BW - 9

# MECHANICAL INTEGRITY TEST (MITs)

DATE:

## Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD

**Sent:** Tuesday, June 24, 2008 9:48 AM

To: 'Philliber, Mark'

Cc: Price, Wayne, EMNRD; Patterson, Bob; Molleur, Loren; Blevins, Sam; Price, Wayne, EMNRD;

Williams, Chris, EMNRD; Jones, William V., EMNRD

Subject: RE: BW-9 MIT Scheduling FY08

## Mark:

Good morning. The OCD will record an MIT Fail on BW-9 for June 4, 2008. This will mark the start of the 90 day corrective action period to be completed by September 4, 2008. If Key Energy Services, LLC is planning to plug and abandon (PA) the well, please submit your C-103 for approval to me and the OCD District Office so we can facilitate approval of the PA for BW-9 before September 4, 2008. The well will need to be PA'd by this date. The standard OCD procedure is to pull tubing (cut if off and abandon in hole), scrape the inner casing, set a bridge plug above the casing shoe, pressure up to test seal, fill casing from bottom to top at sufficient pressure, and set marker per OCD Regs.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505

Office: (505) 476-3491 Fax: (505) 476-3462

E-mail: CarlJ.Chavez@state.nm.us

Website: <a href="http://www.emnrd.state.nm.us/ocd/">http://www.emnrd.state.nm.us/ocd/</a>index.htm (Pollution Prevention Guidance is under "Publications")

**From:** Philliber, Mark [mailto:mphilliber@keyenergy.com]

**Sent:** Wednesday, June 04, 2008 11:13 AM

To: Chavez, Carl J, EMNRD

Cc: Price, Wayne, EMNRD; Patterson, Bob; Molleur, Loren; Blevins, Sam

Subject: FW: BW-9 MIT Scheduling FY08

Carl,

We recently attempted to run tubing to TD on this well and were unsuccessful. We believe this well will not successfully pass an MIT and have begun preparing a request for NMOCD's approval to plug this well.

Thank you,

Mark Philliber SWD Compliance Coordinator Key Energy Services, Inc. 6 Desta Drive, Suite 4400 Midland, Texas 79705 (432) 571-7203 Office (432) 770-5064 Cell Sam Blevins
District Manager
Yard 407
Eunice, NM
(505)394-2581

----Original Message----

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]

Sent: Wednesday, May 21, 2008 9:36 AM

To: Blevins, Sam

**Cc:** Patterson, Bob; Price, Wayne, EMNRD **Subject:** BW-9 MIT Scheduling FY08

### Sam:

Please find below the MIT schedule for Key Energy Services LLC's BW-9. An MIT is required to be performed before Monday, June 26, 2008 (end of FY08 EPA Reporting Period).

SIMS-MCCASLAND BW-9 30-025- N (UL-A)32- Lea 04/06/2009 A BRINE -EUNICE (GP- 25525 32.44152 21S-37E Sims #2) W103.17691

Please contact me to provide a date, time and type of MIT that Key is required to perform this fiscal year.

Thank you.

Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505

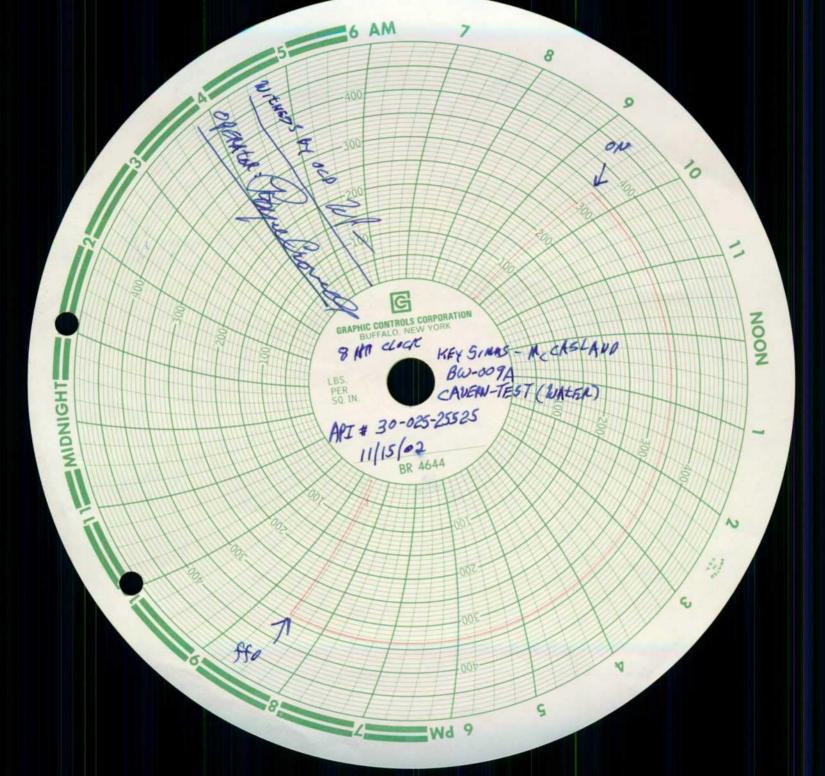
Office: (505) 476-3491 Fax: (505) 476-3462

E-mail: CarlJ.Chavez@state.nm.us

Website: <a href="http://www.emnrd.state.nm.us/ocd/index.htm">http://www.emnrd.state.nm.us/ocd/index.htm</a> (Pollution Prevention Guidance is under "Publications")

Confidentiality Notice: This e-mail, including all attachments is for the sole use of the intended recipient (s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure or distribution is prohibited unless specifically provided under the New Mexico Inspection of Public Records Act. If you are not the intended recipient, please contact the sender and destroy all copies of this message. -- This email has been scanned by the Sybari - Antigen Email System.

