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		- Engi	CONSERVATION DIV neering Bureau - cis Drive, Santa Fe, NM		Mesqu	inte SWP
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	ADMINIS	TRATIVE APPL	ICATION CHE	CKLIST	7011 MAR - 4 P	12: 55
	ation Acronyms [NSL-Non-Star [DHC-Dowi [PC-Po	: idard Location] [NSP-No nhole Commingling] [O ol Commingling] [OLS [WFX-Waterflood Expans	consing at the division on-Standard Proration of CTB-Lease Commingling of CTB-Lease Storage] sion] [PMX-Pressure isposal] [IPI-Injection	Unit] [SD-Simg] [PLC-Pole [OLM-Off-Le Maintenance Income I	30 - 0  sultaneous Dedicate  bl/Lease Commingle  ase Measurement]  Expansion]  crease]	(5-3549) ion] ing]
[1]	TYPE OF AP [A]	PLICATION - Check T Location - Spacing Uni □ NSL □ NSP □	t - Simultaneous Dedica			Eddy
	Check [B]	One Only for [B] or [C] Commingling - Storage  DHC  CTB		OLS 🗆 O	LM	
	[C]	Injection - Disposal - P  ☐ WFX ☐ PMX				
	[D]	Other: Specify				
[2]	NOTIFICATI [A]	ON REQUIRED TO: -  Working, Royalty of			* * *	
	[B]	X Offset Operators, Le	aseholders or Surface C	Owner		
	[C]	X Application is One	Which Requires Publish	ned Legal Not	ice	
	[D]	X Notification and/or U.S. Bureau of Land Manage	Concurrent Approval by	y BLM or SLO	)	
	[E]	☐ For all of the above	, Proof of Notification of	or Publication	is Attached, and/or,	
	[F]	☐ Waivers are Attach	ed			

[3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Kay Havenor	Kay CHavenor	Agent	3/2/2011
Print or Type Name	Signature	Title	Date
		KHavenor@georesources.oe-mail Address	com

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 Recovery Pressure Maintenance X Disposal Stora Application qualifies for administrative approval? Yes No
II.	OPERATOR: Mesquite SWD, Inc.
	ADDRESS: P.O. Box 1479 Carlsbad, NM 88221
	CONTACT PARTY: Kay Havenor PHONE: 575-622-0283
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. drawn	Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle around each proposed injection well. This circle identifies the well's area of review.
	Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schemation plugged well illustrating all plugging detail.
VII.	Attach data on the proposed operation, including:
	<ol> <li>Proposed average and maximum daily rate and volume of fluids to be injected;</li> <li>Whether the system is open or closed;</li> <li>Proposed average and maximum injection pressure;</li> <li>Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,</li> <li>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.).</li> </ol>
Give solids	. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and dept the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolve concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately lying 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
	Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any ion or disposal well showing location of wells and dates samples were taken.
	Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering date and no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of ling water.
XIII.	Applicants must complete the "Proof of Notice" section on the reverse side of this form.
XIV. and b	Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge elief.
	NAME: Kay Havenor TITLE: Agent
	NAME: Kay Havenor TITLE: Agent  SIGNATURE: Kay Havenor DATE: 2/28/2011
	E-MAIL ADDRESS: KHavenor@georesources.com 575-626-4518  If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.
* Please	If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. e 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.

Side 1

INJECTION WELL DATA SHEET

30-05-35749

API 30-015-28960

OPERATOR: Mesquite SWD, Inc.

Cagney 28 Federal Com #1 WELL NAME & NUMBER:

660' FSL & 810' FEL WELL LOCATION:

UNIT LETTER FOOTAGE LOCATION

17S SECTION 28

TOWNSHIP

RANGE

30E

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA Surface Casing

17-1/2" Hole Size:

Casing Size: 11-3/4"

SX. 460

Cemented with:

See attached well diagram

or

 $\mathfrak{H}^{\mathfrak{z}}$ 

Top of Cement: Surface

Method Determined: Circulated

Intermediate Casing

12-1/4" Hole Size:

Casing Size: 9-5/8"

SX. 824

Cemented with:

or

Circ w/1"

Method Determined:

Top of Cement: Surf

 $\mathbb{H}^{3}$ 

Production Casing

8-3/4" Hole Size:

Casing Size: 7"

or SX. 1600 Cemented with:

Ħ

Method Determined: approx 3500' Top of Cement: \_

11756' Total Depth:

(Perforated or Open Hole; indicate which) Perforations 8200' - 9000' Injection Interval

# INJECTION WELL DATA SHEET

Tui	Tubing Size: 3-1/2" J-55 (or 2-7/8") Lining Material: IPC-1850 coated
$T_{y}$	Type of Packer: Lok-Set
Рас	Packer Setting Depth: Approx 8150 ft
Off	Other Type of Tubing/Casing Seal (if applicable):
	<u>Additional Data</u>
1:	Is this a new well drilled for injection? Yes $X$ No
	If no, for what purpose was the well originally drilled? Oil/gas
5.	Name of the Injection Formation: Wolfcamp
$\ddot{s}$	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. <u>Yes. Morrow perfs 11348'</u> to 11352'. CIBP 11135' CIBP 11135 +35 sxs cmt. Perfs 11205' to 11222'. Plugging details listed below in Item VI (a).
5	Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Grayburg-Jackson 7-Rivers, Queen, Grayburg, San Andres and Loco Hills Glorieta-Yeso above 6000', Sand Tank and Cedar Lake Morrow below 10,600'

