

_25

SUBSIDENCE MONITORING REPORTS

DATE:

Chavez, Carl J, EMNRD

From:	Chavez, Carl J, EMNRD
Sent:	Thursday, July 21, 2016 12:12 PM
То:	'David.Alvarado@basicenergyservices.com'
Cc:	Griswold, Jim, EMNRD
Subject:	Annual Class II Brine Report (June 30, 2016) BW 2 & BW-25 Proposal for Subsidence
	Measurement at Brine Wells dated August 29, 2013

David:

Good afternoon.

OCD notices during the 11/30/15 and 1/4/16 Brine vs. fresh water tank sampling events that the tank contained ~ 63,900 ppm Cl and ~ 104,748 ppm TDS. TDS had been ~ 450 ppm TDS. The tank water later tested back to fresh drinking water quality. Does Basic know what happened to explain this?

Draft subsidence monitoring reports were submitted for the Eunice 1 (BW-2) and Salado 2 (BW-25) brine well facilities dated 8-29-2013. OCD approves the proposal for Subsidence Measurement at these brine well facilities.

Please contact me if you have questions. Thank you.

Carl J. Chavez, CHMM Environmental Engineer Oil Conservation Division- Environmental Bureau 1220 South St. Francis Drive Santa Fe, New Mexico 87505 Phone: (505) 476-3490 Main Phone: (505) 476-3440 Fax: (505) 476-3462 E-mail: <u>CarlJ.Chavez@state.nm.us</u> Website: <u>www.emnrd.state.nm.us/ocd</u>

Why not prevent pollution, minimize waste, reduce operation costs, and move forward with the rest of the Nation? To see how, go to "Publications" and "Pollution Prevention" on the OCD Website.

RECEIVED

2008 NOV 26 PM 2 24

November 20, 2008

NMOCD Environmental ATTN: Carl J. Chavez 1220 S. Saint Francis Dr. Santa Fe, NM 87505

RE: Basic Energy Service BW-25

Mr. Chavez:

Find attached answer to your question concerning running sonar test on the brine well. Although it is not available within thirty days, Basic is committed to doing the work.

If you can do anything further, please let me know.

Sincerely,

Elli u An

Eddie W. Seay

From:"Prather, Steve" <Steve.Prather@basicenergyservices.com>To:<seay04@leaco.net>Sent:Thursday, November 20, 2008 8:04 AMSubject:Soar Test BW-2 & BW 25

Eddie,

I have been in conversation with Carl Chavez with OCD. I have been advised they want me to run a sonar test on each brine well within the next 30 days. After calling around about the availability of equipment and personnel. I see no way of being able to start before the first of January.



Steve Prather

Area Manager

Eunice, NM 88231

505-394-3235

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Chavez, Carl J, EMNRD

From:	Chavez, Carl J, EMNRD
Sent:	Friday, November 14, 2008 4:38 PM
То:	'ziatransports@gmail.com'; 'jrmillett@gmail.com'; 'rharrisnm@aim.com'; 'gandy2@leaco.net'; 'seay04@leaco.net'; 'iwcarlsbad@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: <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")



Bill Richardson Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Fesmire Division Director Oll Conservation Division



November 14, 2008

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.

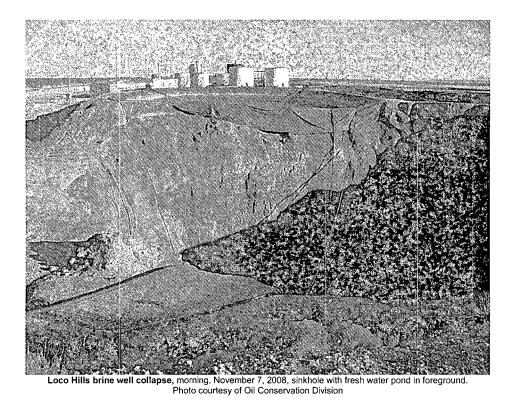
"I am deeply concerned by these two serious incidents and we are taking action to ensure the safety of our citizens and to protect the environment," stated Secretary Prukop.

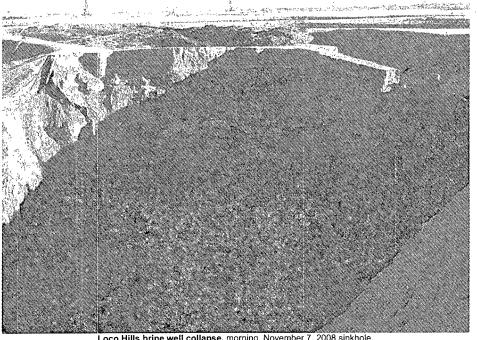
Brine wells are an essential part of the oil and gas drilling industry, particularly in the southeastern part of the state. Oil and gas operators use brine water in the drilling process. Brine is saturated salt water which can be more salty than sea water. Brine is created by injecting fresh water into 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.

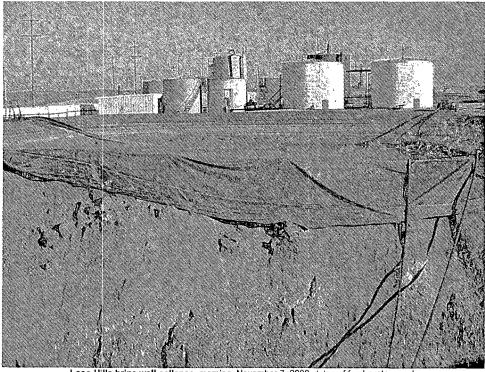
The moratorium will only affect new wells and will not impact existing wells and facilities.

