

COLEMAN OIL & GAS, INC. JUNIPER DISPOSAL SYSTEM

December 1, 2006 STARTED BUILDING DISPOSAL PLANT WITH ODESSA PUMPS FOR THE JUNIPER SWD #1.  
January 4, 2006 SIGNED CONTRACT WITH JEMEZ MOUNTAINS ELECTRIC FOR THREE PHASE POWER.  
January 15, 2006 STARTED BUILDING DISPOSAL PLANT WITH ODESSA PUMPS FOR THE JUNIPER SWD #4.  
February 1, 2006 PERMITS WEST STARTED WORKING ON ROW CLEARANCE WITH BLM FOR ELECTRICAL.  
May 22, 2006 ORDERED NEW PLANT FROM POWER SERVICE IN CASPER WYOMING, 12 TO 16 WEEK DELIVERY.  
August 16, 2006 RECEIVED VERBAL NOTICE FOR ROW CLEARANCE SHOULD RECEIVE WRITTEN NOTICE NEXT SEVERAL DAYS.  
August 16, 2006 TWO TO THREE WEEKS DELIVERY FOR DISPOSAL PLANTS FROM ODESSA PUMPS.  
August 16, 2006 EIGHT TO TEN WEEKS DELIVERY FOR DISPOSAL PLANT FROM POWER SERVICE.  
August 17, 2006 EXPECT SHIPPMENT FOR DISPOSAL PUMP TO POWER SERVICE OCTOBER 2006.  
August 17, 2006 SENT SUNDRY FOR WORKOVER PROCEEDURE TO OCD AZTEC OFFICE.  
August 17, 2006 SENT SUNDRY NOTICE FOR NOTICE FOR STEP RATE TEST ON THE JUNIPER SWD #4.  
August 17, 2006 SPOKE WITH MR. MARTINEZ WITH JEMEZ MOUNTAINS ELECTRIC SHOULD BE ABLE TO  
August 17, 2006 COMPLETE POWER LINE IN 5-8 WEEKS FROM ROW RELEASE.

BEFORE THE OIL CONSERVATION DIVISION  
Santa Fe, New Mexico  
Case No. 13812 Exhibit No. 4  
Submitted by:  
COLEMAN OIL & GAS, INC.  
Hearing Date: November 9, 2006



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

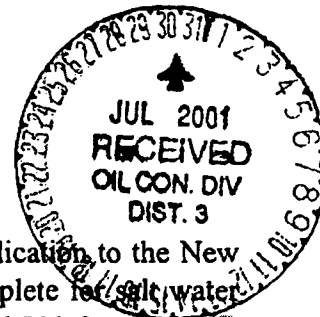
GARY E. JOHNSON  
Governor  
Jennifer A. Salisbury  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

ADMINISTRATIVE ORDER SWD-806

## **APPLICATION OF COLEMAN OIL & GAS FOR SALT WATER DISPOSAL, SAN JUAN COUNTY, NEW MEXICO.**

### ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION



Under the provisions of Rule 701(B), Coleman Oil & Gas made application to the New Mexico Oil Conservation Division on June 13, 2001, for permission to complete for salt water disposal its Juniper SWD Well No. 1 located 880 feet from the North line and 730 feet from the West line (Unit D) of Section 16, Township 24 North, Range 10 West, NMPM, San Juan 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:

Coleman Oil & Gas is hereby authorized to complete its Juniper SWD Well No. 1 located 880 feet from the North line and 730 feet from the West line (Unit D) of Section 16, Township 24 North, Range 10 West, NMPM, San Juan County, New Mexico, in such a manner as to permit the injection of produced water for disposal purposes into the Mesaverde formation from approximately 3,820 feet to 3,980 feet through 2 7/8 inch plastic-lined tubing set in a packer located at approximately 3,790 feet.

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.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

Prior to commencing injection operations into the well, the applicant shall obtain a formation water sample from the proposed Mesaverde injection interval, and shall provide to the Division, a chemical analysis of this formation water.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 764 psi.

