

BW - 9

**SUBSIDENCE
MONITORING
REPORTS**

DATE:

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Monday, December 15, 2008 8:43 AM
To: 'Patterson, Bob'
Cc: Price, Wayne, EMNRD
Subject: RE: Key Energy Services, L.L.C. Status of Plug & Abandonment of BWs 9 API# 30-025-25525 (Lea County) & 19 API# 30-015-21842 (Eddy County)

Bob:

Re: PA of BW-9

Just keep us apprised on the date and time for PA of BW-9. The PA of the well has been on the OCD corrective action list for about 6 months now. 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: <http://www.emnrd.state.nm.us/ocd/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Patterson, Bob [<mailto:bpatterson@keyenergy.com>]
Sent: Saturday, December 13, 2008 11:44 AM
To: Chavez, Carl J, EMNRD; Molleur, Loren
Cc: Perry, Mark; Price, Wayne, EMNRD; Guye, Gerry, EMNRD; Hill, Larry, EMNRD
Subject: RE: Key Energy Services, L.L.C. Status of Plug & Abandonment of BWs 9 API# 30-025-25525 (Lea County) & 19 API# 30-015-21842 (Eddy County)

Carl,
I have BW-9 set up with Key's plugging department. They are currently working on a four well plugging package and will plug the BW-9 as soon as they complete that package, but cannot guarantee it will be before December 31. I have also contracted John West Engineering to provide a proposal for the NMOCD on subsidence monitoring for the BW-9 and BW-19.

Bob Patterson | Key Energy Services, LLC | Area Manager, Trucking Division | O: 575.394.2586 | C: 575.631.7597

-----Original Message-----

From: Chavez, Carl J, EMNRD [<mailto:CarlJ.Chavez@state.nm.us>]
Sent: Thursday, December 11, 2008 9:43 AM
To: Molleur, Loren
Cc: Patterson, Bob; Perry, Mark; Price, Wayne, EMNRD; Guye, Gerry, EMNRD; Hill, Larry, EMNRD
Subject: Key Energy Services, L.L.C. Status of Plug & Abandonment of BWs 9 API# 30-025-25525 (Lea County) & 19 API# 30-015-21842 (Eddy County)

Mr. Molleur:

Re: BW-9 and BW-19 Final C-103 Plug & Abandonment Status

Owner/Operator	Well Name	BW	API#	Location	Co.	PA Statu
KEY ENERGY SERVICES, LLC	SIMS-MCCASLAND BRINE -EUNICE (GP-Sims #2)	BW-9	30-025-25525	(UL-A)32-21S-37E	Lea	PA: 11-308
EY ENERGY SERVICES, LLC.	KEY TRUCKERS BRINE -CARLSBAD	BW-19	30-015-21842	(UL-H)36-22S-26E	Eddy	Awaiting final C-103

Please find below the status of plug and abandonment (PA) on the above listed wells.

BW-9: OCD sent an e-mail dated 10/7/2008 w/ signed C-103 dated 10/7/2008 with conditions for approval of the PA to Mark Philliber of Key. On 12/4/2008, during our most recent telephone conference call, the OCD was informed that a sonar test could not be run. Under the OCD C-103 PA conditions of approval, "if a sonar test cannot be run, the OCD requires a closure plan for the facility including ground water (if applicable), seismic and subsidence monitoring for 30 years; time-frame for equipment decommissioning/site restoration; and financial assurance to ensure that the above is completed." In addition, "at least 290 sacks of Class "C" Cement from the CIBP setting depth of 1154 to surface is required." Based on the recent information provided by Key during the telephone conference call that the well could not be sonar tested, the OCD is currently waiting for the well to be PA'd before December 31, 2008 with submittal of a final C-103 addressing the OCD conditions of approval. The final C-103 is currently unapproved by the OCD until the conditions of approval are satisfied.

BW-19: According to the telephone conference call of 12/4/2008, the OCD was informed that the well had been PA'd and that the final C-103 dated 11/3/2008 was posted on the OCD website. The OCD was also informed that a sonar test could not be run. Under the OCD C-103 PA conditions of approval, "if a sonar cannot be run, then OCD will require seismic and subsidence monitoring and will require additional financial assurance." Based on the recent information provided by Key during the telephone conference call that the well could not be sonar tested, the OCD is currently waiting for Key to address the OCD final C-103 conditions of approval. The final C-103 is currently unapproved by the OCD until the conditions of approval are satisfied.

My Supervisor, Mr. Wayne Price will be in the office next week. Please contact me next week to discuss any questions you may have on obtaining a final OCD signed and approved C-103 PA for the above listed wells. I have forwarded some guidance on Monument Well construction to Mr. Bob Patterson for subsidence monitoring. I have requested from other brine well operators that they seek out information on seismic monitors and to propose a seismic monitoring program to the OCD.

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

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

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Thursday, December 11, 2008 9:43 AM
To: 'Molleur, Loren'
Cc: 'Patterson, Bob'; 'Perry, Mark'; Price, Wayne, EMNRD; Guye, Gerry, EMNRD; Hill, Larry, EMNRD
Subject: Key Energy Services, L.L.C. Status of Plug & Abandonment of BWs 9 API# 30-025-25525 (Lea County) & 19 API# 30-015-21842 (Eddy County)

Mr. Molleur:

Re: BW-9 and BW-19 Final C-103 Plug & Abandonment Status

Owner/Operator	Well Name	BW	API#	Location	Co.	PA Statu
KEY ENERGY SERVICES, LLC	SIMS-MCCASLAND BRINE -EUNICE (GP-Sims #2)	BW-9	30-025-25525	(UL-A)32-21S-37E	Lea	PA: 11-308
EY ENERGY SERVICES, LLC.	KEY TRUCKERS BRINE -CARLSBAD	BW-19	30-015-21842	(UL-H)36-22S-26E	Eddy	Awaiting final C-10

Please find below the status of plug and abandonment (PA) on the above listed wells.

BW-9: OCD sent an e-mail dated 10/7/2008 w/ signed C-103 dated 10/7/2008 with conditions for approval of the PA to Mark Philliber of Key. On 12/4/2008, during our most recent telephone conference call, the OCD was informed that a sonar test could not be run. Under the OCD C-103 PA conditions of approval, "if a sonar test cannot be run, the OCD requires a closure plan for the facility including ground water (if applicable), seismic and subsidence monitoring for 30 years; time-frame for equipment decommissioning/site restoration; and financial assurance to ensure that the above is completed." In addition, "at least 290 sacks of Class "C" Cement from the CIBP setting depth of 1154 to surface is required." Based on the recent information provided by Key during the telephone conference call that the well could not be sonar tested, the OCD is currently waiting for the well to be PA'd before December 31, 2008 with submittal of a final C-103 addressing the OCD conditions of approval. The final C-103 is currently unapproved by the OCD until the conditions of approval are satisfied.

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My Supervisor, Mr. Wayne Price will be in the office next week. Please contact me next week to discuss any questions you may have on obtaining a final OCD signed and approved C-103 PA for the above listed wells. I have forwarded some guidance on Monument Well construction to Mr. Bob Patterson for subsidence monitoring. I have requested from other brine well operators that they seek out information on seismic monitors and to propose a seismic monitoring program to the OCD.

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

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Tuesday, October 07, 2008 3:57 PM
To: 'Philliber, Mark'; Price, Wayne, EMNRD
Cc: Shelton, Jack; Hill, Larry, EMNRD
Subject: RE: Key Energy Brine well PA G.P. Sims No. 2 Brine Well (BW-9)
Attachments: C-103 PA Final 10-7-2008.tif

Mark, Jack, et. al:

Please find attached the OCD's signed C-103 with conditions.

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: <http://www.emnrd.state.nm.us/oed/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Philliber, Mark [mailto:mphilliber@keyenergy.com]
Sent: Monday, October 06, 2008 8:59 AM
To: Chavez, Carl J, EMNRD; Price, Wayne, EMNRD
Cc: Shelton, Jack
Subject: FW: Key Energy Brine well PA

Carl,

In June, we had Sonarwire out here to run a sonar survey on the Sims well but encountered a tight spot in the casing at 1100'. We worked on the well for about a week and milled on the tight spot for several days but were unable to get past this point into the cavern so we were not able to run the survey.

