

**From:** [Chavez, Carl, EMNRD](#)  
**To:** [Laura Angell](#)  
**Subject:** RE: [EXTERNAL] Re: BW-37 State "4" BSW No.1 (API# 30-025-26370) Technical Issues Identified Follow-Up  
**Date:** Tuesday, April 25, 2023 11:37:00 AM  
**Attachments:** [Laura A Memo 4-5-2023.pdf](#)

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Laura,

Good morning!

A few questions/remaining issues:

What is the current bond amount relative to the \$108,000 recent closure plan cost estimate submitted today? Depending on the disparity between existing bond and the new estimated closure amount, a Bond Rider may be needed?

Has there been subsidence surveys performed at the BW-37 Facility?

I have attached my prior March 2023 document for reference because similar to BW-35, OCD had requested the most recent survey data for the subsidence monuments. You will recall that you forwarded the BW-35 surveys and OCD requested the survey company simplify the survey info. to quickly verify the elevations of the monuments. However, OCD was unsure whether surveys had been completed for BW-37 and is requesting the surveys during the permit process to verify that there are no subsidence issues.

This should help us to wrap up BW-37 Tech. Issues once resolved.

Thank you.

**Carl J. Chavez • UIC Group**  
Engineering Bureau  
EMNRD - Oil Conservation Division  
Horizon Building  
8801 Horizon Blvd., Suite 260 | Albuquerque, NM 87113  
505.660.7923 | [CarlJ.Chavez@emnrd.nm.gov](mailto:CarlJ.Chavez@emnrd.nm.gov)  
[www.emnrd.nm.gov](http://www.emnrd.nm.gov)



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**From:** Laura Angell <llanodisposal@gmail.com>  
**Sent:** Tuesday, April 25, 2023 8:55 AM  
**To:** Chavez, Carl, EMNRD <CarlJ.Chavez@emnrd.nm.gov>  
**Subject:** [EXTERNAL] Re: BW-37 State '4' BSW No.1 (API# 30-025-26370) Technical Issues Identified Follow-Up

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Good Morning Car.

Attached is the complete closure plan for BW-37..

Please let me know if you have any questions.

Thank you.

Laura Angell  
Llano Disposal, LLC  
575-399-5880

On Tue, Apr 11, 2023 at 11:38 AM Chavez, Carl, EMNRD <[CarlJ.Chavez@emnrd.nm.gov](mailto:CarlJ.Chavez@emnrd.nm.gov)> wrote:

Laura,

Re. BW-37 Technical Issues

Good morning!

The New Mexico Oil Conservation Division (OCD) is in receipt of your above subject documents.

**OCD notices that the Closure Estimate does not include the costs associated with site reclamation and post-closure monument subsidence monitoring. Please submit within the next 14 calendar days.**

**Also, similar to BW-35, OCD requests all subsidence monitoring surveys completed to date within the next 7 calendar days.**

I want to make sure that OCD has received the requested technical issues documents for BW-35 as OCD is considering issuance of the permit but cannot issue a permit until all technical issues are resolved.

Please contact me if you have questions.

Thank you.

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**From:** Laura Angell <[llanodisposal@gmail.com](mailto:llanodisposal@gmail.com)>  
**Sent:** Wednesday, April 5, 2023 2:10 PM  
**To:** Chavez, Carl, EMNRD <[CarlJ.Chavez@emnrd.nm.gov](mailto:CarlJ.Chavez@emnrd.nm.gov)>  
**Subject:** Re: [EXTERNAL] Re: BW-35 Technical Issues Identified Follow-Up

Good afternoon Carl,

I believe these conclude all of the technical issues for BW-37.

Please let me know if there's anything else you need.

Thank you.

Laura Angell  
Llano Disposal, LLC  
575-399-5880

On Tue, Mar 21, 2023 at 11:23 AM Chavez, Carl, EMNRD <[CarlJ.Chavez@emnrd.nm.gov](mailto:CarlJ.Chavez@emnrd.nm.gov)> wrote:

Laura,

Hi. Please see my responses to your questions below.

Please contact me to communicate or if you have questions.

Thank you.

