

**3R - 417**

**GENERAL  
CORRESPONDENCE**

**YEAR(S):**

**5/22/08**

**Price, Wayne, EMNRD**

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**From:** Price, Wayne, EMNRD  
**Sent:** Thursday, May 22, 2008 12:41 PM  
**To:** 'Don Fernald (dfernal@eprod.com)'  
**Cc:** Perrin, Charlie, EMNRD; Powell, Brandon, EMNRD; VonGonten, Glenn, EMNRD; Cobrain, Dave, NMENV  
**Subject:** CPS-1989  
**Contacts:** Don Fernald

Dear Mr. Fernald:

OCD is in receipt of the March 17, 2008 Investigation and Corrective action plan for the CPS-1989 Cathodic protection well. After reviewing the information and an extensive search by OCD of the surrounding area it appears the Enterprise Cathodic Protection well has caused an exceedence of the New Mexico groundwater standards. Therefore, you are hereby order to submit a groundwater remediation plan for OCD approval within 10 days of receipt of this E-mail.

OCD has assigned a Case # 3R0417 and all correspondence shall have this number on it. The reason OCD did not require an extensive abatement plan process pursuant to OCD rule 19 is that we feel this well can be pumped clean in a very short time. Also, after discussing this issue with the New Mexico Environment Department-Haz Waste Mr. Dave Cobrain, it appears that neutralization may be approved by his office thus rendering the water RCRA non-hazardous.

Please submit another electronic copy of the latest sampling events. If you have any question please do not hesitate to call or write.

Wayne Price-Environmental Bureau Chief  
Oil Conservation Division  
1220 S. Saint Francis  
Santa Fe, NM 87505  
E-mail [wayne.price@state.nm.us](mailto:wayne.price@state.nm.us)  
Tele: 505-476-3490  
Fax: 505-476-3462



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ENTERPRISE PRODUCTS PARTNERS LP  
ENTERPRISE PRODUCTS OPERATING LLC

ENTERPRISE PRODUCTS GP, LLC, GENERAL PARTNER  
ENTERPRISE PRODUCTS OLPGP, INC., GENERAL PARTNER

March 17, 2008

Federal Express  
8623 6321 1212

Mr. Wayne Price  
Environmental Bureau Chief  
New Mexico Oil Conservation Division  
220 South St. Francis Drive  
Santa Fe, NM 87505

3RP-417

**RE: Enterprise Field Services, LLC  
Investigation & Corrective Action Plan / CPS-1989**

Dear Mr. Price,

On March 6, 2008, Enterprise Field Services, LLC (Enterprise) personnel observed that the ancillary equipment of a cathodic protection well (CPS-1989) was damaged by corrosion. The area was fenced at this time to prevent livestock from entering the area. The cathodic well extends 500 feet below ground surface (bgs) and includes an anode bed in addition to other ancillary equipment to protect a nearby pipeline from corrosion. A one-inch, slotted pvc vent pipe extends from 500 feet bgs to the surface to allow the resulting gas to vent from the cathodic well (well data attached). The vent pipe was producing dark-colored fluid that exhibited a very low pH as determined by field testing on March 7, 2008. A sample was obtained for laboratory analysis for cations and anions.

Since the vent was producing fluid, it was fitted with a hose in order to capture the material into poly drums. Analytical data from sample obtained from the well was received on Monday, March 10, 2008. The analytical data revealed a pH of 1.81 in addition to elevated concentrations of sulfates and nitrates. Mr. Brandon Powell with the New Mexico Oil Conservation Division (NMOCD) was notified at approximately 4:30 PM on March 10, 2008 by Don Fernald with Enterprise.

On Thursday, March 13, 2008, Don Fernald discussed the situation with Mr. Wayne Price, Environmental Bureau Chief with the NMOCD. Mr. Fernald indicated that Enterprise was contemplating plugging and abandoning the well in order to eliminate the flow of fluid to the surface. Additionally, Enterprise believes that the cathodic well has likely been ruined due to the corrosive nature of the low pH fluid.

Please note the following additional information, per your request:

- 1. Provide the name and location of the well site, including maps to get to the site, and site where waste will be safety stored.**

Name: CPS 1989

Location: Section 13, Township 28 North, Range 10 West  
San Juan County, NM

Latitude: 36.66775131 / Longitude: -107.83824921

Map: See *Attachment A* / From Hwy 550 South – go east on Sullivan Road or CR 4990 to CR 4960, then go south approximately 2 miles. The site is secured with orange fencing.