Thank you,

Mark Philliber | Key Energy Services | SWD Compliance Coordinator | Corporate Environmental

6 Desta Drive, Suite 4400, Midland, TX 79705 | o: 432.571.7203 | c: 432.770.5064 | e: mphilliber@keyenergy.com

-----Original Message-----

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Monday, October 06, 2008 9:05 AM
To: Shelton, Jack; Price, Wayne, EMNRD
Cc: Philliber, Mark; Hill, Larry, EMNRD

10/7/2008

Subject: RE: Key Energy Brine well PA

Jack:

Once the OCD- Environmental Bureau (EB) receives the signed C-103, Wayne Price will sign it and approve it with conditions (see below). I will scan the signed C-103 and send it back to you upon receipt.

C-103 G.P. Sims No. 2 (BW-9)

API# 30-025-25525

Conditions of Approval

- 1) A sonar test of the salt cavern is required in advance of plugging and abandoning the well.
- 2) Cement must be circulated back to surface under adequate pressure.
- 3) At least 290 sks of Class "C" Cement from CIBP Setting Depth of 1154' to surface is required.
- 4) Install a plug and abandonment marker.
- 5) Final C-103 Form shall be submitted within 30 days of plug and abandonment with final construction details.

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

From: Shelton, Jack [mailto:jshelton@keyenergy.com]
Sent: Monday, October 06, 2008 7:56 AM
To: Chavez, Carl J, EMNRD; Price, Wayne, EMNRD
Cc: Philliber, Mark; Hill, Larry, EMNRD
Subject: RE: Key Energy Brine well PA

Mr. Chavez, I sent the signed copies Fed Ex on Friday to you, should be delivered today.

If I need to send to OCD in Hobbs I will but I talked to Buddy Hill with OCD and he told me to send them to you.

Thanks Jack

Jack Shelton | Key Energy Services | PA Manager | Po Box 1068 Andrews, Tx 79714 | O: 432.523.5155 | F: 432.523.6230 | C: 432.638.3756

-----Original Message-----

10/7/2008

From: Chavez, Carl J, EMNRD [mailto:CarlJ.Chavez@state.nm.us]
Sent: Friday, October 03, 2008 5:13 PM
To: Price, Wayne, EMNRD
Cc: Shelton, Jack; Philliber, Mark; Hill, Larry, EMNRD
Subject: RE: Key Energy Brine well PA

Wayne:

The C-103 was not signed the Key Agent. The OCD needs a signed C-103. Thanks.

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: <http://www.emnrd.state.nm.us/oed/index.htm>
(Pollution Prevention Guidance is under "Publications")

From: Price, Wayne, EMNRD
Sent: Thursday, October 02, 2008 9:51 AM
To: Chavez, Carl J, EMNRD
Subject: FW: Key Energy Brine well PA

From: Shelton, Jack [mailto:jshelton@keyenergy.com]
Sent: Tuesday, September 30, 2008 1:01 PM
To: Price, Wayne, EMNRD
Cc: Philliber, Mark
Subject: Key Energy Brine well PA

Hello Mr. Price, I have completed the C-103 and will mail hard copies to you for approval.

G.P. Sims Well # 2
Brine well
30-025-25525

Please confirm that I've sent this to the right office.

Thank you,

Jack Shelton | Key Energy Services | PA Manager | Po Box 1068 Andrews, Tx 79714 | O: 432.523.5155 | F: 432.523.6230 | C: 432.638.3756

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

10/7/2008

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

Submit 3 Copies To Appropriate District
Office:
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-025-25525
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name G.P. Sims
8. Well Number # 2
9. OGRID Number 19797
10. Pool name or Wildcat Saldo

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☐ Other ☒ Brine well

2. Name of Operator
Key Energy Services

3. Address of Operator
P.O Box 99 Eunice NM

4. Well Location
Unit Letter A 420 : feet from the N line and 210 feet from the E line
Section 32 Township 21 Range 37 NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____

Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: Casing test

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: casing test ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

12/10/2007---- RUPU, Install BOP 2 7/8 6" 900 series, with 7 " larkin Flange, Tally in hole with bit and scraper to 1020' Stack out at 1020' Pull tbq and SION.

12/11/07----- RIH with 6 1/4 bit tag up at 1020' Pull out of hole and RIH with impression block, Possible Csg problems Rig up Reverse unit.

12/12/07-----POH with Bit and RIH with mill and mill to 1148' SION

12/13/07-----POH with mill and tbq, RIH with Packer and test csg.

12/14/2007--- Test csg with reverse unit, casing would not hold below 30' from surface.

Shut in and wait for orders from Midland Office.

RECEIVED

JAN 10 2008

HOBBS OCD

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 below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Sam Bliss TITLE District Manager DATE 1-2-08

Type or print name
For State Use Only

E-mail address:

Telephone No.

APPROVED BY: Chris Williams TITLE OC DISTRICT SUPERVISOR/GENERAL MANAGER DATE JAN 17 2008

Conditions of Approval (if any): Must TR, PA or return to production by 4/15/08. Cll

Key Energy Services

September 29, 2008

Current Wellbore

Lease & Well No.: **G.P. Sims # 2**

Well Category: Status :

Area: New Mexico

Subarea: Eunice Field : G.P. Sims

API Number: 30-025-25525

Legal Description: "A" 420' FNL & 210' FEL Sec.32, T 21S, R 37E
Lea County, New Mexico

Spudded: 05/02/1977

Completed: 05/05/1977

Well History:

5/77 Spud well on 5-2-77. TD 8 3/4" hole @ 1,204'.

Ran 7" 23# K-55 casing to 1,204'. Cmt'd w/ 300 sks

Circulated 15 sks to pit.

Drill 7 7/8" hole to TD 2,434'.

12/81 Pulled tubing out of well. Found tbg parted @ 1,243'.

Ran bit and tubing to 1,441', through salt section.

3/07 Pulled 1,229' of tubing from well. Ran 341' tubing in well.

RKB
DF
GL

8 3/4" hole.

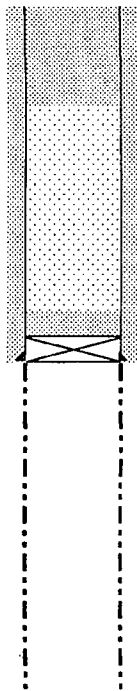
7", 23#, J-55 Casing.
Set @ 1,204', 300 sx cmt.
Circ. TOC at surface.

7 7/8" open hole
1,204'-2,434'.

PBTD:

TD: 2,434'

Key Energy Services
September 29, 2008
Proposed Wellbore



RKB
DF
GL
95 sks 500'-surface

8 3/4" hole.

7", 23#, J-55 Casing.
Set @ 1,204', 300 sx cmt.
Circ. TOC at surface.
CIBP @ 1,154'
Cap w/ 25 sks cmt

7 7/8" open hole
1,204'-2,434'.

TD: 2,434'

Lease & Well No.: G.P. Sims # 2

Well Category: Status :
Area: New Mexico
Subarea: Eunice Field : G.P. Sims
API Number: 30-025-25525
Legal Description: "A" 420' FNL & 210' FEL Sec.32, T 21S, R 37E
Lea County, New Mexico
Spudded: 05/02/1977
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Well History:

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Ran 7" 23# K-55 casing to 1,204'. Cmt'd w/ 300 sks
Circulated 15 sks to pit.
Drill 7 7/8" hole to TD 2,434'.
12/81 Pulled tubing out of well. Found tbg parted @ 1,243'.
Ran bit and tubing to 1,441', though salt section.
3/07 Pulled 1,229' of tubing from well. Ran 341' tubing in well.

Proposed plugging procedure

Plug # 1 CIBP @ 1,154'. Circulate well w/
plugging mud
Plug # 2 20 sks on top of BP.
Plug # 3 95 sks 500'-surface.

Cut off wellhead & anchors 3' BGL
Install dry hole marker.

Submit 3 Copies To Appropriate District
Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505 PM 3 38

WELL API NO. 30-025-25525
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name G.P. Sims
8. Well Number 2
9. OGRID Number
10. Pool name or Wildcat

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type Steel Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____

Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator
Key Energy Services

3. Address of Operator
6 Desta Drive Suite 4400 Midland, Texas 79705

4. Well Location
Unit Letter **A** : **420** feet from the **North** line and **210** feet from the **East** line
Section **32** Township **21-S** Range **37-E** NMPM **Lea** County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

1. Set 7" CIBP @ 1,154'.
2. Circulate well with plugging mud.
3. Spot 20 sks of c cement on top of BP.
4. Spot 95 sks of c cement 500'-surface.
5. Cut off wellhead and anchors 3' BCL. Cap well. Install dry hole marker.

