

**Karen Blue (adpce.ad)**

---

**From:** Travis Doll <travis.doll@jettenviro.com>  
**Sent:** Thursday, July 6, 2023 7:44 AM  
**To:** gwreports  
**Cc:** Conrad, David; Reynolds, Jodi; Caldwell, Mike; Small, Blake; Travis Atwood (adpce.ad); Steve Jett P.G.; Ciara Childers Beavers  
**Subject:** Re: Piezometer Abandonments Report, Eco-Vista Class 4 Landfill, Solid Waste Permit No. 0290-S4-R2, AFIN 72-00144

All:

The recently submitted "2023-07-06 Eco-Vista - Class 4 Piezometer Abandonments Report (Draft)" file name inadvertently says "Draft", however the file is a Final version.

If you have any questions or comments regarding this submittal, please do not hesitate to contact us.

Sincerely,

**Travis Doll, P.G.**  
**Senior Geologist**  
**Jett Environmental Consulting**  
18 Lexington Oaks Court  
Foristell, MO 63348  
573-418-5488  
[travis.doll@jettenviro.com](mailto:travis.doll@jettenviro.com)  
[www.jettenviro.com](http://www.jettenviro.com)

<b>AFIN:</b> 72-00144
<b>PMT#:</b> 0290-S4-R2
<b>Received</b> By Karen Blue at 5:50 pm, Jul 6, 2023
<b>DOC ID#:</b> 84326
<b>TO:</b> BS>FILE <KMB

On Thu, Jul 6, 2023 at 7:20 AM Travis Doll <[travis.doll@jettenviro.com](mailto:travis.doll@jettenviro.com)> wrote:  
On behalf of Eco-Vista, LLC, Jett Environmental Consulting is submitting the attached Piezometer Abandonments Report for the Eco-Vista Class 4 Landfill.

If you have any questions or comments regarding this submittal, please do not hesitate to contact us.

Sincerely,

**Travis Doll, P.G.**  
**Senior Geologist**  
**Jett Environmental Consulting**  
18 Lexington Oaks Court  
Foristell, MO 63348  
573-418-5488  
[travis.doll@jettenviro.com](mailto:travis.doll@jettenviro.com)  
[www.jettenviro.com](http://www.jettenviro.com)



July 6, 2023

*Submitted via Electronic Mail*

Mr. Travis Atwood, Geologist  
Arkansas Department of Energy and Environment  
Division of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118

**Re: Piezometer Abandonment Report  
Eco-Vista, LLC, Class 4 Landfill (Permit No. 0290-S4-R2)  
AFIN: 72-00144**

Dear Mr. Atwood:

On behalf of Eco Vista, LLC, Jett Environmental Consulting is pleased to submit this Piezometer Abandonment Report to the Arkansas Department of Energy and Environment, Division of Environmental Quality (ADEQ), for work conducted on May 11-12, 2023 at the Eco-Vista Class 4 Landfill. The Report documents the abandonment of existing piezometers (C4-PZ-1 and C4-PZ-2) that were located in the footprint of the future Class 4 Landfill expansion area (see Figure 1).

## **1.0 BACKGROUND**

On behalf of Eco Vista, LLC, Jett Environmental Consulting submitted a work plan (DIN 83492) on February 24, 2023 to the ADEQ to abandon the piezometers C4-PZ-1 and C4-PZ-2. DEQ approved the work plan on April 28, 2023 (DIN 83940). Field activities associated with the well abandonments are described in the following sections.

## **2.0 DRILLING METHOD**

The abandonment of the two piezometers was performed by Environmental Works, Inc. (EWI), an Arkansas-licensed driller. The piezometers were abandoned in general conformance with American Society for Testing and Materials (ASTM) D5299-99, US Environmental Protection Agency (EPA) (160014-891034), and Arkansas Water Well Construction Commission (AWWCC) guidance documents.

Drilling activities associated with well abandonment were conducted on May 11-12, 2023. A Jett Environmental Consulting geologist provided field oversight and documentation of the abandonment activities. A track-mounted Boart Longyear LS250 MiniSonic rotary drilling rig was used for abandoning the piezometers. The piezometer abandonments were accomplished by overdrilling the piezometers with 6-inch outer diameter (OD) core barrels.

