

# New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez  
Governor

John H. Bemis  
Cabinet Secretary-Designate

Brett F. Woods, Ph.D.  
Acting Cabinet Secretary

Jami Bailey  
Division Director  
Oil Conservation Division



**\*Response Required – Deadline Enclosed\***

*Underground Injection Control Program  
"Protecting Our Underground Sources of Drinking Water"*

Mailed: 5/3/2011

May 2, 2011

LOVNO. 02-09-197

LINN OPERATING, INC.  
600 TRAVIS SUITE 5100  
HOUSTON TX 77002

30-015-05095

**LETTER OF VIOLATION and SHUT-IN DIRECTIVE  
Failed Mechanical Integrity Test**

Dear Operator:

The following test(s) were performed on the listed dates on the following well(s) shown below in the test detail section.

The test(s) indicates that the well or wells failed to meet mechanical integrity standards of the New Mexico Oil Conservation Division. To comply with guidelines established by the U.S. Environmental Protection Agency, the well(s) must be shut-in immediately until it is successfully repaired. The test detail section which follows indicates preliminary findings and/or probable causes of the failure. This determination is based on a test of your well or facility by an inspector employed by the Oil Conservation Division. Additional testing during the repair operation may be necessary to properly identify the nature of the well failure.

Linn Operating, Inc. (Linn) has 19 injection wells that failed their Mechanical Integrity Tests performed last year in 2010. As of today, twelve of these wells have not been repaired even though there was a deadline of 7/11 to 7/25/2010 to repair these wells. LOV 02-09-148 was issued on April 22, 2010 informing Linn that these wells had to be shut-in and could not be used until they were repaired and tested.

During inspections performed on the wells mentioned above, Inspector Richard Inge observed that Linn was actively injecting into the following wells:

H E WEST A 6	api#30015050650000	H E WEST B 16	api#30015050560000
J L KEEL A 4	api#30015050920000	J L KEEL B 34	api#30015254470000
J L KEEL B 38	api#30015259190000	J L KEEL B 77	api#30015282790000
TURNER A 15	api#30015052400000	TURNER A 35	api#30015200970000

The following wells were shut-in, but have not yet been repaired:

H E WEST B 26	api#30015050600000	J L KEEL B 22	api#30015050820000
J L KEEL B 32	api#30015246940000	J L KEEL B 37	api#30015259340000

Due to Linn's disregard for the rules and directives of the OCD, Linn must immediately cease injection into the wells listed in this LOV. Linn must also disconnect each of these wells from their injection line. Inspector Inge will conduct an inspection within the next few weeks. If he finds these wells connected to an injection line, he will assume that Linn is still injecting into these wells and will pursue further action which may include a hearing to determine if Linn Energy should lose the injection authority of their wells.

Oil Conservation Division  
1301 W. Grand Avenue • Artesia, New Mexico 88210  
Phone (575) 748-1283 • Fax (575) 748-9720 • [www.emnrd.state.nm.us/OCD](http://www.emnrd.state.nm.us/OCD)



### MECHANICAL INTEGRITY TEST DETAIL SECTION

#### H E WEST B No.016

Active Injection - (All Types)

30-015-05056-00-00  
M-3-17S-31E

Test Date: 4/26/2011 Permitted Injection PSI: Actual PSI:  
Test Reason: Post Workover Test Test Result: F Repair Due: 6/1/2011  
Test Type: Std. Annulus Pres. Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Actively injecting into a well that has not been repaired from previous failure.

#### H E WEST B No.026

Active Injection - (All Types)

30-015-05060-00-00  
I-3-17S-31E

Test Date: 4/28/2011 Permitted Injection PSI: Actual PSI:  
Test Reason: Annual IMIT Test Result: F Repair Due: 6/1/2011  
Test Type: Std. Annulus Pres. Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Well not repaired from previous failure. Not tested. Well is shut-in.

#### H E WEST A No.006

Active Injection - (All Types)

30-015-05065-00-00  
H-4-17S-31E

Test Date: 4/26/2011 Permitted Injection PSI: Actual PSI:  
Test Reason: Post Workover Test Test Result: F Repair Due: 6/1/2011  
Test Type: Std. Annulus Pres. Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Actively injecting into a well that has not been repaired from previous failure.

