# STATE OF NEW MEXICO RECEIVED OCD ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISIONAL FEBRURES AND MATURAL RESOURCES DEPARTMENT

APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P. TO REVOKE THE INJECTION AUTHORITY GRANTED BY ADMINISTRATIVE ORDER SWD-640, LEA COUNTY, NEW MEXICO

Case No. 15397

# DEVON ENERGY PRODUCTION COMPANY, L.P.'S RESPONSE TO OXY USA INC.'S MOTION TO CONTINUE

and

#### MOTION TO SHUT IN OXY'S WELL

Devon Energy Production Company, L.P. ("Devon") submits this response to the motion filed by OXY USA Inc. ("OXY") on February 9, 2016. In support thereof, Devon states:

#### A. CONTINUANCE.

- 1. OXY has requested a continuance of the hearing in this matter, asserting:
  - (a) Inability to finalize its exhibits; and
  - (b) Difficulty viewing the documents produced by Devon (pursuant to subpoena) on a "Sharepoint" website, slowing its preparation for the hearing.
- 2. Devon realizes that a continuance will probably be granted to OXY. Devon also needs additional time because it needs to address with OXY (or in the alternative with the Division) certain of the data subpoenaed from OXY which has not been produced, including the results of tests conducted on the SWD well over the last several months. The missing data is described on the e-mail between counsel attached hereto as Exhibit A.
- 3. However, in the interim Devon moves that the OXY SWD well be shut in. This request is made based on data acquired from OXY over the last few weeks.

#### B. SHUTTING IN THE SWD WELL.

1. OXY operates the SWD Well located in Unit Letter N of Section 34, Township 22 South, Range 33 East, N.M.P.M., Lea County, New Mexico.

2. Devon operates one well in Unit Letter M of Section 34. Devon also has plans to drill a number of other wells nearby.

3. OXY informed Devon on November 18, 2015 that it was shutting in the SWD Well to allow additional tests to be performed on it. However, at the motion hearing in this case, held last December, OXY requested that it be allowed to re-commence injection. Although Devon opposed this request, the Division allowed injection.

4. Since mid-January 2016, Devon has reviewed documents produced by OXY pursuant to subpoena. The recently examined documents show that there is a clear connection between OXY's injection and the high pressure encountered by Devon while drilling its well. See the Verified Statement of Roy Hathcock, attached hereto as Exhibit B.

5. As a result, Devon disagrees that a continuance "will not cause harm to either party," as claimed in OXY's motion.

WHEREFORE, Devon requests that:

A. Case No. 15397 be continued approximately two weeks; and

B. The SWD Well be shut in pending a hearing in this case.

Rospectfully submitted,

Inmes Bruce

Post Office Box 1056

Santa Fe, New Mexico 87504

(505) 982-2043

Attorney for Devon Energy Production Company, L.P.

### **CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing pleading was served upon the following counsel of record this ////L day of February, 2016 via e-mail:

Michael H. Feldewert Holland & Hart LLP P.O. Box 2208 Santa Fe, New Mexico 87504 (505) 988-4421

mfeldewert@hollandhart.com

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From: jamesbruc <jamesbruc@aol.com>

To: mfeldewert@hollandhart.com>

Bcc: cari.allen <cari.allen@dvn.com>; stephen.cargill <stephen.cargill@dvn.com>; roy.hathcock

<roy.hathcock@dvn.Om>

Subject: Devon/OXY

Date: Thu, Feb 4, 2016 1:59 pm

Mike: I have spoken with Devon. They have not recieved any documents marked as "Exhibits." If some of the documents received are the hearing exhibits, we would appreciate OXY ID'ng them as such. Otherwise, please provide OXY's hearing exhibits.

Also, Devon believes the foillowing documents are required to be turned over by the subpoenas:

- 1. OXY had a workover rig on its SWD well from 9/9/15 through 9/16/15 to repair something. They filled a summary of their operations in the C-103 dated by OXY on 11/19/15 and approved by the OCD on 12/1/15. Devon needs WellView reports for these operations. They had to have done this work in response to the problems Devon was having on its well. Also, was any additional work done on the well with respect to this test other than that reported to the OCD?
- 2. Devon is entitled to any pressure testing diagnostic work on its well after the pressure kick in Devon's well. Document OXY-125 shows "0" psi pressure on the surface casing and production casing, but this doesn't capture the pressure on the intermediate casing. This data was taken after the SWD well was worked over.
- 3. There was a rig on OXY's well for months, and obviously the SWD well was worked on, or test were taken, over that period. The subpoenas specifically apply to any such tests or documents or information, and must be promptly provided to Devon.
- 4. In your letter to me of January 29th, you state that you "removed for reasons of privilege emails that relate to Oxy's preparation for this case, Oxy's internal investigation of Devon's allegations, and internal discussions about addressing Devon's various requests for meetings and information." Devon provided to OXY its internal discussions, which are within the scope of both OXY's and Devon's subpoenas, and Devon is entitled to OXy's discussions/documents by its employees unless there is some attorney-client information or discussions. Please provide that data

Jim.