Below are photographs of the two recent collapses:

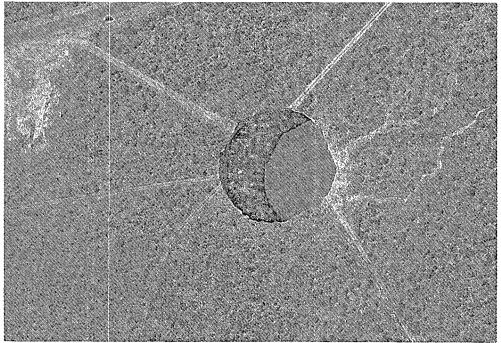




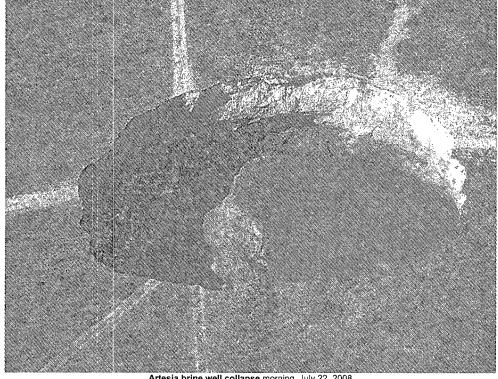
Loco Hills brine well collapse, morning, November 7, 2008 sinkhole. Photo courtesy of Oil Conservation Division



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 • <u>www.emnrd.state.nm.us/OCD</u>



Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD

Sent: Wednesday, November 12, 2008 9:24 AM

To: 'Prather, Steve'

Cc: Price, Wayne, EMNRD

Subject: RE: BW-2 (Eunice No. 1) & BW-25 (Salado Brine Well No. 2) Upcoming MIT & Sonar Testing

Steve:

Yes, but if you are having scheduling difficulty, the OCD may approve an extension if needed? 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/</u>index.htm (Pollution Prevention Guidance is under "Publications")

From: Prather, Steve [mailto:Steve.Prather@basicenergyservices.com]
Sent: Wednesday, November 12, 2008 9:30 AM
To: Chavez, Carl J, EMNRD
Subject: Re: BW-2 (Eunice No. 1) & BW-25 (Salado Brine Well No. 2) Upcoming MIT & Sonar Testing

Are you saying they have moved it up to thirty days from this date and not June 30th of 2009?

Sent using BlackBerry

-----Original Message-----From: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us> To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>; Prather, Steve <Steve.Prather@basicenergyservices.com> CC: Price, Wayne, EMNRD <wayne.price@state.nm.us>; Hill, Larry, EMNRD <larry.hill@state.nm.us>; Sanchez, Daniel J., EMNRD <daniel.sanchez@state.nm.us> Sent: Wed Nov 12 10:12:50 2008 Subject: RE: BW-2 (Eunice No. 1) & BW-25 (Salado Brine Well No. 2) Upcoming MIT & Sonar Testing

Steve:

After speaking 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 at the same time.

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: Chavez, Carl J, EMNRD Sent: Monday, November 10, 2008 1:50 PM To: 'Prather, Steve' Cc: Price, Wayne, EMNRD; Hill, Larry, EMNRD Subject: FW: BW-2 (Eunice No. 1) & BW-25 (Salado Brine Well No. 2) Upcoming MIT & Sonar Testing

Steve:

Hi. BWs-2 and 25 will required the EPA 5-Yr. 30 minute test (pull tubing, set packer near casing shoe (<20 ft. from casing shoe) and pressure up from 300 to 500 psig +/- 10% to pass.

As indicated below, a sonar test is required at BWs-2 and 25, which will facilitate the EPA 5-Yr. MIT before reinstalling the tubing.

Please contact me with your preferred date and time for the MITs and sonar. 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

Re: BW-2 (Eunice No. 1) & BW-25 (Salado Brine Well No. 2) Upcoming MIT & Sonar ... Page 3 of 4

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: Chavez, Carl J, EMNRD
Sent: Tuesday, October 21, 2008 2:38 PM
To: 'Prather, Steve'
Cc: Sanchez, Daniel J., EMNRD; Price, Wayne, EMNRD
Subject: BW-2 (Eunice No. 1) & BW-25 (Salado Brine Well No. 2) Upcoming MIT & Sonar Testing

Steve:

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

Good afternoon. The Oil Conservation Division (OCD) has reviewed Basic Energy Services, LLC responses to the BWIRs for the above subject OCD permitted brine wells. Based on the operational life and volume of brine produced from the above brine wells, 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 wells 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: CarlJ.Chavez@state.nm.us

Website: http://www.emnrd.state.nm.us/ocd/index.htm

(Pollution Prevention Guidance is under "Publications")

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Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD

Sent: Wednesday, October 22, 2008 8:56 AM

To: Hill, Larry, EMNRD

Subject: FW: BW-2 (Eunice No. 1) & BW-25 (Salado Brine Well No. 2) Upcoming MIT & Sonar Testing

Buddy:

FYI.

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")

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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")

RECEIVED 2008 SEP 9 PM 2 55

August 30, 2008

NMOCD Environmental ATTN: Wayne Price 1220 S. St. Francis Dr. Santa Fe, NM 87505

RE: Basic Energy Service BW-002 BW=025=---

Mr. Price:

Find within the information requested on the two brine wells that Basic Energy operates. Information was obtained from operator personnel, well files and physical observation.

Should you need anything further, please call.

Sincerely,

Sui w

Eddie W. Seay, Agent Eddie Seay Consulting 601 W. Illinois Hobbs, NM 88242 (575)392-2236 seay04@leaco.net

cc: Basic Energy Service

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary Mark Fesmire Division Director Oll Conservation Division



OIL CONSERVATION DIVISION BRINE WELL INFORMATION REQUEST

GENERAL INFOR						
Operator Name Bas	ic Enorg	ly Serv.	Well Name	(s)_ S	Mado # 2	
API Number 30 · (<u>325,32</u>	394	Brine Well	Permit	# BW. 025	
Date Permit Expires?	1 Deptem	ser 2	007		· · ·	1
Lessting Costing	20	Ta	05	Da	37 F	
Location: Section _ FNL 1305		15	<u>AJ</u>	_ Kg	EWI	
GPS of well(s) = Lat	_rol		ILL_		1 VV L.	
GPS of well(s): Lat \mathbf{A}	32 07	09	/03	10	34	
Unit A		•			- ·	
Have you reviewed a	ind understa	and all of	your permit	conditi	ons? Yes 🕱 No 🗆	
					Yes 🗆 No 🗆 Don't k	now
Do you operate below	w grade tanl	ks or pits	at the site?	Yes 🗱 N	lo⊡	
Do all tanks, includin	ig fresh wat	ter tanks,	have second	lary con	tainment? Yes No	
Do you think you hav	ve the exper	rtise, kno	wledge and	general	understanding of what d	causes a
brine well to collapse	e? Yes 🕱 N	Io🗆 Gu	nerally			
Do you think OCD sl	hould provi	de guide	lines on subs	idence a	and collapse issues? Y	es 🕱 No 🗆
<i>minute (1": 2000')</i> Is the brine well loca	USGS Qua	d Map. 1	Limit search	to one	· · · · · · · · · · · · · · · · · · ·)n 7.5
Distance and directio	n to neares	t perman	ent structure	house,	school, etc. if less than	one mile.
Distance and directio	n to nearest	t water w	vell if less the	in one n	nile:	
Attached				-		
Distance to nearest w <i>if less than one mile:</i>			plain, playa l	ake(s),	or man-made canal(s) o	er pond(s)
Distance and directio	in to nearest	t known]	karst features	s or min	es if less than one mile:	
	4 1					