Mesquite SWD, Inc. 161968 P.O. Box 1479 Carlsbad, NM 88221

Contact party: Kay Havenor 575-626-4518 KHavenor@georesources.com

#### C-108 Ancillary Data

- 1. API: 30-015-35249
- 2.. Original Lease Name: Cagney 28 Federal #1 New name used here: No
- 3. Legal publication lay distance description: "2.4 miles south of Loco Hills intersection of CR-217 and US-82"
- 4. AOR data: All wells are shown in summary and detail in **Item VI**: Data on unplugged wells in AOR that penetrate proposed disposal zone:
  - 1) 3001534525 Cimarex Energy Co. of Colorado, Full Tank 33 Federal #1, OCD Unit B, Sec. 33, T17S-R30E. 990' FNL & 1980' FEL. Spud 4/28/2006. TD 11,750'. 17-1/2" hole to 510'. Ran 13-3/8" 48# H-40 to 510' cmt w/470 sxs, circ 23 sxs to surface. 12-1/4" hole ran 9-5/8" 40# J-55 to 4,030', cmt w/1200 sxs- circ 66 sxs. Ran 7" 26# P-110 to 9,500', w/450 sxs in 2 stages. TOC 3,400 Temp Survey. Ran 4-1/2" 1106# P-110 liner 9.135' to 1,750' w/275 sxs. Perf 11,556-11,576' w/6 SPF 120 holes. Acid 2,000 gal 7.5% acid. Completed Morrow gas.
- 5. AOR well count as shown in **Item VI (b):** 23 (2 shallow P&A, 2 undrilled locations, 2 deep P&A, 1 deep active, 16 shallow active).
- 6. P&A wells in AOR count: 4 (including target re-entry P&A 3/12/2007)
- 7. List of formation tops applicable to AOR: No logs released from this well. Tops from south offset B-33-T17S-R30E:
  - Queen 2512, San Andres 3400, 2nd Bone Springs sand 6870, Wolfcamp 8175, Canyon 10,005, Strawn 10,520, Atoka 10,695, Morrow 10,970, Mississippian 11,545
- 8. Producing or non-P&A wells in proposed disposal AOR: Wells that penetrates proposed disposal interval:

3001534525 Cimarex Energy Co. of Colorado, Full Tank 33 Federal #1, OCD Unit B, Sec. 33, T17S-R30E. 990' FNL & 1980' FEL Completed Morrow gas. TD 11,750'.

- 9. Is proposed SWD in a depleted zone/well? No.
- 10. Why is proposed interval non-productive?

Operator released no information. Offset logs show water wet through disposal interval. No production from this interval in greater area.

11. Notification and related acreage is shown in **Item XIII**:

Southern Bay shallow in majority of AOR, all  $W/2 \ Sec \ 27$ 

Alamo Permian Resources shallow in unit E-34-17S-30E

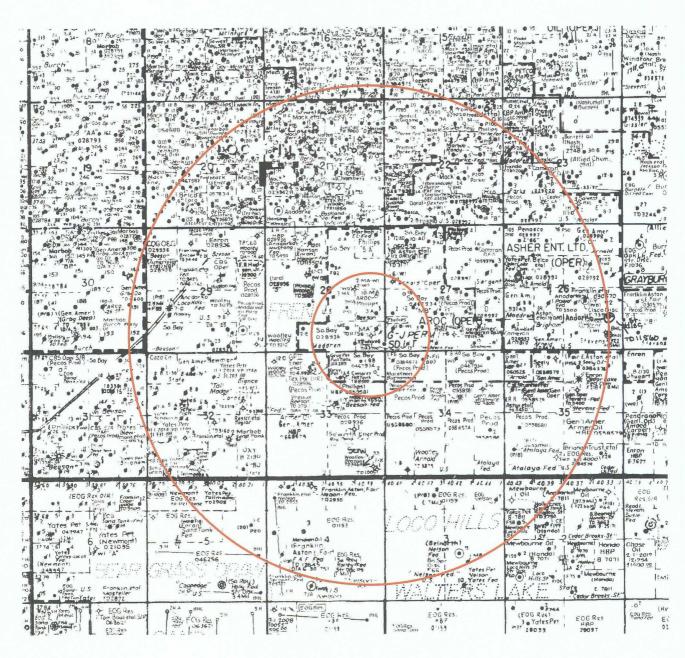
Cimarex Sec 28 and 33 deep in AOR

Three Rivers deep Sec 34 N/2

- 12. Surface owner, as shown in Item XIII, is: BLM Lessee Williams & Son has been notified.
- 13. Rule 5.9 status of applicant: Financial status in compliance. Inactive wells include: 1 inactive
- 14: Location of well as to Potash or other sensitive areas: Not within R-111-P

Item V:

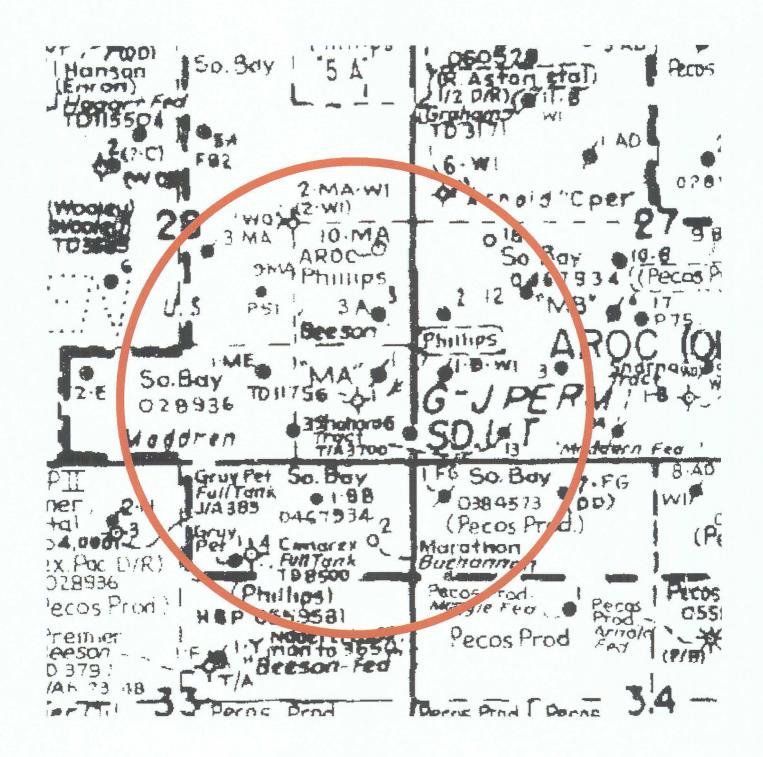
Area of Review ½ Mile AOR and 2 Mile Radius



> Enlarged View of AOR Centered in Unit C Sec. 35, T17S-R29E Eddy Co., NM

Therest See 28,33
Therest See 27
Therest Say 2 See 27
Southern Bay

Item V(a):



