PKRV023094881O AMEND SWD-838 11/20/02 NSA

Duke Energy Corporation
5400 Westheimer Court
P.O. Box 1642
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Duke Energy

Mr. Russell E. Bentley
Duke Energy
5400 Westheimer Court, WP-1225
Houston, TX 77056-5310

November 1, 2002

NOV - 5 2002

Mr. William V. Jones, Hearing Examiner
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
1220 South St. Francis Drive
Santa Fe, NM 87505

(30-015-32324)

Dear Mr. Jones,

Duke Energy Field Services (DEFS) has recently finished the drilling phase of its Duke AGI #1 located at 1232 feet from the South line and 1927 feet from the East line (Unit O) of Section 7, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico. The well reached at total depth of 11, 520 feet, and by NMOCD Administrative Order SWD-838 dated 29-May-2002, DEFS has been authorized to inject an Acid-Gas solution into the Devonian formation. We estimate the top of the Devonian formation from well logs at approximately 11, 190 feet.

The completion phase of the operation will come in two stages – with the first stage being to run a Cement Bond Log, then perforate and test the Devonian formation for suitable injection rates. Assuming the Devonian tests successfully, we will temporarily plug the well and come back in a couple of months (estimated at January, 2003) to run tubing and a specially fabricated downhole choke (if necessary), sour service packer components, and a specially fabricated Emergency Shut-in Valve (ESV). Once all these components are in place, the well will be ready for Acid Gas injection.

In the meantime though, I would like to request that you amend our Injection Order to address two points that have been the subject of much internal engineering and metallurgical discussion:

- The consensus opinion is that instead of running 2 7/8" plastic lined pipe as currently stated in the Order, we would prefer to run 2 7/8" L80 tubing with premium couplings. According to our metallurgist, the plastic (or epoxy) liner will still be permeated by the H2S/CO2, and there is a concern that over time, some flaking of the resins and/or complete separation of the liner from the tubing could occur. This could lead to plugging of our tubing and/or contamination of our perforations. Additionally, it would probably necessitate an early workover of the well to pull the tubing. We feel that it is a much safer scenario to run the

L80 tubing (which is certified for sour service), and then design the tubing string with premium couplings to insure no leaks. As was the case before, DEFS will monitor the pressure between the tubing and the casing to insure no tubing leaks.

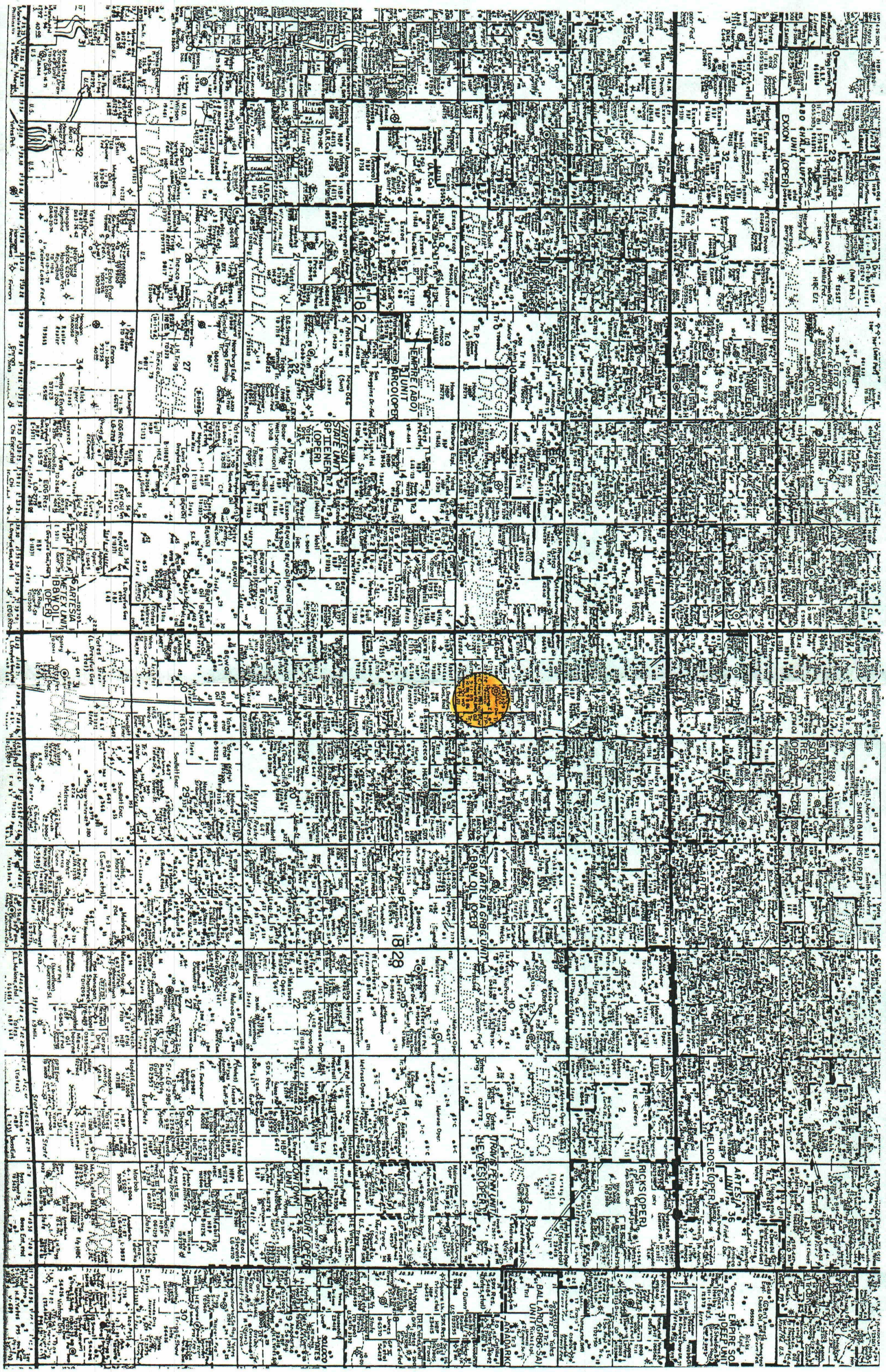
- The second point regards the text in the Order that addresses our Packer fluid. The Order states "The casing-tubing annulus shall be loaded with an inert corrosion inhibited fluid...". However, it would be more advantageous from a chemical engineering standpoint to have diesel fluid behind the tubing in case there ever *was* a leak of H2S/CO2. A leak into a water based fluid would form carbonic acid and would be extremely corrosive. Having diesel as a packer fluid would eliminate this possibility.

Thank you for your cooperation in this matter. Please let me know whether you see any problems with amending our Order with regard to these two matters.

Sincerely,

Russell E. Bentley
Principal Petroleum Engineer
Duke Energy

cc: Mr. Paul Owen, Esq.
Mr. Richard L. Griffith, Esq.
Mr. Steve Miller
Ms. Suzie Boyd
Mr. Robert B. Wheeler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