	plume of fresh water injected into the brine well to date (bbls) and how determined:
Start	te of brine well operation: 9/93
OPE	ATIONS: Please provide the following information.
Jo yo	suspect that your cavern has partially caved in? Yes \Box No \Box Don't know \aleph
	of tubing(s): 1385 み.
	asing shoe set into the salt? Yes \square No \square If yes, how far into the salt?
	of casing(s) shoe below ground surface (feet): /220 asing shoe set in the anhydrite or other layer above the salt? Yes & No D Top %
	laction
-	s) to and thickness(es) of any anhydrite section(s) (located above the salt):
	thethe
-	o the bottom of the salt below ground surface (feet):
A	actual
	of the top of the salt below ground surface (feet):
Сору	f geophysical well logs if available: Attached 🗆 If not, well logs within one mile 🗆
	f a current well diagram: Attached 🖬 f formation record with tops: Attached 🖬
	n depicting the brine well. Check box if attached:
	CONSTRUCTION: Please provide the following information and attach a
, P	Hacked
	of aquifer(s):
-	tachd
	to ground water found above the Salado (salt section), regardless of yield:
×	lached
Dista	ce and direction to nearest paved or maintained road or railroad if less than one mile:
	Attached
	ce and direction to nearest pipeline(s), including fresh water pipelines if less than one
A	aches
Dista	ce and direction to nearest tank battery(ies) if less than one mile:

Total volume of brine water produced (bbls) to date and how determined: 1,700,000 bls. Average over 15yrs in openation Have you ever lost casing or tubing? If yes, please provide details. NO Document attached Do you maintain a surface pressure on your well during idle times? Yes No Have you noticed large amounts of air built up during cavity pressurization? Yes NoK Have you ever noticed fluids or air/gas bubbling up around the casing during testing or normal operations? Yes No MONITORING: Please provide the following information. Are you currently monitoring ground water contamination from your brine well or system? Sampling fresh water supply welks. Yes X No Have you ever run a sonar log? Yes□ No If yes, please provide last date:____ Provide cavern configuration (dimensions and volume) and method(s) used to estimate: If sonar report please attach \Box If other, please specify and provide a sketch of cavern: \Box Do you have a subsidence monitoring program in place? Yes 🗆 No 🕷 Do you have any geophysical monitoring devices, such as a seismic device positioned near Yes I NoX vour brine well? Have you submitted all of your monthly, quarterly, or annual reports to the OCD? Yes 🗆 No 🕅 Have you failed a brine well mechanical integrity test (MIT)? If yes, please attach details and Attached D Tubing back 2005 results. Have you ever had a casing leak? Yes 🗆 Noll Have you ever had a cavern leak? Yes 🗆 No 🗆 Don't know 🗆 Have you ever exceeded the cavern fracture pressure? Yes 🗆 No 🗉 Don't know 🕱 Do you know how to calculate your maximum pressure? Yes 🗆 No 🗆 Don't know 🖀 Have you routinely looked for cracks or fissures in the ground surface around your brine well? Yes 🗙 NoE Do you have any minor or major cracks, fissures, tank settlement, line breakage from settlement or any minor subsidence. Yes 🛛 NoX 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 Not

Anytime during t water volume pu	÷ *	ears, have you exp he well verses brin			
hole? Yes n N	10 🗆	lling the tubing du		· · · · · · · · · · · · · · · · · · ·	
Are you concerne YesŊ No⊡	about run	ning a sonar tool	in fear of losing to	ool because of d	ebris in hole? back in h
Have you ever co photo. □ Photo(s) attaci		ly over of your we	ell site? No X Y	es□ if yes, plea	se provide
		your estimated tota	ed a total of 18,00	00,000 bbls of b	rine in the life
time of the well t 1. Provide t 2. Now prov	hen your ca he calculate vide the dep	lculation would be d number above h oth (ft) from the su nd in #1 above gre	ere: 472 rface to your casi	ng shoe: /220	·
time of the well t 1. Provide t 2. Now prov	hen your ca he calculate vide the dep number four	lculation would be d number above h oth (ft) from the su nd in #1 above gre	ere: 472 rface to your casi	ng shoe: /220	·
time of the well t 1. Provide t 2. Now provide Is the calculated r	hen your ca he calculate vide the dep number four	lculation would be d number above h oth (ft) from the su nd in #1 above gre	ere: 472 rface to your casi	ng shoe: /220	·
time of the well t 1. Provide t 2. Now provide Is the calculated r	hen your ca he calculate vide the dep number four	lculation would be d number above h oth (ft) from the su nd in #1 above gre	ere: 472 rface to your casi	ng shoe: /220	·

Yes□

Yes□ No□

No

Have you ever experienced unexpected pressure gain or loss in the cavern?

If Yes, was there a difference in your normal flow rate?

