Form 3160-5 April 2004)	UNITED STATES DEPARTMENT OF THE II		RASBBS OCD		FORM APPROVED OM B No 1004-0137 Expires March 31, 2007			
CLIA	BUREAU OF LAND MANA	GEMENT	DEC 0 6 2011	5. Lease Sena LC-069	ll No			
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enterance EVED abandoned well. Use Form 3160-3 (APD) for such proposals.					6 If Indian, Allottee or Tribe Name na			
SUBMIT I	TRIPLICATE- Other instru	ctions on reve	rse side.	7 If Unit of	CA/Agreement, Name and/or No			
I. Type of Well ✓ Oil Well□	Gas Well Of Conter	/	`	na 8 Well Nar	me and No			
2 Name of Operator McElvain Energy, Inc.				McElva 9 API We	in # 10			
a Address 1050 - 17th Street, Suite	2500 Denver, Colorado 80265	Bb Phone No <i>(includi</i> 303-893-0933	e area code)	30-025-39520 10 Field and Pool, or Exploratory Area				
4 Location of Well (Footage, Sec, T, R, M, or Survey Description)				EK - Bone Spring				
2240' FSL & 990' FWL (NWSW) Section 31, T18S-R34E				11 County or Parish, State				
12 (117)					unty, New Mexico			
TYPE OF SUBMISSIO	CK APPROPRIATE BOX(ES) TO IN		PE OF ACTION	PORT, OR	OTHER DATA			
	Acıdıze	Deepen	Production (Star	t/Resume)	Water Shut-Off			
Notice of Intent	Alter Casing	Fracture Treat	Reclamation	,	Well Integrity			
Subsequent Report	Change Plans	Casing Repair New Construction Recomplete			andon Other Water Disposal			
Final Abandonment N	Dire Convert to Injection	Plug Back	✓ Water Disposal					
determined that the site The well produces	ted Final Abandonment Notices shall be file is ready for final inspection) rom the 1st Bone Spring Sand. Produc mercial disposal facility by a third party	ed water is averagi	ng 6 BWPD and is stor	red on-site ir	a fiberglass water tank until it			
From an analysis o	the produced water (see attached wate 8,000 mg/L and the concentration of chl	r analysis from Ca	dinal Labs) the pH of	the water is	6.67, the total dissolved solids			
Cooper Enterprises	r is trucked off lease to the Anderson #1 , Inc. out of Monument, New Mexico. 7 Permit/Order # R-12375.							
					CEPTED FOR REC			
	FACHED FOR	A T				υπυ		
CONDI	TIONS OF APPROVA	AL			DEC., 4 2011			
14 I hereby certify that t Name (Printed/Typ	ed)				/s/ JD Whitlock Jr			
E. Reed F	scher	Title S	enior Operations Engi	ineer B	UREAU OF LAND MANAGEME	INT		
Signature	an inte	Date	11	/10/2011	CARLSBAD FIELD OFFICE			
, , , =	THIS SPACE FOR FE	DERAL OR S	TATE OFFICE I	JSE				
			itle	E	ate			
Approved by	y, are attached Approval of this notice doe ds legal or equitable title to those rights in th		office	Ke	16			
Conditions of approval, if an certify that the applicant hol	icant to conduct operations thereon.	I						
certify that the applicant hol which would entitle the app Title 18 U.S.C. Section 1001 a		ume for any person kr	nowingly and willfully to signification	make to any	department or agency of the United			

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CARDINAL

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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Analytical Results For:

MC ELVAIN OIL & GAS 1050 17TH STREET, SUITE 2500 DENVER CO, 80265	Project: MC ELVA Project Number: NONE G Project Manager: REED FI Fax To: NOT GIV	SIVEN ISHER	Reported: 03-Nov-11 10:19	
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WATER SAMPLE

