# BW - <u>27</u>

# MECHANICAL INTEGRITY TEST (MITs)

# DATE:

From:	Andy Rickard <arickard@cambrianmgmt.com></arickard@cambrianmgmt.com>
Sent:	Wednesday, November 30, 2016 10:48 AM
То:	Billy Doucette; Chavez, Carl J, EMNRD
Cc:	Griswold, Jim, EMNRD; Whitaker, Mark A, EMNRD; Alan Means
Subject:	RE: BW-27 (Pyote Salado Dunaway Well No. 1 API# 30-015-28083 and Well No. 2 API#
	30-015-28084): MIT Required

Thanks Billy, we will look into it

Andrew E Rickard Project Manager



415 West Wall St., Suite 900 Midland, TX 79701 Off: 432-620-9181 Cell: 432-553-2828

From: Billy Doucette [mailto:billy@pyotewatersystems.com]
Sent: Wednesday, November 30, 2016 9:39 AM
To: Chavez, Carl J, EMNRD
Cc: Griswold, Jim, EMNRD; Whitaker, Mark A, EMNRD; Alan Means; Andy Rickard
Subject: Re: BW-27 (Pyote Salado Dunaway Well No. 1 API# 30-015-28083 and Well No. 2 API# 30-015-28084): MIT Required

### Carl,

Jerry Burton nor Pyote Well Service over see the wells for Pyote Water Solutions, LLC. You do have the correct email addresses for the new operator, Cambrian Management. Please direct any questions or concerns to them in the future.

Thanks in advance,

Billy Doucette VP of Operations Pyote Water Systems

Sent from my iPhone

On Nov 30, 2016, at 9:17 AM, Chavez, Carl J, EMNRD < <u>Carl J. Chavez@state.nm.us</u>> wrote:

<image001.gif> Jerry: Good morning. OCD had requested that an EPA 5-Yr. Mechanical Integrity Test be performed on the above subject brine well on or before 11/30/16. The MIT schedule was apparently missed.

Please contact Mark Whitaker at the OCD Hobbs District Office within the next 3-days to schedule your MIT. His contact information is as follows:

Mark A. Whitaker - Petroleum Engineering Specialist Phone extension: 120 Mobile: (575) 399-3202

• Field Inspections, Plug and Abandonment, Orphan Well Plugging, P&A Site Release

District 1 1625 N. French Drive Hobbs, New Mexico 88240 OFFICE: (575) 393-6161 FAX: (575) 393-0720 EMERGENCY NUMBER - MOBILE: (575) 370-3186

Business Hours: 7:00 AM-12:00 PM and 1:00 - 4:00 PM

Monday through Friday

This office is responsible for OCD permitting, well data, inspection, and enforcement actions in Chaves, Curry, Lea, and Roosevelt Counties in the Permian Basin of New Mexico. Public access is available to OCD's computerized data.

Please contact me if you have questions. Thank you.

Mr. Carl J. Chavez New Mexico Oil Conservation Division Energy Minerals and Natural Resources Department 1220 South St Francis Drive Santa Fe, New Mexico 87505 Ph. (505) 476-3490 E-mail: <u>Carl J. Chavez@state.nm.us</u> "Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?" (To see how, go to: http://www.emnrd.state.nm.us/OCD and see "Publications")

From:	Chavez, Carl J, EMNRD
Sent:	Wednesday, November 30, 2016 8:17 AM
То:	'Jerry@Pyotewatersystems.com'
Cc:	Griswold, Jim, EMNRD; Whitaker, Mark A, EMNRD; 'ameans@cambrianmgmt.com';
	'arickard@cambrianmgmt.com'
Subject:	BW-27 (Pyote Salado Dunaway Well No. 1 API# 30-015-28083 and Well No. 2 API# 30-015-28084):
	MIT Required

Jerry:

Good morning. OCD had requested that an EPA 5-Yr. Mechanical Integrity Test be performed on the above subject brine well on or before 11/30/16. The MIT schedule was apparently missed.

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From:	Chavez, Carl J, EMNRD
Sent:	Wednesday, October 19, 2016 5:07 PM
То:	'Jerry@Pyotewatersystems.com'
Cc:	Griswold, Jim, EMNRD; Bayliss, Randolph, EMNRD; Inge, Richard, EMNRD; Sanchez, Daniel J., EMNRD
Subject:	BW-27: Dunaway #1 30-015-28083 F-23-22S-27E & Dunaway #2 30-015-28084
-	F-23-22S-27E Last MIT Date: 2/25/2010 & 2/18/2010 Respectively
Attachments:	EPA 5-Yr Casing MIT 10-12-2016 CJC.pdf; UIC Class III Cavern MIT Guidence 10-12-16CJCpdf

Mr. Burton:

Re: BW-27	7	Α	Pyote	Dunaw	yay #1	30-01	5-2808	33 F-2	23-22	S-27E				
1474		2053	32	2.38160	7 -1	104.162	2101	Eddy	Carl	sbad	2		Private	
Private	2	New		Active	1/30/9	5	1/30/	95		-				
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1060 106	4 7	1024	2.875	1300	236	N/A		8,1	183,44	6	1,227	,517	6,563	,384
326	0.3075					2	2/18/20	10	2/25	/2010	u	nder		
review	Jerry@	Pyotewa	tersyste	ems.com	n	Jerry H	Burton	432-4	48-49	17				
			Dunaw	ay #2	30-01	5-2808	4 F-23	-22S-2	27E					
1443		1698	32	2.38170	5 -1	104.163	3300	Eddy	Carl	sbad	2		Private	
Private	2	New		Active	1/30/9	5	1/30/	95		-				
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780 1,1	29,767	6,040,	727	760	0	.7206 1	/19/10		325.	6	1	170-		
1205 33	32,505	2/18/2	2010											

Jerry:

Good afternoon. The New Mexico Oil Conservation Division (OCD) has reviewed its administrative record for the above subject brine wells, and notice that your brine wells must be tested on or before November 30, 2016.

Please contact Mr. Richard Inge (see contact information below) to schedule either your Casing MIT or Cavern MIT (see attached procedures). The choice is yours.