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 below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☐, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE [Signature] TITLE Agent DATE 9-30-2008

Type or print name Jack Shelton E-mail address: jshelton@keyenergy.com Telephone No. 432-523-5155
For State Use Only

APPROVED BY: [Signature] TITLE EBC DATE 10/07/08
Conditions of Approval (if any):

SEE ATTACHED!
[Signature]

C-103 G.P. Sims No. 2 (BW-9)
API# 30-025-25525
Conditions of Approval


- 1) A sonar test of the salt cavern is required in advance of plugging and abandoning the brine well. If a Sonar test cannot be run, the OCD requires a closure plan for the facility including ground water (if applicable), seismic and subsidence monitoring for 30 years; time-frame for equipment decommissioning/site restoration; and financial assurance to ensure that the above is completed.
- 2) The cavern shall be filled with brine water (not fresh water) in advance of plugging operations.
- 3) Cement must be pressure grouted from above CIBP to surface.
- 4) At least 290 sks of Class "C" Cement from CIBP Setting Depth of 1154' to surface is required.
- 5) Install a plug and abandonment marker.
- 6) Final C-103 Form shall be submitted within 30 days of plug and abandonment with final construction details.

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, November 14, 2008 4:38 PM
To: 'ziatransports@gmail.com'; 'jrmillett@gmail.com'; 'rharrisnm@aim.com'; 'gandy2@leaco.net'; 'seay04@leaco.net'; 'iwcarsbad@plateautel.net'; 'Patterson, Bob'; 'Dimas Herrera'; 'gil@mull.us'; 'David Pyeatt'; 'Wayne E Roberts'; Dennis L Shearer; 'garymschubert@aol.com'; 'dgibson@keyenergy.com'; 'Clay Wilson'; 'Prather, Steve'; Ronnie D Devore
Cc: Hill, Larry, EMNRD; Gum, Tim, EMNRD; Price, Wayne, EMNRD
Subject: Brine Well Moratorium Press Release Today.
Attachments: PR-OCD Brine Well Moratorium.pdf

FYI, please see the attached NM OCD Press Release issued today. 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: <http://www.emnrd.state.nm.us/oed/index.htm>
(Pollution Prevention Guidance is under "Publications")



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



November 14, 2008

NEWS RELEASE

Contact: Jodi McGinnis Porter,
Public Information Officer 505.476.3226

Energy, Minerals and Natural Resources Cabinet Secretary Prukop Orders a Six Month Moratorium on New Brine Wells ***Oil Conservation Division to Investigate Brine Well Collapses and Provide Recommendations***

SANTA FE, NM – Secretary Joanna Prukop today ordered the Oil Conservation Division to place a six month moratorium on any new brine well applications located in geologically sensitive areas. Secretary Prukop's action comes following the second brine well collapse in less than four months in southeastern New Mexico. The Secretary has also directed the Oil Conservation Division to work with the Environmental Protection Agency, other states, technical experts and oil and gas industry representatives to examine the causes of recent collapses, and provide a report with recommendations to the Oil Conservation Commission for a safe path forward. The report should be completed by May 1, 2009.

"I am deeply concerned by these two serious incidents and we are taking action to ensure the safety of our citizens and to protect the environment," stated Secretary Prukop.

Brine wells are an essential part of the oil and gas drilling industry, particularly in the southeastern part of the state. Oil and gas operators use brine water in the drilling process. Brine is saturated salt water which can be more salty than sea water. Brine is created by injecting fresh water into salt formations, allowing the water to absorb the salt and then pumping it out of the well. This method creates an underground cavity.

"The moratorium will provide time to properly evaluate the causes of the recent collapses and to discuss the development of new rules or guidelines to ensure the safety and stability of brine well systems," added Secretary Prukop.

The moratorium will only affect new wells and will not impact existing wells and facilities.

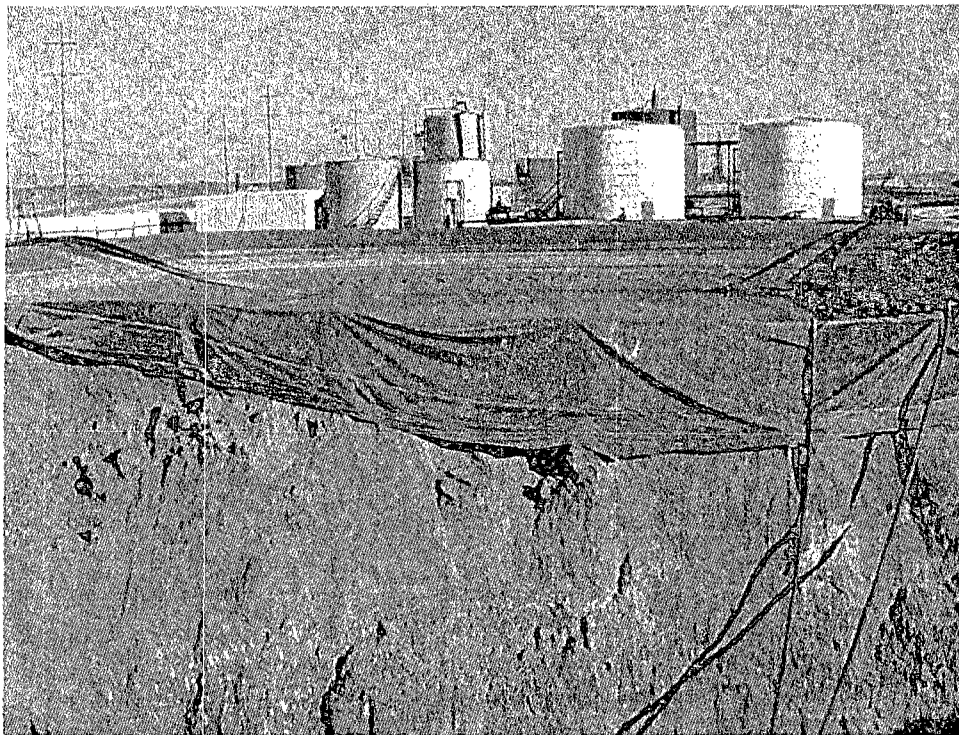
Below are photographs of the two recent collapses:



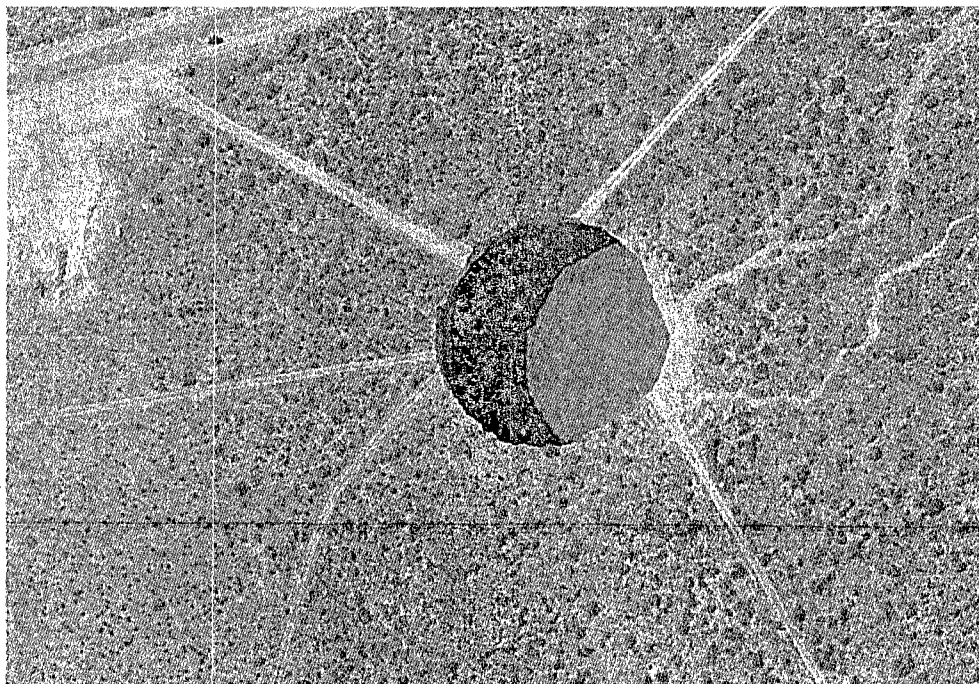
Loco Hills brine well collapse, morning, November 7, 2008, sinkhole with fresh water pond in foreground.
Photo courtesy of Oil Conservation Division