This inbound email has been scanned by the MessageLabs Email Security System.







# NEW MEXICO ENERGY. MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

October 20, 2001

KEY ENERGY BW-84, 18, 19128

CERTIFIED MAIL
RETURN RECEIPT NO. 5357 7546

**Attention: Brine Well Operators** 

Re: Mechanical Integrity Testing of Brine Supply Wells

The Underground Injection Control Program of the Federal Safe Drinking Water Act requires that operators demonstrate mechanical integrity of all injection wells by ensuring there are no leaks in the tubing, casing, or packer, and injected/produced fluids are confined within the piping and injection zones.

The Oil Conservation Division (OCD) requires operators of brine supply wells to perform the following mechanical integrity test:

- 1. At least once every five years isolate the cavern formation from the casing/tubing annuals and hydrostatic fluid pressure test the casing at 300 psig for 30 minutes. New brine wells and wells being worked over will have to be tested in this manner before operations begin.
- 2. Annually perform an open hole cavern formation pressure test by pressuring up the formation with fluids to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. However, no operator may exceed surface injection or test pressures that may cause formation fracturing or system failures. Systems requiring test pressures less than 300 psig or methods that use testing media other than fluids, i.e. gas, must be approved by OCD prior to testing. Brine supply wells operating with isolation packers will have to pressure test both the cavern formation and casing tubing annuals.

Please find enclosed an "OCD Brine Well Test Schedule November 2001" and "Brine Well Test Procedure Guidance Document" for this November 26 through November 30, 2001. Please have your well ready for testing on the date and time you are scheduled. Please refer to the Well Test Schedule attached for the <u>Type of Test</u> you are scheduled to perform. You must receive prior OCD approval to alter the scheduled time or type of test.

What's New!! Please note that operators are required to have their pressure recording devices calibrated to 500 psig and 8-hour clock. See Guidance Document attached.



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

KEY ENERGY BW-9A, 18, 19128 October 20, 2001

CERTIFIED MAIL
RETURN RECEIPT NO. 5357 7546

**Attention: Brine Well Operators** 

Re: Mechanical Integrity Testing of Brine Supply Wells

The Underground Injection Control Program of the Federal Safe Drinking Water Act requires that operators demonstrate mechanical integrity of all injection wells by ensuring there are no leaks in the tubing, casing, or packer, and injected/produced fluids are confined within the piping and injection zones.

The Oil Conservation Division (OCD) requires operators of brine supply wells to perform the following mechanical integrity test:

- 1. At least once every five years isolate the cavern formation from the casing/tubing annuals and hydrostatic fluid pressure test the casing at 300 psig for 30 minutes. New brine wells and wells being worked over will have to be tested in this manner before operations begin.
- 2. Annually perform an open hole cavern formation pressure test by pressuring up the formation with fluids to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. However, no operator may exceed surface injection or test pressures that may cause formation fracturing or system failures. Systems requiring test pressures less than 300 psig or methods that use testing media other than fluids, i.e. gas, must be approved by OCD prior to testing. Brine supply wells operating with isolation packers will have to pressure test both the cavern formation and casing/tubing annuals.

Please find enclosed an "OCD Brine Well Test Schedule November 2001" and "Brine Well Test Procedure Guidance Document" for this November 26 through November 30, 2001. Please have your well ready for testing on the date and time you are scheduled. Please refer to the Well Test Schedule attached for the Type of Test you are scheduled to perform. You must receive prior OCD approval to alter the scheduled time or type of test.

What's New!! Please note that operators are required to have their pressure recording devices calibrated to 500 psig and 8-hour clock. See Guidance Document attached.

Brine Well Operators Oct 20, 2001 Page 2

# What's New!! All operators will provide to the OCD the maximum test pressure that will not cause formation fracturing or system failures.

Operators will be responsible for providing equipment and shall bear all costs incurred. All tests must be witnessed by the New Mexico Oil Conservation Division. Operators failing to abide by the procedures, type of test, and time schedules listed herein may be required to shut-in their systems until OCD has an opportunity to approve and witness testing.

If you require any further information or assistance please do not hesitate to write or call me at 505-476-3487 or E-mail WPRICE@state.nm.us.

Sincerely Yours,

Wayne Price- Senior Envr. Engr.. Environnemental Bureau

**OCD District Offices** 

Wagne Pini

Attachments-

cc:

1. OCD Brine Well Test Schedule November 2001

2. Brine Well Testing Procedure Guidance Document

# Brine Well Testing Procedure Guidance Document

- 1) The cavern and all piping must be filled, pressured up and stabilized for a period of at least 24 hours prior to testing. If this test requires a packer then casing/tubing annulus must be loaded with inert fluid 24 hours prior to testing.
- 2) Have manpower and equipment available for pressure test. Wellhead shall be prepared for test and all valves and gauges should be in good working order.
- 3) Pumps, tanks, external lines etc. must be isolated from the wellhead during test.
- A continuous recording pressure device with an 8-hour clock (min) shall be installed on the casing/tubing annulus. The pressure range shall not be greater than 500 psig. The operator must provide proof that the pressure-recording device has been calibrated within the past 6 months. Note: Wells with packer installed: If this test requires both the casing/tubing annulus and cavern to be tested then two recording devices must be supplied or one recording device with two pins.
- 5) A minimum of one pressure gauge shall be installed on the casing/tubing annulus.
- 6) OCD must witness the beginning of test (putting chart on) and ending of test (removing chart). At the end of test operator may be required to bleed-off well pressure to demonstrate recorder and gauge response.
- 7) The Operator will supply the following information on the pressure chart:
  - A. Company Name, Well Name, API #, Legal Location.
  - B. Test Procedure (1) Casing + Formation (2) Casing Test Only (3) Both (4) Other
  - C. Testing Media: Water, Gas, Oil, Etc.
  - D. Date, time started and ending.
  - E. Name (printed) and signature of company representative and OCD Inspector
- 8) <u>TEST ACCEPTANCE:</u> The OCD will use the following criteria in determining if a well has passed the Mechanical Integrity Test:
  - A. Passes if Zero Bleed-Off during the test.
  - B. Passes if Final Test Pressure is within  $\pm 1\%$  of Starting Pressure, if approved by the OCD inspector.
  - C. Fails if any Final Test Pressure is greater than ± 1% of Starting Pressure. Operators must investigate for leaks and demonstrate that mechanical integrity of the well(s) by ensuring there are no leaks in the tubing, casing, or packer, and injected/produced fluids are confined within the piping and injection zones. Wells shall not resume operations until approved by OCD.

Note: OCD recognizes that different operations, well designs, formation characteristics and field conditions may cause variations in the above procedures. If operator wishes to make or anticipate changes please notify the OCD for approval. All operators are responsible to notify OCD of any procedure that may cause harm to the well system or formation. Please be advised that OCD approval does not relieve any operator of liability should operations result in pollution of surface water, groundwater, or the environment.

394.2428 505-910-4185 1-505-394-2560 1-505-746-2523 505-910-4185 392-6988 885-8477 cell 390-1833 392-6988 1-505-675-2339 FAX #/cell Open hole cavern formation pressure test by pressuring up the formation with fluid to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. Operators shall not exceed surface pressures that may cause formation fracturing or system failures. OCD prior to test shall approve test pressures below 300 psig and methods that use media other than fluids.

Brine supply wells operating with packers will have to pressure both the cavern formation and casing/fubling annuals. 505-394-2545 3( (505) 393-9171 1-505-394-2504 748-5975 cell 1 1-505-748-1352 (505) 383-8171 505-392-8212 806-741-1080 1-505-885-2053 505-392-8212 1-505-675-2358 505-885-8663 Telephone solate cavern formation from the casing/hubing annuals and hydrostatic fluid pressure test the casing at 300 psig for 30 minutes. Doyle Davis Sammy Stoneman George Parchman John Hutcheson Contact Person Royce Crowell
Richard Lentz
Piter Bergstein
CW Trainer Dink Prather Royce Crowell Royce Crowell Richard Lentz L.A. Steams Pressure test cavern
Pressure test cavern or casing
1,2 or 3 Type of Test(s) Required 2 Pressure test cavern 2 Pressure test cavern 2 Pressure test cavern 1 Pressure Test Casing 2 Pressure test cavern Pressure test cavern cell 505-680-1067 7. 2 4:00 PM 12 noon 1:00 PM 2:00 PM 3:30 PM 1:00 PM 2:00 PM 12 noon 1:00 PM 2:00 PM 12 noon 1:00 PM 2:00 PM OCD Contact Wayne Price Nitrogen-Brine Interface Test, Nitrogen Test, Etc. Stop 8:00 AM 9:00 AM 10:00 AM 8:00 AM 9:00 AM 10:00 AM 8:00 AM 9:00 AM 10:00 AM 8:00 AM 10:00 AM 12 noon Start 28-Nov-01 28-Nov-01 28-Nov-01 28-Nov-01 29-Nov-01 29-Nov-01 29-Nov-01 30-Nov-01 30-Nov-01 30-Nov-01 27-Nov 27-Nov 28-Nov-01 Date of Test 草草草 Wen Wen Wells Already Tested in 2001 Wasserhund-Edison ٥ Tue Tue 표표표 Wells Being Repaired-Loco Hilis Area M. Dodd "A" BW#1 SE of Artesia Crossroads Area Crossroads Truckers #2 (Hobbs)
Hobbs Station
Salty Dog-Ark Jct
Marathon Road Eunice Brine Station Eunice Brine Station Eunice Brine Station Carlsbad Area Carlsbad -Euglinle Rowland Truckers Carlsbad Brine St. Salado Brine #2- Jai Facility Name Hobbs Area Eunice Area Tatum Brine St. Loco Hills Brine St. Open Hole Cavern Pressure Test BW-06 BW-019 BW-027 &27A Casing Test OCD BRINE WELL TESTING SCHEDULE 2001 BW-002 BW-009A BW-028 BW-018 BW-012 BW-018 BW-013 BW-029 BW-005 BW-04 BW-22 BW-21 BW-25 Others #**d**0 P&S Brine Key Simms-McCasland Yale E. Key (Old Goldstar) Test Company Key Energy-Carlsbad Scurlock/Permian Key Energy Scurlock-Permian Zia Transportation Type of Pressure Marbob Brine Well Marathon Brine St Chaparral SWD Jims Water Ser Gandy Ray Westall Stearns Inc.





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

October 20, 2000

CERTIFIED MAIL RETURN RECEIPT NO.