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 Mesaverde 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 Aztec 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 Aztec 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 submit monthly reports of the disposal operations on Division Form C-120-A, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

*Administrative Order SWD-806*

*Coleman Oil & Gas*

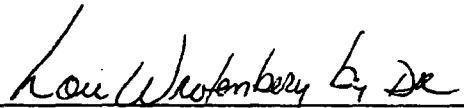
*July 20, 2001*

*Page 3*

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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 this 20th day of July, 2001.



LORI WROTENBERY, Director

LW/DRC

cc: Oil Conservation Division – Aztec /  
Bureau of Land Management-Farmington



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

October 28, 2005

**RECEIVED**

NOV 01 2005

**HOLLAND & HART LLP**

William F. Carr  
Holland & Hart LLP  
P.O. Box 2208  
Santa Fe, NM 87504-2208

E-mail: [wcarr@hollandhart.com](mailto:wcarr@hollandhart.com)

Re: Coleman Oil & Gas, Inc.  
Juniper SWD Well No. 1, API No. 30-045-29732, Unit D, Section 16, Township 24 North, Range 10 West, NMPM  
Injection permit SWD-806-A

Dear Mr. Carr:

Coleman Oil & Gas, Inc. (Coleman) holds administrative permit SWD-806-A, which allows Coleman to dispose of produced water into the Mesaverde formation through perforations from 2,176 feet to 3,974 feet in the Juniper SWD Well No. 1. Oil Conservation Division (OCD) geologists and engineers have determined that the upper Mesaverde injection interval contains protectable waters. The OCD therefore proposes to amend permit SWD-806-A to limit the permitted injection interval to depths of 3,820 to 3,980 feet, and to require remedial cementing operations on offsetting wells located within 1/2 mile of this injection well in order to isolate the upper members of the Mesaverde formation from saltwater injection into the lower Mesaverde. If the OCD and Coleman are not able to agree on an amended permit that will protect the waters in the upper members of the Mesaverde formation, the OCD will file an application for hearing to amend the permit.

## Background

On July 20, 2001, the OCD granted Coleman administrative permit SWD-806 to inject into the Juniper SWD Well No. 1 (API No. 30-045-29732) located 880 feet from the North line and 730 feet from the West line, Unit D, Section 16, Township 24 North, Range 10 West. This permit allowed Coleman to dispose of produced water into the Menefee and Point Lookout members of the Mesaverde formation through perforations from 3,820 feet to 3,980 feet and limited the maximum surface injection pressure to 764 psi.

On May 15, 2002, prior to beginning injection and after examining drilling and logging records on the Juniper SWD Well No. 1, Coleman sought administrative approval for an amendment to permit SWD-806 that would allow Coleman to add perforations in the Cliff House or La Ventana Tongue members of the Mesaverde. The OCD granted Coleman's request, issuing permit SWD-806-A on May 20, 2002. The new permit enabled Coleman to inject from 2,176 feet to 3,974 feet and limited the maximum surface injection pressure to 435 psi.

After the OCD issued the amended permit, representatives of the United States Environmental Protection Agency expressed concern that the upper members of the Mesaverde formation in this general area appear to contain protectable waters.

OCD engineers and geologists investigated this concern and concluded that the upper Mesaverde injection interval as permitted in SWD-806-A contains waters which, at the time the well was drilled, contained less than 10,000 parts per million of total dissolved solids.

### Applicable Statutes and Rules

The underground injection control (UIC) program under the federal Safe Drinking Water Act (SDWA) of 1974 is designed to protect underground sources of drinking water from being contaminated by faulty injection practices. Section 144.3 of Title 40 of the Code of Federal Regulations (CFR) defines an underground source of drinking water as:

An aquifer or its portion:

- (1) Which supplies any public water system; or
- (2) Which contains a sufficient quantity of ground water to supply a public water system; and
  - (i) Currently supplies drinking water for human consumption; or
  - (ii) Contains fewer than 10,000 mg/l total dissolved solids; and
  - (iii) Which is not an exempted aquifer.