**Item VI:** Data on wells in AOR that penetrate the proposed injection interval:

#### All Known Wells in AOR Penetrating Proposed Injection Interval

	API	WELL NAME	STATUS	UNIT	SEC T	WNS RANGE	NS	EW	OPERATOR	LAND	SPUD DATE	PLUG DATE	ELEV-GL	TVD_DEPTH	Highest Perf
1	3001535249	Cagney 28 Federal #1	P&A	Р	28 17	75 30E	660-N	810-E	Cimerax Energy Co. of Colo	Federal	3/12/2007	4/22/2007	3624	11756	None
2	3001534525	Full Tank 33 Fed Com #4	Active	В	33 17	/S 30E	990-N	1980-E	Cimerax Energy Co. of Colo	Federal	4/28/2006		3611	11750	11556
3	3001535379	Full Tank 33 Fed Com #2	P&A	В	33 17	7S 30E	990-N	1880-E	Cimerax Energy Co. of Colo		3/22/2007	4/20/2007	3610	8500	None
	3001535249	Target conversion to SWD													

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

- 1. 3001535249 Cimarex Energy Co. of Colorado, Cagney 28 Federal Com #1, OCD Unit P, Sec. 28, T17S-R30E. 660' FSL & 810' FEL. Spud 3/12/2007. 13-3/8" 46# H-40 @476' w/380 sxs finished w/70 sxs 1" to surface. 9-5/8" 40# J-55 @4,010' w/970 sxs TOC Temp Survey 470', circulated w/104 sxs 1" to surface. Open hole to TD 11,756, bit size 8-3/4". 50 sxs 100' 11656-11756', 50 sxs 11232-323' tagged 11175'. 50 sxs 9514-9614', 100 sxs 7920-8100' no tag, 140 sxs 7920-8100' tagged @7898', 50 sxs 6412-6512', 90 sxs 5404-5564', 100 sxs 3912-4052', 80 sxs 3912-4052' tagged 4002', 80 sxs 348-568' tagged 335', 50 sxs 0-100'. P&A 4/22/2007. TD 11,756' No logs released on this well.
- 2. 3001534525 Cimarex Energy Co. of Colorado, Full Tank 33 Federal #1, OCD Unit B, Sec. 33, T17S-R30E. 990' FNL & 1980' FEL. Spud 4/28/2006. TD 11,750'. 17-1/2" hole to 510'. Ran 13-3/8" 48# H-40 to 510' cmt w/470 sxs, circ 23 sxs to surface. 12-1/4" hole ran 9-5/8" 40# J-55 to 4,030', cmt w/1200 sxs- circ 66 sxs. Ran 7" 26# P-110 to 9,500', w/450 sxs in 2 stages. TOC 3,400 Temp Survey. Ran 4-1/2" 1106# P-110 liner 9.135' to 1,750' w/275 sxs. Perf 11,556-11,576' w/6 SPF 120 holes. Acid 2,000 gal 7.5% acid. Completed Morrow gas. TD 11,750'.
- 3. 3001535379 Cimarex Energy Co. of Colorado, Full Tank 33 Federal #4, OCD Unit B, Sec. 33, T17S-R30E. 990' FNL & 1830' FEL. Spud 3/22/2007. 17-1/2" hole to 499'. Ran 13-3/8" 48# H-40 to 499' cmt w/451 sxs, circ 58 sxs to surface. 12-3/4" hole ran 9-5/8" 40# J-55 to 4,010', cmt w/1977 sxs 2 stages- circ 473 sxs. No testing or completion reported. 35 sxs cmt 8,487-8,384', 60 sxs cmt 8,241-8,061', 50 sxs cmt 5,375-5,225', 100 sxs cmt @4,081' tagged @3,746', 100 sxs cmt @632' tagged @297', 25 sxs cmt to surface. P&A 4/20/2007. TD 8500' does not penetrate the Wolfcamp or the top of proposed injection interval.

Mesquite SWD, Inc.

Cagney 28 Federal Com No. 1

660' FSL & 810' FEL

Sec. 28, T17S-R30E Eddy County, NM

Item VI(b): All known wells in the AOR and their status. Wells that penetrate (or close to) the proposed injection interval are shown below in red.

