

State of New Mexico  
Energy, Minerals and Natural Resources Department

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Susana Martinez  
Governor

David Martin  
Cabinet Secretary

Brett F. Woods, Ph.D.  
Deputy Cabinet Secretary

David R. Catanach, Division Director  
Oil Conservation Division



Administrative Order SWD-1598  
November 13, 2015

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8B. NMAC, R360 Permian Basin, LLC (the "operator") seeks an administrative order to authorize the West Gramma Ridge SWD Well No. 1 located 1105 feet from the North line and 1480 feet from the West line, Lot 3 of Section 6, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico, for the commercial disposal of produced water.

**THE DIVISION DIRECTOR FINDS THAT:**

The application has been duly filed under the provisions of Division Rules 19.15.26.8B. NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objection was received within the required suspense period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

**IT IS THEREFORE ORDERED THAT:**

The applicant, R360 Permian Basin, LLC (OGRID 289936), is hereby authorized to utilize its West Gramma Ridge SWD Well No. 1 (API 30-025-pending) located 1105 feet from the North line and 1480 feet from the West line, Lot 3 of Section 6, Township 22 South, Range 32 East, NMPM, Lea County, for commercial disposal of oil field produced water (UIC Class II only) in the Devonian formation, through open-hole from **15500 to 16500 feet**. Injection will occur through internally-coated, 4½-inch or smaller tubing and a packer set within 100 feet of the open-hole injection interval.

**IT IS FURTHER ORDERED THAT:**

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the completion and construction of the well as proposed in the application, and as modified by this Order.

*This permit is limited as advertised to only the Devonian aged rocks and to the depths listed above. It does not permit disposal into deeper formations including the Ellenburger formation (lower Ordovician) or lost circulation intervals directly on top and obviously connected to that formation.*



*Prior to commencing disposal, the operator shall submit mudlog and geophysical logs information, to the Division's District geologist and Santa Fe Bureau Engineering office, showing evidence agreeable that only the permitted formation is open for disposal including a summary of depths (picks) for contacts of the formations which the Division shall use to amend this order for a final description of the depth for the injection interval.*

*Every casing string shall be cemented and circulated to the surface.*

*The operator shall run a CBL (or equivalent) across the 7-inch casing to surface to ensure good cement across the casing.*

*Within two years after commencing disposal, the operator shall conduct an injection survey, consisting of a temperature log or equivalent, over the entire injection interval using representative disposal rates. Copies of the survey results shall be provided to the Division's District I office and Santa Fe Engineering Bureau office.*

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on the well shall be limited to **no more than 3100 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the disposed fluid from the target formation. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's District I office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's District office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's District I



office of any failure of the tubing, casing or packer in the well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.

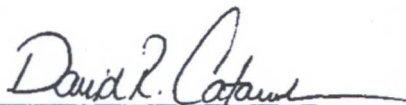
The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection order after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this Order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

Compliance with this Order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

Jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein.




**DAVID R. CATANACH**  
Director

DRC/mam

cc: Oil Conservation Division – Hobbs District Office  
Bureau of Land Management - Carlsbad  
Application number - pMAM15225158575



**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery Pressure Maintenance ☒ Disposal Storage  
Application qualifies for administrative approval? Yes No
- II. OPERATOR: R360 Permian Basin, LLC (wholly owned subsidiary of Waste Connections, Inc.)  
ADDRESS: 3 Waterway Square Place, Suite 110, The Woodlands, TX 77380  
CONTACT PARTY: Luke Bross PHONE: (832) 442-2204
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes ☒ No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: Luke Bross TITLE: Legislative & Regulatory Affairs  
SIGNATURE:  DATE: 8/28/2015  
E-MAIL ADDRESS: LukeB@R360es.com
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

**ATTACHMENT III**

**Injection Well Data Sheet**