



505 East Huntland Dr.  
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Austin, TX 78752

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April 28, 2023

**REVIEWED**

**By Mike Buchanan at 1:54 pm, Jun 07, 2023**

Ms. Jennifer Nobui, P.G.  
Environmental Specialist A  
Environmental Bureau  
New Mexico Energy, Minerals and Natural Resources Department – Oil Conservation Division  
5200 Oakland Avenue N.E. Suite 100  
Albuquerque, New Mexico 87113

**Re: 2022 Annual Groundwater Monitoring Report  
WTX to EMSU Battery to Byrd Pump Segment Crude Oil Release  
NMOCD Incident No. NOY1822242858  
Unit P, Section 11, Township 20S, Range 36E  
Latitude 32.583874, Longitude -103.317460  
Lea County, New Mexico**

Review of the 2022 Annual Groundwater Monitoring Report: **Content Satisfactory**  
1. Continue GW Monitoring and installation per plan for bioventing.  
2. Submit 2023 Annual Report by April 1, 2024.

Dear Ms. Nobui:

On behalf of Holly Energy Partners – Operating, L.P. (HEP), TRC Environmental Corporation (TRC) is providing this *2022 Annual Groundwater Monitoring Report*. This report was prepared to summarize the 2022 groundwater monitoring activities performed at HEP's WTX to EMSU Battery to Byrd Pump Segment gathering line (Site) in accordance with the April 1, 2022, *Remediation Workplan Addendum* (Workplan Addendum), which was approved by New Mexico Oil Conservation Division (NMOCD) on April 5, 2022. Remediation at the Site is being conducted to address remaining affected soil associated with a gathering line release discovered by HEP in 2018. Quarterly groundwater monitoring activities were initiated during the third quarter of 2022.

The Site is located on private property owned by L&K Ranch, LLC, near County Road 46 in Lea County, New Mexico. The Site is located within Unit P, Section 11, Township 20 South, Range 36 East, at latitude 32.583874, longitude -103.317460. The Site location is depicted on a topographic map presented as Figure 1.

## BACKGROUND

Quarterly groundwater monitoring activities were conducted during the third and fourth quarters of 2022 in accordance with the April 2022 Workplan Addendum. While previous groundwater assessment results indicated groundwater beneath the Site has not been affected by the 2018 release from the Byrd Pump Segment gathering line, quarterly groundwater monitoring was proposed at the Site as a conservative measure to monitor groundwater quality during implementation of the soil remedies described in the April 2022 Workplan Addendum. As documented in the October 12, 2022, *Remediation and Bioventing Pilot Test Summary and Full-Scale Bioventing System Recommendation Report* (Bioventing Recommendation Report), soil remediation activities (i.e., excavation and bioventing pilot test) commenced at the Site in August 2022. Thus, quarterly groundwater monitoring commenced at the Site during the third quarter of 2022.

Pending resolution of a power source, a full-scale bioventing system will be installed and activated at the Site during 2023 in accordance with the October 2022 Bioventing Recommendation Report, which was approved by NMOCD on November 28, 2022. Quarterly groundwater monitoring activities will be

Ms. Jennifer Nobui  
2022 Annual Groundwater Monitoring Report  
April 28, 2023  
Page 2

conducted in 2023 and will be continued during operation of the planned bioventing system, as appropriate.

Copies of e-mail correspondence with NMOCD are included in Attachment A.

## GROUNDWATER MONITORING ACTIVITIES

The third quarter 2022 groundwater monitoring event was conducted on August 16, 2022, and the fourth quarter 2022 groundwater monitoring event was conducted on December 20, 2022. During each event, an oil-water interface probe was used to measure static depth to groundwater and depth to light non-aqueous phase liquid (LNAPL), if present, to the nearest 0.01 foot in each monitoring well (MW-01 through MW-05). Measurements were used to determine the groundwater elevation, seasonal groundwater elevation trends, and groundwater flow direction and gradient. Fluid level measurement data is presented in Table 1.

During each event, monitoring wells MW-01 through MW-05 were purged and sampled using low-flow, low-stress sampling techniques. An electric, submersible, variable-rate pump and clean discharge tubing were slowly lowered into each well to prevent turbulence and mixing of any sediment from the bottom of the well. The pump was placed in the approximate center of the saturated screened interval and groundwater was purged at a low rate to minimize groundwater level drawdown in the well. Discharge tubing was connected to a flow-through cell which housed a multi-parameter water quality meter. Groundwater quality parameters were measured approximately every three to five minutes during purging until at least three of the six recorded field parameters (pH, temperature, conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity) were stable. Monitoring well depth to groundwater and pump flow rate were also monitored during purging. Groundwater quality parameters are presented on the groundwater monitoring field forms included as Attachment B.

The flow-through cell was disconnected, and a groundwater sample was collected from the discharge line of the pump once field parameters were stable. Samples were collected in clean, labeled, laboratory-supplied containers. Groundwater samples were collected for laboratory analysis of total petroleum hydrocarbons (TPH) by EPA Method 8015M. All samples were handled with new nitrile gloves and labeled with the sample identification, collection date and time, sample analysis, preservatives, and initials of the samplers. The samples were then placed on ice in a laboratory-supplied cooler which remained in the custody of the sampling personnel until shipped under chain of custody to ALS Environmental of Houston, Texas. All non-dedicated equipment was decontaminated prior to being used at the Site and after use at each well.

## GROUNDWATER MONITORING RESULTS

### Gauging Data

Site-wide, synoptic fluid level gauging was performed during the quarterly groundwater monitoring events on August 16, 2022, and December 20, 2022. LNAPL was not detected in any of the monitoring wells during



Ms. Jennifer Nobui  
2022 Annual Groundwater Monitoring Report  
April 28, 2023  
Page 3

either event. Fluid level measurement data is presented in Table 1. The locations of the monitoring wells are depicted on Figures 2 through 4.

Groundwater flow was to the south-southeast at a hydraulic gradient of 0.003 feet per foot in both August 2022 and December 2022; this is generally consistent with previous monitoring events conducted at the Site. Between October 2021, the previous monitoring event, and August 2022, Site-wide groundwater elevations decreased by an average of 0.37 feet. Between August and December 2022, Site-wide groundwater elevations decreased by an average of 0.18 feet.

### Groundwater Analytical Results

Groundwater samples were analyzed for TPH. NMOCD does not have a groundwater action level for TPH; TPH concentrations are being monitored for any changes during soil remediation activities, which commenced in August 2022. Data from previous monitoring events (November 2022, May 2021, and October 2021) will serve as a baseline for the evaluation of TPH concentrations in groundwater.

In August 2022, TPH diesel range organics (DRO) was detected above report limits (RLs) in wells MW-01 (original and duplicate samples), MW-02, MW-04, and MW-05 at a maximum concentration of 0.085 milligrams per liter (mg/L) in well MW-01 (duplicate sample). TPH motor oil range organics (MRO) was detected above RLs in well MW-01 (original and duplicate samples) at a concentration of 0.11 mg/L (both samples); this is the first detection of TPH MRO above RLs since monitoring at the Site commenced in November 2020. TPH gasoline range organics (GRO) was not detected above RLs in any well during August 2022.

In December 2022, TPH DRO was detected above RLs in wells MW-01, MW-02 (original sample only), MW-04, and MW-05 at a maximum concentration of 0.095 mg/L in well MW-01. TPH MRO was detected above RLs in wells MW-01 and MW-02 (original and duplicate samples) at a maximum concentration of 0.23 in well MW-02 (original sample). The TPH MRO detection in well MW-02 was the first detection of TPH MRO above RLs since monitoring at the Site commenced in November 2020. TPH GRO was not detected above RLs in any well during December 2022.

From October 2021 (the last event conducted before soil remediation activities were commenced) to December 2022, TPH DRO concentrations increased slightly in wells MW-01 and MW-02, and was stable in wells MW-03, MW-04, and MW-05. The 2022 TPH DRO concentrations were at or below the pre-remediation historical maximum TPH DRO concentrations reported at each well (May 2021). Thus, TPH DRO concentrations are overall stable at the Site and do not indicate any increase following implementation of soil remediation activities in August 2022.

As discussed above, TPH MRO was detected for the first time at the Site in August 2022 in well MW-01 and November 2022 in well MW-02. From October 2021 (the last sampling event conducted before soil remediation activities commenced) to August 2022, the TPH MRO concentration increased from non-detect to just above the RL in well MW-01 (original and duplicate samples). From August to December 2022, TPH MRO concentrations increased slightly in well MW-01 and increased from non-detect to just above the RL



Ms. Jennifer Nobui  
2022 Annual Groundwater Monitoring Report  
April 28, 2023  
Page 4

in well MW-02 (original and duplicate samples). TPH MRO concentrations will be watched closely during 2023 monitoring events.

Groundwater sample analytical data from 2020 to 2022 are presented in Table 2. The 2022 analytical results are presented on Figure 4. Copies of the laboratory analytical reports are included in Attachment C. Groundwater elevation and TPH DRO and MRO concentration plots for wells MW-01 through MW-05 are presented in Attachment D.

### **Quality Control/Quality Assurance Results**

Data were reviewed to ensure that reported analytical results meet standard data quality objectives and laboratory-specified control limits. Data were reviewed with respect to analytical holding times, sample preservation, blanks (method and trip), laboratory control sample recoveries, matrix spike/matrix spike duplicate recoveries, and surrogate recoveries. It was determined that quality control data associated with the analytical results indicate reported concentrations of target analytes are defensible and measurement data reliability is generally within the expected limits of sampling and analytical error. The Quality Control Forms are provided in Attachment E.

### **Investigation Derived Waste Management**

The water investigation-derived waste (IDW) generated during the 2022 monitoring activities, including purge and decontamination water, was stored in properly labeled 55-gallon drums at the Site. Field supplies (paper towels, gloves, tubing, etc.) used during field activities were stored in labeled 5-gallon buckets at the Site. The IDW generated during 2022 monitoring activities will be characterized, profiled, and transported to an off-Site disposal facility under manifest in 2023.

## **CONCLUSIONS AND RECOMMENDATIONS**

The following conclusions are based on groundwater monitoring results from the third and fourth quarters of 2022:

- In August 2022 and December 2022, groundwater flow was to the south-southeast. This is generally consistent with previous monitoring events conducted at the Site.
- No LNAPL was observed or detected in any well during 2022.
- TPH DRO and/or MRO were detected above RLs in wells MW-01, MW-02, MW-04, and MW-05 during 2022.
- The 2022 groundwater monitoring results indicate stable concentration trends at the Site with the exception of TPH MRO in wells MW-01 and MW-02, which was detected above RLs in 2022 for the first time since groundwater monitoring at the Site commenced in November 2020. TPH MRO concentrations will be watched closely during 2023 groundwater monitoring events.
- Overall, the 2022 groundwater monitoring data supports previous conclusions that groundwater beneath the Site has not been affected by the 2018 HEP release.





Ms. Jennifer Nobui  
2022 Annual Groundwater Monitoring Report  
April 28, 2023  
Page 5

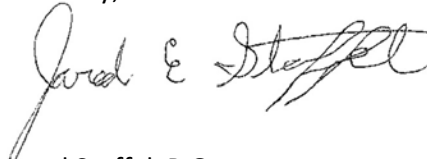
Quarterly groundwater monitoring will continue at the Site during 2023. The first quarter 2023 event was completed on February 15, 2023. A full-scale bioventing system will be installed and activated at the site during 2023 in accordance with the October 2022 Bioventing Recommendation Report. Pending resolution of a power source, it is anticipated that the system will be installed and activated at the site during 2023.

The next Annual Groundwater Monitoring Report summarizing 2023 quarterly groundwater monitoring activities will be submitted to the NMOCD within 120 days from the end of 2023. If installed and activated during 2023, the report will document installation of the bioventing system and will include system operation and maintenance data, as appropriate.

## CLOSING

If you should have any questions or comments regarding this project, please contact Arsin Sahba of HF Sinclair at (972) 689-8540 or Jared Stoffel of TRC at (432) 238-3003.

Sincerely,



Jared Stoffel, P.G.  
Project Manager



Bryan Gilbert, P.G.  
Austin Office ECW Practice Leader

Attachments: Table 1 – Summary of Groundwater Elevations  
Table 2 – Summary of Groundwater Sample Analytical Results  
Figure 1 – Site Location Map  
Figure 2 – Groundwater Potentiometric Surface Map – August 2022  
Figure 3 – Groundwater Potentiometric Surface Map – December 2022  
Figure 4 – Summary of 2022 Groundwater Sample Analytical Results  
Attachment A – Copies of E-Mail Correspondence  
Attachment B – Groundwater Sampling Forms  
Attachment C – Laboratory Analytical Reports  
Attachment D – Groundwater Elevation and TPH Plots  
Attachment E – Analytical Data Quality Control Forms

cc: Mike Bratcher, New Mexico Energy, Minerals, and Natural Resources Department, Artesia, New Mexico  
L&K Ranch LLC, Hobbs, New Mexico  
Melanie Nolan, HEP, Artesia, New Mexico  
Jason Leik, P.E., HEP, Dallas, Texas  
Arsin Sahba, P.G., HF Sinclair, Dallas, Texas



## **TABLES**

**TABLE 1**  
**SUMMARY OF GROUNDWATER ELEVATIONS**  
**WTX TO EMSU BATTERY TO BYRD PUMP CRUDE OIL RELEASE, LEA COUNTY, NM**

Monitor Well ID	Well Total Depth (feet btoc)	Ground Surface at Well Elevation (feet amsl)	Well Top of Casing Elevation (feet amsl)	Screened Interval (feet btoc)	Gauging Date	Depth to LNAPL (feet btoc)	Depth to Water (feet btoc)	LNAPL Thickness (feet)	Corrected Depth to Water (feet btoc)	Corrected Groundwater Elevation (feet amsl)	Well Saturated Thickness (feet)
MW-01	49.25	3,561.71	3,561.53	30.0 - 50.0	11/07/20	ND	36.29	0.00	36.29	3,525.24	12.96
					05/28/21	ND	36.47	0.00	36.47	3,525.06	12.78
					10/12/21	ND	36.67	0.00	36.67	3,524.86	12.58
					08/16/22	ND	37.08	0.00	37.08	3,524.45	12.17
					12/20/22	ND	37.25	0.00	37.25	3,524.28	12.00
MW-02	49.49	3,563.09	3,562.94	30.0 - 50.0	11/07/20	ND	37.59	0.00	37.59	3,525.35	11.90
					05/25/21	ND	37.81	0.00	37.81	3,525.13	11.68
					10/06/21	ND	37.95	0.00	37.95	3,524.99	11.54
					08/16/22	ND	38.35	0.00	38.35	3,524.59	11.14
					12/20/22	ND	38.53	0.00	38.53	3,524.41	10.96
MW-03	49.93	3,562.91	3,562.81	30.0 - 50.0	11/07/20	ND	37.58	0.00	37.58	3,525.23	12.35
					05/25/21	ND	37.79	0.00	37.79	3,525.02	12.14
					10/12/21	ND	37.99	0.00	37.99	3,524.82	11.94
					08/16/22	ND	38.31	0.00	38.31	3,524.50	11.62
					12/20/22	ND	38.49	0.00	38.49	3,524.32	11.44
MW-04	50.31	3,563.26	3,563.12	30.0 - 50.0	11/07/20	ND	37.92	0.00	37.92	3,525.20	12.39
					05/25/21	ND	38.12	0.00	38.12	3,525.00	12.19
					10/06/21	ND	38.28	0.00	38.28	3,524.84	12.03
					08/16/22	ND	38.64	0.00	38.64	3,524.48	11.67
					12/20/22	ND	38.82	0.00	38.82	3,524.30	11.49
MW-05	49.72	3,563.62	3,563.40	30.0 - 50.0	05/28/21	ND	38.15	0.00	38.15	3,525.25	11.57
					10/12/21	ND	38.34	0.00	38.34	3,525.06	11.38
					08/16/22	ND	38.68	0.00	38.68	3,524.72	11.04
					12/20/22	ND	38.89	0.00	38.89	3,524.51	10.83

**Notes:**

amsl = above mean sea level.

btoc = below top of casing.

LNAPL = light non-aqueous phase liquid.

ND = not detected.

**TABLE 2**  
**SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS**  
**WTX TO EMSU BATTERY TO BYRD PUMP CRUDE OIL RELEASE, LEA COUNTY, NM**

Monitoring Well ID	Sample Date	Constituent of Concern (COC)								
		BTEX (mg/L)				TPH (mg/L)			TDS (mg/L)	Chloride (mg/L)
		Benzene	Ethyl-benzene	Toluene	Total Xylenes	GRO	DRO	MRO		
Groundwater Action Levels		0.005	0.7	1.0	0.62	None	None	None	None	250
MW-01	11/7/2020	<0.0050	<0.0050	<0.0050	<0.0050	0.0980	0.084	<0.10 n	3000	1260
	5/28/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	0.24	<0.10 n	--	1270
(Dup)	5/28/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	0.17	<0.10 n	--	1250
	10/12/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	0.052	<0.10 n	--	1280
	8/16/2022	--	--	--	--	<0.0500	0.083	0.11 n	--	--
(Dup)	8/16/2022	--	--	--	--	<0.0500	0.085	0.11 n	--	--
	12/20/2022	--	--	--	--	<0.0500	0.095	0.22 n	--	--
MW-02	11/7/2020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0500	<0.050	<0.10 n	2970	1210
	5/25/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	0.12	<0.10 n	--	1250
	10/6/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	<0.050	<0.10 n	--	1220
	8/16/2022	--	--	--	--	<0.0500	0.067	<0.099 n	--	--
	12/20/2022	--	--	--	--	<0.0500	0.090	0.23 n	--	--
(Dup)	12/20/2022	--	--	--	--	<0.0500	<0.052	0.14 n	--	--
MW-03	11/7/2020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0500	<0.050	<0.10 n	1970	736
	5/25/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	0.11	<0.10 n	--	849
	10/12/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	<0.050	<0.10 n	--	862
	8/16/2022	--	--	--	--	<0.0500	<0.051	<0.10 n	--	--
	12/20/2022	--	--	--	--	<0.0500	<0.050	<0.10 n	--	--
MW-04	11/7/2020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0500	<0.050	<0.10 n	3020	1190
	5/25/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	0.064	<0.10 n	--	1310
	10/6/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	<0.050	<0.10 n	--	1230
(Dup)	10/6/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	<0.050	<0.10 n	--	1280
	8/16/2022	--	--	--	--	<0.0500	0.064	<0.11 n	--	--
	12/20/2022	--	--	--	--	<0.0500	0.054	<0.10 n	--	--
MW-05	5/28/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	0.22	<0.10 n	3690	1170
	10/12/2021	<0.005	<0.005	<0.005	<0.005	<0.0500	<0.050	<0.10 n	--	1230
	8/16/2022	--	--	--	--	<0.0500	0.065	<0.10 n	--	--
	12/20/2022	--	--	--	--	<0.0500	0.053	<0.10 n	--	--

**Notes:**

COC = constituent of concern.

