| The second secon | State of New Mexico   | Form C-103   |  |  |  |  |
|--|---|--|--|--|--|--|
| Office <u>District I</u> – (575) 393-6161 <b>HOBBS</b> (1625 N. French Dr., Hobbs, NM 88240  | Revised July 18, 2013 WELL API NO. 30-025-28224   |  |  |  |  |  |
| D' . I . W (FEE) E40 4000  |   |  |  |  |  |  |
| <u>District III</u> – (505) 334-6178   | QIL CONSERVATION DIVISION<br>1220 South St. Francis Dr.                                     | 5. Indicate Type of Lease                                  |  |  |  |  |
| 1000 Rio Brazos Rd., Aztec, NM 87410<br><u>District IV</u> – (505) 476-3460<br>1220 S. St. Francis Dr., Santa Fe, NM   | 6. State Oil & Gas Lease No.  |  |  |  |  |  |
| 87505<br>SUNDRY NOTICES  | AND REPORTS ON WELLS  | 7. Lease Name or Unit Agreement Name                       |  |  |  |  |
| (DO NOT USE THIS FORM FOR PROPOSALS OF DIFFERENT RESERVOIR. USE "APPLICATION PROPOSALS.)   | TO DRILL OR TO DEEPEN OR PLUG BACK TO A<br>N FOR PERMIT" (FORM C-101) FOR SUCH              | PEARL STATE  |  |  |  |  |
| 1. Type of Well: Oil Well Gas  | 8. Well Number 2  |  |  |  |  |  |
| Name of Operator     OASIS WATER SO  | 9. OGRID Number 310761  |  |  |  |  |  |
| 3. Address of Operator   | - A. A. A.  | 10. Pool name or Wildcat                                   |  |  |  |  |
| PO BOX 36, MONUMENT, NM 88265  |   | WOLFCAMP   |  |  |  |  |
| 4. Well Location   |   |  |  |  |  |  |
| Unit Letter J : 1,980  | feet from the SOUTH line and  | 1,980feet from theEASTline 1                               |  |  |  |  |
| Section 10   | Township 19 S Range 35 E  | NMPM LEA County  |  |  |  |  |
|  | Elevation (Show whether DR, RKB, RT, GR, etc. 3.830 RKB                                     | 2.)  |  |  |  |  |
| The state of the s | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   |  |  |  |  |  |
| 12. Check Appro  | priate Box to Indicate Nature of Notice   | , Report or Other Data                                     |  |  |  |  |
|  |   |  |  |  |  |  |
| NOTICE OF INTEN  |   | BSEQUENT REPORT OF:  |  |  |  |  |
|  | JG AND ABANDON ☐ REMEDIAL WO<br>ANGE PLANS ☐ COMMENCE DE                                    | RK ☐ ALTERING CASING ☐ RILLING OPNS.☐ P AND A ☐            |  |  |  |  |
|  | LTIPLE COMPL CASING/CEME  |  |  |  |  |  |
| DOWNHOLE COMMINGLE   | S. S  |  |  |  |  |  |
| CLOSED-LOOP SYSTEM   |   |  |  |  |  |  |
| OTHER: PERFORM BH / MIT & STEP RA  |   |  |  |  |  |  |
|  |   | nd give pertinent dates, including estimated date          |  |  |  |  |
| of starting any proposed work). Sproposed completion or recomple   | SEE RULE 19.15.7.14 NMAC. For Multiple Co   | ompletions: Attach wellbore diagram of                     |  |  |  |  |
| proposed completion of recomple  | tion.   |  |  |  |  |  |
| PLEASE SEE THE ATTACHED PROC   | CEDURE DESCRIPTION.   |  |  |  |  |  |
|  |   |  |  |  |  |  |
|  | 5501/1  |  |  |  |  |  |
|  | PROVI   | DE S.R.T. RESULTS  |  |  |  |  |
|  |   |  |  |  |  |  |
|  |   | ANTA FE OCD FOR  |  |  |  |  |
|  |   |  |  |  |  |  |
|  |   | ANTA FE OCD FOR  |  |  |  |  |
|  |   | ANTA FE OCD FOR  |  |  |  |  |
|  |   | ANTA FE OCD FOR  |  |  |  |  |
| Spud Date:   |   | ANTA FE OCD FOR  |  |  |  |  |
| Spud Date:   | TO SA   | ANTA FE OCD FOR  |  |  |  |  |
|  | Rig Release Date:   | ANTA FE OCD FOR APPROVAL                                   |  |  |  |  |
|  | TO SA   | ANTA FE OCD FOR APPROVAL                                   |  |  |  |  |
|  | Rig Release Date:   | ANTA FE OCD FOR APPROVAL                                   |  |  |  |  |
| I hereby certify that the information above  | Rig Release Date:   | ANTA FE OCD FOR APPROVAL  ge and belief.                   |  |  |  |  |
|  | Rig Release Date:   | ANTA FE OCD FOR APPROVAL  ge and belief.                   |  |  |  |  |
| I hereby certify that the information above  | Rig Release Date:  is true and complete to the best of my knowled  TITLE CONSULTING ENGINEE | ANTA FE OCD FOR APPROVAL  ge and belief.                   |  |  |  |  |
| I hereby certify that the information above  | Rig Release Date:  is true and complete to the best of my knowled  TITLE CONSULTING ENGINEE | ANTA FE OCD FOR APPROVAL  ge and belief.  ER DATE 11/29/16 |  |  |  |  |
| I hereby certify that the information above SIGNATURE  Type or print name  MICHAEL STEWART  For State Use Only   | Rig Release Date:  is true and complete to the best of my knowled  TITLE CONSULTING ENGINEE | ANTA FE OCD FOR APPROVAL  ge and belief.  ER DATE 11/29/16 |  |  |  |  |
| I hereby certify that the information above SIGNATURE  Type or print name  MICHAEL STEWART   | Rig Release Date:  is true and complete to the best of my knowled  TITLE CONSULTING ENGINEE | ANTA FE OCD FOR APPROVAL  ge and belief.  ER DATE 11/29/16 |  |  |  |  |