The SDWA provides that states that meet certain requirements may receive enforcement authority over injection operations within their state boundaries. New Mexico was granted "primacy" authority by the EPA in 1982 and has since exercised regulatory authority over underground injection operations on state, fee and federal lands within the state. (On Indian lands, the EPA exercises this authority and OCD exercises parallel authority.) The EPA exercises oversight authority over New Mexico's UIC program.

New Mexico regulates injection operations related to oil and natural gas production under the provisions of the Oil and Gas Act, NMSA 1978, §§ 70-2-1 *et seq.* The Oil and Gas Act charges the OCD with regulating the disposition of nondomestic wastes resulting from the exploration, development, production or storage of crude oil or natural gas "to protect public health and the environment." NMSA 1978, §70-2-12(21). In particular, the OCD must regulate the disposition of produced water "in a manner that will afford reasonable protection against contamination of fresh water supplies designated by the state engineer." NMSA 1978, §70-2-12(15).

OCD rules define fresh water to be protected to include "all underground waters containing 10,000 milligrams per liter (mg/l) or less of total dissolved solids (TDS) except for which, after notice and hearing, it is found there is no present or reasonably foreseeable beneficial use which would be impaired by contamination of such waters." 19.15.1.7.F(3) NMAC. And OCD rules define "underground source of drinking water" to include an aquifer "which contains ground water having a total dissolved solids concentration of 10,000 mg/l or less and which is not an exempted aquifer." The OCD may not issue permits for the disposal of produced water into zones containing waters having total dissolved solids concentrations of 10,000 mg/l or less except after notice and hearing, with two exceptions: the OCD may approve permits administratively if the produced water is to be injected into an established exempted aquifer, or if the waters to be disposed of are of higher quality than the native water in the disposal zone. See 19.15.9.701.E(2) and (3) NMAC.

The aquifer at issue is not an "exempted aquifer," and it has not been established after notice and hearing that there is no present or reasonably foreseeable beneficial use that would be impaired by contamination of its waters. Therefore, the water is protectable water, and a permit to inject into the zone containing this water should not have been granted without notice and hearing.

### Proposed Amendment

In order to protect groundwater in the upper members of the Mesaverde formation, the OCD proposes to amend SWD-806-A as follows:

- 1) Limit the permitted injection interval to depths of 3,820 to 3,980 feet.
- 2) Require Coleman to cement squeeze all perforations above 3,820 feet in this well and pressure test those perforations.
- 3) Require Coleman to periodically verify through injection surveys or other means that injection is not entering the prohibited upper perforations or otherwise moving vertically upward from 3,820 feet.
- 4) Require Coleman to run a Step Rate Test accompanied by an injection survey prior to granting any future maximum surface injection pressure increases and limiting those increases to a maximum pressure gradient of 0.7 psi per foot.

5) Require Coleman, prior to any further injection in this well, to perform remedial cementing operations on any non-plugged well within a ½ mile or larger radius, which does not have existing cement outside the casing throughout the entire Mesaverde formation.

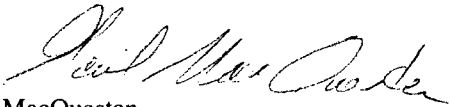
6) Require Coleman, prior to any further injection in this well, to re-enter and re-plug any plugged and abandoned well within a ½ mile or larger radius, which does not have the upper members of the Mesaverde isolated from the Menefee member of the Mesaverde formation and from any formations above the Mesaverde.

Conclusion

Please let me know whether Coleman will agree to the entry of an amended order containing the terms outlined above. If OCD and Coleman have not reached an agreement by November 14, 2005, the OCD will file an application for hearing to amend SWD-806-A.

The OCD looks forward to working with Coleman to protect New Mexico's groundwater.