O_DEPTH_	3171	3258	3278	3265	3700	3637	3268	3156	3650	0	3350	>3250	0	3418	3650	3250	3700	11756	3280	117506	8500	3281	3360
ELEVGL TVD_DEPTH	3650	3632	3624	3631	3620	3622	3629	3630	3631	3621	3622	3627	3621	3623	3618	3628	3622	3624	3619	3611	3610	3595	3616
SPUD_DATE (	27-Mar-1965	Pre 12/1/49	6-Oct-1969	Pre 12/1/49	15-Feb-1998	19-Dec-1980	3-Aug-1938	28-Nov-2000	1-Aug-2000	Expired	29-Dec-1980	Pre 12/1/49	Expired	Pre 12/1/49	22-Jun-2000	5-Mar-1938	18-Apr-1998	12-Mar-2007	16-Sep-1941	28-Apr-2006	22-Mar-2007	25-Apr-1941	1-Apr-1939
AND TYPE PLUG_DATE							30-Sep-75									01-Dec-93		22-Apr-07			20-Apr-07		
TYPE	0	0	0	_	0	0	0	0	0	ဖ	0	_	9	_	0	0	0	9	0	9	0	_	
AN	ᄔ	ш	ᄔ	щ	ш	ᄔ		ш	щ	ш	ᄟ	ᄔ	ш.	ц	<u>ı.                                    </u>	ш	<u>u.</u>	ч.	ш	ᄔ	ш	ᄔ	ц
OPERATOR	SOUTHERN BAY	SOUTHERN BAY	GENERAL AMERICAN OIL	SOUTHERN BAY	SOUTHERN BAY	CIMAREX ENERGY CO. OF	SOUTHERN BAY	1650 W SOUTHERN BAY	CIMAREX ENERGY CO. OF	SOUTHERN BAY	SOUTHERN BAY	PHILLIPS PETROLEUM CO	SOUTHERN BAY	CIMAREX ENERGY CO. OF	SOUTHERN BAY	CIMAREX ENERGY CO. OF	CIMAREX ENERGY CO. OF	SOUTHERN BAY	330 W SOUTHERN BAY				
HANGFTG NS OFTG EWW O	300 W	330 W	1295 W	330 W	M 066	2310 E	330 E	2310 E	1680 E	W 0861	1650 W	1650 W	W 0861	1650 E	1330 E	330 E	50 E	810 E	990 E	1980 E	1830 E	1665 W	330 W
TG_NS_C	2310 N	1650 S	1815 S	990 S	330 S	1650 N	1650 S	2310 S	1840 S	860 S	990 S	990 S	860 S	S 066	330 S	990 S	330 S	8 099	330 N	N 066	N 066	332 N	330 N
RANG	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E	30E
STATUS IIV_ECTIODWINSH	27 17.05	27 17.05	27 17.05	27 17.05	27 17.0S	28 17.05	28 17.05	28 17.05	28 17.0S	28 17.05	28 17.05	27 17.05	28 17.0S	28 17.05	28 17.0S	28 17.05	28 17.0S	28 17.05	33 17.05	33 17.0S	33 17.05	34 17.05	34 17.05
<u>ऑ</u>	ш	_		Σ	Σ	9			_	z	z	z	z	0	0	۵	۵	а	⋖	8	89	ပ	Q
STATUS	Active	Active	Active	Active	Active	Active	Plugged	Active	Active	New	Active	Active	New	Active	Active	Plugged P	Active	Plugged P	Active	Active	Plugged B	Active	Active
WELL_NAME	3001510463 GRAYBURG JACKSON PSU AD	3001504360 GRAYBURG JACKSON PSU MB	3001520256 GRAYBURG JACKSON PSU MB	3001504359 GRAYBURG JACKSON PSU MB	3001530022 GRAYBURG JACKSON PSU MB	3001523392 MADDREN A FEDERAL 005	3001504378 G-J PRMR SD UT TR BA 003	3001521692 GRAYBURG JACKSON PSU MA	3001531272 GRAYBURG JACKSON PSU MA	3001535250 CAGNEY 28 FEDERAL COM 002	3001523405 MADDREN E FEDERAL 002	3001504358 GRAYBURG JACKSON PSU MB	3001535250 CAGNEY 28 FEDERAL COM 002	3001504377 GRAYBURG JACKSON PSU ME	3001531157 GRAYBURG JACKSON PSU ME	3001504376 GRAYBURG JACKSON WF UNIT	3001530170 GRAYBURG JACKSON PSU MA	3001535249 CAGNEY 28 FEDERAL COM 001	3001504443 GRAYBURG JACKSON PSU BB	3001534525 FULL TANK 33 FED COM 001	3001535379 FULL TANK 33 FEDERAL 004	3001504446 GRAYBURG JACKSON PSU FG 002 Active	3001504445 GRAYBURG JACKSON PSU FG
API	3001510463	3001504360	3001520256	3001504359	3001530022	3001523392	3001504378	3001521692	3001531272	3001535250	3001523405	3001504358	3001535250	3001504377	3001531157	3001504376	3001530170	3001535249	3001504443	3001534525	3001535379	3001504446	3001504445

#### Item VII:

- 1. The maximum injected volume anticipated is 15,000 BWPD. Average anticipated is 10,000 BWPD.
- 2. Injection will be through a closed system.
- 3. Maximum injection pressure is expected to be 1,640 PSI.
- 4. Sources will be produced water. These will be compatible with waters in the disposal zone.
- 5. Water sample analyses from the ConocoPhillips Grayburg Deep 25 Federal #5, Unit A, Sec. 25, T17S-R29E, Eddy Co., shown below, averages TDS 39,343 mg/l (Source: NM WAIDS):





## Water Samples for Well GRAYBURG DEEP UNIT 005

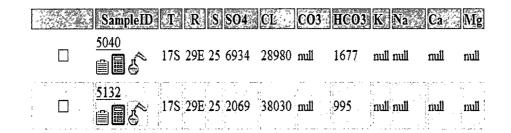
API = 3001503083

Formation ABO

Field null

#### **Current Water Production Information**

Instructions:	
Click 🖺	For general information about this sample.
Click 🗐	For scale calculation pages (Stiff-Davis or Oddo Tomson methods).
Click &	To select this water sample for water mixing. It will lead to the main page, and add the sample ID to the mixing table.
Click <b>664</b>	Click the hyperlinked sample number to make a .csv for that sample, or select several check boxes and click Submit for multiple samples
	The ions are in (mg/L) units.



#### Item VIII:

Disposal will be into the Permian Wolfcamp. The lithology is predominately dolomites and shales. The interbedded members, both porous and non-porous, are effectively separated by very-low vertical permeability shale beds and/or carbonates. The majority of the beds are tight and form excellent barriers to the vertical movement of water. The Wolfcamp is overlain and underlain by bounding shales and dense limestones/dolomites of the Abo and Cisco- Canyon and Strawn limestones and shales respectively. No zones in, above or below the Wolfcamp are known to contain waters less than 10,000 mg/l.

There is no known fresh, potable or stock water within a 2-mile radius. Records from the New Mexico Office of the State Engineer on 2/24/2011 show no known water wells within the 2-mile radius of the proposed Mesquite SWD disposal well.

New Mexico Office of the State Engineer

# Wells with Well Log Information

No wells found.

Basin: Capitan

UTMNAD83 Radius Search (in meters):

Easting (X): 596392

Northing (Y): 3629382

Radius: 3300

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.

2/24/11 7:13 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 Artesia Group is approximately 1,000'. 11-3/4" csg is cemented to 666'. 8-5/8" csg set @4,006' has cement circulated to the surface.

#### **Item IX:**

Acidize perforations in the Wolfcamp between 8,300' and 8,950' in 5-1/2" casing with approximately 20,000 gal 20% HCl.

#### Item X:

Logs are on file with the OCD.

#### Item XI:

No water wells located in the 2-mile area surrounding the proposed disposal. Please note Item VIII 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.