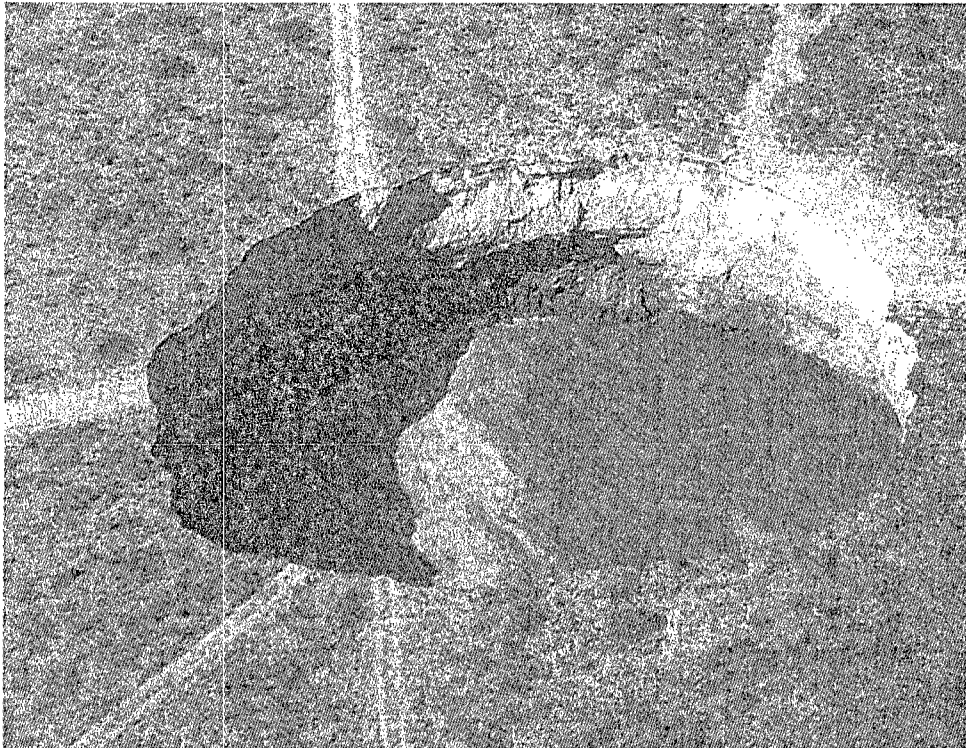
Loco Hills brine well collapse, morning, November 7, 2008 sinkhole.
Photo courtesy of Oil Conservation Division



Loco Hills brine well collapse, morning, November 7, 2008 status of fresh water pond.
Photo courtesy of Oil Conservation Division



Artesia brine well collapse, morning, July 20, 2008 at 10:44 am.
Photo courtesy of National Cave and Karst Research Institute



Artesia brine well collapse morning, July 22, 2008
Photo courtesy of National Cave and Karst Research Institute

#30#

*The Energy, Minerals and Natural Resources Department provides resource protection
and renewable energy resource development services to the public and other state agencies.*

Oil Conservation Division
1220 South St. Francis Drive • Santa Fe, New Mexico 87505
Phone (505) 476-3440 • Fax (505) 476-3462 • www.emnrd.state.nm.us/OCD



Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Wednesday, November 12, 2008 11:50 AM
To: 'ziatr transports@gmail.com'; 'jrmillett@gmail.com'; 'Patterson, Bob'; Philliber, Mark; 'rharrisnm@aim.com'; 'gandy2@leaco.net'; 'David Pyeatt'; 'garymschubert@aol.com'
Cc: Price, Wayne, EMNRD; Sanchez, Daniel J., EMNRD; Hill, Larry, EMNRD; Gum, Tim, EMNRD
Subject: Brine Well Sonar Testing Requirement with this season's upcoming MIT Schedule 2009

Gentlemen:

Re: MITs and OCD Sonar Test Requirement

Good morning. It is that time of season when the OCD requests your proposed MIT schedule. The OCD is requiring a sonar test in addition to the MIT this season. The OCD objective is to complete the MITs on or before July 31, 2009. If circumstances require it, the deadline for MITs may be extended to on or before October 31, 2009. Please contact me within 30 days to schedule your MIT and sonar test with date and time that you prefer. Note that brine well operators scheduled for the annual OCD 4-hr. formation MIT may conduct the EPA 5-Yr. 30 minute MIT (+/- 10% to pass) at 300 – 500 psig on casing in lieu of the OCD annual formation MIT this season.

After reviewing the site files and your responses to the recent OCD questionnaire following the Jims Water Service (BW-5) brine well collapse SE of Artesia in Eddy County on 7/16/2008, and the more recent collapse at Loco Hills (BW-21) in Eddy County on 11/3/2008, the OCD is requiring Sonar Testing along with your MIT this season to assess the configuration of your brine well cavern and any threats to public health and safety in your areas. The OCD is focused on the maturity of brine wells and the "Calculation" from the recent questionnaire attempts to assess brine well maturity by comparing the total brine production relative to the depth of the brine well casing shoe. This is one of the reasons why fresh water and brine well production record reporting to the OCD is so critical. Any operators that are planning to plug and abandon their brine wells are required by the OCD to conduct a sonar test of the well in advance of plugging and abandonment. Also, the OCD requires that the brine cavern be filled with brine fluid as this adds structural stability to the cavern and well. This will be required in a C-103 approved with conditions by the OCD. Currently, 3 brine well operators have been required by the OCD to conduct sonar testing within 30 days due to the maturity issue mentioned above. The OCD is continuing to assess its EPA Class III Brine Well program and will keep you updated on improvements and/or changes as needed.

If you feel that your brine well is too new to require sonar testing or a sonar was recently completed at your brine well, please provide the basis for requesting an exemption to this OCD sonar test requirement ASAP for OCD approval.

Please contact me if you have questions. Thanks in advance for your cooperation in this matter.

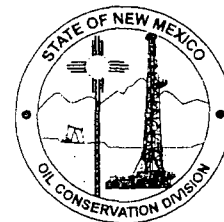
Carl J. Chavez, CHMM
New Mexico Energy, Minerals & Natural Resources Dept.
Oil Conservation Division, Environmental Bureau
1220 South St. Francis Dr., Santa Fe, New Mexico 87505
Office: (505) 476-3491
Fax: (505) 476-3462
E-mail: CarlJ.Chavez@state.nm.us
Website: <http://www.emnrd.state.nm.us/oed/index.htm>
(Pollution Prevention Guidance is under "Publications")

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



OIL CONSERVATION DIVISION BRINE WELL INFORMATION REQUEST

GENERAL INFORMATION:

Operator Name Key Energy Services Well Name(s) G P Sims
API Number 30 025 25525 Brine Well Permit # 09
Date Permit Expires? August 2009

Location: Section 32 Ts 21 Rg 37E
FNL 420 FSL _____ FEL 210 FWL _____
GPS of well(s): Lat: N/A Long: N/A

Have you reviewed and understand all of your permit conditions? Yes ☒ No ☐
Are you presently deficient of any condition in your permit? Yes ☐ No ☒ Don't know ☐
Do you operate below grade tanks or pits at the site? Yes ☐ No ☒
Do all tanks, including fresh water tanks, have secondary containment? Yes ☐ No ☒
Do you think you have the expertise, knowledge and general understanding of what causes a brine well to collapse? Yes ☐ No ☒
Do you think OCD should provide guidelines on subsidence and collapse issues? Yes ☒ No ☐

SITING INFORMATION: *Please provide the following information and depict on 7.5 minute (1"= 2000') USGS Quad Map. Limit search to one mile radius.*

Is the brine well located within a municipality or city limits? Yes ☐ No ☒

Distance and direction to nearest permanent structure, house, school, etc. if less than one mile:

House 500'

Distance and direction to nearest water well if less than one mile:

T/A Water Well on location

Distance to nearest watercourse(s), floodplain, playa lake(s), or man-made canal(s) or pond(s) if less than one mile:

N/A

Distance and direction to nearest known karst features or mines if less than one mile:

N/A



Distance and direction to nearest producing oil or gas well(s) if less than one mile:

Provide API Number:

West 200' Chevron McCrack #11 S32T21R37E

Distance and direction to nearest tank battery(ies) if less than one mile:

Stevens & Johnson East 1/2 mile Unit D S33T21SR37E

Distance and direction to nearest pipeline(s), including fresh water pipelines if less than one mile:

East 200' City Water Line

Distance and direction to nearest paved or maintained road or railroad if less than one mile:

East 600' Eunice Southeast truck bypass

Depth to ground water found above the Salado (salt section), regardless of yield:

Approx. 90'

Name of aquifer(s):

Alluvium

WELL CONSTRUCTION: Please provide the following information and attach a diagram depicting the brine well. Check box if attached:

Copy of a current well diagram:

Attached ☒

Copy of formation record with tops:

Attached ☒ information not available

Copy of geophysical well logs if available:

Attached ☐ If not, well logs within one mile ☐

Depth of the top of the salt below ground surface (feet):

1204'

Depth to the bottom of the salt below ground surface (feet):

2434'

Depth(s) to and thickness(es) of any anhydrite section(s) (located above the salt):

Information not available

Depth of casing(s) shoe below ground surface (feet): 1204'

Is the casing shoe set in the anhydrite or other layer above the salt? Yes ☒ No ☐Is the casing shoe set into the salt? Yes ☐ No ☒ If yes, how far into the salt? _____

Depth of tubing(s):

1690'

Do you suspect that your cavern has partially caved in? Yes ☐ No ☒ Don't know ☒**OPERATIONS:** Please provide the following information.