Groundwater Action Levels = Human health and drinking water standards for groundwater obtained from various sources.

BTEX-Human Health Standards for Groundwater obtained from NMAC 20.6.2.3103 (A).

NMOCD does not have a groundwater action level for TPH.

Chloride-Other Standards for Domestic Water Supply obtained from NMAC 20.6.2.3103 (B).

BTEX = Benzene, Toluene, Ethylbenzene, and Total Xylenes by EPA Method 8260.

TPH = Total Petroleum Hydrocarbons by EPA Method 8015.

GRO = Gasoline Range Organics.

DRO = Diesel Range Organics.

MRO = Motor Oil Range Organics.

Chloride by EPA Method 300.0.

mg/L = milligrams of COC per Liter of groundwater.

-- = Parameter not analyzed.

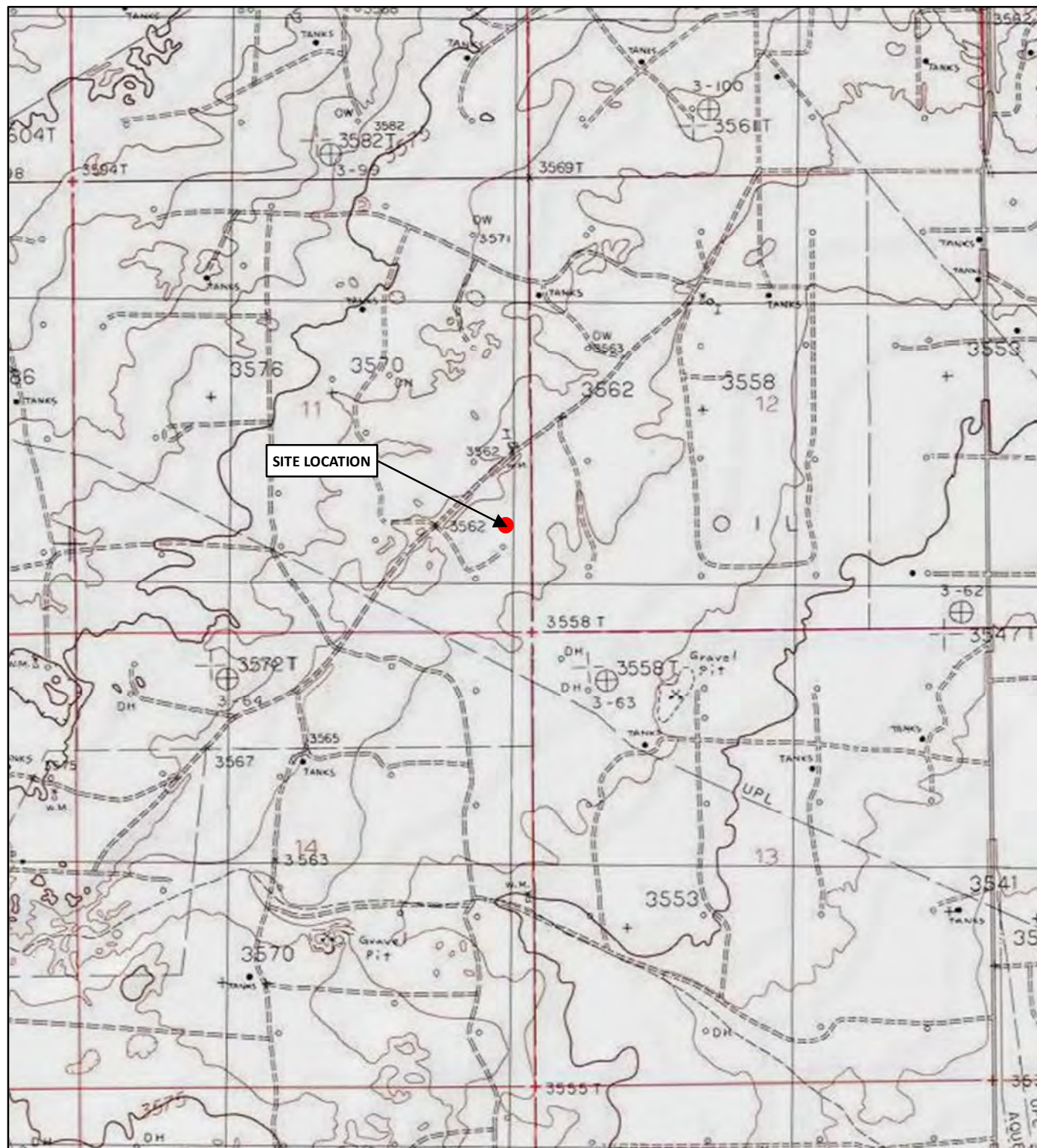
n = Not offered for accreditation.

Dup = Duplicate sample data.

Detected concentrations reported in **bold**.

Gold shading represents concentration above Other Standards for Domestic Water Supply.

## **FIGURES**



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES - MONUMENT SOUTH, NEW MEXICO (32103-E3)



505 EAST HUNTLAND DRIVE  
SUITE #250  
AUSTIN, TX 78752  
PHONE: 512.329.6080

TRC - GIS

PROJECT:

HOLLY ENERGY PARTNERS - OPERATING, L.P.  
MONUMENT, LEA COUNTY, NEW MEXICO  
WTX TO EMSU BATTERY RELEASE SITE

TITLE:

**SITE LOCATION MAP**

DRAWN BY:

M.JAGOE

CHECKED BY:

RDV

APPROVED BY:

J. STOFFEL

DATE:

JANUARY 2023

PROJ. NO.:

426140

FILE:

497744\_1\_Site Location Map.mxd

**FIGURE 1**

S:\1-PROJECTS\HOLLY\_ENERGY\_PARTNERS\466951\mxd\497744\_1\_Site Location Map.mxd -- Saved By: BLEE on 3/28/2023, 19:34:43 PM



TRC - GIS

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Map Rotation: 0

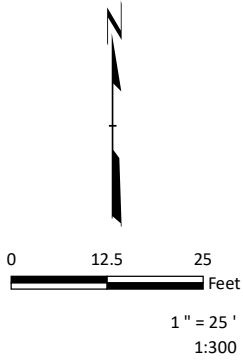
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SOURCE: AERIAL IMAGERY - GOOGLE AND THEIR DATA PARTNERS (11/2/2017)

LEGEND

- MONITORING WELL
- GROUNDWATER FLOW DIRECTION
- 6" GATHERING LINE
- RELEASE LOCATION
- POTENTIOMETRIC CONTOUR (DASHED WHERE INFERRED)
- 3524.50 GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)



PROJECT:		HOLLY ENERGY PARTNERS - OPERATING, L.P. MONUMENT, LEA COUNTY, NEW MEXICO WTX TO EMSU BATTERY RELEASE SITE	
TITLE:		GROUNDWATER POTENTIOMETRIC SURFACE MAP AUGUST 2022	
DRAWN BY:	M. JAGOE	PROJ NO.:	497744
CHECKED BY:	B. LEE	FIGURE 2	
APPROVED BY:	J. STOFFEL		
DATE:	MARCH 2023		
FILE NO.:		497744_2_GW.mxd	

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PHONE: 512.329.6080  
WWW.TRCSOLUTIONS.COM



TRC - GIS

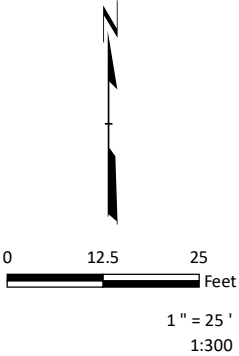
Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)  
Map Rotation: 0

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SOURCE: AERIAL IMAGERY - GOOGLE AND THEIR DATA PARTNERS (11/2/2017)

- MONITORING WELL
- GROUNDWATER FLOW DIRECTION
- 6" GATHERING LINE
- RELEASE LOCATION
- POTENTIOMETRIC CONTOUR (DASHED WHERE INFERRED)
- 3524.50 GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)



PROJECT:		HOLLY ENERGY PARTNERS - OPERATING, L.P. MONUMENT, LEA COUNTY, NEW MEXICO WTX TO EMSU BATTERY RELEASE SITE	
TITLE:		GROUNDWATER POTENTIOMETRIC SURFACE MAP DECEMBER 2022	
DRAWN BY:	M. JAGOE	PROJ NO.:	497744
CHECKED BY:	B. LEE	FIGURE 3	
APPROVED BY:	J. STOFFEL		
DATE:	MARCH 2023		
FILE NO.:		497744_3_GW.mxd	

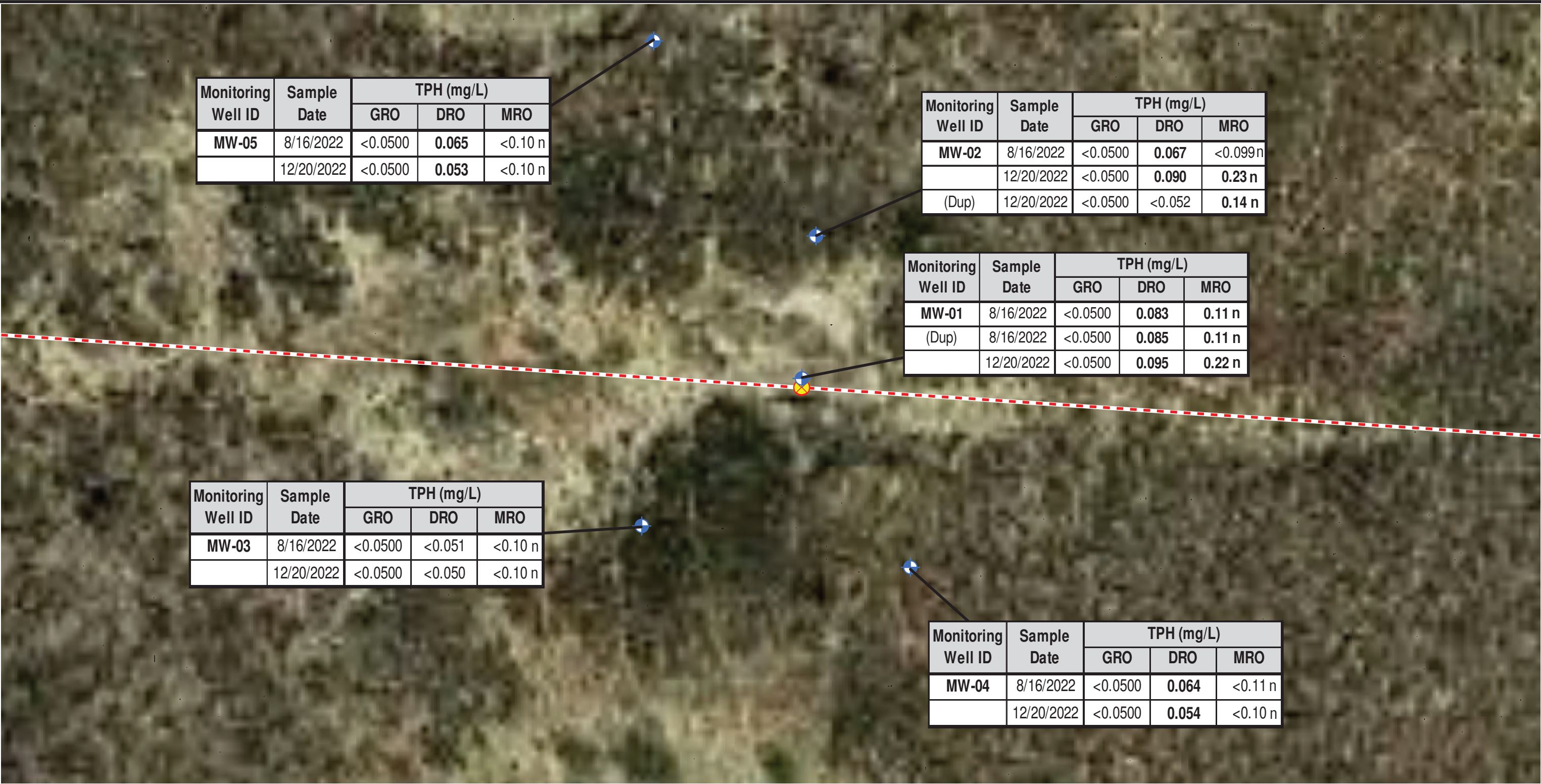


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PHONE: 512.329.6080  
WWW.TRCOLUTIONS.COM



Coordinate System: NAD 1983 2011 StatePlane New Mexico East FIPS 3001 Ft US (Foot US)  
Map Rotation: 0

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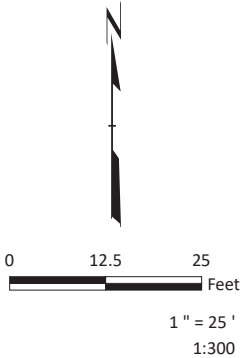


LEGEND

- MONITORING WELL
- 6" GATHERING LINE
- RELEASE LOCATION

NOTES:  
New Mexico Oil Conservation Division (NMOCD) does not have a groundwater action level for TPH.  
TPH = Total Petroleum Hydrocarbons.  
GRO = Gasoline Range Organics.  
DRO = Diesel Range Organics.  
MRO = Motor Oil Range Organics.  
mg/L = milligrams per liter.  
(Dup) = Duplicate sample data.  
n = Not offered for accreditation.  
Detected concentrations reported in bold.

SOURCE: AERIAL IMAGERY - GOOGLE AND THEIR DATA PARTNERS (11/2/2017)



PROJECT:		HOLLY ENERGY PARTNERS - OPERATING, L.P. MONUMENT, LEA COUNTY, NEW MEXICO WTX TO EMSU BATTERY RELEASE SITE	
TITLE:		SUMMARY OF 2022 GROUNDWATER SAMPLE ANALYTICAL RESULTS	
DRAWN BY:	M. JAGOE	PROJ NO.:	497744
CHECKED BY:	B. LEE	FIGURE 4	
APPROVED BY:	J. STOFFEL		
DATE:	MARCH 2023		
		505 EAST HUNTLAND DRIVE, SUITE 250 AUSTIN, TX 78752 PHONE: 512.329.6080 WWW.TRCSOLUTIONS.COM	
FILE NO.:		497744_4_GW.mxd	

**ATTACHMENT A – COPIES OF E-MAIL CORRESPONDENCE**



**Stoffel, Jared**

---

**From:** Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>  
**Sent:** Tuesday, April 5, 2022 4:42 PM  
**To:** Stoffel, Jared; Bratcher, Mike, EMNRD  
**Cc:** Gilbert, Bryan; Sahba, Arsin M.; Melanie Nolan; Trevor.baird; mark.shemaria; Clark, Darija; Helbert, Dana; Hoover, Shannon; Varnell, Richard  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

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**ALWAYS** hover over the link to preview the actual URL/site and confirm its legitimacy.

Jared,

The OCD approves this workplan. Please proceed with the project.

Cheers,

**Chad Hensley** • Environmental Science & Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

811 First St. | Artesia, NM 88210

Office: 575.748.1283 | Cell: 575-703-1723

[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)

<http://www.emnrd.state.nm.us/OCD/>



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**From:** Stoffel, Jared <JStoffel@trccompanies.com>

**Sent:** Friday, April 1, 2022 2:59 PM

**To:** Hensley, Chad, EMNRD <Chad.Hensley@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>

**Cc:** Gilbert, Bryan <BGilbert@trccompanies.com>; Sahba, Arsin M. <arsin.sahba@hollyfrontier.com>; Melanie Nolan <melanie.nolan@hollyenergy.com>; Trevor.baird <Trevor.baird@hollyenergy.com>; mark.shemaria <mark.shemaria@hollyenergy.com>; Clark, Darija <dclark@trccompanies.com>; Helbert, Dana <DHelbert@trccompanies.com>; Hoover, Shannon <SHoover@trccompanies.com>; Varnell, Richard <RVarnell@trccompanies.com>

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Thank you.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752  
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Thank you.

**Jared Stoffel, P.G.**  
Project Manager



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**Stoffel, Jared**

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**From:** Stoffel, Jared  
**Sent:** Monday, August 1, 2022 11:29 AM  
**To:** Nobui, Jennifer, EMNRD; Billings, Bradford, EMNRD; mike.bratcher@state.nm.us  
**Cc:** Gilbert, Bryan; Sahba, Arsin M.; Melanie Nolan; Trevor.baird; Clark, Darija; Helbert, Dana; Hoover, Shannon; Varnell, Richard  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

All,

I would like to follow up on our notification of the pilot test, soil boring activities, remedial excavation activities, and quarterly groundwater sampling activities with an updated timeline. Field activities were projected to be completed by August 12. An updated timeline is provided below.

- Bioventing Pilot Test - Field activities began on August 3, 2022, but the pilot test did not commence until August 9 (Day 1) due to equipment issues and troubleshooting. The pilot test is anticipated to be complete on August 15 (Day 7).
- Soil Boring – Drilling was originally scheduled for August 8. Due to a change in drill rig availability (the drill rig scheduled for the work was not operational), drilling is now scheduled for August 15.
- Quarterly Groundwater Monitoring – Due to the revised bioventing pilot test schedule (the monitoring wells cannot be gauged and sampled during the pilot test), quarterly groundwater monitoring activities are scheduled to begin August 16. This is a slight deviation from the schedule presented in the April 2022 Remediation Work Plan Addendum, which indicated quarterly groundwater monitoring would commence within 90 days of NMOCD approval of the Work Plan (i.e., August 13). Groundwater monitoring activities are expected to take 1 – 2 days.
- Remedial Excavation and Sampling – Due to the revised bioventing pilot test and quarterly groundwater monitoring schedules, remedial excavation and sampling activities are scheduled for August 17 to 19.

Please let me know if you have any questions or concerns. Thank you.

**Jared Stoffel, P.G.**  
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**From:** Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>  
**Sent:** Thursday, August 4, 2022 11:48 AM  
**To:** Stoffel, Jared <JStoffel@trccompanies.com>  
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Hi,

Thank you for notification. Please keep this communication and include in allied report(s).

Bradford Billings  
EMNRD/OCD

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**Sent:** Monday, August 1, 2022 10:29 AM

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**Sent:** Thursday, April 7, 2022 8:16 AM

**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>

**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Jared,

Good morning. The approval is for UIC and the remediation.

Cheers,

**Chad Hensley** • Environmental Science & Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

811 First St. | Artesia, NM 88210

Office: 575.748.1283 | Cell: 575-703-1723

[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)

<http://www.emnrd.state.nm.us/OCD/>



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**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>

**Sent:** Wednesday, April 6, 2022 3:42 PM

**To:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

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**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752

F: 512 329 8750 | C: 432 238 3003

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**From:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>**Sent:** Tuesday, April 5, 2022 4:42 PM**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Jared,

The OCD approves this workplan. Please proceed with the project.

