DISTRICT 1
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1700 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

#### State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Form C-144

June 1, 2004

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tai  Type of action: Registration of a pit									
Operator: COG Operating LLC Telephor	ne: <i>432-685-4372</i>	e-mail address: dku	vkendall@conchor	PSOUPCES COM					
Address: Fasken Center Tower II, 550 W. Texas Ave., Suite 1300, Midl		o-man address. unu	укенишишконспог	sources.com					
l	30-025-37819	U/L or Otr/Otr: K	Sec: 12	Γ: <i>22S</i> R: <i>32E</i>					
	N 32° 24' 16"	Longitude: W 103° 3		1927 🗆 1983 🗀					
Surface Owner: Federal ⊠ State □ Private □ Indian □		5							
<u>Pit</u>	Below-grade tank								
Type: Drilling ⊠ Production □ Disposal □ Volume:bbl Type of fluid:									
Workover ☐ Emergency ☐	Construction material:								
Lined ☑ Unlined □	Double-walled, with leak detection? Yes  If not, explain why not.								
Liner type: Synthetic ⊠ Thickness: 12 mil Clay □									
Pit Volume: 15,000 bbl									
	Less than 50 feet		(20 points)	- Trinks - VA					
Depth to ground water (vertical distance from bottom of pit to seasonal	50 feet or more, but less	s than 100 feet	(10 points)						
high water elevation of ground water.) greater than 100'	100 feet or more - X		( 0 points)	0					
	Voc								
Wellhead protection area: (Less than 200 feet from a private domestic	Yes		(20 points)	_					
water source, or less than 1000 feet from all other water sources.)	No - X		( 0 points) 0						
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet		(20 points)						
irrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but le	ss than 1000 feet	(10 points)						
inigation canais, dienes, and perenniar and epitemerar watercourses.)	1000 feet or more - <b>X</b>		( 0 points)	0					
	Ranking Score (Total	Points)	0 points						
If this is a pit closure: (1) Attach a diagram of the facility showing the pit	s relationship to other equi	nment and tanks (2) Indica	te disposal location	(abade the engite have if					
your are burying in place) onsite \( \subseteq \text{ offsite} \square \text{ If offsite, name of facility} \)									
remediation start date and end date. (4) Groundwater encountered: No				-					
		below ground surface	n and an	sch sample results.					
(5) Attach soil sample results and a diagram of sample locations and excava	tions.	,	- /3 <sup>3</sup>	- 6					
Additional Comments: Pit Closure Plan attached			**************************************	810					
	***	<u> </u>		10 W					
			1 2 TO	273					
			8 8 8 8 B	<b>9</b> ×/					
			12	757					
			State of the state	a all					
I hereby certify that the information above is true and complete to the best	of man language day and 1 at	C 16 (1) (1)	15150	72.03					
has been/will be constructed or closed according to NMOCD guideline	s ⊠, a general permit [	, or an (attached) alternat	e above-described ive OCD-approved	pit or below-grade tank   plan □.					
_				. –					
Date: <u>3-6-07</u>	Signature								
		lles (l.	- Can	ald					
Your certification and NMOCD approval of this application/closure does not herwise endanger public health or the environment. Nor does it relieve the regulations.	ot relieve the operator of I	iability should the contents of a contents of a compliance with an	of the pit or tank cor y other federal, state	ataminate ground water or e, or local laws and/or					
Approval:	1		1	, ,					
Approval: Printed Name/Title GARY W.WINK STAFFMO	Resignatura H	11/1/2	<b>b</b>	3/16/07					
THE TAMES THE CALL AND	s signature	my will me	ے Date:	الالالالالا					