Start date of brine well operation:

May 1977

Total volume of fresh water injected into the brine well to date (bbls) and how determined:

From 1977-1981 Unknown

From 1982-2005 Approximately 3,500,000 from Sales & City Meter

Total volume of brine water produced (bbls) to date and how determined:	
From 1977-1981 estimated 635,545 bbls	Estimated Total Volume
From 1982 to 2005 (Shutin) 3,449,808 from sales records	4,085,353
Have you ever lost casing or tubing? If yes, please provide details.	
Document attached <input checked="" type="checkbox"/>	
Do you maintain a surface pressure on your well during idle times? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Well is T/A	
Have you noticed large amounts of air built up during cavity pressurization? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Have you ever noticed fluids or air/gas bubbling up around the casing during testing or normal operations? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
MONITORING: Please provide the following information.	
Are you currently monitoring ground water contamination from your brine well or system? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Visual Only	
Have you ever run a sonar log? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
If yes, please provide last date: Attempted, but could not get tool through casing.	
Provide cavern configuration (dimensions and volume) and method(s) used to estimate: If sonar report please attach <input type="checkbox"/> If other, please specify and provide a sketch of cavern: <input type="checkbox"/>	
Data not available	
Do you have a subsidence monitoring program in place? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Visual only	
Do you have any geophysical monitoring devices, such as a seismic device positioned near your brine well? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Have you submitted all of your monthly, quarterly, or annual reports to the OCD? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Have you failed a brine well mechanical integrity test (MIT)? If yes, please attach details and results. Attached <input type="checkbox"/>	
Yes	
Have you ever had a casing leak? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Have you ever had a cavern leak? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Don't know <input type="checkbox"/>	
Have you ever exceeded the cavern fracture pressure? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Don't know <input type="checkbox"/>	
Do you know how to calculate your maximum pressure? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>	
Have you routinely looked for cracks or fissures in the ground surface around your brine well? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Do you have any minor or major cracks, fissures, tank settlement, line breakage from settlement or any minor subsidence. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
During operations have you experienced any ground vibration, ground movement, or well movement after opening or shunting valves, pump start-up, shut-down, etc.? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

Have you ever experienced unexpected pressure gain or loss in the cavern? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
If Yes, was there a difference in your normal flow rate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Anytime during the past 5 years, have you experienced a noticeable difference between fresh water volume pumped into the well verses brine water produced? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Are you concerned about pulling the tubing due to the fact it may be difficult to re-enter the hole? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Are you concerned about running a sonar tool in fear of losing tool because of debris in hole? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Have you ever conducted a fly over of your well site? No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> if yes, please provide photo. <input type="checkbox"/> Photo(s) attached
Calculation: Please divide your estimated total volume of produced brine by 180,000 and multiply by 50. Example: If you have produced a total of 18,000,000 bbls of brine in the life time of the well then your calculation would be $18,000,000/180,000 = 100 \times 50 = 5000$. 1. Provide the calculated number above here: <u>1134.82</u> 2. Now provide the depth (ft) from the surface to your casing shoe: <u>1204'</u> Is the calculated number found in #1 above greater than #2? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Comments or recommendations for OCD:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

Key Energy Services
Company Name-print name above

Bob Patterson
Company Representative- print name

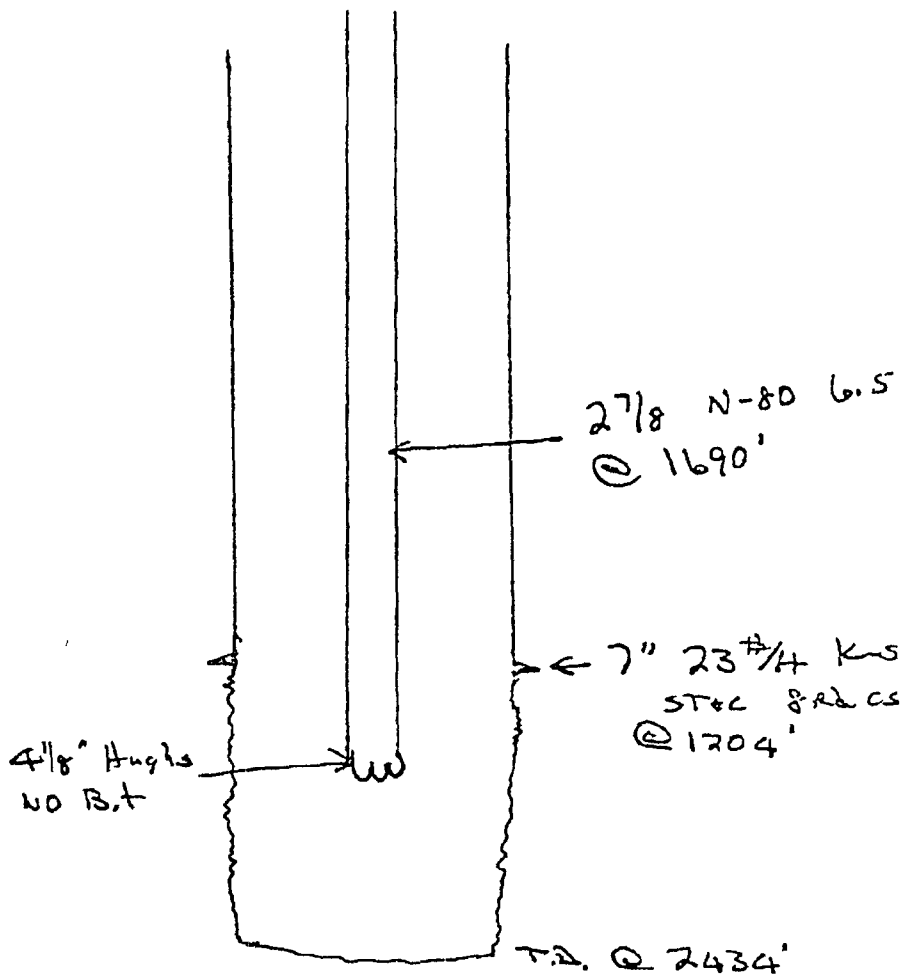
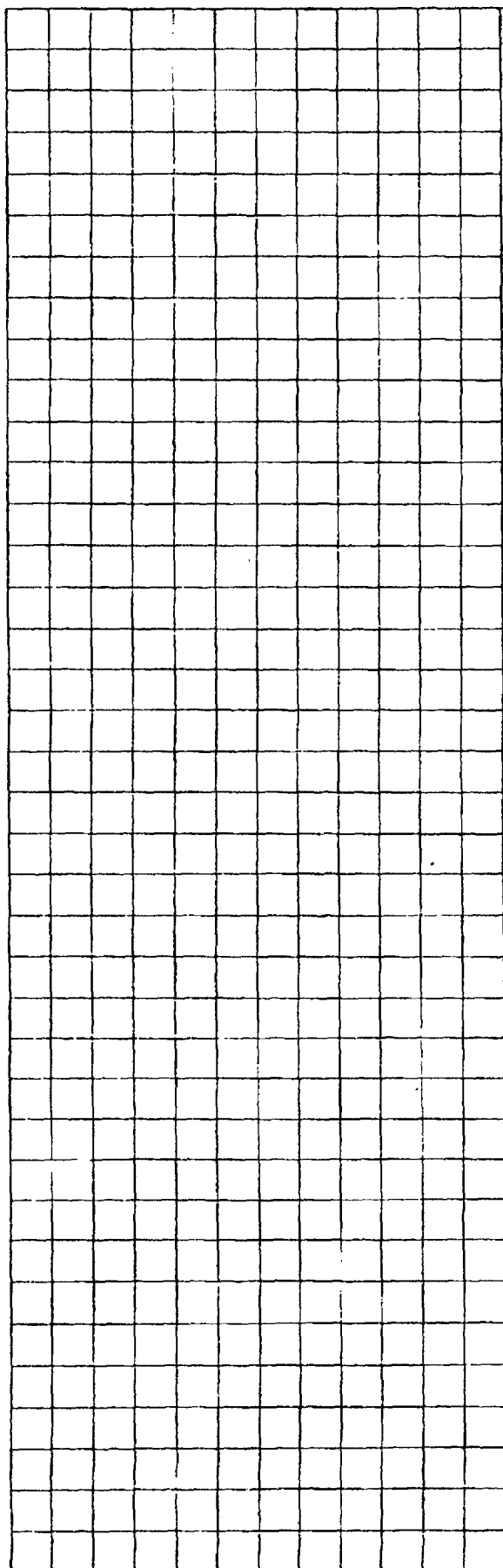
Bob Patterson
Company Representative- Signature

