Form 3160-5 (August 2007)

# **UNITED STATES**

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FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

		SHADBA NOTICES AND DEDODES ON ME
ı	ı	BUREAU OF LAND MANAGEMENT
		DEPARTMENT OF THE INTERIOR

D	TIDEATIOET AND MANIA	CEMENT			Expiros.	July 31, 2010	
T SUNDRY	BUREAU OF LAND MANAGEMENT  Y NOTICES AND REPORTS ON WELLS			5. Lease Serial No. NMNM92781			
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.				6. If Indian, Allottee or Tribe Name			
SUBMIT IN TRIPLICATE - Other instructions on reverse side.			7. If Unit or CA/Agreement, Name and/or No. NMNM94480X				
1. Type of Well  ☑ Oil Well ☐ Gas Well ☐ Other					8. Well Name and No. GAUCHO UNIT 10H		
Name of Operator     DEVON ENERGY PRODUCTION CO EMail: shammy.ingram@dvn.com					9. API Well No. 30-025-41183-00-S1		
			one No. (include area code) 75-748-0174		10. Field and Pool, or Exploratory WC-025 G06 S223421L		
4. Location of Well (Footage, Sec., 7		)			11. County or Parish, and State		
Sec 17 T22S R34E SWSE 20 32.384444 N Lat, 103.483544	LEA COUNTY, NM			NM			
12. СНЕСК АРРІ	ROPRIATE BOX(ES) TO	) INDICATE	E NATURE OF 1	NOTICE, R	EPORT, OR OTHER	RDATA	
TYPE OF SUBMISSION			TYPE O	F ACTION			
☐ Notice of Intent	☐ Acidize	□ Dee	pen	☐ Product	ion (Start/Resume)	☐ Water Shut-Off	
	☐ Alter Casing	_	☐ Fracture Treat ☐ Recl		ation	☐ Well Integrity	
Subsequent Report     ■	Casing Repair	_	lew Construction ☐ R			☑ Other	
☐ Final Abandonment Notice	☐ Change Plans ☐ Convert to Injection		Plug and Abandon ☐ Temp Plug Back ☐ Water		arily Abandon Disposal		
13. Describe Proposed or Completed Ope If the proposal is to deepen directions Attach the Bond under which the won following completion of the involved testing has been completed. Final Abdetermined that the site is ready for final 1. This well is producing from 2. Water produced is approxim 3. There are two 500 bbl tanks 4. Water will be trucked to the API #30-025-36425 and the by 5. A)NW4SE4, SECTION 4, T. B)SW4NW4, SECTION 9, T23	ally or recomplete horizontally, rk will be performed or provide I operations. If the operation respondent Notices shall be file inal inspection.)  the Bone Spring.  nately 150 BWPD  s on location  a)Rio Blanco 4 Fed 3 SW (Caballo 9 State #1 SWD)  23S, R34E  3S, R34E	give subsurface the Bond No. or sults in a multip d only after all	locations and measure file with BLM/BIA le completion or recorded requirements, include the completion of the completion	red and true vo.  Required sultiple of the control	ortical depths of all pertino beequent reports shall be a new interval, a Form 3160 n, have been completed, a HO	ent markers and zones. filed within 30 days 0-4 shall be filed once nd the operator has  BBS OCD  1 8 2014  CEIVED  D FOR	
	Electronic Submission #2 For DEVON ENER d to AFMSS for processing	GY PRODUC	TION CO LP, sent WEATHERFORD	t to the Hobb O on 05/02/20	s 14 (14BMW0290SE)	•	
Name (Printed/Typed) SHAMMY	INGRAM	,	Title PRODU	ICTION TEC	CH		
Signature (Electronic S	Submission)		Date 02/05/2	014	APPRO	VED	
·	THIS SPACE FO	R FEDERA	L OR STATE	OFFICE U	SE		
Approved By	· · · ·		Title		JUL 10	201 Date	
Conditions of approval, if any, are attached tertify that the applicant holds legal or equivalent to condu- which would entitle the applicant to condu	itable title to those rights in the	not warrant or subject lease	Office		JAMES A. A SUPERVISO		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

## Additional data for EC transaction #234602 that would not fit on the form

32. Additional remarks, continued

6. SWD-R 13410 ATTACHED SWD-1077 ATTACHED

#### Revisions to Operator-Submitted EC Data for Sundry Notice #234602

**Operator Submitted** 

**BLM Revised (AFMSS)** 

Sundry Type:

OTHER

Lease:

NMNM92781

Agreement:

NMNM94480X

Operator:

DEVON

6488 SEVEN RIVERS HIGHWAY PO BOX 250 ARTESIA, NM 88211 Ph: 575-746-5559

Admin Contact:

SHAMMY INGRAM PRODUCTION TECH

E-Mail: shammy.ingram@dvn.com

Ph: 575-748-0174

Tech Contact:

SHAMMY INGRAM PRODUCTION TECH

E-Mail: shammy.ingram@dvn.com

Ph: 575-748-0174

Location:

State: County:

NM LEA

Field/Pool:

WC-025-G06S223421L

Well/Facility:

GAUCHO UNIT 10H Sec 17 T22S R34E 200FSL 1780FEL

32.384444 N Lat, 103.483544 W Lon

SR

OTHER

NMNM92781

NMNM94480X (NMNM94480X)

DEVON ENERGY PRODUCTION CO LP 333 WEST SHERIDAN AVE

OKLAHOMA CITY, OK 73102

Ph: 405 235 3611

SHAMMY INGRAM

PRODUCTION TECH

E-Mail: shammy.ingram@dvn.com

Ph: 575-748-0174

SHAMMY INGRAM PRODUCTION TECH

E-Mail: shammy.ingram@dvn.com

Ph: 575-748-0174

NM LEA

WC-025 G06 S223421L

GAUCHO UNIT 10H Sec 17 T22S R34E SWSE 200FSL 1780FEL

32.384444 N Lat, 103.483544 W Lon



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joann Prukop
Cab inettecretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

ADMINISTRATIVE ORDER SWD-1077

# APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, LP FOR PRODUCED WATER DISPOSAL, LEA COUNTY, NEW MEXICO

# ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), DEVON ENERGY PRODUCTION COMPANY, LP made application to the New Mexico Oil Conservation Division for permission to utilize for produced water disposal its Caballo 9 State Well No. 1 (API No. 30-025-34577) located on the surface 1650 feet from the North line and 660 feet from the West line of Section 9, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico.

#### THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations;
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

#### IT IS THEREFORE ORDERED THAT:

The applicant is hereby authorized to utilize its Caballo 9 State Well No. 1 (API No. 30-025-34577) located on the surface 1650 feet from the North line and 660 feet from the West line of Section 9, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico, in such manner as to permit the injection of produced water for disposal purposes into the Bell Canyon and Cherry Canyon members of the Delaware formation through perforations from 5040 feet to 7028 feet and through plastic-lined tubing set with a packer located within 100 feet of the top of

he injection interval.

#### IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

As preparation for injection, the operator shall plug back the well to within 200 feet of the bottom of the permitted injection interval with a cast iron bridge plug and cement.

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.

After installing injection tubing, the casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The wellhead injection pressure on the well shall be limited to no more than 1008 psi. In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface injection pressure to the maximum allowable pressure for this well.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the injection formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

PROVIDED FURTHER THAT, 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 water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall provide written notice of the date of commencement of injection to the Hobbs district office of the Division.

The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on April 26, 2007.

MARK E. FESMIRE, P.E. Director

MEF/wvii

cc: Oil Conservation Division - Hobbs

State Land Office – Oil, Gas, and Minerals Division

### STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

RECEIVED
JUN 2 0 2011
WESTERN LAND

CASE NO. 14600 ORDER NO. R-13410

APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P. FOR APPROVAL OF A SALT WATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO

#### ORDER OF THE DIVISION

#### BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on March 17, 2011, at Santa Fe, New Mexico, before Examiner William V. Jones.

NOW, on this 13<sup>th</sup> day of June, 2011, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

#### FINDS THAT:

- (1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.
- (2) The applicant, Devon Energy Production Company, L.P. ("Devon" or "applicant"), seeks authority to utilize its Rio Blanco 4 Federal Well No. 3 (API No. 30-025-36425, the "subject well"), located 1650 feet from the South line and 1650 feet from the East line, Unit J of Section 4, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico, for oil field water disposal into the Devonian formation from 14,500 feet to 14,653 feet.
- (3) This application was set to hearing by the applicant due to the presence of two Devonian gas wells within the ½ mile Area of Review:
  - a. The Rio Blanco 4 Federal Well No. 1 (API No. 30-025-34515) operated by Devon is a vertical well producing from the Northeast Bell Lake-Devonian Gas Pool (Pool Code 97328) at approximately 200 Mcf gas per

day and 700 barrels of water per day. The estimated ultimate gas recovery from this well is 7.6 Bcf gas (Exhibit No. 3).