Location where fluid is to be stored: Material will be stored temporarily on-site until the NMOCD/NMED concurs with the status of the material.

**2. Fence the site and contain the fluid.**

The site was fenced on March 6, 2008. The fluid is being collected and containerized on site in 55-gallon poly drums.

**3. Place the drums of fluid on an impermeable pad (liner and bermed) and a sign noting any hazards.**

There are currently four, 55-gallon drums of fluid that have been placed into a plastic-lined stock tank. The 55-gallon drums have been labeled as corrosive. See photo in *Attachment B*.

**4. Transport material in accordance with DOT regulations and state Hazardous waste regulations. Call Dave Cobrain - 476-6055.**

The material remains on site pending classification as either exempt or non-exempt. Enterprise has not yet contacted Mr. Cobrain with the NMED.

**5. Make a determination and certify if this waste is RCRA exempt, non-exempt or hazardous. Re-sample the fluid and run the following analysis: 8260 (volatiles), 8270 semi-volatiles, General Chemistry including PH, TDS, cat/an's including Balance, WQCC heavy metals- total (do not filter), PAH's 8310.**

Additional samples were collected on March 14, 2008 and are being analyzed in accordance with the NMOCD's request. The source of the fluid is currently unknown. If the fluid is naturally occurring or from a nearby production well, the material is conditionally exempt. Unless proven otherwise, Enterprise will assume the fluid is exempt from RCRA requirements and requests concurrence from the NMOCD/NMED.

**6. Provide OCD a detail well log schematic including the drill log. The well information shall include depth of water in which the anode is located, any other water bearing zones above the bottom of the well, lithology of the bore hole, and any water analysis of the well water previously taken.**

The well log schematic and data is included in *Attachment C*. No previous fluid sample analytical data is available.

**7. Provide an area of review and identify all wells, mine shafts, possible conduits within ¼ mile radius of your cathodic well.**

Mr. Wayne Price  
Environmental Bureau Chief  
New Mexico Oil Conservation Division  
Page 3  
March 17, 2008

A search was conducted by Enterprise to determine the presence of additional wells with a ¼ mile radius of the site using the State of New Mexico Engineers Office website. This information is presented in *Attachment D*.

**8. Provide a investigation and corrective action plan for OCD approval to both the OCD District and Santa Fe office within 48 hours.**

This submittal is intended to satisfy the initial phase of the NMOC D's request for a corrective action plan. Enterprise is currently making plans to plug and abandon CPS-1989. Once the details associated with the abandonment of the well are completed, the abandonment procedure will be provided to the NMOCD.

Enterprise will continue to collect the fluid emitting from this vent pipe until a plugging and abandonment (P&A) plan has been developed. Once the P&A plan has been developed, a copy will be submitted to the NMOCD.

If you have questions or need additional information, please contact Don Fernald, our local environmental field representative at 505-599-2141 or me directly at 713-880-6518.