Oasis Water Solutions, LLC
OGRID No 310761
Pearl State #2 API No 30-025-28224
Unit Letter J, Section 10, T19S, R35E
Lea Co., NM
Attachment to Form C-103
Notice of Intent to Perform Bradenhead / MIT and Step-Rate Injection Test

## **Proposed Procedure**

- Provide District I NMOCD Office w/ 72 hr notice prior to MIRU (575) 393-6161
- 2. SI well for a minimum of 48 hrs to stabilize SITP.
- 3. MIRU pump truck on 5-1/2" x 3-1/2" annulus w/ chart recorder.
- 4. Load 5-1/2" x 3-1/2" annulus and pressure up to 525 psi. Close valve to PT and record pressure tbg-csg annulus pressure for minimum of 30 mins on chart w/ appropriate pressure range (0-1,000 psi) and hourly chart.
- 5. ND tbg valve and WH.
- 6. Install 3-1/2", 5000# valve on WH tbg flange w/ appropriate XO nipple, tees and side valves to allow for wireline lubrication to be installed on top of tbg valve.
- 7. RU Wireline & install 5k lubricator on top of tbg WH valve
- 8. RIH w/ BHP gauge to ± 10,450' (Pkr @ 10,415', Top Perf @ 10,490')
- RU pump truck sufficient to pump at rates from 4/10 BPM to 10 BPM at a maximum WH injection pressure of 4,000 psi.
- Connect PT to 500 bbl frac tank on location that is full of produced water and connected to tanks at SWD facility w/ transfer pump to keep 500 bbl frac tank full while pumping step rate test.
- 11. Begin step rate test and pump at following rates and step intervals:

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| Oasis Water Solutions       |        |  |        |         |  |                |       |        |        |        |      |
|-----------------------------|--------|--|--------|---------|--|----------------|-------|--------|--------|--------|------|
| Pearl State #2 SWD          |        |  |        |         |  |                |       |        |        |        |      |
| Step Rate Test              |        |  |        |         |  |                |       |        |        |        |      |
| Input Paramenters           |        |  |        |         |  |                |       |        |        |        |      |
| Max Daily Proposed Inj Rate | 12,000 | BFPD                                   |        |         |  |                |       |        |        |        |      |
|                             | Тор    |  | Bottom |         |  |                |       |        |        |        |      |
| Permitted Inj Interval      | 10,430 |  | 10,800 |         |  |                |       |        |        |        |      |
| Actual Injection Interval   | 10,490 | ft                                     | 10,555 | ft      |  |                |       |        |        |        |      |
| Min Frac Gradient (psi/ft)  | 0.20   | psi/ft                                 |        |         |  |                |       |        |        |        |      |
| Max Permitted Inj Pressure  | 2,086  | psi                                    |        |         |  |                |       |        |        |        | 1    |
| Injection Fluid Density     |        | 9.20                                   | ppg    | assumed | needs to b   | e weighed      |       |        |        |        |      |
|                             |        | Туре                                   |        | ID (in) | Hazen<br>Williams<br>Friction<br>Cf  | Burst<br>(psi) |       |        |        |        |      |
| Injection Via               |        | 3-1/2", 9.3 ppf, L-80<br>APGRN IPC Tbg |        | 2.837   | 150  | 10,160         |       |        |        |        |      |
| Packer Depth ft             |        | 10,415                                 |        |         |  |                |       |        |        |        |      |
|                             |        | Stage No.                              |        |         |  |                |       |        |        |        |      |
| Proposed Step Rate          |        | 1                                      | 2      | 3       | 4  | 5              | 6     | 7      | 8      |        |      |
| Inj Rate                    | BPM    | 0.42                                   | 0.83   | 1.67    | 3.33   | 5.00           | 6.67  | 8.33   | 10.00  |        |      |
| % of Max Proposed Inj Rate  | %      | 5.0%                                   | 10.0%  | 20.0%   | 40.0%  | 60.0%          | 80.0% | 100.0% | 120.0% |        |      |
|                             | BPD    | 600                                    | 1,200  | 2,400   | 4,800  | 7,200          | 9,600 | 12,000 | 14,400 |        |      |
|                             |        |  |        |         | A DESCRIPTION OF THE PERSON OF |                |       |        |        | Totals |      |
| Step Duration               |        | 30                                     | 30     |         | 30   | 30             | 30    | 30     | 30     | 240.0  | 4 hr |
| Required Volume             |        | 12.5                                   | 25.0   |         | 100.0  | 150.0          | 200.0 | 250.0  | 300.0  | 1087.5 |      |
| Cum Volume Req              | Bbls   | 12.5                                   | 37.5   | 87.5    | 187.5  | 337.5          | 537.5 | 787.5  | 1087.5 |        |      |

Each step will be 30 minutes in duration.

Utilize mud scale to measure injected fluid weight (ppg) at various intervals during step rate test.

Pmax will be 4,000 psi

Full test will require ± 1,087 bbls of fluid and will require 4 hr pump time.

Record surface WH injection pressure and DH injection pressures over entire step rate test.

- 12. SD and record ISIP, 5" SITP, 10" SITP & 15" SITP
- 13. RD PT
- 14. RD Wireline
- 15. Flowback well to 500 bbl frac tank to allow pressure to bleed off and ND 3-1/2" 5k rental tbg valve and reinstall 3-1/2", 3k tbg valve
- 16. Submit Form C-103 with Step Rate Test and associated plots to Santa Fe office for approval.