NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -1220 South St. Francis Drive, Santa Fe, NM 87505



KHavenor@georesources.com

e-mail Address

ABOVE THIS LINE FOR DIVISION USE ONLY

ADMINISTRATIVE APPLICATION CHECKLIST

					TIVE APPLICATION			ON RULES AND RE	GUI ATIONS
	ation Ac		WHIC		CESSING AT THE I			JN ROLLS AND RE	GOLATIONS
Аррис	[NSL-N [Di	Ion-Stan IC-Dowr [PC-Po	dard Location hole Commin ol Commingli [WFX-Waterfl [SWD-Sa	ngling] [CT ing] [OLS - (lood Expansio alt Water Disp	B-Lease Comm Off-Lease Stor n] [PMX-Pre osal] [IPI-Inj	ingling] age] [OL ssure Main ection Pres	[PLC-Pool/Lea M-Off-Lease N Itenance Expa ssure Increase	ansion]	ng]
[1]	ТҮРЕ	OF AP	Location - S		se Which Appl Simultaneous I SD		OGRID API Well No Located	162683 30-025-2 Bondurant I-1-19	6702
		Check [B]		ng - Storage -	Measurement PLC □ PC			CIMAR	EX.
		[C]			sure Increase - SWD □ IP.			> 5 5	
		[D]	Other: Spec	ify				32	**************************************
[2]	NOTI	FICATI [A]			neck Those Wh Overriding Roy			t Apply	
		[B]	X Offset O	perators, Leas	eholders or Sur	face Owner	r		
		[C]	X Applicat	tion is One W	nich Requires I	Published L	egal Notice		
		[D]	X Notifica	tion and/or Co	ncurrent Appront - Commissioner of P	oval by BLI ublic Lands, State	M or SLO a Land Office		
	, <i>)</i> '	[E]	☐ For all o	of the above, P	roof of Notific	ation or Pul	olication is Att	ached, and/or,	
		[F]	□ Waivers	are Attached					
[3]				ND COMPLE CATED ABO		ATION RE	EQUIRED TO	PROCESS 1	тне түре
	al is acc	urate ar	id <mark>complete</mark> t	o the best of n		I also unde	rstand that no	ication for admaction will be	
	Note: S	tatement	must be comple	=	lual with manager		pervisory capacit	ty.	
Kay Ha	venor			Kay	C Hovenor		Consultar	nt	6/12/2012
Print or	r Type Na	me	S	ignature		Title	e	.	Date

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505

FORM C-108 Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I.	PURPOSE:Secondary RecoveryPressure MaintenanceXDisposalStorage
	Application qualifies for administrative approval? X Yes No
II.	OPERATOR: Cimarex Energy Co. of Colorado
	ADDRESS: 600 N. Marienfeld St. Suite 600; Midland, TX 79702
	CONTACT PARTY: Kay Havenor PHONE: 575-626-4518
III.	WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
IV.	Is this an expansion of an existing project? Yes X No If yes, give the Division order number authorizing the project:
V.	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
VI.	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
*VIII.	Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
IX.	Describe the proposed stimulation program, if any.
*X.	Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
*XI.	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
XII.	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinkin water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV.	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME: Kay Havenor TITLE: Consultant
	NAME: Kay Havenor TITLE: Consultant SIGNATURE: Kay C Howenor DATE: June 12, 2012
*	E-MAIL ADDRESS: <u>KHavenor@georesources.com</u> If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:
 - (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
 - (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
 - (3) A description of the tubing to be used including its size, lining material, and setting depth.
 - (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.
 - (1) The name of the injection formation and, if applicable, the field or pool name.
 - (2) The injection interval and whether it is perforated or open-hole.
 - (3) State if the well was drilled for injection or, if not, the original purpose of the well.
 - (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
 - (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

INJECTION WELL DATA SHEET

OPERATOR:	Cimarex Energy Co. of Colorado		(00	GRID.162383)		
WELL NAME & NUN	MBER: Bondurant Federal #1				30-025-26702	
WELL LOCATION: _	1980 FSL & 660 FEL FOOTAGE LOCATION	I UNIT LETTER	1 SECTION	19S TOWNSHIP	32E RANGE	
	WELLBORE SCHEMATIC			WELL CONSTRU Surface		
			Hole Size: 17	7-1/2"	Casing Size:13%" 48#	-
	See attached diagram		Cemented with:	525 sx.	or	ft³
		e e	Top of Cement: S	urface	Method Determined: _	Circ 8 barrels
				Intermedia	te Casing	
			Hole Size: 11"		Casing Size: <u>8-5/8</u> " 32/28	3#
			Cemented with: 1625 sx	<u> </u>	or	ft ³
			Top of Cement: Surface	•	Method Determined: (Circ
•				<u>Productio</u>	n Casing	
			Hole Size:	7-5/8"	Casing Size: 5-1/2" 17# S	-95/N-80
			Cemented with:	900 sx * sx.	*See Item VI(a) 3 added	l cmt ft ³
			Top of Cement: Opr est	10,800' (Now Circ'd)	Method Determined:	РВ
			Total Depth:13,800'			
		•		Injection	<u>Interval</u>	
				5,862,'	To 7,000'	