**Carl J. Chavez • UIC Group**  
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EMNRD - Oil Conservation Division  
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**From:** Laura Angell <[llanodisposal@gmail.com](mailto:llanodisposal@gmail.com)>  
**Sent:** Tuesday, March 21, 2023 11:14 AM  
**To:** Chavez, Carl, EMNRD <[CarlJ.Chavez@emnrd.nm.gov](mailto:CarlJ.Chavez@emnrd.nm.gov)>  
**Subject:** Re: [EXTERNAL] Re: BW-35 Technical Issues Identified Follow-Up

Ok right. I understand that BW-35 is administratively complete. But the discharge permit said

draft - so is it the permit final and approved? I have not received a letter **[Carl says: ]** OCD has not issued the permit under a permit issuance cover letter yet. OCD when it issues the final permit will wait 30-days for any final protests. OCD cannot issue the permit until all technical issues have been resolved. We are close here but for the remaining technical issue resolutions.

The technical information listed is still needed for BW-37, right? **[Carl says: ]** OCD is on the precipice of issuing an Admin. Complete document either via E-mail or by letter. OCD brought up BW-37 under BW-35 Correspondence on Technical Issues because they may be similar. Regarding the surveying, similar to BW-35, Llano should ensure that surveying has been completed on the monuments for the BW-37 Facility. Do you have correspondence from OCD identifying any technical issues for resolution on BW-37 yet?

Thanks again.

On Tue, Mar 21, 2023 at 10:39 AM Chavez, Carl, EMNRD <[CarlJ.Chavez@emnrd.nm.gov](mailto:CarlJ.Chavez@emnrd.nm.gov)> wrote:

Laura,

Good morning!

Yes, BW-35 has been deemed admin. complete.

BW-37 is planned to be deemed admin. complete with docs sent to management for review, but no response yet.

OCD Draft Website: <https://www.emnrd.nm.gov/ocd/permitting-resources-how-tos/>

**Discharge Permit (BW-35) Llano Disposal, LLC (07/29/2022)**

The Underground Injection Control (UIC) Class III Solution Mining Well "Siringo ACS State Well No. 1" (API# 30-025-30701) is located at UL: D, Section 26, Township 17 South, Range 36 East, Latitude: N 32.81150° Longitude: W -103.33178°, NMPM, Lea County. The injection well is located approximately 8.3 miles south of Lovington, or 1.1 miles east of the intersection of Hwy-483 (Arkansas Jct.) and Hwy-50 (Buckeye Rd.).

[Administratively Complete](#) (7/29/2022)

[Application](#) (6/14/2022)

[Discharge Permit](#) (7/31/2022)

[Public Notice](#) (Estimated OCD date: Sunday 7/31/2022)

Please contact me if you have questions.

Thank you.

**Carl J. Chavez • UIC Group**

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**From:** Laura Angell <[llanodisposal@gmail.com](mailto:llanodisposal@gmail.com)>  
**Sent:** Tuesday, March 21, 2023 10:34 AM  
**To:** Chavez, Carl, EMNRD <[CarlJ.Chavez@emnrd.nm.gov](mailto:CarlJ.Chavez@emnrd.nm.gov)>  
**Subject:** [EXTERNAL] Re: BW-35 Technical Issues Identified Follow-Up

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Good Morning Carl.

I will get the rest to you quickly, I was waiting to hear if the "administratively complete" issuance was done. Did I miss that?

Thank you and have a great week!

Laura

On Tue, Mar 21, 2023 at 10:20 AM Chavez, Carl, EMNRD <[CarlJ.Chavez@emnrd.nm.gov](mailto:CarlJ.Chavez@emnrd.nm.gov)> wrote:

Laura,

Good morning!

Just following up with Llano on the technical issues identified during the permit application review process (See OCD status comments below).

OCD cannot issue a permit until all technical issues have been resolved.  
Thank you.

**Carl J. Chavez • UIC Group**  
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**From:** Laura Angell <[llanodisposal@gmail.com](mailto:llanodisposal@gmail.com)>

**Sent:** Thursday, January 26, 2023 11:04 AM

**To:** Chavez, Carl, EMNRD <[CarlJ.Chavez@emnrd.nm.gov](mailto:CarlJ.Chavez@emnrd.nm.gov)>

**Subject:** [EXTERNAL] Re: Draft Public Notice & Technical Issues Identified

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

Good morning Carl.

In response to your email:

Technical Issues:

**We are working on an updated cost estimate for closing.**

1. **We will submit the subsidence monitoring plans and results. Should this be included in Attachment G, the geological section?***[Carl says: ] Matter resolved with OCD recommendations for providing more presentable and user friendly survey data to track monument elevations. Llano agreed and is working with surveyor for easier tracking of elevations in their reports.*
2. **I believe the well diagram to be current. However, I am verifying again.***[Carl says: ] OCD is awaiting a response to this technical issue request.*
3. **We will provide the map requested.***[Carl says: ] OCD is awaiting a response to this technical issue request for map with Monitor Well(s) location(s).*

*[Carl says: ]* OCD is also awaiting the third-party cost estimate for the closure plan.