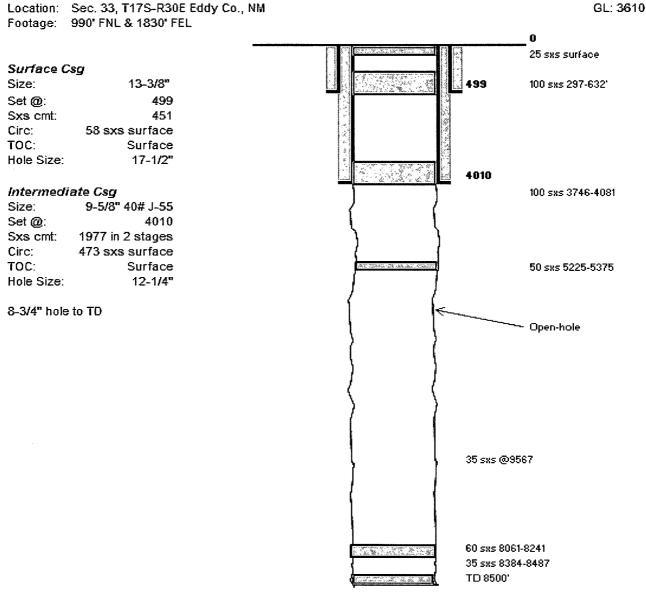
P&A diagram of Cimarex Full Tank 22 Federal #4 Note: This well does not penetrate the proposed the Wolfcamp formation or the top of the proposed injection interval. Included because of depth.

API: 3001535379

Operator: Cimarex Energy Co. of Colorado

Full Tank 33 Federal Well No: KB: NR

Location: Sec. 33, T17S-R30E Eddy Co., NM



Not to Scale

Mesquite SWD, Inc. Cagney 28 Federal Com No. 1 660' FSL & 810' FEL

Sec. 28, T17S-R30E Eddy County, NM

Cimarex Energy #1 Full Tank 33 Federal #1

#### WELL COMPLETION DIAGRAM

API:

3001534525

Operator: Cimarex Energy Co. of Colorado

Lease: Full Tank 33 Federal Location: Sec 33, T17S-R30 Eddy Co., NM

Footage: 990' FNL & 1980' FEL

Well No: 1

KB:

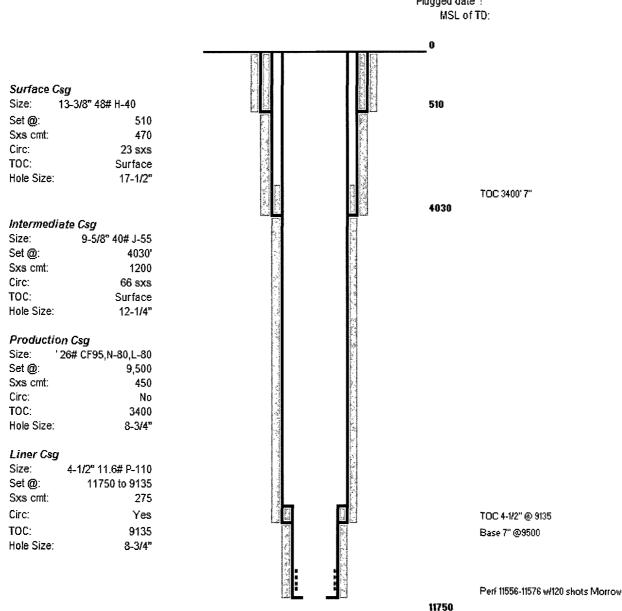
3643

GL: Spud date:

3611 April 28, 2006

Plugged date:

-8107



Not to scale

KB: NR

Mesquite SWD, Inc. Cagney 28 Federal Com No. 1 660' FSL & 810' FEL Sec. 28, T17S-R30E Eddy County, NM

Cimarex Energy Cagney 28 Federal Com #1 (Proposed target re-entry well)

#### Plug and Abandon Diagram

Well No:

API:

3001535429

Operator: Cimarex Energy Co. of Colorado

Lease:

Cagney 28 Federal Com

Location: Sec. 28, T17S-R30E Eddy Co., NM

Footage: 660' FSL & 810' FEL

#### Surface Csq

Size: 13-3/8° 48# H-40 Set @: 8 ---476

Sxs cmt:

380 Circ: 1" w/70 sxs

TOC: Hole Size: Surface 17-1/2"

#### Intermediate Csg

Size:

9-5/8" 40# J-55

Set @:

4010

Sxs cmt: Circ:

1977 in 2 stages 473 sxs surface

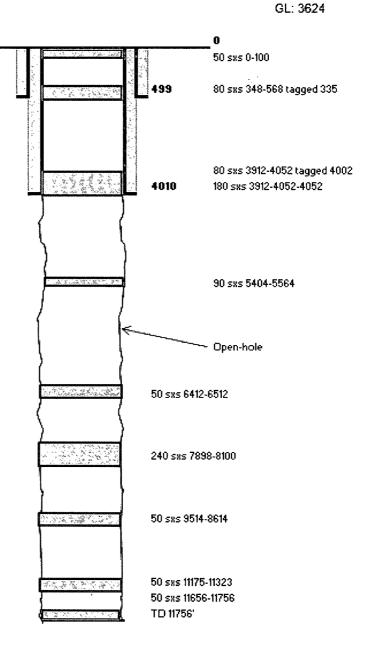
TOC:

Surface

Hole Size:

12-1/4"

APD planned 8-3/4" to TD



Not to Scale

Proposed Mesquite re-entry and re-completion for SWD.

API:

3001535249

Operator: Mesquite SWD, Inc.

Cagney 28 Federal Com

Location: Sec 28, T17S-R30 Eddy Co., NM

Footage: 660' FSL & 810' FEL

Well No: 1

KB: GL: NR

Spud date:

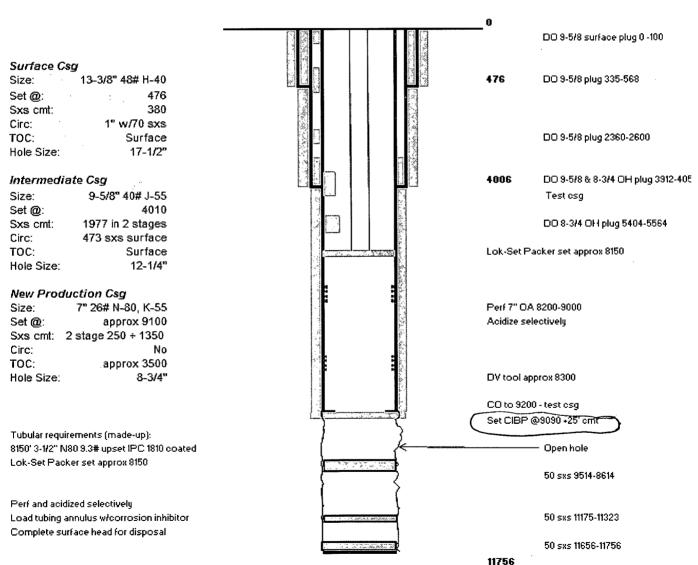
3555 August 22, 1996

Plugged date:

June 5, 2008

MSL of TD:

-8201



Not to scale

Form 3160-5 (November 1994)



#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an

FORM APPRO	VED
OMB No 1004-	0135
Everen July 21	1996

Lease Serial No

_	-	_	_	_	_	_	~	
- 1	.C-	n	5	~2	7	5	u_	Δ

If Indian, Allottee or Tribe Name

,	A CONTRACTOR OF THE PARTY OF TH	abandoned well. Use	e form 3160-3 (A	(PD) for such pro	oposais.		
	¢. I IDANI	IN TRIPLICATE - Other	or instructions.	an savarna alda		7 if Un	it or CA/Agreement, Name and/or No
<del></del>	SOBINIT	IN TRIPLICATE - OTH	er instructions (	on reverse side			
Type of Well Oil Well	X Gas Well	Other	JUN 1920	לחו		8 Well	Name and No.
Name of Operat			0011   3 21	101		Cagney	28 Federal Com No. 1
	nergy Co. of	Colorado	OCD-ARTE	SIA			Well No
Address		5	3b.	Phone No (include	(e area code)	30-015-3	35249
	0007: Irvina	, TX 75014-0907	Job.	972-401-3111	e area code)		d and Pool, or Exploratory Area
				972-401-3111		1	•
		T , R., M , or Survey Descript	ion)				ake; Morrow
660' FSL &			•			ì	nty or Parish, State
P-28-17S-3	······································	K ADDD ODDIATE I	NOV/FOV TO 1	NIDIOATE NAT	SUDE OF NOT	1	ounty, NM
1			BOX(ES) TO I	7-1-1		CE, REPO	ORT, OR OTHER DATA
TYPE OF	SUBMISSIO	N	<del></del>	T	YPE OF ACTION		
Notice of Ir	ntent	Acidize	[	Deepen	Production (Start	(Resume)	Water Shut-Off
	nio, ii			า์ '		or (country)	=
ron.		Alter Casi	ng [_	∫Fracture Treat	Reclamation		Well Integrity
X Subsequer	nt Report	Casing Re	epair	New Construction	Recomplete		Other
		Change F	lans X	Plug and Abandon	Temporarily Aba	ındon	
Final Aban	ndonment Notice	Convert to	o Injection	Plug Back	Water Disposal		
3. Describe Prop	osed or Complete	ed Operation (clearly state all	pertinent details, incli	uded estimated startin	ng date of any proposed	work and appre	oximate duration thereof
04.14.07	strings, R	D (11756'). Surface set eccived permission from	Wesley Ingram	with the BLM to		surface on t	both casing
04.20.07	<u>Plug</u>	Interval	Cement	Remarks			
04.20.07	1 2	11656'-11756' 11123'-11323'	50 sx 50 sx	100' plug	~ @ 11175! (witness	and by Day	Coffell)
04.21.07		9514'-9614'	50 sx	100' plug tag	g @ 11175' (witnes	sed by Roy (	Canany
04.21.07	4A	7920'-8100'	100 sx	180' plug, no	n tag found		
	4B	7920'-8100'	140 sx		igged @ 7898' (wit	nessed by Be	ob Hoskinson)
•	5	6412'-6512'	50 sx	100' plug			•••
	6	5404'-5564'	90 sx		ngged @ 5445' (wit	nessed by B	ob Hoskinson)
	7A	3912'-4052'	100 sx	140' plug			
04.22.07		3912'-4052'	80 sx		ngged @ 4002'		
	8	348'-568'	80 sx	220' plug, ta			
	9	0-100'	50 sx	100' plug (w	vitnessed by Bob H	ioskinson)	
<ol> <li>I hereby certif Name (Printe)</li> </ol>		ng is true and correct		Title			
reamo (r mito	ar, ypea,			Time			
Natalie K	rueger	<del></del>	····	Reg Analy	st l		
Signature		1/		Date			
( Na	tales	Burga		June 7, 200	07	ΔΩ	CEPTED FOR RECOR
<del></del>		THI	S SPACE FOR F	<del></del>	ATE OFFICE USE		
Approved by		<del></del>			Title		Date
pproved by		//			Tide		JUN 1 5 2007
	nnroval if any ar	e attached Approval of this	notice does not wa	rrant or	Office		
		, ,			Onice	ı	
certify that the a	pplicant holds le	gal or equitable title to those to conduct operations there	rights in the subjec		Office		WESLEY NORAM

fraudulent statements or representations as to any matter within its jurisdiction

DISTRICT I 1625 N. Prench Dr., Hobbs, NM 88240 DISTRICT II 1301 W. Grand Avenue, Artesia, NM 88210

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102 Revised October 12, 2005

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

#### DISTRICT III 1000 Rio Brazos Rd., Aztsc, NM 87410

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 67505 OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

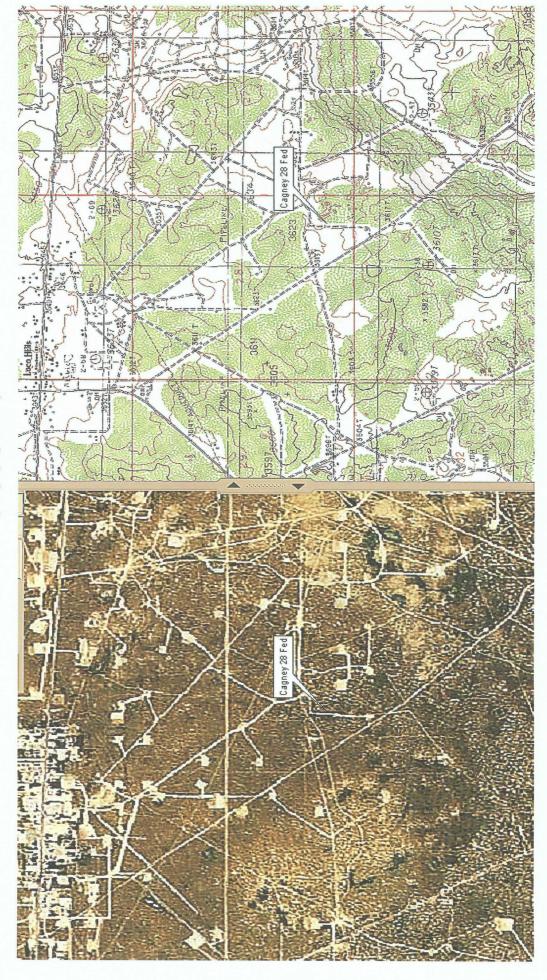
API	Number		71	Pool Code	Ced	dar Lake; Mor	Pool Name		
Property	Code			CAC	Well Number				
ogrid n 16268		Elevation 3624'							
-									
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Р	28	17 S	30 E		660	SOUTH	810	EAST	EDDY
-			Bottom	Hole Lo	cation If Diffe	rent From Sur	face		
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acre	s Joint o	r Infill	Consolidation (	Code Or	der No.	<u> </u>		1	. L
320	Υ		C						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