H102293-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
		Cardin	al Laborat	ories					
Inorganic Compounds			_						
Barium	ND	1 00	mg/L	100	1110302	JM	27-Oct-11	200 7	
Alkalinity, Bicarbonate	1200	5.00	ıng/L	1	1102105	НМ	01-Nov-11	310 IM	
Calcium	768	100	mg/L	100	1110302	JM	27-Oct-11	200 7	
Alkalinity, Carbonate	ND	0 00	mg/L	1	1102105	HM	01-Nov-11	310.1M	
Chloride	102000	4.00	mg/L	1	1110205	HM	01-Nov-11	4500-CI-B	
Conductivity	260000	1 00	uS/cm	1	1102607	НM	25-Oct-11	120 1	
Iron	8.35	5 00	mg/L	100	1110302	JM	27-Oct-11	200 7	
Magnesium	335	100	mg/L	100	1110302	JM	27-Oct-11	200 7	
pH	6.67	0 100	pH Units	1 .	1102607	НМ	25-Oct-11	150 1	
Potassium	1240	100	mg/L	100	1110302	JM	27-Oct-11	200 7	
Resistivity	0.0380		Ohms/m	1	1102607	НМ	25-Oct-11	120 1	
Sodium	46400	100	mg/L	100	1110302	JM	27-Oct-11	200 7	
Specific Gravity @ 60° F	1.088	0 000	[blank]	1	1110307	СК	03-Nov-11	SM 2710F	
Sulfate	1770	10 0	mg/L	1	1110213	НМ	01-Nov-11	375 4	
TDS	153000	5 00	mg/L	1	1102605	HM	27-Oct-11	160 1	
Alkalinity, Total	980	4 00	mg/L	1	1102105	НМ	01-Nov-11	310 IM	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE Liability and Damages Cardinal's liability and clent's exclusive remedy for any daim ansing, whether based in contract or tort, shall be limited to the amount paid by clent for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for moderial or consequential claimages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidianes, affiliates or successors ansing out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celez D.Kune

Celey D. Keene, Lab Director/Quality Manager

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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:

CASE NO. 13511 ORDER NO. R-12375

APPLICATION OF SMITH & MARRS, INC. 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 June 16, 2005, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 28th day of June, 2005, 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, Smith & Marrs, Inc. ("Smith & Marrs" or "applicant"), seeks authority to utilize its Anderson Well No. 1 (API No. 30-025-29962), located 330 feet from the South line and 1980 feet from the East line (Unit O) of Section 8, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico, to dispose of produced water into the Lower San Andres and Glorieta formations from a depth of 4,350 feet to 5,180 feet.

(3) Smith & Marrs originally filed the subject application for administrative approval on December 8, 2004. On December 13, 2004, the Division received a letter of objection to the application from Rice Operating Company. On December 15, 2004, the Division also received a letter of objection to the application from Amerada Hess Corporation, an offset operator to the proposed disposal well. The subject application was subsequently set for hearing before a Division examiner.

(4) Rice Operating Company ("Rice") appeared at the hearing through legal counsel in opposition to the application. Rice cross-examined Smith & Marrs' witness, but presented no evidence or testimony.

- (5) Amerada Hess Corporation did not appear at the hearing.
- (6) Smith & Marrs presented evidence that demonstrates that:
 - (a) the injection interval in the Anderson Well No. 1 was originally proposed to encompass the Lower San Andres, Glorieta, Blinebry and Tubb formations; however, due to concerns expressed by Amerada Hess Corporation regarding injection into the Blinebry and Tubb intervals, the injection interval in the well is to be contracted to include only the Lower San Andres and Glorieta intervals from a depth of 4,350 feet to 5,180 feet;
 - (b) the Anderson Well No. 1 is cased and cemented adequately to preclude the movement of fluid from the injection zone into other formations, including any fresh water aquifers;
 - (c) the Anderson Well No. 1 will be utilized for the commercial disposal of produced water from various oil and gas pools in this area. Approximately 3,000-5,000 barrels of water per day will be disposed of in the subject well; and
 - (d) all "area of review" wells are cased and cemented and/or plugged and abandoned adequately so as to confine the injected fluid to the proposed injection interval.