#### Pit Closure Plan - Drilling Pit

Operator: COG Operating LLC

Well Name: Prohibition "12" Federal #10

Location: Unit K, Section 12, Township 22 S, Range 32 E, Lea County, NM

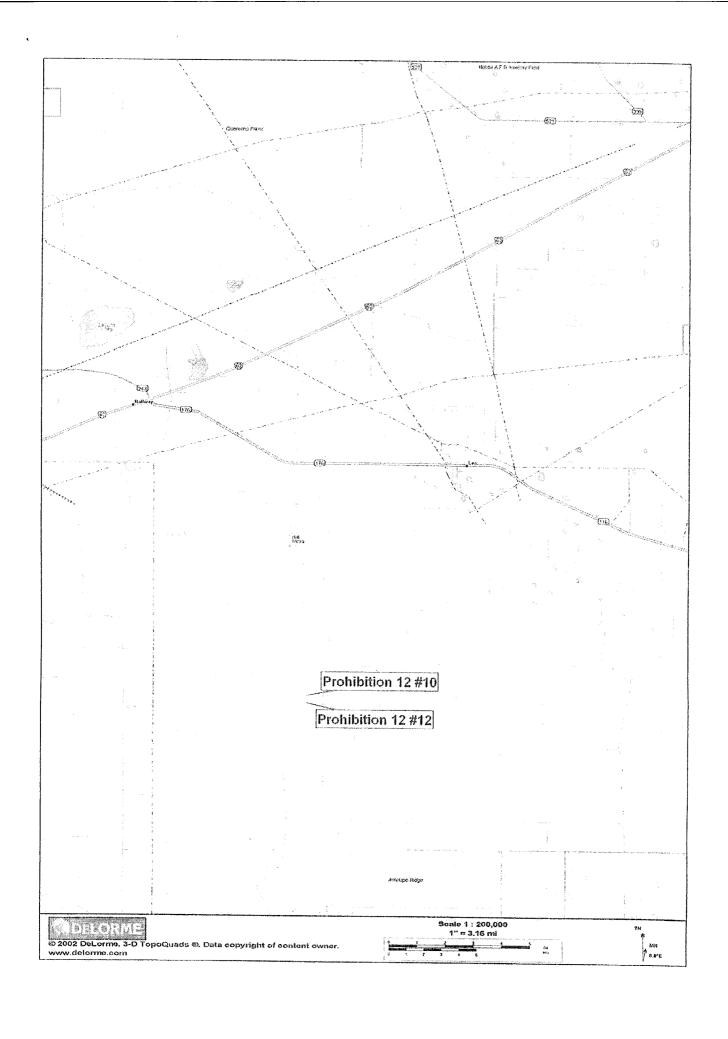
The drilling pit associated with this well will be closed as per New Mexico OCD "Pit and Below-Grade Tank Guidelines" dated November 1, 2004. The visual inspection of the pit indicated that the pit liner has maintained its integrity.

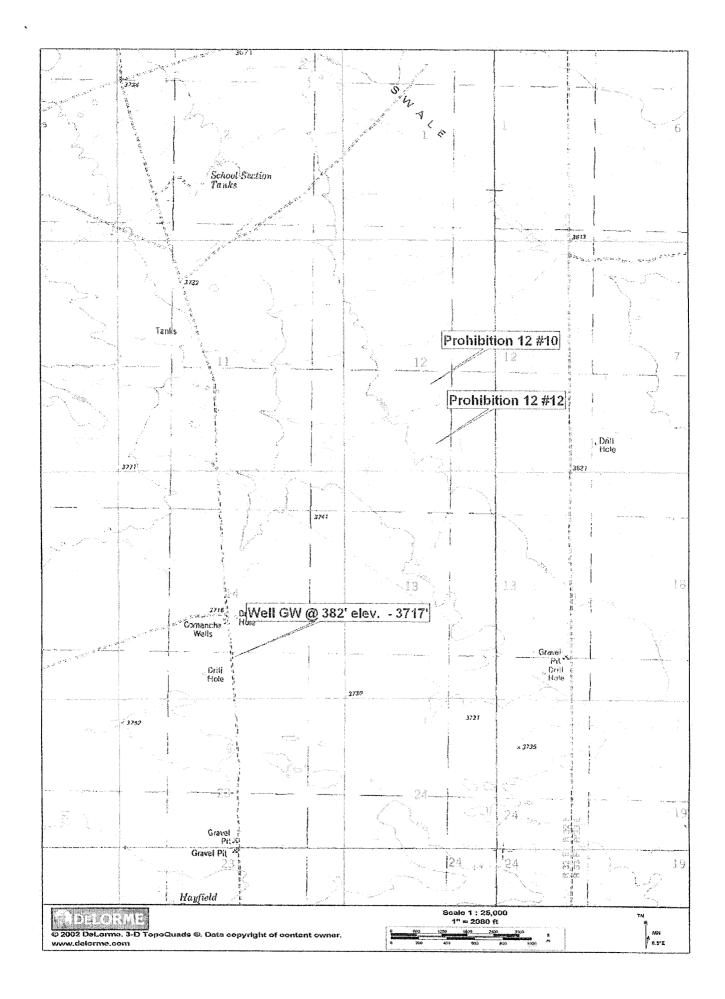
1. Any remaining liquids will be removed from the pit.