Basic Energy S Company Name-print name above 2ar vi ce

ana na

Eddic W Sear Company Representative- print name

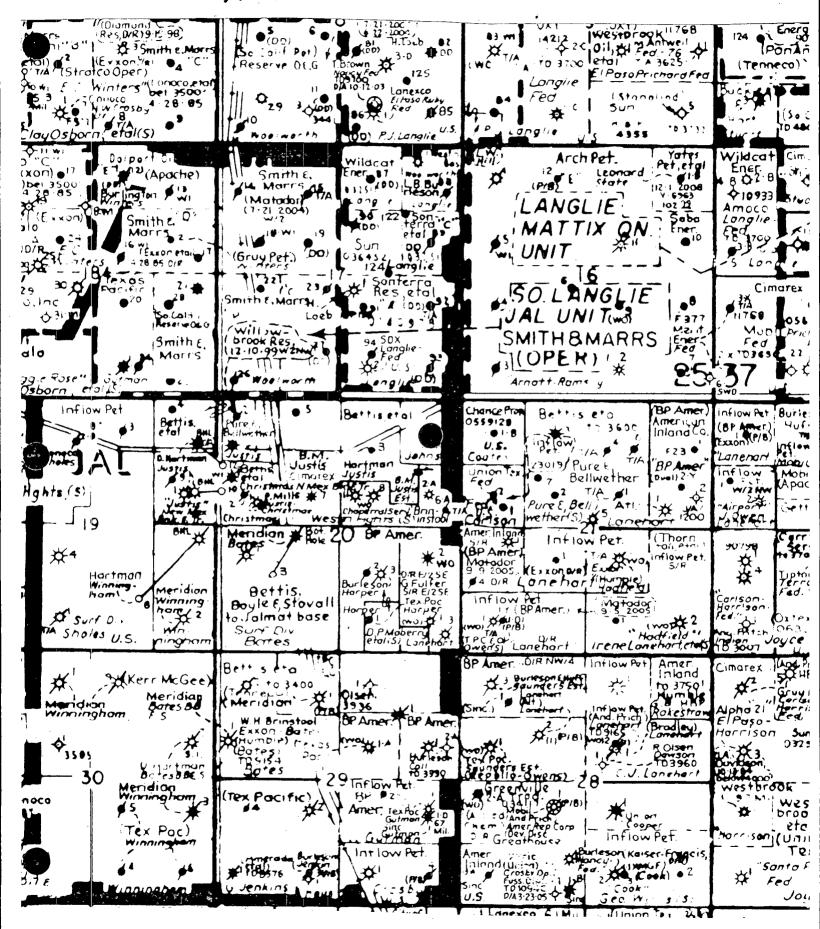
È

Company Representative- Signature

Date: 8 2008 291

Title_A

NEZ OGNEZ Sent 20



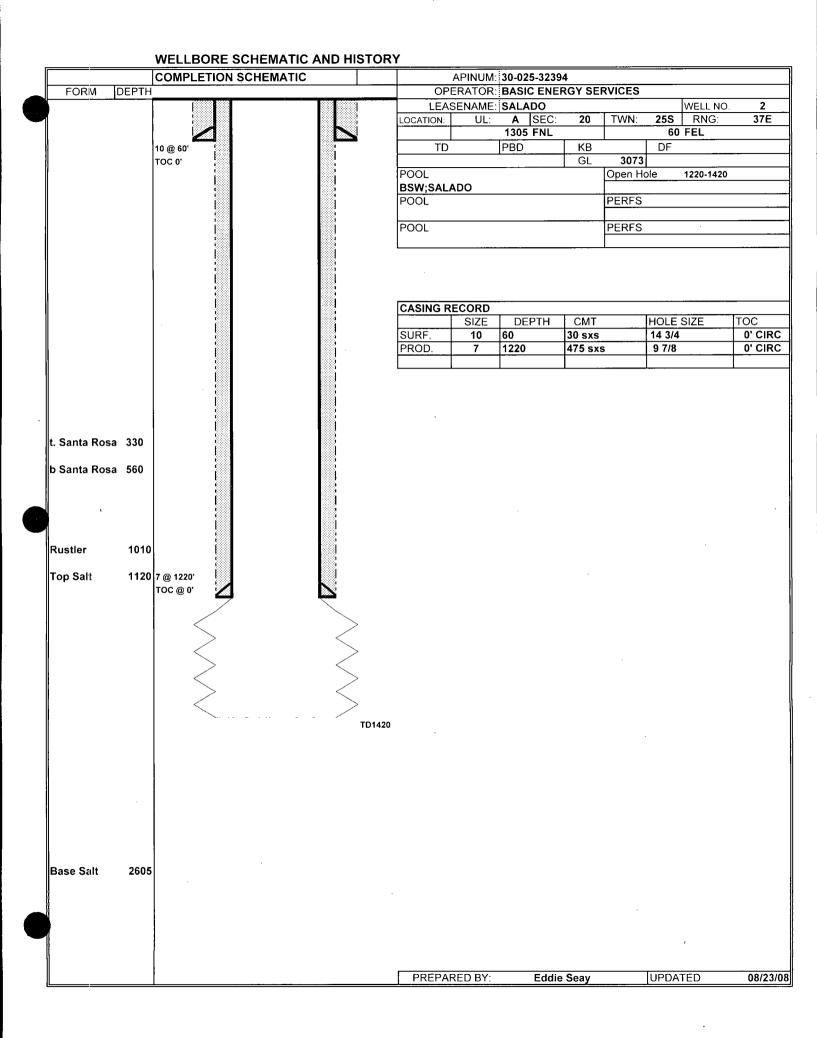
API NUMBER	30-025-32394
OPERATOR	BASIC ENERGY SERVICES
PROPERTY NAME	SALADO # 2
	SALADO # 2
LOCATION	A-20-T25S-R37E
LOCATION	1305 FNL 60 FEL
	TISUS FILL OU FEL
DEPTH TOP SALT BELOW G.L.	1120 FEET
DEPTH BASE SALT BELOW G.L.	2605 FEET
THICKNESS ANHYDRITE ABOVE SALT	110 FEET
LOGS WITHIN 1 MILE	All AVAILABLE ON OCD ONLINE
	30-025-27837
State HWY 128	0.24 miles NW
Water Well (Supply Well)	0.17 miles SW
ank Batteries	
Bettis, Boyle & Stoval	0.12 miles NW
Herman Loeb	0.22 miles SE
ripe Lines	
Duke Gas Line	0.06 miles W
Sid Richardson Pipe Line	0.03 miles E
Southern Union Gas Line	0.06 miles SSE
. <u></u>	
Nater Coarses	
Draw	0.09 miles NW
	· · · · · · · · · · · · · · · · · · ·
DEPTH TO GROUND WATER	
SANTA ROSA	330-560 FEET

. .

