# TENNECO OIL COMPANY PROGNOSIS TO DRILL AND COMPLETE

Lease: USA-Jennings IM 033503

Well No.:3

District: Hobbs

Field: Double X Delaware

Location: 990' Ful & 1650' Fal Sec. 14, T-24-3, R-32-E, Lee County, New Mexico

Projected Horizon: Delaware Sand

Estimated TD: 5100

Estimated Elevation: 3600' GL

## Drilling, Casing & Cement:

1. Drill 12-1/4" hole to approx. 350'.

2. Cement 6-5/8", 21#, J-55 csg w/insert float collar at approx. 350' w/sufficient volume to circulate. Use Incor High Early Portland cmt containing 2% HA-5. Slurry wt will be 14.85#/gal. Pumping time is 1 hr 12 min.

#### Record the following data:

A. Volume of cmt clurry (cubic feet).

- B. Brand name of cmt and additives, percent additives used, and sequence of placement if more than one type cmt slurry is used.
- C. Approx. temperature of cmt slurry when mixed.
- D. Actual time cmt in place prior to starting csg test.
- 3. If float valve holds, release pressure after WOC 4 hrs and nipple up.
- 4. WOC a total of 8 hrs, pressure test csg w/1000 psi for 30 min and drill out cmt.

NOTE: When drilling out cement the weight on the bit should not exceed 20,000# and the rotary speed should not exceed 60 RPM until the top of the D.C. are below the base of the casing.

- 5. Drill 7-7/8" hole to Delaware Sand core point. Approximate core depth <u>Low</u>. Exact core depth will be determined by company exploitation engineer.
- 6. Core from top of Delaware Sand to TD (approx 150') with a 7-13/16 X 4-3/8 diamond core head. Run junk basket on last two trips prior to coring point.
- 7. Set 7. J-55 at TD w/150 sx of 50-50 pozmix "S" w/2% gel (Slurry weight should be 15#/gal) and 50 sx reg cmt containing latex. (Slurry wt should be 14.5#/gal).

#### NOTE:

- A. Prior to running csg, treat mud system w/2 sx of Sodium Bichromate.
- B. Precede cmt w/20 bbls of lime wtr.

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# Prognosis To Drill WA-Jennings WW 031503 Well #3 Page 2

- 8. If float valve holds, release rig when top plug is down.
- 9. WOC 8 hrs and run temperature survey.
- 10. RUDDU, run tbg, displace wtr w/oil and pressure test csg w/1500 psi for 30 min after WOC a minimum of 18 hrs.
- 11. Completion program to be determined at TD.

### Drilling Mud:

- 1. Drill w/fresh wtr and native mud to approximate coring depth. Prior to coring, the mud should have the following properties:
  - A. Type: Salt Gel.
  - B. Viscosity: 35-40 sec/qt.
  - C. Water Loss: 10 cc or less
  - D. Filter Cake: 2/32 or less.

NOTE: Do not suspend drilling operations to mix mid.

### Drilling Time:

- 1. Record 1' drilling time from surface to TD w/a geolograph or equivalent recorder.
- 2. Driller will record 5' drilling time from 4750 to coring point or as specified by company exploitation engineer.

#### Drill Pipe Measurement:

- 1. Tally drill pipe on last trip prior to reaching coring point.
- 2. Tally drill pipe under company supervision at all casing points, coring points, and at TD.

#### Samples:

- 1. Catch one set of 10' samples from 4750 to TD unless otherwise specified by company exploitation engineer.
- 2. Catch circulating samples as specified by company exploitation engineer.
- 3. All samples will be washed, sacked, labeled, and tied in bundles of 100.

### Hole Deviation:

- 1. Run slope test every 100' on surface hole.
- 2. Run slope test on each trip for bit or every 500', whichever occurs sooner.
- 3. If hole deviation changes more than 1-1/2 degrees in any 100' interval, a string reamer will be run to wipe out dog leg.
- 4. If hole deviation changes more than 2 degrees in any 100' interval, the hole shall be plugged back and straightened out.
- 5. Maximum allowable hole deviation is shown on the following page.

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## Prognosis to Drill 1844 Inches By 033501 Well No. 3 Page 3

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Depth	Deviation
0 - 1000	1 degree
1000 - 2000	2 degrees
2000 - 3000	3 degrees
3000 - 4000	4 degr <b>e</b> es
4000 - TD	5 degrees

# Surveys:

- 1. Run GR-Sonic Log from base of surface csg to TD w/detailed section as required.
- 2. Run Laterolog through detailed section.
- 3. Run temperature survey in production csg after WOC 8 hrs. 4. Run Gemma-Ray log w/collar locator through pay section for perforating control.

## Completion:

To be determined at TD.

ORIGINAL SIGNED BY:  C. W. NANCE  C. W. Nance	