Sincerely,



Gail MacQuesten  
Oil Conservation Division Attorney

ec: Daniel Sanchez, Oil Conservation Division UIC Director  
Steve Hayden, Oil Conservation Division, Aztec District



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor  
Betty Rivera  
Cabinet Secretary

Lori Wrotenberg

Director  
Oil Conservation Division

## **AMENDED ADMINISTRATIVE ORDER SWD-806-A**

*23*  
**APPLICATION OF COLEMAN OIL & GAS FOR SALT WATER DISPOSAL, SAN  
JUAN COUNTY, NEW MEXICO.**

### **ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Coleman Oil & Gas made application to the New Mexico Oil Conservation Division on June 13, 2001, for permission to complete for salt water disposal its Juniper SWD Well No. 1 located 880 feet from the North line and 730 feet from the West line (Unit D) of Section 16, Township 24 North, Range 10 West, NMPM, San Juan County, New Mexico. On May 15, 2002, Coleman Oil & Gas applied by written request to both revise the previously approved perforation intervals and the deadline to commence injection operations.

#### **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:**

Coleman Oil & Gas is hereby authorized to complete its Juniper SWD Well No. 1 located

880 feet from the North line and 730 feet from the West line (Unit D) of Section 16, Township 24 North, Range 10 West, NMPM, San Juan County, New Mexico, in such a manner as to permit the injection of produced water for disposal purposes into the Mesaverde formation from approximately 2176 feet to 3,974 feet through 2 7/8 inch plastic-lined tubing set in a packer located at approximately 2125 feet.

**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.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

Prior to commencing injection operations into the well, the applicant shall obtain a formation water sample from the proposed Mesaverde injection interval, and shall provide to the Division, a chemical analysis of this formation water.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing, or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 435 psi.

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 Mesaverde 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 Aztec 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 Aztec 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 submit monthly reports of the disposal operations on Division Form C-120-A, 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.

**Revised application approved at Santa Fe, New Mexico, on this 20th day of May 2002.**

  
LORI WROTENBERY, Director

LW/WVJ

cc: Oil Conservation Division – Aztec  
Bureau of Land Management-Farmington



November 14, 2005

**VIA HAND DELIVERY**

Ms. Gail MacQuesten  
Oil Conservation Division Attorney  
New Mexico Department of Energy,  
Minerals and Natural Resources  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505

2005 NOV 14 PM 4 21

**Re: Juniper SWD Well No. 1 (API No. 30-045-29732)  
Unit D, Section 16, Township 24 North, Range 10 West, NMPM, San Juan County,  
New Mexico. Injection Permit SWD-806-A**

Dear Ms. MacQuesten:

Coleman desires to promptly resolve the issues with its Juniper SWD Well No. 1 well in a way that will fully assure protectable waters are not contaminated. Since receiving your letter concerning the Oil Conservation Division's Injection Permit (SWD-806-A) for this well, Coleman has evaluated the wells in the affected area and the Division's proposed amendments to its prior injection approval, including the requirements for remedial work on offsetting wells.

As you understand, the loss of this injection capability will have a serious adverse impact on Coleman's production operations in this area. Although Coleman cannot agree to the Division's proposal as contained in your letter of October 28, 2005, we would like an opportunity to meet with the Division's staff to explore certain alternative approaches to this problem including (1) the immediate isolation of the La Ventana injection interval with tubing and a packer and continuing to inject below this zone into the Menefee and Point Lookout zones while monitoring the La Ventana interval, and (2) hiring a certified hydrologist to study the area affected by injection to date.

We are ready to meet and request that you contact me concerning the scheduling of a meeting with you and the Division's staff at the earliest possible time.