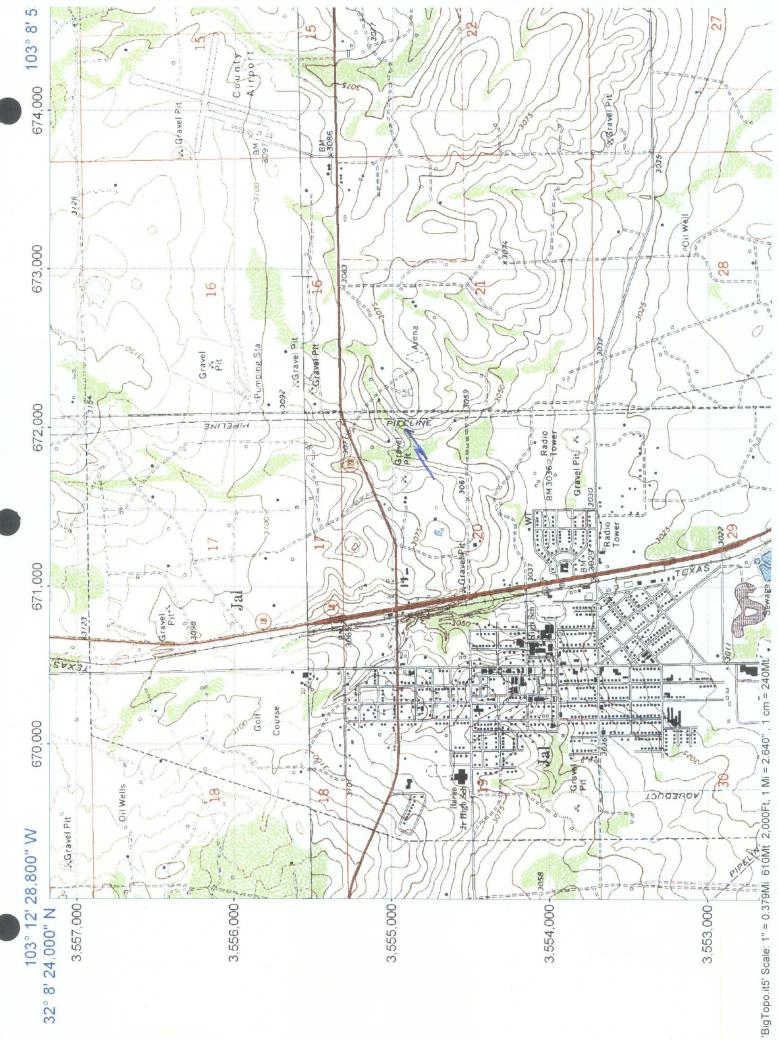
~

BRINE WELL						•								
3002532394 SALADO	SALADO	2 BASIC ENERGY SERVICES		BSW A	Lea		∢	20	25 S S	37 E -	1305 N	60 E		
Wells within 1 r	Wells within 1 mike of Basic Energy Services, Salado # 2 brine well.	alado # 2 brine well.								4,	5280	5280		
API #	PROPERTY NAME	# OPERATOR	TD 1	TYPE STAT	100		n/L S	SEC TWN		RNG N	N/S	EW	DIST	Dir
3002511630	3002511630 LANGLIE JAL UNIT	89 PHOENIX HYDROCARBONS OP CORP		A	lLea	F	Н	17	25 S	37 E [1980 N	660 E	4643	N
3002511631	3002511631 LANGLIE A FEDERAL	I HERMAN L LOEB	2980	G A	Lea	F	ſ	17	25 S	37 E	2310 S	2310 E	4258	NM
3002511633	LANGLIE JAL UNIT	93 PHOENIX HYDROCARBONS OP CORP		Α	Lea	F	P	17	25 S	37 E	660 S	660 E	2054	z
3002511635	3002511635 LANGLIE JAL UNIT	94 PHOENIX HYDROCARBONS OP CORP		0 P&A	Lea	F	0	17	25 S	37 E	990 S	1980 E	2992	NN
3002511636	3002511636 LANGLIE JAL UNIT	92 PHOENIX HYDROCARBONS OP CORP		0 A	Lea	F	1	17	25 S	37 E	1980 S	660 E	3339	z
3002511638	3002511638 SOUTH LANGLIE JAL UNIT	23 SMITH & MARRS INC	3405 1	TA	Lea	Р	K	17	25 S	37 E	2310 S	2310 W	/ 4640	ΝN
3002511641	3002511641 SOUTH LANGLIE JAL UNIT	27 SMITH & MARRS INC	3550 0	0 A	Lea	Ь	z	17	25 S	37 E	S 066	2310 W	/ 3706	NN
3002511645	3002511645 SOUTH LANGLIE JAL UNIT	26 SMITH & MARRS INC	3365 1	TA	Lea	Ρ	М	17	25 S	37 E	330 S	330 W	/ 5156	WNW
3002524891	3002524891 LANGLIE JAL UNIT	91 PHOENIX HYDROCARBONS OP CORP	3850	0 A	Lea	Ρ	J	17	25 S	37 E	1980 S	1980 E	3804	ΝM
3002534620	3002534620 LANGLIE A FEDERAL	2 HERMAN L LOEB	3080 G	3 A	Lea	F	0	17	25 S	37 E	660 S	1980 E	2747	NN
3002535626	3002535626 LANGLIE JAL UNIT	124 PHOENIX HYDROCARBONS OP CORP	3750 O	A O	Lea	F	G	17	25 S	37 E	2622 N	1528 E	4226	NNW
3002535642	3002535642 LANGLIE JAL UNIT	122 PHOENIX HYDROCARBONS OP CORP	3750 O	A (Lea	F	H H	17	25 S	37 E	1404 N	1126 E	5289	z
3002511612	3002511612 ARNOTT RAMSAY NCT E	2 POGO PRODUCING CO		G A	Lea	S ·	0	16	25 S	37 E	660 S	198 E	3892	ENE
3002511626	3002511626 ARNOTT RAMSAY NCT E	4 GULF OIL CORP		0 P&A	Lea		L	16	25 S	37 E	1980 S	660 V	660 W 3362	NNE
