

# TECHNICAL MEMORANDUM

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**To:** Nevada Environmental Response Trust

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**Cc:** Nevada Division of Environmental Protection  
United States Environmental Protection Agency

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**From:** Dana Grady

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**Date:** November 27, 2019

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**Subject:** **Galleria Drive Bioremediation Treatability Study Monthly Progress Report**

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At the direction of the Nevada Environmental Response Trust (NERT or Trust), Tetra Tech, Inc. (Tetra Tech) has prepared this memorandum which summarizes Tetra Tech's progress during October 2019 toward successfully implementing the Galleria Drive Bioremediation Treatability Study.

## Task Progress Update: October 2019

### Task M17 – Galleria Drive Bioremediation Treatability Study

- Task Leader – Dana Grady/Dan Pastor
- Current Status
  - Treatability/Pilot Study Modification No. 8 was submitted to NDEP on July 30, 2019 to summarize a proposed new location and describe the minimal scope of work (referred to as Phase 2a activities) required to confirm the new area is appropriate for relocation of the treatability study. This memorandum was approved on August 2, 2019.
  - Field work associated with Phase 2a activities described in Treatability/Pilot Study Modification No. 8 was conducted from September 9, 2019 through September 24, 2019. Field activities included installation and development of four monitoring wells, collection of groundwater samples, groundwater gauging, and slug testing. The location of the four new monitoring wells installed during Phase 2a activities is shown on Figure 1. Well construction details are provided in Table 1. Based on anomalous analytical laboratory results from instrumentation issues, and at no cost to the Trust, the Phase 2a monitoring wells were resampled on October 23, 2019 to confirm laboratory results.
- Schedule and Progress Updates
- Following Phase 2a data evaluation, and if the new location is deemed appropriate, soil and groundwater analytical results will be presented in a treatability/pilot study modification, which will also formally request relocation of the study. Health and Safety
  - There were no safety incidents related to Task M17 during October 2019.

## CERTIFICATION

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### Galleria Drive Bioremediation Treatability Study Monthly Progress Report


**Nevada Environmental Response Trust Site  
(Former Tronox LLC Site)  
Henderson, Nevada**

#### **Nevada Environmental Response Trust (NERT) Representative Certification**

I certify that this document and all attachments submitted to the Division were prepared at the request of, or under the direction or supervision of NERT. Based on my own involvement and/or my inquiry of the person or persons who manage the systems(s) or those directly responsible for gathering the information or preparing the document, or the immediate supervisor of such person(s), the information submitted and provided herein is, to the best of my knowledge and belief, true, accurate, and complete in all material respects.

Office of the Nevada Environmental Response Trust

Le Petomane XXVII, not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

**Signature:**  \_\_\_\_\_, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

**Not Individually, but Solely  
as President of the Trustee**

**Name:** Jay A. Steinberg, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust Trustee

**Title:** Solely as President and not individually

**Company:** Le Petomane XXVII, Inc., not individually, but solely in its representative capacity as the Nevada Environmental Response Trust Trustee

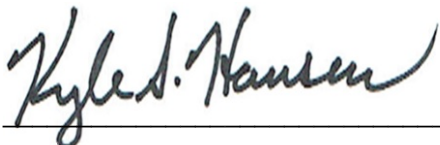
**Date:** \_\_\_\_\_ 11/27/19

## CERTIFICATION

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I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been prepared in a manner consistent with the current standards of the profession, and to the best of my knowledge, comply with all applicable federal, state, and local statutes, regulations, and ordinances. I hereby certify that all laboratory analytical data was generated by a laboratory certified by the NDEP for each constituent and media presented herein.

