



# New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

Joanna Prukop  
Cabinet Secretary

Mark Fesmire  
Division Director  
Oil Conservation Division



Administrative Order SWD-1185

July 17, 2009

Mr. Brian Wood (Permits West, Inc.)  
Cimarex Energy Co  
1700 Lincoln Street  
Suite 1800  
Denver, CO 80203-4518

## ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Rule 26.8B., Cimarex Energy Co seeks an administrative order to utilize its Boardwalk SWD Well No. 12 (API 30-015-NA) to be located 348 feet from the North line and 662 feet from the West line, Unit D of Section 12, Township 21 North, Range 9 West, NMPM, San Juan County, New Mexico, for produced water disposal purposes.

### THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 26.8B. Satisfactory information has been provided that affected parties as defined in Rule 26.8B.(2) have been notified and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 26.8 will be met and the operator is in compliance with Division Rule 5.9.

### IT IS THEREFORE ORDERED THAT:

The applicant, Cimarex Energy Co, is hereby authorized to utilize its Boardwalk SWD Well No. 12 (API 30-015-NA) to be located 348 feet from the North line and 662 feet from the West line, Unit D of Section 12, Township 21 North, Range 9 West, NMPM, San Juan County, New Mexico, for disposal of produced water from the Entrada and Dakota formations into the Entrada formation from approximately 5750 feet to 5950 feet through 2-7/8 inch or smaller diameter, plastic-lined tubing set within 100 feet of the disposal interval.

### Special Requirements:

- a. While drilling the Entrada, the operator shall send to the Division in Aztec at least one copy of the drillers report and also a drilling mud analysis – or as otherwise directed by the Aztec district geologist.



- b. Prior to running casing, the operator shall run a mudlog and open hole porosity and resistivity logs.
- c. The operator shall supply the Division in Aztec with a copy of this mudlog over the permitted injection interval and of any other types of logs run including any cement bond log.
- d. The operator shall supply the Division in Aztec with details and results of any swabbing, testing, or stimulation treatment report over the permitted injection interval.
- e. As disposal begins and in the future: Any well contributing waste water to this well shall have a routine oil field water analysis run and submitted to the Division's engineering bureau in Santa Fe with reference to the formation producing in that well, the well name and API, and this disposal (SWD) permit number.

IT IS FURTHER ORDERED THAT:

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

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 wellhead injection pressure on the well shall be limited to **no more than 1150 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 an acceptable Step-Rate-Test.

The operator shall notify the supervisor of the Division's district III office in Aztec 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 III office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Division Rules 26.13 and 7.24.


Without limitation on the duties of the operator as provided in Division Rules 30 and 29, 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 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.

In accordance with Division Rule No 26.12.C., the disposal 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, mailed by the operator prior to the termination date, may grant an extension thereof for good cause. One year after disposal into the well has ceased, the authority to dispose will terminate *ipso facto*.

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.



MARK E. FESMIRE, P.E.  
Director

MEF/wvjj

cc: Oil Conservation Division – Aztec

Howard Draper  
Navajo Nation Project Review  
PO Box 2249  
Window Rock, AZ 86515

# Injection Permit Checklist (7/17/09)

Case SWD 185 R- SWD 185 WFX PMX IPI PMX Permit Date T.A.S. UIC Qtr T.A.S.

# Wells 1 Well Name: BOARDWALK SWD #12

API Num: (30-) 348 FWL/662 FWL Spud Date: 0/65 New/Old: OK (UIC primacy March 7, 1982)

Footages 348 FWL/662 FWL Unit D Sec 12 Tsp 21N Rge 9W County SAN JUAN

Operator: CIMAREX Energy Co Contact Brian Wood (Permits West)

OGRID: 215099 RULE 5.9 Compliance (Wells) 0/65 (Finan Assur) OK

Operator Address: 1700 LINCOLN ST SUITE 1800, DENVER CO 80203-4518

Current Status of Well: New Drill

Planned Work to Well: Drill & inject Planned Tubing Size/Depth: 2 7/8

	Sizes Hole.....Pipe	Setting Depths	Cement Sx or Cf	Cement Top and Determination Method
Existing Surface	12 1/4 9 5/8	320	175	CIRC
Existing Intermediate				
Existing Long String	8 3/4 5 1/2	6000'	1050 SX	CIRC CBL

DV Tool --- Liner --- Open Hole --- Total Depth 6000'

Well File Reviewed ---

Diagrams: Before Conversion --- After Conversion ✓ Elogs in Imaging File: will be run

Intervals:	Depths	Formation	Producing (Yes/No)
Above (Name and Top)			
Above (Name and Top)	4770	DKTA	
Injection.....	5750	Entada	
Interval TOP:	5750	Entada	
Interval BOTTOM:	5950	Entada	
Below (Name and Top)	10,100	Perm	

Well needed FOR Future  
Cimarex Entada/DKTA Prod.  
in THIS area.

150 PSI Max. WHIP  
NO Open Hole (Y/N)  
NO Deviated Hole?

Free Lease  
BUT  
Narrow Surface

Sensitive Areas: Capitan Reef --- Cliff House --- Salt Depths ---

.... Potash Area (R-111-P) --- Potash Lessee --- Noticed? ---

Fresh Water: Depths: --- Wells none w/1 MILE Analysis? NO Affirmative Statement ✓

Disposal Fluid Sources: Entada/DKTA Analysis? ---

Disposal Interval Production Potential/Testing/Analysis Analysis: 3D seismic USED TO SPOT

well so as to NOT harm Entada Prod.

Notice: Newspaper(Y/N) ✓ Surface Owner Narcho Mineral Owner(s) ---

RULE 26.7(A) Affected Parties: Cimarex only

Area of Review: Adequate Map (Y/N) ✓ and Well List (Y/N) ✓

Active Wells 0 Num Repairs --- Producing in Injection Interval in AOR ---

..P&A Wells 0 Num Repairs --- All Wellbore Diagrams Included? ---

Questions to be Answered:

(complete) Run open hole logs to det. SW & Water  
Turn in lab analysis of all wells / FW DISPOSED in  
THIS well.

Required Work on This Well: --- Request Sent --- Reply: ---

AOR Repairs Needed: --- Request Sent --- Reply: ---

--- Request Sent --- Reply: ---