- 2. Remaining solid wastes (i.e. buckets, cans, miscellaneous trash, debris, contaminated solids, etc.) will be removed from the pit, except for dried mud and cuttings, cement, and frac materials in drilling and reserve pits which have been approved by the OCD for encapsulation.
- 3. This well did penetrate a salt section, and 9.5 lb/gal brine or greater was used during drilling. Therefore, the pit will be closed by <u>capping</u> and <u>encapsulation</u>:

Capping and encapsulation will be accomplished by mixing earthen materials with the pit contents, as necessary to stiffen the pit contents sufficiently to provide physical stability and support for the pit cover; folding the edges of the liner over the stiffened mud and cuttings; capping with a 20 mil minimum thickness impervious, reinforced, synthetic or fabricated liner meeting ASTM standards that is designed to be resistant to the material encapsulated; the liner will overlap the underling pit by at least 3 feet on all directions; and covering the liner cap with minimum of 3 feet of clean soil that is capable of supporting native plant growth.

- 4. Upon closure of the pit, the surface where the pit was located will be contoured to prevent erosion and ponding of rainwater over the site.
- 5. Since this is a federal well, the Bureau of Land Management (BLM) will be contacted for site reclamation requirements.





# Water Well Data Average Depth to Groundwater (ft) COG - Prohibition 12 Federal #12 and #10, Lea County, New Mexico

	21 :	South	3	1 East		***************************************	21	South	***************************************	32 East	CHECKLIC CONTRACTOR OF THE PERSON OF T	#HICTORD COMMON	21	South	***************************************	33 East	***************************************
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3	17	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	13
)	20	21	22	23	24	19	20	21	22	23	24	19	20	21	22	23	24
)	29	28	27	26	25	30	29	28	27	26	25	30	29	28	27	26	25
	32	33	34	35	36	31	32	33	34	35	36	31	32	33	34	35	36

<sup>88</sup> New Mexico State Engineers Well Reports

<sup>105</sup> USGS Well Reports

Geology and Groundwater Conditions in Southern Lea, County, NM (Report 6)
Geology and Groundwater Resources of Eddy County, NM (Report 3)

<sup>34</sup> NMOCD - Groundwater Data

# New Mexico Office of the State Engineer POD Reports and Downloads

Township: 228	Range: 32E	Sections:							
NAD27 X:	Y:	Zone;	Search Radius:						
County:	Basin:		Number:	Suffix:					
Owner Name: (First)	(Las	st) All	Non-Domestic	○ Domestic					
POD / Surface Data Report Avg Depth to Water Report									
Water Column Report									
Clear Form iWATERS Menu Help									

#### AVERAGE DEPTH OF WATER REPORT 12/20/2006

								(Depth	Water in	Feet)
Bsn	Rws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
C	223	32E	14				2	340	360	350
C	22S	32E	19				1	280	280	280