District 2 - ARTESIA

811 S. First St. Artesia, NM 88210

OFFICE: (575) 748-1283 FAX: (575) 748-9720 Business Hours: 7:00 AM - 12:00 PM and 1:00 PM - 4:00 PM Monday through Friday

Richard Inge - Compliance Officer Phone extension: 107 Mobile: (575) 626-0831

Field Inspections, Bradenhead, Packer, and Mechanical Integrity Tests

Please contact me if you have questions. Thank you.

Mr. Carl J. Chavez New Mexico Oil Conservation Division Energy Minerals and Natural Resources Department 1220 South St Francis Drive Santa Fe, New Mexico 87505 Ph. (505) 476-3490 E-mail: <u>CarlJ.Chavez@state.nm.us</u>

"Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?" (To see how, go to: http://www.emnrd.state.nm.us/OCD and see "Publications")

## UIC Program Brine Well EPA 5-Yr. MIT Guidance

(30-minute hydrostatic well casing MIT closed to formation)

- 1) A work over rig must remove all tubing from the hole.
- 2) A packer or plug must be set within 20 feet of the casing shoe depth and piping must be filled, and pressured up from 300 to 500 psi. The casing/tubing annulus must be loaded with inert fluid at least 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.
- 4) A continuous recording pressure device with a 1<u>or 4-hour clock</u> shall be installed on the casing 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.
- 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 into an adequately sized containment vessel(s) for this purpose and to verify that there were no obstructions in the well during the test. Effluent from this vessel must be discharged back into the well at the completion of the test.
- 7) The Operator shall 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. <u>Passes</u> if Zero Bleed-Off during the test.
  - B. <u>**Passes**</u> if Final Test Pressure is within  $\pm 10\%$  of Starting Pressure, if approved by the OCD inspector.
  - C. <u>Fails</u> if any Final Test Pressure is greater than  $\pm 10\%$  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 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.
- Also note: This document is intended to provide technical guidance to operators on technical means to achieve compliance with the rules and regulations of the Oil Conservation Division and the Oil and Gas Act. The test procedures set forth are not regulations or policies and therefore other methods may exist to achieve compliance with the rules and regulations and the Oil and Gas Act.

NMOCD recommends that a licensed professional engineer or licensed geologist, or a licensed professional engineer or licensed geologist designee supervise all test procedures and associated field activity.

## OCD UIC Program Draft Brine Well Cavern MIT Guidance (4-

hour hydrostatic well test open to the salt formation)

- 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.
- 4) A continuous recording pressure device with an <u>8 or 12-hour clock</u> 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 pressurerecording 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). Ensure that fluids from the well are not spilled onto the ground.
- 7) The Operator shall 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. <u>**Passes</u>** if Zero Bleed-Off during the test.</u>
  - B. <u>**Passes**</u> 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  $\pm 1\%$  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. Caution is urged to reduce pressure appropriately as a function of depth to the salt cavern to prevent fracturing during testing.
- 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.
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Wildcat Measurement Service, Inc.

416 East Main Street P.O. Box 1836 Artesia, New Mexico 88211 Office: (575)746-3481 Toll Free: 1-888-421-9453

### Calibration Certificate

Company Name:	Mesquite Services	
Recorder Type:	Barton	······································
Recorder Serial:#	265-061709 CM2	· · · · · · · · · · · · · · · · · · ·

Recorder Pressure Range:0.1000#Accuracy +/-: 0.2%PSIGTemperature Range:Deg F.

Increasing Pro	essure		Decreasing Pre	essure	
Applied Indicated Error		Error%	Applied	Indicated	Error%
Pressure	Pressure		Pressure	Pressure	
0.0#	0.0#	0	800#	800#	0
100#	100#	0	600#	600#	0
300#	300#	0	400#	400#	0
500#	500#	0	200#	200#	0
700#	700#	0	0.0#	0.0#	0
1000#	1000#	0			

Temperature		
Applied	Indicated	Error%
Temperature	Temperature	
,		

Certified Calibration Instrument Used

Gauge: Crystal

Deadweight:

Remarks:

Calibration Dates	10-07-2011	
Technician:	a Suth	
	0	۹

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From:Chavez, Carl J, EMNRDSent:Friday, April 23, 2010 6:56 AMTo:'Alvarado, David'; 'lyn.sockwell@basicenergyservices.com'; 'James Millett'; Clay Wilson;<br/>'Patterson, Bob'; 'gandy2@leaco.net'; 'Gary Schubert'; 'Dan Gibson'Cc:VonGonten, Glenn, EMNRD; Griswold, Jim, EMNRDSubject:New Mexico UIC Class III Brine Well MIT Scheduling with Completion by September 30, 2010

Gentlemen:

Re:

Basic Energy Services: BW-002 & BW-025 Gandy Corporation: BW-004 & BW-022 Key Energy Services, LLC: BW-028 Mesquite: BW-027 (MITs on 2-Well System Completed this Season) & BW-030 Salty Dog: BW-008 HRC: BW-031

Good morning. It is that time of year again to remind operators that their MITs for this season must be completed by 9/30/2010. The list of operator names w/ associated brine wells are provided above and as in the past, the OCD attempts to schedule MITs logistically on the same day and it in a route with start times that is most efficient in the field.

Operators are aware of the annual formation MIT (4-hr @ 300 psig or less depending on historical pressure and TD of well) and every 5-yrs. or after well workover. EPA MIT (30 min. @ 500 psig). Operators need to review well MIT records to inform OCD-EB of the type of MIT it will run this year and inform OCD-EB of any issues or concerns associated with this season's MIT.