(Perforated or Open Hole; indicate which) Perforated

INJECTION WELL DATA SHEET

INJECTION WELL DATA SHEET

Tu	ubing Size: 3-1/2" 9.3# N-80 Lining Material: Fiberglass coated	
Тур	pe of Packer: Lok-Set or equivalent	
Pac	cker Setting Depth:Approx 5,812 ft	
Otł	her Type of Tubing/Casing Seal (if applicable):	
	Additional Data	
1.	Is this a new well drilled for injection? Yes X_No	
	If no, for what purpose was the well originally drilled? Oil/gas	
2.	Name of the Injection Formation: <u>Delaware Cherry Canyon and Brushy Canyon</u>	
3.	Name of Field or Pool (if applicable):	
4.	Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. Morrow 13,524-13,550, 13,162-13,248. Bone Springs 7,570-7584, 8,701-8,866, 9,592-9,750.	_
5.	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:Lusk Seven Rivers 3673', West Tonto Bone Springs 8,750', Buffalo Penn (Morrow) 13,254'	

Item VI: Data on wells in AOR:

Item VI(a): Construction of wells in the AOR that penetrate into the proposed Cherry Canyon injection interval:

[API	WELL_NAME	STATUS	SEC	TWN	RANGE	FTG NS	FTG	EW	OCD	OPERATOR	LAND	WELL PLUG	_DATESPUD_DATE	ELEVGL	TVD
•	3002540182	BONDURANT FEDERAL 012H	New	1	19.0S	32E	330 N	1916	Ε	В	CIMAREX ENERGY CO. OF COLORADO	F	0	11-Aug-11	3701	8703
	3002530972	BONDURANT FEDERAL COM 002	Active	1	19.05	32E	1650 N	330	E	Н	CIMAREX ENERGY CO. OF COLORADO	F	0	4-Sep-90	3687	9100
	3002526702	BONDURANT FEDERAL COM 001	Active	1	19.0S	32E	1980 S	660	E	1	CIMAREX ENERGY CO. OF COLORADO	F	0	9 <u>-Jun-</u> 89	3660	13800

3002540182 Cimarex Energy Company of Colorado Bondurant Federal #012H, OCD Unit B, 330 FNL & 1916-FEL, Sec.1, T19S-R32E Lea
 Co. Elev 3701 GL. Spud 8/11/2011. 17-1/2" hole set 13-3/8" 54.5# J-55 @1500' w/1170 sx circulated. 12-1/4" hole set 9-5/8" 40# N-80 @5,467' w/1785 sx circulated. 8-5/8" hole set 5-1/2" 17# P-110 @19,130' w/2550 sx, TOC 706. PBMD-13131' TVD 8876' (as per BLM 3160-4) Perfs in lateral 10,946'-13070' Bone Springs 120 holes 0.42". Frac. Completed 10/7/2011.

2. 3002530972 Cimarex Energy Company of Colorado Bondurant Federal Com. #2, OCD Unit H, 1650 FNL & 330 FEL, Sec 1, T19S-R32E Lea Co. Elev 3687' GL. Spud 9/4/1990. 12-1/4" hole set 8-5/8" 24#/K-55 STC @1515' w/700 sx, circ 200 sx. 7-7/8" hole set 5-½" 17# K-55 LTC @9,100' w/2,150 sx 2-stage DV@3,797', circ 10 sx. Perf 8,750;-8,850' (OA) w/106 shots. Acid 2,500 gal NEFe. Frac 45,400 gal gel +156,000# 20/40 sand. IP 42 BO, 44 MCFG, 231 BWPD 10/23/1990.

3. 3002526702 Cimarex Energy Company of Colorado Bondurant Federal Com. #1, OCD Unit I, 1980 FSL & 66 0 FEL, Sec 1, T19S-R32E Lea Co. Elev 3660 GL. Spud 4/31/1980. 17-1/2" hole set 13-3/8" 48# @520' w/525 sx circ 8 bbls, 11" hole ran 8-5/8" 32# S-80/K-55 w/DV @ 1,634' csg set@5250' w/1625 sx circ 55 sx, 7-7/8" hole set 5-1/2" 17# S-95/N-80 @13,800' w/900 sx TOC estimated 10,800'. Perf Morrow 13,524-13,550' w/4 JSPF. Perf 13,155'-13,250' (OA) w/4 JSPF, Acid 7000 gal, re-perf 13,162'-13,248' (OA), acid 3,000 gal + N₂. Set CIBP +35' cmt @13,075'. Perf Atoka 12,537'-12,540' w/4 JSPF. CIBP @12,397'. CIBP @12,300'. Pumped 870 sx cmt @9,850'-12,300' w/cmt retainer 9,830', cmt circulated. Perf Bone Springs 9,592'-9,750' w/28 holes, 8,701'-8,866' w/26 holes, 7,570'-7,584' w/29 holes. Currently completed in Bone Springs.

3002526702 Target conversion well.

API 30-025-26702

Cimarex Energy Company of Colorado Bondurant Federal #1 1980' FSL & 660' FEL Sec. 1, T19S-R32E Lea County, NM

Item VI(b): All known wells in the AOR:

API	WELL_NAME	STATUS	SEC	TWN	RANGE	FTG NS	FTG	EW	OCD	OPERATOR	LAND	WELL	PLUG_DATES	SPUD_DATE	ELEVGL	TVD
3002531218	BONDURANT FEDERAL 003	Plugged	1	19.0S	32E	580 N	330	Е	Α	CIMAREX ENERGY CO. OF COLORADO	F	0	5-Sep-10	5-Jul-91	3697	4559
3002532432	BONDURANT FEDERAL 011	Active	1	19.08	32E	990 N	330	Ε	Α	CIMAREX ENERGY CO. OF COLORADO	F	0		8-Mar-94	3690	3700
3002532431	BONDURANT FEDERAL 010	Active	1	19.05	32E	990 N	1980	Ε	В	CIMAREX ENERGY CO. OF COLORADO	F	I I		13-Mar-94	3693	3650
3002531325	BONDURANT FEDERAL 005	Plugged	1	19.05	32E	330 N	1950	Ę	В	CIMAREX ENERGY CO. OF COLORADO	F	0	2-Sep-10	16-Jul-91	3706	3800
3002540182	BONDURANT FEDERAL 012H	New	1	19.0S	32E	330 N	1916	E	В	CIMAREX ENERGY CO. OF COLORADO	F ·	0		11-Aug-11	3701	8703
3002531439	BONDURANT FEDERAL 009	Active	1	19.0 S	32E	1650 N	2210	W	F	CIMAREX ENERGY CO. OF COLORADO	F	0		15-Nov-91	3717	3720
3002531326	BONDURANT FEDERAL 007	Active	1	19.0 S	32E	1650 N	1900	Ε	G	CIMAREX ENERGY CO. OF COLORADO	F	0		12-Aug-91	3694	3740
3002530972	BONDURANT FEDERAL COM 002	Active	1	19.0 S	32E	1650 N	330	Ε	Н	CIMAREX ENERGY CO. OF COLORADO	F	0		4-Sep-90	3687	9100
3002531192	BONDURANT FEDERAL 004	Active	1	19.05	32E	1980 N	330	Ε	Н	CIMAREX ENERGY CO. OF COLORADO	F	0		21-Mar-91	3687	3800
3002526702	BONDURANT FEDERAL COM 001	Active	1	19.05	32E	1980 S	660	Ε	1	CIMAREX ENERGY CO. OF COLORADO	F	0		9-Jun-89	3660	13800
3002531331	BONDURANT FEDERAL 006	Plugged	1	19.0S	32E	2310 S	430	Ε	ı	BURLINGTON RESOURCES OIL; GAS CO. LP	F	0	3-Aug-91	23-Jul-91	3685	3800
3002531607	NELLIS FEDERAL 005	Active	6	19.0 S	33E	1980 N	660	W	E	LEGACY RESERVES OPERATING, LP	F	0		19-Jun-92	3687	3750

Item VII:

- 1. The maximum injected volume anticipated is 6,000 BWPD. Average anticipated is 5,000 BWPD.
- 2. Injection will be through a closed system.
- 3. Maximum injection pressure is expected to be 1172 psi.
- 4. Sources will be produced water from this and adjacent Cimarex leases. These waters will be compatible with waters in the disposal zone.
- 5. Water sample analysis from the Cimarex Bondurant Fed. #9, F-Sec 1, T19S-R32E Lea Co.

P. O. BOX 1488 MONAHANS. TEXAS 79756 PH. 843-3234 OR 563-1040	Martin Water Laboratori	•		709 W. INDIANA IAND. TEXAS 7970I PHONE 683-452I
	LAI	BORATORY NO	129170 12~6-9	
To: Mr. David Cook	SAN	APLE RECEIVED	10 16	
P. O. Box 51810, Midland, TX 79)710 RES	SULTS REPORTE	012-16-	91
COMPANY Meridian 011 Company	LEASE _	Bondura	int #9	
FIELD OR POOL			7716	
SECTION BLOCK SURVEY	COUNTY	<u>Lea</u> s	TATE NM	
SOURCE OF SAMPLE AND DATE TAKEN:	~			
NO. 1 Produced water - taken fr	om Bondurant #9	•		
NO. 2				
NO. 3		>	·	
NO. 4				
REMARKS:	Yates "C" Sand			
CHEMIC	AL AND PHYSICAL PI	ROPERTIES		
	NO. 1	NO, 2	NO, 3	NO. 4
Specific Gravity at 60° F.	1.1038			
pH When Sampled				
pH When Received	5.12			
Bicarbonate as HCO3	415		<u> </u>	
Supersaturation as CaCO3				
Undersaturation as CaCO3	- - - - - 		ļ	
Total Hardness as CaCO3	21,600			
Calcium as Ca Magnesium as Mg	4,400			
Sodium and/or Potassium	2,576 50,092			•
Sulfate as SO4	2,867			
Chloride as C!	90,194		 	
Iron as Fe	36.8			
Barium as Ba			-	
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	150,544			
Temperature °F.				
Carbon Dioxida, Calculated			<u> </u>	
Dissalved Oxygen,				
Hydrogen Sulfide	0.0			
Resignivity, ohms/m at 77° F.	0.070		 	
Suspended Oil Fittrable Solids as mg/)			-	
Volume Filtered, mt				
Total Dissolved Solids @ 180°C.	153,444			<u>,</u>
29462 020002108 002200 0 207				
Res	ults Reported As Milligrams	Per Liter		
Additional Determinations And Remarks We are				
well in order to accomplish a g				
natural Yates. Yates varies su				
of salts. If we can be of any	additional assist	tance with mo	ore informati	on, please
contact us.		· · · · · · · · · · · · · · · · · · ·		
·				
<u> </u>		- CH . 12		
Form No. 3	α.	MAG	Tarken.	
	Ву	Waylan C	Martin, M.A	•

Item VIII:

Disposal will be into the depositional back-reef wedge of Delaware Mountain Group (Cherry Canyon and Brushy Canyon). The Delaware is comprised predominately of sandstones, and shales. The Delaware members are interbedded sandstones and shales with occasional dolomite horizons. The lateral transmissivities of the sandstone beds are highly variable and often form selective barriers to the movement of hydrocarbons while allowing down-gradient movement of water. The transmissivity variations are fundamentally due to 1) the very-fine grained nature of the sands and 2) the local percentage of silt and clay.

A search of the records of the NM Office of the State Engineer disclosed no known domestic or potable water wells within the 2-mile radius of the proposed disposal/injection.



