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Case 15307

OUR FILE NO.

4661-A26

February 16, 2015

## VIA CERTIFIED MAIL & EMAIL

Mr. David Catanach Director of the Oil Conservation 1220 Saint Frances Drive Santa Fe, NM 87505

Re: Protest of Drill at New Salt Water Disposal; Cooper 17 Well #1

Dear Mr. Catanach:

I am writing on behalf of my client Randy Briggs and in regard to the captioned matter. Specifically, my client is providing this notice of protest in response to Oasis Water Solutions, LLC's public notice of the application to the NMOCD to drill and complete a salt water disposal well (Cooper 17 well #1) for the following reasons;

- You should be advised that protest notice was not published in the Hobbs newspaper which is the appropriate newspaper for where the subject well was located.
- 2. A form was submitted by Horizon Oil and Gas and reports original drilling, casing, and cementing operations. It indicates 13 3/8 inch surface casing set at 250 feet, cemented to surface. It also indicates 8 5/8 inch casing set at 1215 feet also with cemented circulated to surface. Please see the Oil Conservation Division report dated July 9, 1987 attached hereto as Exhibit 1.
- 3. A form submitted by Horizon Oil and Gas reports five and a half (5 ½) inch casing run to a TF of 6539 feet and cemented with 820 sacks of cement. Of important note is that this cement job was evidently done in one operation without the use of a DV tool. There is no report of circulation, no report of waiting on cement to cure, and no note of verification of the cement top by bond log or temperature survey. Please see the Oil Conservation Division report dated August 13, 1987 attached hereto as Exhibit 2.
- 4. Attached hereto as Exhibit 3 is a portion of the original drilling report in which formation tops were noted.

- 5. A form submitted by Smith & Marrs, Inc. details the steps taken to convert this well from a producing well to a salt water disposal well. The top and bottom perforations of the disposal zone that was permitted for disposal the lower San Andres. This well was put into SWD service in February 2006. Please see Oil Conservation Division Report dated February 20, 2006 attached hereto as Exhibit 4.
- 6. On or about July 1, 2014 subsequent to the well being transferred to Jay Cooper enterprises, notice was given to the NMOCD that a pressurized water flow had been discovered at the surface and the well had been shut in and the disposal activities had been halted. Please see Oil Conservation Division Reported dated July 1, 2014 attached hereto as Exhibit 5.
- 7. A form dated October 1, 2014 was submitted to NMOCD on October 1, 2014 to report remedial work done to the well during the months of July 2014 and August 2014. Please see Oil Conservation Division Reported dated October 1, 2014 attached hereto as Exhibit 6.
- 8. On or about July 2014, there was work done on the well to attempt down hole repairs. On July 7, 2014, twelve (12) joints of three and a half (3 ½) inch injection tubing were being pulled and laid down. Three (3) of those joints had holes due to corrosion. On July 8, 2014 thirty-five (35) more joints were pulled and laid down that had holes and one hundred seven (107) were pulled and laid down that did not have holes. On July 11, 2014 a retrievable bridge plug was ran to 4.253 feet and set in the five and a half (5 ½) inch casing. A packer was then set just above the bridge plug and there was an unsuccessful attempt to pressure test the bridge plug. The bridge plug was subsequently moved of 4.237 feet and reset. Again I a successful pressure test could not be achieved on the bridge plug. During the day, the plug was moved a total of nine (9) times and tested, all testing events resulting in failed pressure test. The bridge plug was then ran back down a hall to 4,188 feet and reset in the five and a half (5 ½) casing. Fourteen (14) subsequent pressure tests with the packer set at depths ranging from 1,159 feet to 3,517 feet resulted in failed tests. On July 14, 2014 the compression type packer was pulled and a tension tight packer was ran. The casing was subsequently located above the packer set at 1,159 feet successfully. Please see the daily log attached hereto as Exhibit 7.
- 9. There is no record of the bridge plug that had been set at 4,188 feet ever having been pulled. However, on this day a cast iron bridge plug was ran and set on a wire line at 4,300 feet in the five and a half (5 ½) casing. Also on this date a gamma ray log was pulled to 3,200 feet. It is not reported from what

- depth the log was pulled. If the log was run to discern TCO no TCO was subsequently reported.
- 10. On July 18, 2014 it was reported that the casing was squeezed with twenty (20) BBLS water glass and seven hundred (700) sacks cement. The method used to squeeze was not reported.
- 11. On July 21, 2014 a drill bit was run and cement was tagged at 1325 feet. However, the hole could not be circulated for drilling.
- 12. On July 22, 2014 the well was squeezed with twenty (20) BBLS water glass and 200 sacks cement. This was accomplished by displacement down casing ahead of rubber wiper plug.
- 13. On August 8, 2014 a cement retainer was run to 1105 feet and set.
- 14. On August 19, 2014 one hundred fifty (150) sacks cement were pumped through the retainer at 1105 feet and no pump pressures were reported.
- 15. Exhibit 8 is a graphic of assumed current well conditions.

For the forgoing reasons my client objects for the permitting of the Cooper 17 well #1 because of the proximity and condition of the T. Anderson #1 as described above. During the course of all work done to the Anderson #1, no successful easing test was ever accomplished when the test was performed below the packer. The only successful test above the packer were reported so only the upper extent of bag casing is known. Also, the CIPB set at set of 4300 was not tested and there is no verification whatsoever that the plug is holding properly. There is also no report of the CIBP being capped with the cement as it is common practice in the industry. Because the casing is obviously open to the salt and the salt is well known in this area to be both wet and mobile there is no reason to believe that any squeeze resulted in this cement staying behind the five and a half (5 ½) inch production string as would be required to prevent brine flow from the salt section. No cement squeeze pressure were reported. My client feels that there is reasonable expectation that flow could be passing the untested CIBP set above San Andres, potentially resulting in cross flow to higher productions zones. It is logical that the gamma log that was ran was to identify TOC; however, no TOC was reported. Considering that earlier reports suggested this well was cemented from 6,539 feet in one stage without the use of a multi stage cementing tool and considering the greater extent of five and a half (5 ½) inch easing that would not, it would be very reasonable to predict a very poor TOC. Along further injection in this area would only increase the likelihood of cross flow and damage to valuable producing formations in the vicinity as well as damage to the casing and surrounding wells. For the aforementioned reasons, my client

provides this notice in protest and believes that the Cooper 17 well #1 should not be permitted.

Should you need any further information or supporting documentation, please do not hesitate to contact my office. I look forward to hearing from you with regard to this matter.

Very truly yours,

MICHAEL DANOFF & ASSOCIATES, P.C.

Michael L. Danoff

MLD/aal Enclosures

cc: Phillips Goetze

Oasis Water Solutions, LLC

Dr. Randy Briggs