You may access your well information on OCD Online either by API# and/or Permit Number at <a href="http://ocdimage.emnrd.state.nm.us/imaging/AEOrderCriteria.aspx">http://ocdimage.emnrd.state.nm.us/imaging/AEOrderCriteria.aspx</a> and <a href="http://www.emnrd.state.nm.us/OCD/OCDPermitting/Data/Wells.aspx">http://www.emnrd.state.nm.us/imaging/AEOrderCriteria.aspx</a> and <a href="http://www.emnrd.state.nm.us/OCD/OCDPermitting/Data/Wells.aspx">http://www.emnrd.state.nm.us/imaging/AEOrderCriteria.aspx</a> and <a href="http://www.emnrd.state.nm.us/OCD/OCDPermitting/Data/Wells.aspx">http://www.emnrd.state.nm.us/OCD/OCDPermitting/Data/Wells.aspx</a>. For information on New Mexico's UIC Program and training information, please go to: <a href="http://www.emnrd.state.nm.us/ocd/Publications.htm">http://www.emnrd.state.nm.us/ocd/Publications.htm</a>.

Please contact Jim Griswold at (505) 476-343465 on or before May 7, 2010 to schedule your preferred MIT date and time. Jim will work to finalize the witness schedule with each of you. Thank you in advance for your cooperation.

Copy: Brine Well Files BWs- 2, 4, 8, 22, 25, 27, 28, 30 & 31

Carl J. Chavez, CHMM UIC Program Quality Assurance & Quality Control Officer New Mexico Energy, Minerals & Natural Resources Dept. Oil Conservation Division, Environmental Bureau 1220 South St. Francis Dr., Santa Fe, New Mexico 87505 Office: (505) 476-3490 Fax: (505) 476-3462 E-mail: <u>CarlJ.Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u>index.htm (Pollution Prevention Guidance is under "Publications")





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From: Sent: To: Subject: Inge, Richard, EMNRD Thursday, February 18, 2010 3:40 PM Chavez, Carl J, EMNRD MITs on the Mesquite SWD Dunaway 001 and 002

Carl,

We performed MIT pressure tests on the Dunaway 001 and 002 this morning. (30-015-28084 & (30-015-28083) They passed. Clay Wilson said you wanted the original charts. I kept them and have already sent them to be scanned into our well file. They should be there in a couple of days. The inspection information should be available to you tomorrow after I synch RBDMS this evening.

--Richard

### **Active Brine Well Facilities**

BW-2 Basic Energy/P&S Eunice #1 (API 30-025-26884)
Began production in July 1980.
Depth to top-of-salt 1320 ft bgs. Casing shoe @ 1440 ft bgs. Tubing depth 1718 ft bgs.
Last sonar log completed February 2009. Interval imaged 1440 to 1666 ft bgs. Log indicates only 21,000 bbls of cavern volume despite historic production of 6.8 Mbbls. Cavern should be ~1Mbbls.
Permit renewal date: 1/6/2014

• BW-4 Gandy Corporation/Eidson State #1 (API 30-025-26883)

Began production in August 1980.

Depth to top-of-salt 1865 ft bgs. Casing shoe @ 1895 ft bgs. Tubing depth 2461 ft bgs.

Last sonar log completed October 2008. Interval imaged 1909 to 1944 ft bgs. Log indicates only 11 bbls of cavern volume despite historic production of 5.28 Mbbls. Cavern should be ~800,000 bbls. Permit renewal date: 6/11/2011

• BW-8 PAB Services/Brine Supply #1 (API 30-025-26307)

Began production in May 1979.

Depth to top-of-salt 2000 ft bgs. Casing shoe @ 1871 ft bgs. Tubing depth 2552 ft bgs.

Last sonar log completed February 2009. Interval imaged 1871 to 1903 ft bgs. Log indicates only 720 bbls of cavern volume despite historic production of perhaps 12 Mbbls. Cavern should be 1.8 Mbbls.

Permit renewal application currently under review.

• BW-22 Gandy Corporation/Watson #1 (API 30-025-28162)

Began production in April 1983.

Depth to top-of-salt 2290 ft bgs. Casing shoe @ 2249 ft bgs. Tubing depth 2870 ft bgs.

Last sonar log completed August 2008. Interval imaged 2200 to 2220 ft bgs. Log indicates only 11,289 bbls of cavern volume despite historic production of perhaps 18 Mbbls. Cavern should be 2.7 Mbbls.

Permit renewal date: 3/11/2012

• BW-25 Basic Energy/Salado #2 (API 30-025-32394)

Began production in September 1993.

Depth to top-of-salt 1220 ft bgs. Casing shoe @ 1220 ft bgs. Tubing depth 1385 ft bgs. No sonar log run. Historic production of perhaps 1.7 Mbbls, indicating cavern volume of 25,500 bbls. Permit renewal application currently under review.

• **BW-27** Mesquite SWD/Dunaway #1 and #2 (APIs 30-015-28083 and 28084) Began production in January 1995. Depth to top-of-salt 1060 ft bgs. Casing shoe @ 1064 ft bgs. Tubing depth 1024 ft bgs. Last sonar log attempted December 2008 but failed to get any data due to configuration of casing and tubing. Permit renewal date: 9/21/2009

• BW-28 Key Energy/State Brine Well #1 (API 30-025-33547)

Began production in October 1996.

Depth to top-of-salt 1390 ft bgs. Casing shoe @ 1390 ft bgs. Tubing depth 2074 ft bgs. Sonar log completed 5/20/09. Report not yet provided. Estimated production of perhaps 4 Mbbls. Indicating cavern volume of 600,000 bbls.

Permit renewal date: 7/18/2011

• BW-30 Liquid Resource/Hobbs State #10 (API 30-025-35915) Began production in July 2002. Depth to top-of-salt 1645 ft bgs. Casing shoe @ 1633 ft bgs. Tubing depth 1930 ft bgs. OCD did not require them to run sonar due to shortness of operational life. Estimated brine production of 1.4 Mbbls, indicateing cavern may be 207,000 bbls. Permit renewal date: 5/29/2012

• BW-31 HRC/HRC Schubert 7 #1 (API 30-025-36781) Began production in October 2006. Depth to top-of-salt 1800 ft bgs. Casing shoe @ 1865 ft bgs. Tubing depth 2300 ft bgs. No sonar log run. Estimated production of only 560,000 bbls and thus cavern only 84,000 bbls. Permit renewal date: 6/22/2011