5 251 4454 BW-009 5-M

Attention:

**Brine Well Operators** 

Re:

Mechanical Integrity Testing of Brine Supply Wells

The Underground Injection Control Program of the Federal Safe Drinking Water Act requires that operators demonstrate mechanical integrity of all injection wells by ensuring there are no leaks in the tubing, casing, or packer, and injected/produced fluids are confined within the piping and injection zones.

The Oil Conservation Division (OCD) requires operators of brine supply wells to perform the following mechanical integrity tests:

- 1. At least once every five years isolate the cavern formation from the casing/tubing annuals and hydrostatic fluid pressure test the casing at 300 psig for 30 minutes. New brine wells and wells being worked over will have to be tested in this manner before operations begin.
- 2. Annually perform an open hole cavern formation pressure test by pressuring up the formation with fluid to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. Operators shall not exceed surface pressures that may cause formation fracturing or system failures. OCD prior to test shall approve test pressures below 300 psig and methods that use media other than fluids. Brine supply wells operating with packers will have to pressure both the cavern formation and casing/tubing annuals.

Please find enclosed an "OCD Brine Well Test Schedule December 2000" and "Brine Well Test Procedure Guidance Document" for this December 8<sup>th</sup> through 18<sup>th</sup> 2000. Please have your well ready for testing on the date and time you are scheduled. Please refer to the Well Test Schedule attached for the **type of test** you are scheduled to perform. You must receive prior OCD approval to alter the scheduled time or type of test.

Brine Well Operators 10/20/00 Page 2

Operators will be responsible for providing equipment and shall bear all costs incurred. All tests must be witnessed by the New Mexico Oil Conservation Division. Operators failing to abide by the procedures, type of test, and time schedules listed herein may be required to shutin their systems until OCD has an opportunity to approve and witness testing.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,

Mayne Price-Pet. Engr. Spec.

Environmental Bureau

cc: OCD District Offices

Attachments- 1. OCD Brine Well Test Schedule December 2000.

2. Brine Well Testing Procedure Guidance Document.

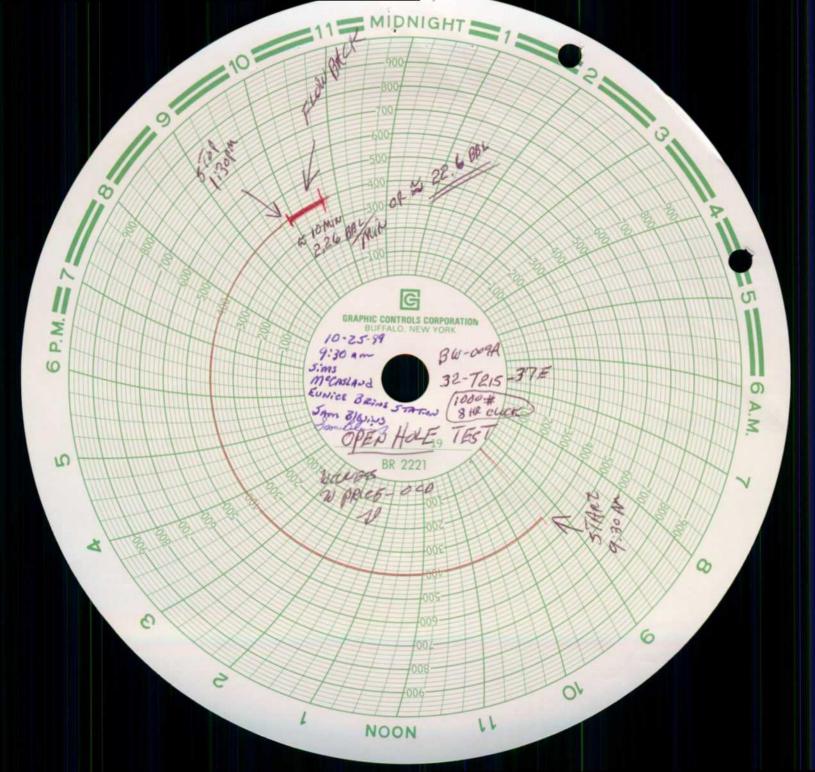
# OCD BRINE WELL TEST SCHEDULE December of 2000