(7) Rice currently operates three (3) commercial disposal wells in this area. These wells are identified as the: i) EME SWD Well No. 5 (API No. 30-025-05902) located in Unit M of Section 5, Township 20 South, Range 37 East, NMPM; ii) EME SWD Well No. 8 (API No. 30-025-06017) located in Unit G of Section 8, Township 20 South, Range 37 East, NMPM, and; iii) EME SWD Well No. 9 (API No. 30-025-12801) located in Unit M of Section 9, Township 20 South, Range 37 East, NMPM. Testimony in this case demonstrates that all of Rice's wells are injecting into the same interval that will be utilized in the Anderson Well No. 1.

(8) Rice's concern is that approval of the subject application will adversely affect its ability to inject water into its EME SWD Wells No. 5, 8 and 9 due to the finite reservoir capacity of the San Andres formation.

(9) The Division is not statutorily obligated to protect the rights of operators with regards to conducting produced water disposal operations, unless such injection activities impair an operator's ability to produce hydrocarbons.

(10) Approval of the application will prevent the drilling of unnecessary wells and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT;

(1) The applicant, Smith & Marrs, Inc., is hereby authorized to utilize its Anderson Well No. 1 (API No. 30-025-29962), located 330 feet from the South line and 1980 feet from the East line (Unit O) of Section 8, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico, to dispose of produced water into the Lower San Andres and Glorieta formations from a depth of 4,350 feet to 5,180 feet.

(2) The operator shall take all steps necessary to ensure that the injected fluids enter only the proposed injection interval and are not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(3) Injection shall be accomplished through 3-1/2 inch internally plastic-lined tubing installed in a packer set at approximately 4,250 feet. The casing-tubing **annulus** shall be filled with an inert fluid and a gauge or approved leak-detection device shall be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(4) The injection well or **pressurization** system shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 870 psi.

(5) The Division Director may administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

(6) Prior to commencing injection operations, the applicant shall effectively isolate all formations deeper than the Glorieta formation in the well. This shall be accomplished by setting a cast iron bridge plug (CIBP) with cement on top at a depth of approximately 5,300 feet; provided however, that the supervisor of the Division's Hobbs District Office may approve an alternate method to isolate these formations in the well.

(7) Prior to commencing injection operations and every five years thereafter, the casing shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

(8) The operator shall give advance notice to the Supervisor of the Division's Hobbs District Office of the date and time the following operations are to be conducted on the Anderson Well No. 1 in order that these operations may be witnessed; i) disposal equipment installed; ii) all formations deeper than the Glorieta formation isolated; and iii) the conductance of the **mechanicial** integrity pressure test.

(9) The operator shall immediately notify the Supervisor of the Division's Hobbs District Office of the failure of the tubing, casing or packer in the disposal well or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the area, and shall take all steps as may be timely and necessary to correct such failure or leakage.

(10) The operator shall submit monthly reports of the disposal operations on Form C-120-A in accordance with Division Rules No. 19.15.9.706 and 19.15.13.1120.

(11) The injection authority granted herein for the Anderson Well No. 1 shall terminate one year after the date of this order if the operator has not commenced injection operations into the well; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.

(12) Pursuant to the requirements set forth on Part VI(4) of Division Form C-108, the applicant shall provide the Division an analysis of all source water that is to be disposed of in the Anderson Well No. 1. This shall be accomplished within six months after commencement of injection operations, and each time thereafter a new source of injected fluid is placed in the well.

(13) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

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



STATE OF NEW MEXICO OIL CONSERVATION DIVISION

MARK E. FESMIRE, P. E. 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. All above ground structures on the lease shall be painted Shale Green (5Y 4/2), or as per approved APD stipulations. This is to be done within 90 days, if you have not already done so.
- 6. Any on-lease open top storage tanks shall be covered with a protective cover to prevent entry by birds and other wildlife.
- 7. This approval should not constitute the granting of any right-of-way or construction rights not granted by the lease instrument.
- 8. 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.
- 9. Disposal at any other site will require prior approval.
- 10. Subject to like approval by NMOCD.

6/17/2011