OCD's objective is to update the financial assurance during the permit renewal process.

*[Carl says: ]* Llano may want to check into the above technical issues for the recent BW-37 application.

On Wed, Jan 25, 2023 at 4:58 PM Chavez, Carl, EMNRD <[CarlJ.Chavez@emnrd.nm.gov](mailto:CarlJ.Chavez@emnrd.nm.gov)> wrote:

Laura,

Some technical issues for resolution before a permit may be issued by the OCD identified in the application for renewal thus far are:

Financial Assurance: OCD needs an updated "Third-Party" Cost Estimate for Plug and Abandonment Bonding of the brine well and surface reclamation and monitoring.

*[Carl says: ]* Unresolved.

1. Ensure subsidence monuments have been constructed and surveying has been completed.*[Carl says: ] Resolved.*
2. Ensure the well diagram is current.*[Carl says: ] Unresolved.*
3. A map to scale displaying the well, surface facilities and any monitoring wells is requested.*[Carl says: ] Unresolved.*

Thank you.

**Carl J. Chavez • UIC Group**

Engineering Bureau

EMNRD - Oil Conservation Division

[5200 Oakland Avenue, N.E. Suite 100 | Albuquerque, NM 87113](https://www.emnrd.nm.gov)

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**From:** [Chavez, Carl, EMNRD](#)  
**To:** [Laura Angell](#)  
**Subject:** RE: [EXTERNAL] Re: BW-37 State "4" BSW No.1 (API# 30-025-26370) Technical Issues Identified Follow-Up  
**Date:** Tuesday, April 25, 2023 2:19:00 PM

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Laura,

Congratulations!

We are done with the technical issues for the BW-37 application at this time.

I will be reviewing the BW-35 technical issues. Seems like Financial Assurance was still unresolved, but I will see where we're at with the remaining technical issues and reply back to you.

Thank you.

**Carl J. Chavez • UIC Group**  
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**Sent:** Tuesday, April 25, 2023 2:14 PM  
**To:** Chavez, Carl, EMNRD <[Carlj.Chavez@emnrd.nm.gov](mailto:Carlj.Chavez@emnrd.nm.gov)>  
**Subject:** Re: [EXTERNAL] Re: BW-37 State '4' BSW No.1 (API# 30-025-26370) Technical Issues Identified Follow-Up

Hi Carl.

See my notes below:

On Tue, Apr 25, 2023 at 1:38 PM Chavez, Carl, EMNRD <[Carlj.Chavez@emnrd.nm.gov](mailto:Carlj.Chavez@emnrd.nm.gov)> wrote:

Laura,

Good morning!

A few questions/remaining issues:

What is the current bond amount relative to the \$108,000 recent closure plan cost estimate

submitted today? Depending on the disparity between existing bond and the new estimated closure amount, a Bond Rider may be needed? **The bond/LOC we have in the bank is now at \$113,500, so we are good.**

Has there been subsidence surveys performed at the BW-37 Facility? **Yes, I submitted all those, and even have a new one I will submit.**

I have attached my prior March 2023 document for reference because similar to BW-35, OCD had requested the most recent survey data for the subsidence monuments. You will recall that you forwarded the BW-35 surveys and OCD requested the survey company simplify the survey info. to quickly verify the elevations of the monuments. However, OCD was unsure whether surveys had been completed for BW-37 and is requesting the surveys during the permit process to verify that there are no subsidence issues. **I believe I submitted all of the new surveys, I will re-submit along with the chart you wanted.**

This should help us to wrap up BW-37 Tech. Issues once resolved.

Thank you.

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Good Morning Car.

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---

**From:** Laura Angell <[llanodisposal@gmail.com](mailto:llanodisposal@gmail.com)>

**Sent:** Wednesday, April 5, 2023 2:10 PM

**To:** Chavez, Carl, EMNRD <[CarlJ.Chavez@emnrd.nm.gov](mailto:CarlJ.Chavez@emnrd.nm.gov)>

**Subject:** Re: [EXTERNAL] Re: BW-35 Technical Issues Identified Follow-Up

Good afternoon Carl,

**Discharge Plan Application for Brine Extraction Facilities  
Tatum Brine Station – State 4 BSW #1**

**Closure Plan**

Upon cease of operations and after regulatory approval, Llano will plug and abandon the brine well, remove all surface equipment, restore the surface to original contour and reseed it with native grasses. In addition, Llano will continue surface subsidence monument surveys for a minimum of 5 years after well plugging.