New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found.

Basin/County Search:

Basin: Lea County

UTMNAD83 Radius Search (in meters):

Easting (X): 620675

Northing (Y): 3617187

Radius: 3218

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

5/30/12 11:18 AM

WELLS WITH WELL LOG INFORMATION

The surface geology of the greater area, including the 2-mile radius as shown in Item V above, is Quaternary eolian and piedmont deposits of Holocene to middle Pleistocene age. These are underlain by the Permian Rustler Formation and some evaporites. The top of the salt is locally reported at 1,530' and the base of the main salt is 2,865'. The top of the Yates Formation of the Artesia Group is at 3,415'. Locally the top of the Delaware is 5,720' and the Bone Springs is at 7,315'.

Item IX:

Acidizing and/or fracturing may be used after initial testing.

Item X:

Logs are on file with the OCD.

Item XI:

No commercial, domestic, or stock water wells are reported in the 2-mile area. Please note Item VIII discussion above.

Item XII:

There is no geological evidence of open faults nor hydrologic connection between the disposal zone and any possible underground sources of protectable water.

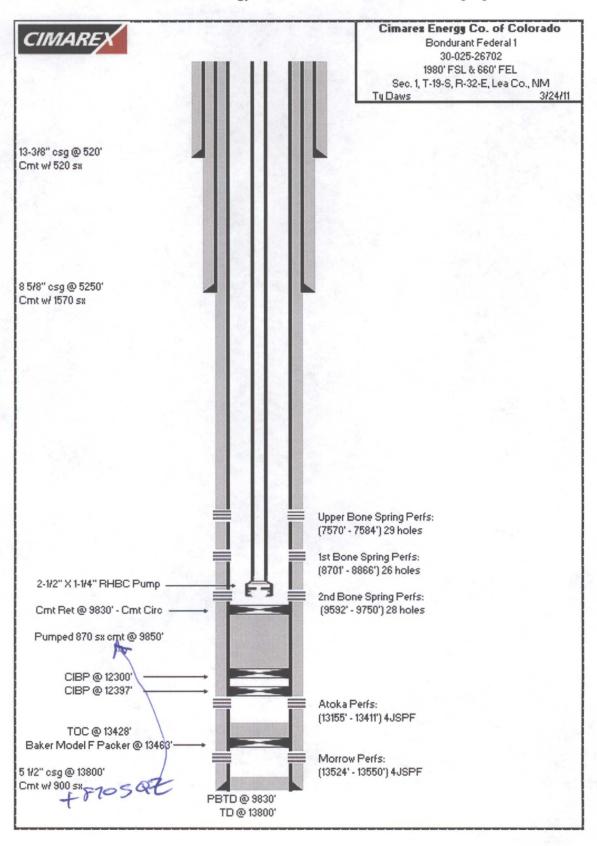
Addendum:

Operators penetrating this lower wedge of the Delaware Mountain Group in the AOR and surrounding acreage have adequately examined, logged with available geological and geophysical tools, tested and evaluated these zones. It has been reasonably determined that the zones do not contain commercial quantities of hydrocarbons.

Formation log tops (KB 3,660'):

Rustler	1,462
Salado	1,696
B/Salt	2,698
Tansill	2,962
Yates	3,182
7-Rivers	3,673
Queen	4,370
San Andres	4,685
Delaware Mtn Gp	5,135
Cherry Canyon	5,760
Brushy Canyon	6,060
Bone Springs	7,385
Wolfcamp	10,705
Cisco	11,168
Canyon	11,374
Strawn	12,075
Atoka	12,432
Morrow	12,938

Present status of Cimarex Energy Co. Bondurant Federal Com #1 proposed SWD



Proposed SWD completion Cimarex Energy Co. Bondurant Federal #1

WELL COMPLETION DIAGRAM

API: 3002526702

Operator: Cimarex Energy Company of Colorado

Lease: Bondurant Federal

Location: Sec 1, T19S-R32 Eddy Co., NM

Footage: 1980'FSL & 660'FEL

Well No: 1

KB: 3660 GL: 3631

Spud date: 30-Jan-80 Plugged date:

MSL of TD: -10140

Surface Csg

 Size:
 13-3/8" 48#

 Set ⊚:
 520

 Sxs omt:
 525

 Circ:
 8 bbls

 TOC:
 Surface

 Hole Size:
 17-1/2"

Intermediate Csg

 Size:
 8-5/8" 32/28# J-55

 Set ⊚:
 5260

 Sxs cmt:
 1625

 Circ:
 Yes

 TOC:
 Surface

 Hole Size:
 12-1/4"