Title Area Manager

Date: 11-3-8

Well No. 2
Lease G. P. Sims

State N. M.
Date 11/17/81



Well was spudded on 5/2/77 TD 8 3/4" hc
@ 1204', 7" 28 #/ft K-55 steel 8rd
casing was then run to 1204' & cement w/
300 sks "C" 2% CaCl₂ circulated 150k
to surface w/o Drill out 540c ft
w/ 7 7/8" B.t Drill to TD @ 2434'
on 5/5/77

* = please attach pertinent documents

I. OPERATOR / LOCATION INFORMATION

Operator ESTATE OF G. P. SIMSAddress BOX 1046EMERY, NM 88231 Phone _____Well unit # A Location 42014 2101ET. 21 R. 37 Sec. 32 NE 1/4 NE 1/4 NE 1/4County G. P. SIMS #2

Purpose of well (brine supply, LPG storage, potash dissolution) _____

BRINE SUPPLY

II. DRILLING / SITING INFORMATION

Contractor SPECTRA DRILLING CO.Date drilling started 2 MAY 77 Date drilling completed 5 MAY 77Drilling method ROTARYElevation of ground surface NA How measured BY TURNER

Date measured _____ Order of survey _____

Name of surveyor G. P. SIMS NATotal depth of hole 2474'

Attach schematic of well, include open hole interval, perforations, etc. *

Type of drilling fluid _____

Type of drilling mud if used (brand if known) _____

List any additives to the drilling mud, or any other chemicals put down well:

Describe casing tests performed _____

Other tests _____

* = please attach pertinent documents

II. DRILLING / SITING (continued)

Casing, tubing, and cementing record (please attach copy)*

Note: if a copy is not available detail casing record on back of this sheet using the following format. Include brand or type of cement if known.

From	To	Size of Hole	Size of Casing	Weight per Foot	Sacks of Cement	Estimated Top of cmt.
------	----	-----------------	-------------------	--------------------	--------------------	--------------------------

Was mudcake on bore wall removed before cementing production casing? _____

Was salt saturated cementing material used opposite salt formation? _____

Is site within 1/2 mile of another well? If so, use note to explain. _____

Site preparation (concrete pad, graded dirt, pit, etc) _____

Type of surface seal or well-head (locking security cap, welded, etc.) _____

Comments (include problems encountered while drilling, loss of circulation, deviation of hole from vertical, centralizers used, tools lost or stuck, fracturing techniques used, etc.) _____

_____ (use back of sheet if more space is required)

From	To	Size of Hole	Size of Casing	Weight per Foot	Sacks of Cement	Estimated Top of cmt.
0-1204	8 3/4	7	23	360	Surface	
near ending depth.						

* = please attach pertinent documents

III. FORMATION INFORMATION

Formation Record			
From	To	Thickness	Formation (name, description)

NOT AVAILABLE

Logs (specify type) None

Identify where logs are on file _____

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-103
Revised 10-1-

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

5a. Indicate Type of Lease
State ☐ Fee ☒
5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT -" (FORM C-101) FOR SUCH PROPOSALS.)

OIL WELL ☐ GAS WELL ☐ OTHER- Brine Well
Name of Operator Sims McCasland Water Station
Address of Operator Estate of G.P. Sims
PO Box 98 Eunice, NM 88231
Location of Well
UNIT LETTER A 420 FEET FROM THE North LINE AND 210 FEET FROM
THE East LINE, SECTION 32 - TOWNSHIP 21 RANGE 37 N.M.P.M.

7. Unit Agreement Name
G.P. Sims
8. Farm or Lease Name
2
9. Well No.

10. Field and Pool, or Wildcat

12. County
Lea

15. Elevation (Show whether DF, RT, CR, etc.)

Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:

PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input checked="" type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	PLUG AND ABANDONMENT <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	OTHER <input type="checkbox"/>	CASING TEST AND CEMENT JOBS <input type="checkbox"/>	

Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

Rigged up pulling unit on 12/26/81. Pull tubing out of well, found tubing parted at 1243', run bit and tubing to 1441' through salt section.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Louis R. Collins TITLE Operations Manager DATE 1/4/82
Only Signed by
Jen. Signed
Dist. by
APPROVED BY Dist. by TITLE DATE JAN 1 1982
CONDITIONS OF APPROVAL, IF ANY:

Submit 3 Copies To Appropriate District Office.
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

WELL API NO. 30-025-25525
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		7. Lease Name or Unit Agreement Name G.P. Sims
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> <u>Brine well</u>		8. Well Number # 2 <u>19797</u>
2. Name of Operator Key Energy Services		9. OGRID Number
3. Address of Operator P.O Box 99 Eunice NM		10. Pool name or Wildcat Saldo
4. Well Location Unit Letter <u>A</u> 420 : feet from the <u>N</u> line and 210 feet from the <u>E</u> line Section 32 Township 21 Range 37 NMPM County Lea		
11. Elevation (Show whether DR, RKB, RT, GR, etc.)		
Pit or Below-grade Tank Application <input type="checkbox"/> or Closure <input type="checkbox"/>		
Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____ Distance from nearest surface water _____		
Pit Liner Thickness: _____ mil Below-Grade Tank: Volume _____ bbls; Construction Material _____		

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Casing test

OTHER: casing test ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

12/10/2007--- RUPU, Install BOP 2 7/8 6" 900 series, with 7 " larkin Flange, Tally in hole with bit and scraper to 1020' Stack out at 1020' Pull tbq and SION.

12/11/07----- RIH with 6 1/4 bit tag up at 1020' Pull out of hole and RIH with impression block, Possible Csg problems Rig up Reverse unit.

12/12/07-----POH with Bit and RIH with mill and mill to 1148' SION

12/13/07-----POH with mill and tbq , RIH with Packer and test csg.

12/14/2007--- Test csg with reverse unit , casing would not hold below 30' from surface.

Shut in and wait for orders from Midland Office.

RECEIVED

JAN 10 2008

HOBBS OCD

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



Certified Receipt/Return Requested:

August 01, 2008

Attention Brine Well Operator(s):

One of the permitted brine wells has experienced a total collapse and created an enormous sinkhole. The well was located approximately 17 miles SE of Artesia, NM. on State Trust Land. The operator was Jim's Water Service and the brine well permit is BW-005. OCD has enclosed a press release with photos of the event.

The magnitude of this event warrants an immediate investigation of all brine wells in the state. Therefore, please find enclosed a "BRINE WELL INFORMATION REQUEST" form to be filled out and returned to this office no later than September 05, 2008. Failure to properly fill out and return the form in a timely manner may result in OCD requesting you shut down your operations until further notice. If you have any questions please do not hesitate to call me at 505-476-3490 or E-mail wayne.price@state.nm.us.