Сотрапу	#4Q	Facility Name	Date of Test	Start	Stop	Type of Test(s) Required	Contact Person	Telephone	FAX#
Marbob Brine Well	BW-029	M. Dodd "A" BW#1	December 08, 2000	1:00 PM	5:00 PM	2 Pressure test cavem	Doyle Davis Raye Miller	748-5975 cell 1-505-746-2523 748-3303	-505-746-2523
P&S Brine Simms-McCasland Salty Dog, Inc.	BW-002 BW-009A BW-008	Eunice Eunice Water ST. Eunice Brine Station Arkansas-Jct	December 11, 2000 December 11, 2000 December 11, 2000	8 am 9:30 am 11 am	12 noon 1:30 pm 3 pm	<ul><li>2 Pressure test cavem</li><li>2 Pressure test cavem</li><li>2 Pressure test cavem</li></ul>	Paul Prather Bob Patterson Mr. Piter Bergstein Walter Brisco	1-505-394-2545 1-505-394-2581 1-806-741-1080	1-505-394-2426 1-505-394-2584
Stearns Inc. Gandy Corp. Key Energy	BW-013 BW-022 BW-018	Crossroads Tatum Water St. Truckers #2 (Hobbs)	December 12, 2000 December 12, 2000 December 12, 2000	8:00 AM 9:00 AM 10:30 AM	12 noon 1:00 PM 2:30 PM	<ul><li>2 Pressure test cavern</li><li>2 Pressure test cavern</li><li>2 Pressure test cavern</li></ul>	L.A. Steams Larry Gandy Pete Tumer	1-505-675-2356 1-505-398-4960 1-505-397-4994	1-505-675-2339 cell 369-5721 1-505-393-9023
I&W Trucking Loco Hills Brine	BW-006 &6A BW-021	Carlsbad Yard Loco Hills	December 13, 2000 December 13, 2000	8:00 AM 1:30 PM	12 noon 5:30 PM	2 Pressure test cavem 2 Pressure test cavem D	George Parchman D. Maloney or R. Harris	1-505-885-6663 1-505-885-8477 1-505-677-2370 1-505-677-2361	1-505-885-8477
Goldstar Quality Oil (Salado Brine Sales)	BW-028 BW-025	Eunice Brine Station Salado Brine St. #2	December 14, 2000 December 14, 2000	9:30 am 11am	1:30 pm 3 pm	2 Pressure test cavern 2 Pressure test cavern	Royce Crowell see P&S	1-505-394-2504 1-505-394-2560	1-505-394-2560
Key Energy-Carlsbad Scurlock/Permian Jims Water Ser.	BW-019 BW-027 &27A BW-005	Rowland Truckers Carlsbad Brine St. SE of Artesia	December 15, 2000 December 15, 2000 December 15, 2000	8:00 AM 9:00 AM 10:30 AM	12 noon 1:00 PM 2:30 PM	2 Pressure test cavern 2 Pressure test cavern 2 Pressure test cavern	John Hutcheson Jim Ephraim Sammy Stoneman	1-713-672-8092	1-505-887-3011 1-713-672-7609 1-505-746-3227
Scurlock-Permian Gandy- WasserHaun	BW-012 BW-004	Hobbs Station Buckeye St.	December 18, 2000 December 18, 2000	8:00 AM 9:00 AM	12 noon 1:00 PM	2 Pressure test cavern 2 Pressure test cavern	Richard Lentz Lany Gandy	1-505-392-8212	1-505-392-6988 cell 369-5721
Notes:									
Type of Pressure Test:	1 Casing Test		Isolate cavern formation	from the casin	g/tubing annua	Isolate cavern formation from the casing/tubing annuals and hydrostatic fluid pressure test the casing at 300 psig for 30 minutes.	st the casing at 300 psig	for 30 minutes.	
	2 Open Hole Cavem Pressure Test	om Pressure Test	Open hole cavern forma 300 psig whichever is gr OCD prior to test shall a Brine supply wells oper	ution pressure to reater for four hipprove test pre sting with packe	est by pressurir ours. Operator ssures below 3 irs will have to	Open hole cavern formation pressure test by pressuring up the formation with fluid to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. Operators shall not exceed surface pressures that may cause formation fracturing or system failures. OCD prior to test shall approve test pressures below 300 psig and methods that use media other than fluids. Brine supply wells operating with packers will have to pressure both the cavern formation and casing/tubing annuals.	e and one-half times the res that may cause forma tila other than fluids. n and casing/tubing annu	normal operating pation fracturing or s	rressure or ystem failures.
	3 Others		Nitrogen-Brine Interface Test, Nitrogen Test, Etc.	Test, Nitrogen	Test, Etc.				

# **Brine Well Testing Procedure Guidance Document**

- 1) The cavern and all piping must be filled, pressured up and stabilized for a period of at least 24 hours prior to testing. If this test requires or utilizes a packer then the casing/tubing annulus must be loaded with inert fluid 24 hours prior to testing.
- 2) Have manpower and equipment available for pressure test. Well head shall be prepared for test and all valves and gauges should be in good working order.
- 3) Pressure devices i.e pumps, truck pumps, etc. must be isolated from the well head during test.
- 4) A continuous recording pressure chart with an 8 hour clock shall be installed on the casing/tubing annulus, as directed by the OCD, with a pressure range of not greater than 500 psig. The operator must provide proof that pressure recording device has a range of 0-500 psig and has been calibrated within the past 6 months. Wells, with isolation packers installed, which requires both the casing/tubing annulus and cavern to be tested will require two recording devices or one recording device with two pins. Operators may utilize other types of pressure recording devices, such as electronic data loggers, etc., if approved by OCD.
- 5) A minimum of one pressure gage shall be installed in the system as directed by OCD.
- 6) OCD must witness the beginning of test (putting chart on) and ending of test (removing chart). At the end of test operator may be required to bleed-off pressure to demonstrate recorder response.
- 7) The Operator will supply the following information on the pressure chart before starting test:
  - 1. Company name, discharge plan #, well name and number, legal location UL, section, township, range and county.
  - 2. Type of Test: Open Hole, Casing Test, or Both.
  - 3. Date, time test started, time stop.
  - 4. Chart and Recorder information. (can be attached)
  - 5. Normal operating surface and formation fracture pressure. (can be attached)
  - 6. **After Test Completed:**Name (printed) and signature of company representative and OCD inspector.

Note: NMOCD recognizes that different operations, well constructions, well designs and field conditions may cause variations in the above procedures. Operator is responsible to notify OCD of any procedure that may cause harm to the well or formation. If operator wishes to make or anticipate changes you must notify the OCD for approval.