Yours truly,

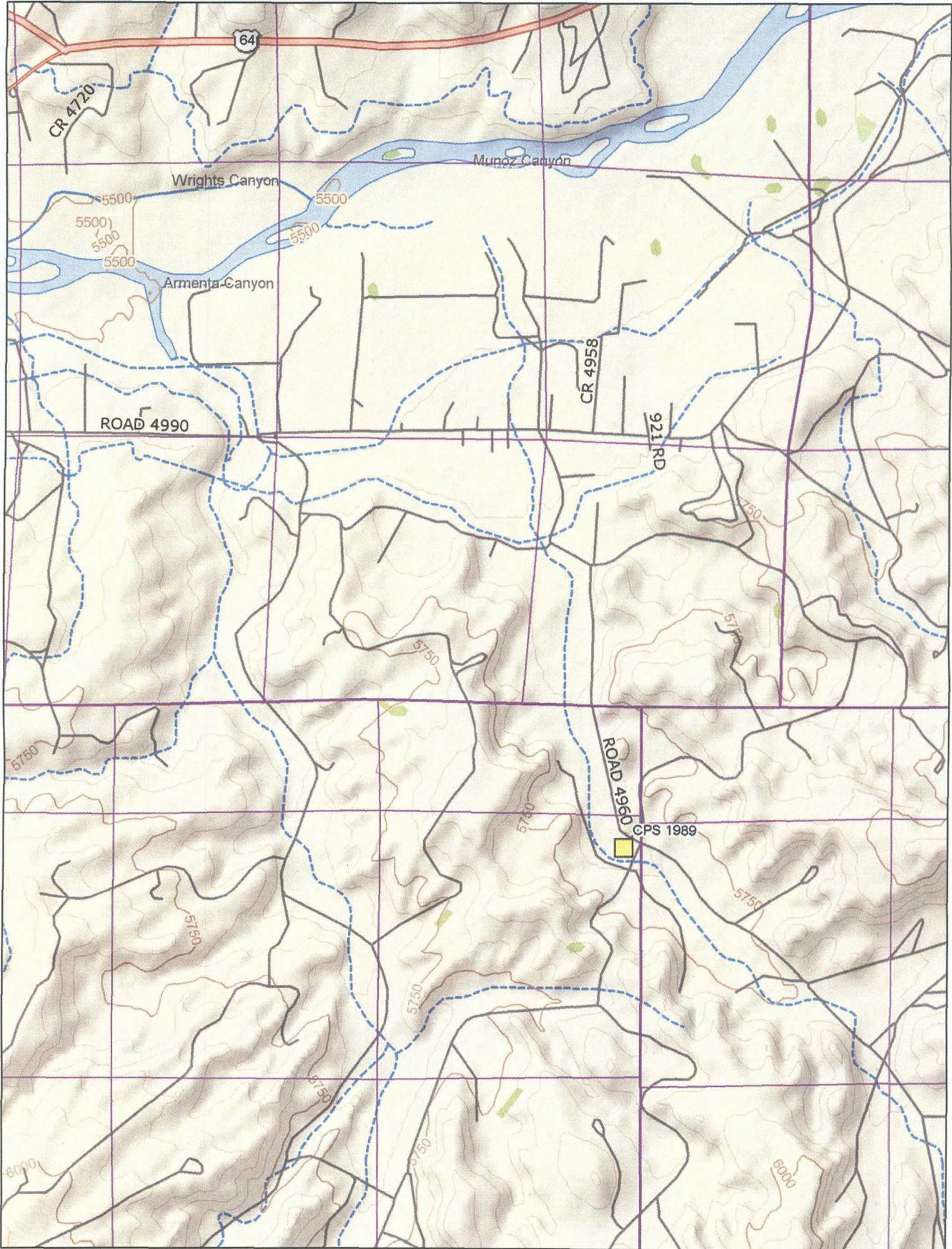
**Enterprise Products Operating LLC**  
**Enterprise Products OLPGP, Inc.**



Mary E. Hebert  
Director, Field Environmental Compliance

/sjn  
attachments

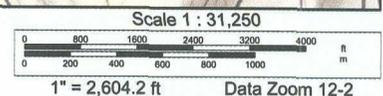
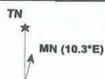
Copy to: Mr. Charlie Perrin, NMOD Aztec District Office  
Mr. Brandon Powell, NMOCD/Aztec District Office  
Mr. David Cobrain, NMED/Santa Fe, NM  
Mr. Steve Fisher, Enterprise/Houston  
Mr. David Smith, Enterprise/Houston  
Mr. Greg Hale, Enterprise/Farmington  
Mr. Don Fernald, Enterprise/Farmington



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**Attachment B**



Photo depicting 55-gallon poly drums placed within plastic lined stock tank.  
Note the orange fencing around the area.