Production Csg

 Size:
 5-1/2" 17# S-95/N-80

 Set ⊚:
 13800

 Sxs omt:
 Original 900

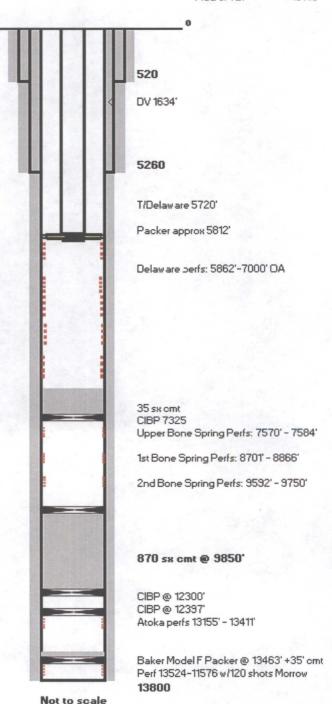
 Circ:
 Yes, on later sqzs

 TOC:
 Now at surface

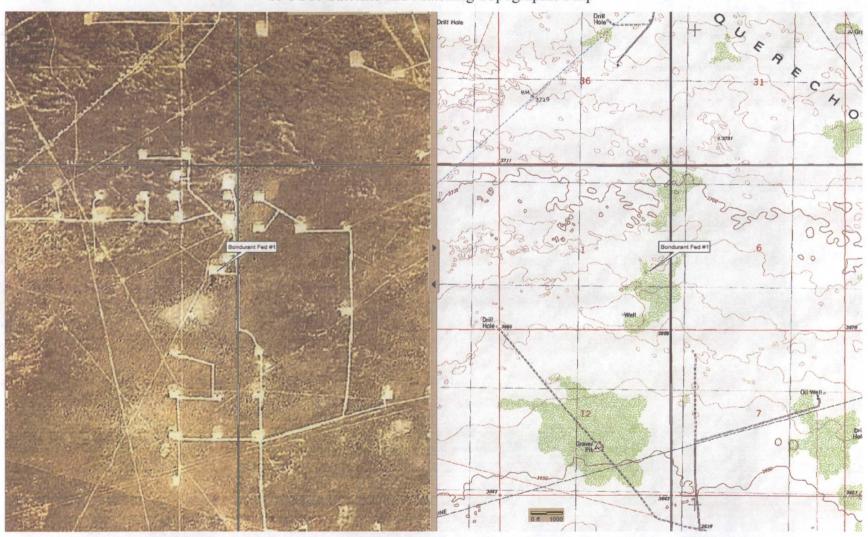
 Hole Size:
 7-7/8"

Tubular requirements (made-up): 3-1/2" 9.3# N-80 upset Fiberglass coated Lok-Set type packer set approx 5812'

Perf and acidized selectively Load tubing annulus wlocrrosion inhibitor Complete surface head for disposal



SPOT10 Satellite and Matching Topographic Map



Location: Approximately 7.7 miles south-southeast of NM-529 and Maljamar Road (CR-126A) intersection.

Jones, William V., EMNRD

From:

Jones, William V., EMNRD

Sent:

Thursday, August`09, 2012 5:01 PM

To:

'khavenor@georesources.com'

Cc:

Ezeanyim, Richard, EMNRD; Kautz, Paul, EMNRD

Subject:

Disposal application from Cimarex: Bondurant Federal #1 30-025-26702 Cherry and

Brushy from 5862 to 7000 feet perforated

Attachments:

EddyNM_NASH_53_SWD.pdf

Hello Dr. Havenor:

Looks like 4 parties were noticed.

Would you let me know where the separately owned tracts of land exist within the ½ mile AOR and the owner(s) of each tract? I saw a few tracts specified in the application, but not all of them. Attaching an example...

Hope all is well,

William V. Jones, P.E. 505-476-3448W 505-476-3462F Engineering Bureau, Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Jones, William V., EMNRD

From:

Kay Havenor < khavenor@georesources.com>

Sent:

Thursday, August 09, 2012 7:44 PM

To:

Jones, William V., EMNRD

Subject:

Re: Disposal application from Cimarex: Bondurant Federal #1 30-025-26702 Cherry and

Brushy from 5862 to 7000 feet perforated

Attachments:

Acreage ownership correction p-15.TIF

This one has the acreage page attached!

Will,

The lease ownership on page 15 had a typo for Penrock as shown on the attached copy. Sorry for the inconvenience. I suppose it is also possible that one (or both) of the two copies sent to Santa Fe may not have shown the acreage on the notification list. I usually do not include the acreage description on copies sent to those notified. Cimarex has the E/2 and E/2 NW/4 and NW/4 SW/4. Of course, that is not self-evident either! Would you prefer a replacement page including Cimarex?

Kay

At 05:00 PM 8/9/2012, you wrote:

Hello Dr. Havenor:

Looks like 4 parties were noticed.

Would you let me know where the separately owned tracts of land exist within the ½ mile AOR and the owner(s) of each tract? I saw a few tracts specified in the application, but not all of them. Attaching an example...

Hope all is well,

William V. Jones, P.E. 505-476-3448W 505-476-3462F Engineering Bureau, Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

Kay C. Havenor, Ph.D., PG. CPG GeoScience Technologies 904 Moore Ave Roswell, NM 88201-1144 (575) 626-4518

Item XIII:

Minerals Owner:

Bureau of Land Management 620 E. Greene St. Carlsbad, NM 87220

Operators for Notification:

Endurance Resources, LLC 15455 Dallas Parkway, Ste. 600 Addison, TX 75234

Penrock Oil Corporation P.O. Box 2769 Hobbs, NM 88241

Saber Oil & Gas Ventures, LLC 400 W. Illinois, Ste. 950 Midland, TX 79701

C IM wast

Surface Lessee:

Salt Lake Allotment Operator Kenneth Smith, Inc 267 Smith Ranch Road Hobbs, NM 88240