Cheers,

**Chad Hensley** • Environmental Science & Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

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[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)<http://www.emnrd.state.nm.us/OCD/>

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**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>**Sent:** Friday, April 1, 2022 2:59 PM**To:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard

<[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>

**Subject:** [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Mr. Hensley and Mr. Bratcher,

Please see the attached addendum to the NMOCD-approved November 12, 2021, *Site Characterization Report and Remediation Workplan* for the WTX to EMSU Battery to Byrd Pump Segment Crude Oil Release Site (NOY1822242858). Included in the appendices are the requested C-108 form and associated federal underground injection form. Please let us know if you require any additional information. Otherwise we will stand by for NMOCD's approval of the Remediation Workplan Addendum and the authorization to inject.

Thank you.

**Jared Stoffel, P.G.**  
Project Manager



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**Stoffel, Jennifer R.**

---

**From:** Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>  
**Sent:** Monday, August 15, 2022 12:20 PM  
**To:** Stoffel, Jared  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Hello,

Thank you for the notification. Please keep this communication and include in allied report(s)

Bradford Billings  
EMNRD/OCD

---

**From:** Stoffel, Jared <JStoffel@trccompanies.com>  
**Sent:** Friday, August 12, 2022 12:49 PM  
**To:** Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>  
**Cc:** Sahba, Arsin <Arsin.Sahba@HFSinclair.com>; Trevor.baird <Trevor.baird@hollyenergy.com>; Melanie Nolan <melanie.nolan@hollyenergy.com>; Clark, Darija <dclark@trccompanies.com>; Gilbert, Bryan <BGilbert@trccompanies.com>; Hoover, Shannon <SHoover@trccompanies.com>; Helbert, Dana <DHelbert@trccompanies.com>; Varnell, Richard <RVarnell@trccompanies.com>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

All,

I would like to follow up on our notification of the pilot test, soil boring activities, remedial excavation activities, and quarterly groundwater sampling activities with an updated timeline. Field activities were projected to be completed by August 12. An updated timeline is provided below.

- Bioventing Pilot Test - Field activities began on August 3, 2022, but the pilot test did not commence until August 9 (Day 1) due to equipment issues and troubleshooting. The pilot test is anticipated to be complete on August 15 (Day 7).
- Soil Boring – Drilling was originally scheduled for August 8. Due to a change in drill rig availability (the drill rig scheduled for the work was not operational), drilling is now scheduled for August 15.
- Quarterly Groundwater Monitoring – Due to the revised bioventing pilot test schedule (the monitoring wells cannot be gauged and sampled during the pilot test), quarterly groundwater monitoring activities are scheduled to begin August 16. This is a slight deviation from the schedule presented in the April 2022 Remediation Work Plan Addendum, which indicated quarterly groundwater monitoring would commence within 90 days of NMOCD approval of the Work Plan (i.e., August 13). Groundwater monitoring activities are expected to take 1 – 2 days.

- Remedial Excavation and Sampling – Due to the revised bioventing pilot test and quarterly groundwater monitoring schedules, remedial excavation and sampling activities are scheduled for August 17 to 19.

Please let me know if you have any questions or concerns. Thank you.

**Jared Stoffel, P.G.**  
Project Manager



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---

**From:** Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>  
**Sent:** Thursday, August 4, 2022 11:48 AM  
**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Hi,

Thank you for notification. Please keep this communication and include in allied report(s).

Bradford Billings  
EMNRD/OCD

---

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Sent:** Monday, August 1, 2022 10:29 AM  
**To:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)>; Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

All,

I would like to submit a notification that the pilot test, soil boring activities, remedial excavation activities, and quarterly groundwater sampling activities are all scheduled to begin this week on August 3, 2022. The activities are projected to be completed within 2 weeks. This email is intended to notify you of both the remedial and monitoring activities occurring onsite and the collection of final samples from the remedial excavation during this time period in accordance with NMAC 19.15.29.12 D(1)(a). Please let me know if there are any questions or concerns. Thank you.

Jared Stoffel, P.G.  
Project Manager



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**From:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>  
**Sent:** Thursday, April 7, 2022 8:16 AM  
**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
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Jared,

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**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Sent:** Wednesday, April 6, 2022 3:42 PM

**To:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
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Chad,

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Project Manager



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**Jared Stoffel, P.G.**  
Project Manager



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**Stoffel, Jared**

---

**From:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>  
**Sent:** Wednesday, August 17, 2022 1:59 PM  
**To:** Stoffel, Jared; Billings, Bradford, EMNRD; Bratcher, Mike, EMNRD  
**Cc:** Sahba, Arsin; Trevor.baird; Melanie Nolan; Clark, Darija; Gilbert, Bryan; Hoover, Shannon; Helbert, Dana; Varnell, Richard; Hamlet, Robert, EMNRD; Harimon, Jocelyn, EMNRD  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Thank you Jared for the notification.

Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Please let us know if you encounter any delays or have any questions.

Thanks,  
Jennifer Nobui

---

**From:** Stoffel, Jared <JStoffel@trccompanies.com>  
**Sent:** Friday, August 12, 2022 12:49 PM  
**To:** Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>  
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Please let me know if you have any questions or concerns. Thank you.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752  
F: 512 329 8750 | C: 432 238 3003  
[LinkedIn](#) | [Twitter](#) | [Blog](#) | [TRCcompanies.com](#)

---

**From:** Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>  
**Sent:** Thursday, August 4, 2022 11:48 AM  
**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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**ALWAYS** hover over the link to preview the actual URL/site and confirm its legitimacy.

Hi,

Thank you for notification. Please keep this communication and include in allied report(s).

Bradford Billings  
EMNRD/OCD

---

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Sent:** Monday, August 1, 2022 10:29 AM  
**To:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)>; Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
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Cheers,

**Chad Hensley** • Environmental Science & Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
811 First St. | Artesia, NM 88210  
Office: 575.748.1283 | Cell: 575-703-1723  
[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)  
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**Sent:** Wednesday, April 6, 2022 3:42 PM

**To:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

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Project Manager



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**Sent:** Tuesday, April 5, 2022 4:42 PM

**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

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Jared,

The OCD approves this workplan. Please proceed with the project.

Cheers,

**Chad Hensley** • Environmental Science & Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

811 First St. | Artesia, NM 88210

Office: 575.748.1283 | Cell: 575-703-1723

[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)

<http://www.emnrd.state.nm.us/OCD/>



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**Sent:** Friday, April 1, 2022 2:59 PM

**To:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

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

Mr. Hensley and Mr. Bratcher,

Please see the attached addendum to the NMOCD-approved November 12, 2021, *Site Characterization Report and Remediation Workplan* for the WTX to EMSU Battery to Byrd Pump Segment Crude Oil Release Site (NOY1822242858). Included in the appendices are the requested C-108 form and associated federal underground injection form. Please let us know if you require any additional information. Otherwise we will stand by for NMOCD's approval of the Remediation Workplan Addendum and the authorization to inject.

Thank you.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752

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**Stoffel, Jared**

---

**From:** Gilbert, Bryan  
**Sent:** Tuesday, August 23, 2022 5:31 PM  
**To:** Nobui, Jennifer, EMNRD; Stoffel, Jared; Billings, Bradford, EMNRD; Bratcher, Mike, EMNRD  
**Cc:** Sahba, Arsin; Trevor.baird; Melanie Nolan; Clark, Darija; Hoover, Shannon; Helbert, Dana; Varnell, Richard; Hamlet, Robert, EMNRD; Harimon, Jocelyn, EMNRD  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

Good Afternoon Jennifer,

Based on the initial confirmation soil sample analytical results for the excavation performed on August 17 and 18, additional remedial excavation and sampling will be conducted at the site on Thursday, August 25.

Please let me know if you have any questions or concerns.

Thanks!

Bryan Gilbert, P.G.  
Austin Office ECW Practice Leader



505 E. Huntland Drive, Suite 250, Austin, TX 78752

C: 925.699.6184 | F: 512.329.8750

[LinkedIn](#) | [Twitter](#) | [Blog](#) | [TRCcompanies.com](#)

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**From:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>  
**Sent:** Wednesday, August 17, 2022 1:59 PM  
**To:** Stoffel, Jared <JStoffel@trccompanies.com>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>  
**Cc:** Sahba, Arsin <Arsin.Sahba@HFSinclair.com>; Trevor.baird <Trevor.baird@hollyenergy.com>; Melanie Nolan <melanie.nolan@hollyenergy.com>; Clark, Darija <dclark@trccompanies.com>; Gilbert, Bryan <BGilbert@trccompanies.com>; Hoover, Shannon <SHoover@trccompanies.com>; Helbert, Dana <DHelbert@trccompanies.com>; Varnell, Richard <RVarnell@trccompanies.com>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@state.nm.us>  
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Thank you Jared for the notification.

Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Please let us know if you encounter any delays or have any questions.

Thanks,  
Jennifer Nobui

---

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Sent:** Friday, August 12, 2022 12:49 PM  
**To:** Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>; Nobui, Jennifer, EMNRD <[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
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**Sent:** Tuesday, April 5, 2022 4:42 PM  
**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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**ALWAYS** hover over the link to preview the actual URL/site and confirm its legitimacy.

Jared,

The OCD approves this workplan. Please proceed with the project.

Cheers,

**Chad Hensley** • Environmental Science & Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
811 First St. | Artesia, NM 88210  
Office: 575.748.1283 | Cell: 575-703-1723  
[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Sent:** Friday, April 1, 2022 2:59 PM

**To:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>

**Subject:** [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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

Mr. Hensley and Mr. Bratcher,

Please see the attached addendum to the NMOCD-approved November 12, 2021, *Site Characterization Report and Remediation Workplan* for the WTX to EMSU Battery to Byrd Pump Segment Crude Oil Release Site (NOY1822242858). Included in the appendices are the requested C-108 form and associated federal underground injection form. Please let us know if you require any additional information. Otherwise we will stand by for NMOCD's approval of the Remediation Workplan Addendum and the authorization to inject.

Thank you.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752  
F: 512 329 8750 | C: 432 238 3003  
[LinkedIn](#) | [Twitter](#) | [Blog](#) | [TRCcompanies.com](http://TRCcompanies.com)

**Stoffel, Jared**

---

**From:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>  
**Sent:** Tuesday, August 23, 2022 5:34 PM  
**To:** Gilbert, Bryan; Stoffel, Jared; Billings, Bradford, EMNRD; Bratcher, Mike, EMNRD  
**Cc:** Sahba, Arsin; Trevor.baird; Melanie Nolan; Clark, Darija; Hoover, Shannon; Helbert, Dana; Varnell, Richard; Hamlet, Robert, EMNRD; Harimon, Jocelyn, EMNRD  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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**ALWAYS** hover over the link to preview the actual URL/site and confirm its legitimacy.

Thanks Gilbert for the notification.

Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,  
Jennifer Nobui

---

**From:** Gilbert, Bryan <BGilbert@trccompanies.com>  
**Sent:** Tuesday, August 23, 2022 4:31 PM  
**To:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@state.nm.us>; Stoffel, Jared <JStoffel@trccompanies.com>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>  
**Cc:** Sahba, Arsin <Arsin.Sahba@HFSinclair.com>; Trevor.baird <Trevor.baird@hollyenergy.com>; Melanie Nolan <melanie.nolan@hollyenergy.com>; Clark, Darija <dclark@trccompanies.com>; Hoover, Shannon <SHoover@trccompanies.com>; Helbert, Dana <DHelbert@trccompanies.com>; Varnell, Richard <RVarnell@trccompanies.com>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@state.nm.us>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

Good Afternoon Jennifer,

Based on the initial confirmation soil sample analytical results for the excavation performed on August 17 and 18, additional remedial excavation and sampling will be conducted at the site on Thursday, August 25.

Please let me know if you have any questions or concerns.

Thanks!

Bryan Gilbert, P.G.  
Austin Office ECW Practice Leader



505 E. Huntland Drive, Suite 250, Austin, TX 78752

C: 925.699.6184 | F: 512.329.8750

[LinkedIn](#) | [Twitter](#) | [Blog](#) | [TRCcompanies.com](#)

---

**From:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)>

**Sent:** Wednesday, August 17, 2022 1:59 PM

**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

**Cc:** Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>; Hamlet, Robert, EMNRD <[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>; Harimon, Jocelyn, EMNRD <[Jocelyn.Harimon@state.nm.us](mailto:Jocelyn.Harimon@state.nm.us)>

**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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**ALWAYS** hover over the link to preview the actual URL/site and confirm its legitimacy.

Thank you Jared for the notification.

Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Please let us know if you encounter any delays or have any questions.

Thanks,  
Jennifer Nobui

---

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>

**Sent:** Friday, August 12, 2022 12:49 PM

**To:** Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>; Nobui, Jennifer, EMNRD <[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

**Cc:** Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>

**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

All,

I would like to follow up on our notification of the pilot test, soil boring activities, remedial excavation activities, and quarterly groundwater sampling activities with an updated timeline. Field activities were projected to be completed by August 12. An updated timeline is provided below.

- Bioventing Pilot Test - Field activities began on August 3, 2022, but the pilot test did not commence until August 9 (Day 1) due to equipment issues and troubleshooting. The pilot test is anticipated to be complete on August 15 (Day 7).
- Soil Boring – Drilling was originally scheduled for August 8. Due to a change in drill rig availability (the drill rig scheduled for the work was not operational), drilling is now scheduled for August 15.
- Quarterly Groundwater Monitoring – Due to the revised bioventing pilot test schedule (the monitoring wells cannot be gauged and sampled during the pilot test), quarterly groundwater monitoring activities are scheduled to begin August 16. This is a slight deviation from the schedule presented in the April 2022 Remediation Work Plan Addendum, which indicated quarterly groundwater monitoring would commence within 90 days of NMOCD approval of the Work Plan (i.e., August 13). Groundwater monitoring activities are expected to take 1 – 2 days.
- Remedial Excavation and Sampling – Due to the revised bioventing pilot test and quarterly groundwater monitoring schedules, remedial excavation and sampling activities are scheduled for August 17 to 19.

Please let me know if you have any questions or concerns. Thank you.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752  
F: 512 329 8750 | C: 432 238 3003  
[LinkedIn](#) | [Twitter](#) | [Blog](#) | [TRCcompanies.com](#)

---

**From:** Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>  
**Sent:** Thursday, August 4, 2022 11:48 AM  
**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

This is an **EXTERNAL** email. Do not click links or open attachments unless you validate the sender and know the content is safe.

**ALWAYS** hover over the link to preview the actual URL/site and confirm its legitimacy.

Hi,

Thank you for notification. Please keep this communication and include in allied report(s).

Bradford Billings  
EMNRD/OCD

---

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Sent:** Monday, August 1, 2022 10:29 AM  
**To:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)>; Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>



**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

All,

I would like to submit a notification that the pilot test, soil boring activities, remedial excavation activities, and quarterly groundwater sampling activities are all scheduled to begin this week on August 3, 2022. The activities are projected to be completed within 2 weeks. This email is intended to notify you of both the remedial and monitoring activities occurring onsite and the collection of final samples from the remedial excavation during this time period in accordance with NMAC 19.15.29.12 D(1)(a). Please let me know if there are any questions or concerns. Thank you.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752  
F: 512 329 8750 | C: 432 238 3003  
[LinkedIn](#) | [Twitter](#) | [Blog](#) | [TRCcompanies.com](http://TRCcompanies.com)

---

**From:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>  
**Sent:** Thursday, April 7, 2022 8:16 AM  
**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>  
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Jared,

Good morning. The approval is for UIC and the remediation.

Cheers,

**Chad Hensley** • Environmental Science & Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
811 First St. | Artesia, NM 88210

Office: 575.748.1283 | Cell: 575-703-1723

[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)

<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>

**Sent:** Wednesday, April 6, 2022 3:42 PM

**To:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>

**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

Chad,

We would like to clarify if this also includes the approval of the injection permits, or if that come separately from the Underground Injection group? Pending approval of the injection permits, as needed, we will proceed with field work following the completion of calving season as requested by the landowner. We will notify you when calving season has completed and the landowner has given us permission to access the property. Thank you very much for the approval to proceed and the additional clarification with regards to the injection permitting process.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752

F: 512 329 8750 | C: 432 238 3003

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---

**From:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>

**Sent:** Tuesday, April 5, 2022 4:42 PM

**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>

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Jared,

The OCD approves this workplan. Please proceed with the project.

Cheers,

**Chad Hensley** • Environmental Science & Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

811 First St. | Artesia, NM 88210

Office: 575.748.1283 | Cell: 575-703-1723

[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)

<http://www.emnrd.state.nm.us/OCD/>



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**Sent:** Friday, April 1, 2022 2:59 PM

**To:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>

**Subject:** [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Mr. Hensley and Mr. Bratcher,

Please see the attached addendum to the NMOCD-approved November 12, 2021, *Site Characterization Report and Remediation Workplan* for the WTX to EMSU Battery to Byrd Pump Segment Crude Oil Release Site (NOY1822242858). Included in the appendices are the requested C-108 form and associated federal underground injection form. Please let us know if you require any additional information. Otherwise we will stand by for NMOCD's approval of the Remediation Workplan Addendum and the authorization to inject.

Thank you.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752

F: 512 329 8750 | C: 432 238 3003

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**Stoffel, Jared**

---

**From:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>  
**Sent:** Tuesday, December 13, 2022 12:48 PM  
**To:** Stoffel, Jared  
**Cc:** Billings, Bradford, EMNRD; Bratcher, Michael, EMNRD; Melanie Nolan; Gilbert, Bryan; Pearson, Christopher; Leik, Jason; Sahba, Arsin; Velez, Nelson, EMNRD  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Hello Jared

Your Remedial Plan for full scale implementation of the bioventing system has been approved. OCD approved it in the OCD portal on 11/28/22 with APP ID # 150523. But you can use this email as well for final approval. I will also make note of final approval of full scale bioventing system implementation in the Incident Events Notes. Please save this email and include it in the upcoming start up report. Let me know if you have any questions.

Thanks  
Jennifer Nobui

---

**From:** Stoffel, Jared <JStoffel@trccompanies.com>  
**Sent:** Tuesday, December 13, 2022 9:02 AM  
**To:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>  
**Cc:** Billings, Bradford, EMNRD <Bradford.Billings@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Melanie Nolan <melanie.nolan@hollyenergy.com>; Gilbert, Bryan <BGilbert@trccompanies.com>; Pearson, Christopher <CPearson@trccompanies.com>; Leik, Jason <Jason.Leik@HFSinclair.com>; Sahba, Arsin <Arsin.Sahba@HFSinclair.com>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

Understood and noted. Please let me know if there are any other questions, comments, or concerns – otherwise we look forward to hearing back regarding the approval of the full-scale system through the portal. Thank you very much!

