

District I – (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II – (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III – (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV – (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-045-35747
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other Wastewater Disposal Well		5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
2. Name of Operator Western Refining Southwest, Inc.		6. State Oil & Gas Lease No.
3. Address of Operator 50 County Road 4990 (PO Box 159) Bloomfield, NM 87413		7. Lease Name or Unit Agreement Name
4. Well Location Unit Letter <u>H</u> : <u>2028</u> feet from the <u>North</u> line and <u>East</u> feet from the _____ line Section <u>27</u> Township <u>29N</u> Range <u>11W</u> NMPM San Juan County		8. Well Number: WDW #2
11. Elevation (Show whether DR, RKB, RT, GR, etc.)		9. OGRID Number 267595
10. Pool name or Wildcat Entrada		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
CLOSED-LOOP SYSTEM <input type="checkbox"/>			
OTHER: Fall Off Test <input checked="" type="checkbox"/>		OTHER: <input type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Pursuant to the Bloomfield Terminal Injection Well Discharge Permit (UICI-011), Western Refining Southwest, Inc. ("Western") is scheduled to perform a Fall-Off Test (FOT) on WDW #2. The fall-off test will consist of three phases:

- Phase 1: Build-Up
- Phase 2: Pressure Fall-Off Monitoring
- Phase 3: Post Monitoring Operations

**Phase 1: Build-Up**

The Build-Up Phase involves the injection of the Terminal's treated wastewaters into the well for 72 hours or until the injection pressure reaches the high-pressure set-point of 1,400 psi, whichever occurs first. A stabilized injection rate will be established using the dedicated injection well pump. Due to the limited time the injection well can operate before reaching the high-pressure set-point of 1,400 psi, tandem memory gauges will first be installed through the crown valve and lubricator using a slick-line unit. The gauges will be positioned at 7,312 ft below grade (reflective to the top of the injection interval). The memory gauges to be used are SP-2000 hybrid-quartz gauges provided by Tefteller, Inc. that will have a resolution of 0.01 psi and an accuracy of  $\pm 0.05\%$  of full scale. The pressure range of the gauges will be 0-5,000 psi minimum. The dedicated injection well will operate for 72-hours or until the discharge pressure approaches the 1,400 psi shutdown pressure following the placement of the tandem memory gauges to allow the gauges to stabilize. During this time, down-hole pressure readings will be recorded. Once the stabilization time has elapsed, the injection well pump will be shut down and the well will be blocked-in by closing the valve at the wellhead and in the pump room (double-block).

**Phase 2: Pressure Fall-Off Monitoring**

With the well blocked-in, bottom-hole readings will be recorded for a minimum of 3 days and up to 14 days. The recording period will be set to record pressures at a minimum of 5-minute intervals, with readings collected more frequently during the early part of the Fall-Off Test period.

### Phase 3: Post Monitoring Operations

Following completion of the fall-off monitoring, the gauges will be pulled while making 5-minute stops at each 1,000 ft interval starting at 7,000 ft to collect pressure gradient readings. After removal of the gauges, the well will return to normal operation.

Upon receipt of NMOCD approval of this test protocol, Western will coordinate with NMOCD District III to provide the opportunity to witness all testing activities. The intent is to initiate field-testing activities on Friday, September 18<sup>th</sup> to ensure completion of field activities prior to September 30, 2020.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE *Kelli Roman* TITLE Environmental Supervisor DATE 9/16/20

Type or print name \_\_\_\_\_ E-mail address: \_\_\_\_\_ PHONE: \_\_\_\_\_  
**For State Use Only**

APPROVED BY: *Carl J. Chavira* TITLE Environmental Engineer DATE 9/17/2020

Conditions of Approval (if any):

- 1) Permittee shall gradually increase the injection flow rate and injection pressure over time to attain and achieve the appropriate steady-state condition below the permit MSIP before FOT monitoring.
- 2) If the Permittee is unable to achieve a steady-state condition before FOT monitoring, the test shall proceed in order to study and evaluate test results and provide observations, conclusions and final recommendations from the test based on operational conditions.
- 3) The Permittee shall ensure the perforated interval, borehole and the immediate injection interval is free from obstructions before the FOT.
- 4) The Permittee shall apply a pressure gauge with the resolution and accuracy requirements commensurate with the Fall-Off Test Plan requirements.
- 5) The Permittee shall provide notice of the dates and times for installation of any bottom hole gauge(s) start of FOT monitoring, bottom hole gauge recovery and MITs to the OCD District Office.