N/2 NE/4 Sec. 12, T19S-R32E Lot 1, Sec. 7, T19S-R33E

W/2 Sec. 7, T19S-R33E

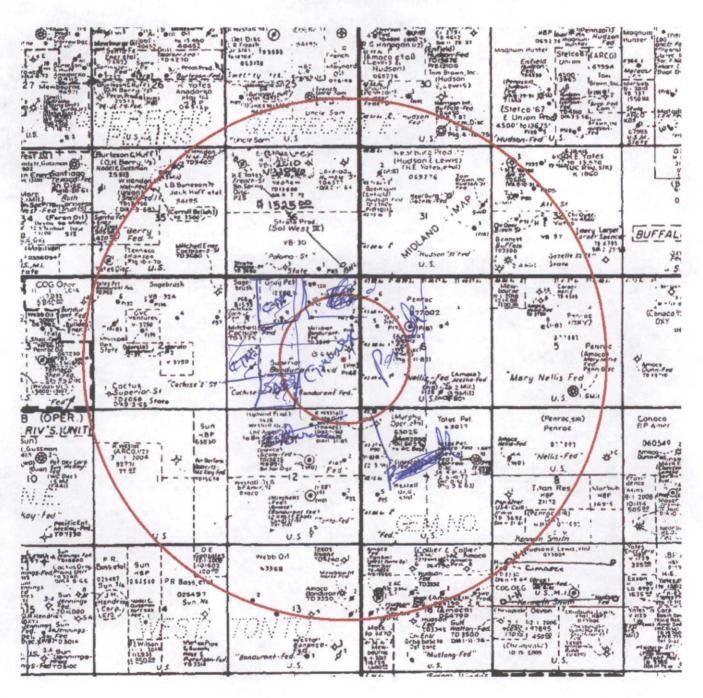
SE/4 SW/4 Sec. 1

E/2, E/2 NW/4, NW/45W/4 (502)

15

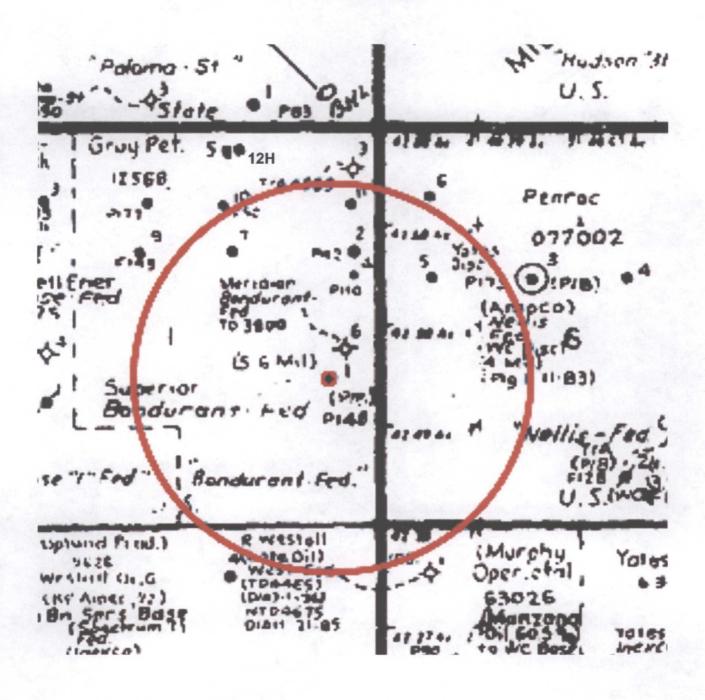
Item V:

Area of Review ½ Mile AOR and 2 Mile Radius



Item V (a):

Area of Review ½ Mile AOR



Item XIII:

Legal Publication

Affidavit of Publication

STATE OF NEW MEXICO)
) ss
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertisting Director of THE LOVINGTON LEADER, a thrice a week newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled Legal Notice was published in a regular and entire issue of THE LOVINGTON LEADER and not in any supplement thereof, for one (1) day(s), beginning with the issue of June 14, 2012 and ending with the issue of June 14, 2012.

And that the cost of publishing said notice is the sum of \$ 35.69 which sum has been (Paid) as Court Costs.

Joyce Olemens, Advertising Manager Subscribed and sworn to before me this 14th day of June, 2012.