#### H E WEST B No.011

Active Injection - (All Types)

30-015-05073-00-00  
K-4-17S-31E

Test Date: 4/26/2011 Permitted Injection PSI: Actual PSI: 2240  
Test Reason: Annual IMIT Test Result: F Repair Due: 7/30/2011  
Test Type: Bradenhead Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Injection pressure over limit. Permitted max pressure is 2064.

#### J L KEEL B No.019

Active Injection - (All Types)

30-015-05081-00-00  
J-5-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 1850  
Test Reason: Annual IMIT Test Result: F Repair Due: 8/2/2011  
Test Type: Bradenhead Test FAIL TYPE: Other External Failure FAIL CAUSE:  
Comments on MIT: Intermediate valve not closed. Unable to test.

#### J L KEEL B No.022

Active Injection - (All Types)

30-015-05082-00-00  
L-5-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI:  
Test Reason: Annual IMIT Test Result: F Repair Due: 6/1/2011  
Test Type: Bradenhead Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Well not repaired from previous failure. Not tested. Well is shut-in.

#### J L KEEL B No.001

Active Injection - (All Types)

30-015-05083-00-00  
D-6-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 1850  
Test Reason: Annual IMIT Test Result: F Repair Due: 8/2/2011  
Test Type: Bradenhead Test FAIL TYPE: Other External Failure FAIL CAUSE:  
Comments on MIT: Unable to open Bradenhead valve. Unable to test.

#### J L KEEL B No.020

Active Injection - (All Types)

30-015-05085-00-00  
P-6-17S-31E

Test Date: 4/18/2011 Permitted Injection PSI: Actual PSI: 1900  
Test Reason: 5-year Test Test Result: F Repair Due: 7/22/2011  
Test Type: Std. Annulus Pres. Test FAIL TYPE: Other Internal Failure FAIL CAUSE:  
Comments on MIT: Well will not hold pressure. Unable to pressure up on casing.

#### J L KEEL B No.026

Active Injection - (All Types)

30-015-05089-00-00  
M-6-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 1850  
Test Reason: Annual IMIT Test Result: F Repair Due: 8/2/2011  
Test Type: Bradenhead Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Injection pressure over limit. Permitted max pressure is 1650.

**J L KEEL A No.004**

Active Injection - (All Types)

**30-015-05092-00-00**  
K-7-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 1350  
Test Reason: Annual IMIT Test Result: F Repair Due: 6/1/2011  
Test Type: Bradenhead Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Actively injecting into a well that has not been repaired from previous failure.

**J L KEEL A No.007**

Active Injection - (All Types)

**30-015-05095-00-00**  
L-7-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 1020  
Test Reason: Annual IMIT Test Result: F Repair Due: 8/2/2011  
Test Type: Bradenhead Test FAIL TYPE: Other External Failure FAIL CAUSE:  
Comments on MIT: Intermediate valve not closed. Unable to test.

**J L KEEL A No.010**

Active Injection - (All Types)

**30-015-05098-00-00**  
I-7-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 1250  
Test Reason: Annual IMIT Test Result: F Repair Due: 8/2/2011  
Test Type: Bradenhead Test FAIL TYPE: Other External Failure FAIL CAUSE:  
Comments on MIT: Intermediate valve not closed. Unable to test.

**J L KEEL B No.003**

Active Injection - (All Types)

**30-015-05104-00-00**  
N-8-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 2260  
Test Reason: Annual IMIT Test Result: F Repair Due: 8/2/2011  
Test Type: Bradenhead Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Injection pressure over limit. Permitted max pressure is 1665.

**J L KEEL B No.006**

Active Injection - (All Types)

**30-015-05107-00-00**  
F-8-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 1700  
Test Reason: Annual IMIT Test Result: F Repair Due: 8/2/2011  
Test Type: Bradenhead Test FAIL TYPE: Other External Failure FAIL CAUSE:  
Comments on MIT: Intermediate valve not closed. Unable to test.