3002511627	3002511627 ARNOTT RAMSAY NCT E	3 GULF OIL CORP)	G P&A	Lea		Σ	16	25 S	37 E	615 S	705 V	705 W 2066	NNE
3002511628	3002511628 ARNOTT RAMSAY NCT E	5 POGO PRODUCING CO	01	S A	Lea	S	E	16	25 S	37 E	1980 N	560 V	560 W 4646	NNE
3002522813 SALINE	SALINE	3 PERMIAN CORP	L	M P&A	Lea		Ρ	16	25 S	37 E	220 S	465 E	465 E 5107	ENE
3002525047	3002525047 ARNOTT RAMSAY NCT E	6 POGO PRODUCING CO		0 A	Lea	s	X	16	25 S	37 E	2310 S	2310 V	2310 W 4322	NNE
3002525465	3002525465 ARNOTT RAMSAY NCT E	7 POGO PRODUCING CO	3700 O	A (Lea	S	Р	16	25 S	37 E	610 S	660 E	660 E 5056	ENE
3002525596	3002525596 ARNOTT RAMSAY NCT E	8 POGO PRODUCING CO	3700 O	V V	Lea	S	-	16	25 S	37 E	610 S	660 E	660 E 5056	ENE
3002525597	3002525597 ARNOTT RAMSAY NCT E	9 POGO PRODUCING CO	3700 O	0 A	Lea	s		16	25 S	37 E	1980 S	1980 E	1980 E 4699	NE
3002511659 HARNER	HARNER	2 TEXAS PACIFIC OIL C		0 P&A	Lea		_	20	25 S	37 E	1980 S	1905 E	2717	SW
3002511660	3002511660 CHRISTMAS	1 BETTIS BOYLE & STOVALL	3285 S	s P&A	Lea	Ŀ	Е	20	25 S	37 E	1650 N	330 V	330 W 4902	WSW
3002511661	3002511661 JOHNS FEDERAL	1 BETTIS BOYLE & STOVALL	3412 0	0 A	Lea	ц	A	20	25 S	37 E	660 N	660 E	660 E 880	ΝŇ
3002511662	3002511662 JUSTIS A FEDERAL	I TENNECO OIL CO		G P&A	Lea		۵	20	25 S	37 E	990 N	330 V	330 W 4900	N
3002511663	3002511663 B M JUSTIS C	5 BETTIS BOYLE & STOVALL	3370 O	0 A	Lea	Р	U	20	25 S	37 E	370 N	1670 V	1670 W 3671	WNW
3002511664	3002511664 B M JUSTIS A	6 BETTIS BOYLE & STOVALL	3332 0) TA	Lea	Р	н	20	25 S	37 E	2310 N	330 E	1040	SW
3002511665	3002511665 B M JUSTIS A	3 BETTIS BOYLE & STOVALL	3380 O) A	Lea	Р	В	20	25 S	37 E	990 N	1980 E	1945	N
3002511666	3002511666 V H JUSTIS	2 BETTIS BOYLE & STOVALL	Ŭ	0 P&A	Lea	Р	D	20	25 S	37 E	370 N	420 W	/ 4890	3
3002511667 BATES	BATES	1 BETTIS BOYLE & STOVALL	Ŭ	G P&A	Lea	4	Ľ	20	25 S	37 E	1980 S	660 W	/ 4977	SW
3002511668	3002511668 B M JUSTIS A	2 BETTIS BOYLE & STOVALL	3030	0 P&A	Lea	4	H	20	25 S	37 E	1980 N	660 W	/ 4609	SW
3002511669	3002511669 B M JUSTIS B	7 BETTIS BOYLE & STOVALL	3285 O	V V	Lea	٩.	ц	20	25 S	37 E	1960 N	1980 W	/ 3305	WSW