Piezometer C4-PZ-1 was overdrilled using a 6-inch core barrel to 43 feet below ground surface (ft bgs). Due to the original boring being slightly out of plumb and formation collapse encountered at 43 ft bgs, the core barrel and drilling rods were locking within the borehole. The 6-inch OD core barrel and associated drilling rods were subsequently retrieved from the boring, and the drilling was advanced from 43 to 58 ft bgs using a 5-inch OD core barrel. The 5-inch OD core barrel and drilling rods experienced similar formation collapses and locking of the drilling rods; although to a lesser extent. The C4-PZ-1 boring was advanced into bedrock to the original total depth of the piezometer, and limestone core was recovered confirming the total depth had been reached. Piezometer C4-PZ-2 was overdrilled to a total depth of 48 ft bgs using a 6-inch OD core barrel. The C4-PZ-1 boring was advanced into bedrock to the original total depth, and cherty limestone core was recovered confirming the total depth had been reached.

**3.0 PIEZOMETER ABANDONMENT**

The equipment used for piezometer abandonment was cleaned and decontaminated prior to the first piezometer and between decommissioning locations. EWI removed the protective outer casing, pipe bollards, and concrete pads at piezometers C4-PZ-1 and C4-PZ-2. Each piezometer was overdrilled to its total installed depth using sonic core barrels and was tremie grouted to the ground surface with high solids bentonite grout. The piezometer abandonment form for each piezometer is included in **Attachment 1**. A summary of the piezometer abandonment details is provided in the table below.

**Summary of Piezometer Abandonment Details**

<b>Piezometer ID</b>	<b>Overdrilled Depth (ft bgs)</b>	<b>Bentonite Grout Calculated Borehole Volume (gallons)</b>	<b>Bentonite Grout Volume Used (gallons)</b>
C4-PZ-1	58	79	120
C4-PZ-2	48	71	110

If you have any questions or comments regarding this Piezometer Abandonment Report, or require additional information, please contact me at [steve.jett@jettenviro.com](mailto:steve.jett@jettenviro.com) or 314-496-4654.