**Jared Stoffel, P.G.**  
Project Manager



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**From:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>  
**Sent:** Monday, December 12, 2022 3:38 PM  
**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Cc:** Billings, Bradford, EMNRD <[Bradford.Billings@emnrd.nm.gov](mailto:Bradford.Billings@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Pearson, Christopher <[CPearson@trccompanies.com](mailto:CPearson@trccompanies.com)>; Leik, Jason <[Jason.Leik@HFSinclair.com](mailto:Jason.Leik@HFSinclair.com)>; Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>; Velez, Nelson, EMNRD <[Nelson.Velez@emnrd.nm.gov](mailto:Nelson.Velez@emnrd.nm.gov)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Thank you Jared for the response below. One quick addition for item #7

7. The proposed bioventing wells should be considered 'remediation wells' and thus **do not** require a C-108 or Class V injection permit approval. **No additional action is required on behalf of HEP with respect to the C-108 or Class V injection permits.**

Please note that each well needs to be named (nomenclature) and tracked individually, each wells' data produced and operating time needs to be tracked and documented just in case EPA contacts you regarding these wells. Please make note of that correction.

Thanks,  
 Jennifer Nobui

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Sent:** Monday, December 12, 2022 2:15 PM  
**To:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>  
**Cc:** Billings, Bradford, EMNRD <[Bradford.Billings@emnrd.nm.gov](mailto:Bradford.Billings@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Pearson, Christopher <[CPearson@trccompanies.com](mailto:CPearson@trccompanies.com)>; Leik, Jason <[Jason.Leik@HFSinclair.com](mailto:Jason.Leik@HFSinclair.com)>; Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

All,

Thank you very much for meeting with us regarding the WTX to EMSU Remediation and Bioventing Pilot Test Summary and Full-Scale Bioventing System Recommendation Report submitted October 10, 2022. A brief summary of our meeting and path forward is provided below.

1. Soil boring SB-19A results showed no BTEX detected in soil above Closure Criteria. No further action with regards to SB-19A.
2. Remedial excavation was completed in accordance with the April 1, 2022 Work Plan Addendum that was approved by the OCD on April 5, 2022. Affected soil from surface to 4.5' bgs has been removed from the site.

3. Affected soil deeper than 4.5 feet bgs will be addressed during proposed full-scale bioventing.
4. HEP's interpretation of the bioventing pilot test results were supported by OCD as discussed during the call, including:
  - a. pressure propagation shows an effective injection ROI of up to 90 feet; and
  - b. the effective injection ROI indicated by the pressure propagation was corroborated by the soil gas results, including oxygen, VOCs, and carbon dioxide.
5. HEP's proposed full-scale bioventing system design was generally consistent with OCD's expectations as discussed during the call.
6. OCD has requested that HEP conduct weekly operations and maintenance (O&M) of the bioventing system for 1 to 2 months following installation and start-up rather than 2-3 weeks proposed by HEP. HEP will evaluate the weekly O&M data after 1 month of operation and will use this data to determine if a second month of weekly O&M is appropriate.
7. The proposed bioventing wells should be considered 'remediation wells' and thus **do not** require a C-108 or Class V injection permit approval. **No additional action is required on behalf of HEP with respect to the C-108 or Class V injection permits.**
8. OCD has requested that confirmation soil borings be proposed for OCD approval once bioventing system data indicate bioventing objectives have been achieved.

Based on our meeting, we anticipate a conditional approval of the October 12, 2022 Remediation and Bioventing Pilot Test Summary and Full-Scale Bioventing System Recommendation Report, thus an additional revision and submittal by HEP to the OCD will not be required. The primary change to the October 2022 report requested by OCD is the additional weekly system O&M following installation and startup (1-2 months rather than 2-3 weeks). HEP does not expect to receive a response or approval of the C-108/Class V permits provided in the October 12, 2022 Remediation and Bioventing Pilot Test Summary and Full-Scale Bioventing System Recommendation Report in order to enact the proposed full-scale bioventing remedy. Please let me know if I've missed or mischaracterized any of our items of discussion.

Again, thank you for taking the time to review the bioventing results and recommendations with us.

**Jared Stoffel, P.G.**  
Project Manager



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**From:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>  
**Sent:** Thursday, December 1, 2022 3:44 PM  
**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Cc:** Billings, Bradford, EMNRD <[Bradford.Billings@emnrd.nm.gov](mailto:Bradford.Billings@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Pearson, Christopher <[CPearson@trccompanies.com](mailto:CPearson@trccompanies.com)>; Leik, Jason <[Jason.Leik@HFSinclair.com](mailto:Jason.Leik@HFSinclair.com)>; Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Hello Jared

We are available for a discussion December 6, 2022 Tuesday at 3pm MST. Please send us an invite.

Thanks

Jennifer Nobui

---

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>

**Sent:** Thursday, December 1, 2022 2:03 PM

**To:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>

**Cc:** Billings, Bradford, EMNRD <[Bradford.Billings@emnrd.nm.gov](mailto:Bradford.Billings@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Pearson, Christopher <[CPearson@trccompanies.com](mailto:CPearson@trccompanies.com)>; Leik, Jason <[Jason.Leik@HFSinclair.com](mailto:Jason.Leik@HFSinclair.com)>; Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>

**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

Jennifer –

Thank you for discussing the WTX to EMSU site with me yesterday. As we discussed, we have already completed the excavation, soil boring installation, and bioventing pilot test activities as approved by Chad Hensley on April 5, 2022. The most recently submitted report (submitted on October 12, 2022) documents the excavation, soil boring, and the results of the bioventing pilot test and provides recommendations for the full-scale bioventing system. I've attached the report for reference – I know there have been multiple submissions for this Site, and want to ensure that we both are referencing the same document.

In order to facilitate our additional discussion of what has occurred to date and answer any questions regarding the bioventing pilot test results, we would like to conduct a meeting with you and your team. Our team's availability (cc'd in this email) for this week and next week include:

December 2: any time of day

December 5: After 4 MST

December 6: After 3 MST

December 7: After 2:30 MST

December 9: After 2 MST

Would any of these days and times work for you? If so, I will set up a Teams meeting at your preferred time. Thank you very much!

**Jared Stoffel, P.G.**  
Project Manager



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F: 512 329 8750 | C: 432 238 3003

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**From:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>

**Sent:** Monday, November 28, 2022 11:12 AM

**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Cc:** Billings, Bradford, EMNRD <[Bradford.Billings@emnrd.nm.gov](mailto:Bradford.Billings@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Hello Jared

I wanted to let you know that the Remediation Plan for the above-referenced site detailing a pilot test for bioventing has been approved with conditions. OCD has approved the proposed excavation activities and the advancement of a soil boring. In addition, OCD has approved the implementation of a pilot test for bioventing. However, please do not proceed with the full scale implementation of the bioventing system until OCD has had the opportunity to review the pilot test data to evaluate effectiveness of a full scale system. Please schedule a meeting with OCD after the pilot test has been completed so we can go over the data.

Also, at this time you are not required to submit a C-108 form or a EPA UDS Sheet. That will need to be addressed once full scale implementation is approved. Please let me know if you have any questions.

Thanks,

**Jennifer Nobui, PG** • Environmental Specialist A  
Environmental Bureau  
EMNRD - Oil Conservation Division  
5200 Oakland Avenue N.E Suite 100 | Albuquerque, NM 87113  
505.470-3407 | [Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>

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**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Sent:** Thursday, October 13, 2022 11:24 AM  
**To:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>; Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Billings, Bradford, EMNRD <[Bradford.Billings@emnrd.nm.gov](mailto:Bradford.Billings@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>  
**Cc:** Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>; Hamlet, Robert, EMNRD <[Robert.Hamlet@emnrd.nm.gov](mailto:Robert.Hamlet@emnrd.nm.gov)>; Harimon, Jocelyn, EMNRD <[Jocelyn.Harimon@emnrd.nm.gov](mailto:Jocelyn.Harimon@emnrd.nm.gov)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

Jennifer,

I wanted to provide an update that the report documenting the pilot test and soil remediation activities along with the full-scale bioventing system recommendations has been submitted through the portal. Please let me know if you have any questions that arise during your review. Thank you very much!

Jared Stoffel, P.G.  
Project Manager



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**From:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)>  
**Sent:** Tuesday, August 23, 2022 5:34 PM  
**To:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>; Hamlet, Robert, EMNRD <[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>; Harimon, Jocelyn, EMNRD <[Jocelyn.Harimon@state.nm.us](mailto:Jocelyn.Harimon@state.nm.us)>  
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Thanks Gilbert for the notification.

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Thanks,  
Jennifer Nobui

---

**From:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>  
**Sent:** Tuesday, August 23, 2022 4:31 PM  
**To:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)>; Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>; Hamlet, Robert, EMNRD <[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>; Harimon, Jocelyn, EMNRD <[Jocelyn.Harimon@state.nm.us](mailto:Jocelyn.Harimon@state.nm.us)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

Good Afternoon Jennifer,

Based on the initial confirmation soil sample analytical results for the excavation performed on August 17 and 18, additional remedial excavation and sampling will be conducted at the site on Thursday, August 25.

Please let me know if you have any questions or concerns.

Thanks!

Bryan Gilbert, P.G.  
Austin Office ECW Practice Leader



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**From:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)>

**Sent:** Wednesday, August 17, 2022 1:59 PM

**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

**Cc:** Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>; Hamlet, Robert, EMNRD <[Robert.Hamlet@state.nm.us](mailto:Robert.Hamlet@state.nm.us)>; Harimon, Jocelyn, EMNRD <[Jocelyn.Harimon@state.nm.us](mailto:Jocelyn.Harimon@state.nm.us)>

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Thank you Jared for the notification.

Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Please let us know if you encounter any delays or have any questions.

Thanks,  
Jennifer Nobui

---

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>

**Sent:** Friday, August 12, 2022 12:49 PM

**To:** Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>; Nobui, Jennifer, EMNRD <[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

**Cc:** Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>

**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

All,

I would like to follow up on our notification of the pilot test, soil boring activities, remedial excavation activities, and quarterly groundwater sampling activities with an updated timeline. Field activities were projected to be completed by August 12. An updated timeline is provided below.

- Bioventing Pilot Test - Field activities began on August 3, 2022, but the pilot test did not commence until August 9 (Day 1) due to equipment issues and troubleshooting. The pilot test is anticipated to be complete on August 15 (Day 7).
- Soil Boring – Drilling was originally scheduled for August 8. Due to a change in drill rig availability (the drill rig scheduled for the work was not operational), drilling is now scheduled for August 15.
- Quarterly Groundwater Monitoring – Due to the revised bioventing pilot test schedule (the monitoring wells cannot be gauged and sampled during the pilot test), quarterly groundwater monitoring activities are scheduled to begin August 16. This is a slight deviation from the schedule presented in the April 2022 Remediation Work Plan Addendum, which indicated quarterly groundwater monitoring would commence within 90 days of NMOCD approval of the Work Plan (i.e., August 13). Groundwater monitoring activities are expected to take 1 – 2 days.
- Remedial Excavation and Sampling – Due to the revised bioventing pilot test and quarterly groundwater monitoring schedules, remedial excavation and sampling activities are scheduled for August 17 to 19.

Please let me know if you have any questions or concerns. Thank you.

**Jared Stoffel, P.G.**  
Project Manager



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**From:** Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>

**Sent:** Thursday, August 4, 2022 11:48 AM

**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>

**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Hi,

Thank you for notification. Please keep this communication and include in allied report(s).

Bradford Billings  
EMNRD/OCD



**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Sent:** Monday, August 1, 2022 10:29 AM  
**To:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@state.nm.us](mailto:Jennifer.Nobui@state.nm.us)>; Billings, Bradford, EMNRD <[Bradford.Billings@state.nm.us](mailto:Bradford.Billings@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarrell@trccompanies.com](mailto:RVarrell@trccompanies.com)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

All,

I would like to submit a notification that the pilot test, soil boring activities, remedial excavation activities, and quarterly groundwater sampling activities are all scheduled to begin this week on August 3, 2022. The activities are projected to be completed within 2 weeks. This email is intended to notify you of both the remedial and monitoring activities occurring onsite and the collection of final samples from the remedial excavation during this time period in accordance with NMAC 19.15.29.12 D(1)(a). Please let me know if there are any questions or concerns. Thank you.

Jared Stoffel, P.G.  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752  
F: 512 329 8750 | C: 432 238 3003  
[LinkedIn](#) | [Twitter](#) | [Blog](#) | [TRCcompanies.com](http://TRCcompanies.com)

**From:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>  
**Sent:** Thursday, April 7, 2022 8:16 AM  
**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarrell@trccompanies.com](mailto:RVarrell@trccompanies.com)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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**ALWAYS** hover over the link to preview the actual URL/site and confirm its legitimacy.

Jared,

Good morning. The approval is for UIC and the remediation.

Cheers,

**Chad Hensley** • Environmental Science & Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
811 First St. | Artesia, NM 88210  
Office: 575.748.1283 | Cell: 575-703-1723  
[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Sent:** Wednesday, April 6, 2022 3:42 PM  
**To:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>  
**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

Chad,

We would like to clarify if this also includes the approval of the injection permits, or if that come separately from the Underground Injection group? Pending approval of the injection permits, as needed, we will proceed with field work following the completion of calving season as requested by the landowner. We will notify you when calving season has completed and the landowner has given us permission to access the property. Thank you very much for the approval to proceed and the additional clarification with regards to the injection permitting process.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752  
F: 512 329 8750 | C: 432 238 3003  
[Linkedin](#) | [Twitter](#) | [Blog](#) | [TRCcompanies.com](http://TRCcompanies.com)

---

**From:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>  
**Sent:** Tuesday, April 5, 2022 4:42 PM  
**To:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>  
**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria

<[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>

**Subject:** RE: [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Jared,

The OCD approves this workplan. Please proceed with the project.

Cheers,

**Chad Hensley** • Environmental Science & Specialist

Environmental Bureau

EMNRD - Oil Conservation Division

811 First St. | Artesia, NM 88210

Office: 575.748.1283 | Cell: 575-703-1723

[chad.hensley@state.nm.us](mailto:chad.hensley@state.nm.us)

<http://www.emnrd.state.nm.us/OCD/>



**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>

**Sent:** Friday, April 1, 2022 2:59 PM

**To:** Hensley, Chad, EMNRD <[Chad.Hensley@state.nm.us](mailto:Chad.Hensley@state.nm.us)>; Bratcher, Mike, EMNRD <[mike.bratcher@state.nm.us](mailto:mike.bratcher@state.nm.us)>

**Cc:** Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Sahba, Arsin M. <[arsin.sahba@hollyfrontier.com](mailto:arsin.sahba@hollyfrontier.com)>; Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Trevor.baird <[Trevor.baird@hollyenergy.com](mailto:Trevor.baird@hollyenergy.com)>; mark.shemaria <[mark.shemaria@hollyenergy.com](mailto:mark.shemaria@hollyenergy.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>; Helbert, Dana <[DHelbert@trccompanies.com](mailto:DHelbert@trccompanies.com)>; Hoover, Shannon <[SHoover@trccompanies.com](mailto:SHoover@trccompanies.com)>; Varnell, Richard <[RVarnell@trccompanies.com](mailto:RVarnell@trccompanies.com)>

**Subject:** [EXTERNAL] WTX to EMSU Remediation Plan Addendum, C-108, and Associated Federal Forms (NOY1822242858)

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Mr. Hensley and Mr. Bratcher,

Please see the attached addendum to the NMOCD-approved November 12, 2021, *Site Characterization Report and Remediation Workplan* for the WTX to EMSU Battery to Byrd Pump Segment Crude Oil Release Site

(NOY1822242858). Included in the appendices are the requested C-108 form and associated federal underground injection form. Please let us know if you require any additional information. Otherwise we will stand by for NMOCD's approval of the Remediation Workplan Addendum and the authorization to inject.

Thank you.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752  
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**Stoffel, Jared**

**From:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>  
**Sent:** Thursday, December 15, 2022 1:10 PM  
**To:** Stoffel, Jared; Billings, Bradford, EMNRD; Bratcher, Michael, EMNRD  
**Cc:** Melanie Nolan; Sahba, Arsin; Leik, Jason; Gilbert, Bryan; Clark, Darija; Harimon, Jocelyn, EMNRD  
**Subject:** RE: [EXTERNAL] WTX to EMSU Groundwater Sampling Notification (NOY1822241858)

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Hello Jared

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thanks,  
Jennifer Nobui

---

**From:** Stoffel, Jared <JStoffel@trccompanies.com>  
**Sent:** Thursday, December 15, 2022 11:46 AM  
**To:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>; Billings, Bradford, EMNRD <Bradford.Billings@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>  
**Cc:** Melanie Nolan <melanie.nolan@hollyenergy.com>; Sahba, Arsin <Arsin.Sahba@HFSinclair.com>; Leik, Jason <Jason.Leik@HFSinclair.com>; Gilbert, Bryan <BGilbert@trccompanies.com>; Clark, Darija <dclark@trccompanies.com>  
**Subject:** [EXTERNAL] WTX to EMSU Groundwater Sampling Notification (NOY1822241858)

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Jennifer –

TRC, on the behalf of HEP, will be conducting the 4<sup>th</sup> quarter groundwater sampling event at the WTX to EMSU site (NOY1822241858) on December 20, 2022. We expect the event duration to be 1 day. Please let me know if you have any questions or concerns. Thank you.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752  
F: 512 329 8750 | C: 432 238 3003  
[LinkedIn](#) | [Twitter](#) | [Blog](#) | [TRCcompanies.com](#)



**Stoffel, Jared**

**From:** Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>  
**Sent:** Tuesday, February 21, 2023 9:37 AM  
**To:** Stoffel, Jared; Melanie Nolan; arsin.sahba@hfsinclair.com; jason.leik@hfsinclair.com; Gilbert, Bryan; Clark, Darija  
**Cc:** Nobui, Jennifer, EMNRD; Velez, Nelson, EMNRD  
**Subject:** RE: [EXTERNAL] WTX to EMSU Groundwater Sampling Notification (NOY1822241858)

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**ALWAYS** hover over the link to preview the actual URL/site and confirm its legitimacy.