**J L KEEL B No.007**

Active Injection - (All Types)

**30-015-05108-00-00**  
C-8-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI:  
Test Reason: Annual IMIT Test Result: F Repair Due: 8/2/2011  
Test Type: Bradenhead Test FAIL TYPE: Operational Violation FAIL CAUSE:  
Comments on MIT: A workover rig was on location - unable to test. An MIT Pressure Test must be performed and witnessed before this well can be returned to injection.

**H E WEST B No.014**

Active Injection - (All Types)

**30-015-05123-00-00**  
K-10-17S-31E

Test Date: 4/26/2011 Permitted Injection PSI: Actual PSI: 1950  
Test Reason: Annual IMIT Test Result: F Repair Due: 7/30/2011  
Test Type: Bradenhead Test FAIL TYPE: Other Internal Failure FAIL CAUSE:  
Comments on MIT: Blow of fluid from casing.

**TURNER B No.002**

Active Injection - (All Types)

**30-015-05182-00-00**  
M-17-17S-31E

Test Date: 4/27/2011 Permitted Injection PSI: Actual PSI: 1820  
Test Reason: Annual IMIT Test Result: F Repair Due: 7/31/2011  
Test Type: Bradenhead Test FAIL TYPE: Other External Failure FAIL CAUSE:  
Comments on MIT: Unable to open intermediate valve.

**C A RUSSELL No.006**

Active Injection - (All Types)

**30-015-05219-00-00**  
C-18-17S-31E

Test Date: 4/27/2011 Permitted Injection PSI: Actual PSI: 1880  
Test Reason: Annual IMIT Test Result: F Repair Due: 7/31/2011  
Test Type: Bradenhead Test FAIL TYPE: Other Internal Failure FAIL CAUSE:  
Comments on MIT: Blow of fluid from casing.

**C A RUSSELL No.008**

Active Injection - (All Types)

**30-015-05221-00-00**

G-18-17S-31E

Test Date: 4/27/2011  
Test Reason: Annual IMIT  
Test Type: Bradenhead Test  
Comments on MIT: Unable to open casing valve.

Permitted Injection PSI:  
Test Result: F  
FAIL TYPE: Other External Failure

Actual PSI: 1780  
Repair Due: 7/31/2011  
FAIL CAUSE:

**TURNER A No.002**

Active Injection - (All Types)

**30-015-05227-00-00**

L-18-17S-31E

Test Date: 4/27/2011  
Test Reason: Annual IMIT  
Test Type: Bradenhead Test  
Comments on MIT: Unable to open intermediate valve. Valve stem twisted.

Permitted Injection PSI:  
Test Result: F  
FAIL TYPE: Other External Failure

Actual PSI: 1670  
Repair Due: 7/31/2011  
FAIL CAUSE:

**TURNER A No.012**

Active Injection - (All Types)

**30-015-05238-00-00**

A-19-17S-31E

Test Date: 4/27/2011  
Test Reason: Annual IMIT  
Test Type: Bradenhead Test  
Comments on MIT: Casing valve not closed. Unable to test.

Permitted Injection PSI:  
Test Result: F  
FAIL TYPE: Operational Violation

Actual PSI:  
Repair Due: 7/31/2011  
FAIL CAUSE:

**TURNER A No.015**

Active Injection - (All Types)

**30-015-05240-00-00**

F-19-17S-31E

Test Date: 4/28/2011  
Test Reason: Post Workover Test  
Test Type: Std. Annulus Pres. Test  
Comments on MIT: Actively injecting into a well that has not been repaired from previous failure.

Permitted Injection PSI:  
Test Result: F  
FAIL TYPE: Permit Violation

Actual PSI:  
Repair Due: 6/1/2011  
FAIL CAUSE:

**FREN OIL COMPANY No.005**

Active Injection - (All Types)

**30-015-05253-00-00**

P-19-17S-31E

Test Date: 4/27/2011  
Test Reason: Annual IMIT  
Test Type: Bradenhead Test  
Comments on MIT: Casing valve buried. Unable to open. Bradenhead valve not visible.