Very truly yours,

William F. Carr  
Attorney for Coleman Oil & Gas, Inc.  
cc: Mr. Jim Anderson  
Mr. Alan Emmendorfer

**Holland & Hart LLP**

Phone (505) 988-4421 Fax (505) 983-6043 [www.hollandhart.com](http://www.hollandhart.com)

110 North Guadalupe Suite 1 Santa Fe, NM 87501 Mailing Address P.O. Box 2208 Santa Fe, NM 87504-2208

Aspen Billings Boise Boulder Cheyenne Colorado Springs Denver Denver Tech Center Jackson Hole Salt Lake City Santa Fe Washington, D.C. ☎



2005 DEC 31 AM 10 37

January 3, 2006

**VIA HAND DELIVERY**

Ms. Gail MacQuesten  
Oil Conservation Division Attorney  
New Mexico Department of Energy,  
Minerals and Natural Resources  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505

**Re: Juniper SWD Well No. 1 (API No. 30-045-29732)  
Unit D, Section 16, Township 24 North, Range 10 West, NMPM, San Juan  
County, New Mexico. Injection Permit SWD-806-A**

Dear Ms. MacQuesten:

The following summarizes Coleman Oil & Gas, Inc.'s proposal to resolve the issues with its Juniper SWD Well No. 1 Well which we discussed at the December 15, 2005, meeting between Coleman representatives and members of the Oil Conservation Division Staff.

Coleman Oil & Gas, Inc. plans to continue to utilize the Juniper SWD Well No. 1 for water disposal by injecting into existing Point Lookout and Menefee perforations by utilizing an isolation Packer. It is proposed to set an Arrow Set IX packer at  $\pm$  2900 feet, adjacent to coats within the Menefee Formation. Produced water would be pumped down the tubing into the existing perforation between 3036'-3974'. This would effectively isolate the La Ventana perforations in the wellbore.

Coleman will use an electronic bottom-hole pressure sensor to monitor the annulus integrity thus omitting the requirement of the pressure integrity test. The bottom-hole pressure will be monitored on a daily basis with digital information sent to the office VIA the internet. Data will be collected and stored on a minimum of 6 hour intervals per day. The EFM will be monitored with the use of sonic fluid level equipment. Fluid levels will be taken at least quarterly and will be recorded and monitored for changes. Electronic Field Measurements as well as fluid levels will be used to monitor tubing and packer integrity thus giving integrity to the isolation of the disposal fluid into the Menefee and Pointlook out Intervals.

Coleman believes that this proposed will isolate and monitor the La Ventana and thereby fully assure protectable waters are not contaminated while we undertake other

HOLLAND & HART



measures to find and develop needed injection capacity for Coleman's production operations in this area.

We are proceeding with our efforts to implement these modifications in the Juniper SWD Well No. 1 at the earliest possible time and will keep the Division advised of our progress. If you need additional information from Coleman, please contact me and we will promptly respond.

Very truly yours,

A handwritten signature in dark ink, appearing to read "William F. Carr", written over a horizontal line.

William F. Carr  
Attorney for Coleman Oil & Gas, Inc.

cc: Mr. Jim Anderson  
Mr. Alan Emmendorfer



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

ADMINISTRATIVE ORDER SWD-806-B


## **APPLICATION OF COLEMAN OIL & GAS, INC. FOR PRODUCED WATER DISPOSAL, SAN JUAN COUNTY, NEW MEXICO.**

### **ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION**

During a meeting between Coleman Oil & Gas, Inc. ("Coleman" or "operator") and the Division on December 15, 2005 in Santa Fe, Coleman requested its injection permit SWD-806-A for the Juniper SWD Well No. 1 (API No. 30-045-29732) located 880 feet from the North line and 730 feet from the West line (Unit D) of Section 16, Township 24 North, Range 10 West, NMPM, San Juan County, New Mexico, be amended to exclude potential sources of drinking water within the Cliff House and the upper Menefee members of the Mesaverde from injection of produced water.