Correction to the incident number: **NOY1822242858**

**From:** Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>  
**Sent:** Monday, February 20, 2023 2:43 PM  
**To:** Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>  
**Subject:** FW: [EXTERNAL] WTX to EMSU Groundwater Sampling Notification (NOY1822241858)

fyi

**From:** Stoffel, Jared <[JStoffel@trccompanies.com](mailto:JStoffel@trccompanies.com)>  
**Sent:** Monday, February 20, 2023 1:42 PM  
**To:** Nobui, Jennifer, EMNRD <[Jennifer.Nobui@emnrd.nm.gov](mailto:Jennifer.Nobui@emnrd.nm.gov)>; Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>  
**Cc:** Melanie Nolan <[melanie.nolan@hollyenergy.com](mailto:melanie.nolan@hollyenergy.com)>; Sahba, Arsin <[Arsin.Sahba@HFSinclair.com](mailto:Arsin.Sahba@HFSinclair.com)>; Leik, Jason <[Jason.Leik@HFSinclair.com](mailto:Jason.Leik@HFSinclair.com)>; Gilbert, Bryan <[BGilbert@trccompanies.com](mailto:BGilbert@trccompanies.com)>; Clark, Darija <[dclark@trccompanies.com](mailto:dclark@trccompanies.com)>  
**Subject:** [EXTERNAL] WTX to EMSU Groundwater Sampling Notification (NOY1822241858)

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

Jennifer –

TRC, on the behalf of HEP, will be conducting the 1<sup>st</sup> quarter groundwater sampling event at the WTX to EMSU site (NOY1822241858) on February 22, 2023. We expect the event duration to be 1 day. Please let me know if you have any questions or concerns. Thank you.

**Jared Stoffel, P.G.**  
Project Manager



505 E Huntland Dr STE 250 Austin, TX 78752  
F: 512 329 8750 | C: 432 238 3003  
[LinkedIn](#) | [Twitter](#) | [Blog](#) | [TRCcompanies.com](http://TRCcompanies.com)

**ATTACHMENT B – GROUNDWATER SAMPLING FORMS**

**Technician:**

WTX/ETHS

**Job #/Task #:**

497 744

Date: 16/04/2022

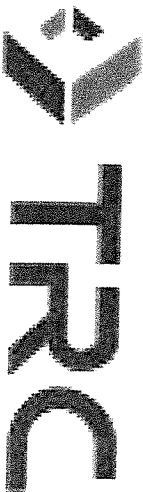
Site #

## Project Manager

JS

Page of

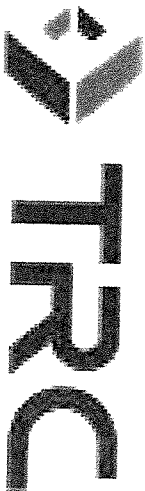


		Sample Location		Are non-potable water signs posted at well and storage tanks?
		Date	8.16.2022	
		Client	H&F	
		Site	W-TX	
Static Depth to Water (ft)	37.08	Sample Collection Time	1500	
Total Purge Volume (gal)	~106	Purge Method	Pump	
Total Depth (ft)	49.25	Sample Method	Pump	
Screen Depth Interval (ft)	30-50	Water Description		
Pump Intake Depth (feet)	~43'	Sampling Personnel	PLS	

[illegible]

Initials					
	* Troube	Put in	hole	→ need	big file
					to open up top

Ms. 2

		Sample Location		Are non-potable water signs posted at well and storage tanks?
		Date		
		Client		
		Site		
		Sample Collection Time		
Static Depth to Water (ft)	38.37	Purge Method	Pump	
Total Purge Volume (gal)	244	Sample Method	Pump	
Total Depth (ft)	49.45	Water Description		
Screen Depth Interval (ft)	30-50	Sampling Personnel	RS	
Pump Intake Depth (feet)	~43			

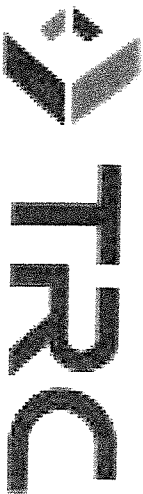
Time (min)	Volume Purged (L)	Flow Rate (L/min)	Depth to Water (ft)	Drawdown (ft)	pH (SU) ± 10%	Temp (C) ± 10%	Conductivity (u-siemens/cm) ± 3%	ORP (mV) ± 10%	Dissolved Oxygen (mg/L) ± 10%	Turbidity (NTUs) <10
1146	2 L	0.5 / min	38.39	1.04						
1150			38.46	.45	6.78	25.12	3.88	904.43	8.5-6	95.5
1158			38.41	.06	6.76	25.18	3.86	<del>1.55</del> 88	1.75	90.6
1201			38.41		6.76	24.45	3.85	42		84.5
1204			38.41		6.77	24.47	3.85	42		85.2
1207			38.42	.07	6.76	24.48	3.85	42		85.0
1210			38.42	.07	6.77	24.48	3.84	41	0.93	84.1

Initials \_\_\_\_\_

Page \_\_\_\_\_ of \_\_\_\_\_



[illegible]

		Sample Location		1458 - W/TX	Are non-potable water signs posted at well and storage tanks?
		Date		8.10.22	
		Client		1458	
		Site		W/TX	
		Sample Collection Time		1410	
Static Depth to Water (ft)	38.64	Purge Method	Pump		
Total Purge Volume (gal)	13 L	Sample Method	Pump		
Total Depth (ft)	50.28	Water Description			
Screen Depth Interval (ft)	30-50				
Pump Intake Depth (feet)	~43	Sampling Personnel	PLS		

[illegible]



## WATER AND PRODUCT LEVEL MONITORING FORM

Technician: C. Bunting & P. Shin

Job #/Task #: WTY to EMSU

Date: 2/20/22


Site # \_\_\_\_\_

Project Manager \_\_\_\_\_

Page 1 of 1

[illegible]




	Sample Location		MW-01	Are non-potable water signs posted at well and storage tanks?
	Date		12/20/22	
	Client		HEP	
	Site		WTX	
	Static Depth to Water (ft)		37.25	
Total Purge Volume (gal)	gal	3.5	Purge Method	Sup pump
Total Depth (ft)		48.55	Sample Method	Grab
Screen Depth Interval (ft)			Water Description	Clear, no odor
Pump Intake Depth (feet)		42.90	Sampling Personnel	C. Butting + P. Skvin

[illegible]



[illegible]




	Sample Location		MW-03	Are non-potable water signs posted at well and storage tanks?
	Date		12/20/22	
	Client		HEP	
	Site		WTR	
	Sample Collection Time		1305	
Static Depth to Water (ft)	38.49	Purge Method	Sub pump	
Total Purge Volume (gal)	~3.0	Sample Method	Grab	
Total Depth (ft)	49.40	Water Description	Clear, no odor	
Screen Depth Interval (ft)		Sampling Personnel	C. Buthine & P. Shinn	
Pump Intake Depth (feet)	~43.99			

[illegible]

Initials \_\_\_\_\_



	Sample Location		NW-04	Are non-potable water signs posted at well and storage tanks?
	Date		12/20/22	
	Client		HEP	
	Site		WSTX	
	Sample Collection Time		1330	
Static Depth to Water (ft)	38.82	Purge Method	Sub pump	
Total Purge Volume (gal)	2.5	Sample Method	Grab	
Total Depth (ft)	50.31	Water Description	Clear, no odor	
Screen Depth Interval (ft)		Sampling Personnel	C. Bernthaupt P. Shih	
Pump Intake Depth (feet)	~44.57			

[illegible]

[illegible]

**ATTACHMENT C – LABORATORY ANALYTICAL REPORTS**



10450 Stancliff Rd. Suite 210  
Houston, TX 77099  
T: +1 281 530 5656  
F: +1 281 530 5887

September 23, 2022

Dana Helbert  
TRC Corporation  
505 East Huntland Drive  
Suite 250  
Austin, TX 78752

Work Order: **HS22081018**

Laboratory Results for: **HEP WTX to EMSU GW**

Dear Dana Helbert,

ALS Environmental received 8 sample(s) on Aug 18, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy C. Neir'.

Generated By: ANDREW.NEIR

Andy C. Neir



## ALS Houston, US

Date: 23-Sep-22

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**Work Order:** HS22081018

## SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22081018-01	MW-01	Water		16-Aug-2022 15:00	18-Aug-2022 09:20	<input type="checkbox"/>
HS22081018-02	MW-02	Water		16-Aug-2022 12:20	18-Aug-2022 09:20	<input type="checkbox"/>
HS22081018-03	MW-03	Water		16-Aug-2022 13:20	18-Aug-2022 09:20	<input type="checkbox"/>
HS22081018-04	MW-04	Water		16-Aug-2022 14:10	18-Aug-2022 09:20	<input type="checkbox"/>
HS22081018-05	MW-05	Water		16-Aug-2022 11:25	18-Aug-2022 09:20	<input type="checkbox"/>
HS22081018-06	Duplicate-01	Water		16-Aug-2022 00:00	18-Aug-2022 09:20	<input type="checkbox"/>
HS22081018-07	EB-08-16-22	Water		16-Aug-2022 16:00	18-Aug-2022 09:20	<input type="checkbox"/>
HS22081018-08	Trip Blank-CG-070822-405	Water		16-Aug-2022 00:00	18-Aug-2022 09:20	<input checked="" type="checkbox"/>

**ALS Houston, US**

Date: 23-Sep-22

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**Work Order:** HS22081018

**CASE NARRATIVE**

---

**GC Semivolatiles by Method SW8015M**

**Batch ID: 182749**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

---

**GC Volatiles by Method SW8015**

**Batch ID: R415440**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

## ALS Houston, US

Date: 23-Sep-22

Client: TRC Corporation  
Project: HEP WTX to EMSU GW  
Sample ID: MW-01  
Collection Date: 16-Aug-2022 15:00

## ANALYTICAL REPORT

WorkOrder:HS22081018  
Lab ID:HS22081018-01  
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	19-Aug-2022 10:46
Surr: 4-Bromofluorobenzene	99.8		70-123	%REC	1	19-Aug-2022 10:46
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 23-Aug-2022 Analyst: PPM		
TPH (Diesel Range)	0.083		0.052	mg/L	1	25-Aug-2022 07:32
TPH (Oil Range)	0.11	n	0.10	mg/L	1	25-Aug-2022 07:32
Surr: 2-Fluorobiphenyl	81.9		60-135	%REC	1	25-Aug-2022 07:32

Note: See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Houston, US

Date: 23-Sep-22

Client: TRC Corporation  
 Project: HEP WTX to EMSU GW  
 Sample ID: MW-02  
 Collection Date: 16-Aug-2022 12:20

**ANALYTICAL REPORT**

WorkOrder:HS22081018  
 Lab ID:HS22081018-02  
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	19-Aug-2022 11:02
Surr: 4-Bromofluorobenzene	98.9		70-123	%REC	1	19-Aug-2022 11:02
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 23-Aug-2022 Analyst: PPM		
<b>TPH (Diesel Range)</b>	<b>0.067</b>		<b>0.049</b>	<b>mg/L</b>	1	25-Aug-2022 08:01
TPH (Oil Range)	ND	n	0.099	mg/L	1	25-Aug-2022 08:01
Surr: 2-Fluorobiphenyl	72.7		60-135	%REC	1	25-Aug-2022 08:01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Houston, US

Date: 23-Sep-22

Client: TRC Corporation  
Project: HEP WTX to EMSU GW  
Sample ID: MW-03  
Collection Date: 16-Aug-2022 13:20

## ANALYTICAL REPORT

WorkOrder:HS22081018  
Lab ID:HS22081018-03  
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	19-Aug-2022 11:17
Surr: 4-Bromofluorobenzene	95.9		70-123	%REC	1	19-Aug-2022 11:17
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 23-Aug-2022		Analyst: PPM
TPH (Diesel Range)	ND		0.051	mg/L	1	25-Aug-2022 08:30
TPH (Oil Range)	ND	n	0.10	mg/L	1	25-Aug-2022 08:30
Surr: 2-Fluorobiphenyl	74.1		60-135	%REC	1	25-Aug-2022 08:30

Note: See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Houston, US

Date: 23-Sep-22

Client: TRC Corporation  
 Project: HEP WTX to EMSU GW  
 Sample ID: MW-04  
 Collection Date: 16-Aug-2022 14:10

**ANALYTICAL REPORT**

WorkOrder:HS22081018  
 Lab ID:HS22081018-04  
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	19-Aug-2022 11:33
Surr: 4-Bromofluorobenzene	100		70-123	%REC	1	19-Aug-2022 11:33
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 23-Aug-2022 Analyst: PPM		
<b>TPH (Diesel Range)</b>	<b>0.064</b>		<b>0.053</b>	<b>mg/L</b>	1	25-Aug-2022 09:00
TPH (Oil Range)	ND	n	0.11	mg/L	1	25-Aug-2022 09:00
Surr: 2-Fluorobiphenyl	75.0		60-135	%REC	1	25-Aug-2022 09:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.



## ALS Houston, US

Date: 23-Sep-22

Client: TRC Corporation  
Project: HEP WTX to EMSU GW  
Sample ID: MW-05  
Collection Date: 16-Aug-2022 11:25

## ANALYTICAL REPORT

WorkOrder:HS22081018  
Lab ID:HS22081018-05  
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	19-Aug-2022 11:49
Surr: 4-Bromofluorobenzene	101		70-123	%REC	1	19-Aug-2022 11:49
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 23-Aug-2022 Analyst: PPM		
TPH (Diesel Range)	0.065		0.051	mg/L	1	25-Aug-2022 09:29
TPH (Oil Range)	ND	n	0.10	mg/L	1	25-Aug-2022 09:29
Surr: 2-Fluorobiphenyl	78.5		60-135	%REC	1	25-Aug-2022 09:29

Note: See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Houston, US

Date: 23-Sep-22

Client: TRC Corporation  
Project: HEP WTX to EMSU GW  
Sample ID: Duplicate-01  
Collection Date: 16-Aug-2022 00:00

## ANALYTICAL REPORT

WorkOrder:HS22081018  
Lab ID:HS22081018-06  
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	19-Aug-2022 12:05
Surr: 4-Bromofluorobenzene	97.8		70-123	%REC	1	19-Aug-2022 12:05
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 23-Aug-2022 Analyst: PPM		
TPH (Diesel Range)	0.085		0.052	mg/L	1	25-Aug-2022 09:58
TPH (Oil Range)	0.11	n	0.10	mg/L	1	25-Aug-2022 09:58
Surr: 2-Fluorobiphenyl	82.4		60-135	%REC	1	25-Aug-2022 09:58

Note: See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Houston, US

Date: 23-Sep-22

Client: TRC Corporation  
Project: HEP WTX to EMSU GW  
Sample ID: EB-08-16-22  
Collection Date: 16-Aug-2022 16:00

## ANALYTICAL REPORT

WorkOrder:HS22081018  
Lab ID:HS22081018-07  
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	19-Aug-2022 10:30
Surr: 4-Bromofluorobenzene	99.4		70-123	%REC	1	19-Aug-2022 10:30
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 23-Aug-2022 Analyst: PPM		
TPH (Diesel Range)	ND		0.054	mg/L	1	25-Aug-2022 10:28
TPH (Oil Range)	ND	n	0.11	mg/L	1	25-Aug-2022 10:28
Surr: 2-Fluorobiphenyl	79.9		60-135	%REC	1	25-Aug-2022 10:28

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 23-Sep-22

Weight / Prep Log

Client: TRC Corporation  
Project: HEP WTX to EMSU GW  
WorkOrder: HS22081018

Batch ID: 182749	Start Date: 23 Aug 2022 10:11	End Date: 24 Aug 2022 12:30
Method: SW3511	Prep Code: 3511_DRO	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22081018-01		31.51 (mL)	2 (mL)	0.06347	40 mL Amber
HS22081018-02		33.38 (mL)	2 (mL)	0.05992	40 mL Amber
HS22081018-03		32.55 (mL)	2 (mL)	0.06144	40 mL Amber
HS22081018-04		31.42 (mL)	2 (mL)	0.06365	40 mL Amber
HS22081018-05		32.2 (mL)	2 (mL)	0.06211	40 mL Amber
HS22081018-06		31.5 (mL)	2 (mL)	0.06349	40 mL Amber
HS22081018-07		30.37 (mL)	2 (mL)	0.06585	40 mL Amber

ALS Houston, US

Date: 23-Sep-22

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**WorkOrder:** HS22081018

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
<b>Batch ID:</b> 182749 ( 0 )		<b>Test Name :</b> TPH DRO/ORO BY SW8015C			<b>Matrix:</b> Water	
HS22081018-01	MW-01	16 Aug 2022 15:00		23 Aug 2022 10:11	25 Aug 2022 07:32	1
HS22081018-02	MW-02	16 Aug 2022 12:20		23 Aug 2022 10:11	25 Aug 2022 08:01	1
HS22081018-03	MW-03	16 Aug 2022 13:20		23 Aug 2022 10:11	25 Aug 2022 08:30	1
HS22081018-04	MW-04	16 Aug 2022 14:10		23 Aug 2022 10:11	25 Aug 2022 09:00	1
HS22081018-05	MW-05	16 Aug 2022 11:25		23 Aug 2022 10:11	25 Aug 2022 09:29	1
HS22081018-06	Duplicate-01	16 Aug 2022 00:00		23 Aug 2022 10:11	25 Aug 2022 09:58	1
HS22081018-07	EB-08-16-22	16 Aug 2022 16:00		23 Aug 2022 10:11	25 Aug 2022 10:28	1
<b>Batch ID:</b> R415440 ( 0 )		<b>Test Name :</b> GASOLINE RANGE ORGANICS BY SW8015C			<b>Matrix:</b> Water	
HS22081018-01	MW-01	16 Aug 2022 15:00			19 Aug 2022 10:46	1
HS22081018-02	MW-02	16 Aug 2022 12:20			19 Aug 2022 11:02	1
HS22081018-03	MW-03	16 Aug 2022 13:20			19 Aug 2022 11:17	1
HS22081018-04	MW-04	16 Aug 2022 14:10			19 Aug 2022 11:33	1
HS22081018-05	MW-05	16 Aug 2022 11:25			19 Aug 2022 11:49	1
HS22081018-06	Duplicate-01	16 Aug 2022 00:00			19 Aug 2022 12:05	1
HS22081018-07	EB-08-16-22	16 Aug 2022 16:00			19 Aug 2022 10:30	1

## ALS Houston, US

Date: 23-Sep-22

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**WorkOrder:** HS22081018

## QC BATCH REPORT

Batch ID: 182749 ( 0 )		Instrument: FID-16		Method: TPH DRO/ORO BY SW8015C					
<b>MBLK</b>	Sample ID: <b>MBLK-182749</b>	Units: <b>mg/L</b>		Analysis Date: <b>24-Aug-2022 15:52</b>					
Client ID:	Run ID: <b>FID-16_415863</b>		SeqNo: <b>6819816</b>		PrepDate: <b>23-Aug-2022</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

TPH (Diesel Range)	ND	0.050							
TPH (Oil Range)	ND	0.10							
Surr: 2-Fluorobiphenyl	0.04699	0.0050	0.06	0	78.3	60 - 135			