Permitted Injection PSI:  
Test Result: F  
FAIL TYPE: Other External Failure

Actual PSI: 1030  
Repair Due: 7/31/2011  
FAIL CAUSE:

**TURNER B No.072**

Active Injection - (All Types)

**30-015-05302-00-00**

O-20-17S-31E

Test Date: 4/29/2011  
Test Reason: 5-year Test  
Test Type: Std. Annulus Pres. Test  
Comments on MIT: Unable to test. Per Operator - road work required before a truck can get to location. The well must be shut-in and an MIT Pressure Test must be performed and witnessed before this well can be returned to

Permitted Injection PSI:  
Test Result: F  
FAIL TYPE: Other External Failure

Actual PSI:  
Repair Due: 8/2/2011  
FAIL CAUSE:

**TURNER B No.055**

Active Injection - (All Types)

**30-015-05444-00-00**

H-29-17S-31E

Test Date: 4/18/2011  
Test Reason: Annual IMIT  
Test Type: Bradenhead Test  
Comments on MIT: Operator reports well is down for repair. Not tested. An MIT Pressure Test must be performed and witnessed before this well can be returned to injection.

Permitted Injection PSI:  
Test Result: F  
FAIL TYPE: Other Internal Failure

Actual PSI:  
Repair Due: 7/22/2011  
FAIL CAUSE:

**MAX FRIESS MA No.004**

Active Injection - (All Types)

**30-015-05471-00-00**

H-30-17S-31E

Test Date: 4/27/2011  
Test Reason: Annual IMIT  
Test Type: Bradenhead Test  
Comments on MIT: Intermediate valve not closed. Unable to test.

Permitted Injection PSI:  
Test Result: F  
FAIL TYPE: Other External Failure

Actual PSI: 1320  
Repair Due: 7/31/2011  
FAIL CAUSE:

**H E WEST B No.029**

Active Injection - (All Types)

**30-015-10376-00-00**

C-9-17S-31E

Test Date: 4/26/2011  
Test Reason: Annual IMIT  
Test Type: Bradenhead Test  
Comments on MIT: Unable to open bradenhead valve.

Permitted Injection PSI:  
Test Result: F  
FAIL TYPE: Other External Failure

Actual PSI:  
Repair Due: 7/30/2011  
FAIL CAUSE:

**TURNER A No.035**

**30-015-20097-00-00**

Active Injection - (All Types)

H-19-17S-31E

Test Date: 4/27/2011 Permitted Injection PSI: Actual PSI:  
Test Reason: Post Workover Test Test Result: F Repair Due: 6/1/2011  
Test Type: Std. Annulus Pres. Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Actively injecting into a well that has not been repaired from previous failure.

**J L KEEL B No.030**

**30-015-21460-00-00**

Active Injection - (All Types)

O-6-17S-31E

Test Date: 4/18/2011 Permitted Injection PSI: Actual PSI:  
Test Reason: 5-year Test Test Result: F Repair Due: 7/22/2011  
Test Type: Std. Annulus Pres. Test FAIL TYPE: Other Internal Failure FAIL CAUSE:  
Comments on MIT: Blow of oil from the casing valve.

**J L KEEL B No.032**

**30-015-24694-00-00**

Active Injection - (All Types)

B-6-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI:  
Test Reason: Annual IMIT Test Result: F Repair Due: 6/1/2011  
Test Type: Bradenhead Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: This well was not yet repaired from a previous failure. A workover rig was on location - unable to test.  
An MIT Pressure Test must be performed and witnessed before this well can be returned to injection.

**J L KEEL B No.034**

**30-015-25447-00-00**

Active Injection - (All Types)

H-6-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 300  
Test Reason: Annual IMIT Test Result: F Repair Due: 6/1/2011  
Test Type: Bradenhead Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Injecting into a well that has not been repaired from previous failure. Not injecting during time of test,  
but injection line was open.

**J L KEEL B No.035**

**30-015-25448-00-00**

Active Injection - (All Types)

C-6-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI:  
Test Reason: Annual IMIT Test Result: F Repair Due: 8/2/2011  
Test Type: Bradenhead Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Operator doing an acid job on well. Due to safety concerns, the well was not tested.

**J L KEEL B No.038**

**30-015-25919-00-00**

Active Injection - (All Types)

I-6-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 1880  
Test Reason: Annual IMIT Test Result: F Repair Due: 6/1/2011  
Test Type: Bradenhead Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Actively injecting into a well that has not been repaired from previous failure.