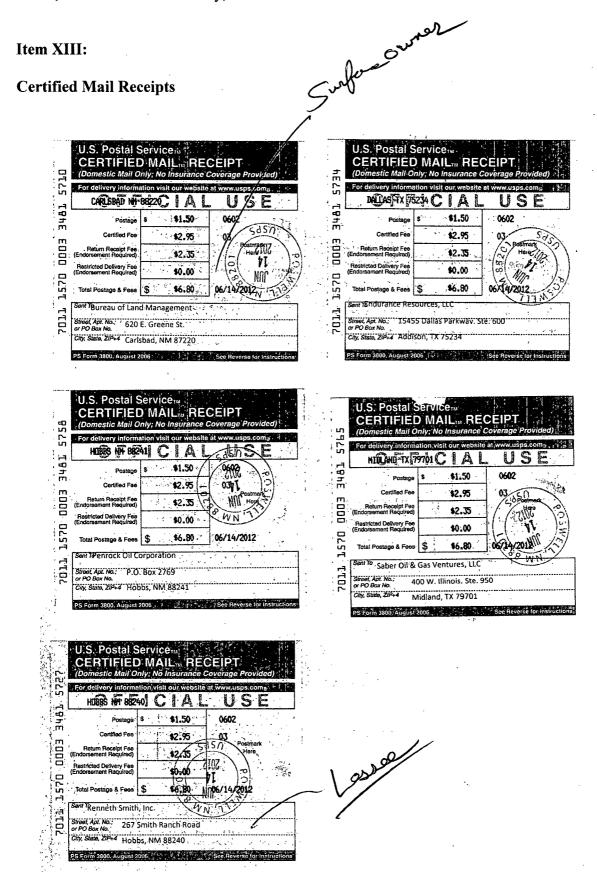
Dirac tout
Gina Fort

Notary Public, Lea County, New Mexico My Commission Expires June 30, 2014



Legal Notice Energy Cimarex Energy
Company of Colorado,
600 N. Marienfeld St., Ste
600, Midland, Texas, 432571-7800, is seeking
approval from the New
Mexico Oil Conservation Cimarex Division to re-complete
the Cimarex Energy
Company Bondurant
Federal Com #1 located
1980 feet from the south line and 660 feet from the east line of Section 1, T19S, R32E, Lea County, NM, located approximately 7.7 miles south-south-east of junction of NM-529 and Maljamar Road, and complete for non-commercial produced water disposal as the Cimarex Energy Com Bondurant Federal Company The proposed disposal interval is the Cherry Canyon/Brushy Canyon Formations through 5-1/2" casing perforations from approximately 5,862 feet to 7,000 feet. Company plans to dis-pose of a maximum of 6,000 BWPD at a maxi-5,000 BWPD at a maximum pressure of 1,172 psi, or as allowed by depth. Parties with questions regarding this proposal are urged to contact Cimarex at the address or above. Cimarex at the address or phone number above. Interested parties must file objections or requests for hearing within 15 days to the New Mexico Oil Conservation Division, 1220 S. St. Francis Dr., Senta Fs. NM 87505. Santa Fe, NM 87505.

Published in the Lovington Leader June 14, 2012.



Miss	Row	C-108	C-108 disposal application submittals CHECKLIST to ensure all items are supplied or considered.
	1		Operator, Well, and Contact info:
	2	- 11	Name of person submitting the application: Kay Havenor Other Contact?
	3	#	Did you Include a contact Email in the application? Yes and Mailing Address? Yes and Phone? Yes
	4	11	Operator Name:Cimarex Energy Company of Colorado OGRID Num:162683
	5		RULE 5.9 ComplianceNumber of Inactive Wellsvs Total Wells Operated1301Is financial assurance required on any well?Yes-59 wells0 wells in violation
	6		Is there any hearing order finding this operator out of compliance with Division Rule 19.15.5.9 NMAC?
	7		Are all Rule 5.9 issues OK to allow the Division to issue Disposal Permits?
	8	111	Well Name:Bondurant Federal #1
	9	III	API Num: <u>30-025-26702</u> Spud Date: <u>1/31/1980</u>
	10		Have you included API numbers on all wellbore diagrams and well list(s) in this application? Yes
	11	Ш	Proposed wellFootages1980' FSL & 660' FEL Unit _ Sec1_ Tsp19S Rge32E County Lea
	12		General Location (i.e. Y miles NW of Z): Located 7.7 miles south-southeast of the junction of juncton NM-529 and Maljamar Road (CR-126A).
	13	····	Current Well Status: O/G active
	14	1	General Summary of Planned Work to Well: Plug-back Bone Springs production interval and recomplete for SWD into Delaware.
	15		INTERVAL TOP and BOTTOM:
	16	IIIB.(2)	Proposed disposal Top Depth: 5,862' Formation Name: Cherry Canyon
	17	IIIB.(2)	Proposed disposal Bottom Depth: 7,000' Formation Name: Brushy Canyon
	18	IIIB.(2)	Is the disposal interval OpenHole? or Perfed?_X or Both?
	19	IIIB.(2)	What will be the disposal tubing size OD?3-1/2" Packer Seat, Feet:approx 8,100'

Miss	Row	C-108	C-108 disposal application submittals CHECKLIST to ensure all items are supplied or considered.
	20	VII	What max surf inj. psi are you proposing?1,172 If differing from 0.2 psi/ft surf. Grad., is supporting data attached such as a Step Rate Test?
	21	<u> </u>	FRESH WATERS:
	22	VIII	Depth to bottom of Fresh Waters:est less than 100"Formation Name(s)?Quaternary alluviumIf present
	23	ΧI	Any Fresh Water Wells Within 1 Mile?None reported If so, did you attach an analysis from these Wells?None available
	24		Are all "Fresh" waters isolated with Casing and Cement?Yes ("Fresh" water is defined as less than 10,000 mg/l of TDS)
	25	XII	Included "Affirmative Statement" concerning any Connection from Disposal Depths to existing Fresh Waters?Yes Item XII
	26		WASTE WATERS:
	27	XIV	Will this be a Lease Only disposal well? or only used for the Operator's own waste needs?Xor Commercial Disposal?
	28	VII	Which formations will supply the waste waters to be disposed into this well List most commonArtesia Group to Bone Springs
	29	VII	Are Waste waters compatible with proposed disposal interval waters?_Yes Did you include waste water analysis?Yes
	30		AT PROPOSED WELLINSITU WATERS AND HYDROCARBON POTENTIAL:
	31		Is a discussion included of the potential for future OIL/GAS recovery from the proposed disposal interval? Yes
	32		If your proposed well for disposal is a depleted producer (within the proposed interval); do you know what was the cumulative oil/gas/water? And did you include a grate-Time plot of this depleted interval? Insitu water analysis Included? No Is the salinity within the disposal interval more than 10.000 mg/l of TDS? Yes or how will you determine this insitu water.
	33	VII	Insitu water analysis Included? No Is the salinity within the disposal interval more than 10,000 mg/l of TDS? Yes or how will you determine this insitu water salinity? Upon completion of perforations the proposed disposal interval will be swabbed to 1) confirm the absence of commercial hydrocarbons and 2) obtain analysis of formation water.
	34	VIII	Does the application include a list of Formation tops down to and including the bottom of the target formation?Yes
	35		What is the topand bottom2,698' of the Salado Salt reported in one nearby cable tool well. Most wells report redbeds and anhydrite.
	36	X	Are all existing Logs (including any CBL over the disposal interval) are on the OCD Web Site?YesIf logs not there, please send
	37	IIIA.	Are the wellbore diagrams for this well included in the ApplicationBefore Conversion? Yes and After Conversion? Yes