**1. Well Plug and Abandonment**

The brine well will be plugged and abandoned per WQCC regulations section 5- 209 and NMOCD rules in place at that time. As discussed in Section VII.A.11 above, the plugging plan includes swabbing approximately one foot of water out of the cavern, removing the tubing string, setting a cast iron bridge plug at 10 feet above the 8-5/8" casing window and filling the casing with a Class C high strength salt resistant cement. The wellhead will be cut off and a dry hole marker installed. Over time, large portions of the resulting salt cavern will re-solidify.

**2. Surface Restoration**

All surface equipment at the brine well location and brine station will be emptied, decommissioned, and removed either through recycle, scrapping, sale or used by the owner elsewhere. The disturbed surface at the well location and brine station will be reclaimed and re-contoured to near original condition. The disturbed area will be reseeded with a BLM grass seed mixture to establish 70% minimum regrowth coverage.

**3. Surface Subsidence Monitoring**

The annual surface subsidence monitoring program discussed in section X.A.2 above will be continued for a minimum of 5 years following plugging and abandonment of the brine well.

**Discharge Plan Application for Brine Extraction Facilities  
Tatum Brine Station – State 4 BSW #1**

**Financial Assurance Plan**

Llano Disposal, LLC has provided financial assurance for the State '4' #1 Brine Well and Tatum Brine Station via an irrevocable letter of credit in the amount of \$108,000 covering well plugging and abandonment, surface restoration and surface subsidence monitoring for 5 years after ceasing operations as detailed below.