Record Count: 3

Water Resources National Water Information System: Web Interface

Data Category: Ground Water

Geographic Area: New Mexico

GO

# Ground-water levels for New Mexico

Search Results -- 1 sites found

Search Criteria

site\_no list = • 322314103384301

Save file of selected sites to local disk for future upload

#### USGS 322314103384301 22S.32E.14.32322

Available data for this site

Ground-water: Field measurements

GO

Lea County, New Mexico **Output formats** Hydrologic Unit Code Latitude 32°23'14", Longitude 103°38'43" NAD27 Table of data Land-surface elevation 3,717.00 feet above sea level NGVD29 Tab-separated data The depth of the well is 435 feet below land surface. Graph of data This well is completed in the SANTA ROSA SANDSTONE (231SNRS) local aquifer. Reselect period USGS 322314103384301 225.32E.14.32322 3350 368 Ground-Mater Level, in feet below land surface 3348 370 3346 372 3344 374 3342 376 3340 378 3338 380 3336 382 3334 384 1973 1976 1979 1982 1985 1988 1991 1994 1997 2000 2003 2006 - Provisional Data Subject to Revision ----

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Water Resources National Water Information

System: Web Interface

Data Category: **Ground Water**  Geographic Area: **New Mexico** 

GO

## **Ground-water levels for New Mexico**

Search Results -- 1 sites found

Search Criteria

site no list =

• 322702103344001

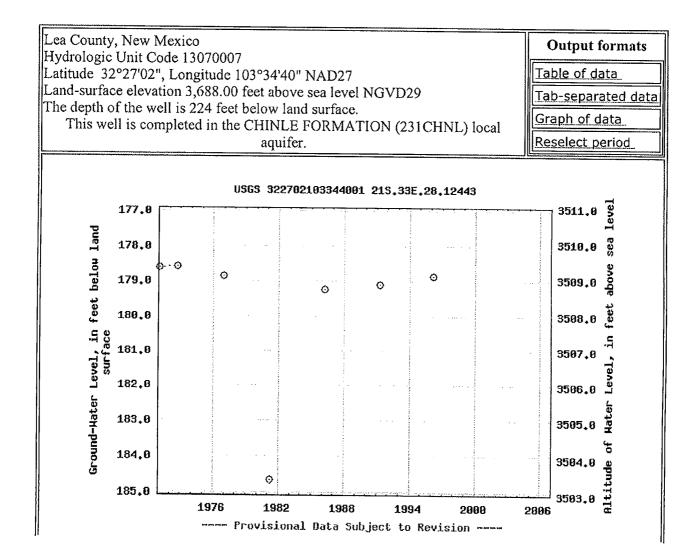
Save file of selected sites to local disk for future upload

#### USGS 322702103344001 21S.33E.28.12443

Available data for this site

Ground-water: Field measurements

GO



李镇上部,188

Water Resources National Water Information System: Web Interface

Data Category: **Ground Water**  Geographic Area: **New Mexico** 

GO

### **Ground-water levels for New Mexico**

Search Results -- 1 sites found

Search Criteria

site no list =

• 322325103313301

Save file of selected sites to local disk for future upload

#### USGS 322325103313301 22S.33E.13.23131

Available data for this site

Ground-water: Field measurements

GO

Lea County, New Mexico **Output formats** Hydrologic Unit Code 13070007 Table of data Latitude 32°23'25", Longitude 103°31'33" NAD27 Land-surface elevation 3,514.00 feet above sea level NGVD29 Tab-separated data The depth of the well is 508 feet below land surface. Graph of data This well is completed in the CHINLE FORMATION (231CHNL) local Reselect period aquifer. USGS 322325103313301 225.33E.13.23131 3131.0 383.0 ō Ground-Water Level, in feet below land 3130.0 384.0 3129.0 385.0 386.0 3128.9 387.0 3127.0 388,9 3126.0 389.0 3125.0 390.0 3124.0 391.0 3123.0 392.0 3122.0 1970 1976 1982 2006 1988 1994 2000 Provisional Data Subject to Revision ----