Sincerely,

Wayne Price
Environmental Bureau Chief
Oil Conservation Division

Attachments: (2)

Cc: EMNRD Cabinet Secretary-Joanna Prukop
OCD Director-Mark Fesmire
NMSLO- Brian Henington SF, Jim Carr-Carlsbad
BLM-Carlsbad Office- Dave Herrell
Eddy Co. Emergency Management-Joel Arnwine
NM State Police -Roswell Sgt. Les Clements
National Cave and Karst Research Institute- Dr. George Veni
NMOSE-John Stewart
Solution Mining Research Institute-John Voigt



Price, Wayne, EMNRD

From: Porter, Jodi, EMNRD
Sent: Wednesday, July 23, 2008 5:00 PM
Subject: PR-Secretary Prukop Proposes Stricter Conditions on Brine Wells State-wide
Attachments: PR-OCD.Brine.Wells07.23.08.pdf



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



July 23, 2008

NEWS RELEASE

Contact: Jodi McGinnis Porter,
Public Information Officer 505.476.3226

Energy, Minerals and Natural Resources Cabinet Secretary Joanna Prukop Proposes Stricter Conditions on Brine Wells State-wide

Artesia brine well collapse prompts statewide review

SANTA FE, NM – Secretary Joanna Prukop has directed the Oil Conservation Division (OCD) to conduct a complete evaluation of the rules and regulations concerning brine wells, a method of creating saturated salt water used in oil and gas production. The OCD evaluation will include an internal audit and inspection of all existing brine wells in New Mexico. Secretary Prukop is considering strengthening oversight of brine wells to protect against well failures such as the recent collapse in Artesia that created a huge sinkhole and forced the closure of an Eddy County road.

"There are several brine wells in New Mexico and we must ensure that they are all properly monitored to ensure safety and stability," stated Cabinet Secretary Joanna Prukop. "We have now seen that these wells can collapse and the extensive damage such a collapse can generate."

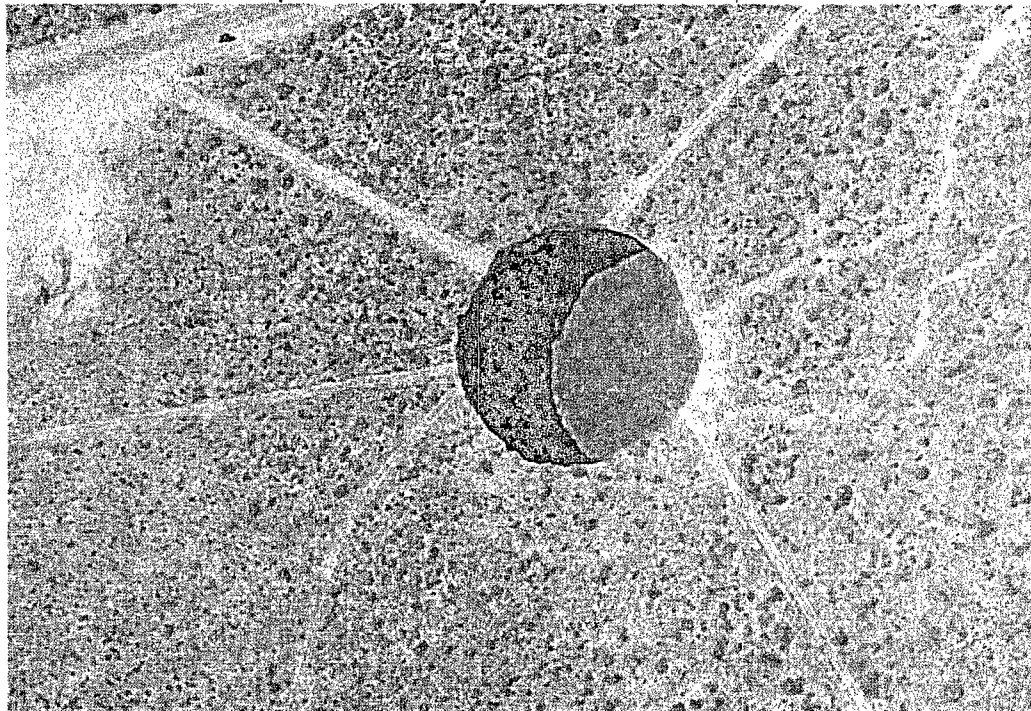
The Oil Conservation Division is continuing to monitor and investigate the collapse of the brine well, located on state trust land 17.3 miles southeast of Artesia, which is still active. The well is owned by Jim's Water Service. County Road 217 remains closed as a safety precaution, and a command center is on site. Division engineers estimate that the well is approximately 300 to 400 feet in diameter, 70 feet to the water level, and the actual depth to the bottom is unknown.

Scientists from the Oil Conservation Division, the Bureau of Land Management, State Land Office, the New Mexico

Bureau of Geology and Mineral Resources, and the National Cave & Karst Research Institute are all working together to assess horizontal and vertical movements to project any future subsidence. Work on a protective fence and keep-out signage began yesterday with completion expected on Friday.

In a related issue, the Oil Conservation Division has also been closely monitoring a brine well operated by I & W, Inc located in Carlsbad, NM. Yesterday, following ongoing inquiries from OCD the operator decided voluntarily to stop operation of the well. The division will work with I & W, Inc. to ensure that the well is properly plugged, permanently abandoned, and monitored for the long term.

Images provided on the brine well collapse are courtesy of National Cave and Karst Research Institute:



Morning, July 20, 2008 at 10:44 am.
courtesy of National Cave and Karst Research Institute



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson

Governor

Joanna Prukop

Cabinet Secretary

Reese Fullerton

Deputy Cabinet Secretary

Mark Fesmire

Division Director

Oil Conservation Division



OIL CONSERVATION DIVISION BRINE WELL INFORMATION REQUEST

GENERAL INFORMATION:

Operator Name _____ Well Name(s) _____

API Number _____ Brine Well Permit # _____

Date Permit Expires? _____

Location: Section _____ Ts _____ Rg _____

FNL _____ FSL _____ FEL _____ FWL _____

GPS of well(s): Lat: _____ Long: _____

Have you reviewed and understand all of your permit conditions? Yes ☐ No ☐

Are you presently deficient of any condition in your permit? Yes ☐ No ☐ Don't know ☐

Do you operate below grade tanks or pits at the site? Yes ☐ No ☐

Do all tanks, including fresh water tanks, have secondary containment? Yes ☐ No ☐

Do you think you have the expertise, knowledge and general understanding of what causes a brine well to collapse? Yes ☐ No ☐

Do you think OCD should provide guidelines on subsidence and collapse issues? Yes ☐ No ☐

SITING INFORMATION: Please provide the following information and depict on 7.5 minute (1": 2000') USGS Quad Map. Limit search to one mile radius.

Is the brine well located within a municipality or city limits? Yes ☐ No ☐

Distance and direction to nearest permanent structure, house, school, etc. if less than one mile:

Distance and direction to nearest water well if less than one mile:

Distance to nearest watercourse(s), floodplain, playa lake(s), or man-made canal(s) or pond(s) if less than one mile:

Distance and direction to nearest known karst features or mines if less than one mile:



Distance and direction to nearest producing oil or gas well(s) <i>if less than one mile</i> : Provide API Number:
Distance and direction to nearest tank battery(ies) <i>if less than one mile</i> :
Distance and direction to nearest pipeline(s), including fresh water pipelines <i>if less than one mile</i> :
Distance and direction to nearest paved or maintained road or railroad <i>if less than one mile</i> :
Depth to ground water found above the Salado (salt section), regardless of yield:
Name of aquifer(s):
WELL CONSTRUCTION: <i>Please provide the following information and attach a diagram depicting the brine well. Check box if attached:</i> Copy of a current well diagram: Attached <input type="checkbox"/> Copy of formation record with tops: Attached <input type="checkbox"/> Copy of geophysical well logs if available: Attached <input type="checkbox"/> If not, well logs within one mile <input type="checkbox"/>
Depth of the top of the salt below ground surface (feet):
Depth to the bottom of the salt below ground surface (feet):
Depth(s) to and thickness(es) of any anhydrite section(s) (located above the salt):
Depth of casing(s) shoe below ground surface (feet): _____ Is the casing shoe set in the anhydrite or other layer above the salt? Yes <input type="checkbox"/> No <input type="checkbox"/> Is the casing shoe set into the salt? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, how far into the salt? _____
Depth of tubing(s):
Do you suspect that your cavern has partially caved in? Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
OPERATIONS: <i>Please provide the following information.</i>
Start date of brine well operation:
Total volume of fresh water injected into the brine well to date (bbls) and how determined:

Total volume of brine water produced (bbls) to date and how determined:
Have you ever lost casing or tubing? If yes, please provide details. Document attached <input type="checkbox"/>
Do you maintain a surface pressure on your well during idle times? Yes <input type="checkbox"/> No <input type="checkbox"/>
Have you noticed large amounts of air built up during cavity pressurization? Yes <input type="checkbox"/> No <input type="checkbox"/>
Have you ever noticed fluids or air/gas bubbling up around the casing during testing or normal operations? Yes <input type="checkbox"/> No <input type="checkbox"/>
MONITORING: Please provide the following information.
Are you currently monitoring ground water contamination from your brine well or system? Yes <input type="checkbox"/> No <input type="checkbox"/>
Have you ever run a sonar log? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, please provide last date: _____
Provide cavern configuration (dimensions and volume) and method(s) used to estimate: If sonar report please attach <input type="checkbox"/> If other, please specify and provide a sketch of cavern: <input type="checkbox"/>
Do you have a subsidence monitoring program in place? Yes <input type="checkbox"/> No <input type="checkbox"/>
Do you have any geophysical monitoring devices, such as a seismic device positioned near your brine well? Yes <input type="checkbox"/> No <input type="checkbox"/>
Have you submitted all of your monthly, quarterly, or annual reports to the OCD? Yes <input type="checkbox"/> No <input type="checkbox"/>
Have you failed a brine well mechanical integrity test (MIT)? If yes, please attach details and results. Attached <input type="checkbox"/>
Have you ever had a casing leak? Yes <input type="checkbox"/> No <input type="checkbox"/> Have you ever had a cavern leak? Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Have you ever exceeded the cavern fracture pressure? Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/> Do you know how to calculate your maximum pressure? Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know <input type="checkbox"/>
Have you routinely looked for cracks or fissures in the ground surface around your brine well? Yes <input type="checkbox"/> No <input type="checkbox"/>
Do you have any minor or major cracks, fissures, tank settlement, line breakage from settlement or any minor subsidence. Yes <input type="checkbox"/> No <input type="checkbox"/>
During operations have you experienced any ground vibration, ground movement, or well movement after opening or shunting valves, pump start-up, shut-down, etc.? Yes <input type="checkbox"/> No <input type="checkbox"/>

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

Date:

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, July 25, 2008 4:21 PM
To: Hansen, Edward J., EMNRD; Price, Wayne, EMNRD
Cc: Sanchez, Daniel J., EMNRD
Subject: RE: PR-Secretary Prukop Proposes Stricter Conditions on Brine Wells State-wide
Attachments: image001.jpg; image007.jpg

Ed, Wayne, et. al:

Based on my records and knowledge of current activities at NMOCD BWs, my tally is as follows:

There are a total of 15 active UIC Class III Brine Well Permits (excluding BW-5 JWS & BW-6 I&W)

There are currently 13 active UIC Class III Brine Wells in operation (BW-2; BW-4; BW-8; BW-9; BW-12; BW-13; BW-22; BW-25; BW-27 Wells 1 & 2; BW-28; BW-30; and BW-31)

There are currently 6 brine wells that have actually been PA'd including: BW-5 JWS Collapse w/ Site Closure; BW-6 Eugenie #2; BW-21 Loco Hills Well #1 recently PA'd; BW-26 Salado Brine Sales; BW-29 Marbob; & William Brininstool.

There are currently 3 pending PAs of BWs including: BW-6 Eugenie #1 w/ Site Closure; BW-18 Key w/ redrill; and BW-19 Key w/ redrill.

There are currently 5 inactive brine wells (BW-5 Collapse w/ Site Closure; BW-6 needs PA Eugenie #1 w/ Site Closure; BW-18 needs PA w/ redrill; BW-19 needs PA w/ redrill; and BW21 needs redrill)

Let me know how we need to straighten RBDMS out. Please contact me if you have questions. Thanks.

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

From: Hansen, Edward J., EMNRD
Sent: Wednesday, July 23, 2008 5:56 PM
To: Price, Wayne, EMNRD
Cc: Chavez, Carl J, EMNRD
Subject: FW: PR-Secretary Prukop Proposes Stricter Conditions on Brine Wells State-wide

Wayne,
Jane and I tallied these numbers off of RBDMS (you may want to double check).

From: Hansen, Edward J., EMNRD
Sent: Wednesday, July 23, 2008 5:54 PM
To: Porter, Jodi, EMNRD
Subject: RE: PR-Secretary Prukop Proposes Stricter Conditions on Brine Wells State-wide

Jodi,

We counted (from our database: RBDMS):


16 Active Brine Wells

11 Plugged and Abandoned Brine Wells

2 Inactive Brine Wells

7/29/2008

From: Porter, Jodi, EMNRD
Sent: Wednesday, July 23, 2008 5:00 PM
Subject: PR-Secretary Prukop Proposes Stricter Conditions on Brine Wells State-wide



New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division



July 23, 2008

NEWS RELEASE

Contact: Jodi McGinnis Porter,
Public Information Officer 505.476.3226

Energy, Minerals and Natural Resources Cabinet Secretary Joanna Prukop Proposes Stricter Conditions on Brine Wells State-wide

Artesia brine well collapse prompts statewide review

SANTA FE, NM – Secretary Joanna Prukop has directed the Oil Conservation Division (OCD) to conduct a complete evaluation of the rules and regulations concerning brine wells, a method of creating saturated salt water used in oil and gas production. The OCD evaluation will include an internal audit and inspection of all existing brine wells in New Mexico. Secretary Prukop is considering strengthening oversight of brine wells to protect against well failures such as the recent collapse in Artesia that created a huge sinkhole and forced the closure of an Eddy County road.

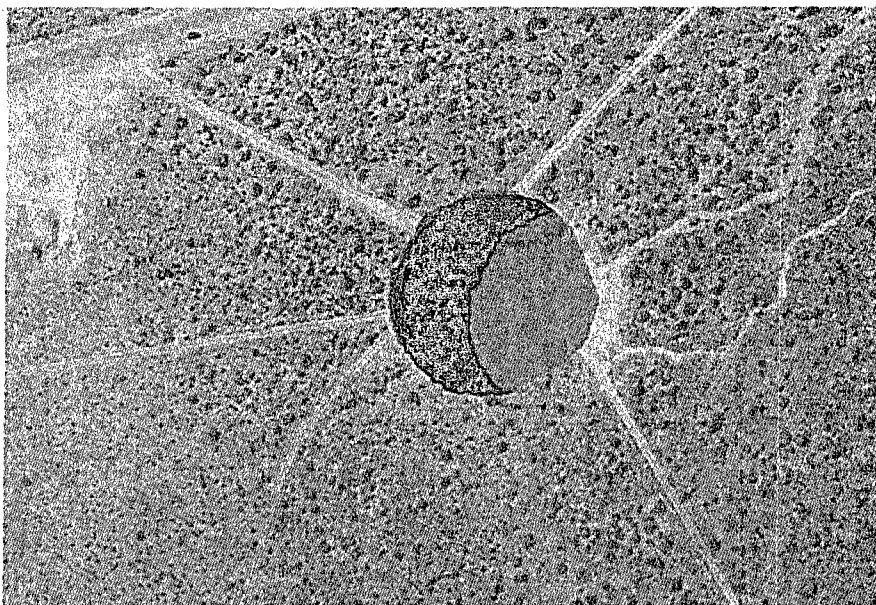
"There are several brine wells in New Mexico and we must ensure that they are all properly monitored to ensure safety and stability," stated Cabinet Secretary Joanna Prukop. "We have now seen that these wells can collapse and the extensive damage such a collapse can generate."

The Oil Conservation Division is continuing to monitor and investigate the collapse of the brine well, located on state trust land 17.3 miles southeast of Artesia, which is still active. The well is owned by Jim's Water Service. County Road 217 remains closed as a safety precaution, and a command center is on site. Division engineers estimate that the well is approximately 300 to 400 feet in diameter, 70 feet to the water level, and the actual depth to the bottom is unknown.

Scientists from the Oil Conservation Division, the Bureau of Land Management, State Land Office, the New Mexico Bureau of Geology and Mineral Resources, and the National Cave & Karst Research Institute are all working together to assess horizontal and vertical movements to project any future subsidence. Work on a protective fence and keep-out signage began yesterday with completion expected on Friday.

In a related issue, the Oil Conservation Division has also been closely monitoring a brine well operated by I & W, Inc located in Carlsbad, NM. Yesterday, following ongoing inquiries from OCD the operator decided voluntarily to stop operation of the well. The division will work with I & W, Inc. to ensure that the well is properly plugged, permanently abandoned, and monitored for the long term.

Images provided on the brine well collapse are courtesy of National Cave and Karst Research Institute:



Morning, July 20, 2008 at 10:44 am.
courtesy of National Cave and Karst Research Institute



Morning, July 22, 2008
courtesy of National Cave and Karst Research Institute

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*The Energy, Minerals and Natural Resources Department provides resource protection
and renewable energy resource development services to the public and other state agencies.*

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Jodi

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7/29/2008

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