Southwestern Instrument Company
Clock-Meter and Gauge Repair Service

PHONE (505) 394 - 2377

EUNICE, NEW MEXICO 88231

P. O. BOX 1352

13-21-99

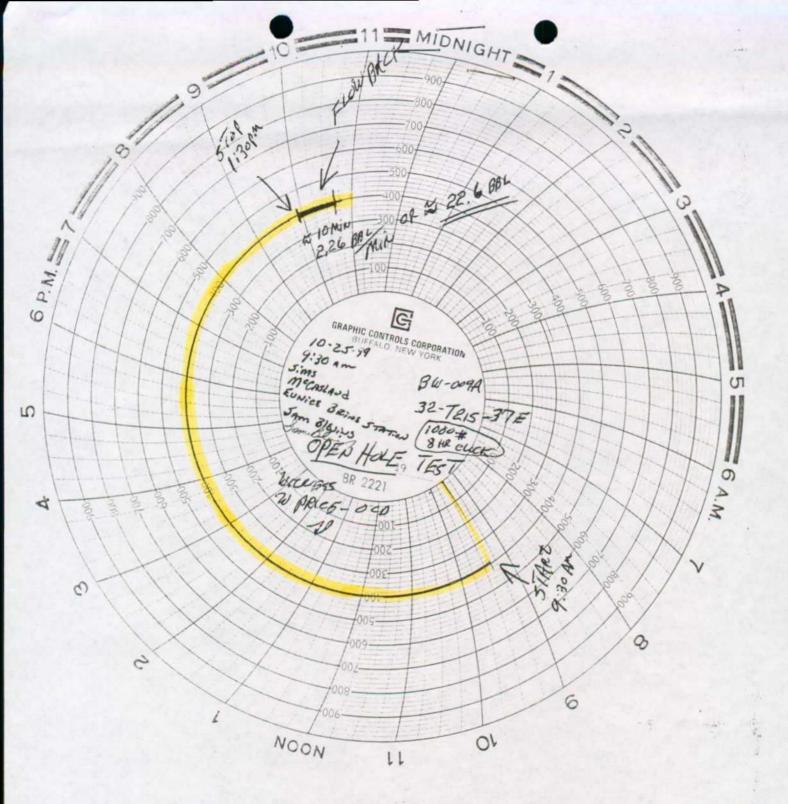
TO WOOD IT HAY CONCERN:

To her day repairing and calibrating a St Matserco pressure reconfine 0-1000 [for Mey Surry Service 120. on the above date.

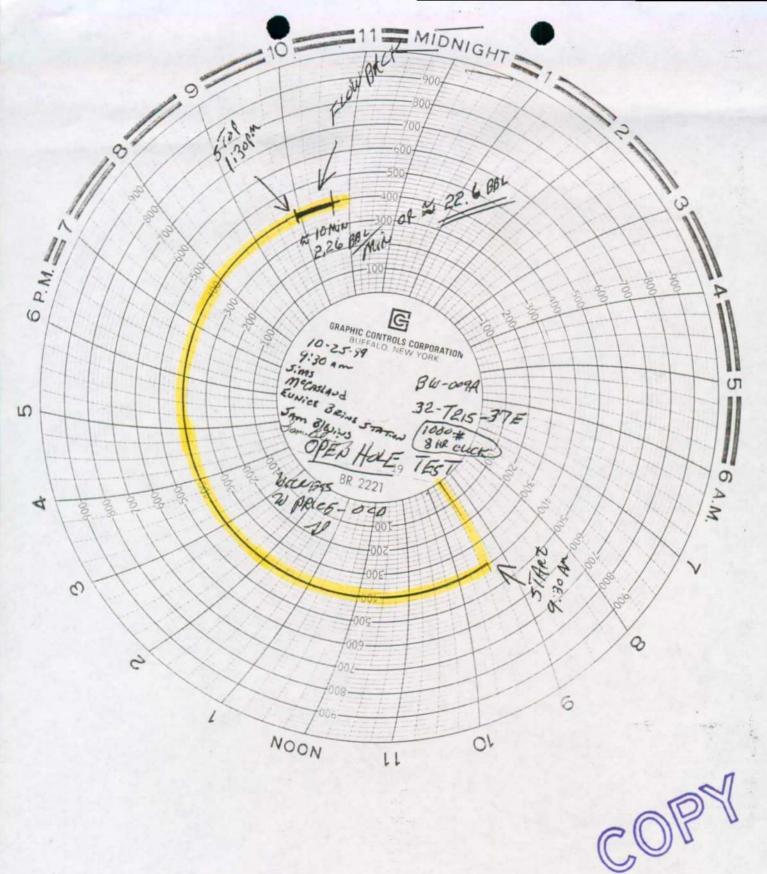
William S. Cottrill

• •

and the supplemental control of the control



COPY



Fax: 1-505-394-2584

October 19, 1999

Mr. Bob Patterson Sims-McCasland Water Sales P.O. Box 99 Eunice, New Mexico 88231

Re: Mechanical Integrity Testing of Brine Supply Wells.

This is a reminder that New Mexico Oil Conservation Division (NMOCD) will be witnessing mechanical integrity test for all brine supply wells during the time period between October 25 through November 2, 1999. A schedule was sent to each operator on September 11, 1999.

Please note that if you were scheduled to "isolate the cavern and pressure test casing, and run a cavern survey", you will have the option this time to defer this procedure and just perform the annual open hole pressure test, however no bleed-off will be allowed. The NMOCD will notify you when these other conditions will be required.