**J L KEEL B No.037**

**30-015-25934-00-00**

Active Injection - (All Types)

E-5-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI:  
Test Reason: Post Workover Test Test Result: F Repair Due: 6/1/2011  
Test Type: Std. Annulus Pres. Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Well not repaired from previous failure. Not tested. Well is shut-in.

**J L KEEL A No.017**

**30-015-25938-00-00**

Active Injection - (All Types)

C-7-17S-31E

Test Date: 4/18/2011 Permitted Injection PSI: Actual PSI: 1700  
Test Reason: 5-year Test Test Result: F Repair Due: 7/22/2011  
Test Type: Std. Annulus Pres. Test FAIL TYPE: Other Internal Failure FAIL CAUSE:  
Comments on MIT: Well will not hold pressure

**J L KEEL B No.040**

**30-015-25940-00-00**

Active Injection - (All Types)

E-6-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 2150  
Test Reason: Annual IMIT Test Result: F Repair Due: 8/2/2011  
Test Type: Bradenhead Test FAIL TYPE: Other External Failure FAIL CAUSE:  
Comments on MIT: Casing valve not closed. Unable to test. Injection pressure is over max limit. Limit is 1752.

**H E WEST B No.033**

Active Injection - (All Types)

**30-015-25944-00-00**  
L-3-17S-31E

Test Date: 4/26/2011 Permitted Injection PSI: Actual PSI: 2000  
Test Reason: Annual IMIT Test Result: F Repair Due: 7/30/2011  
Test Type: Bradenhead Test FAIL TYPE: Other External Failure FAIL CAUSE:  
Comments on MIT: Surface valve not visible. Unable to test.

**HUDSON FEDERAL No.006**

Active Injection - (All Types)

**30-015-26008-00-00**  
H-18-17S-31E

Test Date: 4/19/2011 Permitted Injection PSI: Actual PSI: 1200  
Test Reason: 5-year Test Test Result: F Repair Due: 7/23/2011  
Test Type: Std. Annulus Pres. Test FAIL TYPE: Other Internal Failure FAIL CAUSE:  
Comments on MIT: Well will not hold pressure

**H E WEST B No.044**

Active Injection - (All Types)

**30-015-26574-00-00**  
N-3-17S-31E

Test Date: 4/26/2011 Permitted Injection PSI: Actual PSI: 1900  
Test Reason: Annual IMIT Test Result: F Repair Due: 7/30/2011  
Test Type: Bradenhead Test FAIL TYPE: Other Internal Failure FAIL CAUSE:  
Comments on MIT: Blow of fluid from casing valve.

**J L KEEL B No.077**

Active Injection - (All Types)

**30-015-28279-00-00**  
H-8-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 1750  
Test Reason: Annual IMIT Test Result: F Repair Due: 6/1/2011  
Test Type: Bradenhead Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Actively injecting into a well that has not been repaired from previous failure.

**J L KEEL A No.030**

Active Injection - (All Types)

**30-015-28306-00-00**  
O-7-17S-31E

Test Date: 4/29/2011 Permitted Injection PSI: Actual PSI: 600  
Test Reason: Annual IMIT Test Result: F Repair Due: 8/2/2011  
Test Type: Bradenhead Test FAIL TYPE: Other External Failure FAIL CAUSE:  
Comments on MIT: Intermediate valve not closed. Unable to test.

**TURNER A No.058**

Active Injection - (All Types)

**30-015-29001-00-00**  
O-18-17S-31E

Test Date: 4/27/2011 Permitted Injection PSI: Actual PSI: 3600  
Test Reason: Annual IMIT Test Result: F Repair Due: 7/31/2011  
Test Type: Bradenhead Test FAIL TYPE: Permit Violation FAIL CAUSE:  
Comments on MIT: Injection pressure over limit. Permitted max pressure is 1635.

In the event that a satisfactory response is not received to this letter of direction by the "Repair Due:" date shown above, or if the well(s) are not immediately shut-in, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of CIVIL PENALTIES for your violation of OCD rules.

Sincerely,

*Richard Inge*  
Artesia OCD District Office