START DATE 9-27-04  
 COMPLETION DATE 10-20-04  
 IN SERVICE DATE 11/0/05

CPS #	1989	LOCATION	Tn F & LA 2898	PIPELINE or PLANT NAME	CHACO	HP or Legal Location	13-28-10	Work Order #	093620		
TYPE & SIZE of BIT	7/8	TOTAL DRILLING TIME	24 hrs	TYPE & AMOUNT of MUD		LOST CIRC. MAT'L		DRILLED	500 ft.		
LOGGED	485 ft.	Initial In Service Data	5.2 Volts   28.3 Amps   0.18 Ohms	1st LINE	1410 P/S   9.4 Amps   TK-F	Line #	2nd LINE	1230 P/S   18.9 Amps   28-28	Line #		
3rd LINE		Line #	4th LINE		Line #	5th LINE			KWH #		
P/S	Amps	P/S	Amps	P/S	Amps	P/S	Amps		KWH read		
Anode Depth	#1 480	#2 470	#3 460	#4 450	#5 440	#6 430	#7 420	#8 410	#9 400	#10 390	
Anode Output	#1 .47	#2 .23	#3 .25	#4 .47	#5 .27	#6 .21	#7 .50	#8 .93	#9 .66	#10 .66	
Anode Depth	#11 380	#12 370	#13 360	#14 350	#15 340	#16 330	#17 320	#18 310	#19 300	#20 290	
Anode Output	#11 .85	#12 .53	#13 .36	#14 .54	#15 1.35	#16 .57	#17 1.0	#18 .51	#19 .8	#20 1.01	
Anode Depth	#21 280	#22 270	#23 260	#24 250	#25 240	#26 230	#27 220	#28 210	#29 200	#30 190	
Anode Output	#21 1.26	#22 1.01	#23 1.77	#24 1.58	#25 1.17	#26 .90	#27 .90	#28 1.0	#29 .66	#30 .63	
POWER UNIT DATA	Manufacturer J.A. Electronic Model # CSA-115 Serial # 2040639								NEW Y/N	Y	
CAPACITY	50 V DC	50 A DC	120/220V	AC	AC	PHASE	AC SET FOR	220 V	AC LINE INPUT	240 V	
POWER VENDOR	CITY Power										
Vent Pipe	500 ft.	Perforated	340 ft.	Type	1" PVC	Ft. #8 CP	10,050	Ft. #2 CP	80'	Type Cable	HALAR
SPLICE KITS	Type		CASING		Length		OD 8"   100'				
REMARKS	Driller said some water at 250' feet. Install 100' of 8" PVC Casing & Cemented with 28 sacks of 2 1/2 Portland F.F. Water standing in casing 30' down next morning. Water at 1 gal a min flowing out of casing next morning put 10 500 sacks of Hole Plug Bentonite 3/8" at 65'										
Anode Type	Ano Tec Hoblon					Anode Size 2" X 60"					
DRAWING											
DISTRIBUTION:	ORIGINAL - Div. CPS File					All Construction Completed					
	COPY - ORIGINATOR					Billy Hendricks					
	COPY - PROJECT MANAGER					Signature					

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS  
NORTHWESTERN NEW MEXICO  
(Submit 3 copies to OCD Aztec Office)

Operator Elaro Field Service Location: Unit        Sec. 13 Twp 28 Rng 10

Name of Well/Wells or Pipeline Serviced Trunk F & Lat. 2B-28  
CPS 1989

Elevation 5388 Completion Date 10-1-04 Total Depth 500 Land Type\* S

Casing, Sizes, Types & Depths 8" PVC 100'

If Casing is cemented, show amounts & types used 27-90# sacks  
of 2 1/2 Portland type I II

If Cement or Bentonite Plugs have been placed, show depths & amounts used  
10-50# sack placed at ~~65'~~ 45' / top 45' cemented with 2 1/2 Portland

Depths & thickness of water zones with description of water when possible:  
Fresh, Clear, Salty, Sulphur, Etc. Very light water at 140' & some water  
at 250'

Depths gas encountered: NA

Type & amount of coke breeze used: 7800# of Ashberg 2181

Depths anodes placed: 480' to 190'

Depths vent pipes placed: 500'

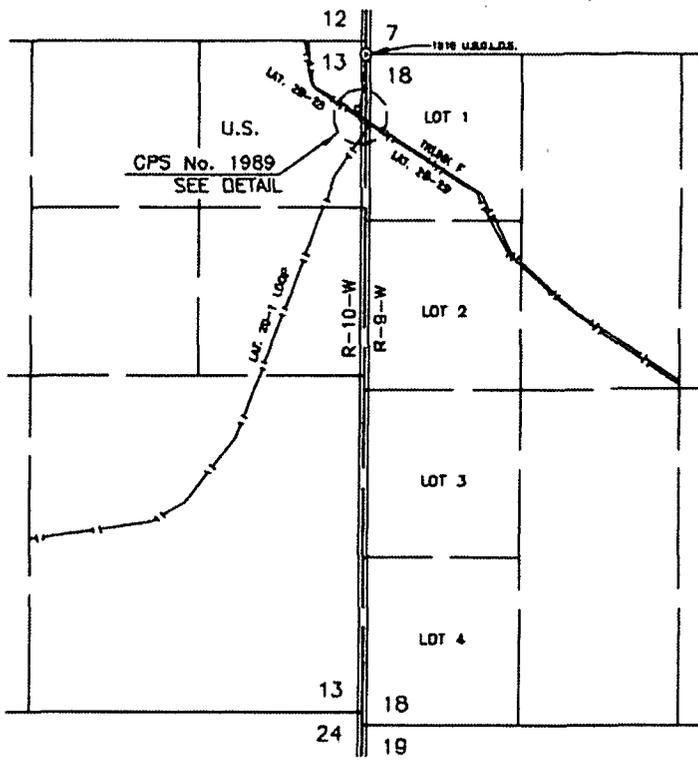
Vent pipe perforations: 340'

Remarks: Bentonite plug stopped water flow & cement plug placed  
on top ~~of~~ up to top of casing. NO water flowing AFTER 48 hrs.