Please have your well(s) ready for testing on the date and time you are scheduled. If there is some emergency which interferes with the scheduled date and time please call and notify NMOCD.

Failure to notify NMOCD may result in your operations being suspended until testing is complete.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155) or notify Mr. Roger Anderson at (505-827-7152).

Sincerely Yours,

Wayne Price-Pet. Engr. Spec.

Ways (1

Environmental Bureau

September 11, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. Z 357 870 160

Mr. Bob Patterson
Sims-McCasland Water Sales
P.O. Box 99
Eunice, New Mexico 88231

Re:

Mechanical Integrity Testing of Brine Supply Wells

Dear Mr. Bob Patterson:

The Underground Injection Control Program of the Federal Safe Drinking Water Act requires that operators demonstrate mechanical integrity of all injection wells by ensuring there are no leaks in the tubing, casing, or packer, and injected/produced fluids are confined within the piping and injection zones.

The Oil Conservation Division (OCD) requires operators of brine supply wells to perform the following mechanical integrity test:

- 1. At least once every five years isolate the cavern formation from the casing/tubing annuals and pressure test the casing at 300 psig for 30 minutes. New brine wells and wells being worked over will have to be tested in this manner before operations begin.
- 2. Annually perform an open hole cavern formation pressure test by pressuring up the formation one and one-half times the normal operating pressure (not to exceed formation fracture pressure) or 300 psig whichever is greater for four hours. Brine supply wells operating with packers will have to pressure both the cavern formation and casing/tubing annuals.

Please find enclosed an OCD Brine Well Test Schedule and Test Procedure for this Fall October 25, 1999 through November 2, 1999. Please have your well ready for testing on the date and time you are schedule. Operators will be responsible for providing equipment and shall bear all costs incurred. All test must be witnessed by the New Mexico Oil Conservation Division.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,

Wayne Price-Pet. Engr. Spec.

Environmental Bureau

Evans / mi

cc: OCD District Offices

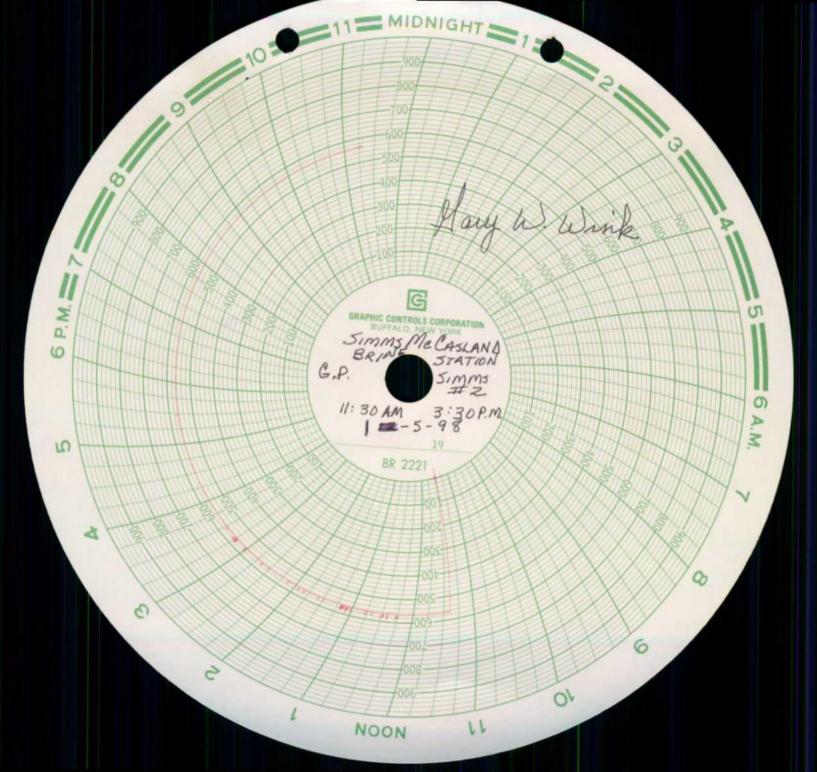
attachments- OCD Brine Well Test Schedule & Brine Well Testing Procedure Guidance Document

				- 1	OCD.	are at a later date approved by OCD
			n to perform now	Companies have the option	Plan Requirments	Cavern Surveys are Discharge Plan Requirments
						1
						Notes:
Isolate cavern & pressure test casing + Cavern survey***	3 pm	II am	PEGE 7 1940ACI	CHICOCK CINC OF		
-	1:30 pm	9:30 am	November 2 1999	Carishad Brine St	** BW-027 &27A	
Pressure test cavern	12 noon	8 am	November 2 1999	Carlsbad Yard	BW-006 &6A	&W Trucking  Key Energy-Carlshad
Pressure test cavern	3 pm	11 am	November 1 1999	of of Artesia	000	
Pressure test cavern	1 pm	9 am	November 1 1999	Loco Hills	BW-021	lims Water Ser
Pressure test cavern	3 pm	11 am	October 29 1999	Marmon Koad	CIO-AAG	
Pressure test cavern	1 pm	9 am	October 29 1999	Buckeye	BW-004	WasserHaun
Pressure test cavern	3 pm	11 am	October 28 1999	Crossroads	BTU-VVG	A STITUTE OF A STATE O
Pressure test cavern	1 pm	9 am	October 28 1999	Tatum Water St.	BW-022	mailty Brine
Isolate cavern & pressure test casing	5:30 pm	1.30 pm	October 77 1888	A SOLITON TO WATER		
Isolate cavern & pressure	5:30 pm	1:30 pm	October 27 1999	Warren -McKee #3	** BW-001	
	12 noon	8 am	October 27 1999	Salado Brine St. #2	** BW-025	Conoco
	3 pm	11 am	October 26 1999	Arkansas-JCI		
Isolate cavern & pressure test	1:30 pm	<u>છ</u> !	October 26 1999	Hobbs Station	# BW 000	
Pressure test cavern + Cavern survey***	12 noon	8 am	October 26 1999	Rowland Truckers #2	** BW-018	Scirios Borning
Pressure test cavem	3 pm	11 am	October 22 1888	Faile Station	010	
	1:30 pm	9:30 am	October 25 1999	Funice Brine Station		
-	12 noon	8 am	October 25 1999	Eunice Eunice Water ST.	** BW-002	Simms-McCasland
Type of Test(s) Required , ,	Stop	Start	Date of Test	Facility Name		Company
						Company