Submit 3 Copies To Appropriate District	State of New Mexico	Form C-103
Office District I	Energy, Minerals and Natural Reso	Durces May 27, 2004
1625 N. French Dr., Hobbs, NM 88240		WELL API NO.
District II	OIL CONSERVATION DIVIS	30-015-28083
1301 W. Grand Ave., Artesia, NM 88210	1220 Gentle St. Erongin Dr.	5. Indicate Type of Lease
1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Francis Dr.	STATE 🔀 FEE 🗌
District IV	Santa Fe, NM 87505	6. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM 87505		
SUNDRY NOTI	CES AND REPORTS ON WELLS	7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPO	SALS TO DRILL OR TO DEEPEN OR PLUG BACK	TO A Dunaway
DIFFERENT RESERVOIR. USE "APPLIC	CATION FOR PERMIT" (FORM C-101) FOR SUCH	
1 Type of Well: Oil Well	Gas Well NO Other BRINE	8. Well Number #1
2 Name of Operator		9 OGRID Number 161968
Mesquite SWD Inc.		
3. Address of Operator		10. Pool name or Wildcat
P.O. Box 1479 Carlsbad NM 8822	1-1479	BSW Salado
4. Well Location		
Unit Letter F	1474 feet from the North	line and 2053 feet from the
West line		
	Translin 220 Dam	
Section 23	10Wilship 225 Kang	ge 2/E NMPM CountyEddy
	11. Elevation (Snow whether DR, KKB, K 3091GP	<i>I</i> , <i>G</i> <b>R</b> , <i>eic</i> .)
Pit or Below-grade Tank Application 🗌 o	r Closure	
Pit type Depth to Groundwa	ater Distance from nearest fresh water well	Distance from nearest surface water
Pit I iner Thickness mil	Relow Grade Tank: Volume	hble: Construction Material
12. Check A	appropriate Box to Indicate Nature of	f Notice, Report or Other Data
	TENTION TO	SUBSEQUENT REPORT OF
PERFORM REMEDIAL WORK		
PULL OR ALTER CASING		G/CEMENT JOB
<u> </u>		
OTHER: Brine well	OTHER	२:
13. Describe proposed or comp	leted operations. (Clearly state all pertinent	details, and give pertinent dates, including estimated date
or recompletion	rk). SEE RULE 1103. For Multiple Compl	letions: Attach wellbore diagram of proposed completion
1) Ru Funice well TOH RUBI	ackwarrior wire line ran in with sinker bar	tagged at 1058ft tried to work throw could not get
through came out hole	accounter whe line lan in with sinker bar	agged at 10381t thed to work threw could not get
2) RU fresh water tried to wash	salt for three bours ran back in hole tagged :	at 1058ft
3) Talk with Larry VanMetre w	ith Socon Sonar he said his tool would not	work inside casing.
4) Ran tubing back in hole.		
5)RU I&W pumped 55bbl of pa	cker fluid, set packer.	
6)Presured up to 300# for 30min	i. held	

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7) RD moved to the Dunaway #2
8) Had I&W come back on 12-10-2008 to run pressure test . pressured up 400# for 30min held.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or belowgrade tank has been/will be constructed or closed according to NMOCD guidelines , a general permit i or an (attached) alternative OCD-approved plan .

SIGNATURE (hy) Ulson	_title <i>V.P</i>	DATE /2/12/08
Type or print name CLAY LWILSON	E-mail address:	Telephone No. 575-706
For State Use Only L		1840
APPROVED BY: lal All	TITLE Environment cogn	DATE 1/ 12/ 69 52
Conditions of Approval (if any):	lon	09
W Under a contra	~	0 1



From:	Chavez, Carl J, EMNRD
Sent:	Monday, January 12, 2009 11:58 AM
To:	'Clay Wilson'
Cc:	Price, Wayne, EMNRD: Gum, Tim, EMNRD
Subject:	Mesquite Carlsbad Dunaway Well Nos. 1 (API# 30-015-28083) & 2 (API# 30-015-28084) (BW-27) Sonar Test Failure 12/10/2008

Clay:

The NMOCD understands why SOCON was unable to run sonar tests for the above two-well brine well system. It appears that you pressured up the annulus above the packer w/o removing the packer and tubing from the wells?

You will need to pull the packers and tubing out of each of the brine wells in order to run the sonar tests. If you are unable to run the sonar tests, based on the shallow depth and thinness of the salt section near Carlsbad, the NMOCD may require that the facility be closed.

Please let me know when the next sonar tests will be performed or what you propose based on the above. 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: <u>Carl J.Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u>index.htm (Pollution Prevention Guidance is under "Publications")

Submit 3 Copies To Appropriate District State of New Me	Exico Form C-103			
District 1 1625 N. French Dr., Hobbs, NM 88240	WELL API NO. 30-015-78084			
1301 W. Grand Ave.; Artesia, NM 88210 OIL CONSERVATION	DIVISION			
District III 1220 South St. Fran	ncis Dr. STATE FEE			
District IV Santa Fe, NM 87410	7505 6. State Oil & Gas Lease No.			
1220 S. St. Francis Dr., Santa Fe, NM				
87505				
OCNOTUSE THE FORM FOR PROPOSALS TO DRUL OR TO DEEPEN OR PLU	UG BACK TO A Dungwoy			
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FO	OR SUCH			
PROPOSALS.)	- Wall Number # 7			
1. Type of Well: Oil Well Gas Well X Other Brine	8. Well Number # 2			
2. Name of Operator	9. OGRID Number 161968			
Mesquite SWD Inc.				
3. Address of Operator	10. Pool name or Wildcat			
P.O. Box 1479 Carisbad NM 88221-1479	BSW Salado			
4. Well Location				
Unit Letter F1443feet from the No	orthline and1698feet from the			
Westline	1			
Section 23 Township 22S	Range 27E NMPM CountyEddy			
11. Elevation (Show whether DR, 3094GR	, RKB, RT, GR, etc.)			
Pit or Below-grade Tank Application or Closure	······································			
Pit typeDepth to GroundwaterDistance from nearest fresh w	vater well Bistance from nearest surface water			
Pit Liner Thickness: mil Below-Grade Tank: Volume	bbls; Construction Material			
12. Check Appropriate Box to Indicate N	lature of Notice, Report or Other Data			
NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF			
PERFORM REMEDIAL WORK PLUG AND ABANDON				
TEMPORARILY ABANDON CHANGE PLANS	COMMENCE DRILLING OPNS [] P AND A			
PULL OR ALTER CASING MULTIPLE COMPL	CASING/CEMENT JOB			
QTHER: Brine well	OTHER:			
13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date				
of second starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion				
12-4 2000 Res Finnice well FOH BH Blackwarring wire line ren in with sinker has teaned at 122/33 triat to me to the				
get through came out hole.				
2) Talk with Larry Van Metre with SOCON Sonar he said his tool would not work he need more than 20 from under the casing shoe				
for sonar tool to be able to work.did not run tool.				
3) Riff rigged up le W pumped 65 bis of packer fluid, set packer, ran 30min chart @ 350 held.				