<b>LCS</b>	Sample ID: <b>LCS-182749</b>	Units: <b>mg/L</b>		Analysis Date: <b>24-Aug-2022 16:21</b>					
Client ID:	Run ID: <b>FID-16_415863</b>		SeqNo: <b>6819817</b>		PrepDate: <b>23-Aug-2022</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

TPH (Diesel Range)	0.6199	0.050	0.6	0	103	70 - 130			
TPH (Oil Range)	0.6853	0.10	0.6	0	114	70 - 130			
Surr: 2-Fluorobiphenyl	0.06149	0.0050	0.06	0	102	60 - 135			

<b>LCSD</b>	Sample ID: <b>LCSD-182749</b>	Units: <b>mg/L</b>		Analysis Date: <b>24-Aug-2022 16:51</b>					
Client ID:	Run ID: <b>FID-16_415863</b>		SeqNo: <b>6819818</b>		PrepDate: <b>23-Aug-2022</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

TPH (Diesel Range)	0.6167	0.050	0.6	0	103	70 - 130	0.6199	0.531	20
TPH (Oil Range)	0.6932	0.10	0.6	0	116	70 - 130	0.6853	1.15	20
Surr: 2-Fluorobiphenyl	0.06177	0.0050	0.06	0	103	60 - 135	0.06149	0.452	20

The following samples were analyzed in this batch:

HS22081018-01	HS22081018-02	HS22081018-03	HS22081018-04
HS22081018-05	HS22081018-06	HS22081018-07	



## ALS Houston, US

Date: 23-Sep-22

Client: TRC Corporation  
 Project: HEP WTX to EMSU GW  
 WorkOrder: HS22081018

## QC BATCH REPORT

Batch ID: R415440 ( 0 )		Instrument: FID-20		Method: GASOLINE RANGE ORGANICS BY SW8015C					
<b>MBLK</b>	Sample ID: <b>MBLK-220819</b>	Units: <b>mg/L</b>		Analysis Date: <b>19-Aug-2022 10:15</b>					
Client ID:	Run ID: <b>FID-20_415440</b>	SeqNo: <b>6810011</b>		PrepDate:		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Gasoline Range Organics ND 0.0500

Surr: 4-Bromofluorobenzene 0.09821 0.00500 0.1 0 98.2 70 - 121

<b>LCS</b>	Sample ID: <b>LCS-220819</b>	Units: <b>mg/L</b>		Analysis Date: <b>19-Aug-2022 09:43</b>					
Client ID:	Run ID: <b>FID-20_415440</b>	SeqNo: <b>6810009</b>		PrepDate:		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Gasoline Range Organics 0.8456 0.0500 1 0 84.6 76 - 124

Surr: 4-Bromofluorobenzene 0.08032 0.00500 0.1 0 80.3 52 - 138

<b>LCSD</b>	Sample ID: <b>LCSD-220819</b>	Units: <b>mg/L</b>		Analysis Date: <b>19-Aug-2022 09:59</b>					
Client ID:	Run ID: <b>FID-20_415440</b>	SeqNo: <b>6810010</b>		PrepDate:		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Gasoline Range Organics 0.907 0.0500 1 0 90.7 76 - 124 0.8456 7.01 20

Surr: 4-Bromofluorobenzene 0.0862 0.00500 0.1 0 86.2 52 - 138 0.08032 7.05 20

The following samples were analyzed in this batch:

HS22081018-01	HS22081018-02	HS22081018-03	HS22081018-04
HS22081018-05	HS22081018-06	HS22081018-07	

**ALS Houston, US**

Date: 23-Sep-22

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**WorkOrder:** HS22081018

**QUALIFIERS,  
ACRONYMS, UNITS**

<b>Qualifier</b>	<b>Description</b>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

<b>Acronym</b>	<b>Description</b>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<b>Unit Reported</b>	<b>Description</b>
mg/L	Milligrams per Liter

ALS Houston, US

Date: 23-Sep-22

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**CERTIFICATIONS,ACCREDITATIONS & LICENSES**

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Agency	Number	Expire Date
Arkansas	22-041-0	27-Mar-2023
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932022-13	31-Jul-2023

## ALS Houston, US

Date: 23-Sep-22

## Sample Receipt Checklist

Work Order ID: HS22081018

Date/Time Received: 18-Aug-2022 09:20

Client Name: TRC-AUS

Received by: Nelson D. Dusara

Completed By: /S/ Niles D. Ranchod	18-Aug-2022 18:29	Reviewed by: /S/ Dane J. Wacasey	19-Aug-2022 13:48
eSignature	Date/Time	eSignature	Date/Time

Matrices: WaterCarrier name: FedEx Priority Overnight

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	1 Page(s)
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samplers name present on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Temperature(s)/Thermometer(s):

4.1C/4.6C UC/C IR #31

Cooler(s)/Kit(s):

46439

Date/Time sample(s) sent to storage:

08/18/2022 19:00

Water - VOA vials have zero headspace?

Yes ☒ No ☐ No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☐ No ☐ N/A ☒

pH adjusted?

Yes ☐ No ☐ N/A ☒

pH adjusted by:

Login Notes: TB received not listed on chain. Logged on Hold

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

Corrective Action:



☒ ALS Laboratory Group  
 10450 Stancliff Rd. #210  
 Houston, Texas 77099  
 (Tel) 281.530.5656  
 (Fax) 281.530.5887

## Chain of Custody Form


Page \_\_\_\_\_ of \_\_\_\_\_

HS22081018

 TRC Corporation  
 HEP WTX to EMSU


Customer Information				ALS Project Manager: Dane Wacasey				Project Information											
Purchase Order	497744			Project Name	HEP WTX to EMSU			A	GW - 5-day TAT										
Work Order				Project Number	497744			B	8015 GRO W 3x VOA HCL										
Company Name	TRC Corporation			Bill To Company	TRC Corporation			C	8015 DRO/MRO - 3x VOA Am Neat										
Send Report To	Dana Helbert / Jared Stoffel			Invoice Attn	TRC - AP			D											
Address	505 East Huntland Drive Suite 250			Address	505 East Huntland Drive Suite 250			E											
City/State/Zip	Austin, TX 78752			City/State/Zip	Austin, TX 78752			F											
Phone	713-306-9550			Phone	512-329-6080			G											
Fax				Fax				H											
e-Mail Address	dhelbert@trccompanies.com / rstoffel@trccompanies.com			e-Mail Address	apinvoiceapproval@trccompanies.com			I											
e-Mail Address				e-Mail Address				J											
No.	Sample Description			Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-01			8.16.2022	1500	W	Y	6	x	x	x								
2	MW-02			8.16.2022	1220	W	Y	6	x	x	x								
3	MW-03			8.16.2022	1320	W	Y	6	x	x	x								
4	MW-04			8.16.2022	1410	W	Y	6	x	x	x								
5	MW-05			8.16.2022	1125	W	Y	6	x	x	x								
6	Duplicate-01			8.16.2022	--	W	Y	6	x	x	x								
7	EB-08-16-22			8.16.2022	1600	W	Y	6	x	x	x								
8																			
9																			
10																			
Sampler(s): Please Print & Sign				Shipment Method:				Required Turnaround Time:				Results Due Date:							
<i>Russell Sebring</i> Relinquished by:				Date: 8/17/22 Time: 1600 Received by:				<input type="checkbox"/> STD 10 Wk Days <input checked="" type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour				Date: 4/6/23							
Relinquished by:				Date: 08/18/22 Time: 9:20 Received by (Laboratory):				Cooler Temp.				QC Package: (Check Box Below)							
Logged by (Laboratory):				Date: Time: Checked by (Laboratory):				X				Level II: Standard QC Level III: Std QC + Raw Data Level IV: SW846 CLP-Like							
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-5036				Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.				Other:				TRRP-Checklist TRRP Level IV							

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 <b>ALS</b> 10450 Stancliff Rd., Suite 210 Houston, Texas 77099 Tel. +1 281 530 5656 Fax. +1 281 530 5887	<b>CUSTODY SEAL</b>		Seal Broken By: <i>SM</i>
	Date: 8/15/22	Time: 16:00	Date: 08/15/22
	Name: <i>JS</i>		
	Company: <i>TRC</i>		

46439 AS1002



ORIGIN ID: SGRA (575) 391-8777  
 AUDREY ELJARI (GUEST)  
 HOLIDAY INN EXPRESS C/O TRC CORP.  
 4000 N. LOVINGTON HWY  
 MOBBIS, NM 88240  
 UNITED STATES US

SHIP DATE: 08AUG22  
 ACTWGT: 1.00 LB MAN  
 CAD: 0221247/CAFE3512  
 DIMS: 26x14x14 IN

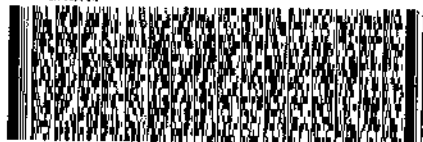
TO SHIPPING DEPT  
 ALS LABORATORY GROUP  
 10450 STANCLIFF RD  
 SUITE 210  
 HOUSTON TX 77099

46439

(281) 530-5656

REF: HEP WTX TOEMSU - BO 87072 - DW

RMA: 000000

FedEx  
Express

FedEx  
 TRK# 5789 1996 5874  
 10221

THU - 18 AUG 10:30A  
 PRIORITY OVERNIGHT

AB SGRA

77099

TX-US

IAH



\*4235553 08/17 55132/1310/FE20





10450 Stancliff Rd. Suite 210  
Houston, TX 77099  
T: +1 281 530 5656  
F: +1 281 530 5887

January 03, 2023

Dana Helbert  
TRC Corporation  
505 East Huntland Drive  
Suite 250  
Austin, TX 78752

Work Order: **HS22121291**

Laboratory Results for: **HEP WTX to EMSU GW**

Dear Dana Helbert,

ALS Environmental received 8 sample(s) on Dec 21, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy C. Neir'.

Generated By: DAYNA.FISHER

Andy C. Neir

## ALS Houston, US

Date: 03-Jan-23

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**Work Order:** HS22121291

## SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22121291-01	MW-01	Water		20-Dec-2022 12:05	21-Dec-2022 11:20	<input type="checkbox"/>
HS22121291-02	MW-02	Water		20-Dec-2022 11:15	21-Dec-2022 11:20	<input type="checkbox"/>
HS22121291-03	MW-03	Water		20-Dec-2022 13:05	21-Dec-2022 11:20	<input type="checkbox"/>
HS22121291-04	MW-04	Water		20-Dec-2022 13:30	21-Dec-2022 11:20	<input type="checkbox"/>
HS22121291-05	MW-05	Water		20-Dec-2022 10:35	21-Dec-2022 11:20	<input type="checkbox"/>
HS22121291-06	Duplicate-01	Water		20-Dec-2022 00:00	21-Dec-2022 11:20	<input type="checkbox"/>
HS22121291-07	EB-12-20-22	Water		20-Dec-2022 13:35	21-Dec-2022 11:20	<input type="checkbox"/>
HS22121291-08	Trip Blank-CG-102122-546	Water		20-Dec-2022 00:00	21-Dec-2022 11:20	<input checked="" type="checkbox"/>

**ALS Houston, US**

Date: 03-Jan-23

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**Work Order:** HS22121291

**CASE NARRATIVE**

---

**GC Semivolatiles by Method SW8015M**

**Batch ID: 187768**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

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**GC Volatiles by Method SW8015**

**Batch ID: R424693,R424780**

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

## ALS Houston, US

Date: 03-Jan-23

Client: TRC Corporation  
Project: HEP WTX to EMSU GW  
Sample ID: MW-01  
Collection Date: 20-Dec-2022 12:05

## ANALYTICAL REPORT

WorkOrder:HS22121291  
Lab ID:HS22121291-01  
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	23-Dec-2022 18:04
Surr: 4-Bromofluorobenzene	116		70-123	%REC	1	23-Dec-2022 18:04
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 24-Dec-2022 Analyst: SAM		
TPH (Diesel Range)	0.095		0.051	mg/L	1	27-Dec-2022 18:03
TPH (Oil Range)	0.22	n	0.10	mg/L	1	27-Dec-2022 18:03
Surr: 2-Fluorobiphenyl	122		60-135	%REC	1	27-Dec-2022 18:03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Houston, US

Date: 03-Jan-23

Client: TRC Corporation  
 Project: HEP WTX to EMSU GW  
 Sample ID: MW-02  
 Collection Date: 20-Dec-2022 11:15

**ANALYTICAL REPORT**

WorkOrder:HS22121291  
 Lab ID:HS22121291-02  
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	23-Dec-2022 18:18
Surr: 4-Bromofluorobenzene	114		70-123	%REC	1	23-Dec-2022 18:18
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 24-Dec-2022 Analyst: SAM		
TPH (Diesel Range)	0.090		0.051	mg/L	1	27-Dec-2022 18:33
TPH (Oil Range)	0.23	n	0.10	mg/L	1	27-Dec-2022 18:33
Surr: 2-Fluorobiphenyl	102		60-135	%REC	1	27-Dec-2022 18:33

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 03-Jan-23

Client:	TRC Corporation	<b>ANALYTICAL REPORT</b>
Project:	HEP WTX to EMSU GW	WorkOrder:HS22121291
Sample ID:	MW-03	Lab ID:HS22121291-03
Collection Date:	20-Dec-2022 13:05	Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	23-Dec-2022 18:31
Surr: 4-Bromofluorobenzene	114		70-123	%REC	1	23-Dec-2022 18:31
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 24-Dec-2022 Analyst: SAM		
TPH (Diesel Range)	ND		0.050	mg/L	1	27-Dec-2022 19:02
TPH (Oil Range)	ND	n	0.10	mg/L	1	27-Dec-2022 19:02
Surr: 2-Fluorobiphenyl	98.5		60-135	%REC	1	27-Dec-2022 19:02

Note: See Qualifiers Page for a list of qualifiers and their explanation.



ALS Houston, US

Date: 03-Jan-23

Client:	TRC Corporation	<b>ANALYTICAL REPORT</b>
Project:	HEP WTX to EMSU GW	WorkOrder:HS22121291
Sample ID:	MW-04	Lab ID:HS22121291-04
Collection Date:	20-Dec-2022 13:30	Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	23-Dec-2022 18:44
Surr: 4-Bromofluorobenzene	114		70-123	%REC	1	23-Dec-2022 18:44
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 24-Dec-2022 Analyst: SAM		
TPH (Diesel Range)	0.054		0.050	mg/L	1	27-Dec-2022 19:32
TPH (Oil Range)	ND	n	0.10	mg/L	1	27-Dec-2022 19:32
Surr: 2-Fluorobiphenyl	106		60-135	%REC	1	27-Dec-2022 19:32

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US

Date: 03-Jan-23

Client:	TRC Corporation	<b>ANALYTICAL REPORT</b>
Project:	HEP WTX to EMSU GW	WorkOrder:HS22121291
Sample ID:	MW-05	Lab ID:HS22121291-05
Collection Date:	20-Dec-2022 10:35	Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	23-Dec-2022 18:58
Surr: 4-Bromofluorobenzene	113		70-123	%REC	1	23-Dec-2022 18:58
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 24-Dec-2022 Analyst: SAM		
TPH (Diesel Range)	0.053		0.050	mg/L	1	27-Dec-2022 20:01
TPH (Oil Range)	ND	n	0.10	mg/L	1	27-Dec-2022 20:01
Surr: 2-Fluorobiphenyl	104		60-135	%REC	1	27-Dec-2022 20:01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Houston, US

Date: 03-Jan-23

Client: TRC Corporation  
Project: HEP WTX to EMSU GW  
Sample ID: Duplicate-01  
Collection Date: 20-Dec-2022 00:00

## ANALYTICAL REPORT

WorkOrder:HS22121291  
Lab ID:HS22121291-06  
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	23-Dec-2022 19:11
Surr: 4-Bromofluorobenzene	113		70-123	%REC	1	23-Dec-2022 19:11
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 24-Dec-2022 Analyst: SAM		
TPH (Diesel Range)	ND		0.052	mg/L	1	27-Dec-2022 20:31
<b>TPH (Oil Range)</b>	<b>0.14</b>	n	<b>0.10</b>	<b>mg/L</b>	1	27-Dec-2022 20:31
Surr: 2-Fluorobiphenyl	99.1		60-135	%REC	1	27-Dec-2022 20:31

Note: See Qualifiers Page for a list of qualifiers and their explanation.

