

TECHNICAL MEMORANDUM

To: Nevada Environmental Response Trust

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

From: Dan Pastor and Dana Grady

Date: July 30, 2018

Subject: Seep Well Field Area Bioremediation Treatability Study Monthly Progress Report

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 June 2018 toward successfully implementing the Seep Well Field (SWF) Area Bioremediation Treatability Study.

Task Progress Update: June 2018

Task M11 – Seep Well Field Area Bioremediation Treatability Study (SWFTS)

- Task Leader – Dana Grady/Dan Pastor
- Current Status
 - The third injection event began on June 11, 2018 and was completed on June 30, 2018. For reference, the attached Figure 1 presents the injection and monitoring well locations. The quantities of EVO, glycerin, phosphorus, and sodium sulfite that were injected during this event were similar to the quantities injected during the first event. Both carbon substrate and distribution water was added to all injection wells, similar to the protocol followed in the first injection event, in order to maximize perchlorate reduction. A summary table of all injection quantities and injection rates will be provided in the July 2018 progress update once the final injection summary report is received from the injection subcontractor.
 - Monthly groundwater sampling will be performed in July, August, September, and October 2018. Results and preliminary analyses of groundwater sampling will be provided in upcoming monthly progress reports.
- Schedule and Progress Updates
 - This task remains on schedule.
 - The next groundwater sampling event is scheduled for the week of July 9 – July 13, 2018.
- Health and Safety
 - There were no safety incidents related to Task M11 during June 2018.

CERTIFICATION

Seep Well Field Area 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

not in individual capacity but solely as President
Signature: Jay A. Steinberg, not individually, but solely in his representative capacity as President of the Nevada Environmental Response Trust 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: 07/30/18

CERTIFICATION

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 Seep Well Field Area Bioremediation Treatability Study Monthly Progress Report.



July 30, 2018

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






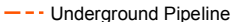


Date

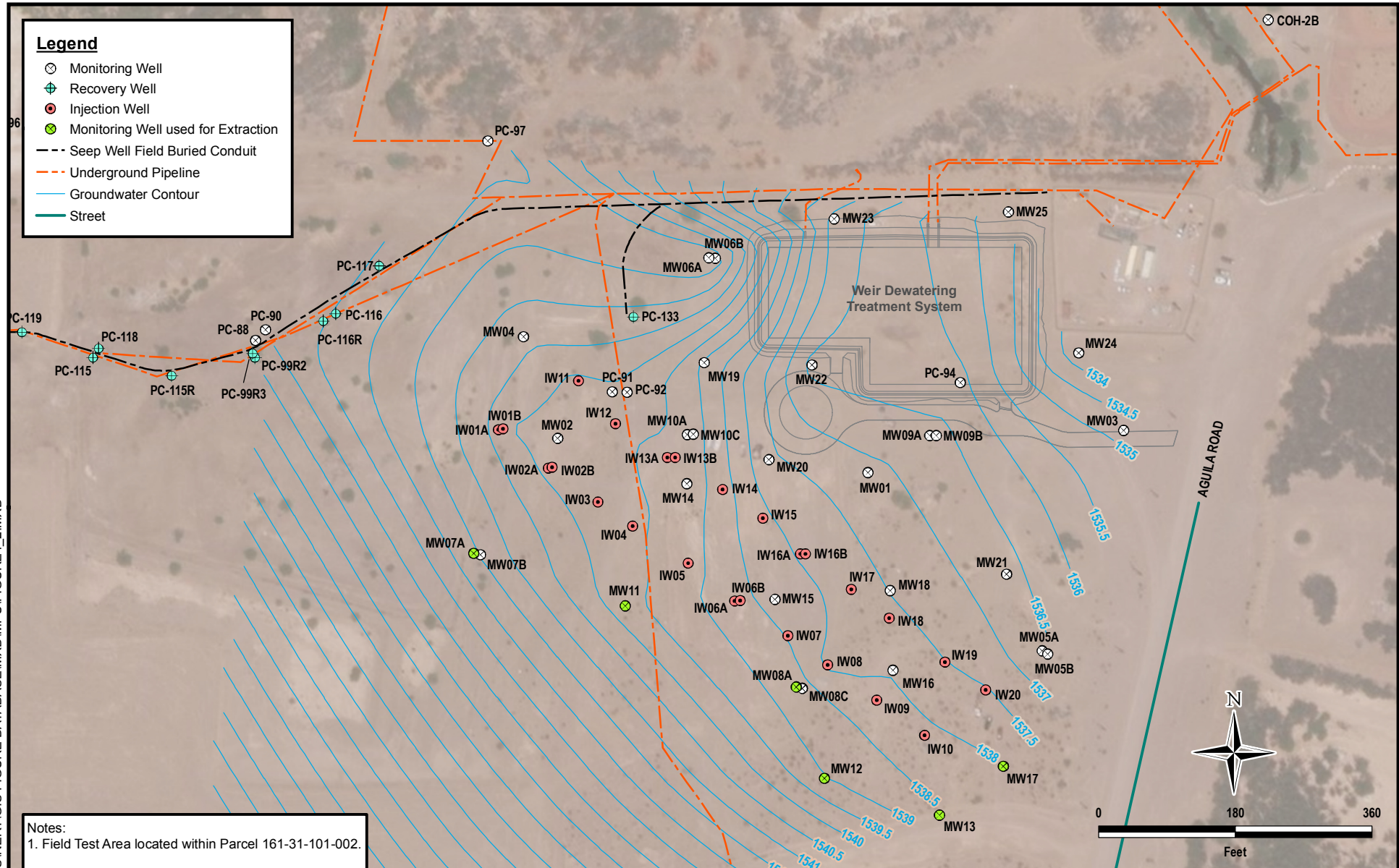
Nevada CEM Certificate Number: 2167
Nevada CEM Expiration Date: September 18, 2018

Figures

DRAFT

Legend

-  Monitoring Well
-  Recovery Well
-  Injection Well
-  Monitoring Well used for Extraction
-  Seep Well Field Buried Conduit
-  Underground Pipeline
-  Groundwater Contour
-  Street



- Notes:**
1. Field Test Area located within Parcel 161-31-101-002.
 2. The prefix 'SWTFS-' not shown for wells labeled as MW or IW. (MW03 = SWTFS-MW03)
 3. Groundwater potentiometric contours presented are based on water levels collected during the baseline groundwater sampling event in July 2017.
 4. Imagery Source: Esri World Map, June 2015

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 TETRA TECH www.tetrattech.com 150 S. 4th Street, Unit A Henderson, Nevada 89015 Phone: (702) 854-2293	NEVADA ENVIRONMENTAL RESPONSE TRUST MONTHLY PROGRESS UPDATE MONITORING AND INJECTION WELL LAYOUT		Project No.: 117-7502018 Date: MAY 31, 2018 Designed By: SRA
			Figure No. <h1>1</h1>