 $\langle \phi \rangle \langle \phi \rangle$ 

4) RD Eunice well, Blackwarrior wireline.
5) Put well back into production.
6) 12-10-2008 RU I&W Ran 30min Chart @ 380 held.

grade tank has been/will be constructed or closed according to NMOCD guid	delines 🗔, a general permit 🔲 or an (attached) alternative OCD-approved plan 🗔.
SIGNATURE / 144 SON TTI	FLE V. P. DATE 12/12/2008
Type or print name CLIAY LWKSON E- For State Use Only	mail address: Telephone No. 575-706 1840
APPROVED BY: Und J. Ch TTT Conditions of Approval (if any): W attuched On dition	TEE Environdal Sugar DATE 1/12/09

· · ·



From: Sent:	Chavez, Carl J, EMNRD Monday, January 12, 2009 11:58 AM
To:	'Clay Wilson'
Cc:	Price, Wayne, EMNRD; Gum, Tim, EMNRD
Subject:	Mesquite Carlsbad Dunaway Well Nos. 1 (API# 30-015-28083) & 2 (API# 30-015-28084) (BW-27) Sonar Test Failure 12/10/2008

Clay:

The NMOCD understands why SOCON was unable to run sonar tests for the above two-well brine well system. It appears that you pressured up the annulus above the packer w/o removing the packer and tubing from the wells?

You will need to pull the packers and tubing out of each of the brine wells in order to run the sonar tests. If you are unable to run the sonar tests, based on the shallow depth and thinness of the salt section near Carlsbad, the NMOCD may require that the facility be closed.

Please let me know when the next sonar tests will be performed or what you propose based on the above. 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: <u>Carl J.Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u>index.htm (Pollution Prevention Guidance is under "Publications")

	From:	Clay Wilson [claylwilson@pccnm.com]
	Sent:	Sunday, November 30, 2008 4:27 PM
	То:	Chavez, Carl J, EMNRD
	Subject	Re: BW-27 (Dunaway No. 2) Upcoming MIT & Sonar Testing
C W T C	arl Ve are set hanks Hay	for the 3rd of December at 9:00am
	Orig From: <u>C</u> To: <u>Clay</u> Sent: Th Subject:	inal Message <u>havez, Carl J, EMNRD</u> <u>Wilson</u> ursday, November 20, 2008 4:39 PM RE: BW-27 (Dunaway No. 2) Upcoming MIT & Sonar Testing
	Clay:	
	Since yo 30 minut you.	u will be pulling the tubing for the sonar, the OCD is allowing the EPA 5-Yr. pressure up on casing for es at 300 to 500 psi. I'll be out of the office all next week. Let me know if you have questions. Thank
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: <u>CarlJ.Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u> index.htm (Pollution Prevention Guidance is under "Publications")		
	From: C Sent: W To: Chav Subject	lay Wilson [mailto:claylwilson@pccnm.com] ednesday, November 19, 2008 7:17 PM /ez, Carl J, EMNRD : Re: BW-27 (Dunaway No. 2) Upcoming MIT & Sonar Testing
	Carl I have m want me formation Thanks Clay	y set up to run the sonar on December 3rd,I"II let you know what time.I'm not sure what MIT test you to run, do you want to pressure test between the casing and tubing or do you want to pressure test the n.If you want the formation it will have to be a different day.
	Ori From: To: <u>Ch</u> Cc: <u>Sa</u> Sent: V Subjec	ginal Message Chavez, Carl J, EMNRD avez, Carl J, EMNRD ; Clay Wilson nchez, Daniel J., EMNRD ; Price, Wayne, EMNRD Vednesday, November 12, 2008 9:08 AM t: RE: BW-27 (Dunaway No. 2) Upcoming MIT & Sonar Testing
	Clay:	
	After sp	peaking with my Supervisor Wayne Price, and under the current circumstances, the OCD is requiring

your brine well to be sonar tested within 30 days of this notice. Since you will be performing this task, it may be prudent to conduct the MIT too. Please contact me to confirm the type of MIT this 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: <u>CarlJ.Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/index.htm</u> (Pollution Prevention Guidance is under "Publications")

From: Chavez, Carl J, EMNRD
Sent: Tuesday, October 21, 2008 3:24 PM
To: 'Clay Wilson'
Cc: Sanchez, Daniel J., EMNRD; Price, Wayne, EMNRD
Subject: BW-27 (Dunaway No. 2) Upcoming MIT & Sonar Testing

Clay:

Re: OCD August 1, 2008 Letter w/ Brine Well Information Request (BWIR)

Good afternoon. The Oil Conservation Division (OCD) has reviewed Mesquite's responses to the BWIRs for the above subject OCD permitted brine well. Based on the operational life and volume of brine produced from the above brine well, sonar testing is required along with your MIT on or before July 31, 2009. According to OCD records, no sonar testing has been conducted on the above subject brine well to date.