			EN APPROVED BY TH	
				OPERATOR CERTIFICATION
				I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretore entered by the division.
.				Zeno Farris  Zeno Farris
			<u> </u>	Printed Name
				SURVEYOR CERTIFICATION
LC-028936-C		LC-053259-A	Long - W103'58'15.6"	I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my belief.
			NMSPCE-N 654985.509 E 652668.709 (NAD-83)	SEPTEMBER 28, 2006  Date Surfedl.
Cagney 28 Fed Com 1980'	#2		LC-053259-A 3541.7'3548.6'	Signature & Seet of Professional Surveyor
	8 H-05	8936-E	510'	Certificate No. Gary L. Jones 7977
		Cagney	8 Fed Com #1	Basin surveyS

Sec. 28, T17S-R30E Eddy County, NM

SPOT10 Satellite and Matching Topographic Map



Delorme Xmap6

Mesquite SWD, Inc.

Cagney 28 Federal Com No. 1 660' FSL & 810' FEL

Sec. 28, T17S-R30E Eddy County, NM

Listing of all known wells/tracts in the one-half mile AOR Wells known to penetrate proposed disposal interval shown in red.

TVD_DEPTH	3171	3258	3278	3265	3700	3637	3268	3156	3650	0	3350	>3250	0	3418	3650	3250	3700	11756	3280	11750	8500	3281	
ELEVGL TV	3650	3632	3624	3631	3620	3622	3629	3630	3631	3621	3622	3627	3621	3623	3618	3628	3622	3624	3619	3611	3610	3595	
SPUD_DATE	27-Mar-1965	Pre 12/1/49	6-Oct-1969	Pre 12/1/49	15-Feb-1998	19-Dec-1980	3-Aug-1938	28-Nov-2000	1-Aug-2000	Expired	29-Dec-1980	Pre 12/1/49	Expired	Pre 12/1/49	22-Jun-2000	5-Mar-1938	18-Apr-1998	12-Mar-2007	16-Sep-1941	28-Apr-2006	22-Mar-2007	25-Apr-1941	
AND TYPE PLUG_DATE							30-Sep-75									01-Dec-93		22-Apr-07			20-Apr-07		
置	0	0	0	_	0	0	0	0	0	ဖ	0	_	9	_	0	0	0	9	0	9	0	_	
ANE	보	F	F	ш	ш.	<u> </u>		ш	ш.	ᄔ	ш.	1.1.	ᄔ	ㅛ	ᄔ	ш	ᆫ	ட	ш	<u> </u>	<u>_</u>	ᄔ	
OPERATOR	300 W SOUTHERN BAY	SOUTHERN BAY	SOUTHERN BAY	SOUTHERN BAY	SOUTHERN BAY	SOUTHERN BAY	GENERAL AMERICAN OIL	SOUTHERN BAY	SOUTHERN BAY	CIMAREX ENERGY CO. OF	SOUTHERN BAY	SOUTHERN BAY	CIMAREX ENERGY CO. OF	SOUTHERN BAY	SOUTHERN BAY	PHILLIPS PETROLEUM CO	SOUTHERN BAY	CIMAREX ENERGY CO. OF	SOUTHERN BAY	CIMAREX ENERGY CO. OF	CIMAREX ENERGY CO. OF	SOUTHERN BAY	
G_NS_GFTG_EWW_C	300 W	330 W	1295 W	330 W	W 066	2310 E	330 E	2310 E	1680 E	1980 W	1650 W	1650 W	1980 W	1650 E	1330 E	330 E	30 E	810 E	990 E	1980 E	1830 E	1666 W	
16_NS_0	2310 N	1650 S	1815 S	S 066	330 S	1650 N	1650 S	2310 S	1840 S	860 S	S 066	S 066	S   098	990 8	330 S	S 066	330 S	S 099	330 N	N 066	N 066	332 N	
MANGE	30E	30E	30E	30E	36	30E	30E	30E	30E	30E	30E	30E	30E	30E	305	30E	30E	30E	30E	30E	30E	30E	
CTICOWNSH	27 17.05	27 17.05	27 17.05	27 17.05	27 17.05	28 17.05	28 17.05	28 17.05	28 17.05	28 17.05	28 17.05	27 17.05		28 17.05	28 17.05	28 17.05	28 17.05	28 17.05	33 17.05	33 17.05	33 17.05	34 17.05	
STATUS IN ECTIODWINSHIANGFT	Active E	Active L	Active L	Active M	Active M	Active G	Plugged	Active J	Active J	New N	Active N	Active N	New N	Active 0	Active 0	Plugged P	Active P	Plugged P	Active A	1	Plugged B	Active C	
API WELL_NAME	3001510463 GRAYBURG JACKSON PSU AD	3001504360 GRAYBURG JACKSON PSU MB	3001520256 GRAYBURG JACKSON PSU MB	3001504359 GRAYBURG JACKSON PSU MB	3001530022 GRAYBURG JACKSON PSU MB	3001523392 MADDREN A FEDERAL 005	3001504378 G-J PRMR SD UT TR BA 003	3001521692 GRAYBURG JACKSON PSU MA		3001535250 CAGNEY 28 FEDERAL COM 002	3001523405 MADDREN E FEDERAL 002	3001504358 GRAYBURG JACKSON PSU MB	١.	3001504377 GRAYBURG JACKSON PSU ME	3001531157 GRAYBURG JACKSON PSU ME	3001504376 GRAYBURG JACKSON WF UNIT	3001530170 GRAYBURG JACKSON PSU MA	3001535249 CAGNEY 28 FEDERAL COM 001	3001504443 GRAYBURG JACKSON PSU BB	3001534525 FULL TANK 33 FED COM 001	3001535379 FULL TANK 33 FEDERAL 004	3001504446 GRAYBURG JACKSON PSU FG 002 Active	