December

Miss	Row	C-108	C-108 disposal application submittals CHECKLIST to ensure all items are supplied or considered.
	38		Are the top and bottom footage of the proposed disposal interval marked on the "after" diagram?Yes
	39		NOTICE:
	40_	XIV	Date of the Newspaper Notice in the County: 6/14/2012 Lea Co.
	41	V	Within 1/2 mile, did you clearly identify (either on a map or by legal description) all separately owned tracts of lands within the disposal interval? Yes
	42	XIII	Did you identify the owner(s) of each of these separately owned tracts? Yes, in Were they all formally noticed? Yes_
	43	XIII	If reentering a P&Aed well, are there depth divisions of ownership within that well?If so, have you also noticed all the shallower interests of the intent to use the well for disposal?
	44	XIII	Is the proposed well within the R-111-P defined Potash Area or the BLM Secretaries Potash Area? No If so, did you send notice to the nearest Potash lessee?
	45	XIV	Who owns the surface lands at the disposal well site (BLM, SLO, or who)2 BLM - Surface leased Was that party formally noticed? Yes
	46		Area of Review:
	47	V	Did you include a map identifying all wells within 2 miles? Yes
	48	· VI	Did you include a list of all AOR wells? Yes Is the list available to be emailed (if requested) in spreadsheet format? Yes - Included in Item VI list
	49	VI	Does this list identify all wells penetrating (at least the top of) the disposal interval within 1/2 mile of the proposed well? Yes
	50	VI	Did you include wellbore diagrams for all P&Aed wells that exist within the 1/2 mile AOR that penetrate the disposal interval? Only this well penetrates zone in AOR
	51	VI	How many wells exist within the 1/2 mile AOR that penetrate the disposal interval? How many of these are Plugged/Dry and Abandoned? 0 P&A
	52	VI	Are details included on cement coverage of the proposed disposal interval for all wells penetrating the disposal interval within 1/2 mile of the proposed well? Yes
	53	VI	Do all reported cement tops describe how that "top" was determined? If Available If you calculated any tops, what fillup efficiency factor did you use?
	54	VI_	Did you identify the presence and depth of all Cement Stage Tools (DV) in the subject well and in the AOR wells? Yes, when info was available
	55	VIII	For the target formation, is there significant formation structural depth changes within the 1/2 mile AOR? No
	56	VIII	Is there any Karst or Massive Limestone in this target formation? Noor in the formations directly above or below? No

Miss	Row	C-108	C-108 disposal application submittals CHECKLIST to ensure all items are supplied or considered.
	57		Administrative or Hearing:
	58	VI	How many wells within the 1/2 mile AOR currently are producing (or still have open perforations) within the disposal interval? 0 is it "gas" or "oil"?
	59		NOTE: If the proposed disposal interval is a "Gas" interval or if any AOR wells are producing or have open perforations within this interval then this application may not be properly classified as a "disposal". These types of applications must be processed at an examiner hearing.
	60		Any other Issues?

	Rorder &	
	Injection Permit Checklist (11/15/2010)	
	WFX PMX SWD 1349 Permit Date UIC Qtr (A)	
	#Wells Well Name(s): BON DURANT Foldred # 1	(
	API Num: 30-0 25 - 26702 Spud Date: New/Old: (UIC primacy March 7, 1982)	
	Footages 1980 FSL / 660 FEL Unit I Sec 1 Tsp 195 Rge 32 E County LEA	
	General Location: 133 Mi NE of Could by NEXE of Rof area	
	Operator: CIMAREX EVEREY CO of COURAD Contact Kay HAVENCR	
	OGRID: 62383 RUKE 5.9 Compliance (Wells) (Finan Assur) 6 KIS 5.9 OK?	5
	Well File ReviewedCurrent Status:	
	Planned Work to Well:	
	Diagrams: Before Conversion	
	Well Details: HolePipe Depths Tool Sx or Cf Method	
	New _Existing _Surface 17 /2 -13 8 525 - 525 SX CIRC	
	New_Existing VInterm 11 -89/8 5250 1634 1625 SX CIRC	_
	New_Existing_Longst 7918 - 512 13,800 705-18705K WOLD 800 1014 014	ر-
	New_Existing _ Liner New_Existing _ OpenHole	
	Depths/Formations: Depths, Ft. Formation Tops?	
.	5 135 Pal 1 Cone 14676 WW	-
	Formation(s) Above 9780 -025-3243 (Calvin)	[F]
	Injection TOP: 5.862 CharuC: Max. PSI 1172 OpenHole Perfs V J J J Packer Depth 5812	4
100	Injection BOTTOM: 700 Brushy C. Tubing Size 3/2 Packer Depth 5812	>
. r . D.	Formation(s) Below 660 Brushy C.	
Nois	Capitan Reef? (Potash? Noticed? Noticed? Noticed? Salado Top/Bot/53 0 - 2865 Cliff-House?	
	Fresh Water: Depths: 60 Formation 0 A L Wells? Maralysis? Affirmative Statement	
	Disposal Fluid Analysis? Sources: CIM was Cases only attores GRP to BS.	
	Disposal Interval: Analysis? Production Potential/Testing: Target in other wells to the first testing.	
		yetic
	0 (6/14) W	>
	RULE 26.7(A) Affected Persons: Evidence of Journal Solar	•
4 0	AOR: Maps? Well List? Producing in Interval? M Wellbore Diagrams?	the
	Active Wells 2 Repairs? WhichWells?	orts:
5		ō
	P&A Wells O Repairs? OWhich Wells?	
	Issues: Request Sent Reply:	