#### **THE DIVISION DIRECTOR FINDS THAT:**

- (1) The existing administrative permit (SWD-806-A) was approved May 20, 2002 and includes permission for Coleman to inject into the Cliff House, Menefee, and Point Lookout members of the Mesaverde formation from depths of 2176 to 3974 feet.
- (2) The well was first perforated in the Point Lookout member of the Mesaverde formation from 3036 to 3974 feet and hydraulically fractured.
- (3) The well was then perforated in the upper Menefee and the Cliff House members of the Mesaverde formation from 2176 to 2758 feet and hydraulically fractured.
- (4) It has been determined through analysis of electric logs that the interval from 2170 to 2758 may contain in-situ waters with characteristics determined to be protectable under Oil Conservation Division Rules and under the federal Safe Drinking Water Act.
- (5) This injection permit should be amended to exclude this fractured interval from direct or indirect injection of oil field produced water.

(6) Coleman should be allowed to either (i) squeeze off the upper perforations and ensure the squeeze will hold up to a pressure test or (ii) place a surface readout and downhole pressure sensor directly above the injection packer after placing the packer below the upper perforated interval. 

(7) Within a 1/2 mile radius from this well are two wellbores drilled to at least the depth of the Point Lookout. Both of these wells have been plugged.

(a) The Monument Well No. 1 (API No. 30-045-21912) is located 1650 feet from the North line and 990 feet from the East line of Section 17, Township 24 North, Range 10 West or approximately 1884 feet southwest of the Juniper Well No. 1. This well was drilled in 1975 to 6100 feet and plugged without setting production casing. The cement plugs were set above and below the Mesaverde, with an open interval from 1900 feet to 3900 feet. This well should be re-entered and re-plugged by filling the hole from 1900 to 3900 feet with cement (or as otherwise ordered by the Aztec district) in order to isolate the injection interval and to isolate and protect the potential fresh water interval.

(b) The Monument Well No. 2 (API No. 30-045-21463) is located 800 feet from the North line and 800 feet from the West line of Section 16, Township 24 North, Range 10 West or approximately 106 feet southwest of the Juniper Well No. 1. This well was drilled in 1974 to 6190 feet and cased with 5-1/2 inch casing cemented in two stages. The depth where the DV tool was set is not available in the Division's well file but can be assumed to be at the bottom of the Mesaverde. The well was plugged in 1976. Logs were run on this well but are also not available in the Division's well file. The operator should be required to supply these logs to the Aztec district office along with any information pertaining to the 5-1/2 inch DV tool.

IT IS THEREFORE ORDERED THAT:

Administrative permit SWD-806-A is hereby amended. Coleman is authorized to utilize its Juniper SWD Well No. 1 (API No. 30-045-29732) located 880 feet from the North line and 730 feet from the West line (Unit D) of Section 16, Township 24 North, Range 10 West, NMPM, San Juan County, New Mexico, in such a manner as to permit the injection of produced water for disposal purposes into the Point Lookout member of the Mesaverde formation from 3036 feet to 3974 feet through plastic-lined tubing set in a packer located within 100 feet above the top of the injection interval.

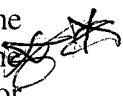
IT IS FURTHER ORDERED THAT:

The operator shall, under direction of the Aztec district office, re-enter and re-plug the Monument Well No. 1 (API No. 30-045-21912) located 1650 feet from the North line and 990 feet from the East line of Section 17, Township 24 North, Range 10 West, NMPM, San Juan County, New Mexico. The goal of this procedure shall be to place cement across all former and future intervals of injection within the Mesaverde in the Juniper Well No. 1 and to cover and

isolate with cement any potential fresh water intervals. The work to re-enter this well must be commenced prior to January 1, 2007 or the permit to inject into the Juniper Well No. 1 will expire.

The operator shall send to the Aztec district office, all available casing information and copies of electric logs for the Monument Well No. 2 (API No. 30-045-21463) located 800 feet from the North line and 800 feet from the West line of Section 16, Township 24 North, Range 10 West, NMPM, San Juan County, New Mexico.

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.

The casing-tubing annulus shall be monitored to ensure leakage does not occur in the casing, tubing, or packer either by (i) squeezing off the upper perforated interval then filling the annulus with inert fluid to the surface and pressure testing or (ii) by placing a pressure sensor directly above the newly set injection packer. 

