

**From:** [Ayarbe, John](#)  
**To:** [Chavez, Carl J, EMNRD](#)  
**Cc:** ["Pieter Bergstein \(pieter@bergsteinenterprises.com\)"; terry@thestandardenergy.com;](#)  
["vincent@thestandardenergy.com"](#)  
**Subject:** [EXTERNAL] Salty Dog Brine Station (DP BW-8), subsidence monitoring data submittal  
**Date:** Friday, December 17, 2021 9:40:32 AM  
**Attachments:** [2021-11-29\\_DBSA-SaltyDogBrineWell-SurveyReport.pdf](#)

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Good Morning Carl,

In accordance with Condition 2.B.1 of DP BW-8 (OCD 03/24/2019), Salty Dog (OGRID 184208) monitors for potential land subsidence in the area of the brine well semiannually. Salty dog is required to report the associated survey data to OCD within 15 days of receipt. The subsidence monitoring points are surveyed using the nearest U.S. Geological Survey (USGS) benchmark referenced to NM State Plane East (NAD 83).

The survey data for the most recent monitoring event (11/23/2021) are reported in the table below. Atkins Engineering Associates Inc. conducted the survey. The surface elevations at the five subsidence monitoring points did not change between this monitoring event and the previous monitoring event in June 2021. The survey data show that there has been no land subsidence.

#### Potential Land Surface Subsidence Monitoring Data

Survey Monitoring Point	Elevation (feet msl)	
	<b>Atkins Engineering 06/29/2021</b>	<b>Atkins Engineering 11/23/2021</b>
SMP-01	3,810.10	3,810.10
SMP-02	3,809.02	3,809.02
SMP-03	3,808.83	3,808.83
SMP-04	3,806.33	3,806.33
SMP-05 (brine well)	3,810.06	3,810.06

We're still working on setting up an account for Salty Dog on the OCD E-Permitting website. We hope to be up and run by the end of the month or early next year.

Thanks!

**John P. Ayarbe**

Senior Hydrogeologist

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11/29/2021

Michael C Zbrozek  
Geologist  
Daniel B. Stephens & Associates, Inc.  
6020 Academy Road NE, Suite 100  
Albuquerque, NM 87109

Emailed to: mzbrozek@geo-logic.com on date of letter.

RE: Salty Dog Brine Facility

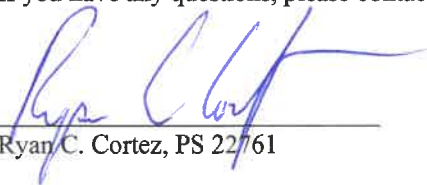
Atkins Engineering Associates, Inc. (AEA) has completed the survey at the Salty Dog Brine Facility. Field work was performed on 11/23/2021. The following table summarizes the coordinate and elevation data for the subsidence monitoring locations located on site.

Name	Northing (USft)	Easting (USft)	Latitude (DMS)	Longitude (DMS)	Elevation (USft)
SMP-1	615475.977	836301.437	32°41'17.960"	-103°22'28.520"	3810.10
SMP-2	615354.850	836264.338	32°41'16.795"	-103°22'28.966"	3809.02
SMP-3	615673.004	836230.089	32°41'19.945"	-103°22'29.334"	3808.83
SMP-4	615615.830	836543.487	32°41'19.352"	-103°22'25.673"	3806.33
SMP-5	615539.029	836348.733	32°41'18.609"	-103°22'27.960"	3810.06
Benchmark	615608.14	836310.07	32°41'19.27"	-103°22'28.40"	3808.62

Horizontal coordinates shown are coordinates provided by earlier survey. Previous survey was conducted by Gary L. Jones, NMPS 7977. Coordinates are in NM State Plane East (NAD83).

Elevations for subsidence monitoring locations were established by using closed level loops, referenced to onsite benchmark previously set by Gary L. Jones. Benchmark is a ½" rebar with plastic cap 7977.

If you have any questions, please contact me at (575) 624-2420 or [ryan@atkinseng.com](mailto:ryan@atkinseng.com)

  
Ryan C. Cortez, PS 22761

11/29/2021  
Date (Signed)

