New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson

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Administrative Order IPI-380 October 12, 2010

Resaca Operating Company 2600 W Interstate 20 Odessa, TX 79763

Attention: Mr. Keith B. Masters (Agent)

RE: <u>Injection Pressure Increase Request</u> R-4019, R-4020, WFX-648, WFX-657, and WFX-671 Langlie-Mattix and Jalmat Pools Lea County, New Mexico

Reference is made to your request on behalf of Resaca Operating Company (OGRID 263848) received by the Division September 29, 2010, to increase the surface injection pressure limit on Eight (8) injection wells.

The original permitted maximum pressure on these wells was governed by Division Order No. R-4019 and R-4020 issued in Case No. 4403 and Case No. 4404 on August 25, 1970. The two orders permitted twenty three (23) injection wells in the Cooper-Jal Unit Area.

Administrative Orders WFX-648, WFX-657, and WFX-671 granted authority to inject at surface pressures greater than 650 psi into the wells.

It is our understanding the wells in need additional surface injection pressure to balance injection and withdrawal rates in order to optimize waterflood operations. The basis for granting these pressure increases are the eight step rate tests run by Resaca in 2010.

Resaca Operating Company is hereby authorized to utilize the equivalent of 0.40 psi per foot as the maximum surface injection pressure on the wells shown below, provided the tubing, size,

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| API | Well <u>#</u> | Unit | S-T-R | Top Inj Interval | Tubing | Pressure |
|--------------|---------------|------|------------|---------------------|--------|----------|
| 30-025-09638 | 122 | L | 24-24S-36E | 3020 | 2.375 | 880 |
| 30-025-09636 | 126 | G | 24-24S-36E | 3021 | 2.375 | 880 |
| 30-025-09639 | 132 | Ι | 24-24S-36E | 3024 | 2.375 | 675 |
| 30-025-09641 | 135 | 0 | 24-24S-36E | 3019 | 2.375 | 830 |
| 30-025-25682 | 151 | A | 24-24S-36E | 3296 | 2.375 | 870 |
| 30-025-09620 | 205 | G | 24-24S-36E | 2988 | 2.375 | 820 |
| 30-025-09787 | 211 | K | 24-24S-36E | 3001 | 2.375 | 800 |
| 30-025-11162 | 220 | M | 19-24S-37E | 2986 | 2.375 | 730 |

type, setting depths and perforation depths do not change, but is prohibited from injecting at pressures that would induce fracturing in individual wells.

This approval is subject to your being in compliance with all other Division rules, including but not limited to Division Rule 5.9.

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected fluid is not being confined to the injection zone or is endangering any fresh water aquifers, or is causing waste of oil and gas.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Sincerely,

1 Mark E. Fesmire, P.E

Mark E. Festaire, P.E Acting Director

MEF/tw

cc: Oil Conservation Division - Hobbs File: R-4019 & R-4020