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

\*Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee.  
Federal or Indian, add Lease Number.

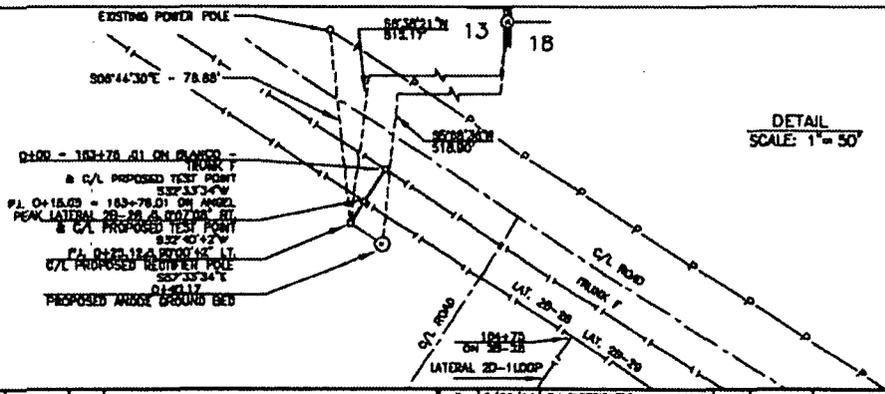
N  
 T-28-N, N.M.P.M.  
 BASIS OF BEARING: C.P.S. OBSERVATIONS



PLAN  
 SCALE: 1"=1000'

OWNERSHIP

SUBDIVISION	OWNER	LESSEE	RODS	ACRE
PORTIONS OF SEC. 13	UNITED STATES	MARY HELENE SULLIVAN	2.435	



DETAIL  
 SCALE: 1"=50'

NO.	DATE	BY	EXPLANATION	NO.	DATE	TO	NO.	DATE	TO

REVISIONS		
C.P.S. SPECS.	EXISTING	NEW
NUMBER OF ANODES		30
SIZE OF ANODES		2" X 60"
DISP. OF ANODES		VERTICLE
SOURCE OF POWER		PURCHASED
DEPTH OF ANODES		300'
DEPTH OF CABLE		18" MIN

PRINT RECORD

**Gulferra**  
 Field Services LLC

**CATHODIC PROTECTION STATION (NO. 1989)**  
 ON BLANCO - TRUNK F & LATERAL 2B-28  
 SECTION 13, T-28-N, R-10-W, N.M.P.M.  
 SAN JUAN COUNTY, NEW MEXICO

RECTIFIER ON GULFERRA PROP. POLE 10' SW OF PIPE	R/W NO. R/W	SURV. DATE: 5/07/04	DWD. NO.
REF. DWGS. 10L732.0-1, 28B732.0-1, F731.0-1	SCALE: SHOWN	DATE: 05/27/04	731.10-X-654
CAD NO. 0000731.10-X-0654	DRAWN BY: GV	CHECKED BY:	W.D. NO. 003620

**Attachment D****Wells Within 1/4 Mile Radius of EFS CPG #1989**

The following legal areas were reviewed to determine the presence of wells within 1/4 miles of CPS-1989.

Sec 13, T28N, R10W    UL A&H  
Sec 18, T28N, R9W    UL D&E  
Sec 12, T28N, R10W    UL P  
Sec 7, T28N, R9W    UL M

<b>Well type</b>	<b>Name</b>	<b>Operator</b>	<b>U-S-T-R</b>	<b>Location</b>	<b>API</b>
No water wells listed in the WATERS database from the State Engineers Office.					
Gas	McClanahan #1	Burlington Resources Oil & Gas	A-13-28N-10W	1090' FNL & 950' FEL	3004507512
Gas	McClanahan #18	Burlington Resources Oil & Gas	A-13-28N-10W	990' FNL & 790' FEL	3004507513
Gas	Reid #15	Burlington Resources Oil & Gas	D-18-28N-09W	990' FNL & 990' FWL	3004507507
Gas	Reid #3	Burlington Resources Oil & Gas	M-07-28N-09W	1090' FSL & 990' FWL	3004513240