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead tubing pressure on the injection well to **no more than 607 psi**.

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 gross injection interval. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

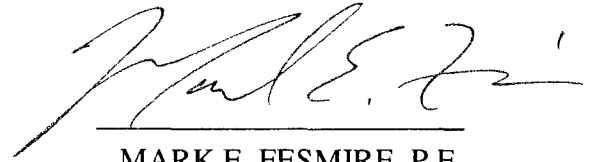
The operator shall notify the supervisor of the Aztec district office of the Division of the date and time of the installation of disposal equipment and of any mechanical integrity test so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Aztec 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. In addition, if a downhole sensor is installed, the operator shall provide the Aztec district office with periodic pressure reports.

The operator shall submit monthly reports of the disposal operations on Division Form C-120-A, in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

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.

Approved at Santa Fe, New Mexico, on May 18, 2006.

A handwritten signature in black ink, appearing to read 'Mark E. Fesmire', is written over a horizontal line.

MARK E. FESMIRE, P.E.  
Director

MEF/wvjj

cc: Oil Conservation Division – Aztec  
Bureau of Land Management-Farmington  
Holland & Hart – William F. Carr, Esq.

**William Carr**

**From:** Jones, William V., EMNRD [William.V.Jones@state.nm.us]  
**Sent:** Thursday, August 17, 2006 2:48 PM  
**To:** William Carr  
**Cc:** Ezeanyim, Richard, EMNRD; Sanchez, Daniel J., EMNRD; Hayden, Steven, EMNRD; Perrin, Charlie, EMNRD; Macquesten, Gail, EMNRD  
**Subject:** Coleman Meeting here in Santa Fe on Wednesday the 23rd at 1:30pm

Hello Bill:

Concerning the above scheduled meeting:

Looks like I will be out all next week and will have an unpredictable schedule until after October 16th. I will of course be here on September 14 because I am scheduled to be the hearing person.

Daniel Sanchez is the head of our UIC program and will be available for this meeting. Gail has been in the know concerning all of the Cliff House issues and will be needed at the meeting. Richard E. is also scheduled to be here, and I have alerted him that he may need to cover for me at this meeting. Steve Hayden and/or Charlie Perrin will be available by phone. Richard, Gail, Daniel, and Steve and of course Catanach are aware of the Cliff House issues and our recently re-inforced policy from Mark Fesmire concerning complete cementing of offset wells within the Area of Review.

I don't know what this meeting will be about, so below are things I can remember that may be discussed:

- 1) A couple of months ago, I received another SWD application from Coleman. I remember it being for injection into the deeper Mesaverde, but the person preparing it copied the AOR data from previous applications even though the well was miles away and noticed the wrong people. I requested the additional data and have never received anything. They can send the requested data including proof of notice(s) and I will resurrect the application.
- 2) How well is Dugan's injection well doing which is located nearby and was to be drilled to the Entrada?
- 3) Is there more data to review, the injection packer and downhole annulus pressure monitor for the Juniper #1 - how is this going?
- 4) Coleman is required to re-enter a plugged well (Monument #1) and add some cement plugs to isolate the Cliff house from migration of fluids up from the Point Lookout. Also they were to attempt to locate the DV stage tool depth on the Monument #2 well. These were conditions of the revised permit SWD-806B for the Juniper Well No. 1 with a January 2007 deadline.
- 5) I realize there is always disagreement as to where the different members of the Mesaverde begin and end. The revised permitted injection depths in the Juniper #1 are designed to NOT have the injection packer placed in the middle of a hydraulically fractured interval but to place the packer between sets of perfs that were each fractured separately irregardless of exactly where the formation tops are.

Bill, please let someone here (Gail?) besides just me know if your client intends to re-schedule. Otherwise, there should be adequate OCD people here next week.

Thanks,

William V. Jones

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11/8/2006