**Description of Services Provided:** Prepared Galleria Drive Bioremediation Treatability Study Monthly Progress Report.



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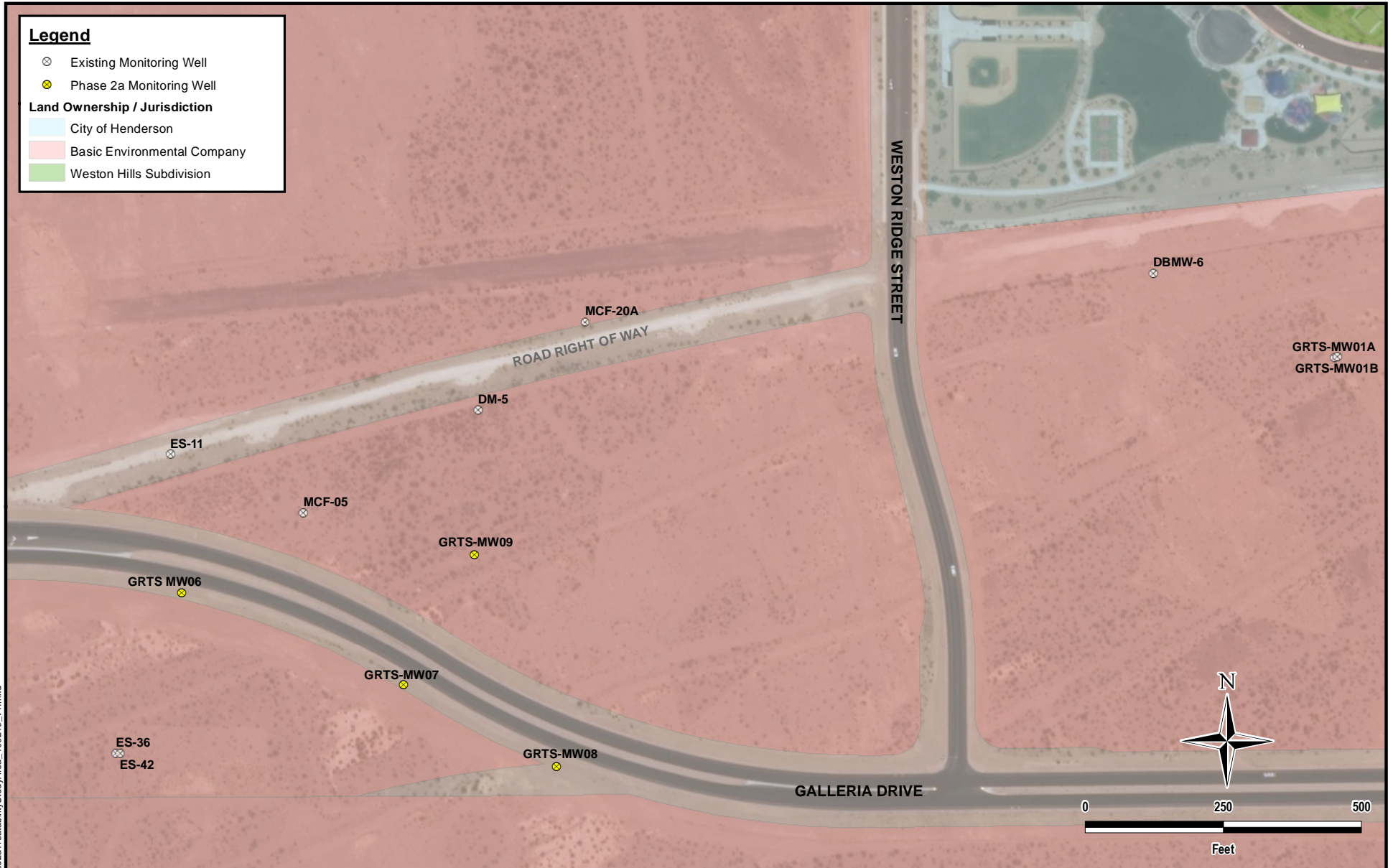
**Kyle Hansen, CEM**  
Field Operations Manager/Geologist  
Tetra Tech, Inc.

November 27, 2019

Date

Nevada CEM Certificate Number: 2167  
Nevada CEM Expiration Date: September 18, 2020

## Figures



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Imagery Source: Esri World Map, May 2017.

**Tt TETRA TECH**  
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**NEVADA ENVIRONMENTAL RESPONSE TRUST**  
 MONTHLY STATUS UPDATE  
 GALLERIA DRIVE BIOREMEDIATION TREATABILITY STUDY  
**PHASE 2A LAYOUT**

|              |                  |
|--------------|------------------|
| Project No.: | 117-7502019      |
| Date:        | OCTOBER 02, 2019 |
| Designed By: | ES               |
| Figure No.   | <b>1</b>         |

## Tables

**Table 1**  
**Phase 2a Monitoring Wells**  
 Galleria Drive Bioremediation Treatability Study

| Monitoring Well/Borehole ID                                      | Northing    | Easting   | Ground Surface Elevation | Top of Casing Elevation | Well Diameter | Borehole Diameter | Borehole Total Depth | Well Total Depth | Top of Screen | Bottom of Screen | Nominal Screen Length | Slot Size |
|--|-------------|-----------|--------------------------|-------------------------|---------------|-------------------|----------------------|------------------|---------------|------------------|-----------------------|-----------|
|  |             |           | feet amsl                | feet amsl               | inches        | inches            | feet bgs             | feet bgs         | feet bgs      | feet bgs         | feet                  | inches    |
| <b>Newly Installed Phase 2a Monitoring Wells (Septemer 2019)</b> |             |           |                          |                         |               |                   |                      |                  |               |                  |                       |           |
| <b>GRTS-MW06</b>   | 26728366.18 | 832650.57 | 1627.02                  | 1626.82                 | 2             | 6                 | 100                  | 75.3             | 55.2          | 74.8             | 20                    | 0.010     |
| <b>GRTS-MW07</b>   | 26728199.68 | 833052.36 | 1631.05                  | 1630.85                 | 2             | 6                 | 100                  | 80.3             | 60.2          | 79.8             | 20                    | 0.010     |
| <b>GRTS-MW08</b>   | 26728052.54 | 833330.01 | 1635.41                  | 1635.29                 | 2             | 6                 | 100                  | 75.3             | 55.2          | 74.8             | 20                    | 0.010     |
| <b>GRTS-MW09</b>   | 26728435.77 | 833180.42 | 1627.68                  | 1627.59                 | 2             | 6                 | 100                  | 75.3             | 55.2          | 74.8             | 20                    | 0.010     |

Notes:

amsl - above mean sea level

bTOC - below top of casing

bgs - below ground surface

- Not Available