</u>	

Schlumberger

COMPUTER
PROCESSED
INTERPRETATION

Frachite*

Using the following logs:

CNL LDT DLL MSFL EPT BHC GR

Company: AVON ENERGY

Well: TURNER "B" #85

Field: GRAYBURG JACKSON

County: EDDY

State: NEW MEXICO

Date Logged: 19-OCT-1990

Date Processed: 22-OCT

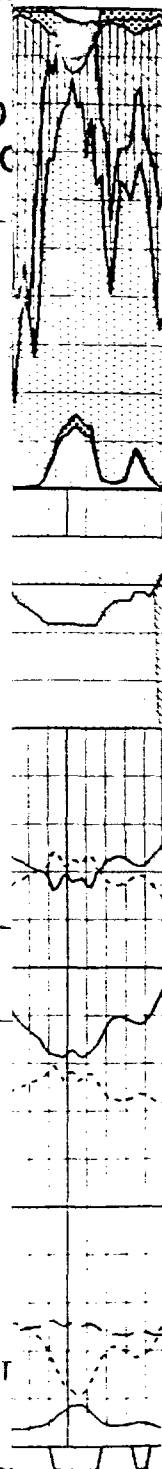
Location: 1305 FNL & 1335 FEL SEC 29 T17S R31E

Elevations: KB: 3751.00 DF: 3750

GL: 3

API no 30-015-26386

A Mark of Schlumberger





**ATLAS
WIRELINE
SERVICES**

WIDS

Well Data System

FRAC MIGRATION

COMPANY AVON ENERGY CORPORATION

WELL TURNER B NO. 84

FIELD GRAYBURG JACKSON

COUNTY EDDY STATE NEW MEXICO

LOCATION 1305 FNL & 2525 FEL

SEC 29 TWP 17-5 RGE 31-E

ELEVATION: KB 3737 DF 3736 GL 3726

DATE 3-21-1991 ECC 889

In making interpretations of logs our employees will give Customer the benefit of their best judgement, but since all interpretations are opinions based on inferences from electrical or other measurements, we cannot and do not guarantee the accuracy of the correctness of any interpretation. We shall not be liable or responsible for any loss, cost, damages, or expenses whatsoever incurred or sustained by the Customer resulting from any interpretation made by any of our employees.

Parameters