Sincerely,



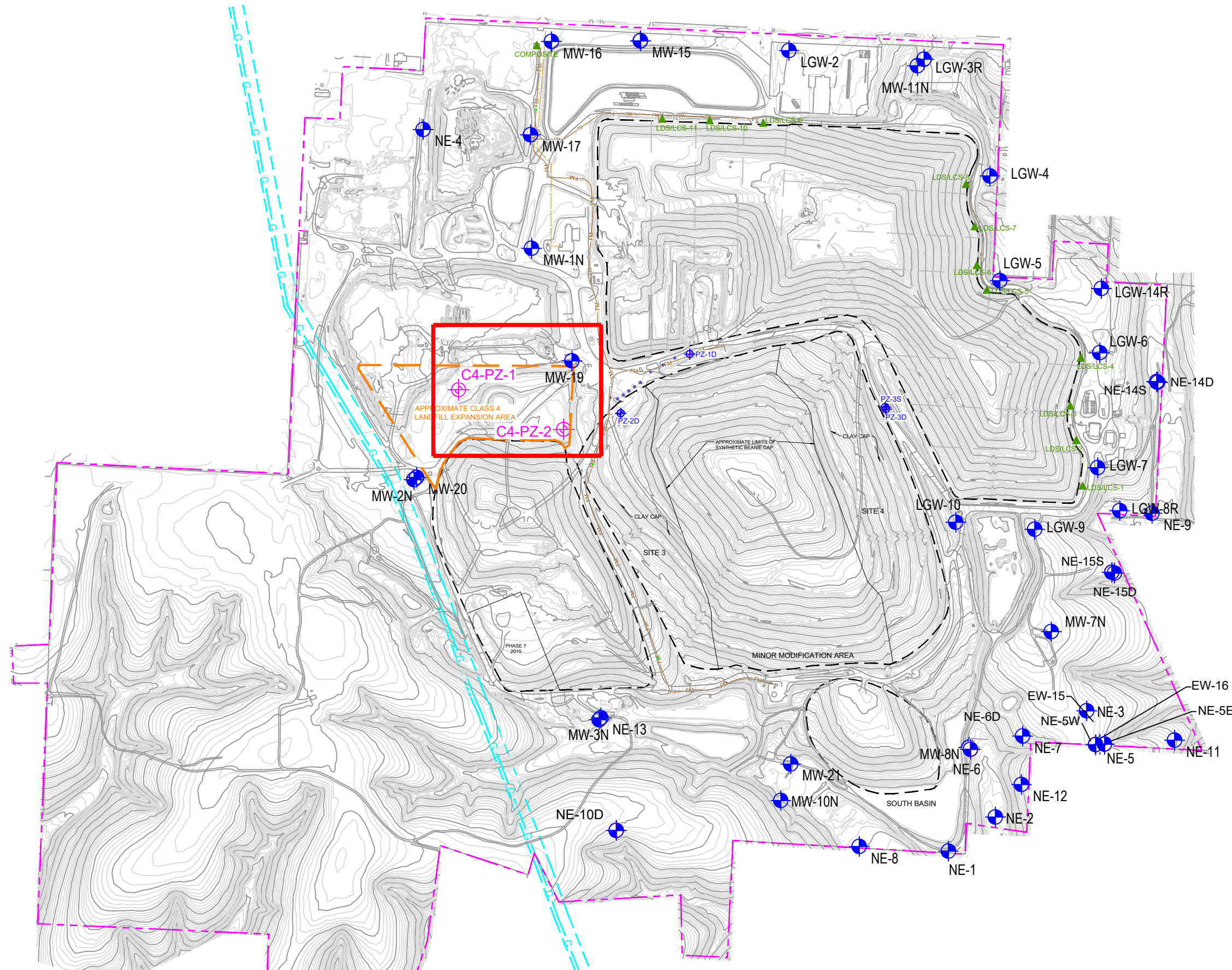
Steve Jett, P.G. No. 1826  
Owner

Travis Doll  
Senior Geologist

*Attachments: Figure 1 – Site Layout & Piezometer Locations  
Attachment 1 – Abandonment Forms*

*cc: Jodi Reynolds – WM (PDF via Email)  
Dave Conrad – WM (PDF via Email)  
Michael Caldwell – WM (PDF via Email)*





**LEGEND**

- LGW-3R Existing Groundwater Monitoring Well
- ⊕ C4-PZ-2 Piezometers Abandoned
- Property Line Boundaries (Approximate)

Note1: Basemap provided by Waste Management.

0 200 400 600 1200  
 Scale in Feet  
 Graphic Scale: 1 inch = 600 feet



**Figure 1**  
 Site Layout & Piezometer Abandonment Locations  
 Eco-Vista Landfill, Springdale, Arkansas



NATURAL RESOURCES DIVISION

Arkansas Water Well Construction Commission
10421 W Markham Street
Little Rock, AR 72205
(501) 682-3900 | Fax: (501) 682-3991
agriculture.arkansas.gov

Arkansas Water Well Abandonment Form

Contractor/Owner Contractor # Date MM/DD/YYYY

1. Well Location (Provide a sketch in the space provided) County

Township Range Section (if available) 1/4 1/4

Latitude Longitude

2. Owner

Address

3. Use of Well

4. Depth of Well Diameter of Well (feet) (inches)

5. Amount of Casing Removed Diameter (feet) (inches)

6. Sealing Material and Placement

Neat Cement Sand Cement Other Placement
Bags (94lb) from to (feet)
Gallons of Water from to (feet)
Yards of Sand from to (feet)

7. Explain Method of Placement of Material

Three horizontal lines for explaining the method of placement of material.

\*Well & Formation Diagram: Sketch a diagram showing depths of well, formations, casing (if present), grouting materials, and placement, etc.

Large empty rectangular box for the Well & Formation Diagram.





NATURAL RESOURCES DIVISION

Arkansas Water Well Construction Commission
10421 W Markham Street
Little Rock, AR 72205
(501) 682-3900 | Fax: (501) 682-3991
agriculture.arkansas.gov

Arkansas Water Well Abandonment Form

Contractor/Owner Contractor # Date MM/DD/YYYY

1. Well Location (Provide a sketch in the space provided) County

Township Range Section (if available) 1/4 1/4

Latitude Longitude

2. Owner

Address

3. Use of Well

4. Depth of Well Diameter of Well (feet) (inches)

5. Amount of Casing Removed Diameter (feet) (inches)

6. Sealing Material and Placement

Neat Cement Sand Cement Other Placement
Bags (94lb) from to (feet)
Gallons of Water from to (feet)
Yards of Sand from to (feet)

7. Explain Method of Placement of Material

Horizontal lines for explaining method of placement of material.

\*Well & Formation Diagram: Sketch a diagram showing depths of well, formations, casing (if present), grouting materials, and placement, etc.

Large empty rectangular box for the Well & Formation Diagram.