#### Item XIII:

#### **Surface and Minerals Owner:**

Bureau of Land Management c/o Carlsbad Field Office 620 E. Greene Street Carlsbad, NM 88220

### **Operators:**

Alamo Permian Resources, LLC 820 Gessner Rd. Ste. 1650 Houston, TX 77024

Cimarex Energy Company of Colorado 15 E. 5th St. Ste. 1000 Tulsa, OK 74103

Southern Bay Operating, LLC 110 CypressStation Dr. #220 Houston, TX 77090

Three Rivers Operating Co., LLC 1122 S. Capital of Texas Hwy, Ste. 325 Austin, TX 78746

#### **BLM Surface Lessee**

Williams & Son Cattle Co. P.O. Box 30 Maljamar, NM 88264

#### Item XIII:

# **Legal Publication**

Affidavit of Publication								
NO. 21573	$\dashv$							
STATE OF NEW MEXICO								
County of Eddy:								
Walter L. Green Walter L. Green								
being duly sworn, says that he is the Publisher								
of the Artesia Daily Press, a daily newspaper of general								
circulation, published in English at Artesia, said county								
and state, and that the hereto attached								
Legal Notice								
was published in a regular and entire issue of the said								
Artesia Daily Press, a daily newspaper duly qualified								
for that purpose within the meaning of Chapter 167 of								
the 1937 Session Laws of the state of New Mexico for								
1Consecutive weeks/days on the same								
day as follows:								
First Publication March 2, 2011								
Second Publication								
Third Publication								
Fourth Publication								
Fifth Publication								
Subscribed and sworn to before me this								
2nd day of March 2011								
OFFICIAL SEAL Danny Scott NOTARY PUBLIC-STATE OF NEW MEXICO								
My commission expires: 3/18/2014								

Danny Scott Notary Public, Eddy County, New Mexico

# **Copy of Publication:**

Mesquite SWD, Inc., c/o Kay Havenor, 904 Moore Ave, Roswell, NM 88201-1144, (575) 626-4518, is seeking approval from the New Mexico Oil Conservation Division to re-enter the Cimerax Energy Company of Colorado., Cagney 28 Federal Com No. 1 well API: 30-015-35249, located 660 feet from the south line and 810 feet from the east line of Section 28, T17S, R30E, Eddy County, NM, 2.4 miles south of Loco Hills intersection of CR-217 and US-82, and complete for commercial produced water disposal as the Mesquite SWD, Inc. Cagney 28 Federal Com No.1

Com No.1
The proposed disposal interval is the Wolfcamp Formation through casing perforations 8,200 feet to 9,000 feet (OA).

Mesquite SWD, Inc. plans to dispose of a maximum of 10,000 BWPD with a maximum pressure of 1,640 psi.

Parties with questions regarding this proposal can contact Kay Havenor at the address or phone number above.

Interested parties must file objections or requests for hearing within 15 days of publication to the Oil Conservation Division: 1220 S. St. Francis Dr., Santa Fe, NM 87505. Published in the Artesia Daily Press, Artesia, N.M., March 2, 2011. Legal No. 21573.

#### Item XIII:

261

5000

0280

7010

Williams & Son Cattle Co.

Street, Apt. No.; P.O. Box 30

Maljamar, NM 88264
PS Form 3800, August 2006

# Certified Mail Receipts



Cimarex Energy Co. of Colo.

or PO Box No. 15 E. 5th St. Ste. 1000

City, State, ZIP+4 Tulsa, OK 74103

Injection Permit Checklist (14/15/2010)
WFX PMX SWD 1213 Permit Date 5 / 11 UIC Qtr M A M
#Wells   Well Name(s): Cogney, 28 Folar Con #1
# Wells _ Well Name(s): Cogney, 28 Folcol Con # 1  API Num: 30-015-352449 Spud Date: 3/12/07 New/Old: N(UIC primacy March 7, 1982)
Footages 660 FSL/810 FEL Unit P Sec 28Tsp 17S Rge 30 Ecounty EDPY
General Location: 2,4 MC S, of Loco #145
Operator: Masquite SWD, FVC.  Contact Kay Hauser  OGRID: RULE 5.9 Compliance (Wells) (Finan Assur) OK IS 5.9 OK? OK
OGRID: RULE 5.9 Compliance (Wells) (Finan Assur) OK IS 5.9 OK? OK
Well File Reviewed Current Status: PE A No CS6 CTO
Planned Work to Well: Re-outer Run CSE, ing
Diagrams: Before Conversion After Conversion Elogs in Imaging File: None
Sizes Setting Stage Cement Determination  Well Details: HolePipe Depths Tool Sx or Cf Method
New_Existing Surface 17/2 133/4 476+70 - 460 CCRC(w/1")
New_Existing Interm 12/4 95/8 4010 824 Sunt W (")
New Existing _ LongSt 83/4 7 8300 1600 3500 est.
New_Existing Liner 11756 TD
New_Existing OpenHole
Depths/Formations: Depths, Ft. Formation Tops?
Formation(s) Above 8175 wc
Injection TOP: SZ WC Max. PSI 640 OpenHole Perfs L
Injection BOTTOM: 9000 wc. Tubing Size 3/202(18 Packer Depth 8150)
Formation(s) Below 10 005 Conyon 7xvRs 2 1790
Capitan Reet? (Petash? Noticed? ) (WIPP? Noticed? ) Salado Top/Bot Ciff House?
Fresh Water: Depths:Formation Wells? None Analysis? Affirmative Statement
Disposal Fluid Analysis? Sources: Commercial 39,000 TDS
Disposal Interval: Analysis? Production Potential/Testing: Les Show Work Wet
Notice: Newspaper Date 3/2/11 Surface Owner BCM William Mineral Owner(s)
RULE 26.7(A) Affected Persons: 3 RVKS/SovemBay/Cirrarex/A carrolleria
AOR: Maps? Well List? Producing in Interval? No Wellbore Diagrams?
Active Wells Repairs? OwhichWells?
P&A Wells Repairs? Owhich Wells?
Issues: Reply:

4/30/2011/1:57 PM