



# New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

**Jon Goldstein**  
Cabinet Secretary  
**Jim Noel**  
Deputy Cabinet Secretary

**Mark Fesmire**  
Division Director  
Oil Conservation Division



Administrative Order IPI-367  
May 6, 2010

Cano Petro of New Mexico, Inc.  
801 Cherry St., Unit 25, Suite 3200  
Fort Worth, Texas 76102

Attention: Mr. Keith Masters (Agent)

**RE: Injection Pressure Increase Request**

Cato San Andres Unit (R-4028)  
Cato San Andres Pool (10540)  
Chaves County, New Mexico

Reference is made to your request on behalf of Cano Petro of New Mexico, Inc. (OGRID 248802) received by the Division May 15, 2010, to increase the surface injection pressure limit on the Thirty (30) injection wells (Exhibit "A").

The original permitted maximum pressure on these wells was governed by Division Order No. R-9029-A issued in Case No. 14128 on September 3, 2008. Forty three (43) injection wells were permitted, and the maximum surface injection pressure was set at 650 psi.

Administrative Order IPI-315, dated March 4, 2009 granted Cano authority to inject at surface pressures greater than 650 psi into five injection wells. Administrative Order IPI-319, dated April 8, 2009 granted Cano authority to inject at surface pressures exceeding 650 psi into six additional injection wells.

It is our understanding the wells in Exhibit "A" need additional surface injection pressure to balance injection and withdrawal rates in order to optimize waterflood operations. The basis for granting this pressure increase is the five step rate tests run by Cano in late 2009.

Cano Petro of New Mexico, Inc. is hereby authorized to utilize the equivalent of 0.40 psi per foot as the maximum surface injection pressure on the wells shown below in Exhibit "A", provided the tubing, size, type, setting depths and perforation depths do not change, but is prohibited from injecting at pressures that would induce fracturing in individual wells.

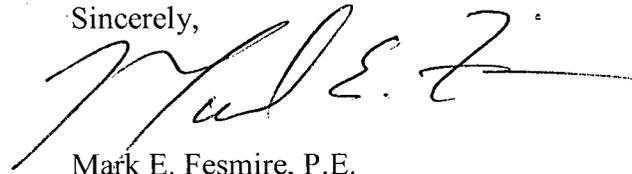


This approval is subject to your being in compliance with all other Division rules, including but not limited to Division Rule 5.9.

The Division Director may rescind this injection pressure increase if it becomes apparent that the injected fluid is not being confined to the injection zone or is endangering any fresh water aquifers, or is causing waste of oil and gas.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark E. Fesmire', with a long horizontal flourish extending to the right.

Mark E. Fesmire, P.E.  
Acting Director

MEF/tw

cc: Oil Conservation Division - Artesia  
File: R-9029-A

**Exhibit "A"**  
**CATO SAN ANDRES UNIT**  
**Township 8S, Range 30E, NMPM, Chaves County, NM**  
**Injection Pressure Increases**

Well	API	Location	Unit	Current Surface Injection Pressure (psig)	Perforations		Maximum Surface Injection Pressure (psig)
					Top (ft)	Bottom (ft)	
6	33-005-20001	S-2, T-8S, R-30E	N	650	3,371	3,507	1,295
7	33-005-10536	S-2, T-8S, R-30E	M	650	3,345	3,462	1,285
23	33-005-10523	S-11, T-8S, R-30E	A	1,220	3,472	3,576	1,350
25	33-005-20294	S-11, T-8S, R-30E	H	650	3,488	3,598	1,345
28	33-005-10503	S-11, T-8S, R-30E	E	650	3,360	3,550	1,290
29	33-005-10473	S-10, T-8S, R-30E	H	650	3,344	3,444	1,285
49	33-005-10455	S-11, T-8S, R-30E	L	1,010	3,414	3,539	1,355
50	33-005-29021	S-11, T-8S, R-30E	J	850	3,496	3,678	1,545
51	33-005-10539	S-11, T-8S, R-30E	I	650	3,514	3,628	1,355
56	33-005-10579	S-11, T-8S, R-30E	M	650	3,413	3,586	1,315
57	33-005-10502	S-10, T-8S, R-30E	P	650	3,395	3,484	1,460
77	33-005-10532	S-15, T-8S, R-30E	A	650	3,414	3,450	1,315
82	33-005-10525	S-13, T-8S, R-30E	D	650	3,544	3,614	1,365
83	33-005-20144	S-13, T-8S, R-30E	E	650	3,538	3,572	1,365
84	33-005-20174	S-14, T-8S, R-30E	H	650	3,511	3,624	1,350
85	33-005-10588	S-14, T-8S, R-30E	G	650	3,553	3,601	1,370
86	33-005-20109	S-14, T-8S, R-30E	F	650	3,444	3,490	1,325
87	33-005-10561	S-14, T-8S, R-30E	E	650	3,426	3,544	1,320
88	33-005-20090	S-15, T-8S, R-30E	H	650	3,400	3,583	1,310
109	33-005-20068	S-15, T-8S, R-30E	I	650	3,425	3,515	1,320
111	33-005-20115	S-14, T-8S, R-30E	K	650	3,477	3,518	1,340
115	33-005-20081	S-14, T-8S, R-30E	O	650	3,531	3,571	1,360
118	33-005-20077	S-15, T-8S, R-30E	P	650	3,472	3,564	1,335
507	33-005-28022	S-2, T-8S, R-30E	O	650	3,442	3,598	1,325
824	33-005-28032	S-12, T-8S, R-30E	E	650	3,300	3,950	1,270
826	33-005-29029	S-11, T-8S, R-30E	G	650	3,456	3,642	1,330
827	33-005-29030	S-11, T-8S, R-30E	F	650	3,300	3,950	1,270
854	33-005-29031	S-11, T-8S, R-30E	O	650	3,486	3,675	1,355
878	33-005-29032	S-14, T-8S, R-30E	D	650	3,300	3,950	1,270
879	33-005-29035	S-14, T-8S, R-30E	C	650	3,300	3,950	1,270