# **Brine Well Testing Procedure Guidance Document**

- 1) The cavern and all piping must be filled, pressured up and stabilized for a period of at least 24 hours prior to testing. If this test requires a packer then casing/tubing annulus must be loaded with inert fluid 24 hours prior to testing.
- 2) Have manpower and equipment available for pressure test. Well head shall be prepared for test and all valves and gauges should be in good working order.
- 3) Pressure devices i.e pumps, truck pumps, etc. must be isolated from the well head before and during test.
- 4) A continuous recording pressure chart with an 8 hour clock shall be installed on the casing/tubing annulus. The pressure range shall not be greater than 1,000 psig. The operator must provide proof that the recording device has been calibrated within the past 6 months. Note: Wells with packer installed: If this test requires both the casing/tubing annulus and cavern to be tested then two recording devices must be supplied or one recording device with two pins.
- 5) A minimum of one pressure gage shall be installed in the system.
- OCD must witness the beginning of test (putting chart on) and ending of test (removing chart). At the end of test operator shall bleed-off pressure by 10% to demonstrate recorder response.
- 7) The following information shall be place on the chart:
  - 1. Date, time test started, time stop.
  - 2. Company name, Discharge Plan #, well name and number, legal location UL, section, township, range and county.
  - 3. Type of Test; Open hole, Casing Test, or Both.
  - 4. Printed name and signature of company representative and OCD representative.

Note: NMOCD recognizes that different operations, well constructions and field conditions may cause variations in the above procedures. If operator wishes to make or anticipate changes please notify the OCD for approval.



August 12, 1997

Certified Mail
Return Receipt No. P-288-258-952

Mr. Bob Patterson Sims-McCasland Water Sales P.O. Box 99 Eunice, New Mexico 88231

RE: Mechanical Integrity Testing of Brine Supply Wells

**Annual Test** 

Sims McCasland Water Sales BW-009

G.P. Sims #1 and #2 Lea County, New Mexico

Dear Mr. Patterson:

The Underground Injection Control Program of the Federal Safe Drinking Water Act requires that operators demonstrate mechanical integrity of all injection wells by ensuring that there are no leaks in the tubing, casing, or packer, and that the injected fluid is confined within the injection zone through proper cementing.

All brine wells that operate without a packer will be required to have an annual open hole pressure test equal to 1.5 times the normal operating pressure or 300 psi, whichever is greater, for four hours with a maximum of 10 percent bleed-off allowed. Every five years or at the time of discharge plan renewals they will be required to have an open hole pressure test equal to 1.5 times the normal operating pressure or 300 psi, whichever is greater, for four hours with zero bleed-off.

All brine wells that operate with a packer will be required to have an annual casing/tubing annulus pressure test equal to 300 psi for 30 minutes.

Operators will be responsible for providing equipment and shall bear all costs incurred. The date and time of all tests will be scheduled and witnessed by the New Mexico Oil Conservation Division.

Please have your wells ready for testing on September 17, 1997 at 10:30 AM as outlined below.

For brine wells operating without a packer:

1) The cavern must be pressured up and stabilized for a period of at least 24 hours prior to testing.

Mr. Bob Patterson August 12, 1997 Page 2

- The system shall be tested to 1.5 times the normal operating pressure or 300 psi, whichever is greater, for a period of four hours. A maximum of 10 percent bleed-off will be allowed for annual tests. Testing conducted every five years or at the time of discharge plan renewal will have zero bleed-off.
- 3) A continuous recording pressure chart with an 8 hour clock shall be installed on the casing/tubing annulus. The pressure range shall not be greater than 1,000 psi.
- 4) Have well head prepared for test. All valves should be in good working order.
- 5) All gauges shall be in good working order.
- 6) Have manpower and equipment available for pressure test.

For brine wells operating with a packer:

- 1) Have the casing/tubing annulus and tubing loaded with inert fluid prior to testing.
- 2) The casing/tubing annulus shall be tested to 300 psi for 30 minutes.
- 3) A continuous recording pressure chart with an 8 hour clock shall be installed on the casing/tubing annulus. The pressure range shall not be greater than 1,000 psi.
- 4) Have well head prepared for test. All valves should be in good working order.
- 5) All gauges shall be in good working order.
- 6) Have manpower and equipment available for pressure test.

If you have any questions regarding this matter, please feel free to contact me at (505) 827-7155.

Sincerely, Mark Hally

Mark Ashley Geologist