S	S	S	SSW	WSW	SW	WSW	WSW	WSW	SW	WSW		NE	SE	SSE	SSE	ESE	ESE	ш	ш	SE	SSE	ENE	SE	ESE	ш	ESE	ESE	E	SSE	SE	ESE	SSW	SSE	SSE
3368	2083	3654	3830	2035	2816	4642	5139	4524	2253	5102	3907	660 W 1007	980 E 4720	810 W 3427	660 W 3392		3427	3046	2139	986	990 W 1968	4464	2853	2148	5019	5055	4703	3703	2357	W 1312	1744	5016	990 W 5074	660 W 4690
660 E	660 E	330 E	1980 E	1980 E	1650 E	1210 W	120 W	790 W	2210 E	120 W	1980 E 3907	660 W	1980 E	810 W	660 W	2310 E 3192	1980 E	2310 E	1980 W	660 W 986	990 W	990 E	1980 W	1980 W	330 E	330 E	660 E	1650 E	330 W	890 W	1650 W 1744	1980 E	990 W	660 W
660 S	1980 S	330 S	660 S	1980 N	1650 S	1635 S	1940 N	2225 N	1980 N	1450 N	1980 S	600 N	660 S	660 S	660 S	2310 N	1980 N	990 N	660 N	1980 N	2310 S	2310 N	1980 S	1980 N	N 066	1980 N	1770 N	990 N	1650 S	2210 N	1650 N	660 N	N 066	660 N
37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E	37 E
25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S -	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S	25 S
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P P	P I	Ь Р	0	P G	<u>-</u>	P K	ΡΕ	Ρ E	P G	ΡĒ	P J	F D	P O	P M	M	P G	P G	P B	P C	ш	P L	Н	P K	ΡF	P A	Н	P H	P B	P L	ы Н	P F	В	P D	P D
Lea	Lea	I Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea	\ Lea	Lea	Lea	Lea	Lea	\ Lea	Lea	\ Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea	Lea
P&A	A	P&A	P&A	¥.	P&A	P&A	. 'Y	А	P&∧	ΤA	A	V	A	A	P&A	TA	TA	TA	A	Ρ&Α	A	P&A	А	А	А	P&A	A	TA	P&∧	A	A	P&A	P&A	P&A
3362 G	3620 O	9	0	3400 G	Ð	Ð	9	3150 G	3150 G	3680 O	3448 G	3077 O	3024 O	9029 O	G	3143 G	0	3101 O	0	0	2928 G	G	3435 O	0	3500 O	0	0	0	0	3340 O	0	0	0	0
1 LEWIS B BURLESON INC	2 FULFER OIL & CATTLE LLC	3 SUN OIL CO	1 TEXAS PACIFIC OIL C	8 BETTIS BOYLE & STOVALL	3 LEWIS B BURLESON INC	3 BURLINGTON RESOURCES O & G CO	10 PLANTATION OP LLC	1 BETTIS BOYLE & STOVALL	11 PLANTATION OP LLC	12 PLANTATION OP LLC	I INFLOW PETROLEUM RESOURCES LP	1 CHANCE PROPERTIES COMPANY	I INFLOW PETROLEUM RESOURCES LP	1-Y INFLOW PETROLEUM RESOURCES LP	I LEWIS B BURLESON INC	5 BETTIS BOYLE & STOVALL	1 BETTIS BOYLE & STOVALL	4 BETTIS BOYLE & STOVALL	3 BETTIS BOYLE & STOVALL	2 UNION TEXAS PETROLEUM	3 INFLOW PETROLEUM RESOURCES LP	1 ATLANTIC RICHFIELD	1 INFLOW PETROLEUM RESOURCES LP	2 BETTIS BOYLE & STOVALL	I INFLOW PETROLEUM RESOURCES LP	2 BURLESON & HUFF	/ INFLOW PETROLEUM RESOURCES LP	6 BETTIS BOYLE & STOVALL	4 LEWIS B BURLESON INC	1 INFLOW PETROLEUM RESOURCES LP	7 BETTIS BOYLE & STOVALL	I OLSEN-BLOUNT OIL CO	1 SINCLAIR OIL & GAS	3 LEWIS B BURLESON INC
3002511670 LEONARD.	LEONARD	3002511672 LANEHART	HARNER	TS B			3002527630 B M JUSTIS	3002527664 JUSTIS CHRISTMAS	3002527837 B M JUSTIS	3002528805 B M JUSTIS	EXXON	3002511674 A B COATES B	3002511676 HADFIELD	I	3002511678 LANEHART	3002511679 B T LANEHART	3002511680 B T LANEHART	3002511681 B T LANEHART	3002511682 B T LANEHART	3002511683 CARLSON	3002511684 LANEHART	3002511685 LANEHART	AZTEC	3002511687 B T LANEHART	ARCO	3002525141 ARCO LANEHART	I ARCO 2-Y	3002525588 B T LANEHART	3002526155 LANEHART	FEDERAL	3002526819 B T LANEHART	COLL	3002511821 LANEHART	3002526077 SAUNDERS ESTATE
3002511670	3002511671	3002511672	3002511673 HARNER	3002520581	3002526319 HORNER	3002527542 BATES	3002527630	3002527664	3002527837	3002528805	3002509779 EXXON	3002511674	3002511676	3002511677	3002511678	3002511679	3002511680	3002511681	3002511682	3002511683	3002511684	3002511685	3002511686 AZTEC	3002511687	3002525071 ARCO	3002525141	3002525174 ARCO	3002525588	3002526155	3002526335 FEDERAL	3002526819	3002511832 COLL	3002511821	3002526077







New Mexico Office of the State Engineer

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	New Mexico Office of the Sta POD Reports and Down	
Township: 25S	Range: 37E Sections: 20	
NAD27 X:	Y: Zone:	Search Radius:
County: LE	Basin:	Number: Suffix:
Owner Name: (First)	(Last) (Last)	○Non-Domestic ○Domestic
POD / Su	face Data Report Ave Water Column Repor	t Depth to Water Report
(Clear Form	enu Help

		AVER	AGE I	EPTH OF	WATER	REPORT	10	/08/20	08		
									(Depth	Water in	Feet)
Bsn	Tws	Rng	Sec	Zone	х	3	Y	Wells	Min	Max	Avg
CP	25S	37E	20					7	23	70	39
Reco	rd Cc	unt:	7		,						

http://iwaters.ose.state.nm.us:7001/iWATERS/WellAndSurfaceDispatcher

10/8/2008

Page 1 of 1

New Mexico Office of the State Engineer

X:	ζ:	Zone	0 1 0 1		
		Zonę. ;	Search Radiu	s:	
Basin:		Nun	nber:	Suffix:	
rst)	(Last)		Non-Domestic	ODomestic	⊛All
		rst) (Last)	rst) (Last) O	(Last) ONon-Domestic	(Last) ONOn-Domestic ODomestic

WATER COLUMN REPORT 10/08/2008

						3≈SW 4=S smalles	-		Depth	Depth	Water	(in feet)
POD Number	Tws	Rng	Sec	P	a a	Zone	x	Y	Well	Water	Column	
<u>CF 00426</u>	25S	37E	20						235	70	165	
<u>CF 00428</u>	258	37E	20	1					90	60	30	
CP 00661	25S	37E	20	1	33				38	23	15	
CP 00620	25S	37E	20	1	33				59	25	34	
<u>CP 00120</u>	25S	37E	20	2	31				460			
<u>CP 00124</u>	25S	37E	20	2	41				530			
CP 00121	255	37E	20	2	43				510			
<u>CP 00619</u>	25S	37E	20	3	1				48	25	23	
CP 00777	255	37E	20	3	24				100	28	72	
CP 00557	255	37E	20	3	33				350	42	308	

Record Count: 10

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

New Mexico Energy, Minerals and Natural Resources Department

Mark Fesmire

Division Director

Oil Conservation Division

NEWS RELEASE

Bill Richardson Governor

Joanna Prukop Cabinet Secretary Reese Fullerton Deputy Cabinet Secretary

July 23, 2008

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.