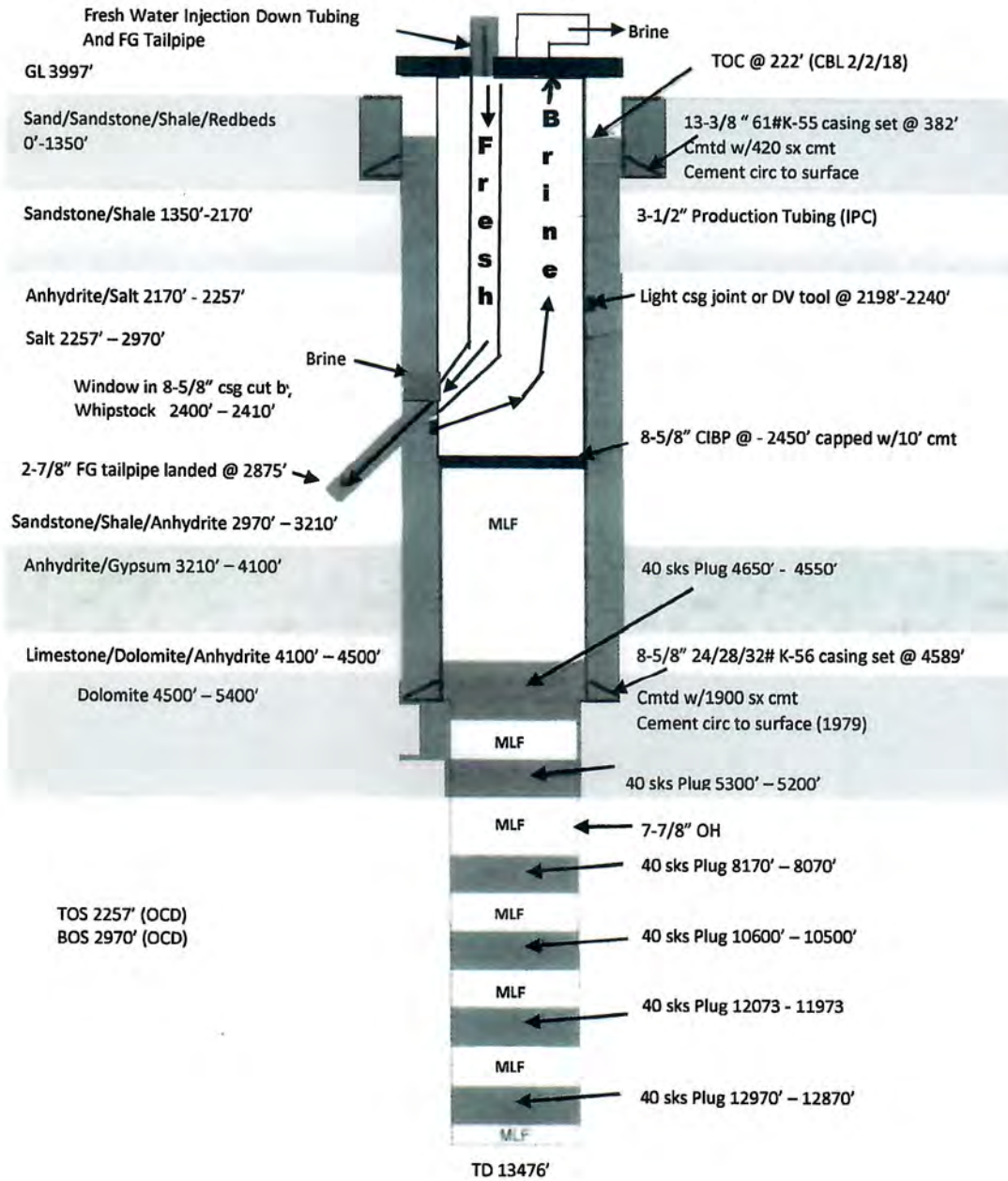
**1. Well Plugging - \$56,310.63**

See cost breakdown below.

Items	Units	Quantity	Unit Cost	Extension
A1 Supervisor	\$/day	4	\$750.00	\$3,000.00
A7 Double Derrick Rig	\$/hour	48	\$325.00	\$15,600.00
B1 Cement Equipment	\$/well	1	\$2,950.00	\$2,950.00
B5 Class C Cement	\$/sack	730	\$27.50	\$20,075.00
C1 Wireline Unit on Location	\$/day	1	\$750.00	\$750.00
C18.5 Perforation	\$/event	1	\$1,500.00	\$1,500.00
C18.5 8 5/8" CIBP	\$/event	1	\$2,750.00	\$2,750.00
E11 BOP with Delivery	\$/well	1	\$750.00	\$750.00
E13 Tubing Tongs	\$/day	4	\$150.00	\$600.00
E13 Blow Down Tank	\$/day	4	\$95.00	\$380.00
F1 Tandem Rig Up Truck	\$/hour	8	\$125.00	\$1,000.00
F4 1 Ton Truck & Driver	\$/hour	16	\$65.00	\$1,040.00
F9 Backhoe	\$/hour	8	\$95.00	\$760.00
F10 Welder	\$/hour	6	\$85.00	\$510.00
F12 P&A Marker	\$/well	1	\$150.00	\$150.00
H12 Vacuum Truck	\$/hour	8	\$95.00	\$760.00
V1 Rig Mats	\$/5 days	1	\$350.00	\$350.00
V5 Fresh Water	\$/bbl	200	\$1.25	\$250.00
M Fluid to SWD	\$/bbl	200	\$1.00	\$200.00
Sub Total				\$53,375.00
5.5 % Sales Tax				\$2,935.63
Total				\$56,310.63

Well Diagram  
Llano Disposal, LLC  
State '4' BSW #1  
API # 30-025-26370

1980' FNL x 660' FWL, UL 'E', Sec 4, T13S, R36E, Lea County, NM



Drawing Not to Scale

**Discharge Plan Application for Brine Extraction Facilities  
Tatum Brine Station – State 4 BSW #1**

**2. Surface Restoration - \$46,260.10**

See cost breakdown below:

<b>Cost</b>	<b>Description</b>
\$4,500.00	Equipment (Trucks for hauling fluids - Llano will provide its own labor)
\$2,640.00	Backhoe/Labor - 2 days to crush fiberglass tanks and PVC components at brine station
\$3,024.00	35 Ys Roll-off Dumpsters - delivery, rental and hauling to landfill
\$661.20	Lea County Landfill Charges
\$0.00	Llano will provide on-site supervision at no additional charges
\$22,064.90	Equipment/Labor -pull all fencing, remove all concrete, disassemble all metal components, re-contour land to original grade, rebuild barbed wire fence to original ranch configuration, remove underground piping, electrical conduit, winch, high line poles, winch and signage
\$2,760.00	Trucking/Disposal - of concrete to Lea County Landfill
\$4,440.00	Trucking - haul metal components to Hobbs Iron & Metal for recycle
\$5,670.00	Decommission buried polyethylene brine pipeline - costs include fresh water, trucking and pumping to wash pipeline clean and disposal of brine and wash water, then leave pipeline in place for ranching, and or fresh water sales use
<u>\$500.00</u>	Reseeding BLM mix grasses will be done by Llano personnel
<b>\$46,260.10</b>	