Please contact me within 8 working days to arrange the type, date and time for the MITs and corresponding date for sonar testing. 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: <u>Carl J. Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u>index.htm (Pollution Prevention Guidance is under "Publications")

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

From:Chavez, Carl J, EMNRDSent:Thursday, December 21, 2006 3:14 PMTo:'claylwilson@pccnm.com'Subject:API# 30-015-28084 (BW-27) Dunaway #2 MIT Cavity Water Test 12/18/2006 Passed

Clay:

Please find attached the MIT Water Cavity Test for your Class III Brine Well (two well system) Dunaway #2. Although the chart shows a greater than 1% differential or about 8 psi drop from 290 psi during the 4 hour test, it was apparent that the cavity was not stabilized for 24 hours before the test. Consequently, Mr. Wayne Price of the OCD factored this into the MIT this year and you passed the MIT. However, next year, please be sure to stabilize the cavity 24 hours in advance of the start of the MIT. Please contact me if you have questions. Thanks for your cooperation.

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: <u>CarlJ.Chavez@state.nm.us</u> Website: <u>http://www.emnrd.state.nm.us/ocd/</u> (Pollution Prevention Guidance is under "Publications")





MESQUITE 500 INC BRINE WELL OUNAWAY # 1 1-17-05 Cor Man Clayh Withon





American Valve & Meter, Inc. III3 W. Broadway B6-0. CARIS BAI Hobbs, NM 88240 mel #1 To: PLAINS MARKETING Date: <u>11-26-01</u> This is to Certify that: I, JONY FLORES , Technician for American Valve & Meter, Inc., has checked the calibration of the following instrument 8" 0-500# P.S.T. Recorder Serial Number\_\_\_\_ at these points. Pressure 0-500# **Temperature** Left Found Found Left Test Test Ð Ð  $\boldsymbol{\partial}$ 100 100 100 • ; 200 200 XO 300 300 300 400 400 400 500 500 500 Remarks:

Signature <u>Jony Hows</u>

~
American Valve & Meter, Inc. BW-027 A

carlybal we # 2

III3 W. Broadway P.O. Box 166 Hobbs, NM 88240

To: Plain Marketing

Date: 11-26-01

This is to Certify that:

I, Tony Flores, Technician for American Valve & Meter, Inc.,

has checked the calibration of the following instrument

<u>8" 0-1000# P.S.T. Recorder</u> Serial Number\_\_\_\_\_

at these points.

Pressure	0-1000 <sup>2</sup>	4 -	Tempera	ture	
Test	Found	Left	Test	Found	Left
<u>+</u>	-5	Ð	<u> </u>		
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1000	<u>995</u>	1000	$\square$		

Remarks: Signature Joy flores







## NEW MEXICO ENERGY, MINERALS and TURAL RESOURCES DEPARTMENT

GARY E. JOHNSON Governor Jennifer A. Salisbury Cabinet Secretary Lori Wrotenbery Director Oil Conservation Division

PLAINS ALL AMERICAN October 20, 2001 BW-12 227, 27A

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT NO.</u> 5357 7539

#### 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 drostatic 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 NUTURAL RESOURCED DEPARTMENT

GARY E. JOHNSON Governor Jennifer A. Salisbury Cabinet Secretary Lori Wrotenbery Director Oil Conservation Division

PLAINS ALL AMERICAN October 20, 2001 BW-12 27, 27A

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Brine Well Operators Oct 20, 2001 Page 2

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#### 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,

Wagner Pini

Wayne Price- Senior Envr. Engr.. Environnemental Bureau

cc: OCD District Offices

Attachments-1.OCD Brine Well Test Schedule November 20012.Brine Well Testing Procedure Guidance Document

#### Brine Well Testing Procedure Guidance Document

- 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.
- 4) 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. <u>Passes</u> if Zero Bleed-Off during the test.
  - B. <u>Passes</u> if Final Test Pressure is within  $\pm 1\%$  of Starting Pressure, if approved by the OCD inspector.
  - C. <u>Fails</u> if any Final Test Pressure is greater than  $\pm 1\%$  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.

		FAX #/cell		1-505-675-2339		-505-748-2523	1-505-748-3227			505-810-4185 392-6988				94-2428	505-910-4185	1-505-394-2560		201 0 100	000-04/1	Cell 390-1633 392-6988																em failures.							
		Telephone		1-505-675-2356		748-5975 cell 1	1-505-748-1352			(505) 383-9171 505-382-8212	808-741-1080			505 304 2545	(505) 383-8171	1-505-384-2504			500-803-8003	1-505-382-2053 505-382-8212													x 30 minutes.		vmel meretine pres	on fracturing or syst		18.					
		Contact Person		L.A. Stearns		Doyle Davis	Sammy Stoneman			Royce Crowell Richard Lentz	Piter Bergstein	CW Trainer		Dink Prether	Royce Crowell	Royce Crowell			George Perchman	Richard Lentz													he casing at 300 psig fo		nd one half times the n	that may cause formati	I other than fluids.	nd casing/tubing annua			•		
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Y		Date of Test		28-Nov-01		27-Nov	27-Nov			28-Nov-01 28-Nov-01	28-Nov-01	28-Nov-01		20 Nort-D1	28-Nov-01	29-Nov-01			10-NON-DE	30-Nov-01													leolete cevern formatio		Oner hole cavern form	300 psig whichever is	OCD prior to test shall	Brine supply wells ope		Nitrogen-Brine Interfac			
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TO <u>Plains Marketing</u> DATE <u>12-2</u> THIS IS TO CERTIFY THAT: I, <u>Jony Flores</u> , METER TECHNICAN FOR AMERICAN VAL METER SERVICE, HAS CHECKED THE CALIBRATION ON THE FOLLOWING INSTRUM <u>B<sup>c</sup>O-SOO<sup>T</sup> pressure acorde</u> SERIAL NUMBER AT THESE POINTS. <u>TEMPERTURE</u> <u>P.S.I.</u> <u>TEST AS FOUND AS LEFT</u> <u>ICO</u> <u>90</u> <u>100</u> 90	2-00 ALVE & JMENT
THIS IS TO CERTIFY THAT: I, <u>Jony FlorES</u> , METER TECHNICAN FOR AMERICAN VAL METER SERVICE, HAS CHECKED THE CALIBRATION ON THE FOLLOWING INSTRUM <u>S"O-SOOT pressure acorde</u> SERIAL NUMBER AT THESE POINTS. <u>TEMPERTURE</u> <u>NEST AS FOUND AS LEFT</u> <u>LCO</u> <u>90</u> 200	ALVE & JMENT
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## NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BW-027 5-P

GARY E. JOHNSON Governor Jennifer A. Salisbury Cabinet Secretary Lori Wrotenbery Director Oil Conservation Division

October 20, 2000

#### <u>CERTIFIED MAIL</u> <u>RETURN RECEIPT NO.</u> 5051 4416

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 <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. 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 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 (505-827-7155).