- b. The Rio Blanco 9 State Well No. 1 (API No. 30-025-36302) also operated by Devon is a vertical well producing from the Northeast Bell Lake-Devonian Gas Pool (Pool Code 97328) at approximately 100 Mcf gas per day and 30 barrels of water per day. The estimated ultimate gas recovery from this well is 1.1 Bcf gas (Exhibit No. 3).
- (4) Devon presented exhibits and testimony at the hearing from a geologist and an engineer. An affidavit from a landman was subsequently presented for the record. The testimony and exhibits indicate the following:
  - a. The subject well was completed in May of 2004 in the Northeast Bell Lake-Devonian Gas Pool (Pool Code 97328). The Devonian formation gas production from this well has totaled approximately 3.4 Bcf gas. The production has declined and the last reported production approximately one year ago showed the well produced at a rate of 592 Mcf gas per day and 2464 barrels of water per day.
  - b. The subject well has produced approximately 2.8 million barrels of water, or more than both of the two offsetting wells combined. The water seems to have come from below rather than laterally.
  - c. Devon does not intend to attempt any further production from the Devonian formation within this wellbore and intends to convert this temporarily abandoned well to injection into the existing open hole interval.
  - d. Devon expects disposal waters to preferentially enter the fractures in the Devonian formation and travel down instead of horizontally.
  - e. The source waters going into this well would originate primarily from Devon's local Devonian wells.
  - f. There is no effect predicted on the two offsetting gas wells and if such production were in fact harmed by this disposal, then Devon could immediately cease injection into this well.
  - g. Devon does not expect any waste of oil or gas to occur as a result of disposal into the Devonian formation.
  - h. Devon expects to extend the producing life of the existing producing wells by using this well for disposal of waste water.

- i. The U.S. Bureau of Land Management is the surface and mineral owner. The BLM was notified and examined the application and submitted a letter in support.
- j. The well is adequately equipped and cemented to isolate any fresh water intervals.
- (5) The half mile Area of Review around this well contains no plugged wells and two wells that are active or have not yet been plugged, that penetrate the disposal interval. All Area of Review wells are adequately cased and cemented in order to isolate the disposal interval.
- (6) The application has been duly filed under the provisions of 19.15.26.8 NMAC. Affected parties have been notified and no objections have been received. There were no other appearances at the hearing or objections to this application.
- (7) The applicant has presented satisfactory evidence that all requirements prescribed in 19.15.26.8 NMAC have been met and the operator is in compliance with 19.15.5.9 NMAC.
  - (8) This application as presented by Devon should be approved.

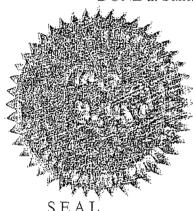
## IT IS THEREFORE ORDERED THAT:

- (1) Devon Energy Production Company, L.P. ("Devon" or "operator"), is hereby authorized to utilize its Rio Blanco 4 Federal Well No. 3 (API No. 30-025-36425) located 1650 feet from the South line and 1650 feet from the East line, Unit J of Section 4, Township 23 South, Range 34 East, NMPM, Lea County, New Mexico, for oil field water disposal (limited only to UIC Class II fluids) into the Devonian formation open hole interval from 14,500 feet to 14,653 feet through lined tubing and a packer set within 100 feet above the permitted disposal interval.
- (2) The operator shall take all steps necessary to ensure that the disposed water enters only the permitted disposal interval depths and is not permitted to escape to other formations or onto the surface.
- (3) 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.
- (4) The wellhead injection pressure on the well shall be limited to **no more** than 2900 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.

- (5) 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.
- (6) The operator shall notify the supervisor of the Division's district office of the date and time of the installation of disposal equipment and of any mechanical integrity test 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 rules 19.15.26.13 NMAC and 19.15.7.24 NMAC.
- (7) Without limitation on the duties of the operator as provided in 19.15.29 NMAC and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district 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 or 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.
- (8) 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.
- (9) The Division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.
- (10) The Division Director shall be authorized to amend this permit administratively after proper notice and opportunity for hearing.
- (11) The disposal authority granted herein shall terminate two years after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request, mailed by the operator prior to the termination date, may grant an extension thereof for good cause.
- (12) One year after disposal into the well has ceased, the authority to dispose will terminate *ipso facto*.
- (13) 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.
- (14) 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 or prior to notice and hearing in event of an emergency, terminate the disposal authority granted herein.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO OIL CONSERVATION DIVISION

JAMI BAILEY Director

#### BUREAU OF LAND MANAGEMENT

Carlsbad Field Office 620 East Greene Street Carlsbad, New Mexico 88220 575-234-5972

## Disposal of Produced Water From Federal Wells Conditions of Approval

Approval of the produced water disposal methodology is subject to the following conditions of approval:

- 1. This agency shall be notified of any change in your method or location of disposal.
- 2. Compliance with all provisions of Onshore Order No. 7.
- 3. This agency shall be notified of any spill or discharge as required by NTL-3A.
- 4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
- 5. Any on-lease open top storage tanks shall be covered with a protective cover to prevent entry by birds and other wildlife.
- 6. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
- 7. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office if you have not already done so.
- 8. Disposal at any other site will require prior approval.
- 9. Subject to like approval by NMOCD.

7/10/14