## ALS Houston, US

Date: 03-Jan-23

Client: TRC Corporation  
Project: HEP WTX to EMSU GW  
Sample ID: EB-12-20-22  
Collection Date: 20-Dec-2022 13:35

## ANALYTICAL REPORT

WorkOrder:HS22121291  
Lab ID:HS22121291-07  
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
<b>GASOLINE RANGE ORGANICS BY SW8015C</b>		<b>Method:SW8015</b>		Analyst: FT		
Gasoline Range Organics	ND		0.0500	mg/L	1	22-Dec-2022 12:26
Surr: 4-Bromofluorobenzene	118		70-123	%REC	1	22-Dec-2022 12:26
<b>TPH DRO/ORO BY SW8015C</b>		<b>Method:SW8015M</b>		Prep:SW3511 / 24-Dec-2022 Analyst: SAM		
TPH (Diesel Range)	ND		0.051	mg/L	1	27-Dec-2022 21:00
TPH (Oil Range)	ND	n	0.10	mg/L	1	27-Dec-2022 21:00
Surr: 2-Fluorobiphenyl	99.4		60-135	%REC	1	27-Dec-2022 21:00

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: TRC Corporation  
Project: HEP WTX to EMSU GW  
WorkOrder: HS22121291

Batch ID: 187768	Start Date: 24 Dec 2022 09:02	End Date: 24 Dec 2022 12:30
Method: SW3511	Prep Code: 3511_DRO	

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22121291-01		32.38 (mL)	2 (mL)	0.06177	40 mL Amber
HS22121291-02		32.42 (mL)	2 (mL)	0.06169	40 mL Amber
HS22121291-03		32.9 (mL)	2 (mL)	0.06079	40 mL Amber
HS22121291-04		32.98 (mL)	2 (mL)	0.06064	40 mL Amber
HS22121291-05		32.93 (mL)	2 (mL)	0.06073	40 mL Amber
HS22121291-06		31.62 (mL)	2 (mL)	0.06325	40 mL Amber
HS22121291-07		32.64 (mL)	2 (mL)	0.06127	40 mL Amber

ALS Houston, US

Date: 03-Jan-23

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**WorkOrder:** HS22121291

**DATES REPORT**

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
<b>Batch ID:</b> 187768 ( 0 )		<b>Test Name :</b> TPH DRO/ORO BY SW8015C			<b>Matrix:</b> Water	
HS22121291-01	MW-01	20 Dec 2022 12:05		24 Dec 2022 09:02	27 Dec 2022 18:03	1
HS22121291-02	MW-02	20 Dec 2022 11:15		24 Dec 2022 09:02	27 Dec 2022 18:33	1
HS22121291-03	MW-03	20 Dec 2022 13:05		24 Dec 2022 09:02	27 Dec 2022 19:02	1
HS22121291-04	MW-04	20 Dec 2022 13:30		24 Dec 2022 09:02	27 Dec 2022 19:32	1
HS22121291-05	MW-05	20 Dec 2022 10:35		24 Dec 2022 09:02	27 Dec 2022 20:01	1
HS22121291-06	Duplicate-01	20 Dec 2022 00:00		24 Dec 2022 09:02	27 Dec 2022 20:31	1
HS22121291-07	EB-12-20-22	20 Dec 2022 13:35		24 Dec 2022 09:02	27 Dec 2022 21:00	1
<b>Batch ID:</b> R424693 ( 0 )		<b>Test Name :</b> GASOLINE RANGE ORGANICS BY SW8015C			<b>Matrix:</b> Water	
HS22121291-07	EB-12-20-22	20 Dec 2022 13:35			22 Dec 2022 12:26	1
<b>Batch ID:</b> R424780 ( 0 )		<b>Test Name :</b> GASOLINE RANGE ORGANICS BY SW8015C			<b>Matrix:</b> Water	
HS22121291-01	MW-01	20 Dec 2022 12:05			23 Dec 2022 18:04	1
HS22121291-02	MW-02	20 Dec 2022 11:15			23 Dec 2022 18:18	1
HS22121291-03	MW-03	20 Dec 2022 13:05			23 Dec 2022 18:31	1
HS22121291-04	MW-04	20 Dec 2022 13:30			23 Dec 2022 18:44	1
HS22121291-05	MW-05	20 Dec 2022 10:35			23 Dec 2022 18:58	1
HS22121291-06	Duplicate-01	20 Dec 2022 00:00			23 Dec 2022 19:11	1



## ALS Houston, US

Date: 03-Jan-23

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**WorkOrder:** HS22121291

## QC BATCH REPORT

Batch ID: 187768 ( 0 )		Instrument: FID-16		Method: TPH DRO/ORO BY SW8015C					
<b>MBLK</b>	Sample ID: <b>MBLK-187768</b>	Units: <b>mg/L</b>		Analysis Date: <b>27-Dec-2022 16:35</b>					
Client ID:	Run ID: <b>FID-16_425169</b>		SeqNo: <b>7059194</b>		PrepDate: <b>24-Dec-2022</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

TPH (Diesel Range)	ND	0.050							
TPH (Oil Range)	ND	0.10							
Surr: 2-Fluorobiphenyl	0.04244	0.0050	0.06	0	70.7	60 - 135			

<b>LCS</b>	Sample ID: <b>LCS-187768</b>	Units: <b>mg/L</b>		Analysis Date: <b>27-Dec-2022 17:04</b>					
Client ID:	Run ID: <b>FID-16_425169</b>		SeqNo: <b>7059195</b>		PrepDate: <b>24-Dec-2022</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

TPH (Diesel Range)	0.5757	0.050	0.6	0	96.0	70 - 130			
TPH (Oil Range)	0.6021	0.10	0.6	0	100	70 - 130			
Surr: 2-Fluorobiphenyl	0.05591	0.0050	0.06	0	93.2	60 - 135			

<b>LCSD</b>	Sample ID: <b>LCSD-187768</b>	Units: <b>mg/L</b>		Analysis Date: <b>27-Dec-2022 17:34</b>					
Client ID:	Run ID: <b>FID-16_425169</b>		SeqNo: <b>7059196</b>		PrepDate: <b>24-Dec-2022</b>		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

TPH (Diesel Range)	0.5714	0.050	0.6	0	95.2	70 - 130	0.5757	0.753	20
TPH (Oil Range)	0.6185	0.10	0.6	0	103	70 - 130	0.6021	2.69	20
Surr: 2-Fluorobiphenyl	0.05377	0.0050	0.06	0	89.6	60 - 135	0.05591	3.91	20

The following samples were analyzed in this batch:

HS22121291-01	HS22121291-02	HS22121291-03	HS22121291-04
HS22121291-05	HS22121291-06	HS22121291-07	

## ALS Houston, US

Date: 03-Jan-23

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**WorkOrder:** HS22121291

## QC BATCH REPORT

Batch ID: R424693 ( 0 )		Instrument: FID-20		Method: GASOLINE RANGE ORGANICS BY SW8015C						
<b>MBLK</b>	Sample ID: MBLK-221222	Units: mg/L		Analysis Date: 22-Dec-2022 11:46						
Client ID:	Run ID: FID-20_424693		SeqNo: 7047783		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	ND	0.0500								
Surr: 4-Bromofluorobenzene	0.1162	0.00500	0.1	0	116	70 - 121				
<b>LCS</b>	Sample ID: LCS-221222	Units: mg/L		Analysis Date: 22-Dec-2022 11:19						
Client ID:	Run ID: FID-20_424693		SeqNo: 7047781		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	1.11	0.0500	1	0	111	76 - 124				
Surr: 4-Bromofluorobenzene	0.1021	0.00500	0.1	0	102	52 - 138				
<b>LCSD</b>	Sample ID: LCSD-221222	Units: mg/L		Analysis Date: 22-Dec-2022 11:32						
Client ID:	Run ID: FID-20_424693		SeqNo: 7047782		PrepDate:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Gasoline Range Organics	0.933	0.0500	1	0	93.3	76 - 124	1.11	17.3	20	
Surr: 4-Bromofluorobenzene	0.09947	0.00500	0.1	0	99.5	52 - 138	0.1021	2.59	20	
The following samples were analyzed in this batch: HS22121291-07										

## ALS Houston, US

Date: 03-Jan-23

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**WorkOrder:** HS22121291

## QC BATCH REPORT

Batch ID: R424780 ( 0 )		Instrument: FID-20		Method: GASOLINE RANGE ORGANICS BY SW8015C					
<b>MBLK</b>	Sample ID: MBLK-221223	Units: mg/L		Analysis Date: 23-Dec-2022 16:31					
Client ID:	Run ID: FID-20_424780		SeqNo: 7050016		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Gasoline Range Organics ND 0.0500

Surr: 4-Bromofluorobenzene 0.1083 0.00500 0.1 0 108 70 - 121

<b>LCS</b>	Sample ID: LCS-221223	Units: mg/L		Analysis Date: 23-Dec-2022 16:05					
Client ID:	Run ID: FID-20_424780		SeqNo: 7050014		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Gasoline Range Organics 0.9507 0.0500 1 0 95.1 76 - 124

Surr: 4-Bromofluorobenzene 0.09804 0.00500 0.1 0 98.0 52 - 138

<b>LCSD</b>	Sample ID: LCSD-221223	Units: mg/L		Analysis Date: 23-Dec-2022 16:18					
Client ID:	Run ID: FID-20_424780		SeqNo: 7050015		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Gasoline Range Organics 1.1 0.0500 1 0 110 76 - 124 0.9507 14.6 20

Surr: 4-Bromofluorobenzene 0.1027 0.00500 0.1 0 103 52 - 138 0.09804 4.69 20

The following samples were analyzed in this batch:

HS22121291-01	HS22121291-02	HS22121291-03	HS22121291-04
HS22121291-05	HS22121291-06		

**ALS Houston, US**

Date: 03-Jan-23

**Client:** TRC Corporation  
**Project:** HEP WTX to EMSU GW  
**WorkOrder:** HS22121291

**QUALIFIERS,  
ACRONYMS, UNITS**

<b>Qualifier</b>	<b>Description</b>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

<b>Acronym</b>	<b>Description</b>
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

<b>Unit Reported</b>	<b>Description</b>
mg/L	Milligrams per Liter

ALS Houston, US

Date: 03-Jan-23

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**CERTIFICATIONS,ACCREDITATIONS & LICENSES**

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Agency	Number	Expire Date
Arkansas	22-041-0	27-Mar-2023
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932022-13	31-Jul-2023

ALS Houston, US

Date: 03-Jan-23

## Sample Receipt Checklist

Work Order ID: HS22121291

Date/Time Received: 21-Dec-2022 11:20

Client Name: TRC-AUS

Received by: Malcolm Burleson

Completed By: /S/ Nelson D. Dusara

21-Dec-2022 16:34

Reviewed by: /S/ Andy C. Neir

23-Dec-2022 15:37

eSignature

Date/Time

eSignature

Date/Time

Matrices: **WATER**Carrier name: **FedEx**

Shipping container/cooler in good condition?

Yes ☒No ☐Not Present ☐

Custody seals intact on shipping container/cooler?

Yes ☒No ☐Not Present ☐

Custody seals intact on sample bottles?

Yes ☐No ☐Not Present ☒

VOA/TX1005/TX1006 Solids in hermetically sealed vials?

Yes ☐No ☐Not Present ☒

Chain of custody present?

Yes ☒No ☐

1 Page(s)

Chain of custody signed when relinquished and received?

Yes ☒No ☐

COC IDs:n/a

Samplers name present on COC?

Yes ☒No ☐

Chain of custody agrees with sample labels?

Yes ☐No ☒

Samples in proper container/bottle?

Yes ☒No ☐

Sample containers intact?

Yes ☒No ☐

Sufficient sample volume for indicated test?

Yes ☒No ☐

All samples received within holding time?

Yes ☒No ☐

Container/Temp Blank temperature in compliance?

Yes ☒No ☐

Temperature(s)/Thermometer(s):

2.0/1.5 C UC/C

IR 31

Cooler(s)/Kit(s):

RED

Date/Time sample(s) sent to storage:

12/21/2022 12:00

Water - VOA vials have zero headspace?

Yes ☒No ☐No VOA vials submitted ☐

Water - pH acceptable upon receipt?

Yes ☐No ☐N/A ☒

pH adjusted?

Yes ☐No ☐N/A ☒

pH adjusted by:

Login Notes: Trip Blank Received not on COC logged in on Hold.

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

Corrective Action:






ALS Laboratory Group  
10450 Stanchitt Rd. #210  
Houston, Texas 77099  
(Tel) 281.530.5656  
(Fax) 281.530.5887

## Chain of Custody Form

Page 1 of 1

ALS Laboratory Group  
3352 128th Avenue  
Holland, Michigan 49424  
(Tel) 616.399.6070  
(Fax) 616.399.6185

Customer Information			Project Information				Parameter/Method Request for Analysis												
Purchase Order	186637	Project Name	HEP WTX to EMSU		A	GW - STD TAT													
Work Order		Project Number	525769.9990.0000		B	8015 GRO W 3x VOA HCL													
Company Name	TRC Corporation	Bill To Company	TRC Corporation		C	8015 DRO/MRO - 3x VOA Am Neat													
Send Report To	Jared Stoffel	Invoice Attn.	TRC - AP		D	<div style="text-align: center;"> <b>HS22121291</b>            TRC Corporation            HEP WTX to EMSU GW   </div>													
Address	505 East Huntland Drive Suite 250	Address	505 East Huntland Drive Suite 250		E														
City/State/Zip	Austin, TX 78752	City/State/Zip	Austin, TX 78752		F														
Phone	713-306-9550	Phone	512-329-6080		G														
Fax		Fax			H														
e-Mail Address	jstoffel@trccompanies.com	e-Mail Address	apinvoiceapproval@trccompanies.com		I														
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold		
1	MW-01	12.20.2022	1205	W	y	6	x	x	x										
2	MW-02	12.20.2022	1115	W	y	6	x	x	x										
3	MW-03	12.20.2022	1305	W	y	6	x	x	x										
4	MW-04	12.20.2022	1330	W	y	6	x	x	x										
5	MW-05	12.20.2022	1035	W	y	6	x	x	x										
6	Duplicate-01	12.20.2022	—	W	y	6	x	x	x										
7	EB-12-20-22	12.20.2022	1335	W	y	6	x	x	x										
8																			
9																			
10																			
Sampler(s): Please Print & Sign <i>C. Bunting</i>			Shipment Method: <i>Fedex</i>		Required Turnaround Time: <input checked="" type="checkbox"/> STD 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour				Results Due Date:										
Relinquished by: <i>[Signature]</i>		Date: 12/20/22	Time: 1730	Received by:			Notes:												
Relinquished by:		Date:	Time:	Received by (Laboratory): <i>[Signature]</i>			QC Package: (Check Box Below)												
Logged by (Laboratory):		Date:	Time:	Checked by (Laboratory):			Cooler Temp. 18.3	X	Level II: Standard QC				TRRP-Checklist						
							2.026 -0.5c		Level III: Std QC + Raw Data				TRRP Level IV						
									Level IV: SW846 CLP-Like										
Preservative Key: 1-HCL 2-HNO3 3-H2SO4 4-NaOH 5-Na2S2O3 6-NaHSO4 7-Other 8-4 degrees C 9-8035																			
Other:																			

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS Laboratory Group.

Bj Fed

Copyright 2008 by ALS Laboratory Group

<b>CUSTODY SEAL</b>		Seal Broken By:
Date: 12/20/22	Time: 17:00	Date:
by: Christine Subling		
Party: PSC		