EXHIBIT A

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

APPLICATION OF DEVON ENERGY PRODUCTION COMPANY, L.P. TO REVOKE THE INJECTION AUTHORITY GRANTED BY ADMINISTRATIVE ORDER SWD-640, LEA COUNTY, NEW MEXICO

Case	No.	15397

#### **VERIFIED STATEMENT OF ROY HATHCOCK**

Roy Hathcock, being duly sworn upon his oath, deposes and states:

- 1. I am over the age of 18, and have personal knowledge of the facts stated herein and those facts are true and correct.
- 2. I am currently employed as a Completion Engineering Manager for Devon Energy Production Company, L.P. ("Devon"), and I am familiar with the drilling of Devon's North Thistle 34 State Com Well No. 1H (the "Devon Well") located in Section 34, Township 22 South, Range 33 East, N.M.P.M., Lea County, New Mexico.
- 3. I have not previously testified before the Division. My educational and employment background is as follows: I graduated from Texas A&M University in 1983 with a degree in Petroleum Engineering. I have been employed as a production, operations and completions engineer/leader in Devon's Gulf of Mexico, Louisiana, Texas and New Mexico operations. I am authorized by Devon to make this statement on its behalf.
- 4. This statement is made in response to OXY's "Motion to Continue" the hearing currently scheduled for February 16, 2016.
- 5. I have reviewed Devon's data, public data and well data provided by OXY for their Diamond SWD well and would like to comment based my evaluation coupled with the collective information Devon's technical staff has compiled.
- 6. Devon is supportive of OXY's continuance request with the condition their **Diamond State 34 SWD #1 well is shut-in immediately** until the Division rules on Devon's claim. Devon disagrees with item #4 of OXY's continuance motion. Devon believes that continued injection into OXY's well further places the mineral interest and fresh water sands in jeopardy, and creates an increased risk for an uncontrolled surface breach of injected water to surface. Findings supporting these claims are as follows:
  - a. The top of cement in OXY's SWD well is much lower than permitted, or previously portrayed by POGO/OXY in their public filings, even below the top of their permitted injection interval. This low cement top exposes the



- 7-5/8" casing shoe to under-saturated injected brine, allowing karsting around the easing seat and upward migration.
- b. OXY's SWD and the C.P. Miller Humble State #1 wells are the closest offsets to Devon's North Thistle State 34 #1H well and both wells observed normal pore (formation) pressures when they were drilled. The only source for the abnormal pore pressure Devon encountered is the 6+ million barrels of water injected into OXY's SWD well.
- c. Pressure measurements from Devon's drilling kick and OXY's SWD well's SITP closely match, supporting the claim the two wells are hydrostatically connected at a depth much shallower than the permitted interval.
- d. The SWD's reservoir pressure has migrated up to 1820' as of September 3, 2015. It is reasonable to assume that this pressure will continue to migrate upward as further karsting occurs, placing fresh water sands and a surface breach at risk.
- e. The OXY SWD well has been hydraulically fractured with over 250,000 lbs of proppant into their reservoir. Subsequently, POGO/OXY has operated this well injecting above their permitted pressure. Either, or both of these, can lead to compromising zonal containment. Temperature anomalies observed in three different OXY logs would suggest there is water movement above the top of cement and the permitted injection zone.
- f. It is clear to Devon that water injected by OXY into their SWD well is not contained in the "Permitted" reservoir, but escapes, migrating to much shallower depths.
- 7. The data I have evaluated, along with the collective information Devon's technical staff has compiled, leads me to believe that water injected by OXY into their Diamond SWD well is not contained in the "Permitted" injection interval of 5,100 feet to 6,516 feet, but escapes, migrating to much shallower depths and that continued injection could have near term negative affects to both Devon and the State of New Mexico.

Roy Hatheock

## **VERIFICATION**

COUNTY OF OKLAHOMA	)	•
STATE OF OKLAHOMA	) ss. )	•
Engineering Manager for Devon Er	nergy Production Cor ad the foregoing states	deposes and states that: He is a Completion impany, L.P.; he is authorized to make this ment, and knows the contents thereof; and c, information, and belief.
SUBSCRIBED AND SWO	RN TO before me thi	is day of February, 2016 by <u>Ro</u>
My Commission Expires: $4-10$	1-2017	House Stavik
ANDREA K (SEAL) Notary F DI State of Ol Commission # 01006048 Ex	Public klahoma	