### BW - \_\_\_999\_\_\_

## OCD POST COLLAPSE BRINE QUESTIONNAIRE FORM

# **BRINE WELL WORK GROUP**

## 3/26/09 - Present

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

<b>GENERAL INFORMATION</b>	:			
Operator Name	Well Name(s)			
API Number	Brine Well Permit #			
Date Permit Expires?				
Location: Section	Ts Rg			
FNLFSL	FEL	FWL		
GPS of well(s): Lat:	Long:			
[				
Have you reviewed and understa	and all of your permit conditions	s? Yes $\Box$ No $\Box$		
Are you presently deficient of any condition in your permit? Yes $\Box$ No $\Box$ Don't know $\Box$				
Do you operate below grade tanks 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 provi	de guidelines on subsidence and	a conapse issues? Yes I no I		
SITING INFORMATION. P	lagge provide the following info	remation and deniet on 7.5		
minute (1": 2000?) USGS Ougd Man Limit search to one mile radius				
minute (1 : 2000 ) 0305 Quu	u map. Limu seurch to one ma			
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 neares	r permanent structure, nouse, se	noon, ere. y ress mun one mue.		
Distance and direction to neares	t water well <i>if less than one mile</i>	e:		
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 neares	t known karst features or mines	if less than one mile:		



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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 □

 Copy of geophysical well logs if available:
 Attached □

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

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□ No□

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 $\Box$  Do

vern fracture pressure? Yes □ No□ Don't know □

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□	No
If Yes, was there a difference in your normal flow rate?	Yes□	No□

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  $\Box$  No $\Box$ 

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

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:
- 2. Now provide the depth (ft) from the surface to your casing shoe:

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

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:\_\_\_\_\_