12/2/21

HOUSTON TX 77099

(291) 630-5606 REF: 0101

DATE: 12/21/99

TIME: 10:30A

TRK# 3925 1204 9497

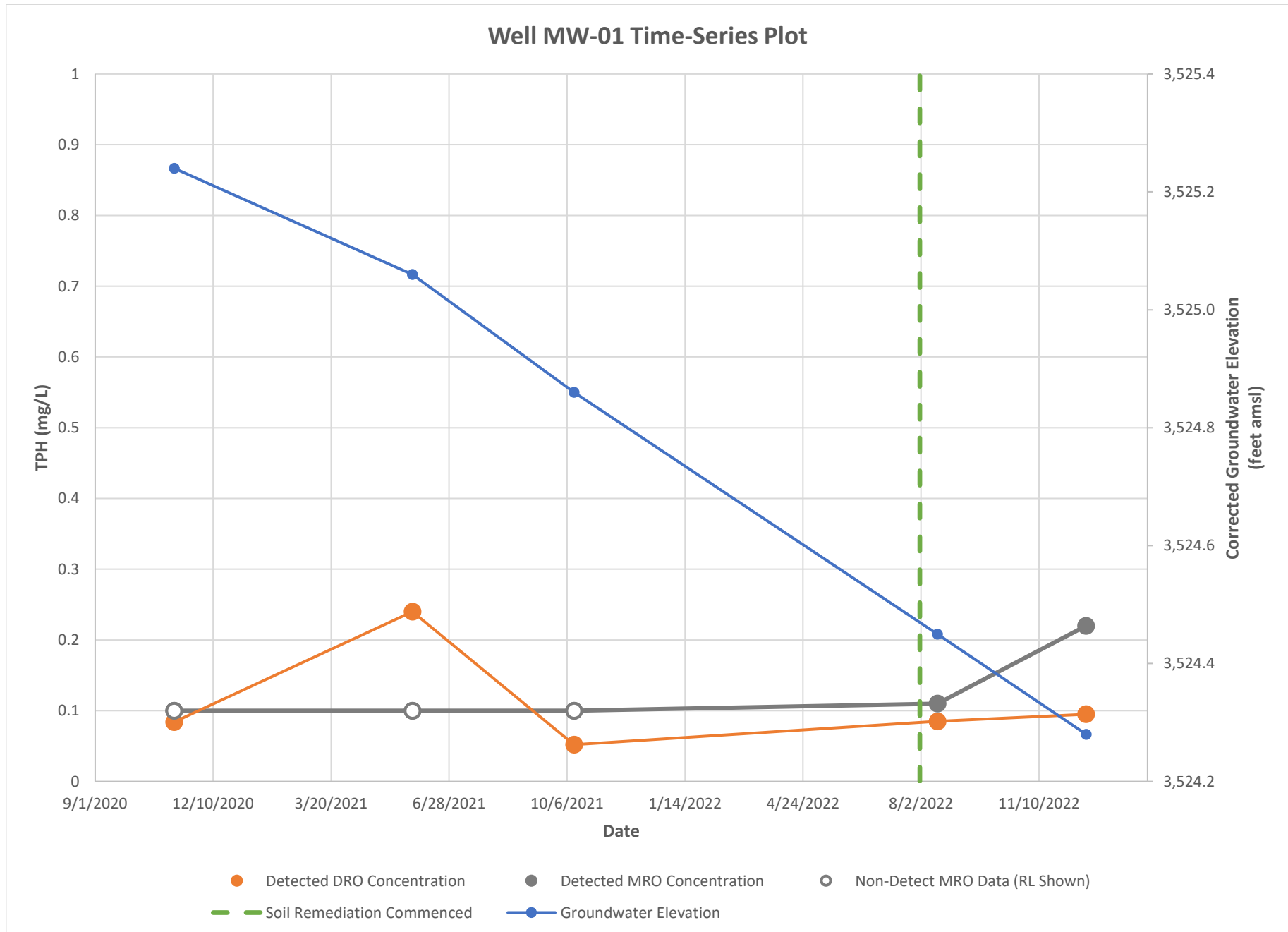
WED - 21 DEC 10:30A

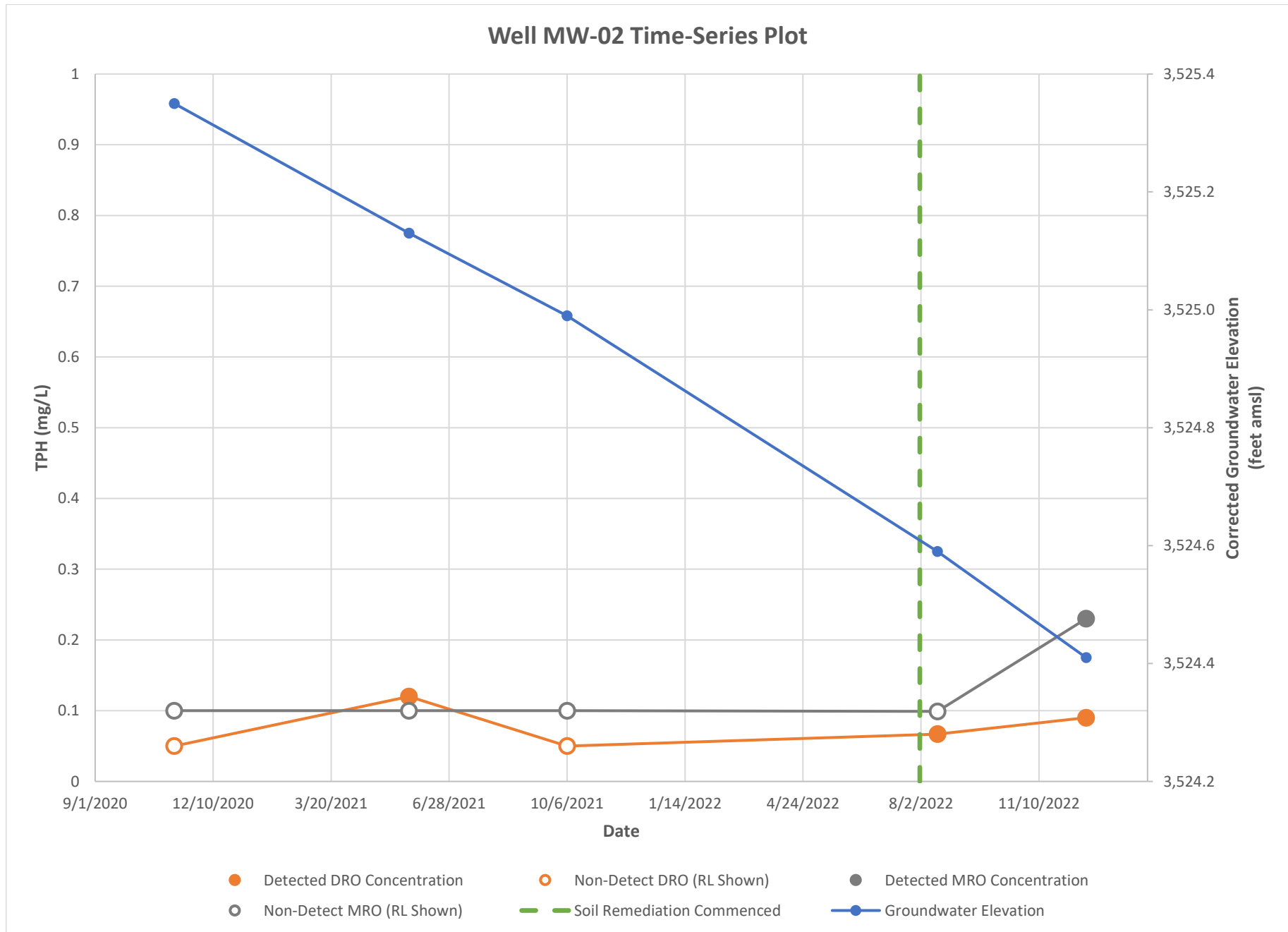
PRIORITY OVERNIGHT

AHS

77099

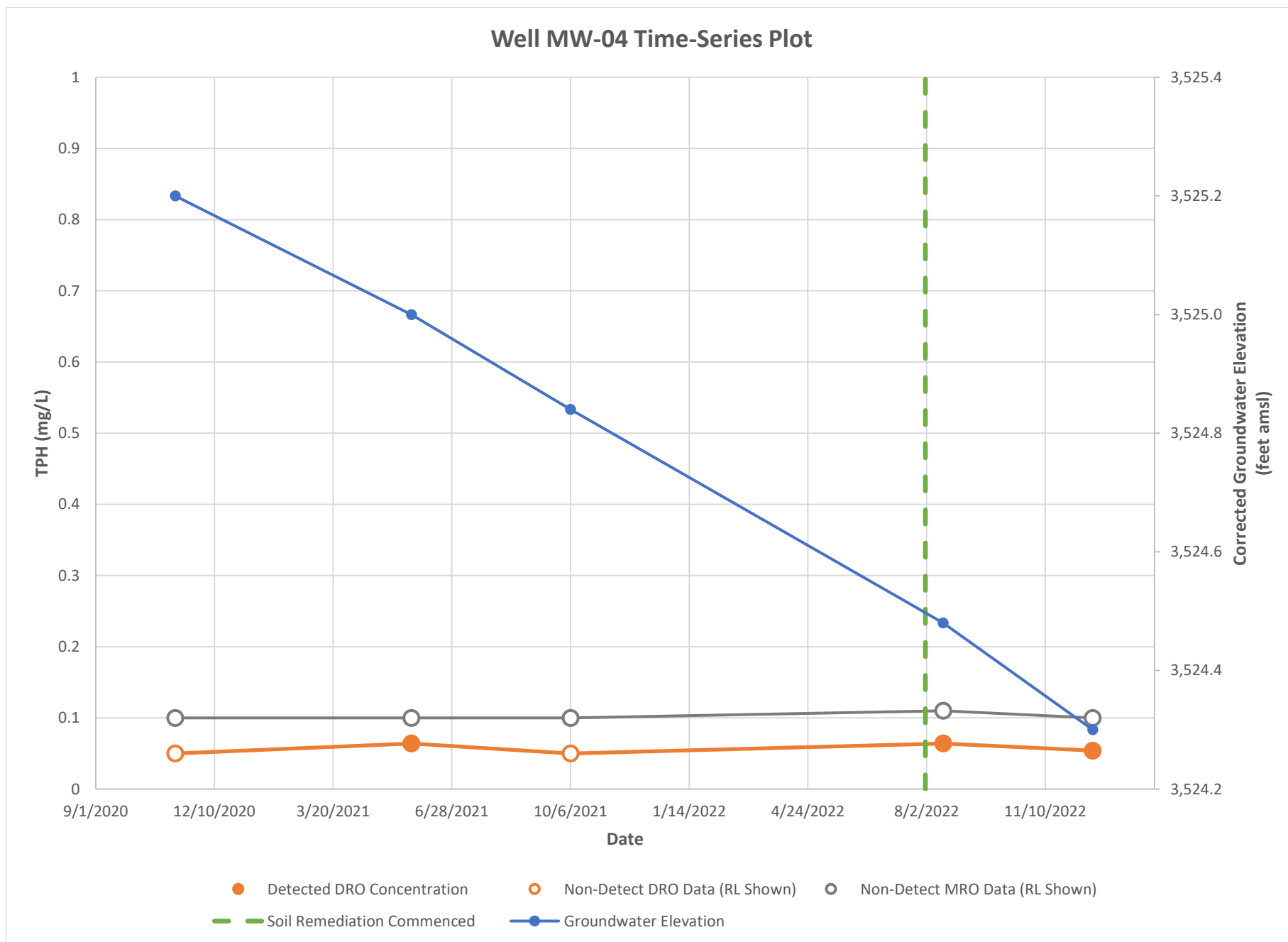
**ATTACHMENT D – GROUNDWATER ELEVATION AND TPH PLOTS**













**ATTACHMENT E – ANALYTICAL DATA QUALITY CONTROL FORMS**



## Analytical Data Review Checklist

Site: WTX (Klein Ranch) Location: Southwest of Monument, NM Client Name: HEP Project #: 497744	Laboratory: ALS (Houston, Tx) Lab Report #: HS22081018	QA Reviewer: A. Eljuri / TRC Peer Reviewer: A. Bass / TRC Date: August 31, 2022
Analytical Method(s): TPH GRO by Method SW8015C; TPH DRO/ORO by Method SW8015M	Matrices Sampled: Groundwater, aqueous quality control (QC) sample	Sample Collection Date(s): August 16, 2022
Sampling Objective(s): Analyze groundwater for routine monitoring.		
Sample IDs: Refer to data package sample summary.		

Review Item or Question		Y	N	NA	Comments
<b>Sample Traceability / Chain of Custody</b>					
1	Were COC forms appropriately completed?	X			
2	Did the laboratory report correct sample IDs?	X			
3	Do the laboratory reported sample collection dates and times agree with the COC forms?	X			
<b>Sample Preservation and Integrity</b>					
4	Did samples arrive at the laboratory appropriately preserved?	X			TPH GRO was preserved with hydrochloric acid.
	Was the cooler temperature between 0-6°C?	X			
	Was acid used for preservation when required (e.g., aqueous VOC and metals samples)?	X			
	Were soil/sediment VOC samples preserved in the field or collected in EnCore® samplers?			X	
5	Were samples received by the laboratory in an acceptable condition (i.e., no breakages, leaks, etc.)?	X			
6	Were any issues noted by the laboratory upon receipt?	X			The cooler included a trip blank, but it was correctly not listed on the COC.
7	Were sample preparation and analysis holding time requirements met?	X			
8	<u>AIR ONLY:</u> Were canisters received with an acceptable vacuum? Were the RPDs between the initial and final canister flow controller calibrations <20?			X	
<b>Data Completeness</b>					
9	Are results reported for all analytical methods requested?	X			
10	Are results reported for all samples submitted for analysis?	X			
11	Were the requested analytical methods used?	X			
12	Are results reported for all target analytes, but no additional analytes?	X			TPH ORO instead of TPH MRO per the COC was reported for all samples. The laboratory confirmed TPH ORO and TPH MRO report the same ranges.



## Analytical Data Review Checklist

Review Item or Question		Y	N	NA	Comments
13	Were soil/sediment results reported on a dry weight basis?			X	
14	If requested, were detected results below the reporting limit (i.e., "J" values) reported?			X	
15	Did we receive the required deliverables (e.g., EDD, Level 4 data, laboratory certification, etc.) in the correct formats?	X			
<b>Sensitivity</b>					
16	Do the reporting limits meet the project specifications (e.g., QAPP or Work Plan)?	X			All non-detect results had reporting limits below project criteria.
17	Were dilutions performed? If so, note sample(s) and parameter(s) affected and the dilution factor(s).		X		
18	Did the laboratory provide an adequate explanation as to why dilutions were performed?			X	
<b>QC Results</b>					
19	Were any target analytes detected in the method blanks? If yes, list contaminants, concentrations detected and associated samples.		X		
20	Does each analytical or preparation batch have its own method blank?	X			
21	Were any target analytes detected in the field blank(s) (e.g., trip blanks, equipment blanks)? If yes, list contaminants, concentrations detected and associated samples (or attach field blank results).		X		Equipment blank identified as EB-08-16-22.
22	Are there any potential false positive results based on questions 19 and/or 21?		X		
23	Are LCS/LCSD recoveries within QC limits? If no, list analytes affected, the LCS/LCSD recoveries and the affected samples.	X			
24	Does each analytical or preparation batch have its own LCS?	X			
25	Are LCS/LCSD RPDs within QC limits? If no, list analytes affected, the RPDs and the affected samples.	X			
26	Are MS/MSD recoveries within QC limits? NOTE: If not performed on a project sample, evaluation is not required. If no, list analytes affected, the MS/MSD recoveries and the sample that was spiked.			X	
27	Are MS/MSD RPDs within QC limits? NOTE: If not performed on a project sample, evaluation is not required. If no, list analytes affected, the RPDs and the sample that was spiked.			X	
28	Are laboratory duplicate RPDs within QC limits? NOTE: If not performed on a project sample, evaluation is not required. If no, list analytes affected, the RPDs and the sample that was prepared/analyzed in duplicate.			X	



## Analytical Data Review Checklist

Review Item or Question		Y	N	NA	Comments
29	Are field duplicate RPDs within QC limits? If no, list analytes affected, the RPDs and the associated samples. Field duplicate criteria for groundwater: RPDs <30% when both results >5x the reporting limit (RL). If one of both results < the RL, absolute difference must be < RL.	X			Field duplicate pair Duplicate-01 and MW-1 meet project criteria.
30	<u>ORGANIC ANALYSES ONLY:</u> Are surrogate recoveries within QC limits? If no, list samples, surrogate recoveries and analytes affected.	X			
<b>Laboratory Comments</b>					
31	Did the case narrative describe any analytical anomalies (i.e., problems or unique occurrences)?		X		
32	Were any other potential data quality issues identified? If yes, describe issues.		X		
<b>Do the Data Make Sense?</b>					
33	Do any results look questionable?		X		
34	Has the EDD been compared with the lab report?	X			

**Reference:** United States Environmental Protection Agency (USEPA) - *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, November 2020)

COC = Chain-of-Custody  
 DRO = Diesel Range Organics  
 EDD = Electronic Data Deliverable  
 GRO = Gasoline Range Organics  
 LCS/LCSD = Laboratory Control Sample / Laboratory Control Sample Duplicate  
 MRO = Motor Range Organics  
 MS/MSD = Matrix Spike / Matrix Spike Duplicate  
 NELAP = National Environmental Laboratory Accreditation Program  
 ORO = Oil Range Organics  
 QAPP = Quality Assurance Project Plan  
 QC = Quality Control  
 %R = Percent Recovery  
 RPD = Relative Percent Difference =  $100\% \times |(A-B)/((A+B)/2)|$   
 TPH = Total Petroleum Hydrocarbon

**Additional Comments:** None.



## Analytical Data Review Checklist

Site: WTX (Klein Ranch) Location: Southwest of Monument, NM Client Name: HEP Project #: 525769	Laboratory: ALS (Houston, Tx) Lab Report #: HS22121291	QA Reviewer: A. Eljuri / TRC Peer Reviewer: A. Bass / TRC Date: January 17, 2023
Analytical Method(s): TPH GRO by Method SW8015C; TPH DRO/ORO by Method SW8015M	Matrices Sampled: Groundwater, aqueous quality control (QC) sample	Sample Collection Date(s): December 20, 2022
Sampling Objective(s): Analyze groundwater for routine monitoring.		
Sample IDs: Refer to data package sample summary.		

Review Item or Question		Y	N	NA	Comments
<b>Sample Traceability / Chain of Custody</b>					
1	Were COC forms appropriately completed?	X			
2	Did the laboratory report correct sample IDs?	X			
3	Do the laboratory reported sample collection dates and times agree with the COC forms?	X			
<b>Sample Preservation and Integrity</b>					
4	Did samples arrive at the laboratory appropriately preserved?	X			TPH GRO was preserved with hydrochloric acid.
	Was the cooler temperature between 0-6°C?	X			
	Was acid used for preservation when required (e.g., aqueous VOC and metals samples)?	X			
	Were soil/sediment VOC samples preserved in the field or collected in EnCore® samplers?			X	
5	Were samples received by the laboratory in an acceptable condition (i.e., no breakages, leaks, etc.)?	X			
6	Were any issues noted by the laboratory upon receipt?	X			The cooler included a trip blank, but it was correctly not listed on the COC. No analyses were performed on the trip blank.
7	Were sample preparation and analysis holding time requirements met?	X			
8	<b>AIR ONLY:</b> Were canisters received with an acceptable vacuum? Were the RPDs between the initial and final canister flow controller calibrations <20?			X	
<b>Data Completeness</b>					
9	Are results reported for all analytical methods requested?	X			
10	Are results reported for all samples submitted for analysis?	X			
11	Were the requested analytical methods used?	X			
12	Are results reported for all target analytes, but no additional analytes?	X			TPH ORO instead of TPH MRO per the COC was reported for all samples. The laboratory confirmed TPH ORO and TPH MRO report the same ranges.





## Analytical Data Review Checklist

Review Item or Question		Y	N	NA	Comments
13	Were soil/sediment results reported on a dry weight basis?			X	
14	If requested, were detected results below the reporting limit (i.e., "J" values) reported?			X	
15	Did we receive the required deliverables (e.g., EDD, Level 4 data, laboratory certification, etc.) in the correct formats?	X			
<b>Sensitivity</b>					
16	Do the reporting limits meet the project specifications (e.g., QAPP or Work Plan)?	X			All non-detect results had reporting limits below project criteria.
17	Were dilutions performed? If so, note sample(s) and parameter(s) affected and the dilution factor(s).		X		
18	Did the laboratory provide an adequate explanation as to why dilutions were performed?			X	
<b>QC Results</b>					
19	Were any target analytes detected in the method blanks? If yes, list contaminants, concentrations detected and associated samples.		X		
20	Does each analytical or preparation batch have its own method blank?	X			
21	Were any target analytes detected in the field blank(s) (e.g., trip blanks, equipment blanks)? If yes, list contaminants, concentrations detected and associated samples (or attach field blank results).		X		Equipment blank identified as EB-12-20-22.
22	Are there any potential false positive results based on questions 19 and/or 21?		X		
23	Are LCS/LCSD recoveries within QC limits? If no, list analytes affected, the LCS/LCSD recoveries and the affected samples.	X			
24	Does each analytical or preparation batch have its own LCS?	X			
25	Are LCS/LCSD RPDs within QC limits? If no, list analytes affected, the RPDs and the affected samples.	X			
26	Are MS/MSD recoveries within QC limits? NOTE: If not performed on a project sample, evaluation is not required. If no, list analytes affected, the MS/MSD recoveries and the sample that was spiked.			X	
27	Are MS/MSD RPDs within QC limits? NOTE: If not performed on a project sample, evaluation is not required. If no, list analytes affected, the RPDs and the sample that was spiked.			X	
28	Are laboratory duplicate RPDs within QC limits? NOTE: If not performed on a project sample, evaluation is not required. If no, list analytes affected, the RPDs and the sample that was prepared/analyzed in duplicate.			X	



## Analytical Data Review Checklist

Review Item or Question		Y	N	NA	Comments
29	Are field duplicate RPDs within QC limits? If no, list analytes affected, the RPDs and the associated samples. Field duplicate criteria for groundwater: RPDs <30% when both results >5x the reporting limit (RL). If one of both results < the RL, absolute difference must be < RL.	X			Field duplicate pair Duplicate-01 and MW-02 meet project criteria.
30	<u>ORGANIC ANALYSES ONLY:</u> Are surrogate recoveries within QC limits? If no, list samples, surrogate recoveries and analytes affected.	X			
<b>Laboratory Comments</b>					
31	Did the case narrative describe any analytical anomalies (i.e., problems or unique occurrences)?		X		
32	Were any other potential data quality issues identified? If yes, describe issues.		X		
<b>Do the Data Make Sense?</b>					
33	Do any results look questionable?		X		
34	Has the EDD been compared with the lab report?	X			

**Reference:** United States Environmental Protection Agency (USEPA) - *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, November 2020)

COC = Chain-of-Custody  
 DRO = Diesel Range Organics  
 EDD = Electronic Data Deliverable  
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 LCS/LCSD = Laboratory Control Sample / Laboratory Control Sample Duplicate  
 MRO = Motor Range Organics  
 MS/MSD = Matrix Spike / Matrix Spike Duplicate  
 NELAP = National Environmental Laboratory Accreditation Program  
 ORO = Oil Range Organics  
 QAPP = Quality Assurance Project Plan  
 QC = Quality Control  
 %R = Percent Recovery  
 RPD = Relative Percent Difference =  $100\% \times |(A-B)/((A+B)/2)|$   
 TPH = Total Petroleum Hydrocarbon

**Additional Comments:** None.

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS  
  
Action 211840

CONDITIONS

Operator: HOLLY ENERGY PARTNERS - OPERATING, LP 1602 W. Main St. Artesia, NM 88210	OGRID: 282505
	Action Number: 211840
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Review of the 2022 Annual Groundwater Monitoring Report: Content Satisfactory 1. Continue GW Monitoring and installation per plan for bioventing. 2. Submit 2023 Annual Report by April 1, 2024.	6/7/2023