Sincerely Yours,

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Wayne Price-Pet. Engr. Spec. Environmental Bureau

cc: OCD District Offices

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Attachments- 1.

OCD Brine Well Test Schedule December 2000. Brine Well Testing Procedure Guidance Document.

December of 2000
WELL TEST SCHEDULE
OCD BRINE

	pressure or system failures.	e normal operating nation fracturing or uals.	ine and one-half times th ures that may cause form edia other than fluids. on and casing/tubing anr	ig up the formation with fluid to a s shall not exceed surface press 00 psig and methods that use m pressure both the cavem formati	st by pressurin urs. Operator isures below 3 is will have to	tion pressure te eater for four ho pprove test pres tiing with packe	Open hole cavern forma 300 psig whichever is g OCD prior to test shall a Brine supply wells oper	im Pressure Test	2 Open Hole Cave	
		ig for 30 minutes.	test the casing at 300 psi	is and hydrostatic fluid pressure	/tubing annua	from the casing	Isolate cavern formation		1 Casing Test	Type of Pressure Test:
			·							Notes:
2051 9416 205	1-505-392-6988 cell 369-5721	1-505-392-8212 1-505-398-4960	Richard Lentz Larry Gandy	<ol> <li>Pressure test cavem</li> <li>Pressure test cavem</li> </ol>	12 noon 1:00 PM	8:00 AM 9:00 AM	December 18, 2000 December 18, 2000	Hobbs Station Buckaye St.	BW-012 BW-004	Scurtock-Permian Gandy- WasserHaun
5051 4416 5051 4416	1-505-887-3011 1-713-672-7609 1-505-746-3227	1-713-672-8092 1-505-748-1352	John Hutcheson Jim Ephraim Sammy Stoneman	<ol> <li>Pressure test cavern</li> <li>Pressure test cavern</li> <li>Pressure test cavern</li> </ol>	12 noon 1:00 PM 2:30 PM	8:00 AM 9:00 AM 10:30 AM	December 15, 2000 December 15, 2000 December 15, 2000	Rowland Truckers Cartsbad Brine St. SE of Artesia	BW-019 BW-027 &27A BW-005	Key Energy-Carisbad Scurtock/Permian Jims Water Ser.
494	1-505-394-2560	1-505-394-2504	Royce Crowell see P&S	<ol> <li>Pressure test cavem</li> <li>Pressure test cavem</li> </ol>	1:30 pm 3 pm	9:30 am 11am	December 14, 2000 December 14, 2000	Eunice Brine Station Salado Brine St. #2	BW-028 BW-025	Goldstar Quality O <u>ULS Sales Of The Sales</u> CHARA C SOR ZNC
5051 4409	1-505-885-8477 1-505-677-2361	TRUT 1-505-885-6663 1-505-677-2370	<b>EVE-EVE</b> - Couge Portman D. Maloney or R. Harris	<ol> <li>Pressure test cavern</li> <li>Pressure test cavern</li> </ol>	12 noon 5:30 PM	8:00 AM 1:30 PM	December 13, 2000 December 13, 2000	Carisbad Yard Loco Hills	BW-006 &6A BW-021	I&W Trucking Loco Hills Brine
153	1-505-675-2339 cell 369-5721 1-505-393-9023	1-505-675-2356 1-505-398-4960 1-505-397-4994	L.A. Steams Larry Gandy Pete Tumer	<ol> <li>Pressure test cavern</li> <li>Pressure test cavern</li> <li>Pressure test cavern</li> </ol>	12 noon 1:00 PM 2:30 PM	8:00 AM 9:00 AM 10:30 AM	December 12, 2000 December 12, 2000 December 12, 2000	Crossroads Tatum Water St. Truckers #2 (Hobbs)	BW-013 BW-022 BW-018	Stearns Inc. Gandy Corp. Key Energy
4455 4454	1-505-394-2426 - 1-505-394-2584 -	1-505-394-2545 1-505-394-2581 1-806-741-1080	Paul Prather Bob Patterson Mr. Piter Bergstein Walter Brisco	<ol> <li>Pressure test cavem</li> <li>Pressure test cavem</li> <li>Pressure test cavem</li> </ol>	12 noon 1:30 pm 3 pm	8 am 9:30 am 11 am	December 11, 2000 December 11, 2000 December 11, 2000	Eunice Eunice Water ST. Eunice Brine Station Arkansas-Jct	BW-002 BW-009A BW-008	P&S Brine Simms-McCasland Salty Dog. Inc.
4512	1-505-746-2523	748-5975 cell 748-3303	Doyle Davis Raye Miller	2 Pressure test cavern	5:00 PM	1:00 PM	December 08, 2000	M. Dodd "A" BW#1	BW-029	Marbob Brine Well
CREE MAIL	FAX#	Telephone	Contact Person	Type of Test(s) Required	Stop	Start	Date of Test	Facility Name	рғ#	Сотрапу

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Nitrogen-Brine Interface Test, Nitrogen Test, Etc.

3 Others

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#### **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.

