



Ray Westall Operating, Inc.

Independent Oil Producer  
Post Office Box 4  
Loco Hills, New Mexico 88255  
PH. 505-677-2370 • FAX 505-677-2361

March 1, 2005

Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

Re: SWD -964  
State G #1  
Ray Westall-Operator

Gentlemen:

Swab test of the Canyon formation through perforations 8730-9220' shows constant fluid level at 7300' from surface, water analysis attached.

Reservoir Pressure:

$$\begin{aligned} 1.051 \text{ SG} &= 0.458 \text{ \#/ft} \\ 0.458 \times 7300' &= 655\# \text{ hydrostatic pressure} \\ (8730 - 7300) \times 1.05 \times 1.433 &= \end{aligned}$$

See TOP PERF

Randall Harris  
Geologist



# Water Analysis

Date: 2/24/2005

2401 Sivley, Artesia NM 88210

Phone (505) 746-3140 Fax (505) 746-2293

## Analyzed For

Company	Well Name	County	State
Westall	State G#1	Eddy	New Mexico

## Sample Source

Sample #

1

## Formation

Canyon

## Depth

Specific Gravity

1.050

SG @ 60 °F

1.051

pH

8.30

Sulfides

Not Tested

Temperature (°F)

65

Reducing Agents

Not Tested

## Cations

Sodium (Calc)

In Mg/L

9,518

In PPM

9,056

Calcium

in Mg/L

5,600

in PPM

5,328

Magnesium

in Mg/L

240

in PPM

228

Soluble Iron (FE2)

in Mg/L

300.0

in PPM

285

## Anions

Chlorides

In Mg/L

24,000

In PPM

22,835

Sulfates

in Mg/L

2,000

in PPM

1,903

Bicarbonates

in Mg/L

185

in PPM

176

Total Hardness (as CaCO3)

in Mg/L

15,000

in PPM

14,272

Total Dissolved Solids (Calc)

in Mg/L

41,844

in PPM

39,813

Equivalent NaCl Concentration

in Mg/L

38,410

in PPM

36,546

## Scaling Tendencies

\*Calcium Carbonate Index

1,038,464

Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

\*Calcium Sulfate (Gyp) Index

11,200,000

Below 500,000 Remote / 500,000 - 10,000,000 Possible / Above 10,000,000 Probable

\*This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.

## Remarks

FAX 677-2361

Report #

1732