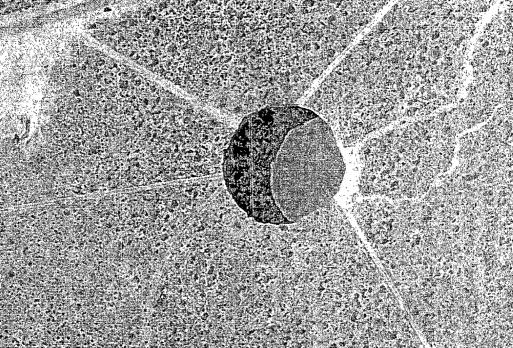
Scientists from the Oil Conservation Division, the Bureau of Land Management, State Land Office, the New Mexico

1

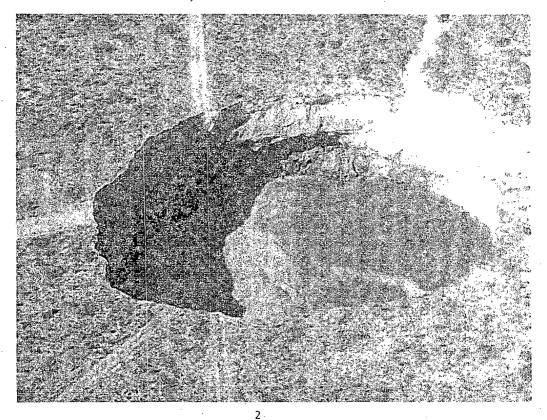
Bureau of Geology and Mineral Resources, and the National Cave & Karst Research Institute are all working together to assess horizontal and vertical movements to project any future subsidence. Work on a protective fence and keep-out signage began yesterday with completion expected on Friday.

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	NameWell Name(s)			
API Number Brine Well Permit #				
Date Permit Expires?				
			<i>2</i>	
Location: Section FNLFSL GPS of well(s): Lat:	Ts	_ Rg	· · ·	
FNLFSL	FEL		FWL	
GPS of well(s): Lat:	Long:			
· · · · · · · · · · · · · · · · · · ·		·		
Have you reviewed and understand	nd all of your permit	conditions?	$Yes \square No \square$	
Are you presently deficient of any condition in your permit? Yes \Box No \Box Don't know \Box				
Do you operate below grade tank	s or pits at the site?	Yes□ No□		
Do all tanks, including fresh water tanks, have secondary containment? Yes \Box No \Box				
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 r	adius.	
Is the brine well located within a		insite? Ver		
Is the brine well located within a	municipality or city I	imits? Yes	SLI NOLI	
Distance and direction to nearest	permanent structure,	house, schoo	ol, etc. if less than one mile:	
	1	,	, 5	
Distance and direction to nearest	water well if less that	n one mile:	· · · · · · · · · · · · · · · · · · ·	
Distance to nearest watercourse(s) floodplain playa l	ke(s) or may	n-made canal(s) or pond(s)	
if less than one mile:), nooupiani, piaya ia	axc(s), or maintain	in-made canal(s) of pond(s)	
ij iess indii one mite.				
Distance and direction to nearest	known korst fasturas	or mines if l	ass 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) *if less than one mile:* Provide API Number:

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

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

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

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

Name of aquifer(s):

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 \Box Copy of geophysical well logs if available:Attached \Box If not, well logs within one mile \Box

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 \Box No \Box Is the casing shoe set into the salt? Yes \Box No \Box If yes, how far into the salt? _____ Depth of tubing(s):

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:

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 \Box

Do you maintain a surface pressure on your well during idle times? Yes□ No□

Have you noticed large amounts of air built up during cavity pressurization? Yes \Box No \Box

Have you ever noticed fluids or air/gas bubbling up around the casing during testing or normal operations? Yes \square No \square

MONITORING: *Please provide the following information.*

Are you currently monitoring ground water contamination from your brine well or system? Yes \Box No \Box

Have you ever run a sonar log? Yes \Box No \Box *If yes*, please provide last date:_____

Provide cavern configuration (dimensions and volume) and method(s) used to estimate: If sonar report please attach \Box If other, please specify and provide a sketch of cavern: \Box

Do you have a subsidence monitoring program in place? Yes \Box No \Box

Do you have any geophysical monitoring devices, such as a seismic device positioned near your brine well? Yes \Box No \Box

Have you submitted all of your monthly, quarterly, or annual reports to the OCD? Yes \Box No \Box

Have you failed a brine well mechanical integrity test (MIT)? If yes, please attach details and results. Attached \Box

Have you ever had a casing leak? Yes \Box No \Box Have you ever had a cavern leak? Yes \Box No \Box Don't know \Box Have you ever exceeded the cavern fracture pressure? Yes \Box No \Box Don't know \Box

Do you know how to calculate your maximum pressure? Yes \Box No \Box Don't know \Box

Have you routinely looked for cracks or fissures in the ground surface around your brine well? Yes \Box No \Box

Do you have any minor or major cracks, fissures, tank settlement, line breakage from settlement or any minor subsidence. Yes \Box No \Box

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 No

Have you ever experienced unexpected pressure gain or loss in the cavern?Yes \Box No \Box If Yes, was there a difference in your normal flow rate?Yes \Box No \Box

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 \Box No \Box

Are you concerned about pulling the tubing due to the fact it may be difficult to re-enter the hole? Yes \square No \square

Are you concerned about running a sonar tool in fear of losing tool because of debris in hole? Yes \Box No \Box

Have you ever conducted a fly over of your well site? No \Box Yes \Box if yes, please provide photo.

 \Box *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:____

Is the calculated number found in #1 above greater than #2? Yes \square No \square

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."

Company Name-print name above

Company Representative- print name

Company Representative- Signature

Title_

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

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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.

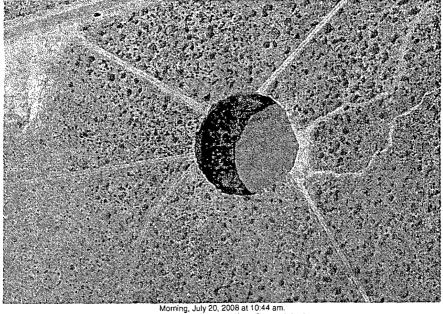
"There are several brine wells in New Mexico and we must ensure that they are all properly monitored to ensure safety and stability," stated Cabinet Secretary Joanna Prukop. "We have now seen that these wells can collapse and the extensive damage such a collapse can generate."

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:



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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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