OCD December of 2000 Brine Well Testing

American Valve & Motor Service 1113 W. BROADWAY, HOBBS, N.M. 88240 P.O. BOX 1667, PHONE 505-393-578 10 Lurlock Perman DATE: 10-06-90 THIS IS TO CERTIFY THAT: 1. Tesse Burg \_\_\_METER TECHICAN FOR AMERICAN VALVE, INC., HAS CHECKED THE CALIBRATION ON THE FOLLOWING INSTRUMENT. Br. 540 / rectand SEIAL NUMBER AT THESE POINTS. TEMPERTURE P.S.I. TEST AS FOUND **AS LEFT** TEST AS FOUND AS LEFT Strain and the second states are 500 500 500 1000 IDAD 300 300 300 **REMARKS**: ÷., SIGNED: 10 DINAL

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## NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

Fax: 1-505-392-6988

October 19, 1999

Mr. Richard Lentz Scurlock Permian Corporation 3514 Lovington Hwy. Hobbs, New Mexico 88240

#### 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,

The april -

Wayne Price-Pet. Engr. Spec. Environmental Bureau





OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

September 11, 1999

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT NO. Z 357 870 147</u>

<u>Mr. Richard Lentz</u> <u>Scurlock Permian Corporation</u> <u>3514 Lovington Hwy.</u> <u>Hobbs, New Mexico 88240</u>

Re: Mechanical Integrity Testing of Brine Supply Wells

Dear Mr. Richard Lentz:

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.

<u>Please find enclosed an OCD Brine Well Test Schedule and Test Procedure for this Fall October</u> <u>25, 1999 through November 2, 1999. Please have your well ready for testing on the date and</u> <u>time you are schedule.</u> 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,

Warpe/in

Wayne Price-Pet. Engr. Spec. Environmental Bureau

cc: OCD District Offices attachments- OCD Brine Well Test Schedule & Brine Well Testing Procedure Guidance Document

**OCD BRINE WELL TEST SCHEDULE** 

FALL OF 1999

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	*** Discharge Plan up for renev *** Cavern Surveys are Dischar are at a later date approved	Notes	&W Trucking Key Energy-Carlsbad Scurlock/Permian	Loco Hills Brine Jims Water Ser.	WasserHaun Marathon Brine St.	Milly Brine Aneth Tank Service	Quality Oil (Salado Brine Sales) Conoco Conoco	Key Energy Scurlock-Permian Salty Dog, Inc.	Company P&S Brine Simms-McCasland Goldstar
	ge Plan Requirment by OCD.		BW-006 &6A BW-019 BW-027 &27A	BW-021 BW-005	BW-004 BW-015	BW-022 BW-013	** BW-025 ** BW-001	** BW-018 ** BW-012	DP# ** BW-002 ** BW-009A BW-028
	s Companies have the opti		Carlsbad Yard Rowland Truckers Carlsbad Brine St.	Loco Hills SE of Artesia	Buckeye Marthon Road	Tatum Water St. Crossroads	Salado Brine St. #2 Warren -McKee #3 Warren -McKee #4	Rowland Truckers #2 Hobbs Station Arkansas-Jct	Facility Name Eunice Eunice Water ST. Eunice Brine Station Eunice Brine Station
	on to perform now		November 2 1999 November 2 1999 November 2 1999	November 1 1999 November 1 1999	October 29 1999 October 29 1999	October 28 1999 October 28 1999	October 27 1999 October 27 1999 October 27 1999	October 26 1999 October 26 1999 October 26 1999	Date of Test October 25 1999 October 25 1999 October 25 1999
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,			12 noon 1:30 pm 3 pm	3 pm	3 pm	3 pm	12 noon 5:30 pm 5:30 pm	12 noon 1:30 pm 3 pm	Stop 12 noon 1:30 pm
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### **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.
- 6) 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.

OCD Fall of 1999 Brine Well Testing









CARISBAN BRINE WELL # 1 TESTED ON 9-1997@ 8:00 P/m TESTOFF 9-20-97 28:30 4/m

KEST FICULD F-RESHWATER TREATED WITH RACKER FLUID





STATE OF NEW MEXICO OIL CONSERVATION DIVISION

#### MEMORANDUM OF MEETING OR CONVERSATION

Time Date Telephone Personal 12:30pm 9-11-97 Originating Party Other Parties MARK ASHLEY ALCHAR LENTZ <u>Subject</u> SCHPLOCK PERMON, BRIVE WELL, OPRISIBILD, BW-2) Discussion WELL WILL NOT HOLD PRESSURE. #2 Conclusions or Agreements THEY WILL INTER FRESH WATER IN #2 WELL MATL & PMLIAND WHIT ON REDRESS OR REPUBLIE THE PAKKER, NALL ASTROAT THE TEST MATL ACKOR IS FAXED Signed **Distribution** Mart He









OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

October 3, 1996

Mr. Steward Rogers Scurlock Permian Corporation P.O. Box 4648 Houston, Texas 77210-4648

RE: Mechanical Integrity Testing of Brine Supply Wells

Dear Mr. Steward Rogers:

Enclosed is a copy of the mechanical integrity test conducted on your brine well. Please retain this copy for your records.

On behalf of the New Mexico Oil Conservation Division, I would like to thank you for your time and cooperation during the testing. If you have any questions, please contact me at (505) 827-7155.

Sincerely, hallm

Mark Ashley Geologist

Attachment



### NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

August 16, 1996

<u>Certified Mail</u> <u>Return Receipt No. Z-765-962-973</u>

Mr. Steward Rogers Scurlock Permian Corporation P.O. Box 4648 Houston, Texas 77210-4648

RE:	Mechanical Integrity Testing of Brine St	upply Wells
	Annual Test	Annual Test
	Carlsbad Brine Station BW-027	Hobbs Brine Station BW-012
	Eddy County, New Mexico	Lea County, New Mexico

Dear Mr. Rogers:

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 psig, 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 psig, 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 1.5 times the normal operating pressure or 300 psig, whichever is greater, for four hours.

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 the Carlsbad Brine Station ready for testing on September 16, 1996 at 7:30 AM, and the Hobbs Brine Station ready for testing on September 17, 1996 at 8:00 AM as outlined below.

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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.
- 2) The system shall be tested to 1.5 times the normal operating pressure or 300 psig, whichever is greater, for a period of four hours. A maximum of 10 percent bleedoff 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 both the casing/tubing annulus and tubing. The pressure range shall not be greater than 1,000 psig.
- 4) Have well head prepared for test. All valves should be in good working order. All casing/tubing annulus and tubing valves shall be open.
- 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 1.5 times the normal operating pressure or 300 psig, whichever is greater, for four hours.
- 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 psig.
- 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.

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

Sincerely,

Mark Ashley Geologist

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