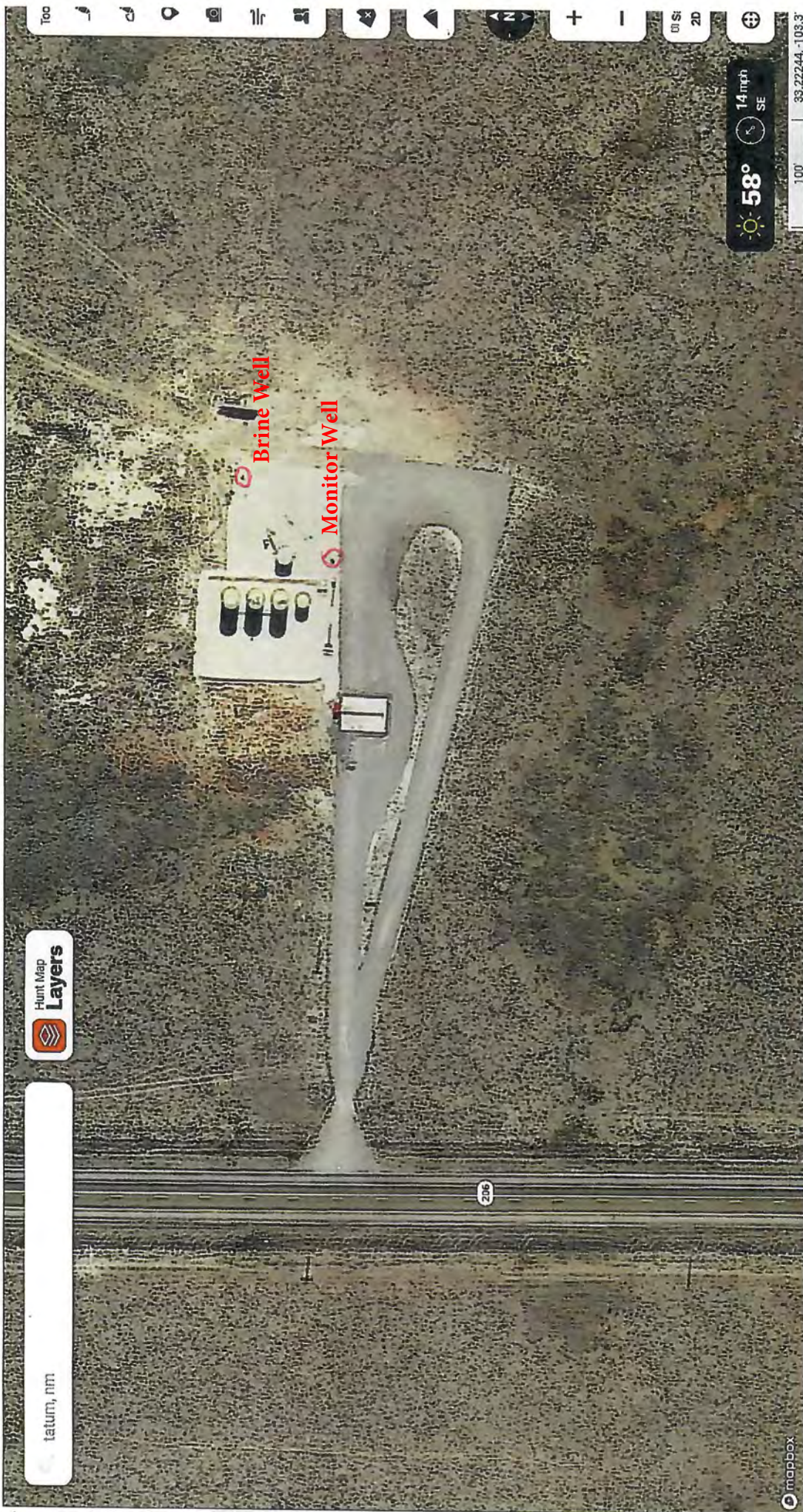
**3. Surface Subsidence Monitoring - \$5,138.35**

Based on current surface subsidence survey cost quotes, these costs total \$5,138.35 for 5 years of follow-on subsidence monument monitoring. Current cost is \$1027.67 per year per year.



tatum, nm

Hunt Map Layers



mapbox

58° 14 mph SE

33.22244, -103.3