# BW - 8

# SUBSIDENCE MONITORING REPORTS

2022

John, et al.,

Received.

Thank you.

Carl J. Chavez • UIC Group Engineering Bureau EMNRD - Oil Conservation Division 5200 Oakland Avenue, N.E. Suite 100 | Albuquerque, NM 87113 505.660.7923 www.emnrd.nm.gov



From: Ayarbe, John <jayarbe@geo-logic.com>
Sent: Wednesday, June 15, 2022 2:50 PM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Cc: 'Pieter Bergstein (pieter@bergsteinenterprises.com)' <pieter@bergsteinenterprises.com>; jack@thestandardenergy.com
Subject: [EXTERNAL] Salty Dog Brine Station (DP BW-8), subsidence monitoring data submittal

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Hi 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 (06/09/2022) 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 November 2021. The survey data show that there has been no land subsidence.

# Potential Land Surface Subsidence Monitoring Data

Survey Monitoring Point	Elevation (feet msl)		
	<u>11/23/2021</u>	<u>06/09/2022</u>	
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	

Thanks!

# John P. Ayarbe

Senior Hydrogeologist

### Daniel B. Stephens & Associates, Inc.

#### a Geo-Logic Company

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06/09/2022

John P. Ayarbe Senior Hydrogeologist Daniel B. Stephens & Associates, Inc. 6020 Academy Road NE, Suite 100 Albuquerque, NM 87109

Emailed to: jayarbe@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 06/09/2022. The following table summarizes the coordinate and elevation data for the subsidence monitoring 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 <sup>1</sup>/<sub>2</sub>" rebar with plastic cap 7977.

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

Ryan C. Cortez, PS 22761

Date (Signed)

